As filed with the Securities and Exchange Commission on April 12, 2024.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-1
REGISTRATION STATEMENT
Under
The Securities Act of 1933

Silvaco Group, Inc.
(Exact name of Registrant as specified in its charter)

Delaware	7372	27-1503712
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Silvaco Group, Inc.
4701 Patrick Henry Drive, Building #23
Santa Clara, CA 95054
(408) 567-1000
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Dr. Babak A. Taheri
Chief Executive Officer
4701 Patrick Henry Drive, Building #23
Santa Clara, CA 95054
(408) 567-1000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Gurpreet Bal
Drew M. Valentine
DLA Piper LLP (US)
2000 University Avenue
East Palo Alto, CA 94303
(650) 833-2000

Eric Jensen
Richard Segal
Darah Protas
Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
(650) 843-5000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box: ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with the provisions of Section 8(a) of the Securities Act of 1933 as amended or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 12, 2024

PRELIMINARY PROSPECTUS

Shares

SILVACO

Silvaco Group, Inc.

Common Stock

This is the initial public offering of shares of common stock of Silvaco Group, Inc. We are offering shares of our common stock.

Prior to this offering, there has been no public market for our common stock. We currently anticipate that the initial public offering price will be between $ and $ per share.

Katherine S. Ngai-Pesic, our controlling stockholder and the chair of our board of directors, currently owns or is the beneficial owner of % of our common stock and upon completion of this offering, will own, or be the beneficial owner of, approximately % of our outstanding common stock (or approximately % if the underwriters exercise their option in full). Upon completion of this offering, we will be a "controlled company" within the meaning of the listing rules of the Nasdaq Stock Market LLC. See "Management—Director Independence and Controlled Company Exemption."

We have applied to list our common stock on the Nasdaq Global Market, or Nasdaq, under the symbol "SVCO."

We are an "emerging growth company" and a "smaller reporting company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and are subject to reduced public company disclosure requirements. See "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Investing in our common stock involves a high degree of risks. See "Risk Factors" beginning on page 18 to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Initial public offering price	$	$
Underwriting discounts and commissions (1)	$	$
Proceeds to Silvaco Group, Inc., before expenses	$	$

(1) See the section titled "Underwriting" for additional information regarding underwriting compensation.

We have granted the underwriters an option to purchase up to an additional shares of common stock from us, at the public offering price, less the underwriting discounts and commissions, for 30 days after the date of this prospectus. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $, and the total proceeds to us, before expenses, will be $.

Jefferies **TD Cowen**

B. Riley Securities **Craig-Hallum Capital Group** **Rosenblatt**

, 2024

TABLE OF CONTENTS

In this prospectus, "Silvaco," "the company," "we," "us" and "our" refer to Silvaco Group, Inc. and its consolidated subsidiaries.

Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information in this prospectus, or any applicable free writing prospectus, is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations, and prospects may have and are likely to have changed since that date.

Through and including , 2024 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

For investors outside the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside of the United States.

This prospectus contains references to trademarks and service marks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights to these trademarks and trade names. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUMMARY

This summary highlights selected information in greater detail contained elsewhere in this prospectus and does not contain all of the information you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and related notes and the information set forth in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Overview

We are a provider of technology computer aided design software, electronic design automation software and semiconductor intellectual property, or TCAD, EDA and SIP, respectively. TCAD, EDA and SIP solutions enable semiconductor and photonics companies to increase productivity, accelerate their products' time-to-market and reduce their development and manufacturing costs. We have decades of expertise developing the "technology behind the chip" and providing solutions that span from atoms to systems, starting with providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. We provide SIP for systems-on-chip, or SoC, integrated circuits, or ICs, and SIP management tools to enable team collaborations on complex SoC designs. Our customers include semiconductor manufacturers, original equipment manufacturers, or OEMs, and original design manufacturers, or ODMs, who deploy our solutions in production flows across our target markets, including display, power devices, automotive, memory, high performance compute, or HPC, internet of things, or IoT, and 5G/6G mobile markets.

EDA offerings, including our solutions, enable companies to streamline their IC design workflows, develop complex IC designs in a cost-efficient manner, and maintain acceptable IC manufacturing yield, by providing interoperable tools that capture and simulate designs from concept to analysis. Our TCAD device and process simulation tools provide compatible data structures that can be used with our EDA modeling, analysis, simulation, verification and yield enhancement tools. Further, our EDA tools are used for designing SIP and IC designs that can be managed and validated by our SIP management tools.

According to Grand View Research, the global aggregate EDA software market was valued at $11.1 billion in global revenue in 2022 and is expected to reach $22.2 billion in global revenue in 2030, representing a 9.1% compound annual growth rate, or CAGR, driven in part by the growing complexity of semiconductor and photonics designs and increasing challenges associated with advanced materials and shrinking process technology nodes across the EDA market. Based on Electronic System Design Alliance's breakdown of the EDA market, including SIP, which was valued at $14.9 billion in global revenue in 2023, we believe Silvaco's solutions compete in portions of the EDA software market representing $3.1 billion of the current global aggregate EDA software market. We believe these trends will increase the need for TCAD, EDA and SIP solutions that accelerate time-to-market at reduced development and manufacturing costs and deliver processes and devices with better operating performance, lower cost, reduced power and improved product yield.

We are a global leader in TCAD solutions for the power devices and display markets. Our TCAD solutions are designed to provide complete, fast, and accurate simulations and modeling of semiconductor and photonics device behavior, allowing our customers to design original, value-added processes and devices, explore trade-offs in performance, power, size and reliability and optimize their final design for manufacturing. By reducing the need to run expensive and time-consuming experiments in manufacturing, TCAD solutions enable companies to rapidly bring their products to market. Our TCAD solutions have been adopted by 3 of the 10 largest semiconductor companies by revenue in 2023, by 8 of the 10 largest flat panel display companies by revenue in 2023, and by 4 of the 10 leading power semiconductor devices companies in 2023.

Our EDA solutions provide analog custom design flows that bring electrical and physical layout views together with circuit simulation and physical verification including sign-off at select foundries to help ensure correct-by-design and high-yielding products before committing to final silicon. We provide device characterization and modeling solutions that enable our customers to generate accurate, high-quality models for use in simulation and analysis of analog, mixed-signal and radiofrequency, or RF, circuits across our target markets. Our EDA solutions have been adopted by 6 of the 10 largest semiconductor companies by revenue in 2023 and by 7 of the 10 largest flat panel display companies by revenue in 2023.

SIP solutions, including our offerings, provide pre-verified, high-yielding and silicon-proven SIP blocks designed to accelerate time-to-market for SoC designs. Our patented SIP fingerprint technology authenticates SIP before and after use in complex SoC designs to avoid costly design iterations and silicon re-spins. Our EDA solutions for SIP design integrate patented machine learning technologies with the goal of minimizing simulation time, chip area and

power consumption. We provide SIP management software at the enterprise-level for managing, tracking and controlling SIPs that are used in SoC designs.

We leverage decades of extensive technological expertise to provide our customers with agilely developed products. In doing so, we have built long-term relationships with select strategic customers that enable us to work with them from project inception in order to tailor solutions for their specific needs. These customer relationships help us improve our new product offerings for the larger market.

Since 2015, we have acquired ten businesses, assets and/or technologies to complement our existing product offerings, expand into new markets or grow our existing market share, increase our engineering talent and enhance our technical capabilities. Our acquisition strategy also allows us to accelerate new product offerings.

Our growth has further been driven by semiconductor and photonics companies' increasing research and development spend due to increasing complexities of new material, new devices, and new systems in the markets we address. We address such market needs by:

- Providing EDA, TCAD and SIP solutions that are interoperable and cost-effective and that our customers can use to introduce their products to market in a timely fashion;
- Using advanced research and development and agile product development techniques to provide our customers with tailored solutions in vertical markets such as display, photonics, power devices, and other markets where new materials or structures are being developed;
- Providing leading-edge products that complement IC design flows and are compatible with customers' existing design flows; and
- Providing production ready and proven SIP, EDA SIP, and SIP/IC design management solutions that can be utilized individually, or as a full interoperable solution.

In 2021, we generated $47.3 million in bookings and recognized $42.0 million of revenue, a $1.8 million net loss and $2.6 million of negative cash flow from operating activities. We also had a U.S. generally accepted accounting principles ("GAAP") operating loss of $3.5 million and a non-GAAP operating loss of $1.3 million during 2021. During 2022, we generated $49.7 million in bookings and recognized $46.5 million of revenue, a $3.9 million net loss and $2.1 million of negative cash flow from operating activities. We also had a GAAP operating loss of $1.9 million and a non-GAAP operating income of $2.3 million during 2022. During 2023, we generated $58.1 million in bookings and recognized $54.2 million of revenue, a $0.3 million net loss and $1.2 million of positive cash flow from operating activities. We also had a GAAP operating income of $1.1 million and a non-GAAP operating income of $4.4 million during 2023. As of December 31, 2023, we had over 800 customers, of which over 200 were academic institutions, that relied on our solutions worldwide. Our academic customers not only have the potential to provide future human resources, but also can act as beta testers and provide feedback that allows us to enhance our products. See *"*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Indicators and Non-GAAP Financial Measures*"* for additional information on bookings and non-GAAP operating income, as well as the reconciliation of operating income (loss) to non-GAAP operating income (loss).

Industry Background

Increasing semiconductor design complexity. The latest technological applications require greater semiconductor performance and functionality, which have necessitated the shift towards more advanced manufacturing process technologies, new materials, and continued reduction of transistor sizes. IC and SoC complexity have significantly increased to accommodate the increased number of functional SIP blocks per chip. The slowing of Gordon Moore's, or Moore's law (which states that the number of circuits on a microchip doubles every two years), has also led to the adoption of new semiconductor materials to address varying application requirements. All these factors have increased semiconductor design complexity, which in turn increases the probability for significant development delays and project failures. As a result, we believe there is a growing need for differentiated and cost-effective tools such as TCAD, EDA and SIP solutions that enable rapid and reliable development of products containing these newly added materials and technologies.

Increasing semiconductor manufacturing and development costs. With each reduction in manufacturing process geometry comes a corresponding increase in manufacturing and development costs. According to International Business Strategies, Inc. ("IBS"), the average cost of designing a 28nm chip is $40.0 million, a 7nm chip is $217.0 million, and a 5nm chip is $416.0 million and a 3nm chip will cost up to $590.0 million. The COVID-19 pandemic and subsequent semiconductor shortage have emphasized the need for supply chain optimization, further accelerating investments in semiconductor foundries. The latest foundries being built are focused on leading-edge manufacturing process technology nodes, primarily driven by mobile applications, and require higher manufacturing yield efficiencies to offset the substantial development costs. As a result of IC technologies moving to sub 7nm process technology

nodes and the resultant increase in design difficulty and development costs, we believe the continuing shift will increase demand for TCAD solutions in the design technology optimization loop to deliver high yields, accelerate time-to-market and further reduce costs by reducing the need to run expensive and time-consuming manufacturing experiments. In addition, as these trends continue, EDA solutions that meet manufacturing requirements and can reduce costs associated with potential production delays and project failures, and SIP solutions which can accelerate time-to-market by providing silicon-proven blocks that address complex SoCs and enable new technologies, such as IoT and HPC, are being more readily adopted to mitigate costs and shorten time to market.

Increasing end market diversity. There has been a significant growth in semiconductor demand driven by new applications in emerging markets such as automotive, HPC and IoT. Performance and functionality requirements significantly vary across each market, which drives new design complexities and increases manufacturing and development costs. The increased diversity of applications in which semiconductors are being used, is leading to a need for more complex semiconductors to satisfy the needs of such applications, which requires further time and cost to develop such semiconductor solutions. As a result, there is a growing need to accelerate time-to-market and reduce costs by adopting complete TCAD, EDA and SIP solutions that enable customers to design, simulate, verify and analyze their products from the concept stage all the way up to complete product yield.

Our Markets

To contend with industry performance requirements and new applications, engineers, researchers, and other professionals rely extensively on TCAD, EDA software tools and SIP for designing and optimizing advanced ICs components. Reliance on software tools and SIP has increased in recent years as design challenges have become increasingly complex.

Rapid increase in complexity of SoCs has been the result of shrinking manufacturing process geometries, application specific customization to improve computing performance, and adoption of new materials for high voltage applications and photonics computing. These changes have led to increased investments in our research and development.

Our solutions address the following markets:

- *Power Electronics Market.* With the advent of high-volume manufacturing of new process technologies such as SiC and GaN, many OEMs and ODMs are producing electronic devices and systems that benefit from these technologies. GaN is being used for low power/voltage, high frequency applications and SiC is being used for high power and high voltage switching power applications. Since 2021, we have gained over one hundred new customers that utilized, and were early adopters of, our TCAD and EDA solutions to address their simulation/analysis needs for these new technologies at foundries, device and process levels all the way up to the system design for power management.
- *Memory Market.* The memory market for semiconductors is expected to continue growing at a fast pace, driven by large increases in the demand for dynamic random-access memory and flash memory products. We believe our TCAD solution, complemented by our device modeling tools and services, enables memory design teams to explore new materials and device architectures and achieve optimum power and performance for memory elements.
- *Display Market.* With the growth in adoption of mobile electronics such as smartphones, smart watches, wearables and virtual reality, or VR, gaming, flat-screen TVs, and more, we believe semiconductors used in display technologies are of increasing importance. According to Allied Market Research, the global display market was valued at $124.1 billion in 2022 and is projected to reach $242.1 billion by 2032, representing a CAGR of 6.8% from 2023 to 2032. Display manufacturers are continuing to make large investments in organic light-emitting diode, or OLED, and active-matrix organic light-emitting diode, or AMOLED, as well as new technologies such as quantum dot-LED and MicroLED. These trends are driving large changes in materials and fabrication methods for displays.
- *Automotive Market.* The semiconductor content in the automotive market is rapidly growing and evolving, driven by vehicle electrification, advances in electronic control, vehicle connectivity to the internet and autonomous driving. According to Allied Market Research, these innovations are expected to lead to significant increases in the amount spent on semiconductor content in electrification of cars, from $59.7 billion in 2022 to a projected $153.9 billion by 2032, representing a CAGR of 10.1% from 2023 to 2032. The new requirements of the automotive market are driving the increasing adoption of different kinds of semiconductor materials such as silicon, or SiC, gallium nitride, or GaN, and other wide bandgap materials to replace traditional silicon in high-voltage power devices. Companies designing or manufacturing SiC or GaN devices for the power device market can use TCAD simulations to replace design of experiments and enable flexible foundry selection by reducing costly and time intensive physical trial and error cycles. We can also provide specialized EDA solutions and foundational SIPs that our customers integrate into their IC design flow.

- *Internet of Things Market*. IoT devices require a complex SoC to perform sensing, collecting data, processing data and connecting to other IoT devices or a central server or cloud through several wireless solutions. At the edge of IoT, new devices with ultra-low energy demands will be needed to harvest sensor data across a wide variety of environments. We provide a comprehensive portfolio of SIPs and tools for the IoT market, including Standard Cell IP, library creation and characterization tools, ultra-low power static random-access memories, or SRAM, compilers, connectivity IOs, microprocessor SIPs, and advance micro controller bus architecture, or AMBA, SIP Cores and Subsystem.
- *5G/6G and Mobile Communications Markets*. IDC estimates that mobile phone semiconductor revenue will reach $191.9 billion in 2026, representing a CAGR of 4.0% from 2021 to 2026, and we believe the shift to 5G/6G will increase demand within our industry due to the complex nature and design cycle of 5G/6G chips. The adoption of more advanced process technology nodes for 5G mobile devices means longer circuit simulation times due to substantial increases in unwanted electrical components (parasitics) in nanometer geometries. We believe our parasitic reduction and analysis tools are unique in the market, complementing existing tool flows. These solutions are complemented by our circuit simulation tool for RF, Physical Verification tools and our full analog/custom flow for analog block creation.
- *High Performance Computing Market.* According to Allied Market Research, the global HPC chipset market was valued at $5.7 billion in 2022 and is projected to reach $29.4 billion by 2032, representing a CAGR of 17.9% from 2023 to 2032. Our foundational SIPs, memory compilers and library creation EDA tools have been adopted by our customers in HPC applications, which we believe allow our customers to gain a performance edge by using specialized circuits. We also provide modeling services and circuit libraries for cryogenic temperatures used in quantum computing and our TCAD software is being used to design photonics devices.

Industry Challenges

Design and manufacturing of SoCs is a time intensive and costly process. Complex AI-driven high performance computing, IoT class of SoCs, high performance memories, and Graphics Processing Unit, or GPU, class processors cost millions to billions of dollars to develop. The development, qualification, and manufacturing cycle for processors, memories and SoCs varies by market and may require lengthy development times. Similarly designing power systems utilizing new materials such as GaN and SiC adds additional costs, time to market and complexity to the systems that enable AI. The main challenges for the industry include:

- Rapid increase of design complexity for ICs and SoCs.
- Rapid increase of design cost and time for ICs and SoCs.
- Evolving manufacturing complexity processes, supply chains and yields.

Our Solutions and Competitive Strengths

We are a provider of TCAD, EDA and SIP solutions. We have decades of expertise developing the “technology behind the chip” and providing solutions that span from atoms to systems, from providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. We are not part of the supply chain for semiconductor manufacturing process, rather part of the value chain, the process of enhancing the value of the products moving along the supply chain, particularly in the early stages of R&D and design of semiconductors. Our primary strengths include:

- *Enabling companies to accelerate IC and photonics designs to efficiently optimize devices.* Companies use TCAD solutions to model the fabrication process and devices used in semiconductors, including low-geometry CMOS, memory and photonics, thus potentially accelerating the time to develop technology and ramping to yield, reducing the need to run wafers, and optimizing devices, all of which can contribute to lower development costs. We develop our EDA design and simulation solutions and SIP to be tailored to specific technologies and market segments, to enhance design flows that optimize Power, Performance and Area-Cost, or PPA.
- E*nabling growth industries like AI, automotive, and high-performance computing*: Our solutions enable our customers’ memory devices, power devices and display technologies to play a crucial role in AI and other advanced applications. Our customers’ power devices are used in designing power systems for things like computers, cars, and servers, enabling them to run smoothly and efficiently. Our display technologies make it easier to interact with technologies like AI, virtual reality (“VR”), and augmented reality (“AR”), improving user experiences.
- *Early mover advantage in vertical markets.* For decades we have focused on vertical markets, such as display and power, and have developed industrial and academic partnerships that enable our agile and fast

development of solutions aligned with market needs, such as our TCAD and EDA software solutions tailored for use in the display and power markets.

- *Leading point tools complement existing chip design flows.* Point tools include Jivaro (parasitic reduction, often included in circuit simulation), Viso (parasitics analysis, often included in extraction), and Varman (statistical variation analysis, used in advanced technologies for cell and memory characterization).
- *Production-ready, also known as silicon-proven, SIP for SoC design.* We provide production-ready SIP to our customers including standard cells, memory and I/O SIP that is developed in-house. In addition, we provide SIP and design management tools that enable SIP validation at SoC level, potentially streamlining design workflows.
- *Development and support of our customers' specific needs.* Our size and focus on specific market segments allow us to develop highly agile solutions and to work with our customers with a goal of developing solutions that meet their specific needs. Through our collaboration with our academic partners such as Purdue University and Christian Doppler Labs at the Vienna University of Technology, our TCAD and EDA tools are made ready for the next generation of processes, materials and systems.
- *Interoperable product Portfolio among TCAD, EDA and SIP.* Our tools have compatible databases across all of our products for seamless scaling of customer designs.
- *Cost-effective end-to-end solutions.* We offer complete solutions for device characterization, compact model development and circuit simulation; analog custom design, including schematics, layout, extraction and design rule check, or DRC, and process and device TCAD. We believe that our software solution pricing is competitive, which is derived from factors such as costs associated with research and development, inflation, licenses mix, number of licenses per product and number of years per TBL, as well as required license maintenance and services.

Based on a report conducted by Electronic System Design Alliance, in 2022 we ranked second worldwide in the TCAD market based on revenue. Our solutions, many of which can be used in tandem with our competitors' tools, have been adopted by some of the leading power devices and display providers. These customers use our design software to address certain design challenges. We believe that our positions in the TCAD and power devices and displays markets are strengthened by our EDA product line capabilities. We believe that we have a competitive advantage in these markets in part due to our investment in advanced semiconductor and photonics TCAD solutions, including investments in atomistic simulations, process etch, process deposition and design of experiments, or DOE, that are artificial intelligence, or AI, driven.

We have also developed software that certain of our customers have labelled as having best-in-class point tools capabilities. To our knowledge, standalone resistor and capacitor, or RC, parasitic reduction (Jivaro) is not offered by competitors and is included in products like circuit simulation. We believe that we have a strong market position in this market niche and that our solution is competitive to other solutions in the market. Also, in the highly competitive analog custom design market, particularly for more mature technologies, we believe that our willingness and capability of developing process design kits, or PDKs, for specific technologies has the potential to give us a natural advantage.

We believe that we provide competitive SIP solutions targeting certain end markets. Our SIP solutions are qualified and silicon-proven at certain foundries, which we believe enables our customers using such foundries to lower their cost of development and reduce their time to market compared to SIP solutions that are not silicon-proven at such foundries.

To our knowledge, we are one of only two EDA/TCAD companies in the world that provide SIP to their customers. Unlike the non-EDA SIP companies, as an EDA company, we have open access to our own Analog Custom Design flow EDA software that we use for designing SIP for our customers. Further, we have developed SIP tools that not only automate generation and characterization of some of our SIPs, but also have SIP management tools as our product that we utilize to manage our SIP and customer SIPs.

Growth Strategy

To further our long-term growth and increase our market share, we have made initial investments in the following areas:

- *Focus on large, growing markets where we have cemented ourselves as a reliable solutions provider*. We seek to continue and expand our presence in the display, automotive semiconductor, memory device and IoT markets by capitalizing on the growth of our existing customers.
- *By increasing our Research and Development expenditures, we plan to expand our presence in established market segments*, which include fin field-effect transistor ("FinFET"), low-geometry CMOS technology, new

specialized SIP, fabrication technology process co-optimization, and photonics. Historically we have not participated materially in these markets.

- *Continue our history of strategic acquisitions to accelerate growth and expand our market footprint.* Historically, we have focused on acquisitions that provide us with technology (e.g., Purdue Atomics simulation tools, commercialized under our Victory Atomistic tools), technical talent, and revenue in new markets. We intend to continue to target acquisitions that allow us to expand our solutions portfolio to better service our customers' needs.
- *Leverage our technology in TCAD, EDA, SIP, and SIP management software*. We plan to continue to invest in the technology that differentiates us and where we can establish or expand our leadership position, such as TCAD for power devices, display, and photonics, simulation of large panels with complex device models, parasitic analysis and reduction, SIP management and fingerprinting, device characterization tools and services, and development of additional SIP.
- *Optimize our competitive advantage by addressing unique customer needs*. We pride ourselves on research and development agility, allowing us to design capabilities specific to customers' requirements and, where appropriate, integrate those capabilities into our software solutions.
- *Focus on a portfolio approach to the licensing and sale of our software platform*. We seek to differentiate ourselves through the breadth of our software and SIP offerings, addressing the full design cycle needs of our customers across applications and industries.
- *Expand our customer base through increased investment in sales and marketing.* We believe our serviceable market is under penetrated and that we can expand our customer base by increasing our marketing and sales resources, particularly in growing segments such as automotive and IoT.
- *Establish, maintain and expand relationships with key technology providers and academic partners*. We maintain successful relationships with SIP providers, foundries, design service companies, EDA companies, our commercial customers and academia. We plan to continue to expand our ecosystem to maximize our reach, integrate into established flows and offer world-class solutions.

Products and Technology

We are a provider of TCAD software, EDA software and SIP, and also provide general engineering and research support to serve our target markets. Within our TCAD, EDA, and SIP product lines, we offer a multitude of products and offerings to efficiently develop new semiconductor processes and devices.

TCAD Solutions and Products

TCAD software solutions, including our offerings, are used to help reduce the time and manufacturing cycles spent to develop semiconductor technologies and help reduce the costs during development cycles. TCAD is part of a design technology co-optimization, or DTCO, flow that is intended to improve designs across multiple domains (Layout, Process, Device, SPICE and RC extraction). Typical applications include:

- physical etch and deposition process simulation;
- calibration of doping profiles and metal oxide semiconductor, or MOS, bipolar transistors;
- modeled effects (including self-heating and thermal gradients for power device and thin-film transistor, or TFT);
- photonics simulation for solar cell, charge-coupled device, or CCD, complementary metal oxide semiconductor image sensor, or CIS, TFT, liquid crystal display, or LCD and OLED using ray tracing, finite-difference time domain, or FDTD, and timing memory, or TMM;
- single event effect and total dose simulation; and
- stress simulation.

We also offer TCAD modeling services that provide a solution for customers who have unique semiconductor device modeling requirements, but do not have the time or resources to operate TCAD software in-house.

EDA Software and Modeling Services

Our EDA software solutions cover multiple areas of analog/mixed-signal/RF circuit simulation, custom IC CAD and interconnect modeling, including support for CMOS, bipolar, diode, junction-gate field-effect transistor, or JFET, silicon on insulator, or SOI, TFT, high-electron mobility transistor, or HEMT, insulated-gate bipolar transistor, or IGBT, resistor and capacitor models. We also provide complete SPICE modeling services for the semiconductor industry, ideally suited to either complement in-house SPICE modeling capabilities when time is critical, or to provide complete SPICE modeling services for occasional needs.

SIP and EDA Software and Design Services

We provide software that optimizes and re-targets standard cell libraries. Automated tools improve productivity by automating standard cell library designs that would otherwise need to be done manually, sometimes by tens of designers. In addition, we provide automated standard cell library characterization tools that replace manual and labor-intensive characterization of standard cells.

Our full-featured standard cell libraries have demonstrated maximal density and routing performance. As a standard feature, all industry standard views (circuit description language, or CDL netlist, library exchange front, or LEF, graphic data system II, or GDSII, Liberty, parasitic extraction, or PEX Spice netlist, Verilog, very high speed integrated circuit hardware description language, or VITAL, electronic design interchange format, or EDIF and others) are provided from a consistent database.

SIP Management Tools and SIP

SIP and SoC Management Software. Our SIP and SoC Management Software (IP Vault) helps teams of designers to manage (release, revision control and contracts) and collaborate amongst the internal team, the SIP providers, and customers. IP Vault also provides the ability for the team to authenticate SIP blocks from various providers and also authenticate and fingerprint the chip that utilize these SIP blocks to verify that the correct SIP is being used in an SoC.

Silicon-Proven Soft IP Blocks. Our silicon-proven Soft IP blocks are embedded in SoCs and ICs in our targeted markets of automotive, IoT, wireless and High-performance Computing.

Fab Technology Co-Optimization, or FTCO™

We have combined our expertise in semiconductor technologies with machine learning and data analysis to develop an artificial intelligence-based solution named fab technology co-optimization, or FTCO™, for wafer level fabrication facilities. FTCO utilizes manufacturing data to perform statistical and physics-based machine learning software simulations to create a computer model of a wafer, which we call the “digital twin” of the wafer, in order to simulate the fabrication of wafers.

Recent Developments

Preliminary Results for the Three Months Ended March 31, 2024 (Unaudited)

We have not yet completed our closing procedures for the three months ended March 31, 2024. Presented below are certain estimated preliminary unaudited financial results for the three months ended March 31, 2024. These ranges are based on the information available to us at this time. We have provided estimated ranges, rather than specific amounts, because these results are preliminary and subject to change. These ranges reflect our management’s best estimate of the impact of events during the quarter.

These estimates should not be viewed as a substitute for our interim unaudited condensed consolidated financial statements prepared in accordance with GAAP. Accordingly, you should not place undue reliance on these preliminary financial results. For example, during the course of the preparation of the respective financial statements and related notes, additional items may be identified that would require material adjustments to be made to the preliminary estimated results presented below. There can be no assurance that these estimates will be realized and these estimates are subject to risks and uncertainties, many of which are not within our control. These estimated preliminary results should be read together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Risk Factors,” “Special Note Regarding Forward-Looking Statements” and our audited consolidated financial statements and the related notes thereto.

All of the data presented below has been prepared by and is the responsibility of management. Neither our independent registered public accounting firm, Moss Adams LLP, nor any other independent accountants, have audited, reviewed, compiled or performed any procedures with respect to the estimated preliminary financial results contained herein. Accordingly, Moss Adams LLP does not express an opinion or any other form of assurance with respect thereto.

The following includes our unaudited preliminary estimated selected financial results as of and for the three months ended March 31, 2024:

	Three Months Ended March 31,	
	2023 (Actual)	2024 (Estimated)

			(Low)	(High)
			(unaudited) (in millions)	
Revenue	$	14.3	$	$
Gross Profit	$	12.3	$	$
Operating Income	$	1.5	$	$

We expect unaudited preliminary estimated revenue for the three months ended March 31, 2024 will be approximately $ million to $ million, as compared to $14.3 million for the same period in 2023. The unaudited preliminary estimated increase in revenue from the three months ended March 31, 2023 to the three months ended March 31, 2024 is primarily due to increased demand for TCAD and EDA tools partially offset by decrease in IP sales. We expect unaudited preliminary estimated gross profit will be approximately $ million to $ million, as compared to $12.3 million for the same period in 2023. The unaudited preliminary estimated increase in gross profit from the three months ended March 31, 2023 to the three months ended March 31, 2024 is primarily due to the estimated increase of TCAD and EDA tool sales partially offset by decrease in IP sales. We expect unaudited preliminary estimated operating income will be approximately $ million to $ million, as compared to $1.5 million for the same period in 2023. The unaudited preliminary estimated increase in operating income from the three months ended March 31, 2023 to the three months ended March 31, 2024 is primarily due to higher gross profit from the estimated increase of TCAD and EDA tool sales, partially offset by a preliminary unaudited estimated increase in operating expenses. The estimated increase in operating expenses was primarily due to higher sales and marketing expenses.

Risk Factors Summary

There are a number of risks that you should consider before making an investment decision regarding this offering. These risks are discussed more fully in the section entitled “Risk Factors” following this prospectus summary. If any of these risks actually occur, our business, financial condition and results of operations could be materially and adversely affected. In such case, the trading price of our common stock would likely decline, and you may lose all or part of your investment. These risks include, but are not limited to, the following:

- We face significant competition from larger companies as well as from third-party providers who may deploy their resources to develop IP solutions internally.
- Our operating results are subject to significant fluctuations and, as a result, period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indicators of future performance.
- Our interim results of operations may be difficult to predict as a result of seasonality.
- Substantial, prolonged economic downturns in key industrial sectors and in major economic regions in which we operate, including China, may result in reduced software solutions sales and lower revenue growth.
- The success of our business depends on sustaining or growing our software license revenue and our maintenance and service revenue and the failure to increase such revenue would lead to a material decline in our results of operations.
- We also depend on growth in the semiconductor and photonics industries and in the end markets that use our products. Any slowdown in the growth of these industries and end markets could harm our business.
- If we are unable to deliver new and innovative software solutions or software license enhancements ahead of rapid technological changes in the market, our revenues could be materially adversely affected.
- We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results.
- Our international sales and operations constitute a substantial portion of our revenue and business operations and could be negatively affected by disruptions in international geographies caused by government actions, trade disputes, direct or indirect acts of war or terrorism, international political or economic instability or other similar events.
- A substantial portion of our revenue comes from our international sales channels, and we have significant operations in numerous international geographies. As such, any adverse fluctuations in exchange rates could adversely affect our performance.
- If we are unable to protect our proprietary technology and inventions through patents and other intellectual property rights, our ability to compete successfully and our financial results could be adversely impacted.
- Our success depends on the interoperability of our software solutions with our customers’ intended use cases and with products and services of other companies, including our competitors.

- If our information technology systems, or those of third parties upon which we rely, or our data are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to, regulatory investigations or actions, litigation, fines and penalties, disruptions of our business operations, reputational harm, loss of revenue or profits, and other adverse consequences.
- Adverse developments affecting the financial services industry could adversely affect our liquidity, financial condition and results of operations, either directly or through adverse impacts on certain of our vendors and customers.
- We may not realize the anticipated benefits of our acquisitions or investments, our business could be disrupted because of acquisitions or investments and, depending on how we finance such acquisitions, we could use significant amounts of cash.
- We may not be able to continue to obtain licenses to third-party software and intellectual property on reasonable terms or at all, which may disrupt our business and harm our financial results.
- Any dispute regarding our intellectual property may require us to indemnify customers, the cost of which could harm our business.
- As long as we are a controlled company, your ability to influence matters requiring stockholder approval will be limited, and the interests of our controlling shareholder may conflict with or differ from your interests as a stockholder.
- Pending or future investigations or litigation could have a material adverse effect on our results of operations and our stock price.
- We have identified a material weakness in our internal control over financial reporting. If our remediation measures are ineffective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to report our financial condition or results of operations accurately or on a timely basis, prevent fraud or file our periodic reports in a timely manner and may incur additional costs to remediate, all of which may adversely affect investor confidence in us and our reported financial information and, as a result, the value of our common stock.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

As a company with less than $1.235 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include, but are not limited to:

- being permitted to include only two years of consolidated financial statements and only two years of related “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus;
- an exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, on the design and effectiveness of our internal controls over financial reporting;
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and financial statements;
- reduced disclosure obligations regarding executive compensation arrangements; and
- exemptions from the requirements of submitting certain executive compensation matters to stockholder advisory votes, such as “say-on-pay,” “say-on-frequency” and “say-on-golden parachutes,” and the correlation between executive compensation and performance and comparisons of the chief executive officer’s compensation to our median employee compensation.

We have elected to take advantage of certain of these reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of some or all of these reduced reporting and other requirements in the future. As a result, the information we provide to our stockholders may be different than the information you might receive from other public companies in which you hold equity interests.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period, provided in Section 13(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, for adopting new or revised accounting standards. As a result, we will be permitted to delay the adoption of new or revised accounting standards until such time as those standards would otherwise apply to private companies. We have elected to take advantage of this extended transition period for complying with new or revised accounting standards until the earlier of the date we (i) are no longer an emerging growth company; or (ii) affirmatively and irrevocably opt out of this extended transition period. As a result, our consolidated financial statements and the reported results of operations contained therein may not be directly comparable to those of other public companies.

We may take advantage of the foregoing provisions until the last day of our fiscal year following the fifth anniversary of the completion of this offering or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earliest of: (i) the last day of the first fiscal year in which our annual gross revenues are $1.235 billion or more; (ii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities; or (iii) the date on which we are deemed to be a "large accelerated filer," which will occur as of the end of any fiscal year in which we (x) have an aggregate market value of our common stock held by non-affiliates of $700.0 million or more as of the last business day of our most recently completed second fiscal quarter, (y) have been required to file annual and quarterly reports under the Exchange Act, for a period of at least 12 months and (z) have filed at least one annual report pursuant to the Exchange Act.

We qualify as a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as the market value of our voting and non-voting common stock held by non-affiliates is less than $250 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

As a result, the information in this prospectus and that we provide to our investors in the future may be different than what you might receive from other public reporting companies.

For risks related to our status as an emerging growth company and a smaller reporting company, see "Risk Factors—General Risk Factors and Risks Related to Being a Public Company—We are an "emerging growth company" and a "smaller reporting company" and any decision on our part to comply with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors."

Corporate Information

We were incorporated in Delaware in November 2009. Our principal executive offices are located at 4701 Patrick Henry Drive, Building #23, Santa Clara, CA 95054. Our telephone number is (408) 567-1000, and our website address is www.silvaco.com. The information contained on, or that can be accessed through, our website is not incorporated by reference in this prospectus and does not form a part of this prospectus. You should not consider information contained on our website to be part of this prospectus in deciding whether to purchase shares of our common stock.

THE OFFERING

Common stock offered by us	shares of common stock.
Option to purchase additional shares of common stock	shares of common stock.
Common stock to be outstanding after this offering	shares of common stock (shares of common stock if the underwriters exercise their option to purchase additional shares in full).
Controlled company	Upon completion of this offering, we will be a "controlled company" within the meaning of the listing rules of Nasdaq. After the closing of this offering, our controlling stockholder will control us and will have, among other things, the ability to approve or disapprove substantially all transactions and other matters requiring approval by stockholders, including the election of directors. See the section titled "Management—Director Independence and Controlled Company Exemption."
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $ million (or approximately $ million if the underwriters exercise their option to purchase additional shares in full), based on an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering primarily for general corporate purposes, including working capital, selling and marketing activities, research and product development, general and administrative matters, the repayment of outstanding debt, and capital expenditures. We also intend to use a portion of the net proceeds from this offering to repay (i) the outstanding balance of our $4.0 million line of credit, or the 2022 Credit Line, from which we have drawn down $2.0 million as of December 31, 2023, payable to Katherine S. Ngai-Pesic, our controlling stockholder and the chair of our board of directors, or Ms. Ngai-Pesic and (ii) the outstanding balance of our $5.0 million loan agreement with East West Bank, or the East West Bank Loan, for which $ million was outstanding as of , 2024. If we elect, at our option, to satisfy the anticipated tax withholding and remittance obligations pursuant to the Optional RSU Net Settlement (as defined below) and pay the anticipated tax withholding and remittance obligations in lieu of applicable holders of RSUs selling shares underlying such RSUs in the open market to cover such tax obligations, a portion of the proceeds would be used to make such payments. We also may use a portion of the net proceeds to acquire complementary businesses, products, services, or technologies. However, we do not have agreements or commitments for any specific acquisitions at this time. See "Use of Proceeds."

Risk factors	You should read the section titled "Risk Factors" and the other information included in this prospectus for a discussion of certain factors to consider carefully before deciding to purchase any shares of our common stock.
Proposed Nasdaq trading symbol	"SVCO"

Unless otherwise indicated, the number of shares of our common stock to be outstanding after this offering is based on shares of common stock (after giving effect to shares to be issued in connection with the RSU Settlement (as defined below)) outstanding as of December 31, 2023, and excludes:

- shares of our common stock subject to the settlement of restricted stock units, or RSUs, outstanding as of December 31, 2023 granted under our 2014 Stock Incentive Plan, or the 2014 Plan, for which the liquidity-based vesting condition, or the Liquidity Event Requirement, will be satisfied upon the completion of this offering, but for which the time-based vesting condition, or the Time-Based Requirement (i) was not satisfied on or before December 31, 2023, or (ii) has not accelerated prior to December 31, 2023 (the Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated on or before, or in connection with, the closing of this offering but after December 31, 2023, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement, as defined below);
- shares of our common stock subject to the settlement of RSUs granted subsequent to December 31, 2023 under the 2014 Plan for which the Liquidity Event Requirement will be satisfied upon the completion of this offering (the Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated in connection with the closing of this offering, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement, as defined below);
- shares of our common stock reserved for future issuance under our 2024 Stock Incentive Plan, or the 2024 Plan, which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2024 Plan and any reserved shares not issued or subject to outstanding awards under the 2014 Plan after the effective date of the 2024 Plan that are subsequently forfeited or terminated, all of which shares shall become available for issuance under the 2024 Plan; and
- shares of our common stock reserved for future issuance under our 2024 Employee Stock Purchase Plan, or the ESPP, which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

Unless otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the completion of this offering;
- a -for- reverse split of our common stock, which we effected on , 2024;
- no settlement or termination of unvested and outstanding RSUs after December 31, 2023, other than in connection with the RSU Settlement, as described below;
- the issuance of shares of common stock upon the completion of this offering from the settlement of RSUs outstanding as of December 31, 2023 issued under the 2014 Plan for which the Liquidity Event Requirement will be satisfied upon the completion of this offering and the Time-Based Requirement (i) was satisfied on or before December 31, 2023 or (ii) will be accelerated in connection with the completion of this offering. We refer to this as the RSU Settlement;
  - in addition, for (a) RSUs outstanding as of December 31, 2023, for which the Liquidity Event Requirement will be satisfied upon the completion of this offering and for which the Time-Based Requirement is anticipated to be satisfied on or before the closing of this offering but after December 31, 2023 and (b) RSUs granted after December 31, 2023 for which the Liquidity Event Requirement will be satisfied upon the completion of this offering and for which the Time-Based Requirement will be satisfied or accelerated in connection with the closing of this offering, the issuance of an aggregate of shares of common stock upon the vesting and settlement of such RSUs. We refer to this as the Additional RSU Settlement. However, except as otherwise indicated, the information in this prospectus does not assume the vesting of these additional RSUs and the related issuance of these additional shares of common stock. See "Executive Compensation—Agreements with Our Named Executive Officers and Potential Payments Upon Termination or Change of Control—Executive Severance Plan" and "Management—Non-Employee Director Compensation" for additional information

regarding the acceleration of the Time-Based Requirement for certain RSUs of executive officers, senior management and directors;

- Further, we may, at our option, elect for the net settlement of any portion of the RSU Settlement or the Additional RSU Settlement to satisfy a portion or all of the applicable RSU holders' associated estimated tax withholding and remittance obligations, which if net settled in full, after giving effect to the withholding of an aggregate of shares of common stock and of shares of common stock for the RSU Settlement and the Additional RSU Settlement, respectively (based on the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and an assumed blended % tax withholding rate), would result in the net issuance of an aggregate of shares of common stock and an aggregate of shares of common stock in connection with the RSU Settlement and the Additional RSU Settlement, respectively. We refer to this optional net settlement of any portion of the RSU Settlement and the Additional RSU Settlement as the Optional RSU Net Settlement. If we elect to net settle the RSU Settlement and the Additional RSU Settlement in full, the Optional RSU Net Settlement would result in an estimated cash payment of $ for the estimated tax withholding and remittance obligations. Except as otherwise indicated, the information in this prospectus does not assume the Optional RSU Net Settlement; and
- no exercise by the underwriters of their option to purchase up to additional shares of our common stock.

SUMMARY CONSOLIDATED FINANCIAL DATA

The summary consolidated statements of operations data presented below for the years ended December 31, 2022 and 2023 and the summary balance sheet data as of December 31, 2023 presented below are derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statements of operations data presented below for the year ended December 31, 2021 are derived from our audited consolidated financial statements, which are not included in this prospectus. The following summary consolidated financial data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus. The summary financial data included in this section are not intended to replace our financial statements and related notes thereto included elsewhere in this prospectus and are qualified in their entirety by our financial statements and related notes thereto included elsewhere in this prospectus. Historical results are not necessarily indicative of the results that may be expected for any period in the future.

Consolidated Statements of Operations Data	Year Ended December 31,		
	2021	2022	2023
	(in thousands, except share and per share data)		
Revenue:			
Software license revenue	$ 29,687	$ 34,411	$ 39,331
Maintenance and service	12,276	12,063	14,915
Total revenue	41,963	46,474	54,246
Cost of revenue	8,653	8,887	9,354
Gross profit	33,310	37,587	44,892
Operating expenses:			
Research and development	13,539	12,447	13,170
Selling and marketing	10,331	10,222	12,707
General and administrative	12,976	16,231	17,881
Impairment charges	—	560	—
Total operating expenses	36,846	39,460	43,758
Operating income (loss)	(3,536)	(1,873)	1,134
Gain on debt extinguishment	2,278	—	—
Interest and other expense, net	(317)	(355)	(624)
Income (loss) before income tax provision	(1,575)	(2,228)	510
Income tax provision	270	1,700	826
Net loss	$ (1,845)	$ (3,928)	$ (316)
Net loss per share attributable to common stockholders[(1)]:			
Basic and diluted	$ (0.05)	$ (0.10)	$ (0.01)
Weighted average shares used in computing per share amounts[(1)]:			
Basic and diluted	40,000,000	40,000,000	40,000,000
Pro forma net loss attributable to common stockholders, basic and diluted (unaudited)[(2)]:			$ (0.34)
Weighted-average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[(2)]:			44,470,786

(1) See Note 2 to our financial statements as of, and for the years ended December 31, 2022 and 2023 included elsewhere in this prospectus for further information on the calculations of net income (loss) per share attributable to common stockholders.

(2) Basic and diluted unaudited pro forma net loss per share attributable to common stockholders for the year ended December 31, 2023 gives effect to the vesting and stock-based compensation expense related to RSUs subject to both the Time-Based Requirement and the Liquidity Event Requirement, for which the Liquidity Event Requirement will be satisfied in connection with this offering, as further

described in Note 2 and Note 11 to our consolidated financial statements as of, and for the year ended December 2023. The following table summarizes our unaudited pro forma net loss per share for the year ended December 31, 2023:

	Year Ended December 31, 2023
	(in thousands, except share and per share data)
Numerator:	
Net loss attributable to common stockholders	$ (316)
Pro forma stock-based compensation expense related to RSUs for which the vesting conditions will be satisfied in connection with this offering [1]	14,715
Pro forma net loss attributable to common stockholders	$ (15,031)
Denominator:	
Weighted average shares used to compute net loss per share attributable to common stockholders, basic and diluted	40,000,000
Pro forma adjustment to reflect vesting of RSUs for which the vesting conditions will be satisfied in connection with this offering[2]	
Weighted-average shares used to compute pro forma net loss per share attributable to common stockholders, basic and diluted[3]	
Pro forma net loss per share attributable to common stockholders, basic and diluted	

(1) Reflects stock-based compensation expense to be recognized related to RSUs for which the Liquidity Event Requirement will be satisfied upon the completion of this offering, and for which the Time-Based Requirement was satisfied by the end of the period presented or will be accelerated upon the completion of this offering. See "Executive Compensation—Agreements with Our Named Executive Officers and Potential Payments Upon Termination or Change of Control—Executive Severance Plan" and "Management—Non-Employee Director Compensation."

(2) Reflects the issuance of shares of our common stock in connection with the RSU Settlement as if such issuances had occurred on December 31, 2023.

(3) Excludes 2,326,351 RSUs with respect to which the Time-Based Requirement was not satisfied as of December 31, 2023, and would not be accelerated upon the completion of this offering, because their effect would have been anti-dilutive for the periods presented.

Consolidated Balance Sheet Data	As of December 31, 2023		
	Actual	**Pro Forma [1][4]**	**Pro Forma as Adjusted [1][2][3][4]**
	(in thousands)		
Cash	$ 4,421	$	$
Accounts receivable, net of allowance for expected credit losses	4,006		
Contract assets, net of allowance for expected credit losses	14,999		
Working capital[5]	(4,105)		
Total assets	40,885		
Deferred revenue	12,953		
Total liabilities	31,483		
Additional paid-in capital	—		
Retained earnings	11,390		
Total stockholders' equity	9,402		

(1) The pro forma column gives effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering, (ii) the RSU Settlement, and (iii) stock-based compensation expense of approximately $ million related to RSUs subject to the RSU Settlement reflected as an $ million increase to additional paid-in capital and a $ million decrease to retained earnings, as further described in Note 12 to our consolidated financial statements included elsewhere in this prospectus.

(2) The pro forma as adjusted column gives effect to (i) the pro forma adjustment discussed in footnote (1) above, (ii) giving further effect to the sale of shares of our common stock by us in this offering at an assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (iii) the repayment of the 2022 Credit Line following the completion of this offering. Excluded from the table above are borrowings on our East West Bank Loan, which was undrawn at December 31, 2023, but for which $ million has been drawn as of , 2024 and is expected to be outstanding at the time of the initial public offering. Such amounts are anticipated to be repaid from the proceeds raised from the initial public offering.

(3) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) each of the amount of cash and cash equivalents, working capital (deficit), total assets, additional paid-in capital and total stockholders' equity by approximately $ million, assuming the number of shares offered, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering costs payable by us. Each 1.0 million increase (decrease) in the

number of shares offered as set forth on the cover page of this prospectus, would increase (decrease) each of our cash and cash equivalents, working capital (deficit), total assets, additional paid-in capital and total stockholders' equity by approximately $ million, assuming no change in the assumed initial public offering price, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(4) The pro forma and pro forma as adjusted columns in the table above do not include the effects of the Additional RSU Settlement. The Additional RSU Settlement would result in an estimated additional stock-based compensation expense of $ million, reflected as an additional increase to additional paid-in capital and decrease to retained earnings. The Optional RSU Net Settlement, if utilized at our option in full, would result in a $ million decrease in cash and decrease in additional paid-in capital.

(5) Working capital is defined as current assets less current liabilities.

Key Operating Indicators and Non-GAAP Financial Measures

	Year Ended December 31,		
	2021	2022	2023
	(dollars in millions)		
Bookings	$ 47.3	$ 49.7	$ 58.1
Non-GAAP operating income (loss)	$ (1.3)	$ 2.3	$ 4.4
Non-GAAP net income (loss)	$ (1.7)	$ 0.4	$ 3.4

We define a booking as a signed contract and related purchase commitment from a customer, based on the value set forth in a purchase order. We believe bookings are a useful metric to measure the success of customer sales and provide an indication of trends in our operating results that are not necessarily reflected in our revenue, because our revenue recognition is based on the later satisfaction of our customer obligations, and not of the sales to customers at the time of sale. Reported bookings may be subject to adjustments and potential cancellations prior to the satisfaction of our customer obligations.

We report our financial results in accordance with U.S. generally accepted accounting principles, or GAAP. However, our management believes that non-GAAP operating income (loss) and non-GAAP net income (loss) provide investors with additional useful information in evaluating our performance. These financial measure are not required by or presented in accordance with GAAP. We believe, however, that these non-GAAP financial measures, when taken together with our financial results presented in accordance with GAAP, provide meaningful supplemental information regarding our operating performance and facilitates internal comparisons of our historical operating performance on a more consistent basis by excluding certain items that may not be indicative of our business, results of operations or outlook. In particular, we believe non-GAAP operating income (loss) and non-GAAP net income (loss) provide useful supplemental information to investors and others in understanding and evaluating our results of operations, as well as provide a useful measure for period-to-period comparisons of our business performance.

Certain items are excluded from our non-GAAP operating income (loss) and non-GAAP net income (loss) because these items are non-cash in nature or are not indicative of our core operating performance, and render comparisons with prior periods and competitors less meaningful. We adjust operating income (loss) and net income (loss) for these items to arrive at non-GAAP operating income (loss) and non-GAAP net income (loss) because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structure and the method by which the assets were acquired. For further explanation of the uses and limitations of these measures and a reconciliation of our non-GAAP operating income (loss) and non-GAAP net income (loss) to the most directly comparable GAAP measure, operating income (loss) and net income (loss), please see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Indicators and Non-GAAP Financial Measures."

This key performance indicator and non-GAAP financial measures are presented for supplemental informational purposes only, should not be considered a substitute for financial information presented in accordance with GAAP and may differ from similarly titled metrics or measures presented by other companies.

The following table reconciles operating income (loss) to non-GAAP operating income (loss).

	Year Ended December 31,		
	2021	2022	2023
	(in thousands)		
Operating income (loss)	$ (3,536)	$ (1,873)	$ 1,134
Add:			
Acquisition-related litigation costs[1]	1,148	1,340	1,707
Executive severance[2]	280	—	—
Amortization of acquired intangible assets[3]	808	316	339
IPO preparation costs[4]	—	1,429	1,221
Regulatory compliance costs[5]	—	523	—
Impairment charges[6]	—	560	—
Non-GAAP operating income (loss)	$ (1,300)	$ 2,295	$ 4,401

The following table reconciles net loss to non-GAAP net income (loss).

	Year Ended December 31,		
	2021	2022	2023
	(in thousands)		
Net loss	$ (1,845)	$ (3,928)	$ (316)
Add:			
Acquisition-related litigation costs[1]	1,148	1,340	1,707
Executive severance[2]	280	—	—
Amortization of acquired intangible assets[3]	808	316	339
IPO preparation costs[4]	—	1,429	1,221
Regulatory compliance costs[5]	—	523	—
Impairment charges[6]	—	560	—
Change in fair value of contingent consideration[7]	295	(211)	325
Foreign exchange (gain) loss	(93)	525	335
Gain on debt[8]	(2,278)	—	—
Income tax effect of non-GAAP adjustments[9]	—	(137)	(169)
Non-GAAP net income (loss)	$ (1,685)	$ 417	$ 3,442

(1) Reflects litigation-related expenses incurred in connection with our acquisitions.
(2) Includes executive severance which occurred in connection with management changes.
(3) Reflects the amortization of intangible assets attributable to our acquisitions.
(4) Reflects one-time costs including third-party professional services fees and costs incurred in connection with, and in preparation for, this offering. Such costs do not include those costs that were considered direct and incremental to the offering and therefore capitalized as deferred transaction costs.
(5) Represents certain legal fees and costs associated with export compliance that are considered non-recurring.
(6) Reflects impairment charges related to certain intangible assets assumed through our acquisition of PolytEDA Cloud LLC, or PolytEDA. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Components of Results of Operations—Impairment Charges."
(7) Includes the change in fair value of contingent consideration recorded in connection with our acquisitions.
(8) Reflects one-time loan forgiveness for our unsecured loan under the Paycheck Protection Program in June 2021.
(9) Reflects the increase in income tax expenses due to Non-GAAP adjustments.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all other information in this prospectus, including our audited consolidated financial statements and the related notes and the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," before investing in our common stock. If any of the following risks are realized, in whole or in part, our business, financial condition, results of operations, and prospects could be materially and adversely affected. In that event, the price of our common stock could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business, financial condition, results of operations, and prospects. The risks described below, and statements found elsewhere in this prospectus, contain forward-looking statements. You should read the explanation of the qualifications and limitations on forward-looking statements discussed under the caption "Special Note Regarding Forward-Looking Statements" beginning on page 51.

Risks Related to Our Business and Industry

We face significant competition from larger companies as well as from third-party providers who may deploy their resources to develop IP solutions internally.

We are engaged in a competitive segment of the global semiconductor and photonics industries. Our competitive landscape is characterized by competition from companies that have greater resources than us. A variety of factors could adversely impact our ability to compete, including rapid technological change in our software solution design, customers that make purchase decisions based on a mix of factors of varying importance and continuous declines in average selling prices of our software solutions. We compete principally on the basis of technology, license quality and features, license terms, compatibility, reliability, interoperability among products and price and payment terms.

We compete against larger companies including Synopsys, Inc., or Synopsys, Coventor, Inc., a Lam Research company, Cadence Design Systems, Inc., or Cadence, Siemens EDA, Ansys, Inc., Arm Limited, and CEVA, Inc. Such companies have greater name recognition than us and possess substantial financial, technical, research and development and engineering resources that can be deployed so they can develop competing TCAD, EDA and SIP solutions. Varying combinations of these resources provide advantages to these competitors that enable them to influence industry trends and the pace at which industries adapt to these trends. A strong competitive response from one or more of our competitors to our marketplace efforts, or a shift in customer preferences to competitors' products, could result in increased pressure to lower our prices more rapidly than anticipated, increased selling and marketing expense, and/or market share loss. The consolidation of our competitors or collaboration among our competitors to deliver more comprehensive offerings than they could prior to consolidation may also impact our ability to compete effectively. To the extent our revenue is negatively impacted by competitive pressures and reduced pricing, our business could be harmed.

In addition, our ability to compete in our market is subject to a variety of factors, many of which are beyond our control. In particular, any of the below factors could significantly affect our ability to compete and could harm our business:

- Our ability to anticipate and lead critical software solution development cycles and technological shifts as driven by our target markets, to innovate rapidly and efficiently and to improve our existing solutions;
- Decisions by semiconductor companies and/or OEMs to develop IP internally, rather than license IP from outside vendors due to strategic changes, enhanced internal capability, budget constraints or excess engineering capacity;
- Our ability to maintain and improve upon our current research and development collaboration agreements;
- Whether any competitor substantially increases its engineering and marketing resources to compete with our software solutions;
- The challenges of developing, or acquiring externally developed, technology solutions that are adequate and competitive in meeting the rapidly evolving requirements of next-generation design challenges;
- Our ability to expand into established market segments;
- Our ability to compete on the basis of payment terms; and
- The potential effects of geopolitical conflicts, such as the ongoing trade disputes between the United States and China and Russia's invasion of Ukraine, including retaliatory and regulatory actions, on purchasing, development, sales and innovation responses and trends in response to such conflicts.

We may also be unable to reduce the cost of our software solutions sufficiently to enable us to compete with our competitors or other third-party providers who may deploy their resources to develop IP solutions internally. Our cost reduction efforts may not allow us to keep pace with competitive pricing pressures and could adversely affect our gross margins. To the extent we are unable to reduce the prices of our software solutions and remain competitive, our revenue will likely decline, resulting in further pressure on our gross margins, which could harm our business.

Our operating results are subject to significant fluctuations and, as a result, period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indicators of future performance.

The majority of our software license revenue is treated as point in time revenue at the start of the license period, so past revenue may not be indicative of the amount of revenue in any future period. Significant portions of our anticipated future revenue, therefore, will likely depend upon our success in attracting new customers or continuing or expanding our relationships with existing customers. However, revenue recognized from licensing arrangements vary significantly from period to period, depending largely on bookings recorded during a quarter, and is difficult to predict. In addition, as we expand our business into new markets, our licensing contracts may be smaller in volume but greater in value, which may result in further fluctuations in our software license revenue quarter to quarter. Our ability to succeed in our licensing efforts will depend on a variety of factors, including the market positioning, performance, quality, breadth and depth of our current and future IP and solutions as well as our sales and marketing success. Our failure to obtain future licensing customers would impede our future revenue growth and could materially harm our business.

Additionally, fluctuations may be caused by many other factors, including the timing of new software license releases or enhancements by us or our competitors, the license mix and timing of bookings and TBL renewals, software bugs or defects or other software solution quality problems, competition and pricing changes, customer booking or renewal deferrals in anticipation of new software solutions or enhancements, changes in demand for our software solutions, changes in operating expenses, changes in the mix of software license and maintenance and service revenue, timing of our collection of cash, personnel changes and general economic conditions.

Further, we and our customers are affected by general business and economic conditions in the United States and globally. These conditions include short-term and long-term interest rates, inflation, money supply, political issues, legislative and regulatory changes, including the imposition of new tariffs affecting our or our customers' products and services, fluctuations in both debt and equity capital markets and broad trends in industry and finance, all of which are beyond our control. Any adverse changes in general domestic and global economic conditions that may occur in the future, including any recession, economic slowdown or disruption of credit markets, may lead to lower demand for products that incorporate our solutions. Macroeconomic conditions that affect the economy and the economic outlook of the United States and the rest of the world, including inflation and changes in currency valuations, could adversely affect us, our customers and vendors, which could have a material adverse effect on our business, financial condition and results of operations.

As a result of these and other factors, you should not rely on the results of any prior interim or annual periods, or any historical trends reflected in such results, as indications of our future revenue or operating performance. Fluctuations in our revenue and operating results could cause our stock price to decline and, as a result, you may lose some or all of your investment.

Our interim results of operations may be difficult to predict as a result of seasonality.

Our results of operations also have fluctuated significantly as a result of seasonality. For example, new year celebrations in certain countries in Asia, summer holidays in Europe and the United States, and winter holidays globally have, in the past, resulted in a slowdown in demand for our software solutions in affected locations. The impact of this cyclicality on our business is evident in lower bookings, including software license renewals and revenue in the second and third quarters of certain years as compared to first and fourth quarters of that year. The seasonality of our business is also affected by our customers' research and development cycles. For example, our bookings generally increase when our customers' increase their research and development spend on their next generation products, which we traditionally see occur in the first quarter and last quarter of each year in part due to our customers' budgetary cycles. We may also be affected by additional seasonal trends in the future, particularly as our business continues to mature. Such seasonality may result from a number of factors, including a slowdown in our customers' procurement process during certain times of the year, both domestically and internationally, and customers choosing to spend remaining budgets shortly before the end of their fiscal years. Seasonality has in the past caused, and may cause in the future, fluctuations in our results of operations and financial metrics, and make forecasting our future results of operations and financial metrics more difficult.

Substantial, prolonged economic downturns in key industrial sectors and in major economic regions in which we operate, including China, may result in reduced software solution sales and lower revenue growth.

Our sales are based significantly on end user demand for our software solutions in the display, power devices, automotive, memory, HPC, IoT, and 5G/6G mobile markets. Many of these markets periodically experience economic declines. These economic declines may be exacerbated by other economic factors, such as the recent increase in global energy prices. These economic factors may adversely affect our business by extending sales cycles and reducing revenue.

Our customers supply semiconductor solutions to a wide spectrum of goods and services providers in all major economic regions. Our performance is materially impacted by general economic conditions and the performance of our customers. Our management team forecasts macroeconomic trends and developments and integrates them through long-range planning into budgets, research and development strategies and a wide variety of general management duties. To the extent that our forecasts are overly optimistic or overly pessimistic about the performance of an economy or sector, our performance may be hindered because of a failure to properly match corporate strategy with economic conditions.

Terrorist attacks, war and other increased global hostilities, including the ongoing conflicts between Russia and Ukraine and Israel and Hamas, pandemics, including the COVID-19 pandemic, and natural disasters have, at times, contributed to widespread uncertainty and speculation in the semiconductor markets. For example, 60% and 60% of our revenue was derived from customers in Asia for the years ended December 31, 2022 and 2023, respectively.

For each of the years ended December 31, 2022 and 2023, 23% of our revenue was derived from our China-based operations. China has been recently experiencing an economic slowdown, which, if continued, could adversely impact our revenue derived from China-based operations in future periods. Further, geopolitical disruptions among the United States and China could result in the suspension or delay of purchases of our software solutions by our customers in China, which could inhibit our ability to secure similar levels of revenue in the future from such customers or otherwise. See "—We face risks associated with doing business in China." Similar uncertainties and speculation may result in further economic contraction, resulting in the suspension or delay of purchases of our software solutions by our customers, which could harm our business, financial condition and results of operations.

The success of our business depends on sustaining or growing our software license revenue and our maintenance and service revenue and the failure to increase such revenue would lead to a material decline in our results of operations.

Our revenue consists of software license fees and other fees and royalties paid for access to our technologies and other maintenance and services we provide to our customers. Our success at continuing to derive revenue from existing customers requires that we continue to service their needs adequately and provide them with solutions that drive value for them. Our ability to secure and renew the software licenses from which our revenue is derived depends on our customers adopting our solutions and may require us to incur significant expenditures and dedicate engineering resources to the development or enhancement of our software licenses without assurance that our solutions will be licensed. If we incur such expenditures and fail to secure revenue from such customers, our results of operations may be adversely affected. If we fail to grow our software license revenue, we are likely to consequently fail to grow our maintenance and service revenue, which would further adversely affect our results of operation. Further, because of the significant costs associated with qualifying new suppliers, customers are likely to use the same or an enhanced version of solution from existing suppliers across a number of similar and successor products for a lengthy period of time. As a result, if we fail to sell our solutions to any particular potential new customer, we may lose the opportunity to make future sales of those solutions to that potential customer for a significant period of time, or at all, and we may experience an associated decline in revenue relating to those products.

From 2016 through 2023, we generated revenues from licensing a certain SIP to our customers, which we licensed from a third party. See "Business—Agreement with NXP." The license agreement relating to this SIP expired on October 30, 2023. During the years ended December 31, 2022 and 2023, we generated $4.2 million, and $4.5 million in software license revenue, respectively, from licensing this SIP to our customers. In connection with this license agreement, we recognized $2.1 million, and $2.0 million in royalty expense during the years ended December 31, 2022 and 2023, respectively. As of April 11, 2024, we amended the license agreement with NXP, which extended the term of the licensing agreement for an additional five years. However, during the period between October 30, 2023 and April 11, 2024, we experienced a decline in revenue associated with the expiration of the agreement with NXP. If in the future, we enter into additional licensing agreements with other third parties and are unable to extend the term of those licensing arrangements, we may experience an associated decline in revenue relating to those products.

We may not be able to maintain or expand sales to our significant customers for a variety of reasons, and our customers can stop incorporating or using our solutions, decline to renew their agreements or terminate their

agreements, often with limited notice to us and often with little or no penalty. The loss of any significant customers, a reduction in sales to any significant customers, a significant delay or negative development in our customers' product development plans, or our inability to attract new significant customers or secure new significant design wins, could negatively impact our business.

The cyclical nature of the semiconductor and photonics industries may limit our ability to maintain or improve our revenue.

The semiconductor and photonics industries are highly cyclical and are prone to significant downturns from time to time. Cyclical downturns can result from a variety of market forces including constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand, all of which can result in significant declines in semiconductor demand and thus demand for our software solutions. We have experienced downturns in the past and may experience such downturns in the future. For example, the industry experienced a significant downturn in connection with the most recent global recession in 2008, and further experienced a downturn in 2020 as a result of the COVID-19 pandemic.

These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Recently, downturns in the semiconductor and photonics industries have been attributed to a variety of factors, including the COVID-19 pandemic, ongoing trade disputes between the United States and China, weakness in demand and pricing for semiconductors across applications and shortages. Recent downturns have directly impacted our business, as has been the case with many other companies, suppliers, distributors and customers in the semiconductor and photonics industries and other industries around the world, and any prolonged or significant future downturns in the semiconductor and photonics industries could harm our business.

We also depend on growth in the semiconductor and photonics industries and in the end markets that use our products. Any slowdown in the growth of these industries and end markets could harm our business.

The growth of our TCAD, EDA and SIP markets are dependent on the semiconductor and photonics industries. A substantial portion of our business and revenue depends upon the commencement of new design projects by semiconductor manufacturers, systems companies and their customers. The increasing complexity of designs of or SoC, ICs, electronic systems and customers' concerns about managing costs, have previously led to, and in the future could lead to, a decrease in design starts and design activity in general. For example, in response to this increasing complexity, some customers may choose to focus on one discrete phase of the design process or opt for less advanced, but less risky, manufacturing processes that may not require new or enhanced design solutions. Demand for our software solutions and services could decrease and our financial condition and results of operations could be adversely affected if growth in the semiconductor and photonics industries slows or stalls, including due to the impact of inflation or a sustained global supply chain disruption. Inflation has accelerated in the United States and globally as a result of global supply chain issues, a rise in energy prices, and strong consumer demand. An inflationary environment can increase our cost of labor, energy and other operating costs and could also impact and reduce the number of customers who purchase our software solutions as credit becomes more expensive or unavailable.

Furthermore, many of our customers outsource the manufacturing of their semiconductor designs to foundries. Our customers also frequently incorporate third-party IP, whether provided by us or other vendors, into their designs to improve the efficiency of their design process. However, if we fail to optimize our EDA and SIP solutions for use with major foundries' manufacturing processes or major IP providers' products, or if our access to such foundry processes or third-party IP licenses is hampered, then our solutions may become less desirable to our customers, resulting in an adverse effect on our business and financial condition.

Our continued success will also depend in large part on general economic growth and growth within our target markets including the display, power devices, automotive, memory, HPC, IoT, and 5G/6G mobile markets. Factors affecting these markets could seriously harm our customers and/or end customers and, as a result, harm us, examples of which include:

- Reduced sales of our customers' and/or end customers' products;
- The effects of catastrophic and other disruptive events at our customers' and/or end customers' offices or facilities;
- Increased costs associated with potential disruptions to our customers' and/or end customers' supply chain and other manufacturing and production operations, including to ongoing supply chain issues caused by the current COVID-19 pandemic and similar disruptions that may occur in future;
- The deterioration of our customers' and/or end customers' financial condition;

- Delays and project cancellations as a result of design flaws in the products developed by our customers and/or end customers;
- The inability of our customers and/or end customers to dedicate the resources necessary to promote and commercialize their products;
- The inability of our customers and/or end customers to adapt to changing technological demands resulting in their products becoming obsolete; and
- The failure of our customers' and/or end customers' products to achieve market success and gain broad market acceptance.

Any slowdown in the growth of these end markets could harm our business.

If we are unable to deliver new and innovative software solutions or software license enhancements ahead of rapid technological changes in the market, our revenues could be materially adversely affected.

We operate in an industry generally characterized by rapidly changing technology and frequent new product introductions that can render existing products obsolete or unmarketable. A major factor in our future success will be our ability to anticipate technological changes and to develop and introduce, in a timely manner, enhancements to our existing software solutions to meet those changes. If we are unable to introduce new software solutions and to respond quickly to industry changes, our business, financial condition, results of operations and cash flows could be materially adversely affected.

The introduction and marketing of new or enhanced software solutions requires us to manage the transition from existing software licenses to minimize disruptions in customer purchasing patterns. There can be no assurance that we will be successful in developing and marketing, on a timely basis, new software solutions, or software license enhancements that our new software licenses will address the changing needs of the marketplace, or that we will successfully manage the transition from existing products. From time to time, we may agree to hold back certain of our software license enhancements for exclusive use of one or a small number of customers, which may limit our ability to timely adapt our broader software solutions range to meet technological innovation by our competitors or the needs of our other customers.

We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results.

To contend with industry performance requirements and new applications, engineers, researchers, and other professionals rely extensively on TCAD and EDA software tools to design and optimize advanced IC components. Reliance on TCAD and EDA software tools has increased in recent years as design challenges have become increasingly complex, which influences our development cycle and consequently our performance and results of operations. Additionally, shrinking manufacturing process geometries, application specific customization to improve computing performance, and adoption of new materials for high voltage applications and photonics computing has led to a rapid increase in the complexity of SoCs. We currently devote substantial resources to the research and development of new and enhanced software solutions. However, we may be required to devote more resources than anticipated to address requirements for specific target markets, new competitors, technological advances in the semiconductor and photonics industries or by competitors, our acquisitions, our entry into new markets, or other competitive factors. If we are required to invest significantly greater resources than anticipated without a corresponding increase in revenue, our operating results could decline. Additionally, our periodic research and development expenses may be independent of our level of revenue, which could negatively impact our financial results. We expect these expenses to increase in the foreseeable future as our technology development efforts continue, and there can be no guarantee that our research and development investments will result in software solutions that result in additional revenue.

We may also decide to increase our research and development investment to seize customer or market opportunities, which could negatively impact our financial results.

Consolidation among our customers and within the industries in which we operate may negatively impact our operating results.

A number of business combinations, including mergers, asset acquisitions and strategic partnerships, among our customers in the semiconductor and photonics industries have occurred over the last several years, and more could occur in the future. Consolidation among our customers could lead to fewer customers or the loss of customers, increased customer bargaining power or reduced customer spending on software and services. Consolidation among our customers could also reduce the demand for our software solutions and services if customers streamline research and development or operations, reduce purchases or delay purchasing decisions.

Reduced customer spending or the loss of a number of customers, particularly our large customers, could adversely affect our business, financial position and results of operations. In addition, we and our competitors from time to time acquire businesses and technologies to complement and expand our respective software solutions offerings. Consolidated competitors could have considerable financial resources, channel influence, and broad geographic reach, allowing them to engage in competition on the basis of software solution differentiation, pricing, marketing, services, support and more. If any of our competitors consolidate or acquire businesses and technologies that we do not offer, they may be able to offer a larger technology portfolio, additional support and service capability or lower prices, which could negatively impact our business and results of operations.

Our international sales and operations constitute a substantial portion of our revenue and business operations and could be negatively affected by disruptions in international geographies caused by government actions, trade disputes, direct or indirect acts of war or terrorism, international political or economic instability or other similar events.

A significant portion of our revenue comes from outside the United States. For example, for the years ended December 31, 2022 and 2023, 68%, and 70%, respectively, of our revenue was from international customers. Risks inherent in our international business activities include imposition of government controls, export license requirements, restrictions on the export of critical technology, products and services, political and economic instability, trade restrictions, changes in tariffs and taxes, difficulties in staffing and managing international operations, longer accounts receivable payment cycles and the burdens of complying with a wide variety of foreign laws and regulations. Effective patent, copyright and trade secret protection may not be available in every foreign country in which we sell our software solutions and services. Our business, financial condition, results of operations and cash flows could be materially adversely affected by any of these risks.

In addition, we have offices globally with our sales and research and development being conducted in offices located in numerous geographical locations. Moreover, conducting business outside the United States subjects us to a number of additional risks and challenges, including:

- Changes in a specific country's or region's political, regulatory or economic conditions;
- Our ability to maintain our offices and/or operations in countries or regions experiencing military, political or social instability;
- A pandemic, epidemic or other outbreak of an infectious disease, including the current COVID-19 pandemic, which may cause us or our distributors, vendors and/or customers to temporarily or completely suspend our or their respective operations in the affected city or country;
- Compliance with a wide variety of domestic and foreign laws and regulations (including those of municipalities or provinces where we have operations) and unexpected changes in those laws and regulatory requirements, including uncertainties regarding taxes, social insurance contributions and other payroll taxes and fees to governmental entities, tariffs, quotas, export controls, export licenses and other trade barriers;
- Unanticipated restrictions on our ability to sell to foreign customers where sales of software solutions and the provision of services may require export licenses or are prohibited by government action, unfavorable foreign exchange controls and currency exchange rates;
- Imposition of tariffs and other barriers and restrictions, including trade tensions such as U.S.-China trade tensions;
- Potential for substantial penalties and litigation related to violations of a wide variety of laws, treaties and regulations, including labor regulations, export control, sanctions and anti-corruption regulations (including the U.S. Foreign Corrupt Practices Act of 1977, as amended, and the U.K. Bribery Act);
- Difficulties and costs of staffing and managing international operations across different geographic areas, time zones and cultures;
- Changes in diplomatic and trade relationships.
- Potential political, legal and economic instability, armed conflict, and civil unrest in the countries in which we and our customers are located;
- Difficulty and costs of maintaining effective data security;
- Inadequate protection of our IP;
- Nationalization and expropriation;
- Restrictions on the transfer of funds to and from foreign countries, including withholding taxes and other potentially negative tax consequences;
- Unfavorable and/or changing foreign tax treaties and policies;
- Increased exposure to general market and economic conditions outside of the United States; and

- Currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we choose to do so in the future.

Additionally, countries in certain international regions in which we operate have continued to experience weaknesses in their currency, banking, and equity markets. These weaknesses could adversely affect customer demand for our software solutions and could have an adverse effect on our business, financial condition and results of operations.

We face risks associated with doing business in China.

We face increased regulatory uncertainties with respect to our China-based operations, including our wholly foreign-owned enterprise operating in China, any joint ventures we may form or contribute IP or other resources to in the future and sales to China-based customers.

For each of the years ended December 31, 2022 and 2023, 23% of our revenue was derived from our China-based operations. Our operating expenses in China were $2.8 million, and $3.2 million, respectively, for the years ended December 31, 2022 and 2023.

On June 3, 2021, President Biden issued Executive Order 14032 (Addressing the Threat from Securities Investments that Finance Certain Companies of the People's Republic of China) targeting entities that are deemed part of the Chinese military-industrial complex. Additionally, on October 7, 2022, the Bureau of Industry and Security of the U.S. Department of Commerce, or BIS, issued new export controls related to the Chinese semiconductor manufacturing, advanced computing and supercomputer industries. The new export controls impose broad end-use and other restrictions on facilities in China that develop or produce semiconductor chips or manufacturing equipment, which may impact our ability to license or support our software solutions to entities in or doing business with certain advanced AI or "supercomputer" design companies, foundries and manufacturers of assemblies and components in China. In addition, in October 2023 the BIS tightened restrictions and compliance burdens on the transfer to China of certain advanced artificial intelligence chips, semiconductors and supercomputing items, software and technology subject to U.S. export controls, in addition to restricting sales to certain semiconductor fab facilities in China. Moreover, restrictions were implemented on U.S. persons' activities in support of the transfer of certain items not subject to U.S. export controls. The extraordinary complexity of these rules, combined with the likelihood of further amendments from BIS, significantly increases our risk of non-compliance, which could result in fines and other penalties, and could change how these rules impact us. While we continue to adjust our policies and practices to ensure compliance with these regulations, and we will seek to mitigate their impact, there can be no assurances that current or future regulations and tariffs will not have a material adverse effect on our business. We maintain policies and procedures reasonably designed to ensure compliance with applicable trade control requirements, laws, and restrictions, including prohibiting the export, re-export or transfer of technology to companies on the Entity List maintained by BIS or other governmental restricted party lists, as well as prohibiting the sale of our products in certain countries. However, due to our global operations, we cannot ensure that our policies and procedures, including related safeguards, will effectively prevent violations, including the unauthorized diversion of products to countries or persons that are the target of U.S. sanctions; the export, re-export, or transfer of technology to companies on BIS's Entity List or other governmental restricted party lists; failure to comply with rules related to import and export of products; appropriate import product classifications; or other trade accounting requirements, laws, and restrictions.

On August 9, 2023, President Biden issued an executive order addressing investments by U.S. persons in companies located in designated countries of concern, currently, China (including Hong Kong and Macau) that engage with certain categories of sensitive technology and products, including semiconductors and microelectronics, quantum information technologies and AI. The executive order requires regulations that would implement limits and potential notification requirements on such investments and was accompanied by an advance notice of proposed rule-making that outlines the intended scope of the program and solicits input from the public regarding the implementation of the executive order. There are no currently effective restrictions or notification requirements; further rule-making is needed to implement the executive order. While we believe it is possible that such regulations may impact our customers, our suppliers, or our business with respect to China, given the uncertainties with respect to the timing and ultimate requirements of these regulations, we are unable to assess the extent of any such impact.

Further U.S. government escalation of restrictions related to China and increased restrictions on Chinese exports may lead to regulatory retaliation by the Chinese government and possibly further escalate geopolitical tensions, and any such scenarios may adversely impact our business. Furthermore, we may, in the future, develop or sell software solutions that are subject to such rules and restrictions. In addition, such export control rules may change or be expanded or interpreted to include the sale of our current software solutions. In addition, geopolitical disruptions among the United States and China could cause general market disruptions and subject our sales efforts in China to licensing restrictions in the future. The prospect of future export controls that are implemented in a similar manner may continue to have an ongoing impact on our business, results of operations or financial conditions. To the extent

we are unable to license our software solutions or support to customers in China, our business, including our revenues and our prospects, would be adversely affected.

Downturns or volatility in general economic conditions could harm our business.

Our revenue, gross margin, and ability to achieve and maintain profitability depend significantly on general economic conditions and the demand for software solutions in the markets in which our customers compete. Weaknesses in the global economy and financial markets and any adverse changes in general domestic and global economic conditions that may occur in the future, including any recession, economic slowdown or disruption of credit markets, may lead to, lower demand for products that incorporate our solutions.

As we have grown, we have become increasingly subject to the risks arising from adverse changes in domestic and global economic conditions. As a result of the current economic slowdown, many companies are delaying or reducing technology purchases, which has had an impact on our visibility into the closing of new business, as opposed to our recurring business. This slowdown has also contributed to, and may continue to contribute to, reductions in sales, longer sales cycles, and increased price pressures, which could adversely affect our business, financial condition, and results of operations.

Additionally, countries in certain international regions in which we operate have continued to experience weaknesses in their currency, banking, and equity markets. These weaknesses could adversely affect customer demand for our software solutions and could have an adverse effect on our financial condition, results of operations and cash flow.

Our customers may fail to pay us in accordance with the terms of their agreements.

If our customers fail to pay us in accordance with the terms of our agreements, we may be adversely affected both from the inability to collect amounts due and the cost of enforcing the terms of our agreements, including litigation and arbitration costs. The risk of these issues increases with the term length of our customer arrangements. Furthermore, some of our customers may seek bankruptcy protection or other similar relief and fail to pay amounts due to us, which we have experienced in the past, or may pay those amounts more slowly, either of which could adversely affect our results of operations, financial condition and cash flow.

Our operations could be disrupted by geopolitical conditions, trade disputes, international boycotts and sanctions, political and social instability, acts of war, terrorist activity or other similar events, which could adversely affect our business, financial condition, and results of operations.

Since we operate on a global basis, our operations could also be disrupted by geopolitical conditions, trade disputes, international boycotts and sanctions, political and social instability, acts of war, terrorist activity or other similar events.

For example, in October 2023, following a series of attacks by Hamas on Israeli civilian and military targets, Israel declared war on Hamas in Gaza. While we do not currently consider the conflict between Israel and Hamas to have had a material impact on our business, the ongoing Israel-Hamas conflict could have a negative impact on the economy and business activity globally, and therefore could adversely affect our results of operations, financial condition and cash flow.

In addition, in February 2022, Russia initiated significant military action against Ukraine. In response, the United States and certain other countries imposed significant sanctions and export controls against Russia, Belarus and certain individuals and entities connected to Russian or Belarusian political, business and financial organizations, and the United States and certain other countries could impose further sanctions, trade restrictions, and other retaliatory actions should the conflict continue or worsen.

Our board of directors is responsible for overseeing the risks to our business, including risks related to the ongoing conflict between Israel and Hamas and between Russia and Ukraine. Such risks include an increased risk of cybersecurity attacks, sanctions, risks related to our employees, service-providers and operations in the affected regions and supply chain disruptions that may affect our customers globally. During 2023, we generated $0.6 million in revenues from the Middle East, including Israel, and had one employee located in the Middle East. While none of our revenue is derived from Russia or Ukraine, we have employees based in both countries and had, prior to the beginning of the conflict, offices in both countries. In response to the ongoing conflict, we recently closed our office in Moscow, Russia, and our office in Kyiv, Ukraine, has been temporarily closed. Our board of directors has received periodic reports from management regarding the impact of the conflict on us and considered whether such events have had, or are reasonably likely to have, a material impact on us. As a result of economic uncertainties and disruption created by the Russian invasion, we recorded in 2022, an impairment charge of $0.6 million associated with intangible assets assumed in connection with our acquisition of PolytEDA, which is based in Ukraine. Unless and until the conflict in Ukraine is stabilized, we do not intend to reopen office locations in either country.

As of December 31, 2023, we had 2 employees and 2 contractors in Russia and 7 employees and 6 contractors in Ukraine, all of which were working remotely. If our employees in Russia or Ukraine become subject to a military draft or are unable to work due to the ongoing conflict, the development of our next generation software could be delayed, which could negatively impact our business.

We have taken security measures designed to help protect against cyber-attacks, security breaches and impermissible downloads in Russia and Ukraine. To the extent that our security measures do not timely detect or prevent such cyber-attacks, security breaches or impermissible downloads, we may be subject to a number of risks, including those risks discussed below in "—Risks Related to Intellectual Property, Information Technology and Data Privacy and Security—If our information technology systems, information, or other resources or those of third parties upon which we rely are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to damage to our reputation and our business, exposure to liability, and material and adverse effects to our results of operations, potentially irreparably."

It is not possible to predict the broader consequences of either Hamas' invasion of Israel or Russia's invasion of Ukraine, including related geopolitical tensions, and the measures and retaliatory actions taken by the United States, and other countries in respect thereof as well as any counter measures or retaliatory actions by Russia or Belarus in response, including, for example, potential cyberattacks or the disruption of energy exports, which are likely to cause regional instability, geopolitical shifts, and could materially adversely affect global trade, currency exchange rates, regional economies and the global economy. The situations remain uncertain, and while it is difficult to predict the impact of any of the foregoing, the conflict and actions taken in response to either conflict could, but are not presently expected to, materially increase our costs, disrupt our supply chain, reduce our sales and earnings, impair our ability to raise additional capital when needed on acceptable terms, if at all, or otherwise further adversely affect our business, financial condition, and results of operations.

A substantial portion of our revenue comes from our international sales channels, and we have significant operations in numerous international geographies. As such, any adverse fluctuations in exchange rates could adversely affect our performance.

For the years ended December 31, 2022 and 2023, 68%, and 70%, respectively, of our revenue was from international customers. We expect to continue to generate a significant amount of revenue through international sales in the future. Our international sales team sells our software solutions to new and existing customers, expands installations within the existing customer base, offers consulting services and provides the first line of technical support. The revenues and expenses associated with our international direct sales channels are subject to foreign currency exchange fluctuations, including the potential of a stronger American dollar which has the potential of impacting our ability to compete internationally, and, as a result, our future financial results may be impacted by fluctuations in exchange rates, including Korean Won, Chinese Yuan, and Japanese Yen. For example, our reported revenues for the years ended December 31, 2022 and 2023 were higher than they would have been if the exchange rate in effect on December 31, 2020 remained constant throughout 2022 and 2023. As exchange rates fluctuate in the future, this could adversely affect our reported revenues.

We currently do not hedge any of our foreign currency exposure. However, our financial strategies may include hedging practices aimed at mitigating risks associated with foreign exchange fluctuations. However, if our hedging strategies are not executed accurately or if market conditions evolve unpredictably, it could result in significant financial misjudgments. This misalignment in our hedging approach could adversely impact our financial performance.

Our ability to increase our customer base and achieve broader market acceptance of our software solutions will depend to a significant extent on our ability to expand our international sales force. We plan to continue expanding our sales force, both domestically and internationally. We also plan to dedicate significant resources to our sales and marketing programs. All of these efforts will require us to invest significant financial and other resources. Our business will be harmed if our sales and marketing efforts do not generate significant increases in revenue or if the increases in revenue are smaller than anticipated. We may not achieve anticipated revenue growth from expanding our sales force if we are unable to hire, develop, integrate and retain talented and effective sales personnel, if our new and existing sales personnel, on the whole, are unable to achieve desired productivity levels in a reasonable period of time, or if our sales and marketing programs are not effective, the occurrence of which could adversely affect our business, financial condition, and results of operations.

Our ability to raise additional capital in the future may be limited and could prevent us from executing our growth strategy.

Our ability to operate and expand our business depends on the availability of adequate capital, which in turn depends on cash flow generated by our business and the availability of borrowings under our outstanding loans, line of credit and future debt, equity or other applicable financing arrangements. We believe that our cash flow from operations,

existing cash, availability under our existing credit line and bank loans, and the anticipated net proceeds of this offering will satisfy our anticipated cash requirements for at least the next 12 months. However, we have based this estimate on our current operating plans and expectations, which are subject to change, and cannot assure you that that our existing resources will be sufficient to meet our future liquidity needs. We may require additional capital to respond to business opportunities, challenges, acquisitions or other strategic transactions and/or unforeseen circumstances. The timing and amount of our working capital and capital expenditure requirements may vary significantly depending on numerous factors, including:

- market acceptance of our SIP and other solutions, and our IP deployment solutions;
- the need to adapt to changing technologies and technical requirements;
- the existence of opportunities for expansion; and
- access to and availability of sufficient management, technical, marketing and financial personnel.

If our capital resources are insufficient to satisfy our liquidity requirements, we may seek to sell additional equity securities or debt securities or obtain additional debt financing. The sale of additional equity securities or convertible debt securities would result in additional dilution to our stockholders. Additional debt would result in increased expenses and could result in covenants that would restrict our operations and our ability to incur additional debt or engage in other capital-raising or other activities. There can be no assurance that additional financing, if required, will be available in amounts or on terms acceptable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow and support our business and respond to business opportunities and challenges could be significantly limited.

Adverse developments affecting the financial services industry could adversely affect our liquidity, financial condition and results of operations, either directly or through adverse impacts on certain of our vendors and customers.

Actual events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions, transactional counterparties or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market-wide liquidity problems. For example, on March 10, 2023, Silicon Valley Bank, or SVB, was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation, or FDIC, as receiver. Similarly, on March 12, 2023, Signature Bank and Silvergate Capital Corp. were each swept into receivership. Although a statement by the Department of the Treasury, the Federal Reserve and the FDIC indicated that all depositors of SVB would have access to all of their money after only one business day of closure, including funds held in uninsured deposit accounts, borrowers under credit agreements, letters of credit and certain other financial instruments with SVB, Signature Bank or any other financial institution that is placed into receivership by the FDIC may be unable to access undrawn amounts thereunder. Although we are not a borrower or party to any such instruments with SVB, Signature Bank or any other financial institution currently in receivership, if any of the banks which hold our cash deposits were to be placed into receivership, we may be unable to access such funds. As of December 31, 2023, $1.0 million, or 23%, of our cash on deposit was maintained with one financial institution in the United States, and our current deposits are in excess of federally insured limits. In addition, if any of our customers, suppliers or other parties with whom we conduct business are unable to access funds pursuant to such instruments or lending arrangements with such a financial institution, such parties' ability to pay their obligations to us or to enter into new commercial arrangements requiring additional payments to us could be adversely affected.

Software bugs or defects could expose us to liability and harm our reputation and we could lose market share.

Software products frequently contain bugs or defects, especially when first introduced, when new versions are released, or when integrated with technologies developed by acquired companies, and the likelihood of bugs or defects may increase for our business if we accelerate the frequency of its product releases. Customers have in the past identified bugs or defects in our products, and there can be no assurance that bugs or defects will not be found in the future in new or enhanced products after commencement of commercial shipments. Product bugs or defects, including those resulting from third-party licensors, have in the past and may in the future affect the performance or interoperability of our products, could delay the development or release of new products or new versions of products and could adversely affect market acceptance or perception of our products. We are currently in receipt of a request from a customer for compensation as a result of alleged product bugs or defects, and there can be no assurance that we will resolve this matter, or any similar future complaint, in a manner that preserves the customer relationship and does not otherwise adversely affect our business or operating results. In addition, any allegations of manufacturability issues resulting from use of our IP products could, even if untrue, adversely affect our reputation and our customers' willingness to license IP products from us. Any such bugs or defects or delays in releasing new products or new

versions of products or allegations of unsatisfactory performance could cause us to lose customers, increase our service costs, result in diversion of resources, damage to our reputation and subject us to liability for damages, any one of which could materially and adversely affect our business and operating results.

Our employees, consultants and third-party providers have in the past and may in the future engage in misconduct that materially adversely affects us.

Our employees, consultants and third-party providers have in the past and may in the future engage in misconduct that materially and adversely affects us. For example, a former employee in China impermissibly used our computers and software to write and configure software for other companies. Misconduct by these parties could include intentional failures to comply with the applicable laws and regulations in the United States and abroad, report financial information or data accurately, violate our internal security policies or duties of confidentiality or disclose unauthorized activities to us. Such misconduct could result in loss of proprietary information or trade secrets, legal or regulatory sanctions, loss of important business information and cause serious harm to our reputation. It is not always possible to identify and deter misconduct, and any precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, which could have a significant impact on our business. Whether or not we are successful in defending against such actions or investigations, if any of our employees, consultants or third-party providers were to engage in or be accused of misconduct, we could be exposed to legal liability, incur substantial costs, loss of proprietary information, our business and reputation could be materially adversely affected, and we could fail to retain key employees.

We use certain third-party services to manage and operate our business, and any failure or interruption in the services provided by these third parties could adversely affect our business, financial condition and results of operations.

We use a number of third-party services to manage and operate our business, including software to assist our sales and marketing teams and our finance and accounting teams. These services are critical to our ability to increase our sales to customers, operate, and maintain our platform, and accurately maintain books and records. Any disruption in these services could impair our ability to execute on our operating plan and disrupt our business. Further, if these services cease to be available to us on commercially reasonable terms, or at all, we may be required to use additional or alternative services, or to develop additional capabilities within our business, any of which could require significant resources and adversely affect our business, financial condition and results of operations.

Periodic reorganizations and adjustments to our sales force could temporarily impact productivity and adversely disrupt our sales.

We rely heavily on our direct sales force. From time to time, we reorganize and make adjustments to our sales force in response to such factors as management changes, performance issues, market opportunities and other considerations. These changes may result in a temporary lack of sales production and may adversely impact revenue in future quarters. There can be no assurance that we will not restructure our sales force in future periods or that the transition issues associated with such a restructuring will not recur.

Variations in actual sales activity from sales forecasts could adversely affect our business, financial condition and results of operations.

We make many operational and strategic decisions based upon short-term and long-term sales forecasts. Our sales personnel continually monitor the status of all proposals, including the estimated closing date and the value of the sale, in order to forecast quarterly and annual sales. These forecasts are subject to significant estimation and are impacted by many external factors. For example, a slowdown in research and development spending or economic factors could cause purchasing decisions to be delayed. A variation in actual sales activity from that forecasted could cause us to plan or to budget incorrectly and, therefore, could adversely affect our business, financial condition and results of operations.

We may not realize the anticipated benefits of our acquisitions or investments, our business could be disrupted because of acquisitions or investments and, depending on how we finance such acquisitions or investments, we could use significant amounts of cash.

Our success depends in part on our ability to continually enhance and broaden our software solutions offerings in order to support our long-term strategic direction, strengthen our competitive position, expand our customer base, provide greater scale to increase our investments in research and development to accelerate innovation, provide

increased capabilities to our existing software solutions, supply new software solutions and services, and enhance our distribution channels. Accordingly, our success depends in part on our ability to identify, complete and integrate acquisitions. Over the past several years, we have completed ten such acquisitions of companies or strategic assets, and in the future, from time to time we will likely seek to acquire or invest in businesses, products, or technologies. Any acquisition, investment or business relationship may result in unforeseen operating difficulties and expenditures, as we have experienced historically. In particular, we may encounter difficulties assimilating or integrating the businesses, technologies, products, personnel or operations of the acquired companies, particularly if the key personnel of the acquired company choose not to work for us, their software is not easily adapted to work with our software solutions or we have difficulty retaining the customers of any acquired business due to changes in ownership, management or otherwise. For example, we have in the past and may in the future face challenges associated with the integration and migration of processes, including issue tracking, release procedures and standardization of license models, which can delay introduction of software solutions. We may be unable to successfully integrate previously acquired businesses and technologies or those acquired in the future, which could adversely impact our business, financial condition and results of operations.

Acquisitions and investments involve numerous risks, including:

- the inability to complete the acquisition or investment on commercially acceptable terms;
- the inability to obtain timely approvals from governmental authorities under competition and antitrust laws and the resulting delay in consummating the acquisition;
- the risk that we may have difficulty incorporating the acquired technologies or products with our existing software solutions and maintaining uniform standards, controls, procedures, and policies;
- the risk that we may not realize the anticipated increase in our revenue if a larger than predicted number of customers decline to renew annual leases or software license updates and license support or, if we are unable to sell or license the acquired solutions to our customer base;
- unforeseen difficulties in legal entity merger integration activities that may result in legal and tax exposures or the loss of anticipated tax benefits;
- disruption of our ongoing businesses and diversion of management attention;
- the risk that our relationships with current and new employees, customers, partners and distributors could be impaired;
- difficulties in integrating the acquired entities, products or technologies and overcoming any unforeseen technical problems with the acquired products or technologies;
- difficulties in operating the acquired business profitably;
- difficulties in preserving and transitioning important licensing, research and development, and customer, distributor and supplier relationships;
- difficulties in implementing the appropriate controls and procedures to ensure the acquired entity is in compliance with the Sarbanes-Oxley Act;
- the risk that the acquisition may result in increased litigation or contingencies, including as described in –“Pending or future investigations or litigation could have a material adverse effect on our results of operations and our stock price” below;
- risks associated with entering lines of business or geographies in which we have no or limited prior experience; and
- unanticipated costs, expenses or liabilities.

In addition, any future acquisitions or investments may result in:

- issuances of dilutive equity securities, which may be at a discount to market price;
- use of significant amounts of cash;
- the incurrence of debt;
- the assumption of significant liabilities;
- unfavorable financing terms;
- large one-time expenses; and
- the creation of certain intangible assets, including goodwill, the write-down of which may result in significant charges to earnings.

Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

If we lose the services of our senior executives or key technical personnel who possess specialized industry knowledge and technical skills, or are unable to hire additional key personnel, it could reduce our ability to compete, to manage our operations effectively, or to develop new software solutions and services.

We are highly dependent upon the ability and experience of our senior executives and our key technical and other management employees, and we do not maintain key person insurance for any of our employees. Although we have employment agreements with certain employees, the loss of these employees, or any of our other key employees, could adversely affect our ability to conduct our operations.

Further, to be successful, we must also attract and retain key employees who join us organically and through acquisitions. There are a limited number of qualified engineers with specialized applicable skills, and competition for these individuals and other qualified employees is intense and has increased globally, including in major markets such as Asia. Our employees are often recruited aggressively by our competitors and our customers worldwide. Any failure to recruit and retain key employees could harm our business, results of operations and financial condition. Additionally, efforts to recruit and retain qualified employees could be costly and negatively impact our operating expenses.

Historically we have issued equity awards as a key component of our overall compensation. If we are unable to grant attractive equity-based packages in the future, it could limit our ability to attract and retain key employees.

We may not be able to effectively manage our growth, and we may need to incur significant expenditures to address the additional operational and control requirements of our growth, either of which could harm our business and operating results.

In order to succeed in executing our business plan, we will need to manage our growth effectively as we make significant investments in research and development and sales and marketing and expand our operations and infrastructure both domestically and internationally. In addition, in connection with operating as a public company, we will incur additional significant legal, accounting and other expenses that we did not incur as a private company. If our revenue does not increase to offset these increases in our expenses, we may not achieve or maintain profitability in future periods.

To continue to grow and to meet our ongoing obligations as a public company, we must continue to expand our operational, engineering, accounting and financial systems, procedures, controls, personnel and other internal management systems. We must also expand our reporting and compliance infrastructure to ensure that relevant information is shared with and among management and our board of directors, including with respect to actual or alleged wrongdoing within our Company. We have in the past experienced inadequate reporting and communication regarding wrongdoing, which resulted in delays and inefficiencies in taking appropriate action. Such expansions may require substantial managerial and financial resources, and our efforts in this regard may not be successful. Our current systems, procedures and controls may not be adequate to support our future operations and we may be unable to meet reporting obligation deadlines under the Exchange Act or may face additional failures with respect to our reporting and compliance infrastructure. Unless our growth results in an increase in our revenue that is proportionate to the increase in our costs associated with this growth, our operating margins will be adversely affected. If we fail to adequately manage our growth, improve our operational, financial and management information systems, improve our reporting and compliance infrastructure or effectively motivate and manage our new and future employees, it could harm our business.

The global COVID-19 pandemic affected our business and operations.

The COVID-19 pandemic and efforts to control its spread significantly curtailed the movement of people, goods, and services worldwide. In light of the uncertain situation relating to the spread of COVID-19, we took precautionary measures intended to minimize the risk of the virus to our employees, our customers, and the communities in which we operate. These measures included modifications to employee travel policies, office closures when and as employees are advised to work from home, and other similar measures, some of which are still in place.

The COVID-19 pandemic has had, and may continue to have, adverse effects on economies and financial markets globally, leading to an economic downturn, which may decrease technology spending generally and could adversely affect demand for our services. It is not possible at this time to estimate the full impact that COVID-19 will have on our business, as the impact will depend on future developments, the emergence of additional strains and subsequent effects of the repercussions, which are highly uncertain and cannot be predicted.

To the extent the COVID-19 pandemic adversely affects our business, financial condition and results of operations, it may also have the effect of heightening many of the other risks described in this “Risk Factors” section, including but not limited to, those related to our ability to increase sales to existing and new customers due to shifting demand, our

performance in international markets, our ability to continue to perform on existing contracts, develop and deploy new technologies and expand our marketing capabilities and sales organization.

We received a Paycheck Protection Program loan, and our application for the PPP Loan and loan forgiveness could in the future be determined to have been impermissible or could result in damage to our reputation.

In May 2020, we received an unsecured loan in the amount of $2.3 million under the Paycheck Protection Program, or the PPP Loan. On June 29, 2021, the PPP Loan was forgiven. The Paycheck Protection Program was established under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, and is administered by the U.S. Small Business Administration, or the SBA. If we are later determined to have been ineligible to receive the PPP Loan or loan forgiveness, we may be subject to significant penalties, including significant civil, criminal and administrative penalties, we could be required to repay the PPP Loan in its entirety and our reputation could suffer. A review or audit by the SBA or other government entity or claims under the U.S. False Claims Act could consume significant financial and management resources and may have an adverse effect on our business, results of operations and financial condition.

Our estimates of market opportunity and forecasts of market growth may prove to be inaccurate.

Market opportunity estimates and growth forecasts whether obtained from third-party sources or developed internally, are subject to significant uncertainty and are based on assumptions and estimates that may prove to be inaccurate. The estimates and forecasts included in this prospectus relating to the size and expected growth of the target market and market demand may also prove to be inaccurate. For example, the Electronic System Design Alliance's EDA market data may be inaccurate or incomplete. Further, Grand View Research's estimations for the size of the 2022 and 2030 global EDA market and the growth thereof are based on assumptions, including as to the future growth of the integrated circuits and electronic manufacturing markets, and the continued advancement of technology in those industries that may prove to be inaccurate or incorrect. In addition, the estimated global EDA market may not materialize in the timeframe we expect, if ever, and even if the markets meet the estimates presented in this prospectus, this should not be taken as indicative of our future growth or prospects. In order to be successful, we will need to continue to develop and advance our software solutions, secure new and renewed bookings, obtain sufficient capital to finance our business and otherwise successfully scale our business and operations. We face a number of challenges in achieving these objectives, including those described elsewhere in these risk factors. There can be no assurance that we will be able to achieve our objectives or successfully grow our business, capture meaningful market share or take advantage of market opportunities.

Risks Related to Intellectual Property, Information Technology and Data Privacy and Security

If we are unable to protect our proprietary technology and inventions through patents and other intellectual property rights, our ability to compete successfully and our financial results could be adversely impacted.

We seek to protect our proprietary technology and innovations, particularly those relating to our software solutions, through patents, trade secrets and other intellectual property rights. Maintenance of our patent portfolios, particularly outside of the United States, is expensive, and the process of seeking patent protection is lengthy and costly. While we intend to maintain our current portfolio of patents and to continue to prosecute our currently pending patent applications and file future patent applications when appropriate, the value of these actions may not exceed their expense. Existing patents and those that may be issued from any pending or future applications may be subject to challenges, invalidation or circumvention, and the rights granted under our patents may not provide us with meaningful protection or any commercial advantage. In addition, the protection afforded under the patent laws of one country may not be the same as that in other countries. This means, for example, that our right to exclusively commercialize a product in those countries where we have patent rights for that product can vary on a country-by-country basis. We also may not have the same scope of patent protection in every country where we do business.

Additionally, it is difficult and costly to monitor the use of our intellectual property. It may be the case that our intellectual property is already being infringed and infringement may occur in the future without our knowledge. Litigation may be necessary to enforce our intellectual property rights. Additionally, defending our intellectual property rights might necessitate significant financial and legal resources. Any such expenditure could negatively impact our financial performance.

While it is our policy to protect and defend our rights to our intellectual property, we cannot predict whether steps taken by us to enforce and protect our intellectual property rights will be adequate to prevent infringement, misappropriation, or other violations of our intellectual property rights. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete. Moreover, in any lawsuit we bring to enforce our intellectual property rights, a court may refuse to stop the other party from using the technology at issue on grounds that our intellectual property rights do not cover the technology in question. Further, in such proceedings, the

defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights. Any litigation of this nature, regardless of outcome or merit, could materially harm our business and hurt our competitive advantage.

We generally control access to and use of our confidential information and trade secrets using internal and external controls, including contractual protections with employees, contractors, and customers. We rely in part on the laws of the United States and international laws to protect our trade secrets. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship. However, we cannot guarantee that we have entered into such agreements with every such party and we may not have adequate remedies in case of a breach of any such agreements. Our trade secrets could be disclosed to our competitors or others may independently develop substantially equivalent technologies or otherwise gain access to our trade secrets. Trade secrets can be difficult to protect and some courts inside and outside of the United States are less willing or unwilling to protect trade secrets.

Despite our efforts to protect our intellectual property, unauthorized parties may still copy, misappropriate, or otherwise obtain and use our software, technology, or other information that we regard as our proprietary intellectual property. In addition, we intend to expand our international operations, and effective patent, copyright, trademark, and trade secret, and other intellectual property protection may not be available or may be limited in some foreign countries. We currently have no trademark registrations or pending applications to register trademarks in foreign countries. Further, intellectual property law, including statutory and case law, particularly in the United States, is constantly developing, and any changes in the law could make it harder for us to enforce our rights.

We have predominantly developed our proprietary technology and other intellectual property internally, through development by our employees and independent contractors and externally, including through our research institution partners and their students. Our development has taken place globally, including the United States, Brazil, Europe, the Middle East and India. We attempt to protect our intellectual property, technology, and confidential information by requiring our employees, consultants, contractors and developer partners who develop intellectual property on our behalf to enter into confidentiality and invention assignment agreements. However, these agreements may not have been properly entered into on every occasion with the applicable counterparty, and such agreements may not always have been effective when entered into in granting ownership of, controlling access to and distribution of our proprietary information or technology. Certain state laws may require that we provide certain notices with respect to the assignment of particular inventions in such agreements, and we may not have been able to include such specific notice requirements in every occasion that it required. Further, if we failed to enter into one of these agreements, or if the assignment language is found to be insufficient under applicable laws, it may not have effectively granted ownership of certain technology or other intellectual property to us. In such an event, there would be a risk that the applicable counterparty would not be available to (or would not be willing to) assist us in perfecting our ownership of the technology or intellectual property, or the counterparty may even assert ownership rights against us and make claims for fees, damages, or equitable relief with respect to such technology or intellectual property, which may have an adverse effect on our ability to utilize, perfect, or protect our proprietary rights over such technology and intellectual property. Each jurisdiction has different rules regarding the correct language and procedures required to effectively assign intellectual property rights, and we may not have effectively implemented such language and procedures in each jurisdiction on every occasion, which may also limit our ability to perfect and protect our technology and intellectual property rights. Further, these agreements do not prevent our competitors or partners from independently developing technologies that are substantially equivalent or superior to our products. In addition, these agreements may not effectively prevent unauthorized use or disclosure of our confidential information, intellectual property, or technology and may not provide an adequate remedy in the event of unauthorized use or disclosure of our confidential information or technology, or infringement of our intellectual property.

From time to time, particularly over the last several years, we have acquired a portion of our intellectual property from one or more third parties. While we have conducted diligence with respect to such acquisitions, because we did not participate in the development or prosecution of such acquired intellectual property, we cannot guarantee that our diligence efforts identified and/or remedied all issues related to such intellectual property, including potential ownership errors, potential errors during prosecution of such intellectual property, and potential encumbrances that could limit our ability to enforce such intellectual property rights.

Our technology is subject to the threat of piracy, unauthorized copying and other forms of intellectual property infringement.

We regard our technology as proprietary and take measures to protect our technology and other confidential information from infringement. Piracy and other forms of unauthorized copying and use of our technology may become persistent, and policing is difficult. Further, the laws of some countries in which our products are or may be

distributed either do not protect our intellectual property rights to the same extent as the laws of the United States, or are poorly enforced. Legal protection of our rights may be ineffective in such countries. In addition, although we take steps to enforce and police our rights, we have in the past and may in the future experience piracy, as factors such as the proliferation of technology designed to circumvent the protection measures used by our business partners or by us, may expand the unauthorized copying and use of our technology.

If we are unable to protect our proprietary technology and inventions through trade secrets, our competitive position and financial results could be adversely affected.

As noted above, we seek to protect our proprietary technology and innovations, particularly those relating to our software solutions, as patents, trade secrets and other forms of intellectual property. Additionally, while software and other forms of our proprietary works may be protected under patent or copyright law, in some cases we have chosen not to seek any patents or register any copyrights in these works, and instead, primarily rely on protecting our software as a trade secret. In the United States, trade secrets are protected under the federal Economic Espionage Act of 1996 and the Defend Trade Secrets Act of 2016, or the Defend Trade Secrets Act, and under state law, with many states having adopted the Uniform Trade Secrets Act, or the UTSA. In addition to these federal and state laws inside the United States, under the World Trade Organization's Trade Related-Aspects of Intellectual Property Rights Agreement, or the TRIPS Agreement, trade secrets are to be protected by World Trade Organization member states as "confidential information." Under the UTSA and other trade secret laws, protection of our proprietary information as trade secrets requires us to take steps to prevent unauthorized disclosure to third parties or misappropriation by third parties. In addition, the full benefit of the remedies available under the Defend Trade Secrets Act requires specific language and notice requirements in the relevant agreements, which may not be present in all of our agreements. While we require our officers, employees, consultants, distributors, and existing and prospective customers and collaborators to sign confidentiality agreements and take various security measures to protect unauthorized disclosure and misappropriation of our trade secrets, we cannot assure or predict that these measures will be sufficient. The semiconductor and photonics industries are generally subject to high turnover of employees, so the risk of trade secret misappropriation may be amplified. If any of our trade secrets are subject to unauthorized disclosure or are otherwise misappropriated by third parties, our competitive position may be materially and adversely affected.

We may be subject to claims that we have wrongfully hired an employee from a competitor, or that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

Many of our employees, consultants and advisors, or individuals that may in the future serve as our employees, consultants and advisors, are currently or were previously employed at companies including our competitors or potential competitors. Although we try to ensure that our employees, consultants, independent contractors and advisors do not use the confidential or proprietary information, trade secrets or know-how of others in their work for us, we may be subject to claims that we have inadvertently or otherwise used or disclosed confidential or proprietary information, trade secrets, or know-how of these third parties, or that our employees, consultants, independent contractors or advisors have inadvertently or otherwise used or disclosed confidential information, trade secrets, or know-how of such individual's current or former employer. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees. Claims that we, our employees, consultants, or advisors have misappropriated the confidential or proprietary information, trade secrets, or know-how of third parties could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our success depends on the interoperability of our software solutions with our customers' intended use cases and with products and services of other companies, including our competitors.

The success of our software solutions depends on the interoperability of our software with our customers' intended use cases and often depends on the existing products and services of other companies, including our direct competitors. As a result, our customers' bookings may rapidly evolve, utilize multiple standards, include multiple versions and generations of our software. In addition, to the extent that hardware and software vendors, including our competitors, perceive that their applications or technologies compete with our software solutions or services, they may have an incentive to withhold any cooperation necessary to ensure interoperability, decline to share access or sell to us their proprietary protocols or formats, or engage in practices to actively limit the functionality, compatibility and certification of our software solutions. In addition, competitors may fail to certify or support or continue to certify or support our software solutions for their systems.

If any of the foregoing occurs, our software solutions development efforts may be delayed or foreclosed and it may be difficult and more costly for us to achieve functionality that would make our offerings attractive to our customers or

potential customers, and we may, among other consequences, lose or fail to increase our market share and experience reduced demand for our services, any of which could negatively impact our business, financial condition and results of operations.

If our information technology systems, or those of third parties upon which we rely, or our data are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to, regulatory investigations or actions, litigation, fines and penalties, disruptions of our business operations, reputational harm, loss of revenue or profits, and other adverse consequences.

In the ordinary course of our business, we and the third parties upon which we rely, routinely receive, collect, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, process) personal data and other sensitive information, including proprietary technology, trade secrets and other confidential information about our business and our customers, suppliers, and business partners (collectively, sensitive data).

As a result, we and the third parties upon which we rely face a variety of evolving risks and threats that could cause security incidents. Cyber-attacks, malicious internet-based activity, online and offline fraud, and other similar activities threaten the confidentiality, integrity, and availability of our sensitive data and information technology systems, and those of the third parties upon which we rely. Such threats are prevalent and continue to rise, are increasingly difficult to detect, and come from a variety of sources, including traditional computer “hackers,” threat actors, “hacktivists,” organized criminal threat actors, personnel (such as through theft or misuse), sophisticated nation-states, and nation-state supported actors.

Some actors now engage, and are expected to continue to engage, in cyber-attacks, including without limitation, nation-state actors for geopolitical reasons and in connection with military conflicts and defense operations. During times of war and other major conflicts, we and the third parties upon which we rely may be vulnerable to a heightened risk of these attacks, including retaliatory cyber-attacks that could materially disrupt our systems, supply chain and operations and ability to provide our services.

We and the third parties upon which we rely are subject to a variety of evolving threats, including but not limited to social-engineering attacks (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service attacks (credential stuffing), credential harvesting, personnel misconduct or error, ransomware attacks, supply chain attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, adware, attacks enhanced or facilitated by AI, telecommunications failures, earthquakes, fires, floods, and other similar threats.

In particular, severe ransomware attacks are becoming increasingly prevalent and can lead to significant interruptions in our operations, ability to provide our services, loss of sensitive data and income, reputational harm, and diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments.

Remote work has become more common and has increased risks to our information technology systems and data, as more of our employees utilize network connections, computers, and devices outside our premises or network, including working at home, while in transit and in public locations. Additionally, future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities’ systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

In addition, our reliance on third-party service providers could introduce new cybersecurity risks and vulnerabilities, including supply chain attacks, and other threats to our business operations. We rely on third-party service providers and technologies to operate critical business systems to process sensitive data in a variety of contexts, including, without limitation, cloud-based infrastructure, data center facilities, encryption and authentication technology, employee email, content delivery to customers, and other functions. We also rely on third-party service providers to provide other products, services, parts, or otherwise to operate our business. Our ability to monitor these third parties’ information security practices is limited and these third parties may not have adequate information security measures in place. If our third-party service providers experience a security incident or other interruption, we could experience adverse consequences. While we may be entitled to damages if our third-party service providers fail to satisfy their data privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award. In addition, supply-chain attacks have increased in frequency and severity, and we

cannot guarantee that third parties' infrastructure in our supply chain or our third-party partners' supply chains have not been compromised.

While we have implemented security measures designed to protect against security incidents, there can be no assurance that these measures will be effective. We take steps to detect, mitigate and remediate vulnerabilities in our information systems (such as our hardware and/or software, including that of third parties upon which we rely). We may not, however, detect and remediate all such vulnerabilities on a timely basis. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities. Such vulnerabilities could be exploited and result in a security incident.

Any of the previously identified or similar threats could cause a security incident or other interruption that could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to our sensitive data or our information technology systems, or those of the third parties upon whom we rely. A security incident or other interruption could disrupt our ability (and that of third parties upon whom we rely) to provide our services.

We may expend significant resources or modify our business activities to try to protect against security incidents. Additionally, certain data privacy and security obligations may require us to implement and maintain specific security measures or industry-standard or reasonable security measures to protect our information technology systems and sensitive data.

Additionally, applicable data privacy and security obligations may require us to notify relevant stakeholders, including affected individuals, customers, regulators and investors, of security incidents. Such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences.

If we (or a third party upon whom we rely) experience a security incident or are perceived to have experienced a security incident, we may experience adverse consequences, such as government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive data (including personal data); litigation (including class claims); indemnification obligations; negative publicity; reputational harm; monetary fund diversions; diversion of management attention; interruptions in our operations (including availability of data); financial loss; and other similar harms. Security incidents and attendant consequences may prevent the use of our services or cause customers to stop using our services, deter new customers from using our services, and negatively impact our ability to grow and operate our business.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. Furthermore, we cannot be sure that our cyber insurance policies will be adequate or sufficient to protect us from or to mitigate liabilities arising out of our privacy and security practices, that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive data about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position. Additionally, our sensitive data or our customers' sensitive data could be leaked, disclosed, or revealed as a result of or in connection with our employees', personnel's, or vendors' use of generative AI technologies.

Our software licenses contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to deliver our software licenses or subject us to litigation or other actions.

Some of our software licenses contain software modules licensed to us under "open source" licenses, and we expect to continue to incorporate such open source software in our software licenses in the future. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide support, warranties, indemnification, or other contractual protections regarding infringement claims or the quality of the code. In addition, the public availability of such software may make it easier for others to compromise our products.

Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use, or grant other licenses to our intellectual property. We seek to ensure that our proprietary software is not combined with, and does not incorporate, open source software in ways that would require the release of the source code of our proprietary software to the public. However, if we combine our proprietary software with open source software in a certain manner, we could, under

certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors or new entrants to create similar offerings with lower development effort and time and ultimately could result in a loss of our competitive advantages. Alternatively, to avoid the public release of the affected portions of our source code, we could be required to expend substantial time and resources to re-engineer some or all of our software. We incorporate software that is licensed under open source licenses which could require release of proprietary code if such license was released or distributed in any manner that would trigger such a requirement to third parties. We take steps to ensure that such software is not released or distributed. Additionally, some open source projects have vulnerabilities and architectural instabilities and are provided without warranties or services to actively provide us patched versions when available, and which, if not properly addressed, could negatively affect the performance of our products.

Although we have certain processes in place to monitor and manage our use of open source software to avoid subjecting our software licenses to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. or foreign courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to provide or distribute our products. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate open source software into their products, and the licensors of such open source software provide no warranties or indemnities with respect to such claims. As a result, we and our customers could be subject to lawsuits by parties claiming ownership of what we believe to be open source software. Moreover, we cannot assure you that our processes for monitoring and managing our use of open source software in our software licenses has been, or will be, effective.

If we are held to have breached or failed to fully comply with all the terms and conditions of an open source software license, or if an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations, could be subject to significant damages, enjoined from the licensing of our software licenses or other liability, or be required to seek costly licenses from third parties to continue providing our software on terms that, if available at all, are not economically feasible, to re-engineer our software, to discontinue or delay the provision of our software if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which would adversely affect our business, financial condition and results of operations.

We may not be able to continue to obtain licenses to third-party software and intellectual property on reasonable terms or at all, which may disrupt our business and harm our financial results.

We license third-party software and other intellectual property for use in research and development and, in several instances, inclusion in our products. We also license third-party software, including the software of our competitors, to test the interoperability of our software solutions with other industry software tools and in connection with our professional services. Our rights to use and employ software and other intellectual property that has been licensed to us, including our rights to develop, manufacture, or sell products covered by claims in licensed patents that are a subject of these licenses, are and will be subject to the continuation of and compliance with the terms of those licenses. We have and may in the future be in breach of a license, which may lead to the termination of rights granted to us under such license. This could result in competitors being able to enter our target markets and compete with us. We also may not be able to further develop, manufacture, or sell the affected products. Our third-party licenses may need to be renegotiated or renewed from time to time, or we may need to obtain new licenses in the future. Some of these licenses may also be terminated by the counterparty for convenience with limited notice to us. Third parties may stop adequately supporting or maintaining their technology, they may become insolvent or cease conducting business in the ordinary course, or they or their technology may be acquired by our competitors. From time to time, our licensors may license their technology to us on condition that we do not provide such technology or licenses incorporating such technology to certain customers. If we are unable to obtain licenses to these third-party software and intellectual property on reasonable terms or at all, we may not be able to sell the affected products, our customers' use of the licenses may be interrupted, or our software solutions development processes and professional services offerings may be disrupted, which could in turn harm our financial results, our customers, and our reputation.

The inclusion of third-party intellectual property in our software solutions can also subject us and our customers to intellectual property infringement claims. Although we seek to mitigate this risk contractually, we have not always been able to, and may not in future be able to sufficiently limit our potential liability. Regardless of outcome, infringement claims may require us to use significant resources and may divert management's attention. See the risk factor "—If we are unable to protect our proprietary technology and inventions through patents and other intellectual property rights, our ability to compete successfully and our financial results could be adversely impacted."

We are subject to stringent and evolving U.S. and foreign laws, regulations, and rules, contractual obligations, industry standards, policies and other obligations related to data privacy and security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions, litigation (including class claims) and mass arbitration demands, fines and penalties, disruptions of our business operations, reputational harm, loss of revenue or profits, and other adverse business consequences.

As a regular part of our business, we process sensitive data and these processing activities subject us to numerous data privacy and security obligations, such as various laws, regulations, guidance, industry standards, external and internal privacy and security policies, contractual requirements, and other obligations relating to data privacy and security.

In the United States, federal, state, and local governments, have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), and other similar laws (e.g., wiretapping laws).

In the past few years, numerous U.S. states, including California, Virginia, Colorado, Connecticut, and Utah, have enacted comprehensive privacy laws that impose certain obligations on covered businesses, including providing specific disclosures in privacy notices and affording residents with certain rights concerning their personal data. As applicable, such rights may include the right to access, correct, or delete certain personal data, and to opt-out of certain data processing activities, such as targeted advertising, profiling, and automated decision-making. The exercise of these rights may impact our business and ability to provide our products and services. Certain states also impose stricter requirements for processing certain personal data, including sensitive information, such as conducting data privacy impact assessments. These state laws allow for statutory fines for noncompliance. For example, the California Consumer Privacy Act of 2018, as amended by the California Privacy Rights Act of 2020 (“CPRA”) (collectively, “CCPA”) applies to personal data of consumers, business representatives, and employees who are California residents, and requires businesses to provide specific disclosures in privacy notices and honor requests of such individuals to exercise certain privacy rights. The CCPA provides for fines of up to $7,500 per intentional violation and allows private litigants affected by certain data breaches to recover significant statutory damages.

Similar laws are being considered in several other states, as well as at the federal and local levels, and we expect more states to pass similar laws in the future. These developments may further complicate compliance efforts and increase legal risk and compliance costs for us and the third parties upon whom we rely.

Outside the United States, an increasing number of laws, regulations, and industry standards may govern data privacy and security. For example, the EU General Data Protection Regulation (“GDPR”), the UK’s GDPR, and China’s Personal Information Protection Law (“PIPL”) impose strict requirements for processing personal data. For example, under the GDPR, companies may face temporary or definitive bans on data processing and other corrective actions, fines of up to 20 million Euros under the EU GDPR, 17.5 million pounds sterling under the UK GDPR or, in each case, up to 4% of annual global revenue, whichever is greater, or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. Additionally, we also target customers in Asia and have operations in China, Korea, Japan, Taiwan and Singapore and may be subject to new and emerging data privacy regimes in Asia, including Japan’s Act on the Protection of Personal Information, and Singapore’s Personal Data Protection Act.

Our employees and personnel use generative AI technologies to perform their work, and the disclosure and use of personal data in generative AI technologies is subject to various privacy laws and other privacy obligations. Governments have passed and are likely to pass additional laws regulating generative AI. Our use of this technology could result in additional compliance costs, regulatory investigations and actions, and consumer lawsuits. If we are unable to use generative AI, it could make our business less efficient and result in competitive disadvantages.

In addition, we may be unable to transfer personal data from the EU, the UK and other jurisdictions to the United States or other countries due to data localization requirements or limitations on cross-border data flows. The EU, UK, and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the EU and UK have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it generally believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EU and UK to the United States in compliance with law, such as the EU standard contractual clauses, the UK’s International Data Transfer Agreement / Addendum, and the EU-U.S. Data Privacy Framework and UK extension thereto (which allows for transfers to relevant U.S.-based organizations who self-certify compliance and participate in the Framework), these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If there is no lawful manner for us to transfer personal data from the EU,

UK, or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions (such as the EU) at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have ordered certain companies to suspend or permanently cease certain transfers of personal data out of Europe for allegedly violating the GDPR's cross-border data transfer limitations.

In addition to data privacy and security laws, we are contractually subject to industry standards adopted by industry groups and may become subject to such obligations in the future. We are also bound by other contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. We publish privacy policies, marketing materials, and other statements, such as compliance with certain certifications or self-regulatory principles, regarding data privacy and security. If these policies, materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Obligations related to data privacy and security (and consumers' data privacy expectations) are quickly changing, becoming increasingly stringent, and creating uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources and may necessitate changes to our services, information technologies, systems, and practices and to those of any third parties that process personal data on our behalf.

We may at times fail (or be perceived to have failed) in our efforts to comply with our data privacy and security obligations. Moreover, despite our efforts, our personnel or third parties on whom we rely may fail to comply with such obligations, which could negatively impact our business operations. If we or the third parties on which we rely fail, or are perceived to have failed, to address or comply with applicable data privacy and security obligations, we could face significant consequences, including but not limited to: government enforcement actions (e.g., investigations, fines, penalties, audits, inspections, and similar); litigation (including class-action claims) and mass arbitration demands; additional reporting requirements and/or oversight; bans on processing personal data; and orders to destroy or not use personal data. In particular, plaintiffs have become increasingly more active in bringing privacy-related claims against companies, including class claims and mass arbitration demands. Some of these claims allow for the recovery of statutory damages on a per violation basis, and, if viable, carry the potential for monumental statutory damages, depending on the volume of data and the number of violations. Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to: loss of customers; inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or substantial changes to our business model or operations.

Risks Related to Intellectual Property Litigation

We may be subject to litigation, regardless of success or merit, that could cause us to incur substantial expenses, reduce our sales, and divert the efforts of our management and other personnel.

The semiconductor and photonics industries are characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. We may receive, communications alleging liability for damages or challenging the validity of our intellectual property or proprietary rights. Any litigation, regardless of success or merit, could cause us to incur substantial expenses, reduce our sales, and divert the efforts of our management and other personnel. In the event we receive an adverse result in any litigation, we could be required to pay substantial damages, seek licenses from third parties, which may not be available on reasonable terms or at all, cease sale of products, expend significant resources to develop alternative technology, or discontinue the use of processes requiring the relevant technology. Furthermore, an adverse determination of any litigation or defense proceedings could put our intellectual property at risk of being invalidated or interpreted narrowly and could put our related pending patent applications at risk of not issuing. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential or sensitive information could be compromised by disclosure in the event of litigation. In addition, during the course of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Our ability to compete successfully depends in part on our ability to commercialize our intellectual property solutions without infringing the patent, trade secret, trademark, copyright, or other intellectual property rights of others.

Just as we seek to protect our technology and inventions with patents, trademarks, copyrights, trade secrets and other intellectual property rights, our competitors and other third parties do the same for their technology and inventions. We have no means of knowing the content of patent applications filed by third parties until they are published and we may not be aware of any patent applications even following their publication or issue.

The semiconductor and photonics industries are rife with patent assertion entities and is characterized by frequent litigation regarding patent and other intellectual property rights. From time to time, we receive communications from third parties that allege that our software solutions or technologies infringe their patent or other intellectual property rights. We are currently subject to litigation alleging we have misappropriated trade secrets, as described in further described in the risk factor "—Risks Related to Legal, Regulatory, Accounting and Tax Matters—Pending or future investigations or litigation could have a material adverse effect on our results of operations and our stock price." As a public company with an increased profile and visibility, we may receive similar communications or lawsuits in the future. In a patent infringement claim against us, we may assert, as a defense, that we do not infringe the relevant patent claims, that the patent is invalid or both. The strength of our defenses will depend on the patents asserted, the interpretation of these patents, and our ability to invalidate the asserted patents. However, we may not be successful in advancing non-infringement and/or invalidity arguments in our defense. In the United States, issued patents enjoy a presumption of validity, and the party challenging the validity of a patent claim must present clear and convincing evidence of invalidity, which is a high burden of proof. Conversely, the patent owner need only prove infringement by a preponderance of the evidence, which is a lower burden of proof. Lawsuits or other proceedings resulting from allegations of infringement could subject us to significant liability for damages, invalidate our proprietary rights and harm our business.

In the event that any third party succeeds in asserting a valid claim against us or any of our customers, we could be forced to do one or more of the following:

- discontinue selling access to certain technologies that contain the allegedly infringing intellectual property which may result in a decline in our revenue and could result in breach of contract claim by our affected customers and damage to our reputation;
- discontinue using trademarks that allegedly infringe the trademarks of others;
- stop receiving payment from a customer that can no longer sell the end-product if it contains allegedly infringing intellectual property;
- seek to develop non-infringing technologies, which may be expensive and not be feasible;
- incur significant legal expenses;
- pay substantial monetary damages to the party whose intellectual property rights we may be found to be infringing; and/or
- we or our customers could be required to seek licenses to the infringed technology that may not be available on commercially reasonable terms, if at all.

If a third party causes us to discontinue the use of any of our technologies, we could be required to design around those technologies. If a third party causes us to discontinue using any of our trademarks, we could be required to adopt alternative brand names. If a third party establishes that they are co-authors of a copyrighted work that we use, we could be required to account for profits arising from exploiting such intellectual property. Each of these scenarios could be costly and time consuming and could have an adverse effect on our results of operations. Any significant impairments of our intellectual property rights from any litigation we face could harm our business and our ability to compete in our industry.

Any dispute regarding our intellectual property may require us to indemnify customers, the cost of which could harm our business.

In any potential dispute involving our patents or other intellectual property, our customers could also become the target of litigation. While we generally try to avoid indemnifying our customers, some of our agreements provide for indemnification, and some require us to provide technical support and information to a customer that is involved in litigation involving use of our technology. In addition, we may be exposed to indemnification obligations, risks and liabilities that were unknown at the time that we acquired assets or businesses. Any of these indemnification and support obligations could result in substantial and material expenses. In addition to the time and expense required for us to indemnify or supply such support to our customers, a customer's development, marketing and sales of licensed semiconductors, mobile communications and data security technologies could be severely disrupted or shut down as a result of litigation, which in turn could severely harm our business as a result of lower licensing or royalty payments.

Risks Related to Our Status as a Controlled Company

Upon completion of this offering, we will be a "controlled company" within the meaning of the Nasdaq listing rules and as such are exempt from certain corporate governance requirements.

As a result of Ms. Ngai-Pesic and the SMIK Grantor Retained Annuity Trust, of which Ms. Ngai-Pesic and members of her immediate family are beneficiaries, or SMIK Trust, collectively holding more than 50% of the voting power of our company, following the completion of this offering, we will be a "controlled company" within the meaning of the Nasdaq listing rules. Therefore, we are not required to comply with certain corporate governance rules that would otherwise apply to us as a listed company on Nasdaq, including the requirement that (i) we have a majority of independent directors on our board of directors; (ii) the compensation of our executive officers be determined by a majority of the independent directors or a compensation committee comprised solely of independent directors; and (iii) director nominees selected or recommended for our board be approved either by a majority of the independent directors or a nominating committee comprised solely of independent directors. Following this offering, we intend to utilize some or all of these exemptions. As a result, we may not have a majority of independent directors on our board of directors. In addition, our compensation and nominating and corporate governance committees may not consist entirely of independent directors and may not be subject to annual performance evaluations. Should the interests of Ms. Ngai-Pesic and the SMIK Trust differ from those of our other stockholders, it is possible that the other stockholders might not be afforded such protections as might exist if our board of directors, or our committees, were required to have a majority, or be composed exclusively, of directors who were independent of Ms. Ngai-Pesic and the SMIK Trust or our management.

As long as we are a controlled company, your ability to influence matters requiring stockholder approval will be limited, and the interests of our controlling shareholder may conflict with or differ from your interests as a stockholder

Following the completion of this offering, Ms. Ngai-Pesic will own shares of our common stock and the SMIK Trust, will own shares of our common stock, collectively representing approximately % of our total outstanding common stock, assuming the underwriters do not exercise their over-allotment option, and approximately % if the underwriters exercise their over-allotment option in full. For so long as Ms. Ngai-Pesic and the SMIK Trust continue to collectively hold at least 50% of our outstanding common stock, they will be able to elect the members of our board of directors and could at any time replace our entire board of directors.

In addition, our amended and restated certificate of incorporation and amended and restated bylaws to be effective upon completion of this offering will provide that, after Ms. Ngai-Pesic, Iliya Pesic, and Yelena Pesic, and each of their respective affiliates, (collectively voting together as a single entity, the "Pesic Family") cease to beneficially own, in the aggregate, at least 50% of the voting power of the outstanding shares of our common stock, all stockholder actions must be effected at a duly called meeting of stockholders and not by written consent. As a result, Ms. Ngai-Pesic and the SMIK Trust will have the ability to control all matters affecting us, including:

- through our board of directors, any determination with respect to our business plans and policies, including the appointment and removal of our officers;
- any determinations with respect to mergers and other business combinations;
- our acquisition or disposition of assets;
- our financing activities;
- the allocation of business opportunities that may be suitable for us;
- the payment of dividends on our common stock; and
- the number of shares available for future issuance and also issuance under our stock plans.

Further, for so long as the Stockholders Agreement (as defined below) remains in effect and the Pesic Family owns in the aggregate, at least 25% of the voting power of the then outstanding shares of our capital stock, our amended and restated certificate of incorporation to be effective upon completion of this offering will provide that the prior written approval or consent of the Pesic Family shall be required for us to (i) implement any amendments to our amended and restated certificate of incorporation that would adversely affect the Pesic Family's rights thereunder, (ii) effect or consummate a change of control or approve another merger, consolidation, business combination, sale or acquisition

that results in changes in the rights and privileges of holders of equity securities, and (iii) effect the liquidation or dissolution or winding up of our business operations.

Additionally, the Stockholders Agreement provides the Pesic Family and the SMIK Trust together have the ability to designate up to four nominees for our board of directors and one non-voting board observer, depending on ownership levels.

Ms. Ngai-Pesic and the SMIK Trust's collective voting control may discourage transactions involving a change of control of us, including transactions in which you as a holder of our common stock might otherwise receive a premium for your shares over the then current market price.

Ms. Ngai-Pesic and the SMIK Trust are not prohibited from selling a controlling interest in us to a third party and may do so without your approval and without providing for a purchase of your shares of common stock. Accordingly, your shares of common stock may be worth less than they would be if Ms. Ngai-Pesic and the SMIK Trust did not maintain voting control over us.

The interests of Ms. Ngai-Pesic and the SMIK Trust could conflict with or differ from your interests as a holder of our common stock. For example, the concentration of ownership held by Ms. Ngai-Pesic and the SMIK Trust could delay, defer or prevent a change of control of us or impede a merger, takeover or other business combination that you as a stockholder may otherwise view favorably. So long as Ms. Ngai-Pesic and the SMIK Trust continue to beneficially own a significant amount of our equity, even if such amount is less than 50%, they may continue to be able to strongly influence or effectively control our decisions.

Our inability to resolve any disputes that arise between us and Ms. Ngai-Pesic with respect to our past, future and ongoing relationships may adversely affect our operating results.

In 2022, we entered into the 2022 Credit Line with Ms. Ngai-Pesic. As of December 31, 2023, we had drawn down $2.0 million from the 2022 Credit Line. We also lease several office facilities from entities controlled by Ms. Ngai-Pesic pursuant to which we recorded a rent expense $0.4 million, and $0.5 million during the years ended December 31, 2022 and 2023, respectively. Because we are controlled by Ms. Ngai-Pesic and the SMIK Trust, we may not have the leverage to negotiate extensions or amendments to our agreements on terms as favorable to us compared to those we would negotiate with an unaffiliated third party. See "Certain Relationships and Related Party Transactions" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

More generally, disputes may arise between Ms. Ngai-Pesic and us in a number of areas relating to our past and ongoing relationships. We may not be able to resolve any potential conflicts, and even if we do, the resolution may be less favorable than if we were dealing with an unaffiliated party.

Risks Related to Legal, Regulatory, Accounting and Tax Matters

We are subject to anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to anti-corruption, anti-bribery, anti-money laundering, and similar laws in the United States and other countries in which we conduct activities, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and the United Kingdom Bribery Act 2010. Anti-corruption and anti-bribery laws, which have been enforced aggressively and are interpreted broadly, generally prohibit companies and their employees, agents, intermediaries and other third parties from directly or indirectly promising, authorizing, making or offering improper payments or other benefits to government officials and others in the private sector. We use third parties, including intermediaries and partners, to support sales of our products. We and these third parties may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we may be held liable for the corrupt or other illegal activities of these third-party intermediaries and partners, our employees, representatives, contractors, and other third parties, even if we do not explicitly authorize such activities. While we have policies and procedures intended to address compliance with anti-corruption, anti-bribery, anti-money laundering and similar laws, we cannot assure you that all of our employees, representatives, contractors, partners, agents, intermediaries or other third parties have not taken, or will not take, actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

Noncompliance with anti-corruption, anti-bribery, and anti-money laundering laws could subject us to investigations, severe criminal or civil sanctions, settlements, prosecution, loss of export privileges, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, whistleblower

complaints, adverse media coverage and other consequences. Any investigations, actions or sanctions could harm our reputation, business, operating results and financial condition.

We are subject to governmental export and import controls and sanctions that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws.

Our software solutions and technology are subject to export control and import laws and regulations of applicable jurisdictions. Certain of our software solutions are subject to U.S. export controls and sanctions, including the Export Administration Regulations, U.S. Customs regulations, and the economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control, or OFAC. These laws and regulations may limit our ability to export our software solutions and technology or may require export authorizations and conditions prior to export. Export control and sanctions laws may also prohibit us from selling or providing our software solutions and technology to embargoed countries, regions, governments, persons, and entities. In addition, various countries regulate the importation of certain products, including through import licensing and permitting requirements, which could limit or restrict our ability to sell our products. The exportation, re-exportation, and importation of our software solutions and technology must comply with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges, as well as reputational harm.

Complying with export control and sanctions laws and regulations can be time-consuming and result in the delay or loss of sales opportunities. We have taken precautions to prevent our software solutions and technology from being provided in violation of such laws and regulations. However, our software solutions and technology have previously been, and could in the future be, provided in violation of such laws despite the precautions in place. Between August 2019 and June 2022, we filed various voluntary disclosures with BIS regarding potential violations of U.S. export control laws and regulations, specifically, the export of our licenses to certain parties designated on BIS's Entity List and Unverified List, and the export of certain software modules without a license which was required at the time of the transaction but that were declassified by BIS in October 2020 to a lesser controlled export classification, meaning that such software generally no longer requires an export license. In July and October 2022 and January 2023, we also filed voluntary disclosures with OFAC regarding potential violations of OFAC sanctions programs, specifically the download of certain Company software modules by users in U.S. embargoed countries. In October 2023, we also filed voluntary disclosures with OFAC regarding certain banking transactions made by our third party service provider in Russia on our behalf, through a bank that was sanctioned by OFAC. These voluntary disclosures remain pending before BIS and OFAC and if either organization chose to bring an enforcement action against us in relation to such potential violations, such actions could result in the imposition of significant penalties against us.

Changes in our software solutions or technology or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our software solutions and technology in international markets, prevent our customers from deploying our software solutions and technology or, in some cases, prevent the export or import of our software solutions and technology to certain countries, governments or persons altogether.

Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our software solutions and technology, or in our decreased ability to export or sell our software solutions and technology to existing or potential customers. Any decreased use of our software solutions and technology or limitation on our ability to export or sell our software solutions and technology would likely adversely affect our business, financial condition and results of operations.

Pending or future investigations or litigation could have a material adverse effect on our results of operations and our stock price.

We are involved in various investigations, claims and legal proceedings from time to time that arise in the ordinary course of our business activities, including intellectual property, collaboration, licensing agreement, product liability, employment, class action, whistleblower and other litigation claims, and governmental and other regulatory investigations and proceedings. For example, we have previously commenced legal proceedings against certain of our customers to protect our intellectual property rights and we may do so again in the future, which could result in resentment within our customer base and adversely affect our business, financial condition and results of operations. Our proceedings currently include customary audit activities by various taxing authorities and legal proceedings. For example, in December 2020, Silvaco, Inc., one of our subsidiaries, filed suit against Ole Christian Andersen et al., or Andersen, in California Superior Court for the County of Santa Clara seeking declaratory relief related to a dispute concerning the interpretation of an earnout agreement with Andersen in connection with the acquisition of the shares of Nangate Denmark ApS, or Nangate. In January 2022, Andersen filed a third amended cross-complaint against Silvaco, Inc. and certain of its board members alleging breach of contract, fraud, and unfair business practices and is

seeking $20 million in damages, along with punitive damages. Discovery in the matter is ongoing and a trial date has been set for May 2024. Silvaco, Inc. intends to contest this matter vigorously. In August 2021, Aldini AG filed suit against Silvaco, Inc. in the United States District Court for the Northern District of California alleging various tort claims against Silvaco, Inc., Silvaco France, and certain of its board members. On August 23, 2022, Aldini AG filed a Second Amended Complaint against Silvaco, Inc., Silvaco France, and certain of its board members that included claims of trade secret theft, conspiracy, and intentional interference with a prospective economic advantage in relation to Silvaco's acquisition of certain assets of Dolphin Design SAS, or Dolphin. Aldini AG seeks $703 million and punitive damages. On March 17, 2023, the Second Amended Complaint was dismissed on all counts, subject to a right of appeal. Aldini has filed a notice of appeal.

Changes in our tax rates or exposure to additional tax liabilities or assessments could affect our profitability, and audits by tax authorities could result in additional tax payments for prior periods.

We are subject to various U.S. and non-U.S. taxes, including direct and indirect taxes, such as corporate income, withholding, customs, excise, value-added, sales and other taxes imposed on our global activities. Significant judgment is required in determining our provisions for taxes, and there are many transactions and calculations where the ultimate tax determination is uncertain.

Our tax returns are subject to audit by U.S. federal, state and local tax authorities and by non-U.S. tax authorities. If audits result in tax liabilities or assessments different from our reserves, our future results may include unfavorable adjustments to our tax liabilities, and our financial statements could be adversely affected.

Changes in tax laws could adversely affect our business, financial position and results of operations.

Any significant changes to the tax system in the United States or in other jurisdictions could adversely affect our business, financial condition and results of operations.

The U.S. Congress, government agencies in non-U.S. jurisdictions where we and our affiliates do business, and the Organization for Economic Cooperation and Development, or OECD, have recently focused on issues related to the taxation of multinational corporations. One example is in the area of "base erosion and profit shifting," where profits are claimed to be earned for tax purposes in low-tax jurisdictions, or payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates. The OECD has released several components of its comprehensive plan to create an agreed set of international rules for addressing base erosion and profit shifting.

Because we operate in numerous taxing jurisdictions, the application of the relevant tax laws can be subject to diverging and sometimes conflicting interpretations by the taxing authorities of these jurisdictions. It is not uncommon for taxing authorities in different countries to have conflicting views with respect to, among other things, whether a permanent establishment exists in a particular jurisdiction, the manner in which the arm's length standard is applied for transfer pricing purposes, or the valuation of intellectual property. For example, if the taxing authority in one country where we operate were to reallocate income from another country where we operate, and the taxing authority in the second country did not agree with the reallocation asserted by the first country, we could become subject to tax on the same income in both countries, resulting in double taxation.

If taxing authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it could increase our tax liability, which could adversely affect our business, financial position and results of operations.

In the United States, the Tax Cuts and Jobs Act enacted in 2017, the Coronavirus Aid, Relief, and Economic Security Act enacted in 2020, and the Inflation Reduction Act enacted in 2022 made many significant changes to U.S. tax laws. For example, the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct research and experimental expenditures in the year incurred in tax years beginning after December 31, 2021, and taxpayers are instead required to capitalize and amortize such expenditures over five years for research activities conducted in the United States and fifteen years for research activities conducted outside the United States. Although there have been legislative proposals to repeal or defer the capitalization requirement, there can be no assurance that such changes will be made. Future guidance from the Internal Revenue Service and other tax authorities with respect to any tax legislation may affect us, and certain aspects of such legislation could be repealed or modified in future legislation.

Due to the potential for changes in tax laws and regulations or changes in the interpretation thereof (including regulations and interpretations pertaining to recent tax reform in the United States), the ambiguity of tax laws and regulations, the subjectivity of factual interpretations, uncertainties regarding the geographic mix of earnings in any particular period and other factors, our estimates of our effective tax rate and our income tax assets and liabilities may be incorrect and our financial statements could be adversely affected. The impact of these factors may be substantially different from period-to-period.

Risks Related to This Offering and Ownership of Our Common Stock

The price of our common stock could be volatile and you may not be able to resell your shares at or above our initial public offering price. Declines in the price of our common stock could subject us to litigation.

Our stock price may be volatile and may decline, resulting in a loss of some or all of your investment. The trading price and volume of our common stock could fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- variations in our operating results and other financial and operational metrics, including the key financial and operating metrics disclosed in this prospectus, as well as how those results and metrics compare to analyst and investor expectations;
- speculation in the market about our operating results;
- the financial guidance we may provide to the public, any changes in guidance or our failure to meet guidance;
- failure of securities analysts to initiate or maintain coverage of us, changes in financial estimates or ratings by any securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
- results of operations that otherwise fail to meet the expectations of securities analysts and investors;
- changes in earnings estimates or recommendations by securities analysts, or other changes in investor perceptions of the investment opportunity associated with our common stock relative to other investment alternatives;
- events or factors resulting from global health crises such as the COVID-19 pandemic, war, incidents of terrorism or responses to these events;
- announcements of software solutions or enhancements, strategic alliances or significant agreements or other developments by us or our competitors;
- announcements by us or our competitors of mergers or acquisitions or rumors of such transactions involving us or our competitors;
- changes in management, other key personnel or our board of directors;
- disruptions in our operations due to security breaches or other issues;
- the strength of the global economy or the economy in the jurisdictions in which we operate, and market conditions in our industry and those affecting our customers;
- trading activity by our controlling stockholders, Ms. Ngai-Pesic and the SMIK Trust, including upon the expiration of contractual lock-up agreements, and other market participants, in whom ownership of our common stock may be concentrated following this offering;
- the potential effects arising if U.S. or global inflationary and/or currency devaluation trends appear or increase;
- market conditions in the semiconductor and photonics industries
- the performance of the equity markets in general and in our industry;
- the operating performance of other similar companies;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- new laws or regulations or new interpretations of existing laws, or regulations applicable to our business;
- changes in regulations, including import, export and economic sanctions, laws and regulations, that may expose us to liability and increase our costs;
- litigation or other claims against us;
- the number of shares of our common stock that are available for public trading; and
- any other factors discussed in this prospectus.

Furthermore, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of particular companies. Broad market and industry factors may significantly affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our common stock shortly following the closing of this offering. In addition, if the market for EDA, TCAD, SIP or other technology stocks or the stock market in general experiences a loss of investor confidence, the price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The price of our common stock might also decline in reaction to events that affect other companies, even if those events do not directly affect us. Some companies that have experienced volatility in the trading price of their stock have been the subject of securities class action litigation. If we are the subject of such litigation, it could result in substantial costs and could divert our management's attention and resources, which could adversely affect our business, financial position and results of operations.

We have not operated as a public company, which will require us to incur substantial costs and will require substantial management attention, and we may not be able to manage our transition to a public company effectively or efficiently.

We have never operated as a public company and will incur significant legal, accounting and other expenses that we did not incur as a private company. We also expect to incur stock-based compensation expenses, which we have not incurred in any material amount as a private company. Our management team and other personnel will need to devote a substantial amount of time to, and we may not effectively or efficiently manage, our transition to a public company. For example, we will be subject to the reporting requirements of the Exchange Act, the applicable requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules and regulations of the SEC. The rules and regulations of Nasdaq will also apply to us following this offering. To comply with the various requirements applicable to public companies, we will need to establish and maintain effective disclosure and financial controls and make changes to our corporate governance practices. If, notwithstanding our efforts to comply with these laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal or administrative proceedings against us and our business may be harmed. Further, failure to comply with these rules might make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management. As such, we intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities.

We also expect that our management and other personnel will need to divert attention from other business matters to devote substantial time to the reporting and other requirements applicable to a public company. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If we are unable to recruit and retain additional finance personnel or if our finance and accounting team is unable for any reason to respond adequately to the increased demands that will result from being a public company, the quality and timeliness of our financial reporting may suffer, which could result in late filings or the identification of additional material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our public reporting could cause our stock price to decline, result in litigation and could harm our business, financial condition and results of operations.

Additionally, as a public company, we may, from time to time, be subject to proposals and other requests from stockholders urging us to take certain corporate actions, including proposals seeking to influence our corporate policies or effect a change in our management. In the event of such stockholder proposals, particularly with respect to matters which our management and board of directors, in exercising their fiduciary duties, disagree with or have determined not to pursue, our business could be harmed because responding to actions and requests of stockholders can be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees. Additionally, perceived uncertainties as to our future direction may result in the loss of potential business opportunities and may make it more difficult to attract and retain qualified personnel, business partners and customers.

We are, and following the completion of this offering will be, subject to significant regulatory compliance and internal governance requirements, and the failure to comply with such regulatory and governance requirements could result in a loss of sales or the loss of investor confidence in our financial reports, which could have an adverse effect on our stock price.

Following the completion of this offering, we will be subject to the rules and regulations of the SEC, including those that require us to report on our internal controls. Compliance with these requirements has and will cause us to incur additional expenses and cause management to divert time from our day-to-day operations. While we anticipate being able to fully comply with these internal control requirements, if we are not able to comply with the Sarbanes-Oxley reporting or certification requirements relating to internal controls, we may be subject to investigations or sanctions by the SEC, Nasdaq or other regulatory authorities.

Our stock will be listed on Nasdaq and we are subject to ongoing financial and corporate governance requirements of Nasdaq. While we anticipate being able to fully comply with applicable Nasdaq requirements, if we are not able to comply, our name may be published on Nasdaq's daily Non-Compliant Companies list until Nasdaq determines that we have regained compliance or we no longer trade on Nasdaq.

There has been no prior public market for our common stock, and an active trading market for our common stock may not develop or be sustained and you may not be able to sell your shares at or above the initial public offering price, or at all.

There has been no public market for our common stock prior to this offering. The initial public offering price for our common stock will be determined through negotiations between the underwriters and us and may vary from the market price of our common stock following this offering. If you purchase our common stock in this offering, you may not be able to resell those shares at or above the initial public offering price, or at all.

An active market in our common stock may not develop upon completion of this offering or, if it does develop, it may not be sustainable or liquid enough for you to sell your shares, especially given the concentration of outstanding shares. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering at the price you paid. An inactive trading market may also impair our ability to raise capital by selling shares of our common stock and enter into strategic partnerships or acquire other complementary products, technologies or businesses by using shares of our common stock as consideration. Furthermore, although we intend to apply to have our common stock listed on Nasdaq, even if listed, there can be no guarantee that we will continue to satisfy the continued listing standards of Nasdaq. If we fail to satisfy the continued listing standards, we could be delisted, which would negatively impact the value and liquidity of your investment.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution.

The initial public offering price of our common stock will be substantially higher than the pro forma net tangible book value per share of our common stock immediately after this offering. If you purchase shares of our common stock in this offering, you will suffer immediate dilution of $ per share, or $ per share if the underwriters exercise their over-allotment option in full, representing the difference between our pro forma as adjusted net tangible book value per share after giving effect to the sale of common stock in this offering and the assumed public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. You will experience additional dilution upon the vesting of RSUs issued under our equity incentive plans, if we issue restricted stock to our employees under our equity incentive plans or if we otherwise issue additional shares of our common stock. See "Dilution."

Future issuances of our common stock or sales of a substantial number of shares of our common stock in the public market following this offering, or the perception that such sales could occur, could cause the price of our common stock to decline.

The market price of our common stock could decline as a result of substantial sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, a large number of shares of our common stock becoming available for sale, or the perception in the market that such sales could occur. We may issue additional common stock, preferred stock, convertible securities or other equity or equity linked securities following the completion of this offering. We also expect to issue common stock to our employees, directors and other service providers pursuant to our equity incentive plans. Such issuances will be dilutive to investors and could cause the price of our common stock to decline. New investors in such issuances could also receive rights senior to those of holders of our common stock.

Upon the closing of this offering, we will have approximately shares of common stock outstanding, assuming no exercise of the underwriters' option to purchase additional shares. All of the shares of common stock sold in this offering and pursuant to the Selling Stockholder Resale Prospectus will be freely transferable without restriction or additional registration under the Securities Act of 1933, as amended, or the Securities Act.

Substantially all of the remaining shares of our common stock, including all shares held by our executive officers, directors and the holders of substantially all of our equity securities, will be subject to the lock-up agreements with the underwriters of this offering described in "Underwriting." We also intend to register all shares of common stock that we may issue under equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus. As these restrictions on resale end, the market price of our common stock could drop significantly if the holders of those shares sell them or are perceived by the market as intending to sell them.

In addition, we do not anticipate satisfying the anticipated tax withholding and remittance obligations as a result of the RSU Settlement and the Additional RSU Settlement. In such case, applicable holders of RSUs will be able to sell shares underlying their RSUs into the open market to the extent needed to satisfy the anticipated tax withholding and remittance obligations, subject to the restrictions set forth in the lock-up agreements discussed in "Underwriting." If we make such an election, the sales of shares underlying RSUs into the open market could cause the market price of our

common stock to decline significantly. The market's expectation that such sales could occur (even if they do not) could also cause the market price of our common stock to decline significantly. Any of the aforementioned declines in our stock price could occur even if our business is otherwise doing well and, as a result, you may lose all or a part of your investment.

If securities analysts or industry analysts downgrade our common stock, publish negative research or reports, or fail to publish reports about our business, our stock price and trading volume could decline.

The market price and trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us, our business and our market. As a newly public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with us, which could affect their ability to accurately forecast our results and could make it more likely that we fail to meet their estimates. If no or few securities or industry analysts commence coverage of us, the trading price for our common stock will be negatively impacted. In the event we do obtain industry or equity research analyst coverage, we will not have any control over the analysts' content and opinions included in their reports. If one or more analysts adversely change their recommendation regarding our stock or change their recommendation about our competitors' stock, our stock price could decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline or become volatile.

We will have broad discretion in the use of the net proceeds to us from this offering and may not apply the proceeds in ways that increase our market value or improve our operating results.

Our management will have considerable discretion in the application of the net proceeds to us of this offering, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds to us may be used for corporate purposes that do not increase the value of our business, which could cause our stock price to decline. The failure by our management to apply the net proceeds from this offering effectively could impair our growth prospects and result in financial losses that could harm our business and cause the price of our common stock to decline. We intend to use a portion of the proceeds of this offering to repay (i) the 2022 Credit Line, from which we have drawn $2.0 million as of December 31, 2023, payable to Ms. Ngai-Pesic and (ii) the East West Bank Loan, from which $ million was drawn as of , 2024. Until the net proceeds we receive are used, they may be placed in investments that do not produce income or that lose value. Additionally, we will have broad discretion in the use of the net proceeds from this offering when determining whether to satisfy the anticipated tax withholding and remittance obligations related to RSU Settlement and the Additional RSU Settlement or whether to elect to allow RSU holders to sell into the open market shares underlying RSUs to the extent needed to satisfy tax obligations associated with RSU settlement.

We do not intend to pay dividends on our common stock, so any returns on your investment will be limited to changes in the value of our common stock.

We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any dividends for the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and subject to, among other things, our compliance with applicable law, and depending on, among other things, our business prospects, financial condition, results of operations, cash requirements and availability, debt repayment obligations, capital expenditure needs, the terms of any preferred equity securities we may issue in the future, covenants in the agreements governing any future indebtedness, other contractual restrictions and industry trends and any other factors or considerations our board of directors may regard as relevant. Any return to stockholders will therefore be limited to the increase, if any, in our stock price, which may never occur.

Our amended and restated charter and bylaws that will be in effect upon the closing of this offering will designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, and provides that federal district courts will be the sole and exclusive forum for Securities Act claims, which could limit our stockholders' ability to obtain what they believe to be a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our charter and bylaws that will be in effect upon the closing of this offering provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware (or, if that court lacks subject matter jurisdiction, another federal or state court situated in the State of Delaware) shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General

Corporation Law, or the DGCL, our certificate of incorporation, or our bylaws, or any issue, in one or more series, of all or any of the remaining shares of preferred stock, and, in the resolution or resolutions providing for such issue; (iv) any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or our bylaws; or (v) any action asserting a claim against us governed by the internal affairs doctrine. If any such action is filed in a court other than a court located within the State of Delaware, or a Foreign Action, in the name of any stockholder, that stockholder shall be deemed to have consented to: (x) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce our choice of forum, or an Enforcement Action, and (y) having service of process made upon such stockholder in any such Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder, in each case, to the fullest extent permitted by law. Our charter and bylaws that will be in effect upon the closing of this offering further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts are the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. The choice of forum provisions will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation will further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolutions of any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying this offering.

We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums, and protection against the burdens of multi-forum litigation. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims or make such lawsuits more costly for stockholders, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. Furthermore, the enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find one or more of the choice of forum provisions that will be contained in our amended and restated certificate of incorporation and amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could seriously harm our business.

General Risk Factors and Risks Related to Being a Public Company

We have identified a material weakness in our internal control over financial reporting. If our remediation measures are ineffective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to report our financial condition or results of operations accurately or on a timely basis, prevent fraud or file our periodic reports in a timely manner and may incur additional costs to remediate, all of which may adversely affect investor confidence in us and our reported financial information and, as a result, impact the value of our common stock.

We have been a private company and, as such, we have not been subject to the internal control and financial reporting requirements applicable to a publicly traded company. As a public company, we will be subject to Section 404 of the Sarbanes-Oxley Act, or Section 404, which requires that we maintain effective internal control over financial reporting and disclosure controls and procedures. Section 404(a) of the Sarbanes-Oxley Act requires that we include a management report on our internal controls, including an assessment of the effectiveness of our internal controls and financial reporting procedures, beginning with annual report for our fiscal year ending December 31, 2024. We will also be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act,

or Section 404(b), following the later of the date we are deemed to be an "accelerated filer" or a "large accelerated filer," each as defined in the Exchange Act, or the date we are no longer an "emerging growth company," as defined in the JOBS Act. See "—We are an "emerging growth company" and a "smaller reporting company" and any decision on our part to comply with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors." In order to comply with Section 404, we must perform system and process evaluations, document our controls and perform testing of our key controls over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting. Our testing will need to include the disclosure of any material weaknesses or significant deficiencies in our internal control over financial reporting identified by our management or our independent registered public accounting firm. Our testing, or the subsequent testing by our independent public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis. If we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock would likely decline and we could be subject to lawsuits, sanctions or investigations by regulatory authorities, which would require additional financial and management resources.

We have in the past and continue to identify material weaknesses in our internal control over financial reporting ("ICFR"). The material weakness as of December 31, 2023, identified in connection with the preparation of our consolidated financial statements, related to a lack of formalized accounting processes over ICFR and an insufficient complement of personnel possessing the technical accounting and financial reporting knowledge and experience to support a timely and accurate close and financial statement reporting process.

Any failure to maintain internal control over financial reporting or to identify any additional material weaknesses could severely inhibit our ability to timely and accurately report our financial condition, results of operations or cash flow. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also adversely affect our future access to the capital markets.

We are working to remediate the material weakness and are taking steps to strengthen our internal control over financial reporting through the enhancement and formalization of our accounting processes over ICFR and the hiring of additional finance and accounting personnel, and we may take additional actions, including hiring additional personnel, implementing system upgrades or other organizational changes. With the additional personnel, we intend to take appropriate and reasonable steps to remediate this material weakness through the formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. We are also reviewing and documenting our accounting and financial processes and internal controls, building out our financial management and reporting systems infrastructure, and further developing and formalizing our accounting policies and financial reporting procedures, which includes ongoing senior management reviews. While we are taking measures and plan to continue to take measures to design and implement an effective control environment, we cannot assure you that the measures we have taken to date and other remediation and internal control measures we implement in the future will be sufficient to remediate our current material weakness or prevent future material weaknesses. We may discover additional material weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, when required, investors may lose confidence in the accuracy and completeness of our financial reports, we may not be able to access to the capital markets, and our stock price may be materially adversely affected. Moreover, we could become subject to investigations by regulatory authorities, which could require additional financial and management resources and result in the imposition of fines or penalties.

We are an "emerging growth company" and a "smaller reporting company" and any decision on our part to comply with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act. We intend to take advantage of certain exemptions under the JOBS Act from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer an "emerging growth company," whichever is earlier.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period under the JOBS Act. Accordingly, our consolidated financial statements may not be comparable to the financial statements of public companies that comply with such new or revised accounting standards.

We cannot predict if investors will find our common stock less attractive if we choose to rely on any of the exemptions afforded to emerging growth companies. If some investors find our common stock less attractive because we rely on any of these exemptions, there may be a less active trading market for our common stock and the market price of our common stock may be more volatile.

We will remain an emerging growth company until the earlier of (ii) the last day of the fiscal year (a) in which the fifth anniversary of the completion of this offering occurs, (b) in which we have total annual gross revenue of at least $1.2 billion or (c) in which we become a large accelerated filer, which means that we have been public for at least 12 months, have filed at least one annual report and the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the last day of our then-most recently completed second fiscal quarter, and (ii) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

We are also a "smaller reporting company." We may continue to be a smaller reporting company after this offering if either (i) the market value of our common stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our common stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K, we are not required to comply with the auditor attestation requirements of Section 404 and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. Any statements contained in this prospectus that are not statements of historical facts may be deemed to be forward-looking statements. Statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, including, among others, statements regarding the offering, liquidity, growth and profitability strategies and factors and trends affecting our business are forward-looking statements The forward-looking statements are contained principally in the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business," but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words "may," "might," "will," "can," "could," "would," "should," "expect," "intend," "plan," "objective," "target," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue" and "ongoing," or the negative of these terms or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from the information expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- market conditions;
- anticipated trends, challenges and growth in our business and the markets in which we operate;
- our ability to appropriately respond to changing technologies on a timely and cost-effective basis;
- our expectations regarding our revenue, gross margin and capacity to increase bookings;
- the size and growth potential of the markets for our software solutions, and our ability to serve those markets;
- our expectations regarding competition in our existing and new markets;
- the level of demand in our customers' end markets;
- regulatory developments in the United States and foreign countries;
- changes in trade policies, including the imposition of tariffs;
- proposed new software solutions, services or developments;
- our ability to attract and retain key management personnel;
- our customer relationships and our ability to retain and expand our customer relationships;
- our ability to diversify our customer base and develop relationships in new markets;
- the strategies, prospects, plans, expectations, and objectives of management for future operations;
- public health crises, pandemics, and epidemics, such as the COVID-19 pandemic, and their effects on our business and our customers' businesses;
- the impact of the current conflict between Ukraine and Russia and the ongoing trade disputes among the United States and China on our business, financial condition or prospects, including extreme volatility in the global capital markets making debt or equity financing more difficult to obtain, more costly or more dilutive, delays and disruptions of the global supply chains and the business activities of our suppliers, distributors, customers and other business partners;
- changes in general economic or business conditions or economic or demographic trends in the United States and foreign countries including changes in interest rates and inflation;
- our ability to raise additional capital;
- our ability to accurately forecast demand for our software solutions;
- our expectations regarding the outcome of any ongoing litigation;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act and as a smaller reporting company under the Exchange Act;
- our expectations regarding our ability to obtain, maintain, protect and enforce intellectual property protection for our technology;
- our status as a controlled company; and
- our use of the net proceeds from this offering.

These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus and are subject to risks and uncertainties. You should refer to the "Risk Factors" section of this prospectus for a discussion of crucial factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate.

Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Considering the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. Moreover, we operate in a competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this prospectus. While we believe that such information provides a reasonable basis for these statements, such information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely on them.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Such forward-looking statements relate only to events as of the date of this prospectus. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

INDUSTRY AND MARKET DATA

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys, studies and other similar third-party sources, as well as our estimates based on such data. The market data and estimates used in this prospectus involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. We believe that the information from these third-party sources is reliable; however, we have not independently verified them, and our business and the industry in which we operate is subject to a high degree of risk and uncertainty. See "Risk Factors" for additional information regarding risks that could cause results to differ materially from those expressed in the estimates made by the third-party sources and by us.

Market and industry data are subject to change and may be limited by the availability of raw data, the voluntary nature of the data gathering process and other limitations inherent in any statistical survey of such data. In addition, projections, assumptions and estimates of the future performance of the markets in which we operate are necessarily subject to uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and "Special Note Regarding Forward-Looking Statements." These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us. Accordingly, you are cautioned not to place undue reliance on such market and industry data or any other such estimates. The content of, or accessibility through, the sources and websites identified herein, except to the extent specifically set forth in this prospectus, does not constitute a part of this prospectus and are not incorporated herein and any websites are an inactive textual reference only.

Certain information in this prospectus is based on independent or third-party sources, including:

1. Allied Market Research, Automotive Semiconductor Market by Component: Global Opportunity Analysis and Industry Forecast, 2023-2032, August 2023.
2. Allied Market Research, IoT Market by Component (Processor, Connectivity IC, Sensors, Others), by Connectivity Technology (WiFi, Bluetooth, Zigbee, Cellular, NFC, RFID, Others), by End-Use (Consumer Electronics, Retail, Logistics, Automotive, Healthcare, Manufacturing, Others): Global Opportunity Analysis and Industry Forecast, 2021-2031, August 2022.
3. Allied Market Research, Display Market, Global Opportunity Analysis and Industry Forecast, 2023-2032, August 2023.
4. Allied Market Research, High Performance Computing (HPC) Chipset Market: Global Opportunity Analysis and Industry Forecast, 2023-2032, August 2023.
5. Allied Market Research, Power Electronics Market by Device Type (Power Discrete, Power Module, Power IC), by Material (Silicon Carbide, Gallium Nitride, Sapphire, Others), by Application (Power Management, UPS, Renewable, Others), by End Use (Telecommunication, Industrial, Automotive, Consumer Electronics, Military and defense, Energy and Power, Others): Global Opportunity Analysis and Industry Forecast, 2021-2031, May 2022.
6. Display Supply Chain Consultants, Quarterly Display Supply Chain Financial Health Report, Fourth Quarter 2022 through Third Quarter 2023 Report, January 2024.
7. Electronic Design Market Data Annual Report, Electronic System Design Alliance, July 2023.
8. Electronic Design Market Data Third Quarter Report, Electronic System Design Alliance, December 2023.
9. Grand View Research, Electronic Design Automation Software Market Size, Share & Trends Analysis Report By End-use (Microprocessors & Controllers, Memory Management Units), By Region And Segment Forecasts, 2023-2030.
10. Grand View Research, Semiconductor Memory Market Size, Share & Trends Analysis Report By Type (SRAM, MRAM, DRAM, Flash ROM), By Application (Consumer Electronics, Automotive), By Region, And Segment Forecasts, 2020-2027.
11. Handel Jones, Chief Executive Officer of IBS, as cited in "The cost of a 3nm chip is nearly $600 million. Where is it?", iMedia.
12. Semiconductor Industry Association World Fab Forecast Report, March 2024.
13. FACT.MR, SiC & GaN Power Semiconductor Market Report (Worldwide), December 2023.
14. IDC, Worldwide Mobile Phone Semiconductor Forecast, May 2022, #US47829222.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately $ million (or approximately $ million if the underwriters exercise their option to purchase additional shares of our common stock in full) from the sale of the shares of our common stock offered by us in this offering, based on an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, each 1.0 million share increase (decrease) in the number of shares offered, as set forth on the cover page of this prospectus, would increase (decrease) the net proceeds that we receive from this offering by approximately $ million, assuming no change in the assumed initial public offering price per share, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to increase our capitalization and financial flexibility, establish a public market for our common stock, facilitate future access to the public equity markets by us, our employees and our stockholders, obtain additional capital to support our operations and increase our visibility in the marketplace.

We currently intend to use the net proceeds from this offering for general corporate purposes, including working capital, selling and marketing activities, research and product development, general and administrative matters, the repayment of outstanding debt, and capital expenditures. We also may use a portion of the net proceeds to acquire complementary businesses, products, services or technologies. However, we do not have agreements or commitments for any specific acquisitions at this time.

Additionally, we intend to use a portion of the offering proceeds to repay the 2022 Credit Line, from which we have drawn $2.0 million as of December 31, 2023, payable to Ms. Ngai-Pesic, our controlling stockholder and the chair of our board of directors, and any amount drawn under the East West Bank Loan, from which $ was drawn as of , 2024. Any amounts due under the 2022 Credit Line is subordinated to the amounts due under the East West Bank Loan. The interest rate on the 2022 Credit Line is the prime rate plus 1% per annum. The 2022 Credit Line has no restrictions or covenants. We have drawn $2.0 million on the 2022 Credit Line as of December 31, 2023. The total outstanding balance of the 2022 Credit Line was due in full upon the earlier of (i) June 13, 2024 or (ii) 10 days following the date that we secure financing in an amount equal to or greater than the 2022 Credit Line. Concurrent with entering into the East West Bank Loan agreement, Ms. Ngai-Pesic agreed to (i) extend the repayment term of the 2022 Credit Line to be the later of (a) the expiration or termination date of the East West Bank Loan or (b) June 13, 2024, and (ii) subordinate the right of repayment of any outstanding amount under the 2022 Credit Line to any amount outstanding under the East West Bank Loan. See "Certain Relationships and Related Party Transactions—Related Party Loans and Lines of Credit" for more information regarding the 2022 Credit Line. The East West Bank Loan bears interest at a per annum rate equal to one half of one percent (0.5%) above the greater of (i) the prime rate or (ii) four and one half percent (4.5%) and terminates on December 14, 2025.

We may use a portion of the net proceeds we receive from this offering, if we so elect, to satisfy the anticipated tax withholding and remittance obligations pursuant to the Optional RSU Net Settlement. We may elect to utilize the Optional RSU Net Settlement in full, in part or not at all. If we elect to utilize the Optional RSU Net Settlement in full, the estimated tax withholding and remittance obligations that we would pay on behalf of applicable RSU holders would be approximately $ million.

The estimated portion of the net proceeds we may elect to use to satisfy any anticipated tax withholding and remittance obligations is based on the initial public offering price. Accordingly, the amount of the proceeds we use will vary depending on the market price of our common stock on the date we elect to settle the applicable RSUs. For example, each $1.00 increase or decrease in the assumed initial public offering price per share of $, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the amount we would be required to pay to satisfy our tax withholding and remittance obligations related to the Optional RSU Net Settlement by approximately $ million.

We may, at our discretion, elect not to satisfy the anticipated tax withholding and remittance obligations as a result of the RSU Settlement and the Additional RSU Settlement. Upon such election, applicable holders of RSUs will be required to sell shares underlying their RSUs into the open market to the extent needed to satisfy the anticipated tax

withholding and remittance obligations, subject to the restrictions set forth in the lock-up agreements discussed in “Underwriting.”

Pending the uses described above, we intend to invest the net proceeds from this offering in short term, interest-bearing securities such as money market accounts, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government.

The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to gain access to additional financing, the pace of our operational expansion relative to revenue growth, and the relative success and cost of our research and development programs. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering.

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock, and we currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business and we do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our common stock. In addition, the East West Bank Loan contains certain negative covenants affecting our ability to pay certain dividends. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, and our capitalization as of December 31, 2023:

- on an actual basis (reflecting a -for- reverse split of our common stock, which we effected on , 2024);
- on a pro forma basis, giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering, (ii) the RSU Settlement, and (iii) stock-based compensation expense of approximately $ million related to RSUs subject to the RSU Settlement reflected as a $ million increase to additional paid-in capital and a $ million decrease to retained earnings; and
- on a pro forma as adjusted basis, giving effect to (i) the pro forma adjustment discussed above, (ii) giving further effect to the sale of shares of our common stock by us in this offering at an assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (iii) the repayment of the 2022 Credit Line following the completion of this offering. Excluded from the table below are borrowings on our East West Bank Loan, which were undrawn at December 31, 2023, but for which $ million has been drawn as of , 2024 and are expected to be outstanding at the time of the initial public offering. Such amounts are anticipated to be repaid from the proceeds raised from the initial public offering.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with the sections titled “Prospectus Summary—Summary Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	As of December 31, 2023		
	Actual	Pro Forma[1]	Pro Forma As Adjusted [1][2]
	(unaudited)		
	(in thousands, except for per share data)		
Cash	$ 4,421	$	$
Debt:			
2022 Credit Line [3]	2,000		
Stockholders’ equity:			
Preferred stock, $0.0001 par value per share; no shares authorized, issued and outstanding, actual; shares authorized, no shares issued and outstanding pro forma and pro forma as adjusted	—		
Common stock, $0.0001 par value; 50,000,000 shares authorized; 40,000,000 shares issued and outstanding, actual; shares authorized, shares issued and outstanding pro forma; shares authorized, shares issued and outstanding pro forma as adjusted	4		
Additional paid-in capital	—		
Retained earnings	11,390		
Accumulated other comprehensive loss	(1,992)		
Total stockholders’ equity	9,402		
Total capitalization	$ 11,402	$	$

(1) The pro forma and pro forma as adjusted columns in the table above do not include the effects of the Additional RSU Settlement and the Optional RSU Net Settlement. The Additional RSU Settlement would result in (i) the issuance of an aggregate of shares of common stock and (ii) an estimated additional stock-based compensation expense of $ million, reflected as an additional increase to additional paid-in capital and decrease to retained earnings. The Optional RSU Net Settlement, if utilized at our option in full, would result in a $ million decrease in cash and decrease in additional paid-in capital.

(2) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) each of the amount of cash and cash equivalents, additional paid-in capital and total capitalization by approximately $ million, assuming the number of shares offered, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and

estimated offering costs payable by us. Each 1.0 million increase (decrease) in the number of shares offered as set forth on the cover page of this prospectus, would increase (decrease) each of our cash and cash equivalents, working capital (deficit), total assets, additional paid-in capital and total stockholders' equity by approximately $ million, assuming no change in the assumed initial public offering price per share, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Reflects the repayment of the 2022 Credit Line following the completion of this offering.

The number of shares of our common stock to be outstanding on a pro forma and a pro forma as adjusted basis in the table above is based on shares of common stock (after giving effect to shares to be issued in connection with the RSU Settlement) outstanding as of December 31, 2023, and excludes:

- shares of our common stock subject to the settlement of RSUs, outstanding as of December 31, 2023 granted under the 2014 Plan, for which the Liquidity Event Requirement, will be satisfied upon the completion of this offering, but for which the Time-Based Requirement (i) was not satisfied on or before December 31, 2023, or (ii) has not accelerated prior to December 31, 2023 (the Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated on or before, or in connection with, the closing of this offering but after December 31, 2023, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement);
- shares of our common stock subject to the settlement of RSUs granted subsequent to December 31, 2023 under the 2014 Plan for which the Liquidity Event Requirement will be satisfied upon the completion of this offering, (the Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated in connection with the closing of this offering, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement);
- shares of our common stock reserved for future issuance under the 2024 Plan which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2024 Plan and any reserved shares not issued or subject to outstanding awards under the 2014 Plan after the effective date of the 2024 Plan that are subsequently forfeited or terminated, all of which shares shall become available for issuance under the 2024 Plan; and
- shares of our common stock reserved for future issuance under the ESPP which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value as of December 31, 2023, was approximately $ million, or $ per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share is our historical net tangible book value divided by the number of shares of common stock outstanding as of December 31, 2023, after giving effect to a -for- reverse split of our common stock, which we effected on , 2024.

Our pro forma net tangible book value as of December 31, 2023, was $ million, or $ per share of common stock. Our pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of our shares of common stock outstanding as of December 31, 2023, after giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering, (ii) the RSU Settlement, and (iii) stock-based compensation expense of approximately $ million related to RSUs subject to the RSU Settlement reflected as an $ million increase to additional paid-in capital and a $ million decrease to retained earnings.

Our pro forma as adjusted net tangible book value as of December 31, 2023 was $, or $ per share of common stock. Pro forma as adjusted net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of December 31, 2023, after giving effect to the pro forma adjustment discussed above and after giving further effect to (i) the sale of shares of our common stock by us in this offering at an assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, (ii) the repayment of the 2022 Credit Line following the completion of this offering and (iii) the repayment of the outstanding balance on the East West Bank Loan following the completion of this offering, from which $ was drawn as of , 2024, our pro forma as adjusted net tangible book value as of December 31, 2023 would have been $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of $ to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value per share of $ to new investors purchasing common stock in this offering.

Our pro forma and pro forma as adjusted net tangible book values do not include the effects of the Additional RSU Settlement. The Additional RSU Settlement would result in an estimated additional stock-based compensation expense of $ million, reflected as an additional increase to additional paid-in capital and a decrease to retained earnings. The Optional RSU Net Settlement, if utilized at our option in full, would result in a $ million decrease in cash and decrease in additional paid-in capital.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Historical net tangible book value per share as of December 31, 2023	$	
Pro forma increase in net tangible book value per share as of December 31, 2023 before giving effect to this offering		
Pro forma net tangible book value per share as of December 31, 2023		
Increase in pro forma net tangible book value per share attributable to investors participating in this offering		
Pro forma as adjusted net tangible book value per share after giving effect to this offering	$ —	
Pro forma as adjusted dilution per share to investors participating in this offering		$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) the pro forma as adjusted net tangible book value per share after this offering by approximately $ per share and the dilution in pro forma per share to investors participating in this offering by approximately $ per share, assuming that the number of

shares offered, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A 1.0 million share increase in the number of shares offered, as set forth on the cover of this prospectus, would increase the pro forma as adjusted net tangible book value per share after this offering by approximately $, and decrease the dilution in pro forma per share to investors participating in this offering by approximately $, and a 1.0 million share decrease in the number of shares offered by us would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately $ and increase the dilution in pro forma per share to investors participating in this offering by approximately $, in each case assuming the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover of this prospectus) remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares in full, the pro forma as adjusted net tangible book value will increase to $ per share, representing an immediate increase in pro forma as adjusted net tangible book value to our existing stockholders of $ per share and an immediate decrease of dilution of $ per share to new investors participating in this offering.

The following table summarizes, on a pro forma as adjusted basis as of December 31, 2023, the number of shares purchased or to be purchased from us, the total consideration paid or to be paid to us, and the average price per share paid to us by our existing stockholders and paid us to by investors participating in this offering at an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, investors participating in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	$	%	$
Investors participating in this offering					
Total		100 %	$	100 %	

The table above assumes no exercise of the underwriters' option to purchase up to an additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by the existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to % of the total number of shares outstanding after this offering.

Except as otherwise indicated, the discussion and tables above are based on shares of our common stock (after giving effect to shares to be issued in connection with the RSU Settlement) outstanding as of December 31, 2023, and excludes:

- shares of our common stock subject to the settlement of RSUs, outstanding as of December 31, 2023 granted under the 2014 Plan, for which the Liquidity Event Requirement, will be satisfied upon the completion of this offering, but for which the Time-Based Requirement (i) was not satisfied on or before December 31, 2023, or (ii) has not accelerated prior to December 31, 2023 (the Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated on or before, or in connection with, the closing of this offering but after December 31, 2023, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement);
- shares of our common stock subject to the settlement of RSUs granted subsequent to December 31, 2023 under the 2014 Plan for which the Liquidity Event Requirement will be satisfied upon the completion of this offering he Time-Based Requirement for of these RSUs is anticipated to be satisfied or accelerated in connection with the closing of this offering, as a result of which additional shares of our common stock are anticipated to be issued in connection with the Additional RSU Settlement);
- shares of our common stock reserved for future issuance under the 2024 Plan which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the 2024 Plan and any reserved shares not issued or subject to outstanding awards under the 2014 Plan after the effective date of the 2024

Plan that are subsequently forfeited or terminated, all of which shares shall become available for issuance under the 2024 Plan; and

- shares of our common stock reserved for future issuance under the ESPP which will become effective as of immediately prior to the completion of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under the ESPP.

To the extent that any outstanding RSUs vest and settle or RSUs are issued under our stock-based compensation plans, or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of financial condition and results of operations together with our audited consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks, uncertainties and assumptions. Our actual results could differ materially from those discussed in or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors." Please also see the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a provider of TCAD software, EDA software and SIP. TCAD, EDA and SIP solutions enable semiconductor and photonics companies to increase productivity, accelerate their products' time-to-market and reduce their development and manufacturing costs. We have decades of expertise developing the "technology behind the chip" and providing solutions that span from atoms to systems, starting with providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. We provide SIP for SoC and ICs, and SIP management tools to enable team collaborations on complex SoC designs. Our customers include semiconductor manufacturers, OEMs and design teams who deploy our solutions in production flows across our target markets, including display, power devices, automotive, memory, HPC, IoT and 5G/6G mobile markets.

EDA offerings, including our solutions, enable companies to streamline their IC design workflows, develop complex IC designs in a cost-efficient manner, and maintain acceptable IC manufacturing yield, by providing interoperable tools that capture and simulate designs from concept to analysis. Our TCAD device and process simulation tools provide compatible data structures that can be used with our EDA modeling, analysis, simulation, verification and yield enhancement tools. Further, our EDA tools are used for designing SIP and IC designs that can be managed and validated by our SIP management tools.

Our go-to-market strategy centers on selling software solutions and associated maintenance and services. Our software solutions accounted for 74% and 73% of our revenue for the years ended December 31, 2022 and 2023, respectively, and associated maintenance and services accounted for 26% and 27% of our revenue for the years ended December 31, 2022 and 2023, respectively. For the years ended December 31, 2022 and 2023, approximately 83% and 81% of our bookings came from existing customers and 17% and 19% came from new customers, respectively. See "—Key Operating Indicators and Non-GAAP Financial Measures—Bookings" for a description of how we define bookings.

We have experienced an increase in bookings and revenue over the past two years. Our revenue was $46.5 million, and $54.2 million for the years ended December 31, 2022 and 2023, respectively. Our bookings were $49.7 million, and $58.1 million for the years ended December 31, 2022 and 2023, respectively. Partially attributable to increased operating expenses in connection with our preparation for this offering, we had a net loss of $3.9 million and $0.3 million for the years ended December 31, 2022 and 2023, respectively.

Acquisitions

Since 2015, we have acquired ten businesses, assets and/or technologies to complement our existing software solution offerings, expand into new markets or grow our existing market share, increase our engineering talent and enhance our technical capabilities. For example, in November 2020, we acquired the memory compiler assets and resources of Dolphin for $1.2 million to provide embedded memory and register files for SoC designers and foundries. In January 2021, we acquired PolytEDA Cloud LLC, or PolytEDA, for $2.0 million to expand our capabilities for rapid physical verification of IC designs prior to mask creation and manufacturing and for cloud enablement of EDA software tools.

In our mergers and acquisitions, or M&A, process, we identify a large pool of potential targets and assess them based on their technology, talent and financial situation. After this initial evaluation, we narrow the universe of potential M&A target candidates to a smaller group for a detailed due diligence review process. This helps us thoroughly understand the operations, finances, and any potential risks involved with acquiring a given candidate. Ultimately, we believe our process allows us to make well-informed decisions about which companies, if any, to pursue further in our M&A efforts. When we engage in M&A, we aim to retain the customers of our acquired companies due to our expanded offerings or improved services. As a result, acquiring target companies may allow us to access and serve a broader range of customers, which ultimately may lead to more bookings, increased revenue growth and expansion in our market share presence.

Impact of COVID-19

We are continuing to monitor the impact of COVID-19 on all aspects of our business. The COVID-19 pandemic has caused and may continue to cause travel bans or disruptions, and in some cases, prohibition of non-essential activities, disruption and shutdown of businesses and greater uncertainty in global financial markets. The impact of COVID-19 is fluid and uncertain, but it has caused and may continue to cause various negative effects, including an inability to meet with actual or potential customers, customers deciding to delay or abandon their planned purchases or failing to make payments to us, closures in our customers' offices, and delays or disruptions in our customers' supply chains.

The extent to which COVID-19 ultimately impacts our results of operations, cash flow and financial position will depend on future developments, which are uncertain and cannot be predicted, including but not limited to, the duration and spread of the pandemic, its severity, the actions taken by governments and authorities to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume.

Geopolitical Conflicts

In October 2023, following a series of attacks by Hamas on Israeli civilian and military targets, Israel declared war on Hamas in Gaza. While we derived $0.5 million and $0.6 million of our revenue during the years ended December 31, 2022 and 2023, respectively, from countries in the Middle East, including Israel, we do not currently consider the conflict between Israel and Hamas to have had a material impact on our business.

In February 2022, Russia invaded Ukraine, and the ensuing conflict has created disruption in the region and around the world. However, we do not currently consider Russia's invasion of Ukraine to have had a material impact on our business. None of our revenue was derived from our Russian or Ukrainian subsidiary in the years ended December 31, 2022 and 2023. In addition, neither our Russian nor Ukrainian subsidiary comprises, or is expected to comprise, a material portion of our net assets which consist primarily of computers, laptops and audio/visual equipment. We do have an aggregate of 7 employees and 6 contractors in Ukraine and 2 employees and 2 contractors in Russia, as of December 31, 2023. As a result of economic uncertainties and disruption created by the initiation of war, we recorded, during the year ended December 31, 2022, an impairment charge of $0.6 million to write down the carrying value of intangible assets associated with our Ukrainian subsidiary, which management determined would not be recoverable. See also Note 6, Goodwill and Intangible Assets and Note 16, Fair Value of Financial Instruments, of our consolidated financial statements for the year ended December 31, 2023.

We continue to closely monitor the ongoing conflicts and related sanctions in the affected regions, such as potential sanctions related to employing individuals located in the affected areas, which could impact our results of operations in the future. Other impacts due to the evolving conflicts are currently unknown and could potentially subject our business to adverse consequences should the situations escalate beyond their current scopes or affect our customers outside of the regions.

Key Factors Affecting our Results of Operations and Future Performance

We believe that the growth of our business and our future success are dependent upon many factors including those described above under "Risk Factors" and elsewhere in this prospectus and those described below. While each of these factors presents significant opportunities for us, these factors also pose challenges that we must successfully address to sustain the growth of our business and enhance our results of operations.

Relationships with Our Existing Customers

Building long-term relationships with our existing customer base is critical in driving renewals for our licenses and overall revenue growth. We have a global sales force selling to semiconductor companies and engineering universities which instruct the next generation of chip designers and fabrication facility managers on the use and benefits of our design tools. Most of our customers enter into multi-year software license agreements for a fixed price including a multi-year software license and maintenance and services.

When we renew expiring contracts with our customers, we may increase our bookings by selling them additional or new software or SIP. Our total bookings increased by 17% from $49.7 million in fiscal year 2022 to $58.1 million in fiscal year 2023. Over time, we expect that existing customers will choose to upgrade and purchase additional products, particularly as we de-emphasize our lower margin products, which we expect will over the long term drive margin expansion. Our ability to continue to generate sales from our existing customers and to expand those relationships is dependent on our ability to continue to offer software solutions that our existing customers demand. Any failure to continue to generate sales with our existing customers or expand our product and service offerings with our existing customers may have an adverse effect on our revenue and results of operations.

We enter into standard software licensing agreements with each of our customers. Pursuant to these agreements, we grant our customers a non-exclusive, non-transferable limited license, without the right to sublicense, to execute, use

and operate certain software. Each party has the right to terminate the software license agreement under certain circumstances, in which event the customer will be required to remove, delete and return all software, related documentation and confidential information furnished under the license agreement.

Our Ability to Expand Our Product Offerings

To meet the increasing complexity of semiconductor designs, the introduction of new advanced materials, and the increased costs associated with more advanced semiconductor technology nodes, we will need to continually enhance our product offerings through our own in-house research and development efforts, acquisitions, or strategic partnerships with third parties. The in-house development of new product offerings or enhancements to our existing product offerings requires significant research and development activities and time and may or may not result in offerings we can successfully market and sell to customers. For example, we have developed an artificial intelligence-based solution named fab technology co-optimization or FTCO™ for wafer level fabrication facilities. FTCO utilizes manufacturing data to perform statistical and physics-based machine learning software simulations to create a computer model of a wafer, which we call the "digital twin" of the wafer, in order to simulate the fabrication of wafers. We may also seek to acquire companies or assets for products or solutions which we believe are complementary to our existing products or solutions. See "—Our Ability to Successfully Identify, Complete and Integrate Acquisitions." Additionally, we have in the past, and may in the future, partner with third parties to expand our product offerings to our customers. Since 2016, we have generated revenues from licensing to our customers a certain SIP which we have licensed from a third party vendor. The license agreement with the third party vendor relating to this SIP expired on October 30, 2023. During the twelve months ended December 31, 2022 and 2023, we generated $4.2 million, and $4.5 million, respectively, in software license revenue from licensing this SIP to our customers. In connection with this license agreement, we recognized $2.1 million and $2.0 million in royalty expense during the years ended December 31, 2022 and 2023, respectively. If in the future, we enter into additional licensing agreements with other third parties and are unable to extend the term of those licensing arrangements, we will experience an associated decline in revenue relating to those products.

Our Ability to Expand into New Markets and Applications and Expansion of our Existing Markets

According to Grand View Research, the global EDA software market was estimated to reach $11.1 billion in potential revenue in 2022 and is expected to reach $22.2 billion in potential revenue in 2030, representing a 9.1% CAGR, driven in part by the growth in the integrated circuits and electronics manufacturing markets, growing complexity of semiconductor and photonics designs and increasing challenges associated with advanced materials and shrinking process technology nodes across the EDA market. We believe these trends will increase the demand for our software solutions over time, which will have a direct impact on our future revenues and results of operations. In response to this increase in complexity and new challenges facing designers, we have increased investments in our research and development for new software product offerings. For example, our research and development expense was 27% and 24% of revenue for the years ended December 31, 2022 and 2023, respectively. We plan to continue to invest in our software solutions to establish and expand a leadership position in our target markets. We also plan to use our research and development efforts to continue to cater to strategic customer needs.

The drive to increase performance and diversification of applications is further accelerated by a broad-scale transition to cloud-based software applications and computing on mobile platforms. The development of semiconductors that are optimized for specific applications, including AI, 5G/6G communications and IoT, has continued to fuel demand for TCAD and EDA software tools, which in turn fuels demand to develop solutions to meet our markets' evolving needs. Our ability to successfully generate customer demand amongst new customers and in new markets is dependent on our ability to educate these customers and markets about our software solutions and our ability to generate sufficient new solutions that solve problems for these potential customers. Our ability to continue to expand our product offerings into new markets also requires that we direct our research and development efforts toward value-generating new and existing initiatives. Our future revenues and results of operations will be directly impacted by our ability to produce and provide new software solutions in new and expanding markets.

Our Ability to Successfully Identify, Complete and Integrate Acquisitions

Our success depends in part on our ability to identify, complete and integrate acquisitions. Our goal for future potential acquisition is to pursue acquisitions that will increase our competitiveness in our markets, and increase our bookings and revenue. Our ability to successfully identify, complete and integrate acquisitions will depend on a number of factors, including access to adequate capital, potential competition for the assets, and technology fit. When we engage in M&A, we aim to retain the customers of our acquired companies due to our expanded offerings or improved services. As a result, acquiring target companies is a key part of our growth strategy and may allow us to access and serve a broader range of customers, which ultimately may lead to more bookings, increased revenue growth and expansion in our market share presence.

Our Ability to Calibrate Our Product Mix to Enhance Margin Expansion

We anticipate that our results will be impacted by the increase or decrease of a given product or service as a percentage of total revenue relative to our other products and services. If and as higher margin products become a larger part of our product mix, or conversely as low margin products become a smaller part of our product mix, our gross margin will expand. While we may enter into agreements with third parties for lower margin product solutions, we anticipate our focus on higher margin solutions will continue to lead our other products and services within our product mix, which we anticipate may lead to gross margin and operating margin expansion. Our future ability to shape our product mix with higher margin products making up a larger percentage of our total revenue will impact our results of operations.

Our Ability to Scale While Mitigating Increases in Expenses

If we can execute on our growth strategy and grow our revenue through a combination of new customer growth, upgrades and increased usage of our products by existing customers, as well as accretive acquisitions, our results will be impacted by our ability to reduce the rate at which our expenses increase in proportion with a rise in revenue. We believe this is possible in a number of expense line items, which may provide for additional gross margin and operating margin expansion. For example, we anticipate as our existing customers choose to upgrade to newer software solutions, our costs related to the support of legacy software decreases, outpacing any increases in cost related to supporting the upgraded software. Additionally, we have incurred increased general and administrative expenses in connection with preparing to become a public company, including increased staff costs and professional services fees, including legal and accounting fees. While we anticipate the increased level of costs to remain, we do not anticipate those costs scaling proportionally with our revenue. Finally, we may be able to gain sales efficiencies as our revenue grows, such that our sales and marketing expenses will decrease as a percentage of revenue. In the aggregate, our ability to keep these expenses from growing proportionally with our revenue may provide for meaningful gross margin and operating margin expansion.

Components of Results of Operations

Revenue

Our revenue is derived from software licensing and maintenance and services. Our customer agreements include combinations of licensed software and maintenance and services, which are accounted for as separate performance obligations with differing revenue recognition patterns. The following table sets forth our quarterly revenue and the components of revenue, along with operating income (loss) for each of the last eight quarters through the period ended December 31, 2023. The unaudited quarterly data below has been prepared on the same basis as the audited consolidated financial statements included elsewhere in this prospectus and, in the opinion of management, reflect all necessary adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of this information. The results of historical quarters are not necessarily indicative of the results of operations for any future period. You should read the following unaudited quarterly data in conjunction with our consolidated financial statements and related notes included elsewhere in this prospectus.

	Three Months Ended							
	Mar 31, 2022	Jun 30, 2022	Sep 30, 2022	Dec 31, 2022	Mar 31, 2023	Jun 30, 2023	Sep 30, 2023	Dec 31, 2023
	(in thousands)							
Revenue:								
Software license revenue	$ 10,803	$ 7,882	$ 9,261	$ 6,465	$ 10,665	$ 8,845	$ 11,083	$ 8,738
Maintenance and service	2,748	3,493	2,486	3,336	3,626	3,680	3,861	3,748
Total revenue	$ 13,551	$ 11,375	$ 11,747	$ 9,801	$ 14,291	$ 12,525	$ 14,944	$ 12,486
Operating income (loss)	$ 1,359	$ (644)	$ (1,137)	$ (1,451)	$ 1,533	$ (205)	$ 1,742	$ (1,936)

Software License Revenue

Revenue from our software licenses is classified as software license revenue. Software license revenue is recognized upfront upon delivery of the licensed product. We also offer licenses of our standard SIP developed in house, and we offer licenses to our SIP developed in partnership with a third party vendor. See "Business—Agreement with NXP." Our SIP licenses provide customers with access to SoC design SIP which meet established industry standards, thus saving customers the time and resources required to develop similar design methodologies. Our SIP are generally ready to use upon delivery, meaning no customization is required for our customers to obtain value from the use of our SIP in their IC designs. We recognize revenue associated with licenses of our SIP at the commencement of the contract upon delivery of the licensed SIP. With respect to our SIP developed in partnership with a third party vendor, we generally acted as a principal to the transaction because we controlled the promised SIP that we delivered to the customer. Consistent with our role as the principal, we recognized SIP revenue of our SIP developed in partnership with the third party vendor on a gross basis. Any royalty fees based upon unit sales, revenue or flat fees which were

paid to the third party vendor were reported in cost of revenue upon delivery pursuant to the terms and conditions of our contractual obligations with the licensors.

Under certain SIP license agreements, we can also derive revenue through royalties from customers who agree to pay usage-based fees to embed our SIP into their own software offerings. Revenue under SIP royalty agreements is generally recognized during the period in which the customer sells its solutions which incorporate our SIP.

Maintenance and Service Revenue

Typically, our software solutions are sold with post-contract support, or PCS, which includes unspecified technical enhancements and customer support. PCS is classified as maintenance revenue and is recognized ratably over the term of the contract, as we satisfy the PCS performance obligation over time.

We also recognized an immaterial portion of our revenue from device characterization and modeling services for the years ended 2022 and 2023. Revenue is recognized upon the completion of the requested services and, as applicable, satisfaction of customer acceptance terms. Revenue from these services is classified as maintenance and service revenue.

Cost of Revenue and Gross Profit

Cost of revenue consists of personnel costs comprised of salaries and benefits for employees directly involved in our customer support function, such as customer support engineering salary and benefits, costs of our other customer services, allocation of overhead and facility costs and royalties related to the recognized revenue. Gross profit represents revenue less cost of revenue.

Operating Expenses

Our operating expenses consist of research and development, selling and marketing, and general and administrative expenses. Personnel costs are the most significant component of our operating expenses and consist of salaries, benefits, bonuses and commissions. Our operating expenses also include consulting costs, costs of facilities, information technology, depreciation and amortization. We expect our operating expenses to fluctuate as a percentage of revenue over time. Historically, we have not recognized stock-based compensation, but we expect we will do so after the closing of our initial public offering. We expect that this expense will be a component of general and administrative expense, research and development expense, selling and marketing expense and cost of revenue, and any such amounts could be significant. As of December 31, 2023, we had $24.5 million in deferred stock-based compensation expense, of which $11.8 million relates to awards that have met the Time-Based Requirement but not the Liquidity Event Requirement, and the remaining $12.7 million in deferred stock-based compensation expense relates to awards that have not met either requirement. In the period in which the Liquidity Event Requirement is satisfied, we will record cumulative stock-based compensation expense for the service period through such date using the straight-line attribution method, net of actual forfeitures, based on the grant-date fair value of the RSU awards. Had the initial public offering, a qualifying Liquidity Event, occurred on December 31, 2023, the Time Based Requirement would have been accelerated, in accordance with their terms, for an additional 348,899 RSUs, and we would have recognized cumulative combined stock-based compensation expense of $14.7 million for active employees, terminated employees, executive officers and directors.

Research and Development

Our research and development expense consists primarily of personnel costs comprised of salaries, benefits for employees directly involved in our research and development efforts, as well as engineering, quality assessment, other related costs associated with the development of new products, enhancements to existing products, quality assurance and testing and allocated overhead costs. We expense research and development costs as incurred. We believe that continued investment in our software solutions and services is important for our future growth and acquisition of new customers and, as a result, we expect our research and development expenses to continue to increase, although it may fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

Selling and Marketing

Selling and marketing expense consists of personnel costs comprised of salaries, benefits, sales commissions, travel costs, and field application engineering directly involved in our selling and marketing efforts, as well as professional and consulting fees, advertising expenses, and allocated overhead costs. We expect selling and marketing expense to continue to increase as we increase our sales and marketing personnel and grow our international operations, although it may fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

General and Administrative

General and administrative expense consists of personnel costs associated with our executive, legal, finance, human resources, information technology and other administrative functions, including salaries, benefits and bonuses. General and administrative expense also includes professional and consulting fees, accounting fees, legal costs, and allocated overhead costs. We expect general and administrative expense to increase as we expand our finance and administrative personnel, grow our operations, and incur additional expense associated with operating as a public company, including director and officer liability insurance and legal and compliance costs, although it may fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

Impairment Charges

On February 24, 2022, Russia launched an invasion of Ukraine. As a result of local economic uncertainties and disruption created by this ongoing conflict, we recorded an impairment charge of $0.6 million during the year ended December 31, 2022 in order to reduce the carrying value of intangible assets associated with our Ukrainian subsidiary, which management determined would not be recoverable.

Interest and Other Expense, Net

Interest and other expense, net includes interest income earned on cash balances or other sources, interest expense associated with cost of borrowings, leases or interest-bearing agreements, foreign exchange gains and losses and changes in the fair value of contingent consideration associated with legacy acquisitions.

Income Tax Provision

Income tax provision is our estimate of current tax expense incurred from the consolidated results of operations globally.

Results of Operations

The following table sets forth our results of operations for the years ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Revenue:		
Software license revenue	$ 34,411	$ 39,331
Maintenance and service	12,063	14,915
Total revenue	46,474	54,246
Cost of revenue	8,887	9,354
Gross profit	37,587	44,892
Operating expenses:		
Research and development	12,447	13,170
Selling and marketing	10,222	12,707
General and administrative	16,231	17,881
Impairment charges	560	—
Total operating expenses	39,460	43,758
Operating income (loss)	(1,873)	1,134
Interest and other expense, net	(355)	(624)
Income (loss) before income tax provision	(2,228)	510
Income tax provision	1,700	826
Net loss	$ (3,928)	$ (316)

The following table summarizes our results of operations as a percentage of total revenue for years ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	2023
	(as a percentage of total revenue)	
Revenue:		
Software license revenue	74 %	73 %
Maintenance and service	26 %	27 %
Total revenue	100 %	100 %
Cost of revenue	19 %	17 %
Gross profit	81 %	83 %
Operating expenses:		
Research and development	27 %	24 %
Selling and marketing	22 %	23 %
General and administrative	35 %	33 %
Impairment charges	1 %	— %
Total operating expenses	85 %	81 %
Operating income (loss)	(4)%	2 %
Interest and other expense, net	(1)%	(1)%
Income (loss) before income tax provision	(5)%	1 %
Income tax provision	4 %	2 %
Net loss	(8)%	(1)%

Comparison of the Years Ended December 31, 2022 and 2023

Revenue

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Revenue:		
Software license revenue	$ 34,411	$ 39,331
Maintenance and service	12,063	14,915
Total revenue	**$ 46,474**	**$ 54,246**

Total revenue increased $7.8 million, or 17%, from $46.5 million for the year ended December 31, 2022 to $54.2 million for the year ended December 31, 2023. The growth in total revenue was driven by $2.0 million of revenue from new customers and an increase in revenue from customer renewals of $5.8 million. Software license revenue increased $4.9 million, or 14%, from $34.4 million for the year ended December 31, 2022 to $39.3 million for the year ended December 31, 2023. Software license revenue generated from the licensing of a product licensed from a third party vendor increased $0.3 million from $4.2 million for the year ended December 31, 2022 to $4.5 million for the year ended December 31, 2023. Maintenance and service revenue increased $2.9 million, or 24%, from $12.1 million for the year ended December, 2022 to $14.9 million for the year ended December 31, 2023, driven by an increase in support services as a result of an increase in software license deliveries on new sales and customer renewals during fiscal 2023.

Gross Profit and Cost of Revenue

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Total revenue	$ 46,474	$ 54,246
Cost of revenue	8,887	9,354
Gross profit	**$ 37,587**	**$ 44,892**
Gross profit margin	**81 %**	**83 %**

Gross profit increased $7.3 million, or 19%, from $37.6 million for the year ended December 31, 2022 to $44.9 million for the year ended December 31, 2023. Gross profit margin increased from 81% for the year ended December 31, 2022 to 83% for the year ended December 31, 2023, driven by an increase in the contribution of software license revenue to total revenue and a decline in the U.S. dollar value of personnel costs associated with our international subsidiaries. Royalty expense to a third party vendor from whom we licensed a SIP declined $0.1 million from $2.1 million for the year ended December 31, 2022 to $2.0 million for the year ended December 31, 2023.

Operating Expenses

	Year Ending December 31,	
	2022	2023
	(in thousands)	
Operating expenses		
Research and development	$ 12,447	$ 13,170
Selling and marketing	10,222	12,707
General and administrative	16,231	17,881
Impairment charges	560	**$ —**
Total operating expenses	**$ 39,460**	**$ 43,758**

Research and Development Expenses

Research and development expenses were $12.4 million and $13.2 million for the years ended December 31, 2022 and 2023, respectively. The increase of $0.8 million, or 6%, was primarily due to higher compensation of $0.4 million and benefits of $0.4 million primarily related to increased headcount.

Selling and Marketing Expenses

Selling and marketing expenses were $10.2 million and $12.7 million for the years ended December 31, 2022 and 2023, respectively. The increase of $2.5 million, or 24%, was primarily due to higher compensation of $1.2 million and benefits of $0.4 million primarily related to increased headcount, a $0.7 million increase in sales and marketing related travel, conferences, trade shows and advertising, and a $0.2 million increase in sales commissions during the year ended December 31, 2023.

General and Administrative Expenses

General and administrative expenses were $16.2 million and $17.9 million for the years ended December 31, 2022 and 2023, respectively. The increase of $1.7 million, or 10%, reflects higher compensation of $1.1 million and benefits of $0.3 million primarily related to increased headcount and a $0.8 million increase in software maintenance and license fees associated with expansion of our financial reporting and compliance systems; partially offset by a $0.3 million decline in facilities and equipment rental expense and a $0.2 million decline in our allowance for credit losses.

Impairment Charges

On February 24, 2022, Russia launched an invasion of Ukraine. As a result of local economic uncertainties and disruption created by the initiation of war, we recorded an impairment charge of $0.6 million to write down the carrying value of intangible assets associated with our Ukrainian subsidiary which management determined would not be recoverable. See also consolidated financial statements for further discussion. See Notes 6 and 16 of our consolidated financial statements for the years ended December 31, 2022 and 2023 appearing elsewhere in this prospectus for additional information.

Interest and Other Expense, Net

Interest and other expense, net, was $0.4 million and $0.6 million for the years ended December 31, 2022 and 2023, respectively. Interest and other expense, net includes interest income earned on cash balances or other sources, interest expense associated with cost of borrowings, leases or interest-bearing agreements, foreign exchange gains

and losses and changes in the fair value of contingent consideration associated with legacy acquisitions. The decrease in interest and other expense, net, was primarily the result of foreign exchange rate fluctuations.

Income Tax Provision

Income tax provision was $1.7 million and $0.8 million for the years ended December 31, 2022 and 2023, respectively. See Note 12 of our consolidated financial statements for the years ended December 31, 2022 and 2023 appearing elsewhere in this prospectus further discussion.

Key Operating Indicators and Non-GAAP Financial Measures

We use the following key performance indicators and non-GAAP financial measures to analyze our business performance and financial forecasts and to develop strategic plans which we believe provide useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management team. These key performance indicators and non-GAAP financial measures are presented for supplemental informational purposes only, should not be considered a substitute for financial information presented in accordance with GAAP and may differ from similarly titled metrics or measures presented by other companies.

Bookings

We define a booking as a signed contract and related purchase commitment from a customer, based on the value set forth in a purchase order. We believe bookings are a useful metric to measure the success of customer sales and provide an indication of trends in our operating results that are not necessarily reflected in our revenue, because our revenue recognition is based on the later satisfaction of our customer obligations, and not of the sales to customers at the time of sale. Reported bookings may be subject to adjustments and potential cancellations prior to the satisfaction of our customer obligations. For the years ended December 31, 2022 and 2023, we recorded $49.7 million and $58.1 million in bookings, respectively.

The following table sets forth our bookings for each of the quarterly periods during the years ended December 31, 2022 and 2023.

	Three Months Ended							
	Mar 31, 2022	Jun 30, 2022	Sep 30, 2022	Dec 31, 2022	Mar 31, 2023	Jun 30, 2023	Sep 30, 2023	Dec 31, 2023
	(in thousands)							
Bookings	$ 14,111	$ 11,201	$ 11,967	$ 12,416	$ 15,667	$ 14,362	$ 12,487	$ 15,565

Non-GAAP Operating Income (Loss) and Non-GAAP Net Income (Loss)

We report our financial results in accordance with GAAP. However, our management believes that non-GAAP operating income (loss) and non-GAAP net income (loss) provide investors with additional useful information in evaluating our performance. These financial measures are not required by or presented in accordance with GAAP. We believe, however, that these non-GAAP financial measures, when taken together with our financial results presented in accordance with GAAP, provide meaningful supplemental information regarding our operating performance and facilitates internal comparisons of our historical operating performance on a more consistent basis by excluding certain items that may not be indicative of our business, results of operations or outlook and provide a useful measure for period-to-period comparisons of our business performance.

We define non-GAAP operating income (loss) as our GAAP operating income (loss) adjusted to exclude certain costs, including acquisition-related litigation costs, executive severance, amortization of acquired intangible assets, IPO preparation costs, regulatory compliance costs and impairment charges. We define non-GAAP net income (loss) as our GAAP net income (loss) adjusted to exclude certain costs, including acquisition-related litigation costs, executive severance, amortization of acquired intangible assets, IPO preparation costs, regulatory compliance costs, impairment charges, change in fair value of contingent consideration, foreign exchange (gain) loss, and gain on extinguishment of debt. We monitor non-GAAP operating income (loss) and non-GAAP net income (loss) as non-GAAP financial measures to supplement the financial information we present in accordance with GAAP to provide investors with additional information regarding our financial results.

Certain items are excluded from our non-GAAP operating income (loss) and non-GAAP net income (loss) because these items are non-cash in nature, or are not indicative of our core operating performance, and render comparisons with prior periods and competitors less meaningful. We adjust GAAP operating income (loss) and net income (loss) for these items to arrive at non-GAAP operating income (loss) and non-GAAP net income (loss) because these amounts can vary substantially from company to company within our industry depending upon accounting methods and book values of assets, capital structure and the method by which the assets were acquired.

The following table reconciles operating income (loss) to non-GAAP operating income (loss).

	Year Ended December 31,		
	2021	2022	2023
	(in thousands)		
Operating income (loss)	$ (3,536)	$ (1,873)	$ 1,134
Add:			
Acquisition-related litigation costs[1]	1,148	1,340	1,707
Executive severance[2]	280	—	—
Amortization of acquired intangible assets[3]	808	316	339
IPO preparation costs[4]	—	1,429	1,221
Regulatory compliance costs[5]	—	523	—
Impairment charges[6]	—	560	—
Non-GAAP operating income (loss)	$ (1,300)	$ 2,295	$ 4,401

The following table reconciles net loss to non-GAAP net income (loss).

	Year Ended December 31,		
	2021	2022	2023
	(in thousands)		
Net loss	$ (1,845)	$ (3,928)	$ (316)
Add:			
Acquisition-related litigation costs[1]	1,148	1,340	1,707
Executive severance[2]	280	—	—
Amortization of acquired intangible assets[3]	808	316	339
IPO preparation costs[4]	—	1,429	1,221
Regulatory compliance costs[5]	—	523	—
Impairment charges[6]	—	560	—
Change in fair value of contingent consideration[7]	295	(211)	325
Foreign exchange (gain) loss	(93)	525	335
Gain on extinguishment of debt[8]	(2,278)	—	—
Income tax effect of non-GAAP adjustments[9]	—	(137)	(169)
Non-GAAP net income (loss)	$ (1,685)	$ 417	$ 3,442

(1) Reflects litigation-related expenses incurred in connection with our acquisitions.
(2) Includes executive severance which occurred in connection with management changes.
(3) Reflects the amortization of intangible assets attributable to our acquisitions.
(4) Reflects one-time costs including third-party professional services fees and costs incurred in connection with, and in preparation for, this offering. Such costs do not include those costs that were considered direct and incremental to the offering and therefore capitalized as deferred transaction costs.
(5) Represents certain legal fees and associated cost associated with export compliance that are considered non-recurring.
(6) Reflects impairment charges related to certain intangible assets assumed through our acquisition of PolytEDA. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Components of Results of Operations—Impairment Charges."
(7) Includes the change in fair value of contingent consideration recorded in connection with our acquisitions.
(8) Reflects one-time loan forgiveness for our unsecured loan under the Paycheck Protection Program in June 2021.
(9) Reflects the increase in income tax expenses due to Non-GAAP adjustments.

Liquidity and Capital Resources

Since inception, we have financed operations primarily through proceeds received from payments from our customers and borrowings from Ms. Ngai-Pesic. Our primary sources of liquidity are cash including cash generated from operations. As of December 31, 2023, we had $4.4 million in cash, of which $3.3 million was held by our foreign subsidiaries.

In December 2023, we entered into the East West Bank Loan which provides for borrowings of up to $5.0 million (the "Revolving Line") bearing interest at a per annum rate equal to one half of one percent (0.5%) above the greater of (i) the prime rate as reported in The Wall Street Journal or (ii) four and one half percent (4.5%). In addition, if any payment required of us under the East West Bank Loan is not made within ten (10) days after such payment is due,

we are required to pay East West Bank a late fee equal to the lesser of (i) six (6%) of such unpaid amount or (ii) the maximum amount permitted to be charged under applicable law, not in any case to be less than $5.00. The East West Bank Loan is secured by certain of our assets, including without limitation, certain of our intellectual property and the equity of certain of our subsidiaries. In addition, the East West Bank Loan contains representations and warranties and customary affirmative, financial and negative covenants. The negative covenants include restrictions on, among other things, indebtedness, liens, investments, mergers, dispositions, transactions with affiliates, and dividends and other distributions. Additionally, each extension of credit under the Revolving Facility is subject to us satisfying certain conditions, including East West Bank concluding that there has not been any material impairment to certain of our affairs, financial results, operations and our ability to repay obligations or material deviation from the most recent Financial Plan (as defined in the East West Bank Loan) presented to East West Bank. As of December 31, 2023, there were no outstanding borrowings under the East West Bank Loan.

The East West Bank Loan matures on December 14, 2025 (the “Revolving Maturity Date”), or if there are any outstanding Credit Extensions at such time (as defined in the East West Bank Loan), for so long as any Obligations (as defined in the East West Bank Loan) under the East West Bank Loan remain outstanding or East West Bank has any obligation to make Credit Extensions under the East West Bank Loan, or we can terminate it prior to the Revolving Maturity Date on 10 business days’ notice and if all outstanding Obligations under the East West Bank Loan have been repaid.

In accordance with the East West Bank Loan, we paid $25,000 to East West Bank on the closing date and for so long as the East West Bank Loan is in place, we are required to pay East West Bank (i) a renewal facility fee equal to one half of one percent (0.5%) of the Revolving Line on each anniversary of the Closing Date and (ii) an annual fee of 0.20% of the difference between the Revolving Line and the average daily balance of the outstanding Credit Extensions (as defined in the East West Bank Loan).

On June 13, 2022, we entered into a business financing agreement with Ms. Ngai-Pesic for a line of credit of up to $4.0 million with a maturity of June 13, 2023, or the 2022 Credit Line. On May 25, 2023, we amended the business financing agreement to extend the maturity date of the 2022 Credit Line to June 13, 2024. We can draw funds from the 2022 Credit Line at any time and can repay such amounts at any time without penalty. The interest rate on the 2022 Credit Line is the prime rate plus 1% per annum. The 2022 Credit Line has no restrictions or covenants. We have drawn $2.0 million on the 2022 Credit Line as of December 31, 2023. The total outstanding balance of the 2022 Credit Line was due in full upon the earlier of (i) June 13, 2024 or (ii) 10 days following the date that we secure financing in an amount equal to or greater than the 2022 Credit Line. Concurrent with entering into the East West Bank Loan agreement, Ms. Ngai-Pesic agreed to (i) extend the repayment term of the 2022 Credit Line to be the later of (a) expiration or termination date of the East West Bank Loan or (b) June 13, 2024, and (ii) subordinate the right of repayment of any outstanding amount under the 2022 Credit Line to any amount outstanding under the East West Bank Loan.

On March 30, 2022, we entered into a promissory note in the principal amount of $0.5 million which accrues interest at a rate of 3.25% per annum, or the March 2022 Loan, from Ms. Ngai-Pesic. The March 2022 Loan was repaid in full in December 2022.

On December 8, 2021, we entered into a business financing agreement with Ms. Ngai-Pesic for a short-term promissory note in the principal amount of $0.5 million, or the December 2021 Loan, which was repaid in full in July 2022.

We believe our cash and remaining available borrowing capacity of $2.0 million under our 2022 Credit Line and $5.0 million under our East West Bank Loan will be sufficient to meet our expected working capital needs, capital expenditures, financial commitments and other liquidity requirements associated with our existing operations for at least the next 12 months. We currently have no other committed sources of capital.

As of December 31, 2023, $1.0 million, or 23%, of our cash was maintained with one financial institution in the United States, where our current deposits are in excess of federally insured limits. Past macroeconomic conditions have resulted in the actual or perceived financial distress of many financial institutions, including the recent failures of Silicon Valley Bank, Signature Bank, First Republic Bank and the UBS takeover of Credit Suisse. If the financial institutions with whom we do business were to become distressed or placed into receivership, we may be unable to access the cash we have on deposit with such institutions. If we are unable to access our cash as needed, our financial position and ability to operate our business could be adversely affected. If our cash and remaining available borrowing capacity under our 2022 Credit Line or the East West Bank Loan are not sufficient to satisfy our liquidity requirements, we may be required to seek additional financing. If we raise additional funds by issuing equity securities or convertible debt securities, our stockholders will experience dilution. Debt financing, if available, may contain covenants that significantly restrict our operations or our ability to obtain additional debt financing in the future. Any additional financing that we raise may contain terms that are not favorable to us or our stockholders. We cannot

assure you that we would be able to obtain additional financing on terms favorable to us or our existing stockholders, or at all. See "Risk Factors—Risks Related to Our Business and Industry—Our ability to raise additional capital in the future may be limited and could prevent us from executing our growth strategy."

Cash Flows

The following table summarizes changes in our cash flows for the periods indicated.

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Cash provided by (used in):		
Net cash (used in) provided by operating activities	**$ (2,097)**	**$ 1,180**
Net cash used in investing activities	(89)	(339)
Net cash provided by (used in) financing activities	624	(1,652)
Effect of exchange rate changes	336	(246)
Net decrease in cash	**$ (1,226)**	**$ (1,057)**

Operating Activities

Cash flows from operating activities may vary significantly from period to period depending on a variety of factors including the timing of our collections and payments. Our ongoing cash outflows from operating activities primarily relate to personnel related costs, payments for professional services, office leases and related facilities costs, and software supporting our company infrastructure, among others. Our primary source of cash inflows is collections of our accounts receivable. The timing of invoices to our customers and subsequent collection is based on agreements executed and payment terms that can vary by customer.

Net cash used by operating activities for the year ended December 31, 2022 was $2.1 million compared to $1.2 million of net cash provided by operating activities for the year ended December 31, 2023. The $3.3 million increase in net cash provided by operating activities reflects a $3.6 million decline in our net loss, partially offset by a $0.4 million decline in net working capital, driven by changes in contract assets during the year ending December 31, 2023.

Investing Activities

Net cash used for investing activities for the years ended December 31, 2022 and 2023 reflects purchases of property and equipment of $0.1 million and $0.3 million, respectively.

Financing Activities

Net cash provided by financing activities for the year ended December 31, 2022, was $0.6 million and reflects our $2.0 million drawdown on the 2022 Credit Line, partially offset by our $0.5 million repayment of the December 2021 Loan and $0.9 million of contingent consideration paid in connection with our Nangate and PolytEDA acquisitions. Net cash used by financing activities for the year ended December 31, 2023, was $1.7 million and reflects $1.0 million of contingent consideration paid in connection with our Nangate and PolytEDA acquisitions and $0.7 million of transaction costs incurred in connection with our anticipated offering.

Effects of Exchange Rate Fluctuations on Cash

The effects of exchange rate fluctuations on cash was $0.3 million and $(0.2) million at December 31, 2022 and 2023, respectively.

Contractual Obligations

The following table summarizes our financial commitments for contractual obligations as of December 31, 2023:

Year Ending December 31,	Operating Lease Liabilities	Contingent Consideration	2022 Credit Line	Total
		(in thousands)		
2024	$ 749	$ 103	$ 2,000	$ 2,852
2025	$ 510	$ 9	$ —	$ 519
2026	$ 235	$ —	$ —	$ 235
2027	$ 196	$ —	$ —	$ 196
2028	$ 196	$ —	$ —	$ 196
Thereafter	$ 196	$ —	$ —	$ 196
Total contractual obligations	**$ 2,082**	**$ 112**	**$ 2,000**	**$ 4,194**

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our consolidated financial statements are described below. See Note 2 to our consolidated financial statements appearing elsewhere in this prospectus for a description of our other significant accounting policies.

Revenue Recognition

Our revenue is derived principally from software licensing and related maintenance and service. We enter into agreements that include combinations of software and maintenance and services, which are accounted for as separate performance obligations with differing revenue recognition patterns. We recognize revenue pursuant to ASC Topic 606, *Revenue from Contracts with Customers*. The core principle of this guidance is that an entity should recognize revenue to depict the delivery of software or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for such software or services. To achieve this objective we apply a five-step approach: (1) identify the contract(s) with a customer, (2) identify the performance obligations within the contract, (3) determine the transaction price, (4) allocate the transaction price to the separate performance obligations and (5) recognize revenue when, or as, each performance obligation is satisfied.

Software license revenue is recognized upfront upon delivery of the licensed software. Typically, our software solutions are licensed with post contract support (“PCS”) which includes unspecified technical enhancements and customer support. The PCS is classified as maintenance and service revenue and is recognized ratably over the term of the maintenance period, as we satisfy the PCS performance obligation over time.

We also offer standard SIP licenses, developed both in house and in partnership with industry-recognized firms. Our SIP licenses provide customers with access to SoC design SIP which meet established industry standards, thus saving customers the time and resources required to re-invent similar design methodology. SIP licenses offered by us are generally ready to use upon delivery. No modification is required in order for the customer to obtain value for use in their integrated circuit designs. We do not license SIP without support.

Revenue associated with the license of our SIP is classified as software license revenue and recognized as revenue upon delivery of the licensed SIP. Under certain SIP license agreements, we also derive revenue through royalties from customers who agree to pay usage-based fees to embed our SIP into their own SoCs. Royalties are generally recognized as revenue during the period in which the customer sells its solutions which incorporate our SIP. The PCS is classified as maintenance and service revenue and is recognized ratably over the term of the contract, as we satisfy the PCS performance obligation over time.

In connection with our SIP which was developed in partnership with a third party vendor, we have entered into various renewable license agreements under which we have the right to sell the technology we license from the third party vendor. When we license these particular SIP to a customer, we generally act as a principal to the transaction

because we control the promised SIP that we deliver to the customer. Consistent with our role as a principal, we recognize SIP revenue on a gross basis. Royalty costs are reported in cost of revenue upon delivery pursuant to the terms and conditions of our contractual obligations with the licensors. Our licensing arrangement with this third party vendor terminated on October 30, 2023.

We also recognized an immaterial portion of our revenue from device characterization and modeling services for the years ended December 31, 2022 and 2023. Revenue is recognized upon the completion of the requested services and, as applicable, satisfaction of customer acceptance terms. Revenue from these services is classified as maintenance and service revenue.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 days. Invoicing may vary from timing of revenue recognition. When timing of invoicing or collections precedes revenue recognition, we record deferred revenue. When timing of revenue recognition precedes invoicing or collections, we record a contract asset. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined our contracts generally do not include a significant financing component.

Non-income related taxes collected from customers and remitted to governmental authorities are recorded on the consolidated balance sheets as accounts receivable and accrued expenses. The collection and payment of these amounts are reported on a net basis in the consolidated statements of loss.

We do not offer a right of return. We warrant to our customers that our software will perform substantially as specified in our current user manuals. We have not experienced significant claims related to software warranties beyond the scope of maintenance support, which we are already obligated to provide. The warranty is not sold, and cannot be purchased, separately. The warranty does not provide any type of additional service to the customer or performance obligation for us.

Our agreements with customers generally require us to indemnify the customer against claims that our software infringes third-party patent, copyright, trademark or other proprietary rights. Such indemnification obligations are generally limited in a variety of industry-standard respects, including by affirming our right to replace an infringing product.

Significant Judgments

Our license agreements enable customers to use our software solutions and to receive certain services. Judgment is required to determine if the promises are separate performance obligations, and if so, to allocate the transaction price to each performance obligation. We use the estimated standalone selling price method to allocate the transaction price for each performance obligation. The estimated standalone selling price is determined using all information reasonably available to us, including market conditions and other observable inputs, historical pricing and the value relationship between our various product and service offerings. The corresponding revenues are recognized as the related performance obligations are satisfied.

Contract Assets and Liabilities

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 days. The timing of revenue recognition may differ from the timing of invoicing to customers, and these timing differences result in receivables (billed), contract assets (unbilled), or contract liabilities (deferred revenue) on our consolidated balance sheets. We record a contract asset when revenue is recognized prior to the right to invoice, or deferred revenue when revenue is recognized subsequent to invoicing. For time-based software agreements, customers are generally invoiced in equal, quarterly amounts, although some customers are invoiced in single or annual amounts. We record an unbilled receivable when revenue is recognized and it has an unconditional right to invoice and receive payment.

Financing

We are required to adjust promised amounts of consideration for the effects of the time value of money if the timing of the payments provides the customer or us with a significant financing benefit. We consider various factors in assessing whether a financing component exists, including the duration of the contract, market interest rates and the timing of payments. Our contracts do not include a significant financing component requiring adjustment to the transaction price.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the fair value of consideration transferred over the fair value of net identifiable assets acquired. Other intangible assets consist of customer relationships, developed technology and noncompete agreements which are amortized over their useful lives of five years. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate an asset’s carrying value may not be recoverable.

Goodwill and intangible assets with indefinite useful lives are not amortized but are tested annually for impairment and more often if there is an indicator of impairment.

We perform testing for impairment of goodwill on an annual basis, or as events occur or circumstances change that would more likely than not reduce the fair value of our single reporting unit below its carrying amount. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its fair value.

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable.

No indicators of impairment or impairments charges were identified or recorded to goodwill during the fiscal years ended December 31, 2022 and 2023.

In connection with Russia's invasion of Ukraine in February of 2022, we recorded an impairment charge of $0.6 million associated with intangibles held by our Ukrainian subsidiary which management determined would not be recoverable. See also Note 6, Goodwill and Intangible Assets and Note 16, Fair Value of Financial Instruments of our consolidated financial statements for the year ended December 31, 2023 appearing elsewhere in this prospectus for additional information.

No indicators of impairment or impairment charges were identified or recorded to intangibles during the fiscal year ended December 31, 2023.

Stock-Based Compensation

We account for stock-based payments in accordance with the authoritative guidance issued by the FASB on stock-based compensation, which establishes the accounting for transactions in which an entity exchanges its equity instruments for goods or services. Under the provisions of the authoritative guidance, stock-based compensation expense is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the requisite employee service period (generally the vesting period), net of actual forfeitures. For stock-based payment awards that contain performance criteria, stock-based compensation expense is recorded when the achievement of the performance condition is considered probable of achievement and is recorded on a straight-line basis over the requisite service period. If such performance criteria are not met, no compensation expense is recognized and any recognized compensation expense is reversed.

Historically, we have not recorded stock-based compensation expense, as the RSUs granted under the 2014 Plan carry both a "time-based vesting requirement" and a "liquidity event vesting requirement," with the satisfaction of the "liquidity event requirement", an improbable contingency as of December 31, 2022 and 2023. See Note 11 to our consolidated financial statements for the year ended December 31, 2023 appearing elsewhere in this prospectus for additional information.

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each RSU grant, with input from management, and considering our most recently available third-party valuation of our common stock. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants Accounting and Valuation Guide, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*.

Our board of directors considered the fair value of our common stock by first determining the equity value of our company, and then allocating that value among our equity securities to derive a per share value of our common stock. The equity value of our company was determined using the market approach by reference to the closest round of equity financing, if any, preceding the date of valuation and analysis of the trading values of publicly traded companies deemed comparable to us.

In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- our results of operations, financial position, and capital resources;
- industry outlook;
- the lack of marketability of our common stock;
- the fact that the RSU grants involve illiquid securities in a private company;
- the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company, given prevailing market conditions;
- the history and nature of our business, industry trends and competitive environment; and
- general economic outlook including economic growth, inflation and unemployment, interest rate environment and global economic trends.

The assumptions underlying these valuations represented management's best estimates, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could be materially different.

Following the completion of this offering, the fair value of our common stock will be based on the closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

Internal Control Over Financial Reporting

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Under standards established by the Public Company Accounting Oversight Board, or PCAOB, a deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or personnel, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. The PCAOB defines a material weakness as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented, or detected and corrected, on a timely basis.

We have in the past and continue to identify material weaknesses in our internal control over financial reporting ("ICFR"). The material weakness, identified in fiscal year 2021, in connection with the preparation of our consolidated financial statements, related to a lack of formalized accounting processes over ICFR and an insufficient complement of personnel possessing the technical accounting and financial reporting knowledge and experience to support a timely and accurate close and financial statement reporting process. The material weakness was unremediated as of December 31, 2023.

We are working to remediate the material weakness and are taking steps to strengthen our internal control over financial reporting through the enhancement and formalization of our accounting processes over ICFR and the hiring of additional finance and accounting personnel, and we may take additional actions, including hiring additional personnel, implementing system upgrades or other organizational changes. With the additional personnel, we intend to take appropriate and reasonable steps to remediate this material weakness through the formalization of accounting policies and controls and retention of appropriate expertise for complex accounting transactions. We are also reviewing and documenting our accounting and financial processes and internal controls, building out our financial management and reporting systems infrastructure, and further developing and formalizing our accounting policies and financial reporting procedures, which includes ongoing senior management reviews. While we are taking measures and plan to continue to take measures to design and implement an effective control environment, we cannot assure you that these measures will significantly improve or remediate the material weakness described above. This material weakness has not been remediated to date.

The actions that we are taking are subject to ongoing executive management review and will also be subject to audit committee oversight. If we are unable to successfully remediate the material weakness, or if in the future, we identify further material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. See "Risk Factors—General Risk Factors and Risks Related to Being a Public Company—We have identified a material weakness in our internal control over financial reporting. If our remediation measures are ineffective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to report our financial condition or results of operations accurately or on a timely basis, prevent fraud or file our periodic reports in a timely manner and may incur additional costs to remediate, all of which may adversely affect investor confidence in us and our reported financial information and, as a result, impact the value of our common stock."

Emerging Growth Company Status and Extended Transition Period Election

We qualify as an "emerging growth company" pursuant to the provisions of the JOBS Act. For as long as we are an "emerging growth company," we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404(b), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding advisory "say-on-pay" votes on executive compensation, and stockholder advisory votes on golden parachute compensation.

The JOBS Act also permits an emerging growth company like us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to "opt-in" to this extended transition period for complying with new or revised accounting standards and, therefore, we will not be

subject to the same new or revised accounting standards as other public companies that comply with such new or revised accounting standards on a non-delayed basis.

Upon completion of this offering, we will also be a "smaller reporting company." We may continue to be a smaller reporting company after this offering if either (i) the market value of our common stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our common stock held by non-affiliates is less than $700.0 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K, we are not required to comply with the auditor attestation requirements of Section 404 and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Qualitative and Quantitative Disclosures about Market Risk

Interest Rate Risk

We had cash of $4.4 million as of December 31, 2023, which consisted of bank deposits. We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. On June 13, 2022, we entered into the up to $4.0 million 2022 Line of Credit with Ms. Ngai-Pesic, bearing interest at a rate of prime plus 1% per annum. We have drawn $2.0 million on the 2022 Line of Credit as of December 31, 2023. As of December 31, 2023, the balance of the 2022 Credit Line was $2.0 million. The interest rate paid on these borrowings is variable, indexed to the prime rate. In December 2023, we entered the East West Bank Loan which provides for borrowings of up to $5.0 million bearing interest at a per annum rate equal to one half of one percent (0.5%) above the greater of (i) the prime rate or (ii) four and one half percent (4.5%). As of December 31, 2023, there were no outstanding borrowings under the East West Bank Loan. A hypothetical 10% change in interest rates would not result in a material impact on our consolidated financial statements.

Foreign Currency Exchange Risk

The effects of foreign exchange on net cash was $0.3 million and $0.2 million for the years ended December 31, 2022 and 2023, respectively. The change was primarily due to the strength of the U.S. dollar against the local currencies which we price and collect accounts receivable, primarily the Korean Won and the Japanese Yen, and convert to U.S. dollars to support our operations. If foreign currency exchange rates were to change adversely by 10% from the levels at December 31, 2023, the effect on our results before taxes from foreign currency fluctuations on our balance sheet would be approximately $1.0 million. The above analysis disregards the possibility that rates for different foreign currencies can move in opposite directions and that losses from one currency may be offset by gains from another currency. As our foreign currency risk increases in the future, we will evaluate alternative strategies, including hedging, to mitigate our foreign currency exposure.

Recently Adopted Accounting Pronouncements

See Note 2 to our consolidated financial statements included elsewhere in this prospectus for information regarding recently issued accounting pronouncements.

BUSINESS

Overview

We are a provider of TCAD software, EDA software and SIP. TCAD, EDA and SIP solutions enable semiconductor and photonics companies to increase productivity, accelerate their products' time-to-market and reduce their development and manufacturing costs. We have decades of expertise developing the "technology behind the chip" and providing solutions that span from atoms to systems, starting with providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. We provide SIP for SoC, ICs and SIP management tools to enable team collaborations on complex SoC designs. Our customers include semiconductor manufacturers, OEMs and ODMs who deploy our solutions in production flows across our target markets, including display, power devices, automotive, memory, HPC, IoT and 5G/6G mobile markets.

EDA offerings, including our solutions, enable companies to streamline their IC design workflows, develop complex IC designs in a cost-efficient manner, and maintain acceptable IC manufacturing yield, by providing interoperable tools that capture and simulate designs from concept to analysis. Our TCAD device and process simulation tools provide compatible data structures that can be used with our EDA modeling, analysis, simulation, verification and yield enhancement tools. Further, our EDA tools are used for designing SIP and IC designs that can be managed and validated by our SIP management tools.

According to Grand View Research, the global aggregate EDA software market was valued at $11.1 billion in global revenue in 2022 and is expected to reach $22.2 billion in global revenue in 2030, representing a 9.1% CAGR, driven in part by the growing complexity of semiconductor and photonics designs and increasing challenges associated with advanced materials and shrinking process technology nodes across the EDA market. Based on Electronic System Design Alliance's breakdown of the EDA market, including SIP, which was valued at $14.9 billion in global revenue in 2023, we believe Silvaco's solutions compete in portions of the EDA software market representing $3.1 billion of the current global aggregate EDA software market. We believe these trends will increase the need for TCAD, EDA and SIP solutions that accelerate time-to-market at reduced development and manufacturing costs and deliver processes and devices with better operating performance, lower cost, reduced power and improved product yield. In estimating the growth of the EDA software market, Grand View Research considered end-use outlook in market segments including microprocessors and controllers, memory management units and others, the overall growth in the integrated circuits and electronic manufacturing markets, regional outlooks in North America, Europe, Asia Pacific, Latin America and the Middle East and Africa, and other variables, including those related to value chains, technology, regulatory frameworks, the impact of certain market drivers and market restraints, including cyber attacks, and competitive and political landscapes affecting the EDA market, and the effects of advancement of technology used in the end-use markets on the demand of EDA software solutions.

We are a global leader in TCAD solutions for the power devices and display markets. Our TCAD solutions are designed to provide complete, fast, and accurate simulations and modeling of semiconductor and photonics device behavior, allowing our customers to design original, value-added processes and devices, explore trade-offs in performance, power, size and reliability and optimize their final design for manufacturing. By reducing the need to run expensive and time-consuming experiments in manufacturing, TCAD solutions enable companies to rapidly bring their products to market. Our TCAD solutions have been adopted by 3 of the 10 largest semiconductor companies by revenue in 2023, by 8 of the 10 largest flat panel display companies by revenue in 2023, and by 4 of the 10 leading power semiconductor devices companies in 2023.

In addition, we have combined our expertise in semiconductor technologies with machine learning and data analysis to develop an artificial intelligence-based solution named fab technology co-optimization, or FTCO™, for wafer level fabrication facilities. FTCO utilizes manufacturing data to perform statistical and physics-based machine learning software simulations to create a computer model of a wafer, which we call the "digital twin" of the wafer, in order to simulate the fabrication of wafers. As a virtual representation of the manufacturing process and the wafer, this "digital twin" serves as a platform through which customers can run experiments and tests to understand the impact on the yield of a wafer due to any variations in the parameters of the manufacturing process, predict the yield for further research on new products, and reduce the time to market for products, without the need to run physical wafers which can be time-consuming and expensive. According to data from the Semiconductor Industry Association, it is estimated there are over 75 companies capable of producing 300mm semiconductor wafers and over 125 companies facilities involved in power-related semiconductor fabrication. We believe these facilities represent potential customers for our FTCO product. We are strategically focusing our marketing efforts on 20 leading companies within each category, totaling 40 potential customers. We estimate that the addressable market for these targeted potential customers could represent an opportunity exceeding $500 million. We have partnered with a memory-focused IDM for the development of FTCO and expect to begin licensing this new product in the second quarter of 2024.

Our EDA solutions provide analog custom design flows that bring electrical and physical layout views together with circuit simulation and physical verification including sign-off at select foundries to help ensure correct-by-design and high-yielding products before committing to final silicon. We provide device characterization and modeling solutions that enable our customers to generate accurate, high-quality models for use in simulation and analysis of analog, mixed-signal and RF circuits across our target markets. Our EDA solutions have been adopted by 6 of the 10 largest semiconductor companies by revenue in 2023 and by 7 of the 10 largest flat panel display companies by revenue in 2023.

SIP solutions, including our offerings, provide pre-verified, high-yielding and silicon-proven SIP blocks designed to accelerate time-to-market for SoC designs. Our patented SIP fingerprint technology authenticates SIP before and after use in complex SoC designs to avoid costly design iterations and silicon re-spins. Our EDA solutions for SIP design integrate patented machine learning technologies with the goal of minimizing simulation time, chip area and power consumption. We provide SIP management software at the enterprise-level for managing, tracking and controlling SIPs that are used in SoC designs.

We leverage decades of extensive technological expertise to provide our customers with agilely developed products. In doing so, we have built long-term relationships with select strategic customers that enable us to work with them from project inception in order to tailor solutions for their specific needs. These customer relationships help us improve our new product offerings for the larger market.

Since 2015, we have acquired ten businesses, assets and/or technologies to complement our existing product offerings, expand into new markets or grow our existing market share, increase our engineering talent and enhance our technical capabilities. Our acquisition strategy also allows us to accelerate new product offerings. For example, in 2020, we acquired Dolphin's memory compiler assets and resources for providing embedded memory and register files for SoC designers and foundries. In 2021, we acquired PolytEDA to expand our capabilities for rapid physical verification of IC designs prior to mask creation and manufacturing and for cloud enablement of EDA tools. These new products are used as sign-off tools in several foundries.

Our growth has further been driven by semiconductor and photonics companies' increasing research and development spend due to increasing complexities of new material, new devices, and new systems in the markets we address. We address such market needs by:

- Providing EDA, TCAD and SIP solutions that are interoperable and cost-effective and that our customers can use to introduce their products to market in a timely fashion;
- Using advanced research and development and agile product development techniques to provide our customers with tailored solutions in vertical markets such as display, photonics, power devices, and other markets where new materials or structures are being developed;
- Providing leading-edge products that complement IC design flows and are compatible with customers' existing design flows; and
- Providing production ready and proven SIP, EDA SIP, and SIP/IC design management solutions that can be utilized individually, or as a full interoperable solution.

Our business model primarily consists of selling time-based software licenses, with an average of approximately 3 years per TBL for the years ended December 31, 2022 and 2023. We seek to grow our business by renewing TBL contracts and licensing new products. In addition to TBL revenue, we have revenue streams from our maintenance, support, and services. Additionally, we have historically grown our customer base annually as a result of our new product offering and services. We believe this business momentum helps increase the predictability of our bookings forecast. See *"*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Indicators and Non-GAAP Financial Measures—Bookings*"* for the definition of "bookings."

In 2021, we generated $47.3 million in bookings and recognized $42.0 million of revenue, a $1.8 million net loss and $2.6 million of negative cash flow from operating activities. We also had a GAAP operating loss of $3.5 million and a non-GAAP operating loss of $1.3 million during 2021. During 2022, we generated $49.7 million in bookings and recognized $46.5 million of revenue, a $3.9 million net loss and $2.1 million of negative cash flow from operating activities. We also had a GAAP operating loss of $1.9 million and a non-GAAP operating income of $2.3 million during 2022. During 2023, we generated $58.1 million in bookings and recognized $54.2 million of revenue, a $0.3 million net loss and $1.2 million of positive cash flow from operating activities. We also had a GAAP operating income of $1.1 million and a non-GAAP operating income of $4.4 million during 2023. As of December 31, 2023, we had over 800 customers, of which over 200 were academic institutions, that relied on our solutions worldwide. Our academic customers not only have the potential to provide future human resources, but also can act as beta testers and provide feedback that allows us to enhance our products. See *"*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Operating Indicators and Non-GAAP Financial Measures*"* for additional information

on bookings and non-GAAP operating income and the reconciliation of operating income (loss) to non-GAAP operating income (loss).

Industry Background

Increasing semiconductor design complexity. The latest technological applications require greater semiconductor performance and functionality, which have necessitated the shift towards more advanced manufacturing process technologies, new materials, and continued reduction of transistor sizes. IC and SoC complexity have significantly increased to accommodate the increased number of functional SIP blocks per chip. The slowing of Gordon Moore's, or Moore's law (which states that the number of circuits on a microchip doubles every two years), has also led to the adoption of new semiconductor materials to address varying application requirements.

For example, silicon carbide, or SiC, and gallium nitride, or GaN, materials are being adopted in automotive, consumer, and industrial power applications. New memory technologies, including resistive random-access memory and magneto-resistive random-access memory, or MRAM, are being deployed across mobile, HPC, and IoT applications. All these factors have increased semiconductor design complexity, which in turn increases the probability for significant development delays and project failures. As a result, we believe there is a growing need for differentiated and cost-effective tools such as TCAD, EDA and SIP solutions that enable rapid and reliable development of products containing these newly added materials and technologies.

Increasing semiconductor manufacturing and development costs. With each reduction in manufacturing process geometry comes a corresponding increase in manufacturing and development costs. According to IBS, the average cost of designing a 28nm chip is $40.0 million, a 7nm chip is $217.0 million, and a 5nm chip is $416.0 million and a 3nm chip will cost up to $590.0 million. The COVID-19 pandemic and subsequent semiconductor shortage have emphasized the need for supply chain optimization, further accelerating investments in semiconductor foundries. The latest foundries being built are focused on leading-edge manufacturing process technology nodes, primarily driven by mobile applications, and require higher manufacturing yield efficiencies to offset the substantial development costs. As a result of IC technologies moving to sub 7nm process technology nodes and the resultant increase in design difficulty and development costs, we believe the continuing shift will increase demand for TCAD solutions in the design technology optimization loop to deliver high yields, accelerate time-to-market and further reduce costs by reducing the need to run expensive and time-consuming manufacturing experiments. In addition, as these trends continue, EDA solutions that meet manufacturing requirements and can reduce costs associated with potential production delays and project failures, and SIP solutions which can accelerate time-to-market by providing silicon-proven blocks that address complex SoCs and enable new technologies, such as IoT and HPC, are being more readily adopted to mitigate costs and shorten time to market.

Increasing end market diversity. There has been a significant growth in semiconductor demand driven by new applications in emerging markets such as automotive, HPC and IoT. Performance and functionality requirements significantly vary across each market, which drives new design complexities and increases manufacturing and development costs. Even traditional markets for semiconductor, such as display applications, are seeing expanded use cases that require different performance and functionality needs. For example, displays in mobile require low power, augmented and virtual reality emphasizes high refresh rates, and televisions are adopting new materials such as quantum dots to reduce manufacturing complexity. The increased diversity of applications in which semiconductors are being used, is leading to a need for more complex semiconductors to satisfy the needs of such applications, which requires further time and cost to develop such semiconductor solutions. As a result, there is a growing need to accelerate time-to-market and reduce costs by adopting complete TCAD, EDA and SIP solutions that enable customers to design, simulate, verify, and analyze their products from the concept stage all the way up to complete product yield.

Our Markets

To contend with industry performance requirements and new applications, engineers, researchers, and other professionals rely extensively on TCAD, EDA software tools and SIP for designing and optimizing advanced ICs components. Reliance on software tools and SIP has increased in recent years as design challenges have become increasingly complex.

Rapid increase in complexity of SoCs has been the result of shrinking manufacturing process geometries, application specific customization to improve computing performance, and adoption of new materials for high voltage applications and photonics computing. These changes have led to increased investments in our research and development.

The drive to increase performance and diversification of applications is further accelerated by a broad-scale transition to cloud-based software applications and computing on mobile platforms. The development of semiconductors that

are optimized for specific applications, including AI, 5G/6G communications and IoT, has continued to fuel demand for our solutions. Our solutions address the markets set forth below.

Solution/ Market	Automotive	IoT	5G/6G	Display	Memory	HPC	Power Devices
TCAD	✔	----	✔	✔	✔	✔	✔
EDA	✔	✔	✔	✔	✔	✔	✔
SIP	✔	✔	✔	----	----	✔	----

Power Electronics Market

With the advent of high-volume manufacturing of new process technologies such as SiC and GaN, many OEMs and ODMs are producing electronic devices and systems that benefit from these technologies. GaN is being used for low power/voltage, high frequency applications and SiC is being used for high power and high voltage switching power applications. These technologies can enable smaller, faster and lower power devices than those built with prior technologies. As a result, many suppliers are switching their products from dated Silicon based devices to wide band-gap, or WBG, semiconductor materials such as GaN. For example, GaN technology has enabled the replacement of existing silicon-based power supplies for laptops, vehicles and battery charging with smaller and lower power solutions.

Since 2021, we have gained over one hundred new customers that utilized, and were early adopters of, our TCAD and EDA solutions to address their simulation/analysis needs for these new technologies at foundries, device and process levels all the way up to the system design for power management.

According to Allied Market Research, the global power electronics market size was valued at $26.6 billion in 2021, and is projected to reach $43.7 billion by 2031, growing at a CAGR of 5.1% from 2022 to 2031. According to FACT.MR SiC & GaN Power Semiconductor Market Report (Worldwide), the SiC and GaN power semiconductor market specifically is expected to grow at a CAGR of 28.8% until 2033. Power electronics play an important role in electrified vehicle applications that provide compact and high-efficient solutions to power conversion. Given the foundries, design houses, ODMs, OEMs, Tier 1s and Tier 2s that provide power electronics solutions, we benefit by enabling our customers in this market with both our TCAD and EDA solutions.

Memory Market

The memory market for semiconductors is expected to continue growing at a fast pace, driven by large increases in the demand for dynamic random-access memory and flash memory products. According to Grand View Research, the memory semiconductor market is estimated to grow at a 5.9% CAGR from 2020 to 2027 and is projected to reach $134.6 billion in 2027. Within data centers, AI technologies require new types of memory technologies such as MRAM that perform weighting calculations in the memory chip itself. We believe our TCAD solution, complemented by our device modeling tools and services, enables memory design teams to explore new materials and device architectures and achieve optimum power and performance for memory elements. Design and technology co-optimization, or DTCO, utilizing both TCAD and EDA solutions to enable designing optimum memory elements is an important stepping stone for many leading-edge ICs in this market, and we provide a targeted DTCO solution for the memory market.

Display Market

With the growth in adoption of mobile electronics such as smartphones, smart watches, wearables and VR, gaming, flat-screen TVs, and more, we believe semiconductors used in display technologies are of increasing importance. According to Allied Market Research, the global display market was valued at $124.1 billion in 2022 and is projected to reach $242.1 billion by 2032, representing a CAGR of 6.8% from 2023 to 2032. Display manufacturers are continuing to make large investments in OLED and AMOLED, as well as new technologies such as quantum dot-LED and MicroLED. At the same time, well-established display technologies, such as LCD, are evolving and improving. Industry adoption of photonics materials, including waveguides and photo detectors, is increasing. These trends are driving large changes in materials and fabrication methods for displays.

Our customers' display development teams use our integrated TCAD solutions with our Analog/Custom design suites to analyze, understand and optimize pixel performance. Our device modeling tools help our customers' display designers to generate accurate models of pixels, which enables them to simulate the correct behavior of displays. Our circuit simulation tool uses advanced modeling of devices to capture the capacity of the given circuit(s), with capacity to handle millions of thin-film transistors, or TFTs. Our Analog/Custom design solution provides powerful pixel array placement and routing capabilities that our customers use to produce circuit layouts that match the customer's manufacturing requirements and ensure design quality.

Through deep collaborations with industry leaders and academia in the display market, we have developed highly differentiated display design solutions spanning TCAD, circuit simulation and Analog/Custom design. We believe the completeness of our display solution is the reason it is deployed at 8 of the top 10 largest display manufacturers by revenue from the fourth quarter of 2022 to the third quarter of 2023 according to Display Supply Chain Consulting.

Automotive Market

The semiconductor content in the automotive market is rapidly growing and evolving, driven by vehicle electrification, advances in electronic control, vehicle connectivity to the internet and autonomous driving. According to Allied Market Research, these innovations are expected to lead to significant increases in the amount spent on semiconductor content in electrification of cars, from $59.7 billion in 2022 to a projected $153.9 billion by 2032, representing a CAGR of 10.1% from 2023 to 2032.

Power devices are at the heart of the electric vehicle revolution, from charging stations to vehicle drivetrain electronics. The new requirements of the automotive market are driving the increasing adoption of different kinds of semiconductor materials such as SiC, GaN and other wide bandgap materials to replace traditional silicon in high-voltage power devices. Companies designing or manufacturing SiC or GaN devices for the power device market can use TCAD simulations as part of their research and development efforts to understand their devices in detail and in turn use that understanding to improve performance, manufacturing yield and reliability. Simulation replaces design of experiments and enables flexibility of foundry selection by reducing costly and time intensive physical trial and error cycles.

In addition, electrification and advanced controls in new automobiles are increasing the number of conventional (silicon-based) semiconductor devices. Desire for increasing time-to-market and engineering efficiencies pushes designers towards using and reusing SIP.

We are part of the existing ecosystems providing silicon-proven SIP to Tier 1 (module providers) and Tier 2 providers (IC providers) to automotive, truck, motorcycle and E-bike OEMs. We can also provide specialized EDA solutions and foundational SIPs that our customers integrate into their IC design flow. The barrier to entry in the automotive market is high due to its requirement for innovative technologies that can include complex structures and high initial costs. Leveraging our silicon-proven SIPs enables customers to develop their solutions with functional interoperability and limit the risk of costly mistakes that may require redesign.

Internet of Things Market

The IoT market is expected to continue to grow as the industry is still in the early stage. According to Allied Market Research, the global IoT market is estimated to grow at a 19% CAGR from 2022 to 2031 and is projected to reach $413.7 billion by 2031. All IoT devices require a complex SoC to perform sensing, collecting data, processing data and connecting to other IoT devices or a central server or cloud through several wireless solutions. At the edge of IoT, new devices with ultra-low energy demands will be needed to harvest sensor data across a wide variety of environments. Such SoC architectures require advanced low power microprocessors, low power IO, compact bus fabrics that connect SIP blocks, and various types of embedded memories including low power, compact SRAM standards. We provide a comprehensive portfolio of SIPs and tools for the IoT market, including Standard Cell IP, library creation and characterization tools, ultra-low power SRAM compilers, connectivity IOs, microprocessor SIPs, AMBA SIP Cores and Subsystem.

5G/6G and Mobile Communications Markets

The semiconductor market for mobile phones is expected to continue its rapid transition, with the continuing development from predominantly 4G phones to 5G/6G phones. As the wireless market continues to migrate to 5G/6G, high-bandwidth, low latency networks are expected to emerge among a massive number of connected devices and sensors, accompanied by an equally sophisticated chip design process. IDC estimates that mobile phone semiconductor revenue will reach $191.9 billion in 2026, representing a CAGR of 4.0% from 2021 to 2026, and we believe the shift to 5G/6G will increase demand within our industry due to the complex nature and design cycle of 5G/6G chips. The adoption of more advanced process technology nodes for 5G mobile devices means longer circuit simulation times due to substantial increases in unwanted electrical components (parasitics) in nanometer geometries. We believe our parasitic reduction and analysis tools are unique in the market, complementing existing tool flows. Our latest parasitic reduction and analysis tools allow our customers' design teams to accelerate circuit simulation times substantially, as compared to our earlier offerings, and perform fast root cause analyses. The development of RF Front-End Modules, or FEM, Low-Noise Amplifiers, or LNAs, Power Amplifiers, or PAs, and RF switches for millimeter wave, or mmW, and 5G applications can result in many silicon iterations, due to poor correlation between simulation and silicon measurements caused by substrate effects. We provide solutions for RF circuit designers to extract substrate parasitics, enabling designers to model these effects accurately and easily with minimal impact on simulation times. These solutions are complemented by our circuit simulation tool for RF, Physical Verification tools and our full analog/custom flow for analog block creation.

High Performance Computing Market

Today, HPC applications involve customized architectures, which in turn, may require specialized circuit and memory elements to implement. Quantum and photonics computing further apply new technologies to address application specific challenges. All these require complex modeling simulations. Our foundational SIPs, memory compilers and library creation EDA tools have been adopted by our customers in HPC applications, which we believe allow our customers to gain a performance edge by using specialized circuits. We also provide modeling services and circuit libraries for cryogenic temperatures used in quantum computing and our TCAD software is being used to design photonics devices.

We believe there will be significant demand for our solutions that meet the performance, power and latency requirements while reducing overall costs. We believe DTCO utilizing both TCAD and EDA to address the complexity of design in the HPC market is now used by many leading-edge ICs, and we offer a complete suite of DTCO flow optimization solutions to address such needs. According to Allied Market Research, the global HPC chipset market was valued at $5.7 billion in 2022 and is projected to reach $29.4 billion by 2032, representing a CAGR of 17.9% from 2023 to 2032.

Industry Challenges

Design and manufacturing of SoCs is a time intensive and costly process. Complex AI-driven high performance computing, IoT class of SoCs, high performance memories, and GPU class processors cost millions to billions of dollars to develop. The development, qualification and manufacturing cycle for processors, memories and SoCs varies by market and may require lengthy development times. Similarly designing power systems utilizing new materials such as GaN and SiC adds additional costs, time to market and complexity to the systems that enable AI. The main challenges for the industry include:

- Rapid increase of design complexity for ICs and SoCs.

Driven by market demands for more functionality, performance, and lower cost, IC design (including memory systems and power systems) and SoC design organizations are faced with designing and developing more complex designs with every new generation of their products. Today, many multiprocessor ICs have gate complexities of billions of gates, which were not possible to design a decade ago. One key factor that has historically driven IC and SoC design complexity is the need to scale and reduce transistor sizes over time, as predicted by Moore's law over three decades ago. As designs approach below 7nm and down to 3nm process technologies, IC/SoC complexity and differentiation is increasingly handled through product-development and design tools rather than manufacturing. Many IC and SoC makers are outsourcing IC manufacturing to foundries, and product differentiation is achieved during design through utilization of EDA tools, TCAD tools and SIPs.

We seek to reduce design complexity of ICs and SoCs by providing silicon-proven, re-useable SIPs, EDA tools for automatic generation of low power and small area SIPs, design management tools for revision-controlled collaboration among the team, and EDA tools enabling fast simulation of chips and automated layout generation and verification.

- Rapid increase of design cost and time for ICs and SoCs.

Generally, as design complexity increases so to do design costs and time to get the product to market. The main factors driving development cost and time are associated with the number of personnel required to design, the verification of the design, and the test and validation of the design, as well as the cost of tools for design, verification, test and validation, and the associated manufacturing costs of masks, wafers and production costs, including testing. In general, the more complex the IC, the more personnel and more tools per personnel are needed, hence increasing the cost of design. Many new GPU processors require thousands of engineers to design over many years.

- Evolving manufacturing complexity processes, supply chains and yields.

The semiconductor industry has made great strides in progressing semiconductor innovation. Researchers have consistently kept pace with Moore's Law where the latest IC process technology nodes are at 7nm, 5nm, 3nm and 2nm. The industry has accomplished this by experimenting with variations of semiconductor materials and corresponding processes to enable high-volume production for devices made of SiC and GaN. We seek to provide for acceptable manufacturing yield through our TCAD and EDA tools, which utilize machine learning and computer experiments to simulate processes with different materials without having to go through the costly and lengthy fabrication processes. We believe that our tools allow fast convergence on candidate materials and processes to meet market requirements by replacing fabrication and wafer level yield design of experiments with simulation driven manufacturing and yield enhancements.

As a result of such pervasive and challenging requirements, companies must allocate significant time and resources towards the design cycle. Engineers have, in turn, come to rely on powerful software tools to simulate, optimize,

approve, plan, validate and verify all aspects of the design process, thereby maximizing reliability, agility and performance at reduced cost. We believe this strong value proposition will continue to drive demand for our design automation software tools.

Our Solutions and Competitive Strengths

We are a provider of TCAD, EDA and SIP solutions. We have decades of expertise developing the "technology behind the chip" and providing solutions that span from atoms to systems, from providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. We are not part of the supply chain for semiconductor manufacturing process, rather part of the value chain, the process of enhancing the value of the products moving along the supply chain, particularly in the early stages of R&D and design of semiconductors. Our primary strengths include:

- *Enabling companies to accelerate IC and photonics designs to efficiently optimize devices.* Companies use TCAD solutions to model the fabrication process and devices used in semiconductors including low-geometry CMOS, memory and photonics, thus potentially accelerating the time to develop technology and ramping to yield, reducing the need to run wafers, and optimizing devices, all of which can contribute to lower development costs. We develop our EDA design and simulation solutions and SIP to be tailored to specific technologies and market segments, to enhance design flows that optimize Power, Performance and Area-Cost, or PPA. For example, our Victory process and Victory device along with simulation, machine learning and AI is capable of DTCO flow that can optimize manufacturing of memory devices, low-geometry CMOS, power devices and photonics devices such as image sensors, quantum dots, micro-LEDs and displays.
- *Enabling growth industries like AI, automotive, and high-performance computing.* Our solutions enable our customers' memory devices, power devices and display technologies to play a crucial role in high performance advanced settings in exciting and growing industries. Our customers' memory devices help computers and servers store and access data quickly, which is crucial for AI and other advanced applications. Our customers' power devices are used in designing power systems for things like computers, cars, and servers, enabling them to run smoothly and efficiently. Our display technologies make it easier to interact with technologies like AI, virtual reality (VR), and augmented reality (AR), improving user experiences.
- *Early mover advantage in vertical markets.* For decades we have focused on vertical markets, such as display and power, and have developed industrial and academic partnerships that enable our agile and fast development of solutions aligned with market needs, such as our TCAD and EDA software solutions tailored for use in the display and power markets. The lessons learned in these markets, and the significant costs in developing our software solutions, have not only prepared us for tailoring solutions for new vertical markets including the photonics and memory markets, but have created a significant barrier for new market entrants looking to compete with our products.
- *Leading point tools complement existing chip design flows.* Point tools offer the capability of optimizing very specific aspects in a design. These capabilities are often included as features in other design tools; by offering them as stand-alone capabilities to be integrated in any design flow, we believe we can extract more value from these capabilities. They include Jivaro (parasitic reduction, often included in circuit simulation), Viso (parasitics analysis, often included in extraction), and Varman (statistical variation analysis, used in advanced technologies for cell and memory characterization).
- *Production-ready, also known as silicon-proven, SIP for SoC design.* The SIP market continues to be the fastest growing segment of the overall EDA market. A key factor in reducing our customers' design complexity is our ability to provide production-ready SIP to our customers. We provide production-ready SIP to our customers, including standard cells, memory and I/O SIP that is developed in-house. In addition, we provide SIP and design management tools that enable SIP validation at SoC level, potentially streamlining design workflows.
- *Development and support of our customers' specific needs.* Our size and focus on specific market segments allow us to develop highly agile solutions and to work with our customers with a goal of developing solutions that meet their specific needs. Our field support engineers interact strongly with our development team to facilitate competent, timely support. Through our collaboration with our academic partners such as Purdue University and Christian Doppler Labs at the Vienna University of Technology, our TCAD and EDA tools are made ready for the next generation of processes, materials and systems.
- *Interoperable product Portfolio among TCAD, EDA and SIP.* Our tools have compatible databases across all of our products for seamless scaling of customer designs. Our product interoperability allows our customers to extend select competitors' tools to aid our customers in choosing their preferred tools for any given design step. For example, our customers can use our simulation tools and parasitic reduction tools through the graphical user interface or menu pull downs built into our competitors' tools.
- *Cost-effective end-to-end solutions.* We offer complete solutions for device characterization, compact model development and circuit simulation; analog custom design, including schematics, layout, extraction and

design rule check, or DRC, and process and device TCAD. We believe that our software solution pricing is competitive, which is derived from factors such as costs associated with research and development, inflation, licenses mix, number of licenses per product, and number of years per TBL, as well as required license maintenance and services. Furthermore, our solutions are largely self-sufficient in that no third-party tools are necessary to address the end-to-end tasks preformed. Our atoms to systems and interoperable solutions enable customers to start their designs from concept and take them to manufacture ready and verified complete design. For example, customers can simulate a new device technology at the atomic level (e.g., nanowire and nanosheet) using our Victory Atomistic TCAD, which generates accurate models that are handed off to our device simulators such as SmartSpice, while larger circuits generate block level SIP with our analog custom suite of tools (Gateway, Expert, SmartSpice, Smart LV/DRC, Hipex, Jivaro and Varman) verified at the SoC level for manufacturing.

Based on a report conducted by Electronic System Design Alliance, in 2022 we ranked second worldwide in the TCAD market based on revenue. Our solutions, many of which can be used in tandem with our competitors' tools, have been adopted by some of the leading power devices and display providers. These customers use our design software to address certain design challenges. We believe that our positions in the TCAD and power devices and displays markets are strengthened by our EDA product line capabilities. For example, our display simulation models and features help us differentiate when we combine EDA with TCAD. We believe that we have a competitive advantage in these markets in part due to our investment in advanced semiconductor and photonics TCAD solutions, including investments in atomistic simulations, process etch, process deposition and design of experiments, or DOE, that are AI driven. We also believe that our academic partnerships with key research universities, including Purdue University, the University of Vienna and Stanford University, who have focused TCAD related studies, gives us a competitive advantage relative to peer companies. Lastly, we believe that we differentiate our products from our competitors' products by providing solutions that address specific customer needs and requirements in the TCAD and displays and power devices markets.

We believe that our agility and synergies among product lines play a crucial role in competing in EDA. For example, our circuit simulator offers capabilities for the display market, such as a differentiated model for Thin Film Transistors (a device extensively used in displays), and hysteresis and stress simulation features. Customers using our TCAD products can adopt our EDA products and TCAD simulation, device modeling (UTMOST product and services) and circuit simulation (SmartSpice) form a natural combination. We have also developed software that certain of our customers have labelled as having best-in-class point tools capabilities. To our knowledge, standalone RC reduction (Jivaro) is not offered by competitors and is included in products like circuit simulation. We believe that we have a strong market position in this market niche and that our solution is competitive to other solutions in the market. Also, in the highly competitive analog custom design market, particularly for more mature technologies, we believe that our willingness and capability of developing process design kits, or PDKs, for specific technologies has the potential to give us a natural advantage.

We believe that we provide competitive SIP solutions targeting certain end markets. Our SIP solutions are qualified and silicon-proven at certain foundries, which we believe enables our customers using such foundries to lower their cost of development and reduce their time to market compared to SIP solutions that are not silicon-proven at such foundries.

To our knowledge, we are one of only two EDA/TCAD companies in the world that provide SIP to their customers. Unlike the non-EDA SIP companies, as an EDA company, we have open access to our own Analog Custom Design flow EDA software that we use for designing SIP for our customers, hence not incurring the EDA tool costs that non-EDA SIP providers incur. Further, we have developed SIP tools that not only automate generation and characterization of some of our SIPs, but also have SIP management tools as our product that we utilize to manage our SIP and customer SIPs.

Growth Strategy

We believe that as the demands of semiconductor technology continue to grow and increase in complexity, we are favorably positioned to deliver value to our customers with our TCAD, EDA and SIP solutions. To further our long-term growth and increase our market share, we have made initial investments in the following areas:

- *Focus on large, growing markets where we have cemented ourselves as a reliable solutions provider.* We seek to continue and expand our presence in the display, automotive semiconductor, memory device and IoT markets. The display, automotive semiconductor, memory, HPC and IoT markets are projected to grow at a CAGR of 6.8%, 10.1%, 5.9%, 17.9% and 18.6%, respectively (for the respective periods described elsewhere in this prospectus). We believe our current position will allow us to capitalize on the growth of our existing customers in these markets. Proof of the point is the fact that our revenue and bookings have grown in these

markets with existing and new customers. For example, our revenue was $46.5 million and $54.2 million for the years ended December 31, 2022 and 2023, respectively. Our bookings were $49.7 million and $58.1 million, for the years ended December 31, 2022 and 2023, respectively.

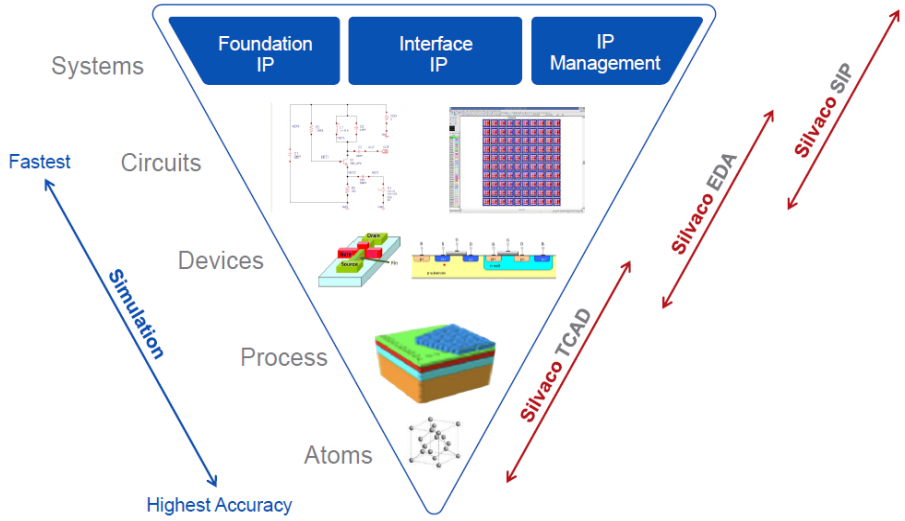
- *By increasing our Research and Development expenditures, we plan to expand our presence in established market segments.* We plan to expand our addressable market in established market segments, which include low-geometry CMOS technology, new specialized SIP, fabrication technology process co-optimization, and photonics. Historically we have not participated materially in these markets. We have established beta and strategic customers and generated revenue in 2022 and 2023 from the beta customers in our target markets to further our expansion in these market segments. Many of our strategic customers engage in advanced research and development projects with us, with a goal of further developing their product simulation capabilities. We believe that their participation in verification and validation of our newly developed products has the potential to enhance our product quality and market testing.
- *Continue our history of strategic acquisitions to accelerate growth and expand our market footprint.* We have a strong history of acquisitions that have enabled our research and development endeavors and target to realize revenue from new product introductions from such acquisitions beginning in the second-year post-acquisition. Since 2015, we have acquired ten companies that have enhanced and expanded our product portfolio. For example, we acquired PolytEDA in 2021, which expanded our capabilities for rapid physical verification of IC designs prior to mask creation and manufacturing and cloud enablement of EDA tools. We also acquired Dolphin's memory compiler team and select SIPs in 2020. This acquisition added memory and memory compiler capabilities to our SIP. Certain of our customers who require embedded memories in their IC and SoC designs are taking advantage of our low power and small area embedded memory. Historically, we have focused on acquisitions that provide us with technology (e.g., Purdue Atomics simulation tools, commercialized under our Victory Atomistic tools), technical talent, and revenue in new markets. Examples of such acquisitions are EdXact in France and Invarian in the United States, which provided us with additional talent pools as well as tools, such as Jivaro and Invar, that we successfully introduced to market. We intend to continue to target acquisitions that allow us to expand our solutions portfolio to better service our customers' needs.
- *Leverage our technology in TCAD, EDA, SIP and SIP management software*. We plan to continue to invest in the technology that differentiates us and where we can establish or expand our leadership position, such as TCAD for power devices, display and photonics, simulation of large panels with complex device models, parasitic analysis and reduction, SIP management and fingerprinting, device characterization tools and services, and development of additional SIP.
- *Optimize our competitive advantage by addressing unique customer needs.* We pride ourselves on research and development agility, allowing us to design capabilities specific to customers' requirements and, where appropriate, integrate those capabilities into our software solutions. We also offer cost-effective complete solutions due to the synergies across our product portfolio.
- *Focus on a portfolio approach to the licensing and sale of our software platform.* We seek to differentiate ourselves through the breadth of our software and SIP offerings, addressing the full design cycle needs of our customers across applications and industries. In 2022, we began engaging with beta customers, and in 2023 we generated revenue from such customers on our newly planned software platforms.
- *Expand our customer base through increased investment in sales and marketing.* We believe our serviceable market is under penetrated and that we can expand our customer base by increasing our marketing and sales resources, particularly in growing segments such as automotive and IoT. Our strategic accounts, which we define as customers that achieved bookings in excess of an aggregate of $1.0 million over the three-year period ended December 31, 2023, contributed $23.0 million of our total bookings in 2023, and the bookings received from strategic accounts grew at a 32% CAGR over the past two years. In addition, we gained 14 new customers in the power end-market and four new customers in the memory end-market in 2023.
- *Establish, maintain and expand relationships with key technology providers and academic partners.* We maintain successful relationships with SIP providers, foundries, design service companies, EDA companies, our commercial customers and academia. These relationships range from seminal technology work with universities to distribution and maintenance of SIP. For example, our master license agreement with the Purdue Research Foundation, or Purdue, allows us to commercialize, make, sell, use, distribute, modify and create derivative works of certain atomistic simulation technologies developed under our strategic alliance agreement with Purdue. We plan to continue to expand our ecosystem to maximize our reach, integrate into established flows and offer world-class solutions.

Products and Technology

We are a provider of TCAD software, EDA software and SIP, and also provide general engineering and research support to serve our target markets. Within our TCAD, EDA and SIP product lines, we offer a multitude of products and offerings to efficiently develop new semiconductor processes and devices. By employing our visualization and simulation tools, users are able to "see" inside the device during the production and design phases. Our focus is on

the development of flexible software solutions that enable users to analyze electronics and optics designs directly on their desktops, laptops, and servers, providing a common platform for fast, efficient, and cost-conscious product development. This is done from design concept to final stages of verification and validation of design with hand off support to manufacturing.

We have regularly developed and delivered updates that provide product enhancements to our customers. We have a demonstrated history and commitment to remaining at the forefront of innovation for semiconductor design optimization, simulation, and modeling software. Below are examples of our products and technologies:



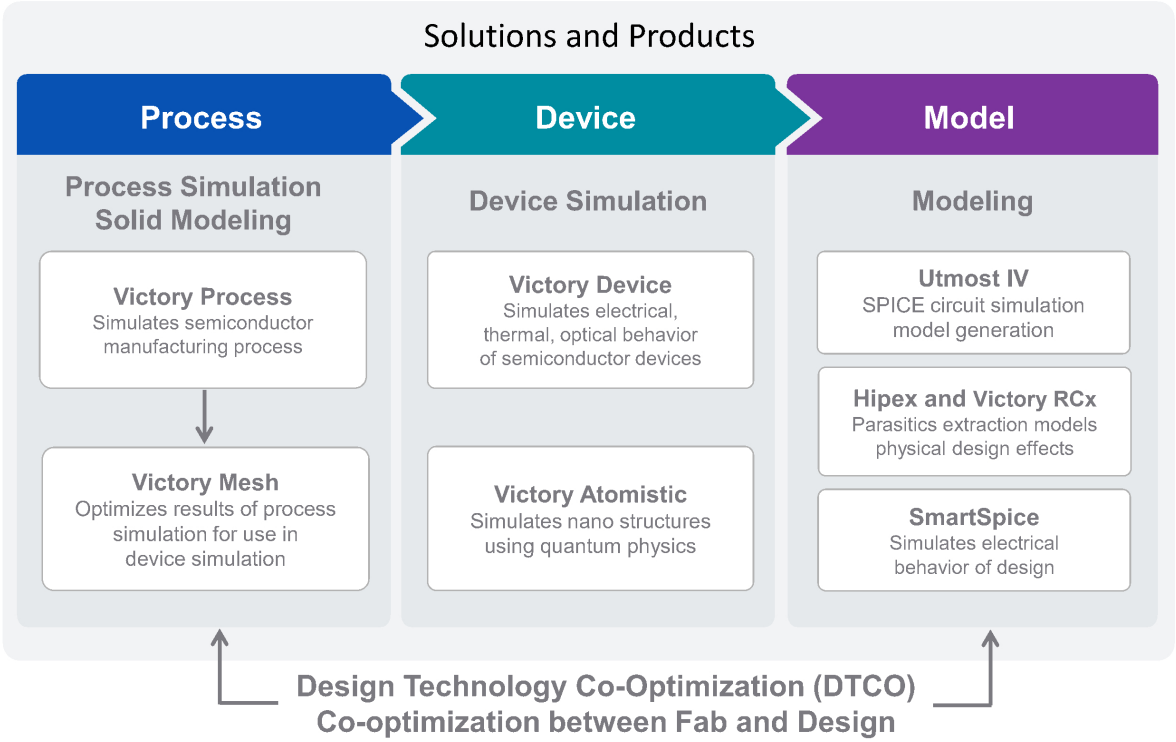
TCAD Solutions and Products

TCAD software solutions, including our offerings, are used to help reduce the time and manufacturing cycles spent to develop semiconductor technologies and help reduce the costs during development cycles. TCAD is part of a DTCO flow that is intended to improve designs across multiple domains (Layout, Process, Device, SPICE and RC extraction). A full TCAD to SPICE flow, in an integrated DTCO environment, helps deliver clear actionable results for circuit design optimization. Typical applications include:

- physical etch and deposition process simulation;
- calibration of doping profiles and MOS/bipolar transistors;
- modeled effects (including self-heating and thermal gradients for power device and TFT);
- photonics simulation for solar cell, CCD, CIS, TFT, LCD and OLED using ray tracing/FDTD/TMM;
- single event effect and total dose simulation; and
- stress simulation.

We also offer TCAD modeling services that provide a solution for customers who have unique semiconductor device modeling requirements, but do not have the time or resources to operate TCAD software in-house. Using TCAD modeling services provides access to our expertise in semiconductor physics and TCAD software operation to help provide a complete, fast and accurate solution. TCAD modeling services deliverables include graphical output (plots of structures and behaviors), structures (TCAD device files and meshes) and device characteristics (electrical, thermal and/or photonics). The graphical results can be delivered through results files and one license of our viewer/plotter tool or final result plots printed by us.

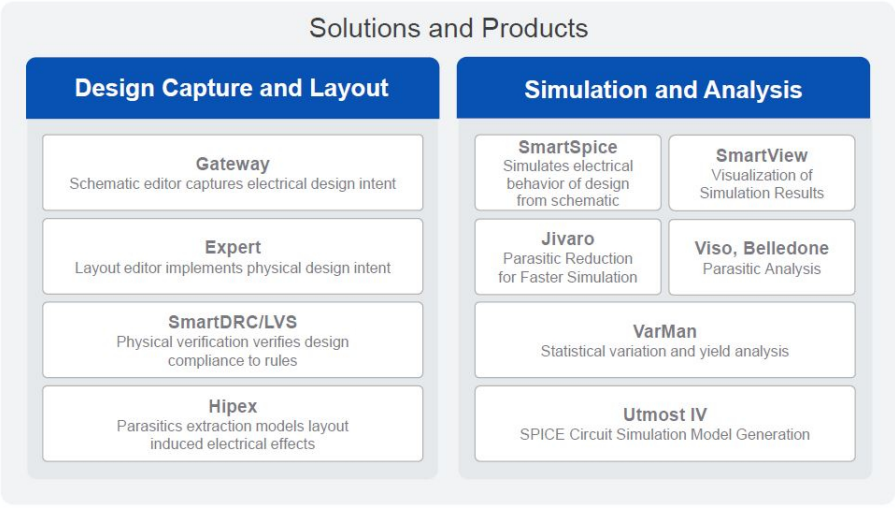
The graphic below shows the three classes of TCAD products we provide, namely Process, Device and modeling. Utilizing all three classes of TCAD products enables our design co-optimization solutions for design and fabrication.



EDA Software and Modeling Services

Our EDA software solutions cover multiple areas of analog/mixed-signal/RF circuit simulation, custom IC CAD and interconnect modeling, including support for CMOS, bipolar, diode, JFET, SOI, TFT, HEMT, IGBT, resistor and capacitor models. We also provide complete SPICE modeling services for the semiconductor industry, ideally suited to either complement in-house SPICE modeling capabilities when time is critical, or to provide complete SPICE modeling services for occasional needs.

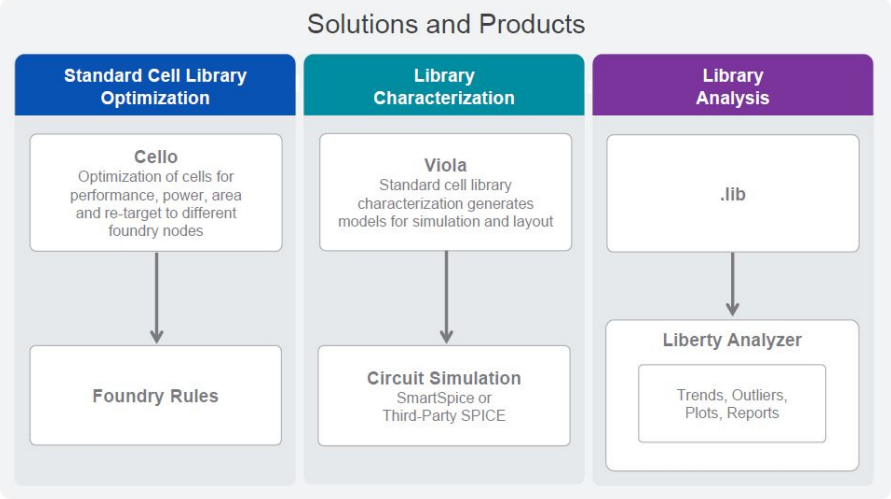
The graphic below shows our EDA products in the design capture and layout and design simulation and analysis classes. We can address specific customer needs by combining any of the products.



SIP and EDA Software and Design Services

We provide software that optimizes and re-targets standard cell libraries. Automated tools improve productivity by automating standard cell library designs that would otherwise need to be done manually, sometimes by tens of designers. In addition, we provide automated standard cell library characterization tools that replace manual and labor-intensive characterization of standard cells.

The graphic below shows our SIP EDA software and solutions enabling foundries, design houses and allowing integration and utilization of our library characterization tools with SmartSpice or third-party SPICE simulators.



We have more than 20 years of experience in developing foundational SIPs in process technology nodes from .35um down to 16nm and have delivered more than 50 standard cell libraries and 96 memory compilers. Our full-featured standard cell libraries have demonstrated maximal density and routing performance. The cell schematic used on more complex cells also provides options for high performance or high-density design optimizations. As a standard feature, all industry standard views (CDL netlist, LEF, GDSII, Liberty, PEX Spice netlist, Verilog, VITAL, EDIF and others) are provided from a consistent database.

Standard cell library development and characterization services, either as a fully independent third-party SIP vendor for foundries or as a partner in the development of specialty libraries, are provided for fabless companies. The most common services provided are:

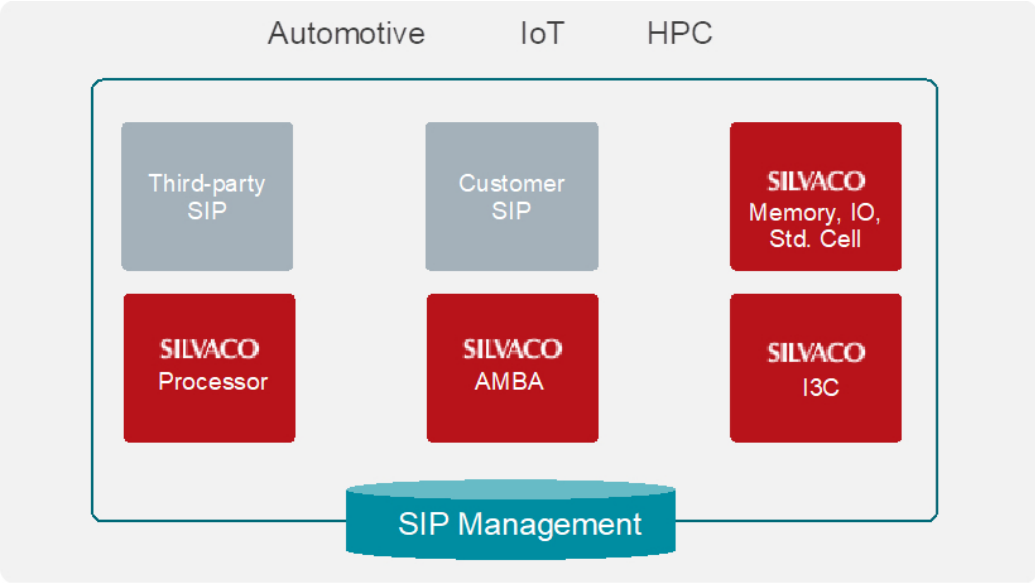
- Complete standard cell library development;
- IP migration to new process;
- Embedded memory compilers such as SRAM, Read Only Memories, or ROM, and Register files both as services and standard products. Our embedded memories span many process technology nodes optimized for speed, power and area;
- Library characterization services; and
- General purpose and custom I/Os as part of our SIP service to our customers.

SIP Management Tools and SIP

SIP and SoC Management Software. Our SIP and SoC Management Software (IP Vault) helps teams of designers to manage (release, revision control and contracts) and collaborate amongst the internal team, the SIP providers, and customers. IP Vault also provides the ability for the team to authenticate SIP blocks from various providers and also authenticate and fingerprint the chip that utilize these SIP blocks to verify that the correct SIP is being used in an SoC.

Silicon-Proven Soft IP Blocks. Our silicon-proven Soft IP blocks are embedded in SoCs and ICs in our targeted markets of automotive, IoT, wireless and High-performance Computing. These SIP blocks are developed internally by our engineers, or in collaboration with our semiconductor foundry partners.

The graphic below shows the SIP management software encompassing all of the SIP designs used in an SoC.



Customers

We provide end-to-end solutions such as software, design IP, and world-class support to a global and diverse customer base of engineers and researchers in both semiconductor companies and academia. We aim to support our customers' use of our products to solve semiconductor design challenges spanning the levels of atoms, devices, and systems. Through decades of collaboration with academia, we have created an end-to-end solution for display visualization and simulated stress-testing coupled with an integrated support system and SIP services. With our combined platform, we believe we can attract new customers, retain existing ones, and create upsell opportunities. As of December 31, 2023, we had over 800 customers that relied on our solutions worldwide, of which over 200 are academic institutions.

As of December 31, 2023, our customers were geographically distributed as follows: 54%in Asia, 29% in North America, and 14% in Europe. During 2022 and 2023, in addition to growth within our existing customer base, we added 60 and 59 net new customers.

Sales and Marketing

We work closely with our customers throughout the semiconductor lifecycle with our solutions, and support offerings to meet their specific and complex needs. We utilize account managers to engage with our customers early in their design-in cycles and collaborate with them throughout the design journey. We rely primarily on direct sales channels across the world and augment our sales efforts with distributors in growth or emerging markets, such as Israel, India and Southeast Asia. To handle the complexities of the industry, we use account managers with specialized knowledge who cover and can speak to all company products. In addition, we rely upon field application engineers for product specialization and sales operations to handle universities and smaller opportunities.

Although the specific terms of our contracts vary from customer to customer, the license agreements are commonly one or three-year commitments. Sales cycles vary depending upon the product and offerings along with the specific needs and complexities of the individual customer. TCAD and EDA opportunities generally have a sales cycle of six to nine months whereas SIP opportunities generally range from three to eight months. Renewal engagement generally starts six to 12 months prior to license expiration.

Our sales and marketing teams have international coverage segmented into three distinct regions: the Americas (USA and Brazil), EMEA and APAC (Japan, China, Korea, Taiwan and Singapore). As of December 31, 2023, our sales and marketing team included 29 regional sales representatives positioned across these geographies. As of December 31, 2023, our sales and marketing management team had an average of over 25 years of sales experience.

Research and Development

We believe that our future growth and acquisition of new customers depends on our ability to introduce enhancements to our existing products and to develop new products for both existing and new markets. As a result, a

material portion of our operating expenses have been allocated towards this effort. Our research and development efforts are focused primarily on TCAD, Analog and Custom Design, Circuit Simulation, and SIP.

We have assembled a core team of experienced engineers and systems designers who conduct research and development activities in the United States, EMEA, and Brazil. As of December 31, 2023, we had 181 engineers worldwide, representing approximately 67% of our total employee base, and approximately 79% of our engineers hold advanced degrees in science or engineering.

We are currently expanding our research and development efforts, with key updates to our product lines, including Victory Process and Device (TCAD), SmartSpice (Circuit Simulation), UTMOST (Modeling), Viso (parasitics Analysis), Jivaro (parasitics Reduction), Varman (Variation Analysis) and Analog Custom Design, or ACD, including Schematics, Layout, Smart DRC, Smart LVS and Extraction. To support our growth, we intend to continue our investments in research and development.

Intellectual Property

Our patents and other legal intellectual property protections are created when we believe we have developed proprietary and unique technologies that may impact our customers' businesses and help differentiate our products. We utilize patents to provide protection for our developed products, helping maintain product differentiation. Currently, our patent portfolio is focused on SIP ("fingerprinting" and "DNA-analysis"), circuit and standard cell design, generation and optimization, cell libraries with a large number of cells, memory cells and arrays, physical verification, simulation of light emitting diodes, or LED, and other related spaces. Our accomplishments of developing our technology and products, and our ability to compete worldwide, is made possible by our commitment to develop and maintain leadership of our products and to stay current with filings to protect our intellectual property.

We rely on patent, copyright, trademark, and trade secret laws, as well as confidentiality and non-disclosure agreements, other contractual protections, and distribution of software licenses only to protect our technologies and proprietary know-how. As of December 31, 2023, we had 19 issued U.S. patents expiring generally between 2028 and 2039, 4 pending U.S. patent applications, 3 issued foreign patents (including 2 French patents and 1 Taiwanese patent) expiring generally between 2032 and 2036, 5 pending foreign patents (including 1 pending Taiwanese application, 2 pending European patent applications, and 2 pending Japanese patent applications) and 2 pending International Patent Cooperation Treaty patent applications. Our issued patents and pending patent applications generally relate to SIP characterization, standard cells, memory, physical verification and LED simulation. As of December 31, 2023, we have obtained registered U.S. federal trademarks for SILVACO, VIRTUAL WAFER FAB, FAB TECHNOLOGY CO-OPTIMIZATION (FTCO) and IPEXTREME (Stylized).

Competition

Within the TCAD software segment, we compete against several other vendors, including Synopsys, Ansys, Inc. and Coventor, Inc., a Lam Research Company. We compete in the industry based on the market segments we serve, technology leadership, product efficiency, ease of integration, ease of use, payment structures, customer support, and time to market. Several factors drive TCAD customers' buying decisions, and we compete across all customer needs in order to capture a portion of our customers' budgets. We believe that the market for TCAD software is highly consolidated, with various inorganic growth strategies, such as mergers and acquisitions, partnerships, and collaboration driving this consolidation.

The EDA industry is highly competitive. We compete against other EDA vendors and against our customers' own design tools and internal abilities. We compete in the industry primarily on principles of technology leadership, product quality and efficiency, ease of integration, license terms, payment structures, and customer support. Major players in the EDA sector include Synopsys, Cadence and Siemens EDA. The industry also features numerous smaller providers of EDA software and services that often focus on specific market niches and phases within the design process.

In SIP, we compete with solutions developed internally by our SoC customers, other third-party providers, and other smaller providers. The largest market segments of SIP such as processors and I/O require large development budgets and are dominated by large players such as Arm Limited and Synopsys. In other segments SIP deployment competes mainly against internally developed solutions, and competitors often consist of smaller companies that provide targeted, specific product solutions rather than comprehensive solutions. In the SIP segment, we compete based on PPA, idle power consumption, data movement performance such as frequency, latency, bandwidth, and time to market. Major players in this industry include Arm Limited, Synopsys, Cadence, and CEVA, Inc.

Agreement with NXP

On September 1, 2016, we entered into a Technology License and Distribution Agreement, as amended, or the Agreement, with NXP, whereby we assumed the rights and obligations of IPextreme, Inc., our predecessor to the Agreement. Pursuant to the Agreement, NXP granted us a limited, non-exclusive, non-transferable, worldwide license to use, perform, display, copy, reproduce, modify, adapt, alter, customize, translate or otherwise create derivative works based on certain NXP technology to develop and make licensed designs for our own account, and to market, demonstrate, promote, sell, offer to sell, distribute and otherwise dispose of such licensed designs, directly or indirectly, to our customers. The Agreement was amended on October 18, 2016 to provide for the transfer of certain technical information regarding I3C Controller technology to us. The Agreement was amended again on November 10, 2018 to provide for the transfer of certain technical information regarding the LinFlexD Controller to us, and amended again on March 22, 2022 to provide for the transfer of certain technical information regarding the e200z760 core technology to us. NXP has the right to terminate the Agreement by notifying us in writing if (i) we fail to make a payment within 30 days of the date that payment was due; (ii) we are in breach of the Agreement and the breach is not capable of being remedied, such breach, if capable of remedy, is not remedied within 30 days after written notice of such breach, or we are otherwise in default; (iii) one of our creditors take possession of our assets; (iv) a voluntary or involuntary petition in bankruptcy or winding up is filed; (v) any proceeding in insolvency or bankruptcy are instituted against us; (vi) a trustee or receiver is appointed over us; (vii) any assignment is made for the benefit of our creditors; or (viii) we have a change of control (as defined in the Agreement). The Agreement provides that upon termination, all licenses will end, payments owed to NXP will become immediately due and payable, and we will immediately return or destroy all technology and confidential information furnished under the Agreement. The Agreement expired on October 30, 2023. On April 11, 2024, we amended the Agreement to extend its term for an additional five years.

Government Regulation

We face increasingly stringent and evolving regulatory challenges. For example, we are subject to anti-corruption, anti-bribery, anti-money laundering, and similar laws in the United States and other countries in which we conduct activities, including the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and the United Kingdom Bribery Act 2010, which generally prohibit companies and their employees, agents, intermediaries and other third parties from directly or indirectly promising, authorizing, making or offering improper payments or other benefits to government officials and others in the private sector. Noncompliance with these regulations could subject us to investigations, severe criminal or civil sanctions, settlements, prosecution, loss of export privileges, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, whistleblower complaints, adverse media coverage and other consequences. We are also subject to governmental export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws. For example, certain of our software solutions are subject to U.S. export controls and sanctions, including the Export Administration Regulations, U.S. Customs regulations, and the economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control, which may limit our ability to export our software solutions and technology or may require export authorizations and conditions prior to export. We regularly engage with outside experts and review our internal compliance related to such U.S. export controls laws, regulations and sanctions programs and have filed certain voluntary disclosures related to potential violations of such U.S. export control laws and regulations and sanctions programs. Such voluntary disclosures remain pending and if an enforcement action is brought against us in relation to such potential violations, such actions could result in the imposition of significant penalties against us. Furthermore, because we may process personal data in the ordinary course of our business we are, or may become, subject to numerous data privacy and security obligations, including federal, state, local, and foreign laws, regulations, guidance, and industry standards related to data privacy and security, including, without limitation, the EU GDPR and the UK GDPR, the CCPA and other U.S. state laws. These privacy and security laws may increase our compliance obligations and exposure for any noncompliance. See the section titled "Risk Factors—Risks Related to Legal, Regulatory, Accounting and Tax Matters" for additional information about the laws and regulations to which we are or may become subject and about the risks to our business associated with such laws and regulations.

Employees and Human Capital Resources

As of December 31, 2023, we had 267 employees worldwide, including 93 full-time equivalent employees located in the United States, consisting of 46 in research and development, 19 in sales and marketing, and 28 in general and administrative. We consider relations with our employees to be good and have never experienced a work stoppage. None of our employees are either represented by a labor union or subject to a collective bargaining agreement.

Facilities

Our principal executive offices are located in a leased facility in Santa Clara, California, consisting of approximately 11,118 square feet of office space under a lease that expires in March 2025. This facility accommodates our principal engineering, sales, marketing, operations, finance, and administrative activities. We also lease offices in China, France, Japan, Korea, Singapore, Taiwan, Ukraine, the United Kingdom and Georgia, U.S.A. We believe that our facilities are generally sufficient to meet our current needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Legal Proceedings

From time to time, we may be subject to legal proceedings in the ordinary course of our business. We are not currently a party to any proceedings that we believe will have, individually or in the aggregate, a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. For more information regarding our current legal proceedings, see "Risk Factors—Risks Related to Legal, Regulatory, Accounting and Tax Matters—Pending or future investigations or litigation could have a material adverse effect on our results of operations and our stock price", Refer to note 14 to our consolidated financial statements as of, and for the years ended, December 31, 2022 and 2023 appearing elsewhere in this prospectus.

MANAGEMENT

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of March 31, 2024:

Name	Age	Position
Executive Officers		
Dr. Babak A. Taheri	62	Chief Executive Officer and Director
Ryan Benton	53	Chief Financial Officer
Dr. Raul Camposano	69	Chief Technology Officer
Dr. Eric Guichard	56	Senior Vice President and General Manager of TCAD
Non-Employee Directors		
Katherine S. Ngai-Pesic	74	Chair of the Board and Director
Dr. Hau L. Lee	71	Lead Independent Director
Anita Ganti	52	Director
William H. Molloie, Jr.	59	Director
Anthony K. K. Ngai	42	Director
Dr. Walden C. Rhines	77	Director
Jodi L. Shelton	59	Director

Executive Officers

Babak A. Taheri, Ph.D., has served as our Chief Executive Officer and member of our board of directors from August 2019 to September 2021 and from November 2021 to present. From October 2018 to August 2019, Dr. Taheri served as our Chief Technology Officer and Executive Vice President of Products. Prior to joining Silvaco, Dr. Taheri served as Chief Executive Officer and President of Integrated Biosensing Technologies (IBT), an advisory and consulting firm, from May 2015 to October 2018. Dr. Taheri has also served on various advisory boards, including MEMS World Summit, a conference for MEMS manufacturers, equipment and material suppliers and research institutes, and Novasentis, Inc., an electromechanical polymer technology development company, and as the advisory board chair of the electrical engineering department at the University of California, Davis. Dr. Taheri also served on the board of directors of Parisi House on The Hill, a residential alcohol and drug non-profit, from June 2021 to May 2022. Dr. Taheri received a B.S. in engineering from San Francisco State University, a M.S. in electrical engineering from San Jose State University and a Ph.D. in biomedical engineering from the University of California, Davis. We believe that Dr. Taheri is qualified to serve on our board of directors due to his experience in the semiconductor and technology industries and extensive leadership, board of director experience, and management experience, including his experience serving as our Chief Executive Officer.

Ryan Benton has served as our Chief Financial Officer since August 2023. Prior to joining Silvaco, Mr. Benton served as Chief Financial Officer and Board Member of Tempo Automation Holdings, Inc. (Nasdaq: TMPO), a software-accelerated electronics manufacturer, from July 2020 to August 2023. Prior to that from September 2018 to July 2020, Mr. Benton served as Chief Financial Officer of Revasum, Inc. From August 2017 to September 2018, Mr. Benton served as Senior Vice President and Chief Financial Officer for BrainChip Holdings Ltd. From 2012 to August 2017, Mr. Benton held multiple positions at Exar Corporation, a fabless semiconductor chip manufacturer (Exar), including as Senior Vice President and Chief Financial Officer from 2012 through 2016 and Chief Executive Officer and Executive Board Member from 2016 until the sale of Exar to Maxlinear, Inc. in May 2017. From 1993 to 2012, Mr. Benton worked at several technology companies including ASMI and eFunds Corporation. Mr. Benton has served on several public company boards, including serving as an Independent Director and Audit Committee Chair. He started his career as an auditor at Arthur Andersen & Company in 1991. Mr. Benton received a B.A. of Business Administration in Accounting from the University of Texas at Austin, and he passed the State of Texas Certified Public Accountancy exam.

Raul Camposano, Ph.D., has served as our Chief Technology Officer since February 2022. Dr. Camposano has served as a partner at Silicon Catalyst LLC, an incubator for semiconductor solutions, since April 2015 and as a lecturer on EDA and Machine Learning Hardware at Stanford University since April 2018. From July 2020 to January 2022, Dr. Camposano served as an advisor to Applied Materials, Inc. (Nasdaq: AMAT), a semiconductor equipment company, or Applied Materials. From August 2015 to July 2020, Dr. Camposano served as Chief Executive Officer of Sage Design Automation, Ltd., a software tools company acquired by Applied Materials in 2020. From November

2010 to May 2014, Dr. Camposano served as Chief Executive Officer of Nimbic, Inc., an EDA cloud company, acquired by Mentor Graphics Corporation in 2014. From January 1994 to January 2007, Dr. Camposano served in various roles at Synopsys (Nasdaq: SNPS), an EDA solutions company, including as its Chief Technology Officer, Senior Vice President, and General Manager. Prior to that, Dr. Camposano served on the board of directors of the German National Research Center for Computer Science, as a professor of computer science at the University of Paderborn, and as a Research Staff Member at the IBM T.J. Watson Research Center. Dr. Camposano received a B.S. and M.S. in electrical engineering from Universidad de Chile and a Ph.D. in computer science from Karlsruhe Institute of Technology. Dr. Camposano was elected as a Fellow of the IEEE in 1999 and to serve on the board of directors of ESDA, the EDA Consortium, in 2012.

Eric Guichard, Ph.D., has served as our Senior Vice President and General Manager of our TCAD division since November 2012, and served as our Vice President of Applications from July 2008 to November 2012. From September 1995 to July 2008, Dr. Guichard served in various roles with Silvaco SA, formerly known as Silvaco Data Systems, one of our wholly-owned subsidiaries, including as an applications engineer. Dr. Guichard received a M.S. in material science and a Ph.D. in semiconductor physics from Instituto Politécnico Nacional de Grenoble, France.

Non-Employee Directors

Katherine S. Ngai-Pesic co-founded Silvaco in 1984 and is our controlling stockholder. Ms. Ngai-Pesic has served as a member of our board of directors since November 2012 and as chair of our board of directors since December 2021. Ms. Ngai-Pesic has also served as a member of our compensation committee since May 2021 and as chair of our compensation committee from December 2021 to September 2022, as chair of our nominating and corporate governance committee from May 2021 to December 2021 and as a member of our nominating and corporate governance committee since December 2021 and as a member of our audit committee from May 2021 to September 2022. In addition, Ms. Ngai-Pesic founded Kipee in March 2001 and has served as its President since inception and founded the Lee Ho Yee Foundation in April 2021 and has served as chair of its board of directors since inception. Mrs. Ngai-Pesic has served as president of the Marriott Business Center HOA Association since October 2012. Ms. Ngai-Pesic also has an endowed associate professorship at Purdue University's Department of Electrical & Computer Engineering. Ms. Ngai-Pesic received a B.S. in chemistry and an M.S. in electrical engineering from Santa Clara University. We believe that Ms. Ngai-Pesic is qualified to serve on our board of directors due to her over 30 years of experience in the semiconductor industry and extensive leadership and management experience.

Hau L. Lee, Ph.D., has served as a member of our board of directors, as our lead independent director and as a member of our compensation committee since September 2022. From September 2002 to May 2023, Dr. Lee served as an Operations, Information and Technology Professor at the Graduate School of Business at Stanford University, where he had been a professor since 1983. Since February 2012, Dr. Lee has also served on the board of directors of TD SYNNEX Corporation (NYSE: SNX), a distributor and solutions aggregator for the IT ecosystem. Since April 2013, Dr. Lee has served as a member of the board of directors and on the audit and compensation committees of Lion Rock Group Limited (HKG: 1127) and its chairman since June 2023. In addition, from March 2014 to July 2020, Dr. Lee served as a member of the board of directors and on the compensation committee of Frontier Services Group (HKG: 0500), a Chinese Africa-focused security, aviation, and logistics company. From June 2014 to September 2020, he served as a member of the board directors and on the compensation committee of Global Brands Group (SEHK: 787), a brand management company, and from February 2019 to September 2022, Dr. Lee served as a member of the board of directors and on the compensation committee of LF Logistics, a logistics solution company. In November 1999, Dr. Lee co-founded DemandTec, Inc., a retail pricing technology company. Dr. Lee received a B.Soc.Sc. degree in Economics and Statistics from the University of Hong Kong, an M.Sc. degree in operational research from the London School of Economics and an M.S. and Ph.D in operations research from the Wharton School of the University of Pennsylvania. We believe that Dr. Lee is qualified to serve on our board of directors due to his extensive experience in the semiconductor industry and extensive leadership experience.

Anita Ganti has served as a member of our board of directors since March 2024 and as the chair of our compensation committee since April 2024. From 2015 to October 2019, Ms. Ganti served as senior vice president of the product engineering services organization of Wipro Limited, a leading global information technology, consulting and business process services company. From 2013 to 2015, she was vice president of global technology at Flex Ltd. (formerly Flextronics), a global electronics manufacturing services company. Since 2020, Ms. Ganti has served as member of the board of director and the audit committee of Power Integrations Inc. (Nasdaq: POWI), which is a fabless semiconductor company. In addition, since June 2023 she has served as a director and the chairperson of the compensation committee and member of the audit committee of Exro Technologies (TSX: EXRO), a power-control electronics company. Ms. Ganti has a B.S. in electrical engineering from Veermata Jijabai Technological Institute in India, an M.S.E.E. from Virginia Polytechnic Institute and State University, and an M.B.A. from the Wharton School, University of Pennsylvania. We believe Ms. Ganti is qualified to serve on our board of directors due to her extensive operating experience and executive leadership and her deep knowledge of the technology industry.

William H. Molloie, Jr. has served as a member of our board of directors and as chair of our audit committee since May 2022. Since March 2021, Mr. Molloie has been a lecturer at the University of California, San Diego Rady School of Management. In July 1986, Mr. Molloie joined PricewaterhouseCoopers, a public accounting firm, and served as an assurance partner from October 1997 to June 2020. Since June 2021, Mr. Molloie has served on the board of directors of WinSanTor Inc., a private clinical-stage biotechnology company, and has served as a member of its compensation committee since April 2022. Mr. Molloie received a B.A. in accounting and finance from Temple University. We believe that Mr. Molloie is qualified to serve on our board of directors due to his financial expertise and his extensive leadership experience in the technology industry.

Anthony K. K. Ngai has served as a member of our board of directors since October 2018 and as a member of our nominating and corporate governance, compensation and audit committees since May 2021. Mr. Ngai has also served as chair of our nominating and corporate governance committee since September 2022 and as chair of our audit committee from November 2021 to April 2022. Since June 2022, Mr. Ngai has served as the Chief Financial Officer of Unience.io, a technology company based in Hong Kong that develops blockchain and Web3 applications and community. From September 2020 to June 2022, Mr. Ngai served as a Partner of Gravity Capital Partners Co. and the Responsible Officer of Avanta Investment Management, an asset management company. Prior to that, Mr. Ngai served as the Head of Credit Trading at J.P. Morgan Asia Pacific, a global financial services firm, from June 2004 to September 2018. In November 2018, Mr. Ngai co-founded JUST FEEL, a nonprofit charity focused on mental health in education. Since July 2020, Mr. Ngai served on the Board of Trustees of the Chinese University of Hong Kong, Chung Chi College. Mr. Ngai received a B.S. in quantitative finance from The Chinese University of Hong Kong and is a graduate of the Program for Management Development from Harvard Business School. We believe that Mr. Ngai is qualified to serve on our board of directors due to his financial expertise and extensive leadership and management experience.

Walden C. Rhines, Ph.D., has served as a member of our board of directors and as a member of our audit committee since September 2022. Since March 2020, Dr. Rhines has served as President and Chief Executive Officer of Cornami, Inc., a fabless semiconductor company. Since 2015, Dr. Rhines has also served as a member of the board of directors and as chair of the compensation committee of Qorvo, Inc. (Nasdaq: QRVO), a semiconductor company, since January 2015 and its chairman since November 2023. He served as a member of the board of directors of PTK Acquisition Corp. (NYSE: PTK), a special purpose acquisition company from July 2020 until September 2021 and served on its audit, nominating and compensation committees. From October 1993 to March 2017, Dr. Rhines served as President and Chief Executive Officer of Mentor Graphics Corporation, an EDA company, and chairman of its board of directors from 2000 until its acquisition by Siemens in March 2017, pursuant to which the company was renamed Mentor Graphics, a Siemens Business. Following the acquisition, Dr. Rhines served as President and Chief Executive Officer of Siemens EDA (formerly Mentor Graphics, a Siemens Business), from March 2017 to October 2018, after which he served as its Chief Executive Officer Emeritus until September 2020. Dr. Rhines received a B.S.E. in metallurgical engineering from the University of Michigan, an M.S. and Ph.D. in materials science and engineering from Stanford University, and a M.B.A. from the Southern Methodist University, Cox School of Business. We believe that Dr. Rhines is qualified to serve on our board of directors due to his experience in the semiconductor and EDA industries, extensive leadership and management experience in technology-based corporations, and experience on public company boards.

Jodi L. Shelton has served as a member of our board of directors and as a member of our nominating and corporate governance committee since September 2022 and our compensation committee since April 2024. Ms. Shelton co-founded Global Semiconductor Alliance, a leading semiconductor industry organization, in June 1994 and has served as its Chief Executive Officer since June 1994. Ms. Shelton also co-founded Shelton Group, a strategic investor relations firm in February 1994 and has served as its chair since February 1994. Since March 2021, Ms. Shelton has also served on the board of directors and as a member of the audit and compensation committees of LF Capital Acquisition Corp (Nasdaq: LFAC), a special purpose acquisition company. Ms. Shelton received a B.S. in political science from San Diego State University and an M.S. in political science from University of Houston. We believe that Ms. Shelton is qualified to serve on our board of directors due to her extensive experience in the semiconductor industry and her experience on various boards.

Familial Relationships

Ms. Ngai-Pesic is the mother of Iliya I. Pesic and aunt of Anthony K. K. Ngai. Ms. Ngai-Pesic and Mr. Ngai are members of our board of directors. Anthony K. K. Ngai and Iliya I. Pesic are first cousins.

Board Composition

Our business and affairs are organized under the direction of our board of directors, which currently consists of nine members. Ms. Ngai-Pesic serves as chair and Dr. Hau L. Lee serves as our lead independent director of our board of directors. The primary responsibilities of our board of directors are to provide oversight, strategic guidance,

counseling, and direction to our management. Our board of directors meets on a regular basis and additionally as required.

In accordance with the terms of our amended and restated charter, which will become effective as of immediately prior to the completion of this offering, our board of directors will be elected annually and will continue to serve as directors until their resignation, removal or successor is duly elected.

Lead Independent Director

Our board of directors has adopted corporate governance guidelines that provide that the board of directors shall appoint an independent director to serve as our lead independent director for so long as we have a non-independent chair. Our board of directors has appointed Dr. Hau L. Lee to serve as our lead independent director. As lead independent director, Dr. Lee will have primary responsibilities to preside over all meetings at which the chair is not present, and serve as a liaison between the chair and the independent directors.

Director Independence and Controlled Company Exemption

We intend to apply to have our common stock listed on Nasdaq. Under the rules of Nasdaq, a director will only qualify as an "independent director" if that company's board of directors affirmatively determines that such person does not have a relationship with our company that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Prior to the closing of this offering, our board of directors undertook a review of the independence of our directors and considered whether any director has a material relationship with us that could compromise that director's ability to exercise independent judgment in carrying out that director's responsibilities. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that none of Dr. Hau L. Lee, Anita Ganti, William H. Molloie, Jr., Anthony K. K. Ngai, Dr. Walden C. Rhines and Jodi L. Shelton, representing six of our eight total directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under Nasdaq's rules. In making these determinations, our board of directors considered the current and prior relationships that each director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including their beneficial ownership of our capital stock and relationships with certain of our significant stockholders, and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

Immediately upon completion of this offering, we will be a "controlled company" within the meaning of the Nasdaq listings rules. As a result, we qualify for exemptions from certain corporate governance requirements under the rules, including the requirements that within one year of the completion of this offering, we have a board, a compensation committee and a nominating and corporate governance committee that is each composed entirely of independent directors. We intend to make use of these corporate governance requirement exemptions. In addition, we will be subject to the rules of the SEC and Nasdaq relating to the membership, qualifications, and operations of the audit committee (as discussed below), which requires that the audit committee be comprised of at least three members composed entirely of independent directors as of the first anniversary of this offering.

The rules of Nasdaq define a "controlled company" as a company of which more than 50% of the voting power for the election of directors is held by an individual, a group or another company. Upon completion of this offering, Ms. Ngai-Pesic will own approximately % of our outstanding common stock (approximately % if the underwriters exercise their option to purchase additional shares in full), representing % of the voting power of the outstanding common stock (approximately % if the underwriters exercise their option to purchase additional shares in full), and the SMIK Trust will own approximately % of our outstanding common stock (approximately % if the underwriters exercise their option to purchase additional shares in full), representing % of the voting power of the outstanding common stock (approximately % if the underwriters exercise their option to purchase additional shares in full). Ms. Ngai-Pesic is a beneficiary of the SMIK Trust and has no voting and dispositive power over the shares held by the SMIK Trust. Through Ms. Ngai-Pesic and the SMIK Trust's collective control of shares of common stock representing a majority of the votes entitled to be cast in the election of our board of directors, Ms. Ngai-Pesic and the SMIK Trust have the ability to control the vote to elect all of our directors. However, if we cease to be a controlled company and we continue to be listed on Nasdaq, we will be required to comply with the director independence requirements of Nasdaq relating to the board of directors, compensation committee and nominating and corporate governance committee by the date our status as a controlled company changes or within specified transition periods applicable to certain provisions, as the case may be.

Role of Our Board of Directors in Risk Oversight

A function of our board of directors is informed oversight of our risk management process. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure and our audit committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The audit committee also monitors compliance with legal and regulatory requirements. Our compensation committee also assesses and monitors whether our compensation plans, policies and programs comply with applicable legal and regulatory requirements.

Board Committees

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. Our board of directors will adopt a charter for each respective committee in connection with this offering, which will comply with the applicable requirements of current Nasdaq rules. We intend to comply with future requirements to the extent they are applicable to us. Following the completion of this offering, copies of the charters for each committee will be available on the investor relations portion of our website.

Audit Committee

Upon effectiveness of the registration statement of which this prospectus forms a part, our audit committee will consist of William H. Molloie, Jr., Walden C. Rhines and Anthony K. K. Ngai. Our board of directors has affirmatively determined that each of the members of our audit committee satisfies the independence requirements of Nasdaq and Rule 10A-3 under the Exchange Act. Each member of our audit committee meets the financial literacy requirements of the Nasdaq rules and the SEC. In arriving at this determination, our board of directors has examined each audit committee member's scope of experience and the nature of their prior and/or current employment.

William H. Molloie, Jr. serves as the chair of our audit committee. Our board of directors has determined that Mr. Molloie qualifies as an "audit committee financial expert", within the meaning of SEC regulations and meets the financial sophistication requirements of the Nasdaq listing rules. In making this determination, our board has considered Mr. Molloie's formal education and previous experience in financial roles. Both our independent registered public accounting firm and management periodically meet privately with our audit committee.

The functions of this committee include, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
- reviewing our financial reporting processes and disclosure controls;
- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- reviewing the adequacy and effectiveness of our internal control policies and procedures, including the responsibilities, budget, staffing and effectiveness of our internal audit function;
- reviewing with the independent auditors the annual audit plan, including the scope of audit activities and all critical accounting policies and practices to be used by us;
- obtaining and reviewing at least annually a report by our independent auditors describing the independent auditors' internal quality control procedures and any material issues raised by the most recent internal quality-control review;
- monitoring the rotation of partners of our independent auditors on our engagement team as required by law;
- prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;
- reviewing our annual and interim financial statements and reports, including the disclosures contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations," and discussing the statements and reports with our independent auditors and management;
- reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls and critical accounting policies;
- reviewing with management and our auditors any earnings announcements and other public announcements regarding material developments;

- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting, auditing or other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and providing oversight of any related person transactions in accordance with our related person transaction policy and reviewing and monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented; and
- reviewing and evaluating on an annual basis the performance of the audit committee and the audit committee charter.

Compensation Committee

Upon effectiveness of the registration statement of which this prospectus forms a part, our compensation committee will consist of Anita Ganti, Hau L. Lee, Ms. Ngai-Pesic, Jodi Shelton and Anthony K. K. Ngai. Ms. Ganti serves as the chair of our compensation committee. The functions of this committee include, among other things:

- reviewing and approving the corporate objectives that pertain to the determination of executive compensation;
- reviewing and approving the compensation and other terms of employment of our executive officers (other than for our chief executive officer, which is approved by the Board of Directors);
- reviewing and approving performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- making recommendations to our board of directors regarding the adoption or amendment of equity and cash incentive plans and approving amendments to such plans to the extent authorized by our board of directors;
- reviewing and making recommendations to our board of directors regarding the type and amount of compensation to be paid or awarded to our non-employee board members;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- administering our equity incentive plans, to the extent such authority is delegated by our board of directors;
- reviewing and approving the terms of any employment agreements, severance arrangements, change in control protections, indemnification agreements and any other material arrangements for our executive officers;
- overseeing the development and implementation of our human capital management, including those policies and strategies regarding recruiting, retention, career development, opportunity, and advancement, and succession, diversity, equity, inclusion, and employment practices;
- reviewing with management our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC, to the extent such caption is included in any such report or proxy statement;
- preparing an annual report on executive compensation that the SEC requires in our annual proxy statement; and
- reviewing and evaluating on an annual basis the performance of the compensation committee and recommending such changes as deemed necessary with our board of directors.

Nominating and Corporate Governance Committee

Upon effectiveness of the registration statement of which this prospectus forms a part, our nominating and corporate governance committee will consist of Hau L. Lee, Anthony K. K. Ngai, Ms. Ngai-Pesic, and Jodi L. Shelton. Mr. Ngai serves as the chair of our nominating and corporate governance committee. The functions of this committee include, among other things:

- identifying, reviewing and making recommendations of candidates to serve on our board of directors;
- evaluating the performance of our board of directors, committees of our board of directors and individual directors and determining whether continued service on our board is appropriate;
- evaluating nominations by stockholders of candidates for election to our board of directors;
- evaluating the current size, composition and organization of our board of directors and its committees and making recommendations to our board of directors for approvals;
- developing a set of corporate governance policies and principles and recommending to our board of directors any changes to such policies and principles;

- reviewing issues and developments related to corporate governance and identifying and bringing to the attention of our board of directors current and emerging corporate governance trends;
- overseeing environmental and social governance matters relevant to us; and
- reviewing periodically the nominating and corporate governance committee charter, structure and membership requirements and recommending any proposed changes to our board of directors, including undertaking an annual review of its own performance.

Compensation Committee Interlocks and Insider Participation

Ms. Ngai-Pesic has served as a member of our compensation committee since May 2021 and served as chair of our compensation committee from December 2021 through August 2022. None of our current executive officers currently serve, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

For information regarding agreements between us and Ms. Ngai-Pesic and Anthony K. K. Ngai, see "Certain Relationships and Related Party Transactions—Consulting and Employment Arrangements."

Limitation on Liability and Indemnification of Directors and Officers

Our amended and restated bylaws, which will become effective as of immediately prior to the completion of this offering, limits our directors' liability to the fullest extent permitted under the DGCL. The DGCL provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability:

- for any transaction from which the director derives an improper personal benefit;
- for any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- for any unlawful payment of dividends or redemption or repurchases of shares; or
- for any breach of a director's duty of loyalty to the corporation or its stockholders.

If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Delaware law and our amended and restated bylaws provide that we will, in certain situations, indemnify our directors and officers and may indemnify other employees and other agents, to the fullest extent permitted by law. Any indemnified person is also entitled, subject to certain limitations, to advancement, direct payment or reimbursement of reasonable expenses (including attorneys' fees and disbursements) in advance of the final disposition of the proceeding.

In addition, we intend to enter into separate indemnification agreements with our directors and officers. These agreements, among other things, will require us to indemnify our directors and officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of their services as one of our directors or officers or any other company or enterprise to which the person provides services at our request.

We maintain a directors' and officers' insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these provisions in our amended and restated certificate of incorporation and amended and restated bylaws and these indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or control persons, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Code of Business Conduct and Ethics for Employees, Executive Officers, and Directors

We intend to adopt a Code of Business Conduct and Ethics, or the Code of Conduct, that will be applicable to our directors, officers and employees (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions), which will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. The Code of Conduct will be available on our website at www.silvaco.com. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only. The nominating and corporate governance committee of our board of directors is responsible for overseeing the Code

of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website.

Non-Employee Director Compensation

We have paid cash retainers, RSU awards and other compensation to certain members of our board of directors. We have reimbursed and will continue to reimburse all of our non-employee directors for their reasonable travel and out of pocket expenses incurred in attending meetings of our board of directors and committees of our board of directors in accordance with our reimbursement procedures.

The following table presents summary compensation information of our non-employee members of our board of directors for the fiscal year ended December 31, 2023.

Name	Fees Earned or Paid in Cash ($)[1]	RSU Awards ($)[2]	All Other Compensation ($)[3]	Total ($)
Katherine S. Ngai-Pesic	82,500	—	15,000	97,500
Dr. Hau L. Lee	85,000[4]	72,806	—	157,806
Anita Ganti[5]	—	—	—	—
William H. Molloie, Jr.	55,000	106,306	—	161,306
Anthony K. K. Ngai	65,000	229,495	—	294,495
Michael E. Paolucci[6]	38,653	110,340	—	148,993
Iliya I. Pesic[7]	38,409	298,462	53,397	390,268
Dr. Walden C. Rhines	50,000[4]	72,806	—	122,806
Jodi L. Shelton	50,000[4]	72,806	—	122,806

(1) Amounts shown in this column include applicable annual retainers for the individual's service on our board of directors and committees thereof; pro-rated for their length of service for directors who were not directors for the full fiscal year ended December 31, 2023, except for Mr. Pesic. Refer to reference note number 5 to this table.

(2) Amounts shown in this column represent the aggregate grant date fair value of RSU awards made during 2023, calculated in accordance with Accounting Standards Codification, or ASC, Topic 718. See Notes 2 and 11 to the notes to our consolidated financial statements as of, and for the years ended December 31, 2022 and 2023 for a discussion of the relevant assumptions used in calculating these amounts. No non-employee director holds stock options or stock awards other than RSUs. As of December 31, 2023, the aggregate number of outstanding RSUs subject to awards held by each of our non-employee directors are set forth in the table below:

Name	RSU Awards (#)
Katherine S. Ngai-Pesic	—
Dr. Hau L. Lee	26,877
Anita Ganti	—
William H. Molloie, Jr.	32,342
Anthony K. K. Ngai	59,938
Michael E. Paolucci	18,000
Iliya I. Pesic	—
Dr. Walden C. Rhines	26,877
Jodi L. Shelton	26,877

(3) Amounts shown in this column represent the amount paid to the director for serving as a consultant to the company in 2023.

(4) Includes annual retainer for the individual's service in our business enhancement and strategy group.

(5) Ms. Ganti was appointed to the board in March of 2024; accordingly no compensation has been reflected for the fiscal year ended December 31, 2023.

(6) Mr. Paolucci resigned as a director on April 11, 2024.

(7) Mr. Pesic resigned as a director on October 4, 2023. On December 1, 2023, we granted Mr. Pesic 10,000 liquidity-contingent RSU awards in connection with his consulting agreement to provide service to the chairperson of the Board. Each RSU award will vest on the first date upon which both the Time-Based Requirement and the Liquidity Event Requirement are satisfied with respect to the award. The Liquidity Event Requirement will be satisfied as to any then-outstanding RSUs on the first to occur of: (1) a change in control event (as defined in the award agreement) or (2) the first sale of common stock pursuant to an underwritten initial public offering, including the consummation of this offering, in either case, within 10 years of the grant date. The Time-Based Requirement will be satisfied on December 1, 2024, subject to Mr. Pesic's continuous service through such date.

Our board of directors approved the following proposed cash compensation, which is based on a review of director compensation at comparable companies in our industry. We anticipate that our board of directors or the compensation committee will approve cash compensation for non-employee directors consisting of a $40,000 annual retainer, an

additional $30,000 annual retainer for the non-executive chair and for the lead independent director, if any, and the following additional annual retainers for committee service:

Committee	Chair[1]	Member
Compensation Committee	$ 10,000	$ 5,000
Nominating and Corporate Governance Committee	$ 10,000	$ 5,000
Audit Committee	$ 10,000	$ 5,000

(1) Retainer is in addition to the retainer received for committee membership.

In addition, the board of directors approved the payment of a $5,000 annual retainer for Dr. Hau Lee, Dr. Walden Rhines and Jodi Shelton for their service in our business enhancement and strategy group. Following the completion of our initial public offering, our non-employee directors who will continue serving as a member of our board of directors will also receive an annual grant of RSUs under the 2024 Plan following the conclusion of each regular annual meeting of our stockholders. The annual RSU award will be with respect to a number of shares of common stock having an aggregate fair market value equal to $150,000 calculated on the date of grant. Each annual RSU award will become fully vested, subject to continued service as a director, on the earliest of the 12-month anniversary of the date of grant, the next annual meeting of stockholders following the date of grant, or the consummation of a change in control as defined in the 2024 Plan.

For information regarding cash compensation earned by our current non-employee directors in connection with their service as employees or consultants of the company and pursuant to the terms of consulting agreements, see “Certain Relationships and Related Party Transactions—Consulting and Employment Arrangements.”

EXECUTIVE COMPENSATION

Our named executive officers, who consist of our principal executive officer, all individuals serving as our principal financial officer, and up to two of our most highly compensated executive officers, for the year ended December 31, 2023 were:

- Dr. Babak A. Taheri, Chief Executive Officer and Director;
- Ryan Benton, Chief Financial Officer;
- Robert McMullan, Former Chief Financial Officer; and
- Dr. Raul Camposano, Chief Technology Officer.

Summary Compensation Table

The following table presents summary information regarding total compensation for the years ended December 31, 2022 and 2023 for each of our named executive officers for the year ended December 31, 2023.

Name and Principal Position	Year	Salary ($)[1]	Bonus ($)[2]	Stock Awards ($)[3]	Nonequity Incentive Plan Compensation ($)[4]	All Other Compensation ($)[5]	Total ($)
Dr. Babak A. Taheri	2023	454,168	—	554,686	174,000	22,550[6]	1,205,404
Chief Executive Officer and Director	2022	391,642	50,091	568,400	113,000	11,188[6]	1,134,321
Ryan Benton	2023	122,348	—	2,737,967	49,000	3,760	2,913,075
Chief Financial Officer[7]							
Robert McMullan	2023	161,093	—	285,000	—	8,583	454,676
Former Chief Financial Officer[8]	2022	217,292	—	404,400	125,000	—	746,692
Dr. Raul Camposano	2023	291,000	—	171,000	57,000	9,630	528,630
Chief Technology Officer	2022	247,958	—	406,000	30,000	3,944	687,902

(1) The amounts in this column represent regular salary, holiday pay and vacation pay.
(2) The amounts in this column represent discretionary cash bonuses granted with respect to 2022 performance.
(3) The amounts in this column represent the aggregate grant-date fair value of awards granted to each individual under our equity incentive plans, computed in accordance with ASC Topic 718. See Notes 2 and 11 to our audited consolidated financial statements as of, and for the years ended December 31, 2022 and 2023 for a discussion of the assumptions we made in determining the grant-date fair value of our equity awards. Such grant-date fair values do not take into account any estimated forfeitures related to service-vesting conditions. The amounts reported in this column reflect the accounting cost for these equity awards and do not correspond to the actual economic value that may be received by the named executive officers in connection therewith.
(4) The amounts in this column represent the applicable service provider's total annual performance-based cash bonus for the years ended December 31, 2022 and 2023, as applicable.
(5) The amounts in this column represent Company contributions in connection with a Company-sponsored 401(k) matching arrangement.
(6) The amount includes payments to Mr. Taheri of $12,650 and $6,613 and for the years ended December 31, 2023 and 2022, respectively, in connection with Mr. Taheri's car lease payment.
(7) Mr. Benton was hired as our Chief Financial Officer in August 2023.
(8) Mr. McMullan was hired as our Chief Financial Officer on January 27, 2022 and served as our Chief Financial Officer until July 5, 2023.

In setting executive base salaries and bonuses, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders, and a long-term commitment to us. We do not target a specific competitive position or a specific mix of compensation among base salary or bonus.

Agreements with Our Named Executive Officers and Potential Payments Upon Termination or Change of Control

Below are descriptions of our employment agreements with our named executive officers. The employment agreements generally provide for at-will employment and set forth the executive officer's initial base salary and eligibility for employee benefits. Our named executive officers are also eligible for severance and change in control benefits under our Executive Severance Plan, as further described below. Furthermore, each of our executive officers has executed a form of our standard proprietary information and inventions assignment agreement.

Agreements with Dr. Babak A. Taheri

On February 29, 2024, we entered into an Amended and Restated Employment Agreement with Dr. Taheri (the "A&R Employment Agreement of Dr. Taheri"), effective as of January 1, 2024. The A&R Employment Agreement of Dr. Taheri amended and restated Dr. Taheri's offer letter agreement with us dated November 23, 2021 to serve in the position of Chief Executive Officer. The A&R Employment Agreement of Dr. Taheri provides that Dr. Taheri is entitled to receive an annual base salary of $485,000 effective as of December 1, 2023. Such base salary shall be evaluated annually by the Board beginning in early 2025, with any Board-approved adjustments effective retroactively as of January 1 of such adjustment year. Additionally, beginning with the fiscal year 2024, Dr. Taheri shall be eligible to earn an annual cash incentive bonus of 60% of his then-current base salary subject to the satisfaction of certain performance targets. Further pursuant to the terms A&R Employment Agreement of Dr. Taheri, Dr. Taheri shall receive a grant for 700,000 RSUs, which shall be cancelled if we fail to close an initial public offering by December 31, 2024. In addition, the 700,000 RSUs shall be subject to time-based vesting where (i) 350,000 of these RSUs will vest on the business day after the closing of the initial public offering and (ii) 350,000 RSUs will vest over a two-year period following the IPO, with 50% of these RSUs vesting on the one-year anniversary of the closing of the initial public offering and 1/8th of these RSUs vesting in equal quarterly installments during the next 4 quarters thereafter.

Dr. Taheri is eligible to participate in Company benefits generally available to Company executives. In addition, the Company shall provide Dr. Taheri the additional benefits: (1) up to $20,000 annually toward whole life insurance policy premium, which will be treated as additional income and not grossed-up; (2) car lease reimbursement up to $1,000 per month, which will be treated as additional income and not grossed-up; (3) attorney's fees up to $30,000 for review and negotiation related to the A&R Employment Agreement of Dr. Taheri; and (4) relocation reimbursement up to $15,000 if the Company requests a relocation of Dr. Taheri's place of work to the Company headquarters.

2021 Separation and Release Agreement with Dr. Babak A. Taheri

We entered into a confidential separation and release agreement with Dr. Taheri on September 1, 2021 that provided Dr. Taheri with certain severance benefits in connection with his resignation from his position as our director, Chief Technology Officer and Chief Executive Officer. In consideration of Dr. Taheri's execution of a release in our favor and agreement to be bound by the conditions of the separation agreement, we agreed (a) to pay Dr. Taheri $360,000, or the Severance Amount, half of which was payable in September 2021 and the remainder of which was payable on or about February 28, 2022 and (b) to pay the entire monthly COBRA premiums for Dr. Taheri and his dependents for the months of September 2021 through February 2022. In addition, the agreement states that Dr. Taheri had service vested in 157,500 RSUs as of his termination date, but that none of these RSUs will fully vest until the occurrence of a liquidity event (as defined in the award agreements underlying such RSUs). Furthermore, the agreement provides that Dr. Taheri will forfeit, as of his separation date, all then-unvested RSUs, and that he will also forfeit all 157,500 service vested RSUs if we do not experience a liquidity event before their applicable expiration dates.

This agreement was rendered null and void as of November 24, 2021 in connection with Dr. Taheri's renewed service as our Chief Executive Officer. Dr. Taheri received and will retain the initial $180,000 of the Severance Amount and did not receive COBRA premiums through February 2022, as he was reinstated as our Chief Executive Officer within three months of his departure date and his November 2021 offer letter rendered the separation agreement null and void.

Agreement with Dr. Raul Camposano

We entered into an offer letter agreement with Dr. Camposano, dated December 25, 2021, to serve in the position of Chief Technology Officer. This offer letter provides for an annual base salary of $283,000 and eligibility to participant in our annual bonus plan, with his bonus awarded quarterly based on the achievement of corporate and individual goals. Dr. Camposano's offer letter also provides for an initial grant of 100,000 RSUs, which vest over four years, vesting as to 25% after one year with the remaining 75% vesting quarterly over the following three years, subject to Dr. Camposano's continuous service with us through each such vesting date, and subject to acceleration in connection with the Executive Severance Plan.

Agreement with Ryan Benton

We entered into an offer letter agreement with Mr. Benton, dated July 20, 2023, to serve in the position of Chief Financial Officer. This offer letter provides for an annual base salary of $340,000 and eligibility to receive an annual bonus with an estimated value equal to 35% of his annual salary based upon the achievement of individual and corporate goals.

In addition, Mr. Benton's offer letter agreement provides grants of up to an aggregate of 460,000 RSUs. Mr. Benton's offer letter provides for an initial grant of 150,000 RSUs which vest over four years, vesting as to 25% after one year with the remaining 75% vesting quarterly over the following three years, subject to Mr. Benton's continuous service with us through each such vesting date, with 50% of the unvested portion accelerating upon the completion of a liquidity event or initial public offering (which will include this offering) and subject to acceleration in connection with

the Executive Severance Plan. In addition, Mr. Benton's offer letter agreement provides for a grant of 100,000 RSUs which shall be awarded within 30 days following an initial public offering (which will include this offering) which will vest over four years from the grant date, vesting as 25% after one year with the remaining 75% vesting quarterly over the following three years, subject to (i) the company consummating an initial public offering of its stock prior to June 30, 2024 and (ii) Mr. Benton's continuous service with us through each such vesting date. Mr. Benton's offer letter agreement also provides that he will be granted up to an aggregate of 60,000 RSUs, based on the total amount of our revenue during a consecutive twelve month period during the four year period after he joined us, subject to continued employment with the Company through each such date. Lastly, Mr. Benton's offer letter agreement provides that he will be granted up to an aggregate of 150,000 RSUs within 30 days following an initial public offering with such RSUs subject to performance-based vesting based on the volume weighted average price of our stock price as measured over a four-year period, subject to Mr. Benton's continuous service with us through each such vesting date.

Executive Severance Plan

We believe that reasonable severance benefits for our executive officers, including our named executive officers, are important because it may be difficult for them to find comparable employment within a short period of time. We also believe that it is important to protect our executive officers in the event of a change of control transaction as a result of which such officers might have their employment terminated. In addition, we believe that the interests of management should be aligned with those of our stockholders as much as possible, and we believe that providing protection upon a change of control is an appropriate counter to any disincentive such officers might otherwise perceive in regard to transactions that may be in the best interest of our stockholders.

Accordingly, in February 2024, our board of directors approved an executive plan, or the Executive Severance Plan, which became effective on February 20, 2024, for our executive officers and other senior management, including the Chief Executive Officer, Chief Financial Officer (but excluding our former Chief Financial Officer, Robert McMullan, who terminated employment with us in July 2023) and Chief Technology Officer. The Executive Severance Plan will provide for vesting acceleration benefits in the event of a qualifying initial public offering, which includes this offering, and severance benefits upon a qualifying termination of employment prior to or in connection with a change of control, as described below. The Executive Severance Plan also provides for severance benefits for a qualifying termination not in connection with a change in control, as further described below. To the extent an executive participates in any other Company plan or has entered into another agreement with us that also provides for one or more of the severance benefits provided for in the Executive Severance Plan, then the Executive Severance Plan will supersede and replace in their entirety such other severance benefits.

IPO Benefits under the Executive Severance Plan

Upon the closing of an initial public offering which occurs prior to a "change in control," including this offering, each named executive officer will be entitled to accelerated time-based vesting of 50% of the unvested portion of the executive officer's restricted stock unit awards outstanding as of the closing of the offering, provided the named executive officer remains employed through the closing of the offering.

The unvested portion of all restricted stock unit awards that are not subject to acceleration of Time-Based Requirement will remain outstanding and subject to continued time-based vesting.

Severance Benefits under the Executive Severance Plan

Under the Executive Severance Plan, if a named executive officer's employment is terminated by the executive officer due to "non-CIC good reason" or by us without "cause" (as such terms are defined in the Executive Severance Plan) not during the period that begins three months prior to and ends 12 months following a change in control, in each case provided that the executive delivers and allows to become effective a signed release of claims in our favor, the named executive officer will be entitled to (i) a cash severance payment equal to the sum of the executive's then-current monthly based salary, multiplied by 15 for our Chief Executive Officer, 12 for our Chief Financial Officer and 6 for our Chief Technology Officer, plus a pro-rated target bonus for the year in which the termination occurs based on the period employed during such year, paid in two equal installments on the first payroll date following the date the release of claims is effective and the first payroll date following the six month anniversary of the release effective date, but not later than March 15th of the year following the year in which the termination occurs, (ii) payment by us of the premiums for continued group health coverage for up to 15 months for our Chief Executive Officer, 12 months for our Chief Financial Officer, and 3 months for our Chief Technology Officer, and (iii) for our Chief Executive Officer and Chief Financial Officer only, accelerated time-based vesting of the unvested portion of the 25% of their then outstanding equity incentive awards.

Change in Control Severance Benefits under the Executive Severance Plan

Under the Executive Severance Plan, if a named executive officer's employment is terminated by the executive officer due to "CIC good reason" or by us without "cause" (as such terms are defined in the Executive Severance Plan) during the period that begins three months prior to and ends 12 months following a change in control, in each case

provided that the executive delivers and allows to become effective a signed release of claims in our favor, the named executive officer will be entitled to (i) a cash severance payment equal to the sum of the executive's then-current monthly based salary, multiplied by 18 for our Chief Executive Officer and 15 for our Chief Financial Officer and Chief Technology Officer, plus a pro-rated target bonus for the year in which the termination occurs based on the period employed during such year, paid in a single lump sum on the first payroll date following the date the release of claims is effective, but not later than March 15th of the year following the year in which the termination occurs, (ii) payment by us of the premiums for continued group health coverage for up to 18 months for our Chief Executive Officer and 15 months for our Chief Financial Officer and Chief Technology Officer, and (iii) for all of the named executive officers accelerated time-based vesting of the unvested portion of the 100% of their then outstanding equity incentive awards.

Health, Welfare and Retirement Benefits

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, and vision insurance plans and 401(k) plan (as described below), in each case on the same basis as all of our other employees. We currently do not contribute to a retirement plan on behalf of employees other than our 401(k) plan.

Nonqualified Deferred Compensation

None of our named executive officers participates in or has account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our board of directors may elect to provide our officers and other employees with nonqualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

401(k) Plan

We sponsor a qualified retirement plan that is intended to qualify for favorable tax treatment under Section 401(a) of the Internal Revenue Code of 1986, as amended, or the Code, and contains a cash or deferred feature that is intended to meet the requirements of Section 401(k) of the Code. Participants may make pre-tax and certain after-tax (Roth) salary deferral contributions to the plan from their eligible earnings up to the statutorily prescribed annual limit under the Code. Participants who are 50 years of age or older may contribute additional amounts based on the statutory limits for catch-up contributions. Participant contributions are held in trust as required by law. No minimum benefit is provided under the plan. An employee's interest in his or her salary deferral contributions is 100% vested when contributed. We have the ability to make discretionary matching contributions under the plan.

2014 Stock Incentive Plan

The 2014 Plan was initially adopted by our board of directors on January 23, 2014 and approved by our stockholders on January 24, 2014. The 2014 Plan was amended and restated in March 2024 in order to increase the number of shares available for issuance and to extend the term of the 2014 Plan an additional ten years. The purpose of the 2014 Plan is to offer selected persons an opportunity to acquire a proprietary interest in our success by acquiring shares of our common stock.

The 2014 Plan permits the direct award or sale of shares and for the grant of nonstatutory stock options, restricted stock, stock appreciation rights, or SARs, RSUs and other stock awards to our employees, directors and consultants and any of our parents' or subsidiaries' employees and consultants. Incentive stock options, within the meaning of Section 422 of the Code, may also be granted but only to our employees and our parents' or subsidiaries' employees. We have only granted liquidity contingent RSUs under the 2014 Plan.

Share reserve. As of the date of this prospectus, 9,200,000 shares of common stock have been authorized for issuance under the 2014 Plan. As of December 31, 2023, a total of 6,797,137 shares of common stock were subject to outstanding RSUs under the 2014 Plan. Shares subject to awards that are cancelled, forfeited, settled in cash or expire by their terms, and shares subject to awards that are used to pay withholding obligations or the exercise price of an option will become available for future awards under the 2014 Plan. Shares of common stock that have previously been issued under the 2014 Plan that are reacquired by us pursuant to a forfeiture provision will again become available for future issuance under the 2014 Plan.

Administration. Our board of directors or a committee appointed thereby administers the 2014 Plan. All actions of the board will be final and binding on all persons.

Stock options. The board may grant incentive and/or nonstatutory stock options under the 2014 Plan; provided that incentive stock options are only granted to employees. The exercise price of options granted under the plan must be equal to or greater than 100% of the fair market value of our common stock on the date of grant. The term of an option may not exceed 10 years; provided, however, that an incentive stock option held by an optionee who owns more than 10% of the total combined voting power of all classes of our stock, any parent or any of our subsidiary corporations, may not have a term in excess of five years and must have an exercise price of at least 110% of the fair

market value of our common stock on the grant date. The exercise price for an option may be paid in cash or check. In addition, the board may permit other forms of payment such as surrender of shares, services rendered, promissory note, cashless exercise, or pledge of shares. Subject to the provisions of the 2014 Plan, the board determines the remaining terms of the options (e.g., exercisability and vesting). The board may permit an optionee to exercise his or her option as to shares that have not vested. The optionee may exercise his or her option, to the extent vested, following termination of the optionee's service for the period specified in the award agreement, such period to be at least 30 days if termination is due to any reason other than cause, death or disability (or six months in the case of termination due to death or disability). However, in no event may an option be exercised later than the expiration of its term.

Restricted shares. Restricted shares may be offered under the 2014 Plan. The board will advise the offeree in writing of the terms, conditions and restrictions related to the offer, including the number of shares that such person will be entitled to purchase, the price to be paid (if any), and the time within which such person must accept such offer.

Restricted Stock Unit Awards. Under the 2014 Plan, RSUs give recipients the right to acquire a specified number of shares of stock (or cash amount) at a future date upon the satisfaction of certain conditions, including any performance conditions or other vesting arrangements, established by the board of directors and as set forth in a RSU award agreement. An RSU award may be settled by cash, delivery of stock, or a combination of cash and stock as deemed appropriate by the board of directors. Recipients of RSUs generally will have no voting or dividend rights prior to the time the vesting conditions are satisfied and the award is settled. At the board of directors' discretion and as set forth in the RSU award agreement, RSUs may provide for the right to dividend equivalents.

We granted RSUs to certain employees that will vest on the first date upon which both the "time-based requirement" and the "liquidity event requirement" (as such terms are defined in the applicable award agreement) are satisfied with respect to that particular RSU; provided, that such vesting conditions are satisfied within 10 years of the grant date. The liquidity event requirement will be satisfied as to any then-outstanding RSUs on the first to occur of: (1) a "change in control" (as defined in the award agreement) pursuant to which the RSUs (or the shares subject to the RSUs) will be settled for cash and/or readily tradeable securities or (2) an underwritten initial public offering, including the consummation of this offering.

The time-based requirement may be satisfied in one of three ways, depending on the form of award agreement under which the RSUs have been issued. Under our standard form of award agreement, the time-based requirement will be satisfied in installments as follows: 25% of the RSUs will have the time-based requirement satisfied on the one-year anniversary of the vesting start date and 1/16th of the RSUs will have the time-based requirement satisfied in equal quarterly installments during the next 12 quarters thereafter, subject to the participant's continuous service through each such vesting date. Certain RSUs have been granted to executives on a second form of award agreement with the same time-based requirement described in the preceding sentence, provided that time-based vesting is subject to acceleration in accordance with the terms of the Executive Change in Control Plan as described above under the heading "—Executive Change in Control Plan." Certain other RSUs have been granted on a third form of award agreement, pursuant to which the RSUs are deemed to have satisfied the time-based requirement as of the grant date.

Upon termination of employment, RSUs terminate to the extent the time-based requirement has not been satisfied. Even if the time-based requirement has been satisfied, if the liquidity event requirement is not satisfied before the expiration date of the RSUs, the RSUs will automatically terminate on such date.

Unrestricted Stock Awards and SARs. We may also grant SARs and other forms of award that are based in whole or in part on shares or the value thereof. SARs generally provide for payments to the recipient based upon increases in the price of our common stock over the exercise price of the SAR. Our board determines the exercise prices of SARs, which cannot be less than 100% of the fair market value of our common stock on the date of grant. A SAR granted under the 2014 Plan vests at the rate specified in the SAR agreement as determined by the board and may have a maximum term of 10 years. Upon the exercise of a SAR, we will pay the participant an amount in stock, cash, or a combination of stock and cash as determined by the board, equal to the product of (1) the excess of the per share fair market value of our common stock on the date of exercise over the exercise price, multiplied by (2) the number of shares of common stock with respect to which the SAR is exercised. We have not granted any SARs or other forms of stock-based awards under the 2014 Plan.

Transferability/forfeiture. Unless determined otherwise by the board, the 2014 Plan generally does not allow for awards to be transferred in any manner other than by will or the laws of descent and distribution. Notwithstanding the foregoing, to the extent permitted by the board, a nonqualified option may be transferred to a revocable trust or as permitted by California securities law and Rule 701 of the Securities Act. Shares awarded or sold under the 2014 Plan or received upon the exercise of options may be subject to certain forfeiture conditions, rights to repurchase, rights of

first refusal, market stand-off or other transfer restrictions as the board may determine and as set forth in the applicable award agreement.

Adjustments. In the event that any dividend or other distribution (whether in the form of cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of our shares or other securities, or other change in our corporate structure affecting the shares occurs, the board will adjust the number of shares that may be delivered under the 2014 Plan and/or the number and price of shares covered by each outstanding award.

Corporate transaction. If we are a party to a merger or consolidation, or in the event of a sale of all or substantially all of our stock or assets, outstanding awards under the 2014 Plan will be subject to the agreement governing the transaction. The terms of such agreement may provide that (a) outstanding awards continue if we are the surviving entity, (b) the 2014 Plan and outstanding awards are assumed by the surviving entity, (c) awards are substituted for awards of the surviving entity or its parent, (d) acceleration of vesting followed by cancellation of the awards, or (e) settlement of the intrinsic value of awards followed by cancellation of the awards, in each case without the award holder's consent.

Plan amendments and termination. Our board may at any time amend, alter, suspend or terminate the 2014 Plan. However, the board will obtain stockholder approval of any 2014 Plan amendment to the extent necessary and desirable to comply with applicable law. A termination or amendment of the 2014 Plan will not impair the rights of any participant under the 2014 Plan, unless mutually agreed to otherwise by such participant and us.

Upon the completion of this offering, the 2014 Plan will be terminated and no shares of our common stock will remain available for future issuance under the 2014 Plan. Shares originally reserved for issuance under the 2014 Plan but which are not issued or subject to outstanding awards on the effective date of the 2024 Plan, and shares subject to outstanding awards under the 2014 Plan on the effective date of the 2024 Plan that are subsequently forfeited or terminated for any reason before being exercised or settled, including shares subject to vesting restrictions that are subsequently forfeited, will become available for awards under the 2024 Plan.

2024 Stock Incentive Plan

On , 2024, our board of directors approved and adopted, subject to stockholder approval, the 2024 Plan, and our stockholders approved the 2024 Plan on , 2024. The 2024 Plan will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. This summary is not a complete description of all provisions of the 2024 Plan and is qualified in its entirety by reference to the 2024 Plan, which will be filed as an exhibit to the registration statement of which this prospectus is a part.

Stock Awards. The 2024 Plan provides for incentive stock options, or ISOs, non-qualified stock options, or NSOs, restricted share awards, stock unit awards, SARs, other stock-based awards, performance-based stock awards, (collectively, "stock awards") and cash-based awards (stock awards and cash-based awards are collectively referred to as "awards"). ISOs may be granted only to our employees, including officers, and the employees of our parent or subsidiaries. All other awards may be granted to our employees, officers, our non-employee directors, and consultants and the employees and consultants of our subsidiaries, and affiliates.

Share Reserve. The aggregate number shares that may be issued pursuant to stock awards under the 2024 Plan will not exceed the sum of (w) shares, plus (x) any shares underlying outstanding awards under the 2014 Plan that are subsequently forfeited or terminated for any reason before being exercised or becoming vested, not issued because an award is settled in cash, or withheld or reacquired to satisfy the applicable exercise, or purchase price, or a tax withholding obligation, plus (y) the number of reserved shares not issued or subject to outstanding grants under the 2014 Plan, on the effective date of the 2024 Plan, plus (z) an annual increase on the first day of each calendar year, for a period of not more than 10 years, beginning on January 1, 2025 and ending on (and including) January 1, 2034, in an amount equal to the lesser of (i) of our outstanding shares on the last day of the immediately preceding calendar year or (ii) such lesser amount (including zero) that the Compensation Committee determines for purposes of the annual increase for that calendar year.

If restricted shares or shares issued upon the exercise of options are forfeited, then such shares will again become available for awards under the 2024 Plan. If stock units, options, or SARs are forfeited or terminate for any reason before being exercised or settled, or an award is settled in cash without the delivery of shares to the holder, then the corresponding shares will again become available for awards under the 2024 Plan.

Any shares withheld to satisfy the exercise price or tax withholding obligation pursuant to any award of options or SARs will again become available for awards under the 2024 Plan. If stock units or SARs are settled, then only the number of shares (if any) actually issued in settlement of such stock units or SARs will reduce the number of shares

available under the 2024 Plan, and the balance (including any shares withheld to cover taxes) will again become available for awards under the 2024 Plan.

Shares issued under the 2024 Plan will be authorized but unissued shares, treasury shares, or previously issued shares. As of the date hereof, no awards have been granted and no shares have been issued under the 2024 Plan.

Incentive Stock Option Limit. The maximum number of shares that may be issued upon the exercise of ISOs under the 2024 Plan is equal to five times the number of shares specified in subpart (w) of the 2024 Plan's share reserve formula as described above under the heading "—Share Reserve", plus, to the extent allowable under Section 422 of the Code, any shares that become available for issuance under the 2024 Plan on account of (i) an award being forfeited before all underlying shares have been issued or settled, or (ii) a portion of the shares underlying an award being withheld to satisfy the exercise price or tax withholding of such award.

Grants to Outside Directors. The sum of (i) the grant date fair value for financial reporting purposes of any awards granted during any calendar year under the 2024 Plan to an outside director as compensation for services as an outside director and (ii) any cash fees paid by us to such outside director during such calendar year for service on our board of directors, may not exceed $, or, in the calendar year in which the outside director is first appointed or elect to our board, $.

Administration. The 2024 Plan will be administered by the Compensation Committee as appointed by our board of directors, or by the board of directors acting as the Compensation Committee. Subject to the limitations set forth in the 2024 Plan, the Compensation Committee will have the authority to determine, among other things, to whom awards will be granted, the number of shares subject to awards, the term during which an option or SAR may be exercised and the rate at which the awards may vest or be earned, including any performance criteria to which they may be subject. The Compensation Committee also will have the authority to determine the consideration and methodology of payment for awards. To the extent permitted by applicable law, the board of directors or Compensation Committee may also authorize one or more of our officers to designate employees, other than officers under Section 16 of the Exchange Act, to receive awards and/or to determine the number of such awards to be received by such persons subject to a maximum total number of awards.

Repricing; Cancellation and Re-Grant of Stock Awards. The Compensation Committee will have the authority to modify outstanding awards under the 2024 Plan. Subject to the terms of the 2024 Plan, the Compensation Committee will have the authority to cancel any outstanding stock award in exchange for new stock awards, including awards having the same or a different exercise price cash, or other consideration, without stockholder approval but with the consent of any adversely affected participant.

Stock Options. A stock option is the right to purchase a certain number of shares, at a certain exercise price, in the future. Under the 2024 Plan, ISOs and NSOs are granted pursuant to stock option agreements adopted by the Compensation Committee. The Compensation Committee determines the exercise price for a stock option, within the terms and conditions of the 2024 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our shares on the date of grant. Options granted under the 2024 Plan vest at the rate specified by the Compensation Committee.

Stock options granted under the 2024 Plan generally must be exercised by the optionee before the earlier of the expiration of such option or the expiration of a specified period following the optionee's termination of employment. The Compensation Committee determines the term of the stock options up to a maximum of 10 years. Each stock option agreement will also set forth the extent to which the option recipient will have the right to exercise the option following the termination of the recipient's service with us, and the right to exercise the option of any executors or administrators of the award recipient's estate or any person who has acquired such options directly from the award recipient by bequest or inheritance.

Payment of the exercise price may be made in cash or, if provided for in the stock option agreement evidencing the award, (1) by surrendering, or attesting to the ownership of, shares which have already been owned by the optionee, (2) future services or services rendered to us or our affiliates prior to the award, (3) by delivery of an irrevocable direction to a securities broker to sell shares and to deliver all or part of the sale proceeds to us in payment of the aggregate exercise price, (4) by delivery of an irrevocable direction to a securities broker or lender to pledge shares and to deliver all or part of the loan proceeds to us in payment of the aggregate exercise price, (5) by a "net exercise" arrangement, (6) by delivering a full-recourse promissory note, or (7) by any other form that is consistent with applicable laws, regulations, and rules.

Tax Limitations on Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our shares with respect to ISOs that are exercisable for the first time by an option holder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be

treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Share Awards. The terms of any awards of restricted shares under the 2024 Plan will be set forth in a restricted share agreement to be entered into between us and the recipient. The Compensation Committee will determine the terms and conditions of such restricted share agreements, which need not be identical. A restricted share award may be subject to vesting requirements or transfer restrictions or both. Restricted shares may be issued for such consideration as the Compensation Committee may determine, including cash, cash equivalents, full recourse promissory notes, past services and future services. Award recipients who are granted restricted shares generally have all of the rights of a stockholder with respect to those shares, provided that dividends and other distributions will not be paid in respect of unvested shares unless otherwise determined by the Compensation Committee and, in such case, only once such unvested shares vest.

Stock Unit Awards. Stock unit awards give recipients the right to acquire a specified number of shares (or cash amount) at a future date upon the satisfaction of certain conditions, including any vesting arrangement, established by the Compensation Committee and as set forth in a stock unit award agreement. A stock unit award may be settled by cash, delivery of shares, a combination of cash and stock as deemed appropriate by the Compensation Committee. Recipients of stock unit awards generally will have no voting or dividend rights prior to the time the vesting conditions are satisfied and the award is settled. At the Compensation Committee's discretion and as set forth in the stock unit award agreement, stock units may provide for the right to dividend equivalents. Dividend equivalents may not be distributed prior to settlement of the stock unit to which the dividend equivalents pertain and the value of any dividend equivalents payable or distributable with respect to any unvested stock units that do not vest will be forfeited.

Stock Appreciation Rights. SARs generally provide for payments to the recipient based upon increases in the price of shares over the exercise price of the SAR. The Compensation Committee determines the exercise price for a SAR, which generally cannot be less than 100% of the fair market value of shares on the date of grant. A SAR granted under the 2024 Plan vests at the rate specified in the SAR agreement as determined by the Compensation Committee. The Compensation Committee determines the term of SARs granted under the 2024 Plan. Upon the exercise of a SAR, we will pay the participant an amount in stock, cash, or a combination of shares and cash as determined by the Compensation Committee, equal to the product of (1) the excess of the per share fair market value of shares on the date of exercise over the exercise price, multiplied by (2) the number of shares with respect to which the SAR is exercised.

Other Stock Awards. The Compensation Committee may grant other awards based in whole or in part by reference to our shares. The Compensation Committee will set the number of shares under the stock award and all other terms and conditions of such awards.

Cash-Based Awards. A cash-based award is denominated in cash. The Compensation Committee may grant cash-based awards in such number and upon such terms as it will determine. Payment, if any, will be made in accordance with the terms of the award, and may be made in cash or in shares, as determined by the Compensation Committee.

Performance-Based Awards. The number of shares or other benefits granted, issued, retainable and/or vested under a stock or stock unit award may be made subject to the attainment of performance goals. The Compensation Committee may utilize any performance criteria selected by it in its sole discretion to establish performance goals.

Changes to Capital Structure. In the event of a recapitalization, stock split, or similar capital transaction, the Compensation Committee will make appropriate and equitable adjustments to the number of shares reserved for issuance under the 2024 Plan, the number of shares that can be issued as incentive stock options, the number of shares subject to outstanding awards and the exercise price under each outstanding option or SAR.

Transactions. If we are involved in a merger or other reorganization, outstanding awards will be subject to the agreement of merger or reorganization. Subject to compliance with applicable tax laws, such agreement may provide, without limitation, for (1) the continuation of the outstanding awards by us, if we are a surviving corporation, (2) the assumption or substitution of the outstanding awards by the surviving corporation or its parent or subsidiary, (3) the immediate vesting, exercisability, and settlement of the outstanding awards followed by their cancellation, (4) cancellation of the award, to the extent not vested or not exercised prior to the effective time of the merger or reorganization, in exchange for such cash or equity consideration (including no consideration) as the Compensation Committee, in its sole discretion, may consider appropriate, or (5) the settlement of the intrinsic value of the outstanding awards (whether or not vested or exercisable) in cash, cash equivalents, or equity (including cash or equity subject to deferred vesting and delivery consistent with the vesting restrictions applicable to such award or the underlying shares) followed by cancellation of such awards, provided that any such amount may be delayed to the

same extent that payment of consideration to the holders of shares in connection with the merger or reorganization is delayed as a result of escrows, earnouts, holdbacks or other contingencies.

Change of Control. The Compensation Committee may provide, in an individual award agreement or in any other written agreement between a participant and us, that the stock award will be subject to acceleration of vesting and exercisability in the event of a change of control.

Transferability. Unless the Compensation Committee provides otherwise, no award granted under the 2024 Plan may be transferred in any manner (prior to the vesting and lapse of any and all restrictions applicable to shares issued under such award), except by will, the laws of descent and distribution, or pursuant to a domestic relations order, provided that all ISOs may only be transferred or assigned only to the extent consistent with Section 422 of the Code.

Amendment and Termination. Our board of directors will have the authority to amend, suspend, or terminate the 2024 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent.

No ISOs may be granted more than 10 years after years after the later of (i) the approval of the Plan by the board (or if earlier, the stockholders) and (ii) the approval by the board (or if earlier, the stockholders) of any amendment to the Plan that constitutes the adoption of a new plan for purposes of Section 422 of the Code.

Recoupment. To the extent permitted by applicable law, the Compensation Committee will have the authority to require that, in the event that we are required to prepare restated financial results owing to an executive officer's intentional misconduct or grossly negligent conduct, such executive officer will reimburse or forfeit to us the amount of any bonus or incentive compensation (whether cash-based or equity-based) such executive officer received during a fixed period, as determined by the Compensation Committee, preceding the year the restatement is determined to be required. That executive officer will forfeit or reimburse to us any bonus or incentive compensation to the extent that such bonus or incentive compensation exceeds what the officer would have received in that period based on an applicable restated performance measure or target. We will recoup incentive-based compensation from executive officers to the extent required under the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules, regulations and listing standards that may be issued under that act.

2024 Employee Stock Purchase Plan

On , 2024, our board of directors approved and adopted, subject to stockholder approval, the ESPP, and our stockholders approved the ESPP on , 2024. The ESPP will become effective upon the effectiveness of the registration statement of which this prospectus forms a part. This summary is not a complete description of all provisions of the ESPP and is qualified in its entirety by reference to the ESPP, which will be filed as an exhibit to the registration statement of which this prospectus is a part.

General. The ESPP is intended to qualify as an "employee stock purchase plan" under Code Section 423, except as explained below under heading "—International Participation." During regularly scheduled "offerings" under the ESPP, participants will be able to request payroll deductions and then expend the accumulated deduction to purchase a number of our shares at a discount and in an amount determined in accordance with the ESPP's terms.

Shares Available for Issuance. The ESPP will have authorized but unissued shares reserved for issuance upon becoming effective, plus an additional number of shares to be reserved annually on the first day of each calendar year for a period of not more than 10 years, beginning on January 1, 2025, in an amount equal to the least of (i) % of our outstanding shares on such date (ii) shares, or (iii) a lesser amount (including zero) that the Compensation Committee determines for purposes of the annual increase for that calendar year.

Administration. The ESPP will be administered by the Compensation Committee, or by our board of directors acting as the Compensation Committee. The Compensation Committee has the authority to construe, interpret and apply the terms of the ESPP to determine eligibility, to establish such limitations and procedures as it determines are consistent with the ESPP and to adjudicate any disputed claims under the ESPP.

Eligibility. Each full-time and part-time employee, including officers, employee directors, and employees of participating subsidiaries, who is employed on the day preceding the start of any offering period will be eligible to participate in the ESPP. The ESPP will permit an eligible employee to purchase shares through payroll deductions, which may not be less than 1% nor more than 15% of the employee's compensation, or such lower limit as may be determined by the Compensation Committee from time to time. However, no employee is eligible to participate in the ESPP if, immediately after electing to participate, the employee would own shares (including shares such employee may purchase under this plan or other outstanding options) representing 5% or more of the total combined voting power or value of all classes of shares. No employee will be able to purchase more than ( ) shares or

such number of shares as may be determined by the Compensation Committee with respect to a single offering period, or purchase period, if applicable.

In addition, under applicable tax rules, no employee is permitted to accrue, under the ESPP and all of our or our subsidiaries' similar purchase plans, a right to purchase shares having a fair market value in excess of $25,000 (determined at the time the right is granted) for each calendar year. Employees will be able to withdraw their accumulated payroll deductions prior to the end of the offering period in accordance with the terms of the offering. Participation in the ESPP will end automatically on termination of employment.

Offering Periods and Purchase Price. The ESPP will be implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, the Compensation Committee may specify offerings with a duration of not more than 27 months and may specify shorter purchase periods within each offering. During each purchase period, payroll deductions will accumulate, without interest. On the last day of the purchase period, accumulated payroll deductions will be used to purchase shares for employees participating in the offering.

The purchase price will be specified pursuant to the offering, but cannot, under the terms of the ESPP, be less than 85% of the fair market value per share on either the offering date or on the purchase date, whichever is less. The fair market value of shares for this purpose will generally be the closing price on the Nasdaq Market (or such other exchange as the shares may be traded at the relevant time) for the date in question, or if such date is not a trading day, for the last trading day before the date in question.

Reset Feature. The Compensation Committee may specify that, if the fair market value of a share on any purchase date within a particular offering period is less than or equal to the fair market value on the start date of that offering period, then the offering period will automatically terminate and the employee in that offering period will automatically be transferred and enrolled in a new offering period which will begin on the next day following such purchase date.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split, appropriate adjustments will be made to (1) the number of shares reserved under the ESPP, (2) the individual and aggregate participant share limitations described in the plan and (3) the price of shares that any participant has elected to purchase.

International Participation. To provide greater flexibility in structuring our equity compensation programs for our non-U.S. employees, the ESPP also permits us to grant employees of non-U.S. subsidiary entities rights to purchase shares pursuant to other offering rules or sub-plans adopted by the Compensation Committee in order to achieve tax, securities law or other compliance objectives. While the ESPP is intended to be a qualified "employee stock purchase plan" within the meaning of Code Section 423, any such international sub-plans or offerings are not required to satisfy those U.S. tax code requirements and therefore may have terms that differ from the ESPP terms applicable in the United States. However, the international sub-plans or offerings are subject to the ESPP terms limiting the overall shares available for issuance, the maximum payroll deduction rate, maximum purchase price discount and maximum offering period length.

Corporate Reorganization. Immediately before a corporate reorganization, the offering period and purchase period then in progress will terminate and either shares will be purchased with the accumulated payroll deductions or the accumulated payroll deductions will be refunded without occurrence of any shares purchase, unless the surviving corporation (or its parent corporation) assumes the ESPP under the plan of merger or consolidation.

Amendment and Termination. Our board of directors and the Compensation Committee will each have the right to amend, suspend or terminate the ESPP at any time. Any increase in the aggregate number of shares to be issued under the ESPP is subject to stockholder approval. Any other amendment is subject to stockholder approval only to the extent required under applicable law or regulation, including Section 423 of the Code.

Rule 10b5-1 Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell our common shares on a periodic basis. Such Rule 10b5-1 plans must comply with Rule 10b5-1 of the Exchange Act, (as amended from time to time, "Rule 10b5-1") and the terms of our insider trading policy. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend or terminate a Rule 10b5-1 plan in some circumstances, subject to compliance with the terms of our insider trading policy and the requirements of Rule 10b5-1. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to the expiration of the period ending 180 days after the date of this prospectus, or the Restricted Period, subject to early termination, the sale of any shares under such Rule 10b5-1 plans would be prohibited by the lock-up agreement that the director or officer has entered into with the underwriters.

Outstanding Equity Awards at Fiscal Year-End

The following table presents information regarding outstanding equity awards for each of our named executive officers for the year ended December 31, 2023. All awards in the table below are subject to the terms and conditions of the Executive Severance Plan as described above.

In accordance with the rules promulgated by the SEC, certain columns relating to information that is not applicable have been omitted from this table.

		Stock Awards	
Name	Grant Date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested ($)
Dr. Babak A. Taheri	10/1/2018[1]	100,000	221,000
	8/1/2019[2]	20,000	50,800
	8/12/2020[1]	50,000	203,000
	8/18/2020[2]	20,000	70,600
	1/8/2021[2]	15,000	53,250
	2/3/2021[2]	15,000	54,525
	5/24/2021[1]	80,000	324,800
	4/22/2022[1]	125,000	507,500
	5/25/2022[1]	15,000	60,900
	1/26/2023[1]	145,970	554,686
Ryan Benton	11/30/2023[1]	150,000	1,034,500
	11/30/2023[3]	100,000	689,667
	11/30/2023[4]	20,000	137,933
	11/30/2023[4]	20,000	137,933
	11/30/2023[4]	20,000	137,933
	11/30/2023[5]	150,000	600,000
Robert McMullan	4/22/2022	90,000	365,400
	8/26/2022	5,000	20,300
	12/2/2022	5,000	20,300
	1/26/2023	75,000	285,000
Dr. Raul Camposano	9/21/2016[1]	5,000	8,350
	4/22/2022[1]	100,000	406,000
	1/26/2023[1]	45,000	171,000

(1) Award vests on the first date upon which both the Time-Based Requirement and the Liquidity Event Requirement are satisfied with respect to the award. The liquidity event requirement will be satisfied as to any then-outstanding RSUs on the first to occur of: (1) an RSU change in control (as defined in the award agreement) or (2) an IPO (as defined in the award agreement), in each case, within 10 years of the grant date (the "Liquidity Event Requirement"). For the avoidance of doubt, failure to satisfy the Liquidity Event Requirement within 10 years of the grant date results in the cancellation of the RSUs. The Time-Based Requirement will be satisfied in installments as follows: 25% of the RSUs will have the Time-Based Requirement satisfied on the one-year anniversary of the vesting commencement date (as defined in the RSU award agreement), with the remaining 75% of the RSUs vesting with respect to the Time-Based Requirement in equal quarterly installments during the next 12 quarters thereafter, subject to the recipient's continuous service through each such date.

(2) Award vests on the first date upon which both the Time-Based Requirement and the Liquidity Event Requirement are satisfied with respect to the award. For the avoidance of doubt, failure to satisfy the Liquidity Event Requirement within 10 years of the grant date results in the cancellation of the RSUs. The Time-Based Requirement is deemed to have been satisfied on the grant date.

(3) Award vests over four years, vesting as 25% after one year with the remaining 75% vesting quarterly over the following three years, subject to (i) the company consummating an initial public offering of its stock prior to June 30, 2024 and (ii) the executive's continuous service through each such vesting date.

(4) Award vests upon which both the Time-Based Requirement and Revenue Requirement are satisfied with respect to the award. The "Revenue Requirement" will be satisfied with respect to different numbers of RSUs, subject to the recipient's continuous service through such date, when our revenues within the four-year period commencing from the vesting commencement date, exceeds certain amounts, and is comprised of three tranches: (i) the Revenue Requirement will be satisfied with respect to 20,000 RSUs if our revenues exceed $75 million during any consecutive twelve-month period during the four-year period commencing the vesting commencement date; (ii) the Revenue Requirement will be satisfied with respect to an additional 20,000 RSUs if our revenues exceed $90 million during any consecutive twelve-month period during the four-year period commencing the vesting commencement date; and (iii) the Revenue Requirement will be satisfied with respect to an additional 20,000 RSUs if our revenues exceed $120 million during any consecutive twelve-month period during the four-year period commencing the vesting commencement date.

(5) Award consists of three tranches of RSUs. The first tranche of 40,000 of RSUs will vest on the first date following the vesting commencement date upon which each of (i) the Time-Based Requirement and (ii) the Market Price Requirement are satisfied with respect to that particular RSU award. The Market Price Requirement for this award will be satisfied on the first date our volume-weighted average stock price (based on the price at the close of market as reflected on Bloomberg.com) for 50 out of 60 consecutive trading days exceeds 125% of the price at which we sell our common stock to the underwriters in the IPO, subject to the grantee's continued service through such date. The second tranche of 50,000 of RSUs will vest on the first date following the vesting commencement date upon which each of (i) the Time-Based Requirement and (ii) the Market Price Requirement are satisfied with respect to that particular RSU award. The Market Price Requirement for this award will be satisfied on the first date our volume-weighted average stock price (based on the price at the close of market as reflected on Bloomberg.com) for 50 out of 60 consecutive trading days exceeds 150% of the price at which we sell our common stock to the underwriters in the IPO, subject to the grantee's continued service through such date. The third tranche of 60,000 RSUs will vest on the first date following the vesting commencement date upon which each of (i) the Time-Based Requirement and (ii) the Market Price Requirement are satisfied with respect to that particular RSU award. The Market Price Requirement for this award will be satisfied on the first date our volume-weighted average stock price (based on the price at the close of market as reflected on Bloomberg.com) for 50 out of 60 consecutive trading days exceeds 200% of the price at which we sell our common stock to the underwriters in the IPO within four years from the date of grant, subject to the grantee's continued service through such date.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2021 to which we have been a party, in which the amount involved in the transaction exceeded the lesser of $120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change of control, and other arrangements, which are described under "Executive Compensation."

Related Party Loans and Line of Credit

In February 2012, Gu-Guide LP, a real estate entity controlled by Ms. Ngai-Pesic, Bank of the West (subsequently acquired by BMO) and Silvaco Group, Inc. entered into a loan agreement (the "BMO Loan Agreement") pursuant to which Bank of the West agreed to lend Gu-Guide LP approximately $1.0 million, together with unpaid interest from a prior loan (the "Loan"). The BMO Loan Agreement has an interest rate of 3.88% per annum. In May 2018, we provided an absolute and unconditional guaranty of any outstanding indebtedness of Gu-Guide LP under the BMO Loan Agreement. The Loan is secured by a building representing a total of 9,000 square feet located at 4701 Patrick Henry Drive, Santa Clara, California 95054. In the event there is a default under the Loan and foreclosure proceedings occur, if the proceeds from the foreclosure of the foregoing collateral are insufficient to repay the outstanding amounts under the Loan, we have guaranteed the repayment of the outstanding amounts under the Loan. As of December 31, 2023, $0.8 million is outstanding under the Loan.

On May 1, 2019, we received a $0.5 million loan from Kipee, a real estate entity owned by Ms. Ngai-Pesic, at an interest rate of 3.0% per annum, pursuant to a promissory note. We received a $0.5 million loan from Kipee on each of July 1, 2019, August 14, 2019, October 10, 2019, or the October 2019 Loan, and February 14, 2020, or the February 2020 Loan, each of which bore an interest rate of 4.0% per annum, pursuant to promissory notes. On December 8, 2021, we received the $0.5 million December 2021 Loan from Ms. Ngai-Pesic at an interest rate of 3.25% per annum, pursuant to a promissory note. As of December 31, 2022, these loans were all paid in full.

On March 30, 2022, we received the $0.5 million March 2022 Loan from Ms. Ngai-Pesic at an interest rate of 3.25% per annum, pursuant to a promissory note. We repaid the March 2022 Loan in full in December 2022. From January 1, 2019 through December 31, 2022, the largest aggregate amount of principal outstanding under our loans with Kipee and Ms. Ngai-Pesic, including the outstanding March 2022 Loan, was $2.5 million, and during that period, we repaid $3.5 million in principal and $0.2 million in interest on such loans.

In 2010, we loaned NHC and NHF, real estate entities owned by Ms. Ngai-Pesic, or the NH Entities, $0.9 million and $1.5 million, respectively, to construct an office building in Grenoble, France. Since then, the NH Entities have made payments to us based on cash generated from the leasing of the Grenoble, France, office, at which Silvaco France SA is a tenant. Our Director of Global Sales Operations serves as director of NHC. These notes receivable were settled in fiscal year 2021, with Ms. Ngai-Pesic paying us $0.2 million on behalf of the NH Entities (the net balance remaining after settlement of the notes receivable from the NH Entities and the October 2019 Loan and February 2020 Loan payable to Kipee).

On June 13, 2022, we entered into the up to $4.0 million 2022 Credit Line with Ms. Ngai-Pesic at an interest rate of prime plus 1.0% per annum, pursuant to a promissory note and line of credit agreement. From June 13, 2022 through December 31, 2023, the largest aggregate amount outstanding under the 2022 Credit Line was $2.5 million, and during that period, we paid $0.2 million in interest. As of December 31, 2023, $2.0 million remained outstanding under the 2022 Credit Line. The total outstanding balance of the 2022 Credit Line was due in full upon the earlier of (i) June 13, 2024 and (ii) 10 days following the date that we secure financing in an amount equal to or greater than the 2022 Credit Line. Concurrent with entering into the East West Bank Loan agreement, Ms. Ngai-Pesic agreed to (i) extend the repayment term of the 2022 Credit Line to be the later of (a) the expiration or termination date of the East West Bank Loan or (b) June 13, 2024, and (ii) subordinate the right of repayment of any outstanding amount under the 2022 Credit Line to any amount outstanding under the East West Bank Loan. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources."

Rental Properties Leased from Ms. Ngai-Pesic

We lease our principal executive offices located in Santa Clara, California, from Ms. Ngai-Pesic, for $18,000 per month. In connection with this lease arrangement, we recorded rent expense of $0.1 million and $0.2 million during the years ended December 31, 2022 and 2023, respectively. Our future minimum lease commitment under this three-year arrangement, which commenced on May 1, 2022 and expires on March 31, 2025, is $0.3 million as of December 31, 2023. We also lease from NHF an office facility located in Grenoble, France, for €3,597 per month. We lease from NHC an office facility located in the Cambridgeshire, United Kingdom, for £12,833 per month plus value-added tax.

We also leased from Kipee an office facility located in Austin, Texas through July 2021. In connection with these lease arrangements, we recorded rent expense of $0.4 million, $0.4 million and $0.5 million during the years ended December 31, 2021, 2022 and 2023, respectively.

Consulting and Employment Arrangements; Board Membership Fees

During the year ended December 31, 2021, Ms. Ngai-Pesic earned $96,000 of cash compensation for services rendered as an employee of the company. Ms. Ngai-Pesic's service to us as an employee ceased on January 11, 2022, and on January 12, 2022, we entered into a consulting advisory agreement with Ms. Ngai-Pesic, under which she receives $15,000 annually for general consulting and management services and reimbursement for certain expenses during the years ended December 31, 2022 and 2023.

During the year ended December 31, 2021, Mr. Pesic earned $190,000 of cash compensation for services rendered as an employee of the company. Mr. Pesic's service to us as an employee ceased on January 11, 2022, and on January 12, 2022, we entered into a consulting advisory agreement (the "2022 Advisory Agreement") with Mr. Pesic, under which he received $50,000 annually for strategic advisory services and reimbursement for certain expenses. On December 1, 2023, we amended the 2022 Advisory Agreement, and accordingly, Mr. Pesic will receive $75,000 annual for such services and be entitled to reimbursement for health, dental and vision benefit plan fees. We also reimbursed Mr. Pesic for his monthly car payments of approximately $600 per month. On December 1, 2023, we entered into a consulting advisory agreement with Mr. Pesic, under which he receives $40,000 annually and an award of 10,000 RSUs, for providing consulting services to the chairperson of the Board.

During the year ended December 31, 2021, neither Ms. Ngai-Pesic nor Mr. Pesic earned annual cash retainers for their service on our board of directors and committees thereof. During the year ended December 31, 2022, Ms. Ngai-Pesic and Mr. Pesic earned $90,000 and $50,000, respectively, as an annual cash retainer for their service on our board of directors and committees thereof. During the year ended December 31, 2023, Ms. Ngai-Pesic and Mr. Pesic earned $82,500 and $38,000, respectively, as an annual cash retainer for their service on our board of directors and committees thereof. Mr. Pesic resigned as a director of the company in October 2023.

We also entered into employment agreements and offer letter agreements with certain of our executive officers prior to the completion of this offering. See "Executive Compensation—Agreements with our Named Executive Officers and Potential Payments Upon Termination or Change of Control."

Indemnification Agreements

On April 19, 2021, we entered into indemnification agreements with each of our directors. These agreements will be superseded by further indemnification agreements described below. During the year ended December 31, 2023, we recorded $359,000 in legal expenses pursuant to the indemnification agreement for attorneys' fees incurred by a former member of the board of directors.

Upon completion of this offering, we intend to enter into new indemnification agreements with each of our directors and executive officers, in addition to the indemnification provided for in our amended and restated certificate of incorporation and amended and restated bylaws. These agreements, among other things, will require us to indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or as a director or executive officer of any other company or enterprise to which the person provides services at our request. In addition, our amended and restated certificate of incorporation and amended and restated bylaws will provide indemnification and advancement of expenses for our directors and executive officers to the fullest extent permitted by the DGCL, subject to certain limited exceptions. We have also purchased directors' and officers' liability insurance for each of our directors and executive officers. For more information regarding these indemnification arrangements, see "Management—Limitation on Liability and Indemnification of Directors and Officers." We believe that these charter provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may decline in value to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Registration Rights Agreement

On April 12, 2024, we entered into a Registration Rights Agreement (the "Registration Rights Agreement") with Ms. Katherine Ngai-Pesic, Mr. Iliya Pesic, Ms. Yelena Pesic and SMIK Trust (together, the "Stockholders") pursuant to which such Stockholders have certain demand registration rights, short-form registration rights and piggyback registration rights in respect of any shares of common stock and related indemnification rights from us, subject to customary restrictions and exceptions. All fees, costs and expenses of registrations, other than underwriting discounts and commissions, are expected to be borne by us.

Stockholders Agreement

On April 12, 2024, we entered into a Stockholders Agreement (the "Stockholders Agreement") with the Stockholders, pursuant to which (i) at any time the Stockholders together beneficially owns in the aggregate fifty percent or more of our issued and outstanding shares of common stock, the Stockholders shall be entitled to designate for nomination four director nominees; (ii) at any time the Stockholders beneficially owns in the aggregate less than fifty percent but at least forty percent or more of all issued and outstanding shares of common stock, the Stockholders shall be entitled to designate for nomination three director nominees; (iii) at any time the Stockholders beneficially owns in the aggregate less than forty percent but at least twenty percent or more of all issued and outstanding shares of our common stock, the Stockholders shall be entitled to designate for nomination two director nominees; and (iv) at any time the Stockholders beneficially owns in the aggregate less than twenty percent but at least ten percent or more of all issued and outstanding shares of Common Stock, the Stockholders shall be entitled to designate for nomination one director nominee. Further, the Stockholders Agreement provides that so long as the Pesic Family has the right to nominate two directors, they will be entitled to designate a non-voting board observer, with the rights to receive board notices and materials, without the ability to vote on matters brought before our board. In addition, the Stockholders Agreement provides that so long as the Pesic Family has the right to nominate two directors, to the fullest extent possible under applicable laws and regulations, they will be entitled to designate one individual to serve as a member of each committee of the Board, other than the audit committee. The Stockholders Agreement additionally contains provisions with respect to vacancies and replacements.

Policies and Procedures for Transactions with Related Persons

We intend to adopt a written Related Person Transactions Policy prior to the completion of this offering that sets forth our policies and procedures regarding the identification, review, consideration, and oversight of "related person transactions." For purposes of our policy only, a "related person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we or any of our subsidiaries are participants involving an amount that exceeds $120,000, in which any "related person" has a material interest.

Transactions involving compensation for services provided to us as an employee, consultant, or director are not considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director or a holder of more than 5% of any class of our voting securities (including our common stock), including any of their immediate family members and affiliates, including entities owned or controlled by such persons.

Under the policy, the related person in question or, in the case of transactions with a holder of more than 5% of any class of our voting securities, an officer with knowledge of the proposed transaction, must present information regarding the proposed related person transaction to our audit committee (or, where review by our audit committee would be inappropriate, to another independent body of our board of directors) for review. To identify related person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders.

In considering related person transactions, our audit committee considers the relevant available facts and circumstances, which may include, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

Our audit committee will approve only those transactions that it determines are fair to us and in our best interests. All of the transactions described above were entered into prior to the adoption of such policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our common stock as of March 31, 2024 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers and directors; and
- all of our current executive officers and directors as a group.

The percentage ownership information under the column "Percentage of shares beneficially owned prior to this offering" is based on 40,000,000 shares of common stock outstanding as of March 31, 2024. The percentage ownership information under the column "Percentage of shares beneficially owned after offering" is based on shares of common stock to be outstanding immediately after the closing of this offering, assuming (i) the issuance of shares upon the RSU Settlement, (ii) no exercise by the underwriters of their option to purchase additional shares of common stock from us and (iii) no potential purchases in this offering by the persons and entity named in the table below.

Information with respect to beneficial ownership has been furnished by each director, officer, or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In computing the number of shares beneficially owned by a person, we deemed to be outstanding all shares of our common stock issuable pursuant to RSUs that are subject to vesting and settlement conditions expected to occur within 60 days of March 31, 2024, including the Liquidity Event Requirement, which will be satisfied upon completion of this offering and, if applicable, the satisfaction or acceleration of the Time-Based Requirement, which may be satisfied or accelerated in connection with the closing of this offering. These shares are deemed to be outstanding and beneficially owned by the person holding those RSUs for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Silvaco Group, Inc., 4701 Patrick Henry Drive, Building #23, Santa Clara, CA 95054.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Prior to this Offering	After this Offering
Greater than 5% Stockholder:			
SMIK Trust[1]	16,445,772	41.1 %	%
Iliya Pesic[2]	2,330,618	5.8 %	
Named Executive Officers and Directors:			
Katherine S. Ngai-Pesic[3]	20,354,228	50.9 %	
Dr. Babak A. Taheri[4]	923,949	2.3 %	
Dr. Raul Camposano[5]	122,656	*	
Ryan Benton[6]	82,500	*	
Dr. Hau L. Lee[7]	5,625	*	
Anita Ganti	—	*	
William H. Molloie, Jr.[8]	7,500	*	
Anthony K. K. Ngai[9]	16,406	*	
Dr. Walden C. Rhines[10]	5,625	*	
Jodi L. Shelton[11]	5,625	*	
All current executive officers and directors as a group (11 persons)[12]	21,663,584	52.4 %	

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

(1) Consists of 16,445,072 shares of common stock held of record by Mark Hancock, acting solely and exclusively in his capacity as trustee of the SMIK Trust, of which Ms. Ngai-Pesic is a beneficiary. Mr. Hancock has sole voting and dispositive power over the shares held by SMIK Trust.

(2) Consists of 330,618 RSUs that vest within 60 days of March 31, 2024.

(3) Consists of 20,354,228 shares of common stock held of record by Ms. Ngai-Pesic. In addition, Ms. Ngai-Pesic is a beneficiary of the shares held by SMIK Trust. Ms. Ngai-Pesic does not have voting or dispositive power over the shares held by SMIK Trust.
(4) Consists of 923,949 RSUs that vest within 60 days of March 31, 2024 or for which vesting will be accelerated in connection with this offering.
(5) Consists of 122,656 RSUs that vest within 60 days of March 31, 2024 or for which vesting will be accelerated in connection with this offering.
(6) Consists of 82,500 RSUs that vest within 60 days of March 31, 2024 or for which vesting will be accelerated in connection with this offering.
(7) Consists of 5,625 RSUs that vest within 60 days of March 31, 2024. An additional 21,252 RSUs will vest on June 30, 2024 if Dr. Lee remains a director as of such date.
(8) Consists of 7,500 RSUs that vest within 60 days of March 31, 2024. An additional 24,842 RSUs will vest on June 30, 2024 if Mr. Molloie remains a director as of such date.
(9) Consists of 16,406 RSUs that vest within 60 days of March 31, 2024. An additional 43,532 RSUs will vest on June 30, 2024 if Mr. Ngai remains a director as of such date.
(10) Consists of 5,625 RSUs that vest within 60 days of March 31, 2024. An additional 21,252 RSUs will vest on June 30, 2024 if Dr. Rhines remains a director as of such date.
(11) Consists of 5,625 RSUs that vest within 60 days of March 31, 2024.An additional 21,252 RSUs will vest on June 30, 2024 if Ms. Shelton remains a director as of such date.
(12) Represents 20,354,228 shares of common stock and 1,309,356 RSUs beneficially owned by our current directors and executive officers that vest within 60 days of March 31, 2024.

DESCRIPTION OF CAPITAL STOCK

The following is a summary of the material rights of our common and preferred stock and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective as of immediately prior to the completion of this offering, and of the DGCL. This summary is not complete. For more detailed information, please see our amended and restated certificate of incorporation and amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the DGCL.

General

Upon completion of this offering and upon the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of shares of common stock, $0.0001 par value per share, and shares of preferred stock, $0.0001 par value per share. All of our authorized preferred stock upon completion of this offering will be undesignated. The information below gives effect to a -for- reverse split of our common stock, which we effected on , 2024.

Common Stock

Outstanding Shares

As of December 31, 2023, 40,000,000 shares of our common stock were outstanding. Upon completion of this offering and assuming no exercise by the underwriters of their option to purchase additional shares, shares of common stock will be outstanding.

Voting

Holders of shares of our common stock will be entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Dividends

Subject to statutory or contractual restrictions on the payment of dividends and to any preferences that may be applicable to any then outstanding preferred stock, the holders of common stock will be entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock will have no preemptive, conversion or subscription rights, and there will be no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Under our amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other

things, have the effect of delaying, deferring, or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of our common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

Restricted Stock Units

As of December 31, 2023, 6,797,137 RSUs were outstanding. As of December 31, 2023, there were 1,202,863 shares of common stock available for future issuance under the 2014 Plan. For additional information regarding terms of the 2014 Plan, see "Executive Compensation—2014 Stock Incentive Plan." Upon the consummation of this offering, shares of our common stock may be granted under our 2024 Plan, which may be increased by up to shares that remained available for grant under our 2014 Plan upon its termination or that are subject to RSUs granted under our 2014 Plan that may expire or terminate without having been exercised or settled in full and may be added to the reserve under the 2024 Plan.

Registration Rights

Our existing stockholders have certain registration rights with respect to our common stock pursuant to the Registration Rights Agreement. See "Certain Relationships and Related Person Transactions—Registration Rights Agreement."

Anti-Takeover Effects of Provisions of Our Certificate of Incorporation, Our Bylaws and Delaware Law

Our amended and restated certificate of incorporation and our amended and restated bylaws, as they will be in effect immediately prior to the closing of this offering, will contain provisions that may delay, defer or discourage another party from acquiring control of us. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give our board of directors the power to discourage acquisitions that some stockholders may favor.

Delaware Anti-Takeover Law

We will be subject to Section 203 of the DGCL, or Section 203. Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (but not the outstanding voting stock owned by the interested stockholder) shares owned by persons who are directors and also officers and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- upon or subsequent to the consummation of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation owned by the interested stockholder;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the voting power of our shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws to be effective upon completion of this offering will provide that, after Pesic Family. cease to beneficially own, in the aggregate, at least 50% of the voting power of the outstanding shares of our common stock, all stockholder actions must be effected at a duly called meeting of stockholders and not by written consent. Further, for so long as the Stockholders Agreement remains in effect and the Pesic Family owns in the aggregate, at least 25% of the voting power of the then outstanding shares of our capital stock, the prior written approval or consent of the Pesic Family shall be required for us to (i) implement any amendments to our charter that would adversely affect the Pesic Family's rights thereunder, (ii) effect or consummate a change of control or approve another merger, consolidation, business combination, sale or acquisition that results in changes in the rights and privileges of holders of equity securities, and (iii) effect the liquidation or dissolution or winding up of our business operations. A special meeting of stockholders may be called by the majority of our board of directors, chair of our board of directors, our President, or our Chief Executive Officer. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control of us or our management.

In addition, our amended and restated certificate of incorporation and amended and restated bylaws will provide that the number of directors constituting our board of directors will be permitted to be set only by a resolution adopted by a majority vote of the members of our board of directors then in office, and that our directors may be removed only for cause. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide that vacancies occurring on our board of directors and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of our board of directors, even though less than a quorum. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that our board of directors is expressly authorized to adopt, amend or repeal our bylaws, and require a 66 2/3% stockholder vote to amend our bylaws and certain provisions of our certificate of incorporation.

Our amended and restated bylaws will provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our amended and restated bylaws will also specify certain requirements regarding the form and content of a stockholder notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

The foregoing provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Choice of Forum

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that the Court of Chancery of the State of Delaware (or, if that court lacks subject matter jurisdiction, another federal or state court situated in the State of Delaware) will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation, or our bylaws, or any issue, in one or more series, of all or any of the remaining shares of preferred stock, and, in the resolution or resolutions providing for such issue; any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. If any such action is filed in a court other than a court located within the State of Delaware, or a Foreign Action, in the name of any stockholder, that stockholder shall be deemed to have consented to: (x) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce our choice of forum, or

an Enforcement Action, and (y) having service of process made upon such stockholder in any such Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder, in each case, to the fullest extent permitted by law. In addition, our amended and restated certificate of incorporation and our amended and restated bylaws will provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Such provision is intended to benefit and may be enforced by us, our officers and directors, employees and agents, including the underwriters and any other professional or entity who has prepared or certified any part of this prospectus. Although our amended and restated certificate of incorporation and amended and restated bylaws will contain the choice of forum provisions described above, it is possible that a court could find one or more of these provisions inapplicable for a particular claim or action or that such provision is unenforceable. Further, Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

Nothing in our amended and restated certificate of incorporation or amended and restated bylaws preclude stockholders that assert claims under the Exchange Act from bringing such claims in state or federal court, subject to applicable law. Any person or entity purchasing or otherwise acquiring any interest in any of our securities will be deemed to have notice of and consented to the provisions of amended and restated certificate of incorporation or amended and restated bylaws described above. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. See "Risk Factors—Risks Related to This Offering and Ownership of Our Common Stock—Our amended and restated charter and bylaws that will be in effect upon the closing of this offering will designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, and provides that federal district courts will be the sole and exclusive forum for Securities Act claims, which could limit our stockholders' ability to obtain what they believe to be a favorable judicial forum for disputes with us or our directors, officers or other employees."

Listing

We have applied to list our common stock on Nasdaq under the symbol "SVCO."

Transfer Agent and Registrar

Upon the closing of this offering, the transfer agent and registrar for our common stock will be Equiniti Trust Company, LLC (f/k/a American Stock Transfer & Trust Company, LLC). The transfer agent and registrar's address is and the telephone number is .

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market, or the perception that such sales may occur, could adversely affect prevailing market prices. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of contractual and legal restrictions on resale described below, sales of substantial amounts of common stock in the public market after the restrictions lapse could adversely affect the prevailing market price for our common stock as well as our ability to raise equity capital in the future.

Based on the number of shares of common stock outstanding as of December 31, 2023, upon completion of this offering, shares of common stock will be outstanding (after giving effect to a -for- reverse split of our common stock, which we effected on , 2024), assuming no exercise of the underwriters' option to purchase additional shares. All of the shares sold in this offering will be freely tradable unless purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. The 40,000,000 shares of common stock outstanding prior to this offering are restricted as a result of securities laws or lock-up agreements. These shares will generally become eligible for sale under Rule 144, subject to the volume limitations, manner-of-sale, and notice provisions described below under "Rule 144," upon expiration of lock-up agreements at least six months after the date of this offering.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, any person who is not an affiliate of ours and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, provided current public information about us is available. In addition, under Rule 144, any person who is not an affiliate of ours and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon completion of this offering without regard to whether current public information about us is available.

Beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of restricted shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; or
- the average weekly trading volume of our common stock on during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales of restricted shares under Rule 144 held by our affiliates are also subject to requirements regarding the manner-of-sale, notice, and the availability of current public information about us. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares, other than the holding period requirement.

Notwithstanding the availability of Rule 144, substantially all of our stockholders, as well as our directors and executive officers, have entered into lock-up agreements as described below and any restricted shares held by them will become eligible for sale at the expiration of the restrictions set forth in those agreements. After these contractual resale restrictions lapse, such stockholders and our directors and executive officers will be able to sell some or all of their shares of our common stock, subject only to applicable restrictions under federal and state securities laws.

Rule 701

Under Rule 701, shares of common stock acquired rights granted under compensatory stock plans may be resold by:

- persons other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information, and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

Lock-Up Agreements

We, our executive officers, directors and the holders of substantially all of our outstanding stock and RSUs have entered into or will enter into lock-up agreements with the underwriters agreeing not to dispose of or hedge any of

their common stock or securities convertible into or exchangeable for shares of common stock during the Restricted Period, subject to certain exceptions. Jefferies LLC may, in its sole discretion, permit early release of shares subject to the lock-up agreements.

Upon the expiration of the lock-up period, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above. For a further description of these lock-up agreements, please see "Underwriting."

Form S-8 Registration Statements

As of December 31, 2023, a total of 6,797,137 shares of common stock were subject to outstanding RSUs under the 2014 Plan. In addition, following the completion of this offering shares of our common stock may be granted under our 2024 Plan, which may be increased by up to shares that remained available for grant under our 2014 Plan upon its termination or that are subject to awards granted under our 2014 Plan that may expire or terminate without having been exercised or settled in full and may be added to the reserve under the 2024 Plan, and shares of our common stock may be granted under our ESPP, which amounts may be subject to annual adjustment. As soon as practicable after the completion of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the offer and sale of shares of our common stock that are issuable pursuant to the 2014 Plan, the 2024 Plan and the ESPP. These registrations statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described above and Rule 144 limitations applicable to affiliates.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a summary of the material U.S. federal income tax consequences of the acquisition, ownership, and disposition of common stock acquired pursuant to this offering by non-U.S. holders (as defined below). This summary assumes that the shares of our common stock are held as capital assets (within the meaning of Section 1221 of the Code, which generally means property held for investment). This summary does not discuss all of the U.S. federal income tax considerations applicable to a non-U.S. holder that is subject to special treatment under U.S. federal income tax laws, including, but not limited to: a dealer in securities or currencies; a broker-dealer; a financial institution; a qualified retirement plan, an individual retirement plan, or other tax-deferred account; a regulated investment company; a real estate investment trust; a tax-exempt organization; an insurance company; a person holding common stock as part of a hedging, integrated, conversion, or straddle transaction or a person deemed to sell common stock under the constructive sale provisions of the Code; a trader in securities that has elected the mark-to-market method of tax accounting; an entity that is treated as a partnership or other pass-through entity for U.S. federal income tax purposes (and partners or beneficial owners therein); a person that received such common stock pursuant to the exercise of employee stock options or otherwise in connection with services provided; a former citizen or long-term resident of the United States; a corporation that accumulates earnings to avoid U.S. federal income tax; a corporation organized outside the United States, any state thereof or the District of Columbia that is nonetheless treated as a U.S. corporation for U.S. federal income tax purposes; a person that is not a non-U.S. holder; a person that owns, or is deemed to own, more than 5% of such common stock (other than as specifically provided below); a “controlled foreign corporation;” or a “passive foreign investment company.”

This summary is based upon provisions of the Code, its legislative history, applicable U.S. Treasury Regulations promulgated thereunder, published rulings, and judicial decisions, all as in effect as of the date hereof. Those authorities may be repealed, revoked, or modified, perhaps retroactively, or may be subject to differing interpretations, which could result in U.S. federal income tax consequences different from those discussed below. We have not sought, and will not seek, any ruling from the Internal Revenue Service, or the IRS, with respect to the tax consequences discussed herein, and there can be no assurance that the IRS will not take a position contrary to the tax consequences discussed below or that any position taken by the IRS would not be sustained. This summary does not address all aspects of U.S. federal income tax, does not deal with all tax considerations that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder’s circumstances, and does not address the Medicare tax imposed on certain investment income, the special tax accounting rules applicable to certain accrual method taxpayers under Section 451(b) of the Code, or any state, local, foreign, gift, estate, or alternative minimum tax considerations.

For purposes of this discussion, a “U.S. holder” is a beneficial holder of common stock that is for U.S. federal income tax purposes: (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia; (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source; or (iv) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (2) was in existence on August 20, 1996 and has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

For purposes of this discussion, a “non-U.S. holder” is a beneficial owner of our common stock that is neither a U.S. holder nor a partnership (or any other entity or arrangement that is treated as a partnership) for U.S. federal income tax purposes regardless of its place of organization or formation. If a partnership (or other entity or arrangement that is treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. A partner of a partnership holding our common stock is urged to consult its tax advisors as to the particular U.S. federal income tax consequences applicable to it.

PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME, ESTATE, AND OTHER TAX CONSEQUENCES OF ACQUIRING, OWNING, AND DISPOSING OF OUR COMMON STOCK IN LIGHT OF THEIR SPECIFIC SITUATIONS, AS WELL AS THE TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, OR NON-U.S. TAX LAWS, ANY APPLICABLE INCOME TAX TREATIES, AND ANY OTHER U.S. FEDERAL TAX LAWS (INCLUDING THE U.S. FEDERAL ESTATE AND GIFT TAX LAWS).

Distributions on Our Common Stock

Distributions with respect to common stock, if any, generally will constitute dividends for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Any portion of a distribution in excess of our current or accumulated earnings and profits will be treated as a tax-free return of capital and will first be applied to reduce the non-U.S. holder's tax basis in its common stock, but not below zero. Any remaining amount will then be treated as gain from the sale or exchange of the common stock and will be treated as described under "—Disposition of Our Common Stock" below.

Distributions treated as dividends that are paid to a non-U.S. holder, if any, with respect to shares of our common stock will be subject to U.S. federal withholding tax at a rate of 30% (or such lower rate as may be specified in an applicable income tax treaty between the United States and such holder's country of residence) of the gross amount of the dividends unless the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, subject to the discussion below regarding foreign accounts. If a non-U.S. holder is engaged in a trade or business in the United States and dividends with respect to the common stock are effectively connected with the conduct of that trade or business and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment or fixed base, then although the non-U.S. holder generally will be exempt from the 30% U.S. federal withholding tax, provided certain certification requirements are satisfied, the non-U.S. holder will be subject to U.S. federal income tax on those dividends on a net income basis at regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. Any such effectively connected income received by a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax equal to 30% (or lower applicable income tax treaty rate between the United States and such holder's country of residence) of its effectively connected earnings and profits for the taxable year, as adjusted under the Code. To claim the exemption from withholding with respect to any such effectively connected income, the non-U.S. holder must generally furnish to us or our paying agent a properly executed IRS Form W-8ECI (or applicable successor form). In the case of a non-U.S. holder that is an entity, U.S. Treasury Regulations and the applicable income tax treaty provide rules to determine whether, for purposes of determining the applicability of an income tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a non-U.S. holder holds our common stock through a financial institution or other agent acting on the holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to such agent. Such non-U.S. holder's agent will then be required to provide certification to us or our paying agent.

A non-U.S. holder of our common stock that wishes to claim the benefit of a reduced rate of withholding tax under an applicable income tax treaty between the United States and such holder's country of residence generally will be required to furnish to us or our paying agent a properly executed valid IRS Form W-8BEN or IRS Form W-8BEN-E (or applicable successor form) certifying such holder's qualification for the exemption or reduced rate. If a non-U.S. holder is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty and such non-U.S. holder does not timely file the required certification, it may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain from a sale, exchange or other disposition of our common stock unless: (a) that gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment or a fixed-base maintained by the non-U.S. holder); (b) the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) for U.S. federal income tax purposes at any time during the shorter of the five-year period preceding the date of disposition or the holder's holding period for our common stock, and certain other requirements are met. Although there can be no assurance, we believe that we are not, and we do not anticipate becoming, a United States real property holding corporation for U.S. federal income tax purposes. Even if we are treated as a United States real property holding corporation, gain realized by a non-U.S. holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the non-U.S. holder owned, directly, indirectly, actually or constructively, no more than 5% of our common stock at all times within the shorter of (x) the five-year period preceding the disposition, or (y) the non-U.S. holder's holding period, and (2) our common stock is regularly traded on an established securities market, as defined in applicable U.S. Treasury Regulations. Although Nasdaq qualifies as an established securities market, there can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market. If a non-U.S. holder's gain on disposition of our common stock is taxable because we are a United States real property holding corporation and such non-U.S. holder's ownership of our common stock exceeds 5%, such non-U.S. holder will be taxed on such disposition generally in the manner applicable to U.S.

persons and in addition, a purchaser of such non-U.S. holder's common stock may be required to withhold tax with respect to that obligation.

If a non-U.S. holder is described in clause (a) of the preceding paragraph, the non-U.S. holder will generally be subject to tax on the net gain derived from the disposition at the regular U.S. federal income tax rates in the same manner as if such non-U.S. holder were a U.S. person, unless an applicable income tax treaty provides otherwise. In addition, a non-U.S. holder that is a corporation may be subject to the branch profits tax at a rate equal to 30% (or lower applicable income tax treaty rate) of its effectively connected earnings and profits. If the non-U.S. holder is an individual described in clause (b) of the preceding paragraph, the non-U.S. holder will generally be subject to a flat 30% tax on the gain derived from the disposition, which may be offset by U.S. source capital losses even though the non-U.S. holder is not considered a resident of the United States, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses. Non-U.S. holders are urged to consult their tax advisors about any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding Tax

We report to our non-U.S. holders and the IRS certain information with respect to any distribution we make on our common stock, including the gross amount of the distribution paid during each fiscal year, the name and address of the recipient, and the amount, if any, of tax withheld. All distributions to holders of common stock are subject to any applicable withholding. Information reporting requirements generally apply even if no withholding was required because the distributions were effectively connected with the non-U.S. holder's conduct of a U.S. trade or business or withholding was reduced by an applicable income tax treaty. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Under U.S. federal income tax law, interest, dividends, and other reportable payments may, under certain circumstances, be subject to "backup withholding" at the then applicable rate (currently, 24%). Backup withholding, however, generally will not apply to distributions on our common stock to a non-U.S. holder, provided the non-U.S. holder furnishes to us or our paying agent the required certification as to its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, or certain other requirements are met. Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that the holder is a U.S. person that is not an exempt recipient. Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability, if any, provided the required information is timely furnished to the IRS.

Foreign Accounts

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, generally impose certain withholding taxes on certain types of payments made to "foreign financial institutions" (as specially defined under these rules) and certain other non-U.S. entities if certification, information reporting and other specified requirements are not met. A 30% withholding tax may apply to certain "withholdable payments" made to a "foreign financial institution" or to a "non-financial foreign entity," (as defined under FATCA) unless (a) the "foreign financial institution" undertakes certain diligence and reporting obligations and other specified requirements are satisfied, (b) the non-financial foreign entity either certifies it does not have any substantial U.S. owners or furnishes identifying information regarding each substantial U.S. owner and other specified requirements are satisfied, or (c) the foreign entity is otherwise exempt under FATCA. If the payee is a foreign financial institution, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities, annually report certain information about such accounts and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements, or comply with comparable requirements under an applicable inter-governmental agreement between the United States and the foreign financial institution's home jurisdiction. "Withholdable payments" under FATCA generally include dividends on our common stock. Under proposed U.S. Treasury Regulations, on which taxpayers (including withholding agents) generally are permitted to rely pending finalization, FATCA withholding will not apply to gross proceeds from the sale or other disposition of our common stock. Holders should consult their own tax advisers regarding the implications of these rules on their investment in our common stock and the entities through which they hold our common stock, including without limitation, the process and deadlines for meeting the applicable requirements to avoid the imposition of the 30% withholding tax under FATCA.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated , among us, Jefferies LLC and TD Securities (USA) LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us the respective number of shares of common stock shown opposite its name below:

Underwriter	Number of Shares
Jefferies LLC	
TD Securities (USA) LLC	
B. Riley Securities, Inc.	
Craig-Hallum Capital Group LLC	
Rosenblatt Securities Inc.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority except sales to accounts over which they have discretionary authority to exceed 5% of the common stock being offered.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of $ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	$	$	$	$
Underwriting discounts and commissions paid by us	$	$	$	$
Proceeds to us, before expenses	$	$	$	$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $. We have also agreed to reimburse the underwriters for their expenses related to clearance of this offering with the Financial Industry Regulatory Authority, Inc., or FINRA, including the related fees and expenses of counsel for the underwriters up to $. In accordance with FINRA Rule 5110, this reimbursed fee is deemed underwriting compensation for this offering.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We have applied to list our common stock on Nasdaq under the trading symbol "SVCO."

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of all or substantially all our outstanding capital stock and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act of 1934; or
- sell or offer to sell any shares of common stock, options, warrants or other rights to acquire shares of common stock of any securities exchangeable or exercisable for or convertible into shares of common stock, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either or record or beneficially (as defined in Rule 13d-3 under the Exchange Act) by such individual or their family member;
- enter into any swap;
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any shares of common stock, options, warrants or other rights to acquire shares of common stock or any securities exchangeable or exercisable for or convertible into shares of common stock, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into shares of common stock, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration; or

- publicly announce an intention to do any of the foregoing during the Restricted Period without the prior written consent of Jefferies LLC.

The restrictions on our directors, officers, and the holders of all of our outstanding equity securities described in the immediately preceding paragraph are subject to certain exceptions, including:

- transfers of common stock or securities convertible into or exercisable or exchangeable for shares of common stock by gift, including to a bona fide charitable organization, or by will or intestate succession to the legal representative, heir or beneficiary of the undersigned or any family member (as defined in the lock-up agreement) or to a trust whose beneficiaries consist exclusively of one or more of the undersigned and/or a family member;
- transfers of common stock or securities convertible into or exercisable or exchangeable for shares of common stock pursuant to a domestic order or negotiated divorce settlement; provided that any filing under Section 16(a) of the Exchange Act shall clearly indicate in the footnotes thereto that the transfer is pursuant to a domestic order or negotiated divorce settlement, that no shares were sold by the reporting person and no other public announcement shall be required or shall be made voluntarily in connection with such exercise;
- if the signatory is a corporation, partnership, limited liability company, trust or other business entity, distributions or transfers of shares of common stock or securities convertible into or exercisable or exchangeable for shares of common stock to (x) another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 promulgated under the Securities Act) of the signatory, (y) any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the signatory or affiliates of the signatory, or (z) limited partners, general partners, members, managers, managing members, stockholders, beneficiaries or other equity holders of the signatory or of the entities described in the preceding clauses (x) and (y); provided that such transfer shall not involve a disposition for value and provided further that, if required, any public report or filing under Section 16(a) of the Exchange Act with regards to such transfer shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause, that no shares were sold by the reporting person and no other public announcement shall be required or shall be made voluntarily in connection with such transfer;
- transfers or dispositions of shares to us as forfeitures or the withholding of shares (x) to satisfy tax withholding and remittance obligations of the signatory in connection with the vesting or exercise of equity awards granted pursuant to our equity incentive plans described herein or (y) pursuant to a net exercise or cashless exercise by the undersigned of outstanding equity awards pursuant to our equity incentive plans described herein; provided that the shares issued upon such exercise or vesting shall continue to be subject to the restrictions on transfer set forth in the lock-up agreement; and provided further, that, if required, any public report or filing under Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to the net settlement of an equity award or the withholding of shares is to satisfy tax withholding, as applicable, that no shares were sold by the reporting person and that shares received upon exercise or vesting are subject to the lock-up agreement;
- transfers of shares or securities convertible into or exercisable or exchangeable for shares of common stock pursuant to a change of control of us (meaning the consummation of any bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of shares the result of which is that any “person” (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of the voting capital stock of us) after this offering that has been approved by the independent members of our board of directors, provided that in the event that such change of control is not completed, the shares or securities convertible into or exercisable or exchangeable for shares of common stock owned by the signatory shall remain subject to the restrictions in the lock-up agreement;
- transfers of shares or securities convertible into or exercisable or exchangeable for shares of common stock to us as a result of the termination of employment of the signatory pursuant to agreements that are in effect as of the date of the underwriting agreement for this offering and disclosed herein, under which we have the option to repurchase such shares or securities convertible into or exercisable or exchangeable for shares of common stock or a right of first refusal with respect to transfers of such shares or securities convertible into or exercisable or exchangeable for shares of common stock; provided that no filing under the Exchange Act or other public disclosure shall be voluntarily made during the Restricted Period and any filing under the Exchange Act or other public disclosure required to be made during the Restricted Period shall include a statement to the effect that such transfer relates to the circumstances described herein; and
- the establishment or amendment of a written trading plan meeting the requirements or Rule 10b5-1 under the Exchange Act relating to the transfer of shares or securities convertible into or exercisable or exchangeable for shares of common stock, provided that such plan does not provide for any transfers of

shares or securities convertible into or exercisable or exchangeable for shares of common stock during the Restricted Period and any required public disclosure, announcement or filing under the Exchange Act made by us or any person regarding the establishment or amendment of such plan during the Restricted Period shall include a statement that the undersigned is not permitted to transfer, sell or otherwise dispose of securities under such plan during the Restricted Period in contravention of the restrictions set forth in the lock-up agreement, and no public announcement, report or filing under the Exchange Act, or any other public filing, report or announcement, shall be voluntarily made regarding the establishment or amendment of such plan during the Restricted Period.

The restrictions on us described above are subject to certain exceptions, including:

- the sale of the shares to the underwriters in connection with this offering;
- the issuance by us of shares of common stock upon the vesting and settlement of an RSU, or the conversion of any other security outstanding on the date of this prospectus; or
- the issuance of shares of common stock or options to purchase shares common stock granted pursuant to our existing employee benefit plans, stock incentive plans and any employee stock purchase plan referred to in the registration statement of which this prospectus forms a part.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter’s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on Nasdaq in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

Canada

(A) Resale Restrictions

The distribution of shares of common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta, British Columbia, Manitoba, New Brunswick and Nova Scotia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the shares of common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

(B) Representations of Canadian Purchasers

By purchasing shares of common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106 – Prospectus Exemptions or Section 73.3(1) of the Securities Act (Ontario), as applicable,
- the purchaser is a "permitted client" as defined in National Instrument 31-103 – Registration Requirements, Exemptions and Ongoing Registrant Obligations,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

(C) Conflicts of Interest

Canadian purchasers are hereby notified that each of the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 – Underwriting Conflicts from having to provide certain conflict of interest disclosure in this document.

(D) Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these shares of common stock in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

(E) Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

(F) Taxation and Eligibility for Investment

Canadian purchasers of shares of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares of common stock in their particular circumstances and about the eligibility of the shares of common stock for investment by the purchaser under relevant Canadian legislation.

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

a) You confirm and warrant that you are either:

   i. a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
   ii. a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
   iii. a person associated with the company under Section 708(12) of the Corporations Act; or
   iv. a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

b) You warrant and agree that you will not offer any of the shares of common stock issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

European Economic Area

In relation to each Member State of the European Economic Area, each, a Relevant State, no shares of common stock have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares of common stock which have been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares of common stock may be offered to the public in that Relevant State at any time:

a) to any legal entity which is a "qualified investor" as defined under Article 2 of the Prospectus Regulation;
b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of representatives for any such offer; or
c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of the shares of common stock shall require us or any of the representatives to publish a prospectus pursuant

to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression "offer to the public" in relation to the shares of common stock in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe for any shares of common stock, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Hong Kong

No shares of common stock have been offered or sold, and no shares of common stock may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong, or the SFO, and any rules made under that Ordinance; or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong, or the CO, or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the shares of common stock has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to shares of common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the shares of common stock may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the shares of common stock will be required, and is deemed by the acquisition of the shares of common stock, to confirm that he is aware of the restriction on offers of the shares of common stock described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any shares of common stock in circumstances that contravene any such restrictions.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv

Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the underwriters will not offer or sell any shares of common stock, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common stock may not be circulated or distributed, nor may the common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

b) trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares of common stock pursuant to an offer made under Section 275 of the SFA except:

   i. to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
   ii. where no consideration is or will be given for the transfer;
   iii. where the transfer is by operation of law;
   iv. as specified in Section 276(7) of the SFA; or
   v. as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The shares of common stock may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, the company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or the CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Kingdom

No shares of common stock have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares of common stock which has been approved by the Financial Conduct Authority, except that the shares of common stock may be offered to the public in the United Kingdom at any time:

a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000, or FSMA,

provided that no such offer of the shares of common stock shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares of common stock in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe for any shares of common stock and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by DLA Piper LLP (US), Palo Alto, California. Cooley LLP, Palo Alto, California is representing the underwriters in this offering.

EXPERTS

The consolidated financial statements of Silvaco Group, Inc. as of December 31, 2022 and 2023, and for the years then ended, included in this prospectus have been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph relating to a change in method for accounting for credit losses on financial instruments due to the adoption of ASC 326). Such consolidated financial statements are included in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov. You may also request a copy of these filings, at no cost, by writing us at 4701 Patrick Henry Drive, Building #23, Santa Clara, CA 95054.

Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available at the web site of the SEC referred to above. We also maintain a website at www.silvaco.com, at which, following the completion of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

SILVACO GROUP, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
Silvaco Group, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Silvaco Group, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2023, the related consolidated statements of loss, comprehensive loss, stockholders' equity and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2022 and 2023, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for allowances for credit losses in 2023 due to the adoption of Accounting Standards Codification Topic No. 326.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Moss Adams LLP

Campbell, California
March 15, 2024

We have served as the Company's auditor since 2021.

SILVACO GROUP, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands except share and par value amounts)

	As of December 31,	
	2022	2023
ASSETS		
Current assets:		
Cash	$ 5,478	$ 4,421
Accounts receivable, net	5,998	4,006
Contract assets	7,659	8,749
Prepaid expenses and other current assets	2,466	2,549
Deferred transaction costs	—	1,163
Total current assets	**21,601**	**20,888**
Long-term assets:		
Property and equipment, net	559	591
Operating lease right-of-use assets, net	2,393	1,963
Intangible assets, net	681	342
Goodwill	9,026	9,026
Long-term portion of contract assets	2,877	6,250
Other assets	1,581	1,825
Total assets	**$ 38,718**	**$ 40,885**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,864	$ 2,495
Accrued expenses	9,017	10,180
Accrued income taxes	1,527	1,626
Operating lease liabilities, current	966	735
Deferred revenue	7,478	7,882
Related party line of credit	2,000	2,000
Other current liabilities	—	75
Total current liabilities	**22,852**	**24,993**
Long-term liabilities:		
Long-term portion of deferred revenue	4,075	5,071
Operating lease liabilities, non-current	1,427	1,198
Other long-term liabilities	341	221
Total liabilities	**28,695**	**31,483**
Commitments and contingencies (Note 14)		
Stockholders' equity:		
Common stock, $0.0001 par value; 50,000,000 shares authorized; 40,000,000 shares issued and outstanding	4	4
Retained earnings	11,926	11,390
Accumulated other comprehensive loss	(1,907)	(1,992)
Total stockholders' equity	**10,023**	**9,402**
Total liabilities and stockholders' equity	**$ 38,718**	**$ 40,885**

The accompanying notes are an integral part of these consolidated financial statements.

SILVACO GROUP, INC.
CONSOLIDATED STATEMENTS OF LOSS
(in thousands except share and per share amounts)

	Year Ended December 31,	
	2022	**2023**
Revenue:		
Software license revenue	$ 34,411	$ 39,331
Maintenance and service	12,063	14,915
Total revenue	**46,474**	**54,246**
Cost of revenue	8,887	9,354
Gross profit	**37,587**	**44,892**
Operating expenses:		
Research and development	12,447	13,170
Selling and marketing	10,222	12,707
General and administrative	16,231	17,881
Impairment charges	560	—
Total operating expenses	**39,460**	**43,758**
Operating income (loss)	**(1,873)**	**1,134**
Interest and other expense, net	(355)	(624)
Income (loss) before income tax provision	**(2,228)**	**510**
Income tax provision	1,700	826
Net loss	**$ (3,928)**	**$ (316)**
Net loss per share attributable to common stockholders:		
Basic and diluted	$ (0.10)	$ (0.01)
Weighted average shares used in computing per share amounts:		
Basic and diluted	40,000,000	40,000,000

The accompanying notes are an integral part of these consolidated financial statements.

SILVACO GROUP, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,	
	2022	2023
Net loss	**$ (3,928)**	**$ (316)**
Other comprehensive loss:		
Foreign currency translation adjustments	(419)	(85)
Comprehensive loss	**$ (4,347)**	**$ (401)**

The accompanying notes are an integral part of these consolidated financial statements.

SILVACO GROUP, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands except share amounts)

	Common Stock		Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount			
Balance, January 1, 2022	**40,000,000**	**$ 4**	**$ 15,854**	**$ (1,488)**	**$ 14,370**
Other comprehensive loss	—	—	—	(419)	(419)
Net loss for the year	—	—	(3,928)	—	(3,928)
Balance, December 31, 2022	**40,000,000**	**$ 4**	**$ 11,926**	**$ (1,907)**	**$ 10,023**
ASC 326 Transition Adjustment	—	—	(220)	—	(220)
Balance, January 1, 2023	**40,000,000**	**$ 4**	**$ 11,706**	**$ (1,907)**	**$ 9,803**
Other comprehensive loss	—	—	—	(85)	(85)
Net loss for the year	—	—	(316)	—	(316)
Balance, December 31, 2023	**40,000,000**	**$ 4**	**$ 11,390**	**$ (1,992)**	**$ 9,402**

The accompanying notes are an integral part of these consolidated financial statements.

SILVACO GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,	
	2022	**2023**
Cash flows from operating activities:		
Net loss	**$ (3,928)**	**$ (316)**
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	551	601
Impairment charges	560	—
Provision for credit losses	424	220
Loss on disposal of fixed assets	—	46
Change in fair value of contingent consideration	(211)	325
Changes in operating assets and liabilities:		
Accounts receivable	(2,201)	1,378
Contract assets	(1,589)	(5,208)
Prepaid expense and other current assets	(501)	133
Other assets	(480)	(267)
Accounts payable	(168)	156
Accrued expenses	1,612	1,875
Accrued income taxes	937	(23)
Deferred revenue	1,210	2,268
Other current liabilities	2,237	94
Other long-term liabilities	(550)	(102)
Net cash (used in) provided by operating activities	**(2,097)**	**1,180**
Cash flows from investing activities:		
Purchases of property and equipment	(89)	(339)
Net cash used in investing activities	**(89)**	**(339)**
Cash flows from financing activities:		
Contingent consideration	(876)	(1,002)
Deferred transaction costs	—	(650)
Proceeds from related party financing	2,500	1,000
Repayments of related party financing	(1,000)	(1,000)
Net cash provided by (used in) financing activities	**624**	**(1,652)**
Effect of exchange rate fluctuations on cash	**336**	**(246)**
Net decrease in cash	**(1,226)**	**(1,057)**
Cash, beginning of period	**6,704**	**5,478**
Cash, end of period	**$ 5,478**	**$ 4,421**
Supplemental disclosures of cash flow information:		
Income taxes paid	$ 655	$ 1,334
Interest paid	$ 71	$ 194
Noncash investing and financing activities:		
Deferred offering costs incurred, not yet paid	$ —	$ 513
Operating lease liability arising from the adoption of ASC 842	$ 2,600	$ —
Right of use assets obtained in exchange for lease obligations	$ —	$ 452

The accompanying notes are an integral part of these consolidated financial statements.

SILVACO GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
For the Years Ended December 31, 2022 and 2023

1. Description of Business

Silvaco Group, Inc. (“Silvaco,” and together with its subsidiaries, the “Company”) was incorporated as a Delaware corporation on November 18, 2009. The Company is a provider of technology computer aided design (“TCAD”) software, electronic data automation (“EDA”) software and semiconductor intellectual property (“SIP”). TCAD, EDA and SIP solutions enable semiconductor and photonics companies to increase productivity, accelerate their products’ time-to-market and reduce their development and manufacturing costs. The Company has decades of expertise developing the “technology behind the chip” and providing solutions that span from atoms to systems, starting with providing software for the atomic level simulation of semiconductor and photonics material for devices, to providing software and SIP for the design and analysis of circuits and system level solutions. The Company provides SIP for system-on-a-chip (“SoC”), integrated circuits (“ICs”) and SIP management tools to enable team collaborations on complex SoC designs. The Company’s customers include semiconductor manufacturers, original equipment manufacturers (“OEMs”) and design teams who deploy the Company's solutions in production flows across the Company's target markets, including display, power devices, automotive, memory, high performance computing (“HPC”), internet of things (“IoT”) and 5G/6G mobile markets.

Given the multi-discipline problem-solving needs of the Company's customers, a single license of software may require components from multiple product lines and include combined technologies. The Company also has a multi-year product and integration strategy that often results in new, combined products or changes to historical product offerings.

2. Summary of Significant Accounting and Reporting Policies

Basis of presentation and consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. Generally Accepted Accounting Principles ("GAAP") and include the accounts of Silvaco and all of the Company's wholly owned subsidiaries with operations in North America, Europe, Asia and South America. All intercompany transactions and balances have been eliminated upon consolidation.

Reclassifications

The Company reclassified its presentation of cash flows from operating activities and financing activities in the Consolidated Statements of Cash Flows for the year ending December 31, 2022 to conform to the current year’s presentation. Such reclassifications had no effect on the previously reported consolidated financial position, consolidated results of operations or consolidated operating or financing cash flows of the Company.

War in Ukraine

On February 24, 2022, Russia launched a full scale invasion of Ukraine. As a result of local economic uncertainties and disruption created by the initiation of war in 2022, the Company recorded an impairment charge of $560,000 associated with goodwill and intangible assets held by Silvaco's Ukrainian subsidiary which management determined would not be recoverable. See also Note 6, Goodwill and Intangible Assets.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Estimates also affect the amounts of revenue and expenses during the reported periods. The Company’s most significant estimates relates to revenue recognition. Other use of estimates include, but are not limited to, accounts receivable allowances, share-based payment compensation, valuation of goodwill and other intangible assets, contingent consideration, uncertain tax positions and income taxes. Actual results could differ from those estimates.

Revenue recognition

The Company's revenue is derived principally from software licensing and related maintenance and service. Silvaco enters into agreements that include combinations of software solutions and maintenance and services which are accounted for as separate performance obligations with differing revenue recognition patterns. The Company recognizes revenue pursuant to ASC Topic 606, *Revenue from Contracts with Customers*. The core principle of this guidance is that an entity should recognize revenue to depict the delivery of software to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for such software or services. To achieve this objective the Company applies a five-step approach: (1) identify the contract(s) with a customer, (2) identify the performance obligations within the contract, (3) determine the transaction price, (4) allocate the

transaction price to the separate performance obligations and (5) recognize revenue when, or as, each performance obligation is satisfied.

Revenue from software licenses is classified as software license revenue. Software license revenue is recognized upfront upon delivery of the licensed software. Typically, the Company's software solutions are licensed with post-contract support ("PCS"), which includes unspecified technical enhancements and customer support. The PCS is classified as maintenance and service revenue and is recognized ratably over the term of the contract, as the Company satisfies the PCS performance obligation over time.

The Company also offers standard SIP licenses, developed both in house and in partnership with industry-recognized companies. The Company's SIP licenses provide customers with access to SoC design intellectual property ("IP") which meet established industry standards, thus saving customers the time and resources required to re-invent similar design methodology. SIP licenses offered by the Company are generally ready to use upon delivery. No modification is required in order for the customer to obtain value for use in their integrated circuit designs. Silvaco does not license SIP without support.

Revenue associated with the license of the Company's SIP is classified as software license revenue and recognized as revenue upon delivery of the licensed SIP. Under certain SIP license agreements, the Company also derives revenue through royalties from customers who agree to pay usage-based fees to embed the Company's licensed software into their own software offerings. Royalties are generally recognized as revenue during the period in which the customer sells its solutions which incorporate the Company's SIP. The PCS is classified as maintenance and service revenue and is recognized ratably over the term of the contract, as the Company satisfies the PCS performance obligation over time.

In connection with the Company's SIP, which was developed in partnership with a third party vendor, Silvaco has entered into various renewable license agreements under which the Company has the right to sell the technology it licenses from the third party vendor. When the Company licenses these particular SIP to a customer, Silvaco generally acts as a principal to the transaction because the Company controls the promised SIP that it delivers to the customer. Consistent with its role as principal, the Company recognizes SIP revenue on a gross basis. Royalty costs are reported in cost of revenue upon delivery pursuant to the terms and conditions of the Company's contractual obligations with the licensors. The Company's licensing arrangement with this third party vendor terminated on October 30, 2023.

The Company recognized an immaterial portion of its revenue from device characterization and modeling services for the years ended December 31, 2022 and 2023. Revenue is recognized upon the completion of the requested services and, as applicable, satisfaction of customer acceptance terms. Revenue from these services is classified as maintenance and service revenue.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 days. Invoicing may vary from timing of revenue recognition. When the timing of invoicing or collections precedes revenue recognition, the Company records deferred revenue. When timing of revenue recognition precedes invoicing or collections, the Company records a contract asset. In instances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined its contracts generally do not include a significant financing component.

Non-income related taxes collected from customers and remitted to governmental authorities are recorded on the consolidated balance sheets as accounts receivable and accrued expenses. The collection and payment of these amounts are reported on a net basis in the consolidated statements of income (loss).

Silvaco does not offer a right of return. The Company warrants to its customers that its software will perform substantially as specified in its current user manuals. Silvaco has not experienced significant claims related to software warranties beyond the scope of maintenance support, which the Company is already obligated to provide. The warranty is not sold, and cannot be purchased, separately. The warranty does not provide any type of additional service to the customer or performance obligation for Silvaco.

The Company's agreements with customers generally require Silvaco to indemnify the customer against claims that the Company's software infringes third-party patent, copyright, trademark or other proprietary rights. Such indemnification obligations are generally limited in a variety of industry-standard respects, including by affirming Silvaco's right to replace an infringing product.

Significant Judgments

Silvaco's contracts typically include promises to transfer licenses, which enables customers to use the Company's software, and services. Judgment is required to determine if the promises are separate performance obligations, and

if so, to allocate the transaction price to each performance obligation. The Company uses the estimated standalone selling price method to allocate the transaction price for each performance obligation. The estimated standalone selling price is determined using all information reasonably available to the Company, including market conditions and other observable inputs, historical pricing and the value relationship between Silvaco's various product and service offerings. The corresponding revenues are recognized as the related performance obligations are satisfied.

Contract Assets and Liabilities

The timing of revenue recognition may differ from the timing of invoicing to customers, and these timing differences result in receivables (billed), contract assets (unbilled), or contract liabilities (deferred revenue) on the Company's consolidated balance sheets. The Company records a contract asset when revenue is recognized prior to the right to invoice, or deferred revenue when revenue is recognized subsequent to invoicing. For time-based software agreements, customers are generally invoiced in equal, quarterly amounts, although some customers are invoiced in single or annual amounts. The Company records an unbilled receivable when revenue is recognized and it has an unconditional right to invoice and receive payment.

Financing

Silvaco is required to adjust promised amounts of consideration for the effects of the time value of money if the timing of the payments provides the customer or the Company with a significant financing benefit. Silvaco considers various factors in assessing whether a financing component exists, including the duration of the contract, market interest rates and the timing of payments. The Company's contracts do not include a significant financing component requiring adjustment to the transaction price.

Sales Commissions

Sales commissions associated with multi-year contracts for new term-based licenses are deferred, capitalized, and amortized over an estimated customer life of five years. Capitalized sales commissions are included in prepaid and other current assets and other assets on the Company's consolidated balance sheets. Amortization of sales commissions is included in selling and marketing expenses on the Company's consolidated statements of income (loss). The Company applies a practical expedient to expense sales commissions as incurred when the amortization period would have been one year or less. During the years ended December 31, 2022 and 2023, the Company capitalized sales commissions of $829,000 and $1.4 million, respectively. Amortization of sales commissions during the years ended December 31, 2022 and 2023 was $719,000 and $848,000, respectively.

Cash

Cash consists of cash held in checking and savings accounts.

Property and equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the various classes of assets, as follows:

Leasehold improvements	Shorter of remaining life of lease, including option to renew that is expected to be exercised, or useful life of improvement.
Computers and software	5 years
Servers and networking equipment	4 years
Vehicles	5 years

Repairs and maintenance are charged to expense as incurred. Gains or losses from the sale or retirement of property and equipment are included within general and administrative expenses in consolidated statements of loss.

Research and development

Research and development costs consist primarily of personnel costs for product development, engineering, quality assessment and other related costs associated with the development of new products, enhancements to existing products, quality assurance and testing. Research and development costs are expensed as incurred. Internally developed software costs required to be capitalized as defined by ASC 350-40, *Internal-Use Software* are not material to the Company's consolidated financial statements.

Goodwill and other intangible assets

Goodwill represents the excess of the fair value of consideration transferred over the fair value of net identifiable assets acquired. Other intangible assets consist of customer relationships, developed technology and noncompete agreements which are amortized over their useful lives of five years. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable.

Goodwill is not amortized but is tested annually for impairment and more often if there is an indicator of impairment.

The Company performs testing for impairment of goodwill on an annual basis, or as events occur or circumstances change that would more likely than not reduce the fair value of the Company's single reporting unit below its carrying amount. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its fair value.

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable.

During the year ended December 31, 2022, the Company recorded an impairment charge of $560,000 to reduce the carrying value of intangible assets associated with Silvaco's Ukrainian subsidiary which management determined would not be recoverable. No impairments charges were recorded to goodwill.

No indicators of impairment or impairments charges were identified or recorded to goodwill or intangible assets during the year ended December 31, 2023.

Impairment of long-lived assets

The Company continually monitors events and changes in circumstances that could indicate the carrying amounts of long-lived assets, including property and equipment, may not be recoverable. Accordingly, when indicators of impairment are present, the Company evaluates the carrying value of such assets in relation to the future undiscounted cash flows of the underlying assets. The Company's policy is to record an impairment loss when it is determined that the carrying amount of the asset may not be recoverable. As a result of local economic uncertainties and disruption created by Russia's invasion of Ukraine in February of 2022, the Company recorded an impairment charge of $560,000 during the year ended December 31, 2022 associated with intangible assets held by Silvaco's Ukrainian subsidiary which management determined would not be recoverable. No impairment charge was recorded for the year ended December 31, 2023

Deferred transaction costs

Deferred offering costs are capitalized and consist of fees and expenses incurred in connection with the Company's anticipated initial public offering ("IPO"), including the legal, accounting, printing, and other IPO-related costs. Upon completion of the IPO, these deferred transaction costs will be reclassified to stockholders' equity and recorded against the proceeds from the offering. If the Company terminates its planned IPO or if there is a significant delay, all of the deferred offering costs will be immediately written off to operating expenses in the consolidated statements of operations. The balance of deferred offering costs as of December 31, 2023 was $1,163,000 which is included in total current assets on the consolidated balance sheets. No balance was outstanding as of December 31, 2022.

Concentrations of credit risk

As of December 31, 2022, customer A represented 28% of the Company's accounts receivable. As of December 31, 2023, customer A represented 20% and customer B represented 15% of the Company's accounts receivable.

In addition to the concentration of credit risk with respect to trade receivables, the Company's cash on deposit with financial institutions is also exposed to concentration risk. The Company's cash on deposit with financial institutions are insured through various public and private bank deposit insurance programs, foreign and domestic; however, a significant portion of cash balances held as of December 31, 2022 and December 31, 2023 exceeded insured limits.

As of December 31, 2023, $1.0 million, or 23%, of the Company's cash was maintained with one financial institution in the United States, where the Company's current deposits are in excess of federally insured limits. On March 10, 2023, Silicon Valley Bank ("SVB") was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation ("FDIC") as receiver. If the financial institutions with whom the Company does business were to become distressed or to be placed into receivership, the Company may be unable to access the cash it has on deposit with such institutions. If the Company is unable to access its cash as needed, the Company's financial position and ability to operate its business could be adversely affected.

Since 2016, Silvaco has generated revenues from licensing to the Company's customers, a certain SIP which the Company has licensed from a third party vendor. The license agreement with the third party vendor relating to this SIP expired on October 30, 2023. During the years ended December 31, 2022 and 2023, the Company generated $4.2 million and $4.5 million in software license revenue, respectively, from licensing this SIP to its customers. In connection with this license agreement with the vendor, the Company recognized $2.1 million and $2.0 million in royalty expense during years ended December 31, 2022 and 2023, respectively.

Allowance for credit losses

Effective January 1, 2023, the Company adopted ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326)*: *Measurement of Credit Losses on Financial Instruments* ("CECL"), which replaces the legacy incurred loss impairment methodology with an expected credit loss model that requires consideration of a broader range of reasonable and supportable information to estimate expected credit losses over the lifetime of a financial asset. The Company adopted CECL using the modified retrospective approach which required the Company to recognize the cumulative effect of adoption as an adjustment to retained earnings. Accordingly, the Company's comparative financial statements of December 31, 2022, have not been adjusted. As of January 1, 2023, the Company recorded cumulative-effect opening balance sheet adjustment to an allowance for estimated credit losses on the Company's contract asset portfolio and accounts receivable of $220,000, with an offsetting entry to decrease the opening balance of retained earnings.

The Company assesses its ability to collect outstanding receivables and contract assets and provides customer-specific allowances for credit losses and general allowances for the portion of receivables and contract assets that are estimated to be uncollectible. Allowances for credit losses are based on historical collection experience and expected credit losses, customer specific financial condition, current economic trends in the customer's industry and geographic region, changes in customer demand and the overall economic climate in the market the Company serves. Provisions for the allowance for expected credit losses attributable to bad debt are recorded as general and administrative expenses. Account balances deemed uncollectible are written off, net of actual recoveries. If circumstances related to specific customers or the market the Company serves change, the Company's estimate of the recoverability of its accounts receivable and contract assets could be further adjusted. The Company does not have any material account receivable or contract asset balances that are past due and has not written off any significant balances in its portfolio against the allowance for credit losses for the periods presented. The following table presents the Company's allowance for credit losses during the years ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	**2023***
	(in thousands)	
Beginning balance – January 1*	**$ 252**	**$ 762**
Provision for credit losses	424	220
Accounts written off	(134)	(442)
Ending balance – December 31	**$ 542**	**$ 540**

* Opening balance as of January 1, 2023 includes a cumulative-effect adjustment of $220,000 for expected credit losses on financial assets in connection with the Company's adoption of CECL.

Income taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period of the enactment date.

The Company records net deferred tax assets to the extent it believes these assets will more likely than not be realized. In making such determinations, the Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. In the event the Company determines that Silvaco will be able to realize deferred tax assets for which a valuation allowance was used to reduce their carrying value, the adjustment to the valuation allowance will be recorded as a reduction to the provision for income taxes.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more-likely-than-not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitations has expired, or the appropriate taxing authority has completed its examination even though the statute of limitations remains open.

The Company recognizes interest and penalties related to income taxes within the income tax provision line in the consolidated statements of income (loss). Accrued interest and penalties are included within accrued income taxes in the consolidated balance sheets.

Foreign currencies

The financial statements of Silvaco's international subsidiaries with local functional currencies are translated to U.S. dollars upon consolidation. Assets and liabilities are translated at the effective exchange rate on the balance sheet date. Results of operations are translated at average exchange rates, which approximate rates in effect when the underlying transactions occurred. For the years ended December 31, 2022 and 2023, the Company recorded foreign currency translation adjustments of $(419,000) and $(85,000), respectively, within accumulated other comprehensive loss.

Certain sales and intercompany transactions are denominated in foreign currencies. These transactions are recorded in functional currency at the appropriate exchange rate on the transaction date. Monetary assets and liabilities denominated in a currency other than the Company's functional currency or its subsidiaries' functional currencies are remeasured at the effective exchange rate on the balance sheet date. Gains and losses resulting from foreign exchange transactions are included in interest and other expense, net. The Company recorded net foreign exchange losses of $525,000 and $335,000 for the years ended December 31, 2022 and 2023, respectively, which is included in interest and other expense, net, in the consolidated statements of loss.

Accumulated other comprehensive loss

Accumulated other comprehensive loss is composed entirely of foreign currency translation adjustments.

Stock-based compensation

The Company accounts for stock-based payments in accordance with the authoritative guidance issued by the FASB on stock-based compensation, which establishes the accounting for transactions in which an entity exchanges its equity instruments for goods or services. Under the provisions of the authoritative guidance, stock-based compensation expense is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the requisite employee service period (generally the vesting period), net of actual forfeitures. For stock-based payment awards that contain performance criteria, stock-based compensation expense is recorded when the achievement of the performance condition is considered probable of achievement and is recorded on a straight-line basis over the requisite service period. If such performance criteria are not met, no compensation expense is recognized and any recognized compensation expense is reversed. For awards with market and service conditions, the Company recognizes stock-based compensation on a straight-line basis for all awards for which the service conditions are met, regardless of whether the market condition is achieved.

Fair value of financial instruments

The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company uses valuation approaches that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.
- Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices), for substantially the full term of the asset or liability.
- Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at measurement date.

As of December 31, 2022 and 2023, the carrying amount of the Company’s cash, accounts receivable, accounts payable and accrued expenses approximated their fair values due to their short maturities. See Note 16, Fair Value of Financial Instruments for additional information. The Company's related party line of credit is carried at net carrying value.

Research and development tax credits

Silvaco is a recipient of research and development ("R&D") tax credits associated with the Company's French subsidiary. Pursuant to French law, the tax credit is determined on the basis of the eligible R&D expenses incurred during the calendar year. Eligible expenditures include tax deductible depreciation expenses relating to fixed assets, created or acquired newly, assigned to eligible R&D projects, including patents acquired; costs relating to staff qualifying as scientists or engineers; expenses resulting from outsourced R&D projects; expenses incurred for patent

registration or in connection with the defense of patents; and expenses relating to the monitoring of technical developments. The tax credits, which are recorded as a reduction of R&D expense, can be offset against corporate income tax liabilities payable with respect to the calendar year during which the eligible R&D expenditures were incurred. Any excess credit can be carried forward and offset against the tax liability of the taxpayer during the next three years. Credits unused after three years will be refunded to the taxpayer. Research and development tax credits are included in prepaid expenses and other current assets in the Company's consolidated balance sheets.

Leases

The Company determines if an arrangement is a lease at inception of the contract, which is the date on which the terms of the contract are agreed to, and the agreement creates enforceable rights and obligations. A contract is or contains a lease when the Company has the right to control the use of an identified asset for a period of time. The commencement date of the lease is the date that the lessor makes an underlying asset available for use by the lessee. On the commencement date, leases are evaluated for classification and assets and liabilities are recognized based on the present value of lease payments over the lease term. Leases are classified as either operating or finance leases based on certain criteria. This classification determines the timing and presentation of expenses on the income statement, as well as the presentation of the related cash flows and balance sheet. Operating leases with terms greater than 12 months are recorded on the balance sheet as operating lease right-of use assets, other accrued expenses and liabilities, and long-term operating lease liabilities. The Company has elected the practical expedient to account for the lease and non-lease components as a single lease component for all asset classes.

The lease term used to calculate the lease liability includes options to extend or terminate the lease when it is reasonably certain that the option will be exercised. The right of use (ROU) asset is initially measured as the amount of lease liability, adjusted for any initial lease costs, prepaid lease payments and any lease incentives. Variable lease payments, consisting primarily of reimbursement of costs incurred by lessors for common area maintenance, real estate taxes and insurance, are not included in the lease liability and are recognized as they are incurred.

As most of the Company’s leases do not provide an implicit rate, the Company uses the incremental secured borrowing rate at lease commencement to measure ROU assets and lease liabilities. The discount rate used for operating leases is primarily determined based on an analysis of the Company’s incremental secured borrowing rate. The related lease payments are expensed on a straight-line basis over the lease term, including, as applicable, any free-rent period during which the Company has the right to use the asset.

The Company has no finance leases. See Note 4 for further information.

Advertising

Advertising costs are expensed as incurred and were $19,000 and $28,000 for the years ended December 31, 2022 and 2023, respectively.

Net Loss per Share

Basic net loss per share is computed based on the weighted average number of shares of common stock outstanding. Diluted net loss per share is computed based on the weighted average number of common shares outstanding increased by dilutive common stock equivalents, attributable to RSU grants.

The following potentially dilutive outstanding securities for the years ended December 31, 2022 and 2023 were excluded from the computation of diluted net loss per share because the issuance of such shares is contingent upon the satisfaction of certain conditions which were not satisfied. See Note 11, Restricted Stock Units for additional information.

	December 31,	
	2022	2023
RSU Grants	5,286,496	6,797,137

Subsequent Events

Subsequent events are events or transactions that occur after the balance sheet date but before consolidated financial statements are issued or are available to be issued. The Company recognizes in the consolidated financial statements the effects of all subsequent events that provide additional evidence about conditions that existed at the date of the balance sheet, including the estimates inherent in the process of preparing the consolidated financial statements. The Company’s consolidated financial statements do not recognize subsequent events that provide evidence about conditions that did not exist at the date of the balance sheet but arose after the balance sheet date and before consolidated financial statements are available to be issued.

Recently Adopted Accounting Pronouncements

Financial Instruments - credit losses: In June 2016, the FASB issued ASU 2016-13, *Financial* Instruments - *Credit Losses (Topic 326)*: *Measurement of Credit Losses on Financial Instruments* ("CECL"), which required the establishment of an allowance for estimated credit losses on financial assets, including trade and other receivables, including contract assets, at each reporting date. Silvaco adopted the new standard on January 1, 2023, the first day of fiscal 2023, and recorded a cumulative-effect adjustment to decrease retained earnings in the amount of $220,000 for expected credit losses on financial assets at the adoption date. See the Company's accounting policy note above regarding allowance for credit losses for further discussion.

Accounting Guidance Issued and Not Yet Adopted

In November 2023, the FASB issued Accounting Standards Update ASU 2023-07, *Segment Reporting (Topic 280)*: Improvements to Reportable Segment Disclosures, which requires disclosure of incremental segment information on an interim and annual basis. This ASU is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal periods beginning after December 15, 2024, and requires retrospective application to all prior periods presented in the financial statements. The Company is currently evaluating the impact of the guidance on the consolidated financial statements and disclosures.

In December 2023, the FASB issued ASU No. 2023-09 ("ASU 2023-09"), *Income Taxes (Topic 740)*: Improvement to Income Tax Disclosures to enhance the transparency and decision usefulness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024 on a prospective basis. Early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on its consolidated financial statements and related disclosures.

3. Revenue

The Company's revenue is derived principally from contracts which promise to deliver combinations of software licensing and related maintenance and services, which are accounted for as separate performance obligations with differing revenue recognition patterns. The transaction price is allocated to each distinct performance obligation based on the relative standalone selling price. Software license revenue consists of the Company's software sold under a software license. Revenue related to stand-alone software applications are generally recognized upon shipment and delivery of license keys. For certain arrangements revenue is recognized based on usage or ratably over the term of the arrangement. Maintenance and service revenue consists of both maintenance revenues and professional services revenues which is recognized based on usage or ratably over the term of the arrangement. Timing of revenue recognition may differ from the timing of invoicing to customers. The Company records a contract asset when revenue is recognized prior to invoicing. An accounts receivable is recorded upon invoicing. Deferred revenue is recorded when invoicing precedes revenue recognition.

The Company accounts for a contract with a customer when both parties have approved the contract and are committed to perform their respective obligations, each party's rights and payment terms can be identified, the contract has commercial substance, and it is probable the Company will collect substantially all of the consideration it is entitled to. Revenue is recognized when, or as, performance obligations are satisfied by transferring control of a promised software or providing service to a customer.

For multi-year software licenses, the Company generally invoices customers annually at the beginning of each annual coverage period.

The contract balances of the Company's accounts receivable and contract assets, net of allowance for expected credit losses, and deferred revenue as of January 1, 2022, December 31, 2022 and December 31, 2023 were as follows:

	Contract Balances		
	January 1, 2022	December 31, 2022	December 31, 2023
	(in thousands)		
Accounts receivable, net	$ 4,466	$ 5,998	$ 4,006
Contract Assets, net	$ 9,442	$ 10,536	$ 14,999
Deferred revenue	$ 8,956	$ 11,553	$ 12,953

The short-term and long-term components of the Company's contract assets, net of allowance for expected credit losses, was as follows as of December 31, 2022 and 2023.

	December 31,	
	2022	2023
	(in thousands)	
Short-term portion of contract assets, net	$ 7,659	$ 8,749
Long-term portion of contract assets, net	2,877	6,250
Total contract assets, net	**$ 10,536**	**$ 14,999**

Transaction Price Allocated to the Remaining Performance Obligations

As of December 31, 2023, approximately $29.8 million of revenue is expected to be recognized from remaining performance obligations. This figure represents contracted revenue that has not yet been recognized, which includes both deferred revenue and backlog, net of cancellations and adjustments. The Company's backlog represents installment billings for periods beyond the current billing cycle. The Company expects to recognize revenue on approximately 55% of these remaining performance obligations over the next 12 months, with the balance recognized thereafter.

Deferred Revenue

Deferred revenue is comprised mainly of unearned revenue related to maintenance and service on software licenses and pending software license deliveries. Maintenance and technical support revenue is recognized ratably over the coverage period. Software license revenue is recognized upfront upon delivery of the licensed software. Deferred revenue also includes contracts for professional services to be performed in the future which are recognized as revenue when the company delivers the related service pursuant to the terms of the customer arrangement.

The Company's deferred revenue as of December 31, 2022 and 2023 was as follows:

	December 31,	
	2022	2023
	(in thousands)	
Short-term portion of deferred revenue	$ 7,478	$ 7,882
Long-term portion of deferred revenue	4,075	5,071
Total deferred revenue	**$ 11,553**	**$ 12,953**

During fiscal year 2022 and 2023, the Company recognized revenue of $5.8 million and $7.2 million, respectively, that was included in the deferred revenue balance at the beginning of fiscal year 2022 and 2023, respectively. All other activity in deferred revenue is due to the timing of invoices in relation to the timing of revenue during fiscal years 2022 and 2023 as described above. Approximately 61% of the Company's deferred revenue as of December 31, 2023 is expected to be recognized over the next 12 months with the remainder recognized thereafter.

4. Leases

The Company's headquarters are located in Santa Clara, California, where the Company has an operating lease covering its corporate office expiring in March of 2025. The Company also has operating leases in Duluth, Georgia, and abroad, in Japan, France, China, the United Kingdom, Taiwan, Singapore, and Korea, among other countries. The expiration dates for these operating leases range from 2024 through 2029. As of December 31, 2022 and 2023, the Company's operating lease right-of-use assets and operating lease liabilities were as follows:

	December 31,	
	2022	2023
	(in thousands)	
Operating lease right-of-use assets, net	$ 2,393	$ 1,963
Operating lease liabilities, current	966	735
Operating lease liabilities, non-current	$ 1,427	$ 1,198

The components of operating lease cost were as follows:

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Operating lease cost	$ 1,065	$ 1,003
Variable lease cost[(1)]	330	223
Total operating lease cost	**$ 1,395**	**$ 1,226**

(1) Variable lease cost includes common area maintenance, utilities, security, insurance and property taxes.

Additional information related to the Company's operating leases for the years ended December 31, 2022 and 2023 was as follows:

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Cash paid for operating lease liabilities	$ 1,081	$ 1,028
Right-of use assets obtained in exchange for operating lease liabilities	$ —	$ 452
Operating lease liability arising from the adoption of ASC 842	$ 2,600	$ —

	December 31,	
	2022	2023
Weighted average remaining lease term (in years)	4.45	4.09
Weighted average discount rate	4.13 %	3.84 %

As of December 31, 2023 maturities of operating lease liabilities were as follows:

Year Ending December 31,	Amount
	(in thousands)
2024	749
2025	510
2026	235
2027	196
2028	196
Thereafter	196
Total lease payments	**2,082**
Less: imputed interest	(149)
Total operating lease liabilities	**$ 1,933**
Current portion of lease liability	**$ 735**
Non-current portion of lease liability	**$ 1,198**

Rent expense for the years ended December 31, 2022 and 2023 was $1.4 million and $1.2 million, respectively.

5. Property and Equipment, Net

The Company's property and equipment at December 31, 2022 and 2023 consisted of the following:

	December 31,	
	2022	2023
	(in thousands)	
Computer software	$ 5,596	$ 5,547
Equipment	707	545
Buildings and improvements	172	167
Leasehold improvements	145	186
Furniture and fixtures	196	156
Total property and equipment	**6,816**	**6,601**
Less accumulated depreciation	(6,257)	(6,010)
Total property and equipment, net	**$ 559**	**$ 591**

During the year ended December 31, 2023, the Company recorded a $46,000 noncash loss on the disposal of fixed assets. No fixed asset disposals were recorded during the year ended December 31, 2022. Depreciation expense was $235,000 and $262,000 for the years ended December 31, 2022 and 2023, respectively.

6. Goodwill and Intangible Assets

Goodwill represents the excess of the fair value of consideration transferred over the fair value of net identifiable assets acquired. Identifiable intangible assets acquired in business combinations and asset acquisitions are recorded based on their fair values on the date of acquisition.

Goodwill and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable. In connection with Russia's invasion of Ukraine in February 2022, the Company recorded an impairment charge of $560,000 to reduce the carrying value of $284,000 of developed technology and $276,000 of customer relationships associated with the Company's Ukrainian subsidiary which management determined would not be recoverable.

There were no changes to goodwill during the years ended December 31, 2022 and 2023.

For the years ended December 31, 2022 and 2023, intangible assets were classified as follows:

		December 31, 2022		
Intangible assets:	**Weighted Average Amortization Period**	**Gross Carrying Value**	**Accumulated Amortization**	**Net Carrying Value**
		(in thousands)		
Developed technology	5	$ 2,660	$ (2,193)	$ 467
Customer relationships	5	2,416	(2,213)	203
Non-compete agreements	5	179	(168)	11
Total intangible assets		**$ 5,255**	**$ (4,574)**	**$ 681**

		December 31, 2023		
Intangible assets:	**Weighted Average Amortization Period**	**Gross Carrying Value**	**Accumulated Amortization**	**Net Carrying Value**
		(in thousands)		
Developed technology	5	$ 2,660	$ (2,367)	$ 293
Customer relationships	5	2,416	(2,374)	42
Non-compete agreements	5	179	(172)	7
Total intangible assets		**$ 5,255**	**$ (4,913)**	**$ 342**

Amortization expense for the intangible assets reflected above was $316,000 and $339,000 for the years ended December 31, 2022 and 2023, respectively.

As of December 31, 2023, estimated future amortization expense for the intangible assets reflected above was as follows:

For Years Ending December 31,	
	(in thousands)
2024	$ 205
2025	137
Total net carrying value of intangible assets	**$ 342**

7. Significant Balance Sheet Components

Prepaid expenses and other current assets consisted of the following:

	December 31,	
	2022	**2023**
	(in thousands)	
Research and development tax credits	$ 940	$ 896
Deferred sales commissions[(a)]	669	808
Short-term lease deposits	16	104
Prepaid expenses	841	741
Total prepaid expenses and other current assets	**$ 2,466**	**$ 2,549**

Other assets consisted of the following:

	December 31,	
	2022	2023
	(in thousands)	
Deferred sales commissions[(a)]	$ 1,135	$ 1,501
Prepaid expenses	99	86
Long-term lease deposits	347	238
Total other assets	**$ 1,581**	**$ 1,825**

(a) Balance reflects commissions paid for new contracts, primarily new multi-year term license arrangements to be amortized over the anticipated customer life of five years.

8. Related Parties

On December 8, 2021, Silvaco entered a promissory note with the Company's founding principal stockholder for $500,000 ("Promissory Note") which was repaid in full in July 2022.

On March 30, 2022, Silvaco entered a second related party note payable with the Company's founding principal stockholder for $500,000 (“March 2022 Note”) bearing interest at 3.25% payable and due on March 30, 2023. The March 2022 Note was repaid in full in December 2022.

On May 1, 2022, the Company entered into a commercial lease agreement with Kipee, a related party controlled by the Company's founding principal stockholder, for Silvaco's corporate office in Santa Clara, California. In connection with this lease arrangement, the Company recorded rent expense of $144,000 and $216,000 of rent expense during the year ended December 31, 2022 and 2023, respectively. The Company's right-of-use asset and operating lease liability under this three year arrangement, which commenced on May 1, 2022 and expires on March 31, 2025, is $259,000 as of December 31, 2023. The short term and long term components of the Company’s operating lease liability for this commercial office lease are $209,000 and $50,000 as of December 31, 2023, respectively.

The Company has two international office leases with New Horizons (Cambridge) LTD (“NHC”) and New Horizons France (“NHF”) in Cambridgeshire, England and Grenoble, France, respectively. NHC and NHF are real estate entities owned and controlled by the Company's founding principal stockholder. In connection with these lease arrangements, the Company recorded rent expense of $278,000 and $314,000 during the year ended December 31, 2022 and 2023, respectively.

On June 13, 2022, Silvaco entered into a $4.0 million line of credit with the Company's founding principal stockholder. In connection with this line of credit, the Company recorded interest expense of $75,000 and $190,000 during the year ended December 31, 2022 and 2023, respectively. As of December 31, 2023, the balance of this line of credit was $2.0 million. See Note 10, Debt, for further discussion.

During the year ended December 31, 2023, the Company recorded $436,000 in legal expenses pursuant to an indemnification agreement for attorney’s fees incurred, by the son of the Company's founding principal stockholder incurred relating to his former role as a member of the board of directors.

In February of 2012, Gu-Guide LP, a real estate entity controlled by the Company’s founding principal stockholder, Bank of the West and Silvaco Group, Inc. entered into a loan agreement pursuant to which Bank of the West agreed to lend Gu-Guide LP certain amounts of money (the “Loan”). The Loan is secured by a building representing a total of 9,000 square feet located at 4701 Patrick Henry Drive, Santa Clara, California 95054. In the event that the proceeds from the foreclosure of the foregoing collateral are insufficient to repay the outstanding amounts under the Loan, Silvaco Group Inc. has guaranteed the repayment of the outstanding amounts under the Loan. As of December 31, 2023, $0.8 million is outstanding under the Loan.

9. Accrued Expenses and Other Long-Term Liabilities

Accrued expenses consisted of the following:

	December 31,	
	2022	2023
	(in thousands)	
Accrued employee expenses	$ 4,869	$ 6,329
Accrued taxes payable	1,608	1,278
Accrued royalties payable[(a)]	787	1,113
Contingent consideration[(b),(c)]	736	103
Accrued operating expense	950	1,293
Other	67	64
Total accrued expenses	**$ 9,017**	**$ 10,180**

Other long-term liabilities consisted of the following:

	December 31,	
	2022	2023
	(in thousands)	
Contingent consideration[(b),(c)]	56	9
Net deferred tax liabilities (Note 12)	285	212
Total other long-term liabilities	**$ 341**	**$ 221**

(a) Silvaco has entered into various renewable license agreements under which the Company has been granted access to the licensor's technology and the right to sell the technology in its product line. Royalties are payable to developers of the software at various rates and amounts, which generally are based upon unit sales, revenue or flat fees. Royalty fees are reported in cost of revenue upon delivery pursuant to the terms and conditions of the Company's contractual obligations.

(b) On March 2, 2018, Silvaco, Nangate Inc, Nangate Denmark APS (together with Nangate, Inc. referred to as "Nangate") and Nangate's shareholder representative, Ole Christian Andersen, entered into a stock purchase agreement, pursuant to which Silvaco agreed to purchase all the outstanding capital stock of Nangate. Pursuant to the stock purchase agreement, the selling shareholders of Nangate are entitled to an earn-out over a five-year period between the closing date of the acquisition and March 3, 2023. The earn-out does not have a minimum and is based on 20% of net revenues generated by Nangate on a quarterly basis, subject to an initial hold-back or payout from a working capital adjustment from the close of the acquisition. This earn-out is a liability classified as contingent consideration as the obligation is due in cash. As such the obligation is recorded at its fair value and re-valued period to period with any changes recorded to operating income (expense). In an effort to clarify its obligations with respect to the earnout payment due to the selling shareholders of Nangate, the Company sought declaratory relief in the California Superior Court in December 2020. See also, Note 14, Commitments and Contingencies, and Note 16, Fair Value of Financial Instruments.

(c) Pursuant to the January 2021 stock purchase agreement for the acquisition of PolytEDA, the selling shareholders are entitled to milestone consideration of up to $1.0 million based upon PolytEDA's technical achievement during 2021 and 2022 in addition to earn-out consideration over a three-year period beginning on the second year following the closing of the acquisition through January 2025. The earn-out does not have a minimum and is based on 20% of the operating income generated by PolytEDA on a quarterly basis, subject to an initial hold-back or payout from a working capital adjustment from the close of the acquisition. The milestone consideration and earn-out are liabilities classified as contingent consideration as the obligations are due in cash. As such the obligations are recorded at their fair value and re-valued period to period with any changes recorded to operating income (expense). See also, Note 16, Fair Value of Financial Instruments.

10. Notes Payable

On December 8, 2021, Silvaco entered a promissory note with the Company's founding principal stockholder for $0.5 million ("Promissory Note") bearing an interest rate of 3.25% payable and due on July 1, 2022. As of December 31, 2021, the balance due on the Promissory Note, including accrued interest, was $0.5 million. The Promissory Note was repaid in full in July 2022.

On March 30, 2022, Silvaco entered a second related party note payable to the Company's founding principal stockholder for $0.5 million bearing interest at 3.25% payable and due on March 30, 2023. The March 2022 Note was repaid in full in December 2022.

On June 13, 2022, Silvaco entered into a $4.0 million line of credit with the Company's founding principal stockholder bearing interest at a rate of prime plus 1% per annum. As of December 31, 2022 and 2023, the balance of this line of credit was $2.0 million. Originally the line of credit was due in full upon the earlier of (a) June 13, 2023 and (b) 10 days following the date that the Company secures subordinated financing in an amount equal to or greater than the line of credit. In May of 2023, the due date was revised to be the earlier of (a) June 13, 2024 and (b) 10 days following the date that the Company secures subordinated financing in an amount equal to or greater than the line of

credit. Concurrent with entering into the East West Bank Loan agreement, described below, Ms. Ngai-Pesic agreed to (i) extend the repayment term of the 2022 Credit Line to be the later of (a) the expiration or termination date of the East West Bank Loan or (b) June 13, 2024, and (ii) subordinate the right of repayment of any outstanding amount under the 2022 Credit Line to any amount outstanding under the East West Bank Loan. Following the extension of the repayment term, the Company has determined that as of December 31, 2023, the line of credit should be classified as current on the consolidated balance sheet, given that under the certain circumstances previously described, including early termination of the East West Bank Loan, the amount outstanding under the line of credit may become due and payable on June 13, 2024.

In December 2023, the Company entered into a loan facility with East West Bank (the “East West Bank Loan”) which has a maturity date of December 14, 2025 and provides for borrowings of up to $5.0 million bearing interest at a per annum rate equal to one half of one percent (0.5%) above the greater of (i) the prime rate or (ii) four and one half percent (4.5%). The East West Bank Loan is secured by certain of the Company’s assets, including without limitation, certain of the Company’s intellectual property and the equity of certain of the Company’s subsidiaries. In addition, the East West Bank Loan contains customary financial and negative covenants, including a six month minimum Adjusted EBITDA of $1.0 million measured at an initial test date of December 2023 and minimum cash at bank covenant of $1.5 million, with such minimum amount increasing to $10.0 million upon the effectiveness of an initial public offering. As of December 31, 2023, there were no outstanding borrowings under the East West Bank Loan and the Company is in compliance with all covenants.

11. Restricted Stock Units

Silvaco has 8.0 million shares of common stock reserved for its restricted stock units (“RSUs”) grants. Since 2014, the Company has issued RSUs to employees, directors, and advisors, pursuant to the Company's 2014 Stock Incentive Plan (the "2014 Plan"). As of December 31, 2022 and 2023, 5,286,496 and 6,797,137 RSUs were outstanding under the 2014 Plan, including 1,359,150 and 2,051,049 RSUs granted during the years ended December 31, 2022 and 2023, respectively. The RSUs generally have two vesting requirements, a time and service-based requirement (the “Time-Based Requirement”) and a “Liquidity Event Requirement.” The Time-Based Requirement generally requires four years for full vesting of the grants, with 25% vesting after one year and quarterly vesting over the subsequent three years. Certain grants have had modified time-based vesting requirements, including certain grants that have been issued with the time-based service requirement satisfied on the grant date. The Liquidity Event Requirement requires the completion of an underwritten initial public offering or a change of control, as defined in the Company's 2014 Plan documents.

In addition to the RSU awards described above, in the fourth quarter of 2023 the Company granted 60,000 RSUs to an executive which contain vesting conditions with both a Time-Based Requirement and a performance condition requirement linked to the Company achieving certain revenue thresholds. The grant date fair value of these awards was $414,000, and there was no stock-based compensation expense recognized related to such awards during the year ended December 31, 2023. The Company also granted to the executive a total of 150,000 RSUs that vest based on a Time-Based Requirement, a Liquidity Event Requirement and a market condition, based on the volume weighted average price of the Company’s stock as measured over a period of time. The grant date fair value of these awards of $600,000 has yet to be recognized as stock-based compensation expense, as throughout 2023 the Liquidity Event Requirement associated with such awards was not deemed probable of occurring.

The following table summarizes the Company's RSU activity for 2022 and 2023:

	Weighted Average		Restricted Stock Units		
	Fair Value	Remaining Contract Term	Granted	Time Vested	Time Unvested
Balance as of January 1, 2022	**$ 2.61**	**6.40**	**4,286,919**	**2,458,419**	**1,828,500**
Granted	4.04	9.14	1,359,150	—	1,359,150
Vested	3.77	8.38	—	684,899	(684,899)
Forfeited / canceled	3.20	6.88	(359,573)	—	(359,573)
Balance as of December 31, 2022	**$ 2.97**	**6.34**	**5,286,496**	**3,143,318**	**2,143,178**
Granted	5.06	9.46	2,051,049	—	2,051,049
Vested	4.35	8.36	—	978,569	(978,569)
Forfeited / canceled	3.71	7.30	(540,408)	—	(540,408)
Balance as of December 31, 2023	**$ 3.60**	**6.56**	**6,797,137**	**4,121,887**	**2,675,250**

The grant date fair value of the RSU awards without market conditions, was based on the Probability-Weighted Expected Return Method, which assessed the value of the Company's equity based on an analysis of future enterprise values under two IPO scenarios, one "Early" and one "Late", as well as a "Stay Private" scenario. The estimated value of the common stock in each scenario was then probability-weighted based on inputs provided by management regarding the likelihood of each scenario as of the valuation date.

The grant date fair value of the RSU awards with market conditions, was determined based on the Monte Carlo valuation model, which requires various estimates, including the expected volatility of the common stock of the Company based on the historical volatility of comparable publicly traded companies, the probability of an IPO, the IPO date and the vesting term.

Historically the Company has not recorded stock-based compensation expense for the RSUs, due to the Liquidity Event Requirement not being probable. The Company has valued the unrecorded stock-based compensation expense, using historical estimates of the fair value of the Company's common stock. Should the Liquidity Event Requirement ("Liquidity Event") become probable, the Company would incur share based compensation expense associated with (i) active employees who have fulfilled or are in the process of fulfilling the Time Based Requirement ("active employees"), (ii) certain terminated employees whose RSU's become fully vested in connection with the Liquidity Event ("terminated employees"), and (iii) the acceleration of the Time Based Requirement for certain awards to executive officers, senior management and directors as a result of Liquidity Event.

As of December 31, 2022, the Company had 5,286,496 outstanding RSUs related to active and certain terminated employees. The total grant date fair value of such outstanding RSUs in unrecognized stock-based compensation expense is $15.7 million. The 3,143,318 RSUs which have contractually met the Time-Based Requirement have a grant date fair value of $7.3 million. The remaining 2,143,178 RSUs which have not met the Time-Based Requirement have a grant date fair value of $8.4 million.

As of December 31, 2023, the Company had 6,797,137 outstanding RSUs related to active and certain terminated employees. The total grant date fair value of such outstanding RSUs in unrecognized stock-based compensation expense is $24.5 million. The 4,121,887 RSUs which have contractually met the Time-Based Requirement have a grant date fair value of $11.8 million. The remaining 2,675,250 RSUs which have not met the Time-Based Requirement have a grant date fair value of $12.7 million.

In the period in which the Liquidity Event Requirement is satisfied, the Company will record cumulative stock-based compensation expense for the service period through such date using the straight-line attribution method, net of actual forfeitures, based on the grant-date fair value of the RSU awards. Had a qualifying Liquidity Event occurred on December 31, 2023, the Time Based Requirement would be accelerated in accordance with their terms for an additional 348,899 RSUs, and the Company would recognize cumulative combined stock-based compensation expense of $14.7 million for active employees, terminated employees, executive officers, and directors.

12. Income Taxes

The domestic and foreign components of the Company's income (loss) before tax provision for the years ended December 31, 2022 and 2023, were as follows:

	December 31,	
	2022	2023
	(in thousands)	
Domestic	$ (3,533)	$ (2,620)
Foreign	1,305	3,130
Income (loss) before income tax provision	**$ (2,228)**	**$ 510**

The components of the Company's income tax provision for the years ended December 31, 2022 and 2023, were as follows:

	December 31,	
	2022	2023
	(in thousands)	
Current:		
Federal	$ 846	$ 393
State	82	62
Foreign	578	408
Deferred:		
Foreign	194	(37)
Income tax provision	**$ 1,700**	**$ 826**

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2022 and 2023 were as follows:

	December 31,	
	2022	2023
	(in thousands)	
Deferred tax assets:		
Accruals and reserves	$ 492	$ 735
Depreciable and amortizable assets	2,212	3,765
Net operating loss carryforward	587	561
Tax credits	8,037	7,328
Total deferred tax asset	**$ 11,328**	**$ 12,389**
Valuation allowance	(10,649)	(12,270)
Net deferred tax asset	**$ 679**	**$ 119**
Deferred tax liabilities		
Revenue recognition	(964)	(349)
Net deferred tax liability	**$ (285)**	**$ (230)**

The following is a reconciliation of the federal statutory income tax rate to the Company's effective tax rate for the years ended December 31, 2022 and 2023:

	December 31,	
	2022	2023
Tax at federal statutory rate	**21 %**	**21 %**
Tax credits	15 %	(60)%
Other	(59)%	(65)%
Valuation allowance	(53)%	266 %
Effective tax rate	**(76)%**	**162 %**

Management establishes a valuation allowance for those deductible temporary differences when it is more likely than not that the benefit of such deferred tax assets will not be recognized. The ultimate realization of deferred tax assets is dependent upon the Company's ability to generate taxable income during periods in which the temporary differences become deductible. Management regularly reviews the deferred tax assets for recoverability and establishes a valuation allowance based on historical taxable income, projected future taxable income, and the expected timing of the reversals of existing temporary differences. Through the year ended December 31, 2023, management believes that it is more likely than not that the deferred tax assets will not be realized, such that a full valuation allowance has been recorded.

During the years ended December 31, 2022 and 2023, the valuation allowance increased by $1.4 million and $1.6 million, respectively.

As of December 31, 2023, the Company had federal research and development tax credits of $5.7 million which begin expiring in 2028 and no net operating loss carryforwards for federal income tax purposes.

As of December 31, 2023 the Company had net operating loss carryforwards for state income tax purposes of $2.9 million which begin expiring in 2029 and state research and development credits of $8.0 million which begin expiring in 2024.

The Company has not recorded a provision for deferred U.S. tax expense that could result from the remittance of foreign undistributed earnings since the Company intends to reinvest the earnings in its foreign subsidiaries indefinitely.

The following table summarizes the activity related to the Company's gross unrecognized tax benefits:

	December 31,	
	2022	2023
	(in thousands)	
Balance as of January 1,	**$ 10,054**	**$ 6,827**
Increases related to prior years' tax positions	40	32
Increases related to current year's tax positions	426	388
Decreases related to prior years' tax positions	(3,693)	—
Balance as of December 31,	**$ 6,827**	**$ 7,247**

The Company records unrecognized tax benefits, where appropriate, for all uncertain income tax positions. The Company recorded unrecognized tax benefits for uncertain tax positions of approximately $7.2 million as of December 31, 2023, of which $1.4 million, if recognized, would impact the effective tax rate.

The Company recognizes interest and/or penalties related to uncertain tax positions in income tax expense. To the extent accrued interest and penalties do not ultimately become payable, amounts accrued will be reduced and reflected as a reduction of the overall income tax provision in the period that such determination is made. During the 2022 and 2023 tax years, interest and penalties recorded in the statements of loss were $16,000 and $19,000, respectively. The amounts of accrued interest and penalties recorded on the consolidated balance sheets as of December 31, 2022 and 2023 were $58,000 and $77,000, respectively. The Company does not believe there will be material changes in its unrecognized tax positions over the next twelve months.

The Company files income tax returns in the U.S. federal jurisdiction, various state jurisdictions and certain foreign jurisdictions. The Company is not currently under audit by the Internal Revenue Service or other similar state, local,

and foreign authorities. All tax years remain open to examination by major taxing jurisdictions to which the Company is subject for a period of three years for federal and four years for states, after the utilization of net operating losses and credits.

13. Segment Reporting and Geographical Concentration

The Company manages its operations through an evaluation of a consolidated business segment that solves semiconductor design challenges by offering affordable and competitive TCAD software, EDA software and design IP to support engineers and researchers across the globe. The chief operating decision maker, who is the Company's Chief Executive Officer, reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. As such, the Company's operations constitute a single operating segment and one reportable segment.

Revenue is attributed to geography based upon the country in which the software license is used, or maintenance and services are delivered. The Company's single reportable segment recorded customer revenue from the following geographical areas for the years ended December 31, 2022 and 2023:

	December 31,	
Region	**2022**	**2023**
	(in thousands)	
United States	$ 14,888	$ 16,214
China	10,685	12,410
Japan	7,288	7,556
Korea	4,172	7,505
All other	9,441	10,561
Total revenue	**$ 46,474**	**$ 54,246**

Property and equipment are attributed to geography based on the country where the assets are located. The following table presents a summary of property and equipment by region as of December 31, 2022 and 2023:

	December 31,	
Region	**2022**	**2023**
	(in thousands)	
United States	$ 214	$ 242
China	162	152
Japan	64	74
All other countries	119	123
Total property and equipment	**$ 559**	**$ 591**

14. Commitments and Contingencies

Warranties

The Company typically provides its customers a warranty on its software licenses for a period of no more than 90 days and on its other tools for a period of no more than one year. Such warranties are accounted for in accordance with the authoritative guidance issued by the FASB on contingencies. For the years ended December 31, 2022 and 2023, the Company has not incurred any costs related to warranty obligations.

Indemnification

Under the terms of substantially all of its license agreements, the Company has agreed to indemnify its customers for costs and damages arising from claims against such customers based on, among other things, allegations that the Company's software infringes the intellectual property rights of a third party. In most cases, in the event of an infringement claim, the Company retains the right to (i) procure for the customer the right to continue using the software; (ii) replace or modify the software to eliminate the infringement while providing substantially equivalent functionality; or (iii) if neither (i) nor (ii) can be reasonably achieved, the Company may terminate the license agreement and refund to the customer a pro-rata portion of the license fee paid to the Company. Such indemnification provisions are accounted for in accordance with the authoritative guidance issued by the FASB on guarantees. From time to time, in the ordinary course of business, the Company receives claims for indemnification, typically from original equipment manufacturers.

Guarantees

In February of 2012, Gu-Guide LP, a real estate entity controlled by the Company's founding principal stockholder, Bank of the West and Silvaco Group, Inc. entered into a loan agreement pursuant to which Bank of the West agreed to lend Gu-Guide LP certain amounts of money. The Loan is secured by a building representing a total of 9,000 square feet located at 4701 Patrick Henry Drive, Santa Clara, California 95054. In the event that the proceeds from the foreclosure of the foregoing collateral are insufficient to repay the outstanding amounts under the Loan, Silvaco Group Inc. has guaranteed the repayment of the outstanding amounts under the Loan. As of December 31, 2023, $0.8 million is outstanding under the Loan.

Contingencies

The Company is involved in routine legal proceedings in the ordinary course of business. The outcome of such matters is not expected to have a material adverse effect on the Company's consolidated financial position, results of operations, or liquidity. However, each of these matters is subject to various uncertainties and it is possible that an unfavorable resolution of one or more of these proceedings could materially affect the Company's results of operations, cash flows or financial position.

In an effort to clarify its obligations with respect to the earnout payment due to the selling shareholders of Nangate, the Company sought declaratory relief in the California Superior Court in December 2020. In February 2021, two of the selling shareholders of Nangate (together with a third cross-complainant who joined later, the "Nangate Parties") filed a cross-complaint against the Company and two members of the Company's board of directors, alleging, among other causes of action, breach of contract, fraud, and negligent misrepresentation. In January 2022, the Nangate Parties filed a third amended cross-complaint against Silvaco, Inc. and certain of its board members alleging breach of contract, fraud, and unfair business practices and is seeking $20.0 million in damages, along with punitive damages. In the intervening period, the Company and the Nangate Parties have engaged in motion practice related to, among other items, the removal of certain of the Company's board members from the proceedings. Each party has also responded to requests for production and begun performing depositions. A trial date has been set for the second quarter of 2024. The Company is vigorously defending itself in this litigation. The Company accordingly has not recorded a charge for this contingency.

On August 19, 2021, Aldini sued the Company, the Company's French affiliate, a member of the Company's board of directors and the Company's CEO, among numerous other noncompany defendants, in connection with the Company's interactions with Dolphin Design SAS ("Dolphin"). Aldini's allegations center around the bankruptcy and reorganization of Dolphin in 2018 and Silvaco, Inc.'s acquisition of certain memory assets of Dolphin, which Aldini alleges was done in violation of its rights as a shareholder of Dolphin. Aldini AG's First Amended Complaint asserts various tort claims against Silvaco, Inc., Silvaco France, and officers Iliya Pesic and Babak Taheri, including claims for trade secret theft, conspiracy, and intentional interference with a prospective economic advantage. Silvaco, Inc. filed a motion to dismiss; the trade secret theft and conspiracy claims were dismissed with prejudice and the intentional tort claims were dismissed with leave to amend. On August 23, 2022, Aldini AG filed a Second Amended Complaint against Silvaco, Inc., Silvaco France, and officers Iliya Pesic and Babak Taheri that included similar claims of trade secret theft, conspiracy, and intentional interference with a prospective economic advantage in relation to Silvaco, Inc.'s acquisition of certain assets of Dolphin Design SAS. Aldini AG seeks $703.0 million and punitive damages. On March 17, 2023, the Second Amended Complaint was dismissed on all counts, subject to a right of appeal. Aldini has filed a notice of appeal although their mediation brief relating to this appeal does not include Silvaco. The Company accordingly has not recorded a charge for this contingency.

The Company's software solutions and technology are subject to export control and import laws and regulations of applicable jurisdictions. Certain of the Company's software solutions are subject to U.S. export controls and sanctions, including the Export Administration Regulations, U.S. Customs regulations, and the economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). Between August 2019 and June 2022, the Company filed various voluntary disclosures with United States Department of Commerce Bureau of Industry and Security ("BIS") regarding potential violations of U.S. export control laws and regulations, specifically, the export of the Company's licenses to certain parties designated on BIS's Entity List and Unverified List, and the export of certain software modules without a license which was required at the time of the transaction. Such software modules were declassified by BIS in October 2020 to a lesser controlled export classification, meaning that such software generally no longer requires an export license. In July and October 2022 and January 2023, the Company also filed voluntary disclosures with OFAC regarding potential violations of OFAC sanctions programs, specifically the download of certain Company software modules by users in U.S. embargoed countries. The matters described in these voluntary disclosures remain pending before BIS and OFAC. The Company cannot estimate any reasonable possible loss at this time and has not recorded a charge for this contingency. However, if either organization chose to bring an enforcement action against the Company such actions could result in significant penalties.

After establishing its branch office in Russia in 2017, the Company used a local bank ("Bank A") as its primary financial institution and engaged a local service provider ("Local Agent") to act as its tax, accounting and legal consultant to advise with respect to matters affecting the branch office. As a result of the conflict in Ukraine, Bank A was sanctioned by OFAC on April 6, 2022, and, based on the recommendation from the Local Agent, the Company established replacement bank accounts at another local bank ("Bank B"), which were opened on June 2, 2022. Following the opening of the new accounts at Bank B, the Local Agent used the Bank B accounts to receive injections of funds from the Company's US bank accounts; transferred the funds from Bank B to Bank A and paid compensation of certain of the Company's employees and other expenses using the Company's bank accounts at Bank A. The discovery of transactions involving the Company's funds through Bank A following the establishment of the Company's accounts at Bank B led to the Company's subsequent voluntary self-disclosure in October 2023 (the "October OFAC Filing"). The Company cannot estimate any reasonable possible loss at this time and has not recorded a charge for this contingency. However, if OFAC chose to bring an enforcement action against the Company such actions could result in significant penalties.

On September 22, 2023, the Company received a demand letter from a customer related to alleged deficiencies in certain intellectual property used by the customer. Management is in initial discussions with the customer regarding the nature of the claims set forth in the letter. Given the early stages of the matter and the unknown financial impact, the Company cannot estimate any reasonable range of loss. The Company accordingly has not recorded a charge for this contingency.

15. Defined Contribution Plan

The Company maintains a defined contribution or 401(k) Plan for its qualified U.S. employees. Participants may contribute a percentage of their compensation on a pre-tax basis, subject to a maximum annual contribution imposed by the Internal Revenue Code. During each of the years ended December 31, 2022 and 2023, the Company contributed $0.1 million related to the 401(k) Plan. In connection with the 401(k) Plan, the Company recorded expense of $0.1 million and $0.5 million during the years ended December 31, 2022 and 2023, respectively.

16. Fair Value of Financial Instruments

Financial Instruments Measured at Fair Value on a Recurring Basis

The following tables present the Company's liabilities that are measured on a recurring basis as of December 31, 2022 and 2023:

	Fair value measurements as of December 31, 2022			
		(in thousands)		
	Carrying value	Level 1	Level 2	Level 3
Liabilities:				
Contingent consideration	792	—	—	792
Total	**$ 792**	**$ —**	**$ —**	**$ 792**

	Fair value measurements as of December 31, 2023			
		(in thousands)		
	Carrying value	Level 1	Level 2	Level 3
Liabilities:				
Contingent consideration	112	—	—	112
Total	**$ 112**	**$ —**	**$ —**	**$ 112**

Pursuant to the stock purchase agreements for the acquisition of Nangate and PolytEDA, the selling shareholders are entitled to additional milestone and earn out consideration based on net revenues, operating income and technical achievement. The milestone consideration and earn-out liabilities are classified as contingent consideration as the obligations are due in cash. As such the obligations are recorded at their fair value and re-valued period to period with any changes recorded to operating income (expense).

The Company's contingent consideration is valued using a discounted cash flow model, and the assumptions used in preparing the discounted cash flow model include estimates for interest rates and the amount of cash flows, in addition to the expected net revenue, operating income and technical achievement of the acquired technology. See also, Note 9, Accrued Liabilities and Note 14, Commitments and Contingencies.

The following is a reconciliation of changes in the liability related to contingent consideration during the years ended December 31, 2022 and 2023:

	Year Ended December 31,	
	2022	2023
	(in thousands)	
Fair value as of January 1,	**$ 1,870**	**$ 792**
Change in fair value	(210)	325
Earn-out payments	(376)	(502)
Milestone achievement paid	(500)	(500)
Foreign exchange	8	(3)
Fair value as of December 31,	**$ 792**	**$ 112**

Nonfinancial Assets Measured at Fair Value on a Nonrecurring Basis

Nonfinancial assets such as property and equipment, intangibles assets, and goodwill are evaluated for impairment and adjusted to fair value using Level 3 inputs only when impairment is recognized.

In connection with Russia's invasion of Ukraine in February 2022, the Company recorded an impairment charge of $560,000 to reduce the carrying value of $284,000 of developed technology and $276,000 of customer relationships associated with the Company's Ukrainian subsidiary which management determined would not be recoverable. The related intangible assets were deemed fully impaired and therefore did not include any sensitive level 3 estimates or inputs as of December 31, 2022.

17. Subsequent Events

During February 2024, the Company drew $3.1 million on the East West Bank Loan.

During February 2024 the board of directors approved the grant of 1,058,559 of restricted stock units under the 2014 Plan. Substantially all the awards include a Time-Based Requirement, which generally requires four years for full vesting of the grants, with 25% vesting after one year and quarterly vesting over the subsequent three years. In addition, such awards contain a Liquidity Event Requirement, which requires the completion of an underwritten initial public offering or a change of control, as defined in the Company's 2014 Plan documents.

On February 29, 2024, the Company entered into an Amended and Restated Employment Agreement with an executive officer (the "A&R Employment Agreement"), effective as of January 1, 2024. The A&R Employment Agreement amended and restated the executive officer's offer letter agreement with the Company dated November 23, 2021. The A&R Employment Agreement provides that the executive officer is entitled to receive an annual base salary of $485,000 effective as of December 1, 2023. Such base salary shall be evaluated annually by the Board beginning in early 2025, with any Board-approved adjustments effective retroactively as of January 1 of such adjustment year. Additionally, beginning with the fiscal year 2024, the executive officer is also entitled to an annual cash incentive bonus of 60% of his then-current base salary. Further, in accordance with the terms A&R Employment Agreement, the executive officer will earn an additional 700,000 RSUs if the Company closes an initial public offering prior to December 31, 2024. If the 700,000 additional RSUs are earned, (i) 350,000 of these RSUs will vest on the business day after the closing of the initial public offering and (ii) 350,000 RSUs will vest over a two-year period following the IPO, with 50% of these RSUs vesting on the one-year anniversary of the closing of the initial public offering and 1/8th of these RSUs vesting in equal quarterly installments during the next 4 quarters thereafter.

18. Events [Unaudited] Subsequent to the Date of the Report of Independent Registered Public Accounting Firm

On March 18, 2024, the Company's board of directors authorized an extension of the maximum term of the 2014 Plan to March 18, 2034 and increased the maximum number of shares of common stock authorized for issuance under the 2014 Plan to 9,200,000 shares.

During March 2024, the Company drew $1.2 million on the East West Bank Loan.

On April 11, 2024, the Company amended its license agreement to offer SIP developed in partnership with a third party vendor to extend its term for an additional five years.

Shares

Common Stock

PRELIMINARY PROSPECTUS

Jefferies **TD Cowen**

B. Riley Securities **Craig-Hallum Capital Group** **Rosenblatt**

, 2024

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than the underwriting discounts and commissions, payable by Silvaco Group, Inc., or the Registrant, in connection with the offer and sale of the common stock being registered. All amounts shown are estimates except for the Securities and Exchange Commission, or the SEC, registration fee, the FINRA filing fee and exchange listing fee.

	Amount
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq filing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous fees and expenses	*
Total	$ *

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

The Registrant is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law, or the DGCL, provides that a Delaware corporation may indemnify any persons who were, are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who were, are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) actually and reasonably incurred.

Upon the closing of this offering, the Registrant's amended and restated certificate of incorporation will provide for the indemnification of its directors to the fullest extent permitted under the DGCL. The Registrant's amended and restated bylaws provide for the indemnification of its directors and officers to the fullest extent permitted under the DGCL. Each of the Registrant's amended and restated certificate of incorporation and amended and restated bylaws will become effective upon completion of this offering.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derives an improper personal benefit;

- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

The Registrant's amended and restated certificate of incorporation will include such a provision. Under the Registrant's amended and restated bylaws, expenses incurred by any director or officers in defending any such action, suit or proceeding in advance of its final disposition will be paid by the Registrant upon delivery to it of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it will ultimately be determined that such director or officer is not entitled to be indemnified by the Registrant, as long as such undertaking remains required by the DGCL. Section 174 of the DGCL provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the DGCL, the Registrant has entered into indemnity agreements with each of its directors and officers that require the Registrant, among other things, to indemnify its directors and officers against certain liabilities which may arise by reason of their status or service as directors or officers to the fullest extent not prohibited by law. These indemnification agreements may be sufficiently broad to permit indemnification of the Registrant's officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act. Under these agreements, the Registrant is not required to provide indemnification for certain matters. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

There is at present no pending litigation or proceeding involving any of the Registrant's directors or executive officers as to which indemnification is required or permitted, and the Registrant is not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Prior to the closing of this offering, the Registrant intends to enter into separate indemnification agreements with each of their directors and executive officers. Each indemnification agreement will provide, among other things, for indemnification to the fullest extent permitted by law and our amended and restated certificate of incorporation and amended and restated bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements will provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law and our amended and restated certificate of incorporation and amended and restated bylaws.

The Registrant intends to enter into an insurance policy that covers its officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act or otherwise.

The Registrant plans to enter into an underwriting agreement which provides that the underwriters are obligated, under some circumstances, to indemnify the Registrant's directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act.

Item 15. Recent Sales of Unregistered Securities.

Since January 1, 2021, we have granted to our employees, consultants, and other service providers, restricted stock units representing an aggregate of 4,842,199 shares of our common stock, under our 2014 Plan.

The issuances of the securities described above were deemed to be exempt from registration under Rule 701 promulgated under the Securities Act as transactions under compensatory benefit plans and contracts relating to compensation. The recipients of such securities were our directors, employees or bona fide consultants and received the securities under our equity incentive plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The list of exhibits is set forth under "Exhibit Index" at the end of this registration statement and is incorporated herein by reference.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby further undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act will be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus will be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time will be deemed to be the initial *bona fide* offering thereof.

EXHIBIT INDEX

Exhibit No.	Description
1.1†	Form of Underwriting Agreement.
3.1.1	Amended and Restated Certificate of Incorporation, as amended and as currently in effect.
3.1.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation, as amended and as currently in effect.
3.2†	Form of Amended and Restated Certificate of Incorporation, to be effective as of immediately prior to the completion of this offering.
3.3	Bylaws, as amended and as currently in effect.
3.4†	Form of Amended and Restated Bylaws, to be effective as of immediately prior to the completion of this offering.
4.1†	Form of Common Stock Certificate of the Registrant.
5.1†	Opinion of DLA Piper LLP (US).
10.1+†	Form of Indemnification Agreement between the Registrant and its directors and officers.
10.2+	Amended 2014 Stock Incentive Plan and Form of Restricted Stock Unit Agreement thereunder.
10.3+	Form of 2024 Stock Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise, Stock Option Grant Notice, Restricted Stock Unit Agreement and Restricted Stock Agreement thereunder.
10.4+	Form of 2024 Employee Stock Purchase Plan.
10.5+	Offer Letter Agreement, dated December 25, 2021, between the Registrant and Dr. Raul Camposano.
10.6+	Offer Letter Agreement, dated July 20, 2023, between the Registrant and Ryan Benton.
10.7+	Consulting Advisory Agreement, dated January 12, 2022, between the Registrant and Katherine S. Ngai-Pesic.
10.8+	Consulting Advisory Agreement, dated January 12, 2022, between the Registrant and Iliya I. Pesic.
10.9+	Amended and Restated Consulting Advisory Agreement, dated December 1, 2023, between the Registrant and Iliya I. Pesic.
10.10+	Consulting Advisory Agreement, dated December 1, 2023, between the Registrant and Iliya I. Pesic.
10.11+	Offer Letter and Termination of Separation Agreement, dated November 23, 2021, between the Registrant and Dr. Babak A. Taheri, as amended by the Amendment to the Offer Letter and Termination of Separation Agreement, dated November 16, 2022.
10.12+	Separation Agreement and Release, dated September 1, 2021, between the Registrant and Dr. Babak A. Taheri.
10.13+	Amended and Restated Employment Agreement, dated February 29, 2024, between the Registrant and Dr. Babak A. Taheri.
10.14	California Commercial Lease Agreement, dated May 1, 2022, between Silvaco, Inc. and Kipee International, Inc.
10.15	Lease Relating to Silvaco Suite, First Floor, Silvaco Technology Centre Compass Point, St. Ives, Cambridgeshire, dated January 1, 2020, between Silvaco Europe Ltd. and New Horizons (Cambridge) Ltd.
10.16	Commercial Lease, dated April 28, 2017, by and between the Registrant, as successor, and New Horizons, as amended by the Commercial Lease, dated September 30, 2021.
10.17+	Executive Severance Plan.
10.18	Promissory Note, dated December 8, 2021, between Silvaco, Inc. and Kipee International, Inc., as amended by Amendment to Promissory Note, dated April 18, 2022, between Silvaco, Inc., Kipee International, Inc. and Katherine S. Ngai-Pesic.
10.19	Promissory Note, dated March 30, 2022, between Silvaco, Inc. and Katherine S. Ngai-Pesic.
10.20	Promissory Note and Line of Credit, dated June 13, 2022, between Silvaco, Inc. and Katherine S. Ngai-Pesic.

10.21	Amendment to Promissory Note and Line of Credit, dated May 25, 2023, between Silvaco, Inc. and Katherine S. Ngai-Pesic.
10.22	Amendment to Promissory Note and Line of Credit, dated December 11, 2023, between Silvaco, Inc. and Katherine S. Ngai-Pesic.
10.23+†	Non-Employee Director Compensation Policy of the Board of Directors of the Registrant.
10.24	Loan and Security Agreement, dated December 14, 2023, between the Registrant and East West Bank.
10.25	Registration Rights Agreement, dated April 12, 2024, among the Registrant and the stockholders named therein.
10.26	Stockholders Agreement, dated April 12, 2024, among the Registrant and the stockholders named therein.
10.27#	Technology License and Distribution Agreement, dated October 30, 2015, between the Registrant, as successor, and NXP Semiconductors Netherlands B.V., originally entered into by Registrant on September 1, 2016, as amended by First Amendment to Technology License and Distribution Agreement, dated April 20, 2016, Second Amendment to Technology License and Distribution Agreement, dated October 18, 2016, Third Amendment to Technology License and Distribution Agreement, dated November 10, 2018, Fourth Amendment to Technology License and Distribution Agreement, dated March 22, 2022 and Fifth Amendment to Technology License and Distribution Agreement, dated April 11, 2024.
21.1†	Subsidiaries of the Registrant.
23.1	Consent of Moss Adams LLP.
23.2†	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
24.1	Power of Attorney (see signature page hereto).
107	Filing Fee Table.

† To be filed by amendment.
+ Indicates management contract or compensatory plan.
# Certain confidential information – identified by a bracketed asterisk "[*]" – has been omitted from this exhibit pursuant to Item 601(b)(10) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of an unredacted copy to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Clara, State of California, on the 12th of April, 2024.

SILVACO GROUP, INC.

/s/ Dr. Babak A. Taheri
Dr. Babak A. Taheri
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Babak A. Taheri and Ryan Benton, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place, or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dr. Babak A. Taheri Dr. Babak A. Taheri	Chief Executive Officer and Director *(Principal Executive Officer)*	April 12, 2024
/s/ Ryan Benton Ryan Benton	Chief Financial Officer *(Principal Financial and Accounting Officer)*	April 12, 2024
/s/ Katherine S. Ngai-Pesic Katherine S. Ngai-Pesic	Chair of the Board	April 12, 2024
/s/ Dr. Hau L. Lee Dr. Hau L. Lee	Lead Independent Director	April 12, 2024
/s/ Anita Ganti Anita Ganti	Director	April 12, 2024
/s/ William H. Molloie, Jr. William H. Molloie, Jr.	Director	April 12, 2024
/s/ Anthony K. K. Ngai Anthony K. K. Ngai	Director	April 12, 2024
/s/ Dr. Walden C. Rhines Dr. Walden C. Rhines	Director	April 12, 2024
/s/ Jodi L. Shelton Jodi L. Shelton	Director	April 12, 2024

CALCULATION OF FILING FEE TABLE

FORM S-1
REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

Silvaco Group, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Proposed Maximum Aggregate Offering Price[1][2]	Fee Rate	Amount of Registration Fee[3]
Equity	Common stock, $0.0001 par value per share	Rule 457(o)	$100,000,000.00	$0.0001476	$14,760.00
Total Offering Amounts			$100,000,000.00		$14,760.00
Total Fees Previously Paid					—
Total Fee Offsets[4]					—
Net Fee Due					$14,760.00

(1) Includes the offering price of shares of common stock that may be sold if the underwriters' option to purchase additional shares of common stock from the Registrant is fully exercised.
(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(3) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.
(4) The Registrant does not have any fee offsets.

CERTIFICATE OF INCORPORATION

OF

SARATOGA INTERNATIONAL, INC.

ARTICLE I

The name of this corporation is Saratoga International, Inc. (the "Corporation").

ARTICLE II

The registered agent and the address of the registered office in the State of Delaware are:

Corporation Service Company
2711 Centerville Road, Suite 400
Wilmington, Delaware 19808
County of New Castle

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law.

ARTICLE IV

The Corporation is authorized to issue one class of stock to be designated Common Stock ("Common Stock"). The total number of shares of Common Stock this Corporation shall have authority to issue is 10,000,000. The Common Stock shall have a par value of 80.0001 per share.

ARTICLE V

The Board of Directors is authorized to adopt, amend or repeal the Bylaws of the Corporation. Election of directors need not be by ballot.

ARTICLE VI

The name and mailing address of the incorporator is:

Scott S. Paraker
c/o Pillsbury Winthrop Shaw Pittman LLP
2475 Hanover Street
Palo Alto, CA 94304-1114

ARTICLE VII

The Corporation reserves the right to adopt, repeal, rescind or amend in any respect any provisions contained in this Certificate of Incorporation in the manner now or hereafter prescribed by applicable law, and all rights conferred on stockholders herein are granted subject to this reservation.

ARTICLE VIII

To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of his fiduciary duty as a director.

(a) Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director, officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan (hereinafter an "indemnitee"), whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than permitted prior thereto), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith and such indemnification shall continue as to an indemnitee who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the indemnitee's heirs, executors and administrators; provided, however, that, except as provided in paragraph (c) hereof with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the board of directors of the Corporation.

(b) Right to Advancement of Expenses. The right to indemnification conferred in paragraph (a) of this Section shall include the right to be paid by the Corporation the expenses incurred in defending any proceeding for which such right to indemnification is applicable in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that, if the Delaware General Corporation Law requires, an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no

further right to appeal (hereinafter a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this Section or otherwise.

(c) Right of Indemnitee to Bring Suit. The rights to indemnification and to the advancement of expenses conferred in paragraphs (a) and (b) of this Section shall be contract rights. If a claim under paragraph (a) or (b) of this Section is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an. advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In (i) any suit brought by the indemnitee to enforce a right to indemnifica¬tion hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) in any suit by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indernnitee has not met any applicable standard for indemnification set forth in the Delaware General Corporation. Law. Neither the failure of the Corporation (including its board of directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the Corporation (including its board of directors, independent legal counsel, or its stockholders) that the indernnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the indernnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Section or otherwise shall be on the Corporation.

(d) Non-Exclusivity of Rights. The rights to indemnification and to the advancement of expenses conferred in this Section shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, the Corporation's certificate of incorporation, bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

(e) Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

(f) Indemnification of Employees and Agents of the Corporation. The Corporation may, to the extent authorized from time to time by the board of directors, grant rights to indemnification, and to the advancement of expenses to any employee or agent of the Corporation to the fullest extent of the provisions of this Section with respect to the indemnification and advancement of expenses of directors and officers of the Corporation.

(g) Amendment. Neither any amendment nor repeal of this Article VIII, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article VIII, shall eliminate or reduce the effect of this Article VIII in respect of any matter occurring, or action or proceeding accruing or arising or that, but for this Article VIII, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

If the Delaware General Corporation Law hereafter is amended to further eliminate or limit the liability of directors, then the liability of a director of the Corporation, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended Delaware General Corporation Law. Any repeal or modification of this paragraph by the stockholders of the Corporation shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the Corporation existing at the time of such repeal or modification.

I, THE UNDERSIGNED, being the incorporator herein before named, for the purpose of forming a corporation pursuant to the General Corporation Laws of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 18th day of November, 2009.

/s/ Scott S. Paraker

Scott S. Paraker
Incorporator

CERTIFICATE OF AMENDMENT OF CERTIFICATE OF INCORPORATION

OF

SARATOGA INTERNATIONAL, INC.

Saratoga International, Inc., a corporation duly organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies as follows:

FIRST: The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware on November 18, 2009 under the name Saratoga International, Inc.

SECOND: This Amendment to the Certificate of Incorporation of the Corporation as set forth below has been duly adopted in accordance with the provisions of Section 242, and has been consented to in writing by the sole stockholder of the Corporation, in accordance with Section 228 of the General Corporation Law of the State of Delaware,

THIRD: Article I of the Certificate of Incorporation of the Corporation is amended to read in its entirety as follows:

"The name of this corporation is Silvaco Group, Inc."

FOURTH: Article IV of the Certificate of Incorporation of the Corporation is amended to read in its entirety as follows:

"The aggregate number of shares which the Company shall have authority to issue is fifty million (50,000,000) shares of capital stock, all of which shall be designated "Common Stock" and have a par value of $0.0001 per share. At the time this Certificate of Amendment of Certificate of Incorporation (the "Amended Certificate") shall become effective, every one (1) share of Common Stock issued and outstanding at such time shall be, and hereby is, changed and reconstituted into four (4) fully paid and non-assessable shares of Common Stock (after aggregating all shares of Common Stock held by each holder), rounded down to the nearest whole share (the "Split"). Each outstanding stock certificate of the Company which, immediately prior to the time this Amended Certificate shall become effective, represented one (1) or more shares of Common Stock shall thereafter be deemed to represent the appropriate number of shares of Common Stock taking into account the Split until such old stock certificate is exchanged for a new stock certificate reflecting the appropriate number of shares resulting from the Split. All references in this Amended Certificate, including all share numbers and prices herein, reflect the Split."

The undersigned declares under penalty of perjury that the matters set forth in the foregoing certificate are true of his own knowledge.

IN WITNESS WHEREOF, the undersigned has executed and subscribed this Certificate of Amendment on this 15th day of November, 2013.

/s/ Iliya Pesic

Name: Iliya Pesic
Title: Chairman of the Board State of Delaware

AMENDED AND RESTATED BYLAWS

OF

SILVACO GROUP, INC.

(a Delaware corporation)

TABLE OF CONTENTS

AMENDED AND RESTATED BYLAWS

OF

SILVACO GROUP, INC.

(a Delaware corporation)

ARTICLE 1

Offices

1.1 Principal Office. The Board of Directors shall fix the location of the principal executive office of the Silvaco Group, Inc. (the "**Corporation**") at any place within or outside the State of Delaware.

1.2 Additional Offices. The Board of Directors (the "**Board**") may at any time establish branch or subordinate offices at any place or places where the Company is qualified to do business.

ARTICLE 2

Meeting of Stockholders

2.1 Place of Meeting. All meetings of the stockholders for the election of directors shall be held at the principal office of the Corporation, at such place as may be fixed from time to time by the Board, or at such other place either within or without the State of Delaware, as shall be designated from time to time by the Board and stated in the notice of the meeting. Meetings of stockholders for any purpose may be held at such time and place within or without the State of Delaware as the Board may fix from time to time, and as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof. The Board may, in its sole discretion, determine that the meeting shall not be held at any place but will instead be held solely by means of remote communication as provided under Section 211 of the General Corporation Law of the State of Delaware (the "**DGCL**").

2.2 Annual Meeting. Annual meetings of stockholders shall be held at such date and time as shall be designated from time to time by the Board and stated in the notice of the meeting. At such annual meetings, the stockholders shall elect a Board and transact such other business as may properly be brought before the meetings.

2.3 Special Meetings. Special meetings of the stockholders may be called for any purpose or purposes, unless otherwise prescribed by the statute or by the Certificate of Incorporation, at the request of the Board, the Chairman of the Board, the Chief Executive Officer or the holders of shares entitled to cast not less than ten percent (10%) of the votes at the meeting, or such additional persons as may be provided in the certificate of incorporation or bylaws. Such request shall state the purpose or purposes of the proposed meeting. Upon request in writing that a special meeting of stockholders be called for any proper purpose, directed to the Chairman of the Board of Directors, the Chief Executive Officer, the Vice President or the Secretary, by any person (other than the board of directors) entitled to call a special meeting of stockholders, the person forthwith shall cause notice to be given to the stockholders entitled to vote that a meeting will be held at a time requested by the person or persons calling the meeting, such time not to be less than thirty-five (35), nor more than sixty (60), days after receipt of the request. Such request shall state the purpose or purposes of the proposed meeting.

2.4 Notice of Meetings. Written notice of stockholders' meetings, stating the place, date and time of the meeting, the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present and vote at such meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be given to each stockholder entitled to vote at such meeting not less than ten (10), nor more than sixty (60), days prior to the meeting.

When a meeting is adjourned to another place, date or time, written notice need not be given of the adjourned meeting if the place, date and time thereof are announced at the meeting at which the adjournment is taken; provided, however, that if the date of any adjourned meeting is more than thirty (30) days after the date for which the meeting was originally noticed, or if a new record date is fixed for the adjourned meeting, written notice of the place, date and time of the adjourned meeting shall be given in conformity herewith. At any adjourned meeting, any business may be transacted which might have been transacted at the original meeting.

2.5 Business Matter of a Special Meeting. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

2.6 List of Stockholders. The officer in charge of the stock ledger of the Corporation or the transfer agent shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting: (i) during ordinary business hours, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held, or (ii) by a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting. If the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is only available to the stockholders. If the meeting is to be held at a place, then the list shall be produced and kept at the place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present in person thereat. If the meeting is to be held solely by means of remote communication, the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.7 Organization and Conduct of Business. The Chairman of the Board or, in his or her absence, the Chief Executive Officer of the Corporation or, in their absence, such person as the Board may have designated or, in the absence of such a person, such person as may be chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders and act as Chairman of the meeting. In the absence of the Secretary of the Corporation, the Secretary of the meeting shall be such person as the Chairman appoints.

The Chairman of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of discussion as seems to him or her in order.

2.8 Quorum and Adjournments. Except where otherwise provided by law or in the Certificate of Incorporation or these Bylaws, the holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented in proxy, shall constitute a quorum at all meetings of the

stockholders. The stockholders present at a duly called or held meeting at which a quorum is present may continue to do business until adjournment, notwithstanding the withdrawal of enough stockholders to have less than a quorum if any action taken (other than adjournment) is approved by at least a majority of the shares required to constitute a quorum. At such adjourned meeting at which a quorum is present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. If, however, a quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat who are present in person or represented by proxy shall have the power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented.

2.9 Voting Rights. Unless otherwise provided in the Certificate of Incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote in person or by proxy for each share of the capital stock having voting power held by such stockholder.

2.10 Majority Vote. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which, by express provision of the statutes or of the Certificate of Incorporation or of these Bylaws, a different vote is required, in which case such express provision shall govern and control the decision of such question.

2.11 Record Date for Stockholder Notice and Voting. For purposes of determining the stockholders entitled to notice of any meeting or to vote, or entitled to receive payment of any dividend or other distribution, or entitled to exercise any right in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which shall not be more than sixty (60) days, nor less than ten (10) days before the date of any such meeting, nor more than sixty (60) days before any other action.

If the Board does not so fix a record date, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the business day next preceding the day on which notice is given or, if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held.

2.12 Proxies. Every person entitled to vote for directors or on any other matter shall have the right to do so either in person or by one or more agents authorized by a written proxy signed by the person and filed with the Secretary of the Corporation. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, facsimile or electronic transmission or otherwise) by the stockholder or the stockholder's attorney-in-fact. A validly executed proxy which does not state that it is irrevocable shall continue in full force and effect unless (a) revoked by the person executing it, before the vote pursuant to that proxy, by a writing delivered to the Corporation stating that the proxy is revoked or by a subsequent proxy executed by the maker of the proxy, or by that person's attendance and vote at the meeting; or (b) written notice of the death or incapacity of the maker of that proxy is received by the Corporation before the vote pursuant to that proxy is counted; provided, however, that no proxy shall be valid after the expiration of three (3) years from the date of the proxy, unless otherwise provided in the proxy.

2.13 Inspectors of Election. Before any meeting of stockholders, the Board may appoint any person other than nominees for office to act as inspectors of election at the meeting or its adjournment. If no inspectors of election are so appointed, the Chairman of the meeting may, and on the request of any stockholder or a stockholder's proxy shall, appoint inspectors of election at the meeting. The number of

inspectors shall be either one (1) or three (3). If inspectors are appointed at a meeting on the request of one or more stockholders or proxies, the holders of a majority of shares or their proxies present at the meeting shall determine whether one (1) or three (3) inspectors are to be appointed. If any person appointed as inspector fails to appear or fails or refuses to act, the Chairman of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

2.14 Action Without Meeting by Written Consent. All actions required to be taken at any annual or special meeting may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted, and shall be delivered to the Corporation by delivery to its registered office, its principal place of business, or an officer or agent of the corporation having custody of the book in which proceedings of meetings or stockholders are recorded.

ARTICLE 3

Directors

3.1 Number; Qualifications. The authorized number of directors shall initially be six (6), such number to be changed from time to time by resolution of the stockholders. All directors shall be elected at the annual meeting or at any special meeting of the stockholders, except as provided in Section 3.2 hereof, and each director so elected shall hold office until the next annual meeting or any special meeting, or until his successor is elected and qualified, or until his earlier resignation or removal. Directors need not be stockholders. All elections of directors shall be by written ballot, unless otherwise provided in the certificate of incorporation; if authorized by the Board, such requirement of a written ballot shall be satisfied by a ballot submitted by electronic transmission, provided that any such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the stockholder or proxy holder.

3.2 Resignation and Vacancies. A vacancy or vacancies in the Board shall be deemed to exist in the case of the death, resignation or removal of any director, or if the authorized number of directors be increased. A vacancy on the Board may be filled by resolution of the stockholders to elect a director to fill such vacancy. If there are no directors in office, then an election of directors may be held in the manner provided by statute.

3.3 Removal of Directors. Unless otherwise restricted by statute, or by the Certificate of Incorporation or these Bylaws, any director or the entire Board may be removed, with or without cause, by the holders of at least a majority of the shares entitled to vote at an election of directors.

3.4 Powers. The business of the Corporation shall be managed by or under the direction of the Board which may exercise all such powers of the Corporation and do all such lawful acts and things which are not by statute or by the Certificate of Incorporation or by these Bylaws directed or required to be exercised or done by the stockholders.

Without prejudice to these general powers, and subject to the same limitations, the directors shall have the power to:

(a) Select and remove all officers, agents, and employees of the Corporation; prescribe any powers and duties for them that are consistent with law, with the Certificate of Incorporation, and with these Bylaws; fix their compensation; and require from them security for faithful service;

(b) Confer upon any office the power to appoint, remove and suspend subordinate officers, employees and agents;

(c) Change the principal executive office or the principal business office in the State of California, or any other state, from one location to another; cause the Corporation to be qualified to do business in any other state, territory, dependency or country, and conduct business within or without the State of California; and designate any place within or without the State of California for the holding of any stockholders meeting, or meetings, including annual meetings;

(d) Adopt, make, and use a corporate seal; prescribe the forms of certificates of stock; and alter the form of the seal and certificates;

(e) Authorize the issuance of shares of stock of the Corporation on any lawful terms, in consideration of money paid, labor done, services actually rendered, debts or securities canceled, tangible or intangible property actually received;

(f) Borrow money and incur indebtedness on behalf of the Corporation, and cause to be executed and delivered for the Corporation's purposes, in the corporate name, promissory notes, bonds, debentures, deeds of trust, mortgages, pledges, hypothecation and other evidences of debt and securities;

(g) Declare dividends from time to time in accordance with law;

(h) Adopt from time to time such stock option, stock purchase, bonus or other compensation plans for directors, officers, employees and agents of the Corporation and its subsidiaries as it may determine; and

(i) Adopt from time to time policies not inconsistent with these Bylaws for the management of the Corporation's business and affairs.

3.5 Place of Meetings. The Board may hold meetings, both regular and special, either within or without the State of Delaware.

3.6 Annual Meetings. The annual meeting of the Board shall be held immediately following the annual meeting of stockholders, and no notice of such meeting shall be necessary to the Board, provided a quorum shall be present. The annual meetings shall be for the purposes of organization, for an election of officers, and for the transaction of other business.

3.7 Regular Meetings. Regular meetings of the Board may be held without notice at such time and place as may be determined from time to time by the Board.

3.8 Special Meetings. Special meetings of the Board may be called by the Chairman of the Board, the Chief Executive Officer, a Vice President, or a majority of the Board upon one (1) day's notice to each director.

3.9 Quorum and Adjournments. At all meetings of the Board, a majority of the directors then in office shall constitute a quorum for the transaction of business, and the act of a majority of the directors

present at any meeting at which there is a quorum shall be the act of the Board, except as may otherwise be specifically provided by law or by the Certificate of Incorporation. If a quorum is not present at any meeting of the Board, the directors present may adjourn the meeting from time to time, without notice other than announcement at the meeting at which the adjournment is taken, until a quorum shall be present. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved of by at least a majority of the required quorum for that meeting.

3.10 Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board or of any committee thereof may be taken without a meeting, if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.11 Telephone Meetings. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any member of the Board or of any committee may participate in a meeting by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.12 Waiver of Notice. Notice of a meeting need not be given to any director who signs a waiver of notice or a consent, or waiver by electronic mail or other electronic transmission by such person, to holding the meeting or an approval of the minutes thereof, whether before or after the meeting, or who attends the meeting without protesting, either prior thereto or at its commencement, the lack of notice to such director. All such waivers, consents and approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

3.13 Fees and Compensation of Directors. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, the Board shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board, and may be paid a fixed sum for attendance at each meeting of the Board or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

3.14 Rights of Inspection. Every director shall have the absolute right at any reasonable time to inspect and copy all books, records and documents of every kind, and to inspect the physical properties of the Corporation and also of its subsidiary corporations, domestic or foreign. Such inspection by a director may be made in person or by agent or attorney, and includes the right to copy and obtain extracts.

ARTICLE 4

Committees of Directors

4.1 Selection. The Board may, by resolution passed by a majority of the entire Board, designate one or more committees, each committee to consist of one or more of the directors of the

Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee.

In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member.

4.2 Power. Any such committee, to the extent provided in the resolution of the Board, shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the Certificate of Incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted by the Board as provided in section 151(a) of the DGCL, fix any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the Corporation or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the Corporation), adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the Corporation's property and assets, recommending to the stockholders a dissolution of the Corporation or a revocation of dissolution, removing or indemnifying directors or amending the Bylaws of the Corporation; and, unless the resolution or the Certificate of Incorporation expressly so provides, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock or to adopt a certificate of ownership and merger. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board.

4.3 Committee Minutes. Each committee shall keep regular minutes of its meetings and report the same to the Board when required.

ARTICLE 5

Officers

5.1 Officers Designated. The officers of the Corporation shall be chosen by the Board and shall be a Chief Executive Officer, a Secretary and a Treasurer. The Board may also choose a Chairman of the Board and one or more assistant Secretaries and assistant Treasurers. The Board or any duly authorized committee may also choose one or more Vice Presidents. Any number of offices may be held by the same person, unless the Certificate of Incorporation or these Bylaws otherwise provide.

5.2 Appointment of Officers. The officers of the Corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or 5.5 hereof, shall be appointed by the Board, and each shall serve at the pleasure of the Board, subject to the rights, if any, of an officer under any contract of employment.

5.3 Subordinate Officers. The Board or any duly authorized committee may appoint, and may empower the Chief Executive Officer to appoint, such other officers and agents as the business of the Corporation may require, each of whom shall hold office for such period, have such authority and perform such duties as are provided in the Bylaws or as the Board or duly authorized committee may from time to time determine.

5.4 Removal and Resignation of Officers. Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board or authorized committee, at any regular or special meeting of the Board or such committee, or, except in case of an officer chosen by the Board or authorized committee, by any officer upon whom such power of removal may be conferred by the Board or authorized committee.

Any officer may resign at any time by giving written notice to the Corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the Corporation under any contract to which the officer is a party.

5.5 Vacancies in Offices. A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these Bylaws for regular appointment to that office.

5.6 Compensation. The salaries of all officers of the Corporation shall be fixed from time to time by the Board, and no officer shall be prevented from receiving a salary because he is also a director of the Corporation.

5.7 The Chairman of the Board. The Chairman of the Board, if such an officer be elected, shall, if present, perform such other powers and duties as may be assigned to him from time to time by the Board. If there is no Chief Executive Officer, the Chairman of the Board shall also be the Chief Executive Officer of the Corporation and shall have the powers and duties prescribed in Section 5.8 hereof.

5.8 The Chief Executive Officer. Subject to such supervisory powers, if any, as may be given by the Board to the Chairman of the Board, if there be such an officer, the Chief Executive Officer shall preside at all meetings of the stockholders and in the absence of the Chairman of the Board, or if there be none, at all meetings of the Board, shall have general and active management of the business of the Corporation, and shall see that all orders and resolutions of the Board are carried into effect. He or she shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the Corporation, except where required or permitted by law to be otherwise signed and executed, and except where the signing and execution thereof shall be expressly delegated by the Board to some other officer or agent of the Corporation.

5.9 The Vice President. The Vice President (or in the event there be more than one, the Vice Presidents in the order designated by the directors, or in the absence of any designation, in the order of their election), shall, in the absence of the Chief Executive Officer or in the event of his disability or refusal to act, perform the duties of the Chief Executive Officer, and when so acting, shall have the powers of and be subject to all the restrictions upon the Chief Executive Officer. The Vice President(s) shall perform such other duties and have such other powers as may from time to time be prescribed for them by the Board, the Chief Executive Officer, the Chairman of the Board or these Bylaws.

5.10 The Secretary. The Secretary shall attend all meetings of the Board and the stockholders and record all votes and the proceedings of the meetings in a book to be kept for that purpose, and shall perform like duties for the standing committees, when required. The Secretary shall give, or cause to be given, notice of all meetings of stockholders and special meetings of the Board, and shall perform such other duties as may from time to time be prescribed by the Board, the Chairman of the Board or the Chief

Executive Officer, under whose supervision he or she shall act. The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary, shall have authority to affix the same to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or by the signature of such Assistant Secretary. The Board may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing thereof by his or her signature. The Secretary shall keep, or cause to be kept, at the principal executive office or at the office of the Corporation's transfer agent or registrar, as determined by resolution of the Board, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates issued for the same, and the number and date of cancellation of every certificate surrendered for cancellation.

5.11 The Assistant Secretary. The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order designated by the Board (or in the absence of any designation, in the order of their election) shall, in the absence of the Secretary, or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the Secretary and shall perform such other duties and have such other powers as may from time to time be prescribed by the Board.

5.12 The Treasurer. The Treasurer shall have the custody of the Corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation, and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board. The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board, taking proper vouchers for such disbursements, and shall render to the Chief Executive Officer and the Board, at its regular meetings, or when the Board so requires, an account of all his or her transactions as Treasurer and of the financial condition of the Corporation. The Treasurer may also be known as the Chief Financial Officer.

5.13 The Assistant Treasurer. The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order designated by the Board (or in the absence of any designation, in the order of their election) shall, in the absence of the Treasurer or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the Treasurer, and shall perform such other duties and have such other powers as may from time to time be prescribed by the Board.

ARTICLE 6

Indemnification of Directors, Officers, Employees and Other Agents

6.1 Indemnification of Directors and Officers. The Corporation shall, to the maximum extent and in the manner permitted by the DGCL, indemnify each of its directors and officers against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the Corporation. For purposes of this Section 6.1, a "director" or "officer" of the Corporation includes any person (a) who is or was a director or officer of the Corporation, (b) who is or was serving at the request of the Corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was a director or officer of a corporation which was a predecessor corporation of the Corporation or of another enterprise at the request of such predecessor corporation.

6.2 Indemnification of Others. The Corporation shall have the power, to the maximum extent and in the manner permitted by the DGCL, to indemnify each of its employees and agents (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, settlements and

other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the Corporation. For purposes of this Section 6.2, an "employee" or "agent" of the Corporation (other than a director or officer) includes any person (a) who is or was an employee or agent of the Corporation, (b) who is or was serving at the request of the Corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was an employee or agent of a corporation which was a predecessor corporation of the Corporation or of another enterprise at the request of such predecessor corporation.

6.3 Payment of Expenses in Advance. Expenses incurred in defending any action or proceeding for which indemnification is required pursuant to Section 6.1 hereof, or for which indemnification is permitted pursuant to Section 6.2 hereof, following authorization thereof by the Board of Directors, shall be paid by the Corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount, if it shall ultimately be determined that the indemnified party is not entitled to be indemnified as authorized in this Article 6.

6.4 Indemnity Not Exclusive. The indemnification provided by this Article 6 shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, to the extent that such additional rights to indemnification are authorized in the Certificate of Incorporation.

6.5 Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify him or her against such liability under the provisions of the DGCL.

6.6 Conflicts. No indemnification or advance shall be made under this Article 6, except where such indemnification or advance is mandated by law or the order, judgment or decree of any court of competent jurisdiction, in any circumstance where it appears:

(a) That it would be inconsistent with a provision of the Certificate of Incorporation, these Bylaws, a resolution of the stockholders or an agreement in effect at the time of the accrual of the alleged cause of the action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(b) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

ARTICLE 7

Stock Certificates

7.1 Certificates for Shares. The shares of the Corporation shall be represented by certificates or shall be uncertificated. Certificates shall be signed by, or be in the name of the Corporation by, the Chairman of the Board, or the Chief Executive Officer or a Vice President and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the Corporation.

Within a reasonable time after the issuance or transfer of uncertified stock, the Corporation shall send to the registered owner thereof a written notice containing the information required by the DGCL or a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof, and the qualifications, limitations or restrictions of such preferences and/or rights.

7.2 Signatures on Certificates. Any or all of the signatures on a certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

7.3 Transfer of Stock. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate of shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the Corporation to issue a new certificate to the person entitled thereto, to cancel the old certificate and record the transaction upon its books. Upon receipt of proper transfer instructions from the registered owner of uncertificated shares, such uncertificated shares shall be canceled, and issuance of new equivalent uncertificated shares or certificated shares shall be made to the person entitled thereto, and the transaction shall be recorded upon the books of the Corporation.

7.4 Registered Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a percent registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

7.5 Record Date. In order that the Corporation may determine the stockholders of record who are entitled to receive notice of, or to vote at, any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or to exercise any rights in respect of any change, conversion, or exchange of stock or for the purpose of any lawful action, the Board may fix, in advance, a record date which shall not be more than sixty (60), nor less than ten (10), days prior to the date of such meeting, nor more than sixty (60) days prior to the date of any other action. A determination of stockholders of record entitled to notice or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

7.6 Lost, Stolen or Destroyed Certificates. The Board may direct that a new certificate or certificates be issued to replace any certificate or certificates theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing the issue of a new certificate or certificates, the Board may, in its discretion and as a condition precedent to the issuance thereof, require the owner of the lost, stolen or destroyed certificate or certificates, or his or her legal representative, to advertise the same in such manner as it shall require, and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

ARTICLE 8

Notices

8.1 Notice. Whenever, under the provisions of the statutes or of the Certificate of Incorporation or of these Bylaws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his or her address as it appears on the records of the Corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic mail or other electronic transmission in the manner provided in Section 232 of the DGCL. An affidavit of the secretary or an assistant secretary or of the transfer agent of the Company that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. Notice to directors may also be given by telephone or by electronic mail or other electronic transmission.

8.2 Waiver. Whenever any notice is required to be given under the provisions of the statutes or of the Certificate of Incorporation or of these Bylaws, a waiver thereof in writing, signed by the person or persons entitled to said notice or waiver by electronic mail or other electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE 9

General Provisions

9.1 Dividends. Dividends upon the capital stock of the Corporation, subject to any restrictions contained in the DGCL or the provisions of the Certificate of Incorporation, if any, may be declared by the Board at any regular or special meeting. Dividends may be paid in cash, in property or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation.

9.2 Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends, such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for such other purpose as the directors shall think conducive to the interest of the Corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

9.3 Annual Statement. The Board shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the Corporation.

9.4 Checks. All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board may from time to time designate.

9.5 Corporate Seal. The Board may provide a suitable seal, containing the name of the Corporation, which seal shall be in charge of the Secretary. If and when so directed by the Board or a committee thereof, duplicates of the seal may be kept and used by the Treasurer or by an Assistant Secretary or Assistant Treasurer.

9.6 Execution of Corporate Contracts and Instruments. The Board, except as otherwise provided in these Bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the Corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the Corporation by any contract or engagement, or to pledge its credit or to render it liable for any purpose or for any amount.

ARTICLE 10

Right Of First Refusal

10.1 Grant. No stockholder shall sell, assign, pledge, or in any manner transfer any of the shares of common stock of the Corporation or any right or interest therein, whether voluntarily or involuntarily, by operation of law, gift or otherwise, except by a transfer which meets the requirements hereinafter set forth in this Article 10. Any sale or transfer, or purported sale or transfer, of securities of the Corporation shall be null and void unless the terms, conditions, and provisions of this Article 10 are strictly observed and followed.

10.2 Notice of Intended Transfer. If a stockholder desires to sell or otherwise transfer any of such stockholder's shares of common stock, such transferring stockholder shall first give written notice thereof to the Corporation. Such notice shall name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer.

10.3 Exercise of Right. For thirty (30) days following receipt of such notice, the Corporation shall have the option to purchase all (but not less than all) of the shares specified in such notice at the price and upon substantially the terms set forth in such notice; provided, however, that, with the consent of the transferring stockholder, the Corporation shall have the option to purchase a lesser portion of the shares specified in such notice at the price and upon substantially the terms set forth therein. In the event of a gift, property settlement or other transfer in which the proposed transferee is not paying the full price for the shares, or a transfer that is not a bona fide arm's length transaction (and a transfer to a competitor of the Corporation shall not be deemed to be such a bona fide arms' length transaction) or does not involve a price freely set by the transferring stockholder and the proposed transferee, the price shall be deemed to be the fair market value of the shares at such time as determined in good faith by the Board. In the event the Corporation elects to purchase all of the shares or, with consent of the transferring stockholder, a lesser portion of the shares, it shall give written notice to the transferring stockholder of its election, and settlement for such shares shall be made as provided below.

In the event the Corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in the transferring stockholder's notice, the Secretary of the Corporation shall so notify the transferring stockholder and settlement thereof shall be made within thirty (30) days after the Secretary of the Corporation receives the transferring stockholder's notice. The purchase price for the shares to be purchased by the Corporation and/or its assignee(s) shall be paid by cash, check, cancellation of indebtedness or other obligation of the transferring stockholder to the Corporation, or any combination of the foregoing; provided, however, that, if the terms of payment set forth in the transferring stockholder's notice are other than cash against delivery, the Corporation and/or its assignee(s) shall pay for such shares on the same terms and conditions as set forth in the transferring stockholder's notice. Should the purchase price specified in such notice be payable in property other than

cash, the Corporation shall have the right to pay the purchase price in the form of the cash equivalent of such property as determined in good faith by the Board.

10.4 Non-Exercise of Right. In the event the Corporation and/or its assignees(s) do not elect to acquire all of the shares specified in the transferring stockholder's notice, such transferring stockholder may, within the sixty (60) day period following the expiration of the right granted to the Corporation and/or its assignees(s) herein, transfer the shares specified in the transferring stockholder's notice that were not acquired by the Corporation and/or its assignees(s) as specified in the transferring stockholder's notice. All shares so transferred by the transferring stockholder shall continue to be subject to the provisions of this Article 10 in the same manner as before such transfer. Any proposed decrease in the purchase price, increase of the number of shares to be sold, change in the proposed transferee or modification of the terms and conditions of such transfer shall require delivery of a new notice to the Corporation and shall again give rise to the right of first refusal provided in this Article 10. To the extent that any of the shares are not transferred pursuant to the terms of the transferring stockholder's notice within such sixty (60) day period, such shares shall once again be subject to the right of first refusal provided in this Article 10.

10.5 Exempt Transfers. Anything to the contrary contained herein notwithstanding, the following transactions shall be exempt from the provisions of this Article 10:

(a) A stockholder's transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership. "Immediate family" as used herein shall mean spouse, lineal descendant, father, mother, grandmother, grandfather, brother or sister of the stockholder making such transfer.

(b) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent transfer of such shares by such institution shall be conducted in the manner set forth in this Article 10.

(c) A stockholder's transfer of any or all of such stockholder's shares to the Corporation or to any other stockholder of the Corporation.

(d) A stockholder's transfer of any or all of such stockholder's shares to a person who, at the time of such transfer, is an officer or director of the Corporation.

(e) A corporate stockholder's transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder.

(f) A corporate stockholder's transfer of any or all of its shares to any or all of its stockholders.

(g) A transfer by a stockholder that is a limited or general partnership to any or all of its partners or former partners.

(h) A transfer of common stock issued upon the conversion of preferred stock of the Company or any right or interest in such common stock (including without limitation the right to receive common stock on conversion of any preferred stock).

(i) A transfer in a bona fide underwritten public offering pursuant to a registration statement declared effective under the Securities Act of 1933, as amended.

In any such case, the transferee, assignee or other recipient of such shares shall receive and hold such shares subject to the provisions of this Article 10, and there shall be no further transfer of such shares except in accordance with this Article 10; provided, however, that common stock issued pursuant to subparagraph (viii) above shall not be subject to this paragraph.

10.6 Amendment and Waiver. The provisions of this Article 10 may be waived with respect to any transfer either by the Corporation, upon duly authorized action of its Board, or by the stockholders, upon the vote or written consent of the holders of a majority of the voting power of the Corporation (excluding the votes or consents represented by those shares to be transferred by the transferring stockholder). This Article 10 may be amended or repealed either by a duly authorized action of the Board or by the stockholders, upon the vote or written consent of the holders of a majority of the voting power of the Corporation.

10.7 Termination of Right. The right of first refusal set forth in this Article 10 shall terminate and cease to have effect upon the earliest to occur of (a) the first date on which shares of the Corporation's common stock are held of record by more than five hundred (500) persons, (b) the determination by the Board that a public market exists for the outstanding shares of the Corporation's common stock, or (c) the closing of a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended covering the offer and sale of the Corporation's common stock in the aggregate amount of at least $5,000,000.

10.8 Legend. The certificates representing shares of common stock of the Corporation shall bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

> THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE CORPORATION.

ARTICLE 11

Amendments

Any amendment, change, alteration, addition or repeal of the Bylaws of the Corporation shall be approved by the holders of a majority of the shares of the Corporation entitled to vote thereon.

CERTIFICATE OF SECRETARY

I, the undersigned, hereby certify:

1. That I am the duly elected, acting and qualified Secretary of SILVACO GROUP, INC., a Delaware corporation; and

2. That the foregoing Amended and Restated Bylaws were adopted as the Bylaws of the Corporation on April 18, 2021 by the stockholders of the Corporation.

IN WITNESS WHEREOF, I have hereunto subscribed my name as of this 18th day of April, 2021.

/s/ Brian Bradburn

Brian Bradburn
Secretary

4/18/2021

SILVACO

December 25, 2021

Raul Camposano

Chief Technology Officer (CTO)

Dear Raul,

On behalf of Silvaco Inc., ("the "Company"), we are pleased to offer you the position of **Chief Technology Officer (CTO) of Silvaco, Inc.** (the "Position") in **Santa Clara, CA**, reporting directly to the Chief Executive Officer, Dr. Babak Taheri. We are excited about the opportunity to work with you. We believe that it is important to a healthy working relationship that both parties understand the terms and conditions of employment before commencing employment. In order to ensure that both you and the Company have a common understanding, we set forth below some of the fundamental premises.

The terms and conditions of your employment are as follows:

Commencement Date: Between Jan 24th to Feb 7th

Baseline Salary: Your "Base Salary" will be $23,583.33 per month ($283,000.00 per annum), less deductions required by law, paid semi-monthly on the 5th and 20th of the month.

Location: Santa Clara, California

Stock Incentive Plan: Silvaco offers a stock incentive plan and intends to periodically issue Restricted Stock Units (RSU's) to employees as incentive and reward for performance. Shares will vest at 25% per year over a four-year period. The amount of RSU's awarded will be determined by a committee appointed by the company's board of directors.

RSU: 100,000 Restricted Stock Units, (RSU), granted upon hire.
(RSU's to be approved by the Board of Directors)

Bonus option: **Corporate Bonus:** The Corporate Bonus pool is a profit pool that is awarded based upon key corporate goals and your annual goals which will be set by your manager.

2022 performance Bonus: Your target 2022 performance bonus will be $40,000. This bonus will be quarterly ($10,000/Quarter) based on achieving the following performance goals:

Q12022 Performance Goal: EDA, and ARD re-organization, and help with both the company product roadmap/strategy and investor pitch. Combine EDA and ARD under one VP/GM. Currently all the revenues and expenses are rolled up under EDA. ARD can be the R&D team for EDA and fully functional under the same. Work on EDA BU plan to break even or become profitable. Keep target 15% growth overall at Company level.

Q22022 Performance Goal: Final fine tuning of roadmaps and strategy for next 3 years and contribute to the investor deck as needed for IPO/Bankers/Investors. Enable LVS/DRC to support FinFET. Work with Dolphin design as a strategy partner to beta test LVS and DRC.

Q32022 Performance Goal: Combining point tools products to Solutions. This will come out of strategy and roadmaps. Currently VISO & SiCure need be integrated after SiCure can supprot EM/IR/Thermal (Q2-Q3). Integrate SS into Varman, Integrate MaxSPICE in compilers and in XMA …, IPO readiness.

Q42022 Performance Goal: Profitability of all Bus and IPO support.

Benefits: You will be eligible to receive certain employee benefits per the Company's policy as follows:

- **Medical, Dental, Vision & Life Insurance Benefits**. Silvaco, Inc. offers Cigna PPO Plans or Kaiser HMO, dental and VSP vision coverage to employees and their eligible dependents. The company pays 90% of the employee's insurance premium. Coverage begins the 1st day of the month following your date of hire. The Company also provides $200,000 of Life insurance and AD&D coverage at no cost to the employee.

- **401(k) Retirement Savings Plan**. You will become eligible to participate in the Company's 401(k) Plan on the first day of the calendar quarter following 90 days of continuous employment. All eligible employees may receive a 1.5% company match.

- **Flexible Time Off**. You will accrue flexible time-off (FTO) according to the following:

Length of employment	Number of Days of FTO	Number of Hours of FTO	Accrual rate of hours per pay period
Hire Date to 5 years	**13**	**103.92**	**4.33**
5 but less than 10 years	**16**	**127.92**	**5.33**
10 or more years	**18**	**144**	**6**

Position Description and Responsibilities

The CTO will be the driving force behind Silvaco's strategy and execution. The CTO will be an experienced leader with a hands-on orientation. The CTO will have a strong strategic orientation while also being action-oriented and capable of driving the vision and mission of the company. The CTO will expand the organization's external presence while developing the strategies and technical infrastructure to support achievement of the Company's objectives. The CTO will have the following direct report and be fully responsible for Business Unit Strategies & day to day oversight: EDA, TCAD, IP Division and Advance R & D division will report directly to the CTO.

Other key responsibilities include:

- Define and execute engineering strategies for BU departments that stabilizes existing products and provides a scalable foundation to evolve in line with projected business growth by the Company. This is 15% aggregated YOY growth.
- Manage an extensive and complex range of projects and product lines using software development and project management processes that yield consistently excellent results on time, within budget, and in step with current and anticipated customer needs.
- Create and deploy KPIs and implement strategies to exceed both the internal and external requirements
- Facilitate collaboration across business units to increase productivity/profitability, reduce waste, and improve communication and teamwork within a highly distributed organization.
- Be a credible leader demonstrating a strong professional presence while conveying trust and connection with teams while leading the organization.
- Determine the long-term vision, strategy and business plans that provide desired market penetration, sustainable 15% YOY, and profitable growth.
- Drive key decisions around Silvaco's next-generation emerging technologies and products.
- Drive on-going cost improvements and operational efficiencies to achieve optimal P&L and effective day-to-day management of the company.
- Understand principal risk to the company and ensure risk is monitored and managed.
- Develop and foster strong industry relationships internationally and locally
- Serve as Chief Technology spokesperson for the company, communicating effectively with shareholders, prospective investors, team members, customers, and suppliers.
- Build leadership capability through strong executive talent recruitment, retention, and on-going executive development; create a cohesive and effective executive leadership team.
- Foster a corporate culture that encourages, recognizes and rewards leadership, excellence, and innovation.
- Is a highly innovative, hands-on leader who thinks like an owner of the business. Has an unending passion and quite effectively employs fact and data riven-based decision-making process

Other Matters

For purposes of federal immigration law, you will be required to provide the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

By your signature below, you acknowledge that you have disclosed to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed, and you represent that the signing of this offer and commencement of employment with the Company will not violate any such agreement.

Moreover, you agree that, during the term of your employment with the Company, you will not engage in any other employment, occupation, consulting, or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to the Company. You confirm that you are not bound by any other lawful agreement with any prior or current employer, person or entity that would prevent you from fully performing your duties with the Company, and that you will not during your employment with the Company, or have not during the pre-hire process, use or disclose any proprietary or confidential information, or trade secrets, of your former or concurrent employers or companies.

As a Company employee, you will be expected to abide by the Company's rules and standards. Specifically, you will be required to sign an acknowledgement that you have read and that you understand the Company's rules of conduct which are included in the Company Handbook.

As a condition of your employment, you are also required to sign and comply with the Company's standard Employee Invention Assignment and Confidentiality Agreement which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of Company proprietary information.

You and the Company agree to submit to mandatory binding arbitration any and all claims arising out of or related to your employment with the Company and the termination thereof, including, but not limited to, claims for unpaid wages, wrongful termination, torts, stock or stock options or other ownership interest in the Company, and/or discrimination (including harassment) based upon any federal, state or local ordinance, statute, regulation or constitutional provision except that each party may, at its, his or her option, seek injunctive relief in court related to the improper use, disclosure or misappropriation of a party's proprietary, confidential or trade secret information. All arbitration hearings shall be conducted in California. The parties hereby waive any rights they may have to trial by jury in regard to such claims. This Agreement does not restrict your right to file administrative claims you may bring before any government agency where, as a matter of law, the parties may not restrict the employee's ability to file such claims (including, but not limited to, the National Labor Relations Board, the Equal Employment Opportunity Commission, and the Department of Labor). However, the parties agree that, to the

fullest extent permitted by law, arbitration shall be the exclusive remedy for the subject matter of such administrative claims.

To accept the Company's offer, please sign and date this letter in the space provided below. This letter, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews, or pre-employment negotiations, whether written or oral.

Your employment with Silvaco, Inc. will be on an at-will basis, which means you and the company are free to terminate the employment relationship at any time for any reason. This letter is not a contract or guarantee of employment for a definite amount of time.

If you have any questions, please contact Babak Taheri

Sincerely,

/s/ Babak Taheri

Babak Taheri
Chief Executive Officer
Silvaco, Inc.

I hereby accept the Chief Technology Officer (CTO)

/s/ Raul Camposano *12/27/2021*

Raul Camposano Date

SILVACO GROUP, INC.

AMENDED AND RESTATED 2014 STOCK INCENTIVE PLAN

Originally Adopted by the Board on January 23, 2014

Originally Approved by the Stockholders on January 24, 2014

Amended and Restated by the Board on March 18, 2024

TABLE OF CONTENTS

SILVACO GROUP, INC.
AMENDED AND RESTATEED 2014 STOCK INCENTIVE PLAN

(As Amended and Restated Effective March 18, 2024)

SECTION 1. PURPOSE.

The Plan was originally adopted by the Board of Directors effective January 23, 2014 and is hereby amended and restated by the Board of Directors effective March 18, 2024. The purpose of the Plan is to offer selected service providers the opportunity to acquire equity in the Company through awards of Options (which may constitute incentive stock options or nonstatutory stock options), Restricted Stock Awards, Stock Appreciation Rights, Restricted Stock Units and Other Stock Awards.

The Awards under the Plan are intended to be exempt from the securities qualification requirements of the California Corporations Code by satisfying the exemption under section 25102(o) of the California Corporations Code. However, Awards may be made in reliance upon other state securities law exemptions. To the extent that other state exemptions are relied upon, the terms of this Plan which are included only to comply with section 25102(o) shall be disregarded to the extent provided in the applicable Award Agreement. In addition, to the extent that section 25102(o) or the regulations promulgated thereunder are amended to delete any requirements set forth in such law or regulations, the terms of this Plan which are included only to comply with section 25102(o) or the regulations promulgated thereunder as in effect prior to any such amendment shall be disregarded to the extent permitted by applicable law.

SECTION 2. DEFINITIONS.

2.1 "*Award*" shall mean, individually or collectively, a grant under the Plan of Options, Restricted Stock Awards, Stock Appreciation Rights, Restricted Stock Units or Other Stock Awards.

2.2 *"Award Agreement"* shall mean the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan, including any documents incorporated by reference therein, as determined by the Board. The Award Agreement is subject to the terms and conditions of the Plan.

2.3 "*Board*" shall mean the Board of Directors of the Company, as constituted from time to time.

2.4 "*Cause*" shall mean (i) in the case where the Employee, Consultant or Outside Director does not have an employment agreement, consulting agreement or similar agreement in effect with the Company or its affiliate at the time of grant of the Award or where there is such an agreement but it does not define "cause" (or words of like import), conduct related to the Employee's, Consultant's or Outside Director's service to the Company or an affiliate for which either criminal or civil penalties against the Employee, Consultant or Outside Director may be sought, misconduct, insubordination, material violation of the

Company's or its affiliate's policies, disclosing or misusing any confidential information or material concerning the Company or an affiliate or material breach of any employment agreement, consulting agreement or similar agreement, or (ii) in the case where the Employee, Consultant or Outside Director has an employment agreement, consulting agreement or similar agreement in effect with the Company or its affiliate at the time of grant of the Award that defines a termination for "cause" (or words of like import), "cause" as defined in such agreement; provided, however, that with regard to any agreement that defines "cause" on occurrence of or in connection with a change in control, such definition of "cause" shall not apply until a change in control actually occurs and then only with regard to a termination thereafter. Notwithstanding the foregoing, in the case of an Award which is intended to comply with section 25102(o) of the California Corporations Code, such event must also constitute "cause" under applicable law.

2.5 "*Change in Control*" shall mean the occurrence of any of the following events:

(a) The consummation of a merger or consolidation of the Company with or into another entity or any other corporate reorganization, if persons who were not stockholders of the Company immediately prior to such merger, consolidation or other reorganization own immediately after such merger, consolidation or other reorganization fifty percent (50%) or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity;

(b) The consummation of the sale, transfer or other disposition of all or substantially all of the Company's assets or the stockholders of the Company approve a plan of complete liquidation of the Company; or

(c) Any "person" (as defined below) who, by the acquisition or aggregation of securities, is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the "Base Capital Stock"); except that any change in the relative beneficial ownership of the Company's securities by any person resulting solely from a reduction in the aggregate number of outstanding shares of Base Capital Stock, and any decrease thereafter in such person's ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person's beneficial ownership of any securities of the Company.

For purposes of Section 2.5(c), the term "person" shall have the same meaning as when used in sections 13(d) and 14(d) of the Exchange Act but shall exclude (1) a trustee or other fiduciary holding securities under an employee benefit plan maintained by the Company or a Parent or Subsidiary, (2) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of

the Stock, and (3) Family Members of the Principal Stockholder (as defined below), any custodian or trustee wholly for the account or benefit of the Principal Stockholder or any such Family Members, or any trust, partnership, limited liability company or other entity wholly for the benefit of, or the ownership interests of which are owned wholly by, the Principal Stockholder or any such Family Members. For purposes of Section 2.5(c), a "Family Member" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, domestic partner, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships.

Notwithstanding the foregoing, the term "Change in Control" shall not include (a) a transaction the sole purpose of which is to change the state of the Company's incorporation, (b) a transaction the sole purpose of which is to form a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction, or (c) a transaction the sole purpose of which is to make an initial public offering of the Company's Stock.

2.6 "*Code*" shall mean the Internal Revenue Code of 1986, as amended.

2.7 "*Committee*" shall mean the committee designated by the Board, which is authorized to administer the Plan, as described in Section 3 hereof.

2.8 "*Company*" shall mean Silvaco Group, Inc., a Delaware corporation.

2.9 "*Consultant*" shall mean a consultant or advisor who is not an Employee or Outside Director and who performs bona fide services for the Company, a Parent or Subsidiary.

2.10 "*Disability*" shall mean a condition that renders an individual unable to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment.

2.11 "*Employee*" shall mean any individual who is a common-law employee of the Company, a Parent or a Subsidiary and who is an "employee" within the meaning of section 3401(c) of the Code and regulations issued thereunder.

2.12 "*Exchange Act*" shall mean the U.S. Securities and Exchange Act of 1934, as amended.

2.13 "*Exercise Price*" shall mean the amount for which one Share may be purchased upon the exercise of an Option, or the amount from which appreciation is measured upon exercise of a Stock Appreciation Right, as specified in an Award Agreement.

2.14 "*Fair Market Value*" means, with respect to a Share, the market price of one Share of Stock, determined by the Board in good faith. Such determination shall be conclusive and binding on all persons.

2.15 "*ISO*" shall mean an incentive stock option described in section 422(b) of the Code.

2.16 "*NSO*" shall mean a stock option that is not an ISO.

2.17 "*Option*" shall mean an ISO or NSO granted under the Plan and entitling the holder to purchase Shares.

2.18 "*Other Stock Award*" shall mean an Award based in whole or in part by reference to Common Stock which is granted pursuant to the terms and conditions of Section 9.7 of the Plan.

2.19 "*Outside Director*" shall mean a member of the Board of the Company, a Parent or a Subsidiary who is not an Employee.

2.20 "*Parent*" shall mean any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

2.21 "*Participant*" shall mean the holder of an outstanding Award.

2.22 "Plan" shall mean the Silvaco Group, Inc. 2014 Stock Incentive Plan.

2.23 "*Principal Stockholder*" shall mean Katherine Ngai-Pesic.

2.24 "*Purchase Price*" shall mean the consideration for which one Share may be acquired under the Plan pursuant to a Restricted Stock Award.

2.25 "*Restricted Stock Award*" shall mean an award or sale of Shares pursuant to the terms and conditions of Section 6 of the Plan.

2.26 "*Restricted Stock Unit*" shall mean an Award of an unfunded and unsecured right to receive Shares (or cash or a combination of Shares and cash, as determined in the sole discretion of the Board) upon settlement of the Award, which is granted pursuant to the terms and conditions of Section 9 of the Plan.

2.27 "*Securities Act*" shall mean the U.S. Securities Act of 1933, as amended.

2.28 "*Service*" shall mean service as an Employee, a Consultant or an Outside Director, subject to such further limitations as may be set forth in the applicable Award Agreement. Service shall be deemed to continue during a bona fide leave of absence approved by the Company in writing if and to the extent that continued crediting of Service for purposes of the Plan is expressly required by the terms of such leave or by applicable law, as determined by the Company. However, for purposes of determining whether an Option is entitled to ISO status, and to the extent required under the Code, an Employee's employment will be treated as terminating three (3) months after such Employee went on leave, unless such Employee's right to return to active work is guaranteed by law or by a contract or such Employee immediately returns to active work. The Company determines

which leaves count toward Service, and when Service terminates for all purposes under the Plan.

2.29 "*Share*" shall mean one share of Stock, as adjusted in accordance with Section 11 (if applicable).

2.30 "*Stock*" shall mean the common stock of the Company.

2.31 "*Stock Appreciation Right*" or "*SAR*" shall mean a stock appreciation right which is granted pursuant to the terms and conditions of Section 8 of the Plan.

2.32 "*Subsidiary*" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

2.33 "*Ten-Percent Stockholder*" means an individual who owns more than ten percent (10%) of the total combined voting power of all classes of outstanding stock of the Company, its Parent or any of its Subsidiaries. In determining stock ownership for purposes of this Section 2.32, the attribution rules of section 424(d) of the Code shall be applied.

SECTION 3. ADMINISTRATION.

3.1 *General Rule* The Plan shall be administered by the Board. However, the Board may delegate any or all administrative functions under the Plan otherwise exercisable by the Board to one or more Committees. Each Committee shall consist of at least one member of the Board who has been appointed by the Board. Each Committee shall have the authority and be responsible for such functions as the Board has assigned to it. If a Committee has been appointed, any reference to the Board in the Plan shall be construed as a reference to the Committee to whom the Board has assigned a particular function. To the extent permitted by applicable law, the Board may also authorize one or more officers of the Company to designate Employees, other than such authorized officer or officers, to receive Awards and/or to determine the number of such Awards to be received by such persons; provided, however, that the Board shall specify the total number of Awards that such officer or officers may so award.

3.2 *Board Authority and Responsibility* Subject to the provisions of the Plan, the Board shall have full authority and discretion to take any actions it deems necessary or advisable for the administration of the Plan. All decisions, interpretations and any other actions of the Board with respect to the Plan shall be final and binding on all persons deriving rights under the Plan.

SECTION 4. ELIGIBILITY.

Only Employees shall be eligible for the grant of ISOs. Only Employees, Consultants and Outside Directors shall be eligible for the grant of NSOs, Restricted Stock Awards, Stock Appreciation Rights, Restricted Stock Units or Other Stock Awards. Notwithstanding anything herein to the contrary, the Principal Stockholder shall not be eligible for the grant of Awards under the Plan.

SECTION 5. STOCK SUBJECT TO PLAN.

5.1 *Share Limit* Subject to Section 11, the aggregate number of Shares which may be issued under the Plan shall be 9,200,000 Shares (the "Authorized Share Limit"). The number of Shares which are subject to Options or other rights to acquire Shares pursuant to Awards which are outstanding at any time shall not exceed the number of Shares which then remain available for issuance under the Plan. The Company, during the term of the Plan, shall at all times reserve and keep available sufficient Shares to satisfy the requirements of the Plan. Shares offered under the Plan may be authorized but unissued Shares or treasury Shares.

5.2 *Additional Shares* Shares subject to Awards that are cancelled, forfeited, settled in cash or expire by their terms, and Shares subject to Awards that are used to pay withholding obligations or the Exercise Price of an Option, will again be available for grant and issuance in connection with other Awards. However, Shares that have actually been issued under the Plan will not be added back to the number of Shares available for issuance under the Plan unless reacquired by the Company pursuant to a forfeiture provision.

5.3 *Incentive Stock Option Limit* Subject to the foregoing limits, the aggregate number of Shares that may be issued under the Plan upon the exercise of ISOs shall not exceed ten times the Authorized Share Limit set forth in Section 5.1 (as amended from time to time and as adjusted pursuant to Section 11), plus, only to the extent allowable under section 422 of the Code, any Shares previously issued under the Plan that are reacquired by the Company pursuant to a forfeiture provision.

SECTION 6. RESTRICTED STOCK.

6.1 *Restricted Stock Award* Subject to the terms of the Plan, the Board may grant Restricted Stock Awards to Participants in such amounts as the Board, in its sole discretion, may determine. Each award or sale of Shares pursuant to a Restricted Stock Award under the Plan shall be evidenced by an Award Agreement between the Participant and the Company. Such award or sale shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions imposed by the Board, as set forth in the Award Agreement, that are not inconsistent with the Plan. The provisions of such Award Agreements need not be identical.

6.2 *Duration of Offers and Non-transferability of Rights* Any right to acquire Shares pursuant to a Restricted Stock Award shall automatically expire if not exercised by the Participant within thirty (30) days after the Company communicates the grant of such right to the Participant, unless otherwise determined by the Board. Such right shall be nontransferable and shall be exercisable only by the Purchaser to whom the right was granted, except to the extent otherwise determined by the Board in its sole discretion.

6.3 *Consideration* To the extent an Award consists of newly issued Shares, the Award recipient shall furnish consideration having a value not less than the par value of such Shares as determined by the Board. Subject to the foregoing in this Section 6.3, the Board shall determine the amount of the Purchase Price in its sole discretion. The Purchase Price shall be payable in a form described in Section 10.

6.4 *Vesting Restrictions* Each award or sale of Shares shall be subject to such vesting and forfeiture conditions as the Board may determine. Such restrictions shall be set forth in the applicable Award Agreement and, unless otherwise provided in the Award Agreement, shall apply to any dividends paid with respect to such Shares.

SECTION 7. STOCK OPTIONS.

7.1 *Stock Option Award* Subject to the terms of the Plan, the Board may grant Options to Participants in such amounts as the Board, in its sole discretion, may determine. Each grant of an Option under the Plan shall be evidenced by an Award Agreement between the Participant and the Company. The Option shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions imposed by the Board, as set forth in the Option Award Agreement, which are not inconsistent with the Plan. The provisions of the various Option Award Agreements entered into under the Plan need not be identical.

7.2 *Number of Shares; Kind of Option* Each Option Award Agreement shall specify the number of Shares that are subject to the Option and shall provide for the adjustment of such number in accordance with Section 11. The Award Agreement shall also specify whether the Option is intended to be an ISO or an NSO.

7.3 *Exercise Price* Each Award Agreement shall set forth the Exercise Price, which shall be payable in a form described in Section 10. Subject to the following requirements, the Exercise Price under any Option shall be determined by the Board in its sole discretion:

(a) Minimum Exercise Price for ISOs. The Exercise Price per Share of an ISO shall not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant; provided, however, that the Exercise Price per Share of an ISO granted to a Ten-Percent Stockholder shall not be less than one hundred ten percent (110%) of the Fair Market Value of a Share on the date of grant.

(b) Minimum Exercise Price for NSOs. The Exercise Price per Share of an NSO shall not be less than one-hundred percent (100%) of the Fair Market Value of a Share on the date of grant.

7.4 *Term* Each Award Agreement shall specify the term of the Option. The term of an Option shall in no event exceed ten (10) years from the date of grant. The term of an ISO granted to a Ten-Percent Stockholder shall not exceed five (5) years from the date of grant. Subject to the foregoing, the Board in its sole discretion shall determine when an Option shall expire.

7.5 *Exercisability* Each Award Agreement shall specify the date when all or any installment of the Option is to become exercisable; provided, however, that no Option shall be exercisable unless the Participant has delivered to the Company an executed copy of the Award Agreement. Subject to the following restrictions, the Board in its sole discretion shall determine when all or any installment of an Option is to become exercisable and may, in its discretion, provide for accelerated exercisability in the event of a Change in Control or other events. An Option Award Agreement may permit the Participant to exercise the Option prior to the time that it has become vested provided that the Shares acquired on exercise will be treated as unvested and subject to a right of repurchase by the Company and any other restrictions that the Board determines appropriate as set forth in the Award Agreement.

7.6 *Transferability of Options*. During a Participant's lifetime, his or her Options shall be exercisable only by the Participant or by the Participant's guardian or legal representatives, and shall not be transferable other than by beneficiary designation, will or the laws of descent and distribution. Notwithstanding the foregoing, however, to the extent permitted by the Board in its sole discretion, an NSO may be transferred by the Participant to a revocable trust or to one or more family members or a trust established for the benefit of the Participant and/or one or more family members to the extent permitted by section 260.140.41(c) of Title 10 of the California Code of Regulations and Rule 701 of the Securities Act.

7.7 *Exercise of Options on Termination of Service*. Each Option shall set forth the extent to which the Participant shall have the right to exercise the Option following termination of the Participant's Service. Each Award Agreement shall provide the Participant with the right to exercise the Option following the Participant's termination of Service during the Option term, to the extent the Option was exercisable for vested Shares upon termination of Service, for at least thirty (30) days if termination of Service is due to any reason other than Cause, death or Disability, and for at least six (6) months after termination of Service if due to death or Disability (but in no event later than the expiration of the Option term). If the Participant's Service is terminated for Cause, the Option Award Agreement may provide that the Participant's right to exercise the Option terminates immediately on the effective date of the Participant's termination. To the extent the Option was not exercisable for vested Shares upon termination of Service, the Option shall terminate when the Participant's Service terminates. Subject to the foregoing, such

provisions shall be determined in the sole discretion of the Board, need not be uniform among all Options issued pursuant to the Plan, and may reflect distinctions based on the reasons for termination of Service.

7.8 *No Rights as a Stockholder*. A Participant, or a transferee of a Participant, shall have no rights as a stockholder with respect to any Shares covered by the Option until such person becomes entitled to receive such Shares by filing a notice of exercise and paying the Exercise Price pursuant to the terms of the Option. No adjustments shall be made, except as provided in Section 11.

7.9 *Modification, Extension and Renewal of Options*. Within the limitations of the Plan, the Board may modify, extend or renew outstanding Options or may accept the cancellation of outstanding Options (to the extent not previously exercised), whether or not granted hereunder, in return for the grant of new Options for the same or a different number of Shares and at the same or a different Exercise Price, or in return for the grant of a different Award for the same or a different number of Shares. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Participant, materially impair his or her rights or increase the Participant's obligations under such Option.

SECTION 8. STOCK APPRECIATION RIGHTS.

8.1 *Stock Appreciation Right Award* Subject to the terms of the Plan, the Board may grant Stock Appreciation Rights to Participants in such amounts as the Board, in its sole discretion, may determine. Each grant of a Stock Appreciation Right under the Plan shall be evidenced by an Award Agreement between the Participant and the Company. The Stock Appreciation Right shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions imposed by the Board, as set forth in the Award Agreement, which are not inconsistent with the Plan. The provisions of the various Stock Appreciation Right Award Agreements entered into under the Plan need not be identical.

8.2 *Number of Shares* Each Award Agreement shall specify the number of Shares to which the SAR pertains and shall provide for the adjustment of such number in accordance with Section 11.

8.3 *Exercise Price* Each Award Agreement shall specify the Exercise Price of the SAR. The Exercise Price shall not be less than 100% of the Fair Market Value of a Share on the date of grant.

8.4 *Term* Each Award Agreement shall specify the term of the SAR. The term of a SAR shall in no event exceed ten (10) years from the date of grant. Subject to the foregoing, the Board in its sole discretion shall determine when an Option shall expire.

8.5 *Exercisability* Each Award Agreement shall specify the date when all or any installment of the SAR is to become exercisable; provided, however, that no SAR shall be

exercisable unless the Participant has delivered to the Company an executed copy of the Award Agreement. The Board in its sole discretion shall determine when all or any installment of a SAR is to become exercisable and may, in its discretion, provide for accelerated exercisability in the event of a Change in Control or other events. SARs may be awarded in combination with Options, and such Awards may provide that the SARs will not be exercisable unless the related Options are forfeited.

8.6 *Exercise of SARs* Upon exercise of a SAR, the Participant (or any person having the right to exercise the SAR after his or her death) shall receive from the Company (a) Shares, (b) cash or (c) a combination of Shares and cash, as the Board shall determine. The amount of cash and/or the Fair Market Value of Shares received upon exercise of SARs shall, in the aggregate, be equal to the amount by which the Fair Market Value (on the date of surrender) of the Shares subject to the SARs exceeds the Exercise Price.

8.7 *Transferability of SARs* During a Participant's lifetime, his or her SARs shall be exercisable only by the Participant or by the Participant's guardian or legal representatives, and shall not be transferable other than by beneficiary designation, will or the laws of descent and distribution. Notwithstanding the foregoing, however, to the extent permitted by the Board in its sole discretion, a SAR may be transferred by the Participant to a revocable trust or to one or more family members or a trust established for the benefit of the Participant and/or one or more family members to the extent permitted by section 260.140.41(c) of Title 10 of the California Code of Regulations and Rule 701 of the Securities Act.

8.8 *Exercise of SARs on Termination of Service* Each SAR shall set forth the extent to which the Participant shall have the right to exercise the SAR following termination of the Participant's Service. Each Award Agreement shall provide the Participant with the right to exercise the SAR following the Participant's termination of Service during the SAR term, to the extent the SAR was vested upon termination of Service, for at least thirty (30) days if termination of Service is due to any reason other than Cause, death or Disability, and for at least six (6) months after termination of Service if due to death or Disability (but in no event later than the expiration of the SAR term). If the Participant's Service is terminated for Cause, the SAR Award Agreement may provide that the Participant's right to exercise the SAR terminates immediately on the effective date of the Participant's termination. To the extent the SAR was not vested upon termination of Service, the SAR shall terminate when the Participant's Service terminates. Subject to the foregoing, such provisions shall be determined in the sole discretion of the Board, need not be uniform among all SARs issued pursuant to the Plan, and may reflect distinctions based on the reasons for termination of Service.

8.9 *No Rights as a Stockholder* A Participant, or a transferee of a Participant, shall have no rights as a stockholder with respect to any Shares covered by the SAR unless and until such person becomes entitled to receive Shares upon exercise of the SAR. No adjustments shall be made, except as provided in Section 11.

8.10 *Modification, Extension and Renewal of SARs* Within the limitations of the Plan, the Board may modify, extend or renew outstanding SARs or may accept the cancellation of outstanding SARs (to the extent not previously exercised), whether or not granted hereunder, in return for the grant of new SARs for the same or a different number of Shares and at the same or a different Exercise Price, or in return for the grant of a different Award for the same or a different number of Shares. The foregoing notwithstanding, no modification of a SAR shall, without the consent of the Participant, materially impair his or her rights or increase the Participant's obligations under such SAR.

SECTION 9. RESTRICTED STOCK UNITS AND OTHER STOCK AWARDS.

9.1 *Restricted Stock Unit Award* Subject to the terms of the Plan, the Board may grant Restricted Stock Units to Participants in such amounts as the Board, in its sole discretion, may determine. Each Award of Restricted Stock Units under the Plan shall be evidenced by an Award Agreement between the Participant and the Company. Such Award shall be subject to all applicable terms and conditions of the Plan and any other terms and conditions imposed by the Board, as set forth in the Award Agreement, that are not inconsistent with the Plan. The provisions of the various Restricted Stock Unit Award Agreements entered into under the Plan need not be identical.

9.2 *Number of Shares; Payment* Each Restricted Stock Unit Award Agreement shall specify the number of Shares that are subject to the Award and shall provide for the adjustment of such number in accordance with Section 11. Unless otherwise provided in the Award Agreement, no consideration other than services shall be required of the Participant for a Restricted Stock Unit Award.

9.3 *Vesting Conditions* Each Award of Restricted Stock Units may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Award Agreement. The Board may determine, at the time of granting Restricted Stock Units or thereafter, that all or part of such Award shall become vested in the event that a Change in Control occurs with respect to the Company.

9.4 *Settlement of Restricted Stock Units* Unless otherwise provided in the Award Agreement, Restricted Stock Units shall be settled when they vest. The Award Agreement may provide that settlement may be deferred to any later date, provided that the terms of such deferral satisfy the requirements of section 409A of the Code. Settlement of the Restricted Stock Units may be made in the form of cash or whole Shares or a combination thereof, as determined by the Board in its sole discretion.

9.5 *Transfer Restrictions* Unless otherwise provided in the Award Agreement, Restricted Stock Units may not be transferred other than by beneficiary designation, will or the laws of descent and distribution.

9.6 *No Rights as a Stockholder* A Participant, or a transferee of a Participant, shall have no voting, dividend or other rights as a stockholder with respect to any Shares covered by a

Restricted Stock Unit Award until such person receives such Shares upon settlement of the Award. Unless the Award Agreement provides otherwise, the Participant shall have no right to be credited with amounts equal to dividends paid on Shares subject to the Restricted Stock Unit Award. A Participant shall have no rights under a Restricted Stock Unit Award other than those of a general creditor of the Company.

9.7 *Other Stock Awards* The Board may grant other forms of Award under the Plan that are based in whole or in part on Stock or the value thereof. Subject to the provisions of the Plan, the Board shall have authority in its sole discretion to determine the terms and conditions of such Other Stock Awards, including the number of Shares (or the cash equivalent thereof) to be granted pursuant to such Awards.

SECTION 10. PAYMENT FOR SHARES.

10.1 *General* The entire Purchase Price of Shares or Exercise Price of Options issued under the Plan shall be payable in cash, cash equivalents or one of the other forms provided in this Section 10, to the extent provided under Applicable Law.

10.2 *Surrender of Stock* To the extent permitted by the Board in its sole discretion, payment may be made in whole or in part by surrendering (in good form for transfer), or attesting to ownership of, Shares which have already been owned by the Participant; provided, however, that payment may not be made in such form if such action would cause the Company to recognize any (or additional) compensation expense with respect to the Award for financial reporting purposes. Such Shares shall be valued at their Fair Market Value on the date of surrender.

10.3 *Services Rendered* As determined by the Board in its discretion, Shares may be awarded under the Plan in consideration of past or future services rendered to the Company, a Parent or Subsidiary.

10.4 *Promissory Notes* To the extent permitted by the Board in its sole discretion, payment may be made in whole or in part with a full-recourse promissory note executed by the Participant. The interest rate payable under the promissory note shall not be less than the minimum rate required to avoid the imputation of income for U.S. federal income tax purposes. Shares shall be pledged as security for payment of the principal amount of the promissory note, and interest thereon; provided that if the Participant is a Consultant, such note must be collateralized with such additional security to the extent required by applicable laws. In no event shall the stock certificate(s) representing such Shares be released to the Participant until such note is paid in full. Subject to the foregoing, the Board shall determine the term, interest rate and other provisions of the note.

10.5 *Exercise/Sale* To the extent permitted by the Board in its sole discretion, and if a public market for the Shares exists, payment may be made in whole or in part by delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker approved by the Company to sell Shares and to deliver all or part of the sale proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

10.6 *Exercise/Pledge* To the extent permitted by the Board in its sole discretion, and if a public market for the Shares exists, payment may be made in whole or in part by delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker or lender approved by the Company to pledge Shares, as security for a loan, and to deliver all or part of the loan proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

10.7 *Net Exercise* To the extent permitted by the Board in its sole discretion, payment of the Exercise Price may be made by a "net exercise" arrangement pursuant to which the number of Shares issuable upon exercise of the Option shall be reduced by the largest whole number of Shares having an aggregate Fair Market Value that does not exceed the aggregate Exercise Price (plus tax withholdings, if applicable) and any remaining balance of the aggregate Exercise Price (and/or applicable tax withholdings) not satisfied by such reduction in the number of whole Shares to be issued shall be paid by the Participant in cash or other form of payment permitted under the Option Award Agreement.

10.8 *Other Forms of Payment* To the extent permitted by the Board in its sole discretion, payment may be made in any other form that is consistent with applicable laws, regulations and rules.

SECTION 11. ADJUSTMENT OF SHARES.

11.1 *General* In the event of a subdivision of the outstanding Stock, a declaration of a dividend payable in Shares, a declaration of an extraordinary dividend payable in a form other than Shares in an amount that has a material effect on the Fair Market Value of the Stock, a combination or consolidation of the outstanding Stock into a lesser number of Shares, a recapitalization, a spin-off, a reclassification, or a similar occurrence, the Board shall make appropriate adjustments to the following: (i) the number of Shares available for future Awards under Section 5; (ii) the number of Shares covered by each outstanding Award; (iii) the Exercise Price under each outstanding Award; and (iv) the price of Shares subject to the Company's right of repurchase; *provided*, *however*, that fractions of a Share will not be issued but will either be paid in cash at the Fair Market Value of such fraction of a Share or will be rounded down to the nearest whole Share, as determined by the Board.

11.2 *Dissolution or Liquidation* To the extent not previously exercised or settled, Awards shall terminate immediately prior to the dissolution or liquidation of the Company.

11.3 *Mergers and Consolidations* In the event that the Company is a party to a merger or other consolidation, or in the event of a transaction providing for the sale of all or substantially all of the Company's stock or assets, outstanding Awards shall be subject to the agreement of merger, consolidation or sale, in each case without the Participant's consent, except as otherwise expressly provided in the Award Agreement. Subject to compliance with Section 409A of the Code, such agreement may provide, without limitation, for one or more of the following: (i) the continuation of the outstanding Awards by the Company, if the Company is a surviving corporation; (ii) the assumption

of the outstanding Awards by the surviving corporation or its parent; (iii) the substitution by the surviving corporation or its parent of its own awards for such outstanding Awards; (iv) immediate vesting, exercisability and settlement of outstanding Awards followed by the cancellation of such Awards upon or immediately prior to the effectiveness of the transaction; or (v) settlement of the intrinsic value of the outstanding Awards (whether or not then vested or exercisable) in cash or cash equivalents or equity (including cash or equity subject to deferred vesting and delivery consistent with the vesting restrictions applicable to such Awards or the underlying Shares) followed by the cancellation of such Awards (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Board determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment). Any acceleration of payment of an amount that is subject to Section 409A of the Code will be delayed, if necessary, until the earliest time that such payment would be permissible under Section 409A without triggering any additional taxes applicable under Section 409A. The Company will have no obligation to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

11.4 *Reservation of Rights* Except as provided in this Section 11, a Participant shall have no rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any dividend or any other increase or decrease in the number of shares of stock of any class. Any issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or Exercise Price of Shares subject to an Award. The grant of an Award pursuant to the Plan shall not affect in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, to merge or consolidate or to dissolve, liquidate, sell or transfer all or any part of its business or assets.

11.5 *Buyout Provisions* The Board may at any time (a) offer to buy out for a payment in cash or cash equivalents an Award previously granted, or (b) authorize a Participant to elect to cash out an Award previously granted, in either case at such time and based upon such terms and conditions as the Board shall establish.

SECTION 12. REPURCHASE RIGHTS AND TRANSFER RESTRICTIONS.

12.1 *Company's Right to Repurchase Shares*. Shares acquired through an Award shall be subject to such forfeiture conditions, rights of repurchase, rights of first refusal and other transfer restrictions as the Board may determine. Such restrictions shall be set forth in the applicable Award Agreement and, unless otherwise provided in the Award Agreement, shall apply to any dividends paid with respect to such Shares. Such restrictions shall apply in addition to any restrictions otherwise applicable to holders of Shares generally.

SECTION 13. WITHHOLDING AND OTHER TAXES.

13.1 *General*. A Participant or his or her successor shall pay, or make arrangements satisfactory to the Board for the satisfaction of, any federal, state, local or foreign withholding tax obligations that may arise in connection with the Plan. The Company shall not be required to issue any Shares or make any cash payment under the Plan if such obligations are not timely satisfied.

13.2 *Share Withholding* The Board may permit a Participant to satisfy all or part of his or her withholding tax obligations by having the Company withhold all or a portion of any Shares that would otherwise be issued to him or her upon exercise or settlement of an Award, or by surrendering all or a portion of any Shares that he or she previously acquired; provided, however, that in no event may a Participant surrender Shares in excess of the legally required minimum tax withholding amount. Such Shares shall be valued at their Fair Market Value on the date when taxes otherwise would be withheld in cash. Any payment of taxes by assigning Shares to the Company may be subject to restrictions, including any restrictions required by rules of any federal or state regulatory body or other authority. All elections by Participants to have Shares withheld for this purpose shall be made in such form and under such conditions as the Board may deem necessary or advisable.

13.3 *Cashless Exercise/Pledge* The Board may provide that if Company Shares are publicly traded at the time of exercise, arrangements may be made to meet the Participant's withholding obligation by cashless exercise or pledge.

13.4 *Other Forms of Payment* The Board may permit such other means of tax withholding as it deems appropriate.

13.5 *Employer Fringe Benefit Taxes* To the extent permitted by applicable federal, state, local and foreign law, a Participant shall be liable for any fringe benefit tax that may be payable by the Company and/or the Participant's employer in connection with any award granted to the Participant under the Plan, which the Company and/or employer may collect by any reasonable method established by the Company and/or employer.

13.6 *Section 409A* Each Award that provides for "nonqualified deferred compensation" within the meaning of section 409A of the Code shall be subject to such additional rules and requirements as specified by the Board from time to time in order to comply with Section 409A. If any amount under such an Award is payable upon a "separation from service" (within the meaning of section 409A) to a Participant who is then considered a "specified employee" (within the meaning of section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the Participant's separation from service, or (ii) the Participant's death, but only to the extent such delay is necessary to prevent the Award from being subject to interest, penalties and/or additional tax imposed pursuant to section 409A. In addition, the settlement of any such Award may not be accelerated except to the extent permitted by section 409A. The provisions of the Plan and each Award Agreement are intended to comply with or be

exempt from the provisions of section 409A and shall be interpreted in a manner consistent therewith. Notwithstanding any other provision of the Plan or an Award Agreement to the contrary, the Board may in its sole discretion (but without any obligation to do so) amend the terms of any Award to the extent it determines necessary to comply with section 409A.

SECTION 14. LEGAL AND REGULATORY REQUIREMENTS.

Shares shall not be issued under the Plan unless the issuance and delivery of such Shares complies with (or is exempt from) all applicable requirements of law, including (without limitation) the Securities Act of 1933, as amended, the rules and regulations promulgated thereunder, state securities laws and regulations and the regulations of any stock exchange on which the Company's securities may then be listed, and the Company has obtained the approval or favorable ruling from any governmental agency which the Company determines is necessary or advisable. The Company shall not be liable to a Participant or other persons as to: (a) the non-issuance or sale of Shares as to which the Company has not obtained from any regulatory body having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares under the Plan; and (b) any tax consequences expected, but not realized, by any Participant or other person due to the receipt, exercise or settlement of any Award granted under the Plan.

SECTION 15. NO RETENTION RIGHTS.

No provision of the Plan, or any Award granted under the Plan, shall be construed to give any Participant any right to become an Employee or other Service provider, to be treated as an Employee, or to continue in Service for any period of time, or restrict in any way the rights of the Company (or Parent or Subsidiary to whom the Participant provides Service), which rights are expressly reserved, to terminate the Service of such person at any time and for any reason, with or without cause.

SECTION 16. DURATION AND AMENDMENTS.

16.1 *Term of the Plan* The Plan, as set forth herein, shall become effective on the date of its adoption by the Board, subject to the approval of the Company's stockholders. In the event that the stockholders fail to approve this amended and restated Plan within twelve (12) months after its adoption by the Board, any grants, exercises or sales that have already occurred under the Plan shall be rescinded, and no additional grants, exercises or sales shall be made under the Plan after such date. Unless earlier terminated, the Plan shall terminate ten (10) years after the date of the adoption by the Board of this amendment and restatement. The Plan may be terminated on any earlier date pursuant to Section 16.2 below.

16.2 *Right to Amend or Terminate the Plan* The Board may amend, suspend, or terminate the Plan at any time and for any reason. An amendment of the Plan shall not be subject to the approval of the Company's stockholders unless it (i) increases the number of Shares

available for issuance under the Plan (except as provided in Section 11) or (ii) materially changes the class of persons who are eligible for the grant of Awards.

16.3 *Effect of Amendment or Termination* No Shares shall be issued or sold under the Plan after the termination thereof, except upon exercise or settlement of an Award granted prior to such termination. The termination of the Plan, or any amendment thereof, shall not have a material adverse effect on any Award previously granted under the Plan without the holder's consent.

SECTION 17. EXECUTION.

To record the adoption of this amended and restated Plan by the Board on March 18, 2024, effective on such date, the Company has caused its authorized officer to execute the same.

SILVACO GROUP, INC.

By: /s/ Babak Taheri

Its: CEO

SILVACO GROUP, INC.

2024 STOCK INCENTIVE PLAN

TABLE OF CONTENTS

SILVACO GROUP, INC.

2024 STOCK INCENTIVE PLAN

SECTION 1. ESTABLISHMENT AND PURPOSE.

The Plan is effective on the date on which the registration statement covering the initial public offering of the Shares is declared effective by the United States Securities and Exchange Commission (the "**Effective Date**"). The Plan's purpose is to enhance the Company's ability to attract, retain, incent, reward, and motivate persons who make (or are expected to make) important contributions to the Company and/or its Subsidiaries and Affiliates by providing Participants with equity ownership and other incentive opportunities.

SECTION 2. DEFINITIONS.

(a) "**2014 Plan**" means the Silvaco Group, Inc. 2014 Stock Incentive Plan.

(b) "**Affiliate**" means any entity other than a Subsidiary if the Company and/or one or more Subsidiaries own not less than fifty percent (50%) of such entity.

(c) "**Award**" means any award of an Option, a SAR, a Restricted Share, a Stock Unit, a Stock-Based Award, or a Cash-Based Award under the Plan.

(d) "**Award Agreement**" means the agreement between the Company and the recipient of an Award which contains the terms, conditions and restrictions pertaining to such Award.

(e) "**Board of Directors**" or "**Board**" means the Board of Directors of the Company, as constituted from time to time.

(f) "**Cash-Based Award**" means an Award that entitles the Participant to receive a cash-denominated payment.

(g) "**Change in Control**" means the occurrence of any of the following events:

(i) A change in the composition of the Board occurs as a result of which fewer than one-half of the incumbent directors are directors who either:

(A) Had been directors of the Company on the "look-back date" (as defined below) (the "**original directors**"); or

(B) Were elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the aggregate of the original directors who were still in office at the time of the election or nomination and the directors whose election or nomination was previously so approved (the "**continuing directors**");

provided, however, that for this purpose, the "original directors" and "continuing directors" shall not include any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board;

(ii) Any "person" (as defined below) who by the acquisition or aggregation of securities, is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the "**Base Capital Stock**"); except that any change in the relative beneficial ownership of the Company's securities by any person resulting solely from a reduction in the aggregate number of outstanding Shares of Base Capital Stock, and any decrease thereafter in such person's ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person's beneficial ownership of any securities of the Company;

(iii) The consummation of a merger or consolidation of the Company or a Subsidiary of the Company with or into another entity or any other corporate reorganization, if persons who were not stockholders of the Company immediately prior to such merger, consolidation or other reorganization own immediately after such merger, consolidation or other reorganization fifty percent (50%) or more of the voting power of the outstanding securities of each of (A) the Company (or its successor) and (B) any direct or indirect parent corporation of the Company (or its successor); or

(iv) The sale, transfer, or other disposition of all or substantially all of the Company's assets.

For purposes of subsection (g)(i) above, the term "look-back" date means the later of (1) the Effective Date and (2) the date that is twenty-four (24) months prior to the date of the event that may constitute a Change in Control.

For purposes of subsection (g)(ii) above, the term "person" shall have the same meaning as when used in Sections 13(d) and 14(d) of the Exchange Act, but shall exclude (1) a trustee or other fiduciary holding securities under an employee benefit plan maintained by the Company or a Parent or Subsidiary, (2) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of the Stock, and (3) the Company or any Subsidiary of the Company.

Any other provision of this Section 2(g) notwithstanding, a transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction, and a Change in Control shall not be deemed to occur if the Company files a registration statement with the United States Securities and Exchange Commission in connection with an initial or secondary public offering of securities or debt of the Company to the public or on account of any transaction or series of transactions principally for bona fide equity financing purposes in which cash is received by the Company or any successor or indebtedness of the Company is cancelled or converted or a combination thereof.

(h) "**Code**" means the United States Internal Revenue Code of 1986, as amended, and the rules and regulations promulgated thereunder.

(i) "**Committee**" means the Compensation Committee of the Board as designated by the Board which is authorized to administer the Plan as described in Section 3 hereof.

(j) "**Company**" means Silvaco Group, Inc., a Delaware corporation, including any successor thereto.

(k) "**Consultant**" means an individual who is a consultant or advisor and who provides bona fide services to the Company, a Parent, a Subsidiary, or an Affiliate as an independent contractor (not including service as a member of the Board) or a member of the board of directors of a Parent or a Subsidiary, in each case who is not an Employee.

(l) "**Disability**" means any permanent and total disability as defined by Section 22(e)(3) of the Code, or in the case of a Participant outside the United States, such other definition as determined by the Committee for purposes of the Plan taking into consideration the provisions of applicable law.

(m) "**Employee**" means any individual who is a common-law employee of the Company, a Parent, a Subsidiary, or an Affiliate.

(n) "**Exchange Act**" means the United States Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(o) "**Exercise Price**" means, in the case of an Option, the amount for which one Share may be purchased upon exercise of such Option, as specified in the applicable Stock Option Award Agreement. "Exercise Price" means, in the case of a SAR, an amount, as specified in the applicable SAR Award Agreement, which is subtracted from the Fair Market Value of one Share in determining the amount payable upon exercise of such SAR.

(p) "**Fair Market Value**" with respect to a Share means the market price of one Share determined by the Committee as follows:

(i) If the Share was traded over-the-counter on the date in question, then the Fair Market Value shall be equal to the last transaction price quoted for such date by the OTC Bulletin Board or, if not so quoted, shall be equal to the mean between the last reported representative bid and asked prices quoted for such date by the principal automated inter-dealer quotation system on which the Shares are quoted or, if the Shares are not quoted on any such system, by the Pink Quote system;

(ii) If the Share was traded on any established stock exchange (such as the New York Stock Exchange, The Nasdaq Capital Market, The Nasdaq Global Market or The Nasdaq Global Select Market) or national market system on the date in question, then the Fair Market Value shall be equal to the closing price reported for such date by the applicable exchange or system; or

(iii) If none of the foregoing provisions is applicable, then the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate.

The determination of fair market value for purposes of tax withholding may be made in the Committee's discretion subject to applicable law and is not required to be consistent with the determination of Fair Market Value for other purposes.

In all cases, the determination of Fair Market Value by the Committee shall be conclusive and binding on all persons.

For any date that is not a trading day, the Fair Market Value of a Share for such date shall be determined under clauses (i) and (ii) above with reference to the immediately preceding trading day. In all cases, the determination of Fair Market Value by the Committee shall be conclusive and binding on all persons and shall be consistent with the rules of Section 409A and Section 422 of the Code to the extent applicable.

(q) "**ISO**" means an Option intended to be an "incentive stock option" described in Section 422 of the Code. Each Option granted pursuant to the Plan will be treated as providing by its terms that it is to be an NSO unless, as of the date of grant, it is expressly designated as an ISO in the applicable Stock Option Award Agreement.

(r) "**Nonstatutory Option**" or "**NSO**" means an Option that is not an ISO.

(s) "**Option**" means an option entitling the holder to acquire Shares upon payment of the exercise price.

(t) "**Outside Director**" means a member of the Board who is not a common-law employee of, or paid consultant to, the Company, a Parent or a Subsidiary.

(u) "**Parent**" means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be a Parent commencing as of such date.

(v) "**Participant**" means a person who holds an Award.

(w) "**Plan**" means this 2024 Stock Incentive Plan of Silvaco Group, Inc., as amended from time to time.

(x) "**Purchase Price**" means the consideration for which one Share may be acquired under the Plan (other than upon exercise of an Option or SAR), as specified by the Committee.

(y) "**Restricted Share**" means a Share subject to restrictions requiring that it be forfeited, redelivered or offered for sale to the Company if specified performance or other vesting conditions are not satisfied awarded under the Plan.

(z) "**Returning Shares**" means Shares subject to outstanding stock awards granted under the 2014 Plan and that following the Effective Date: (A) are not issued because such award or portion thereof is forfeited or terminated for any reason before being exercised or settled; (B) are not issued because such stock award or any portion thereof is settled in cash; (C) are subject to vesting restrictions and are subsequently forfeited; (D) are withheld or reacquired to satisfy the exercise, strike or purchase price; or (E) are withheld or reacquired to satisfy a tax withholding obligation.

(aa) "**SAR**" means a right entitling the holder upon exercise to receive an amount (payable in cash or in Shares of equivalent value) equal to the excess of the Fair Market Value of the Shares subject to the right over the Exercise Price from which appreciation under the SAR is to be measured.

(bb) "**Section 409A**" means Section 409A of the Code.

(cc) "**Securities Act**" means the United States Securities Act of 1933, as amended, the rules and regulations promulgated thereunder.

(dd) "**Service**" means service as an Employee, Consultant or Outside Director, subject to such further limitations as may be set forth in the Plan or the applicable Award Agreement. Service terminates three (3) months after an Employee goes on a bona fide leave of absence, that was approved by the Company in writing, except where the terms of the approved leave provide otherwise, or when continued Service crediting is required by applicable law. For purposes of determining whether an Option is entitled to ISO status, an Employee's employment will be treated as terminating three (3) months after such Employee went on leave, unless such Employee's right to return to active work is guaranteed by law or by a contract. Service terminates in any event when the approved leave ends, unless such Employee immediately

returns to active work. The Administrator determines which leaves of absence count toward Service, and when Service terminates for all purposes under the Plan. Unless a different treatment is approved by the Administrator, vesting will be adjusted pro-rata for any approved reductions in work hours (for example, from full-time to part-time) other than due to an approved leave of absence as discussed in the prior sentence (i.e., the portion of the award vesting on each vesting date is reduced pro-rata based on the reduction in hours worked).

(ee) "**Share**" means one share of ordinary stock, par value $0.0001 per share, of the Company as adjusted in accordance with Section 12 (if applicable).

(ff) *"***Stock-Based Award***"* means an Award other than an Option, a SAR, a Restricted Share, a Stock Unit that is convertible into or otherwise based on Shares.

(gg) *"***Stock Unit***"* means a bookkeeping entry representing the Company's obligation to deliver one Share (or distribute cash measured by the value of a Share on a future date) and may be subject to the satisfaction of performance or other vesting conditions.

(hh) "**Subsidiary**" means any corporation, if the Company owns and/or one or more other Subsidiaries own not less than fifty percent (50%) of the total combined voting power of all classes of outstanding stock of such corporation. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date. The determination of whether an entity is a "Subsidiary" shall be made in accordance with Section 424(f) of the code.

SECTION 3. ADMINISTRATION.

(a) *Committee Composition*. The Plan shall be administered by a Committee appointed by the Board, or by the Board acting as the Committee. The Committee shall consist of two or more directors of the Company. In addition, to the extent required by the Board, the composition of the Committee shall satisfy such requirements of the New York Stock Exchange or the Nasdaq Stock Market, as applicable, and as the Securities and Exchange Commission may establish for administrators acting under plans intended to qualify for exemption under Rule 16b-3 (or its successor) under the Exchange Act.

(b) *Committee Appointment*. The Board may also appoint one or more separate committees of the Board, each composed of one or more directors of the Company who need not satisfy the requirements of Section 3(a), who may administer the Plan, grant Awards under the Plan and determine all terms of such grants, in each case with respect to all Employees, Consultants and Outside Directors (except such as may be on such committee), provided that such committee or committees may perform these functions only with respect to Employees who are not considered officers or directors of the Company under Section 16 of the Exchange Act. Within the limitations of the preceding sentence, any reference in the Plan to the Committee shall include such committee or committees appointed pursuant to the preceding sentence. To the extent permitted by applicable laws, the Board or Committee may also authorize one or more officers of the Company to designate Employees, other than officers under Section 16 of the Exchange Act, to receive Awards and/or to determine the number of such Awards to be received

by such persons; provided, however, that the Board or Committee shall specify the total number of Awards that such officers may so award.

(c) *Committee Responsibilities*. Subject to the provisions of the Plan, the Committee shall have full authority and discretion to take the following actions:

(i) To interpret the Plan and to apply its provisions;

(ii) To adopt, amend, or rescind rules, procedures, and forms relating to the Plan;

(iii) To adopt, amend, or terminate sub-plans established for the purpose of satisfying applicable foreign laws including qualifying for preferred tax treatment under applicable foreign tax laws;

(iv) To authorize any person to execute, on behalf of the Company, any instrument required to carry out the purposes of the Plan;

(v) To determine when Awards are to be granted under the Plan;

(vi) To select the Participants to whom Awards are to be granted;

(vii) To determine the type of Award and number of Shares or amount of cash to be made subject to each Award;

(viii) To prescribe the terms and conditions of each Award, including (without limitation) the Exercise Price and Purchase Price, and the vesting or duration of the Award (including accelerating the vesting of Awards, either at the time of the Award or thereafter, without the consent of the Participant), to determine whether an Option is to be classified as an ISO or as an NSO, and to specify the provisions of the agreement relating to such Award;

(ix) To amend any outstanding Award Agreement, subject to applicable legal restrictions and to the consent of the Participant if the Participant's rights or obligations would be materially impaired;

(x) To prescribe the consideration for the grant of each Award or other right under the Plan and to determine the sufficiency of such consideration;

(xi) To determine the disposition of each Award or other right under the Plan in the event of a Participant's divorce or dissolution of marriage;

(xii) To determine whether Awards under the Plan will be granted in replacement of other grants under an incentive or other compensation plan of an acquired business;

(xiii) To correct any defect, supply any omission, or reconcile any inconsistency in the Plan or any Award Agreement;

(xiv) To establish or verify the extent of satisfaction of any performance goals or other conditions applicable to the grant, issuance, exercisability, vesting, and/or ability to retain any Award; and

(xv) To take any other actions deemed necessary or advisable for the administration of the Plan.

Subject to the requirements of applicable law, the Committee may designate persons other than members of the Committee to carry out its responsibilities and may prescribe such conditions and limitations as it may deem appropriate, except that the Committee may not delegate its authority with regard to the selection for participation of or the granting of Awards under the Plan to persons subject to Section 16 of the Exchange Act. All decisions, interpretations and other actions of the Committee shall be final and binding on all Participants and all persons deriving their rights from a Participant. No member of the Committee shall be liable for any action that such member of the Committee has taken or has failed to take in good faith with respect to the Plan or any Award under the Plan.

SECTION 4. ELIGIBILITY.

(a) *General Rule*. The Committee will select Participants from among Employees, Consultants and Outside Directors. Eligibility for ISOs is limited to individuals described in the first sentence of this Section 4(a) who are employees of the Company or of a "parent corporation" or "subsidiary corporation" of the Company as those terms are defined in Section 424 of the Code. Eligibility for Stock Options, other than ISOs, and SARs is limited to individuals described in the first sentence of this Section 4(a) who are providing direct services on the date of grant of the Award to the Company or to a subsidiary of the Company that would be described in the first sentence of Section 1.409A-1(b)(5)(iii)(E) of the United States Treasury Regulations.

(b) *Ten-Percent Shareholders*. An Employee who owns more than ten percent (10%) of the total combined voting power of all classes of outstanding stock of the Company, a Parent or Subsidiary shall not be eligible for the grant of an ISO unless such grant satisfies the requirements of Section 422(c)(5) of the Code.

(c) *Attribution Rules*. For purposes of Section 4(b) above, in determining stock ownership, an Employee shall be deemed to own the stock owned, directly or indirectly, by or for such Employee's brothers, sisters, spouse, ancestors, and lineal descendants. Stock owned, directly or indirectly, by or for a corporation, partnership, estate, or trust shall be deemed to be owned proportionately by or for its shareholder, partners, or beneficiaries.

(d) *Outstanding Stock*. For purposes of Section 4(b) above, "outstanding stock" shall include all stock actually issued and outstanding immediately after the grant. "Outstanding

stock" shall not include Shares authorized for issuance under outstanding options held by the Employee or by any other person.

SECTION 5. STOCK SUBJECT TO PLAN; OUTSIDE DIRECTOR COMPENSATION LIMIT.

(a) *Basic Limitation*. Shares offered under the Plan shall be authorized but unissued shares or treasury shares. The maximum aggregate number of Shares authorized for issuance as Awards under the Plan shall not exceed (i) [ ] Shares (the "**Share Reserve**"), plus (ii) the sum of any Returning Shares which become available from time to time, plus (iii) the number of reserved Shares not issued or subject to outstanding grants under the 2014 Plan on the Effective Date, plus (iv) an annual increase on the first day of each calendar year for a period of not more than ten years beginning on January 1, 2024 and ending on (and including) January 1, 2034, in an amount equal to (x) five percent (5%) of the total number of Shares outstanding on the last day of the immediately preceding calendar year or (y) such lesser amount (including zero) that the Committee or Board determines for purposes of the annual increase for that calendar year. Notwithstanding the foregoing, the number of Shares that may be delivered in the aggregate pursuant to the exercise of ISOs granted under the Plan shall not exceed five (5) times the number of Shares provided under clause (i) above plus, to the extent allowable under Section 422 of the Code, any Shares that become available for issuance under the Plan pursuant to Section 5(b), but nothing in this Section 5 will be construed as requiring that any, or any fixed number of, ISOs be awarded under the Plan. The limitations of this Section 5(a) shall be subject to adjustment pursuant to Section 12. The number of Shares that are subject to Awards outstanding at any time under the Plan shall not exceed the number of Shares which then remain available for issuance under the Plan. The Company shall at all times reserve and keep available sufficient Shares to satisfy the requirements of the Plan.

(b) *Additional Shares*. If Restricted Shares or Shares issued upon the exercise of options are forfeited, then such Shares shall again become available for Awards under the Plan. If Stock Units, Options, or SARs are forfeited or terminate for any reason before being exercised or settled, or an Award is settled in cash without the delivery of Shares to the holder, then the corresponding Shares shall again become available for Awards under the Plan. If Stock Units or SARs are settled, then only the number of Shares (if any) actually issued in settlement of such Stock Units or SARs shall reduce the number available in Section 5(a) and the balance (including any Shares withheld to satisfy tax withholding obligations) shall again become available for Awards under the Plan. Any Shares withheld to satisfy the Exercise Price or tax withholding obligation pursuant to any Award of Options or SARs shall be added back to the Shares available for Awards under the Plan. Notwithstanding the foregoing provisions of this Section 5(b), Shares that have actually been issued shall not again become available for Awards under the Plan except for Shares that are forfeited and do not become vested.

(c) *Substitution and Assumption of Awards*. The Committee may make Awards under the Plan by assumption, substitution, or replacement of stock options, stock appreciation rights, stock units, or similar awards granted by another entity (including a Parent or Subsidiary), if such assumption, substitution, or replacement is in connection with an asset acquisition, stock

acquisition, merger, consolidation, or similar transaction involving the Company (and/or its Parent or Subsidiary) and such other entity (and/or its affiliate). The terms of such assumed, substituted, or replaced Awards shall be as the Committee, in its discretion, determines is appropriate, notwithstanding limitations on Awards in the Plan. Any such substitute or assumed Awards shall not count against the Share limitation set forth in Section 5(a) (nor shall Shares subject to such Awards be added to the Shares available for Awards under the Plan as provided in Section 5(b) above), except that Shares acquired by exercise of substitute ISOs will count against the maximum number of Shares that may be issued pursuant to the exercise of ISOs under the Plan.

(d) *Outside Director Compensation Limit*. The maximum number of Shares subject to Awards granted under the Plan during any one calendar year to any Outside Director taken together with any cash fees paid by the Company to such Outside Director during such calendar year for service on the Board (other than the calendar year in which an Outside Director commences service on the Board), will not exceed seven hundred and fifty thousand dollars ($750,000) in total value (calculating the value of any such Awards based on the grant date fair value of such Awards for financial reporting purposes), or, with respect to the calendar year in which an Outside Director is first appointed or elected to the Board, one million dollars ($1,000,000).

SECTION 6. RESTRICTED SHARES.

(a) *Restricted Share Award Agreement*. Each grant of Restricted Shares under the Plan shall be evidenced by a Restricted Share Award Agreement between the Participant and the Company. Such Restricted Shares shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various Restricted Share Award Agreements entered into under the Plan need not be identical.

(b) *Payment for Awards*. Restricted Shares may be sold or awarded under the Plan for such consideration as the Committee may determine, including (without limitation) cash, cash equivalents, full-recourse promissory notes, past services, and future services.

(c) *Vesting*. Each Award of Restricted Shares may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Restricted Share Award Agreement. A Restricted Share Award Agreement may provide for accelerated vesting in the event of the Participant's death, Disability or retirement or other events. The Committee may determine, at the time of granting Restricted Shares or thereafter, that all or part of such Restricted Shares shall become vested in the event that a Change in Control occurs with respect to the Company.

(d) *Voting and Dividend Rights*. A holder of Restricted Shares awarded under the Plan shall have the same voting, dividend, and other rights as the Company's other shareholder, except that in the case of any unvested Restricted Shares, the holder shall not be entitled to any dividends or other distributions paid or distributed by the Company in respect of outstanding Shares. Notwithstanding the foregoing, at the Committee's discretion, the holder of unvested Restricted Shares may be credited with such dividends and other distributions, provided that such

dividends and other distributions shall be paid or distributed to the holder only if, when and to the extent such unvested Restricted Shares vest. The value of dividends and other distributions payable or distributable with respect to any unvested Restricted Shares that do not vest shall be forfeited. At the Committee's discretion, the Restricted Share Award Agreement may require that the holder of Restricted Shares invest any cash dividends received in additional Restricted Shares. Such additional Restricted Shares shall be subject to the same conditions as the Award with respect to which the dividend was paid. For the avoidance of doubt, other than with respect to the right to receive dividends and other distributions, the holders of unvested Restricted Shares shall have the same voting rights and other rights as the Company's other shareholder in respect of such unvested Restricted Shares.

(e) *Restrictions on Transfer of Shares*. Restricted Shares shall be subject to such rights of repurchase, rights of first refusal, or other restrictions as the Committee may determine. Such restrictions shall be set forth in the applicable Restricted Share Award Agreement and shall apply in addition to any general restrictions that may apply to all holders of Shares.

SECTION 7. TERMS AND CONDITIONS OF OPTIONS.

(a) *Stock Option Award Agreement*. Each grant of an Option under the Plan shall be evidenced by a Stock Option Award Agreement between the Participant and the Company. Such Option shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions which are not inconsistent with the Plan and which the Committee deems appropriate for inclusion in a Stock Option Award Agreement. The Stock Option Award Agreement shall specify whether the Option is an ISO or an NSO. The provisions of the various Stock Option Award Agreements entered into under the Plan need not be identical.

(b) *Number of Shares*. Each Stock Option Award Agreement shall specify the number of Shares that are subject to the Option and shall provide for the adjustment of such number in accordance with Section 12.

(c) *Exercise Price*. Each Stock Option Award Agreement shall specify the Exercise Price. The Exercise Price of an ISO shall not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant (one hundred and ten percent (110%) for ISOs granted to Employees described in Section 4(b)), and the Exercise Price of an NSO shall not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing, Options may be granted with an Exercise Price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code. Subject to the foregoing in this Section 7(c), the Exercise Price under any Option shall be determined by the Committee in its sole discretion. The Exercise Price shall be payable in one of the forms described in Section 8.

(d) *Withholding Taxes*. As a condition to the exercise of an Option, the Participant shall make such arrangements as the Committee may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with such exercise. The Participant shall also make such arrangements as the Committee may require for

the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the disposition of Shares acquired by exercising an Option.

(e) *Exercisability and Term*. Each Stock Option Award Agreement shall specify the date when all or any installment of the Option is to become exercisable. The Stock Option Award Agreement shall also specify the term of the Option; provided that the term of an option shall in no event exceed ten (10) years from the date of grant (five (5) years for ISOs granted to Employees described in Section 4(b)). A Stock Option Award Agreement may provide for accelerated exercisability in the event of the Participant's death, Disability, or retirement or other events and may provide for expiration prior to the end of its term in the event of the termination of the Participant's Service. Options may be awarded in combination with SARs, and such an Award may provide that the Options will not be exercisable unless the related SARs are forfeited. Subject to the foregoing in this Section 7(e), the Committee in its sole discretion shall determine when all or any installment of an Option is to become exercisable and when an Option is to expire.

(f) *Exercise of Options*. Each Stock Option Award Agreement shall set forth the extent to which the Participant shall have the right to exercise the Option following termination of the Participant's Service with the Company and its Subsidiaries, and the right to exercise the Option of any executors or administrators of the Participant's estate or any person who has acquired such Option(s) directly from the Participant by bequest or inheritance. Such provisions shall be determined in the sole discretion of the Committee, need not be uniform among all Options issued pursuant to the Plan, and may reflect distinctions based on the reasons for termination of Service.

(g) *Effect of Change in Control*. The Committee may determine, at the time of granting an Option or thereafter, that such Option shall become exercisable as to all or part of the Shares subject to such Option in the event that a Change in Control occurs with respect to the Company.

(h) *No Rights as a Stockholder*. A Participant shall have no rights as a stockholder with respect to any Shares covered by an Option or other Award until the date of issuance of a stock certificate or other evidence of ownership for such Shares or until the Participant's ownership of such Shares shall have been entered into the books of the registrar in the case of uncertificated shares. No adjustments shall be made, except as provided in Section 12.

(i) *Modification, Extension and Renewal of Options*. Within the limitations of the Plan, the Committee may modify, extend, or renew outstanding options or may accept the cancellation of outstanding options (to the extent not previously exercised), whether or not granted hereunder, in return for the grant of new Options for the same or a different number of Shares and at the same or a different Exercise Price, or in return for the grant of a different Award for the same or a different number of Shares or for cash. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Participant, materially impair the Participant's rights or obligations under such Option; provided, however, that an amendment or modification that may cause an ISO to become an NSO, and any amendment or modification that

is required to comply with the rules applicable to ISOs, shall not be treated as materially impairing the rights or obligations of the Participant.

(j) *Restrictions on Transfer of Shares*. Any Shares issued upon exercise of an Option shall be subject to such special forfeiture conditions, rights of repurchase, rights of first refusal, and other transfer restrictions as the Committee may determine. Such restrictions shall be set forth in the applicable Stock Option Award Agreement and shall apply in addition to any general restrictions that may apply to all holders of Shares.

(k) *Buyout Provisions*. The Committee may at any time (i) offer to buy out for a payment in cash or cash equivalents an Option previously granted or (ii) authorize a Participant to elect to cash out an Option previously granted, in either case at such time and based upon such terms and conditions as the Committee shall establish.

SECTION 8. PAYMENT FOR SHARES.

(a) *General Rule*. The entire Exercise Price or Purchase Price of Shares issued under the Plan shall be payable in lawful money of the United States of America at the time when such Shares are purchased, except as provided in Section 8(b) through Section 8(h) below.

(b) *Surrender of Stock*. To the extent that a Stock Option Award Agreement so provides, payment may be made all or in part by surrendering, or attesting to the ownership of, Shares which have already been owned by the Participant or the Participant's representative. Such Shares shall be valued at their Fair Market Value on the date when the new Shares are purchased under the Plan. The Participant shall not surrender, or attest to the ownership of, Shares in payment of the Exercise Price if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to the Option for financial reporting purposes.

(c) *Services Rendered*. At the discretion of the Committee, Shares may be awarded under the Plan in consideration of services rendered to the Company or a Subsidiary. If Shares are awarded without the payment of a Purchase Price in cash, the Committee shall make a determination (at the time of the Award) of the value of the services rendered by the Participant and the sufficiency of the consideration to meet the requirements of Section 6(b).

(d) *Cashless Exercise*. To the extent that a Stock Option Award Agreement so provides, if the Stock is traded on an established securities market, payment may be made all or in part by delivery (on a form prescribed by the Committee) of an irrevocable direction to a securities broker to sell Shares and to deliver all or part of the sale proceeds to the Company in payment of the aggregate Exercise Price.

(e) *Exercise/Pledge*. To the extent that a Stock Option Award Agreement so provides, payment may be made all or in part by delivery (on a form prescribed by the Committee) of an irrevocable direction to a securities broker or lender to pledge Shares, as security for a loan, and to deliver all or part of the loan proceeds to the Company in payment of the aggregate Exercise Price.

(f) *Net Exercise*. To the extent that a Stock Option Award Agreement so provides, by a "net exercise" arrangement pursuant to which the number of Shares issuable upon exercise of the Option shall be reduced by the largest whole number of Shares having an aggregate Fair Market Value that does not exceed the aggregate Exercise Price (plus tax withholdings, if applicable) and any remaining balance of the aggregate Exercise Price (and/or applicable tax withholdings) not satisfied by such reduction in the number of whole Shares to be issued shall be paid by the Participant in cash or any other form of payment permitted under the Stock Option Award Agreement.

(g) *Promissory Note*. To the extent that a Stock Option Award Agreement or Restricted Share Award Agreement so provides, payment may be made all or in part by delivering (on a form prescribed by the Company) a full-recourse promissory note.

(h) *Other Forms of Payment*. To the extent that a Stock Option Award Agreement or Restricted Share Award Agreement so provides, payment may be made in any other form that is consistent with applicable laws, regulations, and rules.

(i) *Limitations under Applicable Law*. Notwithstanding anything herein or in a Stock Option Award Agreement or Restricted Share Award Agreement to the contrary, payment may not be made in any form that is unlawful, as determined by the Committee in its sole discretion.

SECTION 9. STOCK APPRECIATION RIGHTS.

(a) *SAR Award Agreement*. Each grant of a SAR under the Plan shall be evidenced by a SAR Award Agreement between the Participant and the Company. Such SAR shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various SAR Award Agreements entered into under the Plan need not be identical.

(b) *Number of Shares*. Each SAR Award Agreement shall specify the number of Shares to which the SAR pertains and shall provide for the adjustment of such number in accordance with Section 12.

(c) *Exercise Price*. Each SAR Award Agreement shall specify the Exercise Price. The Exercise Price of a SAR shall not be less than one hundred percent (100%) of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing, SARs may be granted with an Exercise Price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code. Subject to the foregoing in this Section 9(c), the Exercise Price under any SAR shall be determined by the Committee in its sole discretion.

(d) *Exercisability and Term*. Each SAR Award Agreement shall specify the date when all or any installment of the SAR is to become exercisable. The SAR Award Agreement shall also specify the term of the SAR provided that the term of the SAR shall in no event exceed ten (10) years from the date of grant. A SAR Award Agreement may provide for accelerated exercisability in the event of the Participant's death, Disability, retirement, or other events and

may provide for expiration prior to the end of its term in the event of the termination of the Participant's Service. SARs may be awarded in combination with Options, and such an Award may provide that the SARs will not be exercisable unless the related Options are forfeited. A SAR may be included in an ISO only at the time of grant but may be included in an NSO at the time of grant or thereafter. A SAR granted under the Plan may provide that it will be exercisable only in the event of a Change in Control.

(e) *Effect of Change in Control*. The Committee may determine, at the time of granting a SAR or thereafter, that such SAR shall become fully exercisable as to all Shares subject to such SAR in the event that a Change in Control occurs with respect to the Company.

(f) *Exercise of SARs*. Upon exercise of a SAR, the Participant (or any person having the right to exercise the SAR after the Participant's death) shall receive from the Company (i) Shares, (ii) cash or (iii) a combination of Shares and cash, as the Committee shall determine. The amount of cash and/or the Fair Market Value of Shares received upon exercise of SARs shall, in the aggregate, be equal to the amount by which the Fair Market Value (on the date of surrender) of the Shares subject to the SARs exceeds the Exercise Price.

(g) *Modification, Extension or Assumption of SARs*. Within the limitations of the Plan, the Committee may modify, extend, or assume outstanding SARs or may accept the cancellation of outstanding SARs (whether granted by the Company or by another issuer) in return for the grant of new SARs for the same or a different number of Shares and at the same or a different Exercise Price, or in return for the grant of a different Award for the same or a different number of Shares or cash. The foregoing notwithstanding, no modification of a SAR shall, without the consent of the holder, materially impair the Participant's rights or obligations under such SAR.

(h) *Buyout Provisions*. The Committee may at any time (i) offer to buy out for a payment in cash or cash equivalents a SAR previously granted, or (ii) authorize a Participant to elect to cash out a SAR previously granted, in either case at such time and based upon such terms and conditions as the Committee shall establish.

SECTION 10. STOCK UNITS.

(a) *Stock Unit Award Agreement*. Each grant of Stock Units under the Plan shall be evidenced by a Stock Unit Award Agreement between the Participant and the Company. Such Stock Units shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various Stock Unit Award Agreements entered into under the Plan need not be identical.

(b) *Payment for Awards*. To the extent that an Award is granted in the form of Stock Units, no cash consideration shall be required of the Award recipients.

(c) *Vesting Conditions*. Each Award of Stock Units may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Stock Unit Award Agreement. A Stock Unit Award Agreement may provide for

accelerated vesting in the event of the Participant's death, Disability, retirement, or other events. The Committee may determine, at the time of granting Stock Units or thereafter, that all or part of such Stock Units shall become vested in the event that a Change in Control occurs with respect to the Company.

(d) *Voting and Dividend Rights*. The holders of Stock Units shall have no voting rights. Prior to settlement or forfeiture, any Stock Unit awarded under the Plan may, at the Committee's discretion, carry with it a right to dividend equivalents. Such right, if awarded, entitles the holder to be credited with an amount equal to all cash dividends paid on one Share while the Stock Unit is outstanding. Settlement of dividend equivalents may be made in the form of cash, in the form of Shares, or in a combination of both. Dividend equivalents may also be converted into additional Stock Units at the Committee's discretion. Dividend equivalents shall not be distributed prior to settlement of the Stock Unit to which the dividend equivalents pertain. Prior to distribution, any dividend equivalents shall be subject to the same conditions and restrictions (including without limitation, any forfeiture conditions) as the Stock Units to which they attach. The value of dividend equivalents payable or distributable with respect to any unvested Stock Units that do not vest shall be forfeited. Any entitlement to dividend equivalents or similar entitlements will be established and administered either consistent with an exemption from, or in compliance with, the applicable requirements of Section 409A to the extent applicable to the Participant.

(e) *Form and Time of Settlement of Stock Units*. Settlement of vested Stock Units may be made in the form of (i) cash, (ii) Shares or (iii) any combination of both, as determined by the Committee. The actual number of Stock Units eligible for settlement may be larger or smaller than the number included in the original Award, based on predetermined performance factors. Methods of converting Stock Units into cash may include (without limitation) a method based on the average Fair Market Value of Shares over a series of trading days. A Stock Unit Award Agreement may provide that vested Stock Units may be settled in a lump sum or in installments. A Stock Unit Award Agreement may provide that the distribution may occur or commence when all vesting conditions applicable to the Stock Units have been satisfied or have lapsed, or it may be deferred to any later date, subject to compliance with Section 409A, to the extent applicable. The amount of a deferred distribution may be increased by an interest factor or by dividend equivalents. Until an Award of Stock Units is settled, the number of such Stock Units shall be subject to adjustment pursuant to Section 12.

(f) *Death of Participant*. Any Stock Unit Award that becomes payable after the Participant's death shall be distributed to the Participant's beneficiary or beneficiaries, provided the Committee has permitted the designation of a beneficiary and such beneficiary has been designated prior to the Participant's death in a form acceptable to the Committee. Each recipient of a Stock Unit Award under the Plan shall designate one or more beneficiaries for this purpose by filing the prescribed form with the Company, provided the Committee has permitted the designation of beneficiaries. A beneficiary designation may be changed by filing the prescribed form with the Company at any time before the Participant's death. If the Committee has not permitted the designation of a beneficiary, if no beneficiary was designated or if no designated

beneficiary survives the Participant, then any Stock Units Award that becomes payable after the Participant's death shall be distributed to the Participant's estate.

(g) *Creditors' Rights*. A holder of Stock Units shall have no rights other than those of a general creditor of the Company. Stock Units represent an unfunded and unsecured obligation of the Company subject to the terms and conditions of the applicable Stock Unit Award Agreement.

SECTION 11. CASH-BASED AWARDS AND STOCK BASED AWARDS.

The Committee may, in its sole discretion, grant Cash-Based Awards and Stock-Based Awards to any Participant in such number or amount and upon such terms, and subject to such conditions, as the Committee shall determine at the time of grant and specify in an applicable Award Agreement. The Committee shall determine the maximum duration of the Cash-Based Award or Stock-Based Awards, the amount of cash which may be payable pursuant to the Cash-Based Award, the conditions upon which the Cash-Based Award or Stock-Based Awards shall become vested or payable, and such other provisions as the Committee shall determine. Each Cash-Based Award shall specify a cash-denominated payment amount, formula, or payment ranges as determined by the Committee. Payment, if any, with respect to a Cash-Based Award or Stock-Based Award shall be made in accordance with the terms of the Award and may be made in cash or in Shares, as the Committee determines.

SECTION 12. ADJUSTMENT OF SHARES.

(a) *Adjustments*.

(i) Recapitalization Transactions. In the event of a subdivision of the outstanding Stock, a declaration of a dividend payable in Shares, a declaration of a dividend payable in a form other than Shares in an amount that has a material effect on the price of Shares, a combination or consolidation of the outstanding Stock (by reclassification or otherwise) into a lesser number of Shares, a recapitalization, a spin-off or a similar occurrence, the Committee shall make appropriate and equitable adjustments in:

(A) The class(es) and number of securities available for future Awards and the limitations set forth under Section 5;

(B) The class(es) and number of securities covered by each outstanding Award; and

(C) The Exercise Price under each outstanding Option and SAR.

(ii) Other adjustments. In the event of other transactions, the Committee may make such changes as provided in subsection (a) herein, as it determines

are necessary or appropriate to avoid distortion in the operation of the Plan.

(iii) Committee's Authority. The Committee's determinations will be final, binding and conclusive.

(b) *Dissolution or Liquidation*. To the extent not previously exercised or settled, Options, SARs, and Stock Units shall terminate immediately prior to the dissolution or liquidation of the Company.

(c) *Merger or Reorganization*. In the event that the Company is a party to a merger or other reorganization, outstanding Awards shall be subject to the agreement of merger or reorganization. Such agreement may provide for, without limitation, one or more of the following:

(i) The continuation of the outstanding Awards by the Company, if the Company is a surviving corporation;

(ii) The assumption of the outstanding Awards by the surviving corporation or its parent or subsidiary;

(iii) The substitution by the surviving corporation or its parent or subsidiary of its own awards for the outstanding Awards;

(iv) Immediate vesting, exercisability, or settlement of outstanding Awards followed by the cancellation of such Awards upon or immediately prior to the effectiveness of such transaction;

(v) Cancellation of the Award, to the extent not vested or not exercised prior to the effective time of the merger or reorganization, in exchange for such cash or equity consideration (including no consideration) as the Committee, in its sole discretion, may consider appropriate; or

(vi) Settlement of the intrinsic value of the outstanding Awards (whether or not then vested or exercisable) in cash or cash equivalents or equity (including cash or equity subject to deferred vesting and delivery consistent with the vesting restrictions applicable to such Awards or the underlying Shares) followed by the cancellation of such Awards (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Committee determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), provided that any such amount may be delayed to the same extent that payment of consideration to the holders of Stock in connection with the merger or reorganization is delayed as a result of escrows, earnouts, holdbacks or other contingencies;

in each case without the Participant's consent. Any acceleration of payment of an amount that is subject to Section 409A will be delayed, if necessary, until the earliest time that such payment would be permissible under Section 409A without triggering any additional taxes applicable under Section 409A. Any actions hereunder will comply with, or be exempt from, Section 409A to the extent determined by the Committee to be reasonably practicable.

The Company will have no obligation to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

(d) *Reservation of Rights*. Except as provided in this Section 12, a Participant shall have no rights by reason of any subdivision or consolidation of Shares of stock of any class, the payment of any dividend or any other increase or decrease in the number of Shares of stock of any class. Any issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or Exercise Price of Shares subject to an Award. The grant of an Award pursuant to the Plan shall not affect in any way the right or power of the Company to make adjustments, reclassifications, reorganizations, or changes of its capital or business structure, to merge or consolidate or to dissolve, liquidate, sell, or transfer all or any part of its business or assets. In the event of any potential change affecting the Shares or the Exercise Price of Shares subject to an Award, including a merger or other reorganization, for reasons of administrative convenience, the Company in its sole discretion may refuse to permit the exercise of any Award during a period of up to thirty (30) days prior to the occurrence of such event.

SECTION 13. DEFERRAL OF AWARDS.

(a) *Committee Powers*. Subject to compliance with Section 409A, the Committee (in its sole discretion) may permit or require a Participant to:

(i) Have cash that otherwise would be paid to such Participant as a result of the exercise of a SAR or the settlement of Stock Units credited to a deferred compensation account established for such Participant by the Committee as an entry on the Company's books;

(ii) Have Shares that otherwise would be delivered to such Participant as a result of the exercise of an Option or SAR converted into an equal number of Stock Units; or

(iii) Have Shares that otherwise would be delivered to such Participant as a result of the exercise of an Option or SAR or the settlement of Stock Units converted into amounts credited to a deferred compensation account established for such Participant by the Committee as an entry on the Company's books.

Such amounts shall be determined by reference to the Fair Market Value of such Shares as of the date when they otherwise would have been delivered to such Participant.

(b) *General Rules*. A deferred compensation account established under this Section 13 may be credited with interest or other forms of investment return, as determined by the Committee. A Participant for whom such an account is established shall have no rights other than those of a general creditor of the Company. Such an account shall represent an unfunded and unsecured obligation of the Company and shall be subject to the terms and conditions of the applicable agreement between such Participant and the Company. If the deferral or conversion of Awards is permitted or required, the Committee (in its sole discretion) may establish rules, procedures, and forms pertaining to such Awards, including (without limitation) the settlement of deferred compensation accounts established under this Section 13.

SECTION 14. AWARDS UNDER OTHER PLANS.

The Company may grant awards under other plans or programs. Such awards may be settled in the form of Shares issued under the Plan. Such Shares shall be treated for all purposes under the Plan like Shares issued in settlement of Stock Units and shall, when issued, reduce the number of Shares available under Section 5.

SECTION 15. PAYMENT OF DIRECTOR'S FEES IN SECURITIES.

(a) *Effective Date*. No provision of this Section 15 shall be effective unless and until the Board has determined to implement such provision.

(b) *Elections to Receive NSOs, SARs, Restricted Shares, or Stock Units*. An Outside Director may elect to receive the Outside Director's annual retainer payments and/or meeting fees from the Company in the form of cash, NSOs, SARs, Restricted Shares, Stock Units, or a combination thereof, as determined by the Board. Alternatively, the Board may mandate payment in any of such alternative forms. Such NSOs, SARs, Restricted Shares, and Stock Units shall be issued under the Plan. An election under this Section 15 shall be filed with the Company on the prescribed form.

(c) *Number and Terms of NSOs, SARs, Restricted Shares or Stock Units*. The number of NSOs, SARs, Restricted Shares, or Stock Units to be granted to Outside Directors in lieu of annual retainers and meeting fees that would otherwise be paid in cash shall be calculated in a manner determined by the Board. The terms of such NSOs, SARs, Restricted Shares, or Stock Units shall also be determined by the Board.

SECTION 16. LEGAL AND REGULATORY REQUIREMENTS.

Shares shall not be issued under the Plan unless the issuance and delivery of such Shares complies with (or is exempt from) all applicable requirements of law, including (without limitation) the Securities Act, United States state securities laws and regulations, the regulations of any stock exchange on which the Company's securities may then be listed and any foreign securities, exchange control or other applicable laws, and the Company has obtained the approval or favorable ruling from any governmental agency which the Company determines is necessary or advisable. The Company shall not be liable to a Participant or other persons as to: (a) the non-issuance or sale of Shares as to which the Company has not obtained from any regulatory body

having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares under the Plan; and (b) any tax consequences expected, but not realized, by any Participant or other person due to the receipt, exercise or settlement of any Award granted under the Plan.

SECTION 17. TAXES.

(a) *Withholding Taxes*. To the extent required by applicable federal, state, local, or foreign law, a Participant or the Participant's successor shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise in connection with the Plan. The Company shall not be required to issue any Shares or make any cash payment under the Plan until such obligations are satisfied.

(b) *Share Withholding*. The Committee may permit a Participant to satisfy all or part of the Participant's withholding or income tax obligations by having the Company withhold all or a portion of any Shares that otherwise would be issued to him or her or by surrendering all or a portion of any Shares that the Participant previously acquired. Such Shares shall be valued at their fair market value on the date when taxes otherwise would be withheld in cash. In no event may a Participant have Shares withheld that would otherwise be issued to him or her in excess of the number necessary to satisfy the maximum legally required tax withholding.

(c) *Section 409A*. Each Award that provides for "nonqualified deferred compensation" within the meaning of Section 409A shall be subject to such additional rules and requirements as specified by the Committee from time to time in order to comply with Section 409A. If any amount under such an Award is payable upon a "separation from service" (within the meaning of Section 409A) to a Participant who is then considered a "specified employee" (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six (6) months and one day after the Participant's separation from service, or (ii) the Participant's death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties, and/or additional tax imposed pursuant to Section 409A. In addition, the settlement of any such Award may not be accelerated except to the extent permitted by Section 409A.

SECTION 18. TRANSFERABILITY.

Unless the agreement evidencing an Award (or an amendment thereto authorized by the Committee) expressly provides otherwise, no Award granted under the Plan, nor any interest in such Award, may be sold, assigned, conveyed, gifted, pledged, hypothecated, or otherwise transferred in any manner (prior to the vesting and lapse of any and all restrictions applicable to Shares issued under such Award), other than by will or the laws of descent and distribution; provided, however, that an ISO may be transferred or assigned only to the extent consistent with Section 422 of the Code. Any purported assignment, transfer, or encumbrance in violation of this Section 18 shall be void and unenforceable against the Company.

SECTION 19. PERFORMANCE BASED AWARDS.

The number of Shares or other benefits granted, issued, retained, and/or vested under an Award may be made subject to the attainment of performance goals. The Committee may utilize any performance criteria selected by it in its sole discretion to establish performance goals.

SECTION 20. RECOUPMENT.

In the event that the Company is required to prepare restated financial results owing to an executive officer's intentional misconduct or grossly negligent conduct, the Committee shall have the authority, to the extent permitted by applicable law, to require reimbursement or forfeiture to the Company of the amount of bonus or incentive compensation (whether cash-based or equity-based) such executive officer received during a fixed period, determined by the Committee, preceding the year the restatement is determined to be required, to the extent that such bonus or incentive compensation exceeds what the officer would have received based on an applicable restated performance measure or target. The Company will recoup incentive-based compensation from executive officers to the extent required under the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules, regulations and listing standards that may be issued under that act. Any right of recoupment under this provision will be in addition to, and not in lieu of, any other rights of recoupment that may be available to the Company. No recovery of compensation under any clawback policy or this Section 20 will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or any of its Subsidiaries or Affiliates.

SECTION 21. NO EMPLOYMENT RIGHTS.

No provision of the Plan, nor any Award granted under the Plan, shall be construed to give any person any right to become, to be treated as, or to remain an Employee or Consultant. The Company and/or its Subsidiaries, as applicable, reserve the right to terminate any person's Service at any time and for any reason, with or without notice.

SECTION 22. DURATION AND AMENDMENTS.

(a) *Term of the Plan*. The Plan, as set forth herein, shall come into existence on the date of its adoption by the Board; provided, however, that no Award may be granted hereunder prior to the Effective Date. The Board may suspend or terminate the Plan at any time. No ISOs may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board or (ii) the date the Plan is approved the shareholders of the Company.

(b) *Right to Amend the Plan*. The Board may amend the Plan at any time and from time to time. Rights and obligations under any Award granted before amendment of the Plan shall not be materially impaired by such amendment except with consent of the Participant. An amendment of the Plan shall be subject to the approval of the Company's shareholders only to the extent required by applicable laws, regulations or rules.

(c) *Effect of Termination*. No Awards shall be granted under the Plan after the termination thereof. The termination of the Plan shall not affect Awards previously granted under the Plan.

SECTION 23. AWARDS TO PARTICIPANTS OUTSIDE THE UNITED STATES.

Notwithstanding any provision of the Plan to the contrary, to comply with the laws in countries outside the United States in which the Company and its Subsidiaries and Affiliates operate or in which Participants work or reside, the Committee, in its sole discretion, will have the power and authority to: (i) determine which Participants outside the United States will be eligible to participate in the Plan; (ii) modify the terms and conditions of any Award granted to Participants outside the United States; (iii) establish sub-plans and modify exercise procedures and other terms and procedures and rules, to the extent such actions may be necessary or advisable, including adoption of rules, procedures or sub-plans applicable to particular Subsidiaries and Affiliates or Participants in particular locations; provided that no such sub-plans and/or modifications shall take precedence over Section 3 of the Plan or otherwise require stockholder approval; (iv) take any action, before or after an Award is granted, that it deems advisable to obtain approval or to facilitate compliance with any necessary local governmental regulatory exemptions or approvals and (v) impose conditions on the exercise, vesting, or settlement of Awards in order to minimize the Company's obligation with respect to tax equalization for Participants on assignments outside their home country. Without limiting the generality of the foregoing, the Committee is specifically authorized to adopt rules, procedures and sub-plans with provisions that limit or modify rights on eligibility to receive an Award under the Plan or on death, Disability, retirement or other termination of employment, available methods of exercise or settlement of an Award, payment of income tax, social insurance contributions and payroll taxes, the shifting of employer tax or social insurance contribution liability to a Participant, the withholding procedures and handling of any Share certificates or other indicia of ownership. Notwithstanding the foregoing, the Board will only take action and grant Awards that comply with applicable laws.

SECTION 24. GOVERNING LAW.

The Plan and each Award Agreement shall be governed by the laws of the State of Delaware in the United States of America without application of the conflicts of law principles thereof.

SECTION 25. SUCCESSORS AND ASSIGNS.

The terms of the Plan shall be binding upon and inure to the benefit of the Company and any successor entity, including any successor entity contemplated by Section 12(c).

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SECTION 26. EXECUTION.

To record the adoption of the Plan by the Board, the Company has caused its authorized officer to execute the same.

Silvaco Group, Inc.

By: _____
Name: _____
Title: _____

Date: _____

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
NOTICE OF STOCK OPTION GRANT

You have been granted the following Option (this "**Option**" or this "**Award**") to purchase shares of Common Stock ("**Stock**") of Silvaco Group, Inc. (the "**Company**") under the Silvaco Group, Inc. 2024 Stock Incentive Plan (as may be amended from time to time, the "**Plan**"):

Name of Optionee:	[Name of Optionee]
Grant Date:	[Date of Grant]
Total Number of Shares Subject to Option:	[Total Shares]
Type of Option:	☐ Incentive Stock Option ☐ Nonstatutory Stock Option
Exercise Price Per Share:	$[Exercise Price]
Vesting Commencement Date:	[Vesting Commencement Date]
Vesting Schedule:	[This Option becomes exercisable when you complete [___] months of continuous Service as an Employee or a Consultant from the Vesting Commencement Date. *Actual vesting schedule to be inserted.*]
Expiration Date:	[Expiration Date] This Option expires earlier if your Service terminates earlier, as described in the Stock Option Agreement.

By your written signature below (or your electronic acceptance) and the signature of the Company's representative below, you and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan, this Notice of Option Grant and the Stock Option Agreement, including any special terms for Participants outside the United States (collectively, this "Agreement"), each of which are attached to and made a part of this document.

By your written signature below (or your electronic acceptance), you further agree that the Company may deliver by e-mail all documents relating to the Plan or this Award (including without limitation, prospectuses required by the Securities and Exchange Commission) and all other documents that the Company is required to deliver to its security holders (including without limitation, annual reports and proxy statements). You also agree that the Company may deliver these documents by posting them on a website maintained by the Company or by a third party under contract with the Company. If the Company posts these documents on a website, it will notify you by e-mail. Should you electronically accept this Agreement, you agree to the following: "This electronic contract

contains my electronic signature, which I have executed with the intent to sign this Agreement."

You acknowledge and agree that (i) you have carefully read, fully understand and agree to all of the terms and conditions described in this Notice of Stock Option Grant, the attached Stock Option Agreement and the Plan and (ii) you have been given an opportunity to consult your own legal and tax counsel with respect to all matters relating to this Option prior to signing (or electronically accepting) this Notice of Stock Option Grant and that you have either consulted such counsel or voluntarily declined to consult such counsel.

OPTIONEE	**SILVACO GROUP, INC.**
_____	By: _____
Optionee's Signature	Name: _____
_____	Title: _____
Optionee's Printed Name	

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
STOCK OPTION AGREEMENT

The Plan and Other Agreements

The Option that you are receiving is granted pursuant and subject in all respects to the applicable provisions of the Plan, which is incorporated herein by reference. Capitalized terms not defined in this Agreement will have the meanings ascribed to them in the Plan.

The attached Notice of Stock Option Grant, this Agreement, including any additional terms for Participants outside of the United States ("**U.S.**") set forth in the addendum hereto, and the Plan constitute the entire understanding between you and the Company regarding this Award. Any prior agreements, commitments or negotiations concerning this Option are superseded with the exception of (1) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (2) any written employment or severance arrangement that would provide for vesting acceleration of this Option upon the terms and conditions set forth therein. This Agreement may be amended by the Committee without your consent; however, if any such amendment would materially impair your rights or obligations under this Agreement, this Agreement may be amended only by another written agreement, signed by you and the Company.

Tax Treatment

This Option is intended to be an incentive stock option under Section 422 of the Code or a nonstatutory option, as provided in the Notice of Stock Option Grant. Even if this Option is designated as an incentive stock option, it will be deemed to be a nonstatutory option to the extent required by the $100,000 annual limitation under Section 422(d) of the Code.

Vesting

This Option becomes exercisable in installments, as shown in the Notice of Stock Option Grant. This Option will in no event become exercisable for additional Shares after your Service as an Employee, an Outside Director or a Consultant has terminated for any reason.

Term

This Option expires in any event at the close of business at the Company's headquarters on the day before the tenth (10th) anniversary of the Grant Date, as shown on the Notice of Stock Option Grant (fifth (5th) anniversary for a more than ten percent (10%) shareholder as provided under the Plan if this is an incentive stock option). This Option may expire earlier if your Service terminates, as described below.

Regular Termination

If your Service terminates for any reason except due to your death or Disability, then this Option will expire at the close of business at the Company's headquarters on the date three (3) months after the date your Service terminates (or, if earlier, the Expiration Date). The Company determines when your Service terminates for this purpose and all purposes under the Plan and its determinations are conclusive and binding on all persons.

Death

If your Service terminates because of your death, then this Option will expire at the close of business at the Company's headquarters on the date twelve (12) months after the date your Service terminates (or, if earlier, the Expiration Date). During that period of up to twelve (12) months, your estate or heirs may exercise this Option.

Disability

If your Service terminates because of your Disability, then this Option will expire at the close of business at the Company's headquarters on the date twelve (12) months after the date your Service terminates (or, if earlier, the Expiration Date).

Leaves of Absence

For purposes of this Option, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave of absence was approved by the Company in writing and if continued crediting of Service is required by the terms of the leave or by applicable law. But your Service terminates when the approved leave ends, unless you immediately return to active work.

If you go on a leave of absence, then the vesting schedule specified in the Notice of Stock Option Grant may be adjusted in accordance with the Company's leave of absence policy or the terms of your leave. If your work schedule changes (i.e., your work hours are increased or reduced), then the vesting schedule specified in the Notice of Stock Option Grant may be adjusted in accordance with the Company's part-time work policy or the terms of an agreement between you and the Company pertaining to your part-time schedule.

Restrictions on Exercise

The Company will not permit you to exercise this Option if the issuance of Shares at that time would violate any law or regulation. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance and sale of the Stock pursuant to this Option will relieve the Company of any liability with respect to the non-issuance or sale of the Stock as to which such approval will not have been obtained.

Notice of Exercise

When you wish to exercise this Option you must provide a written or electronic notice of exercise form (substantially in the form attached to this Agreement as Exhibit A) in accordance with such procedures as are established by the Company and communicated to you from time to time. Any notice of exercise must specify how many Shares you wish to purchase and how your Shares should be registered. The notice of exercise will be effective when it is received by the Company. If someone else wants to exercise this Option after your death, that person must prove to the Company's satisfaction that he or she is entitled to do so.

Form of Payment

When you submit your notice of exercise, you must include payment of the Option exercise price for the Shares you are purchasing. Payment may be made in the following form(s):

- Your personal check, a cashier's check, a money order or a wire transfer.
- Certificates for Shares that you own, along with any forms needed to effect a transfer of those Shares to the Company. The value of the Shares, determined as of the effective date of the Option exercise, will be applied to the Option exercise price. If approved by the Company, instead of surrendering Shares, you may attest to the ownership of those Shares on a form provided by the Company and have the same number of Shares subtracted from the Shares issued to you upon exercise of this Option. However, you may not surrender or attest to the ownership of Shares in payment of the exercise price if your action would cause the Company to recognize a compensation expense (or additional compensation expense) with respect to this Option for financial reporting purposes.
- By delivery on a form approved by the Company of an irrevocable direction to a securities broker approved by the Company to sell all or part of the Shares that are issued to you when you exercise this Option and to deliver to the Company from the sale proceeds an amount sufficient to pay the Option exercise price and any withholding taxes. The balance of the sale proceeds, if any, will be delivered to you. The directions must be given by providing a notice of exercise form approved by the Company.
- By delivery on a form approved by the Company of an irrevocable direction to a securities broker or lender approved by the Company to pledge Shares that are issued to you when you exercise this Option as security for a loan and to deliver to the Company from the loan proceeds an amount sufficient to pay the Option exercise price and any withholding taxes. The directions must be given by providing a notice of exercise form approved by the Company.
- If permitted by the Committee, by a "**net exercise"** arrangement pursuant to which the number of Shares issuable upon exercise of the Option will be reduced by the largest whole number of Shares having an aggregate Fair Market Value that does not exceed the aggregate exercise price (plus tax withholdings, if applicable) and any remaining balance of the aggregate exercise price (and/or applicable tax withholdings) not satisfied by such reduction in the number of whole Shares to be issued will be paid by you in cash or other form of payment permitted under this Option. The directions must be given by providing a notice of exercise form approved by the Company.
- Any other form permitted by the Committee in its sole discretion.

Notwithstanding the foregoing, payment may not be made in any

form that is unlawful, as determined by the Committee in its sole discretion.

Withholding Taxes and Stock Withholding

Regardless of any action the Company and/or the Subsidiary or Affiliate employing you (your "**Employer**") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related withholding ("**Tax-Related Items**"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and/or your Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Option, including the grant, vesting or exercise of this Option, the subsequent sale of Shares acquired pursuant to such exercise and the receipt of any dividends; and (2) do not commit to structure the terms of the grant or any aspect of this Option to reduce or eliminate your liability for Tax-Related Items. Further, if you are subject to Tax-Related Items in more than one jurisdiction, you acknowledge that the Company and your Employer may be required to withhold or account for Tax-Related Items in more than one jurisdiction

Prior to exercise of this Option, you will pay or make adequate arrangements satisfactory to the Company and/or your Employer to satisfy all withholdings and payments on account obligations of the Company and/or your Employer. In this regard, you authorize the Company and/or your Employer to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or your Employer. With the Company's consent, these arrangements may also include, if permissible under local law, (a) withholding Shares that otherwise would be issued to you when you exercise this Option, provided that the Company only withholds the amount of Shares necessary to satisfy the maximum applicable tax withholding rate, (b) having the

Company withhold taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization), or (c) any other arrangement approved by the Committee. The Fair Market Value of the Shares, determined as of the effective date of the Option exercise, will be applied as a credit against the withholding taxes. The Company and your Employer may withhold or account for Tax-Related Items by considering statutory withholding amounts or other withholding rates applicable in your jurisdiction(s), including maximum applicable rates, in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the Stock equivalent. Finally, you will pay to the Company or your Employer any amount of Tax-Related Items that the Company or your Employer may be required to withhold as a result of your participation in the Plan or your purchase of Shares that cannot be satisfied by the means previously described. The Company may refuse to honor the exercise and refuse to deliver the Shares if you fail to comply with your obligations in connection with the Tax-Related Items as described in this section.

Restrictions on Resale

You agree not to sell any Shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify.

Transfer of Option

In general, only you can exercise this Option prior to your death. You may not sell, transfer, assign, pledge or otherwise dispose of this Option, other than as designated by you, by will or by the laws of descent and distribution, except as provided below. For instance, you may not use this Option as security for a loan. If you attempt to do any of these things, this Option will immediately become invalid. You may in any event dispose of this Option in your will. Regardless of any marital property settlement agreement, the Company is not obligated to honor a notice of exercise from your former spouse, nor is the Company obligated to recognize your former spouse's interest in this Option in any other way.

However, if this Option is designated as a nonstatutory stock option in the Notice of Stock Option Grant, then the Committee may, in its sole discretion, allow you to transfer this Option as a gift to one or more family members. For purposes of this Agreement, "**family member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships), any individual sharing your household (other than a tenant or employee), a trust in which one or more of these individuals have more than fifty percent (50%) of the beneficial interest, a foundation in which you or one or more of these persons control the management of assets, and any entity in which you or one or more of these persons own more than fifty percent (50%) of the voting interest.

In addition, if this Option is designated as a nonstatutory stock option in the Notice of Stock Option Grant, then the Committee may, in its sole discretion, allow you to transfer this Option to your spouse or former spouse pursuant to a domestic relations order in settlement of marital property rights.

The Committee will allow you to transfer this Option only if both you and the transferee(s) execute the forms prescribed by the Committee, which include the consent of the transferee(s) to be bound by this Agreement.

Stockholder Rights

This Option carries neither voting rights nor rights to dividends. You, or your estate or heirs, have no rights as a shareholder of the Company unless and until you have exercised this Option by giving the required notice to the Company and paying the exercise price. No adjustments will be made for dividends or other rights if the applicable record date occurs before you exercise this Option, except as described in the Plan.

No Retention Rights

Neither this Option nor this Agreement gives you the right to be employed or retained by the Company or any Subsidiary or Affiliate of the Company in any capacity. The Company and its Subsidiaries and Affiliates reserve the right to terminate your Service at any time, with or without cause.

You understand and acknowledge that the vesting of this Option pursuant to the vesting schedule hereof is earned only by your continued Service, or the satisfaction of any other conditions set forth herein, in each case at the will of the Company (not through the act of being hired or being granted this Option). As such, this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as a service provider for the vesting period, for any period, or at all, and shall not interfere in any way with your right or the Company's right to terminate your continued Service at any time, with or without cause.

Adjustments

The number of Shares covered by this Option and the exercise price per Share will be subject to adjustment in the event of a stock split, a stock dividend or a similar change in Company Shares, and in other circumstances, as set forth in the Plan. The forfeiture provisions and restrictions described above will apply to all new, substitute or additional stock options or securities to which you are entitled by reason of this Award.

Successors and Assigns

Except as otherwise provided in the Plan or this Agreement, every term of this Agreement will be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees and assigns.

Notice

Any notice required or permitted under this Agreement will be given in writing, including electronically, and will be deemed effectively given upon the earliest of personal delivery, electronic delivery to the email address assigned to you by the Company or provided by you to the Company, receipt or the third (3rd) full day following mailing with postage and fees prepaid, addressed to the other party hereto at the address last known in the Company's records or at such other address as such party may designate by ten (10) days' advance written notice to the other party hereto.

The Company may, in its sole discretion, deliver any documents related to your current or future participation in the Plan by electronic means. By accepting this Award, you hereby: (1) consent to receive such documents by electronic means; (2) consent to the use of electronic signatures; and (3) agree to participate in the Plan and/or receive any such documents through an on-line or electronic system established and maintained by the Company or a third party designated by the Company, including but not limited to the use of electronic signatures or click-through electronic acceptance of terms and conditions.

Section 409A of the Code

To the extent this Agreement is subject to, and not exempt from, Section 409A of the Code, this Agreement is intended to comply with Section 409A, and its provisions will be interpreted in a manner consistent with such intent. You acknowledge and agree that changes may be made to this Agreement to avoid adverse tax consequences to you under Section 409A.

Applicable Law and Choice of Venue

This Agreement will be interpreted and enforced under the laws of the State of Delaware without application of the conflicts of law principles thereof.

For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this Award or this Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the State of California and agree that any such litigation will be conducted only in the courts of California, or the federal courts of the United States located in California and no other courts.

Governing Document

This Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of the Award, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. Except as expressly provided in this Agreement, in the event of any conflict between the provisions of this Agreement, the Notice of Stock Option Grant, and those of the Plan, the provisions of the Plan will control.

Notwithstanding provisions in this Agreement, the Award shall be subject to additional terms and conditions for Participants outside the U.S. set forth in an addendum to this Agreement, including any additional terms and conditions for your country. Moreover, if you relocate to another country, the special terms and conditions for such country will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Any addendum to this Agreement constitutes part of this Agreement.

Severability

In the event that all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any section of this Agreement (or part of such a section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such section or part of a section to the fullest extent possible while remaining lawful and valid.

Recoupment

This Option is subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of applicable law, any of which could in certain circumstances require forfeiture of the Option and repayment or forfeiture of any Stock or other cash or property received with respect to the Option (including any value received from a disposition of the Stock acquired upon exercise of the Option).

No Tax, Legal or Investment Advice

The Company and your Employer are not providing any tax, legal or financial advice, nor is the Company or your Employer making any recommendations regarding your participation in the Plan or your acquisition or sale of the underlying Stock. You understand and agree that you should consult with your own personal tax, financial and/or legal advisors regarding the Award and Tax-Related Items arising in connection with the Award and by accepting the Award, you have agreed that you have done so or knowingly and voluntarily declined to do so.

Miscellaneous

You understand and acknowledge that (1) the Plan is entirely discretionary, (2) the Company and your Employer have reserved the right to amend, suspend or terminate the Plan at any time, (3) the grant of this Option does not in any way create any contractual or other right to receive additional grants of options (or benefits in lieu of options) at any time or in any amount and no inference shall be drawn from the grant of this Option with respect to the quality of your service to, or standing with, the Company and (4) all determinations with respect to any additional grants, including (without limitation) the times when options will be granted, the number of shares of Stock subject to options, the exercise price and the vesting schedule, will be at the sole discretion of the Company.

The value of this Option will be an extraordinary item of compensation outside the scope of your employment contract, if any, and will not be considered a part of your normal or expected compensation for purposes of calculating severance, resignation, redundancy or end-of-service payments, bonuses, service awards, pension or retirement benefits or similar payments.

You understand and acknowledge that participation in the Plan ceases upon termination of your Service for any reason, except as may explicitly be provided otherwise in the Plan or this Agreement.

You hereby authorize and direct your Employer to disclose to the Company or any Subsidiary or Affiliate any information regarding your employment, the nature and amount of your compensation and the fact and conditions of your participation in the Plan, as your Employer deems necessary or appropriate to facilitate the administration of the Plan.

You consent to the collection, use and transfer of personal data as described in this subsection. You understand and acknowledge that the Company, your Employer and the Company's other Subsidiaries and Affiliates hold certain personal information regarding you for the purpose of managing and administering the Plan, including (without limitation) your name, home address, telephone number, date of birth, social insurance or other government identification number, salary, nationality, job title, any shares of Stock or directorships held in the Company and details of all options or any other entitlements to shares of Stock awarded, canceled, exercised, vested, unvested or outstanding in your favor ("**Data**"). You further understand and acknowledge that the Company, its Subsidiaries and/or its Affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of your participation in the Plan and that the Company and/or any Subsidiary may each further transfer Data to any third party assisting the Company in the implementation, administration and management of the Plan. You understand and acknowledge that the recipients of Data may be located in the United States or elsewhere, and that the laws of a recipient's country of operation (e.g., the United States) may not have equivalent privacy protections as local laws where you reside or work. You authorize such recipients to receive, possess, use, retain and transfer Data, in electronic or other form, for the purpose of administering your participation in the Plan, including a transfer to any broker or other third party with whom you elect to deposit shares of Stock acquired under the Plan of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares of Stock on your behalf. You may, at any time, view Data, require any necessary modifications of Data, make inquiries about the treatment of Data or withdraw the consents set forth in this subsection by contacting the Human Resources Department of the Company in writing.

You acknowledge and agree that you have reviewed the documents provided to you in relation to the Option in their entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting the Option, and fully understand all provisions of such documents. You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of the Option.

BY SIGNING THE NOTICE OF STOCK OPTION GRANT, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
NOTICE OF EXERCISE OF STOCK OPTION

OPTIONEE INFORMATION:

Name: _____

Social Security Number: _____

Employee Number: _____

Address: _____

_____

OPTION INFORMATION:

Grant Date: _____

Exercise Price per Share: $ _____

Total Number of Shares of Silvaco Group, Inc. (the "**Company**") Covered by Option: _____

Type of Stock Option:
☐ Nonstatutory (NSO)
☐ Incentive (ISO)

Number of Shares of the Company for which Option is Being Exercised Now: _____ (the "**Purchased Shares**")

Total Exercise Price for the Purchased Shares: $ _____

Form of Payment:
☐ Cash or Check for $ _____ payable to "Silvaco Group, Inc."
☐ Cashless exercise
☐ Net exercise

Name(s) in which the Purchased Shares should be Registered: _____

The Certificate for the Purchased Shares (if any) should be sent to the Following Address: _____

ACKNOWLEDGMENTS:

1. I understand that all sales of Purchased Shares are subject to compliance with the Company's policy on securities trades.

2. I hereby acknowledge that I received and read a copy of the prospectus describing the Silvaco Group, Inc. 2024 Stock Incentive Plan and the tax consequences of an exercise.

3. In the case of a nonstatutory option, I understand that I must recognize ordinary income equal to the spread between the fair market value of the Purchased Shares on the date of exercise and the exercise price. I further understand that I am required to pay withholding taxes at the time of exercising a nonstatutory option.

4. In the case of an incentive stock option, I agree to notify the Company if I dispose of the Purchased Shares before I have met both of the tax holding periods applicable to incentive stock options (that is, if I dispose of the Purchased Shares prior to the date that is two (2) years after the Grant Date and one (1) year after the date the option was exercised).

SIGNATURE AND DATE:

_____ ,20

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK UNIT AWARD

You have been granted the following Restricted Stock Units (the "**Restricted Stock Units**", "**RSUs**" or this "**Award**") representing shares of Common Stock of Silvaco Group, Inc. (the "**Company**") under the Silvaco Group, Inc. 2024 Stock Incentive Plan (as may be amended from time to time, the "**Plan**"):

Name of Recipient:	[Name of Recipient]
Grant Date:	[Date of Grant]
Total Number of Shares Subject to Restricted Stock Units:	[Total Shares]
Vesting Commencement Date:	[Vesting Commencement Date]
Vesting Schedule:	[The RSUs vest when you complete [___] months of continuous Service as an Employee or a Consultant from the Vesting Commencement Date. *Actual vesting schedule to be inserted.*]

By your written signature below (or your electronic acceptance) and the signature of the Company's representative below, you and the Company agree that the RSUs are granted under and governed by the terms and conditions of the Plan, this Notice of Restricted Stock Unit Grant and the Restricted Stock Unit Agreement, including any special terms for Participants outside of the United States ("U.S.") (collectively, this "Agreement"), each of which are attached to and made a part of this document.

By your written signature below (or your electronic acceptance), you further agree that the Company may deliver by e-mail all documents relating to the Plan or this Award (including without limitation, prospectuses required by the Securities and Exchange Commission) and all other documents that the Company is required to deliver to its security holders (including without limitation, annual reports and proxy statements). You also agree that the Company may deliver these documents by posting them on a website maintained by the Company or by a third party under contract with the Company. If the Company posts these documents on a website, it will notify you by e-mail. Should you electronically accept this Agreement, you agree to the following: "This electronic contract contains my electronic signature, which I have executed with the intent to sign this Agreement."

You acknowledge and agree that (i) you have carefully read, fully understand and agree to all of the terms and conditions described in this Notice of Restricted Stock Unit Award, the attached Restricted Stock Unit Agreement and the Plan and (ii) you have been given an opportunity to consult your own legal and tax counsel with respect to all matters relating to these RSUs prior to signing (or electronically accepting) this Notice of Restricted Stock Unit Award and that you have either consulted such counsel or voluntarily declined to consult such counsel.

RECIPIENT

Recipient's Signature

Recipient's Printed Name

SILVACO GROUP, INC.

By:

Name

Title:

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
RESTRICTED STOCK UNIT AGREEMENT

The Plan and Other Agreements

The RSUs that you are receiving are granted pursuant and subject in all respects to the applicable provisions of the Plan, which is incorporated herein by reference. Capitalized terms not defined in this Agreement will have the meanings ascribed to them in the Plan.

The attached Notice of Restricted Stock Unit Award, this Agreement, including any additional terms for Participants outside of the United States ("**U.S.**") set forth in the addendum hereto, and the Plan constitute the entire understanding between you and the Company regarding this Award. Any prior agreements, commitments or negotiations concerning this Award are superseded, with the exception of (1) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (2) any written employment or severance arrangement that would provide for vesting acceleration of the RSUs upon the terms and conditions set forth therein. This Agreement may be amended by the Committee without your consent; however, if any such amendment would materially impair your rights or obligations under this Agreement, this Agreement may be amended only by another written agreement, signed by you and the Company.

Payment for RSUs

No cash payment is required for the RSUs you receive. You are receiving the RSUs in consideration for Services rendered by you.

Vesting

The RSUs that you are receiving will vest as shown in the Notice of Restricted Stock Unit Award. No additional RSUs vest after your Service as an Employee, an Outside Director or a Consultant has terminated for any reason.

Forfeiture

If your Service terminates for any reason, then this Award expires immediately as to the number of RSUs that have not vested before the termination date and do not vest as a result of termination. Your Service will not be extended by any notice period. This means that the unvested RSUs will immediately be cancelled. You will receive no payment for RSUs that are forfeited. The Company determines when your Service terminates for this purpose and all purposes under the Plan and its determinations are conclusive and binding on all persons.

Leaves of Absence

For purposes of this Award, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave of absence was approved by the Company in writing and if continued crediting of Service is required by the terms of the leave or by applicable law. But your Service terminates when the approved leave ends, unless you immediately return to active work.

If you go on a leave of absence, then the vesting schedule specified in the Notice of Restricted Stock Unit Award may be adjusted in accordance with the Company's leave of absence policy or the terms of your leave. If your work schedule changes (i.e., your work hours are increased or reduced), then the vesting schedule specified in the Notice of Restricted Stock Unit Award may be adjusted in accordance with the Company's part-time work policy or the terms of an agreement between you and the Company pertaining to your part-time schedule.

Nature of RSUs

Your RSUs are mere bookkeeping entries. They represent only the Company's unfunded and unsecured promise to issue Shares on a future date. As a holder of RSUs, you have no rights other than the rights of a general unsecured creditor of the Company.

No Voting Rights or Dividends

Your RSUs carry neither voting rights nor rights to dividends. Neither you, nor your estate or heirs, have any rights as a stockholder of the Company in respect of the RSUs, unless and until your RSUs are settled by issuing Shares. No adjustments will be made for dividends or other rights if the applicable record date occurs before your Shares are issued, except as described in the Plan.

RSUs Nontransferable

You may not sell, transfer, assign, pledge or otherwise dispose of any RSUs. For instance, you may not use your RSUs as security for a loan. If you attempt to do any of these things, your RSUs will immediately become invalid.

Settlement of RSUs

Each of your vested RSUs will be settled when it vests; provided, however, that if the Committee requires you to pay withholding taxes through a sale of Shares, settlement of each RSU may be deferred to the first permissible trading day for the Shares, if later than the applicable vesting date.

Under no circumstances may your RSUs be settled later than two and one-half (2-1/2) months following the calendar year in which the applicable vesting date occurs.

For purposes of this Agreement, "**permissible trading day**" means a day that satisfies all of the following requirements: (1) the exchange on which the Shares are traded is open for trading on that day; (2) you are permitted to sell Shares on that day without incurring liability under Section 16(b) of the Exchange Act; (3) either (a) you are not in possession of material non-public information that would make it illegal for you to sell Shares on that day under Rule 10b-5 under the Exchange Act or (b) Rule 10b5-1 under the Exchange Act would apply to the sale; (4) you are permitted to sell Shares on that day under such written insider trading policy as may have been adopted by the Company; and (5) you are not prohibited from selling Shares on that day by a written agreement between you and the Company or a third party.

At the time of settlement, you will receive one Share for each vested RSU; provided, however, that no fractional Shares will be issued or delivered pursuant to the Plan or this Agreement, and the Committee will determine whether cash will be paid in lieu of any fractional Share or whether such fractional Share and any rights thereto will be canceled, terminated or otherwise eliminated. In addition, the Shares are issued to you subject to the condition that the issuance of the Shares does not violate any law or regulation.

Withholding Taxes and Stock Withholding

Regardless of any action the Company and/or the Subsidiary or Affiliate employing you (your "**Employer**") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related withholding ("**Tax-Related Items**"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and your Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this Award, including the award, vesting or settlement of the RSUs, the subsequent sale of Shares acquired pursuant to settlement and the receipt of any dividends; and (2) do not commit to structure the terms of the award or any aspect of the RSUs to reduce or eliminate your liability for Tax-Related Items. Further, if you are subject to Tax-Related Items in more than one jurisdiction, you acknowledge that the Company and your Employer (or former Employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the settlement of the RSUs, you shall pay or make adequate arrangements satisfactory to the Company and your Employer to satisfy all withholdings and payments on account obligations of the Company and/or your Employer. In this regard, you authorize the Company and your Employer to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or your Employer.

Unless an alternative arrangement satisfactory to the Committee has been provided prior to the vesting date, the default method for paying withholding taxes is withholding Shares that otherwise would be issued to you when the RSUs are settled, provided that the Company only withholds a number of whole Shares having a Fair Market Value equal to the amount necessary to satisfy the maximum applicable tax withholding rate. Notwithstanding the foregoing, if you are classified as a Section 16 officer of the Company under the Exchange Act when the RSUs are settled, you shall be restricted to satisfying your obligation for Tax-Related Items by withholding in fully vested Shares that otherwise would be issued to you when the RSUs are settled, unless this withholding method is not permissible under applicable laws, or the Company has authorized an alternative method for the relevant taxable event.

If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, you are deemed to have been issued the full number of Shares subject to the vested RSU, notwithstanding that a number of the Shares is held back solely for the purpose of paying the Tax-Related Items.

The Committee may also require the withholding of taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization), or any other arrangement approved by the Committee.

The Fair Market Value of the Shares, determined as of the effective date when taxes otherwise would have been withheld in cash, will be applied as a credit against the withholding taxes. The Company or your Employer may withhold or account for Tax-Related Items by considering statutory withholding amounts or other withholding rates applicable in your jurisdiction(s), including maximum applicable tax withholding rates, in which case you may receive a refund of any over-withheld amount in cash and will have no entitlement to the Share equivalent. Finally, you will pay to the Company or your Employer any amount of Tax-Related Items that the Company or your Employer may be required to withhold as a result of your participation in the Plan or your acquisition of Shares that cannot be satisfied by the means previously described. The Company may refuse to deliver the Shares if you fail to comply with your obligations in connection with the Tax-Related Items as described in this section, and your rights to the Shares will be forfeited if you do not comply with such obligations on or before the date that is two and one-half (2-1/2) months following the calendar year in which the applicable vesting date for the RSUs occurs.

Restrictions on Resale

You agree not to sell any Shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify.

No Retention Rights

Neither this Award nor this Agreement gives you the right to be employed or retained by the Company or any Subsidiary or Affiliate of the Company in any capacity. The Company and its Subsidiaries and Affiliates reserve the right to terminate your Service at any time, with or without cause.

You understand and acknowledge that the vesting of your Award pursuant to the vesting schedule hereof is earned only by your continued Service, or the satisfaction of any other conditions set forth herein, in each case at the will of the Company (not through the act of being hired or being granted this Award). As such, this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as a service provider for the vesting period, for any period, or at all, and shall not interfere in any way with your right or the Company's right to terminate your continued Service at any time, with or without cause.

Adjustments The number of RSUs covered by this Award will be subject to adjustment in the event of a stock split, a stock dividend or a similar change in Shares, and in other circumstances, as set forth in the Plan. The forfeiture provisions and restrictions described above will apply to all new, substitute or additional restricted stock units or securities to which you are entitled by reason of this Award.

Successors and Assigns Except as otherwise provided in the Plan or this Agreement, every term of this Agreement will be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees and assigns.

Notice Any notice required or permitted under this Agreement will be given in writing, including electronically, and will be deemed effectively given upon the earliest of personal delivery, electronic delivery to the email address assigned to you by the Company or provided by you to the Company, receipt or the third (3rd) full day following mailing with postage and fees prepaid, addressed to the other party hereto at the address last known in the Company's records or at such other address as such party may designate by ten (10) days' advance written notice to the other party hereto. The Company may, in its sole discretion, deliver any documents related to your current or future participation in the Plan by electronic means. By accepting this Award, you hereby: (1) consent to receive such documents by electronic means; (2) consent to the use of electronic signatures; and (3) agree to participate in the Plan and/or receive any such documents through an online or electronic system established and maintained by the Company or a third party designated by the Company, including but not limited to the use of electronic signatures or click-through electronic acceptance of terms and conditions.

Section 409A of the Code

This Agreement and the RSUs are intended to be exempt from the application of Section 409A of the Code, including but not limited to by reason of complying with the "short-term deferral" rule set forth in Treasury Regulation Section 1.409A-1(b)(4) and any ambiguities herein shall be interpreted accordingly. Notwithstanding the foregoing, to the extent this Agreement and the RSUs are subject to, and not exempt from, Section 409A of the Code, this Agreement and the RSUs are intended to comply with Section 409A, and its provisions will be interpreted in a manner consistent with such intent. You acknowledge and agree that changes may be made to this Agreement to avoid adverse tax consequences to you under Section 409A. If it is determined that the RSUs are deferred compensation subject to Section 409A of the Code and you are a "specified employee" (within the meaning set forth in Section 409A(a)(2)(B)(i) of the Code) as of the date of your "separation from service" (as defined in Section 409A of the Code), then the issuance of any Shares that would otherwise be made upon the date of your separation from service or within the first six (6) months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the date that is six (6) months and one day after the date of the separation from service, with the balance of the Shares issued thereafter in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the Shares is necessary to avoid the imposition of adverse taxation on you in respect of the Shares under Section 409A of the Code. Each installment of Shares that vests is intended to constitute a "separate payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2).

Applicable Law and Choice of Venue

This Agreement will be interpreted and enforced under the laws of the State of Delaware without application of the conflicts of law principles thereof.

For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this Award or this Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the State of California and agree that any such litigation will be conducted only in the courts of California, or the federal courts of the United States located in California and no other courts.

Governing Document

This Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of the Award, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. Except as expressly provided in this Agreement, in the event of any conflict between the provisions of this Agreement, the Notice of Restricted Stock Unit Award, and those of the Plan, the provisions of the Plan will control.

Notwithstanding provisions in this Agreement, the Award shall be subject to additional terms and conditions for Participants outside the U.S. set forth in an addendum to this Agreement, including any additional terms and conditions for your country. Moreover, if you relocate to another country, the special terms and conditions for such country will apply to you, to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Any addendum to this Agreement constitutes part of this Agreement.

Severability

In the event that all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any section of this Agreement (or part of such a section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such section or part of a section to the fullest extent possible while remaining lawful and valid.

No Tax, Legal or Investment Advice

The Company and your Employer are not providing any tax, legal or financial advice, nor is the Company or your Employer making any recommendations regarding your participation in the Plan or your acquisition or sale of the underlying Shares. You understand and agree that you should consult with your own personal tax, financial and/or legal advisors regarding the Award and Tax-Related Items arising in connection with the Award and by accepting the Award, you have agreed that you have done so or knowingly and voluntarily declined to do so.

Miscellaneous

You understand and acknowledge that (1) the Plan is entirely discretionary, (2) the Company and your Employer have reserved the right to amend, suspend or terminate the Plan at any time, (3) the grant of this Award does not in any way create any contractual or other right to receive additional grants of awards (or benefits in lieu of awards) at any time or in any amount and no inference shall be drawn from the grant of this Award with respect to the quality of your service to, or standing with, the Company and (4) all determinations with respect to any additional grants, including (without limitation) the times when awards will be granted, the number of RSUs subject to awards and the vesting schedule, will be at the sole discretion of the Company.

The value of this Award will be an extraordinary item of compensation outside the scope of your employment contract, if any, and will not be considered a part of your normal or expected compensation for purposes of calculating severance, resignation, redundancy or end-of-service payments, bonuses, service awards, pension or retirement benefits or similar payments.

You understand and acknowledge that participation in the Plan ceases upon termination of your Service for any reason, except as may explicitly be provided otherwise in the Plan or this Agreement.

You hereby authorize and direct your Employer to disclose to the Company or any Subsidiary or Affiliate any information regarding your employment, the nature and amount of your compensation and the fact and conditions of your participation in the Plan, as your Employer deems necessary or appropriate to facilitate the administration of the Plan.

You consent to the collection, use and transfer of personal data as described in this subsection. You understand and acknowledge that the Company, your Employer and the Company's other Subsidiaries and Affiliates hold certain personal information regarding you for the purpose of managing and administering the Plan, including (without limitation) your name, home address, telephone number, date of birth, social insurance or other government identification number, salary, nationality, job title, any Shares or directorships held in the Company and details of all awards or any other entitlements to RSUs or Shares awarded, canceled, exercised, vested, unvested or outstanding in your favor (the "**Data**"). You further understand and acknowledge that the Company, its Subsidiaries and/or its Affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of your participation in the Plan and that the Company and/or any Subsidiary may each further transfer Data to any third party assisting the Company in the implementation, administration and management of the Plan. You understand and acknowledge that the recipients of Data may be located in the United States or elsewhere, and that the laws of a recipient's country of operation (e.g., the United States) may not have equivalent privacy protections as local laws where you reside or work. You authorize such recipients to receive, possess, use, retain and transfer Data, in electronic or other form, for the purpose of administering your participation in the Plan, including a transfer to any broker or other third party with whom you elect to deposit Shares acquired under the Plan of such Data as may be required for the administration of the Plan and/or the subsequent holding of Shares on your behalf. You may, at any time, view Data, require any necessary modifications of Data, make inquiries about the treatment of Data or withdraw the consents set forth in this subsection by contacting the Human Resources Department of the Company in writing.

You acknowledge and agree that you have reviewed the documents provided to you in relation to the Award in their entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting the Award, and fully understand all provisions of such documents. You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of the Award.

BY SIGNING THE NOTICE OF RESTRICTED STOCK UNIT AWARD, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK AWARD

You have been granted the following restricted shares of Common Stock (the "**Restricted Shares**" or this "**Award**") of Silvaco Group, Inc. (the "**Company**") under the Silvaco Group, Inc. 2024 Stock Incentive Plan (as may be amended from time to time, the "**Plan**"):

Name of Recipient:	[Name of Recipient]
Grant Date:	[Date of Grant]
Total Number of Shares Granted:	[Total Shares]
Vesting Commencement Date:	[Vesting Commencement Date]
Vesting Schedule:	[The Restricted Shares vest when you complete [___] months of continuous Service as an Employee or a Consultant from the Vesting Commencement Date. *Actual vesting schedule to be inserted*.]

By your written signature below (or your electronic acceptance) and the signature of the Company's representative below, you and the Company agree that the Restricted Shares are granted under and governed by the terms and conditions of the Plan, this Notice of Restricted Stock Award and the Restricted Stock Agreement (collectively, this "Agreement"), both of which are attached to and made a part of this document.

By your written signature below (or your electronic acceptance), you further agree that the Company may deliver by e-mail all documents relating to the Plan or this Award (including without limitation, prospectuses required by the Securities and Exchange Commission) and all other documents that the Company is required to deliver to its security holders (including without limitation, annual reports and proxy statements). You also agree that the Company may deliver these documents by posting them on a website maintained by the Company or by a third party under contract with the Company. If the Company posts these documents on a website, it will notify you by e-mail. Should you electronically accept this Agreement, you agree to the following: "This electronic contract contains my electronic signature, which I have executed with the intent to sign this Agreement."

You acknowledge and agree that (i) you have carefully read, fully understand and agree to all of the terms and conditions described in this Notice of Restricted Stock Award, the attached Restricted Stock Agreement and the Plan and (ii) you have been given an opportunity to consult your own legal and tax counsel with respect to all matters relating to this Award prior to signing (or electronically accepting) this Notice of Restricted Stock Award and that you have either consulted such counsel or voluntarily declined to consult such counsel.

RECIPIENT

Recipient's Signature

Recipient's Printed Name

SILVACO GROUP, INC.

By:

Name:

Title:

SILVACO GROUP, INC.
2024 STOCK INCENTIVE PLAN
RESTRICTED STOCK AGREEMENT

The Plan and Other Agreements

The Restricted Shares that you are receiving are granted pursuant and subject in all respects to the applicable provisions of the Plan, which is incorporated herein by reference. Capitalized terms not defined in this Agreement will have the meanings ascribed to them in the Plan.

The attached Notice of Restricted Stock Award, this Agreement, including any additional terms for Participants outside of the United States ("**U.S.**") set forth in the addendum hereto, and the Plan constitute the entire understanding between you and the Company regarding this Award. Any prior agreements, commitments or negotiations concerning this Award are superseded with the exception of (1) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (2) any written employment or severance arrangement that would provide for vesting acceleration of this Award upon the terms and conditions set forth therein. This Agreement may be amended by the Committee without your consent; however, if any such amendment would materially impair your rights or obligations under this Agreement, this Agreement may be amended only by another written agreement, signed by you and the Company.

Payment For Shares

No cash payment is required for the Shares you receive. You are receiving the Shares in consideration for Services rendered by you.

Vesting

The Shares that you are receiving will vest as shown in the Notice of Restricted Stock Award. No additional Shares will vest after your Service as an Employee, an Outside Director or a Consultant has terminated for any reason.

Shares Restricted

Unvested Shares will be considered "**Restricted Shares**." Except to the extent permitted by the Committee, you may not sell, transfer, assign, pledge or otherwise dispose of Restricted Shares.

Forfeiture

If your Service terminates for any reason, then your Shares will be forfeited to the extent that they have not vested before the termination date and do not vest as a result of termination. This means that the Restricted Shares will immediately revert to the Company. You will receive no payment for Restricted Shares that are forfeited. The Company determines when your Service terminates for this purpose and all purposes under the Plan and its determinations are conclusive and binding on all persons.

Leaves of Absence

For purposes of this Award, your Service does not terminate when you go on a military leave, a sick leave or another *bona fide* leave of absence, if the leave of absence was approved by the Company in writing and if continued crediting of Service is required by the terms of the leave or by applicable law. But your Service terminates when the approved leave ends, unless you immediately return to active work.

If you go on a leave of absence, then the vesting schedule specified in the Notice of Restricted Stock Award may be adjusted in accordance with the Company's leave of absence policy or the terms of your leave. If your work schedule changes (i.e., your work hours are increased or reduced), then the vesting schedule specified in the Notice of Restricted Stock Award may be adjusted in accordance with the Company's part-time work policy or the terms of an agreement between you and the Company pertaining to your part-time schedule.

Stock Certificates or Book Entry Form

The Restricted Shares will be evidenced by either stock certificates or book entries on the Company's stock transfer records pending expiration of the restrictions thereon. If you are issued certificates for the Restricted Shares, the certificates will have stamped on them a special legend referring to the forfeiture restrictions. In addition to or in lieu of imposing the legend, the Company may hold the certificates in escrow. As your vested percentage increases, you may request (at reasonable intervals) that the Company release to you a non-legended certificate for your vested Shares.

Stockholder Rights

During the period of time between the Grant Date and the date the Restricted Shares become vested, you will have all the rights of a shareholder with respect to the Restricted Shares except for the right to transfer the Restricted Shares, as set forth above, and except in the case of any unvested Restricted Shares, you will not be entitled to any dividends or other distributions paid or distributed by the Company in respect of outstanding Shares. Accordingly, you will have the right to vote the Restricted Shares and to receive any cash dividends paid with respect to the vested Restricted Shares.

Withholding Taxes and Stock Withholding

Regardless of any action the Company and/or the Subsidiary or Affiliate employing you ("**Employer**") takes with respect to any or all income tax, social insurance, payroll tax, payment on account or other tax-related withholding ("**Tax-Related Items**"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Company and/or your Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Shares received under this Award, including the award or vesting of such Shares, the subsequent sale of Shares under this Award and the receipt of any dividends; and (2) do not commit to structure the terms of the award to reduce or eliminate your liability for Tax-Related Items. Further, if you are subject to Tax-Related Items in more than one jurisdiction, you acknowledge that the Company and your Employer (or former Employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

No stock certificates will be released to you or no notations on any Restricted Shares issued in book-entry form will be removed, as applicable, unless you have paid or made adequate arrangements satisfactory to the Company and/or your Employer to satisfy all withholdings and payments on account obligations of the Company and/or your Employer. In this regard, you authorize the Company and/or your Employer to withhold all applicable Tax-Related Items legally payable by you from your wages or other cash compensation paid to you by the Company and/or your Employer. With the Company's consent, these arrangements may also include, if permissible under local law, (a) withholding Shares that otherwise would be delivered to you when they vest having a Fair Market Value equal to the amount necessary to satisfy the maximum applicable tax withholding rate, (b) having the Company withhold taxes from the proceeds of the sale of the Shares, either through a voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization), or (c) any other arrangement approved by the Committee. The Fair Market Value of the Shares, determined as of the date when taxes otherwise would have been withheld in cash, will be applied as a credit against the withholding taxes. Finally, you will pay to the Company or your Employer any amount of Tax-Related Items that the Company or your Employer may be required to withhold as a result of your participation in the Plan or your acquisition of Shares that cannot be satisfied by the means previously described. The Company may refuse to deliver the Shares if you fail to comply with your obligations in connection with the Tax-Related Items as described in this section.

Restrictions on Resale

You agree not to sell any Shares at a time when applicable laws, Company policies or an agreement between the Company and its underwriters prohibit a sale. This restriction will apply as long as your Service continues and for such period of time after the termination of your Service as the Company may specify.

No Retention Rights

Neither this Award nor this Agreement gives you the right to be employed or retained by the Company or any Subsidiary or Affiliate of the Company in any capacity. The Company and its Subsidiaries and Affiliates reserve the right to terminate your Service at any time, with or without cause.

You understand and acknowledge that the vesting of your Award pursuant to the vesting schedule hereof is earned only by your continued Service, or the satisfaction of any other conditions set forth herein, in each case at the will of the Company (not through the act of being hired or being granted this Award). As such, this Agreement, the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as a service provider for the vesting period, for any period, or at all, and shall not interfere in any way with your right or the Company's right to terminate your continued Service at any time, with or without cause.

Adjustments

The number of Restricted Shares covered by this Award will be subject to adjustment in the event of a stock split, a stock dividend or a similar change in Shares, and in other circumstances, as set forth in the Plan. The forfeiture provisions and restrictions described above will apply to all new, substitute or additional restricted shares or securities to which you are entitled by reason of this Award.

Successors and Assigns

Except as otherwise provided in the Plan or this Agreement, every term of this Agreement will be binding upon and inure to the benefit of the parties hereto and their respective heirs, legatees, legal representatives, successors, transferees and assigns.

Governing Plan Document

This Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of the Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Except as expressly provided in this Agreement, in the event of any conflict between the provisions of this Agreement, the Notice of Restricted Award, and those of the Plan, the provisions of the Plan will control.

Severability

In the event that all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any section of this Agreement (or part of such a section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such section or part of a section to the fullest extent possible while remaining lawful and valid.

Recoupment	This Award is subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of applicable law, any of which could in certain circumstances require forfeiture of the Award and repayment or forfeiture of any Shares or other cash or property received with respect to the Award (including any value received from a disposition of the Shares).
No Tax, Legal or Investment Advice	The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying Shares. You understand and agree that you should consult with your own personal tax, financial and/or legal advisors regarding the Award and Tax-Related Items arising in connection with the Award and by accepting the Award, you have agreed that you have done so or knowingly and voluntarily declined to do so.
Notice	Any notice required or permitted under this Agreement will be given in writing, including electronically, and will be deemed effectively given upon the earliest of personal delivery, electronic delivery to the email address assigned to you by the Company or provided by you to the Company, receipt or the third (3rd) full day following mailing with postage and fees prepaid, addressed to the other party hereto at the address last known in the Company's records or at such other address as such party may designate by ten (10) days' advance written notice to the other party hereto. The Company may, in its sole discretion, deliver any documents related to your current or future participation in the Plan by electronic means. By accepting this Award, you hereby: (1) consent to receive such documents by electronic means; (2) consent to the use of electronic signatures; and (3) agree to participate in the Plan and/or receive any such documents through an on-line or electronic system established and maintained by the Company or a third party designated by the Company, including but not limited to the use of electronic signatures or click-through electronic acceptance of terms and conditions.
Applicable Law and Choice of Venue	This Agreement will be interpreted and enforced under the laws of the State of Delaware without application of the conflicts of law principles thereof. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this Award or this Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the State of California and agree that any such litigation will be conducted only in the courts of California, or the federal courts of the United States located in California and no other courts.

Miscellaneous

You understand and acknowledge that (1) the Plan is entirely discretionary, (2) the Company and your Employer have reserved the right to amend, suspend or terminate the Plan at any time, (3) the grant of this Award does not in any way create any contractual or other right to receive additional grants of awards (or benefits in lieu of awards) at any time or in any amount and no inference shall be drawn from the grant of this Award with respect to the quality of your service to, or standing with, the Company and (4) all determinations with respect to any additional grants, including (without limitation) the times when awards will be granted, the number of Shares subject to awards, the purchase price and the vesting schedule, will be at the sole discretion of the Company.

The value of this Award will be an extraordinary item of compensation outside the scope of your employment contract, if any, and will not be considered a part of your normal or expected compensation for purposes of calculating severance, resignation, redundancy or end-of-service payments, bonuses, service awards, pension or retirement benefits or similar payments.

You understand and acknowledge that participation in the Plan ceases upon termination of your Service for any reason, except as may explicitly be provided otherwise in the Plan or this Agreement.

You hereby authorize and direct your Employer to disclose to the Company or any Subsidiary or Affiliate any information regarding your employment, the nature and amount of your compensation and the fact and conditions of your participation in the Plan, as your Employer deems necessary or appropriate to facilitate the administration of the Plan.

You consent to the collection, use and transfer of personal data as described in this subsection. You understand and acknowledge that the Company, your Employer and the Company's other Subsidiaries and Affiliates hold certain personal information regarding you for the purpose of managing and administering the Plan, including (without limitation) your name, home address, telephone number, date of birth, social insurance or other government identification number, salary, nationality, job title, any Shares or directorships held in the Company and details of all awards or any other entitlements to Shares awarded, canceled, exercised, vested, unvested or outstanding in your favor ("**Data**"). You further understand and acknowledge that the Company, its Subsidiaries and/or its Affiliates will transfer Data among themselves as necessary for the purpose of implementation, administration and management of your participation in the Plan and that the Company and/or any Subsidiary may each further transfer Data to any third party assisting the Company in the implementation, administration and management of the Plan. You understand and acknowledge that the recipients of Data may be located in the United States or elsewhere, and that the laws of a recipient's country of operation (e.g., the United States) may not have equivalent privacy protections as local laws where you reside or work. You authorize such recipients to receive, possess, use, retain and transfer Data, in electronic or other form, for the purpose of administering your participation in the Plan, including a transfer to any broker or other third party with whom you elect to deposit Shares acquired under the Plan of such Data as may be required for the administration of the Plan and/or the subsequent holding of Shares on your behalf. You may, at any time, view Data, require any necessary modifications of Data, make inquiries about the treatment of Data or withdraw the consents set forth in this subsection by contacting the Human Resources Department of the Company in writing.

You acknowledge and agree that you have reviewed the documents provided to you in relation to the Award in their entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting the Award, and fully understand all provisions of such documents. You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of the Award.

BY SIGNING THE NOTICE OF RESTRICTED STOCK AWARD, YOU AGREE TO ALL OF THE TERMS AND CONDITIONS DESCRIBED ABOVE AND IN THE PLAN.

SILVACO GROUP, INC.

2024 EMPLOYEE STOCK PURCHASE PLAN

TABLE OF CONTENTS

SILVACO GROUP, INC.
2024 EMPLOYEE STOCK PURCHASE PLAN

SECTION 1. PURPOSE OF THE PLAN.

The Plan is effective on the date on which the registration statement covering the initial public offering of the Shares is declared effective by the United States Securities and Exchange Commission (the "**Effective Date**"). The purpose of the Plan is to provide a broad-based employee benefit to attract the services of new Eligible Employees, to retain the services of existing Eligible Employees, and to provide incentives for such individuals to exert maximum efforts toward the Company's success by purchasing Shares from the Company on favorable terms and to pay for such purchases through payroll deductions. The Plan is intended to qualify under Section 423 of the Code and to be exempt from the application and requirements of Section 409A of the Code, and is to be construed accordingly.

The Company intends to make two types of offerings under the Plan: offerings that are intended to qualify as an "employee stock purchase plan" under Section 423 of the Code and to be exempt from the application and requirements of Section 409A of the Code, and to be construed accordingly (each, a "Section 423 Offering") and offerings that are not intended to qualify as an "employee stock purchase plan" under Section 423 of the Code (each, a "Non-423 Offering"). The Section 423 Offerings will be construed so as to extend and limit Plan participation in a uniform and nondiscriminatory basis consistent with the requirements of Section 423 of the Code. An option to purchase shares of Common Stock under the Non-423 Offering will be granted pursuant to any rules, procedures, agreements, appendices or sub-plans adopted by the Committee designed to achieve tax, securities laws, or any other objectives. Except as otherwise provided herein, the Non-423 Offering will operate and be administered in the same manner as the Section 423 Offering.

SECTION 2. DEFINITIONS.

(a) "**Affiliate**" means any entity that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under the common control with, the Company.

(b) "**Board**" means the Board of Directors of the Company, as constituted from time to time.

(c) "**Code**" means the United States Internal Revenue Code of 1986, as amended.

(d) "**Committee**" means the Compensation Committee of the Board or such other committee, comprised exclusively of one or more directors of the Company, as may be appointed by the Board from time to time to administer the Plan. To the extent a such a committee is not appointed by the Board to administer the Plan, references to "Committee" in this Plan shall refer to the Board.

(e) "**Company**" means Silvaco Group, Inc., a Delaware corporation, including any successor thereto.

(f) "**Compensation**" means, unless provided otherwise by the Committee in the terms and conditions of an Offering, base salary and wages paid in cash to a Participant by a Participating Company, without reduction for any pre-tax contributions made by the Participant under sections 401(k) or 125 of the Code. "Compensation" shall, unless provided otherwise by the Committee in the terms and conditions of an Offering, exclude variable compensation (including commissions, bonuses, incentive compensation, overtime pay and shift premiums), all non-cash items, moving or relocation allowances, cost-of-living equalization payments, car allowances, tuition reimbursements, imputed income attributable to cars or life insurance, severance pay, fringe benefits, contributions or benefits received under employee benefit plans, income attributable to the exercise of stock options or any other equity awards, and similar items. The Committee shall determine whether a particular item is included in Compensation. Further, the Committee shall have the discretion to determine the application of this definition to Participants outside the United States.

(g) "**Corporate Reorganization**" means:

(i) The consummation of a merger or consolidation of the Company with or into another entity, or any other corporate reorganization; or

(ii) The sale, transfer or other disposition of all or substantially all of the Company's assets or the complete liquidation or dissolution of the Company.

(h) "**Eligible Employee**" means any Employee of a Participating Company who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan. The foregoing notwithstanding, an individual shall not be considered an Eligible Employee if such individual's participation in the Plan is prohibited by the law of any country which has jurisdiction over the employee.

(i) *"***Employee***"* means any person who is "employed" for purposes of Section 423(b)(4) of the Code by a Participating Company. However, service solely as a director, or payment of a fee for such services, will not cause a director to be considered an "Employee" for purposes of the Plan.

(j) "**Exchange Act**" means the United States Securities Exchange Act of 1934, as amended.

(k) "**Fair Market Value**" means the fair market value of a Share, determined as follows:

(i) If Shares were traded on any established national securities exchange, including the New York Stock Exchange or The Nasdaq Stock Market, on the date in question, then the Fair Market Value shall be equal to the closing price as quoted on such exchange (or the exchange with the greatest volume of trading with respect to the Shares) on such date as

reported in the Wall Street Journal or such other source as the Committee deems reliable; or

(ii) If the foregoing provision is not applicable, then the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate.

The determination of fair market value for purposes of tax withholding may be made in the Committee's discretion subject to applicable law and is not required to be consistent with the determination of Fair Market Value for other purposes.

For any date that is not a Trading Day, the Fair Market Value of a Share for such date shall be determined by using the closing sale price for the immediately preceding Trading Day. Determination of the Fair Market Value pursuant to the foregoing provisions shall be conclusive and binding on all persons.

(l) "**Offering**" means the grant of options to purchase Shares under the Plan to Eligible Employees.

(m) "**Offering Date**" means the first day of an Offering.

(n) "**Offering Period**" means a period with respect to which the right to purchase Shares may be granted under the Plan, as determined pursuant to Section 4(a).

(o) "**Participant**" means an Eligible Employee who elects to participate in the Plan, as provided in Section 4(b).

(p) "**Participating Company**" means (i) the Company and (ii) each present or future Subsidiary or Affiliate designated by the Committee as a Participating Company. The Committee may so designate any Subsidiary or Affiliate, or revoke any such designation, at any time and from time to time, either before or after the Plan is approved by the shareholders, and may further designate such companies or Participants as participating in the 423 Component or the Non-423 Component. The Committee may also determine which Affiliates or Eligible Employees may be excluded from participation in the Plan, to the extent consistent with Section 423 of the Code or as implemented under a Non-423 Offering, and determine which Participating Company or Companies will participate in separate Offerings (to the extent that the Company makes separate Offerings). For purposes of Section 423 Offerings, only the Company and its Subsidiaries may be Participating Companies; provided, however, that at any given time, a Subsidiary that is a Participating Company in a Section 423 Offering will not be a Participating Company in a Non-423 Offering.

(q) *"***Plan***"* means this Silvaco Group, Inc. 2024 Employee Stock Purchase Plan, as it may be amended from time to time.

(r) "**Plan Account**" means the account established for each Participant pursuant to Section 8(a).

(s) "**Purchase Date**" means one or more dates during an Offering on which Shares may be purchased pursuant to the terms of the Offering.

(t) "**Purchase Period**" means one or more successive periods during an Offering, beginning on the Offering Date or on the day after a Purchase Date, and ending on the next succeeding Purchase Date.

(u) "**Purchase Price**" means the price at which Participants may purchase Shares under the Plan, as determined pursuant to Section 8(b).

(v) "**Shares**" means the common stock, par value $0.0001 per share, of the Company.

(w) "**Subsidiary**" means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

(x) "**Trading Day**" means a day on which the national stock exchange on which the Shares are traded is open for trading.

SECTION 3. ADMINISTRATION OF THE PLAN.

(a) *Administrative Powers and Responsibilities*. The Plan shall be administered by the Committee. The Committee shall have full power and authority, subject to the provisions of the Plan, to promulgate such rules and regulations as it deems necessary for the proper administration of the Plan, to interpret the provisions and supervise the administration of the Plan, and to take all action in connection therewith or in relation thereto as it deems necessary or advisable. Any decision reduced to writing and signed by all of the members of the Committee shall be fully effective as if it had been made at a meeting duly held. The Committee's determinations under the Plan, unless otherwise determined by the Board, shall be final and binding on all persons. The Company shall pay all expenses incurred in the administration of the Plan. No member of the Committee shall be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan, and all members of the Committee shall be fully indemnified by the Company with respect to any such action, determination or interpretation. The Committee may adopt such rules, guidelines and forms as it deems appropriate to implement the Plan. Subject to the requirements of applicable law, the Committee may designate persons other than members of the Committee to carry out its responsibilities and may prescribe such conditions and limitations as it may deem appropriate. All decisions, interpretations and other actions of the Committee shall be final and binding on all Participants and all persons deriving their rights from a Participant. No member of the Committee shall be liable for any action that he has taken or has failed to take in good faith with respect to the Plan. Notwithstanding anything to the contrary in the Plan, the Board may, in its sole discretion, at any time and from time to time, resolve to administer the Plan. In such event, the Board shall have all of the authority and responsibility granted to the Committee herein.

(b) *International Administration*. The Committee may establish sub-plans (which need not qualify under Section 423 of the Code) and initiate separate Offerings for the purpose of (i) facilitating participation in the Plan by non-U.S. employees in compliance with foreign laws and regulations without affecting the qualification of the remainder of the Plan under Section 423 of the Code or (ii) qualifying the Plan for preferred tax treatment under foreign tax laws (which sub-plans, at the Committee's discretion, may provide for allocations of the authorized shares reserved for issue under the Plan as set forth in Section 14(a)). The rules, guidelines and forms of such sub-plans (or the Offerings thereunder) may take precedence over other provisions of the Plan, with the exception of Section 4(a)(i), Section 5(b), Section 8(b) and Section 14(a), but unless otherwise superseded by the terms of such sub-plan, the provisions of the Plan shall govern the operation of such sub-plan. Alternatively and in order to comply with the laws of a foreign jurisdiction, the Committee shall have the power, in its discretion, to grant options in an Offering to citizens or residents of a non-U.S. jurisdiction (without regard to whether they are also citizens of the United States or resident aliens) that provide terms which are less favorable than the terms of options granted under the same Offering to employees resident in the United States, subject to compliance with Section 423 of the Code.

SECTION 4. ENROLLMENT AND PARTICIPATION.

(a) *Offering Periods*. While the Plan is in effect, the Committee may from time to time grant options to purchase Shares pursuant to the Plan to Eligible Employees during a specified Offering Period. Each such Offering shall be in such form and shall contain such terms and conditions as the Committee shall determine, subject to compliance with the terms and conditions of the Plan (which may be incorporated by reference) and, as applicable, the requirements of Section 423 of the Code, including the requirement that all Eligible Employees participating in each Section 423 Offering have the same rights and privileges. The Committee shall specify prior to the commencement of each Offering (i) the period during which the Offering shall be effective, which may not exceed twenty-seven (27) months from the Offering Date and may include one or more successive Purchase Periods within the Offering, (ii) the Purchase Dates and Purchase Price for Shares which may be purchased pursuant to the Offering, and (iii) if applicable, any limits on the number of Shares purchasable by a Participant, or by all Participants in the aggregate, during any Offering Period or, if applicable, Purchase Period, in each case consistent with the limitations of the Plan. The Committee shall have the discretion to provide for the automatic termination of an Offering following any Purchase Date on which the Fair Market Value of a Share is equal to or less than the Fair Market Value of a Share on the Offering Date, and for the Participants in the terminated Offering to be automatically re-enrolled in a new Offering that commences immediately after such Purchase Date. The terms and conditions of each Offering need not be identical, and shall be deemed incorporated by reference and made a part of the Plan.

(b) *Enrollment*. Any individual who, on the day preceding the first day of an Offering Period, qualifies as an Eligible Employee may elect to become a Participant in the Plan for such Offering Period by completing the enrollment process prescribed and communicated for this purpose from time to time by the Company to Eligible Employees.

(c) *Duration of Participation*. Once enrolled in the Plan, a Participant shall continue to participate in the Plan until the Participant ceases to be an Eligible Employee or withdraws from the Plan under Section 6(a). A Participant who withdrew from the Plan under Section 6(a) may again become a Participant, if the Participant then is an Eligible Employee, by following the procedure described in Subsection (b) above. A Participant whose employee contributions were discontinued automatically under Section 9(b) shall automatically resume participation at the beginning of the earliest Offering Period ending in the next calendar year, if the Participant then is an Eligible Employee. Except as otherwise provided in the terms and conditions of an Offering, when a Participant reaches the end of an Offering Period but the Participant's participation is to continue, then such Participant shall automatically be re-enrolled for the Offering Period that commences immediately after the end of the prior Offering Period.

SECTION 5. EMPLOYEE CONTRIBUTIONS.

(a) *Frequency of Payroll Deductions*. A Participant may purchase Shares under the Plan solely by means of payroll deductions; provided, however, that to the extent provided in the terms and conditions of an Offering, a Participant may also make contributions through payment by cash or check prior to one or more Purchase Dates during the Offering. Payroll deductions, subject to the provisions of Subsection (b) below or as otherwise provided under the terms and conditions of an Offering, shall occur on each payday during participation in the Plan.

(b) *Amount of Payroll Deductions*. An Eligible Employee shall designate during the enrollment process the portion of the Eligible Employee's Compensation that the Eligible Employee elects to have withheld for the purchase of Shares. Such portion shall be a whole percentage of the Eligible Employee's Compensation, but not less than one percent (1%) nor more than fifteen percent (15%) (or such lower rate of Compensation specified as the limit in the terms and conditions of the applicable Offering).

(c) *Changing Deduction Rate*. Unless otherwise provided under the terms and conditions of an Offering, (i) a Participant may not increase the rate of payroll deductions during the Offering Period, and (ii) a Participant may discontinue or decrease the rate of payroll deductions during the Offering Period to a whole percentage of the Participant's Compensation (including a reduction to zero percent (0%)) in accordance with such procedures and subject to such limitations as the Company may establish for all Participants. A Participant may also increase or decrease the rate of payroll deductions effective for a new Offering Period by submitting an authorization to change the payroll deduction rate pursuant to the process prescribed by the Company from time to time. The new deduction rate shall be a whole percentage of the Eligible Employee's Compensation consistent with Subsection (b) above.

(d) *Discontinuing Payroll Deductions*. If a Participant wishes to discontinue employee contributions entirely, the Participant may do so by withdrawing from the Plan pursuant to Section 6(a). In addition, employee contributions may be discontinued automatically pursuant to Section 9(b).

SECTION 6. WITHDRAWAL FROM THE PLAN.

(a) *Withdrawal*. A Participant may elect to withdraw from the Plan by giving notice pursuant to the process prescribed and communicated by the Company from time to time. Such withdrawal may be elected at any time before the last day of an Offering Period, except as otherwise provided in the Offering. In addition, if payment by cash or check is permitted under the terms and conditions of an Offering, Participants may be deemed to withdraw from the Plan by declining or failing to remit timely payment to the Company for the Shares. As soon as reasonably practicable thereafter, payroll deductions shall cease and the entire amount credited to the Participant's Plan Account shall be refunded to him or her in cash, without interest, except as may be required by applicable law. No partial withdrawals shall be permitted.

(b) *Re-enrollment After Withdrawal*. A former Participant who has withdrawn from the Plan shall not be a Participant until the Participant re-enrolls in the Plan under Section 4(b). Re-enrollment may be effective only at the commencement of an Offering Period.

SECTION 7. CHANGE IN EMPLOYMENT STATUS.

(a) *Termination of Employment*. Termination of employment as an Eligible Employee for any reason, including death, shall be treated as an automatic withdrawal from the Plan under Section 6(a). A transfer from one Participating Company to another shall not be treated as a termination of employment.

(b) *Leave of Absence*. For purposes of the Plan, employment shall not be deemed to terminate when the Participant goes on a military leave, a sick leave or another bona fide leave of absence, if the leave was approved by the Company in writing. Employment, however, shall be deemed to terminate three (3) months after the Participant goes on a leave, unless a contract or statute guarantees the Participant's right to return to work. Employment shall be deemed to terminate in any event when the approved leave ends, unless the Participant immediately returns to work.

(c) *Death*. In the event of the Participant's death, the amount credited to the Participant's Plan Account shall be paid to the Participant's estate.

SECTION 8. PLAN ACCOUNTS AND PURCHASE OF SHARES.

(a) *Plan Accounts*. The Company shall maintain a Plan Account on its books in the name of each Participant. Whenever an amount is deducted from the Participant's Compensation under the Plan, such amount shall be credited to the Participant's Plan Account. Amounts credited to Plan Accounts shall not be trust funds and may be commingled with the Company's general assets and applied to general corporate purposes, except where applicable law requires that amounts credited to Plan Accounts be held separately or deposited with a third party. No interest shall be credited to Plan Accounts, except as may be required by applicable law.

(b) *Purchase Price*. The Purchase Price for each Share purchased during an Offering Period shall be the lesser of:

(i) eighty-five percent (85%) of the Fair Market Value of such share on the Purchase Date; or

(ii) eighty-five percent (85%) of the Fair Market Value of such share on the Offering Date.

The Committee may specify an alternate Purchase Price amount or formula in the terms and conditions of an Offering, but in no event may such amount or formula result in a Purchase Price less than that calculated pursuant to the immediately preceding formula.

(c) *Number of Shares Purchased*. As of each Purchase Date, each Participant shall be deemed to have elected to purchase the number of Shares calculated in accordance with this Subsection (c), unless the Participant has previously elected to withdraw from the Plan in accordance with Section 6(a). The amount then in the Participant's Plan Account shall be divided by the Purchase Price, and the number of shares that results shall be purchased from the Company with the funds in the Participant's Plan Account (rounded down to the nearest whole share, unless otherwise set forth in the terms and conditions of an Offering). Unless provided otherwise by the Committee prior to commencement of an Offering, the maximum number of Shares which may be purchased by an individual Participant during such Offering is 25,000 shares. The foregoing notwithstanding, no Participant shall purchase more than such number of Shares as may be determined by the Committee with respect to the Offering Period, or Purchase Period, if applicable, nor more than the amount of Shares set forth in Sections 9(b) and 14(a). For each Offering Period and, if applicable, Purchase Period, the Committee shall have the authority to establish additional limits on the number of Shares purchasable by all Participants in the aggregate.

(d) *Available Shares Insufficient*. In the event that the aggregate number of Shares that all Participants elect to purchase during an Offering Period exceeds the maximum number of Shares remaining available for issuance under Section 14(a), or which may be purchased pursuant to any additional aggregate limits imposed by the Committee, then the number of Shares to which each Participant is entitled shall be determined by multiplying the number of Shares available for issuance by a fraction, the numerator of which is the number of Shares that such Participant has elected to purchase and the denominator of which is the number of Shares that all Participants have elected to purchase.

(e) *Issuance of Shares*. Certificates representing the Shares purchased by a Participant under the Plan shall be issued the Participant as soon as reasonably practicable after the applicable Purchase Date, except that the Company may determine that such shares shall be held for each Participant's benefit by a broker designated by the Company. Shares may be registered in the name of the Participant or jointly in the name of the Participant and the Participant's spouse as joint tenants with right of survivorship or as community property.

(f) *Unused Cash Balances*. Unless otherwise set forth in the terms and conditions of an Offering, an amount remaining in the Participant's Plan Account that represents the Purchase Price for any fractional share shall be carried over in the Participant's Plan Account to the next Offering Period or refunded to the Participant in cash at the end of the Offering Period, without interest (except as may be required by applicable law), if the Participant's participation is not continued. Any amount remaining in the Participant's Plan Account that represents the Purchase Price for whole shares that could not be purchased by reason of Subsection (c) or (d) above, Section 9(b) or Section 14(a) shall be refunded to the Participant in cash, without interest (except as may be required by applicable law).

(g) *Shareholder Approval*. The Plan shall be submitted to the shareholders of the Company for their approval within twelve (12) months after the date the Plan is adopted by the Board. Any other provision of the Plan notwithstanding, no Shares shall be purchased under the Plan unless and until the Company's shareholders have approved the adoption of the Plan.

SECTION 9. LIMITATIONS ON STOCK OWNERSHIP.

(a) *Five Percent Limit*. Any other provision of the Plan notwithstanding, no Participant shall be granted a right to purchase Shares under the Plan if such Participant, immediately after the Participant's election to purchase such Shares, would own stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or any parent or Subsidiary of the Company. For purposes of this Subsection (a), the following rules shall apply:

(i) Ownership of stock shall be determined after applying the attribution rules of Section 424(d) of the Code;

Each Participant shall be deemed to own any stock that the Participant has a right or option to purchase under this or any other plan; and

(ii) Each Participant shall be deemed to have the right to purchase up to the maximum number of Shares that may be purchased by a Participant under the Plan under the individual limit specified pursuant to Section 8(c) with respect to each Offering Period.

(b) *Dollar Limit*. Any other provision of the Plan notwithstanding, no Participant shall accrue the right to purchase Shares at a rate which exceeds twenty-five thousand dollars ($25,000) of Fair Market Value of such Shares per calendar year (under the Plan and all other employee stock purchase plans of the Company or any parent or Subsidiary of the Company), determined in accordance with the provisions of Section 423(b)(8) of the Code and applicable United States Treasury Regulations promulgated thereunder.

For purposes of this Subsection (b), the Fair Market Value of Shares shall be determined as of the beginning of the Offering Period in which such Shares are purchased. Employee stock purchase plans not described in Section 423 of the Code shall be disregarded. If a Participant is

precluded by this Subsection (b) from purchasing additional Shares under the Plan, then the Participant's employee contributions shall automatically be discontinued.

SECTION 10. RIGHTS NOT TRANSFERABLE.

The rights of any Participant under the Plan, or any Participant's interest in any Shares or moneys to which the Participant may be entitled under the Plan, shall not be transferable by voluntary or involuntary assignment or by operation of law, or in any other manner other than by the laws of descent and distribution. If a Participant in any manner attempts to transfer, assign or otherwise encumber the Participant's rights or interest under the Plan, other than by the laws of descent and distribution, then such act shall be treated as an election by the Participant to withdraw from the Plan under Section 6(a).

SECTION 11. NO RIGHTS AS AN EMPLOYEE.

Nothing in the Plan or in any right granted under the Plan shall confer upon the Participant any right to continue in the employ of a Participating Company for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Participating Companies or of the Participant, which rights are hereby expressly reserved by each, to terminate the Participant's at-will employment at any time and for any reason, with or without cause.

SECTION 12. NO RIGHTS AS A SHAREHOLDER.

A Participant shall have no rights as a shareholder with respect to any Shares that the Participant may have a right to purchase under the Plan until such shares have been purchased on the applicable Purchase Date and such Participant's ownership of such Shares shall have been entered into the books of the registrar or the Participant is issued a stock certificate, as applicable.

SECTION 13. SECURITIES LAW REQUIREMENTS.

Shares shall not be issued under the Plan unless the issuance and delivery of such shares comply with (or are exempt from) all applicable requirements of law, including (without limitation) the United States Securities Act of 1933, as amended, the rules and regulations promulgated thereunder, state or non-U.S. securities laws and regulations, the regulations of any stock exchange or other securities market on which the Company's securities may then be traded, and any foreign securities, exchange control or other applicable laws of any country which has jurisdiction over the applicable Participant.

SECTION 14. SHARES OFFERED UNDER THE PLAN.

(a) *Authorized Shares*. The maximum aggregate number of Shares available for purchase under the Plan is [_____] Shares, plus an annual increase to be added on the first day of each of the Company's fiscal years for a period of up to ten years, beginning with the fiscal year that begins January 1, 2024, equal to the least of (i) one percent (1%) of the outstanding Shares on such date, (ii) [_____] shares, or (iii) a lesser amount determined by the

Committee or Board. The aggregate number of shares available for purchase under the Plan (and the limit in clause (ii) to the annual increase thereto) shall at all times be subject to adjustment pursuant to Section 14(b).

(b) *Antidilution Adjustments*. The aggregate number of Shares offered under the Plan, the individual and aggregate Participant share limitations described in Section 8(c) and the price of shares that any Participant has elected to purchase shall be adjusted proportionately by the Committee in the event of any change in the number of issued Shares (or issuance of shares other than Shares) by reason of any forward or reverse share split, subdivision or consolidation, or share dividend or bonus issue, recapitalization, reclassification, merger, amalgamation, consolidation, split-up, spin-off, reorganization, combination, exchange of Shares, the issuance of warrants or other rights to purchase Shares or other securities, or any other change in corporate structure or in the event of any extraordinary distribution (whether in the form of cash, Shares, other securities or other property), in any case, in a manner that complies with Section 423 of the Code.

(c) *Reorganizations*. Any other provision of the Plan notwithstanding, in the event of a Corporate Reorganization in which the Plan is not assumed by the surviving corporation or its parent corporation pursuant to the applicable plan of merger or consolidation, the Offering Period then in progress shall terminate immediately prior to the effective time of such Corporate Reorganization and either shares shall be purchased pursuant to Section 8 or, if so determined by the Board or Committee, all amounts in all Participant Accounts shall be refunded pursuant to Section 15 without any purchase of shares. The Plan shall in no event be construed to restrict in any way the Company's right to undertake a dissolution, liquidation, merger, consolidation or other reorganization.

SECTION 15. AMENDMENT OR DISCONTINUANCE.

The Board or Committee shall have the right to amend, suspend or terminate the Plan at any time and without notice; provided, however, that any amendment that would be treated as the adoption of a new plan for purposes of Section 423 of the Code will have no force or effect unless approved by the shareholders of the Company within twelve (12) months before or after its adoption. Upon any such amendment, suspension or termination of the Plan during an Offering Period, the Board or Committee may in its discretion determine that the applicable Offering shall immediately terminate and that all amounts in the Participant Accounts shall be carried forward into a payroll deduction account for each Participant under a successor plan, if any, or promptly refunded to each Participant. Except as provided in Section 14, any increase in the aggregate number of Shares to be issued under the Plan shall be subject to approval by a vote of the shareholders of the Company. In addition, any other amendment of the Plan shall be subject to approval by a vote of the shareholders of the Company to the extent required by an applicable law or regulation. The Plan shall continue until the earlier to occur of (a) termination of the Plan pursuant to this Section 15 or (b) issuance of all of the Shares reserved for issuance under the Plan.

SECTION 16. LIMITATION ON LIABILITY.

Notwithstanding anything to the contrary in the Plan, neither the Company, nor any of its Subsidiaries, nor the Committee, nor any person acting on behalf of the Company, any of its Subsidiaries, or the Committee, will be liable to any Participant, to any permitted transferee, to the estate or beneficiary of any Participant or any permitted transferee, or to any other person by reason of any acceleration of income, any additional tax, or any penalty, interest or other liability asserted by reason of the failure of the Plan or any option to purchase Shares to satisfy the requirements of Section 423, or otherwise asserted with respect to the Plan or any option to purchase Shares.

SECTION 17. UNFUNDED PLAN.

The Company's obligations under the Plan are unfunded, and no Participant will have any right to specific assets of the Company in respect of any option to purchase Shares. Participants will be general unsecured creditors of the Company with respect to any amounts due or payable under the Plan.

SECTION 18. OFFER TO PARTICIPANTS OUTSIDE THE UNITED STATES.

Notwithstanding any provision of the Plan to the contrary, to comply with applicable law in countries outside the United States in which the Company and its Subsidiaries and Affiliates operate or in which Participants work or reside, the Committee, in its sole discretion, shall have the power and authority to: (i) determine which Employees outside the United States will be Eligible Employees under the Plan; (ii) modify the terms and conditions of any Offering to Eligible Employees outside the United States; (iii) establish sub-plans and modify terms, procedures and rules, to the extent such actions may be necessary or advisable, including adoption of rules, procedures or sub-plans applicable to particular Subsidiaries and Affiliates or Participants in particular locations; provided that no such sub-plans and/or modifications shall take precedence over Section 3 of the Plan or otherwise require shareholder approval; (iv) take any action, before or after options to purchase Shares are granted, that it deems advisable to obtain approval or to facilitate compliance with any necessary local governmental regulatory exemptions or approvals and (v) impose conditions on participation in the Plan and/or the purchase of Shares in order to minimize the Company's obligation with respect to tax equalization for Participants on assignments outside their home country. Without limiting the generality of the foregoing, the Committee is specifically authorized to adopt rules, procedures and sub-plans with provisions that limit or modify rights on eligibility to participate in an Offering, on termination of employment, available methods of contribution, payment of income tax, social insurance contributions and payroll taxes, the shifting of employer tax or social insurance contribution liability to a Participant, the withholding procedures and handling of any Share certificates or other indicia of ownership. Notwithstanding the foregoing, the Board will only take action and grant options to purchase Shares that comply with applicable laws.

SECTION 19. GOVERNING LAW.

The Plan shall be governed by the laws of the State of Delaware, without application of the conflicts of law principles thereof.

[Remainder of Page Intentionally Blank]

SECTION 20. EXECUTION.

To record the adoption of the Plan by the Board, the Company has caused its authorized officer to execute the same.

Silvaco Group, Inc.

By: _____
Name:
Title:
Date:

SILVACO

July 20, 2023

Ryan Benton
4ryanb@gmail.com

Chief Financial Officer (CFO)

Dear Ryan,

Congratulations! We are pleased to confirm that you have been selected to work for Silvaco Group Inc. and we are delighted to make you the following job offer.

The position that we are offering is that of **Chief Financial Officer (CFO)** and you will report directly to **Babak Taheri, Chief Executive Officer (CEO)**.

Base Salary:	$ 340,000 annually ($ 14,166.67 /semi-monthly). You will be eligible for a base salary adjustment at the same time as other senior executives in 2024.
Incentive Bonus Plan:	You are also eligible to receive an annual performance bonus under the Company's Incentive Bonus Plan as approved by the Compensation Committee of the Board (the "Committee"). Your target bonus opportunity will be thirty-five percent (35%) of your annualized base salary (prorated for time worked during 2023). Any bonus payment will be subject to the terms approved by the Compensation Committee and generally be paid in Q1 of the year following the completion of the Company's fiscal year.
Location:	Remote - CA
Stock Incentive Plan:	Silvaco maintains a Stock Incentive Plan (the "Plan") that is used to reward employees and provide incentive to create sustainable shareholder value. You will be eligible for annual awards under the Plan as approved by the Committee. The Company currently awards Restricted Stock Units (RSU's) to employees under the Plan. RSUs generally vest 25% at the end of the 1st year from the day of grant and

SILVACO

RSU

Subject to the approval of the Board of Directors, this offer of employment provides you with the opportunity to be awarded up to 460,000 RSUs under the Plan as follows:

- **Employment RSUs**. 150,000 RSUs shall be awarded upon your hire date and vest quarterly over a four-year period with a one-year cliff subject to (i) your continued employment at the Company on each vesting date; and (ii) the consummation of a Liquidity Event (as defined in the Company's certificate of incorporation). The Employment RSU award will include 50% acceleration of the unvested Employment RSUs upon the successful completion of a Liquidity Event or IPO;
- **IPO-Contingent RSUs.** 100,000 RSUs shall be awarded within 30 days following the consummation of the IPO (as defined below) and vest quarterly over a four-year period with a one-year cliff subject to (i) your continued employment at the Company on each vesting date; and (ii) the consummation of the Company's initial public offering of its common stock in an underwritten public offering (the "IPO") prior to June 30, 2024. For the avoidance of doubt, if the IPO is not consummated prior to June 30, 2024, the IPO-Contingent RSUs will be not be awarded;
- **Revenue-based RSUs.** 60,000 RSUs shall be awarded within 30 days after your hire date and vest in three separate tranches after two conditions have been met, specifically (i) your continued employment at the Company on each vesting date over a four year period with a one year cliff; and (ii)(a) 20,000 RSUs will vest when the Company achieves revenues of $75 million during any consecutive twelve month period during the four year period commencing after You join the Company; (b) 20,000 RSUs will vest when the Company achieves revenues of $90 million during any consecutive twelve month period during the four year period commencing after You join the Company; and (c) 20,000 RSUs will vest when the Company achieves revenues of $120 million during any consecutive twelve month period during the four year period commencing after You join the Company. For the avoidance of doubt, any unvested RSUs at the end of the four-year period will be forfeited; and
- **Market Price RSUs**. 150,000 RSUs shall be awarded 30 days following the consummation of the IPO, as follows;
  - 40,000 RSUs shall vest quarterly over a four-year period with a subject to (i) your continued employment at the Company on each vesting date; and (ii) the Company's VWAP stock price for 50 out of 60 consecutive trading days exceeds 125% of the price at which the Company sells its common stock to the underwriters in the IPO;

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- 50,000 RSUs shall vest quarterly over a four-year period with a subject to (i) your continued employment at the Company on each vesting date; and (ii) the Company's VWAP stock price for 50 out of 60 consecutive trading days exceeds 150% of the price at which the Company sells its common stock to the underwriters in the IPO; and
- 60,000 RSUs shall vest quarterly over a four-year period subject to (i) your continued employment at the Company on each vesting date; and (ii) the Company's VWAP stock price for 50 out of 60 consecutive trading days exceeds 200% of the price at which the Company sells its common stock to the underwriters in the IPO.

CIC Severance

We currently have an "Executive CIC Plan" in place. However, such plan is currently under review and the Board plans certain updates prior to any IPO or liquidity event, and will engage with the executives on any update to the same. You will engage as an executive level participant in the current and revised plan. Such plan will address treatment of 280G parachute payments, treatment of severance benefits under Section 409A and the terms of equity acceleration tied to a CIC related termination, among other things.

Non-CIC Severance Benefit

Your employment with the Company is at-will and may be terminated by you or by the Company at any time for any reason. However, in the event that your employment is terminated by the Company without Cause or by you or for Good Reason, each as defined below) you shall be entitled to receive the "Severance Benefits".

"Cause" shall mean termination of your employment as a result of your material personal dishonesty, willful misconduct that results in harm to the Company, breach of a fiduciary duty involving personal profit, intentional failure to perform stated duties, willful violation of any law, rule, or regulation (other than traffic violations or similar offenses) or final cease-and-desist order "Good Reason" shall mean any one of the following that occurs without your written consent: (i) a material diminution in your responsibilities, authority, title or duties (which for the avoidance of doubt, shall include interference by the Company's Board of Directors in the day to day operating activities of the Company; (ii) a material diminution in your Base Salary; (iii) the Company requiring you to change your principal place of employment to a location more than 25 miles from your principal place of employment on your start date; and (iv) any other action or inaction that constitutes a material breach by the Company of this Agreement. In order to invoke a termination for Good Reason, you shall provide written notice to the Company of the existence of one or more of the events, circumstances or conditions described in clauses (i) through (iv) within 90 days following your knowledge of the initial existence of such events, circumstances or conditions, specifying in reasonable detail the events,

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circumstances or conditions constituting Good Reason, and the Company shall have 30 days following receipt of such written notice (the "Cure Period") during which it may remedy the events, circumstances or conditions if such events, circumstances or conditions are reasonably subject to cure. In the event that the Company fails to remedy the events, circumstances or conditions constituting Good Reason during the Cure Period (if applicable), your resignation from employment for Good Reason must occur, if at all, within 180 days following the initial existence of such events, circumstances or conditions in order for such termination as a result of such condition to constitute a termination of employment for Good Reason. Your mental or physical incapacity following the occurrence of an event described above in clauses (i) through (iv) shall not affect your ability to terminate employment for Good Reason and your death following delivery of a notice of termination for Good Reason shall not affect your estate's entitlement to the severance payments and benefits provided hereunder upon a termination of employment for Good Reason.

"Severance Benefits" shall mean all the following. (i) Company shall pay to Executive a cash payment equal to twelve (12) months of Executive's Base Salary and annual bonus at target level at the rate in effect immediately prior to Executive's date of termination (ignoring any reductions that would give rise to Good Reason) payable in a lump sum within 30 days of the termination date; (ii) the Company shall pay your COBRA premiums for you and your eligible dependents for a period of twelve (12) months following your termination date and (iii) Each Employment RSU held by you that would have become vested during the twelve (12) month period following the date of termination shall automatically become vested (with respect to any time-based vesting requirement, and any forfeiture restrictions or rights on repurchase thereon shall lapse) or shall otherwise be accelerated in accordance with the company's executive change in control plan if applicable.

In addition to salary, incentive plan, and stock, Silvaco Inc. provides its employees with a generous benefit package that includes:

- Heath, Dental and Vision Benefits
- FSA Accounts (Medical and Dependent Care)
- Travel Assistance
- Flexible time off
- 401(k)-retirement savings plan with a 1.5% company contribution based on employee participation

Your employment with Silvaco, Inc. will be on an at-will basis, which means you and the company are free to terminate the employment relationship at any time for any reason. This letter is not a contract or guarantee of employment for a definite amount of time.

This job offer is contingent upon the following:

- Completion of a satisfactory background check.
- Completion of a satisfactory credit check.
- Execution of an employment/noncompete/confidentiality agreement.

We are excited to have you become a part of the Silvaco team and for you to bring your considerable expertise to this position. We would like for you to start work on **August 7, 2023**.

✓ **Human Resources will arrange your first day orientation via zoom.**

If you have any questions, please contact me directly.

To confirm your intention to join Silvaco, Inc., please sign and return this original no later than **July 21, 2023**.

Sincerely,

/s/Babak Taheri
Babak Taheri
Chief Executive Officer (CEO)
btaheri@silvaco.com

I have read and understood the provisions of this offer of employment, and I accept the above conditional job offer. I understand that my employment with Silvaco is considered at will, meaning that either the company or I may terminate this employment relationship at any time with or without cause or notice. Notwithstanding the at-will nature of this employment, I understand that I may be entitled to severance payments and benefits as detailed above in this agreement upon termination of my employment under certain conditions.

/s/Ryan Benton	07/20/2023
Ryan Benton	Date

CONSULTING ADVISORY AGREEMENT

Effective as of January 12, 2022 (the "**Effective Date**"), Silvaco Group, Inc., a Delaware corporation (the "**Company**"), and Katherine Ngai Pesic ("**Advisor**") agree as follows:

1. Services and Payment. Advisor agrees to provide the services described in Exhibit A attached hereto (the "**Services**)". As consideration due Advisor for such Services, the Company will provide Advisor with the consideration described in Exhibit A attached hereto. The consulting relationship between the Company and Advisor, whether commenced before, upon or after the Effective Date of this Consulting Advisory Agreement (this "**Agreement**"), is referred to herein as the "**Relationship**." Advisor also currently serves on the Board of Directors of the Company and the parties hereto agree that nothing herein in modifies or changes any of the obligations or rights of Katherine Ngai Pesic in her relationship as a member of the Board of Directors

2. Confidential Information. In relation to his services as a member of the Board of Directors of the Company, Advisor signed a Proprietary Information and Inventions Agreement dated July 1, 2021. Company and Advisor agree that by its terms such Proprietary Information and Inventions Agreement shall continue to apply to Advisor's Relationship hereunder.

3. Reimbursement for Expenses. Certain expenses may be reimbursable by the Company. Subject to the Company's policies on reimbursement, Advisor may obtain reimbursement of such expenses by submitting expense reports with receipts or such other documentation as may be required under the Company's policies. All other expenses incurred by Advisor in connection with providing the Services under this Agreement will be the sole responsibility of Advisor.

4. Term; Termination. This Agreement is effective as of the Effective Date and will continue for a period of twelve (12) months and will renew automatically for subsequent twelve (12) month periods unless terminated in writing by either party, with our without cause upon thirty (30) days' written notice to the other party, unless earlier terminated as set forth below. Either party may terminate this Agreement at any time, with or without cause, upon ten (10) days' written notice to the other party. The Company may terminate this Agreement immediately and without prior notice if Advisor refuses or is unable to perform the Services or is in breach of any material provision of this Agreement.

5. Taxes. In conformity with the Advisor's independent contractor status, The Company will not withhold any amounts for payment of taxes from the compensation of the Advisor hereunder. Any and all sums subject to deductions, if any, required to be withheld and/or paid under any applicable state, federal or municipal laws or regulations shall be the Advisor's sole responsibility. Advisor acknowledges and understands and agrees to be responsible for filing all federal and state or city income tax returns and self-employment tax returns. The Company shall furnish Advisor with an IRS 1099 Form indicating all compensation paid to Advisor on an annual basis if required by law.

6. General Provisions.

(a) Governing Law; Venue. This Agreement will be governed by the laws of the State of California, without giving effect to the principles of conflict of laws. With respect to any disputes arising out of or related to this Agreement, the parties consent to the exclusive jurisdiction of, and venue in, the state courts in Santa Clara County in the State of California (or in the event of exclusive federal jurisdiction, the courts of the Northern District of California).

(b) Entire Agreement; Amendments and Waivers. This Agreement sets forth the entire agreement and understanding between the parties relating to its subject matter and supersedes all prior discussions and agreements (whether oral or written) between the parties with respect thereto. No amendments or waivers to this Agreement will be effective unless in writing and signed by the party against whom such amendment or waiver is to be enforced. The failure of either party to enforce its rights under this Agreement at any time for any period will not be construed as a waiver of such rights.

(c) Severability. If any provision of this Agreement is deemed void or unenforceable, such provision will nevertheless be enforced to the fullest extent allowed by law, and the validity of the remainder of this Agreement will not be affected.

(d) Successors and Assigns. Advisor may not assign, transfer or subcontract any obligations under this Agreement without the written consent of the Company. Any attempt to do so will be void. The Company may assign its rights and obligations under this Agreement in whole or part. This Agreement will be binding upon Advisor's heirs, executors, administrators and other legal representatives, and Advisor's successors and permitted assigns, and will be binding on and for the benefit of the Company and its successors and assigns.

(e) Remedies. Advisor acknowledges and agrees that violation of this Agreement will cause the Company irreparable harm and that the Company will therefore be entitled to seek extraordinary relief in court, including, but not limited to, temporary restraining orders, preliminary injunctions and permanent injunctions without the necessity of posting a bond or other security (or, if such bond or security is required, Advisor agrees that a $1,000 bond will be adequate), in addition to any other rights or remedies that the Company may have for a breach of this Agreement. If any party brings any suit, action, counterclaim or arbitration to enforce or interpret the provisions of this Agreement, the prevailing party will be entitled to recover a reasonable allowance for attorneys' fees and litigation expenses in addition to court costs.

(f) Notices. All notices under this Agreement must be in writing and will be deemed given when delivered personally or by email, one (1) day after being sent by nationally recognized courier service, three (3) days after being sent by prepaid certified mail, to the address of the party to be noticed as set forth herein or such other address as such party last provided to the other party by written notice, or upon confirmation of receipt of email.

IN WITNESS WHEREOF, the parties have entered into this Consulting Advisory Agreement as of the first date set forth above.

SILVACO GROUP, INC.

By: /s/ Babak Taheri
(Signature)

Name: Babak Taheri

Title: Chief Executive Officer

ADVISOR:

/s/ Katherine Pesic
(Signature)

Katherine Ngai Pesic
(Print Name)

EXHIBIT A

SERVICES AND COMPENSATION

Services:

- Provide general consulting services in relation to the management of Silvaco Group, Inc. including such projects as may be requested by the CEO or Board from time to time, relating to the Company's products, operations, hiring and fund-raising efforts.

Compensation:

- $15,000 annually, to be paid quarterly in arrears on or around the last day of each calendar quarter.

- Participation in the Silvaco, Inc. health, dental and vision benefit plans which may be in effect from time to time during the term of the Agreement, provided that nothing herein shall limit Company's ability to change, amend or discontinue such plans. Company shall be responsible for 100% of the cost of premiums applicable to Advisor's participation in such plans.

CONSULTING ADVISORY AGREEMENT

Effective as of January 12, 2022 (the "**Effective Date**"), Silvaco Group, Inc., a Delaware corporation (the "**Company**"), and Iliya Pesic ("**Advisor**") agree as follows:

1. Services and Payment. Advisor agrees to provide the services described in Exhibit A attached hereto (the "**Services**)". As consideration due Advisor for such Services, the Company will provide Advisor with the consideration described in Exhibit A attached hereto. The consulting relationship between the Company and Advisor, whether commenced before, upon or after the Effective Date of this Consulting Advisory Agreement (this "**Agreement**"), is referred to herein as the "**Relationship**." Advisor also currently serves on the Board of Directors of the Company and the parties hereto agree that nothing herein in modifies or changes any of the obligations or rights of Iliya Pesic in his relationship as a member of the Board of Directors

2. Confidential Information. In relation to his services as a member of the Board of Directors of the Company, Advisor signed a Proprietary Information and Inventions Agreement dated July 1, 2021. Company and Advisor agree that by its terms such Proprietary Information and Inventions Agreement shall continue to apply to Advisor's Relationship hereunder.

3. Reimbursement for Expenses. Certain expenses may be reimbursable by the Company. Subject to the Company's policies on reimbursement, Advisor may obtain reimbursement of such expenses by submitting expense reports with receipts or such other documentation as may be required under the Company's policies. All other expenses incurred by Advisor in connection with providing the Services under this Agreement will be the sole responsibility of Advisor.

4. Term; Termination. This Agreement is effective as of the Effective Date and will continue for a period of twelve (12) months and will renew automatically for subsequent twelve (12) month periods unless terminated in writing by either party, with our without cause upon thirty (30) days' written notice to the other party, unless earlier terminated as set forth below. Either party may terminate this Agreement at any time, with or without cause, upon ten (10) days' written notice to the other party. The Company may terminate this Agreement immediately and without prior notice if Advisor refuses or is unable to perform the Services or is in breach of any material provision of this Agreement.

5. Taxes. In conformity with the Advisor's independent contractor status, The Company will not withhold any amounts for payment of taxes from the compensation of the Advisor hereunder. Any and all sums subject to deductions, if any, required to be withheld and/or paid under any applicable state, federal or municipal laws or regulations shall be the Advisor's sole responsibility. Advisor acknowledges and understands and agrees to be responsible for filing all federal and state or city income tax returns and self-employment tax returns. The Company shall furnish Advisor with an IRS 1099 Form indicating all compensation paid to Advisor on an annual basis if required by law

6. General Provisions.

(a) Governing Law; Venue. This Agreement will be governed by the laws of the State of California, without giving effect to the principles of conflict of laws. With respect to any disputes arising out of or related to this Agreement, the parties consent to the exclusive jurisdiction of, and venue in, the state courts in Santa Clara County in the State of California (or in the event of exclusive federal jurisdiction, the courts of the Northern District of California).

(b) Entire Agreement; Amendments and Waivers. This Agreement sets forth the entire agreement and understanding between the parties relating to its subject matter and

supersedes all prior discussions and agreements (whether oral or written) between the parties with respect thereto. No amendments or waivers to this Agreement will be effective unless in writing and signed by the party against whom such amendment or waiver is to be enforced. The failure of either party to enforce its rights under this Agreement at any time for any period will not be construed as a waiver of such rights.

(c) Severability. If any provision of this Agreement is deemed void or unenforceable, such provision will nevertheless be enforced to the fullest extent allowed by law, and the validity of the remainder of this Agreement will not be affected.

(d) Successors and Assigns. Advisor may not assign, transfer or subcontract any obligations under this Agreement without the written consent of the Company. Any attempt to do so will be void. The Company may assign its rights and obligations under this Agreement in whole or part. This Agreement will be binding upon Advisor's heirs, executors, administrators and other legal representatives, and Advisor's successors and permitted assigns, and will be binding on and for the benefit of the Company and its successors and assigns.

(e) Remedies. Advisor acknowledges and agrees that violation of this Agreement will cause the Company irreparable harm and that the Company will therefore be entitled to seek extraordinary relief in court, including, but not limited to, temporary restraining orders, preliminary injunctions and permanent injunctions without the necessity of posting a bond or other security (or, if such bond or security is required, Advisor agrees that a $1,000 bond will be adequate), in addition to any other rights or remedies that the Company may have for a breach of this Agreement. If any party brings any suit, action, counterclaim or arbitration to enforce or interpret the provisions of this Agreement, the prevailing party will be entitled to recover a reasonable allowance for attorneys' fees and litigation expenses in addition to court costs.

(f) Notices. All notices under this Agreement must be in writing and will be deemed given when delivered personally or by email, one (1) day after being sent by nationally recognized courier service, three (3) days after being sent by prepaid certified mail, to the address of the party to be noticed as set forth herein or such other address as such party last provided to the other party by written notice, or upon confirmation of receipt of email.

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IN WITNESS WHEREOF, the parties have entered into this Consulting Advisory Agreement as of the first date set forth above.

SILVACO GROUP, INC.

By: /s/ Babak Taheri
(Signature)

Name: Babak Taheri

Title: Chief Executive Officer

ADVISOR:

/s/ Iliya Pesic
(Signature)

Iliya Pesic
(Print Name)

Address:

EXHIBIT A

SERVICES AND COMPENSATION

Services:

- Provide general consulting services in relation to the management of Silvaco Group, Inc. including such projects as may be requested by the CEO or Board from time to time, relating to the Company's products, operations, hiring and fund-raising efforts.

Compensation:

- $50,000 annually, to be paid quarterly in arrears on or around the last day of each calendar quarter.
- Participation in the Silvaco, Inc. health, dental and vision benefit plans which may be in effect from time to time during the term of the Agreement, provided that nothing herein shall limit Company's ability to change, amend or discontinue such plans. Company shall be responsible for 100% of the cost of premiums applicable to Advisor's participation in such plans.

AMENDED AND RESTATED CONSULTING ADVISORY AGREEMENT

This Amended and Restated Consulting Advisory Agreement by and between Silvaco Group, Inc., a Delaware corporation (the "**Company**"), and Iliya Pesic ("**Advisor**" and together with the Company, the "**Parties**") is effective as of December 1, 2023 (the "**Effective Date**") and amends and restates in its entirety that certain Consulting Advisory Agreement dated as of January 12, 2022 by and between the Parties. The Parties agree as follows:

1. Services and Payment. Advisor agrees to provide the services described in Exhibit A attached hereto (the "**Services**)". As consideration due Advisor for such Services, the Company will provide Advisor with the consideration described in Exhibit A attached hereto. The consulting relationship between the Company and Advisor, whether commenced before, upon or after the Effective Date of this Consulting Advisory Agreement (this "**Agreement**"), is referred to herein as the "**Relationship**."

2. Confidential Information. Advisor has signed a Proprietary Information and Inventions Agreement dated July 1, 2021. Company and Advisor agree that by its terms such Proprietary Information and Inventions Agreement shall continue to apply to Advisor's Relationship hereunder.

3. Reimbursement for Expenses. Certain expenses, including without limitation, health, dental and vision benefits plan for Advisor, may be reimbursable by the Company. Subject to the Company's policies on reimbursement, Advisor may obtain reimbursement of such expenses by submitting expense reports with receipts or such other documentation as may be required under the Company's policies. All other expenses incurred by Advisor in connection with providing the Services under this Agreement will be the sole responsibility of Advisor.

4. Term; Termination. This Agreement is effective as of the Effective Date and will continue for a period of twelve (12) months and will renew automatically for subsequent twelve (12) month periods unless terminated in writing by either party, with or without cause upon thirty (30) days' written notice to the other party, unless earlier terminated as set forth below. Either party may terminate this Agreement at any time, with or without cause, upon ten (10) days' written notice to the other party. The Company may terminate this Agreement immediately and without prior notice if Advisor refuses or is unable to perform the Services or is in breach of any material provision of this Agreement.

5. Taxes. In conformity with the Advisor's independent contractor status, The Company will not withhold any amounts for payment of taxes from the compensation of the Advisor hereunder. Any and all sums subject to deductions, if any, required to be withheld and/or paid under any applicable state, federal or municipal laws or regulations shall be the Advisor's sole responsibility. Advisor acknowledges and understands and agrees to be responsible for filing all federal and state or city income tax returns and self-employment tax returns. The Company shall furnish Advisor with an IRS 1099 Form indicating all compensation paid to Advisor on an annual basis if required by law.

6. General Provisions.

(a) Governing Law; Venue. This Agreement will be governed by the laws of the State of California, without giving effect to the principles of conflict of laws. With respect to any disputes arising out of or related to this Agreement, the parties consent to the exclusive jurisdiction of, and venue in, the state courts in Santa Clara County in the State of California (or in the event of exclusive federal jurisdiction, the courts of the Northern District of California).

(b) Entire Agreement; Amendments and Waivers. This Agreement sets forth the entire agreement and understanding between the parties relating to its subject matter and supersedes all prior discussions and agreements (whether oral or written) between the parties with respect thereto. No amendments or waivers to this Agreement will be effective unless in writing and signed by the party against whom such amendment or waiver is to be enforced. The failure of either party to enforce its rights under this Agreement at any time for any period will not be construed as a waiver of such rights.

(c) Severability. If any provision of this Agreement is deemed void or unenforceable, such provision will nevertheless be enforced to the fullest extent allowed by law, and the validity of the remainder of this Agreement will not be affected.

(d) Successors and Assigns. Advisor may not assign, transfer or subcontract any obligations under this Agreement without the written consent of the Company. Any attempt to do so will be void. The Company may assign its rights and obligations under this Agreement in whole or part. This Agreement will be binding upon Advisor's heirs, executors, administrators and other legal representatives, and Advisor's successors and permitted assigns, and will be binding on and for the benefit of the Company and its successors and assigns.

(e) Notices. All notices under this Agreement must be in writing and will be deemed given when delivered personally or by email, one (1) day after being sent by nationally recognized courier service, three (3) days after being sent by prepaid certified mail, to the address of the party to be noticed as set forth herein or such other address as such party last provided to the other party by written notice, or upon confirmation of receipt of email.

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IN WITNESS WHEREOF, the parties have entered into this Consulting Advisory Agreement as of the first date set forth above.

SILVACO GROUP, INC.

By: /s/ Babak Taheri
(Signature)

Name: Babak Taheri

Title: Chief Executive Officer

ADVISOR:

By: /s/ Iliya Pesic
(Signature)

Name: Iliya Pesic

EXHIBIT A

SERVICES AND COMPENSATION

Services:

- Provide general consulting services in relation to the management and operations of Silvaco Group, Inc. and its subsidiaries including such projects as may be requested by the CEO or management of the Company from time to time, relating to the Company's products, marketing efforts, including without limitation, Silvaco Technical Forum. operations, hiring and fund-raising efforts.

Compensation:

- $75,000 annually, to be paid quarterly in arrears on or around the last day of each calendar quarter.

- In addition, if Advisor does not seek reimbursement for health, dental and vision benefit plans for Advisor (the "Benefits Fees") in accordance with Section 3 hereof, the Company shall also pay to Advisor, the amount of the Benefits Fees within thirty (30) days of the confirmation by the Company of the amount of the Benefits Fees.

CONSULTING ADVISORY AGREEMENT

Effective as of December 1, 2023 (the "**Effective Date**"), Silvaco Group, Inc., a Delaware corporation (the "**Company**"), and Iliya Pesic ("**Advisor**") agree as follows:

1. Services and Payment. Advisor agrees to provide the services described in Exhibit A attached hereto (the "**Services**)". As consideration due Advisor for such Services, the Company will provide Advisor with the consideration described in Exhibit A attached hereto. The consulting relationship between the Company and Advisor, whether commenced before, upon or after the Effective Date of this Consulting Advisory Agreement (this "**Agreement**"), is referred to herein as the "**Relationship**."

2. Confidential Information. Advisor has signed a Proprietary Information and Inventions Agreement dated July 1, 2021. Company and Advisor agree that by its terms such Proprietary Information and Inventions Agreement shall continue to apply to Advisor's Relationship hereunder.

3. Reimbursement for Expenses. Certain expenses, including without limitation, health, dental and vision benefits plan for Advisor, may be reimbursable by the Company. Subject to the Company's policies on reimbursement, Advisor may obtain reimbursement of such expenses by submitting expense reports with receipts or such other documentation as may be required under the Company's policies. All other expenses incurred by Advisor in connection with providing the Services under this Agreement will be the sole responsibility of Advisor.

4. Term; Termination. This Agreement is effective as of the Effective Date and will continue for a period of twelve (12) months and will renew automatically for subsequent twelve (12) month periods unless terminated in writing by either party, with or without cause upon thirty (30) days' written notice to the other party, unless earlier terminated as set forth below. Either party may terminate this Agreement at any time, with or without cause, upon ten (10) days' written notice to the other party. The Company may terminate this Agreement immediately and without prior notice if Advisor refuses or is unable to perform the Services or is in breach of any material provision of this Agreement.

5. Taxes. In conformity with the Advisor's independent contractor status, the Company will not withhold any amounts for payment of taxes from the compensation of the Advisor hereunder. Any and all sums subject to deductions, if any, required to be withheld and/or paid under any applicable state, federal or municipal laws or regulations shall be the Advisor's sole responsibility. Advisor acknowledges and understands and agrees to be responsible for filing all federal and state or city income tax returns and self-employment tax returns. The Company shall furnish Advisor with an IRS 1099 Form indicating all compensation paid to Advisor on an annual basis if required by law.

6. General Provisions.

(a) Governing Law; Venue. This Agreement will be governed by the laws of the State of California, without giving effect to the principles of conflict of laws. With respect to any disputes arising out of or related to this Agreement, the parties consent to the exclusive

jurisdiction of, and venue in, the state courts in Santa Clara County in the State of California (or in the event of exclusive federal jurisdiction, the courts of the Northern District of California).

(b) Entire Agreement; Amendments and Waivers. This Agreement sets forth the entire agreement and understanding between the parties relating to its subject matter and supersedes all prior discussions and agreements (whether oral or written) between the parties with respect thereto. No amendments or waivers to this Agreement will be effective unless in writing and signed by the party against whom such amendment or waiver is to be enforced. The failure of either party to enforce its rights under this Agreement at any time for any period will not be construed as a waiver of such rights.

(c) Severability. If any provision of this Agreement is deemed void or unenforceable, such provision will nevertheless be enforced to the fullest extent allowed by law, and the validity of the remainder of this Agreement will not be affected.

(d) Successors and Assigns. Advisor may not assign, transfer or subcontract any obligations under this Agreement without the written consent of the Company. Any attempt to do so will be void. The Company may assign its rights and obligations under this Agreement in whole or part. This Agreement will be binding upon Advisor's heirs, executors, administrators and other legal representatives, and Advisor's successors and permitted assigns, and will be binding on and for the benefit of the Company and its successors and assigns.

(e) Notices. All notices under this Agreement must be in writing and will be deemed given when delivered personally or by email, one (1) day after being sent by nationally recognized courier service, three (3) days after being sent by prepaid certified mail, to the address of the party to be noticed as set forth herein or such other address as such party last provided to the other party by written notice, or upon confirmation of receipt of email.

[remainder of this page left intentionally blank]

IN WITNESS WHEREOF, the parties have entered into this Consulting Advisory Agreement as of the first date set forth above.

SILVACO GROUP, INC.

By: /s/ Babak Taheri
(Signature)

Name: Babak Taheri

Title: Chief Executive Officer

ADVISOR:

/s/ Iliya Pesic
(Signature)

Name: Iliya Pesic

EXHIBIT A

SERVICES AND COMPENSATION

Services:

- Provide general consulting services in relation to the Chairperson of the board of directors of Silvaco Group, Inc. (the "Chairperson") including such projects as may be requested by the board of directors, from time to time, as approved by Chairperson from time to time, including without limitation:

    - Review and provide assessment to the Chairperson about the Company's strategy, products and portfolio mix;
    - Update the Chairperson regarding developments in the EDA and semiconductor markets; attend tradeshows, seminars, and conferences that relate to Silvaco's business; and share any customer feedback;
    - Review documents relating to the Company as requested by the Chairperson; and
    - Attend the business portion of the Company's regular board meeting and special board meetings if requested by the Board.

Compensation:

$40,000 annually, to be paid quarterly in arrears on or around the last day of each calendar quarter.
In addition, the Company shall recommend that the Advisor be granted an award of 10,000 RSUs which shall be time-based vested upon the one-year anniversary of the Effective Date of this Agreement, and that the Advisor be granted an additional award of 10,000 RSUs which shall be time-based vested upon the expiration of any subsequent twelve-month period in which this Agreement is renewed.

SILVACO

November 23, 2021

Dr. Babak Taheri

Offer Letter and Termination of Separation Agreement

Dear Babak,

On behalf of Silvaco Group, Inc. ("Silvaco Group") and Silvaco Inc., (collectively, the "Company"), we are pleased to offer you the position of **Chief Executive Officer (CEO) of each of Silvaco Group and Silvaco, Inc.** and a member of the Board of Directors (the "Position") in **Santa Clara, CA**, reporting directly to **the Board of Directors of Silvaco Group**. We are excited about the opportunity to work with you. We believe that it is important to a healthy working relationship that both parties understand the terms and conditions of employment before commencing employment. In order to ensure that both you and the Company have a common understanding, we set forth below some of the fundamental premises.

The terms and conditions of your employment are as follows:

COMMENCEMENT DATE

It is understood that your start date will be Wednesday, November 24, 2021

BASELINE SALARY

Your salary will be $33,333.33 per month ($400,000.00 per annum) (the "Base Salary"), less deductions required by law, paid semi-monthly. The new Base salary will start on January 1, 2022.

TARGET ANNUAL CASH BONUS

Your annual bonus will be based on Silvaco Group Net profit, calculated according to ASC606 Net Profit recognition as follows: Your target bonus for the year 2021, and 2022 will be in line with the table below, with appropriate adjustments made for future years. Net profit numbers shall be rounded to the nearest tenth.

Net Profit	**Cash Bonus**
17.1% to 20%	$800,000.00
15.1% to 17%	$500,000.00
12.1% to 15%	$350,000.00
10.1% to 12%	$320,000.00
$5 Million	$292,000.00
$4Million	$232,000.00
$3 Million	$172,000.00

/s/ BT

$2 Million	$113,000.00
$1 Million	$62,000.00

The company will provide financial control per PCAOB no later than Q1 2022.

TARGET RSU COMPENSATION Subject to annual authorization from the Silvaco Group Board of Directors and entrance into an award agreement under the Silvaco Group, Inc. 2014 Stock Incentive Plan, you will be granted up to 200,000 restricted stock units ("RSUs") annually based on the total amount of Company bookings. The target amounts (in US Dollars) for 2022 are listed below and will be revised yearly by the Silvaco Group Board of Directors. This Bookings Target is based on the assumption that company has accomplished $45 million by end of calendar date of 2021as baseline. If the 2021 booking is lower than $45 million the table below will be adjusted accordingly and normalized to the 2021 bookings.

Booking	**RSUs Granted**
$54 Million	$200,000.00
$53 Million	$187,000.00
$52 Million	$175,000.00
$51 Million	$162,000.00
$50 Million	$150,000.00
$49 Million	$137,000.00
$48 Million	$125,000.00
$47 Million	$112,000.00
$46 Million	$100,000.00
$45 Million	$87,000.00

RSUs shall vest over a four-year period (25% per year) commencing on the Start Date and shall not be subject to any clawback provisions. Detailed terms related to your RSU grants can be found in your award agreement.

TARGETED RSU DISTRIBUTION FOR IPO
In the event that the Company, directly or indirectly (including through a "SPAC" transaction), undergoes an initial public offering ("IPO") with the shareholder approval, you will be eligible for additional RSU grants.
When the Company completes such an IPO, you will be granted additional RSUs at the time of IPO according to the following schedule:

- 900,000 RSUs granted if an IPO is completed in 2022.
- 800,000 RSUs granted if an IPO is completed before July 1, 2023.
- 700,000 RSUs granted if an IPO is completed before December 31, 2023.

Severance Package: Your employment with the Company is at-will and may be terminated by you or by the Company at any time for any legal reason. However, in the event that your

/s/ BT

employment is terminated by the Company without Cause or by you or for Good Reason, each as defined below) you shall be entitled to receive the "Severance Benefits".

"Cause" shall mean termination of your employment as a result of your material personal dishonesty, willful misconduct that results in harm to the Company, breach of a fiduciary duty involving personal profit, intentional failure to perform stated duties, willful violation of any law, rule, or regulation (other than traffic violations or similar offenses) or final cease-and-desist order "Good Reason" shall mean any one of the following that occurs without your written consent: (i) a material diminution in your responsibilities, authority, title or duties (which for the avoidance of doubt, shall include interference by the Company's Board of Directors in the day to day operating activities of the Company; (ii) a material diminution in your Base Salary; (iii) the Company requiring you to change your principal place of employment to a location more than 25 miles from your principal place of employment on your start date; and (iv) any other action or inaction that constitutes a material breach by the Company of this Agreement. In order to invoke a termination for Good Reason, you shall provide written notice to the Company of the existence of one or more of the events, circumstances or conditions described in clauses (i) through (iv) within 90 days following your knowledge of the initial existence of such events, circumstances or conditions, specifying in reasonable detail the events, circumstances or conditions constituting Good Reason, and the Company shall have 30 days following receipt of such written notice (the "Cure Period") during which it may remedy the events, circumstances or conditions if such events, circumstances or conditions are reasonably subject to cure. In the event that the Company fails to remedy the events, circumstances or conditions constituting Good Reason during the Cure Period (if applicable), your resignation from employment for Good Reason must occur, if at all, within 180 days following the initial existence of such events, circumstances or conditions in order for such termination as a result of such condition to constitute a termination of employment for Good Reason. Your mental or physical incapacity following the occurrence of an event described above in clauses (i) through (iv) shall not affect your ability to terminate employment for Good Reason and your death following delivery of a notice of termination for Good Reason shall not affect your estate's entitlement to the severance payments and benefits provided hereunder upon a termination of employment for Good Reason.

"Severance Benefits" shall mean all the following. (i) Company shall pay to Executive a cash payment equal to fifteen (15) months of Executive's Base Salary and annual bonus at target level at the rate in effect immediately prior to Executive's date of termination (ignoring any reductions that would give rise to Good Reason) payable in a lump sum within 30 days of the termination date; (ii) the Company shall pay your COBRA premiums for you and your eligible dependents for a period of twelve (12) months following your termination date and (iii) Each outstanding and unvested equity award held by you that would have become vested during the twelve (12) month period following the date of termination shall automatically become vested (with respect to any time-based vesting requirement, and any forfeiture restrictions or rights on repurchase thereon shall lapse.

In addition, if you are terminated without Cause or for Good Reason within three (3) months prior to or twelve months following a Change in Control, then each outstanding and unvested equity award held by Executive on Executive's date of termination shall automatically become

/s/ BT

fully vested and, if applicable, exercisable, and any forfeiture restrictions or rights on repurchase thereon shall lapse, in each case, with respect to one hundred percent (100%) of the then-unvested shares

Prior Severance Package: You and Silvaco Group entered into a Separation Agreement and Release dated September 1, 2021 (the "Separation Agreement"). By signing this letter, Both Company and you agree and acknowledge that neither party is in material violation of any covenant in the Separation Agreement, and the Separation Agreement shall be considered null and void as of the Commencement of this offer letter.

In connection with your taking of the Position and the termination of the Separation Agreement, unvested RSUs granted to you prior to August of 2021 shall be treated as having been granted to you as of their original grant date and shall resume progress toward vesting in accordance with the original vesting schedule for each such grant. For the purposes of calculating such vesting, time between the effective date of the Separation Agreement and the Commencement Date shall be treated as time employed with the Company.

Benefits: You will be eligible to receive certain employee benefits per the Company's policy as follows:

- **Medical, Dental, Vision & Life Insurance Benefits**. Silvaco, Inc. offers Cigna PPO Plans or Kaiser HMO, dental and VSP vision coverage to employees and their eligible dependents. The company pays 100% of the employee's insurance premium and a portion of the eligible dependent's premium. Coverage begins the 1st day of the month following your date of hire. The Company also provides $200,000 of Life insurance and AD&D coverage at no cost to the employee.

- **401(k) Retirement Savings Plan**. You will become eligible to participate in the Company's 401(k) Plan on the first day of the calendar quarter following 90 days of continuous employment. All eligible employees may receive a 1.5% company match.

- **Flexible Time Off**. You will accrue flexible time-off (FTO) according to the following:

Length of employment	Number of Days of FTO	Number of Hours of FTO	Accrual rate of hours per pay period
Hire Date to 5 years	**13**	**103.92**	**4.33**
5 but less than 10 years	**16**	**127.92**	**5.33**
10 or more years	**18**	**144**	**6**

/s/ BT

Starting end of Q1 2022

- Company Car Allowance: The company will provide up to $1000 / month toward lease of a car chosen by the you.
- You have the option of choosing business class (International) and/or first class (Domestic) for travel related to the Company business.
- The Company shall contribute an amount equal to $20,000 annually towards a whole life insurance chosen by you under your name.

Other Matters

The CEO will hire a professional executive coach with the board approval by Q1 2022.

Both the board and CEO agree that no Silvaco source code or software IP will be transferred to China without the board approval.

For purposes of federal immigration law, you will be required to provide the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

By your signature below, you acknowledge that you have disclosed to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed, and you represent that the signing of this offer and commencement of employment with the Company will not violate any such agreement.

Moreover, you agree that, during the term of your employment with the Company, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to the Company. You confirm that you are not bound by any other lawful agreement with any prior or current employer, person or entity that would prevent you from fully performing your duties with the Company, and that you will not during your employment with the Company, or have not during the pre-hire process, use or disclose any proprietary or confidential information, or trade secrets, of your former or concurrent employers or companies.

As a Company employee, you will be expected to abide by the Company's rules and standards. Specifically, you will be required to sign an acknowledgement that you have read and that you understand the Company's rules of conduct which are included in the Company Handbook.

As a condition of your employment, you are also required to sign and comply with the Company's standard Employee Invention Assignment and Confidentiality Agreement which

/s/ BT

requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of Company proprietary information.

You and the Company agree to submit to mandatory binding arbitration any and all claims arising out of or related to your employment with the Company and the termination thereof, including, but not limited to, claims for unpaid wages, wrongful termination, torts, stock or stock options or other ownership interest in the Company, and/or discrimination (including harassment) based upon any federal, state or local ordinance, statute, regulation or constitutional provision except that each party may, at its, his or her option, seek injunctive relief in court related to the improper use, disclosure or misappropriation of a party's proprietary, confidential or trade secret information. All arbitration hearings shall be conducted in California. The parties hereby waive any rights they may have to trial by jury in regard to such claims. This Agreement does not restrict your right to file administrative claims you may bring before any government agency where, as a matter of law, the parties may not restrict the employee's ability to file such claims (including, but not limited to, the National Labor Relations Board, the Equal Employment Opportunity Commission and the Department of Labor). However, the parties agree that, to the fullest extent permitted by law, arbitration shall be the exclusive remedy for the subject matter of such administrative claims.

To accept the Company's offer, please sign and date this letter in the space provided below. This letter, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews or pre-employment negotiations, whether written or oral.

If you have any questions, please feel free to contact me at .

Sincerely,

/s/ Katherine Pesic

Katherine Pesic
Director / Founder
Silvaco Group, Inc.

I hereby accept the Chief Executive Officer (CEO) of each of Silvaco Group and Silvaco, Inc. Position.

/s/ Babak Taheri	11/24/2021
Babak Taheri	Date

SILVACO

November 16, 2022

Dr. Babak Taheri

Dear Babak:

This letter amends the offer letter previously provided to you by Silvaco (the "Company"), signed November 24, 2021, as amended (the "Offer Letter").

The following amendment corrects the target annual cash bonus as stated in the original offer letter signed November 24, 2021.

TARGET ANNUAL CASH BONUS Your annual bonus will be based on Silvaco Group Net profit, calculated according to ASC606 Net Profit (non-GAAP) recognition as follows: Your target bonus for the year 2021, and 2022 will be in line with the table below, with appropriate adjustments made for future years. Net profit numbers shall be rounded to the nearest tenth.

Net Profit	**Cash Bonus**
17.1% to 20%	$800,000.00
15.1% to 17%	$500,000.00
12.1% to 15%	$350,000.00
10.1% to 12%	$320,000.00
$5 Million	$292,000.00
$4 Million	$232,000.00
$3 Million	$172,000.00
$2 Million	$113,000.00
$1 Million	$62,000.00

All other elements of the original signed offer letter shall remain in place. If you have any questions, please contact Human Resources at HR@silvaco.com.

Sincerely,

/s/ Carrie Allegretti

Carrie Allegretti
VP of Global Human Resources

I have read and understood the corrected corporate goal provided in my original offer of employment, and I accept the above amendment dated November 16, 2022. I understand that my

employment with Silvaco remains at will, meaning that either the company or I may terminate this employment relationship at any time with or without cause or notice.

/s/ Babak Taheri	11/16/2022
Babak Taheri	Date

CONFIDENTIAL SEPARATION AGREEMENT AND RELEASE

RECITALS

This Confidential Separation Agreement and Release (the "Agreement") is made by and between Babak A. Taheri, an individual ("Executive") and Silvaco Group ("Silvaco" or the "Company") (individually each a "Party" and collectively the "Parties"). Executive must sign and return this Agreement within twenty-one (21) days of his receipt of this Agreement to be eligible for the severance benefits described below.

WHEREAS, Executive served the Company as its Chief Technology Officer and Executive Vice President of Products from October 2018 to August of 2019, and was promoted to Chief Executive Officer of Silvaco Inc. In March of 2021 to August 27, 2021 he was the CEO, CTO and board member of the Silvaco Group. On August 27, 2021, Executive's employment with the Company terminated (the "Termination Date"); and

WHEREAS, Executive has resigned his position as a Director of the Company, as well as all other positions held with the Company and its subsidiaries and affiliates, pursuant to the resignation letter attached as Exhibit A, and effective as of the Termination Date; and

WHEREAS, the Company and Executive entered into an Employee Proprietary Information and Inventions Agreement dated July 13, 2021 (the "Confidentiality Agreement"); and

WHEREAS, the Company wishes to provide Executive with a severance package, but is willing to do so only if Executive provides the Company with this release so that the Company is assured that the severance pay satisfies Executive's expectations.

NOW, THEREFORE, in consideration of the promises made herein, the Parties hereby agree as follows:

COVENANTS

1. Consideration. In consideration of Executive's execution of this Agreement and Executive's fulfillment of all of its terms and conditions, and provided that Executive does not revoke the Agreement under Section 9 below, the Company agrees as follows:

(a) Separation Pay. The Company agrees to pay Executive the gross amount of Three Hundred Sixty Thousand dollars ($360,000.00) ("Separation Pay"), payable as follows:

(i) The first payment of One Hundred Eighty Thousand dollars ($180,000.00), less applicable payroll withholding, will be made on or before the twentieth (20th) day following the Effective Date of this Agreement (as defined in Section 9 below); and

(ii) The second payment of One Hundred Eighty Thousand dollars ($180,000.00), less applicable payroll withholding, will be made on or about February 28, 2022, six months after the Termination Date.

/s/ PYL
/s/BT

(b) COBRA. If and to the extent that Executive elects to continue health insurance coverage under COBRA, then for the months of September 2021 through February 2022, so long as Executive remains eligible, the Company agrees to pay the entire monthly COBRA premiums for Executive and his dependents at the same coverage level prior to the Termination Date. Executive is solely responsible for timely filing any necessary paperwork for COBRA coverage. Executive agrees promptly to notify the Company if he becomes ineligible for continued COBRA coverage during the specified period.

(c) General. Executive acknowledges that without this Agreement, he is not otherwise entitled to the consideration listed in this Section 1, which is offered by the Company solely as consideration for this Agreement.

2. Benefits. Executive's company-provided health insurance benefits will cease on August 31, 2021, subject to Executive's right to continue his health insurance under COBRA (see Section 1(b) above). Except as specified in this Agreement, Executive's participation in all benefits and incidents of employment, including, but not limited to, the accrual of any bonuses, PTO, and RSU service vesting, will cease as of the Termination Date.

3. Restricted Stock Units. At various times during the term of Executive's employment, the Company granted Executive certain Liquidity Contingent Restricted Stock Units ("RSUs") pursuant to its 2014 Stock Incentive Plan and applicable Restricted Stock Unit Award Agreements, which plan and agreements shall continue to govern the treatment and disposition of Executive's RSU awards as described herein. As summarized in Exhibit B hereto: (a) Executive has service-vested in 70,000 RSUs that are not subject to the claw-back provision set forth in the 2014 Stock Incentive Plan and Restricted Stock Unit Award Agreements, and (b) as of the Termination Date, Executive will have service-vested in an additional 87,500 RSUs that are subject to the claw-back provision set forth in the 2014 Stock Incentive Plan and Restricted Stock Unit Award Agreements. Executive agrees and acknowledges that (i) the vesting of the RSUs is subject to two conditions, i.e., the completion of a time based service-vesting schedule and the occurrence of a liquidity event as defined by the Board of Directors for purposes of such RSUs ("Liquidity Event") before the expiration of the remaining term of the RSUs or such earlier expiration date following termination of employment as may be specified in a claw-back provision in the applicable Restricted Stock Unit Award Agreement, (ii) none of the RSUs have vested as of the Termination Date, (iii) Executive will forfeit as of the Termination Date all RSUs that have not service-vested as of such date, and (iv) Executive will forfeit all service-vested RSUs if the Company does not have a Liquidity Event before the applicable expiration date. Executive further agrees and acknowledges that he is not entitled to any common shares or other securities of the Company (other than pursuant to those RSUs in which he has service-vested as of the Termination Date as summarized in Exhibit B hereto if and only to the extent they become vested upon a Liquidity Event before the applicable expiration date as described above).

4. Trade Secrets and Confidential Information/Company Property. Executive reaffirms and agrees to observe and abide by the terms of the Confidentiality Agreement. Further, Executive's signature below constitutes his certification that he has returned all

/s/ PYL
/s/BT

documents and other items in whatever form or format, provided to Executive by the Company (excluding only payroll and personnel records and other similar documents to which Executive is entitled), developed or obtained by Executive in connection with his employment or any other affiliation with the Company, or otherwise belonging to the Company. Except as may be required by law, subpoena or court order, Executive and the Company further agree to keep the contents of this Agreement, and the negotiations leading up to it, confidential and will not disclose it to third parties (with the exception of immediate family members, attorneys, accountants and financial advisors).

5. Payment of Salary and Receipt of All Benefits. Executive acknowledges and represents that, other than the consideration set forth in this Agreement, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, leave, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Executive.

6. Company Release of Claims. The Company, on behalf of itself and all of its current and former officers, directors, employees, agents, investors, attorneys, shareholders, founders, administrators, affiliates, divisions, subsidiaries, predecessor and successor corporations and assigns, hereby and forever releases Executive and his respective heirs, family members, executors, agents, and assigns ("Executive Releasees"), from, and agrees not to sue concerning, or in any manner to institute, prosecute or pursue, any claim, complaint, charge, duty, obligation or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that the Company may possess against any of the Executive Releasees arising from any omissions, acts or facts or damages that have occurred up until and including the Effective Date of this Agreement including, without limitation (i) any and all claims relating to or arising from Executive's employment relationship with the Company and the termination of that relationship, (ii) any and all claims relating to or arising from Executive's right to vest in or purchase RSUs or other equities of the Company; and (iii) any and all claims for attorneys' fees and costs. Notwithstanding the foregoing, the Company does not intend to waive, and does not waive, any claims against Executive arising as a result of Executive's employment-related conduct that results in federal or state criminal liability. The Company agrees that the release set forth in this Section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement.

7. Executive Release of Claims. Executive agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Executive by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, founders, administrators, affiliates, divisions, subsidiaries, predecessor and successor corporations and assigns (the "Company Releasees"). Executive, on his own behalf, and on behalf of his respective heirs, family members, executors, agents, and assigns, and in his capacity as an individual and as a representative of any purported class, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute or pursue, any claim, complaint, charge, duty, obligation or cause of action relating to

/s/ PYL
/s/BT

any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Executive may possess against any of the Releasees arising from any omissions, acts or facts or damages that have occurred up until and including the Effective Date of this Agreement including, without limitation:

(a) any and all claims relating to or arising from Executive's employment relationship with the Company and the termination of that relationship;

(b) any and all claims relating to or arising from Executive's right to vest in or purchase RSUs or other equities of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

(c) any and all claims for wrongful discharge of employment; constructive discharge; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of a covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; and conversion;

(d) any and all claims for violation of any federal, state or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Age Discrimination in Employment Act of 1967 (29 U.S.C. § 621 et seq.); the Americans with Disabilities Act of 1990; the Fair Credit Reporting Act; the Employee Retirement Income Security Act of 1974; the Family and Medical Leave Act; the Worker Adjustment and Retraining Notification Act; the Older Workers Benefit Protection Act; the Sarbanes-Oxley Act of 2002; the Fair Labor Standards Act (29 U.S.C. §201 et seq.); relevant California labor codes, and all amendments to each of the above-referenced statutes; any other laws of the state of California; and any other federal, state or local laws or regulations relating to employment terms and conditions of employment;

(e) any and all claims for violation of the federal, or any state, constitution;

(f) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(g) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Executive as a result of this Agreement; and

(h) any and all claims for attorneys' fees and costs.

(i) Executive agrees that the release set forth in this Section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement. This release does not release

/s/ PYL
/s/BT

claims that cannot be released as a matter of law, including but not limited to Executive's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that any such filing or participation does not give Executive the right to recover any monetary damages against the Company; Executive's release of claims herein bars Executive from recovering such monetary relief from the Company). This release also does not release (i) any claims for indemnification that Executive may have against the Company or the Releasees under any indemnification agreement or other arrangement with the Company or the Releasees, or under applicable law or (ii) any right to coverage under any D&O or other similar insurance policy.

8. Additional Effects of Release. Without limiting the generality of the forgoing, Executive agrees that as a result of his resignation from employment as described herein, Executive has no right to severance benefits of any type, other than as set forth herein, and expressly waives and releases any rights to severance or other benefits under his offer letter dated September 21, 2018 (which is hereby expressly terminated) or any other agreement with, or policy or practice of, the Company.

9. Acknowledgement of Waiver of Claims Under ADEA. Executive acknowledges that he is waiving and releasing any rights he may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Executive agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Executive acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Executive was already entitled.

Executive further acknowledges that he has been advised by this writing that:

(a) he should consult with an attorney prior to executing this Agreement;

(b) he has twenty-one (21) days within which to consider and accept the terms of this Agreement. To accept the terms of this Agreement, Executive shall date and sign this Agreement and return it to Jay Bart, Vice-President of Human Relations, Silvaco Group, 2811 Mission College Blvd., Sixth Floor, Santa Clara, CA 95054;

(c) he has seven (7) days following his execution of this Agreement to revoke this Agreement (the "Revocation Period"). If he decides to revoke this Agreement after signing it, he must submit a written statement of revocation by the last day of the Revocation Period to Jay Bart, Vice-President of Human Relations, Silvaco Group, 2811 Mission College Blvd., Sixth Floor, Santa Clara, CA 95054;

(d) if Executive does not revoke during the seven-day Revocation Period, this Agreement will take effect on the eighth (8th) day after the date Executive signs the Agreement ("Effective Date"); and

/s/ PYL
/s/BT

(e) nothing in this Agreement prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Executive signs this Agreement and returns it to the Company in less than the 21-day period identified above, Executive hereby acknowledges that he has freely and voluntarily chosen to waive the time period allotted for considering this Agreement.

10. Unknown Claims. Except as expressly excluded, the release of claims herein extends to all claims of every nature and kind whatsoever, whether known or unknown, suspected or unsuspected. The Parties expressly waive the benefits of any provision of the laws of the United States or of any state (including but not limited to California Civil Code section 1542) which provide that a general release does not extend to claims which a party does not know or expect to exist in its favor at the time of executing the release, which if known to the party may have materially affected the settlement. It is the parties' intention to forever discharge and release known and unknown, present and future claims against the Company Releasees and the Executive Releasees within the scope of the release set forth herein.

11. No Pending or Future Lawsuits. Executive represents that Executive has no lawsuits, claims, administrative actions or otherwise pending in his name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Executive also represents that he does not intend to bring any claims on his own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

12. Application for Employment. Executive understands and agrees that, as a condition of this Agreement, Executive shall not be entitled to any employment with the Company, and Executive hereby waives any right, or alleged right, of employment or re-employment with the Company.

13. No Cooperation. Executive agrees not to act in any manner that might damage the business of the Company. Executive further agrees that he will not knowingly encourage or counsel any attorneys or their clients in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so. Executive agrees both to immediately notify the Company upon receipt of any such subpoena or court order, and to furnish to the Company, within three (3) business days of its receipt, a copy of such subpoena or other court order. If approached by anyone for counsel in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints against any of the Releasees, Executive shall state no more than that he cannot provide counsel.

14. Non-Disparagement; Employment Representations. Executive agrees to refrain from any disparagement, defamation, libel or slander of the Company, its current and former members of its Board of Directors and current and former executives, or any tortious interference with the contracts, relationships, and prospective economic advantage of the Company. The Company agrees that its members of its Board of Directors and executives shall refrain from any disparagement, libel or slander of Executive or any tortious interference with the contracts,

/s/ PYL
/s/BT

relationships, and prospective economic advantage of Executive. Executive will direct all inquiries by potential future employers to Jay Bart, Vice President of Human Relations, and the Company will only provide Executives dates of employment, positions, and the fact that the Executive had resigned.

15. No Admission of Liability. Executive understands and acknowledges that this Agreement constitutes a compromise and settlement of any and all actual or potential disputed claims. No action taken by the Company hereto, either previously or in connection with this Agreement, shall be deemed or construed to be: (a) an admission of the truth or falsity of any claims; or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Executive or to any third party.

16. Attorneys' Fees and Costs. The Parties shall each bear its/his own costs, expert fees, attorneys' fees and other fees incurred in connection with the preparation of this Agreement.

17. ARBITRATION. THE PARTIES AGREE THAT ANY AND ALL DISPUTES ARISING OUT OF THE TERMS OF THIS AGREEMENT, THEIR INTERPRETATION, AND ANY OF THE MATTERS HEREIN RELEASED, SHALL BE SUBJECT TO ARBITRATION IN SAN JOSE, CALIFORNIA BEFORE JAMS, PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES ("JAMS RULES"). THE ARBITRATOR MAY GRANT INJUNCTIONS AND OTHER RELIEF IN SUCH DISPUTES. THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH CALIFORNIA LAW, WITHOUT REFERENCE TO ANY CONFLICT-OF-LAW PROVISIONS OF ANY JURISDICTION. THE DECISION OF THE ARBITRATOR SHALL BE FINAL, CONCLUSIVE, AND BINDING ON THE PARTIES TO THE ARBITRATION. THE PARTIES AGREE THAT THE PREVAILING PARTY IN ANY ARBITRATION SHALL BE ENTITLED TO INJUNCTIVE RELIEF IN ANY COURT IN SAN JOSE, CALIFORNIA TO ENFORCE THE ARBITRATION AWARD. TO THE EXTENT PERMITTED BY LAW, THE PARTIES TO THE ARBITRATION SHALL EACH PAY AN EQUAL SHARE OF THE UP FRONT COSTS AND EXPENSES OF SUCH ARBITRATION, AND EACH PARTY SHALL SEPARATELY PAY FOR ITS RESPECTIVE COUNSEL FEES AND EXPENSES. THE PARTIES HEREBY AGREE TO WAIVE THEIR RIGHT TO HAVE ANY DISPUTE BETWEEN THEM RESOLVED IN A COURT OF LAW BY A JUDGE OR JURY. NOTWITHSTANDING THE FOREGOING, THIS SECTION WILL NOT PREVENT EITHER PARTY FROM SEEKING INJUNCTIVE RELIEF (OR ANY OTHER PROVISIONAL REMEDY) FROM ANY COURT HAVING JURISDICTION OVER THE PARTIES AND THE SUBJECT MATTER OF THEIR DISPUTE RELATING TO THIS AGREEMENT AND THE AGREEMENTS INCORPORATED HEREIN BY REFERENCE. SHOULD ANY PART OF THE ARBITRATION AGREEMENT CONTAINED IN THIS SECTION CONFLICT WITH ANY OTHER ARBITRATION AGREEMENT BETWEEN THE PARTIES, THE PARTIES AGREE THAT THIS ARBITRATION AGREEMENT SHALL GOVERN.

18. Cooperation with Company. Executive agrees to cooperate and assist the Company, both before and after the Termination Date, and at the reasonable request of the

/s/ PYL
/s/BT

Company, in the defense and/or prosecution of any charges, claims, investigations (internal or external), administrative proceedings and/or lawsuits (including, but not limited to, the Nangate litigation) relating to matters occurring during Executive's period of employment and in any actions necessary or proper to effectuate the resignations set forth on Exhibit A Executive acknowledges that a portion of the consideration referred to in Section 1 constitutes compensation for such cooperation and assistance.

19. Tax Consequences. The Company makes no representations or warranties with respect to the tax consequences of the payments provided to Executive or made on his behalf under the terms of this Agreement. Executive acknowledges that the Company is not providing tax or investment advice in connection with the execution of this Agreement or otherwise, and Executive has been advised to seek independent tax, investment and other advice or counsel.

Executive agrees and understands that he is responsible for payment, if any, of local, state and/or federal taxes on the payments made hereunder by the Company and any penalties or assessments thereon. Executive further agrees to indemnify and hold the Company harmless from any claims, demands, deficiencies, penalties, interest, assessments, executions, judgments, or recoveries by any government agency against the Company for any amounts claimed due on account of: (a) Executive's failure to pay or the Company's failure to withhold, or Executive's delayed payment of, federal or state taxes; or (b) damages sustained by the Company by reason of any such claims, including attorneys' fees and costs.

20. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Agreement. Executive represents and warrants that he has the capacity to act on his own behalf and on behalf of all who might claim through him to bind them to the terms and conditions of this Agreement. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein.

21. No Representations. Executive represents that he has had an opportunity to consult with an attorney and has carefully read and understands the scope and effect of the provisions of this Agreement. Executive has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

22. Severability. In the event that any provision, or any portion thereof, becomes or is declared by an arbitrator or a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision or portion of said provision.

23. Attorneys' Fees. In the event that either Party brings an action to enforce or effect its rights under this Agreement, the prevailing Party shall be entitled to recover its costs and expenses, including the costs of arbitration, litigation, court fees, and reasonable attorneys' fees, incurred in connection with such an action.

/s/ PYL
/s/BT

24. Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Executive concerning the subject matter of this Agreement and Executive's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Executive's relationship with the Company, with the exception of the Confidentiality Agreement and the pertinent 2014 Stock Incentive Plan and applicable Restricted Stock Unit Award Agreements.

25. No Waiver. The failure of the Company to insist upon the performance of any of the terms and conditions in this Agreement, or the failure to prosecute any breach of any of the terms and conditions of this Agreement, shall not be construed thereafter as a waiver of any such terms or conditions. This entire Agreement shall remain in full force and effect as if no such forbearance or failure of performance had occurred.

26. No Oral Modification. This Agreement may only be amended in a writing signed by Executive and the Chairman of the Board of the Company.

27. Governing Law and Venue. Any dispute which is not arbitrated pursuant to Section 18 shall be litigated exclusively in federal or state courts located in San Jose, California. This Agreement shall be construed interpreted, governed and enforced in accordance with the laws of the State of California

28. Notices. Any notice to be provided to the Company pursuant to this Agreement must be submitted to the Company's Jay Bart, Vice-President of Human Relations, Silvaco Group, 2811 Mission College Blvd., Sixth Floor, Santa Clara, CA 95054. Any notice to be provided to Executive pursuant to this Agreement must be submitted to his mailing address .

29. Counterparts. This Agreement may be executed in counterparts and by facsimile or PDF, and each counterpart and facsimile or PDF shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

30. Voluntary Execution of Agreement. Executive represents that he executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of his claims against the Company and any of the other Releasees. Executive acknowledges that:

(a) he has read this Agreement;

(b) he has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of his own choice or that he has voluntarily declined to seek such counsel;

(c) he understands the terms and consequences of this Agreement and of the releases it contains; and

(d) he is fully aware of the legal and binding effect of this Agreement.

/s/ PYL
/s/BT

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

Silvaco Group

Dated: 08/31/2021

By: /s/ Pierre-Yves Lesaicherre

Pierre-Yves Lesaicherre

Chairman of the Board of Directors

Babak A Taheri, an individual

Dated: 09/01/2021

By: /s/ Babak A Taheri

/s/ PYL
/s/BT

EXHIBIT A

Date: August 31, 2021

To: Board of Directors
Silvaco Group
Attention: Pierre-Yves Lesaicherre, Chairman of the Board

Ladies and Gentlemen:

I, Babak A Taheri, hereby resign from all employment positions, all officer or representative roles and directorships of Silvaco Group and its affiliates, effective August 27, 2021.

/s/ Babak A Taheri
Babak A Taheri

/s/ PYL
/s/BT

SILVACO

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Amended and Restated Employment Agreement (the "Agreement") is entered into as of the 29th day of February 2024 by and between Dr. Babak Taheri (the "Executive") and Silvaco Group, Inc. (the "Company"; the Executive and the Company are collectively referred to as the "Parties"). This Agreement shall be effective as of January 1, 2024 (the "Effective Date").

RECITALS

WHEREAS, the Executive and the Company previously entered into that certain Offer Letter and Termination of Separation Agreement, dated as of November 24, 2021 (the "Prior Agreement"), pursuant to which the Executive currently serves as the Company's Chief Executive Officer ("CEO");

WHEREAS, the Executive also serves as a member of the Board of Directors (the "Board") solely by election of the stockholders of the Company;

WHEREAS, the Company desires to continue to employ the Executive as the Company's CEO and President, and the Executive desires to continue to be employed by the Company on the new terms and conditions contained herein;

WHEREAS, the Executive and the Company agree that the Prior Agreement is amended and restated in its entirety as set forth in this Agreement as of the Effective Date; and

WHEREAS, the Parties acknowledge and agree that neither the execution of this Agreement, the restatement of the Prior Agreement nor any other action of the Company through the Effective Date (including in respect of changes in compensation pursuant to this Agreement) shall constitute Good Reason for purposes of the Prior Agreement or the Plan (as hereafter defined);

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, including the IPO RSU Grant (as set forth in Section 2(c)) and Executive's severance eligibility (as set forth in Section 3), the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Employment.

(a) Terms. The Company will employ the Executive, and the Executive hereby accepts such employment, on the terms set forth herein commencing as of the Effective Date.

(b) Position and Duties. The Executive shall serve as the CEO of the Company and shall have such powers and duties as may from time to time be prescribed by the Chair of the Board or any other individual designated by the Board, managing member or similar governing body of the Company, provided that such duties are consistent with the Executive's position, or other positions that the Executive may hold from time to time. The Executive shall devote Executive's full working time and efforts to the business and affairs of the Company. Notwithstanding the foregoing, the Executive may serve on other boards of directors, with the approval of the Board, or engage in religious, charitable or other community activities as long as such services and activities are disclosed to the Board and do not materially interfere with the Executive's obligations or performance of Executive's duties to the Company as provided in this Agreement. For purposes of clarity, the Company specifically approves

Executive's participation in those activities listed on Exhibit A hereto as described by the Executive and which Executive has confirmed do not conflict with or interfere with Executive's obligations or performance of Executive's duties to the Company, nor use any information obtained as part of the Executive's employment. The Executive's initial place of work shall be his home office in Arizona, with visits to the Company's offices and such business travel as may be reasonably required by the Board.

(c) At-Will Employment. The nature of the employment relationship between the Executive and the Company is "at-will" and may be terminated at any time by either Executive or the Company upon notice to the other, for any or no reason, subject to the terms of this Agreement. In addition, the Company reserves the right to modify the Executive's compensation, position, duties or reporting relationship at any time to meet business needs. The Executive acknowledges that nothing in this Agreement, or in any written or unwritten policies of the Company, including the Company's employee handbook, changes the at-will status of the Executive's employment.

2. Compensation and Related Matters.

(a) Base Salary. The Executive's annual base salary shall be four hundred eighty-five thousand dollars ($485,000) effective as of December 1, 2023. The base salary shall be evaluated annually by the Board beginning in early 2025, with any Board-approved adjustments effective retroactively as of January 1 of such adjustment year (or such other date Board-approved adjustments are made for other executive officers). The base salary in effect at any given time is referred to herein as "Base Salary." The Base Salary shall be payable in a manner that is consistent with the Company's usual payroll practices.

(b) Annual Cash Incentive Compensation. The Executive shall be eligible to receive a cash incentive bonus annually under the annual bonus plan approved by the Compensation Committee of the Board. Executive's target bonus opportunity will be 60% of Base Salary as of January 1 of the performance year. To earn a cash incentive bonus, the Executive must be employed by the Company from January 1st to December 31st of the year for which the annual cash incentive is calculated, and shall be paid on the day such incentive compensation is paid to all or substantially all other employees who are also subject to annual cash incentive bonuses in the regular course of business. Actual payout will be approved by the Board following recommendation by the Compensation Committee.

(c) IPO RSU Grant. Subject to the approval of the Board of Directors of Silvaco, on or promptly following the date of this Agreement, Executive shall be awarded 700,000 restricted stock units ("RSU"s) under the Company's 2014 Stock Incentive Plan subject to certain terms and conditions set forth in the 2014 Stock Incentive Plan and RSU Award Agreement, in the form of RSU award agreement used for senior executives including vesting conditions modified as set forth below. The RSUs shall be subject to three (3) vesting requirements: (i) a "Liquidity Event Requirement" (ii) a "Retention Requirement" and a (iii) "Time-Based Requirement." Each vesting requirement shall be further detailed in the RSU Award Agreement. In relation to the satisfaction of the Time-Based Requirement only, the RSUs shall vest as follows:

(i) 350,000 RSUs shall vest on the first business day following the closing of an underwritten public offering by the Company of its securities that is

registered under the United States Securities Act of 1933 or its equivalent under another country's laws (an "IPO");

(ii) 350,000 RSUs shall vest over a two-year period with a portion vesting as a one-year cliff and the remainder quarterly over the following four quarters (50% vesting on the one-year anniversary of the Vesting Start Date and 1/4 of the remaining unvested RSUs set forth in (c)(ii) vesting on each quarterly anniversary thereafter, such that on the two year anniversary of the Vesting Start Date, 100% of the RSUs shall be fully vested), subject to your continued employment unless otherwise specified herein;

(iii) The "Vesting Start Date" shall be the first business day following the closing of an IPO.

provided, however, if an IPO has not closed on or prior to December 31, 2024, the RSU Award Agreement shall provide that the full award of 700,000 RSUs shall be immediately cancelled and forfeited without any further obligations related to Executive in relation to such award or any other IPO-related equity grant.

Subject to and only following the satisfaction of the Liquidity Event Requirement and Retention-Based Requirement, the RSUs shall also be subject to acceleration as provided in the 2024 Silvaco Group, Inc. Executive Severance Plan and Summary Plan Description (the "Plan") attached hereto as Exhibit C. Further, subject to all applicable laws and the terms of applicable incentive plans, the Company shall take all reasonable steps to allow executive to satisfy withholding obligations as to the 350,000 RSUs per section (b)(i) at or following the settlement date of such RSUs with a portion of the underlying shares (i.e., net settlement).

(d) Annual Equity Incentive Compensation. In addition to the IPO RSU Grant, the Executive shall be eligible to receive an equity award annually based on the Board's assessment of market competitive conditions and Executive's overall individual performance. The design and delivery of such annual equity awards and plan, and the grant of such equity awards, will be determined by and subject to the approval of the Board following recommendation by the Compensation Committee.

(e) Employee Benefits. The Executive will be entitled to participate in the Company's employee benefit plans and programs in effect from time to time and available to all full time US-based employees, including those with respect to paid time off, subject to the terms of such plans and programs. Notwithstanding the forgoing, the Company may modify and/or terminate its employee benefit plans and programs offered to full time US-based employees at any time. Additionally, the Company agrees to provide Executive with supplemental benefits as set forth in Exhibit B hereto, subject to the terms of this Agreement.

(f) Expenses. The Executive shall be entitled to receive prompt reimbursement for all reasonable and documented out-of-pocket business expenses incurred by the Executive in performing services hereunder, in accordance with the policies and procedures then in effect and established by the Company for its senior executive officers, provided that Executive shall be reimbursed for travel as set forth in Exhibit B.

3. Termination of Employment. The Executive shall be eligible to participate in the Plan, as may be amended from time to time, subject to and in accordance with the terms and conditions of such Plan, which shall among other things govern cash and equity related severance benefits in both "change of control" and non-change of control situations, including the terms and conditions of such payments and benefits, as further detailed in the Plan, except for modifications to certain defined terms in the Plan as reflected in Exhibit E. The definitions set forth on Exhibit E shall replace the same defined terms in the Plan in full only for the Executive and shall only apply to the Executive in relation to the termination of his employment as Chief Executive Officer pursuant to this agreement but shall not otherwise affect the Executive's rights under the Plan.

4. Section 409A. The compensation and benefits provided under this Agreement are intended to qualify for one or more exemptions from application of Section 409A to the maximum extent such exemptions are available. Each payment pursuant to this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, the following provisions shall apply.

(a) Anything in this Agreement to the contrary notwithstanding, if at the time of the Executive's separation from service within the meaning of Section 409A of the Code, the Company determines that the Executive is a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that the Executive becomes entitled to under this Agreement or the Plan on account of the Executive's separation from service would be considered deferred compensation otherwise subject to the twenty percent (20%) additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six (6) months and one (1) day after the Executive's separation from service, or (B) the Executive's death (the "Specified Employee Initial Payment Date"). If any such delayed cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule.

(b) All in-kind benefits provided and expenses eligible for reimbursement under this Agreement shall be provided by the Company or incurred by the Executive during the time periods set forth in this Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year (except for any lifetime or other aggregate limitation applicable to medical expenses). Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

(c) To the extent that any payment or benefit described in this Agreement constitutes "non-qualified deferred compensation" under Section 409A of the Code, and to the extent that such payment or benefit is payable upon the Executive's termination of employment, then such

payments or benefits shall be payable only upon the Executive's "separation from service." The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h).

(d) The Parties intend that this Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The Parties agree that this Agreement may be amended, as reasonably determined by the Company, and as may be necessary to fully comply with Section 409A of the Code and all related rules and regulations in order to preserve the payments and benefits provided hereunder without additional cost to either party.

(e) The Company makes no representation or warranty and shall have no liability to the Executive or any other person if any provisions of this Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

5. Continuing Obligations. The terms of the Proprietary Information and Inventions Agreement dated July 13, 2021 (the "Confidentiality Agreement"), between the Company and the Executive continue to be in full force and effect.

6. Third-Party Agreements and Rights. The Executive represents to the Company that the Executive's execution of this Agreement, the Executive's employment with the Company and the performance of the Executive's duties for the Company as contemplated under this Agreement will not violate any obligations the Executive may have to any other party. In the Executive's work for the Company, the Executive will not disclose or make use of any information in violation of any agreements with or rights of any such other party, and the Executive will not bring to the premises of the Company any copies or other tangible embodiments of non-public information belonging to or obtained from any such other party.

7. No Conflicts. The Executive agrees that during the course of employment with the Company the Executive shall not, without the prior written consent of the Company, either directly or indirectly, through an affiliated or controlled entity or person, or as an employee, partner, consultant, proprietor, principal, agent, or otherwise in any other capacity, work for, render services to, own, manage, operate, engage in any business anywhere in the world which is in competition with the business of the Company.

8. Severability. If any provision of this Agreement, or any part thereof, is held by a court or other authority of competent jurisdiction to be invalid or unenforceable, the parties agree that the court or authority making such determination will have the power to reduce the duration or scope of such provision or to delete specific words or phrases as necessary (but only to the minimum extent necessary) to cause such provision or part to be valid and enforceable. If such court or authority does not have the legal authority to take the actions described in the preceding sentence, the parties agree to negotiate in good faith a modified provision that would, in so far as possible, reflect the original intent of this Agreement without violating applicable law.

9. Remedies. The Executive acknowledges that the restrictions contained in this Agreement are reasonable and necessary to protect the Company's legitimate business interests and that any violation of the provisions contained herein would result in irreparable injury to the Company and that monetary damages may not be sufficient to compensate the Company for any economic loss which may be incurred by reason of breach of the restrictions contained herein. In the event of a breach or a threatened breach by the Executive of any provision contained herein, the Company shall be entitled to a temporary restraining order and injunctive relief restraining the Executive from the commission of any breach, shall not be required to provide any bond or other security in connection with obtaining any such equitable remedy and the prevailing party shall be entitled to recover its reasonable attorneys' fees, costs and expenses related to the breach. Nothing contained in this Section 9 shall be construed as prohibiting the Company from pursuing any other remedies available to it for any breach, including, without limitation, the recovery of money damages.

10. Withholding. All payments made by the Company to the Executive under this Agreement will be reduced by any tax or other amounts required to be withheld by the Company under applicable law.

11. Enforceability. If any portion or provision of this Agreement (including, without limitation, any portion or provision of any section of this Agreement) shall to any extent be declared illegal or unenforceable by a court of competent jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each portion and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

12. Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of the Executive's employment to the extent necessary to effectuate the terms contained herein.

13. Waiver. No waiver of any provision hereof shall be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement, or the waiver by any party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.

14. Notices. Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by a nationally recognized overnight courier service or by registered or certified mail, postage prepaid, return receipt requested, to the Executive at the last address the Executive has filed in writing with the Company or, in the case of the Company, at its main offices, attention of the Board, with a copy to the Company's General Counsel or Chief Legal Officer and Legal@Silvaco.com.

15. Amendment. This Agreement may be amended or modified only by a written instrument signed by the Executive and by a duly authorized representative of the Company.

16. Governing Law. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of California without giving effect to any choice or conflict of law

provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

17. Arbitration. Except as otherwise required by law, any dispute, claim, question or controversy arising under or relating to this Agreement, the Executive's employment with the Company or the termination thereof shall be resolved pursuant to the Employee Arbitration Agreement attached hereto as Exhibit D.

18. Successor to Company. This Agreement shall inure to the benefit of and be enforceable by any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company.

19. No Third-Party Beneficiaries. This Agreement is intended solely for the benefit of the parties and the Company's respective successors and permitted assigns and shall not confer upon any other person any remedy, claim, liability, reimbursement, or other right. The Agreement is not intended and shall not be construed to create any third-party beneficiaries or to provide to any third parties with any remedy, claim, liability, reimbursement, cause of action, or other right or privilege.

20. Integration. This Agreement (together with Exhibits A, B, C, D, and E) constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior written or oral agreements between the Parties concerning such subject matter, with the exception of the Confidentiality Agreement.

21. Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered shall be taken to be an original; but such counterparts shall together constitute one and the same document.

[Remainder of Page Left Intentionally Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date and year first above written.

SILVACO GROUP, INC.

By: /s/ Katherine S. Ngai-Pesic

Name: Katherine S. Ngai-Pesic

Title: Chair of the Board of Directors

/s/ Babak Taheri

DR. BABAK TAHERI

Exhibit A

List of Approved Activities

1. Chairman of the Advisory Board at University of California ECE department
2. CEO and President of Integrated Biosensing Technologies since 2015

For the aforementioned activities, Executive provides occasional consultation on matters unrelated to Silvaco or Silvaco's technology for approximately 2 hours or less per month.

EXHIBIT B

In addition to the Executive's participation in the Company's employee benefit plans in effect from time to time, the Company shall provide the Executive with the benefits listed below, subject to the Executive's continued employment and subject to applicable tax deductions and withholdings:

The Company will pay an amount of up to $20,000 annually toward a premium for the Executive's chosen whole life insurance policy. Such payment will be treated as income to the Executive and not grossed-up for any income related taxes.

The Company will reimburse the Executive for the lease of a car of his choice, in an amount equal to $1,000 per month. Reimbursement of Executive's business travel shall be subject to the travel policy adopted by the Board for Board member travel, provided that Executive's travel to the Company's headquarters in the ordinary course of business shall not be reimbursable, unless such travel is in relation to Board meetings or for special events required by the Company.

The Company will reimburse Executive's attorneys' fees related to the review and negotiation related to this Amended and Restated Employment Agreement, up to a total of $30,000.

If the Company requests a relocation of the Executive's place of work to the Company's headquarters the Company agrees to reimburse reasonable amounts of actual relocation expenses incurred by such Executive not to exceed $15,000 (adjusted by the annual consumer price index for all items published by the Unites States Bureau of Labor and Statistics) and subject to the Executive producing receipts and documentary support for expenses claimed for reimbursement.

Exhibit C

2024 Silvaco Group, Inc. Executive Severance and Summary Plan Description

[Separately Attached]

Exhibit D

EMPLOYEE ARBITRATION AGREEMENT

Silvaco Group, Inc. ("Company") and the undersigned employee ("Employee") hereby enter into this Employee Arbitration Agreement and agree that, to the fullest extent permitted by law, any and all claims or controversies between them (or between Employee and any present or former officer, director, agent, or employee of Company or any parent, subsidiary, or other entity affiliated with Company) relating in any manner to the employment or the termination of employment of Employee, including but not limited to the interpretation, applicability, or enforceability of this Agreement, shall be resolved by final and binding arbitration. Except as specifically provided herein, any arbitration proceeding shall be conducted in accordance with the Employment Arbitration Rules and Mediation Procedures of the American Arbitration Association ("the AAA Rules"), available at www.adr.org/rules or provided upon request by Company. Claims subject to arbitration shall include without limitation contract claims, tort claims, claims relating to compensation and stock options, as well as claims based on any federal, state, or local law, statute, or regulation, including but not limited to any claims arising under Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act. Claims for unemployment compensation, workers' compensation, claims under the National Labor Relations Act, and other claims excluded by law shall not, however, be subject to arbitration under this Agreement ("Excluded Claims"). Nothing in this Agreement shall be interpreted to mean that Employee is precluded from filing complaints with the U.S. Equal Employment Opportunity Commission (or state equivalent) or the National Labor Relations Board or from pursuing an individual or joint action in court alleging sexual assault or sexual harassment.

Employee and Company expressly intend and agree that: (a) class action and representative action procedures are hereby waived and shall not be asserted, nor will they apply, in any arbitration pursuant to this Agreement; (b) each will not assert class action or representative action claims against the other in arbitration or otherwise; and (c) Employee and Company shall only submit their own, individual claims in arbitration and will not seek to represent the interests of any other person. To the extent that a dispute involves both timely filed Excluded Claims and claims subject to arbitration under this Agreement, Company and Employee agree that the party bringing such claims will bifurcate and stay for the duration of the arbitration proceedings any such Excluded Claims.

A neutral and impartial arbitrator shall be chosen by mutual agreement of the parties; however, if the parties are unable to agree upon an arbitrator within a reasonable period, then a neutral and impartial arbitrator shall be appointed in accordance with the arbitrator nomination and selection procedure set forth in the AAA Rules. The arbitrator shall prepare a written decision containing the essential findings and conclusions on which the award is based to ensure meaningful judicial review of the decision. The arbitration proceedings will allow for reasonable discovery under the AAA Rules, and the arbitrator shall decide all discovery disputes. The arbitrator shall apply the same substantive law, with the same statutes of limitations and same remedies that would apply if the claims were brought in a court of law. The arbitrator shall have the authority to consider and decide pre-hearing motions, including dispositive motions.

Either Company or Employee may bring an action in court to compel arbitration under this Agreement and to enforce an arbitration award. Except as otherwise provided in this Agreement, neither party shall initiate or prosecute any lawsuit in any way related to any arbitrable claim, including without limitation any claim as to the making, existence, validity, or enforceability of an agreement to arbitrate. Provided, however, that either party may, at its option, seek injunctive relief in a court of competent jurisdiction.

This Agreement shall be governed by the Federal Arbitration Act to the extent allowed by law. In ruling on procedural and substantive issues raised in the arbitration itself, the Arbitrator shall in all cases apply the substantive law of the state of California.

All arbitration hearings under this Agreement shall be conducted in Palo Alto, California unless prohibited by applicable law, in which case arbitration hearings shall be conducted within 30 miles of Employer's primary worksite.

Company shall bear the costs of the arbitrator, forum and filing fees. Each party shall pay its own costs and attorney's fees, unless a party prevails on a statutory claim, and the statute provides that the prevailing party is entitled to payment of its attorneys' fees. In that case, the arbitrator may award reasonable attorneys' fees and costs to the prevailing party as provided by law.

This Agreement is not, and shall not be construed to create, any contract of employment, express or implied. This Agreement does not alter Employee's at-will employment status. Either Employee or Company may terminate Employee's employment at any time, for any reason or no reason, with or without prior notice.

If any provision of this Agreement shall be held by a court or the arbitrator to be invalid, unenforceable, or void, such provision shall be enforced to the fullest extent permitted by law, and the remainder of this Agreement shall remain in full force and effect. The parties' obligations under this Agreement shall survive the termination of Employee's employment with Company and the expiration of this Agreement.

Company and Employee understand and agree that this Agreement contains a full and complete statement of any agreements and understandings regarding resolution of disputes between the parties, and the parties agree that this Agreement supersedes all previous agreements, whether written or oral, express, or implied, relating to the subjects covered in this Agreement. The parties also agree that the terms of this Agreement cannot be revoked or modified except in a written document signed by both Employee and the highest-level executive of Company.

THE PARTIES ALSO UNDERSTAND AND AGREE THAT THIS AGREEMENT CONSTITUTES A WAIVER OF THEIR RIGHT TO A TRIAL BY JURY OF ANY CLAIMS OR CONTROVERSIES COVERED BY THIS AGREEMENT. THE PARTIES AGREE THAT NONE OF THOSE CLAIMS OR CONTROVERSIES SHALL BE RESOLVED BY A JURY TRIAL.

THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE BEEN GIVEN THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH THEIR LEGAL COUNSEL AND HAVE AVAILED THEMSELVES OF THAT OPPORTUNITY TO THE EXTENT THEY WISH TO DO SO.

EMPLOYEE: Dr. Babak Taheri

Signature: /s/ Babak Taheri

Print Name: Babak Taheri

Date: February 29, 2024

Silvaco Group, Inc.

Signature: /s/ Katherine S. Ngai-Pesic

Print Name: Katherine S. Ngai-Pesic

Print Title: Chair of the Board of Directors

Date: February 29, 2024

EXHIBIT E

Modifications to certain definitions in 2024 Silvaco Group, Inc. Executive Severance Plan and Summary Plan Description (the "Plan")

The below changes shall modify the definitions of "Cause", "CIC Good Reason" and "Non-CIC Good Reason" as reflected in Section 9 of the Plan solely in relation to the benefits and obligations to the Executive as a participant of the Plan.

(a) Cause. Solely for purposes of the Plan, "Cause" means:

(i) the Executive's willful failure to materially perform the Executive's duties or responsibilities;

(ii) the Executive's material breach of any written agreement or covenant with the Company, including, but not limited to, any applicable invention assignment and confidentiality agreement or similar agreement between the Company and the Executive;

(iii) the commission by the Executive of acts satisfying the elements of (A) any felony or (B) a misdemeanor involving moral turpitude, deceit, dishonesty or fraud;

(iv) any material violation of the Company's code of conduct (which the Executive will certify they have read and understood on a yearly basis) or material violation of any of the Company's written employment policies (as made available to the Executive in advance) or misconduct by the Executive that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries or affiliates if the Executive were to continue to be employed in the same position; or

(v) the Executive's willful failure to cooperate with an investigation authorized by the Company or initiated by a governmental or regulatory authority, in either case, relating to the Company, its business, or any of its directors, officers or employees.

(f) CIC Good Reason. Solely for purposes of the Plan, "CIC Good Reason" means the occurrence of one or more of the following without the Executive's written consent:

(i) a material reduction by the Company of the Executive's base salary as in effect immediately prior to such reduction (other than a proportionate reduction in connection with a general reduction of compensation to similarly situated Executives not to exceed 10%);

(ii) a non-temporary relocation of the Executive's place of work by the Company to a location that increases the Executive's one-way commute by more than 50 miles from Phoenix, Arizona or such other agreed location approved by the Board at which the Executive performed duties immediately prior to such relocation, other than a relocation to the Company's primary location in or within 15 miles of Santa Clara, California with at least one-hundred-twenty (120) days prior notice to the executive;

(iii) a material diminution in the Executive's responsibilities, title or duties; or

(iv) a material breach by the Company or any successor entity of the Plan or any employment agreement between the Company and the Executive.

In order for an event to qualify as "CIC Good Reason," the Executive must provide the Company (or its successor) with written notice of the acts or omissions constituting the grounds for "CIC Good Reason" within sixty (60) days of the Executive becoming aware of the initial existence of the grounds for "CIC Good Reason" and a reasonable cure period of thirty (30) days following the date of written notice (the "CIC Cure Period"), such grounds must not have been cured during such time, and the Executive must resign within thirty (30) days following the end of the CIC Cure Period.

(l) Non-CIC Good Reason. Solely for purposes of the Plan, "Non-CIC Good Reason" means the occurrence of one or more of the following without the Executive's written consent:

(i) a material reduction by the Company of the Executive's base salary as in effect immediately prior to such reduction (other than a proportionate reduction in connection with a general reduction of compensation to similarly situated Executives not to exceed 10%);

(ii) a non-temporary relocation of the Executive's place of work by the Company to a location that increases the Executive's one-way commute by more than 50 miles from Phoenix, Arizona or such other agreed location approved by the Board at which the Executive performed duties immediately prior to such relocation other than a relocation to the Company's primary location in or within 15 miles of Santa Clara, California with one-hundred-twenty (120) days prior notice to the executive;

(iii) a material breach by the Company or any successor entity of the Plan or any employment agreement between the Company and the Executive;

(iv) a material diminution in the Executive's responsibilities, title or duties; or

(v) material and intentional interference with the reporting lines between employees of the Company and Executive by the Board which constitutes a gross interference with the Executive's ability to perform his customary or prescribed duties or responsibilities to the Company, unless such actions are deemed necessary or proper for the Board or any of its members to fulfill his or her fiduciary duties to the Company and its shareholders under applicable law.

In order for an event to qualify as "Non-CIC Good Reason," the Executive must provide the Company (or its successor) with written notice of the acts or omissions constituting the grounds for "Non-CIC Good Reason" within sixty (60) days of the initial existence of the grounds for "Non-CIC Good Reason" and a reasonable cure period of thirty (30) days following the date of written notice (the "Non-CIC Cure Period"), such grounds must not have been cured during such time, and the Executive must resign within thirty (30) days following the end of the Non-CIC Cure Period.

CALIFORNIA COMMERCIAL LEASE AGREEMENT

THIS COMMERCIAL LEASE AGREEMENT hereinafter known as the "**Lease**" is entered into this 1st day of May, 2022, ("**Effective Date**") by and between Kipee International, Inc. with mailing address at 4701 Patrick Henry Drive, Santa Clara, CA 95054, hereinafter referred to as the "**Lessor,**"

And

Silvaco, Inc. with mailing address at 2811 Mission College Boulevard, 6th Floor, Santa Clara, CA 95054 hereinafter referred to as the "**Lessee,**" collectively referred to herein as **"the Parties."**

WHEREAS, the Lessor desires to lease the Premises defined herein to the Lessee under the terms and conditions as set forth herein; and

WHEREAS, the Lessor desires to lease the Premises defined herein from the Lessor under the terms and conditions set forth herein.

NOW THEREFORE, for and in consideration of the covenants and obligations set forth herein and of other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. **THE PREMISES**. In accordance with the terms and conditions of this Lease, the Lessor hereby agrees to lease to the Lessee the property described below together with all the improvements thereto:

Address: 4701 Patrick Henry Drive, Santa Clara, CA 95054
Floor and/Unit Number: Buildings 18, 23 and 24
Net Floor Area:

Building 18: 350 Square Feet
Building 23, 1st Floor: 5,575 Square Feet
Building 23, 2nd Floor: 1,560 Square Feet
Building 24, 1st Floor: 3,633 Square Feet
Total: 11,118 Square Feet

Hereinafter known as the "**Premises**".

The Lessee hereby leases and takes from the Lessor the Premises and confirms that the floor numbers and/or unit numbers of the Premises referred to above are designated by The Lessor.

2. **PERMITTED USE**. Lessee agrees to continuously and at all times use and occupy the Premises during the Lease Term solely for the Permitted Use(s) as specified below("**Permitted Use")**:
Commercial office space for performing the Lessee's business activities, including without limitation hosting meetings and events, engaging in technical research and other common activities associated with a company in Lessee's industry. No other use is permitted without prior written approval of Lessor, which approval Lessor may grant or withhold.

3. **LEASE TERM**. The term of this Lease shall commence on 1st day of May, 2022 and shall subsist for a period of 3 years, and expire on the last day of the Lease term, the 31st day of March, 2025. ("**Lease Term**")

4. **RENEWAL**. (Check One)

☒ The Lessor shall have no obligation to renew the Lease or extend the Lease Term. The Lessee shall have no further right to extend the Lease Term upon its expiration.

☐ The Lessee will have right to renew the lease for the additional term of ____ years and ____ months (the "**Renewal Term**") by giving the Lessor a Notice of Renewal not later than _____ months/days but no earlier than _____ months/days, prior to the expiration of the Lease Term ("**Renewal Period**"). The Renewal Term shall commence immediately upon the expiration of the Lease Term. In the event of the renewal of this Lease, the terms and conditions of this Lease shall remain in full and effect for the duration of the Renewal Term unless otherwise agreed to in writing by the Parties.

The Rent for the Renewal term shall: (Choose one.)

☐ be equal to the Rent payable during the Lease Term.

☐ shall be based on the then current market rates for comparable premises provided that the Rent upon the Renewal Term shall not increase by more than _____% above the Rent payable in the immediately preceding year.

5. **RENT**. The Lessee shall pay the net amount of $ $18,000 for every month for the duration of the Lease (herein after referred to as **"Rent"**). The rent shall be payable every 1st day of the month ("Due Date"), every month for the duration of the lease notwithstanding that the Due Date falls on a weekend or public holiday.

6. **EXPENSES**. The Parties agree that the responsibility for the expenses in relation to this Lease shall be borne as follows:

A. **Utilities**.

The Utilities including: electricity and water charges, communications and telephone and data charges shall be borne and paid by (choose one) ☐ the Lessor
☒ the Lessee ☐ the Parties jointly.

B. **Maintenance**.

The Maintenance of the Premises including the following shall be borne and paid by (choose one) ☒ the Lessor ☐ the Lessee ☐ the Parties jointly: (Choose all that is applicable)
☒ Janitorial and pest control services
☒ Garbage removal
☒ Grease traps, drainage and pipes maintenance
☒ Parking maintenance
☒ Lawn maintenance
☒ Snow removal

☒ HVAC Maintenance
☒ Repairs other than Minor Repairs as defined herein.

C. **Insurance.** (Choose all that is applicable)

☒ Casualty Insurance. ☒ The Lessor ☐ The Lessee ☐ The Parties (jointly) shall be responsible for obtaining and maintaining casualty insurance for the Premises for losses against fire.
☒ Comprehensive General Liability Insurance. The Lessee shall procure and maintain a valid Comprehensive General Liability Insurance indemnifying the Lessor with minimum coverage of $1,000,000 for personal injury and $1,000,000 for damage to property.

D. **Taxes**.

The Lessee shall bear all Taxes and fees that are payable under Laws in connection with other payments made by the Lessee, the Lessee's interests under this Lease, the Lessee's improvements and property at the Premises, and the Lessee's activities at the Premises.

☒ The Lessor ☐ The Lessee ☐ The Parties (jointly) shall bear all Taxes and fees that are payable under Laws in connection with the Rent.

☒ The Lessor ☐ The Lessee ☐ The Parties (jointly) shall pay all Taxes and fees payable in connection with this Agreement under Laws to the extent that such Taxes and fees are payable under the applicable Laws by owners of buildings that are of a similar nature to the Premises, or by sub-lessors of land use rights (for example, real property, real estate and/or personal property taxes).

7. **COMMON AREAS**. The Lessor shall at all times have exclusive management and control of the Common Areas for any purpose or in any manner that it deems necessary or appropriate. The Lessor reserves the right to remove, relocate or otherwise change or carry out any alteration or addition or other works to the Common Areas. The Lessor shall not be liable to Lessee for any damage incidental to the exercise of its rights under this section, provided that such damage is not accompanied by any fault, negligence or bad faith on the part of the Lessor or his agents. The Lessee shall abide by the Lessor's rules and management of the Common Areas.

"**Common Areas**" refers to those portions of the structure in which the Premises and located and areas surrounding the Premises including the driveways, entrances and exits, pedestrian passageways, walkways, loading docks, landscaped and streetscaped areas, any on-site parking areas, facilities (such as escalators, and lifts), installations (such as doors, windows, electrical installations and wiring), water and drainage pipes, gas pipes, fire systems, security and air-conditioning facilities, and all other areas or improvements which may be provided by Lessor from time to time for the general use of tenants of the structure in which the Premises and located and areas surrounding the Premises and their respective employees, guests, patrons, suppliers, licensees and other invitees.

8. **SECURITY DEPOSIT**. Lessee shall deposit with Lessor the amount of $_____ to secure the faithful performance of the terms and conditions of this Lease (the **"Security Deposit"**) on

or before the execution of this Lease. The Security Deposit shall be held by Lessor: (Choose one that applies)
☐ free of interest throughout the Lease Term. /
☐ in escrow in an interest-bearing account with interest accruing to the Lessee and to be delivered to the Lessee upon the return of the Security Deposit.

Except in the event that the same has been forfeited by the Lessee, the Security Deposit shall be returned to the Lessee within _____ days after the termination of the Lease.

9. **ALTERATIONS AND IMPROVEMENTS.** No alterations to or improvements on the Premises shall be made by the Lessee without prior express consent of the Lessor to the same in writing. The Lessor agrees to not unreasonably withhold consent to reasonably necessary alterations or improvements. The Lessee shall ensure compliance with any and all applicable laws, rules, ordinances and codes when undertaking any alteration or improvement to the Premises.

A. **Unauthorized Alterations or Improvements.** In the event that the Lessee shall undertake alterations or improvements relating to the Premises in violation of this section the same shall be considered a material breach of this Lease and shall put the Lessee in default. The Lessor may, upon the Lessor's discretion, require the Lessee to undo the alterations or improvements and restore the Premises to its condition prior to any unauthorized alteration or improvement at the sole expense of the Lessee.

B. **Ownership of Alterations and Improvements.** In all cases of alterations, improvements, changes, accessories and the like that cannot be removed from the Premises without destroying or otherwise deteriorating the Premises or any surface thereof shall, upon creation, become the Lessor's property without need for any further transfer, delivery or assignment thereof.

C. **Initial Improvements.** Promptly upon the start of the Lease Term the Parties intend to work together to make mutually desirable improvements to the Premises. Expenditures on such improvements shall not exceed $35,000 without the written agreement of Lessor and Lessee, with all costs for such improvements to be split equally between Lessor and Lessee. Lessor will initially pay for all costs and shall invoice Lessee for 50% of such costs, for which Lessee shall remit payment to Lessor within 30 days.

10. **COMPLIANCE WITH LAW**. The Lessee undertakes to comply with and abide by, at its sole expense, any and all Federal or California state laws, municipal or county ordinances, rules, regulations, codes and all other issuances from authorized government authorities respecting the Premises and the Lessee's occupation and use thereof, including but not limited to obtaining all pertinent licenses and permits and maintaining copies thereof in the Premises.

11. **OBLIGATIONS OF THE LESSEE:**

A. The Lessee shall keep the premises in a clean, sanitary, neat and presentable condition.

B. The Lessee shall be responsible for the repairs, outside of ordinary wear and tear, of any part of the Premises that do not affect the structural parts of the building or structure in which it is located or those that are generally considered as minor repair ("**Minor Repairs**") including but not limited to replacing light bulbs, cleaning or repairs of windows, doors, toilets and similar appurtenances.

C. The Lessee shall, at its sole expense restore, repair and/or rectify any damage, outside of ordinary wear and tear, to the Premises caused by the Lessee or others that the lessee permits into the Premises that are not covered or compensable by any insurance.

12. **ASSIGNMENT.** The Lessee acknowledges that this Lease is not transferrable and that the Lessee may not assign the Lease, any part of the Lease or any of the rights or obligations herein without the prior express and written consent of the Lessor. The Lessee shall not sublet, sublease or otherwise grant any other party any license or right in relation to the Premises or this Lease without such consent. Any license, assignment, sublease or agreement in violation of this clause shall be null and void with no legal force whatsoever.

13. **RIGHT OF ENTRY.** The Lessor shall, upon giving 1 days' notice, be granted by the Lessee access and allowed by the latter to enter the Premises to make necessary inspections, repairs or alterations on the property, or pursuant to any lawful purpose as the Lessor, provided that the time of entry requested is reasonable considering the purpose.

14. **DAMAGE TO LEASED PREMISES**. If the event that the Premises and/or the structure or building in which it is located is damaged or destroyed by fire or other casualty without the fault or negligence of the Lessee or his agents, the Lessor shall, at its own expense, repair the damaged portion, the Premises, structure and/or building to restore the same to substantially the condition in which it was handed over to Lessee. The Rent shall be abated until such repairs are completed.

In the event such repair cannot be accomplished or of total destruction the Lease shall cease and terminate with no early termination or other liability accruing to either of the Parties.

15. **DEFAULT AND POSSESSION**. If Rent is not paid within 30 days of the Due Date, the Rent shall be considered past due and a late fee of ☐ $_____ or ☒ ___1__% of the Rent past due shall be applied for every ☐ day Rent is late or ☒ occurrence Rent is late.

In the event that the Lessee fails to pay Rent on the Due date or is in default of any of the terms of this Lease, the Lessor shall promptly provide the Lessee with a notice of such default, informing the Lessee that failure to rectify the same within 30 days may terminate the Lease and allow the Lessor to recover the premises at the end of such period. Should the Lessee fail to rectify the same within 30 days after receiving such Notice of Default, the Lessor may terminate this Lease and recover the Premises from the Lessee. In such an event, the Lessor may hold the Lessee's possessions found in the Premises as security until sums owed by the Lessee has been paid.

16. **SURRENDER OF PREMISES.** On or before 11:59 P.M. on the last day of the Lease Term, the Lessee shall deliver up vacant possession of the Premises to Lessor more or less in the condition it was delivered to the Lessee, save ordinary wear and tear, and the Parties shall carry out the inspection of the Premises and shall sign a handover form jointly prepared and signed by Parties to confirm the condition and handover of the Premises. The Lessee shall also return all keys and other devices giving access to any part of the Premises and the building or structure in which it is located.

Without prejudice to the foregoing, the Lessee shall at its expense, at the request of Lessor, immediately make good any deficiencies identified during the handover inspection and remove from the Premises any alterations, fixtures or property of Lessee that Lessor requests to be removed, provided that the same were not existing in the Premises delivered by the Lessor or do not consist of alterations or improvements consented to by the Lessor as provided in Section 9 hereof.

Failure of the Lessee to return the Premises to Lessor in accordance with the above, shall entitle the Lessor to enter the Premises and carry out appropriate repair to the Premises and removal of any property of Lessee and any cost so incurred shall be borne by Lessee. All property left in the Premises by Lessee shall be deemed to have been abandoned by Lessee and Lessor shall be entitled to dispose of the same as Lessor deems appropriate.

17. **DISABILITY ACCESS**. The Premises ☐ has or ☒ has not been inspected by a Certified Access Specialist (CASp) and the Premises ☐ has or ☒ has not been determined to meet all applicable construction-related standards for the disabled pursuant to Cal. Civ. Code § 55.53.

18. **ASBESTOS**. The Premises ☐ was or ☒ was not constructed prior to 1979. If the Premises was constructed before 1979, Lessor warrants that it ☐ knows or ☐ does not know of whether the building contains asbestos-containing construction materials.

19. **INDEMNIFICATION**. The Lessor shall not be liable for any injury to the Lessee or any other persons or property entering the Premises occurring within the Premises during the Lease Term. Neither shall the Lessor be liable for any damage to the structure within which the Premises is located or any part thereof. The Lessor hereby agrees to hold the Lessor harmless from and indemnify the Lessor for any and all claims or damage not arising solely from the Lessor's acts, omission, fault or negligence.

20. **GOVERNING LAW**. This Lease shall be governed by and its terms and conditions be interpreted according to the laws of the State of California.

21. **NOTICE.** All notices in relation to this Lease shall be delivered to the following addresses:

To the Lessee at the address:
Silvaco, Inc. at 4701 Patrick Henry Drive, Bldg. 23, Santa Clara, CA 95054;

and

To Lessor at the address:
4701 Patrick Henry Drive, Santa Clara, CA 95054

22. **SEVERABILITY.** Should any provision of this Lease be found, for whatever reason, invalid or unenforceable, such nullity or unenforceability shall be limited to those provisions. All other provisions herein not affected by such nullity or dependent on such invalid or unenforceable provisions shall remain valid and binding and shall be enforceable to the full extent allowed by law.

23. **BINDING EFFECT**. The terms, obligations, conditions and covenants of this Lease shall be binding on Lessee, the Lessor, their heirs, legal representatives and successors in interest and shall inure to the benefit of the same.

24. **ENTIRE AGREEMENT.** This Lease and, if any, attached documents are the complete agreement between the Lessor and the Lessee concerning the Premises. There are no oral agreements, understandings, promises, or representations between the Lessor and the Lessee affecting this Lease. All prior negotiations and understandings, if any, between the Parties hereto with respect to the Premises shall be of no force or effect and shall not be used to interpret this Lease. No modification or alteration to the terms or conditions of this Lease shall

be binding unless expressly agreed to by the Lessor and the Lessee in a written instrument signed by both Parties.

IN WITNESS WHEREOF, the parties hereto agree to the terms listed herein as of the date first written above.

Lessee's Signature	Printed Name
/s/ Babak Taheri	Babak Taheri
Lessor's Signature	Printed Name
/s/ Kathy Pesic	Kathy Pesic

DATED 1ST JANUARY 2020

NEW HORIZONS (CAMBRIDGE) LTD

-and-

SILVACO EUROPE LIMITED

Lease
Relating to
Silvaco Suite, First Floor, Silvaco Technology Centre
Compass Point, St. Ives, Cambridgeshire

CONTENTS

DATE 1ST JANUARY 2020

PARTIES

(1) **NEW HORIZONS (CAMBRIDGE) LTD** incorporated and registered in England and Wales with company number 04277605 whose registered office is at Silvaco Technology Centre Compass Point St. Ives Cambridgeshire PE27 5JL **(Landlord),** and

(2) **Silvaco Europe Ltd** incorporated and registered in England and Wales with company number 3207883 whose registered office is at Silvaco Technology Centre Compass Point St. Ives Cambridgeshire PE27 5JL **(Tenant).**

AGREED TERMS

1. Interpretation

1.1 The definitions and rules of interpretation set out in this clause applies to this lease.

Annual Rent: rent at the rate of £ 160,000.00 per annum plus VAT. This rate shall be discounted for the term of the lease by £6,000.00 per annum plus VAT as compensation for the provision of a Client Representative for New Horizons Limited by Silvaco Europe Limited.

Building: Compass Point St Ives Cambridgeshire comprised within title number CB259495

Common Parts: the Building including all entrance hallways staircase lifts estate roads car park forecourts deliver areas other than the Property and the other office suites at the Building.

Interest Rate: 4% points above the base rate of National Westminster Bank plc.

Permitted Use: use as offices to which business associates may attend with ancillary storage during office hours.

Property: Silvaco Suite, First Floor of the Building, bounded by and including the internal wall and ceiling finishes and floor coverings of that part and the glass in the but excluding all Service Media which are within that part but which do not serve it exclusively and excluding any load bearing or structural part.

Service Charge: included within rental.

Service Media: lifts and lift machinery and equipment and all media for the supply or removal of heat, electricity, gas, water, sewerage, air-conditioning, energy, telecommunications, data and all other services and utilities and all structures, machinery and equipment ancillary to those media.

Term: a term of 10 years beginning on, and including the date of this lease and ending on, and including 31St December 2029.

VAT: value added tax chargeable under the Value Added Tax Act 1994 or any similar replacement or additional tax.

1.2 A reference to this lease, except a reference to the date of this lease, is a reference to this deed and any deed, licence, consent, approval or other instrument supplemental to it.

1.3 A reference to the Landlord includes a reference to the person entitled to the immediate reversion to this lease.

1.4 Unless the context otherwise requires, references to the Building, the Common Parts and the Property are to the whole and any part of them or it.

1.5 A reference to the end of the Term is to the end of the Term however it ends.

1.6 Unless otherwise specified, a reference to a law is a reference to it as it is in force for the time being, taking account of any amendment, extension, application or re-enactment and includes any subordinate laws for the time being in force made under it.

1.7 Any obligation in this lease on the Tenant not to do something includes an obligation not to agree to or suffer that thing to be done and an obligation to use best endeavours to prevent that thing being done by another person.

1.8 A person includes a corporate or unincorporated body.

1.9 Except where a contrary intention appears, a reference to a clause is a reference to a clause of this lease.

1.10 Clause headings do not affect the interpretation of this lease.

2. GRANT

2.1 The Landlord lets the Property to the Tenant for the Term.

2.2 The grant is made together with the ancillary rights set out in clause 3, excepting and reserving to the Landlord the rights set out in clause 4, and subject to all rights and covenants affecting the Building including the matters referred to in office copy entries dated 20t^{h} March 2003 in the property register and entry 1 of the charges register of title number CB259495

2.3 The grant is made with the Tenant paying to the Landlord as rent, the Annual Rent and all VAT in respect of it, and all other sums due under this lease.

3. ANCILLARY RIGHTS

3.1 The Landlord grants the Tenant the following rights (the Rights) to use in common with the Landlord and any other person authorised by the Landlord:

(a) The right of support and protection from those parts of the Building that afford support and protection for the Property at the date of this lease and to the extent that such support and protection exists at the date of this lease,

(b) The right to use the Common Parts for the purposes of access to and egress from the Property to and from the public highway including a right of way at all times with or without vehicles over and along the roadway coloured brown on the attached Plan 2 and the land comprised within title number CB259495

(c) The right to park 18 motor vehicles belonging to the Tenant, its employees and visitors in such spaces

(d) The right to use the lavatories and kitchen on the Common Parts, and

(e) The right to use and to connect into any Service Media at the Building that belong to the Landlord and serve (but do not form part of) the Property which are in existence at the date of this lease.

3.2 In relation to the Right mentioned in clause 3.1(e), the Landlord may, at its discretion, re-route or replace any such Service Media and that Right will then apply in relation to the Service Media as re-routed or replaced.

3.3 The Tenant shall exercise the Rights:

(f) Only in connection with its use of the Property for the Permitted Use and in a manner that is consistent with its obligations in clause 10.2,

(g) In accordance with any regulations made by the Landlord as mentioned in clause 10.5, and

(h) In accordance with all relevant laws.

3.1 Except as mentioned in this clause 3, neither the grant of this lease nor anything in it confers any right over the Common Parts or any other part of the Building or any other property nor is to be taken to show that the Tenant may have any right over the Common Parts or any other part of the Building or any other property, and section 62 of the Law of Property Act 1925 does not apply to this lease.

4. RIGHTS EXPECTED AND RESERVED

4.1 The following rights are excepted and reserved from this lease to the Landlord (the Reservations):

(a) Rights of light and air as those rights are capable of being enjoyed at any time during the Term,

(b) The right to use and to connect into Service Media at, but not forming part of, the Property; the right to install and construct Service Media at the Property to serve any part of the Building or any other property (whether or not such Service Media also serve the Property) and to connect into and use such Service Media; and the right to re-route any Service Media mentioned in this paragraph subject to the restriction in sub-clause (c) below

(c) The right to enter the Property for any purpose mentioned in this lease or connected with it or with the Landlord's interest in the Building or any other property at any reasonable time after having given reasonable notice to the Tenant (and the notice need not be in writing and need not be given in the case of an emergency), and provided the Landlord complies with the reasonable security procedures of the Tenant; and

(d) The right to develop land other than the Building, the Landlord owns whether or not such land.

4.2 The Reservations may be exercised by the Landlord and by anyone else who is or becomes entitled to exercise them and by anyone authorised by the Landlord.

4.3 The Landlord will not be liable for any loss or inconvenience to the Tenant by reason of the exercise of any of the Reservations (other than any loss or inconvenience in respect of which the law prevents the Landlord excluding liability).

5. THE ANNUAL RENT AND OTHER PAYMENTS

5.1 The Tenant shall pay the Annual Rent and any VAT in respect of it in advance each month. No deposit is required.

5.2 All sums payable by the Tenant are exclusive of any VAT that may be chargeable and the Tenant shall pay VAT in respect of all taxable supplies made to it in connection with this lease except where recoverable by the Landlord. Every obligation on the Tenant under or in connection with this lease to pay, refund or to indemnify the Landlord or any other person any money or against any liability includes an obligation to pay, refund or

indemnify against any VAT, or an amount equal to any VAT, chargeable in respect of it except where recoverable by the Landlord.

5.3 The Tenant shall pay the reasonable and proper costs and expenses (assessed on a full indemnity basis) of the Landlord, including any solicitors' or other professionals' costs and expenses and whether incurred during or after the end of the Term, in connection with or in contemplation of the enforcement of the tenant covenants of this lease and with any consent applied for in connection with this lease.

5.4 If any Annual Rent or any other money payable under this lease has not been paid within 21 days the date it is due, whether it has been formally demanded or not, the Tenant shall pay the Landlord interest at the Interest Rate on that amount for the period from the due date to and including the date of payment.

5.5 The Annual Rent and all other money due under this lease are to be paid by the Tenant without deduction, counterclaim or set-off.

6. INSURANCE

6.1 The Landlord shall keep the Building insured against loss or damage by fire and such other risks as the Landlord considers it prudent to insure against, provided that such insurance is available in the market on reasonable terms acceptable to the Landlord. The Landlord will inform the Tenant of relevant terms of its insurance policy.

6.2 If the Building or the access thereto is damaged or destroyed by a risk against which the Landlord has insured so as to make the Property unfit for occupation and use, and the Landlord has not repaired the Building or the access thereto so as to make the Property fit for occupation and use within 14 days of it having been damaged or destroyed, then the Landlord may determine this lease by giving 14 days prior written notice to the Tenant.

6.3 If the Building or the access thereto is damaged or destroyed by a risk against which the Landlord has insured so as to make the Property unfit for occupation and use, then provided that:

(a) The Landlord's insurance policy has not been vitiated in whole or part by any act or omission of the Tenant or any person at the Building with the actual or implied authority of the Tenant and

(b) The Landlord has not repaired the Building or the access thereto so as to make the Property fit for occupation and use within 14 days of it having been damaged or destroyed,

The Tenant may determine this lease by giving 14 days prior written notice to the Landlord.

6.4 If the Building or the access thereto is destroyed or damaged by a risk against which the Landlord is not obliged to insure pursuant to clause 6.1, or has not infact insured against so as to make the Property unfit for occupation and use, and the Landlord has not repaired the Building so as to make the Property fit for occupation and use within 14 days of the damage or destruction. Then the Landlord or the Tenant may terminate this lease by giving 14 days prior written notice to the other.

6.5 In any case where the Tenant is able to terminate this lease pursuant to this clause (or would be able to if the period of 14 days mentioned in clause 6.3(b) and 6.4 had ended), then payment of the Annual Rent (or a fair proportion of it according to the nature and extent of the damage) will be suspended until the Building or access thereto has been repaired so as to make the Property fit for occupation and use or, if earlier, this lease is terminated.

6.6 If this lease is terminated pursuant to this clause, then the termination will be without prejudice to any right or remedy of either party in respect of any antecedent breach of the covenants in this lease.

6.7 Nothing in this clause shall oblige the Landlord to repair the Building.

7. SERVICES

7.1 The Landlord shall:

(a) Keep the Common Parts clean and tidy and the internal Common Parts adequately heated and lit,

(b) Clean the outside of the windows of the Building as often as is reasonably necessary,

(c) Provide proper and adequate supplies of hot and cold water and heating to the Property and the Common Parts, and

(d) Keep the Service Media at the Building including those within the Property in reasonable working order and to maintain the lifts at the Building.

(e) To keep the Property, the Building and the Common Parts in good and substantial repair and good decorative order

(f) To maintain adequate third party liability insurance in respect of the Common Parts

(g) Ensure that the Building the Common Parts and the Property comply with all applicable fire regulations health and safety legislation and environmental law and shall indemnify the Tenant against any actions claims demands proceedings costs and expenses whatsoever arising from any non-compliance

(h) Supply in the Property the fixtures and fittings and furnishings set out on the attached list

7.2 The Landlord shall pay all costs in connection with the supply of electricity, water, sewerage, telecommunications and data and other services and utilities to or from the Property other than the actual cost of the telephone/data line rental and call charges.

7.3 The Landlord shall pay all rates, taxes and other impositions payable in respect of the Property, its use and any works carried out there

7.4 The Landlord will not be liable for any loss or inconvenience arising from any failure or interruption of any service mentioned in clause 7.1 (or any other service provided by the Landlord) due to the carrying out of any necessary repairs or servicing nor due to any act or omission that is beyond the reasonable control of the Landlord (other than any loss or inconvenience in respect of which the law prevents the Landlord excluding liability).

8. PROHIBITION OF DEALINGS

The Tenant shall not assign, underlet, charge, part with possession or share occupation of this lease or the Property or hold the lease on trust for any person (except by reason only of joint legal ownership), nor grant any right or licence over the Property in favour of any third party without the consent of the Landlord

9. REPAIRS, DECORATION, ALTERATIONS, AND SIGNS

9.1 The Tenant shall keep the Property clean and tidy, and shall make good any damage caused to the Property including any damage to the decoration of the Property by any act or omission of the Tenant or any person under the control of the Tenant.

9.2 The Tenant shall not make any alteration to the Property, other than the installation and removal of non-structural, demountable partitioning and minor ancillary electrical works and provided that, where reasonably required by the Landlord, it removes any such partitioning and ancillary works before the end of the Term and makes good any damage to the Property and to any part of the Common Parts caused by any such installation or removal.

9.3 Subject to clause 9.3 the Tenant shall not install, nor alter the route of, any Service Media at and forming part of the Property without the consent of the Landlord, such consent not to be unreasonably withheld.

9.4 The Tenant shall not attach any sign, poster or advertisement to the Property so as to be seen from the outside of the Building. The Tenant may place a nameplate or the Landlord reasonably approves nameplates of a design and in a position on the Common Parts as.

9.5 The Landlord may enter the Property to inspect its condition and may give the Tenant a notice of any breach of any of the tenant covenants in this lease relating to the condition of the Property. The Tenant shall carry out and complete any works needed to remedy that breach within the time reasonably required by the Landlord, in default of which the Landlord may enter the Property and carry out the works needed. The costs incurred by the Landlord in carrying out any works pursuant to this clause (and any professional fees and any VAT in respect of those costs) will be a debt due from the Tenant to the Landlord and payable within 21 days of written demand.

10. USE

10.1 The Tenant shall not use the Property for any purpose except the Permitted Use

10.2 The Tenant shall not use the Property nor exercise any of the Rights:

(a) For any illegal purpose, nor

(b) For any purpose in a manner that would cause any loss, legal nuisance to the Landlord, the other tenants or occupiers of the Building or any owner or occupier of any other property, nor

(c) In any way that would vitiate the Landlord's insurance of the Building, nor

(d) In a manner that would interfere with any right subject to which this lease is granted.

10.3 The Tenant shall not overload any structural part of the Building nor any Service Media at or serving the Property.

10.4 The Tenant shall comply with all laws relating to:

(e) The occupation and use of the Property by the Tenant,

(f) The use of all Service Media and machinery and equipment at or serving the Property, and

(g) All materials kept at or disposed from the Property.

10.1 The Tenant shall observe all regulations made from time to time by the Landlord in accordance with the principles of good estate management relating to the use of the Common Parts and the management of the Building.

11. RETURNING THE PROPERTY TO THE LANDLORD

11.1 At the end of the Term the Tenant shall return the Property to the Landlord in the same decorative condition fair wear and tear excepted as set out in the attached Schedule of Condition and will remove from the Property all chattels belonging to or used by it.

11.2 The Tenant irrevocably appoints the Landlord to be the Tenant's agent to store or dispose of any chattels or items it has fixed to the Property and which have been left by the Tenant on the Property for more than ten working days after the end of the Term. The Tenant will indemnify the Landlord in respect of any claim made by a third party in relation to that storage or disposal.

12. INDEMNITY

The Tenant shall keep the Landlord indemnified against all proper and reasonable expenses, costs, claims, damage and loss arising from any breach of any tenant covenant in this lease, or from any act or omission of the Tenant or any person on the Property or the Common Parts with its actual or implied authority.

13. LANDLORD'S COVENANT FOR QUIET ENJOYMENT

The Landlord covenants with the Tenant, that, the Tenant will have quiet enjoyment of the Property without any lawful interruption by the Landlord or any person claiming under the Landlord.

14. CONDITION FOR RE-ENTRY

14.1 The Landlord may re-enter the Property at any time after any of the following occurs:

(a) Any rent is unpaid 21 days after becoming payable whether it has been formally demanded or not, or

(b) Any breach of any condition or tenant covenant of this lease.

14.2 If the Landlord re-enters the Property pursuant to this clause, this lease will immediately end, but without prejudice to any right or remedy of the Landlord in respect of any antecedent breach of the tenant covenants of this lease.

15. TENANT'S OPTION TO BREAK

15.1 If the Tenant shall desire to determine the term hereby granted at any time after the end of the six months from the date of this lease and shall give to the Landlord at least three months previous notice in writing of such desire ("the Break Notice") and the Tenant shall up to the expiry of the Break Notice have paid the Annual Rent and Service Charge applicable to the period from the date of this lease to the expiry of the Break Notice and shall deliver up possession on the expiry of the Break Notice then at the expiry of the Break Notice the present demise and everything herein contained shall be void and cease but without prejudice to the rights and remedies of either party in respect of any antecedent claim or breach of covenant

15.2 The Property shall be yielded up at the expiry of the Break Notice with vacant possession

16. LANDLORD'S OPTION TO BREAK

If the landlord shall desire to determine the term hereby granted at any time after the end of the six months from the date of this lease and shall give to the Tenant at least three months previous notice in writing of such desire ("the Option Notice") Tenant shall on the Option Date deliver up possession and the present demise and everything therein contained shall be void and cease but without prejudice to the rights and remedies of the Tenant in respect of any antecedent claim or breach of the Landlord's obligations

17. LIABILITY

17.1 The obligations of the Tenant arising by virtue of this lease are owed to the Landlord and the obligations of the Landlord are owed to the Tenant.

17.2 The obligations of the Tenant arising by virtue of this lease are joint and several obligations. The Landlord may release or compromise the liability of any one of the persons making up the Tenant or grant any time or concession to any one of them without affecting the liability of any other of them.

18. NOTICES

18.1 Except in a case of emergency, any notice given pursuant to this lease must, unless otherwise stated, be in writing, and writing includes faxes but does not include email.

18.2 Within five working days after receipt of any notice or other communication affecting the Property or the Building the Tenant shall send a copy of the relevant document to the Landlord.

19. ENTIRE AGREEMENT AND EXCLUSION OF REPRESENTATIONS

19.1 This deed constitutes the entire agreement and understanding of the Landlord and the Tenant relating to the transaction contemplated by the grant of this deed and supersedes any previous agreement or understanding between them relating to it.

19.2 The Tenant acknowledges that in entering into this lease it has not relied on, nor will have any remedy in respect of, any statement or representation made by or on behalf of the Landlord.

19.3 Nothing in this lease constitutes or will constitute a representation or warranty that the Property may lawfully be used for any purpose allowed by this lease.

19.4 Nothing in this clause shall, however, operate to limit or exclude any liability for fraud.

20. MISCELLANEOUS

20.1 The parties confirm that:

No statutory declaration was required in this case.

20.2 The parties agree that the provisions of sections 24 to 28 of the Landlord and Tenant Act 1954 are excluded in relation to the tenancy created by this lease

20.3 A person who is not a party to this lease will not have any rights under or in connection with this lease by virtue of the Contracts (Rights of Third Parties) Act 1999.

20.4 This lease creates a new tenancy for the purposes of the Landlord and Tenant (Covenants) Act 1995.

This document has been executed as a deed and is delivered and takes effect on the date stated at the beginning of it.

The Common Seal of NEW HORIZONS
(CAMBRIDGE) LTD was hereunto affixed
to this deed in the presence of:

Director /s/ Chris Marnoch

Signed on behalf of Silvaco Europe Ltd :

Director /s/ Chris Marnoch

Witnessed by:

Witness /s/ David Green

Name /s/ DAVID GREEN

Address

Exhibit 10.16

COMMERCIAL LEASE

BY AND BETWEEN

NEW HORIZONS

("LESSOR")

AND

INFINISCALE

("LESSEE")

COMMERCIAL LEASE

BETWEEN THE UNDERSIGNED:

- NEW HORIZONS, Limited Liability Company [SARL] with 7,624 euros in share capital, headquarters located at 55 rue Biaise Pascal, ZIRST II - 38330 MONTBONNOT ST MARTIN and registered in the GRENOBLE Trade Register at number 429 556 590,

  Represented by Mrs. Katherine NGai Pesic, with full authority for the purposes herein in her capacity as Manager, herself represented by Mr. Chris MARNOCH, duly authorized for the purposes herein by virtue of a delegation of power,

  Hereinafter referred to as "**Lessor**",

PARTY OF THE FIRST PART,

AND:

- **INFINISCALE,** a Corporation [SA] with 964,000 euros in share capital, headquarters located at 55 rue Biaise Pascal, ZIRST II — 38330 MONTBONNOT ST MARTIN registered in the GRENOBLE Trade Register at number 484 806 534 000 26,

  Represented by its General Manager, Mr. FIRAS MOHAMED MONADE

  Hereinafter referred to as "**Lessee**",

PARTY OF THE SECOND PART,

Hereinafter jointly referred to as "**Parties**" and individually as "**Party**".

Now, therefore, the following is agreed and made binding:

COMMERCIAL LEASE

NEW HORIZONS, the first undersigned party, hereby declares to grant a commercial lease, in accordance with the provisions of Articles L. 145-1 et seq. of the Commercial Code and the new provisions of Law No. 2014-626 of June 18, 2014, the so-called "Pinel Law" and of Decree No. 2014-1317 dated November 3, 2014, for the terms and conditions stipulated below, to INFINISCALE, the second undersigned party, for the property described below.

FM CM

DESCRIPTION OF THE LEASED PREMISES

The property that is the subject of this lease is, to the exclusion of all others, one part of the premises located in a building located in MONTBONNOT SAINT MARTIN (38330) “La Baudonière” and “Pré Nalier” hamlet and appearing in the updated property register of this commune under Number 231, Section A0 for an area of 64 ares and 35 centiares, the exact address of which is “Immeuble Silvaco” - ZIRST II - 55 rue Biaise Pascal, and consisting of:

- on the first floor of the building in question (south side) one part of the left wing, as described in the plan attached in **Exhibit 1** to this instrument, for an area of 99 m^2, including the share of common parts of the ground floor and upstairs, including specifically one half of:

  Seven (7) offices,
  One (1) open office space,
  One (1) interior cabinet,
  One (1) outside storage space

- As well as ten (10) parking spaces.

This commercial lease grants Lessee the right to use the common areas, equipment and accessories of the building, subject to compliance with the terms specified herein.

Lessee further declares to be well acquainted with the leased premises by virtue of having visited them prior to this instrument with a view to enter into this instrument and therefore exempts Lessor from making a broader description of them.

TERM OF THE LEASE

This commercial lease is granted and accepted for a term of nine (9) full and consecutive years commencing on May 1, 2017 and ending on April 30, 2026.

Lessee shall have the ability to terminate this lease at the end of each three-year period, by giving notice through deed of service or registered letter with acknowledgement of receipt a minimum of six (6) months in advance. If the notice is late or given in breach of regulations, the lease shall continue for a new three- (3-)year period with all obligations for Lessee arising from it.

It is further noted that Lessor has, pursuant to Article L. 145-4 of the Commercial Code, the ability to give notice at the end of each three-year period, by giving notice through deed of service a minimum of six (6) months in advance, if it intends to invoke the provisions of Articles L. 145-18, L. 145-21, L. 145-23-1 and L. 145-24 of the Commercial Code, in order to build, rebuild or raise the height of the existing building, reallocate the additional living premises to this use or execute prescribed or approved projects in the framework of a property renovation operation, and in case of demolition of the building, in the framework of an urban renewal project.

RENT
AMOUNT/PAYMENT/REVISION/INDEXING

Amount of the rent

This lease is granted and accepted through annual rent, exclusive of taxes and charges [EOT/EOC], in the amount of eleven thousand, eight hundred and eighty-eight euros (€11,880.00 EOT/EOC), or quarterly rent, exclusive of taxes and charges, in the amount of two thousand, nine hundred and seventy euros (€2,970.00 EOT/EOC).

This rent, which is subject to VAT, shall be paid and subject to revision under the terms indicated below.

Payment of the rent

The agreed upon annual rent shall be payable in advance by quarter to Lessor or its designated representative, at their domicile or any other location indicated by them.

Lessee agrees to pay Lessor, in addition to the rent, the amount of the VAT or any other new additional or replacement tax that could be created at the legal rate in force on the date of each payment.

Lessor formally agrees in parallel to maintain for the entire term of the lease the option to subject the rent stipulated above to the VAT rate.

Therefore, the rent shall be paid for the first time on May 1, 2017 for an amount exclusive of taxes and charges, in the amount of one thousand nine hundred and eighty euros (€1,980.00 EOT/EOC) corresponding to the period from May 1, 2017 to June 30, 2017.

Delivery of any receipt at the time of payment by check shall be subject to the effective cashing of the check.

Any late payment of the rent shall be the subject of a registered reminder letter, the cost of which is set at five euros (€5), including all fees, to be paid by Lessee.

Revision of the rent

The rent may be revised at the request of either of the Parties, every three (3) years and under the terms set forth in Articles L. 145-37 and L. 145-38 of the Commercial Code.

Indexing of the rent

The rent established above, or an annual rent exclusive of taxes and charges, in the amount of eleven thousand, eight hundred and eighty-eight euros (€11,880.00 EOT/EOC), shall be revised automatically and with no need for Lessor to make a specific request for this purpose on each anniversary date of this lease based on the variation in the index defined below.

The Parties agree that this index shall be the Tertiary Activities Rent Index (TARI) as published by the I.N.S.E.E. (National Institute of Statistics and Economic Studies).

The Parties agree that the base index shall be the one for the fourth quarter of 2016, or 108.94.

This index shall be compared, on May 1 of each year and for the first time on May 1, 2018, to the last index published on May 1 of each year, and so on for each year.

If on the day when the indexation clause must be consulted, the reference index has not been published, the rent shall be paid temporarily at the old rate. A readjustment will be made when the index is published and back rent will then be owed retroactively by Lessee.

In the event the chosen index should not exist or cease to be published, the new index that replaces it would be applied automatically, considering the official or unofficial linking coefficients published by the I.N.S.E.E. (National Institute of Statistics and Economic Studies).

If no replacement index was published, to which the index eliminated could be linked, an expert shall be chosen by the Parties through mutual agreement, or in the absence of agreement, designated at the request of the first Party to take action by the President of the Regional Court in the location where the building is located, ruling as an urgent application. He/she shall be tasked with finding a new index relative to the purpose of the contract or the activity of one of the Parties. The index determined in this manner and chosen by the expert, shall be applicable retroactively from the [time] the index stipulated originally ceases to exist.

If, for any reason whatsoever, one of the Parties fails to insist on the benefit of this clause, the fact that it pays or cashes the rent [payment] at the old rate shall not in any case be considered implicit waiver to invoking the current indexing. In order to be considered, this waiver must result in a written agreement.

Lessor declares that this indexing clause is an essential and determinative term of its wish to enter into the contract, without which this lease would not have been made.

CHARGES AND CONDITIONS

The charges and conditions of this commercial lease appear in order below:

- I. - Charges
- II. - Security deposit
- III. - Schedule of condition of the leased property
- IV. - Maintenance, work and repairs
- V. Obligations of Lessee with respect to enjoyment of the leased premises
- VI. - Obligations of Lessor
- VII. - Obligations of the Parties relative to the establishment of a centralized building management
- VIII. - Insurance
- IX. - Destruction of the leased premises
- X – Transfer of the lease – subleasing
- XI. - Return of the premises
- XII. - Joint and several liability and severability
- XIII. - Void clause
- XIV. - Penalty clause
- XV. - Preferential right
- XVI. - Registration
- XVII. - Information on potential natural and technical risks
- XVIII. - Energy performance diagnosis
- XIX. - Technical asbestos assessment
- XX. - Exhibits

I. - CHARGES

I.1 – Building charges

Lessee shall pay or must reimburse Lessor upon first request, in addition to the rent, for all charges related to the leased premises, with the exception of those set forth by the provisions of Article R. 145-35 of the Commercial Code, and this, as they are described according to the specific and limited schedule of charges attached to this lease (**Exhibit 2**) and this, in application of the provisions of Articles L. 145-40-2 and R. 145-36 of the Commercial Code.

Said charges shall be the subject of a quarterly provision in addition to the rent.

If applicable during the lease, Lessor agrees to inform Lessee of any new charges.

I.2 – Taxes and fees

Lessee shall pay its own taxes: all related taxes and generally all taxes, contributions and charges, fiscal or parafiscal, to which it is subject personally and which Lessor could be liable for it under Articles 1686 and 1687 of the General Tax Code or for any other reason whatsoever, and it must prove their payment to Lessor upon any request, and specifically upon expiration of the lease, prior to any removal of furnishings, equipment or merchandise.

Lessee further agrees to reimburse Lessor for a portion of the taxes and fees related to the building where the leased premises are located, as listed in **Exhibit 2** to this instrument, and these taxes and fees shall also be subject to the use of a quarterly provision, in addition to the rent.

If applicable during the lease, Lessor agrees to inform Lessee of any new taxes, fees or usage fees.

The taxes and fees thereby reimbursed to Lessor by Lessee shall be prorated by the term of the lease during the year for which said taxes and fees are collected, when they are established for a full calendar year.

I.3 – Provision for charges, taxes and fees

Lessee agrees to pay, for the application of the stipulations of Clauses I.1 and I.2 above, an annual provision relative to the various supplies, services and charges specified in **Exhibit 2**, and to the taxes and fees to be reimbursed pursuant to Clause I.2 above, calculated based on an estimated budget, totalling for the leased premises forty-seven euros exclusive of tax (€ 47 EOT) per m2 and per year.

This provision relative to charges shall be paid in advance each quarter in addition to the rent, for an annual amount exclusive of taxes of four thousand, six hundred and fifty-three euros (€4,653 EOT), or a quarterly amount, exclusive of taxes, of one thousand, one hundred and sixty-three euros and twenty-five centimes (€1,163.25 EOT).

This provision shall be paid for the first time concurrently with the payment of the first rent for an amount exclusive of taxes of seven hundred and seventy-five euros and fifty centimes (€775.50 EOT) corresponding to the period from May 1, 2017 to June 30, 2017.

If the provision specified above exceeds the annual amount of said charges and services, Lessor shall reimburse the difference to Lessee. If the provision is low, Lessee shall pay the difference, just as it is required.

The annual charges shall be adjusted each year through the establishment of an annual summary statement including the close and adjustment of the charge accounts, which shall be passed on no later than September 30 of the year following the one for which said specific and limited schedule of charges was established, or for co-ownership properties, within three (3) months from the presentation of the co-ownership charges for the annual financial year, and this, pursuant to the provisions of Articles L. 145-40-2 and R. 145-36 of the Commercial Code.

The amount of the aforementioned annual provision shall be revalued each year based on a new estimated budget calculated based on the actual amount of the charges incurred (as listed in **Exhibit 2**) for the preceding year.

II. - SECURITY DEPOSIT

Lessee is not required to pay a security deposit.

III. - SCHEDULE OF CONDITION OF THE LEASED PROPERTY

When Lessee takes possession of the premises, an inter partes schedule of condition of the leased property shall be established amicably by the Parties, or failing this, by bailiff's official report.

Lessee shall take the leased premises in the condition in which they are found when it takes possession, without the ability to make any claim for any reason whatsoever, or claim any compensation, repairs or reduction in the amount of the rent during the term of this lease.

The Parties agree that the charges for any work - under the provisions of Article 606 of the Civil Code – which is necessary to bring the leased property into compliance with existing general regulations as specified in Clause IV.2.2 below shall be paid by Lessor exclusively and that the charges for all work that could be necessary to bring the leased property into compliance with regulations specific to the activity of Lessee shall be paid by it exclusively.

The same terms apply if these regulations are modified, and for this reason, the leased premises no longer comply with general regulatory standards or are no longer in compliance with rules imposed on Lessee to conduct its activity.

IV. - MAINTENANCE, WORK AND REPAIRS

IV.1. Maintenance of the leased premises

Lessee shall maintain the leased premises in good condition compared to the condition of the leased premises on the effective date of the lease, by making as they become necessary all repairs for which it is responsible under this commercial lease, so that the leased premises are returned in good condition at the end of the lease. Lessee must therefore maintain in a good state of maintenance, operation, safety and cleanliness the entire leased premises, windows, locks, woodwork, electrical and plumbing fixtures, and more generally all furnishings, accessories and equipment; replace, if necessary, what cannot be repaired; maintain the floor coverings in perfect condition, and specifically, repair any stains, burns, tears, holes or detachment that arise and oversee the safe use and circulation; restore, as it arises, any damage that could occur in the leased premises.

With a view to uniformity, Lessee further agrees to have all repair and maintenance work necessary under this instrument performed by the contractor designated to it by Lessor.

Lessee must inform Lessor immediately, by registered letter, of any damage or deterioration arising in the leased premises and which requires work for which it would be responsible under this lease. If it fails to fulfill this obligation, it shall be liable for all types of damage caused by its silence or delay.

IV.2. Work during the lease

IV.2.1. Work performed by Lessee

- Lessee may not perform any work involving support elements for the foundation or framework that contributes to the stability or solidity of the building (structural works) and closure, covering and watertightness without the prior written approval of Lessor and its architect. Lessee shall be responsible for the fees for the involvement of Lessor's architect.
- Lessee may not make any change in the layout of the leased premises without the prior written consent of Lessor.
- All work, embellishments and improvements carried out by Lessee, which are in all cases subject to prior approval from Lessor, shall remain owned by the latter at the end of the lease, without any compensation, unless Lessor prefers to request their removal and return of the premises to their previous condition, at the expense of Lessee.

IV.2.2. Work performed by Lessor

- Lessee shall endure without compensation all construction and any work whatsoever executed in the leased premises or in the building and may not request any rent reduction, irrespective of the magnitude and duration, while the latter shall not exceed forty (40) days.
- Lessee shall endure all work involving the common areas made necessary for their improvement and all repairs in this manner and finally layout work on other private parts of the building.
- Lessee must dismantle at its own expense and without delay all formwork, decorations and all installations it may have made and whose removal is necessary to detect and repair leaks of any nature, cracks in the smoke or ventilation pipes, in particular after a fire or [water] seepage, and generally for the execution of the restoration, all layouts, signs, etc. whose removal is necessary to perform the work.

  It is stipulated that there may be access covers in the premises to access the conduits for air conditioning, electricity, telephone, etc. that would likely serve other contiguous units.

  Opening these covers must always be approved, as well as workers and other specialists coming through for connection work, in particular electrical, telephone and computer.

Lessor declares, in accordance with the provisions of Article L. 145-40-2 of the Commercial Code:

- That it has not performed any work in the last three (3) years.
- that it does not plan to perform any work within the next three (3) years, with the exclusion of the work listed above.

If applicable, Lessor agrees, pursuant to the provisions of Article R. 145-37 of the Commercial Code to provide the following documents within two (2) months after each of the three-year due dates:

- A provisional summary of the work planned in the next three years accompanied by an estimated budget;
- A summary statement on any work performed in the last three years, including its cost;

IV.3. Repairs

Lessor shall only be responsible for major repairs as defined by Article 606 of the Civil Code (restoration in their entirety of roofing, beams, major walls): Lessee is responsible for all other repairs, even when they are necessary due to age or hidden defects, or even accidents or acts of God.

Lessee agrees to use the contractor designated to it by Lessor for all repairs made necessary in this manner.

V. - OBLIGATIONS OF LESSEE RELATIVE TO ENJOYMENT OF THE LEASED PREMISES

V.1. Use of the leased premises

Lessee may only use the leased premises to perform the activity resulting from its corporate purpose and for office use exclusively.

The leased premises may not be assigned another use, even temporarily, and no activity other than the one indicated above may be carried out there.

V.2. Terms of enjoyment of the premises by Lessee

- Lessee must use the leased premises, providing all reasonable care. It shall ensure that the tranquility and proper order of the building are not disturbed by its actions or those of its employees, suppliers or customers. It must specifically take all precautions to avoid any disturbance of use and any odors.

  It must comply fully with the orders of any regulations, police orders, health regulations, etc. and ensure compliance with hygiene, health, etc. regulations.

- With respect more specifically to the performance of its activity, Lessee must ensure that it complies with the legal and administrative orders that may relate to it.

- Lessee shall handle personally all claims or disputes that could arise due to its activity in the premises, so that Lessor is never concerned or sought in this regard. It shall be responsible for all conversions and any repairs whatsoever required by the exercise of its activity, all while standing surety vis-à-vis Lessor for any actions for damages by the other lessees or neighbors that the exercise of this activity could provoke.

- Furthermore, Lessee must handle personally, and without the ability to exercise for that fact any recourse against Lessor, any claim or order that could come from competent officials concerning the terms of the occupation of said premises by it, all potential administrative approvals related to its fitting out and/or its use of the leased premises or the exercise of its activity in said premises.

  Consequently, Lessor may not incur any liability in the event of denial or delay in obtaining these approvals.

  Lessee must pay all amounts, fees, taxes and other levies related to this fitting out, use or activity.

V.3. Obligations relative to establishment of the computer server.

If Lessee uses a computer network, it must install its server in the mechanical room located upstairs in the left wing of the building, unless it equips its private premises with an air conditioning system appropriate for the installation of a computer server.

All lessees in the building have shared access to the mechanical room. In this context, Lessee is expressly prohibited from accessing the server of each of the other lessees located in the technical room.

Lessee further agrees to designate one person who, alone, shall be authorized to gain access to this mechanical room, with the stipulation that each entrance is monitored individually through the centralized building management.

Lessor must be informed in advance of all entries into the mechanical room. This information must be provided a minimum of one (1) hour prior to accessing said mechanical room, via e-mail sent to the following address: new.horizons.france@gmail.com.

Lessee shall however have the opportunity to request entry in the mechanical room with Lessor present. This entry shall only be possible from 9 a.m. to 5 p.m. without interruption on business days and subject to written notification of Lessor a minimum of forty-eight (48) hours in advance.

The person designated by Lessee to enter the mechanical room may also be contacted by the other lessees, in case of emergency only, at any time. If the designated person is not available, Lessee must inform the other lessees of the designation of another person whose contact information it will provide to them. If it is unable to reach the person designated in this manner by Lessee, Lessor is expressly authorized to take any measure required by the situation.

Any entry in the mechanical room by Lessee or by any of its employees or representatives in breach of the rules defined above will trigger the liability of Lessee.

Lessee waives all appeals for liability or claims against Lessor, and all representatives of Lessor, and their insurers and agrees to obtain the same waivers from all insurers in case of entry into the mechanical room in breach of the access rules defined by this clause.

V.4. Obligation to keep the premises open and filled

Lessee must maintain the premises in constant use, subject to potential closure during the annual paid leave period or for work.

Lessee shall fill the premises with sufficient furnishings for their normal use, in order to guarantee the payment of three (3) months of rent and performance of the clauses and conditions of the lease.

V.5. Premises visit

V.5.1 During the lease

Lessee must allow Lessor, its representative, architects and all other lessees and workers to enter the leased premises and inspect them in order to observe their condition, whenever this appears necessary, without the visits able to be excessive, provided there is a minimum of twenty-four (24) hours advance notice, except in emergency cases. It must also allow workers who have to perform work to enter the premises.

Lessee must allow a banner or sign to be affixed to the façade of the leased premises indicating that the premises are for rent, as well as the name, address and telephone number of the person responsible for the leasing.

V.5.2 In case of sale of the building or renewal at the end of the lease

Subject to the terms specified in Clause XV below of this instrument, in case of sale of the building, Lessee must allow visits to the premises from 9 a.m. to 5 p.m., without interruption on business days.

Lessee must allow a banner or sign to be affixed to the façade of the leased premises indicating that the premises are for sale, as well as the name, address and telephone number of the person responsible for the sale.

V.6. Miscellaneous obligations.

Lessee agrees to ensure compliance with the total ban on smoking inside the entirety of the building, including the common areas.

Lessee further agrees to prohibit access to the parking reserved for customers by its employees or any person working under its responsibility, and to reserve its use strictly for its customers and those of the other lessees in the building owned by Lessor.

If Lessee installs coffee machines or other miscellaneous fixtures in the premises that are the subject of this instrument, it agrees to protect the floor coverings to avoid the appearance of stains, the cleaning of which Lessee must handle, in any case.

In addition, Lessee agrees not to obstruct or occupy, even temporarily, the areas of the building not included in this lease, and specifically the building's lobby.

Lessor authorizes Lessee to affix a plaque identifying Lessee on the outside intercom. Other signage, signs or advertising on or around the building is prohibited.

Lessee agrees, on the expiration of this commercial lease, to uninstall the aforementioned signage and return the premises to their previous condition.

VI. - OBLIGATIONS OF LESSOR

VI.1. Hidden defects

Lessor shall not be bound to guarantee hidden defects that may affect the ground, basement or buildings.

VI.2. Responsibilities and recourse

Lessee waives all actions for compensation or claims against Lessor, and all representatives of Lessor and their insurers, and agrees to obtain the same waivers from all insurers for the following cases:

- In the case of theft, attempted theft, any criminal offense or unlawful act of which Lessee could be victim in the leased premises of the building. Lessee expressly waives the benefit of Article 1719, paragraph 3 of the Civil Code, with Lessor assuming no obligation for security.

- In case of any irregularities, improper operation or interruption of the water, electricity or telephone, air conditioning, electricity generators of all computer systems, if any, [and] more generally the group services and common equipment of the building or specific to the leased premises.
- In case of modification or elimination of the common services.
- In case of damage caused to the leased premises and/or to any furnishings there as a result of leaks, [water] infiltration, moisture or other circumstances.
- In case of misconduct by other occupants of the building, their personnel, vendors and customers, and all third parties in general, that causes damage to the building, Lessee specifically waives any recourse against Lessor pursuant to Article 1719, paragraph 3 of the Civil Code.
- In case of accidents occurring in the leased premises or due to the leased premises during the lease, irrespective of the cause. It shall be personally responsible for and cover the costs of all civil liability arising from this with regard to its personnel, Lessor or third parties, without Lessor able to be concerned or sued for this reason.
- In case of a flaw or defect in the leased premises, Lessee specifically waives invoking the provisions of Articles 1719 and 1721 of the Civil Code.

Moreover, it is expressly agreed that:

- Lessee shall handle personally, without recourse against Lessor, all damage caused to the premises by turmoil, disturbances, strikes, civil war and any disruption in use arising from them.
- In case of expropriation for public use, Lessee may not make any claims against Lessor, and all rights of said Lessee vis-à-vis the government or expropriating body shall be reserved.

VII. - OBLIGATIONS OF THE PARTIES RELATED TO THE ESTABLISHMENT OF A CENTRALIZED BUILDING MANAGEMENT

VII.1. Remote control of centralized building management

Lessee is hereby advised that some specific technical functions (air conditioning, lighting, alarms, blinds, gate, etc.) are controlled by a centralized building management system.

In this regard, four (4) remote controls enabling control of these different functions as well as a written procedure for use shall be delivered to Lessee when it takes final possession of the premises that are the subject of this instrument.

Any damage, destruction or loss of one of these remote controls must be reported to Lessor, which shall provide a new remote control to Lessee ***after the latter reimburses Lessor for the cost of the repair or replacement of the previous remote control*** *(current charge in effect: €49 EOT).*

VII.2. Alarm.

Lessee is also hereby advised that the premises that are the subject of this instrument are protected by an alarm linked to the video surveillance company SECURITAS the triggering of which is conditioned by complete closure of all exits of the building.

The obligations related to the placement of this alarm are the subject of a written procedure, which shall be provided to the Procedure [sic] when taking effective possession of the premises that are the subject of this instrument.

VIII.-INSURANCE

- Lessee must maintain constant insurance against the risks of fire, explosion, theft, water damage and against risks related to the lease and appeals of neighbors for the leased premises that are the subject of this instrument as well as the furnishings and commercial and industrial equipment, keeping the leased premises full, and doing so for the entire term of this lease, with a known solvable French or foreign insurance company. For this purpose, it must pay the premiums regularly and prove all of this upon first request of Lessor.
- Lessee must also insure any computer server it has installed in the mechanical room in accordance with this instrument, as well as any antennas that it may have installed on the roof of the building.

- The policy must contain a waiver by the insurance company of all appeals against Lessor, all representatives of Lessor, all persons with ownership or possession rights to the building or all other parts of the building, or the insurers of the aforementioned persons, for the portion of the damage or harm for which the latter parties could be responsible for any reason whatsoever.
- Lessee hereby expressly waives all recourse and any actions against the aforementioned people and their insurers as a result of the aforementioned damage or denial of right to enjoy the leased premises.
- If the activity performed by Lessee and/or work carried out by it in accordance with the provisions of this lease as an exception leads to additional insurance premiums for Lessor or for the other lessees in the building or neighbors, Lessee would be bound to both compensate Lessor for the amount of the additional premium paid and hold it harmless against all claims of the other lessees or neighbors.

IX. - DESTRUCTION OF THE LEASED PREMISES

If the premises that are the subject of this commercial lease are destroyed entirely due to age, construction defects, acts of war, civil war, disturbances, accident or any other cause independent of the will of Lessor, this commercial lease shall be terminated automatically without compensation.

If, however, the leased premises were destroyed or rendered only partially unusable, Lessee could only receive a reduction in the rent based on the areas destroyed, with the exclusion of termination of the lease.

X. - TRANSFER OF THE LEASE - SUBLEASING

Lessee shall occupy the leased premises personally. It shall be prohibited from subleasing or loaning said premises in whole or part to third parties under any pretext whatsoever, and in any manner whatsoever, even temporarily and free of charge and commitment, and establishing the domicile of any individual or legal entity there.

With the exception of the buyer of its business or company, Lessee may not transfer its right to this lease without the express and written consent of Lessor and acting as a guarantor and being jointly liable for the payment of the rent and execution of the charges and conditions of the lease, and this for three (3) years from the date of the deed of transfer of the right to the lease.

The joint and individual responsibilities stipulated in this clause in favor of Lessor shall exist equally among all successive grantees of this lease;

In all cases, no contribution or transfer may be made if rent or additional fees are owed.

Lessor must be notified of the transfer or contribution in accordance with Article 1690 of the Civil Code, a minimum of ten days prior to the expiration of the time limit for raising an objection. The notification must contain a full explanation of the compliance with the preceding stipulations, and in particular, the transfer of the business or industry.

A registered original or enforceable copy of the lease transfer must be submitted to Lessor at no cost, within the month of the transfer, under penalty of said transfer being unenforceable.

XI. - RETURN OF THE PREMISES

One (1) month prior to moving out, Lessee must provide proof of payment by presenting receipts, prior to any removal, even partial, of the furnishings, of the contributions for which it is responsible, for both past months and for the current month, and of all rent and charges periods, and provide its future address to Lessor.

Lessee must also return the leased premises to perfect condition in terms of cleanliness and lease-related repairs and must pay the amount of any repairs that could be due.

For this purpose, no later than fifteen (15) days prior to the expiration date of the lease or the date of its effective departure, if another date is necessary, an inter partes schedule of condition of the leased property shall be established with a bailiff present, which shall contain a summary of the repairs to be made by Lessee.

Lessee must have all these repairs made at its expense prior to the planned date of its effective departure, under the control of Lessor’s architect whose fees it shall pay as well.

If Lessee does not make the repairs within this period, or it does not respond to Lessor's notice or refuses to sign the condition of leased property, Lessor shall have the amount of said repairs calculated by its architect and Lessee must then pay this to it [Lessor] immediately.

In this same scenario, Lessee would owe Lessor compensation equal to the rent and charges calculated *pro rata,* during the time the premises are tied up in order to make the repairs for which Lessee is responsible.

XII. - JOINT AND SEVERAL LIABILITY

The obligations of Lessee arising from this lease constitute a joint and several liability for all its successors and for all persons bound to the payment and performance.

XIII. - VOID CLAUSE

This lease shall be terminated automatically in the case of failure to pay on its exact due date a single rent term or any rent reminder following an increase in it, such as failure to reimburse expenses, lease-related fees, taxes, charges or services that constitute its additional fees, or finally failure to perform any clause or condition of this lease or the co-ownership regulations that the Parties' agreement also makes, or even nonperformance of the obligations imposed on Lessee by law or regulations, and one (1) month after an order to pay or a served notice that goes unanswered.

If, in this case, Lessee refuses to quit the leased premises, its expulsion, and that of all occupants accordingly, could occur immediately by simple provisional order handed down by the President of the competent Regional Court, the jurisdiction of which is expressly assigned in accordance with this instrument.

XIV - PENALTY CLAUSE

Failure to pay the rent, additional expenses and amounts due at for each term, fifteen (15) days after receipt by Lessee of a registered letter with acknowledgement of receipt remains unanswered, the case shall be transferred to a bailiff and the amounts owed automatically increased five percent (5%) as a flat-rate allowance for legal expenses, and irrespective of any formal notice and collection expenses.

In the case of automatic or judicial termination, the full amount of the advance rent and the security deposit shall be acquired by Lessor for the purpose of flat-rate and irreducible compensation of the damage alone arising from this termination, without prejudice to other compensation owed or damages to compensate for the damage arising from the actions of Lessee, irrespective of whether it caused this termination.

Compensation for occupation owed by Lessee if it does not vacate the premises after automatic or judicial termination or expiration of the lease shall be established as a flat rate based on the total rent for the last year of leasing increased by fifty percent (50%).

XV. - PREFERENTIAL RIGHT

It is noted that in accordance with Article L. 145-46-1 of the Commercial Code, the Lessee of premises for commercial use or traditional production shall benefit from a preferential right in the case of sale of the leased premises.

In this context, and in the scenario where Lessor plans to sell the premises that are the subject of this lease, it must comply with the preferential right established for Lessee under the conditions described in Article L. 145-46-1 of the Commercial Code reproduced in full below:

"When the owner of premises to be used commercial or traditional production purposes plans to sell them, it shall so inform the Lessee by registered letter with acknowledgement of receipt, or in person, against receipt or signature. In order to be valid, this notification must indicate the price and terms of the planned sale. It is an offer for sale to Lessee. The latter shall have a period of one month from receipt of this offer to decide. If it accepts, Lessee shall have a period of two months from the date its response is sent to Lessor to carry out the sale. If it provides notice in its response of its intention to use a loan, the acceptance by Lessee of the offer for sale is conditional to obtaining the loan, and the period to carry out the sale becomes four months.
If, at the end of this period, the sale has not been carried out, the acceptance of the offer for sale is non-binding.

If the owner decides to sell under conditions or at a price that is more advantageous for the buyer, the notary must, when Lessor has not done so previously, notify Lessee of these conditions and this price in the manner set forth in the first paragraph, under penalty of the voiding the sale. This notification can be considered an offer for sale to Lessee. This offer for sale is valid for a period of one month from its receipt. Offers not accepted within this period are null and void.

Lessees that accept an offer notified in this manner shall have a period of two months from the date their response is sent to Lessor or the notary to establish the contract of sale. If, in its response, it provides notice of its intention to use a loan, the acceptance by Lessee of the offer for sale is conditional to obtaining the loan, and the period to carry out the sale becomes four months. If, at the end of this period, the sale has not been carried out, the acceptance of the offer for sale is non-binding.

The provisions of the first four paragraphs of this article shall be reproduced in each notification in order to be valid.

This clause is not applicable in case of single sale of several premises in a commercial group, single sale of different commercial premises or sale of commercial premises under co-ownership in a commercial group. It is also not applicable to the global sale of a building including commercial premises or to the sale of premises to the spouse of the Lessor, or to an ancestor or descendant of the Lessor or of his/her spouse."

By exception to the preceding, the Parties expressly agree that in the case of sale of the premises to a company belonging to the same group of companies as Lessor, Lessor shall be exempt from the notifications set forth by Article L. 145-46-1 of the Commercial Code, with Lessee waiving its preferential right specified above.

XVI. - REGISTRATION

The Parties do not require registration of this instrument.

XVII. - INFORMATION ON ANY NATURAL AND TECHNOLOGICAL RISKS

In accordance with the provisions of Articles L. 125-5 and R. 125-24 of the Environmental Code, Lessor has provided to Lessee on this date a statement of natural and technological risks (to which items are attached that make it possible to locate the building with respect to the risks considered), established in accordance with provisions above. This statement appears in **Exhibit 3** to this instrument.

Lessee duly notes this information, declares to be satisfied with it and to personally handle it, without appeal to Lessor, and consequently waives all requests for termination of the lease, compensation or reduction of the rent.

XVIII - ENERGY PERFORMANCE DIAGNOSIS

In accordance with the provisions of Article L. 134-3-1 of the Building and Housing Code, Lessor has provided to lessee on this date, which acknowledges it, an Energy Performance Diagnosis (EPD) – as defined in Article L. 134-1 of said code – for the leased premises that are the subject of this instrument. This diagnosis appears in **Exhibit 4** to this instrument.

Lessee acknowledges now that the information contained in the Energy Performance Diagnosis is of informational value only, and consequently, it cannot be used against Lessor.

XIX - TECHNICAL ASBESTOS ASSESSMENT

Lessor declares that the provisions of Decree No. 93-97 of February 7, 1996, No. 97-855 of September 12, 1997, No. 2001-840 of September 13, 2011 and No. 2002-839 of May 3, 2002 relative to protecting the population against the health risks related to asbestos exposure in buildings do not apply to the building that is the subject of this lease, and this, insofar as the building permit was issued after July 1, 1997, which Lessee expressly acknowledges.

XX.-EXHIBITS

The exhibits listed below are attached to this lease. They are part and parcel to the lease, with which they form an indivisible whole:

Exhibit 1: Plan of the leased premises
Exhibit 2: Specific and limited list of the charges attributable to Lessee
Exhibit 3: Statement of natural and technological risks
Exhibit 4: Energy Performance Diagnosis

Executed in MONTBONNOT SAINT MARTIN
April 28, 2017
In two (2) counterparts

NEW HORIZONS
Represented by
Mr. Chris MARNOCH

/s/ Chris Marnoch

INFINISCALE
Represented by

Mr. Firas MOHAMED MONADE

/s/ Firas Mohamed Monade

NEW HORIZONS
ZIRST II
55, rue Biaise Pascal
38330 MONTBONNOT - FRANCE
Tel. 33 (4) 56 38 10 99 - Fax 33 (4) 56 38 10 99

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Exhibits Attached

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COMMERCIAL LEASE

BY AND BETWEEN

NEW HORIZONS
("LESSOR")

AND

SILVACO FRANCE
("LESSEE")

FM CM

COMMERCIAL LEASE

BETWEEN THE UNDERSIGNED:

- **NEW HORIZONS,** Limited Liability Company with 7,624 euros in share capital, headquarters located at 55 rue Blaise Pascal, ZIRST II - 38330 MONTBONNOT ST MARTIN and registered in the GRENOBLE Trade Register at number 429 556 590,

  Represented by Mrs. Katherine NGai Pesic, with full authority for the purposes herein in her capacity as Manager, herself represented by Mr. Chris MARNOCH, duly authorized for the purposes herein by virtue of a delegation of power,

  Hereinafter referred to as "**Lessor**",

PARTY OF THE FIRST PART,

AND:

- **SILVACO France**, a Corporation [SA] with a Board of Directors and 964,000 euros in share capital, headquarters located at 55 Rue Blaise Pascal - 38330 MONTBONNOT SAINT MARTIN and registered in the GRENOBLE Trade Register at number 484 806 534,

  Represented by Mr. Firas Mohamed Monade, with full authority for the purposes herein in his capacity as Appointed General Manager,

  Hereinafter referred to as "**Lessee**",

PARTY OF THE SECOND PART,

Hereinafter jointly referred to as "**Parties**" and individually as "**Party**".

NOW, THEREFORE, the following is agreed and made binding:

COMMERCIAL LEASE

NEW HORIZONS, the first undersigned party, hereby declares to grant a commercial lease, in accordance with the provisions of Articles L. 145-1 et seq. of the Commercial Code for the terms and conditions stipulated below, to SILVACO France, the second undersigned party, for the property described below.

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DESCRIPTION OF THE LEASED PREMISES

The property that is the subject of this lease is, to the exclusion of all others, one part of the premises located in a building located in MONTBONNOT SAINT MARTIN (38330) “La Baudonière” and “Pré Nalier” hamlet and appearing in the updated property register of this commune under Number 231, Section A0 for an area of 64 ares and 35 centiares, the exact address of which is “Immeuble Silvaco” - ZIRST II - 55 rue Blaise Pascal, and consisting of:

- on the first floor of the building in question, one part of the left wing, as described in the plan attached in **Exhibit 1** to this instrument, for an area of 200 m ^{2} including the share of common parts of the ground floor and upstairs, including specifically:

  3 offices *(each equipped with a white board)*
  One (1) open space

  With the following furnishings:

  9 desks 180x120x74
  10 filing cabinets with 3 drawers 80x40x74
  1 filing cabinet with 2 drawers 80x40x74
  1 filing cabinet with 4 drawers 50x50x114
  1 armoire with 2 doors 120x50x190
  1 table 180x80x74

- as well as 12 outside parking spaces, parking spaces located between space numbers 45 and 12, as designated in the parking of the building’s plan appearing in **Exhibit 2**.

This commercial lease grants Lessee the right to use the common areas, equipment and accessories of the building, subject to compliance with the terms specified herein.

Lessee further declares to be well acquainted with the leased premises and therefore exempts Lessor from making a broader description of them.

TERM OF THE LEASE

This commercial lease is granted and accepted for a term of forty-three (43) full and consecutive months commencing on October 1, 2021 and ending on April 30, 2026.

Lessee shall have the ability to terminate this lease on April 30, 2023, by giving notice through deed of service or registered letter with acknowledgement of receipt a minimum of six (6) months in advance. If the notice is late or given in breach of regulations, the lease shall continue for a new three- (3-)year period with all obligations for Lessee arising from it.

It is further noted that Lessor has the ability, pursuant to Article L. 145-4 of the Commercial Code, to give notice at the end of each three-year period, by giving notice through deed of service a minimum of six (6) months in advance, if it intends to invoke the provisions of Articles L. 145-18, L. 145-21, L. 145-23-1 and L. 145-24 of the Commercial Code, in order to build, rebuild or raise the height of the existing building, reallocate the additional housing area to

this use or execute prescribed or approved projects in the framework of a property renovation operation, and in case of demolition of the building, in the framework of an urban renewal project.

RENT
AMOUNT/PAYMENT/REVISION/INDEXING

Amount of the rent

This lease is granted and accepted through annual rent, exclusive of taxes [EOT] and exclusive of charges [EOC], in the amount of twenty thousand, four hundred euros (€20,400 EOT/EOC), or quarterly rent, exclusive of taxes and charges, in the amount of five thousand, one hundred euros (€5,100 EOT/EOC).

This rent, which is subject to VAT, shall be paid and subject to revision under the terms indicated below.

Payment of the rent

The agreed upon annual rent shall be payable quarterly and in advance to Lessor or its designated representative, at their domicile or any other location indicated by them.

Lessee agrees to pay Lessor, in addition to the rent, the amount of the VAT or any other new additional or replacement tax that could be created at the legal rate in force on the date of each payment.

Lessor formally agrees in parallel to maintain for the entire term of the lease the option to subject the rent stipulated above to the VAT rate.

By exception to the foregoing, the first term of the rent (as well as the provision for real estate taxes and expenses, see I.3 below) – corresponding to the period from October 1, 2021 to December 31, 2021 – shall be paid by Lessee on the date this instrument is signed, and do so by bank transfer to the bank account of Lessor.

Revision of the rent

The rent may be revised at the request of either of the Parties, every three (3) years and under the terms set forth in Articles L. 145-37 and L. 145-38 of the Commercial Code.

Indexing of the rent

The rent established above, or an annual rent exclusive of taxes and charges, in the amount of twenty thousand, four hundred euros (€20,400 EOT/EOC), shall be revised automatically and with no need for Lessor to make a specific request for this purpose on each anniversary date of this lease based on the variation in the index defined below.

The Parties agree that this index shall be the Tertiary Activities Rent Index (TARI) as published by the I.N.S.E.E. (National Institute of Statistics and Economic Studies).

The Parties agree that the base index shall be the one for the fourth quarter of 2020, or 114.06.

This index shall be compared, on May 1 of each year and for the first time on May 1, 2022, to the last index published on May 1 of each year, and so on for each year.

If the reference index has not been published on the date when the indexation clause must be consulted, the rent shall be paid temporarily at the old rate. A readjustment will be made when the index is published and back rent will then be owed retroactively by Lessee.

In the event the chosen index should not exist or cease to be published, the new index that replaces it will be applied automatically, considering the official or unofficial linking coefficients published by the I.N.S.E.E.

If no replacement index was published, to which the index eliminated could be linked, an expert shall be chosen by the Parties through mutual agreement, or in the absence of agreement, designated at the request of the first Party to take action by the President of the Regional Court in the location where the building is located, ruling as an urgent application. He/she shall be tasked with finding a new index relative to the purpose of the contract or the activity of one of the Parties. The index determined in this manner and chosen by the expert, shall be applicable retroactively from the [time] the index stipulated originally ceases to exist.

If, for any reason whatsoever, one of the Parties fails to insist on the benefit of this clause, the fact that it pays or cashes the rent [payment] at the old rate shall not in any case be considered implicit waiver to invoking the current indexing. In order to be considered, this waiver must result in a written agreement.

Lessor declares that this indexing clause is an essential and determinative term of its wish to enter into the contract, without which this lease would not have been made.

CHARGES AND CONDITIONS

The charges and conditions of this commercial lease appear in order below:

- I. - Charges
- II. — Security deposit
- III. — Schedule of condition of the leased property
- IV. — Maintenance, work and repairs
- V. — Obligations of Lessee with respect to enjoyment of the leased premises
- VI. — Obligations of Lessor
- VII. — Obligations of the Parties relative to the establishment of a centralized building management
- VIII. — Insurance
- IX. — Destruction of the leased premises
- X. - Transfer of the lease – subleasing
- XI. — Return of the premises
- XII. — Joint and several liability and severability
- XIII. — Void clause
- XIV. — Penalty clause
- XV. - Preferential right
- XIV. — Registration
- XVII. — Risks and pollution
- XVIII. — Energy performance diagnosis
- XIX. — Technical asbestos assessment
- XX. - Exhibits

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I. - CHARGES

I.1. - Building charges

Lessee shall pay or must reimburse Lessor upon first request, in addition to the rent, for all charges related to the leased premises, with the exception of those specified by the provisions of Article R. 145-35 of the Commercial Code, and as they are described according to the specific and limited schedule of charges attached to this lease (**Exhibit 3**) and in application of the provisions of Articles L. 145-40-2 and R. 145-36 of the Commercial Code.

Said charges shall be the subject of a quarterly provision in addition to the rent.

If applicable during the lease, Lessor agrees to inform Lessee of any new charges.

I.2. - Taxes and fees

Lessee shall pay its own taxes: all related taxes and generally all taxes, contributions and charges, fiscal or parafiscal, to which it is subject personally and which Lessor could be liable for it under Articles 1686 and 1687 of the General Tax Code or for any other reason whatsoever, and it must prove their payment to Lessor upon any request, and specifically upon expiration of the lease, prior to any removal of furnishings, equipment or merchandise.

Lessee further agrees to reimburse Lessor for a portion of the taxes and fees related to the building where the leased premises are located, as listed in **Exhibit 3** to this instrument, and these taxes and fees shall also be subject to the use of a quarterly provision, in addition to the rent.

If applicable during the lease, Lessor agrees to inform Lessee of any new taxes, fees or usage fees.

The taxes and fees thereby reimbursed to Lessor by Lessee shall be prorated by the term of the lease during the year for which said taxes and fees are collected, when they are established for a full calendar year.

I.3. - Provision for charges, taxes and fees

Lessee agrees to pay, for the application of the terms of Clauses I.1 and I.2 above, an annual provision relative to the various supplies, services and charges specified in **Exhibit 3,** and to the taxes and fees to be reimbursed pursuant to Clause I.2 above, calculated based on an estimated budget, totaling for the leased premises fifty-four euros exclusive of tax (€ 54 EOT) per m^2 and per year.

This provision for charges shall be paid in advance each quarter in addition to the rent, for an annual amount exclusive of taxes of ten thousand, eight hundred euros (€10,800 EOT), or a quarterly amount, exclusive of taxes, of two thousand, seven hundred euros (€2,700 EOT).

If the provision specified above exceeds the annual amount of said charges and services, Lessor shall reimburse the difference to Lessee. If the provision is lower, Lessee shall and expressly agrees to pay the difference.

The annual charges shall be adjusted each year by establishing an annual summary statement including the payment and adjustment of the charge accounts [and] this statement shall be provided no later than September 30 of the year following the one for which the specific and limited list of charges was prepared, or for co-owned properties, within three (3) months from the presentation of the co-ownership charges for the annual business year, and this in application of the provisions of Articles L. 145-40-2 and R. 145-36 of the Commercial Code.

The amount of the aforementioned annual provision shall be revalued each year based on a new estimated budget calculated based on the actual amount of the charges and taxes incurred (as listed in **Exhibit 3**) for the preceding year.

II. - SECURITY DEPOSIT

The Parties expressly agree that Lessee shall not pay a security deposit to Lessor in the framework of this commercial lease.

III. - SCHEDULE OF CONDITION OF THE LEASED PROPERTY

When Lessee takes possession of the premises, an inter partes schedule of condition of the leased property shall be established amicably by the Parties, or failing this, by bailiff's official report, with the expenses divided equally by the Parties.

Lessee shall take the leased premises in the condition in which they are found when it takes possession, without the ability to make any claim for any reason whatsoever, or claim any compensation, repairs or reduction in the amount of the rent during the term of this lease.

The Parties agree that the charges for any work - under the provisions of Article 606 of the Civil Code – which is necessary to bring the leased property into compliance with existing general regulations as specified in Clause IV.2.2 below shall be paid by Lessor exclusively and that the charges for all work that could be necessary to bring the leased property into compliance with regulations specific to the activity of Lessee shall be paid by it exclusively.

The same terms apply if these regulations are modified, and for this reason, the leased premises no longer comply with general regulatory standards or are no longer in compliance with rules imposed on Lessee to conduct its activity.

IV. - MAINTENANCE, WORK AND REPAIRS

IV.1. Maintenance of the leased premises

Lessee shall maintain the leased premises in good condition compared to the condition of the leased premises on the effective date of the lease, by making as they become necessary all repairs for which it is responsible under this commercial lease, so that the leased premises are returned in good condition at the end of the lease. Lessee must therefore maintain in a good state of maintenance, operation, safety and cleanliness the entire leased premises, windows, locks, woodwork, electrical and plumbing fixtures, and more generally all furnishings, accessories and equipment; replace, if necessary, what cannot be repaired; maintain the floor coverings in perfect condition, and specifically, repair any stains, burns, tears, holes or detachment that arise and oversee the safe use and circulation; restore, as it arises, any damage that could occur in the leased premises.

With a view to uniformity, Lessee further agrees to have all repair and maintenance work necessary under this instrument performed by the contractor designated to it by Lessor.

Lessee must inform Lessor immediately, by registered letter, of any damage or deterioration arising in the leased premises and which requires work for which it would be responsible under this lease. If it fails to fulfill this obligation, it shall be responsible for all types of damage caused by its silence or delay.

IV.2. Work during the lease

IV.2.1. Work performed by Lessee

- Lessee may not perform any work involving support elements for the foundation or framework that contributes to the stability or solidity of the building (structural works) and closure, covering and watertightness without

the prior written approval of Lessor and its architect. Lessee shall be responsible for the fees for the involvement of Lessor's architect.

- Lessee may not make any change in the layout of the leased premises without the prior written consent of Lessor.

- All work, embellishments and improvements carried out by Lessee, which are in all cases subject to prior approval from Lessor, shall remain owned by the latter at the end of the lease, without any compensation, unless Lessor prefers to request their removal and return of the premises to their previous condition, at the expense of Lessee.

- In any case, all work made necessary to bring the leased premises into compliance with regulations specific to the activity of Lessee shall be paid in full by it.

IV.2.2. Work performed by Lessor

- Lessee shall endure without compensation all construction and any work whatsoever executed in the leased premises or in the building and may not request any rent reduction, irrespective of the magnitude and duration, while the latter shall not exceed twenty-one (21) days.

- Lessee shall endure all work involving the common areas made necessary for their improvement and all repairs in this manner and finally layout work on other private parts of the building.

- Lessee must dismantle at its own expense and without delay all formwork, decorations and all installations it may have made and whose removal is necessary to detect and repair leaks of any nature, cracks in the smoke or ventilation pipes, in particular after a fire or [water] seepage, and generally for the execution of the restoration, all layouts, signs, etc. whose removal is necessary to perform the work.

It is stipulated that there may be access covers in the premises to access the conduits for air conditioning, electricity, telephone, etc. that would likely serve other contiguous units.

Opening these covers must always be approved, as well as workers and other specialists coming through for connection work, in particular electrical, telephone and computer.

Lessor declares, in accordance with the provisions of Article L. 145-40-2 of the Commercial Code:

– That it has not performed any work in the last three (3) years.

– That is does not plan to perform any work in the next three (3) years.

If applicable, Lessor agrees, pursuant to the provisions of Article R. 145-37 of the Commercial Code to provide the following documents within two (2) months after each of the three-year due dates:

– A preliminary statement on any work planned in the next three years, including an estimated budget;

– A summary statement on any work performed in the last three years, including its cost;

IV.3. Repairs

Lessor shall only be responsible for major repairs as defined by Article 606 of the Civil Code (restoration in their entirety of roofing, beams, outer walls): Lessee is responsible for all other repairs, even when they are necessary due to age or hidden defects, or even accidents or acts of God.

Lessee agrees to use the contractor designated to it by Lessor for all repairs made necessary in this manner.

V. - OBLIGATIONS OF LESSEE RELATIVE TO ENJOYMENT OF THE LEASED PREMISES

V.1. Use of the leased premises

Lessee may only use the leased premises to perform the activity resulting from its corporate purpose and for office use exclusively.

The leased premises may not be assigned another use, even temporarily, and no activity other than those indicated above may be carried out there.

V.2. Terms of enjoyment of the premises by Lessee

- Lessee must use the leased premises, providing all reasonable care. It shall ensure that the tranquility and proper order of the building are not disturbed by its actions or those of its employees, suppliers or customers. It must specifically take all precautions to avoid any disturbance of use and any odors.

  It must comply fully with the orders of any regulations, police orders, health regulations, etc. and ensure compliance with hygiene, health, etc. regulations.

- With respect more specifically to the performance of its activity, Lessee must ensure that it complies with the legal and administrative orders that may relate to it.

- Lessee shall handle personally all claims or disputes that could arise due to its activity in the premises, so that Lessor is never concerned or sought in this regard. It shall be responsible for all conversions and any repairs whatsoever required by the exercise of its activity, all while standing surety vis-à-vis Lessor for any actions for damages by the other lessees or neighbors that the exercise of this activity could provoke.

- Furthermore, Lessee must handle personally, and without the ability to exercise for that fact any recourse against Lessor, any claim or order that could come from competent officials concerning the terms of its occupation of said premises, all potential administrative approvals related to its fitting out and/or its use of the leased premises or the exercise of its activity in said premises.

  Consequently, Lessor may not incur any liability in the event of denial or delay in obtaining these approvals.

  Lessee must pay all amounts, fees, taxes and other levies related to this fitting out, use or activity.

V.3. Obligations relative to establishment of the computer server.

If Lessee uses a computer network, it must install its server in the mechanical room located upstairs in the left wing of the building, unless it equips its private premises with an air conditioning system appropriate for the installation of a computer server.
All lessees in the building have shared access to the mechanical room. In this framework, Lessee is expressly prohibited *from* accessing the server of each of the other lessees located in the mechanical room.

Lessee further agrees to designate one person who, alone, shall be authorized to gain access to this mechanical room, with the stipulation that each entrance is monitored individually through the centralized building management.

Lessor must be informed in advance of all entries into the mechanical room. This information must be provided a minimum of one (1) hour prior to accessing said mechanical room, via e-mail sent to the following address: new.horizons.france@gmail.com.

Lessee shall however have the opportunity to request entry in the mechanical room with Lessor present. This entry shall only be possible from 9 a.m. to 5 p.m. without interruption on business days and subject to written notification of Lessor a minimum of forty-eight (48) hours in advance.

The person designated by Lessee to enter the mechanical room may also be contacted by the other lessees, in case of emergency only, at any time. If the designated person is not available, Lessee must inform the other lessees of the designation of another person whose contact information it will provide to them. If it is unable to reach the person designated in this manner by Lessee, Lessor is expressly authorized to take any measure required by the situation.

Any entry in the mechanical room by Lessee or by any of its employees or representatives in breach of the rules defined above will trigger the liability of Lessee.

Lessee waives all appeals for liability or claims against Lessor, and all representatives of Lessor, and their insurers and agrees to obtain the same waivers from all insurers in case of entry into the mechanical room in breach of the access rules defined by this clause.

V.4. Obligation to keep the premises open and filled

Lessee must maintain the premises in constant use, subject to potential closure during the annual paid leave period or for work.

Lessee shall fill the premises with sufficient furnishings for their normal use, in order to guarantee the payment of three (3) months of rent and performance of the clauses and conditions of the lease.

V.5. Premises visit

V.5.1 <u>During the lease</u>

Lessee must allow Lessor, its representative, architects and all other lessees and workers to enter the leased premises and inspect them in order to observe their condition, whenever this appears necessary, without the visits able to be excessive, provided there is a minimum of twenty-four (24) hours advance notice, except in emergency cases. It must also allow workers who have to perform work to enter the premises.

Lessee must allow a banner or sign to be affixed to the façade of the leased premises indicating that the premises are for rent, as well as the name, address and telephone number of the person responsible for the leasing.

V.5.2 <u>In the event of sale of the building or re-leasing at the end of the lease</u>

Subject to the terms of Clause XV below of this instrument, if the building is put up for sale, Lessee must allow visits to the premises from 9 a.m. to 5 p.m. without interruption on business days.

Lessee must allow a banner or sign to be affixed to the façade of the leased premises indicating that the premises are for sale, as well as the name, address and telephone number of the person responsible for the sale.

V.6. Miscellaneous obligations.

Lessee agrees to ensure compliance with the total ban on smoking inside the entirety of the building, including the common areas.

Lessee further agrees to prohibit access to the parking reserved for customers by its employees or any person working under its responsibility, and to reserve its use strictly for its customers and those of the other lessees in the building owned by Lessor.

If Lessee installs coffee machines or other miscellaneous fixtures in the premises that are the subject of this instrument, it agrees to protect the floor coverings to avoid the appearance of stains, the cleaning of which Lessee must handle, in any case.

In addition, Lessee agrees not to obstruct or occupy, even temporarily, the areas of the building not included in this lease, and specifically the building's lobby.

Lessor authorizes Lessee to affix a plaque identifying Lessee on the outside intercom. Other signage, signs or advertising on or around the building is prohibited.

Lessee agrees, on the expiration of this commercial lease, to uninstall the aforementioned signage and return the premises to their previous condition.

VI. - OBLIGATIONS OF LESSOR

VI.1 Hidden defects

Lessor shall not be bound to guarantee hidden defects that may affect the ground, basement or buildings.

VI.2 Responsibilities and recourse

Lessee waives all actions for compensation or claims against Lessor, and all representatives of Lessor and their insurers, and agrees to obtain the same waivers from all insurers for the following cases:

- In the case of theft, attempted theft, any criminal offense or unlawful act of which Lessee could be victim in the leased premises of the building. Lessee expressly waives the benefit of Article 1719, paragraph 3 of the Civil Code, with Lessor assuming no obligation for security.

- In case of any irregularities, improper operation or interruption of the water, electricity or telephone, air conditioning, electricity generators of all computer systems, if any, [and] more generally the group services and common equipment of the building or specific to the leased premises.

- In case of modification or elimination of the common services.

- In case of damage caused to the leased premises and/or to any furnishings there as a result of leaks, [water] infiltration, moisture or other circumstances.

- In case of actions by other occupants of the building, their personnel, vendors and customers, all third parties in general that cause damage, Lessee specifically waives all recourse against Lessor based on Article 1719, paragraph 3, of the Civil Code.

- In case of accidents occurring in the leased premises or due to the leased premises during the lease, irrespective of the cause. It shall be personally responsible for and cover the costs of all civil liability arising from this with regard to its personnel, Lessor or third parties, without Lessor able to be concerned or sued for this reason.

- In case of a flaw or defect in the leased premises, Lessee specifically waives invoking the provisions of Articles 1719 and 1721 of the Civil Code.

Moreover, it is expressly agreed that:

- Lessee shall handle personally, without recourse against Lessor, all damage caused to the premises by turmoil, disturbances, strikes, civil war and any disruption in use arising from them.

- In case of expropriation for public use, Lessee may not make any claims against Lessor, and all rights of said Lessee vis-à-vis the government or expropriating body shall be reserved.

VII. - OBLIGATIONS OF THE PARTIES RELATED TO ESTABLISHMENT OF CENTRALIZED BUILDING MANAGEMENT

VII.1. Remote control of centralized building management

Lessee is hereby advised that some specific technical functions (air conditioning, lighting, alarms, blinds, gate, etc.) are controlled by a centralized building management system.

For this purpose, when Lessee takes final possession of the premises that are the subject of this lease, it shall be given ten (10) remote controls enabling control of these various functions as well as a written procedure for use.

Any damage, destruction or loss of one of these remote controls must be reported to Lessor, which shall provide a new remote control to Lessee ***after the latter reimburses Lessor for the cost of the repair or replacement of the previous remote control*** *(current rate in effect: €50 EOT).*

VII.2. Alarm.

Lessee is also advised that the premises that are the subject of this instrument are protected by an alarm linked to the SECURITAS video surveillance company, the triggering of which is conditioned by the complete closure of all exits of the building.

The obligations related to this alarm are the subject of a written procedure which shall be provided to Lessee when it effectively takes possession of the premises that are the subject of this instrument

VIII. -INSURANCE

- Lessee must maintain constant insurance against the risks of fire, explosion, theft, water damage and against risks related to the lease and appeals of neighbors for the leased premises that are the subject of this instrument as well as the furnishings and commercial and industrial equipment, keeping the leased premises full, and doing so for the entire term of this lease, with a known solvable French or foreign insurance company. For this purpose, it must pay the premiums regularly and prove all of this upon first request of Lessor.

- Lessee must also insure any computer server it has installed in the mechanical room in accordance with this instrument, as well as any antennas that it may have installed on the roof of the building.

- The policy must contain a waiver by the insurance company of all appeals against Lessor, all representatives of Lessor, all persons with ownership or possession rights to the building or all other parts of the building, or the insurers of the aforementioned persons, for the portion of the damage or harm for which the latter parties could be responsible for any reason whatsoever.

- Lessee expressly waives all appeals and any actions whatsoever against the aforementioned persons and their insurers due to the aforementioned damage or denial of possession of the leased premises.

- If the activity performed by Lessee and/or work carried out by it in accordance with the provisions of this lease as an exception leads to additional insurance premiums for Lessor or for the other lessees in the building or neighbors, Lessee would be bound to both compensate Lessor for the amount of the additional premium paid and hold it harmless against all claims of the other lessees or neighbors.

IX. - DESTRUCTION OF THE LEASED PREMISES

If the premises that are the subject of this commercial lease are destroyed entirely due to age, construction defects, acts of war, civil war, disturbances, accident or any other cause independent of the will of Lessor, this commercial lease shall be terminated automatically without compensation.

If, however, the leased premises are destroyed or rendered only partially unusable, Lessee may only receive a reduction in the rent based on the areas destroyed, with the exclusion of termination of the lease.

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X. - TRANSFER OF THE LEASE - SUBLEASING

With the exception of the buyer of its business or company, Lessee may not sublease in whole or part, or transfer or contribute its right to this lease without the prior express written consent of Lessor. In the case of transfer or sublease, Lessee shall act as a guarantor and be jointly and severally liable with its transferee or sublessee for the payment of the rent and performance of the conditions of the lease, and the joint and several liability obligation shall extend to all successive transferees and sublessees, with the stipulation that in the framework of the transfer, this joint guarantee shall extend for a limit of three (3) years from the transfer of this lease.

In all cases, no contribution or transfer may be made if rent or additional fees are owed.

Furthermore, any transfer or sublease must be carried out through rent equivalent to that established above, payable directly to Lessor and it must be made through a private agreement to which Lessor shall be called and an original of this agreement must be provided to it at no charge.

In the case of partial subleasing, the leased premises are an indivisible whole in the common intent of the Parties, as a result, upon expiration of the lease for any reason whatsoever, specifically termination, nonrenewal, [or] departure of Lessee, it is expressly agreed that the sublessees may not claim a right to renew their sublease and must quit the premises without any form of compensation. Lessee remaining guarantor with joint and several liability with its sublessees for compliance with and performance of this instrument, it shall personally handle relations with them so that Lessor cannot be concerned or sought out in any manner whatsoever.

In the case of subleasing in whole or part, the term of the sublease may not in any case exceed the term of this lease.

Lessor may not challenge the sublease or subleases, which shall contain an express waiver by the sublessee or partial sublessees of any action and rights (specifically to renewal of the sublease) vis-à-vis Lessor.

In addition, Lessee is bound to assume vis-à-vis its total or partial sublessee(s) the payment of any compensation, of any nature whatsoever, in particular that which may be due for delivery of the premises.

If subleases or transfers were carried out, the waiver of any appeal against Lessor should appear in the insurance contracts of the sublessees and transferees.

In all cases where Lessor does not participate in the agreement, regardless of the reason, a copy of the sublease agreement must be sent to it within fifteen (15) days after it is executed.

XI. - RETURN OF THE PREMISES

One (1) month prior to moving out, Lessee must provide proof of payment by presenting receipts, prior to any removal, even partial, of the furnishings, of the contributions for which it is responsible, for both past months and for the current month, and of all rent and charges periods, and provide its future address to Lessor.

Lessee must also return the leased premises to perfect condition in terms of cleanliness and lease-related repairs and must pay the amount of any repairs that could be due.

For this purpose, no later than fifteen (15) days prior to the expiration date of the lease or the date of its effective departure, if another date is necessary, an inter partes schedule of condition of the leased property shall be established with a bailiff present, which shall contain a summary of the repairs to be made by Lessee.

Lessee must have all these repairs made at its expense prior to the planned date of its effective departure, under the control of Lessor's architect.
If Lessee does not make the repairs within this period, or it does not respond to Lessor's notice or refuses to sign the condition of leased property, Lessor shall have the amount of said repairs calculated by its architect and Lessee must then pay this to it [Lessor] immediately.

In this same scenario, Lessee would owe Lessor compensation equal to the rent and charges calculated *pro rata,* during the time the premises are tied up in order to make the repairs for which Lessee is responsible.

XII. - JOINT AND SEVERAL LIABILITY

The obligations of Lessee arising from this lease constitute a joint and several liability for all its successors and for all persons bound to the payment and performance.

XIII. -VOID CLAUSE

This lease shall be terminated automatically in the case of failure to pay on its exact due date a single rent term or any rent reminder following an increase in it, such as failure to reimburse expenses, lease-related fees, taxes, charges or services that constitute its additional fees, or finally failure to perform any clause or condition of this lease or the co-ownership regulations that the Parties' agreement also makes, or even nonperformance of the obligations imposed on Lessee by law or regulations, and one (1) month after an order to pay or a served notice that goes unanswered.

If, in this case, Lessee refuses to quit the leased premises, its expulsion, and that of all occupants accordingly, could occur immediately by simple provisional order handed down by the President of the competent Regional Court, the jurisdiction of which is expressly assigned in accordance with this instrument.

XIV. - PENALTY CLAUSE

Failure to pay the rent, additional expenses and amounts due at for each term, fifteen (15) days after receipt by Lessee of a registered letter with acknowledgement of receipt remains unanswered, the case shall be transferred to a bailiff and the amounts owed automatically increased by ten percent (10%) as a flat-rate allowance for legal expenses, and irrespective of any formal notice and collection expenses.

In the case of automatic or judicial termination, the full amount of the advance rent and the security deposit shall be acquired by Lessor for the purpose of flat-rate and irreducible compensation of the damage alone arising from this termination, without prejudice to other compensation owed or damages to compensate for the damage arising from the actions of Lessee, irrespective of whether it caused this termination.

Compensation for occupation owed by Lessee if it does not vacate the premises after automatic or judicial termination or expiration of the lease shall be established as a flat rate based on the total rent for the last year of leasing increased by fifty percent (50%).

XV. - PREFERENTIAL RIGHT

It is noted that pursuant to Article L.145-46-1 of the Commercial Code, Lessees of premises to be used commercial or traditional production purposes shall benefit from a pre-emption right if the leased premises are sold.

In this scenario, and if Lessor plans to sell the premises that are the subject of this lease, it must comply with the pre-emption right established for Lessee under the terms described in Article L.145-46-1 of the Commercial Code fully reproduced below:

"When the owner of premises to be used commercial or traditional production purposes plans to sell them, it shall so inform the Lessee by registered letter with acknowledgement of receipt, or in person, against receipt or signature. In order to be valid, this notification must indicate the price and terms of the planned sale. It can be considered an offer for sale to the Lessee. The latter shall have a period of one month from receipt of this offer to decide. If accepted, the Lessee shall have two months commencing on the date its answer is sent to Lessor to carry out the sale. If it provides notice in its response of its intention to use a loan, the acceptance by Lessee of the offer for sale is conditional to obtaining the loan, and the period to carry out the sale becomes four months.

If, at the end of this period, the sale has not been carried out, the acceptance of the offer for sale is non-binding.

If the owner decides to sell under conditions or at a price that is more advantageous for the buyer, the notary must, when Lessor has not done so previously, notify Lessee of these conditions and this price in the manner set forth in the first paragraph, under penalty of the voiding the sale. This notification can be considered an offer for sale to Lessee. This offer for sale is valid for a period of one month from its receipt. Offers not accepted within this period are null and void.

Lessees that accept an offer notified in this manner shall have a period of two months from the date their response is sent to Lessor or the notary to establish the contract of sale. If it provides notice in its response of its intention to use a loan, the acceptance by Lessee of the offer for sale is conditional to obtaining the loan, and the period to carry out the sale becomes four months. If, at the end of this period, the sale has not been carried out, the acceptance of the offer for sale is non-binding.

The provisions of the first four paragraphs of this article shall be reproduced in each notification in order to be valid.

This clause is not applicable in case of single sale of multiple units in a commercial group, single sale of different commercial units or sale of a commercial unit under co-ownership in a commercial group. It is also not applicable to the global sale of a building including commercial premises or to the sale of premises to the spouse of the Lessor, or to an ancestor or descendant of the Lessor or of his/her spouse."

XVI. - REGISTRATION

The Parties do not require registration of this instrument.

XVII. - RISKS AND POLLUTION

In accordance with the provisions of Articles L. 125-5 and R. 125-24 of the Environmental Code, Lessor has provided to Lessee on this date a statement of risks and pollution (to which items are attached that make it possible to locate the building with respect to the risks considered), established in accordance with provisions above. This statement appears in **Exhibit 4** to this instrument.

Lessee duly notes this information, declares to be satisfied with it and to personally handle it, without appeal to Lessor, and consequently waives all requests for termination of the lease, compensation or reduction of the rent.

XVIII. - ENERGY PERFORMANCE DIAGNOSIS

In accordance with the provisions of Article L. 134-3-1 of the Building and Housing Code, Lessor has provided to lessee on this date, which acknowledges it, an Energy Performance Diagnosis (EPD) – as defined in Article L. 134-1

of said code – for the leased premises that are the subject of this instrument. This diagnosis appears in **Exhibit 5** to this instrument.

Lessee acknowledges now that the information contained in the Energy Performance Diagnosis is of informational value only, and consequently, it cannot be used against Lessor.

XIX. - TECHNICAL ASBESTOS ASSESSMENT

Lessor declares that the provisions of Decree No. 93-97 of February 7, 1996, No. 97-855 of September 12, 1997, No. 2001-840 of September 13, 2011 and No. 2002-839 of May 3, 2002 relative to protecting the population against the health risks related to asbestos exposure in buildings do not apply to the building that is the subject of this lease, and this, insofar as the building permit was issued after July 1, 1997, which Lessee expressly acknowledges.

XX. - EXHIBITS

The exhibits listed below are attached to this lease. They are part and parcel to the lease, with which they form an indivisible whole:

Exhibit 1: Plan of the leased premises
Exhibit 2: Plan of parking spaces
Exhibit 3: Specific and limited list of the charges attributable to Lessee
Exhibit 4: Statement of risks and pollution
Exhibit 5: Energy Performance Diagnosis

Executed in MONTBONNOT SAINT MARTIN
On *September 30*, 2021
In two (2) counterparts

NEW HORIZONS
Represented by
Mr. Chris MARNOCH
/s/ Chris Marnoch

SILVACO France
Represented by
Mr. Firas MOHAMED MONADE
/s/ Firas Mohamed Monade

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Exhibits Attached

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SILVACO GROUP, INC.

EXECUTIVE SEVERANCE PLAN
AND SUMMARY PLAN DESCRIPTION

This Executive Severance Plan (this "Plan") is adopted by Silvaco Group, Inc., a Delaware corporation (the "Company"), effective (the "Effective Date") on the date approved by the Board of Directors of the Company (the "Board"). This Plan replaces in its entirety any prior severance agreements, policies, understanding, or plans, agreed to by any Executive and the Company. For the avoidance of doubt, this Plan controls over any severance benefits, equity award agreements, employee benefit plans, or other conflicting terms included or referenced within an Executive's employment offer/agreement or continued employment agreement(s), except as set forth in Section 17(a).

The Compensation Committee (the "Committee") of the Board may, in its sole and absolute discretion, designate executive employees of the Company to participate in the Plan. For purposes of this Plan, all references to the Company shall include the Company's affiliates and subsidiaries unless the context otherwise requires.

This Plan is designed to be an unfunded "employee welfare benefit plan," as defined in Section 3(1) of ERISA and, accordingly, the Plan is governed by ERISA. This document, together with the Participation Agreement, constitutes the official Plan document and summary plan description.

RECITALS

The Committee realizes it is beneficial for all parties that the employment separation process and associated benefits be as clear as possible between the Executive and the Company so misunderstandings can be avoided, whether that separation is the result of an involuntary termination as a result of a Change in Control or otherwise. The Committee has also determined that it is in the best interests of the Company and its stockholders to assure that the Company shall have the continued dedication and objectivity of the Executive, notwithstanding the possibility, threat or occurrence of a CIC of the Company.

Certain capitalized terms used in this Plan are defined in Section 9 below.

PLAN

1. General.

(a) Plan Administration. The Plan shall be administered by the Committee. The Committee shall have the authority to interpret the Plan, designate executive employees of the Company to participate in the Plan, and to make any and all other determinations necessary or advisable for the administration of the Plan. The Committee shall have the authority to amend the Plan at any time and for any reason; provided, however, that except as otherwise permitted by the Plan or as required to comply with any applicable law, regulation or rule, any amendment thereof shall not have a material adverse effect on an Executive's benefits under the Plan without the Executive's consent. The Committee may delegate any and all of its powers and responsibilities hereunder to other persons and such persons shall have the full authority to exercise the duties so delegated.

2. Participation. The Committee will select the executive employees who will be eligible to participate in the Plan and will deliver a letter agreement to each such executive employee, substantially in the form attached hereto as Exhibit A (the "Participation Agreement"), informing the executive

employee that he or she is eligible to participate in the Plan. Each executive employee who receives a Participation Agreement and makes the representations in such Participation Agreement by returning the signed and unmodified Participation Agreement within 30 days of the date of the Participation Agreement (unless specified otherwise in the Participation Agreement) to the General Counsel of the Company (unless specified otherwise in the Participation Agreement) shall become a participant in the Plan (each such individual is referred to as an "Executive"). In addition, as a pre-condition to the Executive's participation on the Plan, the Executive will be required to have executed the Employee Arbitration Agreement in the form attached hereto as Exhibit B.

3. At-Will Employment. An Executive's employment with the Company is "at-will" employment and may be terminated by the Company at any time with or without Cause or notice. This Plan does not create any right to continued employment. Further, the Executive's job performance or promotions, commendations, bonuses or the like from the Company do not give rise to or in any way serve as the basis for modification, amendment, or extension, by implication or otherwise, of his or her employment with the Company.

4. IPO Benefit. If Executive becomes a participant of the Plan prior to the closing of an IPO prior to a Change of Control, the Executive shall be entitled to accelerated time-based vesting of the Executive's Specified IPO Percentage set forth in Executive's Participation Agreement of the then unvested portion of the Executive's RSU award(s) outstanding as of the closing of the IPO, subject to the Executive's continued employment through such closing. The unvested portion of the RSU award(s) that is not subject to acceleration of time-based vesting shall remain outstanding subject to continued time-based vesting. This benefit shall not apply to RSUs which have a vesting start date at or following the closing of an IPO.

5. Non-Change in Control Termination. If the Executive's employment with the Company is terminated by the Company without Cause or by the Executive for Non-CIC Good Reason (a "Non-CIC Involuntary Termination"), such termination does not occur within the CIC Period, and the Executive complies with the terms of this Plan and the Participation Agreement, Executive shall be eligible to receive the following payments and benefits.

(a) A cash severance payment equal to the sum of the Executive's Monthly Base Salary *multiplied by* the number of months set forth in the Executive's Participation Agreement plus the Pro Rata Full Target Bonus Amount. Such cash severance payment shall be paid in two equal payments each subject to standard payroll deductions and withholdings, with the one-half paid on the first payroll date following the date the Release executed by the Executive and returned to the Company in accordance with Section 8 becomes effective (the effective date of the Release, the "Release Date") and one-half paid on the first payroll date following the six-month anniversary following the Release Date, but in no event shall any such payment be made later than March 15th of the calendar year following the calendar year in which the Non-CIC Involuntary Termination occurs.

(b) The Company shall, at the Company's expense, for the period of time ending on the earlier to occur of (i) the completion of the number of months set forth in the Executive's Participation Agreement, (ii) the expiration of the Participant's eligibility for the continuation coverage under COBRA and (iii) the date on which the Executive becomes eligible to receive healthcare coverage from a subsequent employer or other source (the "Benefit Continuation Period"), pay for the entire cost of continued coverage under the Company's group medical plans pursuant to COBRA as if the Executive's employment had not been terminated, or reimburse the cost of such medical coverage, provided that (A) such Executive completes and timely files all necessary COBRA election documentation, which will be

sent to such Executive after the date of termination of employment, and (B) in the event the Company provides reimbursement rather than direct payment to the carrier(s), during any COBRA period such Executive continues to make all required premium payments required by COBRA. The Company may include the fair market value of the cost of such coverage in the Executive's taxable income. Notwithstanding the foregoing, if any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the Benefit Continuation Period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), or the Company is otherwise unable to continue to cover such Executive under its group health plans without a fine or penalty to the Company or the Executive under applicable law (including without limitation, Section 2716 of the Public Health Service Act) or due to unwillingness of the applicable group health plan's insurer to allow such coverage, then, in either case, an amount equal to the COBRA premium as in effect as of such date shall thereafter be paid to such Executive in substantially equal monthly installments over the remainder of the Benefit Continuation Period (which payments will be taxable compensation to the Executive) and which shall be paid regardless of any Executive election of COBRA coverage or continued eligibility for COBRA coverage. For purposes of this Section, any applicable COBRA premiums that are paid by the Company shall not include any amounts payable by executive under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are the Executive's sole responsibility. Each Executive agrees to promptly notify the Company as soon as the Executive becomes eligible for health insurance coverage in connection with new employment or self-employment or from another source.

(c) The then-unvested portion of any of such Executive's Company equity incentive awards that were granted pursuant to the Stock Plans that are outstanding immediately prior to such termination of employment and that vest solely based on the passage of time subject to continued service ("Unvested Equity Awards") shall be credited with additional time-based vesting immediately prior to such termination equal to the Executive's Specified Non-CIC Percentage set forth in the Executive's Participation Agreement multiplied by the amount of such Unvested Equity Awards (but each such award shall not vest in excess of 100% of the shares subject to the award); provided, that if the Executive terminates employment before the date identified in the termination notice provided by the Company (unless this condition is waived by the Company) or the Executive fails to timely execute or revokes the Release, all such accelerated vested awards shall be forfeited upon such failure or revocation.

6. CIC Termination. If (i) the Executive's employment with the Company is terminated by the Executive with CIC Good Reason or by the Company without Cause, (ii) such termination occurs within the CIC Period (a "CIC Involuntary Termination"), and (iii) the Executive complies with the terms of this Plan and the Participation Agreement, the Executive shall be eligible to receive the following payments and benefits.

(a) A cash severance payment equal to the sum of the Executive's Monthly Base Salary *multiplied by* the number of months set forth in the Executive's Participation Agreement plus the Pro Rata Full Target Bonus Amount. Such cash severance payment shall be paid, subject to standard payroll deductions and withholdings on the first payroll date following the date the Release executed by the Executive and returned to the Company in accordance with Section 8 becomes effective, but in no event shall any such payment be made later than March 15th of the calendar year following the calendar year in which the CIC Involuntary Termination occurs.

(b) The Company shall, at the Company's expense, for the period of time ending on the earlier to occur of (i) the completion of the number of months set forth in the Executive's Participation Agreement, (ii) the expiration of the Participant's eligibility for the continuation coverage under COBRA and (iii) the date on which the Executive becomes eligible to receive healthcare coverage from a

subsequent employer or other source (the "CIC Benefit Continuation Period"), pay for the entire cost of continued coverage through the Company's group medical plans pursuant to COBRA as if the Executive's employment had not been terminated, or reimburse the cost of such medical coverage, provided that (A) such Executive completes and timely files all necessary COBRA election documentation, which will be sent to such Executive after the date of termination of employment, and (B) in the event the Company provides reimbursement rather than direct payment to the carrier(s), during any COBRA period, such Executive continues to make all required premium payments required by COBRA. The Company may include the fair market value of the cost of such coverage in the Executive's taxable income. Notwithstanding the foregoing, if (A) an Executive becomes ineligible for COBRA coverage during the CIC Benefit Continuation Period, (B) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the CIC Benefit Continuation Period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), or (C) the Company is otherwise unable to continue to cover such Executive under its group health plans without a fine or penalty to the Company or the Executive under applicable law (including without limitation, Section 2716 of the Public Health Service Act) or due to unwillingness of the applicable group health plan's insurer to allow such coverage, then, in each case, an amount equal to the COBRA premium as in effect as of such date shall thereafter be paid to such Executive in substantially equal monthly installments over the remainder of the CIC Benefit Continuation Period (which payments will be taxable compensation to the Executive) and which shall be paid regardless of any Executive election of COBRA coverage or continued eligibility for COBRA coverage. For purposes of this Section, any applicable COBRA premiums that are paid by the Company shall not include any amounts payable by executive under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are the Executive's sole responsibility. Executive agrees to promptly notify the Company as soon as the Executive become eligible for health insurance coverage in connection with new employment or self-employment or from another source.

(c) Executive's Unvested Equity Awards shall be credited with additional time-based vesting immediately prior to such termination equal to the Executive's Specified CIC Percentage set forth in the Executive's Participation Agreement multiplied by the amount of such Unvested Equity Awards (but each such award shall not vest in excess of 100% of the shares subject to the award); provided, that if the Executive terminates employment before the date identified in the termination notice provided by the Company (unless this condition is waived by the Company) or the Executive fails to timely execute or revokes the Release, all such accelerated vested awards shall be forfeited upon such failure or revocation.

To the extent an Executive is entitled to any payments or benefits set forth in this Section 6, such Executive shall not be entitled to any payments or benefits set forth in Section 5, such that there will be no duplication of benefits provided under the Plan. If an Executive becomes eligible for severance benefits under both Section 5 and Section 6, the Executive shall receive the benefits set forth in this 5 reduced by any benefits previously provided under Section 5.

7. Other Terminations. In the event an Executive's employment with the Company is terminated in any circumstance not addressed in Section 5 or Section 6 (for example, if the Executive's employment is terminated by the Company for Cause OR the Executive voluntarily terminates or resigns employment without Non-CIC Good Reason or CIC Good Reason, or in the event of the Executive's death or disability), the Executive (or the Executive's estate, as applicable) shall not be entitled to any benefits under the Plan.

8. Conditions to Receiving Benefits. An Executive's receipt of the benefits in Sections 5 and 6 of this Plan will be conditioned upon and subject in all cases to:

(a) The Executive executing, delivering to the Company and allowing to become effective, a waiver and release of claims in a form substantially similar to that attached hereto as Exhibit C (the "Release"), within the applicable deadline set forth therein following the Executive's Non-CIC Involuntary Termination or CIC Involuntary Termination and permitting the Release to become effective in accordance with its terms, which effective date of the Release may not be later than 60 days following the date of the Executive's Non-CIC Involuntary Termination or CIC Involuntary Termination, as applicable.

(b) The Executive's compliance with the Executive's continuing obligations to the Company under this Plan and any other written agreement(s), including but not limited to, any applicable invention assignment and confidentiality agreement or similar agreement between the Company and the Executive;

(c) The Executive's resignation from all offices, directorships, trusteeships, and Board positions then held by the Executive at the Company and its subsidiaries and affiliates, with such resignations to be effective upon the date of the Executive's Non-CIC Involuntary Termination or CIC Involuntary Termination, as applicable, unless otherwise requested by the Company.

9. Definitions.

(a) Cause. Solely for purposes of the Plan, "Cause" means:

(i) the Executive's willful failure to materially perform the Executive's duties;

(ii) the Executive's material violation of any of the Company's written employment policies or material breach of any written agreement or covenant with the Company, including, but not limited to, any applicable invention assignment and confidentiality agreement or similar agreement between the Company and the Executive;

(iii) the commission by the Executive of acts satisfying the elements of (A) any felony or (B) a misdemeanor involving moral turpitude, deceit, dishonesty or fraud;

(iv) any material violation of the Company's code of conduct (which the Executive will certify they have read and understood on a yearly basis) or other written employment policies, or misconduct by the Executive that would reasonably be expected to result in material injury or reputational harm to the Company or any of its subsidiaries or affiliates if the Executive were to continue to be employed in the same position; or

(v) the Executive's willful failure to cooperate with an investigation authorized by the Company or initiated by a governmental or regulatory authority, in either case, relating to the Company, its business, or any of its directors, officers or employees.

(b) Change in Control or CIC. Solely for purposes of the Plan, “Change in Control” or “CIC” shall mean the occurrence of any of the following events:

(i) the consummation of a merger or consolidation of the Company with or into another entity or any other corporate reorganization, if persons who were not stockholders of the Company immediately prior to such merger, consolidation or other reorganization own immediately after such merger, consolidation or other reorganization fifty percent (50%) or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity;

(ii) the consummation of the sale, transfer or other disposition of all or substantially all of the Company’s assets or the stockholders of the Company approve a plan of complete liquidation of the Company; or

(iii) a transaction or series of transactions by which a “person” (as defined below) by the acquisition or aggregation of securities becomes the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the combined voting power of the Company’s then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the “Base Capital Stock”); except that any change in the relative beneficial ownership of the Company’s securities by any person resulting solely from a reduction in the aggregate number of outstanding shares of Base Capital Stock, and any decrease thereafter in such person’s ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person’s beneficial ownership of any securities of the Company.

For purposes of the definition of “Change of Control” or “CIC”, the term “person” shall have the same meaning as when used in sections 13(d) and 14(d) of the Exchange Act but shall exclude (1) a trustee or other fiduciary holding securities under an employee benefit plan maintained by the Company or a Parent or Subsidiary, (2) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of the Stock, and (3) Katherine S. Ngai-Pesic (the “Principal Stockholder”) or Family Members of the Principal Stockholder (as defined below), any custodian or trustee wholly for the account or benefit of the Principal Stockholder or any such Family Members, or any trust, partnership, limited liability company or other entity wholly for the benefit of, or the ownership interests of which are owned wholly by, the Principal Stockholder or any such Family Members. For purposes herein, a “Family Member” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, domestic partner, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships.

Notwithstanding the foregoing, the term “Change in Control” or “CIC” shall not include (a) a transaction the sole purpose of which is to change the state of the Company’s incorporation, (b) a transaction the sole purpose of which is to form a holding company that will be owned in substantially the same proportions by the persons who held the Company’s securities immediately before such transaction, or (c) a transaction the sole purpose of which is to make an initial public offering of the Company’s Stock.

(c) CIC Period. Solely for purposes of the Plan, "CIC Period" means the period beginning on the date that is three (3) months prior to the consummation of a CIC and ending on the twelve (12) month anniversary of the consummation of a CIC.

(d) COBRA. COBRA means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, and the validly issued regulations and other binding guidance thereunder and any similar statute or law under state law.

(e) Code. Code means the Internal Revenue Code of 1986, as amended, and the validly issued regulations and other binding guidance thereunder.

(f) CIC Good Reason. Solely for purposes of the Plan, "CIC Good Reason" means the occurrence of one or more of the following without the Executive's written consent:

(i) a material reduction by the Company of the Executive's base salary as in effect immediately prior to such reduction (other than a proportionate reduction in connection with a general reduction of compensation to similarly situated Executives not to exceed 10%);

(ii) a non-temporary relocation of the Executive's business office to a location that increases the Executive's one-way commute by more than 50 miles from the primary location at which the Executive performed duties immediately prior to such relocation, other than a relocation to the Company's primary location in or within 15 miles of Santa Clara, California with at least one-hundred twenty (120) days prior notice to Executive;

(iii) a material diminution in the Executive's responsibilities, title, duties, and reporting lines; or

(iv) a material breach by the Company or any successor entity of the Plan or any employment agreement between the Company and the Executive.

In order for an event to qualify as "CIC Good Reason," the Executive must provide the Company (or its successor) with written notice of the acts or omissions constituting the grounds for "CIC Good Reason" within sixty (60) days of the initial existence of the grounds for "CIC Good Reason" and a reasonable cure period of thirty (30) days following the date of written notice (the "CIC Cure Period"), such grounds must not have been cured during such time, and the Executive must resign within thirty (30) days following the end of the CIC Cure Period.

(g) ERISA. ERISA means the Employee Retirement Income Security Act of 1974, as amended, and the validly issued regulations and other binding guidance thereunder.

(h) Exchange Act. Exchange Act means the United States Securities Exchange Act of 1934, as amended, and the validly issued regulations and other binding guidance thereunder.

(i) IPO. For purposes of the Plan, "IPO" means an underwritten public offering by the Company of its securities that is registered under the United States Securities Act of 1933, as amended.

(j) Monthly Base Salary. Monthly Base Salary means the Executive's annual base salary in effect immediately prior to the date of the qualifying termination of employment, ignoring any reduction that forms the basis for Non-CIC Good Reason or CIC Good Reason, as applicable, divided by twelve (12).

(k) Pro-Rata Full Target Bonus Amount. Pro-Rata Full Target Bonus Amount means the Executive's pro-rata amount of her or his full target annual bonus in the performance year of

termination assuming 100% of the target was achieved for such performance year multiplied by the quotient of the number of days Executive was employed by the Company in the performance year prior to the termination date divided by 365.

(l) Non-CIC Good Reason. Solely for purposes of the Plan, "Non-CIC Good Reason" means the occurrence of one or more of the following without the Executive's written consent:

(i) a material reduction by the Company of the Executive's base salary as in effect immediately prior to such reduction (other than a proportionate reduction in connection with a general reduction of compensation to similarly situated Executives not to exceed 10%); or

(ii) a non-temporary relocation of the Executive's business office to a location that increases the Executive's one-way commute by more than 50 miles from the primary location at which the Executive performed duties immediately prior to such relocation, other than a relocation to the Company's primary location in or within 15 miles of Santa Clara, California with at least one hundred twenty (120) days prior notice to Executive; or

(iii) a material breach by the Company or any successor entity of the Plan or any employment agreement between the Company and the Executive.

In order for an event to qualify as "Non-CIC Good Reason," the Executive must provide the Company (or its successor) with written notice of the acts or omissions constituting the grounds for "Non-CIC Good Reason" within sixty (60) days of the initial existence of the grounds for "Non-CIC Good Reason" and a reasonable cure period of thirty (30) days following the date of written notice (the "Non-CIC Cure Period"), such grounds must not have been cured during such time, and the Executive must resign within thirty (30) days following the end of the Non-CIC Cure Period.

(m) Stock Plans. Solely for purposes of the Plan, "Stock Plans" means the Company's 2014 Stock Incentive Plan, as amended from time to time, or its successor(s).

10. Limitation on Payments.

(a) In the event that the severance and other benefits provided for in this Plan or otherwise payable to the Executive as a result of a CIC Termination (i) constitute "parachute payments" within the meaning of Section 280G of Code and (ii) but for this Section 10, would be subject to the excise tax imposed by Section 4999 of the Code, then the Executive's severance and other benefits shall be either: (A) delivered in full, or (B) delivered as to such lesser extent which would result in no portion of such severance and other benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the Executive on an after-tax basis, of the greatest amount of severance and other benefits, notwithstanding that all or some portion of such severance and other benefits may be taxable under Section 4999 of the Code.

(b) If a reduction in severance and other benefits constituting "parachute payments" as defined in Section 280G of the Code is necessary so that benefits are delivered to a lesser extent, reduction shall occur in the following manner:

(i) first a pro-rata reduction of cash payments subject to Section 409A of the Code as deferred compensation and cash payments not subject to Section 409A of the Code, and

(ii) second a pro rata cancellation of (A) equity-based compensation subject to Section 409A of the Code as deferred compensation and (B) equity-based compensation not subject to Section 409A of the Code.

Reduction in either cash payments or equity compensation benefits shall be made pro-rata between and among benefits which are subject to Section 409A of the Code and benefits which are exempt from Section 409A of the Code. In the event that the accelerated vesting of equity awards is to be cancelled, such vesting acceleration shall be cancelled in the reverse chronological order of the Executive's equity award grant dates.

(c) Unless the Company and the Executive otherwise agree in writing, any determination required under this Section 9 shall be made in writing by an accounting firm selected by the Company prior to the CIC (the "Accountants"), whose determination shall be conclusive and binding upon the Executive, the Company, and the acquiring company for all purposes. For purposes of making the calculations required by this Section 9, in consultation with and as approved by the Company immediately prior to the CIC, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section 9. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 9.

11. Section 409A. Notwithstanding anything to the contrary in this Plan, if the Company determines that the Executive is a "specified employee" within the meaning of Section 409A of the Code ("Section 409A") at the time of the Executive's termination of employment (other than due to death), then to the extent delayed commencement of any portion of the benefits to which the Executive is entitled pursuant to this Plan, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "Deferred Compensation Separation Benefits"), is required to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, then such benefits shall be delayed until the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of the Executive's termination of employment. All subsequent Deferred Compensation Separation Benefits, if any, shall be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if the Executive dies following the Executive's termination of employment but prior to the six (6) month anniversary of the Executive's termination of employment, then any payments delayed in accordance with this paragraph shall be payable in a lump sum as soon as administratively practicable after the date of the Executive's death and all other Deferred Compensation Separation Benefits shall be payable in accordance with the payment schedule applicable to each payment or benefit.

Each payment and benefit payable under this Plan is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). Notwithstanding anything to the contrary in this Plan, no Deferred Compensation Separation Benefits payable under this Plan shall be considered due or payable until and unless the Executive has a "separation from service" within the meaning of Section 409A and to the extent required by Section 409A, if the period during which an Executive may review and execute the Release begins in one taxable year and ends in the next taxable year, the Deferred Compensation Separation Benefits will be paid in the second taxable year. Similarly, no severance payable to the Executive pursuant to this Plan that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) shall be payable until the Executive has a "separation from service" within the meaning of Section 409A.

The foregoing provisions are intended to comply with the requirements of Section 409A so that none of this Plan's benefits shall be subject to the additional tax imposed under Section 409A, and any ambiguities herein shall be interpreted to so comply. The Company reserves the right to amend this Plan and to take such reasonable actions which are necessary, appropriate, or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to the Executive under Section 409A, provided that such amendment or action may not materially reduce the benefits provided or to be provided to the Executive under this Plan.

Notwithstanding anything herein to the contrary, the Company shall have no liability to the Executive or to any other person if the payments and benefits provided in this Plan that are intended to be exempt from or compliant with Section 409A are not so exempt or compliant, as applicable.

12. Successors.

(a) Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Plan and agree expressly to perform the obligations under this Plan in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Plan, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 12(a) or which becomes bound by the terms of this Plan by operation of law.

(b) Executive's Successors. The terms of this Plan and all rights of the Executive hereunder shall inure to the benefit of, and be enforceable by, the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

13. Notices. All notices, requests, demands and other communications called for hereunder shall be in writing and shall be deemed given as follows (a) if sent by email, when sent, provided that (i) the subject line of such email states that it is a notice delivered pursuant to this Plan and (ii) the sender of such email does not receive a written notification of delivery failure, (b) if sent by a well-established commercial overnight service, on the date of delivery, or, if earlier, one (1) day after being sent, (c) if sent by registered or certified mail, three (3) days after being mailed, return receipt requested, prepaid and addressed to the parties or their successors at the following addresses, or at such other addresses as the parties may later designate in writing:

If to the Company: Silvaco Group, Inc.
4701 Patrick Henry Drive, Building 23/24
Santa Clara, CA 95054
Attention: General Counsel

or to such other address or the attention of such other person as the recipient party has previously furnished to the other party in writing in accordance with this paragraph.

14. Claims, Inquiries and Appeals.

(a) Claim for Benefits. Any claim for benefits must be submitted to the Plan Administrator in writing by a claimant. The Plan Administrator is set forth below. If a claimant believes

that he or she has been incorrectly denied a benefit or has not received the proper benefit under the Plan, then the claimant may submit a signed, written claim to the Plan Administrator (or its authorized delegate). The claimant may review any pertinent documents, other than those that are legally-privileged. The claimant may also designate in writing an authorized representative to act on his or her behalf. The Plan Administrator shall be able to establish such rules, policies and procedures, consistent with ERISA and the Plan, as it may deem necessary or appropriate in carrying out its duties.

(b) Denial of Claims. The Plan Administrator will review the claimant's claim and notify the claimant of its decision in writing or electronically within ninety (90) days after the Plan Administrator receives the claim. If, however, special circumstances require an extension of time, then the Plan Administrator will notify the claimant prior to the end of the initial ninety (90)-day period informing him or her of the extension. Any extension will not exceed an additional ninety (90)-days from the end of the initial ninety (90)-day period.

In the event that any claim for benefits is denied in whole or in part, the Plan Administrator will provide the claimant with written or electronic notice of the denial of the claim, and of the claimant's right to review the denial. The notice of denial will be set forth in a manner designed to be understood by the claimant and will include the following:

(1) the specific reason or reasons for the denial;

(2) reference to the specific Plan provision(s) upon which the denial is based;

(3) a description of any additional information or material necessary for the claimant to perfect the review and an explanation of why such information or material is necessary; and

(4) an explanation of the Plan's review procedures and the time limits applicable to such procedures, including a statement of the claimant's right to bring a claim in arbitration, as described in section (d) below.

(c) Request for a Review. Any person (or that person's authorized representative) for whom a claim for benefits is denied, in whole or in part, may appeal the denial by submitting a request for a review to the Plan Administrator within 60 days after the claim is denied. A request for a review will be in writing and will be addressed to:

Silvaco Group, Inc.
4701 Patrick Henry Drive, Building 23/24
Santa Clara, CA 95054
Attention: General Counsel

A request for review must set forth all of the grounds on which it is based, all facts in support of the request and any other matters that the claimant feels are pertinent. The claimant (or the claimant's representative) will have the opportunity to submit (or the Plan Administrator may require the claimant to submit) written comments, documents, records, and other information relating to the claimant's claim. The claimant (or the claimant's representative) will be provided, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the claimant's claim (other than those that are legally-privileged). The review will take into account all documents, records and other information submitted by the claimant (or the claimant's representative)

relating to the claim, without regard to whether such information was submitted or considered in the initial benefit determination.

(d) Decision on Review. The Plan Administrator will act on each request for review within 60 days after receipt of the request, unless special circumstances require an extension of time (not to exceed an additional 60 days), for processing the request for a review. If an extension for review is required, written notice of the extension will be furnished to the claimant within the initial 60-day period. This notice of extension will describe the special circumstances necessitating the additional time and the date by which the Plan Administrator is to render its decision on the review. The Plan Administrator will give prompt, written or electronic notice of its decision to the claimant. In the event that the Plan Administrator confirms the denial of the claim for benefits, in whole or in part, the notice will set forth, in a manner designed to be understood by the claimant, the following:

(1) the specific reason or reasons for the denial;

(2) references to the specific Plan provisions upon which the denial is based;

(3) a statement that the claimant is entitled to receive, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to his or her claim; and

(4) a statement of the claimant's right to bring a claim in arbitration.

(e) Rules and Procedures. The Plan Administrator may establish such policies, rules and procedures, consistent with the Plan and with ERISA, as it deems necessary or appropriate in carrying out its fiduciary responsibilities in reviewing benefit claims. The Plan Administrator may require a claimant who wishes to submit additional information in connection with an appeal from the denial of benefits to do so at the claimant's own expense.

(f) Exhaustion of Remedies. No legal action for benefits under the Plan may be brought until the claimant (i) has submitted a written claim for benefits in accordance with the procedures described above, (ii) has been notified by the Plan Administrator that the claim is denied, (iii) has filed a written request for a review of the claim in accordance with the appeal procedure described above, and (iv) has been notified that the Plan Administrator has denied the appeal. Notwithstanding the foregoing, if the Plan Administrator does not respond to a claimant's claim or appeal within the relevant time limits, the claimant may bring a claim in arbitration for benefits under the Plan. In addition, no arbitration proceeding or any other action in law or equity shall be brought more than one (1) year after the Plan Administrator's affirmation of a denial of the claim or the expiration of the appeal decision period if no decision is issued (for purposes of clarification, including (without limitation) if the claimant never request such a decision) pursuant to the claims review procedures described above. This one (1)-year statute of limitations on arbitration or any other legal action for benefits under this Plan shall apply in any forum where the claimant may initiate such a legal action.

15. Basis Of Payments To And From Plan. All benefits under the Plan will be paid by the Company. The Plan will be unfunded and benefits hereunder will be paid only from the general assets of the Company.

16. Other Plan Information.

(a) Employer and Plan Identification Numbers. The Employer Identification Number assigned to the Parent (which is the "Plan Sponsor" as that term is used in ERISA) by the Internal Revenue Service is . The Plan Number assigned to the Plan by the Plan Sponsor pursuant to the instructions of the Internal Revenue Service is .

(b) Ending Date for Plan's Fiscal Year. The date of the end of the Plan's fiscal year for the purpose of maintaining the Plan's records is December 31. The first Plan year is a short plan year commencing on the Effective Date and ending on December 31, 2024.

(c) Agent for the Service of Legal Process. The agent for the service of legal process with respect to the Plan is:

Silvaco Group, Inc.
c/o General Counsel
4701 Patrick Henry Drive, Building 23
Santa Clara, CA 95054

(d) Plan Sponsor. The "Plan Sponsor" of the Plan is the Company. All notices and requests should be directed to:

Silvaco Group, Inc.
4701 Patrick Henry Drive, Building 23
Santa Clara, CA 95054
Attention: General Counsel

(e) Plan Administrator. The "Plan Administrator" is the Committee (or such other entity as may be designated from time to time by the Committee) which is the named fiduciary (as that term is used in ERISA) charged with the responsibility for administering the Plan with regard to ERISA fiduciary functions. All notices and requests should be directed to:

Silvaco Group, Inc.
4701 Patrick Henry Drive, Building 23
Santa Clara, CA 95054
Attention: General Counsel

The telephone number for the Plan Administrator is (408) 567-1000.

(f) Statement of ERISA Rights.

Participants in the Plan (which is a welfare benefit plan sponsored by the Parent) are entitled to certain rights and protections under ERISA. Executives participating in the Plan are considered participants in the Plan for the purposes of this Section and, under ERISA, such participants are entitled to:

Receive Information About Your Plan and Benefits

Examine, without charge, at the Plan Administrator's office and at other specified locations, such as worksites, all documents governing the Plan and a copy of the latest annual report (Form 5500 Series), if

applicable, filed by the Plan with the U.S. Department of Labor and available at the Public Disclosure Room of the Employee Benefits Security Administration;

Obtain, upon written request to the Plan Administrator, copies of documents governing the operation of the Plan and copies of the latest annual report (Form 5500 Series), if applicable, and an updated (as necessary) Summary Plan Description. The Plan Administrator may make a reasonable charge for the copies; and

Receive a summary of the Plan's annual financial report, if applicable. The Plan Administrator is required by law to furnish each participant with a copy of this summary annual report.

Prudent Actions By Plan Fiduciaries

In addition to creating rights for Plan participants, ERISA imposes duties upon the people who are responsible for the operation of the employee benefit plan. The people who operate the Plan, called "fiduciaries" of the Plan, have a duty to do so prudently and in the interest of participants and other Plan participants and beneficiaries. No one, including the participant's employer or any other person, may fire a participant or otherwise discriminate against a participant in any way to prevent a participant from obtaining a Plan benefit or exercising a participant's rights under ERISA.

Enforcement of Participant Rights

If a participant's claim for a Plan benefit is denied or ignored, in whole or in part, the participant has a right to know why this was done, to obtain copies of documents relating to the decision without charge, and to appeal any denial, all within certain time schedules.

Under ERISA, there are steps a participant can take to enforce the above rights. For instance, if the participant requests a copy of Plan documents or the latest annual report from the Plan, if applicable, and does not receive them within 30 days, the participant may file suit in a federal court. In such a case, the court may require the Plan Administrator to provide the materials and pay the participant up to $110 a day until you receive the materials, unless the materials were not sent because of reasons beyond the control of the Plan Administrator.

If a participant has a claim for benefits that is denied or ignored, in whole or in part, the participant may file suit in a state or federal court. Notwithstanding the foregoing, please note that by voluntarily electing to participate in this Plan per the timely execution of the Participation Agreement, a participant has waived his or her right to file suit in court and instead agreed to arbitrate any claims for benefits under the Plan.

If a participant is discriminated against for asserting the participant's rights, the participant may seek assistance from the U.S. Department of Labor, or the participant may file suit in a federal court. The court will decide who should pay court costs and legal fees. If the participant is successful, the court may order the person the participant has sued to pay these costs and fees. If the participant loses, the court may order the participant to pay these costs and fees, for example, if it finds the participant's claim is frivolous.

Assistance With Participant Questions

If a participant has any questions about the Plan, the participant should contact the Plan Administrator. If the participant have any questions about this statement or about the participant's rights under ERISA, or if the participant needs assistance in obtaining documents from the Plan Administrator, the participant

should contact the nearest office of the Employee Benefits Security Administration, U.S. Department of Labor, listed in the participant's telephone directory or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue N.W., Washington, D.C. 20210. A participant may also obtain certain publications about the participant's rights and responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

17. Miscellaneous Provisions.

(a) Prior or Subsequent Agreements. By accepting participation in the Plan, effective as of the Effective Date, of if later, the date an eligible executive executes and timely returns a Participation Agreement, such Executive irrevocably waives the Executive's rights to any and all severance benefits (including vesting acceleration) that would be payable on a qualifying termination of employment, including in connection with a Change in Control, under any offer letter, employment agreement or other policy, plan or commitment, whether written or otherwise, with the Company that is in effect at such time. Effective as of the Effective Date, or if later, the date an eligible executive executes and timely returns a Participation Agreement, all other individual or group severance, separation pay, or salary continuation plans, arrangements, practices, policies or agreements otherwise applicable to the executive who has properly and timely executed a Participation Agreement are expressly superseded by this Plan except for changes to the Plan or Plan Documents as it applies to any certain Executive to the extent explicitly agreed to by such Executive and the Company in any separate written employment agreement or Participation Agreement with regards to certain changes to defined terms or benefits set forth in the Plan. All other individual severance, separation pay, and salary continuation arrangements or agreements otherwise applicable to an executive that are adopted after the date the Plan is first adopted are expressly superseded by this Plan, except for changes to the Plan or Plan Documents as it applies to any certain Executive to the extent explicitly agreed to by such Executive and the Company in any separate written employment agreement or Participation Agreement with regards to certain changes to defined terms or benefits set forth in the Plan.

(b) Clawback; Recovery. All payments and severance benefits provided under the Plan will be subject to recoupment in accordance with any clawback policy that the Company adopts in accordance with the listing standards of any national securities exchange or association on which the Company's securities are listed or as it deems is otherwise required by applicable law. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason," "CIC Good Reason," "Non-CIC Good Reason," "constructive termination," or any similar term under any plan, agreement or arrangement with the Company.

(c) Exclusive Discretion. The Plan Administrator, in its fiduciary capacity and with regard to fiduciary-related functions, has full and exclusive discretion and authority to administer, construe and interpret the Plan and to decide any and all questions arising in connection with the operation of the Plan, including but not limited to interpreting ambiguous terms, provided, however that such authority shall not effect participant's rights as set forth in Section 17(g). In addition, the Plan Administrator may do all things necessary or appropriate to effect the intent and purpose of the Plan whether or not such powers are expressly reserved in the Plan. Any determination by the Plan Administrator or its authorized delegate(s) will be final, conclusive and binding upon all employees, Executives or persons, and shall be given the maximum possible deference allowed by law. Similarly, the Company, in its settlor (non-fiduciary) capacity and with regard to settlor-related functions, has full and exclusive discretion and authority with regard to all settlor-related functions under the Plan.

(d) Headings. All captions and section headings used in this Plan are for convenient reference only and do not form a part of this Plan.

(e) Severability. The invalidity or unenforceability of any provision or provisions of this Plan shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(f) Withholding. All payments made pursuant to this Plan shall be subject to withholding of applicable income and employment taxes.

(g) Governing Law and Venue. The validity, interpretation, construction and performance of this Plan shall in all respects be governed by the laws of the State of California, without preference to principles of conflict of law. Except as otherwise required by law any dispute, claim, question or controversy arising under or relating to this Plan shall be resolved pursuant to the Employee Arbitration Agreement.

(h) Survival. Those provisions and obligations of this Plan which are intended to survive shall survive notwithstanding termination of the Executive's employment with the Company or any of its affiliates or subsidiaries or the termination of this Plan.

(i) No Effect on Other Benefits. Benefits under this Plan, if any, shall not be counted as compensation for purposes of determining benefits under other benefit plans, programs, policies or agreements, except to the extent expressly provided therein or herein.

[Remainder of Page Intentionally Blank]

In witness whereof, Silvaco Group, Inc., by its duly authorized representative, has caused this Plan to be adopted.

SILVACO GROUP, INC.

By: /s/ Babak Taheri

Name: Babak Taheri, CEO

Date: 2/20/2024

EXHIBIT A

[COMPANY LETTERHEAD]

[DATE]

ELECTRONIC DELIVERY
[NAME] [EMAIL]

Re: Executive Severance Plan

Dear NAME OF EXECUTIVE :

Silvaco Group, Inc. (the "**Company**") adopted the Silvaco Group, Inc. Executive Severance Plan (the "**Plan**") to attract and retain qualified executives and to provide severance benefits to executives on certain terminations of employment. A participant in the Plan is eligible to receive severance benefits if his or her employment is terminated under certain circumstances, as described in the Plan.

The Compensation Committee of the Board of Directors has selected you to be a participant in the Plan, subject to your being an eligible employee on the date of your involuntary termination and the other terms and conditions set forth in the Plan. Specifically, you will receive severance benefits if your employment is terminated involuntarily by the Company other than for Cause or if you resign for CIC Good Reason or Non-CIC Good Reason, as such capitalized terms are defined in the Plan or in an employment agreement entered into between yourself and the Company, if such terms are specifically modified in such agreement in reference to the benefits in this plan. For purposes herein, if there is a discrepancy between the definition of such capitalized terms, the definitions of such terms of such employment agreement shall control. All other capitalized terms are as set forth in the Plan.

ALT 1 [If your employment is involuntarily terminated under the circumstances described above, you will be eligible for a payment equal to [XX] months of your then annual base salary and your Pro-Rata Full Target Bonus Amount, and a Specified Non-CIC Percentage of [XX]%, in each case subject to and payable in accordance with the Plan's terms and conditions. If your involuntary termination occurs during the period that begins three (3) months before a change in control of the Company (as defined in the Plan) and ends twelve (12) months following the change in control of the Company, then your lump sum payment and the payment of your cost of COBRA premiums will be for a period of [XX] months instead of [XX] months, and a Specified CIC Percentage of [XX]%, in each case subject to the Plan's terms and conditions.]

In addition, upon the closing of an IPO prior to a Change in Control, your Specified IPO Percentage shall be [XX]% of the then unvested portion of your RSU Awards (other than any awards for which the Vesting Start Date does not begin until or after the closing of the IPO).

A copy of the Plan is attached hereto as Annex A. Please sign below, acknowledging your receipt of a copy of the Plan and accepting your designation to participate in the Plan, and return to the Company's [_____] by email to [EMAIL] by [DATE].

Sincerely,

SILVACO GROUP, INC.

By: _____
Name:
Title:

I acknowledge receipt of a copy of the Plan and accept my designation as a participant under the terms and conditions of the Plan.

[NAME OF EXECUTIVE]

_____
Signature

Date:

Exhibit B

EMPLOYEE ARBITRATION AGREEMENT

Silvaco Group, Inc. ("Company") and the undersigned employee ("Employee") hereby enter into this Employee Arbitration Agreement and agree that, to the fullest extent permitted by law, any and all claims or controversies between them (or between Employee and any present or former officer, director, agent, or employee of Company or any parent, subsidiary, or other entity affiliated with Company) relating in any manner to the employment or the termination of employment of Employee, including but not limited to the interpretation, applicability, or enforceability of this Agreement, shall be resolved by final and binding arbitration. Except as specifically provided herein, any arbitration proceeding shall be conducted in accordance with the Employment Arbitration Rules and Mediation Procedures of the American Arbitration Association ("the AAA Rules"), available at www.adr.org/rules or provided upon request by Company. Claims subject to arbitration shall include without limitation contract claims, tort claims, claims relating to compensation and stock options, as well as claims based on any federal, state, or local law, statute, or regulation, including but not limited to any claims arising under Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act. Claims for unemployment compensation, workers' compensation, claims under the National Labor Relations Act, and other claims excluded by law shall not, however, be subject to arbitration under this Agreement ("Excluded Claims"). Nothing in this Agreement shall be interpreted to mean that Employee is precluded from filing complaints with the U.S. Equal Employment Opportunity Commission (or state equivalent) or the National Labor Relations Board or from pursuing an individual or joint action in court alleging sexual assault or sexual harassment.

Employee and Company expressly intend and agree that: (a) class action and representative action procedures are hereby waived and shall not be asserted, nor will they apply, in any arbitration pursuant to this Agreement; (b) each will not assert class action or representative action claims against the other in arbitration or otherwise; and (c) Employee and Company shall only submit their own, individual claims in arbitration and will not seek to represent the interests of any other person. To the extent that a dispute involves both timely filed Excluded Claims and claims subject to arbitration under this Agreement, Company and Employee agree that the party bringing such claims will bifurcate and stay for the duration of the arbitration proceedings any such Excluded Claims.

A neutral and impartial arbitrator shall be chosen by mutual agreement of the parties; however, if the parties are unable to agree upon an arbitrator within a reasonable period, then a neutral and impartial arbitrator shall be appointed in accordance with the arbitrator nomination and selection procedure set forth in the AAA Rules. The arbitrator shall prepare a written decision containing the essential findings and conclusions on which the award is based to ensure meaningful judicial review of the decision. The arbitration proceedings will allow for reasonable discovery under the AAA Rules, and the arbitrator shall decide all discovery disputes. The arbitrator shall apply the same substantive law, with the same statutes of limitations and same remedies that would apply if the claims were brought in a court of law. The arbitrator shall have the authority to consider and decide pre-hearing motions, including dispositive motions.

Either Company or Employee may bring an action in court to compel arbitration under this Agreement and to enforce an arbitration award. Except as otherwise provided in this Agreement, neither party shall initiate or prosecute any lawsuit in any way related to any arbitrable claim, including without limitation any claim as to the making, existence, validity, or enforceability of an agreement to arbitrate. Provided, however, that either party may, at its option, seek injunctive relief in a court of competent jurisdiction.

This Agreement shall be governed by the Federal Arbitration Act to the extent allowed by law. In ruling on procedural and substantive issues raised in the arbitration itself, the Arbitrator shall in all cases apply the substantive law of the state of [California].

All arbitration hearings under this Agreement shall be conducted in Palo Alto, California unless prohibited by applicable law, in which case arbitration hearings shall be conducted within 30 miles of Employer's primary worksite.

Company shall bear the costs of the arbitrator, forum and filing fees. Each party shall pay its own costs and attorney's fees, unless a party prevails on a statutory claim, and the statute provides that the prevailing party is entitled to payment of its attorneys' fees. In that case, the arbitrator may award reasonable attorneys' fees and costs to the prevailing party as provided by law.

This Agreement is not, and shall not be construed to create, any contract of employment, express or implied. This Agreement does not alter Employee's at-will employment status. Either Employee or Company may terminate Employee's employment at any time, for any reason or no reason, with or without prior notice.

If any provision of this Agreement shall be held by a court or the arbitrator to be invalid, unenforceable, or void, such provision shall be enforced to the fullest extent permitted by law, and the remainder of this Agreement shall remain in full force and effect. The parties' obligations under this Agreement shall survive the termination of Employee's employment with Company and the expiration of this Agreement.

Company and Employee understand and agree that this Agreement contains a full and complete statement of any agreements and understandings regarding resolution of disputes between the parties, and the parties agree that this Agreement supersedes all previous agreements, whether written or oral, express, or implied, relating to the subjects covered in this Agreement. The parties also agree that the terms of this Agreement cannot be revoked or modified except in a written document signed by both Employee and the highest-level executive of Company.

THE PARTIES ALSO UNDERSTAND AND AGREE THAT THIS AGREEMENT CONSTITUTES A WAIVER OF THEIR RIGHT TO A TRIAL BY JURY OF ANY CLAIMS OR CONTROVERSIES COVERED BY THIS AGREEMENT. THE PARTIES AGREE THAT NONE OF THOSE CLAIMS OR CONTROVERSIES SHALL BE RESOLVED BY A JURY TRIAL.

THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE BEEN GIVEN THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH THEIR LEGAL COUNSEL AND HAVE AVAILED THEMSELVES OF THAT OPPORTUNITY TO THE EXTENT THEY WISH TO DO SO.

EMPLOYEE:

Signature: _____

Print Name: _____

Date: _____

Silvaco Group, Inc.

Signature: _____

Print Name: _____

Print Title: _____

Date: _____

EXHIBIT C

FORM OF SEPARATION AGREEMENT AND RELEASE

SEPARATION AGREEMENT AND RELEASE

This Separation Agreement and Release ("Agreement") is made by and between [NAME] ("Employee") and Silvaco Group, Inc. (the "Company") (collectively referred to as the "Parties" or individually referred to as a "Party") as of the Effective Date (as defined below) in connection with the Company's Executive Severance Plan dated [date] (the "Plan"), to which this Release is attached and in which Employee participates pursuant to a Plan acknowledgment dated [date]. This is the "Release" referenced in the Plan. Terms with initial capitalization that are not otherwise defined in this Release have the meanings set forth in the Plan. The consideration for the Employee's agreement to this Release consists of the severance compensation provided under, and subject to, the Plan's terms and conditions. This Release is automatically tendered to the Employee upon the date of the termination of the Employee's employment, if the Employee is eligible for severance benefits in connection with such termination pursuant to the Plan.

RECITALS

WHEREAS, Employee and the Company entered into a Proprietary Information and Inventions Agreement dated [date], as amended from time to time (the "Confidentiality Agreement");

WHEREAS, Employee's employment with the Company was terminated effective [date] (the "Termination Date");

WHEREAS, the Parties wish to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions, and demands that the Employee may have against the Company and any of the Releasees as defined below, including, but not limited to, any and all claims arising out of or in any way related to Employee's employment with or separation from the Company;

NOW, THEREFORE, in consideration of the mutual promises made herein, the Company and Employee hereby agree as follows:

COVENANTS

1. Recitals. The Recitals set forth above are expressly incorporated into this Agreement.

2. Consideration. Provided that this Agreement becomes effective and Employee complies with Employee's obligations under this Agreement and the Confidentiality Agreement, the Company agrees to provide severance benefits in accordance with the Plan and as set forth in Attachment A to this Release.

3. Benefits. Employee agrees that Employee's participation in all benefits and incidents of employment (except as specifically provided on Exhibit A to this Release), including, but not limited to, vesting in stock, and the accrual of bonuses, vacation, and paid time off, ceased as of the Termination Date. Employee's health and dental insurance benefits, if any, shall cease on the last day of [month in which termination occurs] 20[XX], subject to Employee's right to continue Employee's coverage under COBRA.

4. Payment of Salary and Receipt of All Benefits. Employee acknowledges and represents that, other than the consideration set forth in this Agreement, the Company has paid or provided all salary, wages, bonuses, accrued vacation/paid time off, premiums, leaves, housing allowances, relocation costs, interest, severance, outplacement costs, fees, reimbursable expenses, commissions, stock, stock options, vesting, and any and all other benefits and compensation due to Employee. Employee specifically represents that Employee is not due to receive any commissions or other incentive compensation from the Company other than as set forth in this Agreement.

5. Release of Claims.[1] Employee agrees that the foregoing consideration represents settlement in full of all outstanding obligations owed to Employee by the Company and its current and former officers, directors, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries, and predecessor and successor corporations and assigns (collectively, the "Releasees"). Employee, on Employee's own behalf and on behalf of Employee's respective heirs, family members, executors, agents, and assigns, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, demand, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Employee may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up until and including the Effective Date of this Agreement, including, without limitation:

a. any and all claims relating to or arising from Employee's employment relationship with the Company and the termination of that relationship;

b. any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

c. any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; commission payments; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

d. any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Labor Standards Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002; the Immigration Control and Reform Act; the California Family Rights Act; the California Labor Code; the California Business & Professions Code; the California Government Code;

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[1] Note to Draft: The Company reserves the right to update this release language in accordance with applicable state law or to account for changes in applicable law. Release to extend to all claims that could have accrued in any jurisdiction during the course of employment and that may lawfully be released.

the California Civil Code; the California Fair Employment and Housing Act; and any other similar statutes, regulations or laws;

e. any and all claims for violation of the federal or any state constitution;

f. any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

g. any claim for any loss, cost, damage, or expense arising out of any dispute over the nonwithholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; and

h. any and all claims for attorneys' fees and costs.

Employee specifically agrees that this Agreement includes without limitation any and all claims that were raised, or that reasonably could have been raised, under the applicable Wage Order, Labor Code sections 201, 202, 203, 212, 226, 226.3, 226.7, 510, 512, 515, 558, 1194, and 1198, as well as claims under the Business & Professions Code sections 17200, *et seq.* and Labor Code sections 2698, *et seq.*, based on alleged violations of Labor Code provisions. Employee further covenants that Employee will not seek to initiate any proceedings seeking penalties under Labor Code sections 2699, *et seq.* based upon the Labor Code provisions specified above.

Employee agrees that the release set forth in this section shall be and remain in effect in all respects as a complete general release as to the matters released. This release does not extend to any obligations incurred under this Agreement. Employee represents that Employee has made no assignment or transfer of any right, claim, complaint, charge, duty, obligation, demand, cause of action, or other matter waived or released by this section.

Notwithstanding anything herein to the contrary, the general release of claims in this Section does not extend to claims by Employee for: (1) unemployment compensation benefits; (2) worker's compensation benefits; (3) state disability compensation; (4) previously vested benefits under any the Company-sponsored benefits plan; (5) claims for indemnification pursuant to any applicable Director and Officer insurance policies held by the Company, CA Labor Code §2802 (to the extent applicable), or any other agreement or understanding regarding indemnification between the Parties; (6) claims related to the enforcement of this Agreement; or (7) any other rights or benefits that cannot by law be released by private agreement or, as a matter of law, may not be waived, including but not limited to unwaivable rights Employee might have under federal and/or state law. You shall be eligible for, and the Company will not dispute your eligibility for unemployment insurance benefits.

6. Acknowledgment of Waiver of Claims under ADEA.[2] Employee acknowledges that Employee is waiving and releasing any rights Employee may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Employee agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Employee acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further acknowledges that Employee has been advised by this writing that: (a) Employee should consult with an attorney prior to executing this Agreement; (b) Employee has twenty-one (21)

[2] Note to Draft: The Company reserves the right to amend in the event of a group termination, to include OWBPA waiver language, an extended consideration period, and required disclosures.

days within which to consider this Agreement; (c) Employee has seven (7) days following Employee's execution of this Agreement to revoke this Agreement; (d) this Agreement shall not be effective until after the revocation period has expired; and (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Employee signs this Agreement and returns it to the Company in less than the 21-day period identified above, Employee hereby acknowledges that Employee has freely and voluntarily chosen to waive the time period allotted for considering this Agreement. Employee acknowledges and understands that revocation must be accomplished by a written notification to the person executing this Agreement on the Company's behalf that is received prior to the eighth day after Employee signs this Agreement. The Parties agree that changes, whether material or immaterial, do not restart the running of the 21-day period.

7. California Civil Code Section 1542. Employee acknowledges that Employee has been advised to consult with legal counsel and is familiar with the provisions of California Civil Code Section 1542, a statute that otherwise prohibits the release of unknown claims, which provides as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

Employee, being aware of said code section, agrees to expressly waive any rights Employee may have thereunder, as well as under any other statute or common law principles of similar effect.

8. No Pending or Future Lawsuits. Employee represents that Employee has no lawsuits, claims, or actions pending in Employee's name, or on behalf of any other person or entity, against the Company or any of the other Releasees. Employee also represents that Employee does not intend to bring any claims on Employee's own behalf or on behalf of any other person or entity against the Company or any of the other Releasees.

9. Trade Secrets and Confidential Information/Company Property. Employee reaffirms and agrees to observe and abide by the terms of the Confidentiality Agreement, specifically including the provisions therein regarding nondisclosure of the Company's trade secrets and confidential and proprietary information; *provided* that Employee hereby acknowledges receipt of the following notice required pursuant to 18 U.S.C § 1833(b)(1): "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal." Employee affirms that Employee has returned all documents and other items provided to Employee by the Company, developed or obtained by Employee in connection with Employee's employment with the Company, or otherwise belonging to the Company.

10. No Cooperation. Employee agrees that Employee will not knowingly encourage, counsel, or assist any attorneys or their clients in the presentation or prosecution of any disputes,

differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so or as related directly to the ADEA waiver in this Agreement. Employee agrees both to immediately notify the Company upon receipt of any such subpoena or court order, and to furnish, within three (3) business days of its receipt, a copy of such subpoena or other court order. If approached by anyone for counsel or assistance in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints against any of the Releasees, Employee shall state no more than that Employee cannot provide counsel or assistance.

11. Mutual Nondisparagement. Employee agrees to refrain from any disparagement, defamation, libel, or slander of any of the Releasees, and agrees to refrain from any tortious interference with the contracts and relationships of any of the Releasees. Employee agrees to refrain from making, either directly or indirectly, any negative, damaging or otherwise disparaging communications concerning the Company's services. Notwithstanding the foregoing, nothing in this Agreement prevents Employee from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that Employee has reason to believe is unlawful. Additionally, nothing in this Agreement prevents Employee from responding to a peace officer's questions relating to an alleged criminal sexual offense or obscenity or making a statement, not initiated by Employee, in a criminal proceeding relating to an alleged sexual offense or obscenity. Employee shall not use any Company information that is confidential either under applicable law or the Confidentiality Agreement to which Employee had access during the scope of Employee's employment with the Company in order to communicate with or solicit any of the Company's current or prospective clients. Subject to Employee's compliance with the terms set forth in this Section 11, the Company agrees to refrain from any disparagement, defamation, libel, or slander of Employee. Employee understands that the Company's obligations under this paragraph extend only to the Company's current executive officers and members of its Board of Directors, and only for so long as each officer or member is an employee or Director of the Company. Employee shall direct any inquiries by potential future employers to the Company's human resources department, which shall use its best efforts to provide only the Employee's last position and dates of employment.

12. Protected Disclosure. Nothing contained in this Agreement limits Employee's ability to file a charge or complaint with any federal, state or local governmental agency or commission (a "Government Agency"). In addition, nothing contained in this Agreement limits Employee's ability to communicate with any Government Agency or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including Employee's ability to provide documents or other information, without notice to the Company, nor does anything contained in this Agreement apply to truthful testimony in litigation. If Employee files any charge or complaint with any Government Agency and if the Government Agency pursues any claim on Employee's behalf, or if any other third party pursues any claim on Employee's behalf, Employee waives any right to monetary or other individualized relief (either individually, or as part of any collective or class action).

13. Concerted Activity. Nothing in this Agreement, including but not limited to its non-disparagement and confidentiality provisions, is intended to preclude or dissuade Employee from engaging in activities protected by state or federal law (including under Section 7 of the National Labor Relations Act, if applicable), such as discussing wages, benefits, or other terms and conditions of employment or raising complaints about working conditions for the purpose of mutual aid or protection. The Company will not construe this Agreement in a way that limits such rights.

14. Litigation and Regulatory Cooperation. During and after Employee's employment, Employee shall cooperate fully and truthfully with the Company in (i) the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate to events or occurrences that transpired while Employee was employed by the Company, and (ii) any investigation, whether internal or external. Employee's full and truthful cooperation in connection with such claims, actions or investigations shall include, but not be limited to, being available to meet with counsel to answer questions and to prepare for discovery or trial and to act as a witness on behalf of the Company. During and after Employee's employment, Employee also shall cooperate fully with the Company in connection with any investigation or review of any federal, state or local regulatory authority as any such investigation or review relates to events or occurrences that transpired while Employee was employed by the Company.

15. Confidentiality. This Agreement, its contents and all information pertaining to its negotiations shall remain confidential. Employee agrees to not disclose this Agreement or its contents to any person, other than: (a) to Employee's spouse or significant other and Employee's legal or tax advisor (in each case, so long as Employee first obtains the agreement of any such individual(s) to maintain the confidentiality of this Agreement and its terms), (b) as may otherwise be required or permitted by law (including for the purposes described in the Concerted Activity section above), or (c) as may be necessary to challenge an alleged breach of this Agreement in a court of competent jurisdiction.

16. Breach. In addition to the rights provided in the "Attorneys' Fees" section below, Employee acknowledges and agrees that any material breach of this Agreement unless such breach constitutes a legal action by Employee challenging or seeking a determination in good faith of the validity of the waiver herein under the ADEA, or of any provision of the Confidentiality Agreement, shall entitle the Company to recover consideration provided to Employee under this Agreement and to obtain damages as determined by an arbitrator or court of competent jurisdiction, except as provided by law.

17. No Admission of Liability. Employee understands and acknowledges that this Agreement constitutes a compromise and settlement of any and all actual or potential disputed claims by Employee. No action taken by the Company hereto, either previously or in connection with this Agreement, shall be deemed or construed to be (a) an admission of the truth or falsity of any actual or potential claims or (b) an acknowledgment or admission by the Company of any fault or liability whatsoever to Employee or to any third party.

18. Costs. The Parties shall each bear their own costs, attorneys' fees, and other fees incurred in connection with the preparation of this Agreement, except as otherwise provided for in Employee's Employment Agreement.

19. Tax Consequences. The Company makes no representations or warranties with respect to the tax consequences of the payments and any other consideration provided to Employee or made on Employee's behalf under the terms of this Agreement. Employee agrees and understands that Employee is responsible for payment, if any, of the employee portion of local, state, and/or federal taxes on the payments and any other consideration provided hereunder by the Company and any penalties or assessments thereon. Employee further agrees to indemnify and hold the Company harmless from any claims, demands, deficiencies, penalties, interest, assessments, executions, judgments, or recoveries by any government agency against the Company for any amounts claimed due on account of (a) Employee's

failure to pay or delayed payment of federal or state taxes, or (b) damages sustained by the Company by reason of any such claims, including attorneys' fees and costs.

20. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all who may claim through it to the terms and conditions of this Agreement. Employee represents and warrants that Employee has the capacity to act on Employee's own behalf and on behalf of all who might claim through Employee to bind them to the terms and conditions of this Agreement. Each Party warrants and represents that there are no liens or claims of lien or assignments in law or equity or otherwise of or against any of the claims or causes of action released herein.

21. No Representations. Employee represents that Employee has had an opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Agreement. Employee has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

22. Severability. In the event that any provision or any portion of any provision hereof or any surviving agreement made a part hereof becomes or is declared by a court of competent jurisdiction or arbitrator to be illegal, unenforceable, or void, this Agreement shall continue in full force and effect without said provision or portion of provision.

23. Attorneys' Fees. Except with regard to a legal action challenging or seeking a determination in good faith of the validity of the waiver herein under the ADEA, in the event that either Party brings an action to enforce or effect its rights under this Agreement, the prevailing Party shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, court fees, and reasonable attorneys' fees incurred in connection with such an action.

24. Entire Agreement. This Agreement represents the entire agreement and understanding between the Company and Employee concerning the subject matter of this Agreement and Employee's employment with and separation from the Company and the events leading thereto and associated therewith, and supersedes and replaces any and all prior agreements and understandings concerning the subject matter of this Agreement and Employee's relationship with the Company, with the exception of the Confidentiality Agreement and the Stock Agreements.

25. No Oral Modification. This Agreement may only be amended in a writing signed by Employee and a duly authorized representative of the Company.

26. Governing Law. This Agreement shall be governed by the laws of the State of California, without regard for choice-of-law provisions. Employee consents to personal and exclusive jurisdiction and venue in the State of California.

27. Effective Date. Employee understands that this Agreement shall be null and void if not executed by Employee within twenty-one (21) days. In the event that Employee signs this Agreement within twenty-one days, then the Company has seven days after such date to countersign the Agreement and return a fully-executed version to Employee. This Agreement will become effective on the eighth

(8th) day after Employee signed this Agreement, so long as it has been signed by the Company and has not been revoked by either Party before that date (the "Effective Date").

28. Counterparts. This Agreement may be executed in counterparts and by facsimile, and each counterpart and facsimile shall have the same force and effect as an original and shall constitute an effective, binding agreement on the part of each of the undersigned.

29. Voluntary Execution of Agreement. Employee understands and agrees that Employee executed this Agreement voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Employee's claims against the Company and any of the other Releasees. Employee acknowledges that:

(a) Employee has read this Agreement;

(b) Employee has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of Employee's own choice or has elected not to retain legal counsel;

(c) Employee understands the terms and consequences of this Agreement and of the releases it contains; and

(d) Employee is fully aware of the legal and binding effect of this Agreement.

[Signature page follows; Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

[NAME], an individual

Dated: _____, 20[XX]

_____

[NAME]

SILVACO GROUP, INC.

Dated: _____, 20[XX]

By _____

Name:

Its:

ATTACHMENT A

Severance Benefits

[As set forth in the Participation Agreement between Participant and the Company dated [date] 2024]

PROMISSORY NOTE

THIS PROMISSORY NOTE ("Note"), effective on December 8, 2021 ("Effective Date"), is by and between **Silvaco, Inc.**, with offices located at 2811 Mission College Blvd, 6th Floor, Santa Clara, CA 95054 ("Borrower"), and **Kipee International, Inc.**, with offices located at 2811 Mission College Blvd, 6th Floor 6, Santa Clara, CA 95054 ("Lender").

WHEREAS, subject to the terms and conditions of this Note, Lender is willing to provide Borrower with the Loan Amount, and Borrower wishes to accept such Loan Amount from Lender.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein, the parties hereby agree as follows:

1. **Loan Amount; Interest**. Effective on the Effective Date, the principal sum of Five Hundred Thousand Dollars US Dollars (**US$500,000**) ("Loan Amount"), with interest accruing on the unpaid balance at a rate of three-point two five percent (3.25%) percent per annum (3.25% + 0 points), will be provided to Borrower by Lender under this Note.

2. **Payments.** The total outstanding balance of the Note, including all accrued interest and late fees, is due in full on July 1, 2022 ("Due Date").

2.1 **Installments.** Borrower shall pay Lender the monthly principal and interest in the amount of eighty-four thousand one hundred twenty-five dollars and 04 cents ($84,125.04). Any remaining outstanding balance shall be due on the Due Date.

3. **Security.** The parties agree that no security is provided for the Note under this Agreement.

4. **Interest Due on Default.** In the event Borrower fails to pay the Note in full on the Due Date, the unpaid principal shall accrue interest at the maximum rate then-allowed by law, until Borrower is no longer in default.

5. **Allocation of Payments.** Payments shall be credited as follows: (i) any late fees due, (ii) interest, and (iii) principal.

6. **Pre-payment.** Borrower may pre-pay this Note without penalty.

7. **Acceleration**. If Borrower is in default under this Note or materially breaches any provision of this Note, and such breach is not cured within the time required by law after written notice of such breach, Lender may, at Seller's discretion, require all outstanding sums owed on this Note to be immediately due and payable.

8. **Attorneys' Fees and Costs**. Borrower shall pay all costs incurred by Lender in collecting any amounts due under this Note resulting from a default, including reasonable attorneys' fees. If either party initiates legal proceedings to enforce this Note or to obtain a declaration of its rights hereunder, the prevailing party in any such proceeding shall be

entitled to recover from the non-prevailing party, its reasonable attorneys' fees and costs (collectively, "Expenses") incurred in such proceeding (including Expenses incurred in any bankruptcy proceeding or appeal).

9. **Waiver of Presentments**. Borrower waives presentment for payment, notice of dishonor, protest and notice of protest.

10. **Non-Waiver**. No failure or delay by Lender in exercising Lender's rights under this Note shall be considered a waiver of such rights.

11. **Severability**. If any provision herein is determined by a court of competent jurisdiction to be void or unenforceable for any reason, such determination shall not affect the validity or enforceability of any other provision, all of which shall remain in full force and effect.

12. **Integration**. There are no verbal or other agreements which modify or affect the terms of this Note. This Note may not be modified or amended except by a written agreement signed by Borrower and Lender.

13. **Conflicting Terms**. The terms of this Note shall control over any conflicting terms in any agreement or document agreed to in writing by the parties after the Effective Date.

14. **Notice.** Any notices required or permitted to be given hereunder shall be given in writing and shall be effective upon (i) delivery, if in person, (ii) upon receipt, if by email, (iii) five (5) business days, if by certified mail, postage prepaid, return receipt requested, or (iv) two (2) business days, if by commercial overnight courier, next day delivery guarantee. Such notices shall be made to the parties at the addresses specified herein.

15. **Co-Signer**. The parties agree there is no co-signer for this Note.

16. **Principal**. Borrower hereby executes this Note as a principal and not as a surety.

17. **Governing Law.** This Note shall be governed by the laws of the State of California, without reference to provisions on conflicts of law.

IN WITNESS WHEREOF, the parties hereto have executed this Note on the date(s) below.

Lender's Signature /s/ Katherine Pesic

Print Name Katherine Pesic

Date: 12/8/2021

Borrower's Signature /s/ Greg Swyt

Print Name Greg Swyt

Date: 12/8/2021

Witness Signature /s/ Jay Baret

Print Name Jay Baret

Date: 12/8/2021

Amendment to Promissory Note

This amendment to promissory note ("Amendment"), effective as of April 18, 2022, is by and between Silvaco, Inc. ("Silvaco"), Kipee International, Inc. ("Kipee") and Katherine Ngai Pesic ("Pesic").

Whereas, Silvaco and Kipee entered into a promissory note, effective December 8, 2021 (the "Note") pursuant to which Kipee agreed to loan the Loan Amount to Silvaco.

Whereas, due to a clerical error, the Note was incorrectly drafted to be between Kipee and Silvaco rather than Pesic and Silvaco.

Whereas, Silvaco, Pesic and Kipee agree that the rights and obligations of Kipee under the Note have been enjoyed and undertaken by and were intended to flow to Pesic and not Kipee.

Whereas, Pesic agrees that she has enjoyed and undertaken such rights and obligations, intended to do so prior to the Effective Date and agrees to continue doing so.

Whereas, capitalized terms used herein but not defined shall have the meanings ascribed to them in the Note.

Now, therefore, the parties agree as follows:

1. **All references in the Note to Kipee International, Inc. or Lender shall refer to Pesic.**
2. **Except as expressly modified by this amendment, all terms and conditions of the Note shall remain in full force and effect.**

Silvaco, Inc.	**Kipee International, Inc.**	**Kathy Pesic**
/s/ Babak Taheri	/s/ Katherine Pesic	/s/ Katherine Pesic
Name: Babak Taheri	Name: Kathy Pesic	Name: Kathy Pesic
Date: 04/19/2022	Date: 04/21/2022	Date: 04/21/2022

PROMISSORY NOTE

THIS PROMISSORY NOTE ("Note"), effective on March 30, 2022 ("Effective Date"), is by and between **Silvaco, Inc.**, with offices located at 2811 Mission College Blvd, 6th Floor, Santa Clara, CA 95054 ("Borrower"), and **Katherine Ngai-Pesic**, an individual ("Lender").

WHEREAS, subject to the terms and conditions of this Note, Lender is willing to provide Borrower with the Loan Amount, and Borrower wishes to accept such Loan Amount from Lender.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein, the parties hereby agree as follows:

1. **Loan Amount; Interest**. Effective on the Effective Date, the principal sum of Five Hundred Thousand Dollars US Dollars (**US$500,000**) ("Loan Amount"), with interest accruing on the unpaid balance at a rate of three-point two five percent (3.25%) per annum (3.25% + 0% points), will be provided to Borrower by Lender under this Note.

2. **Payments**. The total outstanding balance of the Note, including all accrued interest and late fees, is due in full on the first anniversary of the Effective Date ("Due Date").

2.1. **Alternative Financing Acceleration**. In the event that Borrower secures financing in an amount equal or greater to the Loan Amount from one or more sources ("Alternative Funds") before the Due Date, the Note shall become due and payable within ten (10) business days the first day on which Borrower is eligible to access the Alternative Fund.

3. **Security**. The parties agree that no security is provided for the Note under this Agreement.

4. **Interest Due on Default**. In the event Borrower fails to pay the Note in full on the Due Date, the unpaid principal shall accrue interest at the maximum rate then-allowed by law, until Borrower is no longer in default.

5. **Allocation of Payments**. Payments shall be credited as follows: (i) any late fees due, (ii) interest, and (iii) principal.

6. **Pre-payment**. Borrower may pre-pay this Note without penalty.

7. **Acceleration**. If Borrower is in default under this Note or materially breaches any provision of this Note, and such breach is not cured within the time required by law after written notice of such breach, Lender may, at Lender's discretion, require all outstanding sums owed on this Note to be immediately due and payable.

8. **Attorneys' Fees and Costs**. Borrower shall pay all costs incurred by Lender in collecting any amounts due under this Note resulting from a default, including reasonable attorneys' fees. If either party initiates legal proceedings to enforce this Note or to obtain a declaration of its rights hereunder, the prevailing party in any such proceeding shall be entitled to recover from the non- prevailing party, its reasonable attorneys' fees, and costs (collectively, "Expenses") incurred in such proceeding (including Expenses incurred in any bankruptcy proceeding or appeal).

9. **Waiver of Presentments**. Borrower waives presentment for payment, notice of dishonor, protest, and notice of protest.

10. **Non-Waiver**. No failure or delay by Lender in exercising Lender's rights under this Note shall be considered a waiver of such rights.

11. **Severability**. If any provision herein is determined by a court of competent jurisdiction to be void or unenforceable for any reason, such determination shall not affect the validity or enforceability of any other provision, all of which shall remain in full force and effect.

12. **Integration**. There are no verbal or other agreements which modify or affect the terms of this Note. This Note may not be modified or amended except by a written agreement signed by Borrower and Lender.

13. **Conflicting Terms**. The terms of this Note shall control over any conflicting terms in any agreement or document agreed to in writing by the parties after the Effective Date.

14. **Notice**. Any notices required or permitted to be given hereunder shall be given in writing and shall be effective upon (i) delivery, if in person, (ii) upon receipt, if by email, (iii) five (5) business days, if by certified mail, postage prepaid, return receipt requested, or (iv) two (2) business days, if by commercial overnight courier, next day delivery guarantee. Such notices shall be made to the parties at the addresses specified herein.

15. **Co-Signer**. The parties agree there is no co-signer for this Note.

16. **Principal**. Borrower hereby executes this Note as a principal and not as a surety.

17. **Governing Law**. This Note shall be governed by the laws of the State of California, without reference to provisions on conflicts of law.

IN WITNESS WHEREOF, the parties hereto have executed this Note on the date(s) below.

Lender's Signature	/s/Katherine Ngai-Pesic
Print Name	Katherine Ngai-Pesic
Date	3/30/2022
Borrower's Signature	/s/Babak Taheri
Print Name	Babak Taheri
Date	3/30/2022

PROMISSORY NOTE and LINE of CREDIT

THIS PROMISSORY NOTE and LINE of CREDIT ("Note"), effective on June 13, 2022 ("Effective Date"), is by and between Silvaco, Inc., with offices located at 4701 Patrick Henry Drive Bldg #23, Santa Clara, CA 95054 ("Borrower"), and **Katherine Ngai-Pesic**, an individual ("Lender").

WHEREAS, subject to the terms and conditions of this Note, Lender is willing to provide Borrower with the Loan Amount, and Borrower wishes to accept such Loan Amount from Lender.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein, the parties hereby agree as follows:

1. **Line of Credit; Interest**. Effective on the Effective Date, the principal sum of up to Four Million Dollars US Dollars (**US$4,000,000**) ("Line of Credit"), with interest accruing on the unpaid balance at the prime rate plus one percent (1%) per annum and calculated monthly, will be provided to Borrower by Lender under this Note.

2. **Payments**. Lender will invoice and Borrower shall pay accrued interest on a monthly basis. The total remaining outstanding balance of the Note, including all remaining accrued interest and late fees, is due in full on the first anniversary of the Effective Date ("Due Date").

2.1 **Alternative Financing Acceleration**. In the event that Borrower secures financing in an amount equal or greater to the Line of Credit from one or more sources ("Alternative Funds") before the Due Date, the Note shall become due and payable within ten (10) business days the first day on which Borrower is eligible to access the Alternative Fund.

3. **Security**. The parties agree that no security is provided for the Note under this Agreement.

4. **Interest Due on Default**. In the event Borrower fails to pay the Note in full on the Due Date, the unpaid principal shall accrue interest at the maximum rate then-allowed by law, until Borrower is no longer in default.

5. **Allocation of Payments**. Payments shall be credited as follows: (i) any late fees due, (ii) interest, and (iii) principal.

6. **Draws Against and Pre-payment**. Borrower may draw down and pre-pay this Note without penalty any increments.

7. **Acceleration**. If Borrower is in default under this Note or materially breaches any provision of this Note, and such breach is not cured within the time required by law after written notice of such breach, Lender may, at Lender's discretion, require all outstanding sums owed on this Note to be immediately due and payable.

8. **Attorneys' Fees and Costs**. Borrower shall pay all costs incurred by Lender in collecting any amounts due under this Note resulting from a default, including reasonable attorneys' fees. If either party initiates legal proceedings to enforce this Note or to obtain

a declaration of its rights hereunder, the prevailing party in any such proceeding shall be entitled to recover from the non-prevailing party, its reasonable attorneys' fees, and costs (collectively, "Expenses") incurred in such proceeding (including Expenses incurred in any bankruptcy proceeding or appeal).

9. **Waiver of Presentments**. Borrower waives presentment for payment, notice of dishonor, protest, and notice of protest.

10. **Non-Waiver**. No failure or delay by Lender in exercising Lender's rights under this Note shall be considered a waiver of such rights.

11. **Severability**. If any provision herein is determined by a court of competent jurisdiction to be void or unenforceable for any reason, such determination shall not affect the validity or enforceability of any other provision, all of which shall remain in full force and effect.

12. **Integration**. There are no verbal or other agreements which modify or affect the terms of this Note. This Note may not be modified or amended except by a written agreement signed by Borrower and Lender.

13. **Conflicting Terms**. The terms of this Note shall control over any conflicting terms in any agreement or document agreed to in writing by the parties after the Effective Date.

14. **Notice**. Any notices required or permitted to be given hereunder shall be given in writing and shall be effective upon (i) delivery, if in person, (ii) upon receipt, if by email, (iii) five (5) business days, if by certified mail, postage prepaid, return receipt requested, or (iv) two (2) business days, if by commercial overnight courier, next day delivery guarantee. Such notices shall be made to the parties at the addresses specified herein.

15. **Co-Signer**. The parties agree there is no co-signer for this Note.

16. **Principal**. Borrower hereby executes this Note as a principal and not as a surety.

17. **Governing Law**. This Note shall be governed by the laws of the State of California, without reference to provisions on conflicts of law.

IN WITNESS WHEREOF, the parties hereto have executed this Note on the date(s) below.

Lender's Signature	/s/Katherine Ngai-Pesic
Print Name	Katherine Ngai-Pesic
Date	6/22/2022
Borrower's Signature	/s/Robert McMullan
Print Name	Robert McMullan
Date	6/28/2022

Amendment to Promissory Note and Line of Credit

This Amendment amends that certain Promissory Note and Line of Credit (the "LOC Agreement") effective as of June 13, 2022, by and between Silvaco, Inc. and Katherine Ngai-Pesic. Capitalized terms not defined herein shall have the meaning assigned to such term in the LOC Agreement.

The Parties agree to amend and restate Section 2 of the LOC Agreement as set forth below:

> "2. Payments. Lender will invoice and Borrower shall pay accrued interest on a monthly basis. The total remaining outstanding balance of the Note, including all remaining accrued interest and late fees, is due on the second anniversary of the Effective Date ("Due Date")."

Unless otherwise amended by this Amendment, the terms and conditions of the LOC Amendment shall remain unchanged.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment on the date set forth below.

Lender's Signature

/s/ Katherine Ngai-Pesic

Katherine Ngai-Pesic

Date: 05 / 22 / 2023

Borrower's Signature

/s/ Robert McMullan

Name: Robert McMullan

Title: CFO

Date: 05 / 25 /2023

Exhibit 10.22

Amendment #2 to Promissory Note and Line of Credit

This Amendment #2 amends that certain Promissory Note and Line of Credit effective as of June 13, 2022 by and between Silvaco, Inc. (the "Company") and Katherine Ngai-Pesic, as amended (the "LOC Agreement"). Capitalized terms not defined herein shall have the meaning assigned to such term in the LOC Agreement.

The Parties agree to amend and restate Section 2 of the LOC Agreement as set forth below:

> "2. Payments. Lender will invoice and Borrower shall pay accrued interest on a monthly basis. The total remaining outstanding balance of the Note, including all remaining accrued interest and late fees, is due upon the later of (a) the expiration or termination of that certain Loan and Security Agreement by and between Silvaco Group, **Inc.,** the Company and East West Bank, or (b) the second anniversary of the Effective Date ("Due Date")."

Unless otherwise amended by this Amendment, the terms and conditions of the LOC Amendment shall remain unchanged.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the date set forth below.

Lender's Signature

/s/ Katherine Ngai-Pesic

Date: 12/11/2023

Borrower’s Signature

/s/ Babak Taheri

Name: Babak Thaeri

Title: CEO

Date: 12/11/2023

SILVACO GROUP, INC.
SILVACO, INC.
AND
EAST WEST BANK
LOAN AND SECURITY AGREEMENT

This **LOAN AND SECURITY AGREEMENT** (the "Agreement") is entered into as of December 14, 2023, by and between EAST WEST BANK ("Bank"), SILVACO GROUP, INC. ("Parent"), and SILVACO, INC. ("Silvaco").

RECITALS

Borrowers wish to obtain credit from time to time from Bank, and Bank desires to extend credit to Borrowers. This Agreement sets forth the terms on which Bank will advance credit to Borrowers, and Borrowers will repay the amounts owing to Bank.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION.

1.1 Definitions. As used in this Agreement, the following terms shall have the following definitions:

"Accounts" means all presently existing and hereafter arising accounts, contract rights, payment intangibles, and all other forms of obligations owing to a Borrower arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology) or the rendering of services by a Borrower, whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by a Borrower and such Borrower's Books relating to any of the foregoing.

"Adjusted EBITDA" means Parent's consolidated net income/loss determined in accordance with GAAP, before (i) interest, (ii) taxes, (iii) depreciation and amortization, (iv) non-cash stock compensation expenses, (v) non-cash impairment charges, (vi) one-time, non-recurring expenses, including those incurred in connection with financing transactions (including transaction fees, costs and expenses (including legal fees and expenses)), including an IPO, and restructuring costs, in an aggregate amount not to exceed $1,500,000 in any single fiscal year, and (vii) other non-cash expenses as may be approved by Bank on a case by case basis in its sole discretion.

"Advance" or "Advances" means a cash advance or cash advances under the Revolving Facility.

"Advance Rate" means One Hundred Fifty Percent (150%).

"Affiliate" means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by or is under common control with such Person, and each of such Person's senior executive officers, directors, and partners.

"Bank Expenses" means all reasonable costs or expenses (including attorneys' fees and expenses, whether generated in-house or by outside counsel) incurred in connection with the preparation, negotiation, administration, and enforcement of the Loan Documents, Collateral audit fees, lockbox services fees, and attorneys' fees and expenses (whether generated in-house or by outside counsel) incurred in amending, modifying, enforcing or defending the Loan Documents (including fees and expenses of appeal), incurred before, during and after an Insolvency Proceeding, whether or not suit is brought.

"Beneficial Ownership Certification" means a certification regarding beneficial ownership required by the Beneficial Ownership Regulation, which certification shall be substantially in form and substance satisfactory to Bank.

"Beneficial Ownership Regulation" means 31 C.F.R. § 1010.230.

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which Bank is prohibited from dealing or otherwise engaging in any transaction by any Anti Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Borrower" or "Borrowers" means each of Parent, Silvaco, and any other Person joined as a co-borrower to this Agreement after the Closing Date.

"Borrower's Books" means all of a Borrower's books and records including: ledgers; records concerning such Borrower's assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment, containing such information.

"Borrowing Base" means an amount equal to (a) Borrowers' Eligible Recurring Revenue for the upcoming twelve month period, multiplied by (b) the Advance Rate, as determined by Bank with reference to the most recent Borrowing Base Certificate delivered by Borrowers; minus any Reserves, provided, however, that the Advance Rate and the Borrowing Base may be revised from time to time by Bank, based on revenue churn or to mitigate the impact of events, conditions, contingencies, or risks which may adversely affect the Collateral or its value.

"Business Day" means any day other than a Saturday, Sunday or any day on which commercial banks in Los Angeles, California are authorized or required to close

"Change in Control" shall mean a transaction in which (i) any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a sufficient number of shares of all classes of stock then outstanding of Parent ordinarily entitled to vote in the election of directors, empowering such "person" or "group" to elect a majority of the Board of Directors of Parent, who did not have such power before such transaction; or (ii) Parent ceases to directly or indirectly own all of the capital stock of any other Borrower.

"Closing Date" means the date of this Agreement.

"Code" means the California Uniform Commercial Code, as amended or supplemented from time to time.

"Collateral" means the property described on **Exhibit A** attached hereto.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any indebtedness, lease, dividend, letter of credit or other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards, or merchant services issued or provided for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designed to protect such Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by Bank in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Contracts" means software as a service (SaaS) subscription contracts executed by Borrowers' customers in the ordinary course of business for the provision of maintenance and support services for an initial term of at least one year.

"Copyrights" means any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held.

"Credit Extension" means each Advance, use of the FX Sublimit, or any other extension of credit by Bank for the benefit of Borrowers hereunder.

"Daily Balance" means the amount of the Obligations owed at the end of a given day.

"Eligible Recurring Revenue" means, as of any particular measurement month, (i) Recurring Revenue generated from existing Eligible Recurring Revenue Contracts, plus (ii) Recurring Revenue generated from new Eligible Recurring Revenue Contracts entered into and effective in such month, plus (iii) the amount of Recurring Revenue that was upsold in the month on Eligible Recurring Revenue Contracts, minus (iv) the aggregate amount of Recurring Revenue lost in connection with Eligible Recurring Revenue Contracts, that were cancelled, terminated, expired or not renewed in the measurement month, and minus (v) the aggregate amount of Recurring Revenue lost in connection with Eligible Recurring Revenue Contracts that were downsized in such month (but only to the extent downsized).

"Eligible Recurring Revenue Contracts" are active Contracts with corporate customers yielding Recurring Revenue, that meet all of Borrower's representations and warranties described in Section 5.4, provided that Bank may change the standards of eligibility based on the results of a Collateral audit or based on events, conditions, contingencies, or risks which, as reasonably determined by Bank, may reasonably be expected to adversely affect Collateral. Unless otherwise agreed to by Bank, Eligible Recurring Revenue Contracts shall not include:

(a) Contracts that have not yet expired or been terminated but such customer has elected to cancel or failed to renew;

(b) Contracts for which the customer has gone out of business or become insolvent;

(c) Contracts that are billed or collected outside of the United States;

(d) Contracts with any college or university;

(e) Contracts with an individual consumer/user; or

(f) Contracts that Bank has determined in its reasonable business discretion are unsuitable for inclusion.

"Equipment" means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments, in each case, located in the US, in which a Borrower has any interest.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

"Event of Default" has the meaning assigned in Article 8.

"FX Amount" means the aggregate amount, in United States Dollars, of the then-outstanding FX Contracts between Borrower(s) and Bank as of any date of determination, as may be adjusted by the risk factor applicable to such FX Contract, in accordance with terms of the applicable FX Contract.

"FX Sublimit" means a sublimit for foreign exchange services and hedging activities under the Revolving Line not to exceed One Million Dollars ($1,000,000).

"GAAP" means generally accepted accounting principles as in effect from time to time.

"Indebtedness" means (a) all indebtedness for borrowed money or the deferred purchase price of property or services, including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations and (d) all Contingent Obligations.

"Insolvency Proceeding" means any proceeding commenced by or against any Person under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Intellectual Property" means all of Borrower's right, title, and interest in and to the following: (a) Copyrights, Trademarks and Patents; (b) any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held; (c) any and all design rights which may be available to Borrower now or hereafter existing, created, acquired or held; (d) any and all claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above; (e) all licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights; (f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and (g) all proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

"Inventory" means all inventory in which a Borrower has or acquires any interest, including work in process and finished products intended for sale or lease or to be furnished under a contract of service, of every kind and description now or at any time hereafter owned by or in the custody or possession, actual or constructive, of a Borrower, including such inventory as is temporarily out of its custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and such Borrower's Books relating to any of the foregoing.

"Investment" means any beneficial ownership of (including stock, partnership interests, limited liability company membership interests or any other securities) any Person, or any investment, loan, advance or capital contribution or transfer of any assets through advances, equity positions, or other avenues to any Person.

"IPO" shall mean the initial sale of equity securities of the Parent to the public pursuant to a registration statement filed with, and declared effective by, the U.S. Securities and Exchange Commission resulting in the Parent becoming a publicly-traded entity on any recognized U.S. stock exchange.

"Lien" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"Loan Documents" means, collectively, this Agreement, the intellectual property security agreement, any lockbox services agreement, any note or notes, documents or instruments executed by a Borrower, any guarantees, pledges or security agreements provided by third parties entered into in connection with this Agreement, and any other document, instrument or agreement entered into in connection with this Agreement, all as amended or extended from time to time.

"Material Adverse Effect" means a material adverse effect on (i) the business operations or condition (financial or otherwise) of Borrowers and their Subsidiaries taken as a whole or (ii) the ability of Borrowers to repay

the Obligations or otherwise perform their obligations under the Loan Documents or (iii) the priority of Bank's security interests in the Collateral or (iv) the value of the Collateral.

"Negotiable Collateral" means all letters of credit of which a Borrower is a beneficiary, notes, drafts, instruments, securities, documents of title, and chattel paper, and such Borrower's Books relating to any of the foregoing.

"Obligations" means all debt, principal, interest, Bank Expenses and other amounts owed to Bank by Borrowers pursuant to this Agreement or any other agreement, whether absolute or contingent, due or to become due, now existing or hereafter arising, including any interest that accrues after the commencement of an Insolvency Proceeding and including any debt, liability, or obligation owing from Borrowers to others that Bank may have obtained by assignment or otherwise.

"OFAC" means the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Parent Financial Reports" means the Parent's most recent consolidated financial statements, whether interim or audited, delivered to Bank.

"Patents" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"Periodic Payments" means all installments or similar recurring payments that Borrowers may now or hereafter become obligated to pay to Bank pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrowers and Bank.

"Permitted Indebtedness" means:

(a) Indebtedness of Borrowers in favor of Bank arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date and disclosed in the Schedule;

(c) Indebtedness secured by a lien described in clause (c) of the defined term "Permitted Liens," provided (i) such Indebtedness does not exceed the lesser of the cost or fair market value of the equipment financed with such Indebtedness and (ii) such Indebtedness does not exceed $100,000 in the aggregate at any given time;

(d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;

(e) Subordinated Debt; and

(f) extensions, refinancings and renewals of any items of Permitted Indebtedness described in clauses (a) through (d) above, provided that the principal amount is not increased or the terms modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"Permitted Investment" means:

(a) Investments existing on the Closing Date disclosed in the Schedule; and

(b) certificates of deposit maturing no more than one (1) year from the date of investment therein issued by Bank and Bank's money market accounts; and

(c) other Investments with Bank's written consent.

"Permitted Liens" means the following:

(a) any Liens existing on the Closing Date and disclosed in the Schedule or arising under this Agreement or the other Loan Documents;

(b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings and for which Borrowers maintain adequate reserves, provided the same have no priority over any of Bank's security interests;

(c) Liens (i) upon or in any equipment which was not financed by Bank acquired or held by a Borrower or any of its Subsidiaries to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment, or (ii) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment; and

(d) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (c) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase.

"Person" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"Prime Rate" means the Prime Rate published in the Money Rates section of the Western Edition of The Wall Street Journal, or such other rate of interest publicly announced from time to time by Bank as its Prime Rate.

"Recurring Revenue" means annual recurring Revenue from Contracts. Recurring Revenue expressly excludes Revenue with respect to one-time, non-recurring transactions, installation, and/or set-up fees, or from any other one-time non-contractually accruing sources.

"Reserve" means, as of any date of determination, any amount that Bank may establish from time to time for any purpose, including (a) events, conditions, contingencies or risks which materially and adversely affect the assets, business or prospects of Borrowers, or the Collateral or its value , or the enforceability, perfection or priority of Bank's Lien in the Collateral, (b) any collateral report or financial information relating to the Loan Parties and furnished to Bank is incomplete, inaccurate or misleading in any material respect, (c) any events or circumstances which does or would with notice or passage of time or both, constitute an Event of Default or (d) liability, contingent or otherwise, of Bank or any affiliate of Bank to any third party in connection with any Bank Product.

"Responsible Officer" means each of the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer and the Controller of each Borrower.

"Revenue" means revenue recognized in accordance with GAAP.

"Revolving Facility" means the facility under which Borrowers may request Bank to issue Advances, as specified in Section 2.1(a) hereof.

"Revolving Line" means Five Million Dollars ($5,000,000).

"Revolving Maturity Date" means the second anniversary of the Closing Date.

"Schedule" means the schedule of exceptions attached hereto and approved by Bank, if any.

"Shares" means all of the issued and outstanding capital stock, membership units or other securities owned or held of record by a Borrower or any Subsidiary of a Borrower, in any direct or indirect Subsidiary, provided however that (i) the Shares shall not include more than sixty six percent (66%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by a Borrower or any Subsidiary of a Borrower, in any direct or indirect foreign Subsidiary, to the extent that the pledge in excess of more than sixty six percent (66%) of such Shares to Bank as Collateral creates a present and existing adverse tax consequence to Borrowers under the IRC; and (ii) the Shares shall not include the capital stock of any foreign Subsidiary where pledging such stock to Bank is prohibited by the local law of the jurisdiction of formation of such foreign Subsidiary.

"Subordinated Debt" means any debt incurred by a Borrower that is subordinated to the debt owing by such Borrower to Bank on terms acceptable to Bank (and identified as being such by such Borrower and Bank), pursuant to a subordination agreement in form and substance satisfactory to Bank.

"Subsidiary" means any corporation, company, partnership or other Person in which (i) any general partnership interest or (ii) more than 50% of the stock or other units of ownership which by the terms thereof have the voting power to elect a majority of the board of directors or other managers or trustees of such Person, at the time as of which any determination is being made, is owned by a Borrower, either directly or through an Affiliate.

"Trademarks" means any trademark and service mark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower(s) connected with and symbolized by such trademarks.

1.2 Accounting Terms. All accounting terms not specifically defined herein shall be construed in accordance with GAAP and all calculations made hereunder shall be made in accordance with GAAP. When used herein, the terms "financial statements" shall include the notes and schedules thereto.

2. LOAN AND TERMS OF PAYMENT.

2.1 Credit Extensions.

Each Borrower promises to pay to the order of Bank, in lawful money of the United States of America, the aggregate unpaid principal amount of all Credit Extensions made by Bank to Borrowers hereunder. Each Borrower shall also pay interest on the unpaid principal amount of such Credit Extensions at rates in accordance with the terms hereof.

(a) Revolving Advances.

(i) Subject to and upon the terms and conditions of this Agreement, Borrowers may request Advances in an aggregate outstanding amount not to exceed (i) the Revolving Line or (ii) the Borrowing Base, minus, in each case, the aggregate amounts outstanding under the FX Sublimit. Subject to the terms and conditions of this Agreement, amounts borrowed pursuant to this Section 2.1(a) may be repaid and reborrowed at any time prior to the Revolving Maturity Date, at which time all Advances under this Section2.1(a) shall be immediately due and payable. Borrowers may prepay any Advances without penalty or premium.

(ii) Whenever a Borrowers desire an Advance, such Borrowers will notify Bank by email, facsimile transmission or telephone no later than 2:00 p.m. Pacific Time, on the Business Day that is one day before the Business Day the Advance is to be made. Each such notification shall be made (i) by telephone or in-person followed by written confirmation from Borrower within 24 hours by delivering to Bank a Revolving Advance Request Form Payment/Advance Form in substantially the form of **Exhibit B** hereto, or (ii) by electronic mail or facsimile transmission of a Revolving Advance Request Form Payment/Advance Form in substantially the

form of **Exhibit B** hereto. Bank is authorized to make Advances under this Agreement, based upon instructions received from a Responsible Officer or a designee of a Responsible Officer, or without instructions if in Bank's discretion such Advances are necessary to meet Obligations which have become due and remain unpaid. Bank shall be entitled to rely on any notice given by a person who Bank reasonably believes to be a Responsible Officer or a designee thereof, and Borrowers shall indemnify and hold Bank harmless for any damages or loss suffered by Bank as a result of such reliance. Bank will credit the amount of Advances made under this Section to the appropriate Borrower's deposit account at Bank.

(b) FX Sublimit. Subject to and upon the terms and conditions of this Agreement, Borrower(s) may request Bank to enter into foreign exchange services and/or hedging contracts ("FX Contracts") with Borrower(s), with such FX Contracts due not later than the Revolving Maturity Date. Borrowers shall pay any standard issuance and other fees or charges that Bank notifies Borrowers will be charged for issuing and processing FX Contracts for any Borrower. The FX Amount shall at all times be equal to or less than the FX Sublimit, and availability under the Revolving Line shall be reduced by the FX Amount. At Bank's election, or any time the Revolving Facility is terminated or otherwise ceases to exist, Borrowers shall immediately secure in cash all obligations on any outstanding FX Contracts in such amounts and on terms reasonably acceptable to Bank.

2.2 Overadvances. If the aggregate amount of the outstanding Advances plus the aggregate amounts outstanding under the FX Sublimit exceeds the Revolving Line at any time, Borrowers shall immediately pay to Bank, in cash, the amount of such excess. Bank shall endeavor to provide notice to Parent of any overadvance, but failure to provide such notice shall not modify or relieve Borrowers from their payment obligations hereunder.

2.3 Interest Rates, Payments, and Calculations.

(a) Interest Rates. Except as set forth in Section 2.3(b), the Advances shall bear interest, on the outstanding Daily Balance thereof, at a per annum rate equal to one half of one percent (0.5%) above the greater of (i) the Prime Rate or (ii) four and one half percent (4.5%).

(b) Late Fee; Default Rate. If any payment is not made within ten (10) days after the date such payment is due, Borrowers shall pay Bank a late fee equal to the lesser of (i) six percent (6%) of the amount of such unpaid amount or (ii) the maximum amount permitted to be charged under applicable law, not in any case to be less than $5.00. All Obligations shall bear interest, from and after the occurrence and during the continuance of an Event of Default, at a rate equal to five (5) percentage points above the interest rate applicable immediately prior to the occurrence of the Event of Default.

(c) Payments. Interest hereunder shall be due and payable on the first Business Day of each month during the term hereof. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder. All payments shall be made free and clear of, and without deduction or withholding for, any present or future taxes or other charges imposed by any jurisdiction. All Periodic Payments and any other payments due and payable hereunder will be made via auto debit from the Borrower's account at Bank.

(d) Computation. The applicable rate of interest hereunder shall be computed daily on the basis of a 360 day year and actual days elapsed, and shall be increased or decreased effective as of the day the Prime Rate is changed as provided in the definition thereof, by an amount equal to such change in the Prime Rate. If the Prime Rate becomes unavailable during the term of this Agreement, Bank may designate a substitute rate after written notification to Borrowers.

2.4 Crediting Payments. Unless otherwise agreed or required by applicable law, payments will be applied first to any accrued and unpaid interest, then to principal, then to any late charges or fees, and then to any unpaid Bank Expenses. Borrowers will pay Bank at Bank's address set forth in Section 10 or at such other place as Bank may designate in writing. After the occurrence of an Event of Default, the receipt by Bank of any wire transfer of funds, check, or other item of payment shall be immediately applied to conditionally reduce Obligations,

but shall not be considered a payment on account unless such payment is of immediately available federal funds or unless and until such check or other item of payment is honored when presented for payment. Notwithstanding anything to the contrary contained herein, any wire transfer or payment received by Bank after 12:00 noon Pacific Time shall be deemed to have been received by Bank as of the opening of business on the immediately following Business Day. Any wire transfer or other payment received by Bank before 12:00 noon Pacific time shall be deemed to have been received by Bank as of the opening of business on such Business Day. Whenever any payment to Bank under the Loan Documents would otherwise be due (except by reason of acceleration) on a date that is not a Business Day, such payment shall instead be due on the next Business Day, and additional fees or interest, as the case may be, shall accrue and be payable for the period of such extension.

2.5 Fees and Expenses.

(a) Facility Fees. On the Closing Date, Borrowers shall pay to Bank a equal to Twenty Five Thousand United States Dollars ($25,000). On each anniversary of the Closing Date, for so long as the Revolving Facility is in place, Borrowers shall pay to Bank a renewal facility fee equal to one half of one percent (0.5%) of the Revolving Line. Each facility fee shall be nonrefundable.

(b) Unused Fee. Borrower shall pay to Bank an annual fee equal to 0.20% of the difference between the Revolving Line and the average daily balance of the outstanding Credit Extensions, payable within ten (10) days of the last day of each quarter (which equates to a quarterly fee equal to 0.05% of the difference between the Revolving Line and the average daily balance of the outstanding Credit Extensions during such quarter).

(c) Bank Expenses. Borrowers shall pay to Bank on the Closing Date, all Bank Expenses incurred through the Closing Date, including reasonable attorneys' fees and expenses and, after the Closing Date, all Bank Expenses, including attorneys' fees and expenses, as and when they are incurred by Bank. Borrower authorizes Lender, at its sole option, to (i) debit Bank Expenses from the initial Advance on or after the Closing Date, (ii) debit Bank Expenses from any Borrower's deposit account with Bank or (iii) make demand upon Borrower, for payment of Bank Expenses.

2.6 Term. Unless otherwise terminated by the parties in writing, this Agreement shall become effective on the Closing Date and, subject to Section 12.8, shall continue in full force and effect until the Revolving Maturity Date or if there are any outstanding Credit Extensions at such time, for so long as any Obligations under this Agreement remain outstanding or Bank has any obligation to make Credit Extensions under this Agreement. In addition, this Agreement may be terminated by Borrower at any time prior to the Revolving Maturity Date, effective no later than ten (10) Business Days after written notice of termination is given to Bank and all outstanding Obligations under this Agreement have been repaid. Notwithstanding the foregoing, Bank shall have the right to terminate its obligation to make Credit Extensions under this Agreement immediately and without notice upon the occurrence and during the continuance of an Event of Default. Notwithstanding termination, Bank's Lien on the Collateral shall remain in effect for so long as any Obligations are outstanding.

3. CONDITIONS OF LOANS.

3.1 Conditions Precedent to Initial Credit Extension. The obligation of Bank to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, the following:

(a) this Agreement;

(b) a certificate of the Secretary of each of Parent and Silvaco with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement;

(c) Beneficial Ownership Certification;

(d) UCC National Form Financing Statements

(e) an intellectual property security agreement;

(f) a subordination agreement executed by Katherine Ngai-Pesic;

(g) copy of an amendment to the loan agreement with Katherine Ngai-Pesic evidencing the extension of maturity date to a date no earlier than the Revolving Maturity Date;

(h) landlord waiver with respect to Silvaco's headquarters location;

(i) certificate(s) of insurance naming Bank as loss payee and additional insured;

(j) payment of the fees and Bank Expenses then due specified in Section 2.5 hereof;

(k) current financial statements and such other updated financial information as Bank may reasonably request; and

(l) establishment of the Collections Account;

(m) such other documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

3.2 Conditions Precedent to all Credit Extensions. The obligation of Bank to make each Credit Extension, including the initial Credit Extension, is further subject to the following conditions:

(a) timely receipt by Bank of the Payment/Advance Form as provided in Section 2.1;

(b) the representations and warranties contained in Section 4.4 shall be true and correct in all material respects on and as of the date of Borrowers' request for such Credit Extension and on the effective date of each Credit Extension as though made at and as of each such date, and no Event of Default shall have occurred and be continuing, or would exist after giving effect to such Credit Extension. The making of each Credit Extension shall be deemed to be a representation and warranty by Borrowers on the date of such Credit Extension as to the accuracy of the facts referred to in this Section 3.2; and

(c) in Bank's sole discretion, there has not been any material impairment in the Accounts, general affairs, management, results of operation, financial condition or the prospect of repayment of the Obligations, or there has not been any material adverse deviation by Borrowers from the most recent Financial Plan of Borrowers presented to Bank.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Each Borrower grants and pledges to Bank a continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt repayment of any and all Obligations and in order to secure prompt performance by Borrowers of each of its covenants and duties under the Loan Documents. Such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in Collateral acquired after the date hereof.

4.2 Delivery of Additional Documentation Required. Borrowers shall from time to time execute and deliver to Bank, at the request of Bank, all Negotiable Collateral, all financing statements and other documents that Bank may reasonably request, in form satisfactory to Bank, to perfect and continue the perfection of Bank's security interests in the Collateral and in order to fully consummate all of the transactions contemplated

under the Loan Documents. Borrowers from time to time may deposit with Bank specific time deposit accounts to secure specific Obligations. Each Borrower authorizes Bank to hold such balances in pledge and to decline to honor any drafts thereon or any request by a Borrower or any other Person to pay or otherwise transfer any part of such balances for so long as the Obligations are outstanding.

4.3 Right to Inspect. Bank (through any of its officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrowers' usual business hours but no more than twice a year (unless an Event of Default has occurred and is continuing), to inspect each Borrower's Books and to make copies thereof and to check, test, and appraise the Collateral in order to verify Borrowers' financial condition or the amount, condition of, or any other matter relating to, the Collateral.

4.4 Pledge of Shares. Each Borrower hereby pledges, assigns and grants to Bank, a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. Within thirty (30) days of the Closing Date, or, to the extent not certificated as of the Closing Date, within thirty (30) days of the certification of any Shares, the certificate or certificates for the Shares (to the extent such Shares are in certificated form) will be delivered to Bank, accompanied by an instrument of assignment duly executed in blank by Borrower. To the extent required by the terms and conditions governing the Shares, Borrower shall cause the books of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares; provided however, that Borrowers shall not be required to undertake any actions under the local jurisdiction governing such Shares absent an Event of Default. Upon the occurrence of an Event of Default hereunder, Bank may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Bank and cause new (as applicable) certificates representing such securities to be issued in the name of Bank or its transferee. Borrower will execute and deliver such documents, and take or cause to be taken such actions, as Bank may reasonably request to perfect or continue the Shares; provided however, that Borrowers shall not be required to undertake any actions under the local jurisdiction governing such Shares absent an Event of Default. Unless an Event of Default shall have occurred and be continuing, Borrower shall be entitled to exercise any voting rights with respect to the Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and continuance of an Event of Default.

5. REPRESENTATIONS AND WARRANTIES.

Each Borrower represents and warrants as follows, as of (i) the Closing Date, (ii) the last day of each month, (iii) the date each Compliance Certificate is delivered to Bank, (iv) the date of Borrowers' request for any Credit Extension and (v) the effective date of each Credit Extension when made, as though made on such date:

5.1 Due Organization and Qualification. Each Borrower and each Subsidiary is a corporation duly existing under the laws of its state of incorporation and qualified and licensed to do business in any state in which the conduct of its business or its ownership of property requires that it be so qualified.

5.2 Due Authorization; No Conflict. The execution, delivery, and performance of the Loan Documents are within each Borrower's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in a Borrower's Certificate of Incorporation or Bylaws (or similar governing document), nor will they constitute an event of default under any material agreement to which a Borrower is a party or by which a Borrower is bound. No Borrower is in default under any material agreement to which it is a party or by which it is bound.

5.3 Collateral. Each Borrower has rights in or the power to transfer the Collateral, free and clear of Liens, adverse claims, and restrictions on transfer or pledge except for Permitted Liens. All Collateral is

located solely in the United States. Except as set forth in the Schedule, none of the Collateral is maintained or invested with a Person other than Bank or Bank's Affiliates.

5.4 Eligible Recurring Revenue Contracts. The Eligible Recurring Revenue Contracts are bona fide existing obligations. The property and services giving rise to such Eligible Recurring Revenue Contracts has been delivered or rendered to the account debtor or to the account debtor's agent for immediate and unconditional acceptance by the account debtor. No Borrower has received notice of actual or imminent Insolvency Proceeding of any account debtor that is included in any Borrowing Base Certificate as an Eligible Recurring Revenue Contract.

5.5 Merchantable Inventory. All Inventory is in all material respects of good and marketable quality, free from all material defects.

5.6 Intellectual Property. Each Borrower is the sole owner of the Intellectual Property, except for non-exclusive licenses granted by such Borrower to its customers or other third parties in the ordinary course of business. To the knowledge of the Borrowers, each of the Patents is valid and enforceable. No part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and no claim has been made that any part of the Intellectual Property violates the rights of any third party. Except as set forth in the Schedule and other than any rights granted pursuant to intercompany agreements, each Borrower's rights as a licensee of intellectual property do not give rise to more than five percent (5%) of such Borrower's gross revenue in any given quarter, including without limitation revenue derived from the sale, licensing, rendering or disposition of any product or service. No Borrower is party to, or bound by, any license or agreement or any other property that prohibits or restricts such Borrower from undertaking its obligation set forth in Section 4.1 above.

5.7 Name; Location of Chief Executive Office. Except as disclosed in the Schedule, no Borrower has done business under any name other than that specified on the signature page hereof; or, in the past five (5) years, changed its jurisdiction of formation, corporate structure, organizational type, or any organizational number assigned by its jurisdiction and the exact legal name of each Borrower is as set forth in the first paragraph of this Agreement. The chief executive office of Borrowers is located at the address indicated in Section 10 hereof. Except as disclosed in the Schedule, all of each Borrower's Inventory and Equipment is located only at the location set forth in Section 10 hereof.

5.8 Litigation. Except as set forth in the Schedule, there are no actions or proceedings pending by or against any Borrower or any Subsidiary before any court or administrative agency.

5.9 No Material Adverse Change in Financial Statements. Except as set forth in the Schedule, all consolidated and consolidating financial statements related to Parent that Bank has received from Borrowers fairly present in all material respects Parent's financial condition as of the date thereof and Parent's consolidated and consolidating results of operations for the period then ended. There has not been a material adverse change in the consolidated or the consolidating financial condition of Parent since the date of the most recent of such financial statements submitted to Bank.

5.10 Solvency, Payment of Debts. The fair salable value of Borrowers' assets (including goodwill minus disposition costs) exceeds the fair value of its liabilities; Borrowers are not left with unreasonably small capital after the transactions in this Agreement. Each Borrower is solvent and able to pay its debts (including trade debts) as they mature.

5.11 Regulatory Compliance. Each Borrower and each Subsidiary (as applicable to such Borrower or Subsidiary) have met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA, and no event has occurred resulting from a Borrower's failure to comply with ERISA that could result in any Borrower's incurring any material liability. No Borrower is an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. No Borrower is engaged principally, or as one of the important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T and U of the

Board of Governors of the Federal Reserve System). Each Borrower and each Subsidiary, if applicable, have complied with all the provisions of the Federal Fair Labor Standards Act. No Borrower or any Subsidiary has violated any material statutes, laws, ordinances or rules applicable to it. Each Borrower is in material compliance with all Environmental Laws, regulations and ordinances.

5.12 Taxes. Each Borrower and each Subsidiary have filed or caused to be filed all tax returns required to be filed, and have paid, or have made adequate provision for the payment of, all taxes reflected therein, except those being contested in good faith with adequate reserves under GAAP.

5.13 Subsidiaries. Except as set forth on the Schedule, no Borrower owns any stock, partnership interest or other equity securities of any Person.

5.14 Government Consents. Each Borrower and each Subsidiary have obtained all material consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Borrowers' business as currently conducted.

5.15 Operating, Depository and Investment Accounts. All of Borrower's and its Subsidiary's operating, depository and investment account(s) that are maintained or invested with a Person other than Bank as of the Closing Date are set forth on the schedule separately provided to Bank prior to the date hereof.

5.16 Shares. Each Borrower has full power and authority to create a first lien on the Shares as contemplated in Section 4.4 hereof, and no disability or contractual obligation exists that would prohibit such Borrower from pledging the Shares pursuant to this Agreement. There are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been duly authorized and validly issued, and are fully paid and non-assessable. The Shares are not the subject of any present or to the knowledge of the Borrower, threatened suit, action, arbitration, administrative or other proceeding, and no Borrower knows of any reasonable grounds for the institution of any such proceedings.

5.17 Beneficial Ownership. The information included in the Beneficial Ownership Certification most recently delivered to Bank is true and correct in all respects.

5.18 Anti-Terrorism Laws. Except as set forth on the Schedule, no Borrower, nor any of its Subsidiaries, or any of Borrower's or its Subsidiaries' Affiliates is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. No Borrower, nor any of its Subsidiaries (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

5.19 Full Disclosure. No representation, warranty or other statement made by any Borrower in any certificate or written statement furnished to Bank, when taken as a whole contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading.

6. AFFIRMATIVE COVENANTS. Each Borrower shall do all of the following:

6.1 Good Standing. Each Borrower shall maintain its and each of its Subsidiaries' corporate existence and good standing in its jurisdiction of incorporation and maintain qualification in each jurisdiction in which it is required under applicable law. Each Borrower shall maintain, and shall cause each of its Subsidiaries to maintain, in force all such licenses, approvals and agreements, where the loss of which could have a Material Adverse Effect.

6.2 Government Compliance. Each Borrower shall meet, and shall cause each Subsidiary to meet, the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. Borrower shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could reasonably be expected to result in a Material Adverse Effect.

6.3 Financial Statements, Reports, Certificates; Other Notices and Information. Parent shall deliver the following to Bank:

(a) as soon as available, but in any event within thirty (30) days after the last day of each month, (i) aged listings of accounts receivable and accounts payable in detailed and summary format, (ii) recurring revenue metrics reports, including customer churn, recurring revenue (and annualized recurring revenue calculated for the upcoming twelve month period), revenue booking reports (license and maintenance), and (iii) a Borrowing Base Certificate signed by a Responsible Officer in substantially the form of **Exhibit C** hereto;

(b) as soon as available, but in any event within thirty (30) days after the end of each calendar month, a company prepared consolidated and consolidating balance sheet, income statement, and cash flow statement covering Parent's consolidated and consolidating operations during such period, prepared in accordance with GAAP, consistently applied, in a form acceptable to Bank, accompanied by a Compliance Certificate signed by a Responsible Officer, in substantially the form of **Exhibit D** hereto;

(c) as soon as available, but in any event no later than fifteen (15) days prior to the beginning of Parent's next fiscal year, annual operating plan (including income statements, balance sheets and cash flow statements presented in a quarterly format) for the upcoming fiscal year, approved by Parent's board of directors, which shall be in a form reasonably satisfactory to Bank (each, a "Financial Plan");

(d) as soon as available, but in any event within one hundred eighty (180) days after the end of Parent's fiscal year, audited consolidated and consolidating financial statements of Parent prepared in accordance with GAAP, consistently applied, together with an unqualified opinion on such financial statements of an independent certified public accounting firm reasonably acceptable to Bank;

(e) such budgets, sales projections, operating plans, other financial information including information related to the verification of Borrowers' Accounts as Bank may reasonably request from time to time;

(f) promptly (and in any event within three (3) Business Days) upon any Borrower becoming aware of the existence of any Event of Default or event described in Section 8 which, with the giving of notice or passage of time, or both, would constitute an Event of Default, such Borrower shall give written notice to Bank of such occurrence, which such notice shall include a reasonably detailed description of such Event of Default or event which, with the giving of notice or passage of time, or both, would constitute an Event of Default;

(g) promptly (and in any event within three (3) Business Days) following a Borrower's creation or acquisition of any commercial tort claim (as defined in the Code), such Borrower shall promptly notify Bank in writing of the general details thereof (with such written notice being deemed as such Borrower's grant to Bank of a security interest therein and in the proceeds thereof);

(h) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened against either Borrower or any Subsidiary arising after the Closing Date that could result in damages or costs to such Borrower or any Subsidiary of Two Hundred Fifty Thousand Dollars ($250,000) or more, or any terminations of customer agreements or customer disputes/claims, where the termination, dispute or claim involves more than Two Hundred Fifty Thousand Dollars ($250,000);

(i) periodic updates on pending litigation matters, promptly following any material developments in such pending litigation, along with copies of any court filings; and

(j) promptly following any request therefor, Borrower shall provide to Bank any information and documentation reasonably requested by Bank for purposes of compliance with applicable "know your customer" requirements under the USA Patriot Act, Title III of Pub. L. 107-56 (signed into law on October 26, 2001) (the "Patriot Act"), the Beneficial Ownership Regulation or other applicable anti-money laundering laws, including but not limited to a Beneficial Ownership Certification form acceptable to Bank; and immediate notice if a Borrower or any Subsidiary has knowledge that a Borrower, or any Subsidiary or Affiliate of a Borrower, is listed on the OFAC Lists or (i) is convicted on, (ii) pleads *nolo contendere* to, (iii) is indicted on, or (iv) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Borrowers may deliver to Bank on an electronic basis any certificates, reports or information required pursuant to this Section 6.3, and Bank shall be entitled to rely on the information contained in the electronic files, provided that Bank in good faith believes that the files were delivered by a Responsible Officer.

6.4 Audits. Bank shall have a right from time to time hereafter to audit Borrower's Accounts and appraise Collateral at Borrower's reasonable expense, provided that such audits/appraisals will be conducted no more often than once every twelve (12) months unless an Event of Default has occurred and is continuing.

6.5 Taxes. Each Borrower shall make, and shall cause each Subsidiary to make, due and timely payment or deposit of all federal, state, and local taxes, assessments, or contributions required of it by law, including, but not limited to, those laws concerning income taxes, F.I.C.A., F.U.T.A., state disability, and local, state, and federal income taxes, and will, upon request, execute and deliver to Bank, on demand, proof satisfactory to Bank indicating that such Borrower or a Subsidiary has made such payments or deposits and any appropriate certificates attesting to the payment or deposit thereof; provided that such Borrower or a Subsidiary need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by Borrowers.

6.6 Insurance.

(a) Each Borrower, at its expense, shall keep the Collateral which are fixed assets, insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where each Borrower's business is conducted on the date hereof. Each Borrower shall also maintain insurance relating to such Borrower's business, ownership and use of the Collateral in amounts and of a type that are customary to businesses similar to such Borrower's business.

(b) All such policies of insurance shall be in such form, with such companies, and in such amounts as are reasonably satisfactory to Bank. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Bank, showing Bank as an additional loss payee thereof, and all liability insurance policies shall show the Bank as an additional insured and shall specify that the insurer must give at least twenty (20) days' notice to Bank before canceling its policy for any reason. Upon Bank's request, Borrowers shall deliver to Bank certified copies of such policies of insurance and evidence of the payments of all premiums therefor. All proceeds payable under any such policy shall, at the option of Bank, be payable to Bank to be applied on account of the Obligations.

6.7 Collections. Borrowers shall cause all account debtors to pay any amounts owing to any Borrower made by wire, ACH, electronic funds transfer or other electronic payment method directly to an account maintained at Bank (the "Collections Account"), and Borrowers shall deposit all payments made by check to the Collections Account. All invoices shall specify such Collections Account information as the remit to / payment information for all Accounts. If a Borrower receives any amount despite such instructions, such Borrower shall immediately transfer such payment to the Collections Account.

6.8 Operating, Depository and Investment Accounts.

(a) Each Borrower shall maintain its primary US depository, operating (including any administrative deposit accounts and cash managements services), and investment accounts with Bank, provided however, that Borrowers shall have thirty (30) days from the Closing Date to fully comply with the foregoing.

(b) For each domestic operating, depository or investment account that a Borrower maintains outside of Bank, such Borrower shall cause the applicable bank or financial institution at or with which any such account is maintained to execute and deliver an account control agreement or other appropriate instrument in form and substance satisfactory to Bank; provided however, that Borrowers shall have thirty (30) days from the Closing Date to obtain such account control agreements on its domestic accounts existing as of the Closing Date.

(c) At least eighty five percent (85%) of Borrowers' total cash and cash equivalents in domestic U.S. accounts shall be maintained in Borrowers' accounts with Bank at all times.

6.9 Financial Covenants.

(a) Minimum Cash at Bank. At all times on and after the date the initial Advance is made to Borrowers, Borrowers shall maintain an aggregate of at least (i) $1,500,000 in unrestricted cash in their depository, operating and investment accounts at Bank, measured on a daily basis at all times prior to the effectiveness of the IPO, or (ii) at least $10,000,000 in unrestricted cash in their depository, operating and investment accounts at Bank, measured on a daily basis at all times upon and after the effectiveness of the IPO.

(b) Minimum Adjusted EBITDA. At all times prior to the effectiveness of the IPO, Borrowers shall comply with the following covenant:

(i) Parent's trailing six months' Adjusted EBITDA, measured on a quarterly basis beginning with the six month period ending on December 31, 2023 shall be at least in the amounts set forth below, as of the measurement dates set forth below:

Measurement Date	Measurement Period	Minimum Adjusted EBITDA
December 31, 2023	July 1, 2023 – December 31, 2023	$1,000,000
March 31, 2024	October 1, 2023 – March 31, 2024	$1,000,000
June 30, 2024	January 1, 2024 – June 30, 2024	$1,500,000
September 30, 2024	April 1, 2024 – September 30, 2024	$1,500,000

(ii) Parent's trailing six months' Adjusted EBITDA, measured on a quarterly basis beginning with the six month period ending on December 31, 2024 and thereafter shall be $2,000,000.

(c) Equity Cure.

(i) In the event Borrowers fail to comply with Section 6.9(b) of this Agreement as of any required measurement date (the "Noncompliance Date"), Borrowers shall have the right to cure such non-compliance (the "Equity Cure Right") by receiving a cash proceeds of at least the shortfall amount (the "Cash Contribution"), from the sale and issuance of Parent's equity securities or Subordinated Debt from existing shareholders within the thirty (30) day period following the Noncompliance Date (the "Initial Cure Period") or within the twenty (20) Business Day period that follows thereafter (the "Extended Cure Period"). If the Cash Contribution is received during the Initial Cure Period, Borrowers shall note as such on the Compliance Certificate delivered to Bank at the end of the Initial Cure Period. If the Cash Contribution has not been received during the Initial Cure Period, Borrowers shall note on the Compliance Certificate delivered to Bank at the end of the Initial Cure Period that Borrowers have elected to exercise the Equity Cure Right and intend to receive the Cash Contribution during the Extended Cure Period, and shall notify Bank within one Business Day following receipt of such Cash Contribution, but in any event no later than the end of the Extended Cure Period.

(ii) Upon receipt of such Cure Contribution in accordance with the terms set forth above, Borrowers shall be deemed as if they were in compliance with such financial covenant as of the Noncompliance Date and no Event of Default shall be deemed not to have occurred for purposes of the Loan Documents.

(iii) Cash Contributions received in compliance with the foregoing shall be included in the calculation of Borrowers' Adjusted EBITDA for the purposes of determining compliance with Section 6.9(b) for the affected period, and for the subsequent period which includes the affected period. The Equity Cure Right shall not be exercised more than twice over the erm of this Agreement, and shall not be exercised for any two consecutive measurement dates.

6.10 Intellectual Property Rights.

(a) Borrower shall (i) protect, defend and maintain the validity and enforceability of its Intellectual Property (including all trade secrets, Trademarks, Patents and Copyrights); (ii) use commercially reasonable efforts to detect infringements of the Trademarks, Patents and Copyrights and; (iii) promptly advise Bank in writing of material infringements detected; and (iii) not allow any Intellectual Property material to Borrowers' business to be abandoned, forfeited or dedicated to the public.

(b) Borrowers shall give Bank written notice of any applications or registrations of intellectual property rights filed with the United States Patent and Trademark Office or the United States Copyright Office, including the title of such intellectual property being filed, the date of such filing and the registration or application numbers, if any, promptly, but in any event no later than the end of the month following the month in which such application or registration occurs, and Borrowers shall execute such documents as Bank may reasonably request for Bank to maintain its perfection in such intellectual property rights to be registered by any Borrower, and upon the request of Bank, shall file such documents simultaneously with the filing of any such applications or registrations. Upon filing any such applications or registrations with the United States Copyright Office, Borrower shall promptly provide Bank with (i) a copy of such applications or registrations, without the exhibits, if any, thereto, (ii) evidence of the filing of any documents requested by Bank to be filed for Bank to maintain the perfection and priority of its security interest in such intellectual property rights, and (iii) the date of such filing.

(c) Bank may audit any Borrower's Intellectual Property to confirm compliance with this Section, provided such audit may not occur more often than twice per year, unless an Event of Default has occurred and is continuing. Bank shall have the right, but not the obligation, to take, at Borrowers' sole expense, any actions that a Borrower is required under this Section to take but which such Borrower fails to take, after 15 days' notice to Borrowers. Borrowers shall reimburse and indemnify Bank for all costs and expenses incurred in the exercise of its rights under this Section.

6.11 Formation or Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, at the time that a Borrower forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary, Borrowers shall (a) cause such new domestic Subsidiary to provide to Bank a joinder to this Agreement to cause such Subsidiary to become a co-borrower hereunder or provide a secured guaranty, together with such appropriate financing statements and/or control agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new foreign or domestic Subsidiary, in form and substance satisfactory to Bank, in accordance with Section 4.4, and (c) provide to Bank all other documentation in form and substance satisfactory to Bank that in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above.

6.12 Further Assurances. At any time and from time to time Borrowers shall execute and deliver such further instruments and take such further action as may reasonably be requested by Bank to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS. No Borrower will do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, transfer or otherwise dispose of (collectively, a "Transfer"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property (including any spinoffs or divisions), or move cash balances on deposit with Bank to accounts opened at another financial institution, other than: (i) Transfers of Inventory in the ordinary course of business; (ii) Transfers of non-exclusive licenses and similar arrangements for the use of the property of a Borrower or its Subsidiaries in the ordinary course of business; or (iii) Transfers of worn-out or obsolete Equipment which was not financed by Bank; (iv) Transfers between Borrowers; (v) Transfers by a Subsidiary that is not a Borrower to a Borrower or another Subsidiary; and (vi) Transfers permitted under Section 7.12.

7.2 Change in Business or Executive Office. Engage in any business, or permit any of its Subsidiaries to engage in any business, other than the businesses currently engaged in by Borrowers and any business substantially similar or related thereto (or incidental thereto); experience a change in a Responsible Officer without providing Bank with prompt notice (within ten (10) days following) of such change, or cease to conduct business in substantially the manner conducted by Borrowers as of the Closing Date; change the date on which its fiscal year ends; or change its type of corporate form of entity; or without thirty (30) days prior written notification to Bank, relocate its chief executive office or state of incorporation or change its legal name.

7.3 Mergers or Acquisitions; Change in Control. Suffer or permit a Change in Control; or merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or any material portion of property of another Person; provided however, (i) any Subsidiary that is not a Borrower may merge into any other Subsidiary with prompt notice to Bank and (ii) only advance written notice to the Bank will be required for any action restricted by this Section 7.3 if all Obligations are paid in full in cash out of the proceeds of the initial closing of such action and such payment is listed as a condition to the consummation of such action.

7.4 Indebtedness. Create, incur, guarantee, assume or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness.

7.5 Encumbrances. Create, incur, assume or suffer to exist any Lien with respect to any of its property, or assign or otherwise convey any right to receive income, including the sale of any Accounts; or permit any of its Subsidiaries so to do, except for Permitted Liens; or enter into any agreement with any Person other than Bank that prohibits or otherwise restricts Borrower from encumbering any of its property other than restrictions in equipment leases or equipment financing documents on Liens on the specific equipment being leased or financed.

7.6 Distributions. Pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock, or permit any of its Subsidiaries to do so, except that (i) at any time following an IPO from which Parent receives at least $40,000,000 in net cash proceeds, Parent may repurchase the stock of former employees in accordance with Parent's stock incentive program as long as an Event of Default does not exist prior to such repurchase or would not exist after giving effect to such repurchase and (ii) any Subsidiary of Parent may pay dividends or make distributions on account of any capital stock without restriction.

7.7 Investments. Directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments; or suffer or permit any Subsidiary to be a party to, or be bound by, an agreement that restricts such Subsidiary from paying dividends or otherwise distributing property to a Borrower.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrowers except for transactions that are in the ordinary course of such Borrower's business, upon fair and reasonable terms that are no less favorable to such Borrower than would be obtained in an arm's length transaction with a non-affiliated Person.

7.9 Subordinated Debt. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except in compliance with the terms of the subordination agreement applicable to such Subordinated Debt, or amend any provision contained in any documentation relating to the Subordinated Debt without Bank's prior written consent.

7.10 Inventory and Equipment. Store the Inventory or the Equipment with a bailee, warehouseman, or other third party unless the third party has been notified of Bank's security interest and Bank (a) has received an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Bank's benefit or (b) is in pledge possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Store or maintain any Equipment or Inventory at a location other than the location set forth in Section 10 of this Agreement.

7.11 Compliance. Become an "investment company" or be controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Credit Extension for such purpose. Fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply with the Federal Fair Labor Standards Act or violate any law or regulation, which violation could have a Material Adverse Effect, or a material adverse effect on the Collateral or the priority of Bank's Lien on the Collateral, or permit any of its Subsidiaries to do any of the foregoing.

7.12 Foreign Subsidiary Transactions. Other than cost-plus arrangements and intercompany service or transfer agreements entered into in the ordinary course of business), loan, Transfer, downstream any cash or other assets or property to, or make any Investment in, any foreign Subsidiary or make any payments to or on behalf of such foreign Subsidiary in excess of the lesser of (i) $500,000 per year or (ii) the amount necessary to fund the ongoing operational expenses of such foreign Subsidiaries, as reasonably determined by Borrower.

7.13 Anti-Terrorism; OFAC Lists. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries, permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading

or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

8. EVENTS OF DEFAULT.

Any one or more of the following events shall constitute an Event of Default by Borrowers under this Agreement:

8.1 Payment Default. If Borrowers fail to pay, when due, any of the Obligations.

8.2 Covenant Default.

(a) If a Borrower fails to perform any obligation under Article 6 (other than Section 6.1, 6.2, 6.4, and 6.10) or violates any of the covenants contained in Article 7 of this Agreement; or

(b) If a Borrower fails or neglects to perform or observe any obligation under Section 6.1, 6.2, 6.4, or 6.10 or any other material term, provision, condition, covenant contained in this Agreement, in any of the Loan Documents, or in any other present or future agreement between such Borrower and Bank and as to any default under such other term, provision, condition or covenant that can be cured, has failed to cure such default within ten days after such Borrower receives notice thereof; provided, however, that if the default cannot by its nature be cured within the ten day period or cannot after diligent attempts by such Borrower be cured within such ten day period, and such default is likely to be cured within a reasonable time, then such Borrower shall have an additional reasonable period (which shall not in any case exceed 30 days) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default but no Credit Extensions will be made.

8.3 Material Adverse Effect. If there occurs any circumstance or circumstances that could reasonably be expected to have a Material Adverse Effect.

8.4 Attachment. If any portion of a Borrower's assets with a value in excess of Two Hundred Fifty Thousand Dollars ($250,000) is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity, or if a Borrower is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any part of its business affairs in the ordinary course, or if a judgment or other claim becomes a lien or encumbrance upon any portion of a Borrower's assets, or if a notice of lien, levy, or assessment is filed of record with respect to any of a Borrower's assets by the United States Government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by such Borrower.

8.5 Insolvency. If a Borrower becomes insolvent, or if an Insolvency Proceeding is commenced by a Borrower, or if an Insolvency Proceeding is commenced against any Borrower by any third party.

8.6 Other Agreements. If there is a default or other failure to perform in any agreement to which a Borrower is a party or by which it is bound resulting in a right by a third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Fifty Thousand Dollars ($50,000) or which could have a Material Adverse Effect.

8.7 Judgments; Settlements; Fines; Penalties. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least Five Hundred Thousand Dollars ($500,000) shall be rendered against a Borrower; or if a Borrower enters into any settlement agreement with respect to any litigation matters that results in payment obligations or liabilities incurred by such Borrower in excess of Three Hundred Thousand Dollars ($300,000) without the prior consent of the Bank; or if one or more fines, penalties or orders or decrees for the payment of money in excess of One Fifty Thousand Dollars ($150,000) shall be rendered against a

Borrower by any governmental authority with jurisdiction over any Borrower; and the foregoing shall remain unsatisfied and unstayed for a period of thirty (30) days (provided that no Credit Extensions will be made prior to the satisfaction or stay of such judgment, settlement, fine, penalty or orders or decree).

8.8 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any other Loan Document or certificate delivered to Bank by any Responsible Officer pursuant to this Agreement or to induce Bank to enter into this Agreement or any other Loan Document.

8.9 Guaranty. If any guaranty of all or a portion of the Obligations that is provided to Bank after the Closing Date (a "Guaranty") ceases for any reason to be in full force and effect, or any guarantor fails to perform any obligation under any Guaranty or a security agreement securing any Guaranty (collectively, the "Guaranty Documents"), or any event of default occurs under any Guaranty Document or any guarantor revokes or purports to revoke a Guaranty, or any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth in any Guaranty Document or in any certificate delivered to Bank in connection with any Guaranty Document, or if any of the circumstances described in Sections 8.3 through 8.8 occur with respect to any guarantor or any guarantor dies or becomes subject to any criminal prosecution, or any circumstances arise causing Bank, in good faith, to become insecure as to the satisfaction of any of any guarantor's obligations under the Guaranty Documents.

9. BANK'S RIGHTS AND REMEDIES.

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Borrowers:

(a) Declare all or any portion of the Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, immediately due and payable (provided that upon the occurrence of an Event of Default described in Section 8.5, all Obligations shall become immediately due and payable without any action by Bank);

(b) Cease advancing money or extending credit to or for the benefit of Borrowers under this Agreement or under any other agreement between Borrowers and Bank;

(c) Settle or adjust disputes and claims directly with account debtors or any other debtors for amounts, upon terms and in whatever order that Bank reasonably considers advisable;

(d) Make such payments and do such acts as Bank considers necessary or reasonable to protect its security interest in the Collateral. Each Borrower agrees to assemble the Collateral if Bank so requires, and to make the Collateral available to Bank as Bank may designate. Each Borrower authorizes Bank to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Bank's determination appears to be prior or superior to its security interest and to pay all expenses incurred in connection therewith. With respect to any of a Borrower's owned premises, each Borrower hereby grants Bank a license to enter into possession of such premises and to occupy the same, without charge, in order to exercise any of Bank's rights or remedies provided herein, at law, in equity, or otherwise;

(e) Set off and apply to the Obligations any and all (i) balances and deposits of any Borrower held by Bank, or (ii) indebtedness at any time owing to or for the credit or the account of Borrowers held by Bank;

(f) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Bank is hereby granted a license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, each Borrower's labels, Patents,

Copyrights, rights of use of any name, trade secrets, trade names, Trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section 9.1, Borrowers' rights under all licenses and all franchise agreements shall inure to Bank's benefit;

(g) Dispose of the Collateral by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including each Borrower's premises) as Bank determines is commercially reasonable, and apply any proceeds to the Obligations in whatever manner or order Bank deems appropriate;

(h) Bank may credit bid and purchase at any public sale; and

(i) Apply for the appointment of a receiver, trustee, liquidator or conservator of the Collateral, without notice and without regard to the adequacy of the security for the Obligations and without regard to the solvency of Borrower, any guarantor or any other Person liable for any of the Obligations; and

(j) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrowers.

Bank may comply with any applicable state or federal law requirements in connection with a disposition of the Collateral and compliance will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral.

9.2 Power of Attorney. Effective only upon the occurrence and during the continuance of an Event of Default, each Borrower hereby irrevocably appoints Bank (and any of Bank's designated officers, or employees) as such Borrower's true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of Bank's security interest in the Accounts; (b) notify all account debtors with respect to the Accounts or any other debtors of a Borrower to pay Bank directly; (c) sign a Borrower's name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; (d) make, settle, and adjust all claims under and decisions with respect to a Borrower's policies of insurance; (e) demand, collect, receive, sue, and give releases to any account debtor or other debtor of any Borrower for the monies due or which may become due upon or with respect to the Accounts and to compromise, prosecute, or defend any action, claim, case or proceeding relating to the Accounts; (f) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Bank determines to be reasonable; (g) sell, assign, transfer, pledge, compromise, discharge or otherwise dispose of any Collateral; (h) receive and open all mail addressed to a Borrower for the purpose of collecting the Accounts; (i) endorse either Borrower's name on any checks or other forms of payment or security that may come into Bank's possession; (j) execute on behalf of a Borrower any and all instruments, documents, financing statements and the like to perfect Bank's interests in the Accounts and file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral; and (k) do all acts and things necessary or expedient, in furtherance of any such purposes; provided however Bank may exercise such power of attorney with respect to any actions described in clause (k) above, regardless of whether an Event of Default has occurred. The appointment of Bank as each Borrower's attorney in fact, and each and every one of Bank's rights and powers, being coupled with an interest, is irrevocable until all of the Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions hereunder is terminated.

9.3 Accounts Collection. In addition to the foregoing, at any time after the occurrence of an Event of Default, Bank may notify any Person owing funds to Borrowers of Bank's security interest in such funds and verify the amount of such Account. Each Borrower shall collect all amounts owing to Borrowers for Bank, receive in trust all payments as Bank's trustee, and immediately deliver such payments to Bank in their original form as received from the account debtor, with proper endorsements for deposit.

9.4 Bank Expenses. If Borrowers fail to pay any amounts or furnish any required proof of payment due to third persons or entities after reasonably requested by Bank, as required under the terms of this

Agreement, then Bank may do any or all of the following: (a) make payment of the same or any part thereof; (b) set up such reserves under a loan facility in Section 2.1 as Bank deems necessary to protect Bank from the exposure created by such failure; or (c) obtain and maintain insurance policies of the type discussed in Section 6.6 of this Agreement, and take any action with respect to such policies as Bank deems prudent. Any amounts so paid or deposited by Bank shall constitute Bank Expenses, shall be immediately due and payable, and shall bear interest at the then applicable rate hereinabove provided, and shall be secured by the Collateral. Any payments made by Bank shall not constitute an agreement by Bank to make similar payments in the future or a waiver by Bank of any Event of Default under this Agreement.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices, Bank shall not in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Borrowers.

9.6 Shares. Each Borrower recognizes that Bank may be unable to effect a public sale of any or all the Shares, by reason of certain prohibitions contained in federal securities laws and applicable state and provincial securities laws or otherwise, and may be compelled to resort to one or more private sales thereof to a restricted group of purchasers which will be obliged to agree, among other things, to acquire such securities for their own account for investment and not with a view to the distribution or resale thereof. Borrowers acknowledge and agree that any such private sale may result in prices and other terms less favorable than if such sale were a public sale and, notwithstanding such circumstances, agrees that any such private sale shall be deemed to have been made in a commercially reasonable manner. Bank shall be under no obligation to delay a sale of any of the Shares for the period of time necessary to permit the issuer thereof to register such securities for public sale under federal securities laws or under applicable state and provincial securities laws, even if such issuer would agree to do so. Upon the occurrence of an Event of Default which continues, Bank shall have the right to exercise all such rights as a secured party under the Code as it, in its sole judgment, shall deem necessary or appropriate, including without limitation the right to liquidate the Shares and apply the proceeds thereof to reduce the Obligations. Effective only upon the occurrence and during the continuance of an Event of Default, Borrowers hereby irrevocably appoint Bank (and any of Bank's designated officers, or employees) as such Borrowers' true and lawful attorney to enforce such Borrower's rights against any Subsidiary, including the right to compel any Subsidiary to make payments or distributions owing to such Borrower.

9.7 Remedies Cumulative. Bank's rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Bank shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Bank of one right or remedy shall be deemed an election, and no waiver by Bank of any Event of Default on Borrowers' part shall be deemed a continuing waiver. No delay by Bank shall constitute a waiver, election, or acquiescence by it. No waiver by Bank shall be effective unless made in a written document signed on behalf of Bank and then shall be effective only in the specific instance and for the specific purpose for which it was given. Borrowers expressly agree that this Section 9.6 may not be waived or modified by Bank by course of performance, conduct, estoppel or otherwise;

9.8 Demand; Protest. Each Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Bank on which Borrowers may in any way be liable.

10. NOTICES.

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight

courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below.

If to any Borrower:	Silvaco Group, Inc. 4701 Patrick Henry Drive, Building #23 Santa Clara, CA 95054 Attn: Chief Executive Officer
If to Bank:	EAST WEST BANK Technology & Commercial Banking Group 2350 Mission College Blvd., Suite 988 Santa Clara, CA 95054 Attn: Linda Lee

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER.

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to principles of conflicts of law. Jurisdiction shall lie in the State of California. BANK AND BORROWER EACH ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED. EACH OF THEM, AFTER CONSULTING OR HAVING HAD THE OPPORTUNITY TO CONSULT, WITH COUNSEL OF THEIR CHOICE, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ANY RIGHT ANY OF THEM MAY HAVE TO A TRIAL BY JURY IN ANY LITIGATION, ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY RELATED INSTRUMENT OR LOAN DOCUMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT OR ANY COURSE OF CONDUCT, DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN), OR ACTION OF ANY OF THEM. THESE PROVISIONS SHALL NOT BE DEEMED TO HAVE BEEN MODIFIED IN ANY RESPECT OR RELINQUISHED BY BANK OR BORROWER, EXCEPT BY A WRITTEN INSTRUMENT EXECUTED BY EACH OF THEM.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, who shall be a retired state or federal court judge, mutually selected by the parties or, if they cannot agree, then any party may seek to have a private judge appointed in accordance with California Code of Civil Procedure §§ 638 and 640 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts). The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which

shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure § 644(a). The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph. The parties agree that time is of the essence in conducting the referenced proceedings. The parties shall promptly and diligently cooperate with one another and the referee, and shall perform such acts as may be necessary to obtain prompt and expeditious resolution of the dispute or controversy in accordance with the terms hereof. Nothing in this section shall limit the right of any party at any time to exercise self-help remedies, foreclose against Collateral or obtain provisional remedies, and Bank may bring suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Bank.

12. GENERAL PROVISIONS.

12.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties; provided, however, that neither this Agreement nor any rights hereunder may be assigned by any Borrower without Bank's prior written consent, which consent may be granted or withheld in Bank's sole discretion. Bank shall have the right without the consent of or notice to Borrowers to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights and benefits hereunder.

12.2 Indemnification. Each Borrower shall defend, indemnify and hold harmless Bank and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this Agreement; and (b) all losses or Bank Expenses in any way suffered, incurred, or paid by Bank, its officers, employees and agents as a result of or in any way arising out of, following, or consequential to transactions between Bank and Borrowers whether under this Agreement, or otherwise (including without limitation reasonable attorneys' fees and expenses), except in each case for losses caused by Bank's gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

12.5 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in this Agreement and the other Loan Documents consistent with the agreement of the parties.

12.6 Amendments in Writing, Integration. All amendments to or terminations of this Agreement or the other Loan Documents must be in writing. All prior agreements, understandings, representations, warranties, and negotiations between the parties hereto with respect to the subject matter of this Agreement and the Loan Documents, if any, are merged into this Agreement and the Loan Documents.

12.7 Counterparts; Electronic Signatures. This Agreement and any other Loan Document may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement or Loan Document, as applicable. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to this Agreement and/or any Loan Document and the transactions contemplated hereby shall be deemed to include Electronic Signatures (as defined below), deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the

case may be. As used herein, “Electronic Signatures” means any electronic symbol or process attached to, or associated with, any contract or other record and adopted by a person with the intent to sign, authenticate or accept such contract or record.

12.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations remain outstanding or Bank has any obligation to make Credit Extensions to Borrowers. The obligations of Borrowers to indemnify Bank with respect to the expenses, damages, losses, costs and liabilities described in Section 12.2 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Bank have run.

12.9 Confidentiality. In handling any confidential information Bank and all employees and agents of Bank shall exercise the same degree of care that it exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information thereby received or received pursuant to this Agreement except that disclosure of such information may be made (i) to the subsidiaries or affiliates of Bank in connection with their present or prospective business relations with Borrowers, (ii) to prospective transferees or purchasers of any interest in the loans, provided that they are similarly bound by confidentiality obligations, (iii) as required by law, regulations, rule or order, subpoena, judicial order or similar order, (iv) as may be required in connection with the examination, audit or similar investigation of Bank and (v) as Bank may determine in connection with the enforcement of any remedies hereunder. Confidential information hereunder shall not include information that either: (a) is in the public domain or in the knowledge or possession of Bank when disclosed to Bank, or becomes part of the public domain after disclosure to Bank through no fault of Bank; or (b) is disclosed to Bank by a third party, provided Bank does not have actual knowledge that such third party is prohibited from disclosing such information.

12.10 Patriot Act Notice. Bank hereby notifies Borrowers that, pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies the Borrowers, which information includes names and addresses and other information that will allow Bank, as applicable, to identify the Borrowers in accordance with the Patriot Act. Borrowers shall, promptly following a request by Bank, provide all documentation and other information that Bank requests in order to comply with its ongoing obligations under applicable “know your customer” and anti-money laundering rules and regulations, including the Patriot Act, and Borrower is required to provide identifying information about each beneficial owner and/or individuals who have significant responsibility to control, manage or direct any Borrower.

13. CO-BORROWERS.

13.1 Co-Borrowers. Borrowers are jointly and severally liable for the Obligations and Bank may proceed against one Borrower to enforce the Obligations without waiving its right to proceed against the other Borrower. This Agreement and the Loan Documents are a primary and original obligation of each Borrower and shall remain in effect notwithstanding future changes in conditions, including any change of law or any invalidity or irregularity in the creation or acquisition of any Obligations or in the execution or delivery of any agreement between Bank and any Borrower. Each Borrower shall be liable for existing and future Obligations as fully as if all of the Credit Extensions were advanced to such Borrower. Bank may rely on any certificate or representation made by any Borrower as made on behalf of, and binding on, all Borrowers, including without limitation Advance Request Forms and Compliance Certificates. Each Borrower appoints each other Borrower as its agent with all necessary power and authority to give and receive notices, certificates or demands for and on behalf of both Borrowers, to act as disbursing agent for receipt of any Advances on behalf of each Borrower and to apply to Bank on behalf of each Borrower for Advances, any waivers and any consents. This authorization cannot be revoked, and Bank need not inquire as to one Borrower’s authority to act for or on behalf of another Borrower.

13.2 Subrogation and Similar Rights. Notwithstanding any other provision of this Agreement or any other Loan Document, each Borrower irrevocably waives, until all obligations are paid in full and Bank has no further obligation to make Credit Extensions to Borrower, all rights that it may have at law or in equity (including, without limitation, any law subrogating the Borrower to the rights of Bank under the Loan Documents) to seek contribution, indemnification, or any other form of reimbursement from any other Borrower, or any other

Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by the Borrower with respect to the Obligations in connection with the Loan Documents or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by the Borrower with respect to the Obligations in connection with the Loan Documents or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Borrower in contravention of this Section, such Borrower shall hold such payment in trust for Bank and such payment shall be promptly delivered to Bank for application to the Obligations, whether matured or unmatured.

13.3 Waivers of Notice. Each Borrower waives, to the extent permitted by law, notice of acceptance hereof; notice of the existence, creation or acquisition of any of the Obligations; notice of an Event of Default except as set forth herein; notice of the amount of the Obligations outstanding at any time; notice of any adverse change in the financial condition of any other Borrower or of any other fact that might increase the Borrower's risk; presentment for payment; demand; protest and notice thereof as to any instrument; and all other notices and demands to which the Borrower would otherwise be entitled by virtue of being a co-borrower or a surety. Each Borrower waives any defense arising from any defense of any other Borrower, or by reason of the cessation from any cause whatsoever of the liability of any other Borrower. Bank's failure at any time to require strict performance by any Borrower of any provision of the Loan Documents shall not waive, alter or diminish any right of Bank thereafter to demand strict compliance and performance therewith. Each Borrower also waives any defense arising from any act or omission of Bank that changes the scope of the Borrower's risks hereunder. Each Borrower hereby waives any right to assert against Bank any defense (legal or equitable), setoff, counterclaim, or claims that such Borrower individually may now or hereafter have against another Borrower or any other Person liable to Bank with respect to the Obligations in any manner or whatsoever.

13.4 Subrogation Defenses. Until all Obligations are paid in full and Bank has no further obligation to make Credit Extensions to Borrower, each Borrower hereby waives any defense based on impairment or destruction of its subrogation or other rights against any other Borrower and waives all benefits which might otherwise be available to it under California Civil Code Sections 2809, 2810, 2819, 2839, 2845, 2848, 2849, 2850, 2899, and 3433 and California Code of Civil Procedure Sections 580a, 580b, 580d and 726, as those statutory provisions are now in effect and hereafter amended, and under any other similar statutes now and hereafter in effect.

13.5 Right to Settle, Release.

(a) The liability of Borrowers hereunder shall not be diminished by (i) any agreement, understanding or representation that any of the Obligations is or was to be guaranteed by another Person or secured by other property, or (ii) any release or unenforceability, whether partial or total, of rights, if any, which Bank may now or hereafter have against any other Person, including another Borrower, or property with respect to any of the Obligations.

(b) Without notice to any given Borrower and without affecting the liability of any given Borrower hereunder, Bank may (i) compromise, settle, renew, extend the time for payment, change the manner or terms of payment, discharge the performance of, decline to enforce, or release all or any of the Obligations with respect to any other Borrower by written agreement with such other Borrower, (ii) grant other indulgences to another Borrower in respect of the Obligations, (iii) modify in any manner any documents relating to the Obligations with respect to any other Borrower by written agreement with such other Borrower, (iv) release, surrender or exchange any deposits or other property securing the Obligations, whether pledged by a Borrower or any other Person, or (v) compromise, settle, renew, or extend the time for payment, discharge the performance of, decline to enforce, or release all or any obligations of any guarantor, endorser or other Person who is now or may hereafter be liable with respect to any of the Obligations.

13.6 Subordination. All indebtedness of a Borrower now or hereafter arising held by another Borrower, is subordinated to the Obligations and the Borrower holding the indebtedness shall take all actions reasonably requested by Bank to effect, to enforce and to give notice of such subordination.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

BORROWERS:

SILVACO GROUP, INC.

By: /s/ Katherine S. Ngai-Pesic

Name: Katherine S. Ngai-Pesic

Title: Chairwoman of the Board

SILVACO, INC.

By: /s/ Katherine S. Ngai-Pesic

Name: Katherine S. Ngai-Pesic

Title: Chairwoman of the Board

BANK:

EAST WEST BANK

By: /s/ Linda Lee

Name: Linda Lee

Title: Senior Vice President

DEBTORS: **SILVACO GROUP, INC. and SILVACO, INC.**

SECURED PARTY: **EAST WEST BANK**

EXHIBIT A

COLLATERAL DESCRIPTION ATTACHMENT
TO LOAN AND SECURITY AGREEMENT

The Collateral consists of all right, title and interest of each Borrower (each, a "Debtor") in and to all of its personal property, whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

(a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), commercial tort claims, deposit accounts, securities accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of each Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records;

(b) all common law and statutory copyrights and copyright registrations, applications for registration, now existing or hereafter arising, in the United States of America or in any foreign jurisdiction, obtained or to be obtained on or in connection with any of the forgoing, or any parts thereof or any underlying or component elements of any of the forgoing, together with the right to copyright and all rights to renew or extend such copyrights and the right (but not the obligation) of Secured Party to sue in its own name and/or in the name of the Debtor for past, present and future infringements of copyright;

(c) all trademarks, service marks, trade names and service names and the goodwill associated therewith, together with the right to trademark and all rights to renew or extend such trademarks and the right (but not the obligation) of Secured Party to sue in its own name and/or in the name of the Debtor for past, present and future infringements of trademark;

(d) all (i) patents and patent applications filed in the United States Patent and Trademark Office or any similar office of any foreign jurisdiction, and interests under patent license agreements, including, without limitation, the inventions and improvements described and claimed therein, (ii) licenses pertaining to any patent whether the Debtor is licensor or licensee, (iii) income, royalties, damages, payments, accounts and accounts receivable now or hereafter due and/or payable under and with respect thereto, including, without limitation, damages and payments for past, present or future infringements thereof, (iv) right (but not the obligation) to sue in the name of a Debtor and/or in the name of Secured Party for past, present and future infringements thereof, (v) rights corresponding thereto throughout the world in all jurisdictions in which such patents have been issued or applied for, and (vi) reissues, divisions, continuations, renewals, extensions and continuations-in-part with respect to any of the foregoing; and

(e) any and all cash proceeds and/or noncash proceeds generated or received from any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment.

All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time.

EXHIBIT B
LOAN ADVANCE/PAYDOWN REQUEST FORM

TO: East West Bank DATE: _____ TIME: _____

FROM: SILVACO, INC. _____ Authorized Signer's Name _____ Authorized Signature (Borrower) PHONE #: _____ FROM ACCOUNT#: _____ (please include loan number, if applicable) TO ACCOUNT #: _____ (please include loan number, if applicable)	TELEPHONE REQUEST (For Bank Use Only): The following person is authorized to request the loan payment transfer/loan advance on the designated account and is known to me. _____ Authorized Request & Phone # _____ Received by (Bank) & Phone # _____ Authorized Signature (Bank)

REQUESTED TRANSACTION TYPE	REQUESTED DOLLAR AMOUNT	For Bank Use Only
PRINCIPAL INCREASE (ADVANCE) PRINCIPAL PAYMENT (ONLY)	$ _____ $ _____	Date Rec'd: Time: Comp. Status: YES NO Status Date: Time: Approval:
OTHER INSTRUCTIONS:		

By its execution above, the authorized officer named above represents and warrants, on behalf of all Borrowers, that all representations and warranties of Borrowers stated in the Loan and Security Agreement are true, correct and complete in all material respects as of the date hereof (provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date), and no Event of Default has occurred that is continuing.

EXHIBIT C
BORROWING BASE CERTIFICATE

BORROWERS: SILVACO GROUP, INC. and SILVACO, INC

Recurring Revenue Borrowing Base Calculation			**As of Month Ended:** _____
1.	Recurring Revenue for prior month from Contracts		**$**_____
2.	Recurring Revenue from Contracts that are not Eligible Recurring Revenue Contracts: (a) Contracts which such customer has elected to cancel or failed to renew (but Contract has not yet expired or been terminated); (b) Contracts for which the customer has gone out of business or become insolvent; (c) Contracts that are billed or collected outside of the United States; (d) Contracts with any college or university; (e) Contracts with an individual consumer/user; or (f) Contracts that Bank has determined in its reasonable business discretion are suitable for inclusion.	**$**_____ **$**_____ **$**_____ **$**_____ **$**_____ **$**_____	
3.	Eligible Recurring Revenue Contracts (#1 minus #2)		**$**_____
4.	Plus: Recurring Revenue from New Eligible Recurring Revenue Contracts	**$**_____	
5.	Plus: Upsells on Eligible Recurring Revenue Contracts	**$**_____	
6.	Minus: Recurring Revenue from cancelled/terminated Contracts	**$**_____	
7.	Minus: Downsells on Eligible Recurring Revenue Contracts	**$**_____	
8.	Eligible Recurring Revenue (#3 + #4 + #5 – #6 – #7)		**$**_____
9.	Advance Rate:		**150%**
10.	Borrowing Base Amount (#8, multiplied by #9)		$_____
11.	Revolving Line Facility Amount		$5,000,000
12.	Availability (lesser of #10 or #11)		**$**_____
13.	Outstanding Advances		**$**_____
14.	Outstanding FX Amount		**$**_____
15.	Reserves		**$**_____
16.	**Available for Drawdown/Need to Pay** (#12 minus #13, #14 & #15)		**$**_____

If line #16 is a negative number, this amount must be remitted to the Bank immediately to bring loan balance into compliance. By signing this certificate, you authorize Bank to deduct any advance amounts directly from the any deposit account at Bank in the event there is an overadvance.

The undersigned represents and warrants that the foregoing is true, complete and correct, and that the information reflected in this Borrowing Base Certificate complies with the representations and warranties set forth in the Loan and Security Agreement between Borrowers and Bank, and all representations and warranties of Borrowers stated in the Loan and Security Agreement are true, correct, and complete in all material respects as of the date of this Borrowing Base Certificate.

By (Authorized Signer):	Title:	Date:
Reviewed by Bank:	Title:	Date:

EXHIBIT D
COMPLIANCE CERTIFICATE

TO: EAST WEST BANK
FROM: SILVACO GROUP, INC.

The undersigned authorized officer of Silvaco Group, Inc., on behalf of itself and Silvaco, Inc., hereby certifies, on behalf of all Borrowers, that in accordance with the terms and conditions of the Loan and Security Agreement between Borrowers and Bank (the "Agreement"), (i) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below and (ii) all representations and warranties of Borrowers stated in the Agreement are true and correct as of the date hereof. Attached herewith are the required documents supporting the above certification. The Officer further certifies that these are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	**Required**	**Complies**	
A/R & A/P Agings	Monthly within 30 days	Yes	No
Recurring revenue metrics reports	Monthly within 30 days	Yes	No
Borrowing Base Certificate	Monthly within 30 days	Yes	No
Monthly financial statements	Monthly within 30 days	Yes	No
Compliance Certificate	Monthly within 30 days	Yes	No
Annual financial statements (CPA Audited)	FYE within 180 days	Yes	No
Annual operating plan approved by board of directors	15 days prior to fiscal year beginning	Yes	No
Any new copyrights, patents or trademarks (applications or registrations)?	Within the month that follows the month in which such IP registration/application occurs	Yes	No

Banking / Deposits	**Required**	**Actual**	**Complies**	
Borrowers' total deposit balances in US accounts	N/A	$_____		
Borrowers' deposit balance at Bank	At least 85% of above	$_____	Yes	No

Financial Covenant	**Required**	**Actual**	**Complies**	
After initial Advance is made to Borrowers:				
Minimum cash at Bank (at all times prior to IPO)	$1,500,000	$_____	Yes	No
Minimum cash at Bank (at all times after IPO)	$10,000,000	$_____	Yes	No
Minimum T6M Adjusted EBITDA (prior to IPO)				
As of 12/31/23	$1,000,000	$_____	Yes	No *
As of 3/31/24	$1,000,000	$_____	Yes	No *
As of 6/30/24	$1,500,000	$_____	Yes	No *
As of 9/30/24	$1,500,000	$_____	Yes	No *
As of 12/31/24 and beyond	$2,000,000	$_____	Yes	No *

* [If not in compliance, is Borrower electing Equity Cure Right? Yes / No]
[If yes, Cash Contribution has been or will be received on _____; and total amount is $_____]

Comments Regarding Exceptions: See Attached.

Sincerely,

SIGNATURE

TITLE

DATE

BANK USE ONLY

Received by: _____
AUTHORIZED SIGNER

Date: _____

Verified: _____
AUTHORIZED SIGNER

Date: _____

Compliance Status Yes No

SCHEDULE OF EXCEPTIONS

Permitted Indebtedness (Section 1.1)

None

Permitted Investments (Section 1.1)

None

Permitted Liens (Section 1.1)

None

Inbound Licenses (Section 5.6)

None

Prior Names (Section 5.7)

None

Litigation (Section 5.8)

Silvaco, Inc. v. Ole Christian Andersen

In 2018, Silvaco, Inc. (the "Company") acquired Nangate. In an effort to clarify its obligations with respect to the earnout payment due to the selling shareholders of Nangate, Inc., the Company sought declaratory relief in the California Superior Court inDecember 2020. In February 2021, two of the selling shareholders of Nangate (together with a third cross-complainant who joined later, the "Nangate Parties") filed a cross-complaint against the Company and two members of the Company's board of directors, alleging, among other causes of action, breach of contract, fraud and negligent misrepresentation. A trial date of the second quarter of 2024 has been set. The Company considers these allegations to be baseless and is vigorously defending itself in this litigation.

Aldini AG v. Silvaco, Inc. et al, Case No. 5:21-cv-6423, was filed in the United States District Court for the Northern District of California, San Jose division on August 19, 2021. Aldini AG's First Amended Complaint asserts various tort claims against Silvaco, Inc. ("Silvaco"), Silvaco France, and officers Iliya Pesic and Babak Taheri, including claims for trade secret theft, conspiracy, and intentional interference with a prospective economic advantage. Silvaco filed a motion to dismiss; the trade secret theft and conspiracy claims were dismissed with prejudice and the intentional tort claims were dismissed with leave to amend. On August 23, 2022, Aldini AG filed a Second Amended Complaint against Silvaco, Silvaco France, and officers Iliya Pesic and Babak Taheri that included claims of trade secret theft, conspiracy, and intentional interference with a prospective economic advantage in relation to Silvaco's acquisition of certain assets of Dolphin Design SAS. Aldini AG seeks $703 million and punitive damages. On March 17, 2023, the Second Amended Complaint was dismissed on all counts, subject to a right of appeal. Aldini has filed a notice of appeal.

On December 11, 2023, the Company received a copy of a complaint filed by the former employee of the Company's French entity regarding his termination. The former employee is seeking Euros 294,917.

Financial Statements (Section 5.9)

On February 2012 Gu-Guide LP, an entity affiliated with Ms. Pesic (the principal shareholder of Parent), Bank of the West and Silvaco Group, Inc. entered into a loan agreement. As of November 30, 2023, approximately $811,000 is outstanding under the loan agreement. Silvaco Group, Inc. has guaranteed the amounts due under the loan which is also secured by 4701 Patrick Henry Drive Building 4 and Building 6, Santa Clara, California 95054, with total square foot of approximately 9,000 sq. ft.

Subsidiaries (Section 5.13)

Silvaco Group, Inc. owns all of the Shares of :

- Silvaco, Inc.
- Silvaco Europe, Ltd
- Silvaco Gmbh
- Silvaco Brasil Servicos De Tecnologia LTDA
- Silvaco Japan Co, Ltd
- Silvaco Data Systems Korea, Ltd
- Silvaco Singapore PTE, Ltd
- Silvaco India PVT, Ltd
- Silvaco Taiwan Co, Ltd
- Silvaco Hong Kong co. Ltd

Silvaco, Inc. owns all of the Shares of:

- Silvaco SA
- Silvaco Denmark ApS
- Silvaco Ukraine

Silvaco, Hong Kong Co. Ltd owns all of the Shares of:

- Silvaco China Co, Ltd

Silvaco Group, Inc. maintains the following branch offices:

- Silvaco Moscow

Anti-Terrorism Laws (Section 5.18)

After establishing its branch office in Russia, the Company used Alfa Bank as its primary financial institution and engaged Legalbridge as its tax, accounting and legal consultant to advise with respect to matters affecting the branch office. As a result of the conflict in Ukraine, Alfa Bank was sanctioned by the Office of Foreign Assets Control on April 6, 2022. As a result, the Company worked with Legalbridge to establish bank accounts at Raieffeisen Bank. Those bank accounts were opened on June 2, 2022. Following the opening of the accounts at Raieffeisen Bank, unbeknownst to the Company, Legalbridge used the Raieffeisen bank accounts to receive injections of funds from the Company's US bank accounts; transferred the funds from Raieffeisen Bank to Alfa Bank; and paid compensation of certain of the Company's employees and other expenses using the Company's bank accounts at Alfa Bank. The Company learned about this intermediary transfer from Raieffeisen Bank to Alfa Bank in October 2023 and is preparing a voluntary self disclosure with OFAC.

The Company regularly licenses software to its customers in various countries, and such transactions may be subject to US export laws. In 2019, when one of the Company's customers was placed on BIS' "entities list", the Company reviewed undertook a review of the export control classifications of its software and of its overall customer base. Based on this review, the Company made a voluntary self-disclosure to BIS in June 2020 (the "June 2020 Filing").

The June 2020 Filing identified a potential of 18,258 violations but noted numerous mitigating factors, including without limitation, (i) the lack of any willful conduct, (ii) the fact that a vast majority of the transactions were eligible for a license exemption had the Company obtained appropriate documentation, (iii) most transactions would likely have been licensed had the Company sought a license, (iv) the downloads were not useable by the downloading party, (v) many downloads were intracompany transfers, and (vi) one software module was of foreign origin and therefore only subject to US export control law as the module was stored on a server in the US. The case agent assigned to the June 2020 Filing reached out to the Company in March 2021 and July 2021 regarding classification of software and the Company's China customer list. The Company provided the classification information in September 2021.

A review of the Company's China customer list ultimately led to the Company's subsequent voluntary self-disclosure with BIS in June 2022 (the "June 2022 Filing") and with OFAC in October 2022 (the "OFAC Filing"). The June 2022 Filing identified a potential of 16,766 violations but noted numerous mitigating factors, including without limitation, (i) the lack of any willful count, (ii) the vast majority of transactions occurred prior to the implementation of corrective actions arising from the June 2020 Filing, (iii) the introduction of additional corrective actions to address new root causes which had been identified, (iv) many downloads of the Company's software were not useable by the downloading party, (v) more sensitive software was de-controlled as of October 2020, (vi) many transactions were duplicative, and (vii) some downloads were eligible for a license exception had the Company obtained appropriate documentation. The Company has not received any outreach from BIS regarding the June 2022 Filing, other than a notification of the name of the case agent. The OFAC Filing identified a potential of 858 violations but noted numerous mitigating factors, including without limitation (i) the lack of any willful count, (ii) a minimal harm to OFAC sanction program objectives, (iii) many transactions were duplicative, (iv) the lack of any history of violations of OFAC sanctions regulations, and (v) the implementation of corrective actions.

SILVACO GROUP, INC.

REGISTRATION RIGHTS AGREEMENT

TABLE OF CONTENTS

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (this "**Agreement**"), is made as of April 12, 2024, by and among Silvaco Group, Inc., a Delaware corporation (the "**Company**") and each of the parties listed on Schedule A hereto (each of which is referred to in this Agreement as a "**Holder**").

RECITALS

WHEREAS, the Company is contemplating an offer and sale of its common stock, par value $0.0001 per share (the "**Common Stock**"), to the public in an underwritten initial public offering (the "**IPO**"); and

WHEREAS, in connection with the IPO, the Company has agreed to grant to the Holders certain rights with respect to the registration of the Registrable Securities (as defined below) on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree as follows:

1. DEFINITIONS. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "**Business Day**" means any day that is not a Saturday, a Sunday or other day on which banks are required or authorized by law to be closed in New York City.

1.3 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein (in the case of a prospectus or preliminary prospectus, in light of the circumstances under which they were made) not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) in connection with the registration covered by the registration statement of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.4 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.5 "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to the issuance of securities in an SEC Rule 145 transaction; (iii) a registration on

any form that does not permit substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.6 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.7 "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.8 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.9 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.10 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.11 "**Registrable Securities**" means any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, held by the Holders or acquired by any of them after the date hereof; excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.12 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.13 "**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(a)hereof.

1.14 "**SEC**" means the Securities and Exchange Commission.

1.15 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.16 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.17 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.18 "**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.7.

1.19 "**Transfer**" means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer.

2. REGISTRATION RIGHTS. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the effective date of the registration statement for the IPO, the Company receives a request from the Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to all or part of the Registrable Securities then outstanding (only if the anticipated aggregate offering price, net of Selling Expenses, would exceed $15 million), then the Company shall (i) within five (5) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within ten (10) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.4.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $15 million, then the Company shall (i) within five (5) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within thirty (30) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within ten (10) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2(e) and 2.4.

(c) No Demand Registration shall be deemed to have occurred for purposes of Subsections 2.1(a) and 2.1(b) if (i) the Registration Statement relating thereto (A) does not become effective, (B) is not maintained effective for the period required pursuant to Subsection 2.5, or (C) the offering of the Registrable Securities pursuant to such Registration Statement is subject to a stop order, injunction or similar order or requirement of the SEC during such period, (ii) more than 90% of the Registrable Securities requested by the demanding Holder to be included in such registration are not so included pursuant to Subsection 2.4 or (iii) the conditions to closing specified in any underwriting agreement, purchase agreement or similar agreement entered into in connection with the registration relating to such request are not satisfied (other than as a result of a material default or breach thereunder by such demanding Holder or its Affiliates) or otherwise waived by such demanding Holder; provided that the Company's obligation to pay expenses pursuant to Subsection 2.7 hereof shall still apply.

(d) Each Holder that submitted a Demand Notice pursuant to a particular offering and the holders of a majority of the Registrable Securities that are to be registered in a particular offering pursuant to Subsection 2.1 shall have the right, prior to the effectiveness of the Registration Statement, to notify the Company that it or they, as the case may be, have determined that the Registration Statement be abandoned or withdrawn, in which event the Company shall abandon or withdraw such Registration Statement. Any Holder who has elected to sell Registrable Securities in an underwritten offering pursuant

to this Subsection 2.1 (including the Holder who delivered the Demand Notice of such registration) shall be permitted to withdraw from such registration by written notice to the Company if the price to the public at which the Registrable Securities are proposed to be sold will be less than 90% of the average closing price of the class of stock being sold in the offering during the 10 trading days preceding the date on which the Demand Notice of such offering was given pursuant to Subsection 2.1

(e) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act (collectively, (i), (ii) and (iii) are an "**Adverse Disclosure**"), then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period or periods of not more than sixty (60) days per calendar year after the request of the Initiating Holders is given; provided, however, that the Company shall not register any securities for its own account or that of any other stockholder during any such sixty (60) day period other than an Excluded Registration.

(f) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a): (i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected three registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b): during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(f) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.7 in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(f)

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for any other Holder or for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.4, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw

any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration, without prejudice to the rights of the Holders to request that such registration be effected as a registration under Subsection 2.1. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.7. If a registration requested pursuant to this Subsection 2.2 involves an underwritten public offering, any Holder requesting to be included in such registration may elect, in writing at least two (2) Business Days prior to the effective date of the Registration Statement filed in connection with such registration, to withdraw its request to register such securities in connection with such registration.

2.3 Shelf Registration.

(a) Request for Shelf Registration. If at any time after one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from any Holder that the Company file with the SEC a shelf Registration Statement pursuant to Rule 415 under the Securities Act (a "**Shelf Registration Statement**") relating to the offer and sale of Registrable Securities by any Holders thereof, then the Company shall (i) within ten (10) days after the date of such request is given, give notice thereof (the "**Shelf Registration Notice**") to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Shelf Registration Statement covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within ten (10) days of the date the Shelf Registration Notice is given, and in each case, subject to the limitations of Subsections 2.3(c), 2.3(d) and 2.4.

(b) If on the date of the Shelf Registration Request the Company is a well-known seasoned issuer as defined in Rule 405 under the Securities Act (a "**WKSI**"), then the Shelf Registration Request may request registration of an unspecified amount of Registrable Securities to be sold by unspecified Holders. If on the date of the Shelf Registration Request the Company is not a WKSI, then the Shelf Registration Request shall specify the aggregate amount of Registrable Securities to be registered. The Company shall provide to the Holders the information necessary to determine the Company's status as a WKSI upon request.

(c) Suspension of Registration. If the continued use of such Shelf Registration Statement at any time would require the Company to make an Adverse Disclosure, the Company may, upon giving prompt written notice of such action to the Holders, suspend use of the Shelf Registration Statement (a "**Shelf Suspension**"); provided, however, that the Company shall not be permitted to exercise a Shelf Suspension more than one time during any twelve (12)-month period for a period not to exceed sixty (60) days. In the case of a Shelf Suspension, the Holders agree to suspend use of the applicable prospectus in connection with any sale or purchase of, or offer to sell or purchase, Registrable Securities, upon receipt of the notice referred to above. The Company shall immediately notify the Holders in writing upon the termination of any Shelf Suspension, amendment or supplement to the prospectus, if necessary, so it does not contain any untrue statement or omission and furnish to the Holders such numbers of copies of the prospectus as so amended or supplemented as the Holders may reasonably request. The Company shall, if necessary, supplement or amend the Shelf Registration Statement, if required by the registration form used by the Company for the Shelf Registration Statement or by the instructions applicable to such registration form or by the Securities Act or as may reasonably be requested by the Holders of a majority of Registrable Securities that are included in such Shelf Registration Statement.

(d) Shelf Takedown. If at any time when the Company has an effective Shelf Registration Statement with respect to a Holder's Registrable Securities, the Company receives a request from a Holder (a "**Shelf Takedown Request**") that the Company effect a public offering, including an underwritten public offering conducted as a bought deal or block sale to a financial institution (a "**Underwritten Shelf Takedown**"), of all or a portion of such Holder's Registrable Securities that may be registered under such Shelf Registration Statement, then the Company shall (i) within five (5) days after the date such request is given (or such shorter period as may be reasonably requested in connection with an underwritten block trade) for any Underwritten Shelf Takedown, give a notice ("**Shelf Takedown Notice**") to all Holders with Registrable Securities covered by the applicable Registration Statement other than the Initiating Holders, or to all other Holders other than the Initiating Holders if such Shelf Registration Statement is undesignated; and (ii) as soon as practicable amend or supplement the Shelf Registration Statement as necessary for such purpose, as specified by notice given by each such Holder to the Company within three (3) days of the date (or such shorter period as may be reasonably requested in connection with an underwritten block trade) the Shelf Takedown Notice is given.

(e) The Company shall not be obligated to take any action to effect any Underwritten Shelf Takedown if a demand registration or company registration was declared effective or an Underwritten Shelf Takedown was consummated within the preceding ninety (90) days (unless otherwise consented to by the Company). Additionally, the Company shall not be obligated to undertake any action to file or effect a Shelf Registration Statement until the Company is eligible to file a Shelf Registration Statement with the SEC under the Securities Act.

2.4 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. If the Company proposes to effect any registration of Registrable Securities pursuant to a Demand Notice validly issued and received pursuant to Subsection 2.1, the underwriter(s) will be selected by a majority in interest of the Initiating Holders and shall be reasonably acceptable to the Company (except in the case of any "non-marketed block trade" or "bought" offering, in which case the Company shall have no right to reasonable consent). If the Company proposes to register any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.5(f)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.4 if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, on a pro rata basis in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder as of the date of such proposed registration or in such other proportion as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the

underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders on a pro rata basis in proportion (or as nearly as practicable) to the number of Registrable Securities owned by each selling Holder as of the date of such proposed registration or in such other proportion as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, (ii) the number of Registrable Securities included in the offering be reduced below twenty percent (20%) of the total number of securities included in such offering. For purposes of the provision in this Subsection 2.4(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.4(a) fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.5 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with (or submit confidentially to) the SEC a registration statement, and all amendments and supplements thereto and related prospectuses, with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective all in accordance with the Securities Act and all applicable rules and regulations promulgated thereunder (provided that before filing or confidentially submitting a registration statement or prospectus or any amendments or supplements thereto, the Company will furnish to the counsel selected by the Initiating Holders covered by such registration statement copies of all such documents proposed to be filed or submitted, which documents will be subject to the review and comment of such

counsel) and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of at least one hundred and eighty (180) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred and eighty (180) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred and eighty (180) day period shall be extended, if necessary, so long as requested by the Holders of a majority of the Registrable Securities thereunder until all such Registrable Securities are sold;

(b) notify each Holder of (i) the issuance by the SEC of any stop order suspending the effectiveness of any registration statement or the initiation of any proceedings for that purpose, (ii) the receipt by the Company or its counsel of any notification with respect to the suspension of the qualification of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose, and (iii) the effectiveness of each registration statement filed hereunder;

(c) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to keep such registration statement effective for a period ending when all of the securities covered by such registration statement have been disposed of in accordance with the intended methods of distribution by the sellers thereof set forth in such registration statement (but not in any event before the expiration of any longer period required under the Securities Act or, if such registration statement relates to an underwritten public offering, such longer period as in the opinion of counsel for the underwriters a prospectus is required by law to be delivered in connection with sale of Registrable Securities by an underwriter or dealer) and comply with the provisions of the Securities Act in order to enable the disposition of all securities covered by such registration statement during such period in accordance with the intended methods of disposition by the sellers thereof set forth in such registration statement;

(d) furnish, without charge, to each of the selling Holders and each underwriter, if any, such number of copies of such registration statement, each amendment and supplement thereto, the prospectus included in such registration statement (including each preliminary prospectus), and such other documents as such seller or underwriter, if any, may reasonably request in order to facilitate the disposition of their Registrable Securities owned by such seller (the Company hereby consenting to the use in accordance with all applicable laws of each such registration statement, each such amendment and supplement thereto, and each such prospectus (or preliminary prospectus or supplement thereto) in connection with the offering and sale of the Registrable Securities covered by such registration statement or prospectus);

(e) use its commercially reasonable efforts to register or qualify the securities covered by such registration statement under such other securities or blue sky laws of such jurisdictions as shall be reasonably requested by the selling Holders, and do any and all other acts and things which may be reasonably necessary or advisable to enable such seller to consummate the disposition in such jurisdictions of the Registrable Securities owned by such seller; provided that the Company shall not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph or (ii) consent to general service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction;

(f) enter into and perform such customer agreements (including, in the event of any underwritten public offering underwriting agreements, in usual and customary form), and take all such

other actions as the Initiating Holders or the underwriters, if any, reasonably request in order to expedite or facilitate the disposition of such Registrable Securities (including, without limitation, making available the executive officers of the Company and participating in "road shows," investor presentations, marketing events and other selling efforts and effecting a stock or unit split or combination, recapitalization or reorganization);

(g) (i) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed and, if not so listed, to be listed on a securities exchange and, without limiting the generality of the foregoing, to arrange for at least two market markers to register as such with respect to such Registrable Securities with FINRA, and (ii) comply (and continue to comply) with the requirements of any self-regulatory organization applicable to the Company, including without limitation all corporate governance requirements;

(h) provide and cause to be maintained a transfer agent and registrar for all such Registrable Securities from and after the effective date of such Registration Statement (and in connection therewith, if required by the Company's transfer agent, the Issuer will promptly after the effective date of the Registration Statement, cause an opinion of counsel as to the effectiveness of the Registration Statement to be delivered to and maintained with such transfer agent, together with any other authorizations, certificates and directions required by the transfer agent which authorize and direct the transfer agent to issue such Registrable Securities without any legend upon sale by the Holder or the underwriter or managing underwriter of an underwritten offering of Registrable Securities, if any, of such Registrable Securities under the Registration Statement) and provide a CUSIP number for all such Registrable Securities, not later than the effective date of such registration;

(i) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(j) notify in writing each selling Holder and its counsel, (i) promptly after the Company receives notice thereof, of the date and time when such registration statement and each post-effective amendment thereto has become effective or a prospectus or supplement to any prospectus relating to a registration statement has been filed and when any registration or qualification under a state securities or blue sky law or any exemption thereunder has been obtained, (ii) promptly after receipt thereof, of any request by the SEC for the amendment or supplementing of such registration statement or prospectus or for additional information, and (iii) at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event or of any information or circumstances as a result of which the prospectus included in such registration statement contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading, and, subject to Section 2, if required by applicable law or to the extent requested by the Initiating Holders, the Company will use its best efforts to promptly prepare and file a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading and (iv) if at any time the representations and

warranties of the Company in any underwriting agreement, securities sale agreement, or other similar agreement, relating to the offering shall cease to be true and correct;

(k) take all actions to ensure that any Free-Writing Prospectus utilized in connection with any demand registration or Shelf Registration Statement hereunder complies in all material respects with the Securities Act, is filed in accordance with the Securities Act to the extent required thereby, is retained in accordance with the Securities Act to the extent required thereby and, when taken together with the related prospectus, prospectus supplement and related documents, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;

(l) otherwise use its best efforts to comply with all applicable rules and regulations of the SEC, and make available to its security holders, as soon as reasonably practicable, an earnings statement covering the period of at least twelve (12) months beginning with the first day of the Company's first full calendar quarter after the effective date of the registration statement, which earnings statement will satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(m) permit any Holder which, in its sole and exclusive judgment, might be deemed to be an underwriter or a controlling person of the Company, to participate in the preparation of such registration or comparable statement and to allow such Holder to provide language for insertion therein, in form and substance satisfactory to the Company, which in the reasonable judgment of such Holder and its counsel should be included;

(n) use best efforts to (i) make short-form registration available for the sale of Registrable Securities and (ii) prevent the issuance of any stop order suspending the effectiveness of a registration statement, or the issuance of any order suspending or preventing the use of any related prospectus or suspending the qualification of any equity securities included in such registration statement for sale in any jurisdiction use, and in the event any such order is issued, best efforts to obtain promptly the withdrawal of such order;

(o) use its reasonable best efforts to cause such Registrable Securities covered by such registration statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to enable the sellers thereof to consummate the disposition of such Registrable Securities;

(p) cooperate with the Holders covered by the registration statement and the managing underwriter or agent, if any, to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold and not bearing any restrictive legends (or arrange for book entry transfer of securities in the case of uncertificated securities), and enable such Registrable Securities to be in such denominations and registered in such names as the managing underwriter, or agent, if any, or such Holders may request at least two (2) business days prior to any proposed sale of Registrable Securities to the underwriters;

(q) if requested by any managing underwriter, include in any prospectus or prospectus supplement updated financial or business information for the Company's most recent period or current quarterly period (including estimated results or ranges of results) if required for purposes of marketing the offering in the view of the managing underwriter;

(r) take no direct or indirect action prohibited by Regulation M under the Exchange Act; provided, however, that to the extent that any prohibition is applicable to the Company, the Company will take such action as is necessary to make any such prohibition inapplicable;

(s) (i) cooperate with each Holder covered by the registration statement and each underwriter or agent participating in the disposition of such Registrable Securities and their respective counsel in connection with the preparation and filing of applications, notices, registrations and responses to requests for additional information with FINRA, the New York Stock Exchange, Nasdaq or any other national securities exchange on which the equity securities are or are to be listed, and (ii) to the extent required by the rules and regulations of FINRA, retain a "Qualified Independent Underwriter" acceptable to the managing underwriter;

(t) in the case of any underwritten offering, use its best efforts to obtain, and deliver to the underwriter(s), in the manner and to the extent provided for in the applicable underwriting agreement, one or more cold comfort letters from the Company's independent public accountants in customary form and covering such matters of the type customarily covered by cold comfort letters;

(u) use its best efforts to provide (i) a legal opinion of the Company's outside counsel, dated the effective date of such registration statement addressed to the Company, (ii) on the date that such Registrable Securities are delivered to the underwriters for sale in connection with a demand registration or Shelf Registration Statement, if such securities are being sold through underwriters, or, if such securities are not being sold through underwriters, on the closing date of the applicable sale, (1) one or more legal opinions of the Company's outside counsel, dated such date, in form and substance as customarily given to underwriters in an underwritten public offering or, in the case of a non-underwritten offering, to the broker, placement agent or other agent of the Holders assisting in the sale of the Registrable Securities and (2) one or more "negative assurances letters" of the Company's outside counsel, dated such date, in form and substance as is customarily given to underwriters in an underwritten public offering or, in the case of a non-underwritten offering, to the broker, placement agent or other agent of the Holders assisting in the sale of the Registrable Securities, in each case, addressed to the underwriters, if any, or, if requested, in the case of a non-underwritten offering, to the broker, placement agent or other agent of the Holders assisting in the sale of the Registrable Securities and (3) customary certificates executed by authorized officers of the Company as may be requested by any Holder or any underwriter of such Registrable Securities;

(v) if the Company files an automatic Shelf Registration Statement covering any Registrable Securities, use its best efforts to remain a WKSI (and not become an ineligible issuer (as defined in Rule 405 under the Securities Act)) during the period during which such automatic Shelf Registration Statement is required to remain effective;

(w) if the Company does not pay the filing fee covering the Registrable Securities at the time an automatic Shelf Registration Statement is filed, pay such fee at such time or times as the Registrable Securities are to be sold;

(x) cause its officers to use their reasonable best efforts to support the marketing of the Registrable Securities covered by the Registration Statement (including, without limitation, participation in such number of "road shows" and other customary marketing activities, including "one-on-one" meetings with prospective purchasers of the Registrable Securities, in each case as the underwriter(s) reasonably request); and

(y) if the automatic Shelf Registration Statement has been outstanding for at least three (3) years, at the end of the third year, refile a new automatic Shelf Registration Statement covering the Registrable Securities, and, if at any time when the Company is required to re-evaluate its WKSI status the Company determines that it is not a WKSI, use its best efforts to refile the Shelf Registration Statement on Form S-3 and, if such form is not available, Form S-1 and keep such registration statement effective during the period during which such registration statement is required to be kept effective.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

The Company agrees not to file or make any amendment to any Registration Statement with respect to any Registrable Securities, or any amendment of or supplement to the prospectus or any supplements thereto (including free writing prospectuses under Rule 433 (each a "**Free Writing Prospectus**") used in connection therewith, that refers to any Holder covered thereby by name, or otherwise identifies such Holder as the holder of any securities of the Company, without the consent of such Holder, such consent not to be unreasonably withheld or delayed, unless and to the extent such disclosure is required by law, in which case the Company shall provide written notice to such Holder no less than five Business Days prior to the filing of such amendment to any Registration Statement or amendment of or supplement to the Prospectus or any Free Writing Prospectus.

2.6 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.7 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed $150,000, of one counsel for the selling Holders ("**Selling Holder Counsel**") per each registration or shelf takedown effected pursuant to Section 2, shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company that was not known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). The Selling Holder Counsel shall be selected by the Holders of a majority of the Registrable Securities to be registered. All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.8 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.9 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.9(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder with respect to itself expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.9(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.9(b) and 2.9(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.9 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.9, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may

be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.9, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.9.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.9 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.9 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.9, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.9(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.9(b) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.9 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.10 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a

Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.11 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (i) to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

2.12 Restrictions on Transfer.

(a) Each certificate, instrument, or book entry representing (i) the Registrable Securities and (ii) any other securities issued in respect of the Registrable Securities, upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(b)) be notated with a legend substantially in the following form:

> THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(b) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(a) except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1, 2.2, or 2.3 shall terminate upon the earliest to occur of:

(a) such time as such Holder ceases to hold or beneficially own any remaining Registrable Securities or upon the dissolution, liquidation or winding up of the Company; or

(b) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration.

3. MISCELLANEOUS.

3.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 25% of such Holder's shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or

stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

3.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, excluding any rule of law that would cause the application of the laws of any jurisdiction other than the laws of the State of Delaware.

3.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

3.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

3.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 3.5. If notice is given to the Company, a copy shall also be sent to DLA Piper LLP (US), 3203 Hanover Street, Suite 100, Palo Alto, CA 94304, Attention: Gurpreet Bal.

3.6 Amendments and Waivers. Except as otherwise provided herein, the provisions of this Agreement may be amended, modified, terminated or waived only with the prior written consent of the Company and each Holder. The failure or delay of any Person to enforce any of the provisions of this Agreement shall in no way be construed as a waiver of such provisions and shall not affect the right of such Person thereafter to enforce each and every provision of this Agreement in accordance with its terms. A waiver or consent to or of any breach or default by any Person in the performance by that Person of his, her or its obligations under this Agreement shall not be deemed to be a consent or waiver to or of any other breach or default in the performance by that Person of the same or any other obligations of that Person under this Agreement.

3.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

3.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

3.9 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

3.10 Dispute Resolution. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT OF COMPETENT JURISDICTION IN NEW YORK COUNTY, NEW YORK.

EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL- ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

3.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or non-defaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year first above written.

SILVACO GROUP, INC.

By: /s/ Babak Taheri
Name: Babak Taheri
Title: CEO

[*Signature Page to Registration Rights Agreement*]

SMIK GRANTOR RETAINED ANNUITY TRUST

By: /s/ Mark Hancock
Name: Mark Hancock
Title: Trustee

[*Signature Page to Registration Rights Agreement*]

KATHERINE NGAI-PESIC

By: /s/ Katherine Ngai-Pesic

[*Signature Page to Registration Rights Agreement*]

ILIYA PESIC

By: /s/ Iliya Pesic

[*Signature Page to Registration Rights Agreement*]

YELENA PESIC

By: /s/ Yelena Pesic

STOCKHOLDERS AGREEMENT OF SILVACO GROUP, INC.

THIS STOCKHOLDERS AGREEMENT, dated as of April 12, 2024 (as it may be amended, restated or otherwise modified from time to time in accordance with the terms hereof, this "Agreement"), is entered into by and among **Silvaco Group, Inc.**, a Delaware corporation (the "Corporation"), and **SMIK Grantor Retained Annuity Trust**, **Katherine Ngai-Pesic**, **Iliya Pesic** and **Yelena Pesic (**together, the "Stockholders"). Certain terms used in this Agreement are defined in Section 6.

RECITALS

WHEREAS, the Stockholders together beneficially own all outstanding shares of common stock, par value $0.0001 per share (the "Common Stock"), of the Corporation;

WHEREAS, Iliya Pesic and Yelena Pesic are the son and daughter of Katherine Ngai-Pesic;

WHEREAS, the Corporation is contemplating an offering and sale of the shares of its Common Stock in an underwritten initial public offering; and

WHEREAS, the Stockholders anticipate that they will continue to hold over 50% of the Common Stock immediately following the closing of the contemplated underwritten initial public offering.

NOW, THEREFORE, in consideration of the covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Corporation and the Stockholders agree as follows:

AGREEMENT

Section 1. Election of the Board of Directors; Observer; Committees.

(a) Subject to this Section 1(a), the Stockholders, voting together as a single class, shall be entitled to designate for nomination by the Board up to four (4) Directors from time to time (any Director designated by the Stockholders, a "Designated Director"). The right of the Stockholders to designate the Designated Directors for nomination as set forth in this Section 1(a) shall be subject to the following: (i) if at any time the Stockholders together beneficially owns in the aggregate fifty percent (50%) or more of all issued and outstanding shares of Common Stock, the Stockholders shall be entitled to designate four (4) Designated Directors; (ii) if at any time the Stockholders beneficially owns in the aggregate less than fifty percent (50%) but at least forty percent (40%) or more of all issued and outstanding shares of Common Stock, the Stockholders shall be entitled to designate three (3) Designated Directors; (iii) if at any time the Stockholders beneficially owns in the aggregate less than forty percent (40%) but at least twenty percent (20%) or more of all issued and outstanding shares of Common Stock, the Stockholders shall be entitled to designate two (2) Designated Directors; and (iv) if at any time the Stockholders beneficially owns in the aggregate less than twenty percent (20%) but at least ten percent (10%) or more of all issued and outstanding shares of Common Stock, the Stockholders shall be entitled to designate only one (1) Designated Director. The Stockholders shall not be entitled to designate any Designated Directors for nomination in accordance with this Section 1(a) if at any time the Stockholders beneficially own in the aggregate of less than ten percent (10%) of all issued and outstanding shares of Common Stock.

(b) Subject to Section 1(a), each Stockholder hereby agrees for the exclusive benefit of the Corporation (which shall have sole right to enforce this Section 1(b)), to vote, or cause to be voted, all

outstanding shares of Common Stock beneficially owned by them (or any of their Permitted Transferees) at any annual or special meeting of stockholders of the Corporation at which Directors of the Corporation are to be elected or removed, or in actions by written consent or otherwise so as to effectuate the provisions of this Agreement (as may be permitted under the Corporation's Bylaws and Charter at the time of such vote), to take all Necessary Action in their capacity as stockholders of the Corporation to cause the election or removal of a Designated Director as a Director, as provided herein and to implement and enforce the provisions set forth in Section 3. For the avoidance of doubt, except as provided above, nothing in this Agreement shall limit the right of a Stockholder to vote (or cause to be voted), including by proxy, if applicable, in favor of, or against or to abstain with respect to, any other matters presented to the stockholders of the Corporation.

(c) For so long as the Pesic Family has the ability pursuant to Section 1(a) to designate for nomination at least one (1) Director, the Pesic Family has the right to designate one non-voting board observer who will be entitled to attend all meetings of the Board of Directors of the Company (and, in connection therewith, receive notices of such meetings according to the same terms on which notices of such meetings are required to be provided to the members of the Board of Directors pursuant to the Company's bylaws), participate in all deliberations of the Board of Directors and receive copies of all materials provided to the Board of Directors, provided, however, that such observer shall have no voting rights with respect to actions taken or elected not to be taken by the Board of Directors. Such non-voting board observer shall execute a confidentially agreement substantially in the form request by the Company prior to receiving any information, and such board observer shall not be entitled to receive any notices, documents, materials or other information, or be in attendance for any meeting (or any portion thereof) could: (i) adversely affect attorney client privilege between the Company and its counsel, (ii) present an actual conflict of interest between the Pesic Family or any of its affiliates and the Company or any of its affiliates or (iii) otherwise, upon advice of outside counsel, violate the fiduciary or other duties of the Board of Directors.

(d) For so long as the Pesic Family has the ability pursuant to Section 1(a) to designate for nomination at least one (1) Director, the Pesic Family shall have, to the fullest extent permitted by applicable law, subject to the Nasdaq rules and in compliance with other applicable laws, rules and regulations, and subject to the requirements of the charter for the nominating and corporate governance committee, the right, but not the obligation, to designate one (1) member for each of the committees (other than the audit committee).

Section 2. Vacancies and Replacements.

(a) No reduction in the number of shares of Common Stock that each Stockholder beneficially owns shall shorten the term of any incumbent Director.

(b) The Stockholders, voting together as a single class, shall have the sole right to request that one or more of the Designated Directors, as applicable, tender their resignations as Directors of the Board, in each case, with or without cause at any time, by sending a written notice to such Director and the Corporation's Secretary stating the name of the Director or Directors whose resignation from the Board is requested (the "Removal Notice").

(c) The Stockholders, voting separately as a single class, shall have the exclusive right to designate a replacement Director for nomination for election by the Board to fill vacancies created as a result of not designating their respective Directors initially or by death, disability, retirement, resignation, removal (with or without cause) of their respective Directors, or otherwise by designating a successor for

nomination for election by the Board to fill the vacancy of their respective Directors created thereby on the terms and subject to the conditions of Section 1; it being understood that any such designee shall serve the remainder of the term of the Director whom such designee replaces.

(d) So long as a Stockholder has the right to nominate at least one Director under Section 1(a) or any such Director is serving on the Board, the Corporation shall maintain in effect at all times directors and officers indemnity insurance coverage reasonably satisfactory to the Stockholders, and the Charter and Bylaws shall at all times provide for indemnification, exculpation and advancement of expenses to the fullest extent permitted under applicable law.

Section 3. Initial Directors.

The initial Designated Director pursuant to Section 1(a) shall be Anita Ganti, Katherine Ngai-Pesic, Anthony Ngai, and Jodi Shelton.

Section 4. Covenants of the Corporation.

(a) The Corporation agrees to take all Necessary Action to cause the individuals designated in accordance with Section 1 to be included in the slate of nominees proposed to be elected to the Board at the next annual or special meeting of stockholders of the Corporation at which Directors are to be elected, or in actions by written consent or otherwise so as to effectuate the provisions of this Agreement (as may be permitted under the Corporation's Bylaws and Charter at the time of such vote), in accordance with the Bylaws, Charter, Securities Laws, and General Corporation Law of the State of Delaware and at each annual meeting of stockholders of the Corporation thereafter at which such Director's term expires or in any action by written consent or otherwise to effectuate the provisions of this Agreement (as may be permitted under the Corporation's Bylaws and Charter at the time of such vote).

(b) The Stockholders shall comply with the requirements of the Charter and Bylaws when designating and nominating individuals as Directors, in each case, to the extent such requirements are applicable to Directors generally.

Section 5. Termination.

This Agreement shall terminate, as to each individual party but not collectively to all parties, upon the earliest to occur of any one of the following events:

(a) the Stockholders ceasing to beneficially own any shares of Common Stock; and

(b) the unanimous written consent of the Corporation and each of the Stockholders (if they continue to beneficially own any shares of Common Stock).

Section 6. Definitions.

As used in this Agreement, any term that it is not defined herein, shall have the following meanings:

"beneficially own" shall have the meaning given to such term in Rule 13d-3 promulgated under the Exchange Act, as the same may be amended or restated from time to time.

"Board" means the board of directors of the Corporation.

"Bylaws" means the amended and restated bylaws of the Corporation, dated as of the date hereof, as the same may be further amended, restated, amended and restated or otherwise modified from time to time.

"Charter" means the amended and restated certificate of incorporation of the Corporation, effective as of the date hereof, as the same may be further amended, restated, amended and restated or otherwise modified from time to time.

"Director" means a member of the Board.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Necessary Action" means, with respect to a specified result, all commercially reasonable actions required to cause such result that are within the power of a specified Person, including (i) voting or providing a written consent or proxy with respect to the equity securities owned by the Person obligated to undertake the necessary action, (ii) voting in favor of the adoption of stockholders' resolutions and amendments to the organizational documents of the Corporation, (iii) executing agreements and instruments, and (iv) making, or causing to be made, with governmental, administrative or regulatory authorities, all filings, registrations or similar actions that are required to achieve such result.

"Permitted Transferee" of a Person shall mean any "affiliate" of such Person as defined in Rule 405 promulgated under the Securities Act of 1933, as amended.

"Person" means any individual, corporation, limited liability company, partnership, trust, joint stock company, business trust, unincorporated association, joint venture, governmental authority or other entity or organization, including a government or any subdivision or agency thereof.

"Securities Laws" means the Securities Act of 1933, as amended, and the Exchange Act, and the rules promulgated thereunder.

"Subsidiary" means with respect to any Person, any corporation, limited liability company, partnership, association, trust or other form of legal entity, of which (a) such first Person directly or indirectly owns or controls at least a majority of the securities or other interests having by their terms voting power to elect a majority of the board of directors or others performing similar functions, or (b) such first Person is a general partner or managing member (excluding partnerships in which such Person or any Subsidiary thereof does not have a majority of the voting interests in such partnership).

Unless the context of this Agreement otherwise requires, (i) words of any gender include each other gender; (ii) words using the singular or plural number also include the plural or singular number, respectively; (iii) the terms "hereof," "herein," "hereby" and derivative or similar words refer to this entire Agreement; (iv) the terms "Article" or "Section" refer to the specified Article or Section of this Agreement; (v) the word "including" shall mean "including, without limitation"; (vi) each defined term has its defined meaning throughout this Agreement, whether the definition of such term appears before or after such term is used; and (vii) the word "or" shall be disjunctive but not exclusive. References to agreements and other documents shall be deemed to include all subsequent amendments and other modifications thereto. References to statutes shall include all regulations promulgated thereunder and references to statutes or regulations shall be construed as including all statutory and regulatory provisions consolidating, amending or replacing the statute or regulation.

Section 7. Choice of Law and Venue; Waiver of Right to Jury Trial.

(a) THIS AGREEMENT SHALL BE GOVERNED BY, CONSTRUED, APPLIED AND ENFORCED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF DELAWARE. EACH OF THE PARTIES HERETO ACKNOWLEDGES AND AGREES THAT IN THE EVENT OF ANY BREACH OF THIS AGREEMENT, THE NON-BREACHING PARTY WOULD BE IRREPARABLY HARMED AND COULD NOT BE MADE WHOLE BY MONETARY DAMAGES, AND THAT, IN ADDITION TO ANY OTHER REMEDY TO WHICH THEY MAY BE ENTITLED AT LAW OR IN EQUITY, THE PARTIES SHALL BE ENTITLED TO SUCH EQUITABLE OR INJUNCTIVE RELIEF AS MAY BE APPROPRIATE. THE CHOICE OF FORUM SET FORTH IN THIS SECTION SHALL NOT BE DEEMED TO PRECLUDE THE ENFORCEMENT OF ANY JUDGMENT OF A DELAWARE FEDERAL OR STATE COURT, OR THE TAKING OF ANY ACTION UNDER THIS AGREEMENT TO ENFORCE SUCH A JUDGMENT, IN ANY OTHER APPROPRIATE JURISDICTION.

(b) IN THE EVENT ANY PARTY TO THIS AGREEMENT COMMENCES ANY LITIGATION, PROCEEDING OR OTHER LEGAL ACTION IN CONNECTION WITH OR RELATING TO THIS AGREEMENT, ANY RELATED AGREEMENT OR ANY MATTERS DESCRIBED OR CONTEMPLATED HEREIN OR THEREIN, THE PARTIES TO THIS AGREEMENT HEREBY (1) AGREE UNDER ALL CIRCUMSTANCES ABSOLUTELY AND IRREVOCABLY TO SUBMIT TO THE EXCLUSIVE JURISDICTION OF THE COURT OF CHANCERY OF THE STATE OF DELAWARE, OR IF (AND ONLY IF) SUCH COURT FINDS IT LACKS SUBJECT MATTER JURISDICTION, THE SUPERIOR COURT OF THE STATE OF DELAWARE (COMPLEX COMMERCIAL DIVISION), OR IF UNDER APPLICABLE LAW, SUBJECT MATTER JURISDICTION OVER THE MATTER THAT IS THE SUBJECT OF THE ACTION OR PROCEEDING IS VESTED EXCLUSIVELY IN THE FEDERAL COURTS OF THE UNITED STATES OF AMERICA, THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE, AND APPELLATE COURTS FROM ANY THEREOF, WITH RESPECT TO ALL ACTIONS AND PROCEEDINGS ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY; (2) AGREE THAT IN THE EVENT OF ANY SUCH LITIGATION, PROCEEDING OR ACTION, SUCH PARTIES WILL CONSENT AND SUBMIT TO THE PERSONAL JURISDICTION OF ANY SUCH COURT DESCRIBED IN CLAUSE (1) OF THIS SECTION 7(B) AND TO SERVICE OF PROCESS UPON THEM IN ACCORDANCE WITH THE RULES AND STATUTES GOVERNING SERVICE OF PROCESS; (3) AGREE TO WAIVE TO THE FULL EXTENT PERMITTED BY LAW ANY OBJECTION THAT THEY MAY NOW OR HEREAFTER HAVE TO THE VENUE OF ANY SUCH LITIGATION, PROCEEDING OR ACTION IN ANY SUCH COURT OR THAT ANY SUCH LITIGATION, PROCEEDING OR ACTION WAS BROUGHT IN ANY INCONVENIENT FORUM; (4) AGREE TO WAIVE ANY RIGHTS TO A JURY TRIAL TO RESOLVE ANY DISPUTES OR CLAIMS RELATING TO THIS AGREEMENT; (5) AGREE TO SERVICE OF PROCESS IN ANY LEGAL PROCEEDING BY MAILING OF COPIES THEREOF TO SUCH PARTY AT ITS ADDRESS SET FORTH HEREIN FOR COMMUNICATIONS TO SUCH PARTY; (6) AGREE THAT ANY SERVICE MADE AS PROVIDED HEREIN SHALL BE EFFECTIVE AND BINDING SERVICE IN EVERY RESPECT; AND (7) AGREE THAT NOTHING HEREIN SHALL AFFECT THE RIGHTS OF ANY PARTY TO EFFECT SERVICE OF PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.

Section 8. Notices.

Any notice, request, claim, demand, document and other communication hereunder to any party shall be effective upon receipt (or refusal of receipt) and shall be in writing and delivered personally or sent by facsimile, or by electronic mail, or first class mail, or by Federal Express or other similar courier or other similar means of communication, as follows:

(a) If to Katherine Ngai-Pesic, addressed as follows:

Katherine Ngai-Pesic
Silvaco Group Inc.
Patrick Henry Dr., Bldg 23
Santa Clara, CA 95054

with a copy (which copy shall not constitute notice) to:

Latham & Watkins LLP
1271 Avenue of the Americas
New York, NY 10020
Attn: Ian Schuman & Adam Gelardi

(b) If to Iliya Pesic, addressed as follows:

Iliya Pesic

with a copy (which copy shall not constitute notice) to:

Latham & Watkins LLP
1271 Avenue of the Americas
New York, NY 10020
Attn: Ian Schuman & Adam Gelardi

(c) If to Yelena Pesic, addressed as follows:

Yelena Pesic

with a copy (which copy shall not constitute notice) to:

Latham & Watkins LLP
1271 Avenue of the Americas
New York, NY 10020
Attn: Ian Schuman & Adam Gelardi

(d) If to the SMIK Grantor Retained Annuity Trust, addressed as follows:

SMIK Grantor Retained Annuity Trust

with a copy (which copy shall not constitute notice) to:

Latham & Watkins LLP
1271 Avenue of the Americas
New York, NY 10020
Attn: Ian Schuman & Adam Gelardi

(e) If to the Corporation, addressed as follows:

Silvaco Group, Inc.
4701 Patrick Henry Drive, Building #23
Santa Clara, CA 95054
Telephone: (408) 567-1000
Attn: Chief Financial Officer

with a copy (which copy shall not constitute notice) to:

DLA Piper LLP (US)
3203 Hanover Street, Suite 100,
Palo Alto, CA 94304
Attn: Gurpreet Bal

or, in each case, to such other address or email address as such party may designate in writing to each party by written notice given in the manner specified herein. All such communications shall be deemed to have been given, delivered or made when so delivered by hand or sent by facsimile (with confirmed transmission), on the next business day if sent by overnight courier service (with confirmed delivery) or when received if sent by first class mail, or in the case of notice by electronic mail, when the relevant email enters the recipient's server.

Section 9. Assignment.

Except as otherwise provided herein, all of the terms and provisions of this Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the respective successors and permitted assigns of the parties hereto. This Agreement may not be assigned (by operation of law or otherwise) without the express prior written consent of the other parties hereto, and any attempted assignment, without such consents, will be null and void; *provided*, *however*, that each Stockholder is permitted to assign this Agreement to their respective Permitted Transferees, in which case references to Stockholders and parties to this Agreement, as applicable, shall be deemed to include such Permitted Transferees if they were originally signatories hereto, except to the extent otherwise provided herein. Each Stockholder shall cause any of their respective Permitted Transferees to become a party to this Agreement. References to beneficial ownership of percentages of issued and outstanding shares of

Common Stock by a Stockholder herein shall include all ownership of shares of Common Stock by Permitted Transferees of such Stockholder.

Section 10. Amendment and Modification; Waiver of Compliance.

This Agreement may not be amended, modified, altered or supplemented except by means of a written instrument executed on behalf of each of the Corporation and the Stockholders. Except as otherwise provided in this Agreement, any failure of any of the parties to comply with any obligation, covenant, agreement or condition herein may be waived by the party or parties entitled to the benefits thereof only by a written instrument signed by the party or parties granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

Section 11. Waiver.

No failure on the part of either party hereto to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of either party hereto in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver thereof; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

Section 12. Severability.

If any provision of this Agreement, or the application of such provision to any Person or circumstance or in any jurisdiction, shall be held to be invalid or unenforceable to any extent, (i) the remainder of this Agreement shall not be affected thereby, and each other provision hereof shall be valid and enforceable to the fullest extent permitted by law, (ii) as to such Person or circumstance or in such jurisdiction such provision shall be reformed to be valid and enforceable to the fullest extent permitted by law and (iii) the application of such provision to other Persons or circumstances or in other jurisdictions shall not be affected thereby.

Section 13. Counterparts.

This Agreement may be executed in any number of counterparts and signatures may be delivered by facsimile, each of which may be executed by less than all parties, each of which shall be enforceable against the parties actually executing such counterparts, and all of which together shall constitute one instrument.

Section 14. Further Assurances.

At any time or from time to time after the date hereof, the parties hereto agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as any other party may reasonably request in order to evidence or effectuate the provisions of this Agreement and to otherwise carry out the intent of the parties hereunder.

Section 15. Titles and Subtitles.

The descriptive headings of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

Section 16. Representations and Warranties.

(a) Each of the Stockholders and each Person who becomes a party to this Agreement after the date hereof, severally and not jointly and solely with respect to itself, represents and warrants to the Corporation as of the time such party becomes a party to this Agreement that (1) if applicable, it is duly authorized to execute, deliver and perform this Agreement; (2) this Agreement has been duly executed by such party and is a valid and binding agreement of such party, enforceable against such party in accordance with its terms; and (3) the execution, delivery and performance by such party of this Agreement does not violate or conflict with or result in a breach of or constitute (or with notice or lapse of time or both constitute) a default under any agreement to which such party is a party or, if applicable, the organizational documents of such party.

(b) The Corporation represents and warrants to each other party hereto that (1) the Corporation is duly authorized to execute, deliver and perform this Agreement; (2) this Agreement has been duly authorized, executed and delivered by the Corporation and is a valid and binding agreement of the Corporation, enforceable against the Corporation in accordance with its terms; and (3) the execution, delivery and performance by the Corporation of this Agreement does not violate or conflict with or result in a breach by the Corporation of or constitute (or with notice or lapse of time or both constitute) a default by the Corporation under the Charter or Bylaws, any existing applicable law, rule, regulation, judgment, order, or decree of any governmental authority exercising any statutory or regulatory authority of any of the foregoing, domestic or foreign, having jurisdiction over the Corporation or any of its Subsidiaries or any of their respective properties or assets, or any agreement or instrument to which the Corporation or any of its Subsidiaries is a party or by which the Corporation or any of its Subsidiaries or any of their respective properties or assets may be bound.

Section 17. No Strict Construction.

This Agreement shall be deemed to be collectively prepared by the parties hereto, and no ambiguity herein shall be construed for or against any party based upon the identity of the author of this Agreement or any provision hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the day and year first above written.

SILVACO GROUP,INC.

By: /s/ Babak Taheri
Name: Babak Taheri
Title: CEO

[*Signature Page to Stockholders Agreement*]

SMIK GRANTOR RETAINED ANNUITY TRUST

By: /s/ Mark Hancock
Name: Mark Hancock
Title: Trustee

[*Signature Page to Stockholders Agreement*]

KATHERINE NGAI PESIC

By: /s/ Katherine Ngai-Pesic

[*Signature Page to Stockholders Agreement*]

ILIYA PESIC

By: /s/ Iliya Pesic

[*Signature Page to Stockholders Agreement*]

YELENA PESIC

By: /s/ Yelena Pesic

[*] Indicates that certain information in this exhibit has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

BY AND BETWEEN

NXP SEMICONDUCTORS NETHERLANDS B.V.

AND

IPEXTREME, INC.

DATED

30 OCTOBER 2015

This Agreement is made as of 30 October 2015 by and between:

1. **NXP Semiconductors Netherlands B.V.**, a corporation duly incorporated under the laws of the Netherlands, having its principal office at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("**NXP**"), and

2. **IPextreme, Inc.**, a corporation duly incorporated under the laws of Delaware, USA, having offices at 808 East McGlincy Lane, Campbell, CA 95008, USA ("**IPextreme**").

IPextreme and NXP are collectively referred to as "**Parties**" and individually referred to as a "**Party**".

WHEREAS, IPextreme is a company with activities in the field of semiconductor intellectual property licensing and acts as a developer and value-added reseller of silicon-proven IP from major semiconductor companies; and

WHEREAS, NXP is a company which is active in the field of design, manufacture and sale of integrated circuits and has for many years invested in research and development of semiconductor IP-blocks; and

WHEREAS, NXP wishes to commercialize its investment in the Technology through licensing and distributing such Technology for subsequent sublicensing and distribution to third parties; and

WHEREAS, IPextreme wishes to develop, market, promote, distribute and sell products and services based on the Technology, including sublicensing the Technology to third parties and has requested NXP grant a license to such effect as well as NXP's disclosure and making available certain know-how and expertise; and

WHEREAS, IPextreme and NXP have entered into a non-disclosure agreement effective August 14, 2014 covering the initial disclosure and an evaluation license agreement effective April 1, 2015 covering the exchange of confidential and proprietary information in connection with the Technology; and

WHEREAS, the Parties wish to set forth the terms and conditions pursuant to which the Technology is disclosed to IPextreme and IPextreme is granted a license to market, promote, distribute and sell products and services based on the Technology.

NOW, THEREFORE, in consideration of the mutual obligations and covenants contained herein, the Parties have agreed as follows:

SECTION 1.0 - DEFINITIONS

In addition to other terms defined elsewhere in this Agreement, the following terms when used herein shall have the meanings set forth below. All definitions shall apply both to their singular or plural forms, as the context may require.

"Affiliate"	(a) as regards IPextreme: any corporation, company or other legal entity that IPextreme now or hereafter Controls, is Controlled by or is under common Control with; and (b) as regards NXP: NXP's parent company NXP B.V. and any corporation, company or other legal entity that NXP B.V. now or hereafter Controls; where "Control" means the direct or indirect ownership of more than fifty percent (>50%) of the shares or similar ownership interests entitled to vote for the election of directors or other persons performing similar functions. An entity may be considered an Affiliate only so long as such Control exists.
"Agreement"	this Technology License and Distribution Agreement, including all Appendices hereto, which shall form an integral part hereof.
"Appendix"	an appendix to this Agreement.
"Change of control"	with respect to a Party, the occurrence any of the following events: (a) any consolidation or merger of such Party with or into any other entity in which the holders of such Party's outstanding shares immediately before such consolidation or merger do not, but immediately after such consolidation or merger, do retain stock representing a majority of the voting power of the surviving entity or stock representing a majority of the voting power of an entity that wholly owns, directly or indirectly, the surviving entity; (b) the sale, transfer or assignment of securities of such Party representing a majority of the voting power of all of such Party's outstanding voting securities to an acquiring Party or group; (c) the sale of all, or substantially all, of such Party's assets; or (d) the transfer, directly or indirectly, of fifty percent (50%) or more of the such Party's outstanding shares entitled to vote for the election of directors or other persons performing similar functions, or by equivalent change in ownership or control of such Party if a partnership or other non-corporate form.
"Confidential Information"	any and all proprietary and/or confidential data and information (including any third party data and information) that may be disclosed (directly or indirectly, whether in writing or other tangible form, or orally, visually, electronically or other tangible form) hereunder to the receiving Party, including, without limitation: products and roadmaps, marketing plans, strategies, business plans, finances and prices, customers, suppliers, vendors, business partners, services, software, hardware, research and development, methods, techniques, drawings, designs, specifications, know-how, ideas, inventions (patentable or otherwise) or patents, which data or information is: (a) marked as "confidential" or "proprietary" or the like when disclosed; or (b) is unmarked (e.g. orally disclosed) but treated as confidential at the time of disclosure and is summarized and described as confidential in a writing that is delivered to the receiving Party within thirty (30) days of disclosure; or (c) a reasonable person would recognize as confidential or proprietary considering the nature of the information and the circumstances of disclosure.

"Customer"	a business enterprise which acquires the Licensed Design for use in its normal business operations, being the design, manufacturing, distribution and sale of Licensed Products and not for resale, distribution or transfer to others.
"Defect"	an operation problem solely within the Technology furnished by NXP hereunder that prevents it from functioning substantially in accordance with NXP's specifications, including but not limited to any bug, error, failure(s), virus, hidden program or intentionally harmful destructive or disabling mechanism or device in the Technology. The term Defect does not apply to, and excludes any problems or effects created by or associated with any Modifications or combination of the Technology with other products or services.
"Documentation"	all documentation relating to the Technology, including but not limited to customer reference and installation manuals, technology design kits such as so called PTPs, SDKs and PDKs, instructions, specifications, annotations, user guides, programmer guides, technical training and programmer guides, and other written materials, whether in printed or in electronic form, that NXP includes or otherwise provides with the Technology.
"Effective Date"	the date first written above.
"End-User"	a person or business enterprise which acquires the Licensed Products for its or ordinary personal purposes or use in its normal business operations.
"Feedback"	any and all suggestions, comments or other feedback provided to NXP in connection with the (use of the) Technology.
"Intellectual Property Rights" or **"IPR"**	all present and future industrial and intellectual property rights, including, but not limited to, patents, utility models, trade and service marks, trade names, mask work rights, rights in domain names, right in designs, copyrights, moral rights, topography rights, rights in databases, trade secrets and know-how, in all cases whether or not registered or registrable and including all registrations and applications for registration of any of these and rights to apply for the same, as well as any renewals, extensions, combinations, divisions, continuations or reissues thereof, rights to receive equitable remuneration in respect of any of these and all rights and forms of protection of a similar nature or having equivalent or similar effect to any of these anywhere in the world.
"Know-How"	information, data, know how, secret skills, methods, formulations, processes, and other trade secrets related to the Technology, which are at the Effective Date owned or controlled by NXP which NXP is free to disclose and license without any obligation for payment or other consideration to a third party.

"Licensed Design"	means the commercial package of deliverables created by IPextreme for sale to customers that contains the Technology. These deliverables shall include at a minimum, but are not be limited to: (1) encapsulation of the Technology in IPextreme's proprietary semiconductor intellectual property packaging technology, referred to as XPack, (2), documentation, (3) integration environment including scripts for customer use in creating Licensed Products, (4) infrastructure and resource for customer delivery and support, (5) creation and maintenance of sales and marketing collateral, (6) infrastructure for tracking and reporting customer licenses and royalties, (7) resources for maintaining Licensed Design over time.
"Licensed Products"	means the Customer's integrated circuit that instantiates the Technology encapsulated in a Licensed Design.
"Modification"	any change, finding, reconfiguration, alteration, improvement, enhancement, formulation, discovery, addition, translation, transformation or other derivative work of the Technology, whether or not patented or patentable, made by or for IPextreme after execution of this Agreement.
"Statement of Work"	a description embodied in Appendix F of the efforts and. costs associated with the development of Licensed Designs from the Technology described in Appendix A.
"Technology"	NXP's technology, consisting of the hardware, software and Documentation provided to IPextreme hereunder, all as further described in Appendix A-n, where n is a sequential cardinal number beginning with 1, including all Know-How and expertise contained therein and provided therewith, and all copies thereof and all Updates thereto. Appendix A may be amended by the Parties from time to time as mutually agreed.
"Term"	the effective period of this Agreement as further defined in Clause 6.1.
"Update"	any enhancement, error correction, maintenance release, new version of, or revision to, the Technology provided to IPextreme by or on behalf of NXP.

SECTION 2.0 - LICENSE

2.1. **License**. Subject to IPextreme's full and unconditional compliance with its obligations under this Agreement, NXP hereby grants to IPextreme, and IPextreme hereby accepts from NXP, during the Term a limited, non-exclusive, non-transferable, worldwide license, without the right to sublicense except as expressly set forth herein, under NXP's Intellectual Property

a. (have) use, perform, display, copy, reproduce, modify, adapt, alter, customize, translate and/or otherwise create derivative works from any portion of the Technology to develop and

make Licensed Designs solely for IPextreme's own account, all in accordance with the terms and conditions of this Agreement; and

b. market, demonstrate, promote, sell, offer to sell, distribute and otherwise dispose of such Licensed Designs, directly or indirectly, to IPextreme's Customers, for subsequent distribution of Licensed Products to, and ultimate use thereof by, End-Users.

2.2. **Updates**. The license granted under Clause 2.1 above shall extend to Updates furnished to IPextreme by NXP, with the express understanding, however, that NXP shall not have any obligation to generate, or otherwise make improvements, new versions, Updates, bug-fixes, or other enhancements of the release version of the Technology.

2.3. **Customer's and End-User's rights to use the integrated Technology**. It is understood and agreed that the rights granted hereunder include any Customer's right to embed the Technology as packaged in Licensed Designs in Licensed Products and End-User's right to personally use the Technology as packaged in Licensed Designs and embedded in Licensed Products and that such right of use shall survive the expiration or termination of this Agreement, subject to IPextreme's continued compliance with the terms and conditions set forth herein, including but not limited to its confidentiality obligations and its obligation to share revenues with NXP.

2.4. **Restrictions**. The Technology is licensed and is not sold. NXP retains all rights, title and interest in and to the Technology and other Confidential Information furnished hereunder, and to each whole or partial copy thereof, including all of its Intellectual Property Rights related thereto. IPextreme will take all reasonable measures to protect NXP's (intellectual) property rights in at least the same way as IPextreme protects its own rights and shall not do or permit any act to be done, including without limitations, any registration or pending application for registration for the protection of copyright, trademark, patent or similar Intellectual Property Rights, which is likely to prejudice or jeopardize NXP's Intellectual Property Rights. Other than the limited license granted to IPextreme hereunder, no other rights or licenses are granted, or implied by estoppel or otherwise, under any Intellectual Property Rights of NXP or its Affiliates or any intellectual property residing in the Technology or any other Confidential Information furnished by NXP hereunder. Except as expressly permitted hereunder or by mandatory applicable law in spite of this Section 2.0, IPextreme agrees not to, and agrees not to permit any third party to:

a. assign, sublicense, lease, rent, loan, transfer, encumber or otherwise dispose of (any of its limited rights to) the Technology; or

b. reverse assemble, reverse engineer, decompile or disassemble the Technology; or

c. remove or circumvent any protection of the Technology.

2.5. **Exclusions**. Notwithstanding anything to the contrary herein, this Agreement shall not include, or be construed or interpreted as:

a. imposing on NXP any obligation to furnish any manufacturing or technical information except as expressly specified under this Agreement; or

b. conferring any license, right or immunity, express or implied, under any Intellectual Property Rights or any other intellectual property residing in the Technology or any other Confidential Information furnished hereunder: (i) for the combination of such Technology or other Confidential Information with one or more other items (including items acquired from NXP or its Affiliates) even if such items have no substantial use other than as part of such combination; (ii) covering a standard, whether proprietary or open, a standard being any technical specification promulgated for the purpose of widespread adoption; or (iii) with respect to which NXP and/or any of its Affiliates has informed IPextreme in writing that a separate license has to be obtained or that no implied license is granted.

2.6. **Notices**. IPextreme shall not remove or alter any copyright notices, proprietary information notices or confidentiality, restricted or proprietary rights notices, legends or marking(s) contained in or affixed to the Technology. IPextreme shall exactly reproduce such notices, legends and marking(s) and shall affix such notices, legends and marking(s) to any media containing a copy or any portion of the Technology, as were affixed to the original media.

2.7. **Modifications**. No license is granted to IPextreme or to any IPextreme Customer to modify, make derivative works, adapt, or in any manner change the Technology or the functionality of an integrated circuit based on the Licensed Design. The prohibition of this Section does not apply to nor limit IPextreme's right to modify, make derivative works, adapt or change the Technology to include it in a Licensed Design, to document the Licensed Design or to enable the manufacture of a Licensed Product based on the Technology by a particular semiconductor process. IPextreme shall retain all right, title and interest in and to Modifications made pursuant to the license granted under Clause 2.1 above, subject to NXP's underlying Intellectual Property Rights in and to the Technology furnished to IPextreme hereunder. For any Modifications, IPextreme hereby grants NXP,and its Affiliates and NXP and its Affiliates hereby accept from IPextreme, a perpetual, irrevocable, worldwide, non-exclusive, transferable, royalty-free, fully paid license, including the right to sublicense, to implement, use, reproduce, distribute and create further derivative works of such Modifications, as well as any and all Intellectual Property Rights therein, and to otherwise exploit such Modifications, and Intellectual Property Rights therein, in any manner that NXP or its Affiliates desire(s). Upon NXP's first request, IPextreme shall deliver to NXP a copy of the Licensed Designs incorporating such Modifications, including all available information, instructions and documentation of such Modifications, as well as the source code of any software pertaining to such Modifications which may be necessary or useful for NXP's or its Affiliate's use of such Modifications and the Intellectual Property Rights therein. IPextreme shall provide no warranty towards and have no obligation to support NXP's exploitation of any Modifications delivered unless NXP opts to purchase IPextreme's standard support package for such Licensed Designs, support to which NXP is entitled to under this Agreement.

2.8. **No representations or warranties**. IPextreme shall be solely responsible for the (quality of) the Licensed Designs and Licensed Products made, marketed, promoted, sold or distributed by or on behalf of IPextreme and without NXP's express prior written consent IPextreme shall not make, nor entitle its Customers to make, publish or assign any representations, warranties, or guarantees on behalf of NXP, whether directly or indirectly, concerning the Technology and/or Licensed Designs and Licensed Products.

SECTION 3.0 - DELIVERY; ACCEPTANCE

3.1. **Delivery**. NXP shall deliver or otherwise disclose the release version of the Technology to IPextreme or IPextreme's designated representative in accordance with the planning mutually agreed by the Parties. Said version will be provided to IPextreme by means of secured electronic transfer or storage media, as specified by NXP, or as may be otherwise mutually agreed by the Parties. The timing of any Technology delivery from NXP to IPextreme will be mutually agreed after Effective Date.

3.2. **Acceptance**. Except as expressly set forth otherwise, the Technology is provided to, and is accepted by, IPextreme "as is" without warranty of any kind. IPextreme acknowledges that prior to entering into this Agreement, IPextreme has had the opportunity to evaluate the Technology pursuant to the evaluation license agreement effective April 1, 2015, and agrees that NXP shall not be required to make (nor will make) any representations or warranties vis-a-vis third parties. All Technology deliverables will have deemed to be accepted at the time of the Licensed Design Specification milestone agreed in the SoW of the associated Licensed Design.

3.3. **Limited Warranty**. NXP hereby warrants to IPextreme that NXP owns or has acquired all necessary rights, power and authority to grant IPextreme the license granted hereunder. This provision will not be construed as a representation or warranty of non-infringement and IPextreme acknowledges and agrees that IPextreme's sole and exclusive remedy for infringement claims is as set forth in Clause 8.2.

3.4. **Disclaimer**. EXCEPT FOR THE LIMITED WARRANTY SET FORTH ABOVE, NXP EXPRESSLY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

SECTION 4.0 - CONSULTANCY, DEFECTS, FEEDBACK

4.1. **Consultancy**. NXP will provide IPextreme with limited ad hoc consultancy to IPextreme's specialist(s) in the use of the Technology as described in Appendix B.

4.2. **Relevant Defects**. Each Party will notify the other Party in the event it detects any relevant Defects. For this purpose, "relevant" shall mean all those Defects of which a Party has become aware and of which it is established that it materially and adversely affects or disables the functionality of the Technology. NXP shall, however, not have any obligation to provide corrections or to otherwise maintain or support the Technology.

4.3. **Feedback**. Any Feedback provided to NXP shall not be subject to any obligation, encumbrance or restriction of any kind, including IPextreme's or any third party's Intellectual Property Rights or other rights. For any Feedback provided to NXP by or on behalf of IPextreme, IPextreme hereby grants NXP, and NXP hereby accepts from loitials NXP, IPextreme, a perpetual, irrevocable, worldwide, non-exclusive, transferable, royalty-free, fully paid license, including the right to sublicense, to implement, use and reproduce such Feedback and to otherwise exploit such Feedback in any manner that NXP desires.

SECTION 5.0 - REVENUES; PAYMENT, RECORDS, AUDIT

5.1. **Revenue Sharing**. In consideration for the license rights granted herein, all revenues received by IPextreme, directly or indirectly, whether in monetary or in non-monetary consideration, from, or pursuant to, its distribution and licensing of the Technology shall be divided and allocated between the Parties as set forth in Appendix E.

5.2. **Revenue, Reports, Forecasts, and Payments**. Within thirty (30) days following 31 March, 30 June, 30 September and 31 December of each calendar year, IPextreme shall: (i) submit to NXP (even in the event that no revenues have been received) its duly signed written statement ("**Quarterly Report**") in the form as attached hereto as Appendix C setting forth with respect to the preceding quarterly period:

- the revenues actually received by IPextreme and the revenues due to NXP for that respective quarter
- a non-binding forecast for the next two quarters based on the sales pipeline and NXP Support needs
- the number of each Licensed Design sold to Customers
- the number Licensed Products (listed per Licensed Design) shipped by Customers as obtained from End User royalty reports related to royalty-bearing Licensed Designs if permitted by customer confidentiality obligations;

and (ii) pay to NXP the revenues due for that respective quarter, without any prior invoicing being required. Any amounts due to NXP hereunder, including without limitation any payments for specific services agreed between the Parties, shall be paid by IPextreme to NXP ultimately within thirty (30) days after the Quarterly Report statement due date unless expressly agreed otherwise by the Parties in writing.

5.3. **Payment Conditions**. All amounts are in United States Dollars (USD). IPextreme shall pay all amounts due hereunder by wire transfer into the bank account designated by NXP in writing. Except as agreed in a Statement of Work for an NXP share in Product Packaging Costs as defined in Appendix E, IPextreme shall not offset, withhold or reduce any payment(s) due to NXP and all such payments, for the avoidance of any doubt also all Prepayments as defined in Appendix E, shall be non-refundable and non-recoupable. All costs, taxes, duties, import and export fees, which are imposed by any governmental entity or authority on the amounts due to

NXP hereunder, or which otherwise arise out of or are imposed on this Agreement, shall be duly paid by IPextreme. IPextreme shall not withhold any such costs, charges, taxes, duties or fees from payments due to NXP. If any such governmental authority, however, imposes income taxes on any amounts paid by IPextreme to NXP hereunder and requires IPextreme to withhold such taxes, duties or fees from such payments, IPextreme may deduct such taxes, duties and fees from such payments provided such taxes, duties and fees are paid to the appropriate authorities. In such event, IPextreme shall promptly furnish NXP with tax receipts issued by appropriate tax authorities so as to enable NXP to support a claim for credit against income taxes which may be payable by NXP and/or its Affiliates in the Netherlands as well as to enable NXP to document, if necessary, its compliance with tax obligations in any jurisdiction outside the Netherlands.

5.4. **Interest on late payments**. As from the date any amount is due hereunder until payment thereof has been received by NXP in full, IPextreme shall owe NXP an interest at the rate of one and a half percent (1.5%) per month or the maximum rate permitted by applicable law, whichever is lower.

5.5. **Keeping books and records**. IPextreme shall keep complete and accurate books and records relating to the use of the Technology, the disposition of each Licensed Design and the proper determination of all amounts due hereunder, and shall keep the books and records available for a period of five (5) years following such disposition.

5.6. **Additional information**. Without limiting any other provision of this Agreement, IPextreme shall provide all relevant information as NXP may reasonably request from time to time, so as to enable NXP to ascertain which Licensed Designs have been sold or otherwise been disposed of by IPextreme, the Technology which has been used in connection with such Licensed Designs and the amounts payable to NXP in connection therewith.

5.7. **Intentionally left blank**

5.8. **Audits by NXP**. During the Term and for a period of three (3) years thereafter, NXP's designated representatives and auditors shall have the right, upon reasonable notice, to inspect the facilities used in connection with IPextreme's undertakings hereunder and to audit all relevant books and records of IPextreme to ensure IPextreme's compliance with the terms and conditions of this Agreement, including, without limitation, to verify the correctness of Quarterly Reports and the proper payment of royalties due hereunder for the Technology. Such audits will be conducted during normal business hours. IPextreme shall willingly co-operate and provide all such assistance and information in connection with such audit as NXP and/or its auditors may require. The audit will be conducted at NXP's expense, unless the audit reveals that IPextreme has breached the license terms under this Agreement and/or has underpaid the amounts owed to NXP by three percent (3%) or more, in which case IPextreme will forthwith reimburse NXP for all reasonable costs and expenses incurred by NXP in connection with such audit. IPextreme shall promptly pay to NXP any amounts shown by any such audit or audit certificate to be owed. If the amounts due to be paid to NXP is greater than the amounts actually paid to NXP, IPextreme shall promptly pay any such payment shortage with interest calculated from the date of such underpayment subject to an interest percentage of one and a half percent (1.5%) per month or the maximum rate permitted by applicable law, whichever is lower.

5.9. **Confidentiality**. Any information provided by or on behalf of IPextreme to NXP or NXP's auditors in writing and marked as 'Confidential' under this Section 5.0, shall be treated by NXP as Confidential Information of IPextreme, save that the foregoing shall not prevent NXP form using such information for or in any action against IPextreme.

SECTION 6.0 - TERM; TERMINATION

6.1. **Term**. This Agreement shall commence on the Effective Date and shall remain in force and effect for a period of [*] years, unless terminated sooner as set forth herein, with the understanding that this Agreement may be extended, each time for a renewed term of [*] years in mutual written agreement between the Parties, provided that such agreement is reached ultimately 3 (three) months prior to the expiration of the running contract period.

6.2. **Termination**. Without prejudice to any other rights or remedies NXP has or may have hereunder and under the applicable law, NXP is entitled to terminate this Agreement with immediate effect by written notice to IPextreme, if:

a. IPextreme fails to make any payment under this Agreement within thirty (30) days of the date on which such payment was ultimately due; or

b. IPextreme breaches or fails to perform any of the terms or conditions of this Agreement, and: (i) such breach or failure is not capable of remedy; or (ii) such breach or failure, if capable of remedy, is not remedied within thirty (30) days after written notice requiring such breach or failure to be remedied; or (iii) IPextreme has otherwise come in default; unless such breach or failure, having regard to its nature or minor importance, does not justify this termination with its consequences; or

c. a creditor or other claimant takes possession of any of the assets of IPextreme; or

d. a voluntary or involuntary petition in bankruptcy or winding up is filed against IPextreme; or

e. any proceedings in insolvency or bankruptcy (including reorganization) are instituted against IPextreme; or

f. a trustee or receiver is appointed over IPextreme; or

g. any assignment is made for the benefit of creditors of IPextreme; or

h. a Change of Control occurs in relation to IPextreme; or

i. this Agreement requires the approval or validation by competent governmental authorities.

6.3. **Consequences of termination or expiration**. Upon termination or expiration of this Agreement:

a. all licenses granted under this Agreement shall immediately end except as expressly set forth otherwise herein; and

b. all payments to be made under this Agreement shall become immediately due and payable with the understanding that payments to NXP shall also be due on all Licensed Products made prior to the date of expiration or termination of this Agreement where IPextreme shall submit to NXP within thirty (30) days after expiration or termination of this Agreement a reporting form stating the number and nature of such Licensed Products; and

c. IPextreme shall immediately return to NXP, or destroy - so to the sole discretion of NXP - all Technology and other Confidential Information furnished hereunder, including any and all copies and derivative works thereof. In case, NXP requests IPextreme to destroy these materials and information, IPextreme shall subsequently provide NXP within ultimately thirty (30) days of such termination or expiration, with a written certificate signed by a duly authorized representative of IPextreme confirming IPextreme's destruction as set forth above.

6.4. **No compensation**. IPextreme shall not be entitled vis-a-vis NXP to any compensation based on the expiration or termination of this Agreement.

6.5. **Survival**. Any expiration or termination of this Agreement for whatsoever reason shall not prejudice the provisions which by their nature must be deemed to survive such expiration or termination and shall not affect any accrued rights or liabilities of either Party. For the avoidance of doubt, it is expressly agreed that any and all Technology related agreements entered into by IPextreme with its Customers prior to the date of termination or expiration of this Agreement, shall continue in force and effect for the then remaining term thereof subject to IPextreme's compliance with the (surviving) terms and obligations under this Agreement including but not limited to IPextreme's ongoing sharing of the revenues referred to in Section 5.0.

SECTION 7.0 - CONFIDENTIALITY

7.1. **Obligations**. With respect to each portion of Confidential Information disclosed pursuant to this Agreement, the receiving Party agrees, for a period of five (5) years (and unlimited amount of years for the Technology itself) from the date of disclosure, not to:

a. use such Confidential Information for any purpose, other than for the purpose set forth under Clause 2.1; and

b. disclose the disclosing Party's Confidential Information to any third party, except to its and its Affiliates' employees, consultants and contractors who (A) have a legitimate "need to know" to accomplish said purpose under Clause 2.1, and (8) are obligated to keep secret and protect such Confidential Information pursuant to terms and conditions no less protective of the disclosing Party than those contained in this Agreement. A breach of the confidentiality

obligations by a Party's employees, Affiliates, consultants or contractors shall constitute a breach by such Party and such Party shall be liable for any damages resulting there from.

The receiving Party shall furthermore adopt appropriate security measures to safeguard the disclosing Party's Confidential Information from theft, access or use by unauthorized persons and shall exercise the same degree of care in protecting such information as required hereunder as the receiving Party uses to protect its own Confidential Information of a similar nature, but in no event shall less than reasonable care be used. The Technology and all other information furnished by or on behalf of NXP hereunder is hereby designated Confidential Information of NXP and shall be treated by IPextreme accordingly.

7.2. **Exclusions**. The receiving Party's obligations referred to above shall not apply to any data or information that it can prove:

a. is lawfully possessed or known by the receiving Party, prior to the time of receipt from the disclosing Party, without use or disclosure restrictions; or

b. is or becomes publicly available through no act or omission of the receiving Party; or

c. is lawfully furnished to the receiving Party by a third party, after the time of receipt from the disclosing Party, without use or disclosure restrictions; or

d. is independently developed by the receiving Party without use of or reference to any of the disclosing Party's Confidential Information.

Furthermore, a (partial) disclosure by the receiving Party that is required pursuant to any judicial or governmental proceeding shall not be considered a breach of this Agreement, provided that the receiving Party promptly after learning of such action shall notify the disclosing Party thereof to give the disclosing Party the opportunity to contest disclosure or to seek any available legal remedies to maintain such information in confidence.

7.3. **Terms**. Neither Party shall publicize or disclose the actual terms of this Agreement to any third party, other than on a confidential basis to its legal and financial advisors, without the prior written consent of the other Party, except as otherwise may be required by law.

SECTION 8.0 - INDEMNIFICATION

8.1. **Indemnification for NXP**. IPextreme shall, at IPextreme's expense, defend, or cause to be defended, NXP against any third party legal proceedings brought against NXP for:

a. any breach by IPextreme of its representations and obligations hereunder; or

b. losses, damages or expenses of whatever nature relating to the Licensed Designs or their use, notwithstanding Clause 8.2 below;

and will pay the costs or damages awarded against, and effectively incurred by, NXP by final judgment to the extent these costs or damages are directly and solely attributable to such breach or use.

8.2. **Indemnification for IPextreme**. NXP shall, at NXP's expense, defend, or cause to be defended, IPextreme against third party legal proceedings brought against IPextreme for (alleged) copyright infringement or trade secret misappropriation related to the Technology and will pay the costs or damages awarded against, and effectively incurred by, IPextreme by final judgment to the extent these costs or damages are directly and solely attributable to such infringement or misappropriation, provided NXP: (i) is promptly notified of such third party claim or action; (ii) has sole control of the defense and all negotiations for settlement, including but not limited to the selection of counsel; and (iii) is provided by IPextreme with all reasonable information, cooperation and assistance to settle or defend such claim or action.

Notwithstanding the above, NXP shall have no obligation or liability hereunder if the claim or action to which the legal proceedings pertain relates to, or arises from, wholly or partially:

a. the combination or implementation of Technology with IPextreme's or third party's materials, unless it is determined by a court of competent jurisdiction that the Technology is the sole infringing element of such claim; or

b. the modification, customization or translation of the Technology, or any portion of the Technology; or

c. the unauthorized use or distribution of the Technology; or

d. the infringement of any third party's Intellectual Property Rights covering the manufacture, testing or application of any assembly, circuit, combination, method or process in which the Technology may have been used; or

e. any license, right or immunity excluded in Clause 2.5 (b); or

f. any cause, which is outside the scope of influence of NXP.

IPextreme shall indemnify NXP according to the same principles for the excess, for any third party legal proceedings brought against NXP for any such exception under a. through f. and for any failure to inform NXP timely or provide NXP with the required reasonable assistance.

8.3. **Remedies**. If the Technology is, or in NXP's opinion is likely to become, the subject of a claim of infringement or misappropriation as referred to under Clause 8.2 above, NXP shall have the right, without obligation and at its sole discretion, to:

a. procure for IPextreme the right to continue to use the Technology furnished by NXP hereunder; or

b. replace or modify the Technology by NXP furnished hereunder in such a way as to make such non-infringing; or

c. terminate this Agreement, provided that in the event of such termination, NXP shall, as sole remedy to IPextreme, refund the amounts received by NXP hereunder over the previous twelve (12) months that is then subject to the claimant's continuing claim of infringement or trade secret misappropriation.

8.4. **Entire liability**. Subject to the limitations set forth in Section 9.0 below, the foregoing states NXP's entire liability and obligations and IPextreme's sole remedy with respect to any actual or alleged infringement or misappropriation of any Intellectual Property Rights of any kind.

SECTION 9.0 - LIMITATION OF LIABILITY

9.1. **Limitation**. EXCEPT FOR ANY DAMAGES PURSUANT TO ANY BREACH OR VIOLATION OF THE PROVISIONS UNDER SECTION 7.0 ('CONFIDENTIALITY'), THE AGGREGATE LIABILITY OF NXP, INCLUDING BUT NOT LIMITED TO ANY LIABILITY PURSUANT TO SECTION 8.0 ('INDEMNIFICATION'), SHALL IN NO EVENT EXCEED THE AMOUNT ACTUALLY RECEIVED BY NXP UNDER THIS AGREEMENT IN THE TWELVE (12) MONTHS IMMEDIATELY PRECEDING THE EVENT GIVING RISE TO ANY SUCH LIABILITY. IPEXTREME ACKNOWLEDGES THAT THE AMOUNTS TO BE PAID BY IPEXTREME UNDER THIS AGREEMENT REFLECT THIS ALLOCATION OF RISK.

9.2. **Exclusion**. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NXP SHALL NOT BE LIABLE FOR ANY TYPE OF INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS, HOWSOEVER CAUSED OR ARISING, ON ANY THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO ANY RECALL COSTS, LOST PROFITS, LOST INCOME AND/OR REVENUE, LOSS OF OPPORTUNITY, LOST PRODUCTION, LOSS OF - OR DAMAGE TO - GOODWILL AND REPUTATION, LOST SHELF-SPACE, LOST DATA, LOST INTEREST AND LOST SAVINGS. THIS LIMITATION SHALL APPLY EVEN IF NXP HAS BEEN ADVISED, OR IS AWARE, OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

9.3. **Term for Claims**. Any claim for damages against NXP must be brought by IPextreme within ninety (90) days of the date of the event giving rise to any such claim, and any lawsuit relative to any such claim must be filed within one (1) year of the date of the claim.

SECTION 10.0 - FORCE MAJEURE

Neither Party shall be in default of its obligation(s) hereunder to the extent that its performance is delayed or prevented by a force majeure, which is defined as an event, circumstance, or act of a third party that is beyond the Party's reasonable control and could not have been avoided by the exercise of due care. Upon the occurrence of a force majeure, the Party claiming a force majeure will provide the other Party with written notice, including the estimated delay and actions being taken or planned to avoid or minimize the impact of any delay. The Party claiming a force majeure will have the burden of establishing that a force majeure has delayed delivery or performance and to use commercially reasonable efforts to minimize the delay. If a force

majeure event results in a delay of more than thirty (30) days, the other Party may cancel any further delivery or performance, including pending deliveries, without liability.

SECTION 11.0 - COMPLIANCE WITH LAWS; EXPORT CONTROL

Each Party shall comply with all applicable export and import control laws and regulations and, in particular, will not in any way whatsoever export or re-export the Technology, in whole or in part, without all required national and international government licenses, approvals, or waivers. IPextreme furthermore expressly agrees that it will not knowingly transfer, divert, export or re-export, directly or indirectly, any product, software, including software source code, or technical data restricted by such regulations or by other applicable national regulations, received from NXP hereunder, or any direct product of such software or technical data to any person, firm, entity country or destination to which such transfer, diversion, export or re-export is restricted or prohibited by applicable law, without obtaining prior authorization from the applicable competent government authorities to the extent required by those laws. This provision shall survive any termination of this Agreement.

SECTION 12.0 - GOVERNING LAW; DISPUTES

This Agreement and all other agreements related hereto or resulting from this Agreement shall be governed by the substantive laws of the Netherlands without regard to any principle of conflicts of law. All disputes arising under, or in connection with, this Agreement, as well as any and all other agreements related hereto or resulting from this Agreement, shall be finally settled by arbitration in accordance with the Arbitration Rules of the Netherlands Arbitration Institute (NAI) provided, however, that NXP may: (i) enforce its Intellectual Property Rights in any court of competent jurisdiction, including but not limited to equitable relief; and (ii), elect, in its sole discretion, to bring legal action regarding any dispute or controversy relating to IPextreme's non- or late, payment of any amounts payable hereunder, before: (i) the competent court in Amsterdam, the Netherlands; or (ii) the state or federal courts located in the Northern District of California, USA; to whose jurisdiction in these matters IPextreme hereby expressly submits and consents to, for the exclusive benefit of NXP. IPextreme acknowledges that a breach of its obligations under this Agreement may cause irreparable damage for which recovery of money damages would be inadequate, and that, in addition to any and all remedies available at law, NXP shall be entitled to seek injunctive relief to protect its rights and interest under this Agreement.

The place of arbitration shall be Amsterdam, the Netherlands. The arbitration shall be conducted in the English language. The arbitrators shall not have the right to issue injunctive relief. The arbitral award shall be binding upon the Parties and shall be enforceable in any court of competent jurisdiction. The Parties undertake and agree that all arbitral proceedings conducted under this Section shall be kept confidential in accordance with the confidentiality obligations in force between the Parties, unless otherwise mutually agreed by the Parties under a written, stipulated protective order for such arbitration, and all information, documentation, materials in whatever form disclosed in the course of such arbitral proceeding shall be used solely for the purpose of those proceedings.

SECTION 13.0 - MARKETING

13.1. **Promotion**. IPextreme will use its best efforts to promote and market the Technology and related Licensed Designs on an on-going basis and NXP will provide commercially reasonable support to such promotion and marketing by IPextreme. IPextreme will furthermore undertake marketing activities, which could include sponsoring of conferences, web seminars, white papers, and contributed articles.

13.2. **Press Release**. IPextreme will have the right to issue a press release within forty-five (45) days of the Effective Date with a quote from NXP. Such press release will require the prior written approval of each Party.

13.3. **Prioritization**. IPextreme shall have the right, at its sole discretion, to prioritize the scope and extent of its marketing, sales, and the requisite engineering efforts based on its market research and direct feedback from prospective Customers.

SECTION 14.0 - MISCELLANEOUS.

14.1. **Relationship**. The Parties hereto intend to establish a relationship of licensor and licensee and as such are independent contractors with neither Party having authority to act as an agent or legal representative of the other to create any obligation, express or implied, on behalf of the other. Nothing in this Agreement shall create a joint venture, partnership or principal-agent relationship between the Parties. Each Party shall be liable for any failure of its Affiliates, contractors and consultants to abide by the provisions of this Agreement as if such failure was the act or omission of such Party.

14.2. **Costs and Expenses**. Except as expressly otherwise set forth herein, all costs and expenses, including but not limited to fees and disbursements of counsel, advisors, contractors and consultants, incurred in connection with this Agreement and the undertakings contemplated herein, shall be paid by the Party incurring such costs and expenses.

14.3. **Assignment**. IPextreme shall not assign or transfer any of its rights or obligations hereunder without the prior written consent of NXP. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Without limiting the generality of the foregoing, a Change of Control over IPextreme shall be deemed an assignment of this Agreement by IPextreme for the purpose of this Clause. Any attempted assignment other than in strict compliance with this Clause shall be void. NXP shall be free to assign this Agreement.

14.4. **Notices**. All notices, requests, demands, claims and other formal communications made hereunder shall be in writing and shall be deemed delivered upon hand delivery, upon receipt if by acknowledged facsimile communication, or upon receipt if sent by world renown overnight courier or mailed by registered or certified mail, return receipt requested, postage prepaid, addressed to a Party at its address set forth below or such other address of which a Party may notify the other Party from time to time.

14.5. **Waiver**. A waiver of any right hereunder shall in no way waive any other rights. No waiver, alteration, modification or amendment of this Agreement shall be effective unless in writing and signed by both Parties.

14.6. **Severability**. In the event that any term or other provision of this Agreement is held to be invalid, illegal or unenforceable by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in force and effect and such provision shall be deemed amended to achieve the economic effect of the intent of the Parties in a valid, lawful and enforceable manner, or if not possible, be deleted and ineffective to the extent thereof, without affecting any other condition or provision of this Agreement.

14.7. **Headings**. The headings and captions to Sections, Clauses and Appendices of this Agreement are for reference only and shall not affect the construction or interpretation of this Agreement.

14.8. **Construction**. All representations and warranties set forth herein shall be narrowly construed and limited specifically to the terms set forth therein.

14.9. **Entire Understanding**. This Agreement constitutes the entire agreement regarding the subject matter hereof and supersedes all prior agreements, (memorandum of) understandings and communications, oral and written, between the Parties regarding the subject matter hereof without prejudice to the confidentiality or nondisclosure arrangements made between the Parties prior to the Effective Date hereof. The provisions of Sections 1.0 through 14.0 of this Agreement shall prevail over any conflicting provisions in the Appendices.

14.10. **Execution**. This Agreement may be executed in counterparts (and may be exchanged by fax or e-mail when signed), each of which shall be deemed to be an original, and all of such counterparts shall together constitute one instrument.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this Agreement as of the Effective Date:

NXP Semiconductors Netherlands B.V.

/s/ John Schmitz

Name: John Schmitz

Function: Senior Vice President – IP&L

Date: Nov. 2, 2015

Address for notices:

NXP Semiconductors Netherlands B.V.

c/o Intellectual Property & Licensing Department

High Tech Campus 60

5656 AE Eindhoven

The Netherlands

Attn.: Head of the IP Department

Fax nr.:[ ]

Copy to: Attn. General Council, Legal dpt.

Fax nr.: [ ]

IPextreme, Inc.

/s/ Warren Savage

Name: Warren Savage

Function: President and CEO

Date: Nov. 2, 2015

Address for notices:

IPextreme, Inc.

Attn. President – CEO

808 E. McGlincy Ln

Campbell

CA 95008 USA

Fax nr.: [ ]

Appendix A-1

IP3511 - USB 2.0 Full Speed Device Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

[*]

3. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:
Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

4. SUPPORT

Per Appendix B

Appendix A-2

IP3516 - USB 2.0 Full Speed Device and Host Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

[*]

2. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:
Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix A-3

IP3511_HS - USB 2.0 High Speed Device Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

[*]

2. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:
Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix A-4

IP3516_HS - USB 2.0 High/Full/Low Speed Device and Host Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

[*]

2. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:
Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix A-5

IP3525- [*] USB 2.0 High Speed PHY

1. TECHNICAL INFORMATION TO BE TRANSFERRED

   [*]

2. COMPENSATION

   A. License Fees:
      Per Appendix E.

   B. Running Royalty:
      Per Appendix E.

   C. Packaging Costs:
      Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix A-6

[*] USB 1.1 Full and Low Speed 10

1. TECHNICAL INFORMATION TO BE TRANSFERRED

Subject to availability, NXP will transfer the following technical information to IPextreme.

[*]

2. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:

Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix A-7

[*] USB 1.1 Full and Low Speed 10

1. TECHNICAL INFORMATION TO BE TRANSFERRED

Subject to availability, NXP will transfer the following technical information to IPextreme.

[*]

2. COMPENSATION

A. License Fees:
Per Appendix E.

B. Running Royalty:
Per Appendix E.

C. Packaging Costs:
Per Appendix E & F.

3. SUPPORT

Per Appendix B

Appendix B
Transfer and 2nd-line support from NXP

1. LIMITED SUPPORT LEVEL AGREEMENT ("**LSLA**")

A. Support nature: NXP will within a period of 12 months after the Effective Date provide limited support ("NXP Support") to IPextreme by transferring the Technology as described in Appendices A-1 to A-7 and support its conversion into Licensed Designs as well as provide initial 2nd-line support to assist IPextreme with first lead customers in using those Licensed Designs. Following this 12-month period, NXP may continue to provide support requested by IPextreme at its own discretion.

B. Support amount: the amount of NXP Support is limited in effort as follows:

For support efforts related to	**Appendix**	**Hours in 2015**	**Hours in 2016**
System and digital	A-1 to A-4	40	192
NXP specific technology node & library POK support	A-5 to A-7	8	32
IP3525 - 90nm USB 2.0 High Speed PHY	A-5	32	128
[*] USB 1.1 Full and Low Speed IO	A-6		
[*] USB 1.1 Full and Low Speed IO	A-7	0	64

C. Support response times: as NXP's support needs to be organized as background task, response times will be to NXP's discretion only while based on commercially reasonable criteria. As a result, the following support procedures will be used:

a. The IPextreme representative (specified in Appendix D) shall request support to an authorized NXP representative (specified in Appendix D) with the following information:
   i. The support request itself
   ii. Timeframe for when support is needed

b. The NXP representative will determine:
   i. Which NXP Support person will be responsible for the requested support
   ii. When that person is available to begin that support
   iii. How much time is allocated to that support
   iv. When will the support activity be completed v. Report this data back to IPextreme within two (2) NXP working days ("NXP Working Days")

c. The IPextreme representative will either authorize or not authorize the support activity by NXP

d. At the conclusion of the support request, NXP will provide a written summary to IPextreme of the support activity and hours used in completion of that activity.

2. NXP SUPPORT COMPENSATION BY IPEXTREME

NXP shall be compensated by IPextreme for its support efforts as further quantified in Appendix E.

Appendix C

Example Revenue and Quantities Reporting Form for each Licensed Design

NXP Semiconductors Netherlands B.V.

To: [ ]

Cc: [ ]

Intellectual Property & Licensing Dpt.

High Tech Campus 605656 AG Eindhoven

The Netherlands

Date: _____

Ref: IPextreme-NXP TLDA Quarterly Report (Licensed Design number/sequential quarter number)

Dear Madam/Sir,

Please find below IPextreme's quarterly report under the technology license and distribution agreement setting forth the revenues received by or on behalf of IPextreme during the quarterly period specified below, as well as the specification of the corresponding amount of revenues due to NXP in connection therewith.

Licensed Design: _____

Calendar Quarter ending: _____

Number of this Licensed Designs sold this quarter to Customers: [*]

The abovementioned total amount shall be paid by IPextreme by wire transfer into NXP's bank account number specified as:

NXP Semiconductors Netherlands B.V.
[ ]
IBAN: [ ]
SWIFTCODE: [ ]

or such other bank account designated by NXP to IPextreme in writing.

I attest that the above is true, complete and accurate and has thus been signed and submitted on behalf of IPextreme, Inc.

Name: .....

Title: .....

Appendix D

Contacts for operational correspondence

1. IPextreme

business/project manager:

Name:	Warren Savage
Phone:	[ ]
Mobile:	[ ]
Fax:	[ ]
Email:	[ ] with a copy to [ ]

2. NXP

business/project manager:

Name:	[ ]
Phone:	[ ]
Mobile:	[ ]
Fax:	[ ]
Email:	[ ] with a copy to:
	For technical support: [ ]
	For other operational matters, including finance: [ ]

These contacts can be updated in writing by both IPextreme and NXP

Appendix E

Financial compensation to NXP by IPextreme

1. FINANCIAL PRINCIPLES

A. NXP shall be financially compensated for IPextreme's use of NXP Support (as defined in Appendix B).
B. NXP shall be financially compensated for the Technology (as defined in Appendices A-1 to A-7) used in Licensed Designs that are sublicensed to Customers by IPextreme.
C. NXP shall be financially compensated with a "**Finders Fee**" (as further explained in this Appendix E, Section 5) for introducing potential customers to IPextreme.
D. There will be no payments from NXP to IPextreme.
E. All financial compensation to NXP shall be derived from the income IPextreme receives from the sale of Licensed Designs.
F. Revenue split: Income (minus pre-agreed costs "**Packaging Costs**" as further defined in this Appendix E, Section 3) obtained by IPextreme (and reported via the Quarterly Report described in Appendix C) from selling Licensed Designs will be paid out to NXP by IPextreme on a quarterly basis ("**Quarterly Payout**") according to a split percentage further described in this Appendix E, Section 2).
G. Reference pricing: for all Licensed Design modules (described in Appendices A-1 to A-7) NXP and IPextreme agreed reference selling prices ("**Module Reference Price**") listed in Table 1 as further provided in this Appendix E, Section 4.
H. Discounts: IPextreme has the freedom to negotiate commercially reasonable discounts with its prospects for each of the Licensed Designs, however not below [*]% of the applicable Module Reference Price per use {adjusted for "**Annual Price Erosion**" also given in Table 1.) without prior written approval of NXP. Moreover, for any discounted Licensed Design sale, the applied discount must not be lower than for any other product sale of IPextreme to the same customer that can be directly or indirectly linked to this sale.

2. REVENUE SPLIT

A. Regular cases: the baseline revenue split agreed is [*]% for IPextreme and [*]% for NXP.
B. Finder's fee NXP bonus: in case of a Licensed Design customer brought to IPextreme by NXP, a [*]% bonus payment ("**Finder's Fee**") is granted to NXP, leading to a revenue split of [*]% for IPextreme and [*]% for NXP. The terms and conditions for a Finder's Fee to be applicable are further discussed in this Appendix E, Section 5.
C. IPextreme Prepayment bonus: in case of a quarterly extra advanced payment ("**Prepayment**") to NXP by IPextreme provided a prior agreement of NXP in writing, IPextreme gets an accumulative [*]% bonus discount, leading in the regular case of above Section 2.A. to a revenue split of [*]% for IPextreme and [*]% for NXP (and in the Finder's Fee case of above Section 2.B. to a revenue split of [*]% for IPextreme and [*]% for NXP) for Licensed Designs sold in the quarter during which the

Prepayment was made. The terms and conditions for such Prepayments are further discussed in this Appendix E, Section 6.

3. PACKAGING COSTS

A. Packaging: IPextreme needs to undertake certain Modifications of the NXP Technology leading to Packaging Costs for IPextreme for all preparations to sell Licensed Design modules based on the Technology described in Appendices A-1 to A-7 and/or port the analog parts of the Technology to other foundries and technology nodes.

B. Packaging Costs: costs for Licensed Design preparations such as product documentation, user scripts, test benches and marketing collateral.

C. Compensation for Packaging Costs: IPextreme will be compensated for its costs and efforts under the following conditions:

- There will be no upfront payments from NXP to IPextreme
- No compensation shall be taken unless NXP has approved in writing the Licensed Design specifications resulting from the activities described in Appendices F-1 to 7
- The share of NXP in IPextreme's Packaging Costs is [*]% for each Licensed Design created by IPextreme
- Compensation will be taken from NXP's share of revenue proceeds as described above in this Appendix E, Section 2 up to a maximum of [*]% of any Quarterly Payout per Licensed Design as described hereunder in Section 3.F.

D. Included SoWs: this Agreement further contains SoWs (further described in Appendices F-1 to 7) covering the Modifications on the Technology modules described in Appendices A-1 to 4 leading to four (4) digital RTL-based "Soft IP" Licensed Design products, on the Technology modules described in Appendices A-5 & A-7 leading to two (2) mixed-signal "Hard IP" Licensed Design products in generic TSMC [*] technology and on the Technology module described in Appendix A-6 leading to one (1) Hard IP Licensed Design product in generic TSMC [*] technology. Under no circumstance shall the aggregated Packaging Costs described in Appendices F-1 through F-7 be greater than $[*].

E. Additional SoWs can be later added after mutual agreement in writing to this Agreement as i-numbered Appendices F-(i) to create new Licensed Design variants for sale to Customers, e.g. to support other chip foundries or process nodes, new features, specification updates, etc..

F. Packaging Cost recovery: each SoW also provides in a Packaging Cost summary for the creation of the covered Licensed Design of which NXP share (as described above in Section 3.C) in the Packaging Cost can be deducted only from resulting corresponding Licensed Design revenue share (as described above in this Appendix E, Section 2) for NXP and reported on the Quarterly Reports as described in Appendix C.

4. MODULE REFERENCE PRICES

A. Table 1: Module Reference Prices for the seven (7) initially covered Licensed Designs under this Agreement and referring to the Technologies described in Appendices A-1-A-7:

[*]

B. The Annual Price Erosion will be calculated from the time passed after Effective Date in steps of twelve (12) months.

5. FINDER'S FEE PROCEDURE

A. Leads: NXP has the possibility to notify (in writing) any interested candidate ("Lead") to buy Licensed Designs from IPextreme.

B. Response time: As soon as NXP has forwarded such Lead IPextreme has ten (10) of its working days ("IPextreme Working Days") to qualify the lead and inform NXP that the Lead will be commercially pursued. If not pursued, NXP is entitled to look for other options to have this Lead taken care of.

C. Finder's Fee acknowledgement: within the same 10 IPextreme Working Days following NXP's Lead notification, IPextreme has the option if applicable to prove in writing that IPextreme had been already informed about the same Lead for the same Licensed Design by any other channel, in such case the [*]% Finder's Fee bonus for NXP would be applicable as described in Appendix E, Section 2.B.

6. PREPAYMENTS PROCEDURE

A. Request for Prepayment: one (1) month prior to the issuing deadline for a forthcoming Quarterly Report, IPextreme has the option to propose a Prepayment amount on top of the applicable Quarterly Revenue to be reported to NXP.

B. NXP Prepayment authorization: within 2 weeks following IPextreme's Prepayment request has the option to accept such Prepayment, only in which case IPextreme will be obliged to add the Prepayment amount to the applicable Quarterly Report, in which case the Prepayment discount of 5 % bonus will be granted to IPextreme as described in Appendix E, section 2.C.

7. NXP SUPPORT PAYMENTS

A. NXP Support hours will be preordered by IPextreme in portions of 20 hours by official email request, to be renewed each time when taken up according to the procedure described in Appendix B, Section 1.C.

B. The applicable hour rate for NXP Support will be [*]USD.

C. Upon Effective Date, NXP will invoice IPextreme for NXP Support costs covering an initial order of 20 hours for the amount of [*]USD.

Appendix F-1

Statement of Work for IP3511 - USB 2.0 Full Speed Device Controller ("USB FS Device")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
- To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
- To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) that can be created as easily and inexpensively as possible.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy to use interface for configuring the IP and generation of EDA-neutral scripts for integration into the customer's design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are cleanly isolated from technology independent regions.

3. Final RTL code shall be VHDL and technology independent.

4. The design shall be configurable so that Customers can easily configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation will be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. Licensed Design Specification. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and l/O interface.

B. Sales and Marketing Collateral. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. Licensed Design Development. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			

1	Licensed Design Specification	T0+4 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+12 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of [*] per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-2

Statement of Work for IP3516 - USB 2.0 Full Speed Device and Host Controller (“USB FS Device+Host”)

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

“ To develop a Licensed Design with a set of features that are attractive to the worldwide USB market

- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
- To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
- To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) that can be created as easily and inexpensively as possible.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy to use interface for configuring the IP and generation of EDA-neutral scripts for integration into the customer’s design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are cleanly isolated from technology independent regions.

3. Final RTL code shall be VHDL and technology independent.

4. The design shall be configurable so that Customers can easily configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation will be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. Licensed Design Specification. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and 1/0 interface.

B. Sales and Marketing Collateral. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. Licensed Design Development. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			

1	Licensed Design Specification	T0+4 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+12 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of [*] per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-3

Statement of Work for IP3511_HS - USB 2.0 High Speed Device Controller ("USB HS Device")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
- To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
- To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) that can be created as easily and inexpensively as possible.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy to use interface for configuring the IP and generation of EDA-neutral scripts for integration into the customer's design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are cleanly isolated from technology independent regions.

3. Final RTL code shall be VHDL and technology independent.

4. The design shall be configurable so that Customers can easily configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation will be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			

1	Licensed Design Specification	T0+4 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+12 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of [*] per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-4

Statement of Work for IP3516_HS - USB 2.0 High/Full/Low Speed Device and Host Controller ("USB HS Device+Host")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
- To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
- To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) that can be created as easily and inexpensively as possible.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy to use interface for configuring the IP and generation of EDA-neutral scripts for integration into the customer's design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are cleanly isolated from technology independent regions.

3. Final RTL code shall be VHDL and technology independent.

4. The design shall be configurable so that Customers can easily configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation will be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			

1	Licensed Design Specification	T0+4 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+12 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of $125 USD per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-5

Statement of Work for IP3525-[*] USB 2.0 High Speed PHY [*]

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard industry format for mixed-signal IP, such as the TSMC 9000 standard.
2. The Licensed Design shall include all the necessary views for customer integration by the Customer in the Licensed Product.
3. Testing and validation should be done to insure the Licensed Design can be integrated in the Customer's Licensed Product.
4. Customer documentation will be developed using any NXP-supplied documentation as a starting point
5. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C**. Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of $125 USD per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-6

Statement of Work for [*] USB 1.1 Full and Low Speed 10 [*]

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard industry format for mixed-signal IP, such as the TSMC 9000 standard.
2. The Licensed Design shall include all the necessary views for customer integration by the Customer in the Licensed Product.
3. Testing and validation should be done to insure the Licensed Design can be integrated in the Customer's Licensed Product.
4. Customer documentation will be developed using any NXP-supplied documentation as a starting point
5. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of [*] per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

Appendix F-7

Statement of Work for [*]USB 1.1 Full and Low Speed 10 [*]

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has the following objectives:

- To develop a Licensed Design with a set of features that are attractive to the worldwide USB market
- To develop the appropriate sales and marketing collateral for the Licensed Design
- To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product
- To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard industry format for mixed-signal IP, such as the TSMC 9000 standard.
2. The Licensed Design shall include all the necessary views for customer integration by the Customer in the Licensed Product.
3. Testing and validation should be done to insure the Licensed Design can be integrated in the Customer's Licensed Product.
4. Customer documentation will be developed using any NXP-supplied documentation as a starting point
5. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and I/O interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B and E.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E at the rate of [*] per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

FIRST AMENDMENT

TO

TECHNOLOGY

LICENSE AND DISTRIBUTION

AGREEMENT

BY AND BETWEEN

NXP SEMICONDUCTORS NETHERLANDS B.V.

AND

IPEXTREME, INC.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

This first amendment to the Technology License and Distribution Agreement ("FIRST AMENDMENT"), is effective of the last signature date below, is entered into by and between:

1. **NXP Semiconductors Netherlands B.V.**, a corporation duly incorporated under the laws of the Netherlands, having its principal office at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("**NXP**"), and

   IPextreme, Inc., a corporation duly incorporated under the laws of Delaware, USA, having offices at 808 East McGlincy Lane, Campbell, CA 95008, USA ("**IPextreme**").

IPextreme and NXP are collectively referred to as "**Parties**" and individually referred to as a "**Party**".

WHEREAS, the **Parties** have entered into an agreement dated to 30 October 2015 to license to market, promote, distribute and sell products and services based on certain NXP technology; the parties agree to amend that agreement to include additional NXP technology.

NOW, THEREFORE, in consideration of the mutual obligations and covenants contained herein, the Parties have agreed as follows:

1. The Agreement is amended to add Appendix A-8 in its entirety which is incorporated herein by this reference.

2. The Agreement is amended to add Appendix B-1 in its entirety which is incorporated herein by this reference.

3. The Agreement is amended to add Appendix E-1 in its entirety which is incorporated herein by this reference.

4. The Agreement is amended to add Appendix F-8 in its entirety which is incorporated herein by this reference.

5. IPextreme shall not retain any offsets of Packaging Costs associated with NXP (including legacy Freescale) products from NXP's share of licensing proceeds while there remains a backlog in payments (including any accumulated interest payment obligations thereof) owed to NXP. The hereby non-retained Packaging Costs shall reduce the remaining backlog accordingly.

6. The Agreement is amended to replace clause 3.F in Appendix E in its entirety by:

Packaging Cost recovery: each SoW also provides in a Packaging Cost summary for the creation of the covered Licensed Design of which NXP share (as described above in Section 3.C) in the Packaging Cost reported by IPextreme can be deducted only from resulting corresponding

Licensed Design revenue share (as described above in this Appendix E, Section 2) for NXP and reported on the Quarterly Reports as described in Appendix C.

7. Counterparts. This FIRST AMENDMENT may be executed in one or more original counterparts, all of which together will constitute one agreement, and facsimile signatures will have the same effect as original signatures.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this FIRST AMENDMENT as of the Effective Date: April 20, 2016

NXP Semiconductors Netherlands B.V.

/s/ John Schmitz
Name: John Schmitz
Title: SVP Mgr. IP Special Projects

IPextreme, Inc.

/s/ Warren Savage
Name: Warren Savage
Title: President & CEO

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

Date _____ Date _____

Appendix A-8

FlexCAN-FD Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

Subject to the wiring to NXP by IPextreme of [*] USD (in words [*] US dollars) covering IPextreme's outstanding Quarterly Reports payment backlog within one week after this First Amendment to have become effective, NXP will transfer the following technical information to IPextreme.

[*]

3. COMPENSATION

A. License Fees:
Per Appendix E-1.

B. Running Royalty:
Per Appendix E-1.

C. Packaging Costs:
Per Appendix E-1 & F-8.

4. SUPPORT

Per Appendix B-1.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

Appendix B-1

Transfer and 2nd-line support from NXP

1. LIMITED SUPPORT LEVEL AGREEMENT ("**LSLA**")

   A. Support Nature: NXP will within a period of 12 months after the Effective Date provide limited support ("**NXP Support**") to IPextreme by transferring the Technology as described in Appendix A-8 and support its conversion into Licensed Designs as well as provide initial 2nd line support to assist IPextreme with first lead customers in using those Licensed Designs. Following this 12-month period, NXP may continue to provide support requested by IPextreme at its own discretion.

   B. Support Amount: The amount of NXP Support is limited in effort as follows:

For support efforts related to	Appendix	Hours
System and digital	A-8	120

   C. Support Response Times: As NXP's support needs to be organized as background task, response times will be to NXP's discretion only while based on commercially reasonable criteria. As a result, the following support procedures will be used:
      a. The IPextreme representative (specified in Appendix D) shall request support to an authorized NXP representative (specified in Appendix D) with the following information:
         i. The support request itself
         ii. Timeframe for when support is needed
      b. The NXP representative will determine:
         i. Which NXP Support person will be responsible for the requested support
         ii. When that person is available to begin that support
         iii. How much time is allocated to that support
         iv. When will the support activity be completed
         v. Report this data back to IPextreme within two (2) NXP working days ("**NXP Working Days**")
      c. The IPextreme representative will either authorize or not authorize the support activity by NXP
      d. At the conclusion of the support request, NXP will provide a written summary to IPextreme of the support activity and hours used in completion of that activity.

2. NXP SUPPORT COMPENSATION BY IPEXTREME

NXP shall be compensated by IPextreme for its support efforts as further quantified in Appendix E-1.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

Appendix E-1

Financial compensation to NXP by IPextreme

1. FINANCIAL PRINCIPLES

   A. NXP shall be financially compensated for IPextreme's use of NXP Support (as defined in Appendix B-1).
   B. NXP shall be financially compensated for the Technology (as defined in Appendix A-8) used in Licensed Designs that are sublicensed to Customers by IPextreme.
   C. NXP shall be financially compensated with a "**Finders Fee**" (as further explained in this Appendix E-1, Section 5) for introducing potential customers to IPextreme.
   D. There will be no payments from NXP to IPextreme.
   E. All financial compensation to NXP shall be derived from the income IPextreme receives from the sale of Licensed Designs.
   F. Revenue split: Income (minus pre-agreed costs "**Packaging Costs**" as further defined in this Appendix E-1, Section 3) obtained by IPextreme (and reported via the Quarterly Report described in Appendix C) from selling Licensed Designs will be paid out to NXP by IPextreme on a quarterly basis ("**Quarterly Payout**") according to a split percentage further described in this Appendix E-1, Section 2).
   G. Reference pricing: for all Licensed Design modules (described in Appendix A-8) NXP and IPextreme agreed reference selling prices ("**Module Reference Price**") listed in Table 1 as further provided in this Appendix E-1, Section 4.
   H. Discounts: IPextreme has the freedom to negotiate commercially reasonable discounts with its prospects for each of the Licensed Designs, however not below [*]% of the applicable Module Reference Price per use (adjusted for "**Annual Price Erosion**" also given in Table 1) without prior written approval of NXP. Moreover, for any discounted Licensed Design sale, the applied discount must not be lower than for any other product sale of IPextreme to the same customer that can be directly or indirectly linked to this sale.

2. REVENUE SPLIT

   A. Regular Cases: the baseline revenue split agreed is [*]% for IPextreme and [*]% for NXP.
   B. Finder's Fee NXP Bonus: in case of a Licensed Design customer brought to IPextreme by NXP, a [*]% bonus payment ("**Finder's Fee**") is granted to NXP, leading to a revenue split of [*]% for IPextreme and [*]% for NXP. The terms and conditions for a Finder's Fee to be applicable are further discussed in this Appendix E-1, Section 5.
   C. IPextreme Prepayment bonus: in case of a quarterly extra advanced payment ("**Prepayment**") to NXP by IPextreme provided a prior agreement of NXP in writing, IPextreme gets an accumulative [*]% bonus discount, leading in the regular case of above Section 2.A. to a revenue split of [*]% for IPextreme and

[*]% for NXP (and in the Finder's Fee case of above Section 2.B. to a revenue split of [*]% for IPextreme and [*]% for NXP) for Licensed Designs sold in the quarter during which the Prepayment was made. The terms and conditions for such Prepayments are further discussed in this Appendix E-1, Section 6.

3. PACKAGING COSTS
   A. Packaging: IPextreme needs to undertake certain Modifications of the NXP Technology leading to Packaging Costs for IPextreme for all preparations to sell Licensed Design modules based on the Technology described in Appendix A-8 and/or port the analog parts of the Technology to other foundries and technology nodes.
   B. Packaging Costs: costs for Licensed Design preparations such as product documentation, user scripts, test benches and marketing collateral.
   C. Compensation for Packaging Costs: IPextreme will be compensated for its costs and efforts under the following conditions:
      There will be no upfront payments from NXP to IPextreme
      No compensation shall be taken unless NXP has approved in writing the Licensed Design specifications resulting from the activities described in Appendix F-8
      The share of NXP in IPextreme's Packaging Costs is [*]% for each Licensed Design created by IPextreme
      Compensation will be taken from NXP's share of revenue proceeds as described above in this Appendix E-2, Section 2 up to a maximum of [*]% of any Quarterly Payout per Licensed Design as described hereunder in Section 3.F.
   D. Included SoWs: this Agreement further contains Sows (further described in Appendix F-8) covering the Modifications on the Technology modules described in Appendix A-8 leading to a digital RTL-based "**Soft IP**" Licensed Design products. Under no circumstance shall the aggregated Packaging Costs
   E. Additional SoWs can be later added after mutual agreement in writing to this Agreement as i-numbered Appendices F-(i) to create new Licensed Design variants for sale to Customers, e.g. to support other chip foundries or process nodes, new features, specification updates, etc.
   F. Packaging Cost Recovery: each SoW also provides in a Packaging Cost summary for the creation of the covered Licensed Design of which NXP share (as described above in Section 3.C) in the Packaging Cost reported by IPextreme can be deducted only from resulting corresponding Licensed Design revenue share (as described above in this Appendix E, Section 2) for NXP and reported on the Quarterly Reports as described in Appendix C.

4. MODULE REFERENCE PRICES

   A. Table 1: Module Reference Prices for the Licensed Designs under this Agreement and referring to the Technologies described in Appendix A-8:

Technology Module Name	Licensed Design Name	Reference Price (USO)	Annual Price Erosion
AB-CAN-FD Controller	L-CAN-FD-VER-SRC	[*]	[*]

   B. The Annual Price Erosion will be calculated from the time passed after Effective Date in steps of twelve (12) months.

5. FINDER'S FEE PROCEDURE

   A. Leads: NXP has the possibility to notify (in writing) any interested candidate ("**Lead**") to buy Licensed Designs from IPextreme.

   B. Response Time: As soon as NXP has forwarded such Lead IPextreme has ten (10) of its working days ("**IPextreme Working Days**") to qualify the lead and inform NXP that the Lead will be commercially pursued. If not pursued, NXP is entitled to look for other options to have this Lead taken care of.

   C. Finder's Fee Acknowledgement: within the same 10 IPextreme Working Days following NXP's Lead notification, IPextreme has the option if applicable to prove in writing that IPextreme had been already informed about the same Lead for the same Licensed Design by any other channel, in such case the [*]% Finder's Fee bonus for NXP would be applicable as described in Appendix E-1, Section 2.8.

6. PREPAYMENTS PROCEDURE

   A. Request for Prepayment: one (1) month prior to the issuing deadline for a forthcoming Quarterly Report, IPextreme has the option to propose a Prepayment amount on top of the applicable Quarterly Revenue to be reported to NXP.

   B. NXP Prepayment Authorization: within 2 weeks following IPextreme's Prepayment request has the option to accept such Prepayment, only in which case IPextreme will be obliged to add the Prepayment amount to the applicable Quarterly Report, in which case the Prepayment discount of [*]% bonus will be granted to IPextreme as described in Appendix E-1, Section 2.C.

7. NXP SUPPORT PAYMENTS

   A. NXP Support hours will be preordered by IPextreme in portions of 20 hours by official email request, to be renewed each time when taken up according to the procedure described in Appendix 8-1, Section 1.C.

   B. The applicable hour rate for NXP Support will be [*] USD.

   C. Upon Effective Date, NXP will invoice IPextreme for NXP Support costs covering an initial order of 20 hours for the amount of [*] USD.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

Appendix F-1

Statement of Work for CAN-FD Controller ("**CAN-FD Controller**")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers under the terms of this Agreement.

More specifically, the project has:

To develop a Licens dwide USB market

To develop the appropriate sales and marketing collateral for the Licensed Design

To ensure the Licensed Design has a complete set of deliverables to allow the Customer to easily integrate it into their Licensed Product

To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers

To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology

To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) that can be created as easily and inexpensively as possible.

IPextreme will be responsible for ensuring the success of these objectives and provide the engineers required to implement the Licensed Design. NXP will provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy-to-use interface for configuring the IP and generation of EDA-neutral scripts for integration into the customer's design flow.
2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are cleanly isolated from technology independent regions.
3. Final RTL code shall be Verilog and technology independent.
4. The design shall be configurable so that Customers can easily configure it for their application through the use of top-down generic parameters and/or constants.
5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.
7. Customer documentation will be developed using any NXP-supplied documentation as a starting point
8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into IPextreme release infrastructure to enable on-going support and maintenance of the Licensed Design over time, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, IPextreme (with the support of NXP) will determine the supported features of the Licensed Design along with its top level parameters and I/O interface.

B. **Sales and Marketing Collateral**. During this period IPextreme will develop the necessary sales collateral such as PowerPoint slides, whitepapers, website, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period IPextreme (with the support of NXP) will develop the complete Licensed Design.

IV. Estimated Schedule and IPextreme Costs

The following is an estimate of the costs and timescales associated with each of the major milestone phases. IPextreme will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs. In the event this is not possible, IPextreme will notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the below estimates.

It is assumed no additional costs will be incurred as part of this project such as travel, etc. Should the parties mutual agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B-1 and E-1.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

IPextreme will be compensated for its expenses as outlined in Appendix E-1 at the rate of [*] USD per person hour for the efforts described in this Statement of Work.

NXP Support may also be involved during the execution of this project and will be compensated for its efforts according to terms outlined in Appendix B-1.

IPextreme will deliver at the end of project, a report that indicates the number of engineering hours delivered.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

SECOND AMENDMENT

TO

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

BY AND BETWEEN

NXP SEMICONDUCTORS NETHERLANDS B.V.

AND

SILVACO, INC.

This Second Amendment to the Technology License and Distribution Agreement ("SECOND AMENDMENT"), is effective of the last signature date below, and is entered into by and between:

NXP Semiconductors **Netherlands B.V.**, a corporation duly incorporated under the laws of the Netherlands, having its principal office at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("**NXP**"), and

Silvaco, Inc., a corporation duly incorporated under the laws of Delaware. USA, having offices at 4701 Patrick Henry Drive, Building 2, Santa Clara, CA 95054. USA ("**Silvaco**"). Silvaco having assumed the obligations of, and rights enjoyed by, IPextreme pursuant to the Consent to Assignment executed by Silvaco on 4 August 2016, and NXP on 1 September 2016 (and so references below to IPextreme will be understood as also being to Silvaco).

Silvaco and NXP are collectively referred to as "**Parties**" and individually referred to as a "**Party**".

WHEREAS, NXP Semiconductors Netherlands B.V. entered into a Technology License and Distribution Agreement with IPextreme, Inc. dated to 30 October 2015 (hereafter, the "Agreement") to license, market, promote, distribute and sell products and services based on certain NXP technology, and NXP and IPextreme agreed to the assignment of that agreement and its First Amendment to Silvaco; the Parties hereby amend that Technology License and Distribution Agreement to include the additional NXP technology identified herein.

Furthermore, NXP plans to release a free, unsupported version of its 13C technology to MIPI Alliance members and also expose additional variants of that technology for commercialization.

NOW, THEREFORE, in consideration of the mutual obligations and covenants contained herein, the Parties have agreed as follows:

1. The Agreement is amended to replace clause 2.5 ("Exclusions") with the following (the last paragraph has been added):

2.5 Exclusions. Notwithstanding anything to the contrary herein, this Agreement shall not include, or be construed or interpreted as:

a. imposing on NXP any obligation to furnish any manufacturing or technical information except as expressly specified under this Agreement; or

b. conferring any license, right or immunity, express or implied, under any Intellectual Property Rights or any other intellectual property residing in the Technology or any other Confidential Information furnished hereunder: (i) for the combination of such Technology or other Confidential Information with one or more other items (including items acquired from NXP or its Affiliates) even if such items have no substantial use other than as part of such combination; (ii) covering a standard, whether proprietary or open, a standard being any technical specification promulgated for the

purpose of widespread adoption; or (iii) with respect to which NXP and/or any of its Affiliates has informed IPextreme in writing that a separate license has to be obtained or that no implied license is granted.

To clarify the extent to which NXP's patent rights may be exhausted, the license granted in Clause 2.1 under the patents in NXP's IPR extends only to (1) the claims of those patents which would otherwise be infringed directly by the Technology, and (2) the chip-level and lower claims of patents which read on the Technology.

2. The Agreement is amended to replace clause 5.4 ("Interest on Late Payments" with the following (the term "owe an interest" has been changed to "owe compound interest"):

5.4 Interest on late payments. As from the date any amount is due hereunder until payment thereof has been received by NXP in full, IPextreme shall owe NXP compound interest at the rate of one and a half percent (1.5%) per month or the maximum rate permitted by applicable law, whichever is lower.

3. The Agreement is amended to replace Clause S(C) of Appendix E with the following:

Finder's Fee waiver. within the same 10 IPextreme Working Days following NXP's Lead notification, IPextreme may, if applicable prove to NXP in writing that IPextreme had been already informed about the same Lead for the same Licensed Design by a non-NXP entity, in such case the [*]% Finder's Fee bonus for NXP as described in Appendix E, Section 2.B., would not be applicable.

4. The First Amendment of the Agreement is amended to replace Clause 5(C) of Appendix E-1 with the following:

Finder's Fee waiver: within the same 10 IPextreme Working Days following NXP's Lead notification, IPextreme may, if applicable prove to NXP in writing that IPextreme had been already informed about the same Lead for the same Licensed Design by a non-NXP entity, in such case the [*]% Finder's Fee bonus for NXP as described in Appendix E-1. Section 2.B., would not be applicable.

5. The Agreement is amended to add Appendices A-9, A-10, A-11 in their entirety, and which are incorporated herein by this reference.

6. The Agreement is amended to add Appendix E-2 in its entirety, and which is incorporated herein by this reference.

7. The Agreement is amended to add Appendices F-9, F-10, F-11 in their entirety, and which are incorporated herein by this reference.

8. Counterparts. This SECOND AMENDMENT may be executed in one or more original counterparts, all of which together will constitute one agreement, and facsimile signatures will have the same effect as original signatures.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this SECOND AMENDMENT as of the Effective Date:

NXP Semiconductors Netherlands B.V.	Silvaco, Inc.
By:	By:
/s/Guido Dierick	/s/Warren Savage
Name: Guido Dierick	Name: Warren Savage
Title: EVP and General Counsel	Title: General Manager
Date 18 October 2016	Date 18 October 2016

Appendix A-9

13C Basic Slave Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The 13C Basic Slave Controller is the same version of the Verilog RTL code that NXP may possibly provide to MIPI Alliance members at no cost. For each of the following items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

2. COMPENSATION

A. License Fees:

Per Appendix E-2.

B. Running Royalty:

Per Appendix E-2.

C. Packaging Costs:

Per Appendices E-2 & F-9.

Appendix A-10

13C Advanced Slave Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The 13C Advanced Slave Controller represents Technology that contains additional features beyond the features of the 13C Basic Slave Controller. For each of the following items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

3. COMPENSATION

A. License Fees:

Per Appendix E-2.

B. Running Royalty:

Per Appendix E-2.

C. Packaging Costs:

Per Appendices E-2 & F-9.

Appendix A-11

13C Master + Slave Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The 13C Master + Slave Controller represents Technology that contains both Master and Slave 13C features. For each of the following items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

2. COMPENSATION

A. License Fees:

Per Appendix E-2.

B. Running Royalty:

Per Appendix E-2.

C. Packaging Costs:

Per Appendices E-2 & F-9.

Appendix E-2
Financial compensation to NXP by Silvaco

1. FINANCIAL PRINCIPLES

A. NXP shall be financially compensated for the Technology (as defined in Appendices A-9. A-10, A-11) used in Licensed Designs that are sublicensed to Customers by Silvaco.
B. NXP shall be financially compensated with a "**Finders Fee**" (as further explained in this Appendix E-2, Section 5) for introducing potential customers to Silvaco.
C. There shall be no payments from NXP to Silvaco.
D. All financial compensation to NXP shall be derived from the income Silvaco receives from the sale of Licensed Designs.
E. Revenue split: Income (minus pre-agreed costs ("**Packaging Costs**") as further defined in this Appendix E-2, Section 3) obtained by Silvaco (and reported via the Quarterly Report described in Appendix C) from selling Licensed Designs will be paid out to NXP by Silvaco on a quarterly basis ("Quarterly Payout") according to a split percentage further described in this Appendix E-2, Section 2).
F. Reference pricing: for all Licensed Design modules (described in Appendices A-9, A-10, A-11) NXP and Silvaco agreed reference selling prices ("**Module Reference Price**") listed in Table 1 as further provided in this Appendix E-2, Section 4.
G. Discounts: Silvaco has the freedom to negotiate commercially reasonable discounts with its prospects for each of the Licensed D signs, however, not to be below [*]% of the applicable Module Reference Price per use (adjusted for "**Annual Price Erosion**" also given in Table 1.) without prior written approval of NXP. Moreover, for any discounted Licensed Design sale, the applied discount must not be lower than that for any other product sale of Silvaco to the same customer which can be directly or indirectly linked to this sale.
H. NXP presently plans to offer its own package of IP for the 13C Basic Slave to MIPI Alliance members through the MIPI Alliance website. Silvaco may offer support to interested MIPI Alliance members for that package with no share of that support generating compensation due to NXP. It is understood by both parties that such a support model is non-exclusive.
I. Any financial compensation for NXP resulting from 13C Technology related bookings in the year 2016 by Silvaco for Licensed Designs under this 2nd Amendment will be exceptionally reported by Silvaco with an ad hoc 13C royalty report by Dec. 23, 2016 and accordingly paid within 30 days net.

2. REVENUE SPLIT

A. Regular cases: the baseline revenue split agreed upon is [*]% for Silvaco and [*]% for NXP.
B. Finder's fee NXP bonus: in case of a Licensed Design customer brought to Silvaco by NXP, a [*]% bonus payment ("Finder's Fee") is granted to NXP,

leading to a revenue split of [*]% for Silvaco and [*]% for NXP. The terms and conditions for a Finder's Fee to be applicable are discussed in this Appendix E-2, Section 5.

C. Silvaco Prepayment bonus: in case of a quarterly extra advanced payment ("**Prepayment**") to NXP by Silvaco, provided Silvaco obtains NXP's prior written agreement, Silvaco gets an accumulative [*]% bonus discount, leading in the regular case of above Section 2.A. to a revenue split of [*]% for Silvaco and [*]% for NXP (and in the Finder's Fee case of above Section 2.B. to a revenue split of [*]% for Silvaco and [*]% for NXP) for Licensed Designs sold in the quarter during which the Prepayment was made. The terms and conditions for such Prepayments are discussed in this Appendix E-2, Section 6.

3. PACKAGING COSTS

A. Packaging: Silvaco needs to undertake certain Modifications of the NXP Technology leading to Packaging Costs for Silvaco for all preparations to sell Licensed Design modules based on the Technology described in Appendices A-9, A-10, A-11.

B. Packaging Costs: costs for Licensed Design preparations such as product documentation, user scripts, test benches and marketing collateral.

C. Compensation for Packaging Costs: Silvaco shall be compensated for its costs and efforts under the following conditions:

There shall be no upfront payments from NXP to Silvaco

No compensation shall be taken unless NXP has first approved in writing the Licensed Design specifications resulting from the activities described in Appendices F-9, F-10, F-11

NXP's share in Silvaco's Packaging Costs is [*]% for each Licensed Design created by Silvaco

Compensation will be taken from NXP's share of revenue proceeds as described above in this Appendix E-2, Section 2 up to a maximum of [*]% of any Quarterly Payout per Licensed Design as described hereunder in Section 3.F.

D. Included Statements of Work ("SoWs"): this Agreement further contains SoWs (further described in Appendices F-9 F-10 F-11) covering the Modifications on the Technology modules described in Appendices A-9, A-10, A11 leading to a digital RTL-based "**Soft IP**" Licensed Design products. Under no circumstance shall the aggregated Packaging Costs described in Appendices F-9, F-10, F-11 be greater than $[*].

E. Additional SoWs can be later added after mutual agreement in writing to this Agreement as i-numbered Appendices F-(i) to create new Licensed Design variants for sale to Customers, e.g. to support other chip foundries or process nodes, new features, specification updates, etc.

F. Packaging Cost recovery: each SoW also shall provide in a Packaging Cost summary for the creation of the covered Licensed Design of which NXP's share (as described above in Section 3.C) in the Packaging Cost reported by Silvaco can

be deducted only from resulting corresponding Licensed Design revenue share (as described above in this Appendix E, Section 2) for NXP and which shall be reported on the Quarterly Reports as described in Appendix C.

4. MODULE REFERENCE PRICES

A. Table 1: Module Reference Prices for the Licensed Designs under this Agreement and referring to the Technologies described in Appendices A-9, A-10, A-11:

Technology Module name	Licensed Design name	Reference Price (USD)	Annual Price Erosion
A9-13C Basic Slave Controller	L-13C-SLAVE-VER-SRC	[*]	[*]
A10-13C Advanced Slave Controller	L-13C-ADV-SLAVE-VER-SRC	[*]	[*]
A11-13C Master+Slave Controller	L-13C-MASTER+SLAVE-VER-SRC	[*]	[*]

B. The Annual Price Erosion will be calculated from the time after the Effective Date, in twelve (12) month increments.

5. FINDER'S FEE PROCEDURE

A. Leads: NXP has the ability to notify (in writing) any interested candidate ("**Lead**") that they can purchase Licensed Designs from Silvaco.

B. Response time: As soon as NXP has forwarded such a Lead Silvaco has ten (10) of its working days, a working day be any weekday that is not a Federal or State holiday in California ("Silvaco Working Days") to qualify the lead and inform NXP that the Lead will be commercially pursued. If not pursued, NXP is entitled to look for other options to have this Lead taken care of.

C. Finder's Fee waiver: within the same 10 Silvaco Working Days following NXP's Lead notification, Silvaco may, if applicable, prove to NXP in writing that Silvaco had been already informed about the same Lead for the same Licensed Design by a non-NXP entity, in such case the [*]% Finder's Fee bonus for NXP as described in Appendix E-2, Section 2.8, would not be applicable.

6. PREPAYMENTS PROCEDURE

A. Request for Prepayment: one (1) month prior to the issuing deadline for a forthcoming Quarterly Report, Silvaco has the option to propose a Prepayment amount on top of the applicable Quarterly Revenue to be reported to NXP.

B. NXP Prepayment authorization: within 2 weeks following Silvaco's Prepayment request, NXP has the option to accept such Prepayment, in which case Silvaco shall add the Prepayment amount to the applicable Quarterly Report, in which case the Prepayment discount of [*]% bonus will be granted to Silvaco as described in Appendix E-2, section 2.C.

Appendix F-9

Statement of Work for 13C Basic Slave Controller ("**13C Basic Slave Controller**")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers consistent with the terms of this Agreement.

More specifically, the project has the following objectives:

To develop a Licensed Design with a set of features that are attractive to the 13C market
To develop appropriate sales and marketing collateral for the Licensed Design
To ensure the Licensed Design has a complete set of deliverables to allow each Customer to easily integrate it into their Licensed Product
To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) can be created as easily and inexpensively as possible.

Silvaco shall be responsible for ensuring the success of these objectives and provide the engineers and other support necessary to implement the Licensed Design. NXP shall provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy-to-use interface for configuring the IP and generation of EDA-neutral scripts for integration into each customer's design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology-specific implementation (memories, etc.) are suitably isolated from technology-independent regions.

3. Final RTL code shall be Verilog- and technology-independent.

4. The design shall be configurable so that Customers can with reasonable ease configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation shall be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into Silvaco release infrastructure to enable on-going support and maintenance of the Licensed Design, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, Silvaco (with the support of NXP) shall determine the supported features of the Licensed Design, as well as its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period Silvaco shall develop reasonably necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period Silvaco (with the support of NXP) shall develop the complete Licensed Design.

IV. Estimated Schedule and Silvaco Costs

The following is an estimate of the costs and timeframes associated with each of the major milestone phases. Silvaco will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs and timeframes. In the event this is not possible, Silvaco shall notify NXP of any delays and cost overruns and provide new estimates, which in no event shall exceed 50% of the estimates set forth in the table below.

It is assumed that no additional costs shall be incurred as part of this project such as travel, meals, equipment, professional advisor fees, etc. Should the parties mutually agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B-2 and E-2.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]

2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

Silvaco shall be compensated for its expenses for the efforts described in this Statement of Work as outlined in Appendix E-2, at the rate of [*] USD per person hour.

NXP Support may also be required during the execution of this project and NXP shall be compensated for its efforts according to terms outlined in Appendix B-2.

Silvaco will deliver at the end of project, a report that sets forth the number of NXP engineering hours that were required.

Appendix F-10

Statement of Work for 13C Advanced Slave Controller ("**13C Advanced Slave Controller**")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers consistent with the terms of this Agreement.

More specifically, the project has the following objectives:

To develop a Licensed Design with a set of features that are attractive to the 13C market
To develop appropriate sales and marketing collateral for the Licensed Design
To ensure the Licensed Design has a complete set of deliverables to allow each Customer to easily integrate it into their Licensed Product
To ensure the Licensed Design is technology Independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) can be created as easily and inexpensively as possible.

Silvaco shall be responsible for ensuring the success of these objectives and provide the engineers and other support necessary to implement the Licensed Design. NXP shall provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy-to-use interface for configuring the IP and generation of EDA-neutral scripts for integration into each customer's design flow.
2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are suitably isolated from technology-independent regions.
3. Final RTL code shall be Verilog- and technology-independent.
4. The design shall be configurable so that Customers can with reasonable ease configure ii for their application through the use of top-down generic parameters and/or constants.
5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.
6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.

7. Customer documentation shall be developed using any NXP-supplied documentation as a starting point
8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into Silvaco release Infrastructure to enable on-going support and maintenance of the Licensed Design, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, Silvaco (with the support of NXP) shall determine the supported features of the Licensed Design, as well as its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period Silvaco shall develop reasonably necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period Silvaco (with the support of NXP) shall develop the complete Licensed Design.

IV. Estimated Schedule and Silvaco Costs

The following is an estimate of the costs and timeframes associated with each of the major milestone phases. Silvaco will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs and timeframes. In the event this is not possible, Silvaco shall notify NXP of any delays and cost overruns and provide new estimates, which in no event shall exceed 50% of the estimates set forth in the table below.

It is assumed that no additional costs shall be incurred as part of this project such as travel, meals, equipment, professional advisor fees, etc. Should the parties mutually agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B-2 and E-2.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

Silvaco shall be compensated for its expenses for the efforts described in this Statement of Work as outlined in Appendix E-2 at the rate of [*] USD per person hour.

NXP Support may also be required during the execution of this project and NXP shall be compensated for its efforts according to terms outlined in Appendix B-2.

Silvaco will deliver at the end of project, a report that sets forth the number of NXP engineering hours that were required.

Appendix F-11

Statement of Work for 13C Master+Slave Controller ("**13C Master+Slave Controller**")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers consistent with the terms of this Agreement.

More specifically, the project has the following objectives:

To develop a Licensed Design with a set of features that are attractive to the 13C market
To develop appropriate sales and marketing collateral for the Licensed Design
To ensure the Licensed Design has a complete set of deliverables to allow each Customer to easily integrate ii into their Licensed Product
To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) can be created as easily and inexpensively as possible.

Silvaco shall be responsible for ensuring the success of these objectives and provide the engineers and other support necessary to implement the Licensed Design. NXP shall provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package lo provide an easy-to-use interface for configuring the IP and generation of EDA-neutral scripts for integration into each customer's design flow.
2. The design shall be partitioned as necessary such that blocks that can benefit from technology-specific implementation (memories, etc.) are suitably isolated from technology-independent regions.
3. Final RTL code shall be Verilog- and technology-independent.
4. The design shall be configurable so that Customers can with reasonable ease configure ii for their application through the use of top-down generic parameters and/or constants.
5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, including reusable models, verification components and representative tests.
7. Customer documentation shall be developed using any NXP-supplied documentation as a starting point
8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into Silvaco release infrastructure to enable on-going support and maintenance of the Licensed Design, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period. Silvaco (with the support of NXP) shall determine the supported features of the Licensed Design, as well as its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period Silvaco shall develop reasonably necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period Silvaco (with the support of NXP) shall develop the complete Licensed Design.

IV. Estimated Schedule and Silvaco Costs

The following is an estimate of the costs and timeframes associated with each of the major milestone phases. Silvaco will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs and timeframes. In the event this is not possible, Silvaco shall notify NXP of any delays and cost overruns and provide new estimates which in no event shall exceed 50% of the estimates set forth in the table below.

It is assumed that no additional costs shall be incurred as part of this project such as travel, meals, equipment. professional advisor fees, etc. Should the parties mutually agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in Appendices B-2 and E-2.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			
1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

Silvaco shall be compensated for its expenses for the efforts defined in this Statement of Work as outlined in Appendix E-2 at the rate of [*] USD per person hour

NXP Support may also be required during the execution of this project and NXP shall be compensated for its efforts according to terms outlined in Appendix B-2.

Silvaco will deliver at the end of project, a report that sets forth the number of NXP engineering hours that were required.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

THIRD AMENDMENT

TO

TECHNOLOGY
LICENSE AND DISTRIBUTION
AGREEMENT

BY AND BETWEEN

NXP SEMICONDUCTORS NETHERLANDS B.V.

AND

SILVACO, INC.

This Third Amendment to the Technology License and Distribution Agreement ("THIRD AMENDMENT"), is effective of the last signature date below (the "**Third Amendment Effective Date**"), and is entered into by and between:

1. **NXP Semiconductors Netherlands B.V**., a corporation duly incorporated under the laws of the Netherlands, having its principal office at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("**NXP**"), and

   Silvaco, Inc., a corporation duly incorporated under the laws of Delaware, USA, having offices at 2811 Mission College Boulevard, 6th floor, Santa Clara, CA 95054, USA ("**Silvaco**"), Silvaco having assumed the obligations of, and rights enjoyed by, IPextreme pursuant to the Consent to Assignment executed by Silvaco on 4 August 2016, and NXP on 1 September 2016 (and so some references below to IPextreme will be understood as also being to Silvaco).

Silvaco and NXP are collectively referred to as "**Parties**" and individually referred to as a "**Party**".

WHEREAS, NXP Semiconductors Netherlands B.V. entered into a Technology License and Distribution Agreement with IPextreme, Inc. dated to 30 October 2015 (hereafter, the "Agreement") to license, market, promote, distribute and sell products and services based on certain NXP technology, and NXP and IPextreme agreed to the assignment of that agreement and its First Amendment to Silvaco; the Parties hereby amend that Technology License and Distribution Agreement to include the additional NXP technology identified herein.

WHEREAS, the Parties completed a First Amendment, dated 20 April 2016 to add FlexCAN-FD technology to the Agreement, and a Second Amendment, dated 18 October 2016 to add 13C technology to the Agreement; the Parties hereby further amend that Technology License and Distribution Agreement to include the additional NXP technology identified herein.

NOW, THEREFORE, in consideration of the mutual obligations and covenants contained herein, the Parties have agreed as follows:

1. The Agreement is amended to add Appendix A-12 in its entirety, and which is incorporated herein by this reference.

2. The Agreement is amended to add Appendix E-3 in its entirety, and which is incorporated herein by this reference.

3. The Agreement is amended to add Appendix F-12 in their entirety, and which is incorporated herein by this reference.

4. The [*]% Finder's Fee and [*]% Prepayment principles described in Appendix E-3 become applicable for all Technologies (including those under former Freescale Distribution and License Agreements and IPextreme such as are identified in the letter dated August 4, 2016, from Silvaco (signed by David Dutton & Warren Savage) to NXP

Semiconductors Netherlands B.V. (signed by Changhae Park)) from NXP distributed by Silvaco after the last signature below.

5. Counterparts. This THIRD AMENDMENT may be executed in one or more original counterparts, all of which together will constitute one agreement, and facsimile signatures will have the same effect as original signatures.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this THIRD AMENDMENT as of the Third Amendment Effective Date:

NXP Semiconductors Netherlands B.V.	Silvaco, Inc.
By: /s/Erwin de Bruijne Name: Erwin de Bruijne Title: Director Date 31 October 2018	By: /s/Babak Taheri Name: Babak Taheri Title: CEO and EVP Date 11/10/2018

Appendix A-12

LinFlexD Controller

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The LinFlexD Controller Is a standards-based Interface used primarily in automotive and aerospace applications along with bus fabric and peripherals that results in an integrated subsystem. For each of the following Items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

3. COMPENSATION

A. License Fees:

Per Appendix E-3.

B. Running Royalty:

Per Appendix E-3.

C. Packaging Costs:

Per Appendices E-3 & F-12.

Appendix E-3

Financial compensation to NXP by Silvaco

1. FINANCIAL PRINCIPLES

A. NXP shall be financially compensated for the Technology (as defined In Appendix A-12) used In Licensed Designs that are sublicensed to Customers by Silvaco.

B. NXP shall be financially compensated with a "Finders Fee" (as further explained in this Appendix E-3, Section 5) for introducing potential customers to Silvaco.

C. There shall be no payments from NXP to Silvaco.

D. All financial compensation to NXP shall be derived from the Income Silvaco receives from the sale of Licensed Designs.

E. Revenue split: Income (minus pre-agreed costs ("**Packaging Costs**") as further defined in this Appendix E-3, Section 3) obtained by Silvaco (and reported via the Quarterly Report described in Appendix C) from selling Licensed Designs will be paid out to NXP by Silvaco on a quarterly basis ("**Quarterly Payout**") according to a split percentage further described In this Appendix E-3, Section 2).

F. Reference pricing: for all Licensed Design modules (described in Appendix A-12) NXP and Silvaco agreed reference selling prices ("**Module Reference Price**") listed in Table 1 as further provided in this Appendix E-3, Section 4.

G. Discounts: Silvaco has the freedom to negotiate commercially reasonable discounts with its prospects for each of the Licensed Designs, however, not to be below [*]% of the applicable Module Reference Price per use (adjusted for "**Annual Price Erosion**" also given In Table 1.) without prior written approval of NXP. Moreover, for any discounted Licensed Design sale, the applied discount must not be lower than that for any other product sale of Silvaco to the same customer which can be directly or indirectly linked to this sale.

H. Any financial compensation for NXP resulting from LinFlexD Controller Technology related to bookings in the 4th quarter of 2018 by Silvaco for Licensed Designs under this 3rd Amendment will be exceptionally reported by Silvaco with an ad hoc off-cycle LinFlexD Controller royalty report in the form described in Appendix C by December 21, 2018 and accordingly paid within 30 days net. For the avoidance of any doubt, this off-cycle payment would not be treated as Prepayment under Section 6 hereunder.

2. REVENUE SPLIT

A. Regular cases: the baseline revenue split agreed upon is [*]% for Silvaco and [*]% for NXP.

B. Finder's fee NXP bonus: In case of a Licensed Design customer brought to Silvaco by NXP, a [*]% bonus payment ("**Finder's Fee**") is granted to NXP, leading to a revenue split of [*]% for Silvaco and [*]% for NXP. The terms and conditions for a Finder's Fee to be applicable are discussed in this Appendix E-3, Section 5.

C. Silvaco Prepayment bonus: in case of a quarterly extra advanced payment ("**Prepayment**") to NXP by Silvaco, provided Silvaco obtains NXP's prior written agreement, Silvaco gets an accumulative [*]% bonus discount, leading in the regular case of above Section 2.A. to a revenue split of [*]% for Silvaco and [*]% for NXP (and in the Finder's Fee case of above Section 2.B. to a revenue split of [*]% for Silvaco and [*]% for NXP) for Licensed Designs sold in the quarter during which the Prepayment was made. The terms and conditions for such Prepayments are discussed in this Appendix E-3, Section 6.

3. PACKAGING COSTS

A. Packaging: Silvaco needs to undertake certain Modifications of the NXP Technology leading to Packaging Costs for Silvaco for all preparations to sell Licensed Design modules based on the Technology described In Appendix A-12.

B. Packaging Costs: costs for Licensed Design preparations such as product documentation, user scripts, test benches and marketing collateral.

C. Compensation for Packaging Costs: Silvaco shall be compensated for its costs and efforts under the following conditions:

There shall be no upfront payments from NXP to Silvaco
No compensation shall be taken unless NXP has first approved in writing the Licensed Design specifications resulting from the activities described in Appendix F-12.
NXP's share in Silvaco's Packaging Costs is [*]% for each Licensed Design created by Silvaco
Compensation will be taken from NXP's share of revenue proceeds as described above in this Appendix E-3, Section 2 up to a maximum of [*]% of any Quarterly Payout per Licensed Design as described hereunder in Section 3.F.

D. Included Statements of Work ("SoWs"): this Agreement further contains SoWs (further described in Appendix F-12) covering the Modifications on the Technology modules described in Appendix A-12 leading to a digital RTL-based

"**Soft IP**" Licensed Design products. Under no circumstance shall the aggregated Packaging Costs described in Appendix F-12 be greater than $[*].

E. Additional SoWs can be later added after mutual agreement in writing to this Agreement as I-numbered Appendices F-(1) to create new Licensed Design variants for sale to Customers, e.g. to support other chip foundries or process nodes, new features, specification updates, etc.

F. Packaging Cost recovery: each SoW also shall provide In a Packaging Cost summary for the creation of the covered Licensed Design of which NXP's share (as described above in Section 3.C) In the Packaging Cost reported by Silvaco can be deducted only from resulting corresponding Licensed Design revenue share (as described above in this Appendix E, Section 2) for NXP and which shall be reported on the Quarterly Reports as described in Appendix C.

4. MODULE REFERENCE PRICES

A. Table 1: Module Reference Prices for the Licensed Designs under this Agreement and referring to the Technologies described in AppendiceX A-123:

Technology Module name	Licensed Design name	Reference Price (USD)	Annual Price Erosion
A14-LinFlexD Controller	L-LinFlexD-Controller	$[*]	[*]%

B. The Annual Price Erosion will be calculated from the time after the Third Amendment Effective Date, in twelve (12) month Increments.

5. FINDER'S FEE PROCEDURE

A. Leads: NXP has the ability to notify (in writing) any Interested candidate ("**Lead**") that they can purchase Licensed Designs from Silvaco.

B. Response time: As soon as NXP has forwarded such a Lead Silvaco has ten (10) of its working days, a working day be any weekday that Is not a Federal or State holiday in California ("**Silvaco Working Days**") to qualify the lead and inform NXP that the Lead will be commercially pursued. If not pursued, NXP Is entitled to look for other options to have this Lead taken care of.

C. Finder's Fee waiver: within the same 10 Silvaco Working Days following NXP's Lead notification, Silvaco may, If applicable, prove to NXP in writing that Silvaco had been already Informed about the same Lead for the same Licensed Design by a non-NXP entity, in such case the [*]% Finder's Fee bonus for NXP as described in Appendix E-3, Section 2.B, would not be applicable.

6. PREPAYMENTS PROCEDURE

A. Request for Prepayment: one (1) month prior to the Issuing deadline for a forthcoming Quarterly Report, Silvaco has the option to propose a Prepayment amount on top of the applicable Quarterly Revenue to be reported to NXP.

B. NXP Prepayment authorization: within 2 weeks following Silvaco's Prepayment request, NXP has the option to accept such Prepayment, in which case Silvaco shall add the Prepayment amount to the applicable Quarterly Report, in which case the Prepayment discount of [*] bonus will be granted to Silvaco as described In Appendix E-3, section 2.C.

Appendix F-12

Statement of Work for LinFlexD Controller ("LinFlexD")

I. Executive Summary

The primary objective of this project is to create a Licensed Design based on the Technology in order to sell a complete, high-quality, easy-to-integrate, product that can be sold to Customers consistent with the terms of this Agreement.

More specifically, the project has the following objectives:

To develop a Licensed Design with a set of features that are attractive to the automotive market
To develop appropriate sales and marketing collateral for the Licensed Design
To ensure the Licensed Design has a complete set of deliverables to allow each Customer to easily integrate it into their Licensed Product
To ensure the Licensed Design is technology independent so as to allow fabrication by Customers on any design foundry process using EDA tools from any of the major suppliers
To ensure the RTL code and other deliverables are of high quality, preserving to as great extent as possible the silicon-proven heritage of the Technology
To ensure the Licensed Design is designed in such a way that derivative products (including Verilog versions) can be created as easily and inexpensively as possible.

Silvaco shall be responsible for ensuring the success of these objectives and provide the engineers and other support necessary to implement the Licensed Design. NXP shall provide architectural expertise and technical assistance as agreed upon between the parties herein to complete the project.

II. Project Scope

The primary activities that will be undertaken are as follows:

1. The Licensed Design shall be packaged into the standard Xena Soft IP Package to provide an easy-to-use interface for configuring the IP and generation of EDA-neutral scripts for Integration Into each customer's design flow.

2. The design shall be partitioned as necessary such that blocks that can benefit from technology specific implementation (memories, etc.) are suitably isolated from technology-Independent regions.

3. Final RTL code shall be Verilog- and technology-independent.

4. The design shall be configurable so that Customers can with reasonable ease configure it for their application through the use of top-down generic parameters and/or constants.

5. Licensed Design shall contain implementation scripts for tools supporting the major EDA tools companies.

6. An integration testbench shall be reused from the Technology deliverables to as great extent as possible, Including reusable models, verification components and representative tests.

7. Customer documentation shall be developed using any NXP-supplied documentation as a starting point

8. The database (code, documentation, development specifications, etc.) from this project shall be incorporated into Silvaco release infrastructure to enable on-going support and maintenance of the Licensed Design, in the same manner as other IP products.

III. Major Milestone and Project Flow

A. **Licensed Design Specification**. During this period, Silvaco (with the support of NXP) shall determine the supported features of the Licensed Design, as well as its top level parameters and 1/0 interface.

B. **Sales and Marketing Collateral**. During this period Silvaco shall develop reasonably necessary sales collateral such as PowerPoint slides, whitepapers, web site, portal listings, and pricing guides.

C. **Licensed Design Development**. During this period Silvaco (with the support of NXP) shall develop the complete Licensed Design.

IV. Estimated Schedule and Silvaco Costs

The following is an estimate of the costs and timeframes associated with each of the major milestone phases. Silvaco will track and report efforts for each of these milestone phases and will use best commercial efforts to stay within these costs and timeframes. In the event this is not possible, Silvaco shall notify NXP of any delays and cost overruns and provide new estimates, which in no event shall exceed 50% of the estimates set forth in the table below.

It is assumed that no additional costs shall be incurred as part of this project such as travel, meals, equipment, professional advisor fees, etc. Should the parties mutually agree on the necessity of such expenses, then the party incurring the expense shall be compensated according to the terms outlined in and E-3.

T	Milestone	Schedule	Effort	Packaging Costs
0	Agreement date			

1	Licensed Design Specification	T0+2 weeks	[*]	[*]
2	Sales and Marketing Collateral	T0+6 weeks	[*]	[*]
3	Licensed Design Development	T1+8 weeks	[*]	[*]

V. Financial Summary

Silvaco shall be compensated for its expenses for the efforts described in this Statement of Work as outlined in Appendix E-3 at the rate of $[*] USD per person hour.

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

FOURTH AMENDMENT

TO

TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

BY AND BETWEEN

NXP SEMICONDUCTORS NETHERLANDS B.V.

AND

SILVACO, INC.

This Fourth Amendment to the Technology License and Distribution Agreement ("FOURTH AMENDMENT"), is effective of the last signature date below, and is entered into by and between:

NXP Semiconductors Netherlands B.V., a corporation duly incorporated under the laws of the Netherlands, having its principal office at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("**NXP**"), and

Silvaco, Inc., a corporation duly incorporated under the laws of Delaware, USA, having offices at 2811 Mission College Boulevard, 6th floor, Santa Clara, CA 95054, USA ("**Silvaco**"). Silvaco having assumed the obligations of, and rights enjoyed by, IPextreme pursuant to the Consent to Assignment executed by Silvaco on 4 August 2016, and NXP on 1 September 2016 (and so references below to IPextreme will be understood as also being to Silvaco).

Silvaco and NXP are collectively referred to as "**Parties**" and individually referred to as a "**Party**".

WHEREAS, NXP **and IPextreme** entered into a Technology License and Distribution Agreement dated 30 October 2015 (hereafter, the "Agreement") to license, market, promote, distribute and sell products and services based on certain NXP Technology, and NXP and IPextreme agreed to the assignment of that Agreement and its First Amendment to Silvaco; the Parties hereby amended that Agreement to include the additional NXP Technology identified herein.

WHEREAS, the Parties completed a Second Amendment, dated 18 October 2016 to add I3C technology to the Agreement; the Parties hereby amended that Agreement to include the additional NXP Technology identified herein.

WHEREAS, the Parties completed a Third Amendment, dated 31 October 2018 to add LinFlexD technology to the Agreement; the Parties hereby amended that Agreement to include the additional NXP Technology identified herein.

NOW, THEREFORE, in consideration of the mutual obligations and covenants contained herein, the Parties have agreed as follows:

1. The Agreement is amended to replace Section 11.0 in its entirety by:

   SECTION 11.0 EXPORT LAWS

   Each Party shall comply with all applicable federal, state and local laws, including, but not limited to those pertaining to U.S. Export Administration (including restrictions on certain military end uses and military end users as specified in Section 15 C.F.R. § 744.21) or the export and import control laws and regulations of other applicable jurisdictions and, in particular, will not in any way whatsoever export or re-export the technology, in whole or in part, without all required national and international

government licenses, approvals, or waivers. Licensee furthermore expressly agrees that it will not knowingly transfer, divert, export or re-export, directly or indirectly, any product, software, including software source code, or technical data restricted by such regulations or by other applicable national regulations, received from NXP hereunder, or any direct product of such software or technical data to any person, firm, entity country or destination to which such transfer, diversion, export or re-export is restricted or prohibited by applicable law, without obtaining prior authorization from the applicable competent government authorities to the extent required.

2. The Agreement is amended to add Appendices A-13, A-14 in their entirety, and which are incorporated herein by this reference.

3. The Agreement is amended to add Appendix E-4 in its entirety, and which is incorporated herein by this reference.

4. The Term of the Agreement will be hereby extended to 30 October 2023 under Clause 6.1.

5. Counterparts. This FOURTH AMENDMENT may be executed in one or more original counterparts, all of which together will constitute one agreement, and facsimile signatures will have the same effect as original signatures.

IN WITNESS WHEREOF, duly authorized representatives of each Party have executed this FOURTH AMENDMENT as of the Effective Date:

NXP Semiconductors Netherlands B.V.

By:

/s/Erwin de Bruijne

Name: Erwin de Bruijne

Title: Director

Date 22 March 2022

By:

/s/Jean Schreurs

Name: Jean Schreurs

Title: Director

Date 22 March 2022

Silvaco, Inc.

By:

/s/Babak Taheri

Name: Babak Taheri

Title: CEO

Date 03/22/2022

Appendix A-13

E200Z760 Core

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The e200z760 core is a high performance synthesizable Power Architecture™ core. For each of the following items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

2. COMPENSATION

A. License Fees:

Per Appendix E-4.

B. Running Royalty:

Per Appendix E-4.

C. Packaging Costs:

None

Appendix A-14

E200Z710 Core

1. TECHNICAL INFORMATION TO BE TRANSFERRED

The e200z710 core is a high performance synthesizable Power Architecture™ core. For each of the following items that have been developed by NXP, or may be developed in the future, NXP will transfer "as is" to Silvaco:

[*]

2. COMPENSATION

A. License Fees:

Per Appendix E-4.

B. Running Royalty:

Per Appendix E-4.

C. Packaging Costs:

None

Appendix E-4

Financial compensation to NXP by Silvaco

1. FINANCIAL PRINCIPLES

A. NXP shall be financially compensated for the Technology (as defined in Appendices A-13, A-14) used in Licensed Designs that are sublicensed to Customers by Silvaco.

B. NXP shall be financially compensated with a "**Finders Fee**" (as further explained in this Appendix E-4, Section 5) for introducing potential customers to Silvaco.

C. There shall be no payments from NXP to Silvaco.

D. All financial compensation to NXP shall be derived from the income Silvaco receives from the sale of Licensed Designs based on the collections from the Customer.

E. Revenue split: Income obtained by Silvaco (and reported via the Quarterly Report described in Appendix C) from selling Licensed Designs will be paid out to NXP by Silvaco on a quarterly basis ("**Quarterly Payout**") according to a split percentage further described in this Appendix E-4, Section 2).

F. Reference pricing: for all Licensed Design modules (described in Appendices A-13, A-14) NXP and Silvaco agreed reference selling prices ("**Module Reference Price**") listed in Table 1 as further provided in this Appendix E-4, Section 4.

G. Discounts: Silvaco has the freedom to negotiate commercially reasonable discounts with its prospects for each of the Licensed Designs, however, not to be below [*]% of the applicable Module Reference Price per use (adjusted for "**Annual Price Erosion**" also given in Table 1.) without prior written approval of NXP. Moreover, for any discounted Licensed Design sale, the applied discount must not be lower than that for any other product sale of Silvaco to the same customer which can be directly or indirectly linked to this sale.

2. REVENUE SPLIT

A. Regular cases: the baseline revenue split agreed upon is [*]% for Silvaco and [*]% for NXP.

B. Finder's fee NXP bonus: in case of a Licensed Design customer brought to Silvaco by NXP, a [*]% bonus payment ("Finder's Fee") is granted to NXP, leading to a revenue split of [*]% for Silvaco and [*]% for NXP. The terms and conditions for a Finder's Fee to be applicable are discussed in this Appendix E-4, Section 5.

3. INTENTIONALLY LEFT BLANK

4. MODULE REFERENCE PRICES

A. Table 1: Module Reference Prices for the Licensed Designs under this Agreement and referring to the Technologies described in Appendices A-13, A-14:

Technology Module name	Licensed Design name	Reference Price (USD)	Annual Price Erosion
A12-e200z760 Core	L-E200Z760-CORE	[*]	[*]
A13-e200z710 Core	L-E200Z710-CORE	[*]	[*]

B. The Annual Price Erosion will be calculated from the time after the Effective Date, in twelve (12) month increments.

C. No royalties per unit have to be applied to Licensed Designs. However if applied by Silvaco to Silvaco Customers those royalties have to be added to Silvaco Income as discussed in this Appendix E-4, Section 1- D.

5. FINDER'S FEE PROCEDURE

A. Leads: NXP has the ability to notify (in writing) any interested candidate ("**Lead**") that they can purchase Licensed Designs from Silvaco.

B. Response time: As soon as NXP has forwarded such a Lead Silvaco has ten (10) of its working days, a working day be any weekday that is not a Federal or State holiday in California ("**Silvaco Working Days**") to qualify the lead and inform NXP that the Lead will be commercially pursued. If not pursued, NXP is entitled to look for other options to have this Lead taken care of.

C. Finder's Fee waiver: within the same 10 Silvaco Working Days following NXP's Lead notification, Silvaco may, if applicable, prove to NXP in writing that Silvaco had been already informed about the same Lead for the same Licensed Design by a non-NXP entity, in such case the [*]% Finder's Fee bonus for NXP as described in Appendix E-4, Section 2.B, would not be applicable.

AMENDMENT
TO FLEXRAY DESIGN LICENSE AGREEMENT
AND
TO TECHNOLOGY LICENSE AND DISTRIBUTION AGREEMENT

This Amendment To FlexRay Design License Agreement and to Technology License and Distribution Agreement and (the "**Amendment**"), effective as of the date of last signature below ("**Amendment Effective Date**"), is made by and between NXP B.V., NXP Semiconductors Netherlands B.V., both Netherlands companies having their principal place of business at High Tech Campus Building 60, 5656 AG Eindhoven, Netherlands ("**NXP BV**") and ("**NXP Semi**"), respectively, and NXP USA, Inc, a Delaware corporation having its principal place of business at 6501 William Canon Drive West, Austin, Texas, 78735 ("**NXP USA**") (NXP BV, NXP Semi and NXP USA collectively "**NXP**") on the one hand; and Silvaco, Inc., a Delaware corporation having its principal place of business at 4701 Patrick Henry Drive, Building 23, Santa Clara, California 95054 ("**Silvaco**" or "**Company**") on the other hand (individually, each a "**Party**", collectively, the "**Parties**").

BACKGROUND

WHEREAS IPextreme Inc., a Delaware corporation, ("**IPextreme**") and Freescale Semiconductor, Inc. ("**Freescale**") entered into a FlexRay Design License Agreement effective as of August 22, 2005 related to a FlexRay protocol engine ("**FDLA**") subsequently amended as described below;

WHEREAS IPextreme and Freescale executed the following amendments to the FDLA:

A first amendment on October 16, 2006 related to Nexus port controller, ARM7 Nexus3, ARM9 Nexus3, and AHB Nexus technologies ("**FDLA-A1**");

A second amendment on November 14, 2006 related to ColdFire V2 and V4e core technologies ("**FDLA-A2**");

A third amendment on November 21, 2006 related to FPGA FlexRay technology ("**FDLA-A3**");

A fourth amendment on January 18, 2007 related to Zen0, Zen1, Zen3, Zen 6, INTC, and NAND memory controller technologies ("**FDLA-A4**");

A fifth amendment on March 4, 2008 related to ColdFire V1 technology ("**FDLA-A5**");

A sixth amendment on March 4, 2008 related to ColdFire V1 Lite technology ("**FDLA-A6**");

WHEREAS IPextreme and NXP Semi entered into a Technology License and Distribution Agreement effective as of October 30, 2015 related to USB 2.0 controller technology ("**TLDA**") subsequently amended as described below;

WHEREAS IPextreme and NXP Semi executed the following amendments to the TLDA:

A first amendment on April 20, 2016 related to a FlexCAN FD controller technology ("**TLDA-A1**");

A second amendment on October 18, 2016 related to an I3C basic slave controller, technology ("**TLDA-A2**");

WHEREAS NXP BV acquired Freescale on December 7, 2015;

WHEREAS, on November 4, 2016, Freescale merged into NXP Semiconductors USA, Inc, is the surviving entity of that merger, and simultaneously changed its name to NXP USA;

WHEREAS Silvaco acquired IPextreme on June 24, 2016;

WHEREAS NXP Semi consented to the assignment of the FDLA and of the TLDA, including all existing amendments to either agreement from IPextreme to Silvaco on September 1, 2016, effective June 24, 2016;

WHEREAS Silvaco and NXP Semi executed the following amendment to the TLDA:

A third amendment on November 10, 2018 related to LinFlexD controller technology ("**TLDA-A3**");

A fourth amendment on March 22, 2022 related to E200Z760 and E200Z710 Core technology ("**TLDA-A4")**

WHEREAS NXP Semi is the economic owner of the intellectual property rights of NXP BV;

WHEREAS, the Parties wish to modify certain terms of the FDLA and TLDA.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the Parties agree as follows:

Part 1 Amendment

1.1 Additional definitions:

"**Five Year Period**" means the period beginning April 1, 2024 and ending March 31, 2029.

1.2 Payment. In consideration for the amendments in this Amendment, Silvaco shall pay to NXP Semi the sum of [*] according to the following schedule:

1.2.1 [*] on or before May 15, 2024,
1.2.2 [*] on or before August 1, 2024,
1.2.3 [*] on or before November 1, 2024,
1.2.4 [*] on or before February 1, 2025,

1.2.5 [*] on or before May 1, 2025,
1.2.6 [*] on or before May 1, 2026,
1.2.7 [*] on or before May 1, 2027,
1.2.8 [*] on or before May 1, 2028.
1.2.9 For the avoidance of doubt, the foregoing amounts represent the entirety of the consideration to be paid by Silvaco to NXP under the TLDA and FDLA during the Five Year Period for the technology licensed under FDLA-A1, FDLA-A2, TLDA-A1, TLDA-A2 and TLDA-A3.

1.3 Payment Instructions. Payment must be made by electronic funds transfer in U.S. Dollars. Payments will be deemed to be made on the date credited to the following account:

[*]

1.4 Late Payments. Any payment hereunder that is delayed for more than 30 days beyond the due date will be subject to an interest charge of 1.5% per month compounded monthly on the unpaid balance payable in United States currency until paid. The foregoing interest payment will not affect NXP's right to terminate in accordance with Section 6.2 of the TLDA or Sections 7.3-7.4 of the FDLA.

1.5 Taxes. All fees and amounts payable by Company to NXP are exclusive of any value added tax, goods and service tax, sales tax, use tax, consumption tax or any other similar tax only (collectively referred to as "VAT"). If the transactions as described in this Amendment are subject to any applicable VAT, NXP shall provide Company with an invoice which specifically states this VAT. Provided NXP has stated VAT (as identified above) on an invoice Company will pay to NXP the VAT properly chargeable in respect of that payment. NXP will not invoice or otherwise attempt to collect from Company any taxes with respect to which Company has provided NXP with (i) a valid resale or exemption certificate, (ii) evidence of direct payment authority, or (iii) other evidence, reasonably acceptable to NXP, that such taxes do not apply. If any VAT or VAT surcharge deductions or withholdings are required by applicable law to be made from any of the sums payable, the Company shall pay such additional amount to NXP as well, after the VAT or VAT surcharge deduction or withholding has been made, leaving the NXP with the same amount as it would have been entitled to receive in the absence of any such requirement to make a VAT or VAT surcharge deduction or withholding. Each party will bear its own taxes imposed on it with respect to any payments made under this Agreement. In the event that the government of a country imposes any withholding taxes on payments made or to be made hereunder by Company to NXP and requires Company to withhold such taxes from the amount due, Company may deduct such taxes from the amount due provided that such taxes are paid to the appropriate tax authorities. In such event Company shall promptly furnish NXP with tax receipts issued by appropriate tax authorities to enable NXP to support (if applicable) a claim for credit against income taxes as well as to enable NXP to document, its compliance with tax obligations in any jurisdiction outside its home country.

1.6 Except as expressly modified by this Amendment, all other terms and conditions of the FDLA and TLDA shall remain in full force and effect.

Part 2 Amendment to FDLA and Amendments thereto

2.1 All capitalized terms used in this Part 2 but not otherwise defined in this Amendment shall have the respective meanings as set forth in the FDLA.

2.2 Customer Modification Rights. In FDLA, Section 5.2 is replaced in its entirety with the following new provisions:

5.2 FREESCALE grants to COMPANY and its SUBSIDIARIES a worldwide, nonexclusive, nonassignable license under the FREESCALE INTELLECTUAL PROPERTY RIGHTS to grant licenses to third parties,

(a) to prepare derivative works solely for the purpose of integrating a LICENSED PRODUCT into a customer's integrated circuit

(b) to make, including to have made, LICENSED PRODUCTS, and

(c) to use, sell offer to sell, or import LICENSED PRODUCTS.

2.3 FlexRay. In FDLA, Appendix A-1, Section 3, COMPENSATION, subparts A and B are replaced in their entirety with following new provision:

A. License Fees and Royalties:

COMPANY may offset [*] of the fees it receives for the LICENSED DESIGN to compensate it for performing the INTEGRATION SERVICES. During the Five Year Period COMPANY does not have to share any license fees with FREESCALE. Thereafter, and provided COMPANY has recovered [*] for performing INTEGRATION SERVICES, COMPANY will pay FREESCALE [*] of any license fee it receives. During the Five Year Period, no royalty is due under this Appendix. Thereafter, for each LICENSED PRODUCT, COMPANY will pay FREESCALE one half of any per unit royalty it receives from its customers.

B. Intentionally left blank.

2.4 ColdFire. In FDLA-A3, Section 3.B, Compensation, subparts A and B are replaced in its entirety with the following new provision:

A. License Fees and Royalties:

COMPANY may offset [*]of the fees it receives for the LICENSED DESIGN(s) to compensate it for performing the INTEGRATION SERVICES. During the Five Year Period COMPANY does not have to share any license fees with FREESCALE. Thereafter, and provided COMPANY has recovered [*] for performing INTEGRATION SERVICES, COMPANY will pay FREESCALE [*] of any license fee it receives. During the Five Year Period, no royalty is due under this Appendix. Thereafter, for each LICENSED PRODUCT, COMPANY will pay FREESCALE one half of any per unit royalty it receives from its customers.

B. Intentionally left blank.

2.5 Term. FDLA Section 7.1 is replaced in its entirety with the following new provision:

This AGREEMENT becomes effective as of the EFFECTIVE DATE and shall remain in force until the end of the Five Year Period.

2.6 Reporting; Audit. The following sentence shall be appended to the end of each of Sections 6.3, 6.4, and 6.5 of the FDLA:

The foregoing obligations of COMPANY shall not apply during the Five Year Period for the technology licensed under FDLA-A1, FDLA-A2 and FDLA-A3.

Part 3 Amendment to TLDA and Amendments thereto

3.1 All capitalized terms used in this Part 3 but not otherwise defined in this Amendment shall have the respective meanings as set forth in the TLDA.

3.2 Customer Modification Rights. Section 2.7, Modifications, is amended by replacing the first sentence thereof with the following sentence:

Except as required to integrate Technology into an IPextreme Customer's Licensed Design, no license is granted to IPExtreme or to any IPextreme Customer to modify, make derivative woks, adapt, or in any manner change the Technology or functionality of an integrated circuit based on the Licensed Design.

3.3 Term. Section 6.1 of the TLDA is replaced in its entirety with the following new provision:

This Agreement shall commence on the Effective Date and shall remain in force until the end of the Five Year Period.

3.4 FDCAN.

a. In TLDA-A1, Appendix E-2, Section 2, REVENUE SPLIT, subpart A is replaced in its entirety with the following new provision:

A. Regular cases: During the Five Year Period, revenue is not split between Silvaco and NXP. Thereafter, the baseline revenue split agreed upon is [*] for Silvaco and [*] for NXP.

b. Minimum pricing and erosion. In TLDA-A1, Appendix E-2, the following subparts are deleted in their entirety: 1.G., 1.H., 4.A., and 4.B.

3.5 I3C.

a. In TLDA-A2, Appendix E-2, Section 2, REVENUE SPLIT, subpart A is replaced in its entirety with the following new provision:

A. Regular cases: During the Five Year Period, revenue is not split between Silvaco and NXP. Thereafter, the baseline revenue split agreed upon is [*] for Silvaco and [*] for NXP.

b. Minimum pricing and erosion. In TLDA-A2, Appendix E-2 the following subparts are deleted in their entirety: 1.F., 1.G., 4.A., and 4.B.

3.6 LinFlexD.

a. In TLDA-A3, Appendix E-3, Section 2, REVENUE SPLIT, subpart A is replaced in its entirety with the following new provision:

A. Regular cases: During the Five Year Period, revenue is not split between Silvaco and NXP. Thereafter, the baseline revenue split agreed upon is [*] for Silvaco and [*] for NXP.

b. Minimum pricing and erosion. In TLDA-A2, Appendix E-3 the following subparts are deleted in their entirety: 1.F., 1.G., 4.A., and 4.B.

3.7 Reporting; Audit. The following sentence shall be appended to the end of each of Sections 5.2, 5.5, and 5.8 of the TLDA:

The foregoing obligations of IPextreme shall not apply during the Five Year Period for the technology licensed under TLDA-A1, TLDA-A2 and TLDA-A3.

[The remainder of this page has been intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed as of the date first above written.

Silvaco, Inc.	NXP B.V.
By: /s/ Babak Taheri	By: /s/ Timothy Shelhamer
Name: Babak Taheri	Name: Timothy Shelhamer
Title: CEO	Title: Authorized Signatory
Date: 4/11/24	Date: 4/10/24

NXP Semiconductors Netherlands B.V.

By: /s/ Jean Schreurs

Name: Jean Schreurs

Title: Director

Date: 4/10/24

NXP Semiconductors Netherlands B.V.

By: /s/ Erwin de Bruijne

Name: Erwin de Bruijne

Title: Director

Date: 4/10/24

NXP USA Inc.

By: /s/ Katherine Haight

Name: Katherine Haight

Title: VP, Commercial Legal Support

Date: 4/11/24

NXP USA Inc.

By: /s/ Jaime French

Name: Jaime French

Title: Senior Director, Legal

Date: 4/11/24

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the use in this Registration Statement on Form S-1 of Silvaco Group, Inc. of our report dated March 15, 2024 relating to the consolidated financial statements of Silvaco Group, Inc. (the “Company”) (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the adoption of Accounting Standards Codification Topic No. 326). We also consent to the reference to us under the heading “Experts” in such Registration Statement.

Campbell, California
April 12, 2024