

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2024

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 001-42043

Silvaco Group, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

7372
(Primary Standard Industrial
Classification Code Number)

27-1503712
(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)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	SVCO	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of August 5, 2024 the registrant had 26,294,217 shares of common stock, \$0.0001 par value per share, outstanding.

TABLE OF CONTENTS

	Page
PART I.	<u>1</u>
	<u>1</u>
Item 1.	<u>1</u>
	<u>1</u>
	<u>2</u>
	<u>3</u>
	<u>4</u>
	<u>6</u>
	<u>7</u>
Item 2.	<u>23</u>
Item 3.	<u>34</u>
Item 4.	<u>34</u>
PART II.	<u>36</u>
	<u>36</u>
Item 1.	<u>36</u>
Item 1A.	<u>36</u>
Item 2.	<u>68</u>
Item 3.	<u>68</u>
Item 4.	<u>68</u>
Item 5.	<u>69</u>
Item 6.	<u>70</u>

[SIGNATURES](#)

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in thousands except share and par value amounts)

	June 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 34,274	\$ 4,421
Short-term marketable securities	54,611	—
Accounts receivable, net	6,781	4,006
Contract assets, net	9,175	8,749
Prepaid expenses and other current assets	3,369	2,549
Deferred transaction costs	—	1,163
Total current assets	108,210	20,888
Long-term assets:		
Long-term marketable securities	13,392	—
Property and equipment, net	742	591
Operating lease right-of-use assets, net	2,144	1,963
Intangible assets, net	4,956	342
Goodwill	9,026	9,026
Long-term portion of contract assets, net	9,096	6,250
Other assets	1,845	1,825
Total long-term assets	41,201	19,997
Total assets	\$ 149,411	\$ 40,885
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,572	\$ 2,495
Accrued expenses and other current liabilities	23,748	10,255
Accrued income taxes	2,288	1,626
Deferred revenue, current	8,519	7,882
Operating lease liabilities, current	863	735
Related party line of credit	—	2,000
Vendor financing obligation, current	2,049	—
Total current liabilities	40,039	24,993
Long-term liabilities:		
Deferred revenue, non-current	3,337	5,071
Operating lease liabilities, non-current	1,266	1,198
Vendor financing obligation, non-current	2,738	—
Other long-term liabilities	185	221
Total liabilities	47,565	31,483
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value; 10,000,000 shares authorized, no shares issued and outstanding as of June 30, 2024; no shares authorized as of December 31, 2023	—	—
Common stock, \$0.0001 par value; 500,000,000 shares authorized; 26,294,217 shares issued and outstanding as of June 30, 2024; 25,000,000 shares authorized; 20,000,000 shares issued and outstanding as of December 31, 2023	3	2
Additional paid-in capital	129,837	—
(Accumulated deficit) Retained earnings	(25,618)	11,392
Accumulated other comprehensive loss	(2,376)	(1,992)
Total stockholders' equity	101,846	9,402
Total liabilities and stockholders' equity	\$ 149,411	\$ 40,885

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF (LOSS) INCOME
(Unaudited, in thousands except share and per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Revenue:				
Software license revenue	\$ 11,023	\$ 8,845	\$ 23,281	\$ 19,510
Maintenance and service	3,937	3,680	7,568	7,306
Total revenue	14,960	12,525	30,849	26,816
Cost of revenue	4,861	2,373	6,834	4,398
Gross profit	10,099	10,152	24,015	22,418
Operating expenses:				
Research and development	7,707	3,169	11,323	6,544
Selling and marketing	7,171	2,930	10,483	5,735
General and administrative	18,314	4,258	22,914	8,811
Estimated litigation claim	14,696	—	14,696	—
Total operating expenses	47,888	10,357	59,416	21,090
Operating (loss) income	(37,789)	(205)	(35,401)	1,328
Loss on debt extinguishment	(718)	—	(718)	—
Interest income	682	2	682	3
Interest and other expense, net	(349)	(240)	(554)	(572)
(Loss) income before income tax provision	(38,174)	(443)	(35,991)	759
Income tax provision (benefit)	214	(112)	1,019	276
Net (loss) income	\$ (38,388)	\$ (331)	\$ (37,010)	\$ 483
(Loss) earnings per share attributable to common stockholders:				
Basic and diluted	\$ (1.55)	\$ (0.02)	\$ (1.65)	\$ 0.02
Weighted average shares used in computing per share amounts:				
Basic and diluted	24,811,112	20,000,000	22,405,557	20,000,000

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(Unaudited, in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net (loss) income	\$ (38,388)	\$ (331)	\$ (37,010)	\$ 483
Other comprehensive (loss) income:				
Foreign currency translation adjustments	(199)	(134)	(384)	(46)
Comprehensive (loss) income	\$ (38,587)	\$ (465)	\$ (37,394)	\$ 437

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands except share amounts)

	Three Months Ended June 30, 2024						
	Common Stock		Additional Paid- in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	
	Shares	Amount					
Balance, March 31, 2024	20,000,000	\$ 2	\$ —	\$ 12,770	\$ (2,177)	\$ 10,595	
Issuance of common stock in connection with initial public offering, net of underwriting fees and commissions and net of deferred transaction costs of \$3,298	6,000,000	1	102,721	—	—	102,722	
Conversion of Micron Note into common stock	294,217	—	5,589	—	—	5,589	
Stock-based compensation expense	—	—	21,527	—	—	21,527	
Other comprehensive loss	—	—	—	—	(199)	(199)	
Net loss	—	—	—	(38,388)	—	(38,388)	
Balance, June 30, 2024	26,294,217	\$ 3	\$ 129,837	\$ (25,618)	\$ (2,376)	\$ 101,846	

	Three Months Ended June 30, 2023						
	Common Stock		Additional Paid- in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	
	Shares	Amount					
Balance, March 31, 2023	20,000,000	\$ 2	\$ —	\$ 12,522	\$ (1,819)	\$ 10,705	
Other comprehensive loss	—	—	—	—	(134)	(134)	
Net loss	—	—	—	(331)	—	(331)	
Balance, June 30, 2023	20,000,000	\$ 2	\$ —	\$ 12,191	\$ (1,953)	\$ 10,240	

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited, in thousands except share amounts)

	Six Months Ended June 30, 2024						
	Common Stock		Additional Paid- in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	
	Shares	Amount					
Balance, December 31, 2023	20,000,000	\$ 2	\$ —	\$ 11,392	\$ (1,992)	\$ 9,402	
Issuance of common stock in connection with initial public offering, net of underwriting fees and commissions and net of deferred transaction costs of \$3,298	6,000,000	1	102,721	—	—	102,722	
Conversion of Micron Note into common stock	294,217	—	5,589	—	—	5,589	
Stock-based compensation expense	—	—	21,527	—	—	21,527	
Other comprehensive loss	—	—	—	—	(384)	(384)	
Net loss	—	—	—	(37,010)	—	(37,010)	
Balance, June 30, 2024	26,294,217	\$ 3	\$ 129,837	\$ (25,618)	\$ (2,376)	\$ 101,846	

	Six Months Ended June 30, 2023						
	Common Stock		Additional Paid- in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	
	Shares	Amount					
Balance, December 31, 2022	20,000,000	\$ 2	\$ —	\$ 11,928	\$ (1,907)	\$ 10,023	
ASC 326 Transition Adjustment	—	—	—	(220)	—	(220)	
Balance, January 1, 2023	20,000,000	2	—	11,708	(1,907)	9,803	
Other comprehensive loss	—	—	—	—	(46)	(46)	
Net income	—	—	—	483	—	483	
Balance, June 30, 2023	20,000,000	\$ 2	\$ —	\$ 12,191	\$ (1,953)	\$ 10,240	

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Six Months Ended June 30,	
	2024	2023
Cash flows from operating activities:		
Net (loss) income	\$ (37,010)	\$ 483
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:		
Depreciation and amortization	475	309
Stock-based compensation expense	21,829	—
Provision for credit losses	143	43
Estimated litigation claim	14,696	—
Loss on debt extinguishment	718	—
Accretion of discount on marketable securities, net	(194)	—
Change in fair value of contingent consideration	(18)	341
Changes in operating assets and liabilities:		
Accounts receivable	(3,102)	759
Contract assets	(4,081)	290
Prepaid and other current assets	(882)	(13)
Other assets	(84)	—
Accounts payable	(2)	(1,068)
Accrued expenses	(1,321)	(652)
Accrued income taxes	687	(107)
Deferred revenue	(673)	1,368
Other current liabilities	34	830
Other long-term liabilities	(9)	(417)
Net cash (used in) provided by operating activities	(8,794)	2,166
Cash flows from investing activities:		
Purchases of marketable securities	(67,809)	—
Purchases of property and equipment	(56)	(202)
Net cash used in investing activities	(67,865)	(202)
Cash flows from financing activities:		
Proceeds from initial public offering, net of underwriting fees	106,020	—
Proceeds from issuance of convertible note, net of debt issuance costs	4,852	—
Proceeds from loan facility	4,250	—
Repayment of loan facility	(4,250)	—
Repayment of 2022 line of credit	(2,000)	—
Deferred transaction costs	(2,126)	—
Contingent consideration	(22)	(921)
Payments of vendor financing obligation	(300)	—
Net cash provided by (used in) financing activities	106,424	(921)
Effect of exchange rate fluctuations on cash and cash equivalents	88	(173)
Net increase in cash and cash equivalents	29,853	870
Cash and cash equivalents, beginning of period	4,421	5,478
Cash and cash equivalents, end of period	\$ 34,274	\$ 6,348

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

SILVACO GROUP, INC.
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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.

Initial public offering

In May 2024, the Company completed its initial public offering (“IPO”), in which it issued and sold 6,000,000 shares of its common stock at the public offering price of \$19.00 per share. The Company received gross proceeds of \$114.0 million, with \$106.0 million funded to the Company after deducting underwriting discounts and commissions of \$8.0 million.

2. Summary of Significant Accounting and Reporting Policies

Basis of presentation and consolidation

The accompanying condensed 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.

Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with GAAP have been omitted from these condensed consolidated financial statements, as permitted by Securities and Exchange Commission (“SEC”) rules and regulations. Accordingly, these condensed consolidated financial statements should be read in conjunction with its audited consolidated financial statements for the year ended December 31, 2023 and the related notes thereto included in the Company’s final prospectus relating to the initial public offering, dated May 8, 2024, relating to the registration statement on Form S-1 (File No. 333-278666), as amended, filed with the SEC on May 10, 2024, pursuant to Rule 424(b)(4) under the Securities Act of 1933, as amended (“Securities Act”). The December 31, 2023 condensed consolidated balance sheet was derived from the audited consolidated financial statements as of that date. In management’s opinion, the unaudited condensed consolidated financial statements have been prepared on the same basis as the annual financial statements and reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the condensed consolidated financial statements.

The results of operations for the three and six months ended June 30, 2024 are not necessarily indicative of the Company’s operating results to be expected for the full fiscal year or any other future interim or annual period.

Revision of prior financial statements

For the three and six months ended June 30, 2023, general and administrative expenses were understated by \$0.2 million and \$0.4 million, respectively, in the Company’s condensed consolidated statement of income (loss) and accrued expenses were understated by \$0.4 million in the Company’s condensed consolidated balance sheet due to certain accruals for professional services rendered not being recorded. The Company has determined that such errors are immaterial for the three and six months ended June 30, 2023 and has increased accrued expenses and other current liabilities and general and administrative expenses to correct these immaterial errors.

Emerging growth company status

The Company is an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act, until such time as those standards apply to private companies.

The Company will remain an emerging growth company until the earliest of (i) the last day of the first fiscal year (a) following the fifth anniversary of the consummation of the Company's initial public offering ("IPO"), (b) in which the Company's total annual gross revenue is at least \$1.2 billion, or (c) when the Company is deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th and (ii) the date on which the Company has issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

Use of estimates

The preparation of financial statements in conformity with GAAP 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 relate to revenue recognition. Other estimates include, but are not limited to, accounts receivable allowances, stock-based compensation expense, valuation of goodwill and other intangible assets, contingent consideration, derivative valuations, uncertain tax positions and income taxes. Actual results could differ from those estimates.

Stock split

On April 29, 2024, the Company effected a 1-for-2 reverse split of its common stock. Upon the effectiveness of the reverse stock split, (i) every two shares of outstanding common stock was combined into a single share of common stock, (ii) the number of shares of common stock to be granted upon the vesting of each outstanding restricted stock unit ("RSU") was proportionally decreased on a 2-for-1 basis, and (iii) the fair value of each outstanding RSU was proportionately increased on a 1-for-2 basis. All of the outstanding common stock share numbers, RSUs, RSU fair values and per share amounts have been adjusted, on a retroactive basis, to reflect this 1-for-2 reverse stock split for all periods presented. The par value per share and authorized number of shares of common stock were not adjusted as a result of the reverse stock split.

Concentrations of credit risk

As of June 30, 2024, three customers represented 25%, 13% and 10% of the Company's accounts receivable. As of December 31, 2023, two customers represented 20% and 15% of the Company's accounts receivable.

During the three and six months ended June 30, 2024, one customer represented 37% and 19% of the Company's total revenue, respectively. During the three and six months ended June 30, 2023, none of the Company's customers represented more than 10% of the Company's total revenue.

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 June 30, 2024 and December 31, 2023 exceeded insured limits.

As of June 30, 2024, \$8.8 million, or 26%, of the Company's cash and cash equivalents was maintained with one financial institution, where the Company's 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 failures of Silicon Valley Bank, Signature Bank and First Republic Bank and the UBS takeover of Credit Suisse. If the financial institutions with whom the Company does business were 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.

Marketable securities

The Company's investments in marketable securities have been classified and accounted for as available-for-sale and are recorded at estimated fair value. The Company's available-for-sale marketable securities are comprised of money market funds, U.S. treasury securities and U.S. government securities. The Company classifies its investments with original maturities of three months or less when acquired as cash equivalents. The Company classifies its marketable securities with original maturities of longer than three months but within twelve months as of the reporting date as short-term marketable securities. Marketable securities with maturities of twelve months or longer as of the reporting date are classified as long-term marketable securities. Purchase discounts are accreted using the effective interest method over the life of the related security and such accretion is included in interest income in the condensed consolidated statement of income (loss).

For available-for-sale debt securities in an unrealized loss position, the Company evaluates whether it intends to sell the security before the recovery of its amortized cost basis. If both of these criteria are met, the security's amortized cost basis is written down to fair value and a loss is recorded in interest expense and other, net on the condensed consolidated statements of income (loss), not to exceed the amount of the unrealized loss. The Company did not recognize any other-than-temporary impairment on its marketable securities during the six months ended June 30, 2024. Unrealized gains and losses (excluding other-than-temporary impairment and credit loss) on available-for-sale marketable securities are reported in other comprehensive loss on the condensed consolidated statements of comprehensive loss. Credit-related unrealized losses are recognized as an allowance on the consolidated balance sheets with a corresponding charge to interest expense and other, net on the condensed consolidated statements of income (loss). The cost of securities sold is based on the specific identification method and realized gains and losses are reported in interest income and interest expense and other, net on the consolidated statements of income (loss), respectively. The Company's unrealized gains and losses on available-for-sale marketable securities were not material for the three and six months ended June 30, 2024.

Allowance for credit losses

The Company assesses its ability to collect outstanding receivables and contract assets and provides customer-specific allowances, allowances for credit losses 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 Company's provision for credit losses was a recovery of \$0.1 million and a loss of \$0.1 million for the three and six months ended June 30, 2024, respectively, and losses of \$22,000 and \$43,000 for the three and six months ended June 30, 2023, respectively. The Company's allowance for expected credit losses on accounts receivable and contract assets, in the aggregate, was \$0.7 million and \$0.5 million as of June 30, 2024 and December 31, 2023, respectively.

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 occur. The Company recorded foreign currency translation adjustments of \$0.2 million and \$0.4 million for the three and six months ended June 30, 2024, respectively, and, \$0.1 million and \$46,000 for the three and six months ended June 30, 2023, 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 transaction losses of \$0.1 million and \$0.2 million for the three and six months ended June 30, 2024, respectively, and foreign exchange transaction losses of \$0.2 million and \$0.4 million for the three and six months ended June 30, 2023, respectively.

Accumulated other comprehensive loss

Accumulated other comprehensive loss is composed of foreign currency translation adjustments and unrealized gains and losses on marketable securities. Unrealized gains and losses on marketable securities were immaterial for the three and six months ended June 30, 2024.

Earnings per share

Basic earnings per share ("EPS") is computed based on the weighted average number of shares of common stock outstanding, including RSUs vested but not yet issued. Diluted EPS is computed based on the weighted average number of common shares outstanding increased by dilutive common stock equivalents attributable to RSU grants.

The following outstanding securities were excluded from the computation of diluted earnings per share because (i) the effect would be anti-dilutive for the three and six months ended June 30, 2024, and (ii) the securities were contingent upon conditions for issuance which were not satisfied as of June 30, 2023. See [Note 8](#), Restricted Stock Units for additional information.

	June 30,	
	2024	2023
RSU Grants	1,605,949	3,049,328

Recently adopted accounting pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ASU 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. This ASU simplifies accounting for convertible instruments by removing major separation models required under current GAAP. The Company adopted this standard on January 1, 2024 and the adoption did not impact the condensed consolidated financial statements.

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. Early adoption is permitted. The Company is currently evaluating the impact of this accounting standard update on the condensed consolidated financial statements and related 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 the condensed 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. The 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 upon invoicing or deferred revenue when invoicing precedes revenue recognition.

Customer contracts

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.

Transaction price allocated to the remaining performance obligations

As of June 30, 2024, approximately \$33.2 million of revenue is expected to be recognized from remaining performance obligations. Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized, which includes both deferred revenue and backlog. The Company's backlog represents installment billings for periods beyond the current billing cycle. The Company expects to recognize revenue on approximately 47% of these remaining performance obligations over the next 12 months, with the remaining 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 service 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.

During the three and six months ended June 30, 2024, the Company recognized revenue of \$1.8 million and \$4.1 million, respectively, that was included in the total deferred revenue balance as of December 31, 2023. All other activity in deferred revenue is due to the timing of invoices in relation to the timing of revenue during the three and six months ending June 30, 2024 as described above.

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 June 30, 2024 and December 31, 2023, the Company's operating lease right-of-use assets and operating lease liabilities were as follows:

	June 30, 2024	December 31, 2023
	<i>(in thousands)</i>	
Operating lease right-of-use assets, net	\$ 2,144	\$ 1,963
Operating lease liabilities, current	863	735
Operating lease liabilities, non-current	\$ 1,266	\$ 1,198

The components of operating lease cost during the periods presented were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>		<i>(in thousands)</i>	
Operating lease cost	\$ 247	\$ 243	\$ 477	\$ 499
Variable lease cost ⁽¹⁾	32	48	92	72
Total operating lease cost	\$ 279	\$ 291	\$ 569	\$ 571

(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 three and six months ended June 30, 2024 and 2023 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>		<i>(in thousands)</i>	
Cash paid for operating lease liabilities	\$ 241	\$ 244	\$ 463	\$ 500
Right-of-use assets obtained in exchange for lease obligations	\$ 166	\$ —	\$ 733	\$ —

	Six Months Ended June 30,	
	2024	2023
Weighted average remaining lease term (in years)	3.58	4.38
Weighted average discount rate	3.09 %	4.14 %

As of June 30, 2024 maturities of operating lease liabilities were as follows:

Year Ending December 31,	Amount
	<i>(in thousands)</i>
Remainder of 2024	\$ 448
2025	753
2026	412
2027	234
2028	195
Thereafter	195
Total lease payments	\$ 2,237
Less: imputed interest	(108)
Total operating lease liabilities	\$ 2,129
Current portion of lease liability	\$ 863
Non-current portion of lease liability	\$ 1,266

5. Goodwill and Intangible Assets

There were no changes in goodwill during the three and six months ended June 30, 2024 and 2023.

As of June 30, 2024 intangible assets were classified as follows:

Intangible assets:	Weighted Average Amortization Period (in years)	June 30, 2024		
		Gross Carrying Value	Accumulated Amortization	Net Carrying Value
		<i>(in thousands)</i>		
Developed technology	5	\$ 800	\$ (587)	\$ 213
Customer relationships	5	90	(82)	8
Non-compete agreements	5	20	(15)	5
Licensed IP	5	4,979	(249)	4,730
Total intangible assets		\$ 5,889	\$ (933)	\$ 4,956

Intangible assets:	Weighted Average Amortization Period (in years)	December 31, 2023		
		Gross Carrying Value	Accumulated Amortization	Net Carrying Value
		<i>(in thousands)</i>		
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

On April 11, 2024, the Company amended and reinstated its license agreement to offer semiconductor intellectual property (“SIP”) developed in partnership with NXP (the “NXP IP”) for total cash consideration of \$6.0 million, to be paid over 5 years. The NXP IP has a net book value of \$4.7 million as of June 30, 2024 and a useful life of 5 years, which is the length of the license agreement. The Company recorded a corresponding vendor financing obligation related to the license agreement with NXP. See [Note 7](#), Debt and Financing Obligations, for further discussion.

Amortization expense for intangible assets was \$0.3 million and \$0.4 million during the three and six months ended June 30, 2024, respectively, of which \$0.2 million was recognized in cost of revenue for each of the three and six months ended June 30, 2024, with the remainder recognized in research and development expense in the Company’s condensed consolidated statement of income (loss). Amortization expense for intangible assets was \$0.1 million and \$0.2 million during the three and six months ended June 30, 2023, respectively, all of which was recognized in research and development expense on the Company’s condensed consolidated statement of income (loss).

As of January 1, 2024, the Company removed the carrying value of \$4.3 million of fully amortized intangible assets which at time of removal had nil net book value.

As of June 30, 2024, estimated future amortization expense for the intangible assets reflected above was as follows:

Year Ending December 31,	Amount (in thousands)
Remainder of 2024	\$ 587
2025	1,132
2026	996
2027	996
2028	996
Thereafter	249
Total net carrying value of intangible assets	\$ 4,956

6. Related Parties

The Company has a commercial lease agreement with Kipee International, Inc., a related party controlled by Katherine Ngai-Pesic, who is the Company's founding principal stockholder and chairperson of the Board of Directors, for Silvaco's corporate office in Santa Clara, California. In connection with this lease arrangement, the Company recorded rent expense of \$54,000 and \$0.1 million during the three and six months ended June 30, 2024 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 \$0.2 million as of June 30, 2024.

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 Ms. Ngai-Pesic. In connection with these lease arrangements, the Company recorded rent expense of \$74,000 and \$0.1 million during the three and six months ended June 30, 2024 and 2023, respectively. The Company's right-of-use asset and operating lease liability under the NHC lease, which expires on December 31, 2029, is \$1.0 million as of June 30, 2024. The Company's right-of-use asset and operating lease liability under the NHF lease, which expires on April 30, 2026, is \$0.1 million as of June 30, 2024.

On June 13, 2022, Silvaco entered into a \$4.0 million line of credit with Ms. Ngai-Pesic (the "2022 Credit Line"). In connection with this line of credit, the Company recorded interest expense of \$22,000 and \$0.1 million during the three and six months ended June 30, 2024, respectively, and \$47,000 and \$0.1 million during the three and six months ended June 30, 2023, respectively. The outstanding amounts due under the 2022 Credit Line were repaid in full and the 2022 Credit Line was terminated in May of 2024. See [Note 7](#), Debt and Financing Obligations, for further discussion.

In February of 2012, Gu-Guide LP, a real estate entity controlled by Ms. Ngai-Pesic, Bank of the West and Silvaco Group, Inc., as guarantor, 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 was 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. had guaranteed the repayment of the outstanding amounts under the Loan. The Loan was repaid in July of 2024.

A member of the Company's board of directors also serves as chairman of the board for one of Silvaco's customers. The Company recorded \$28,000 and \$0.6 million in software revenue from this customer during the three and six months ended June 30, 2024, respectively, and \$10,000 and \$0.1 million in software revenue from this customer during the three and six months ended June 30, 2023, respectively. As of June 30 2024, the balance of the Company's contract assets with this customer was \$0.3 million.

7. Debt and Financing Obligations

On June 13, 2022, Silvaco entered into the 2022 Credit Line which bears interest at a rate of prime plus 1% per annum. As of December 31, 2023, the principal balance of the 2022 Credit Line was \$2.0 million. In May 2024, the outstanding balance under the 2022 Credit Line was repaid in full, and the 2022 Credit Line was terminated. The Company did not recognize any gain or loss on the extinguishment of the 2022 Credit Line.

In December 2023, the Company entered into a loan facility with East West Bank (the "East West Bank Loan") which had a maturity date of December 14, 2025 and provided 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 Company drew \$4.3 million on the East West Bank Loan during the six months ended June 30, 2024 and repaid the \$4.3 million in full in May 2024. Accordingly, the Company recognized a loss on debt extinguishment of \$0.1 million during the three and six months ended June 30, 2024. The Company additionally recorded interest expense of \$0.1 million and \$0.2 million during the three and six months ended June 30, 2024, respectively, with respect to the East West Bank Loan. In May 2024, the East West Bank Loan was terminated.

On April 11, 2024, the Company amended its license agreement with NXP, pursuant to which the Company financed the purchase of licensed IP and recorded an associated vendor financing obligation, which has a balance of \$4.8 million as of June 30, 2024. The Company determined that the vendor financing obligation had an imputed interest rate of 9%, which is reflective of its borrowing rate with similar terms to that of the license agreement, and recognized interest expense of \$0.1 million for the three and six months ended June 30, 2024. The Company's vendor financing obligation is comprised of the following payments as of June 30, 2024:

For the year ending December 31,	Amount
	<i>(in thousands)</i>
Remainder of 2024	\$ 600
2025	1,500
2026	1,200
2027	1,200
2028	1,200
Total undiscounted cash flows	\$ 5,700
Less: Imputed interest	913
Present value of vendor financing obligation	\$ 4,787
Vendor financing obligation, current	2,049
Vendor financing obligation, non-current	\$ 2,738

On April 16, 2024, the Company entered into a note purchase agreement with Micron Technology Inc. ("Micron"), which has been and is a customer of the Company, pursuant to which the Company issued to Micron a senior subordinated convertible promissory note in the principal amount of \$5.0 million (the "Micron Note"). The Micron Note was contractually subordinated to the East West Bank Loan through a subordination agreement with East West Bank, but was senior to all of our other existing debt and was senior to any new future debt incurred (other than any undrawn amount available under the East West Bank Loan while it was outstanding). The Micron Note accrued interest at a rate of 8% per annum, with principal and interest due upon maturity three years after the date of issuance. Upon the consummation of the IPO, the Micron Note was mandatorily convertible into a number of shares equal to the outstanding principal amount and accrued interest divided by a conversion price equal to (a) the price of the Company's common stock issued in the initial public offering, times (b) 0.90. The Company determined that the feature that allowed for settlement of the Micron Note into a variable number of shares required bifurcation as a derivative liability and should be initially measured at fair value. The Company recorded a derivative liability of \$0.5 million and a corresponding debt discount of \$0.5 million on the issuance date.

On May 13, 2024, the Micron Note was converted into 294,217 shares of the Company's common stock in connection with the consummation of the IPO. The shares issued pursuant to the Micron Note have been registered for resale under the Securities Act. Upon the settlement of the Micron Note, the derivative liability was settled and the Company remeasured it to its fair value and recorded a loss on derivative remeasurement of \$28,000 during the three and six months ended June 30, 2024, which was recorded in interest and other expense, net on the Company's condensed consolidated statements of income (loss). As a result, the fair value of the shares issued of \$5.6 million was recognized in additional paid-in capital and the Company settled the debt, inclusive of the derivative liability, and recognized a loss on debt extinguishment of \$0.7 million during the three and six months ended June 30, 2024.

8. Restricted Stock Units

On March 18, 2024, the number of shares of common stock reserved for issuance of RSU under the Company's 2014 Stock Incentive Plan (the "2014 Plan") was increased to 4.6 million and the term of the 2014 Plan was extended to March 18, 2034. On April 26, 2024, in connection with the Company's IPO, the Company's board of directors approved and adopted, subject to stockholder approval, the 2024 Stock Incentive Plan ("2024 Plan"), and the Company's stockholders approved the 2024 Plan on April 29, 2024. The 2024 Plan became effective on May 8, 2024 and supersedes the Company's 2014 Plan. All shares granted under the 2014 Plan that are forfeited and shares reserved for future issuance under the 2014 Plan are included in the share reserve under the 2024 Plan. As of June 30, 2024, the number of shares of common stock reserved for future issuance under the 2024 Plan was 3,739,932.

The Company issues RSUs to its employees, directors and service providers. The RSUs awarded under the 2014 Plan generally had two vesting requirements, a time and service-based requirement (the "Time-Based Requirement") and a liquidity event requirement (the "Liquidity Event Requirement"). The Liquidity Event Requirement would 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 IPO, in either case, within 10 years of the grant date. The Liquidity Event Requirement was satisfied upon the consummation of the IPO on May 13, 2024. 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 Requirement satisfied on the grant date. The Company recognizes its stock-based compensation expense ratably over the requisite service period, which is generally four years.

The following table summarizes the Company's RSU activity pursuant to the 2014 Plan and the 2024 Plan for the six months ended June 30, 2024:

	Weighted Average		
	Grant Date Fair Value	Remaining Contract Term (in years)	Number of Awards
Balance as of December 31, 2023	\$ 7.20	6.56	3,398,276
Granted	15.69	9.62	980,059
Vested ⁽¹⁾	7.16	5.54	(2,679,397)
Forfeited / canceled	8.64	6.74	(92,989)
Balance as of June 30, 2024	\$ 12.13	9.09	1,605,949

(1) Vested RSUs as of June 30, 2024 are excluded from the calculation of the Company's common stock outstanding on the Company's condensed consolidated balance sheet and condensed consolidated statements of stockholders' equity as of June 30, 2024, due to the pending issuance of the common stock which are subject to lock-up agreements.

During the three and six months ended June 30, 2024 prior to the IPO, the grant date fair value of the RSU awards was derived from an interpolation based on the contemplated listing price of the Company's anticipated IPO. For RSUs granted after the IPO, the Company used the publicly listed stock price as the grant date fair value.

Historically the Company has not recorded stock-based compensation expense for the RSUs, as the Liquidity Event Requirement was not deemed probable. The Company has valued the RSUs granted using historical estimates of the fair value of the Company's common stock. Upon the consummation of the Company's IPO, the Liquidity Event Requirement was met, and the Company incurred stock-based compensation expense associated with (i) RSUs granted to active employees and service providers, (ii) RSUs granted to certain former employees and service providers whose RSUs become vested in connection with the Liquidity Event, and (iii) the acceleration of the Time Based Requirement for certain awards to executive officers, senior management and directors as a result of the Liquidity Event.

In November 2023, the Company issued 30,000 RSUs with certain performance-based conditions, in addition to the Time-Based Requirement, and a grant date fair value of \$0.4 million. The Company estimates the probability of achievement of applicable performance goals for performance-based RSUs in each reporting period and recognizes related stock-based compensation expense using the straight line attribution method. The amount of stock-based compensation expense recognized in any period can vary based on the attainment or expected attainment of the various performance goals. If such performance goals are not ultimately met, no stock-based compensation expense is recognized and any previously recognized compensation expense is reversed. The Company recognized stock-based compensation expense of \$0.1 million related to these RSUs during the three and six months ended June 30, 2024.

In November 2023, the Company issued 75,000 RSUs with certain market-based conditions, in addition to the Time Based Requirement and the Liquidity Event Requirement, and a grant date fair value of \$0.6 million. The Company estimated the fair value of market-based RSUs on the grant date using a Monte Carlo simulation model. The vesting of the market-based RSUs is contingent on achieving a minimum volume-weighted average stock price ("VWAP"). The assumptions used in the Monte Carlo simulation model to determine the grant date fair value were a daily VWAP of \$8.92, a volatility of 50%, and a risk-free rate of 4.3%. The Company recognized stock-based compensation expense of \$0.1 million related to these RSUs during the three and six months ended June 30, 2024.

As of June 30, 2024, the Company had unrecognized stock-based compensation expense of \$17.8 million which is expected to be recognized over a weighted average period of 2.7 years.

During the three and six months ended June 30, 2024, the Company recorded stock-based compensation expense of \$21.8 million 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. The following table summarizes stock-based compensation expense by function for the three and six months ended June 30, 2024:

	Amount
	<i>(in thousands)</i>
General and administrative	\$ 11,745
Research and development	4,065
Selling and marketing	3,552
Cost of revenue	2,467
	<u>\$ 21,829</u>

During the three and six months ended June 30, 2024, the Company's compensation committee approved the issuance of a variable number of RSUs as a portion of the employee bonus program for the fiscal year 2024. The number of RSUs issued will be calculated as the volume-weighted average price of the Company's common stock upon the bonus being finalized after the end of the fiscal year. As the Company has an obligation to issue a variable number of shares for a fixed monetary amount, the RSUs will be accounted for as liability-classified awards and subsequently re-measured to their fair value at each reporting date. The Company recognized stock-based compensation expense of \$0.3 million associated with the liability-classified RSUs during the three and six months ended June 30, 2024, with a corresponding increase to accrued expenses of \$0.3 million. If the bonus was finalized on June 30, 2024, the Company would be required to issue 33,637 RSUs to its employees.

9. Income Taxes

The Company's provision for income taxes consists principally of state and local, and foreign taxes, as applicable, in amounts necessary to align the Company's year-to-date tax provision with the effective rate that it expects to achieve for the full year.

During the three and six months ended June 30, 2024, the Company recorded an income tax provision of \$0.2 million and \$1.0 million, respectively, as compared to an income tax benefit of \$0.1 million and provision of \$0.3 million, respectively, during the three and six months ended June 30, 2023. The effective tax rate for the three and six months ended June 30, 2024 was (1)% and (3)%, respectively, as compared to 25% and 36%, respectively, for the three and six months ended June 30, 2023.

The Company determines its income tax provision for interim periods using an estimate of its annual effective tax rate adjusted for discrete items occurring during the periods presented. The primary difference between its effective tax rate and the federal statutory rate is attributable to state income taxes, foreign income taxes, the effect of certain permanent differences, and full valuation allowance against net deferred tax assets.

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 six months ended June 30, 2024, 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.

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.

10. 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 the purpose of allocating resources and evaluating financial performance. As such, the Company's operations constitute a single operating segment and one reportable segment.

11. 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 three and six months ended June 30, 2024 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.

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., as guarantor, 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. The Loan was repaid and the Company was released from the guarantee in July of 2024.

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 December 2020, the Company sought declaratory relief in the California Superior Court to clarify its obligations regarding the earnout payments due to the selling shareholders of Nangate, Inc. ("Nangate") following its acquisition by the Company in 2018. In February 2021, two of the selling shareholders of Nangate, along with a third cross-complainant (collectively, the "Nangate Parties") filed a cross-complaint against the Company, as well as one current and one former member of the Company's board of directors (the "Co-Defendants"). The cross-complaint alleged breach of contract, fraud, and negligent misrepresentation among other causes of action.

In January 2022, the Nangate Parties filed a third amended cross-complaint against the Company, as well as one current and one former member of the Company's board of directors, seeking \$20.0 million in damages for breach of contract, fraud, and unfair business practices, as well as punitive damages.

On July 23, 2024, a jury awarded the Nangate Parties \$11.3 million in damages under breach of contract related claims, including breach of contract and breach of the covenant of good faith and fair dealing, along with the potential for an award of statutory pre-judgment interest, and court and litigation related costs and certain expert expenses subject to the Nangate Parties establishing the legal right to them and to be determined by the court. The interest, if awarded, is estimated to be between \$3.4 million to \$3.8 million as of June 30, 2024 (collectively with the \$11.3 million damages award, the "Contract Damages"). As a result, during the three and six months ended June 30, 2024, the Company recorded a charge to estimated litigation claim and accrued expenses and other current liabilities of \$14.7 million for the amount awarded to the Nangate Parties. The Company believes it has strong grounds for appeal on multiple issues and is actively evaluating its legal strategies and options, including the possibility of post-trial motions and appeals.

The jury also found the Company and the Co-Defendants liable for certain of the fraud claims and awarded the Nangate parties \$6.6 million. Punitive damages relating to the fraud claims, including false promise and intentional misrepresentation, will be considered at a hearing scheduled for August 16, 2024. Any punitive damages awarded would be incremental to the \$6.6 million awarded for the fraud claims (collectively, the "Fraud Damages"). After the hearing, the Nangate Parties will have the option to choose either the Contract Damages or the Fraud Damages, but in no circumstances will the Nangate Parties receive both remedies. Given the uncertainty surrounding the potential range of punitive damages and therefore, whether the Fraud Damages will exceed the Contract Damages, the Company at this time cannot reasonably estimate the possible loss or range of loss, if any, that might arise from the Fraud Damages, and above-mentioned court and litigation related costs and certain expert expenses that may be awarded. Therefore, the Company has not recorded any charges for potential liability related to Fraud Damages, and court and litigation related costs and certain expert expenses that may be awarded in this matter.

On August 19, 2021, Aldini AG (“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’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 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. Aldini 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 filed a notice of appeal on April 27, 2023. The Company is vigorously defending itself in this litigation. The Company accordingly has not recorded a charge for this contingency.

The Company’s software solutions and technology are subject to sanctions, export control and import laws and regulations of the United States and other applicable jurisdictions, including the Export Administration Regulations, U.S. Customs regulations, and economic and trade sanctions regulations administered by the U.S. Department of Treasury’s Office of Foreign Assets Control (“OFAC”). Between August 2019 and June 2022, the Company filed various voluntary disclosures with U.S. 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 certain OFAC sanctions programs, specifically the download of certain Company software modules by users in U.S. embargoed countries.

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 to OFAC in October 2023.

In July 2024, OFAC issued a cautionary letter regarding the sanctions matters instead of pursuing a civil monetary penalty or taking other enforcement action. However, OFAC reserved the right to take future enforcement action should additional information warrant renewed attention.

On September 22, 2023 and May 3, 2024, the Company received demand letters 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.

12. Fair Value of Financial Instruments

Fair value measurements

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), such as quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions.
- 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.

Financial instruments measured at fair value on a recurring basis

The following tables present the Company's financial assets and liabilities that are measured at estimated fair value on a recurring basis as of June 30, 2024 and December 31, 2023:

Fair value measurements as of June 30, 2024				
(in thousands)				
	Carrying value	Level 1	Level 2	Level 3
Financial assets:				
Cash equivalents:				
Money market funds	17,905	17,905	—	—
U.S. treasury securities	4,729	—	4,729	—
Total	22,634	17,905	4,729	—
Available-for-sale marketable securities:				
U.S. treasury securities	45,771	—	45,771	—
U.S. government agencies securities	22,232	—	22,232	—
Total	68,003	—	68,003	—
Total	\$ 90,637	\$ 17,905	\$ 72,732	\$ —
Liabilities:				
Contingent consideration	72	—	—	72
Total	\$ 72	\$ —	\$ —	\$ 72
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

The Company's level 1 financial assets were valued using quoted prices in active markets for identical assets as of June 30, 2024. The Company's level 2 financial assets were determined based on third-party inputs which are either directly or indirectly observable, such as reported trades and broker or dealer quotes. The Company's marketable securities have an amortized cost that approximates fair value as of June 30, 2024.

Pursuant to the Company's stock purchase agreements for the acquisition of Nangate in March of 2018 and PolyEDA Cloud LLC ("PolyEDA") in January of 2021, 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 other 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.

The following is a reconciliation of changes in the liability related to contingent consideration as of December 31, 2023 and June 30, 2024:

	<i>(in thousands)</i>
Fair value as of January 1, 2023	\$ 792
Change in fair value	325
Earn-out payments	(502)
Milestone achievement	(500)
Foreign exchange	(3)
Fair value as of December 31, 2023	\$ 112
Change in fair value	(18)
Earn-out payments	(22)
Fair value as of June 30, 2024	\$ 72

Nonfinancial assets such as property and equipment, operating lease right-of-use assets, intangibles assets, and goodwill are evaluated for impairment and adjusted to fair value using Level 3 inputs only when impairment is recognized.

13. Subsequent Events

On July 23, 2024, a jury awarded the Nangate Parties \$11.3 million in damages under breach of contract related claims, including breach of contract and breach of the covenant of good faith and fair dealing, along with the potential for an award of statutory pre-judgment interest, and court and litigation related costs and certain expert expenses subject to the Nangate Parties establishing the legal right to them and to be determined by the court. Refer to [Note 11](#), Commitments and Contingencies, for further discussion.

ITEM 2. 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 set forth in our final prospectus relating to the initial public offering, dated May 8, 2024 (the "Prospectus"), relating to the Registration Statement on Form S-1 (File No. 333-278666), as amended ("Registration Statement"), filed with the SEC on May 10, 2024, pursuant to Rule 424(b) (4) under the Securities Act of 1933, as amended ("Securities Act"). This discussion contains forward-looking statements that involve risks, uncertainties and assumptions set forth in our Registration Statement. 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 this Quarterly Report on Form 10-Q titled "Risk Factors." Forward-looking statements may be identified by words including, but not limited to, "may," "will," "could," "would," "can," "should," "anticipate," "expect," "intend," "believe," "estimate," "project," "continue," "forecast," "likely," "potential," "seek," or the negatives of such terms and similar expressions. The information included herein represents our estimates and assumptions as of the date of this filing. Unless required by law, we undertake no obligation to update publicly any forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. All subsequent written or oral forward-looking statements attributable to the Company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The following discussion and analysis also includes a discussion of certain non-GAAP financial measures. For a description and reconciliation of the non-GAAP measures discussed in this section, see "Key Operating Indicators and Non-GAAP Financial Measures."

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 75% of our revenue for the three and six months ended June 30, 2024, respectively, and 71% and 73% of our revenue for the three and six months ended June 30, 2023, respectively. Associated maintenance and services revenue accounted for 26% and 25% of our revenue for the three and six months ended June 30, 2024, respectively, and 29% and 27% of our revenue for the three and six months ended June 30, 2023, respectively. For the three and six months ended June 30, 2024, approximately 91% and 89% of our bookings came from existing customers, respectively, and 9% and 11% came from new customers, respectively. For the three and six months ended June 30, 2023, approximately 81% and 79% of our bookings came from existing customers, respectively, and 19% and 21% came from new customers, respectively.

During the three and six months ended June 30, 2024, we continued to experience an increase in bookings and revenue. Our bookings were \$19.5 million and \$35.6 million for the three and six months ended June 30, 2024, respectively, and \$14.4 million and \$30.0 million for the three and six months ended June 30, 2023, respectively. Our revenue was \$15.0 million and \$30.8 million for the three and six months ended June 30, 2024, respectively, and \$12.5 million and \$26.8 million for the three and six months ended June 30, 2023, respectively.

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 quarterly report 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. 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. Additionally, we currently, and have in the past, and may in the future, partner with third parties to expand our product offerings to our customers. 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% 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 52% and 37% of revenue for the three and six months ended June 30, 2024, respectively, and 25% and 24% of revenue for the three and six months ended June 30, 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.

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. 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 standard SIPs 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 three and six months ended June 30, 2024 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. We recognized \$2.5 million of stock-based compensation expense in cost of revenue during the three and six months ended June 30, 2024. Gross profit represents revenue less cost of revenue.

Operating Expenses

Our operating expenses consist of research and development, selling and marketing, general and administrative expenses, and estimated litigation claim. Personnel costs are the most significant component of our operating expenses and consist of salaries, benefits, stock-based compensation expense, 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 expense, but after the consummation of the IPO, we recognized an aggregate of \$21.8 million of stock-based compensation expense during the three and six months ended June 30, 2024. Of the aggregate stock-based compensation expense recorded during the three and six months ended June 30, 2024, we recognized \$11.7 million, \$4.1 million, and \$3.6 million in general and administrative expense, research and development expense, and selling and marketing expense, respectively.

Research and Development

Our research and development expense consists primarily of personnel costs comprised of salaries, stock-based compensation expense, and 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, stock-based compensation expense, 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, stock-based compensation expense, 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.

Estimated Litigation Claim

Estimated litigation claim expense consists of legal costs that became probable and reasonably estimable associated with our obligations with respect to the earnout payment due to the selling shareholders of Nangate, Inc. ("Nangate"), along with a third cross-complainant (collectively, the "Nangate Parties"). On July 23, 2024, a jury awarded the Nangate Parties \$11.3 million in damages under breach of contract related claims, including breach of contract and breach of the covenant of good faith and fair dealing, along with the potential for an award of statutory pre-judgment interest, and court and litigation related costs and certain expert expenses subject to the Nangate Parties establishing the legal right to them and to be determined by the court.

Loss on Debt Extinguishment

Loss on debt extinguishment includes losses incurred related to the extinguishment of our note purchase agreement with Micron Technology Inc. and our loan facility with East West Bank.

Interest Income

Interest income includes interest income earned on our cash and marketable securities balances and accretion of the purchase discounts on our marketable securities balances.

Interest and Other Expense, Net

Interest and other expense, net includes 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 three and six months ended June 30, 2024 and 2023:

	Three Months Ended June 30,			Six Months Ended June 30,		
	2024	2023	% Change	2024	2023	% Change
	<i>(in thousands)</i>					
Revenue:						
Software license revenue	\$ 11,023	\$ 8,845	25 %	\$ 23,281	\$ 19,510	19 %
Maintenance and service	3,937	3,680	7 %	7,568	7,306	4 %
Total revenue	14,960	12,525	19 %	30,849	26,816	15 %
Cost of revenue	4,861	2,373	105 %	6,834	4,398	55 %
Gross profit	10,099	10,152	(1)%	24,015	22,418	7 %
Operating expenses:						
Research and development	7,707	3,169	143 %	11,323	6,544	73 %
Selling and marketing	7,171	2,930	145 %	10,483	5,735	83 %
General and administrative	18,314	4,258	330 %	22,914	8,811	160 %
Estimated litigation claim	14,696	—	100 %	14,696	—	100 %
Total operating expenses	47,888	10,357	362 %	59,416	21,090	182 %
Operating (loss) income	(37,789)	(205)	18,334 %	(35,401)	1,328	(2,766)%
Loss on debt extinguishment	(718)	—	100 %	(718)	—	100 %
Interest income	682	2	34,000 %	682	3	22,633 %
Interest and other expense, net	(349)	(240)	45 %	(554)	(572)	(3)%
(Loss) income before income tax provision	(38,174)	(443)	8,517 %	(35,991)	759	(4,842)%
Income tax provision (benefit)	214	(112)	(291)%	1,019	276	269 %
Net (loss) income	\$ (38,388)	\$ (331)	11,498 %	\$ (37,010)	\$ 483	(7,763)%

The following table summarizes our results of operations as a percentage of total revenue for the three and six months ended June 30, 2024 and 2023:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(as a percentage of total revenue)</i>			
Revenue:				
Software license revenue	74 %	71 %	75 %	73 %
Maintenance and service	26 %	29 %	25 %	27 %
Total revenue	100 %	100 %	100 %	100 %
Cost of revenue	32 %	19 %	22 %	16 %
Gross profit	68 %	81 %	78 %	84 %
Operating expenses:				
Research and development	52 %	25 %	37 %	24 %
Selling and marketing	48 %	23 %	34 %	21 %
General and administrative	122 %	34 %	74 %	33 %
Estimated litigation claim	98 %	— %	48 %	— %
Total operating expenses	320 %	83 %	193 %	79 %
Operating income	(253)%	(2)%	(115)%	5 %
Loss on debt extinguishment	(5)%	— %	(2)%	— %
Interest Income	5 %	— %	2 %	— %
Interest and other expense, net	(2)%	(2)%	(2)%	(2)%
Income before income tax provision	(255)%	(4)%	(117)%	3 %
Income tax provision	1 %	(1)%	3 %	1 %
Net income	(257)%	(3)%	(120)%	2 %

Comparison of the Three and Six Months Ended June 30, 2024 and 2023

Revenue

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>			
Revenue:				
Software license revenue	\$ 11,023	\$ 8,845	\$ 23,281	\$ 19,510
Maintenance and service	3,937	3,680	7,568	7,306
Total revenue	\$ 14,960	\$ 12,525	\$ 30,849	\$ 26,816

Total revenue increased \$2.4 million, or 19%, to \$15.0 million for the three months ended June 30, 2024 from \$12.5 million for the three months ended June 30, 2023. The growth in total revenue was driven primarily by a \$3.1 million increase in revenue associated with our TCAD and EDA tools, partially offset by a \$0.7 million decline in revenue derived from IP sales, as a result of the lapse in the previous contractual arrangement with NXP. Software license revenue increased \$2.2 million, or 25%, to \$11.0 million for the three months ended June 30, 2024 from \$8.8 million for the three months ended June 30, 2023. Maintenance and service revenue increased \$0.3 million, or 7%, to \$3.9 million for the three months ended June 30, 2024 from \$3.7 million for the three months ended June 30, 2023.

Total revenue increased \$4.0 million, or 15%, to \$30.8 million for the six months ended June 30, 2024 from \$26.8 million for the six months ended June 30, 2023. The growth in total revenue was driven primarily by a \$5.4 million increase in revenue associated with our TCAD and EDA tools, including a significant FTCO™ digital-twin modeling product sale to a memory customer, partially offset by a \$1.4 million decline in revenue derived from IP sales, as a result of the lapse in the previous contractual arrangement with NXP. Software license revenue increased \$3.8 million, or 19%, to \$23.3 million for the six months ended June 30, 2024 from \$19.5 million for the six months ended June 30, 2023. Maintenance and service revenue increased \$0.3 million, or 4%, to \$7.6 million for the six months ended June 30, 2024 from \$7.3 million for the six months ended June 30, 2023.

Gross Profit

Gross profit declined \$0.1 million, or 1%, to \$10.1 million for the three months ended June 30, 2024 from \$10.2 million for the three months ended June 30, 2023. Gross profit margin decreased to 68% for the three months ended June 30, 2024 from 81% for the three months ended June 30, 2023. Excluding the impact of \$2.5 million in non-cash stock-based compensation expense recorded upon the consummation of the IPO, gross profit increased \$2.4 million, or, 24%, to \$12.6 million for the three months ended June 30, 2024 from \$10.2 million for the three months ended June 30, 2023, and gross profit margin increased to 84% for the three months ended June 30, 2024 from 81% for the three months ended June 30, 2023, primarily due to the increase of TCAD and EDA tool sales partially offset by a decrease in IP sales.

Gross profit increased \$1.6 million, or 7%, to \$24.0 million for the six months ended June 30, 2024 from \$22.4 million for the six months ended June 30, 2023. Gross profit margin decreased to 78% for the six months ended June 30, 2024 from 84% for the six months ended June 30, 2023. Excluding the impact of \$2.5 million in non-cash stock-based compensation expense recorded upon the consummation of the IPO, gross profit increased \$4.1 million, or 18%, to \$26.5 million for the six months ended June 30, 2024 from \$22.4 million for the six months ended June 30, 2023, and gross profit margin increased to 86% for the six months ended June 30, 2024 from 84% for the six months ended June 30, 2023, primarily due to the increase of TCAD and EDA tool sales partially offset by a decrease in IP sales.

Operating Expenses

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>			
Operating expenses				
Research and development	\$ 7,707	\$ 3,169	\$ 11,323	\$ 6,544
Selling and marketing	7,171	2,930	10,483	5,735
General and administrative	18,314	4,258	22,914	8,811
Estimated litigation claim	14,696	—	14,696	—
Total operating expenses	\$ 47,888	\$ 10,357	\$ 59,416	\$ 21,090

Research and Development Expenses

Research and development expenses were \$7.7 million and \$3.2 million for the three months ended June 30, 2024 and 2023, respectively. The increase of \$4.5 million, or 143%, was primarily due to \$4.1 million of stock-based compensation expense recorded as a result of the consummation of the IPO and a \$0.4 million increase in software maintenance expense.

Research and development expenses were \$11.3 million and \$6.5 million for the six months ended June 30, 2024 and 2023, respectively. The increase of \$4.8 million, or 73%, was primarily due to \$4.1 million of stock-based compensation expense recorded as a result of the consummation of the IPO, a \$0.4 million increase in software maintenance expense, and a \$0.3 million increase in consulting, simulation and engineering support expenses.

Selling and Marketing Expenses

Selling and marketing expenses were \$7.2 million and \$2.9 million for the three months ended June 30, 2024 and 2023, respectively. The increase of \$4.2 million, or 145%, was primarily due to \$3.6 million of stock-based compensation expense recorded as a result of the consummation of the IPO, a \$0.3 million increase in salary and benefits expenses, primarily related to increased headcount and merit increases, a \$0.2 million increase in commission expenses and a \$0.1 million increase in trade show related expenses.

Selling and marketing expenses were \$10.5 million and \$5.7 million for the six months ended June 30, 2024 and 2023, respectively. The increase of \$4.7 million, or 83%, was primarily due to \$3.6 million of stock-based compensation expense recorded as a result of the consummation of the IPO, a \$0.7 million increase in salary and benefits expenses, primarily related to increased headcount and merit increases, a \$0.1 million increase in professional fees, and a \$0.1 million increase in commission expenses.

General and Administrative Expenses

General and administrative expenses were \$18.3 million for the three months ended June 30, 2024 as compared to \$4.3 million during the three months ended June 30, 2023. The increase of \$14.1 million, or 330%, was primarily due to \$11.7 million of stock-based compensation expense recorded as a result of the consummation of the IPO and a \$2.4 million increase in legal, professional and audit fees.

General and administrative expenses were \$22.9 million for the six months ended June 30, 2024 as compared to \$8.8 million during the six months ended June 30, 2023. The increase of \$14.1 million, or 160%, was primarily due to \$11.7 million of stock-based compensation expense recorded as a result of the consummation of the IPO, and a \$2.5 million increase in legal, professional and audit fees.

Estimated Litigation Claim

Estimated litigation claim was \$14.7 million for the three and six months ended June 30, 2024. The estimated litigation claim consists of a \$14.7 million charge recorded due to a jury's verdict to award the Nangate Parties \$11.3 million with additional statutory pre-judgment interest, and court and litigation related costs and certain expert expenses (the "Nangate Litigation").

Loss on debt extinguishment

On May 13, 2024, the Micron Note was converted into 294,217 shares of our common stock in connection with the consummation of the IPO. As a result, \$5.6 million was recognized in additional paid-in capital and we recognized a loss on debt extinguishment of \$0.6 million during the three and six months ended June 30, 2024. We also recognized a loss on debt extinguishment of \$0.1 million associated with the settlement of our East West Bank Loan. See [Note 7](#) of our condensed consolidated financial statements for further discussion.

Interest Income

Interest income reflects interest earned and accretion on our cash and cash equivalents and marketable securities.

Interest and Other Expense, Net

Interest and other expense, net, was \$0.3 million and \$0.2 million for the three months ended June 30, 2024 and 2023, respectively, and \$0.6 million for each of the six months ended June 30, 2024 and 2023, respectively. Interest and other expense, net, includes interest expense associated with cost of borrowings, vendor financing, leases, vendor financing or interest-bearing agreements, foreign exchange gains and losses and changes in the fair value of contingent consideration associated with legacy acquisitions. The increase in interest and other expense, net, for the three months ended June 30, 2024 was primarily due an increase in the amount of interest-bearing debt outstanding during the period. The Company does not have any interest-bearing debt outstanding as of June 30, 2024.

Income Tax Provision

Income tax provision (benefit) was a provision of \$0.2 million and a benefit of \$0.1 million for the three months ended June 30, 2024 and 2023, respectively, and provisions of \$1.0 million and \$0.3 million for the six months ended June 30, 2024 and 2023, respectively. See [Note 9](#) of our condensed consolidated financial statements for 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 we recognize revenues on the later satisfaction of the obligations to our customers, and not at the time of sale to a customer. Reported bookings may be subject to adjustments and potential cancellations prior to the satisfaction of the obligations to our customers. For the three and six months ended June 30, 2024, we recorded \$19.5 million and \$35.6 million in bookings, respectively, as compared to \$14.4 million and \$30.0 million in bookings for the three and six months ended June 30, 2023, respectively.

The following table sets forth our bookings for each of the three month periods during the trailing five quarters as of June 30, 2024.

	Jun 30, 2024	Mar 31, 2024	Dec 31, 2023	Sep 30, 2023	Jun 30, 2023
Bookings	\$ 19,478	\$ 16,112	\$ 15,565	\$ 12,487	\$ 14,362

Non-GAAP Operating Income and Non-GAAP Net Income

We report our financial results in accordance with GAAP. However, our management believes that non-GAAP operating income and non-GAAP net income 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 certain transaction-related costs, IPO preparation costs, acquisition-related estimated litigation claim and legal costs, stock-based compensation expense, amortization of acquired intangible assets, impairment charges, and executive severance costs. We define non-GAAP net income (loss) as our GAAP net income (loss) adjusted to exclude certain costs, including certain transaction-related costs, IPO preparation costs, acquisition-related estimated litigation claim and legal costs, stock-based compensation expense, amortization of acquired intangible assets, impairment charges, executive severance costs, change in fair value of contingent consideration, foreign exchange (gain) loss, loss on debt extinguishment, and the income tax effect on non-GAAP items. 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. By excluding certain items that may not be indicative of our recurring core operating results, we believe that non-GAAP operating income (loss) and non-GAAP net income (loss) provide meaningful supplemental information regarding our performance.

The following table reconciles operating income to non-GAAP operating income.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>			
Operating (loss) income	\$ (37,789)	\$ (205)	\$ (35,401)	\$ 1,328
Add:				
Acquisition-related estimated litigation claim and legal costs ⁽¹⁾	16,717	233	17,311	469
Amortization of acquired intangible assets ⁽²⁾	296	74	366	175
IPO preparation costs ⁽³⁾	607	711	873	979
Stock-based compensation expense	21,829	—	21,829	—
Non-GAAP operating income	<u>\$ 1,660</u>	<u>\$ 813</u>	<u>\$ 4,978</u>	<u>\$ 2,951</u>

The following table reconciles net income to non-GAAP net income.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
	<i>(in thousands)</i>			
Net (loss) income	\$ (38,388)	\$ (331)	\$ (37,010)	\$ 483
Add:				
Acquisition-related estimated litigation claim and legal costs ⁽¹⁾	16,717	233	17,311	469
Amortization of acquired intangible assets ⁽²⁾	296	74	366	175
IPO preparation costs ⁽³⁾	607	711	873	979
Stock-based compensation expense	21,829	—	21,829	—
Change in fair value of contingent consideration ⁽⁴⁾	(10)	65	(18)	341
Foreign exchange loss	114	168	244	415
Loss on debt extinguishment ⁽⁵⁾	718	—	718	—
Income tax effect of non-GAAP adjustments ⁽⁶⁾	(43)	(81)	(76)	(104)
Non-GAAP net income	<u>\$ 1,840</u>	<u>\$ 839</u>	<u>\$ 4,237</u>	<u>\$ 2,758</u>

(1) Reflects litigation-related expenses incurred in connection with our acquisitions and the Nangate Litigation estimated claim accrual.

(2) Reflects the amortization of intangible assets attributable to our acquisitions.

(3) Reflects one-time costs including third-party professional services fees and costs incurred in connection with, and in preparation for, the IPO. Such costs do not include those costs that were considered direct and incremental to the IPO and therefore capitalized as deferred transaction costs.

(4) Includes the change in fair value of contingent consideration recorded in connection with our acquisitions.

(5) Reflects loss incurred on conversion of the Micron Note to common stock in connection with the IPO and the loss incurred on the extinguishment of the East West Bank Loan.

(6) 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, borrowings from Ms. Ngai-Pesic and other lenders, and the net proceeds from the sale of our common stock in the IPO. Our primary sources of liquidity are cash, cash equivalents and marketable securities including cash generated from operations. As of June 30, 2024, we had \$34.3 million in cash and cash equivalents, of which \$3.4 million was held by our foreign subsidiaries, \$54.6 million in short-term marketable securities and \$13.4 million in long-term marketable securities.

On June 13, 2022, we entered into a \$4.0 million line of credit (“the 2022 Credit Line”) with Ms. Ngai-Pesic bearing interest at a rate of prime plus 1% per annum. As of December 31, 2023, the principal balance of the 2022 Credit Line was \$2.0 million. In May 2024, the 2022 Credit Line was repaid in full and terminated.

In December 2023, we entered into a loan facility with East West Bank (“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 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. We drew \$4.3 million on the East West Bank Loan during the six months ended June 30, 2024 and repaid the outstanding amounts due under the East West Bank Loan in full during the three and six months ended June 30, 2024. In May 2024, the East West Bank Loan was repaid in full and terminated.

On April 11, 2024, we amended our license agreement with NXP, pursuant to which we recorded an associated vendor financing obligation of \$4.8 million. We determined that the vendor financing obligation had an imputed interest rate of 9%, which is reflective of our borrowing rate with similar terms to that of the license agreement.

On April 16, 2024, we entered into a note purchase agreement with Micron Technology, Inc. ("Micron"), which has been and is a customer of Silvaco, pursuant to which we issued to Micron a senior subordinated convertible promissory note in the principal amount of \$5.0 million ("the Micron Note"). The Micron Note accrued interest at a rate of 8% per annum with principal and interest due upon maturity three years after the date of issuance. On May 13, 2024, the Micron Note was converted into 294,217 shares of our common stock in connection with the consummation of the IPO.

On May 13, 2024, we sold 6,000,000 shares of common stock in the IPO at a price to the public of \$19.00 per share. The gross proceeds from the IPO were \$114.0 million, with \$106.0 million funded to us after deducting underwriting discounts and commissions of \$8.0 million.

We believe our cash and marketable securities balances, which include the proceeds received in connection with the IPO and the \$5.0 million received in connection with the Micron Note 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 June 30, 2024, \$8.8 million, or 26%, of our cash and cash equivalents was maintained with one financial institution, 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 and 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.

Cash Flows

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

	Six Months Ended June 30,	
	2024	2023
	<i>(in thousands)</i>	
Cash provided by (used in):		
Operating activities	\$ (8,794)	\$ 2,166
Investing activities	(67,865)	(202)
Financing activities	106,424	(921)
Effect of exchange rate fluctuations on cash and cash equivalents	88	(173)
Net change in cash	\$ 29,853	\$ 870

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 six months ended June 30, 2024 was \$8.8 million compared to \$2.2 million of net cash provided by operating activities for the six months ended June 30, 2023. The \$11.0 million decrease in net cash provided by operating activities was primarily due to a \$10.4 million decline in net working capital mainly driven by changes in contract assets and accounts receivable during the six months ended June 30, 2024, and the payment of litigation-related expenses incurred in connection with our acquisitions.

Investing Activities

Net cash used for investing activities for the six months ended June 30, 2024 and 2023 was \$67.9 million and \$0.2 million, respectively. During the six months ended June 30, 2024, we used cash of \$67.8 million for purchases of marketable securities and \$0.1 million on purchases of property and equipment. During the six months ended June 30, 2023, we used \$0.2 million of cash to purchase property and equipment.

Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2024, was \$106.4 million. We received \$106.0 million in net proceeds from the IPO, \$4.9 million in net proceeds from the Micron Note, and \$4.3 million from our drawdown on the East West Bank Loan, partially offset by the \$4.3 million repayment of the East West Bank Loan, payment of \$2.1 million related to deferred transaction costs incurred in connection with the IPO, the \$2.0 million repayment of the 2022 Line of Credit and \$0.3 million of payments for our vendor financing obligation. Net cash used in financing activities for the six months ended June 30, 2023 was \$0.9 million due to contingent consideration paid in connection with our Nangate and PolyEDA acquisitions.

Effects of Exchange Rate Fluctuations on Cash and Cash Equivalents

The effects of exchange rate fluctuations on cash were \$88,000 and \$0.2 million for the six months ended June 30, 2024 and June 30, 2023, respectively.

Contractual Obligations

Following the consummation of the IPO, our financial commitments for contractual obligations include our operating lease commitments, our vendor financing obligation, and contingent consideration. Refer to [Note 4](#), Leases, [Note 7](#), Debt and Financing Obligations, and [Note 12](#), Fair Value of Financial Instruments, of our condensed consolidated financial statements for further discussion.

Critical Accounting Policies and Significant Judgments and Estimates

There have not been any material changes during the three and six months ended June 30, 2024 to the methodology applied by management for critical accounting policies previously disclosed in our audited financial statements set forth in our Registration Statement. For further discussion of our critical accounting policies and estimates, please refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" in our Registration Statement.

ITEM 3. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company as defined by Rule 12b-2 of the Securities Exchange Act of 1934 and are not required to provide the information under this item.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, regardless of how well they were designed and are operating, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were not effective at the reasonable assurance level due a material weakness in connection with the preparation of our consolidated financial statements, related to a lack of formalized accounting processes over internal control over financial reporting ("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.

Changes in Internal Control Over Financial Reporting

There were no changes in our ICFR identified in connection with the evaluation required by Rule 13a-15(f) or 15d-15(f) of the Exchange Act during the period covered by this Quarterly Report, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

The effectiveness of any system of ICFR is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting can only provide reasonable, not absolute, assurances that its objectives will be met. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but we cannot assure that such improvements will be sufficient to provide us with effective ICFR.

PART II. OTHER INFORMATION

ITEM 1. 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 are estimable or will have, individually or in the aggregate, a material effect on our core operations of providing TCAD, EDA software and SIP solutions. 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, refer to note 11 of our unaudited condensed consolidated financial statements for the three and six months ended June 30, 2024 for further information.

ITEM 1A. RISK FACTORS.

A description of the risks and uncertainties associated with our business is set forth below. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and related notes. Our business, results of operations, financial condition, and prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe to be material. If any of the risks actually occur, our business, results of operations, financial condition and prospects could be harmed. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

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., Coventor, Inc., a Lam Research company, Cadence Design Systems, Inc., 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 cyclical nature 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 41% and 52% of our revenue was derived from our customers in APAC for the three and six months ended June 30, 2024, respectively.

During the three and six months ended June 30, 2024, 17% and 14% of our revenue was derived from our customers in China, respectively. During the three and six months ended June 30, 2023, 29% and 23% of our revenue was derived from our customers in China, respectively. 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.

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
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- 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. During the three and six months ended June 30, 2024, 49% and 62%, respectively of our revenue was from international customers. During the three and six months ended June 30, 2023, 72% and 69%, 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.

During the three and six months ended June 30, 2024, 17% and 14% of our revenue, respectively, was derived from our customers in China. Our operating expenses in China were \$0.8 million and \$1.5 million, respectively, for the three and six months ended June 30, 2024. During the three and six months ended June 30, 2023, 29% and 23% of our revenue, respectively, was derived from our customers in China. Our operating expenses in China were \$0.9 million and \$1.3 million, respectively, for the three and six months ended June 30, 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. Unless and until the conflict in Ukraine is stabilized, we do not intend to reopen office locations in either country.

As of June 30, 2024, we had 3 employees in Russia and 6 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 situation remains 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.

During the three and six months ended June 30, 2024, 49% and 62%, respectively, of our revenue was from international customers. During the three and six months ended June 30, 2023, 72% and 69%, 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.

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 future debt, equity or other applicable financing arrangements. We believe that our cash flow from operations and existing cash and marketable securities balances 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 June 30, 2024, \$8.8 million, or 26%, of our cash was maintained with one financial institution, where 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 forecast 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.

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 the IPO in May of 2024, we became 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 members of her immediate family collectively holding more than 50% of the voting power of our company, following the completion of the IPO in May, we became 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 the IPO, 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 her immediate family members 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 her immediate family members 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 stockholder may conflict with or differ from your interests as a stockholder

The Pesic Family (as defined below) own 20,000,000 shares of our common stock, collectively representing approximately 70% of our total outstanding common stock. For so long as the Pesic Family 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 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, the Pesic Family 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 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 or bylaws 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 has the ability to designate up to four nominees for our board of directors and one non-voting board observer, depending on ownership levels.

The Pesic Family'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.

The Pesic Family are not prohibited from selling a controlling interest in us to a third party and may do so without the approval of other stockholders and without providing for a purchase of shares of common stock held by other stockholders. Accordingly, the shares of common stock held by other stockholders may be worth less than they would be if the Pesic Family did not maintain voting control over us.

The interests of the Pesic Family could conflict with or differ from the interests as a holder of other stockholders. For example, the concentration of ownership held by the Pesic Family could delay, defer or prevent a change of control of us or impede a merger, takeover or other business combination that other stockholders may otherwise view favorably. So long as the Pesic Family 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, or other members of the Pesic Family, 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 March 31, 2024, we had drawn down \$2.0 million from the 2022 Credit Line. The 2022 Credit Line was repaid in connection with the IPO in May of 2024. We also lease several office facilities from entities controlled by Ms. Ngai-Pesic pursuant to which we recorded a rent expense of \$0.1 million and \$0.2 million during the three and six months ended June 30, 2024, respectively. Because we are controlled by the Pesic Family, 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 [Note 6](#) to our condensed consolidated financial statements 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, or other members of the Pesic Family, 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. In July 2024, OFAC issued a cautionary letter regarding the sanctions matters instead of pursuing a civil monetary penalty or taking other enforcement action. However, OFAC reserved the right to take future enforcement action should additional information warrant renewed attention. If either BIS and OFAC chooses to bring an enforcement action against us in relation to any potential violations in the future, 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 we sought declaratory relief in the California Superior Court to clarify our obligations regarding the earnout payments due to the selling shareholders of Nangate, Inc. ("Nangate") following its acquisition by us in 2018. In February 2021, two of the selling shareholders of Nangate, along with a third cross-complainant (collectively, the "Nangate Parties") filed a cross-complaint against us, as well as one current and one former member of our board of directors (the "Co-Defendants"). The cross-complaint alleged breach of contract, fraud, and negligent misrepresentation among other causes of action.

In January 2022, the Nangate Parties filed a third amended cross-complaint against us, as well as one current and one former member of the Company's board of directors, seeking \$20.0 million in damages for breach of contract, fraud, and unfair business practices, as well as punitive damages.

On July 23, 2024, a jury awarded the Nangate Parties \$11.3 million in damages under breach of contract related claims, including breach of contract and breach of the covenant of good faith and fair dealing, along with the potential for an award of statutory pre-judgment interest, and court and litigation related costs and certain expert expenses subject to the Nangate Parties establishing the legal right to them and to be determined by the court. The interest, if awarded, is estimated to be between \$3.4 million to \$3.8 million as of June 30, 2024 (collectively with the \$11.3 million damages award, the "Contract Damages"). As a result, during the three and six months ended June 30, 2024, we recorded a charge to estimated litigation claim and accrued expenses and other current liabilities of \$14.7 million for the amount awarded to the Nangate Parties. We believe we have strong grounds for appeal on multiple issues and are actively evaluating our legal strategies and options, including the possibility of post-trial motions and appeals.

The jury also found us and the Co-Defendants liable for certain of the fraud claims and awarded the Nangate Parties \$6.6 million. Punitive damages relating to the fraud claims, including false promise and intentional misrepresentation, will be considered at a hearing scheduled for August 16, 2024. Any punitive damages awarded would be incremental to the \$6.6 million awarded for the fraud claims (collectively, the "Fraud Damages"). After the hearing, the Nangate

Parties will have the option to choose either the Contract Damages or the Fraud Damages, but in no circumstances will the Nangate Parties receive both remedies. Given the uncertainty surrounding the potential range of punitive damages and therefore, whether the Fraud Damages will exceed the Contract Damages, we cannot reasonably estimate the possible loss or range of loss, if any, that might arise from the Fraud Damages, and above-mentioned court and litigation related costs and certain expert expenses that may be awarded. Therefore, the Company has not recorded any charges for potential liability related to punitive damages and court and litigation related costs and certain expert expenses that may be awarded in this matter.

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 the IPO in May of 2024 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 the IPO 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, the Pesic Family, including upon the expiration of contractual lock-up agreements, and other market participants, in whom ownership of our common stock may be concentrated following the IPO;
- 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. 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 previously 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.

Until the IPO, we 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 expense, which we did not incur 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 are 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 also apply to us following the IPO. 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 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.

We are 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 is 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.

An active trading market for our common stock may not be sustained and you may not be able to sell your shares at or above the IPO price, or at all.

An active market in our common stock 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 is not sustained, it may be difficult for you to sell shares you purchase in the IPO 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, 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.

Future issuances of our common stock or sales of a substantial number of shares of our common stock in the public market following the IPO, 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 in the future. 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 the IPO, we had approximately 28,529,318 shares of common stock outstanding, including 2,235,101 vested shares pursuant to the 2014 Plan, and 294,217 shares issued to Micron in connection with the mandatory conversion of the Micron Note. All of the shares of common stock sold in the IPO and issued to Micron are 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, are subject to the lock-up agreements with the underwriters of the IPO. We have registered all shares of common stock that we may issue under equity compensation plans and therefore, those shares can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements. 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.

Other than shares which are vested as of the end of the lock-up period, we do not anticipate satisfying the anticipated tax withholding and remittance obligations as a result of vesting of RSUs granted to our employees. 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. 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 may 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 may 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 have broad discretion in the use of the net proceeds to us from the IPO and may not apply the proceeds in ways that increase our market value or improve our operating results.

Our management has considerable discretion in the application of the net proceeds from the IPO, 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 the IPO 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 used a portion of the proceeds of the IPO to repay in full (i) the 2022 Credit Line payable to Ms. Ngai-Pesic and (ii) the East West Bank Loan. Until the net proceeds we receive are fully used, they may be placed in investments that do not produce income or that lose value. Additionally, we have broad discretion in the use of the net proceeds from the IPO when determining whether to satisfy the anticipated tax withholding and remittance obligations related to vesting of RSUs granted to our employees 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 these vested RSUs.

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 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 provide 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 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 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 does 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 do 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 the IPO.

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 are 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 ICFR 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 the IPO, (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 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

Since January 1, 2021, we have granted to our employees, consultants, and other service providers, restricted stock units representing an aggregate of 3,401,159 shares of our common stock, under our 2014 Plan and 2024 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 who 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.

On April 16, 2024, the Company entered into a note purchase agreement with Micron, which has been and is a customer of the Company, pursuant to which the Company issued the Micron Note. The Micron Note accrued interest at the rate of 8% annually, with principal and interest due upon maturity three years after the date of issuance. The Micron Note was mandatorily convertible into a number of shares equal to (i) the outstanding principal amount and accrued interest divided by (ii) a conversion price equal to (a) the price of the Company's common stock issued in an initial public offering, times (b) 0.90 if the initial public offering of common stock was consummated on or prior to May 31, 2024. On May 13, 2024, the Micron Note was converted into 294,217 shares of the Company's common stock in connection with the consummation of the IPO. The shares issued pursuant to the Micron Note have been registered for resale under the Securities Act.

On May 13, 2024, the Company completed the IPO of an aggregate of 6,000,000 shares of Common Stock at a price to the public of \$19.00 per share pursuant to a Registration Statement on Form S-1 that was declared effective on May 8, 2024 (File No. 333-278666). Jefferies LLC and TD Securities (USA) LLC acted as joint book-running managers for the IPO, Needham & Company, LLC as lead manager, and Craig-Hallum Capital Group LLC and Rosenblatt Securities Inc. acted as co-managers for the IPO. The gross proceeds to the Company from the IPO were \$114.0 million, with \$106.0 million funded to the Company after deducting underwriting discounts and commissions.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of Silvaco Group, Inc. (filed as Exhibit 3.1 of the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 13, 2024)
3.2	Amended and Restated Bylaws of Silvaco Group, Inc. (filed as Exhibit 3.2 of the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 13, 2024)
31.1*	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS *	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH *	Inline XBRL Taxonomy Extension Schema Document.
101.CAL *	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF *	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB *	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE *	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104 *	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

* Filed herewith.

** The certifications attached as Exhibit 32.1 and 32.2 accompanying this Quarterly Report on Form 10-Q, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

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 August 7, 2024.

SILVACO GROUP, INC.

/s/ Babak A. Taheri

Name: Dr. Babak A. Taheri
Title: Chief Executive Officer

/s/ Ryan A. Benton

Name: Ryan A. Benton
Title: Chief Financial Officer

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) OR RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Dr. Babak A. Taheri, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Silvaco Group, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By:

/s/ Babak A. Taheri

Dr. Babak A. Taheri

Chief Executive Officer

Date: August 7, 2024

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) OR RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Ryan A Benton, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Silvaco Group, Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By:

/s/ Ryan A. Benton

Ryan A. Benton

Chief Financial Officer

Date: August 7, 2024

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
OF THE SECURITIES EXCHANGE ACT OF 1934 AND 18 U.S.C. SECTION 1350**

I, Dr. Babak A. Taheri, Chief Executive Officer of Silvaco Group Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2024 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

By: /s/ Babak A. Taheri

Dr. Babak A. Taheri

Chief Executive Officer

Date: August 7, 2024

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
OF THE SECURITIES EXCHANGE ACT OF 1934 AND 18 U.S.C. SECTION 1350**

I, Ryan A. Benton, Chief Executive Officer of Silvaco Group Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2024 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

By: /s/ Ryan A. Benton

Ryan A. Benton

Chief Financial Officer

Date: August 7, 2024