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Silvaco Delivers New Generation of MIPI I3C® Sensor Connectivity IP

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Builds on Collaboration with NXP Semiconductors to Deliver Enhanced IP for Automotive and IoT

Santa Clara, California – March 30, 2020 – Silvaco, Inc. today announced it is building on its existing collaboration and development efforts with NXP® Semiconductors to bring a new generation of MIPI I3C semiconductor intellectual property (IP) to market. As a result of this effort, a new set of MIPI V1.1 specification-compliant IP cores will be available to customers directly from Silvaco.

Relying on a lower number of pins and the smallest PCB footprint available compared with other bus connectivity solutions, MIPI I3C interfaces with a mix of mechanical, motion, biometric, and environmental sensors.

An important feature in the new 1.1 version is the use of extra bus lanes to increase the interface speed by 4X, to near 100 MHz, future-proofing the interface for rising speed requirements. The greater speed support comes with a host of other new features including grouped addressing, enhanced error detection/recovery, secondary reset, comprehensive flow control, outside end transfer and new command, control and communication capabilities work together to enable a diverse set of new applications such as:

- "Always-on" imaging
- Server manageability
- Debug application communications
- Touchscreen command and communications
- Sensor device command, control and data transport
- Power management
- Memory control

"The new 1.1 version of I3C builds upon our ongoing collaboration with NXP for MIPI I3C and other design IP for the automotive and IoT markets," stated Jeff Elias, general manager of the IP Division at Silvaco. "This new generation of controllers enable customers to rapidly take advantage of the tremendous benefits of MIPI I3C V1.1 to integrate multiple sensors into their designs with 4X higher speeds, lower power, and smaller design footprint."

The new version 1.1 of MIPI I3C is now in pre-release with select customers. The production release of the IP will be available in early Q2.

To learn more about the new I3C version, watch the webinar "[What's in the New MIPI Alliance I3C V1.1 Standard?](#)" presented by Paul Kimelman, Platform Architect for Automotive Microcontrollers and Processors at NXP Semiconductors. For more details and to view the webinar, click [here](#).

About Silvaco, Inc.

Silvaco is a leading EDA tools and semiconductor IP provider used for process and device development for advanced semiconductors, power IC, display, and memory design. For over 30 years, Silvaco has enabled its customers to develop next generation semiconductor products in the shortest time with reduced cost. Silvaco is a technology company outpacing the EDA industry by delivering innovative smart silicon solutions to meet the world's ever-growing demand for mobile intelligent computing. The company is headquartered in Santa Clara, California and has a global presence with offices located in North America, Europe, Japan, and Asia

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