



SkyWater Technology Foundry Selects Veeco's Waferstorm for 3D Monolithic System-on-a-Chip Development

Veeco's best in class precision surface processing platform supports SkyWater's collaborative work with Massachusetts Institute of Technology to maximize electronic device performance

PLAINVIEW, N.Y. and BLOOMINGTON, MN, April 3, 2019—[Veeco Instruments Inc.](#) (NASDAQ: VECO) today announced that [SkyWater Technology Foundry](#) has taken delivery of the WaferStorm® single wafer wet process system to support advanced development work for the design and fabrication of next-generation 3D monolithic System-on-a-Chip (3DSoC) technology. The most advanced U.S.-based and solely U.S.-owned Technology Foundry, SkyWater is leveraging the process performance and production capabilities of WaferStorm to create densely integrated logic and memory products. Using breakthrough 3DSoC technology, SkyWater is collaborating with researchers at the Massachusetts Institute of Technology (MIT) to set a new threshold for device performance and energy efficiency.

"Our selection of the WaferStorm system was based on Veeco's reputation of delivering best-in-class technology for wet processing that enables many leading-edge applications," stated Gregg Damminga, Vice President of Technology Development, SkyWater. "The solvent-based platform offers a precise level of control during wafer processing which is essential to the innovations we are working on with MIT to develop technology that drives better performing devices at lower cost."

WaferStorm's unique ImmJET™ solvent technology provides customers with the best overall process performance, flexibility and production capability in its class compared to conventional batch or spray-only approaches. WaferStorm offers proven, reliable solutions for metal lift-off (MLO), photoresist strip, dry film resist strip, via cleans, flux removal and other advanced packaging processes. WaferStorm is also the production tool of record for MLO at several leading vertical-cavity surface-emitting laser (VCSEL) manufacturers today.

"SkyWater's selection of WaferStorm further showcases Veeco's leadership in advanced wet processing technology and we're pleased to be working with the foundry driving true innovation

in the 3DSoC space,” said Scott Kroeger, general manager of Veeco’s Precision Surface Processing business unit. “Our full suite of solvent, clean and etch technologies is ideally suited to help create a new class of microelectronic devices and systems that extends beyond previous thresholds for performance and efficiency.”

As reported by [IEEE](#), advances in monolithic 3D integration lay the foundation for highly efficient next-generation computing systems. With the emergence of artificial intelligence, edge computing and deep learning driving innovation in memory access as a key enabler for future systems design, the use of 3DSoC represents a paradigm shift for the computer industry and high-tech world. As the industry reaches the next-generation of 3DSoC technology, WaferStorm delivers excellent process results at the lowest cost of ownership, enabling innovators like [SkyWater and MIT](#) to advance research and enhance device performance.

About Veeco

Veeco (NASDAQ: VECO) is a leading manufacturer of innovative semiconductor process equipment. Our proven MOCVD, lithography, laser annealing, ion beam and single wafer solvent etch & clean technologies play an integral role in producing LEDs for solid-state lighting and displays, and in the fabrication of advanced semiconductor devices. With equipment designed to maximize performance, yield and cost of ownership, Veeco holds technology leadership positions in all these served markets. To learn more about Veeco's innovative equipment and services, visit www.veeco.com.

About SkyWater Technology Foundry

SkyWater is the only U.S.-based and U.S.-owned, DMEA-accredited pure-play Technology Foundry, specializing in advanced Innovation Engineering Services to develop and quickly scale next wave technologies. Serving as both an ASIC and custom foundry, SkyWater manufactures a wide variety of differentiated integrated circuits in markets including: consumer, industrial, medical, aerospace and defense, automotive, and the IoT, among others. SkyWater tailors its business and technical services according to individual project and customer needs. For more information, please visit: www.skywatertechnology.com/.

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