NEWS

FOR IMMEDIATE RELEASE

VEECO AND ALLOS DEMONSTRATE INDUSTRY-LEADING 200MM GAN-ON-SILICON PERFORMANCE TO ENABLE MICRO-LED ADOPTION

Plainview, N.Y., November 1, 2017 – Veeco Instruments Inc. (Nasdaq: VECO) announced today the completion of a strategic initiative with ALLOS Semiconductors (ALLOS) to demonstrate 200mm GaN-on-Si wafers for Blue/Green micro-LED production. Veeco teamed up with ALLOS to transfer their proprietary epitaxy technology onto the Propel® Single-Wafer MOCVD System to enable micro-LED production on existing silicon production lines.

"With the Propel reactor, we have an MOCVD technology that is capable of high yielding GaN Epitaxy that meets all the requirements for processing micro-LED devices in 200 millimeter silicon production lines," said Burkhard Slischka, CEO of ALLOS Semiconductors. "Within one month we established our technology on Propel and have achieved crack-free, meltback-free wafers with less than 30 micrometers bow, high crystal quality, superior thickness uniformity and wavelength uniformity of less than one nanometer. Together with Veeco, ALLOS is looking forward to making this technology more widely available to the micro-LED ecosystem."

Micro-LED display technology consists of <30x30 square micron red, green, blue (RGB) inorganic LEDs that are transferred to the display backplane to form sub-pixels. Direct emission from these high efficiency LEDs offers lower power consumption compared with OLED and LCD while providing superior brightness and contrast for mobile displays, TV and wearables. The manufacturing of micro-LEDs requires high quality, uniform epitaxial wafers to meet the display yield and cost targets.

"In contrast to competing MOCVD platforms, Propel offers leading-edge uniformity and simultaneously achieves excellent film quality as a result of the wide process window afforded by Veeco's TurboDisc® technology," said Peo Hansson, Ph.D., Senior Vice President and General Manager of Veeco MOCVD Operations. "Combining Veeco's leading MOCVD expertise with ALLOS' GaN-on-Silicon epi-wafer technology enables our customers to develop micro-LEDs cost effectively for new applications in new markets."

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 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 ALLOS Semiconductors

ALLOS is an IP licensing and technology engineering company helping clients from the semiconductor industry worldwide to master GaN-on-Si technology and unleash its benefits. ALLOS is providing licenses to its technology know-how and patents as well as transferring the technology to its customers' MOCVD reactors. In addition, ALLOS is delivering customer specific solutions as well as consulting services for next generation GaN-on-Si development challenges.

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