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Micron Unveils Complete High-Density 45nm Automotive-Grade NOR Flash Portfolio

Production at World's First Memory Fab to Earn IATF Certification for Quality

BOISE, Idaho and MUNICH, Germany, Nov. 13, 2018 (GLOBE NEWSWIRE) -- At Electronica 2018, Micron Technology, Inc., (Nasdaq: MU) an industry leader in innovative memory and storage solutions, today announced its complete high-density automotive AEC-Q100 Grade 1 (+125°C) qualified NOR flash portfolio to enable next-generation, ultra-high temperature automotive solutions with fast boot and instant-on performance, along with direct execute-in-place (XiP) operation. The portfolio encompasses Micron's leading-edge 45nm NOR flash solutions utilizing both quad-SPI and **Xccela™** bus interfaces, with densities ranging from 128 megabits (Mb) up to 2 gigabits (Gb).

As the performance of automotive advanced driver assisted systems (ADAS) technologies such as vision, LiDAR, radar and infrared sensors increases to address autonomous driving requirements, the system temperature levels also increase. The rise in system temperature is due to both the heat generated by the more advanced processors and the miniaturization of the sensors embedded into a vehicle's bodywork. To ensure reliable and safe system operation, the application firmware code, key parametric and calibration data, and incident and error data logs must be stored in and executed from a high-speed non-volatile memory that is capable of withstanding elevated temperatures as high as +125°C. Automotive system designers have long used NOR flash to provide high levels of reliability, robustness and performance. With initial latencies as fast as 78ns and operating temperature support up to +125°C, Micron's NOR flash allows safety systems to reliably boot in an instant to meet the needs of next-generation ADAS sensors and control units.

"Micron's advanced 45nm automotive NOR devices are produced in our high-reliability wafer fab that is solely dedicated to long-lifecycle products, which underlines our commitment to supplying the automotive market with high-quality NOR solutions," stated Richard De Caro, director of the NOR flash product line at Micron Technology. "Our 45nm automotive NOR solutions have also been designed with specific features not available in our industrial-grade offerings. These features are included to further enhance data integrity and the reliability of the devices to meet the stringent requirements of the automotive market."

Micron produces the 45nm NOR flash devices at its wafer fabrication facility located in Manassas, Virginia, which is the world's leading production plant dedicated to long-lifecycle memory and storage technologies. Micron is the first memory supplier to earn International Automotive Task Force (IATF) 16949:2016 quality certification, a key milestone that is a clear reflection of Micron's relentless commitment to quality.

Xccela™ Flash

Through close partnership and collaboration with automotive customers and chipset vendors, Micron architected **Xccela** flash from the ground up to meet the stringent requirements of next-generation automotive applications. With the latest product line extension, Micron's MT35X **Xccela** flash product family now meets the Automotive Electronics Council (AEC) qualification standard of AEC-Q100 Grade 1 with an extended temperature range of -40°C to +125°C, as well as AEC-Q100 Grade 2 with a temperature range of -40°C to +105°C. With initial latencies as short as 78ns, sequential byte reads as fast as 2.5ns, and sustained read throughputs as high as 400 MB/s (3.2 Gb/s), **Xccela** flash revolutionizes the way the electronics industry develops systems to meet the "instant-on" and fast system responsiveness requirements for ADAS and advanced dashboard cluster systems. **Xccela** flash densities range from 256Mb to 2Gb, with samples and production volumes available now for all densities.

Serial NOR Multi-I/O Flash

Micron's MT25Q Serial NOR flash product family is now qualified to meet both the AEC-Q100 Grade 1 and Grade 2 standards. With quad-I/O operation at clock frequencies as high as 166 MHz in single transfer rate (STR) mode and 90 MHz in dual transfer rate (DTR) mode, coupled with advanced features to enhance data integrity, reliability, and security, the MT25Q family provides ADAS and infotainment applications with the speed and feature flexibility necessary for robust system designs. MT25Q densities range from 128Mb to 2Gb, with samples and production volumes available now for all densities (+125°C version of the 2Gb will ramp production in 2Q19).

Micron will showcase its automotive-grade products during Electronica 2018, November 13-16, in Munich, Germany (exhibit hall B5, booth 438).

About Micron Technology, Inc.

We are an industry leader in innovative memory and storage solutions. Through our global brands — Micron®, Crucial® and Ballistix® — our broad portfolio of high-performance memory and storage technologies, including DRAM, NAND, NOR Flash and 3D XPoint™ memory, is transforming how the world uses information to enrich life. Backed by 40 years of technology leadership, our memory and storage solutions enable disruptive trends, including artificial intelligence, machine learning, and autonomous vehicles, in key market segments like cloud, data center, networking, mobile and automotive. Our common stock is traded on the NASDAQ under the MU symbol. To learn more about Micron Technology, Inc., visit www.micron.com.

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