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Micron Unveils Secure NOR Flash Memory Solution to Accelerate and Authenticate Intelligence at the Edge

New Micron MT25Q NOR Flash Enabled with Authentica™ Technology Embeds Cyber Security into Standard Flash Memory, Reducing Costs and Time to Market

BOISE, Idaho, Nov. 14, 2018 (GLOBE NEWSWIRE) -- Micron Technology, Inc., (NASDAQ: MU) an industry leader in innovative memory and storage solutions, today introduced its new MT25Q NOR flash enabled with Authentica™ technology, providing content and command authentication to protect device functionality at the silicon level. This provides additional defenses to add enhanced trustworthiness for IoT devices, seamlessly expanding security to otherwise unsecured intelligent devices. High firmware integrity down to the lowest level of boot is critical today for connected devices used in a range of industries such as automotive, enterprise, industrial control and connected home. In addition to device security, Authentica technology allows new services such as secure over-the-air updates and additional services from edge silicon to cloud services.

As more devices, cars, homes and "things" are transformed by ubiquitous connectivity, the threat of cyberattacks continues to grow — especially with the rise of "always-on" internet connections. The new Authentica NOR flash trusted memory solution introduces a unique level of hardware-based security that not only enhances the integrity of the connected device itself, but also extends protection to the software that runs on the device, starting with the boot process. Moreover, Authentica NOR flash can easily replace the standard serial NOR flash used pervasively in the industry, enabling a unified approach to managing device health, functionality and updatability.

"As manufacturers and enterprises increasingly accelerate the movement of intelligence to the edge of networks, cybersecurity concerns loom large, threatening profits and reputations," said Kris Baxter, marketing vice president of Micron's Embedded Business Unit. "With trust features embedded directly into the memory component, Authentica NOR flash provides a strong cryptographic fingerprint to authenticate devices, lock down code and further secure critical data — all while reducing costs and quickening time to market."

With trusted identity embedded at the hardware level and secure boot capability, Authentica technology allows connected devices to be authenticated directly with a host or secure gateway — whether in the cloud, at the edge or on the device. Micron MT25Q NOR flash combines these security features in a NOR flash solution that meets stringent quality requirements for automotive memory components in advanced driver-assistance systems (ADAS).

"The MT25Q family of NOR memory is used to configure Xilinx Zynq SOC and FPGA-based solutions and can hold critical operational code and data," said Dan Isaacs, director of automotive strategy and customer marketing at Xilinx. "Customers can now incorporate increased levels of security and device integrity in their systems, including enabling cloud-based services for secure over-the-air silicon functional updates. The combination of Xilinx adaptable technology with over-the-air silicon functional update capability and Micron's Authentica technology provides a tremendous advantage to allow the secure use of flash memory critical to engine control units in cars today."

Micron MT25Q Authentica NOR Flash Key Features

- | SHA256 measurement accelerator with flexible user-defined settings
- | Secure boot authentication
- | Trusted Computing Group's (TCG) Device Identifier Composition Engine (DICE) architecture
- | Attestable measurement values and automatic comparison with known good measurement
- | Cryptographic command control
- | Industrial and full automotive AEC-Q100 Grade 1 (-40°C to +125°C)
- | x1, x2, and x4 multi-I/O serial peripheral interface (SPI) operation at clock frequencies up to 166 MHz
- | Industry-standard 5x6mm WDFN package in both 1.8V and 3V options

The MT25Q Authentica NOR flash is sampling now, delivering system-level enhanced cybersecurity for a broad range of connected devices. Customers can use this generation of flash memory the same way they have used standard quad-SPI NOR flash memory in past designs. All Authentica capabilities are powered by the upcoming Micron Key Management Service (KMS) that will enable a smooth hand-off of keys to customers or partners. Software development kits and partner solutions

environments can be leveraged for additional resource savings and faster time to market.

For more information, visit <https://www.micron.com/products/advanced-solutions/authenta>.

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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