April 24, 2017

Micron and Microsoft Announce Collaboration to Help Improve Internet of Things Security

Initiative combines Microsoft Azure IoT cloud with newly-announced Micron® Authenta™ Technology

HANNOVER, Germany, April 24, 2017 (GLOBE NEWSWIRE) -- Micron Technology (Nasdaq:MU) and Microsoft today announced a collaboration that aims to address the major challenge of providing trusted computing models for IoT deployments in industrial, automotive and consumer environments. As digitization and adoption of Internet Protocol (IP) for sensors and devices becomes increasingly pervasive, cyber-security is one of the biggest challenges and barriers to the growth of IoT deployments and associated business models. The new solution utilizes a hardware 'root of trust' integrated into Micron's flash memory in the IoT device along with the Microsoft Azure IoT cloud to establish a strong trusted link between that IoT device and the cloud.

At the Hannover Messe 2017, Micron has also announced a new IoT security technology called Micron® Authenta™ that helps enable strong cryptographic device identity and device health management in flash memory. The concept of monitoring persistent memory storage is becoming more and more critical to understanding a device's health. By using Microsoft's support of Device Identity Composition Engine (DICE), an upcoming standard from the Trusted Computing Group (TCG), the combination of the Microsoft Azure IoT cloud and Micron® Authenta™ Technology helps ensure that only trusted hardware gains access to the IoT cloud.

The key aspect of the combined solution is that the health and identity of an IoT device is verified in hardware on the device where critical code is typically stored. This enables more advanced functionality like hardware-based device attestation and provisioning, as well as allows an administrator to securely remediate the device if compromised in the field.

Micron's Authenta™ Technology provides a unique level of protection for the lowest layers of IoT device software, starting with the boot process. The approach of utilizing existing standard flash memory sockets enables system developers to harden system level security without adding additional hardware components, leading to a more affordable and robust IoT solution. A wide range of IoT devices that use standard flash memory chips can now be enhanced to improve cyber-security using this combined approach.

In addition to the hardware, Microsoft and Micron today announced that they will offer software development kits (SDKs) that help make it easier to provide secure IoT cloud management and connectivity for new platforms and devices, as well as the ability to retrofit legacy systems.

"Microsoft and Micron are collaborating to provide customers with a unified approach to improve IoT security. This capability will speed up adoption of the latest IoT concepts by enabling customers to broaden their IoT connectivity while decreasing the investment of implementation," said Sam George, director of Azure IoT cloud services. "Combining these technologies will enable critical security competencies to be underpinned at a low-level in both hardware and software so that users can quickly begin to add their value to these solutions without many of the resource burdens that have been repressing innovation in the industry."

"A secure Internet of Things requires an always on trust between billions of end-points and cloud management services. Anchors of this trust must be rooted in hardware and be scalable to even the smallest embedded devices," said Amit Gattani, senior director of Segment Marketing, Embedded Business at Micron. "We are pleased to see Microsoft extending their Azure IoT platform to include such trust services and creating an ecosystem with partners like Micron that provide hardware root of trust building blocks for end-devices. This will significantly ease developments and deployments for our customers across Industrial, Automotive and Consumer IoT markets."

Visitors to the Hannover Messe Industrial show this week can come see Azure-connected Micron Authenta Technology Flash solutions in action at the Microsoft booth (C040XX) in Hall 7. And developers can learn how to improve the ROI on IoT implementations by utilizing these solutions at Microsoft Build in Seattle May 10—12.

Micron's Authenta™ Technology is initially available in the Serial NOR product family and is sampling now to select customers. Users of Microsoft's DICE technology and Azure IoT services can now contact Micron and Microsoft to begin evaluation and integration of these security and identity solutions. For more information, visit http://www.micron.com and read Microsoft's blog at https://azure.microsoft.com/en-us/blog/azure-iot-supports-new-security-hardware-to-strengthen-iot-

security/

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Micron Technology is a world leader in innovative memory solutions. Through our global brands — Micron, Crucial®, Lexar® and Ballistix® — our broad portfolio of high-performance memory technologies, including DRAM, NAND, NOR Flash and 3D XPoint™ memory, is transforming how the world uses information. Backed by more than 35 years of technology leadership, Micron's memory solutions enable the world's most innovative computing, consumer, enterprise storage, data center, mobile, embedded and automotive applications. Micron's common stock is traded on the Nasdaq under the MU symbol. To learn more about Micron Technology, Inc., visit micron.com.

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