Micron Xccela™ Flash Adopted by Xilinx to Accelerate Performance of Artificial Intelligence Applications

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Xccela Flash Memory Enables Near-Instant Booting, Configuration and Dynamic Reconfiguration of Xilinx Versal Acceleration Platform; Delivers Lowest Effective Energy Consumption Per Bit

BOISE, Idaho, Sept. 30, 2019 (GLOBE NEWSWIRE) -- Micron Technology, Inc. (Nasdaq: MU), an industry leader in innovative memory and storage solutions, today announced that it is working with Xilinx to boost the boot and dynamic configuration performance of Xilinx's Versal™ platform, the industry's first adaptive compute acceleration platform (ACAP). ACAP, a new category of heterogeneous compute devices, will use Micron Xccela™ flash and other Micron memory solutions to reduce system startup times and increase system responsiveness in automotive, industrial, networking and consumer applications that use artificial intelligence (AI).

"Xilinx's choice to support Xccela flash in its Versal ACAP is a testament to the growing importance of bandwidth for memory and storage used in artificial intelligence applications," said Richard De Caro, director of NOR flash for Micron's Embedded Business Unit. "As autonomous driving vehicles incorporate higher levels of artificial intelligence inference capabilities into advanced driver-assistance systems (ADAS), Xccela flash enables Versal ACAP-based systems to power up and configure rapidly to meet ADAS application requirements."

The rising complexity of AI and machine learning systems is driving an ever greater need to complement processing power with more memory and storage for faster data processing. Increased amounts of memory and storage help avoid performance and throughput bottlenecks while transforming vast amounts of data into insights. Applications such as autonomous driving that rely on multiple displays and sensors have an additional need for "instant on" and quick reset or reboot capability to ensure timely delivery of information for decision-making. By working together, Micron and Xilinx aim to develop heterogenous compute platforms with low latency that address the demanding compute and data processing requirements of AI applications.

"Our Versal ACAP customers are developing compute-intensive, often safety-critical applications," said Sumit Shah, senior director of FPGA, SoC and ACAP product marketing and management at Xilinx. "Micron embodies the excellence we seek in our partners. And with Micron's innovative Octal SPI Xccela flash, developers can meet their near-instant-on requirements and take full advantage of Versal ACAP's adaptable, dynamically configurable hardware for their next-generation platforms."

Xilinx Versal ACAP is built for AI inference in emerging applications of data center, automotive, 5G infrastructure, aerospace, defense, and test and measurement. Using the Xccela bus interface, a JEDEC xSPI-compliant standard developed and promoted by the Xccela Consortium, Xilinx Versal ACAP increases boot and configuration performance by eight times, compared to prior-generation FPGA platforms using quad serial peripheral interface (SPI) NOR flash. Xccela flash delivers up to 400 megabytes per second in double data rate mode while consuming 30% less effective energy per bit over traditional quad SPI NOR flash.

Xccela flash expands Micron's leading-edge 45 nm NOR flash portfolio of solutions, which are manufactured at its wafer fabrication facility in Manassas, Virginia. Micron's Xccela flash product family meets the Automotive Electronics Council qualification standard (AEC-Q100), supporting temperature ranges from -40 C to 125 C and densities from 256Mb to 2Gb. All densities and temperature ranges are available for ordering in volume quantities.

In addition to Xccela flash, Micron will provide support for Xilinx Versal ACAPs through other portfolio solutions, including its DDR4, LPDDR4X, e.MMC 5.1 and serial NOR products.

Resources:

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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 data center, networking, automotive, industrial, mobile, graphics and client. Our 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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