



Contact: John Schroeter
Pico Computing
506 Second Avenue, Suite 1300
Seattle, WA 98104
Phone: (206) 283-2178
jschroeter@picocomputing.com

Pico Computing Delivers the First PCI Express Card to Integrate Micron's Hybrid Memory Cube and Multiple Altera Stratix V FPGAs

Unprecedented combination of high-performance technologies overcomes the bandwidth limitations of both memory and conventional processors

Seattle, WA (PRWEB) – December 2, 2013 – Pico Computing , the technology leader in hardware-based acceleration, today announced they have created the world's most powerful blade server. The EX-800 delivers compute density never before realized in a single PCI Express card and features Micron's groundbreaking Hybrid Memory Cube (HMC) technology which provides unprecedented levels of high-bandwidth, low-power, random-access memory performance.

The EX-800 introduces a number of significant firsts. Micron's HMC has effectively knocked down the proverbial memory wall with its high Giga-Updates Per Second (GUPs)/low latency performance, which in turn exposes the remaining barrier to high-performance computing: the CPU wall—the focus of Pico Computing's technologies. Built upon the PCIe3 standard and integrating four Altera Stratix V FPGAs, the EX-800 provides 3.6M FPGA gates plus performance bandwidth sufficient to run the HMC at full speed—far surpassing the computing limitations presented by serial processors. In other words, with the introduction of the EX-800, Pico Computing has knocked down the CPU wall.

"We are excited about Micron's HMC technology and how it will enable us to architect new HPC products," said Jaime Cummins, CEO at Pico Computing. "With its combination of high bandwidth and low latency we see the opportunity to significantly improve applications across a wide range of big data-driven markets. We have been particularly pleased to work with Micron in bringing such creative solutions to the commercial market."

"By demonstrating Pico's EX-800 and HMC working together, we're empowering customers to leverage one of the most exciting combinations available for advanced computing applications," said Scott Graham, Micron's general manager for Hybrid Memory Cube. "Pico Computing's technical expertise and experience coupled with HMC's performance and efficiency will enable users to overcome their most challenging requirements for next-generation systems."

Other notable features of the air-cooled EX-800 include:

- 160 GB/s of memory bandwidth
- 16 full-duplex lane connections from the HMC to each of the four Stratix V FPGAs
- A 4GB Micron DDR3L SODIMM dedicated to each of the four FPGAs (32GB total)

- PCI Express Gen 3 full duplex switch
- x16 Gen3 PCI Express to the host
- x8 Gen3 PCI Express link to each Stratix V FPGA

With the world's data doubling every year, applications like bioinformatics, financial trading, imaging, and surveillance require the ability to capture and process an ever-increasing volume of data at faster rates. The extreme bandwidth and exceptionally low latency offered by the EX-800 will enable significant advances in these and other industries.

About Pico Computing

Pico Computing is the technology leader in high-performance computing. Our modular, highly scalable HPC and embedded systems solve the biggest of the big data computing challenges—from the edge to the data center to the desktop. Whether targeted to PCI Express-based HPC or standalone embedded applications, Pico Computing's massively-scalable architecture, built upon Field Programmable Gate Array (FPGA) technologies, brings orders-of-magnitude performance gains, greatly reduced energy costs, the industry's smallest form factors, and simplified application design. To learn more about Pico Computing, visit www.picocomputing.com

About Micron

Micron Technology, Inc., is a global leader in advanced semiconductor systems. Micron's broad portfolio of high-performance memory technologies—including DRAM, NAND and NOR Flash—is the basis for solid state drives, modules, multichip packages and other system solutions. Backed by more than 35 years of technology leadership, Micron's memory solutions enable the world's most innovative computing, consumer, enterprise storage, networking, 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 www.micron.com

###