Micron introduces Third generation reduced latency mEMORY

Micron Technology, Inc. today introduced its third-generation reduced latency DRAM (RLDRAM 3 memory), a high-bandwidth memory technology that enables a more efficient transfer of information across the network. The proliferation of video content, mobile applications and cloud computing has created the need for a more effective network infrastructure that can keep pace with the amount of data being moved online. As compared with previous generations, Micron's new RLDRAM 3 memory offers a further increase in density and speed, while minimizing latency and reducing power consumption for higher performing networking applications.

"Micron's RLDRAM 3 memory meets the growing need for technology that can support the increases to network traffic as we watch Internet content consumption continue to grow," said Robert Feurle, vice president of DRAM marketing for Micron.

Micron is also continuing to provide the highest levels of support for its current generation RLDRAM 2 technology and is planning long-term production of the product. Additionally, Micron is transitioning its RLDRAM 2 product portfolio to the more advanced 50nm process technology, boosting system performance and lowering power consumption.

Product Features of RLDRAM 3 Memory
The primary features and benefits of Micron's new RLDRAM 3 memory include:

Low latency: Sub 10-nanoseconds tRC, offering the industry's lowest random access latency

Increased density: 576Mb-1Gb, giving flexibility for many designs

Faster speeds: Reaches 2133Mb/s, providing faster access to data

Greater energy efficiency: Familiar 1.2V IO and 1.35V core, for more power savings

Building an RLDRAM Ecosystem
Micron maintains a broad ecosystem of partners that have validated its RLDRAM memory solutions for ease of integration into networking equipment. Micron's collaboration with its extensive network of partners and enablers provides customers with tailored-made solutions that optimize networking system performance. As part of this valued ecosystem, Micron is currently working with leading FPGA companies including Altera Corporation and Xilinx to design RLDRAM 3 memory into their family of products.

"Altera's 28nm Stratix V FPGAs include new, hardened datapaths that enable high-performance and low-latency interfaces to Micron's memories," said Luanne

Schirrmeister, senior director of component product marketing at Altera. “The release of RLDRAM 3 memory allows us to offer memory bandwidth as high as 1600 Mbps, the highest in the industry, at dramatically lower latency. Enabled by Micron’s new memory offering and Altera’s new memory interface architecture, this technical achievement is one of many pinnacles in our multi-year technical partnership with Micron.”

“Xilinx 7 series FPGAs are enabling the most advanced networking equipment to keep pace with the insatiable need for bandwidth worldwide,” said Rina Raman, Senior Director, Applications and Technical Marketing at Xilinx. “As a result of our work with Micron to support their new RLDRAM 3 technology, we are enabling our customers to develop networking platforms that meet the most rigorous infrastructure demands.”

Product Availability
Micron is expected to begin sampling its RLDRAM 3 device in the first half of 2011 and is currently working with customers and enablers for their design considerations of RLDRAM 3 memory. Additionally, Micron expects to begin sampling 50nm RLDRAM 2 products in the fourth quarter of 2010.