

# Micron Introduces Next-Generation RealSSD™ Solid State Drives For Enterprise Server And Notebook Applications

August 5, 2008 at 12:00 AM EDT

**Boise, Idaho**, **Tuesday, August 05, 2008** – Micron Technology, Inc., today introduced its next-generation RealSSD solid state drives (SSDs) for enterprise computing and notebook applications. The new drives—the enterprise-class RealSSD P200 and the client-focused RealSSD C200—provide a dramatic improvement in capacity, power and performance for the applications they serve.

"We are seeing SSD interest in a variety of applications where historically hard disk drives have reigned. For many, the most logical place is in notebook computers, but there is incredible value for SSDs in enterprise server systems," said Dean Klein, vice president of memory system development at Micron.

## RealSSD P200: Offering Improved Performance, Power & Reliability for Enterprise Servers

Server system OEMs are investigating new technologies for increased performance in data storage given the exponential growth of the digital information stored in today's data centers. Historically, boosting system performance has required that adjustments be made to the processor, main memory and storage technologies, all at a cost of increasing the system's power consumption. While Micron has made strides in main memory design with its Aspen Memory® portfolio of energy-efficient products, little has been done to reduce the power of the storage subsystem. In fact, until today, for storage engineers to increase performance, they've had to absorb a significant increase in power consumption and cost by deploying additional HDDs in a redundant array of independent disk (RAID) configurations—which offer only fractional gains in capacity and performance while requiring even more power.

Recognizing the complex requirements of these storage applications, Micron has designed a new line of SSDs that will enable enterprise applications to deliver the necessary bandwidth and performance – and reduce the strain on the data center power budget. Micron's RealSSD P200 offerings range in density from 16 gigabytes (GBs) to 128GBs and are available in a standard 2.5-inch form factor. Using Micron's high-performa single-level cell (SLC) NAND technology, the P200 provides the industry's fastest 3Gb/s SATA-based sequential read and write speed of up to a maximum of 250 megabytes per second (MB/s). Three key differentiating benefits of Micron's enterprise-class RealSSD P200 offerings are:

- Performance. The P200 is more than 10 times faster at accessing transactional data when compared to a typical
  enterprise HDD. It achieves sub-millisecond latency while a typical enterprise HDD has an average latency of
  approximately eight milliseconds, dramatically reducing the data seek time inherent with conventional HDDs.
- Power. The P200 consumes about one-tenth the power of a typical data center hard drive, operating at 2.5 watts in active
  mode and under at 0.3 watts in idle. In contrast, data center hard drives typically consume anywhere between 8 to 28
  watts. Additionally, with its low-wattage and high temperature range (the P200 operates at a temperature range of zero to
  +70 degrees Celsius where an HDD operates at +5 to +55 degrees Celsius) the P200 requires almost zero cooling,
  keeping power consumption low.
- Reliability. The P200 is ideal for the demanding reliability requirements of mission-critical enterprise applications. The P200 provides improved wear-leveling capabilities across its high-performance SLC write cycles, offering a mean time between failure (MTBF) rate of approximately two million hours compared to 300,000 to 500,000 MTBF of an HDD, dramatically reducing the concerns of a mechanical breakdown.

For additional information about SSDs in the enterprise market, Micron has authored several white papers on the topic, which can be found in Micron's virtual media kit at <a href="https://www.micron.com/media">www.micron.com/media</a>.

## RealSSD C200: Bringing Capacity, Performance & Power to Notebooks

Designed using Micron's multi-level cell (MLC) NAND process technology, the RealSSD C200 drives will be available in 2.5-inch and 1.8-inch form factors. The 2.5-inch C200 will be offered in densities of up to 256GBs. And with its small form-factor, the 1.8-inch C200 will range in density from 32GBs to 128GBs offering uncompromised power and performance levels. Using a 3 Gb/s SATA interface, the C200 products provide a read speed of up to 250 MB/s and a write speed of up to 100 MB/s. The increased read and write speeds of the C200 will enable consumers to have an overall improved computing experience when compared to a notebook designed with an HDD, offering improved boot and application load times and lower power consumption for smaller form factor notebook designs.

"With our C200 products, we are providing a balanced price to performance solution specifically designed for notebook applications by utilizing MLC NAND technology and highly optimized NAND management algorithms," continued Klein.

#### Availability

Micron's RealSSD P200 and C200 drives are sampling now with mass production expected in the fourth quarter of 2008. And Micron's Lexar Media subsidiary plans to bring the advantages of this latest RealSSD architecture to consumers in the fourth quarter of 2008.

## **Additional Information**

A virtual press kit is available at <a href="https://www.micron.com/media">www.micron.com/media</a> providing media and analysts with additional information on the RealSSD P200 and C200 drives including product flyers and photos, as well as application white papers, videos and more.

## Micron Showcases RealSSD & NAND Wares at Flash Memory Summit

Come join Micron at the Flash Memory Summit, August 12 – 14 in Santa Clara, CA where it will showcase its portfolio of NAND-based products. Additionally, Dean Klein will be keynoting the event on August 12 at 11:15 a.m. providing attendees with a "Closer Look at NAND Flash."

#### **About Micron**

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets DRAMs, NAND flash memory, CMOS image sensors, other semiconductor components, and memory modules for use in leading-edge computing, consumer, networking, and mobile products. Micron's common stock is traded on the New York Stock Exchange (NYSE) under the MU symbol. To learn more about Micron Technology, Inc., visit <a href="https://www.micron.com">www.micron.com</a>.

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This press release contains forward-looking statements regarding the production of the RealSSD C200 & P200 solid state drives. Actual events or results may differ materially from those contained in the forward-looking statements. Please refer to the documents the Company files on a consolidated basis from time to time with the Securities and Exchange Commission, specifically the Company's most recent Form 10-K and Form 10-Q. These documents contain and identify important factors that could cause the actual results for the Company on a consolidated basis to differ materially from those contained in our forward-looking statements (see Certain Factors). Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update any of the forward-looking statements after the date of this press release to conform to actual results.

#### **Related Links**

Micron Media Center Micron RealSSDs Micron Solid State Drives

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