

# Micron Introduces New 34-Nanometer High-Density NAND Products, Increasing Performance and Reducing Die Size

June 30, 2009 at 12:00 AM EDT

Boise, Idaho and Fremont, Calif., Tuesday, June 30, 2009 – Micron Technology, Inc. today announced mass production of <a href="new NAND flash"><u>new NAND flash</u></a> <a href="memory products"><u>memory products</u></a> using its award-winning <a href="memory 34-nanometer"><u>34-nanometer (nm) process</u></a> technology. As consumers demand increased capacity to store more music, videos, photos, and applications in ever smaller portable electronic devices, manufacturers need a storage solution that delivers on capacity, performance, and size. Micron's new 16- and 32-gigabit (Gb) NAND chips pair large capacity with performance, providing a compelling solution for today's demanding portable storage requirements that are tailored to end-customer product dimensions.

The newly architected 32Gb multi-level cell (MLC) NAND chip is 17 percent smaller than Micron's first-generation 32Gb chip. The 16Gb MLC NAND chip, at just 84mm², provides high-capacity in an ultra tiny package. Micron is also now sampling 8- and 16Gb single-level cell (SLC) NAND chips using the 34nm process.

Additionally, Lexar Media, Inc. – a subsidiary of Micron and a leading provider of consumer memory products for digital devices – is taking advantage of Micron's new 34nm NAND products by delivering a wide range of flash memory cards and USB flash drives utilizing this technology.

"Our industry-leading NAND products are opening new possibilities for some of the world's most popular consumer electronic devices," said Brian Shirley, vice president of Micron's memory group. "With our new 16- and 32Gb NAND chips in mass production, we are enabling customers to design cost-effective, high-capacity storage in their small-form factor products, using less space and fewer die. In addition, the high-speed interface is ideal in the industry's quest to continue to increase throughput performance for SSDs."

Both products feature an ONFI 2.1 synchronous interface that delivers transfer speeds of up to 200 megabytes per second (MB/s). In comparison, traditional SLC NAND is limited to 40 MB/s. With this improved transfer speed, the interface delivers the fastest read and write throughputs offered in today's NAND devices. And with solid state drives (SSDs) trending toward a SATA 6 Gb/second interface, the high-speed NAND interface enables manufacturers to design products that deliver twice the throughput of today's existing SATA 3Gb/s solutions. Customers can expect this high-speed interface designed into all future high-density Micron® NAND products.

### Micron 34nm NAND Enabling New High-Capacity Memory Cards from Lexar Media

Lexar Media is utilizing Micron's high-capacity 34nm technology in its high-performance memory cards, including the new Lexar® Platinum II 32GB Secure Digital High Capacity (SDHC™) memory card and the Lexar 16GB microSDHC™ mobile memory card By the end of September, Micron's new 34nm NAND will also be used in a wide range of Lexar microSD™ and microSDHC cards, Memory Stick Micro™ (M2™) cards, and variou capacities of Secure Digital, SDHC, CompactFlash®, and Memory Stick PRO Duo™ cards. Additionally, Micron 34nm NAND will be used in Lexar's JumpDrive® USB flash drives, including JumpDrive Retrax, JumpDrive TwistTurn, JumpDrive FireFly, and JumpDrive Secure II Plus.

"By integrating the increased capacity and performance of Micron's new 34nm NAND into Lexar's flash memory products, we are giving our customers the ability to take full advantage of their digital cameras, phones and devices," said Greg Rhine, vice president of sales and product marketing at Lexar Media. "With Lexar's cost-effective, high-capacity, and high-speed memory cards and USB flash drives, consumers can capture more pictures and videos, listen to more music, and transfer data between their devices even faster than before."

The first Lexar memory card to feature Micron's new 32Gb NAND chip is the new 32GB Lexar Platinum II SDHC memory card. With the ability to store up to 12 hours of high-definition (HD) video or more than 20,000 5-megapixel images, the increased capacity enables photographers to capture important events and memories with photos and HD video. Beyond video and photography, the Lexar Platinum II 32GB SDHC memory card can be used as a convenient way to expand the available storage in today's emerging, ultra-portable notebook computer applications, such as netbooks and mobile Internet devices (MIDs).

In addition to its high capacity, the new Lexar Platinum II SDHC card is speed-rated at 60x (Class 4), offering a minimum-sustained write speed of 9MB per second that enables photo enthusiasts to take advantage of their camera's burst-mode setting to capture many images in rapid succession. In addition, a minimum-sustained read speed of 12MB per second ensures fast transfers of images from the card to a host computer.

Micron's tiny 16Gb, 34nm NAND chip, which is approximately one-third the size of a keyboard key, is ideal for ultra-small, high-capacity microSD cards, such as the Lexar 16GB microSDHC mobile memory card. The Lexar 16GB microSDHC card allows consumers to expand the capabilities of their digital devices, such as mobile phones with photo and video capture capabilities, MP3 players, and smartphones. Consumers can store up to 48,000 2-megapixel JPEG photos, 4,000 songs, or 80 hours of standard-definition video content on the Lexar 16GB microSDHC card when used in a digital device.\*

\*For test parameters, visit the Lexar mobile memory capacity chart, here: www.lexar.com/digfilm/mobile\_cap\_chart.html

## Relevant Links

There are other ways to stay up-to-date on Micron and Lexar news:

Micron Innovations Blog: <a href="www.micronblogs.com">www.micronblogs.com</a>
 Micron on Twitter: <a href="twitter.com/microntechpr">twitter.com/microntechpr</a>
 Lexar on Twitter: <a href="twitter.com/lexarmedia">twitter.com/lexarmedia</a>

Micron Technology, Inc. is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets <a href="DRAMs">DRAMs</a>, <a href="NAND flash memory">NAND flash memory</a>, <a href="CMOS image sensors">CMOS image sensors</a>, 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="www.micron.com">www.micron.com</a>.

#### **About Lexar Media**

Lexar Media is a leading designer, manufacturer, and marketer of NAND flash and DRAM memory products under the Lexar and Crucial® brand names. Lexar offers products in all major flash and DRAM memory categories, including consumer and enterprise-level USB flash drives, industry-leading memory cards for photography, and all popular form factors of memory cards for mobile devices. For computers, Lexar also offers a full range of DRAM computer memory upgrades for PCs and Mac® systems, and solid state drives (SSDs). An industry leader in innovative, patented flash memory technology, Lexar is vertically integrated with Micron Technology, Inc. one of the largest semiconductor manufacturers worldwide.

For more information about Lexar, visit <a href="www.lexar.com">www.lexar.com</a>. For more information about Crucial products, visit <a href="www.crucial.com">www.crucial.com</a>, <a href="www.crucial.com/eu">www.crucial.com/eu</a>. Lexar Media, Inc. is a subsidiary of Micron Technology, Inc. Lexar Media is a division of Micron Europe Limited, a division of Micron Semiconductor Asia Pte. Ltd., and a division of Micron Japan, Ltd.

Lexar. When Memory Matters.™

©2009 Micron Technology, Inc. Micron and the Micron orbit logo are trademarks of Micron Technology, Inc. Lexar, the Lexar logo, and JumpDrive are trademarks of Lexar Media, Inc. All other trademarks are the property of their respective owners.

#### **Related Links**

Micron Media Center Lexar Media

#### **Contacts**

For Micron: Kirstin Bordner Micron Technology, Inc. Phone +1-208-368-5487 kbordner@micron.com

For Lexar Media: Andrew Rodger Matter Communications
Phone +1-978-499-9250 x233
mailto:andrew@matternow.com