

Intel, Micron Extend NAND Flash Technology Leadership, Introduce Industry's Smallest, Most Advanced 20-Nanometer Process

New 20nm, 8-gigabyte Device Delivers Highest Capacity in Smallest Form Factor for Tablets, Smartphones, SSDs and Other Consumer and Compute Devices

NEWS HIGHLIGHTS

- Intel and Micron deliver industry's smallest, most advanced NAND flash process technology at 20nm.
 IM Flash Technologies leads the industry with 20nm process and quick
- -- IM Flash Technologies leads the industry with 20nm process and quick transitions of the entire fab network.
- -- Measuring just 118mm2, the 8GB MLC NAND device provides high capacity for smartphones, tablets, SSDs and more.

SANTA CLARA, Calif. & BOISE, Idaho--(BUSINESS WIRE)-- Intel Corporation and Micron Technology Inc. today introduced a new, finer 20-nanometer (nm) process technology for manufacturing NAND flash memory. The new 20nm process produces an 8-gigabyte (GB) multi-level cell (MLC) NAND flash device, providing a high-capacity, small form factor storage option for saving music, video, books and other data on smartphones, tablets and computing solutions such as solid-state drives (SSDs).

This photo shows a comparison of two 32 Gigabit (Gb) Intel Micron Flash Technologies (IMFT) 34nm die versus one 64Gb, or 8 Gigabyte (GB), die on 25nm and new 20nm processes. Shrinking NAND lithography is the most cost-effective method for increasing fab output and reducing die cost. Shrinking from 25nm to 20nm process will provide an approximately 50 percent more gigabyte capacity from IMFT factories when compared to current technology. The new 20nm process maintains similar performance and endurance as the previous generation 25nm NAND technology. (Photo: Business Wire)

The growth in data storage combined with feature enhancements for tablets and smartphones is creating new demands for NAND flash technology, especially greater capacity in smaller designs. The new 20nm 8GB device measures just 118mm² and enables a 30 to 40 percent reduction in board space (depending on package type) compared to the companies' existing 25nm 8GB NAND device. A reduction in the flash storage layout provides greater system level efficiency as it enables tablet and smartphone manufacturers to use the extra space for end-product improvements such as a bigger battery, larger screen or adding another chip to handle new features.

Manufactured by IM Flash Technologies (IMFT), Intel and Micron's NAND flash joint venture,

the new 20nm 8GB device is a breakthrough in NAND process and technology design, further extending the companies' lithography leadership. Shrinking NAND lithography to this technology node is the most cost-effective method for increasing fab output, as it provides approximately 50 percent more gigabyte capacity from these factories when compared to current technology. The new 20nm process maintains similar performance and endurance as the previous generation 25nm NAND technology.

"Close customer collaboration is one of Micron's core values and through these efforts we are constantly uncovering compelling end-product design opportunities for NAND flash storage," said Glen Hawk, vice president of Micron's NAND Solutions Group. "Our innovation and growth opportunities continue with the 20nm NAND process, enabling Micron to deliver cost-effective, value-added solid-state storage solutions for our customers."

"Our goal is to enable instant, affordable access to the world's information," said Tom Rampone, vice president and general manager, Intel Non-Volatile Memory Solutions Group. "Industry-leading NAND gives Intel the ability to provide the highest quality and most cost-effective solutions to our customers, generation after generation. The Intel-Micron joint venture is a model for the manufacturing industry as we continue to lead the industry in process technology and make quick transitions of our entire fab network to smaller and smaller lithographies."

The 20nm, 8GB device is sampling now and expected to enter mass production in the second half of 2011. At that time, Intel and Micron also expect to unveil samples of a 16GB device, creating up to 128GBs of capacity in a single solid-state storage solution that is smaller than a U.S. postage stamp.

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 a full range of DRAM, NAND and NOR flash memory, as well as other innovative memory technologies, packaging solutions and semiconductor systems for use in leading-edge computing, consumer, networking, embedded and mobile products. Micron's common stock is traded on the NASDAQ under the MU symbol. To learn more about Micron Technology Inc., visit www.micron.com.

About Intel

Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Additional information about Intel is available at newsroom.intel.com and blogs.intel.com.

Intel and the Intel logo are trademarks of Intel Corporation in the United States and other countries.

* Other names and brands may be claimed as the property of others.

(C)2011 Micron Technology, Inc. and Intel Corporation. All rights reserved. Information is subject to change without notice.

Micron and the Micron logo are trademarks of Micron Technology, Inc. This news release contains forward-looking statements regarding the production of the 20nm, 8GB and 16GB NAND device. Actual events or results may differ materially from those contained in the forward-looking statements. Please refer to the documents Micron files on a consolidated basis from time to time with the Securities and Exchange Commission, specifically Micron's most recent Form 10-K and Form 10-Q. These documents contain and identify important factors that could cause the actual results for Micron 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.

Photos/Multimedia Gallery Available: http://www.businesswire.com/cgi-bin/mmg.cgi?eid=6683398&lang=en

Source: Intel Corporation