

SanDisk to Launch 43-Nanometer Multi-Level NAND Flash Memory in Mass Production

February 6 2008

SanDisk Corporation today announced the introduction of Multi-Level (MLC) NAND flash memory using 43 nanometer process technology co-developed with Toshiba Corporation in Japan.

This 43nm technology advancement provides twice the density per chip compared to 56nm 16Gigabit (Gb) process technology, thus lowering the die-cost while maintaining performance and reliability.

During the second quarter of 2008, SanDisk intends to begin shipping products using the industry's highest available density of single-chip MLC NAND flash memory. Shipments will start with 16Gigabit and will be followed by 32Gigabit in the second half of 2008.

“We’re excited about commencing the production ramp of the 43nm generation of MLC NAND flash memory with its significantly lower cost benefits,” said Dr. Randhir Thakur, SanDisk’s executive vice president of technology and worldwide operations. “Technology features include SanDisk’s patented All Bit line (ABL) architecture with efficient programming algorithms and 8-Kilobyte (KB) page size, providing high performance capabilities. State-of-the-art lithography, other process technology innovations and industry-first 64-NAND string architecture provide lower cost per megabyte and excellent performance. The 43nm technology generation will become our major focus during 2008 as we continue to provide leading-edge technology and cost benefits to our

customers” he added.

SanDisk and Toshiba presented today a joint paper on 43nm 16Gb NAND flash memory at the 2008 International Solid State Circuits Conference (ISSCC), highlighting the technical advancements.

Continuing its leadership in the development and fabrication of advanced NAND flash technology, SanDisk has started the transition to 43nm manufacturing at Toshiba’s Yokkaichi Operations near Nagoya, Japan. SanDisk and Toshiba share output from the Yokkaichi facility and have co-developed many of the designs and technologies in MLC NAND flash. The new 43nm flash will be produced initially at Fab 4, the new 300mm wafer facility that SanDisk and Toshiba recently opened. In the second half of 2008, Fab 3 also is expected to transition to 43nm.

The 43nm generation of NAND flash combined with SanDisk’s systems innovation and proprietary controllers is also expected to enable emerging markets such as Solid State Drives (SSDs) and managed NAND such as iNAND, to expand the flash storage capabilities of the rapidly growing mobile market, and to extend our leadership in differentiated high performance product lines.

Source: SanDisk

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