SanDisk, Toshiba to Launch 56-Nanometer, 16-Gigabit High-Performance NAND Flash Memory

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SanDisk today announced that it expects to see the launch of the next generation of NAND flash memory this quarter as it begins the transition from 70 nanometer (nm) to 56nm multi-level cell (MLC) flash memory chips at Fab 3, the 300mm wafer fabrication facility that is located at Toshiba's Yokkaichi Operations near Nagoya, Japan. In the first half of this year, SanDisk intends to start shipping products with the industry's highest available density of single-chip MLC NAND flash memory.

After qualifying limited engineering samples, SanDisk plans to introduce 8Gb (1 gigabyte) single-chip MLC NAND flash memory on 56nm process technology in the first quarter. In Q2-07, the company expects to introduce 56nm 16Gb (2 Gigabyte) NAND, which doubles the memory density per chip when compared to 70nm technology. Architectural innovations and improved programming efficiency in 56nm technology are expected to enhance product performance. The adoption of 56nm process technology allows SanDisk to continue its leadership in providing cost-effective flash memory-based products.

"With commencement of the 56nm technology, SanDisk is rolling out its fifth generation of MLC NAND flash memory," said Dr. Randhir Thakur, SanDisk's executive vice president of technology and worldwide operations. "The technology and design advances will help enable SanDisk products to offer approximately twice the improvement in write

performance compared to the 70nm generation. We are pleased with the joint development of 56nm advanced technology with Toshiba, and expect it to become a production workhorse in Fab 3 during the second half of this year. We are executing according to plan and continue to make the captive Fabs highly cost-effective sources of flash memory for our expanding array of consumer products," he added.

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 56nm flash will be produced initially at Fab 3, the first 300mm wafer facility that SanDisk and Toshiba opened in 2005. By the end of this year, Fab 4, the new 300mm facility now under construction in connection with Flash Alliance, Ltd., a venture between the two companies, is expected to add to the 56nm flash production.

Source: SanDisk

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