Toshiba launches 19nm process NAND flash memory

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(PhysOrg.com) -- Toshiba Corporation today announced that it has fabricated NAND flash memories with 19nm process technology, the finest level yet achieved. This latest technology advance has already been applied to 2-bit-per-cell 64-gigabit (Gb) chips that are the world's smallest and offer the highest density on a single chip (8 gigabytes (GB)). Toshiba will also add 3-bit-per-cell products fabricated with the 19nm process technology to its product line-up.

Samples of 2-bit-per-cell 64-gigabit will be available from the end of this month with mass production scheduled for the third quarter of the year (July to September 2011).

Toshiba leads the industry in fabricating high density, small die size NAND flash memory chips. Application of the 19nm generation process technology will further shrink chip size, allowing Toshiba to assemble sixteen 64Gbit NAND flash memory chips in one package and to deliver 128GB devices for application in smartphones and tablet PCs. The 19nm process products are also equipped with Toggle DDR2.0, which enhances data transfer speed.

As the market for mobile equipment, such as smartphones, tablet PCs, and SSDs (solid state drives) expands, demand for smaller, higher density memory products grows. By accelerating process migration in NAND flash memory, Toshiba aims to reinforce and extend its leadership in the NAND flash memory.

Source: Toshiba Corporation