Toshiba introduces new embedded-NAND flash memory in 24nm process

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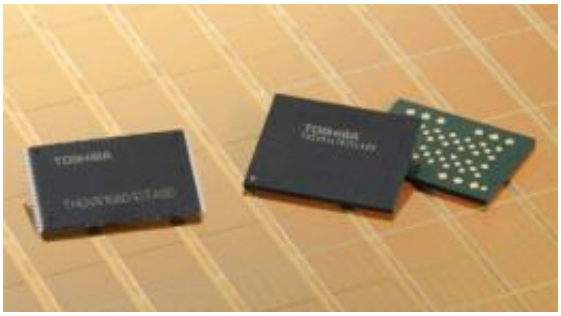

Toshiba Corporation today announced that it has enhanced its NAND flash portfolio with the introduction of next-generation 24-nanometer (nm) generation "SmartNAN," which integrate robust error management into the NAND package. The new chips will support simplified host-side design and application of advanced NAND process generation in consumer applications, including digital audio players, tablet PCs, information equipment, digital TVs, set-top boxes and other applications that require high-density, non-volatile memory.

Samples of the new SmartNAND line-up will be available from middle of April, and mass production will start in the second quarter of CY2011 (April to June).

The SmartNAND series packages integrate leading-edge 24nm process

NAND flash technology with a control chip supporting error correction code (ECC). The five devices in the latest line-up range from 4 to 64 gigabyte (GB) capacities, and are expressly designed to remove the burden of ECC from the host processor while minimizing protocol changes. The SmartNAND portfolio is targeted for portable media players, tablet PCs and other consumer digital products etc.

The new 24nm product line-up will replace current 32nm generation devices, and its advanced process combined with faster controller and internal interface will realize faster read and write speeds and enhance overall performance. SmartNAND also supports a range of read and write speeds, optimized to suit design objectives, and four read modes and two write modes will be offered.

The new products utilize the long established raw NAND interface, and include new features that are optimized for high-capacity and high-performance applications. Managing bit errors is essential for digital products to maintain acceptable levels of performance and reliability. Installing error management with the NAND devices in a single package allows Toshiba's customers to take advantage of high capacity, advanced flash memory solutions offering excellent error management.

Demand continues to grow for large density chips that support high resolution video and enhanced storage, particularly for embedded memories with a controller function that minimizes development requirements and eases integration into system designs. Toshiba has established itself as an innovator in this key area, and is now reinforcing its leadership by further enhancing its SmartNAND.

Source: Toshiba Corporation

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