

Micron unveils innovative flash memory devices that extend the life of NAND

2 December 2010

Micron Technology, Inc. today introduced a portfolio of high-capacity flash memory products that will lengthen the life of NAND for years to come. By integrating the error management techniques in the same NAND package, the new Micron ClearNAND devices alleviate the challenges traditionally found in NAND process shrinks. Micron's ClearNAND portfolio extends the opportunities for more advanced NAND process generations to be used in enterprise servers, tablet PCs, portable media players, and dozens of other consumer applications.

"The pace of NAND scaling is largely responsible for the incredible growth and success the industry has seen to date, and for helping to create new flash-based storage solutions," said Glen Hawk, vice president of Micron's NAND Solutions Group. "While the advantages in NAND scaling are evident, so are the challenges with the technology becoming increasingly more difficult to manage. Micron's ClearNAND products remove this management burden for our customers and extend the life of this all-important technology."

Micron's ClearNAND products utilize a traditional raw NAND interface, and include new features that are optimized for high-capacity and high-performance applications. As the industry progresses past 20-nanometer (nm), flash management gets more challenging because the amount of bit errors increases dramatically, impacting NAND performance and reliability. By tightly coupling the error management with the NAND devices in a single package, Micron's customers can continue to take advantage of the highest capacity and lowest cost-per-bit [flash memory](#) solution. Micron's ClearNAND products are first designed using its 25nm multi-level cell (MLC) process, and are available in two versions: Standard and Enhanced.

Micron's Standard ClearNAND products come in 8 to 32 [gigabyte](#) (GB) packages, and are intended to

remove the error correction code (ECC) burden from the host processor with minimal protocol changes compared to raw NAND. The Standard ClearNAND portfolio is targeted for portable media players and other consumer electronic devices.

Micron's Enhanced ClearNAND products, in addition to removing the ECC burden from the host processor, also provide new enterprise specific features to enable high-capacity designs, delivering improved performance and reliability. Capacities are available in 16 to 64GB packages. The Enhanced ClearNAND products are targeted at enterprise and computing applications, and allows leading-edge 25nm MLC [NAND](#) to be used in these applications for the first time.

Both Micron Standard ClearNAND and Enhanced ClearNAND products are available now.

Source: Micron

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