

iNAND embedded flash drives enable continued development of powerful mobile devices

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SanDisk Corporation, the global leader in flash memory cards, today announced its next generation of iNAND and iNAND Ultra embedded flash drives featuring smaller and thinner form factors. Available in packages as small as 11.5mm x 13mm x 1mm, SanDisk's new iNAND and iNAND Ultra e.MMC products support the increasing demand for slimmer and more compact smartphone and tablet designs.

SanDisk reduced its iNAND package sizes by using advanced 24nm generation NAND memory chips, which are more compact than previous versions, and reduced its iNAND package heights by using advanced packaging technologies. iNAND EFDs are based on SanDisk's three-bit-per-cell NAND [flash technology](#) and iNAND Ultra EFDs are based on SanDisk's two-bit-per-cell [NAND flash](#) technology.

"For smartphones and tablets, every millimeter of thickness counts," said

Amir Lehr, vice president, embedded business, [SanDisk](#). "Designers are constantly looking for new ways to make mobile devices as small and thin as possible. To meet that need, SanDisk's advanced NAND process and packaging technologies allow us to pack more storage into smaller and slimmer footprints. This in turn enables OEMs to design more compact devices while freeing up precious board space for other needs, such as larger batteries."

As smartphones continue to increase in [computing power](#) and offer advanced features, they require greater amounts of storage; at the same time, consumer demand for smaller and slimmer devices presents a significant challenge to hardware designers. To meet this need, SanDisk reduced the package size of its iNAND and iNAND Ultra e.MMC embedded storage devices, enabling handset manufacturers to develop sleek, highly functional products.

- SanDisk iNAND and iNAND Ultra EFDs offer up to 64 gigabytes (GB) of storage in a 12mm x 16mm JEDEC standard package
- Package heights reduced to as low as 1.0mm for even slimmer handset designs. 32GB versions of both iNAND and iNAND Ultra products offered in 1.2mm package heights; for comparison, ten sheets of 20-pound office paper is approximately 1.0mm thick
- SanDisk iNAND products with capacities up to 8GB available in 11.5mm x 13mm sizes
- The new products will be available beginning in the third quarter of 2011

SanDisk also offers embedded solid state drives for use in "productivity tablets" with high performance requirements. SanDisk's integrated solid state drive is the world's smallest 64GB SSD in a BGA package and first in a new category of embedded SSDs that are smaller than a postage stamp and weigh less than a paper clip. iSSD devices are available in capacities ranging from 4GB to 64GB with a SATA interface. The iSSD

device is the fastest high-capacity embedded storage solution at this physical size, and is designed for high performance and reliability for mobile computing platforms including high-end tablets. iSSD devices are based on MLC technology.

SanDisk iNAND EFDs come in a variety of storage capacities ranging from 2GB to 64GB for quick integration into handset and other designs that require an eMMC interface. With managed physical partitions, customizable attributes and advanced power failure immunity, SanDisk iNAND EFDs feature highly reliable boot code and application storage device capabilities in addition to being a mass storage solution. iNAND drives use advanced caching technology that improves system responsiveness, and are designed based on SanDisk's usage analysis capabilities. iNAND EFDs are based on both MLC and X3 technologies.

More information: Mobile World Congress attendees can visit SanDisk at Hall P8, Stand 8B91.

Source: Sandisk Corporation

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