

Samsung Intros Industry's First Higher-performing 20nm-class NAND Flash Memory

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Samsung Electronics announced the industry's first production of 20 nanometer class NAND chips for use in Secure Digital (SD) memory cards and embedded memory solutions. Based on this cutting-edge technology, the introduction of 32 gigabit (Gb) MLC NAND will expand the company's memory card solutions for smart phones, high-end IT applications and high-performance memory cards.

“The new 20nm-class [NAND](#) is not only a significant step forward in process design, but we have incorporated advanced technologies into it to enable substantial performance innovation.”

Mr. Soo-In Cho, president, Memory Division, [Samsung Electronics](#), said

"In just one year after initiating 30nm-class NAND production, Samsung has made available the next generation node 20nm-class NAND, which exceeds most customers requirements for high-performance, high-density NAND-based solutions." He added, "The new 20nm-class NAND is not only a significant step forward in process design, but we have incorporated advanced technologies into it to enable substantial performance innovation."

Samsung's 20nm-class MLC NAND has a 50 percent higher productivity level than 30nm-class MLC NAND. The write performance of a 20nm-class-based, eight gigabyte (GB) and higher density, SD card is 30 percent faster than the 30nm-class NAND and it delivers a speed-class rating of 10 (read speed of 20MB/s, write speed of 10MB/s). By applying cutting-edge process, design and controller technology, Samsung also has secured reliability levels comparable to 30nm-class NAND.

Samsung Electronics first began producing 32Gb NAND with 30nm-class process technology in March 2009. Now it is shipping [SD card](#) samples to customers, that are built with 20nm-class 32Gb NAND, and will expand production later this year.

[Memory cards](#) based in the 20nm-class will be available from 4GB through 64GB densities.

Samsung's introduction of its high-performance premium NAND will better support the growing memory requirements of high-density smartphones, high-end IT applications and high-performance memory cards.

Source: Samsung

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