

Samsung now producing 20nm-class, 64-gigabit 3-bit NAND flash memory

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Samsung Electronics announced today the industry’s first production of a 3-bit-cell (3bit), 64 gigabit (Gb) NAND flash using 20 nanometer (nm)-class process technology. The highly advanced new chip can be used in high-density flash solutions such as USB flash drives (UFDs) and Secure Digital (SD) memory cards.

“Samsung has repeatedly provided the market with leading-edge NAND flash solutions, including the introduction of 30nm-class, 32Gb 3-bit NAND flash last November,” said Seijin Kim, vice president, Flash [Memory](#) Planning/Enabling, [Samsung Electronics](#). “By now entering into full production of 20nm-class 64Gb 3-bit devices, we expect to accelerate adoption of our high-performance NAND solutions that use Toggle DDR technology, for applications that also require high-density

NAND.”

The availability of storage density as high as eight gigabyte (64Gb) in a single chip will trigger widespread acceptance of Toggle DDR-based high-performance flash in UFDs and SD cards, as well as smart phones and SSDs, while replacing previous four gigabyte (32Gb) devices in the market.

Samsung’s 20nm-class, 64Gb 3-bit NAND has a 60 percent higher productivity level than 30nm-class, 32Gb 3-bit NAND. The device also offers improved performance by applying Toggle DDR (Double Data Rate) 1.0 specifications, compared to those of SDR (Single Data Rate) based 30nm-class NAND chips.

Following the production of 20nm-class 32Gb MLC NAND in April, Samsung expands its product offerings at the leading-edge 20nm-class process node with the introduction of the 20nm-class 64Gb 3-bit [NAND](#).

Source: Samsung

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