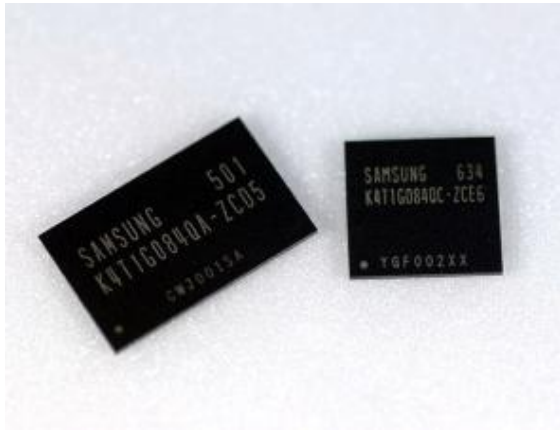


# Samsung First to Mass-produce 1Gb DDR2 Memory with 80nm Process Technology



**Samsung Electronics, the world leader in advanced memory technology, announced today mass production of 1Gigabit (Gb) DDR2 DRAM memory using 80 nanometer (nm) process technology. While monolithic 1Gb DDR2 is available today, it is produced with more costly and less efficient 90 nm technology.**

By applying 80nm process technology, Samsung will produce the world's smallest DRAM package (11x11.5mm). This is 36% smaller than the 11x18mm package required for a DRAM chip utilizing 90nm and nearly as small as the 512Mb DRAM, which is half the size of a 90nm 1Gb chip.

Most 1Gb DRAM chips today are stacked in high-capacity DRAM modules for next-generation servers. These modules include the 4GB fully buffered Dual In-line Memory Module (DIMM) and the 2GB Small Outline Dual Inline Memory Module (SODIMM).

Thirty-six 1Gb DRAM chips are needed to create a 4GB module, which has had to be configured either by stacking two chips on top of one another or by enclosing two chips into the same package. Avoiding chip stacking simplifies the production process, lowers production costs and enhances overall electrical properties.

The market research firm Gartner estimated that the global DRAM market is worth US\$28.7 billion this year and predicted that will rise to US\$37.8 billion by 2008. The 1Gb DRAM currently represents 8% of total market share, but is expected make up 36% of all DRAM sold in 2008.

Samsung is now producing all densities of DDR2 DRAM at the 80nm node. It began producing the first 512Mb DDR2 DRAM at 80nm node since last March.

Source: Samsung Electronics

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