

Samsung Develops World's First Eight-Die Multi-Chip Package Technology for Multimedia Cell Phones

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Samsung Electronics Co., Ltd., the world leader in advanced memory technology, today announced that it has developed the world's first eight-die [multi-chip package](#) (MCP) [technology](#), designed for use in high-capacity mobile devices such as 3G handsets and other increasingly smaller mobile devices.

Typically, as the number of chips per memory package increases, so does the thickness of the package. Using its Wafer Supporting System technology to make wafers thinner during design processing, Samsung has been able to minimize overall die thickness as well as decrease the space between the stacked dies. As a result, the eight-die MCP solution offers an unmatched combined capacity of 3.2 gigabits in a package that is 1.4mm thick, equaling the thickness of a four-die MCP solution.

The new eight-chip MCP is an extremely compact, high-capacity solution that is likely to trigger development of new next-generation mobile applications. It will provide much greater functionality in cell phones and other smart mobile devices, from movie videos to games as well as faster Internet access.

The new eight-die MCP uses all the memory devices available today for mobile products in a single 11 x 14 x 1.4mm package. It includes two 1Gb NAND flash memories, two 256Mb NOR flash memories, two 256Mb mobile DRAMs, one 128Mb UtRAM and one 64Mb UtRAM.

The market research organization, iSuppli, has predicted that the 3G mobile phone market will expand an average of 87 percent a year. Samsung Electronics, a leader in next-generation multi-function package technology, is the world's largest supplier of DRAM, SRAM and NAND flash memory chips.

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