## World's Largest-capacity Multi-chip Package for Mobile Applications

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Samsung Electronics Co., Ltd., the world leader in advanced memory technology, today announced that it is mass producing the world's largestcapacity multi-chip package (MCP). The new 2.5 Gb MCP will enable multimedia-intensive mobile phones, especially 3G phones, to have memory levels that, for the first time, are equivalent to that of a personal computer's main memory: 320MBytes.

As mobile phones become slimmer and lighter, their increasing functionality continues to become more sophisticated and diverse. Today's handset designs must be able to support multimedia, including digital multimedia broadcasting (DMB). This requires higher capacity
memory, particularly that afforded by multiple chip package designs.

Samsung's new 2.5 Gb MCP consists of four dies - a stack of two 1 Gb NAND flash memory chips and two 256Mb Mobile DRAMs. The new MCP operates on only 1.8 volts and is capable of storing up to four hours of high-quality (QVGA) video data. Its capacity of 2.5 Gb far exceeds the current 1.5 Gb capacity level.

Samsung's MCPs can be configured in many different ways to accommodate a wide variety of specific applications. This multifunction device is helping mobile phone makers to utilize the limited space inside their products much more efficiently.

Samsung continues to lead the market in the development and introduction of high-density multi-chip packages, one of the fastest growing areas of its semiconductor business. Complimenting its recently announced development of the industry's first eight-chip MCP, the new 2.5 Gb MCP also is expected to accelerate the introduction of smaller, more versatile 3 G mobile phones.

The market research firm iSuppli predicts that the market for 3G mobile phones will grow an average of $78 \%$ a year through 2008, when 240 million units will be sold worldwide.

Samsung is the only company producing NAND flash memory, Moible DRAM, NOR flash memory and UtRAM at the same time - all of the types of memory that can be used in the design of multi-chip packages today.

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