

MMCmicro - New Samsung's Tiny Removable Memory Cards for Mobile Phones

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Samsung announced today that it has developed an extremely small, low-power multimedia memory card (MMC) for mobile phones. The Samsung MMCmicro memory card has been designed to overcome a major hurdle in cell phone design -- achieving high performance with a low-power, removable memory card, now smaller than the size of a thumbnail.

Memory cards are made by a variety of manufacturers, and come in different sizes. Prices among capacities and types of memory cards also vary. Some types of memory cards have a wider range of memory capacities available, and the prices vary between these types and capacities.

Memory card types are not compatible with one another. There are six main types of memory cards: CompactFlash (CF), MemoryStick (MS), Secure Digital (SD), xD memory cards, SmartMedia (SM), and Multimedia (MMC).

With dimensions of only 12x14x1.1mm, Samsung's new "MMCmicro" device is one-third the size of today's common reduced-size multimedia cards (RS-MMC). Samsung said that the design of its low-power card makes it easy to incorporate removable memory into progressively smaller mobile phones. Each card can operate on 1.8 or 3.3 volts of power.

Despite its exceptionally small size, the Samsung MMCmicro has proven to be highly reliable in delivering excellent performance through extensive testing. The card can read at 10MB per second and write at 7MB per second; a 128MB version can store about 60 5-megapixel digital photographs or nearly one hour of QVGA-resolution video. Highly durable, the card can be erased and reused at least 100,000 times and offers an operating speed between card and system of 26MB per second. With exceptional storage and performance characteristics, the MMCmicro is designed to be easily removed from the handset and replaced with a new MMCmicro card when users decide to upgrade.

Samsung can stack up to five NAND flash memory devices into each of the new ultra-small memory cards. Initially, they will be sold in 32, 64 and 128 Mbyte sizes.

Research and analysis firm Gartner, Inc. predicts that demand for MMC cards will grow at an average of 61 percent annually through 2007. Samsung is working on standardizing the "MMCmicro" memory card with the Multimedia Card Association (MMCA).

Other Samsung multimedia cards include RS-MMC and MMCmobile for cellular phones, and MMC and MMCplus versions for digital cameras.

Samsung will begin mass production of its thumbnail-sized memory cards in early 2005.

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