

Samsung Says High-bandwidth 512Mb Memory Will Enable 3D Graphics in Smaller Mobile Phones

January 19 2005

Samsung Electronics, the world leader in advanced memory technology, today announced that it has completed the world's first working prototype of a 512Mb mobile DRAM device that operates up to 333Mbps, transmitting 32 bits of data simultaneously. This memory [chip](#) is fast enough to support high-quality 3D graphics and streaming video in next-generation mobile phones, PDAs, portable scanners and other handheld products.

Two of the new 512Mb mobile DRAMs can be stacked together to provide a one-gigabit memory capacity, opening up new possibilities for mobile storage.

Powered by just 1.8 volts, the high-bandwidth Samsung chip is available in double data rate (DDR) and synchronous DRAM (SDRAM) formats to work with as many data transmission systems as possible. Samsung also will develop versions of the 512Mb mobile memory for its multi-chip packages (MCPs) and system-in-a-package (SIP) devices.

Third-generation mobile phones, which are equipped to handle streaming video, represent the largest market for the 512Mb mobile DRAM. Sales of 3G phones are expected to increase an average of 67% a year from 2004, to reach 280 million units sold in 2008. IDC, the market analysis agency, predicts that overall annual sales of mobile phones will reach 790 million units worldwide in 2008.

Samsung will begin producing the chip early in the second half of 2005. Both x16 and x32 devices will be produced.

Samsung Electronics became the world's first to apply 90-nanometer design technology to a standard 512Mb DRAM beginning in September, 2004. Now, the company is again leading the industry in using this cutting-edge processing technology to produce its 512Mb mobile DRAM.

Citation: Samsung Says High-bandwidth 512Mb Memory Will Enable 3D Graphics in Smaller Mobile Phones (2005, January 19) retrieved 19 April 2024 from <https://phys.org/news/2005-01-samsung-high-bandwidth-512mb-memory-enable.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.