Samsung's first 90nm 512Mb DRAM memory adopted for use in Playstation 3

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Samsung Electronics today announced that it has produced the first 90-nanometer production samples of 512-Megabit XDR (eXtreme Data Rate) DRAM, the fastest memory for multimedia applications.
The Samsung 512Mb XDR DRAM can transmit data with up to 9.6 GigaBytes per second, 12 times faster than DDR400 memory and 6 times faster than leading RDRAM (PC 800) devices. It uses advanced 90-nanometer memory technology to achieve a peak operating speed of 4.8Gbps at 1.8 volts.
XDR DRAM from Samsung will be adopted for Sony Computer Entertainment's next generation computer entertainment system, Playstation 3.

The memory device targets high-performance broadband applications that need advanced digital imaging or 3D graphics, such as the latest game consoles, digital TVs, high-end servers and premium workstations.

Yeong Ho Kang, Vice President, Memory Marketing, Samsung Semiconductor, said, "We have worked closely with Sony Computer Entertainment to assure that the next generation computer entertainment system had what Sony Computer Entertainment wanted for the launch of Playstation 3: the fastest system memory with optimal thermal performance."

Samsung's XDR DRAM is based on Rambus' XDR memory interface technology. It can support the widest variety of data input and output requirements and will be available in x2, x4, x8 and x16 versions.

According to IDC, a market research firm, the XDR DRAM market will grow steadily over the next four years (2006-2009) to reach 800 million units of 256Mb-equivalent memory.