

Elpida Completes Development of 50nm Process DDR3 SDRAM

November 26 2008

Elpida Memory, Japan's leading global supplier of Dynamic Random Access Memory (DRAM), today announced that it has completed development of a 50nm process DDR3 SDRAM. The new DRAM product features the lowest power consumption in the industry, 2.5Gbps ultra high speed and a 1.2V low voltage operation based on the industry's smallest chip size.

The new 50nm process DDR3 SDRAM was developed using the industry's most advanced 193nm (ArF) immersion lithography technology and copper interconnect technology and has a chip size of less than 40mm². Also, the new SDRAM is an eco-friendly DRAM. It operates on not only DDR3 standard 1.5V supply voltage but even lower voltages of 1.35V and 1.2V and contributes to the low-power operations of high-density memory systems such as servers and data centers.

Features of the new 50nm process DDR3 SDRAM:

- Data rate: 800Mbps, 1066Mbps, 1333Mbps, 1600Mbps, 1866Mbps, 2133Mbps and 2500Mbps
- Operating voltage: 1.2V, 1.35V, 1.5V
- Low electric current: A maximum 50% reduction (IDD4) compared to 70nm process DRAM

The new DDR3 SDRAM will initially find applications in high-end desktop PCs. Applications are possible elsewhere based on the current shift away from DDR2 SDRAMs in notebook PCs and server

equipment. As a leading vendor of DDR3, Elpida supplies an extensive lineup of high-speed, low-power and dependable DDR3 products. It is also accelerating the availability of a wider range of DDR3 memory applications by now providing high-performance, low-cost 50nm process products.

Mass production of the new 50nm process DDR3 SDRAM is scheduled to begin in the January-March 2009 quarter. Elpida is also aggressively developing 50nm process products for high-end digital consumer electronic products and Mobile RAM.

Source: Elpida

Citation: Elpida Completes Development of 50nm Process DDR3 SDRAM (2008, November 26) retrieved 27 April 2024 from <https://phys.org/news/2008-11-elpida-50nm-ddr3-sdram.html>

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