Elpida Completes Development of New 50nm Process 2-Gigabit Mobile RAM

December 10 2008

Elpida Memory today announced that it had completed development of a 50nm process 2-gigabit Mobile RAM product using 50nm process technology with 193nm (ArF) immersion lithography and copper interconnect.

The ultra low-power features of Mobile RAM are ideal for use in mobile phones, portable multimedia devices, portable internet-related devices and other handheld device applications. In its development of Mobile RAM Elpida has focused on conserving electric current. Compared with 70nm products the new 50nm product uses less than half the data retention current and half the operating current. These enhanced features enable double the memory capacity without an increase in system power consumption.

The new product optimizes the pad layout for PoP (Package on Package), MCP (Multi Chip Package) and other packaging technology and is designed to meet the need for smaller yet higher capacity memory packages for use in mobile devices.

It uses an x32-bit I/O configuration based on double-data rate (DDR) that can operate at an extremely fast speed of 400Mbps (200MHz) to transmit data at the rate of 1.6 gigabytes per second. Thus it can meet demand for high-resolution high-quality graphics display and high bandwidth video play. Moreover, it enables applications that achieve higher performing systems functions while maintaining small mounting space and power consumption. In addition to JEDEC standard 1.8V the

product supports 1.2V supply voltage to further lower power consumption.

Elpida's newest Mobile RAM joins a line-up that can meet a wide variety of customer needs. It supports both single-data rate (SDR) and the more advanced DDR and has either an x32 bit or x16 bit I/O configuration on a single-chip.

The company plans to begin mass production of this product in the first half of CY 2009.

Provided by Elpida