Elpida starts sample shipments of next-generation mobile RAM products

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Elpida Memory, the world's third largest Dynamic Random Access Memory manufacturer, today announced that it has begun sample shipments of 4-gigabit Wide IO Mobile RAMTM and 4-gigabit DDR3 Mobile RAM (LPDDR3).

Wide IO Mobile RAM is a next-generation mobile memory chip that provides solutions to opposing needs for faster speed and lower power consumption. The rising performance of smartphones and tablet devices in recent years has led to demand for faster DRAMs (DRAMs with greater data transfer rates), but in turn this has generated concerns about increases in system power consumption.

The solution is that Wide IO Mobile RAM expands the I/O width by using x512-bit, a data width that is more than 10 times larger than the width for existing DRAMs, which enables a data transfer rate of 12.8 gigabytes per second (GB/s) per chip while operating at a low speed of 200MHz. The reduced DRAM speed results in approximately 50% less power consumption compared with DDR2 Mobile RAM (LPDDR2), currently the leading DRAM choice for mobile devices, configured at the same transfer rate.

LPDDR3 is another of Elpida's new next-generation mobile memory. This new chip achieves a data transfer rate that is twice as fast as LPDDR2. A single LPDDR3 has a data transfer rate of 6.4 GB/s or 12.8GB/s based on a two-chip configuration for high-end mobile devices. When compared with LPDDR2 on an identical speed basis,

LPDDR3 consumes roughly 25% less power, enabling it to extend the operating time of smartphones and tablet devices.

Now that 4-gigabit Wide IO Mobile RAM and 4-gigabit DDR3 Mobile RAM (LPDDR3) sample shipments have started. Elpida plans to begin volume production in 2012. Also, both chips will be used to develop two-layer 8-gigabit and four-layer 16-gigabit high-density packages for addition to the company's product line-up.

Elpida will promote Wide IO Mobile RAM and DDR3 Mobile RAM (LPDDR3) as memory chip choices that can strongly support next-generation mobile applications.

Provided by Elpida