

Elpida develops 1600 Mbps 4-gigabit DDR3 mobile RAM (LPDDR3)

November 24 2011

Elpida Memory, Dynamic Random Access Memory ("DRAM") manufacturer, today announced that it has developed an advanced 30nm process 4-gigabit DDR3 Mobile RAM™ (LPDDR3). The new chip can achieve a high-speed data transfer rate of 1600Mbps at low operating voltage of 1.2V.

The new LPDDR3, along with the newly developed high-performance low-power consumption Wide IO Mobile RAM recently announced, enables Elpida to strongly support the development of next-generation mobile devices.

LPDDR3 achieves a data transfer rate that is twice as fast as DDR2 Mobile RAM (LPDDR2), the current leading DRAM preference for mobile devices.

Based on a per pin speed of 1600Mbps, a single LPDDR3 device has a data transfer rate of 6.4 gigabytes per second (GB/s) or 12.8GB/s in high-end mobile devices using a two-chip configuration. When compared with LPDDR2 on a same-speed basis, LPDDR3 consumes roughly 25% less power, enabling it to extend the operating time of such mobile devices as smartphones and tablet PCs.

Sample shipments of the new LPDDR3 will begin toward the end of 2011. Depending on customer demand, [volume production](#) is expected to start in late 2012. Also, two- and four-layer stacking configurations will enable high-density 8-gigabit and 16-gigabit chips to be added the

line-up of LPDDR3 products.

Provided by Elpida Memory

Citation: Elpida develops 1600 Mbps 4-gigabit DDR3 mobile RAM (LPDDR3) (2011, November 24) retrieved 4 October 2025 from <https://phys.org/news/2011-11-elpida-mbps-gigabit-ddr3-mobile.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.