

# Elpida Begins Mass Production of 40nm 2-Gigabit DDR3 SDRAM

December 22 2009

---

Elpida Memory, Japan's leading global supplier of Dynamic Random Access Memory (DRAM), today announced that its Hiroshima Plant has begun volume production of 40nm process 2-gigabit DDR3 SDRAMs. Since completing development of the DDR3 SDRAM last October it has taken Elpida only two months to ramp up mass production.

The new 2-gigabit DDR3 SDRAM achieves 44% more chips per wafer compared with Elpida's 50nm DDR3 SDRAM and a 100% yield for DDR3 products that operate at 1.6Gbps, the fastest speed standard for current DDR3. It also supports high-speed products. Compared with 50nm products, it uses about two-thirds less current and supports 1.2V/1.35V operation as well as DDR3 standard 1.5V, resulting in reduced [power consumption](#) of around 50%.

Initially, Elpida plans a phased expansion of 40nm 2-gigabit DDR3 SDRAM [mass production](#) at its Hiroshima Plant. In the second quarter of 2010, 40nm process production will also begin at Rexchip, a subsidiary in Taiwan, to increase the manufacture of 40nm process products in order to lower products costs. Depending on conditions in the DRAM market, Elpida may transfer 40nm process technology to foundry partners ProMOS and Winbond to expand production based on this technology to an even higher level.

Source: Elpida

Citation: Elpida Begins Mass Production of 40nm 2-Gigabit DDR3 SDRAM (2009, December 22) retrieved 26 April 2024 from <https://phys.org/news/2009-12-elpida-mass-production-40nm-gigabit.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.