

## Numonyx Design Breakthrough Makes It First To Deliver 45nm NOR Flash Memory Chips

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GENEVA Feb. 9, 2009 – Numonyx B.V. today announced the industry's first samples of multi-level cell (MLC) NOR flash memory products using 45 nanometer (nm) process technology, allowing it to significantly increase the performance of its memory products while providing high levels of continuity and reliability for its customers. This latest device extends beyond its 65nm predecessor as the most advanced NOR flash in the market. Numonyx NOR flash memory chips are most commonly used in mobile phones to run critical phone operations, manage personal data and store photos, music and videos.

The 45nm 1gigabit (Gb) monolithic device is based on the Numonyx<sup>TM</sup> StrataFlash® memory architecture and is drop-in compatible with Numonyx high-volume 65nm NOR flash chips. The architectural compatibility and continuity enables cellular OEMs to reduce development costs, extend the life of current platforms, and bring new products that take advantage of the significant storage and faster execute-in-place memory capacity to market faster. The new technology will also increase the speed in which data is written up to 50 percent over the previous generation.

"The mobile phone memory segment remains large and the need for high-density, low-cost non-volatile NOR flash memory continues to drive aggressive scaling requirements," said Ed Doller, chief technology officer at Numonyx. "Numonyx engineers overcame major scaling limitations by developing new process techniques to produce the 7th generation MLC NOR flash on the industry's most advanced 45nm technology, and to be the first to bring the cost and performance benefits to our customers."

Numonyx technologists achieved a significant breakthrough in how they designed this latest generation of its NOR flash memory technology. Using a new self-aligned contact (SAC) approach, the method allows Numonyx NOR flash memory products to continue to scale while maintaining backward compatibility and highest levels of quality and reliability. "At a time when the entire industry grapples with the scalability of all flash memory technologies, it's quite an accomplishment to be able to deliver architectural and product continuity that meets or exceeds customers' cost and reliability requirements," added Doller.

Numonyx is sampling now in limited quantities and densities, and plans to introduce products on the new technology this year. High volume production is expected in 2010. Numonyx also plans to deploy this technology across the broad range of its embedded flash memory solutions, extending the performance benefits as well as the stability and reliability of architectural continuity to key embedded market segments.

## **About Numonyx**

Numonyx provides a full complement of integrated NOR, NAND, RAM and Phase Change non-volatile memory technologies and products to meet the increasingly sophisticated needs of customers in the cellular, data and embedded markets. Numonyx is dedicated to providing high density, low power memory technologies and packaging solutions to a global base of customers. Additional information about Numonyx is available at <a href="https://www.numonyx.com">www.numonyx.com</a>

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