

# Numonyx Introduces New, High-Density M29 Flash Memory For Embedded Applications

October 28, 2008

Numonyx Introduces New, High-Density M29 Flash Memory For Embedded ApplicationsESC BOSTON, BOSTON, Mass. Oct. 28, 2008 –Numonyx B.V. today introduced a new family of security enhanced, high-density memory products with fast programmability features to makers of set-top boxes, telecommunications equipment providers and other embedded customers. At densities of up to 2 gigabits (Gb)\*, Numonyx<sup>TM</sup> Axcell<sup>TM</sup> M29EW Flash Memory will extend the range of densities Numonyx offers in support o the popular M29 industry standard, helping the company to aggressively enter these high-density embedded NOR flash memory segments.

The Numonyx Axcell M29EW Flash Memory line of products is the industry's first 65nm NOR memory product specifically designed for the rigorous code and data reliability needs of the broad embedded market. Numonyx Axcell M29EW is the first of many product lines that Numonyx will deliver on its 65nm technology through the course of 2009, including its primary parallel and serial NOR embedded products. The smaller lithography ensures that Numonyx continues to deliver unique quality, reliability, cost and performance advantages with its flash memory solutions.

"Numonyx Axcell M29EW Flash Memory is a sophisticated combination of cutting-edge product features with trusted and reliable technology and manufacturing," says Glen Hawk, vice president and general manager of the Embedded Business Group at Numonyx. "Numonyx has added faster programming and increased security capabilities at the highest densities available, while at the same time using M29 industry standards and proven multi-level cell technology."

The Numonyx Axcell M29EW extends the current Numonyx Industry Standard Flash Memory (M29) product family available in densities from 4Mb to 128Mb, to the higher densities of 256Mb to 2Gb. Since a sizable portion of M29 industry standard customers purchase memory densities higher than 256Mb, this represents a substantial growth opportunity for Numonyx. With Numonyx Axcell M29EW Flash Memory, Numonyx has an even broader product portfolio of wide-ranging densities, proven quality and reliability, and enhanced features that will allow it to aggressively pursue the high-density segment.

# **Increased Programming Speed and Added Security**

In addition to the advantages of socket and software compatibility, the Numonyx Axcell M29EW line of products offer user-selectable, value-added features that significantly enhance the applications that adopt this product line. These include a range of configuration, performance and security levels that offer a broad selection for customers.

Numonyx Axcell M29EW provides a dramatically improved programming speed that enables customers to improve the programming throughput, time-to-market and total cost of ownership. At speeds of nearly 1.5MB per second, the new memory can provide a full-chip programming advantage of as much as 11 times faster than typical competitive products. For example, programming 256Mb of code will take an estimated 23 seconds with the M29EW instead of 4.2 minutes it takes with most competitive solutions\*\*- bringing significant savings in production time and costs.

As embedded systems continue to evolve they bring with them a growing need for secure solutions for their memory subsystems. In addition to a standard set of system protection security features that help protect systems from malicious or inadvertent writes, Numonyx Axcell Flash Memory adds a sophisticated security option to provide enhanced intellectual property protection. Numonyx has added password access technologies that helps prevent content alterations thereby enabling system manufacturers to protect their intellectual property stored in the device whether they manufacture their products directly or through contract manufacturing companies.

### **Quality and Reliability**

Based on industry standard (JEDEC) footprints and command sets, the Numonyx Axcell M29 family of products has the benefit of broad industry support, design flexibility and enables embedded customers to scale the memory subsystem across various densities. Numonyx NOR flash memory has been in production on 65nm technology for more than 18 months, demonstrating dependable and proven manufacturing processes.

The addition of the 65nm process for embedded applications enables Numonyx to support long product life cycles, as well as offer enhanced product features and cost efficiencies. Numonyx plans to bring the benefits of 65nm process to many of its NOR product offerings for embedded market segments including both parallel and serial solutions. Numonyx Industry Standard Flash Memory (M29) meets the demanding needs of embedded designs with the added advantages of performance, ease of use and reliability. Numonyx<sup>TM</sup> StrataFlash® Embedded Memory (P30/P33) is the company's burst-enabled, high-density, high-performance code and data solution.

Numonyx Embedded Flash Memory (J3 vD) continues to provide a wide range of densities for legacy designs. The industry-standard Numonyx Serial Flash Memory (M25) simplifies board design and saves board space with a low pin-count interface and smaller package for a range of applications such as DTVs, DVDs, PCs, modems and printers.

Samples of the 256Mb Numonyx Axcell M29EW product are available now with volume production beginning next quarter. Numonyx plans to bring higher densities of the product to market throughout 2009.

#### **About Numonyx**

Numonyx designs and manufactures 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 combines the technology and manufacturing expertise of the flash memory divisions of Intel Corporation and STMicroelectronics, and 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>

- \* 2Gb densities are in stacked configuration
- \*\* Based on data sheet specifications

# Contact:

Mark Miller d: 916.377.8459 m: 916.380.2090 mark.miller@numonyx.com

Roberto Arrigoni d: +39 039 603 5732 m: +39 348 709 8651 roberto.arrigoni@numonyx.com