Numonyx to Present Phase Change Memory Research Results at Leading Technology Industry Conference

December 1, 2009
Numonyx to Present Phase Change Memory Research Results at Leading Technology Industry Conference **GENEVA – December 1, 2009 –** Numonyx B.V. researchers will present their latest findings on phase change memory (PCM) next week at the 2009 International Electron Devices Meeting (IEDM), the world's main forum for reporting breakthroughs in technology, physics and the modeling of semiconductors and other electronic devices. Numonyx will share the advances made on its PCM technology through a combination of contributed and invited papers, demonstrating the company's leadership in PCM research and development.

"The prevalence of PCM at this year's IEDM conference is evidence of the growing interest and credibility of PCM as the memory technology of today and for the future," said Paolo Cappelletti, vice president of technology development at Numonyx. "In addition to validating our PCM technology, the different papers Numonyx and its industry partners are presenting at the conference shows the capability of this technology to meet the needs of most non-volatile memory (NVM) applications from very high-density storage class memory to logic-embedded memory for system-on-a-chip integration. PCM is a powerful and versatile NVM solution."

Numonyx participation at IEDM includes individual and joint paper submissions, memory technology session co-chairs and an invited speakership on PCM.

On Monday, December 7, Roberto Bez, research and development fellow at Numonyx, will speak on PCM during a memory technology session, presenting the invited paper "Chalcogenide PCM: A Memory Technology for the Next Decade." He will describe how PCM is the only proposed non-volatile memory (NVM) alternative that is demonstrating the capability to enter the broad market and become a mainstream memory technology for the next decade. Because of a new set of features that combine the components of NVM and DRAM, PCM is very attractive for new applications and could be both a sustaining and disruptive technology.

STMicroelectronics'* researchers in conjunction with Numonyx will then present "Phase Change Memory Technology for Embedded Non-Volatile Memory Applications for 90nm and Beyond." For the first time, STMicroelectronics and Numonyx were able to fully integrate a 4Mb PCM macrocell on 90nm CMOS platform. This helps pave the way for PCM technology to be used for embedded NVM applications such as Smart Cards and industrial microcontrollers.

Another paper entitled "A 45nm Generation Phase Change Memory Technology" shows the scaling of PCM to the 45nm lithography node for the first time. Numonyx has already produced a 128Mb PCM device at 90nm, and in this paper, demonstrates a 45nm generation PCM technology on a 1Gb product with an effective cell size of 0.015um2. Numonyx researchers report good electrical properties and reliability results, confirming that PCM has reached the maturity to become a mainstream technology for high density NVM applications.

As previously announced, Numonyx will also present a paper called "A Stackable Cross Point Phase Change Memory" with Intel Corporation*. For the first time, researchers have demonstrated a 64Mb test chip that enables the ability to stack, or place, multiple layers of PCM arrays within a single die. These findings pave the way for building memory devices with greater capacity, lower power consumption and optimal space savings for random access non-volatile memory and storage applications.

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 www.numonyx.com

* Other names and brands may be claimed as the property of others.

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