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**Media Advisory**

**Hynix and Innovative Silicon to Describe Memory Breakthrough at 2009 Symposium on VLSI Technology**

*Highly scalable Z-RAM memory with longest data retention time ever reported*

**SANTA CLARA, Calif. and SEOUL, Korea — June 9, 2009** — [Innovative Silicon, Inc.](#) (ISi), developer of the Z-RAM® zero-capacitor floating body memory (FB) technology, and [Hynix Semiconductor Inc.](#) announced today that Hynix will deliver a paper titled “Highly scalable Z-RAM with remarkably long data retention for DRAM application” at the [2009 Symposium on VLSI Technology](#) in Session 12A-4. The presentation will take place on Wednesday, June 17 at 5:30 p.m. at the Rihga Royal Hotel Kyoto in Kyoto, Japan.

Dr. Tae-Su Jang, member of technical staff in the Hynix R&D Division, will deliver the paper that highlights the operating characteristics of Z-RAM memory technology fabricated on a 50nm DRAM process. Using a 54nm x 54nm floating-body memory bitcell, the paper presents the longest floating-body retention time reported – longer than 8 seconds at 93 degrees Celsius – as well as an extremely large programming window of 1.6 volts. These improvements were obtained through DRAM technology optimizations such as junction engineering, thermal treatments, and improved passivation processes. The paper concludes by demonstrating the suitability of floating body memories for DRAM applications.

**About the 2009 Symposia on VLSI Technology and Circuits**

Since 1987, the Symposia has provided a forum whereby the world's top technologists engage in an open exchange of ideas. The presentation of high-quality papers has made it possible for attendees (technology people and circuit and system designers) to learn about new directions in the development

of VLSI technology. Event sponsors include the IEEE Electron Devices Society and Solid-State Circuits Society, and the Japan Society of Applied Physics in cooperation with the Institute of Electronics, Information and Communication Engineers.

#### **About Hynix Semiconductor Inc.**

Hynix Semiconductor Inc. (HSI) of Icheon, Korea, is the world's top tier memory semiconductor supplier offering Dynamic Random Access Memory chips ("DRAMs"), Flash memory chips ("NAND Flash") and CMOS Image Sensor ("CIS") for a wide range of distinguished customers globally. The Company's shares are traded on the Korea Exchange, and the Global Depository shares are listed on the Luxembourg Stock Exchange. Further information about Hynix is available at [www.hynix.com](http://www.hynix.com).

#### **About Innovative Silicon**

Innovative Silicon, Inc. (ISi) is the inventor and licensor of the Z-RAM® ultra-dense memory technology for stand-alone DRAM memory applications. Simpler to manufacture than DRAM, Z-RAM is the world's lowest-cost semiconductor memory technology. ISi and the Z-RAM technology have received numerous industry awards, including the World Economic Forum's selection of ISi as a 2008 Technology Pioneer, and IEEE Spectrum Magazine's selection of Z-RAM as the 2007 "Emerging Technology Most Likely to Succeed." Z-RAM is a "Zero Capacitor," true single-transistor floating body memory that eliminates the complex capacitor found in today's DRAM technologies – a fundamental roadblock to Moore's Law of scaling. Z-RAM provides semiconductor manufacturers a solution for nanoscale manufacturing processes that can dramatically lower semiconductor costs. The Z-RAM memory technology has been licensed by Hynix Semiconductor for use in its DRAM chips, and by AMD for use in microprocessors. Since 2003, the company has closed three funding rounds totaling \$47 million, received dozens of patents on the technology, developed test chips in multiple technologies from 90nm to 32nm, and has established global R&D, engineering and support centers in Europe, Asia and North America. For more information see [www.z-ram.com](http://www.z-ram.com).

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