



Press Contact:

Eileen Elam
KJ Communications, Inc.
Tel: +1 408 927-7753
eileen@kjcompr.com

Innovative Silicon Selected to Present at ICSI-6

Technologists to present important findings for low leakage applications, floating body memories, and Z-RAM memory cells

SANTA CLARA, Calif., — May 12, 2009 — [Innovative Silicon, Inc.](http://www.innovative-silicon.com) (ISI), developer of the Z-RAM® zero-capacitor floating body memory (FB) technology, today announced that Yong Liu, principal member of technical staff, and Dr. Victor Koldyaev, ISI fellow, are making a poster presentation entitled “Surface Recombination-Generation Processes of Gate, STI and Buried Oxide Interfaces Responsible for Junction Leakage on SOI,” at the 6th International Conference on Silicon Epitaxy and Heterostructures ([ICSI-6](http://www.icsi6.com)). The session, 4P 667607, is scheduled for Tuesday, May 19 at 7:00 pm at the Ayres Hotel in Manhattan Beach, CA.

About the Presentation

Liu and Koldyaev will describe a specially designed gated-diode test structure and the experimental study using it to quantify the carrier recombination-generation at the top gate oxide, bottom buried oxide (BOX), and shallow trench isolation (STI) oxide interfaces of a silicon on insulator (SOI) gated-diode. Unlike a normal gated-diode that has only a single top gate, dedicated gates on the two STI sides of a diode silicon body have been used, for the first time, to control the surface state of STI/SOI interface and its subsequent impact on diode current. The findings in the study are important for all low-leakage devices, floating body SOI based memories, as well as for the zero-capacitor random-access-memory (Z-RAM) cells that have STI interfaces embracing the floating bodies. The presenters will also provide analysis of leakage paths responsible for zero-capacitor random-access-memory data retention, based on the measured gated-diode current via electron-hole generation at interface traps located on the top side and the STI sides of a p-type silicon body as well as generation centers in field-induced junctions.

About ICSI-6

ICSI-6 (the 6th International Conference on Silicon Epitaxy and Heterostructures) is the 6th of the biannual conference series that brings together researchers from all over the world on subjects ranging from crystal growths, processing, nanostructures, characterization techniques, electronic transport studies, to electronics and optoelectronic device applications. Historically, the conference series has been well represented by participants from the industry as well as academia. While the emphasis has



been on silicon-based heterostructures, new topics including carbon electronics and spintronics will be represented in ICSI-6. For more information, see www.icsi-6.org.

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.

Z-RAM is a registered trademark of Innovative Silicon, Inc. or its subsidiaries in the United States and other countries. AMD is a trademark of Advanced Micro Devices, Inc. All other trademarks and registered trademarks are the property of their respective owners.

###