

KAIST unveils DRAM using MEMS switches

Korea Advanced Institute of Science and Technology (KAIST) has unveiled a DRAM that can prevent leakage by using a MEMS switch at Transducers '07 held from June 10, 2007 in Lyon, France. The DRAM is reportedly a joint development with Samsung Electronics Co., Ltd. of Korea. It was presented in a paper entitled

«A DRAM-like Mechanical Non-volatile Memory.» KAIST classifies the device as a nonvolatile memory. The device has basically the same circuit configuration as that of a DRAM except that it uses a MEMS switch instead of a transistor. KAIST claims that it can reduce a leakage from the capacitor to almost zero. The measurement

proved that the capacitance in the capacitor barely changed for 1 million seconds (approx. 280 hours). The MEMS switch is formed by surface micromachining and it is switched on/off by the electrostatic force. The setup unveiled this time requires a voltage as high as 24 V for switching.

www.kaist.edu

Korea Instruments expands its MEMS probe card business

After unprecedented growth of 47% CAGR over the last four years, Korea Instrument Company Ltd. announced that it is expanding its product breadth with advanced Flash, DRAM and Logic probe cards. The recent growth has been fueled by the highly successful PSJS probe card

product that was well received by Korean customers. Building upon the success of this mature product, the company is now introducing additional micro-electrical-mechanical-system (MEMS) based probe cards as a result of its partnership with Microfabrica Inc., a micro-device maker located in Southern

California. Capitalizing on the PSJS expertise gained from delivering large-substrate and 1-touch probing solutions, the company is now delivering its first probe cards, which utilize MEMS technology developed in partnership with Microfabrica.

www.kicl.co.kr

ICx Photonics to launch low power MEMS for industry

ICx Photonics, a business unit of ICx Technologies, has launched its SensorChip CO2 4P, which it calls «a revolutionary technology» for carbon dioxide detection, in the U.S. and Europe. According to ICx, this is the first MEMS-based CO2 4P gas sensor module available. ICx Photo-

nic has further reduced power consumption for the sensor from the original design of 132 mW down to 99 mW, resulting in the lowest power IR CO2 4P sensor in its class. The company says its Hydrocarbon (HC) SensorChip is scheduled to launch before the end of the summer. The HC de-

vice has all the benefits of the CO2 device and will also be available in a 4P format. The low power consumption and intrinsic safety of this device will make it equally attractive as the CO2 4P.

www.icxt.com

Discera's MEMS oscillators qualified for commercialization

Discera, Inc., a supplier of CMOS MEMS resonator technology and provider of next-generation timing solutions, announced its MEMS-based oscillators have successfully passed a series of frequency stability and standard

semiconductor qualification and reliability tests. The testing was designed to prove the frequency stability, reliability and durability of silicon-based MEMS resonators compared to quartz for timing devices. Key target applications for MEMS-based timing

devices can be found throughout the consumer, computing, industrial, and military markets.

www.discera.com