

David Bondurant

Vertical Memory

Friday, September 02, 11:00 am. Osborne A204

Non-volatile RAM for the Internet of Things (IOT)



The Internet of Things (IOT) is the vast network of computerized things (other than computers & servers). Some these things include contract-less identification devices, smart cards, thermostats, smoke detectors, smart locks, video monitors, etc. These IOT devices are typically low-power, low-cost single chip systems. Today's commodity memory technologies (DRAM, NAND Flash, NOR Flash) do not provide the optimum solution for these complex single chip systems. New non-volatile memory technologies have emerged over the last 30-years to meet the needs of IOT. This presentation covers the history and current status of ferroelectric RAM (FRAM) and magnetoresistive RAM (RAM) technologies and products.

Short Bio

David Bondurant has been involved with the computer and semiconductor industry for 49-years. He was a computer architect at Control Data, Sperry-Univac, and Honeywell. He was involved with the government-sponsored advanced semiconductor program called VHSIC (Very High Speed Integrated Circuits) at Univac & Honeywell where he developed microprocessor and ASIC semiconductor products in bipolar CML, CMOS, and radiation hard CMOS. He was involved with emerging non-volatile RAM marketing at industry leading companies, Ramtron (FRAM), Simtek (non-volatile SRAM), and Freescale Semiconductor/Everspin Technologies (MRAM) as they became viable over the last 30-years.