



Current Status and Trends in MRAM

Seung Heon Baek, Ph.D. Senior Engineer, SK hynix

Spin transfer torque Magnetic Random Access Memory (STT-MRAM) is a new memory technology that was introduced with high expectations to replace current memory devices such as SRAM and DRAM. Latest reports show that STT-MRAM has successfully been developed for embedded memory applications, such as a replacement for e-flash. Researchers are pushing the limit to develop smaller and faster MRAM for applications in stand-alone memory, IoT and many more.

This talk will give a brief overview of current development status of STT-MRAM. In the later part of the talk, latest research and new technology beyond STT will be discussed such as Spin orbit torque (SOT) and Voltage controlled magnetic anisotropy (VCMA). Physics, material and device related aspects will be discussed.