

Title :Non-volatile Flash Memory "MRAM vs alternatives"

Sub-title :(Potential of MRAM for High speed & High Density Application)

Speaker: Hiroaki Yoda, Corporate Research & Development center, Toshiba Corporation

Abstract:

MRAM is the only non-volatile work memory because of its fast switching and no endurance limit which none of other memories possesses. The only concern about the reliability of its tunneling barrier was cleared. However, magnetic field writing conventional MRAM faced a technological wall for scaling. To overcome the difficulty, spin torque writing has been investigated intensively. If the switching threshold current is lowered, this new writing MRAM will have scalability. But the writing accompanies concerns, whether it is fast, endurance-free, and reliable. This talk discusses the concerns as well as its scalability.