

### FEATURES

- Supports standard DDR3 SDRAM features
- Non-volatile 64Mb (8Mb x 8)
- $V_{DD} = 1.5v \pm 0.075v$
- 400MHz  $f_{CK}$
- Page size of 512 bits
- On-device termination
- On-Chip DLL aligns  $\overline{DQ}$ ,  $\overline{DQS}$ ,  $\overline{DQS}$  transition with CK transition
- All addresses and control inputs are latched on rising edge of Clock
- Burst length of 8 with programmable Burst Chop length of 4
- Standard 78-Ball BGA Package



### DESCRIPTION

The EMD3D064M08 64Mb DDR3 Spin-Torque MRAM is a memory that offers non-volatility and high endurance at DDR3 speeds. The device is capable of DDR3 operation at rates of up to 800MT/sec/pin. It is designed to comply with all DDR3 DRAM features with some timing differences that are unique to Spin-Torque MRAM.

With Spin-Torque MRAM technology, cell refresh is not required, which greatly simplifies system design and reduces overhead.

All control and address inputs are synchronized with a pair of externally supplied differential clocks, with input latching at clock crosspoints. I/Os are synchronized with a pair of bidirectional strobes ( $\overline{DQS}$ ,  $\overline{DQS}$ ). The device uses a  $\overline{RAS}/\overline{CAS}$  multiplexing scheme and operates at 1.5V.

For more information contact Everspin [here](#).