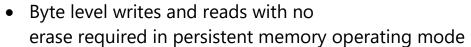


## **EMxxLX xSPI Industrial STT-MRAM**

## The Highest Performing Persistent Memory in the Industry

## **Features**

- Expanded SPI bus interface supporting Octal, Quad, Dual and Single SPI protocol
- Up to 200MHz single and double transfer rate (STR/DTR) for Octal SPI
- Unlimited read and write operations
- JEDEC compliant: JESD251, JESD251-1



- High Data integrity: No external ECC required.
- SPI backwards compatibility: NVSRAM, FRAM, NOR, Toggle MRAM
- SPI, xSPI Commands for Program/Erase emulated NOR compatible Execute-in-place (XIP)
- Densities available: 8Mb, 16Mb, 32Mb, 64Mb
- 400MBps sustained throughput with OSPI at 200MHz, DTR, for reads and writes
- JEDEC standard, RoHS compliant packages:
  - o 24-ball BGA, 6mm x 8mm (5 x 5 array)
  - o 8-pin DFN, 6mm x 8mm
- Operating temperature range
  - Commercial: 0°C to +70°C
  - o Industrial: -40°C to +85°C



## **Device Description**

The **EMxxLX** is the industry's first xSPI serial interface persistent memory based on Everspin's unique industrial STT MRAM technology. It is a high-performance, multiple I/O, SPI-compatible MRAM device featuring a high-speed, low pin count SPI compatible bus interface with a clock frequency of up to 200 MHz and a single 1.8V power supply. The EM064LX delivers up to 400MBps reads and writes via eight I/O signals with a clock frequency of 200MHz.

A new era of universal memory applications is enabled with the **EMXXLX**, replacing products such as SRAM, BBSRAM, NVSRAM and over-provisioned NOR devices. Targets applications are: Industrial IoT, Process Automation and Control, FPGA Configuration, Aero/Avionics, Medical, and Gaming. It is a great choice for the following application usage models:



For more information please visit <a href="www.everspin.com/xspi-industrial-iot-and-embedded-systems">www.everspin.com/xspi-industrial-iot-and-embedded-systems</a> or contact your local Everspin sales location, <a href="www.everspin.com/sales">www.everspin.com/sales</a>.

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