

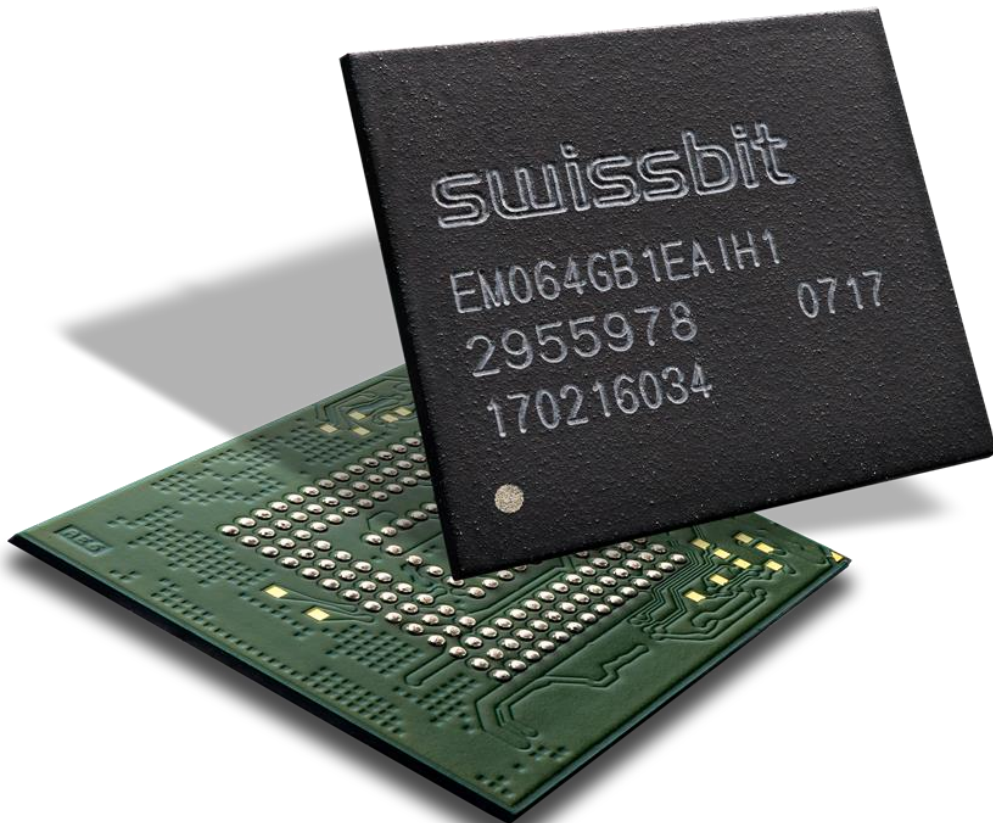
swissbit®

Product Fact Sheet

Industrial e-MMC Memory

EM-26 Series

JEDEC e-MMC 5.0 compliant,
BGA 153 ball, Enhanced Mode (pSLC)



Embedded MMC 5.0

EM-26 INDUSTRIAL e-MMC MEMORY 2GB TO 32GB

Main Features

- Fully compliant with JEDEC e-MMC 5.0 Standard (JESD84-B50)
- 153-ball BGA, 0.5mm pitch
11.5 x 13mm, RoHS compliant
- Enhanced Mode (pSLC)
- Single partition
- High performance e-MMC 5.0 specification
 - Eleven-wire bus (clock, Data Strobe, 1 bit command, 8 bit data bus) and a hardware reset
 - Three different data bus width modes: 1-bit (default), 4-bit, and 8-bit
 - Clock frequencies 0-200MHz, High Speed Mode HS400
 - Up to 270MB/s sequential read and up to 160MB/s sequential write
- Power Supply: (Low-power CMOS technology)
 - VCCQ 1.7V...1.95V or 2.7V...3.6V e-MMC supply
 - VCC 2.7V...3.6V NAND Flash supply
- Optimized FW algorithms
 - Power-fail data loss protection
 - Wear Leveling technology
Equal wear leveling of static and dynamic data. The wear leveling assures that dynamic data as well as static data is balanced evenly across the memory. With that the maximum write endurance of the device is guaranteed
 - Read Disturb Management
The read commands per region are monitored and the content is conditionally refreshed when critical levels have occurred
 - Auto Read Refresh
The interruptible background process maintains the user data for Read Disturb effects or Retention degradation due to high temperature effects
 - Diagnostic features with Device Health Report according to e-MMC Spec 5.0
 - Field Firmware update according to e-MMC Spec 5.0
 - Discard and Sanitize, Trim
 - Boot Operation Mode and Alternative Boot Operation Mode
 - Replay Protected Memory Block (RPMB)
- High reliability
 - Designed with sophisticated firmware architecture for industrial and embedded markets.
 - Enhanced Mode (pSLC) with higher write performance and endurance than MLC configured products (EM-20).
 - Ideal for application like POS/POI, PLC, IoT, gaming, medical and use as general boot medium for embedded applications.
 - The product is optimized for long life cycle that requires superior data retention as well as power fail safety.
 - Industrial Temperature range, -40° up to 85°C
- Controlled BOM & PCN process

