

swissbit®

Product Fact Sheet

Industrial MultiMedia Card

M-120 Series SLC

Extended and Industrial
Temperature Grade

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Product Summary

- **Capacities:** 128 MBytes
- **Form Factor:** Standard MMC 32.0mm x 24.0mm x 1.4mm
- **Operating Voltage:** 2.7...3.6V (Low-power CMOS technology)
- **Compliance:** Fully compliant with MMC Card specification 3.31.
- **Performance:**
 - 1 bit MMC or SPI data transfer
 - MMC and SPI burst up to 20Mbit/s (2.5MB/s)
- **Operating Temperature Range:**
 - Extended: -25 °C to 85 °C
 - Industrial: -40 °C to 85 °C
- **Data Retention:** 10 year (JEDEC)

Product Features

- Custom-designed, highly-integrated memory controller
 - Four integrated 4KByte Sector Buffers for fast data transfer
- Patented power-off reliability
 - No data loss of older sectors
 - Max. 16 sectors data loss (old data kept)
 - All data were written to the flash, if the card is ready after the last write command
- 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.
- Write Endurance
 - Due to intelligent wear leveling an even use of the entire flash is guaranteed, regardless how much "static" (0S) data is stored.
- High reliability
 - Designed for embedded market
 - MTBF > 4,000,000 hours
 - Number of card insertions/removals: >10,000
 - Extended Temperature range -25° up to 85°C
 - Industrial Temperature range available -40° up to 85°C (optional)
- Hot swappable
- Life Time Monitoring over special vendor command set
- Controlled BOM & PCN process
- Life Cycle Management

Why Swissbit?

Swissbit is focused on the design, development, manufacture, and support of leading edge memory and storage solutions for the worldwide OEM/ODM marketplace. As a global supplier, Swissbit recognizes and addresses the higher level of application requirements of today's industrial, Netcom, and automotive customers by providing best-in-class products and services, with uncompromised attention to driving overall value and quality.