swissbit®

Product Fact Sheet

**Industrial
MultiMedia Card**

M-120 Series
SLC

Extended and Industrial
Temperature Grade

Date: April 05, 2023
Revision: 1.01

Made in Germany

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" (OS) 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.

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Page 2 of 2