## swissbit®

**Product Fact Sheet** 

Industrial MICRO SD Memory Card

S-200u Series
SPI and SD compliant





## S-200U SERIES MICRO SD Memory Card

## 1 Feature summary

- Highly-integrated memory controller
  - Fully compliant with SD Memory Card specification 2.0 and Micro SD Memory Card specification 2.0 addendum
  - Four integrated 4KByte Sector buffers for fast data transfer
- Standard MICRO SD Memory Card form factor
  - o 15.0mm x 11.0mm x 0.7mm
- 2.7...3.6V normal operating voltage
- Low-power CMOS technology
- Wear Leveling: 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.
- Patented power-off reliability
  - No data loss of older sectors
  - Max. 16 sectors data loss (old data kept) if power off during writing
- High reliability
  - Best available SLC NAND Flash technology
  - Designed for embedded market
  - MTBF: > 3,000,000 hours
  - Number of insertions: >10,000
  - Extended Temperature range: -25° up to 85°C Industrial Temperature range: -40° up to 85°C
- Hot swappable
- High performance
  - SD burst up to 25MB/s
  - SD Low speed o...25MHz clock rate
  - SD High speed 25...50MHz clock rate
  - Up to 21/18 MB/s sustained read/write speed
  - Flash burst up to 40MB/s
  - "Default speed cards" with disabled high speed mode available
- Available densities
  - 512MB up to 2GBytes
- Controlled BOM
- Life Time Monitoring SD/SPI with standard or vendor commands

























