

SMART's Flash Products

XceedSD Memory Card

MEMORY • FLASH • STORAGE • DISPLAYS • EMBEDDED

XceedSD Memory Card

SMART Modular Technologies' high performance, industrial temp. Xceed Secure Digital (SD) Memory Card product offering is specifically targeted at the needs of OEM markets such as networking, telecommunications and data communications applications. SMART's XceedSD products are also a natural fit for mobile and embedded computing, medical, automotive and industrial applications.

SMART's XceedSD Memory Card product line is offered in a UL approved housing with an advanced 9-pin connector. It contains a controller and a flash memory device. The onboard controller interfaces with a SD Card Host allowing data to be written to and read from the flash memory device.

XceedSD Memory Card Specifications:

Performance

- Capacity Range 512MB to 8GB
- Read max 18MB/s
- Write max 15MB/s

Reliability

- MTBF > 2,500,000 hours
- Data Reliability 10¹⁴ bits, read
- Data Retention 10 years
- Endurance >2,000,000 program/erase cycles
- Secure Digital Specification Standard (V2.0)
- On-Board Wear Leveling

Power

- VCC 3.3V (2.7V – 3.6V)
- Read max 80mA at 3.6V
- Write max 80mA at 3.6V
- Passive 3mA (pre-initialization)
150uA (post-initialization)

Environmental

- Shock 50G max. @ 11ms
- Vibration 15G peak to peak
- Operating temperature -40°C to +85°C (Industrial temp.)
- Storage temperature -65°C to 150°C
- Humidity 5% to 95%
- Altitude Up to 80,000 ft.
- RoHS Compliant

Physical Dimensions

- Length 1.26in. (32.0mm)
- Width 0.95in. (24.0mm)
- Thickness 0.08in. (2.1mm)
- Weight 0.07oz. (2.0g)

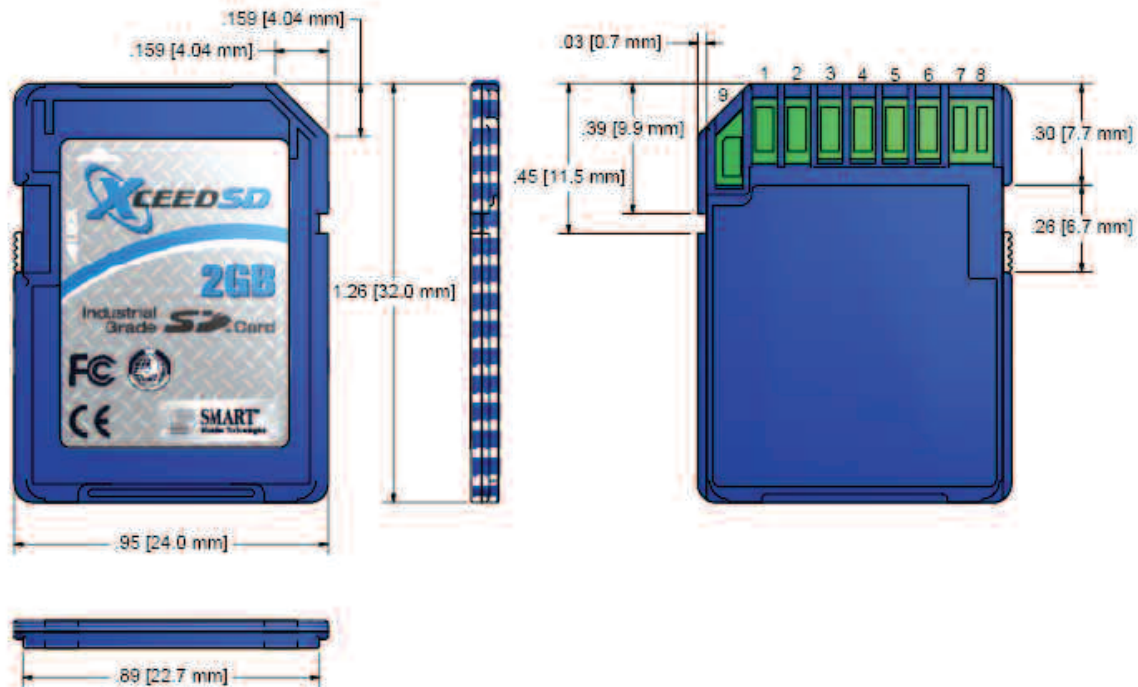


Ordering Information

| SMART Part Number | Chip Density | Unformatted Capacity | Sectors/Card |
|-------------------|--------------|----------------------|--------------|
| SG9SD512PHB4 | 512MB | 485 MB | 994,303 |
| SG9SD1GPHB9 | 1GB | 972 MB | 1,990,655 |
| SG9SD2GPHBA | 2GB | 1946 MB | 3,985,407 |
| SG9SD4GPHBB | 4GB | 3902 MB | 7,992,319 |
| SG9SD8GPHBB | 8GB | 7802 MB | 15,980,008 |

Note: All available in industrial grade. Part numbers ending in (I) are also available in industrial temp.

XceedSD Memory Card Mechanical Specifications



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