

# Flash Products

## XceedSD Memory Card

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### 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 10<sup>14</sup> 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

