



The Cactus Technologies Secure Digital<sup>®</sup> Memory Card (SD) is a low capacity solid-state flash memory product that complies with the Secure Digital Card Association (SDA) standard. Cactus SD Cards and SDChips provide up to 8GB (Class 6) of formatted storage capacity and are designed to be used in applications which require reliable, high performance solid state storage in a small form factor.

### Cactus SD Card and SDChip Features

- Industry Standard SD Card Version 1.1 and Version 2.0
- Card Capacities 128MB to 8GB
- Interface Supports:
  - SD Interface
  - SPI Mode
- Voltage Range 2.7V to 3.6V
- Traceability Electronic Code
- Solid State Design Without Moving Part
- Industry Leading:
  - Data Reliability
  - Shock & Vibration
  - Operating Temp Range
  - Data Transfer Rates
- Zero dB Noise
- 4-Million Hour MTBF
- 5-year Warranty

### Performance

Read Data Transfer Rate : 20MB/sec  
Write Data Transfer Rate : 17MB/sec

### Reliability

Supports Wear Leveling  
Supports ECC  
Less Than 1 Error in 10<sup>15</sup> Bits Read  
MTBF 4,000,000 Hours

### Environmental & Power

Operating Temperature Range  
Standard : -25°C to +85°C  
Industrial : -45°C to +90°C

Power Consumption  
3.3V±10%  
Read : 40mA  
Write : 75mA  
Sleep : 180uA

Shock & Vibration  
Shock : 50G  
Vibration : 15G peak-to-peak



### Industrial Grade Secure Digital Card

Interface	SD Card Version 1.1 and Version 2.0
Interface Transfer Rate	25 MB/sec
Power Requirement	DC Input Voltage : 3.3V ± 10%
	Sleep : 180uA
	Read : 40mA
	Write : 75mA
Environmental Specification	Standard Temperature : -25°C to +85°C
	Extended Temperature : -45°C to +90°C
	Humidity : 8-95%, non-condensing
	Acoustic Noise : 0 dB
	Vibration : 15G peak to peak max.
	Shock : 50G max.
	Altitude : 100,000 feet max.
Reliability and Maintenance	Endurance : 2,000,000 erase cycles per block
	MTBF : 4,000,000 Hours
	Data Reliability : less than 1 Error in 10 <sup>15</sup> bits read
Card Capacity	128MB – 8GB