

Secure Digital® Memory Card (SD) 220 Series



The Cactus Technologies Secure Digital Memory Card (SD) - 220 Series is a solid-state flash memory product that complies with the Secure Digital Card Association (SDA) standard. Cactus SD Cards provide up to 64GB (Class 10) of formatted storage capacity and are designed to be used in applications which require high performance solid state storage in a small form factor.

CACTUS SD CARD FEATURES

- **INDUSTRY STANDARD SD CARD VERSION 1.1 AND 2.0**
- **CARD CAPACITIES**
 - 4GB to 64GB
- **INTERFACE SUPPORTS**
 - SD Interface
 - SPI Mode
- **VOLTAGE RANGE**
 - 2.7V to 3.6V
- **BASED ON MLC NAND FLASH**
- **SOLID STATE DESIGN WITH NO MOVING PARTS**
- **INDUSTRY LEADING**
 - Data Reliability
 - Shock & Vibration
 - Data Transfer Rates
- **ZERO DB NOISE**
- **2-YEAR WARRANTY**



PERFORMANCE

Read Data Transfer Rate

up to 35MB/sec

Write Data Transfer Rate

up to 20MB/sec



RELIABILITY

- Supports Wear Leveling
- Error Checking & Correction
- Less Than 1 Error in 10¹⁴ Bits Read



ENVIRONMENTAL & POWER

Operating Temperature Range

Standard -25°C to +85°C

Extended Contact Cactus



POWER CONSUMPTION

	3.3V ± 10%
Read	85 mA
Write	120 mA
Sleep	1 mA



SHOCK & VIBRATION

Shock	50G
Vibration	15G peak-to-peak

CACTUS TECHNOLOGIES
Secure Digital® Memory Card (SD)
220 Series



COMMERCIAL GRADE SECURE DIGITAL CARD

→ INTERFACE	SD Card Version 1.1, 2.0 and 3.0	
→ INTERFACE TRANSFER RATE	SDR50 (50MB/sec)	
→ POWER REQUIREMENT	DC Input Voltage	3.3V ± 10%
	Sleep	1 mA
	Read	85 mA
→ ENVIRONMENTAL SPECIFICATION	Write	120 mA
	Standard Temperature	-25°C to +85°C
	Extended Temperature	Contact Cactus
	Humidity	8-95%, non-condensing
	Acoustic Noise	0dB
	Vibration	15G peak to peak max.
→ RELIABILITY AND MAINTENANCE	Shock	50G max.
	Altitude	100,000 feet max.
	Endurance	100,000 erase cycles per block
→ CARD CAPACITY	MTBF	200,000 Hours
	Data Reliability	less than 1 Error in 10 ¹⁵ bits read

Cactus Technologies Limited
 Suite C, 15/F, Capital Trade Center
 62 Tsun Yip Street, Kwun Tong
 Kowloon, Hong Kong
 Tel: +852-2797-2277
 Email: sales@cactus-tech.com

Cactus USA
 3112 Windsor Road
 Suite A356
 Austin, Texas 78703
 Tel: (512) 775-0746
 Email: americas@cactus-tech.com



www.cactus-tech.com