The Cactus Technologies Secure Digital microSD Card (SD) - 803M Series is a low capacity solid-state flash memory product that complies with the Secure Digital Card Association (SDA) standard. Cactus microSD Cards provide up to 4GB (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 MICROSD FEATURES

- INDUSTRY STANDARD MICROSD CARD VERSION 1.1 AND 2.0
- CARD CAPACITIES
  - 1GB to 4GB
- INTERFACE SUPPORTS
  - SD Interface
  - SPI Mode
- VOLTAGE RANGE
  - 2.7V to 3.6V
- TRACEABILITY ELECTRONIC CODE
- SOLID STATE DESIGN WITH NO MOVING PARTS
- 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
  - up to 20MB/sec
- Write Data Transfer Rate
  - up to 17MB/sec

RELIABILITY

- Supports Wear Leveling
- Error Checking & Correction
- Less Than 1 Error in 10^{14} Bits Read
- MTBF 4,000,000 Hours

ENVIRONMENTAL & POWER

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

POWER CONSUMPTION

- Read: 3.3V ± 10%
- Write: 60mA
- Sleep: 80mA
- Sleep: 200uA

SHOCK & VIBRATION

- Shock: 50G
- Vibration: 15G peak-to-peak
# Secure Digital® microSD (SD) 803M Series

## INDUSTRIAL GRADE MICROSD CARD

<table>
<thead>
<tr>
<th>Interface</th>
<th>SD Card Version 1.1 and Version 2.0</th>
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<td>Interface Transfer Rate</td>
<td>25MB/sec</td>
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<td>Sleep 200uA</td>
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<tr>
<td></td>
<td>Read 60mA</td>
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<td>Write 80mA</td>
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<tr>
<td>Environmental Specification</td>
<td>Standard Temperature -25°C to +85°C</td>
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<td></td>
<td>Extended Temperature -45°C to +90°C</td>
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<tr>
<td></td>
<td>Humidity 8-95%, non-condensing</td>
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<td></td>
<td>Acoustic Noise 0dB</td>
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<tr>
<td></td>
<td>Vibration 15G peak to peak max.</td>
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<td>Shock 50G max.</td>
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<td>Altitude 100,000 feet max.</td>
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<tr>
<td>Reliability and Maintenance</td>
<td>Endurance 2,000,000 erase cycles per block</td>
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<td></td>
<td>MTBF 4,000,000 Hours</td>
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<td></td>
<td>Data Reliability less than 1 Error in $10^{15}$ bits read</td>
</tr>
<tr>
<td>Card Capacity</td>
<td>1GB to 4GB</td>
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**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

[RoHS Compliant](https://www.cactus-tech.com)