

# Apacer

The Most **Reliable**  
Storage For Industries

CH120-MSD



## CH120-MSD

### Overview

Apacer microSD CH120-MSD is compatible with the microSD card version 6.1. The command list supports [Physical Layer Specification Ver6.10 Final] definitions. Card Capacity of Non-secure Area, Secure Area Supports [Part 3 Security Specification Ver4.0 Final] Specifications.

The microSD 6.1 card comes with 8-pin interface. It can alternate communication protocols between the SD mode and SPI mode. It performs data error detection and correction with very low power consumption. It supports capacity up to 128GB with exFAT SDXC.

Apacer microSD CH120-MSD Secure Digital 6.1 with high performance, good reliability and wide compatibility is nowadays one of the most popular cards with customized firmware techniques in semi-industrial/medical markets already.

\* The actual available memory on the device is less than what is listed on the package. This is due to small discrepancies in file formats and algorithms used by various operating systems. In addition, a portion of memory space is reserved for system files and data sectors for better performance.

### Feature

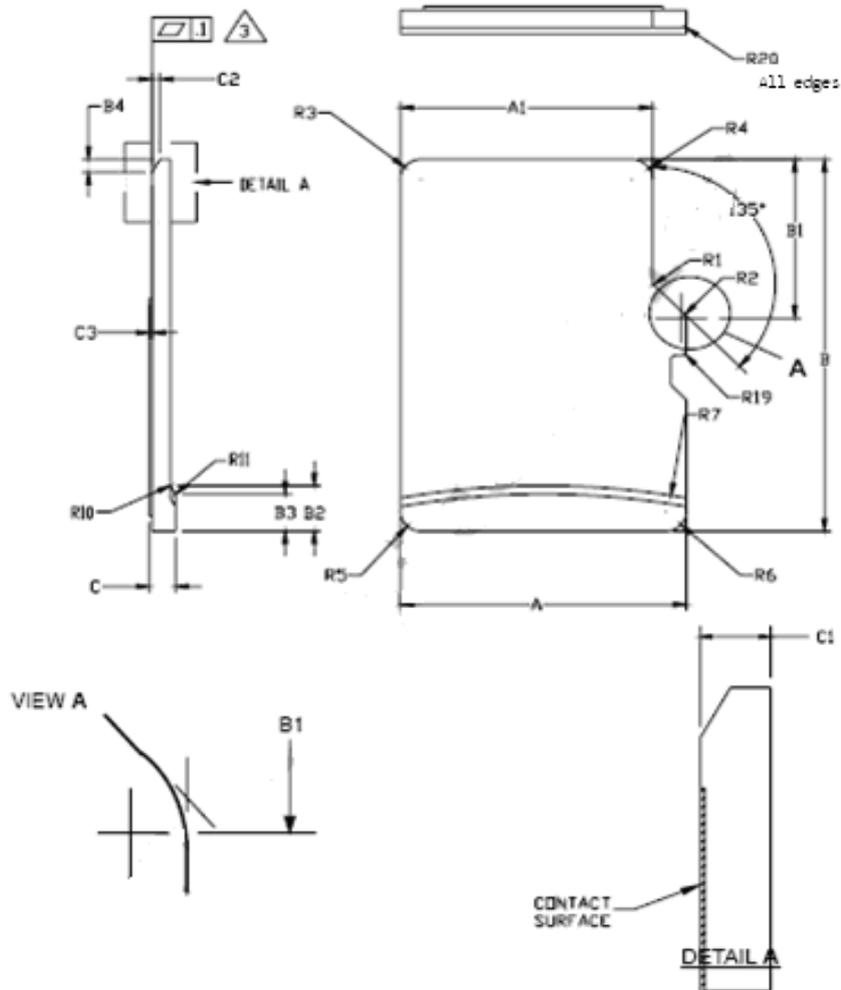
- Built-in advanced ECC algorithm
- Global Wear Leveling
- Flash bad-block management
- Power Failure Management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T. Support
- SMART Read Refresh™
- Support SLC-liteX (P/E cycle: 30K)



## Specifications

<b>Model</b>	CH120-MSD
<b>Interface</b>	SD6.1
<b>Connector</b>	–
<b>Form Factor</b>	microSD
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	16GB~128GB
<b>Sustained Read Performance (MB/sec)</b>	Up to 90
<b>Sustained Write Performance (MB/sec)</b>	Up to 80
<b>ECC Engine</b>	Built-in advanced ECC algorithm
<b>IOPS (4K Random Write)</b>	1900
<b>Standard Operating Temperature ( °C )</b>	-25 ~ + 85
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 85
<b>Housing</b>	Yes
<b>H/W Write Protect</b>	–
<b>Shock</b>	(Operating) 1,500G, 0.5ms
<b>Vibration</b>	20Hz~80Hz/1.52mm (frequency/displacement) 80Hz~2,000Hz/20G (frequency/accelerate)
<b>Operating Voltage</b>	2.7V ~ 3.6V
<b>Power Consumption</b>	Active mode: 80 mA & Idle mode: 190 uA
<b>Dimension (L x W x H )</b>	15 x 11 x 1 mm
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification



Unit: mm

For more information,  
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