

# Apacer

The Most **Reliable**  
Storage For Industries

CH210-MSD



## CH210-MSD

### Overview

Apacer microSD CH210-MSD is compatible with the microSD card version 5.0. The command list supports [Physical Layer Specification Ver6.10 Final] definitions. Card Capacity of Non-secure Area, Secure Area Supports [Part 3 Security Specification Ver5.0 Final] Specifications.

The microSD 5.0 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 64GB with exFAT SDXC.

Apacer microSD CH210-MSD Secure Digital 5.0 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.

## CH210-MSD

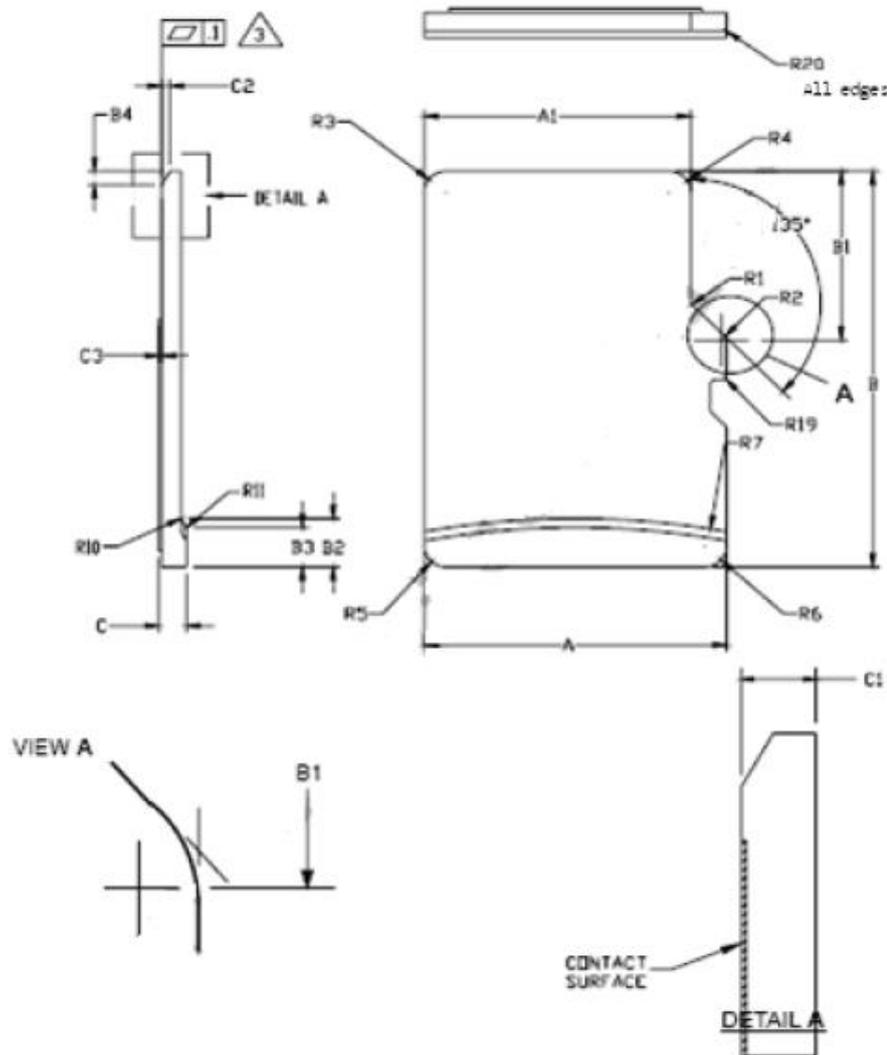
### Feature

- Compliant with SD 5.0 Specification
- Supports Class 10 with U3 and UHS-I\*\*
- S.M.A.R.T Support
- Global Wear-Leveling and Block Management
- Low Power Consumption
- Wide Temperature Support (Optional)
- DataRAID™
- SMART Read Refresh™
- SLC-liteX

## Specifications

<b>Model</b>	CH210-MSD
<b>Interface</b>	SD 5.0
<b>Connector</b>	-
<b>Form Factor</b>	microSD
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	SDHC: 16GB~64GB
<b>Sustained Read Performance (MB/sec)</b>	Up to 90
<b>Sustained Write Performance (MB/sec)</b>	Up to 70
<b>ECC Engine</b>	Built-in advanced ECC algorithm
<b>IOPS (4K Random Write)</b>	300
<b>Standard Operating Temperature ( °C )</b>	-25 ~ + 85
<b>Extended Operating Temperature ( °C )</b>	-
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>Housing</b>	-
<b>H/W Write Protect</b>	-
<b>Shock</b>	Operation: Acceleration, 50(G)/11(ms)/half sine (compliant with MIL-STD-202G) Non-operation: Acceleration, 1,500(G)/0.5(ms)/half sine (compliant with MIL-STD-883K)
<b>Vibration</b>	Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02 Grms, 15~2000 Hz/random (compliant with MIL-STD-810G)
<b>Operating Voltage</b>	2.7V ~ 3.6V
<b>Power Consumption</b>	Active mode: 80 mA & Idle mode: 135 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,  
contact your Apacer representative

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