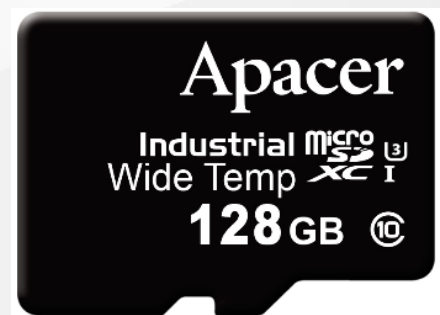


# Apacer

The Most **Reliable**  
Storage For Industries

**Industrial microSD R1-M**

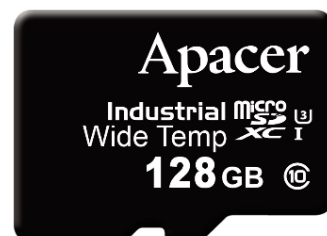


## Industrial microSD R1-M

### Overview

Apacer R1-M microSD/SD memory cards are built with original high-quality MLC chips and are subject to rigorous environmental testing. Used with page mapping firmware, it increases the random read and write speed several tens of megabytes per second faster, making it more effective in processing small random writes. The value-adding function of firmware technology also significantly reduces the write amplification factor (WAF), prolonging product life and durability. Furthermore, customized firmware optimizing tools, such as write protect, protect stored contents, ensuring data security and integrity.

Compatible with the latest SD3.0 interface, the Apacer R1-M series microSD/SD memory cards are available in capacities of 8GB to 128GB despite their small form factor and demonstrate excellent performance while consuming little power.



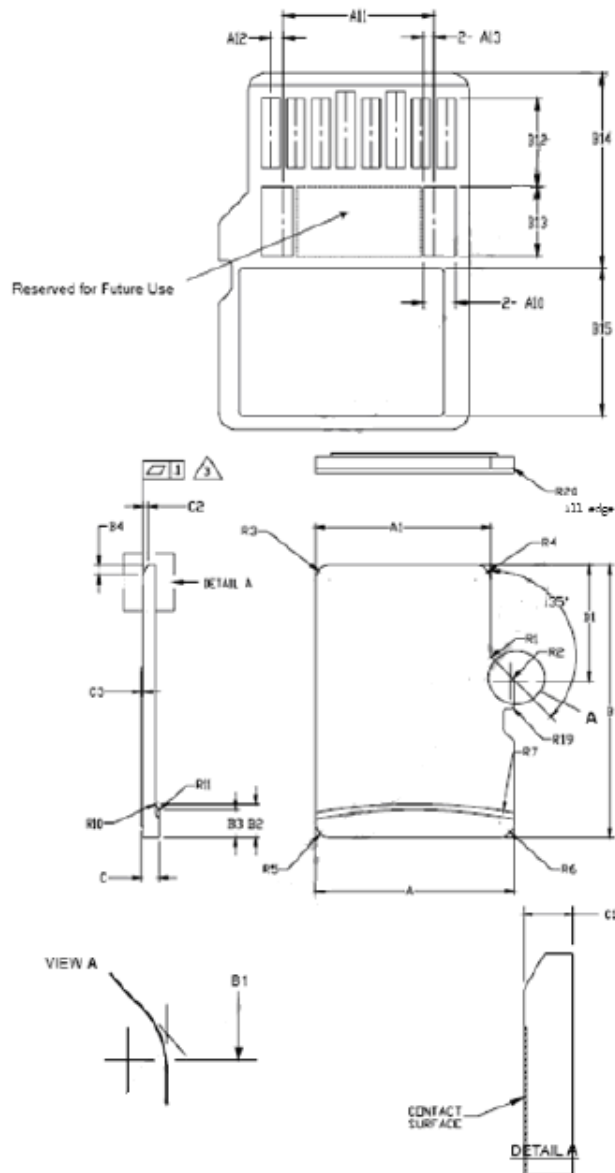
### Feature

- Compliant with SD 3.0 Specification
- S.M.A.R.T supported
- Page mapping
- Support SD mode and SPI mode
- Global Wear-Leveling and Block Management
- Read disturb management
- Low Power Consumption

## Specifications

<b>Model</b>	Industrial microSD R1-M
<b>Interface</b>	SD3.0
<b>Connector</b>	-
<b>Form Factor</b>	microSD
<b>Transfer Mode</b>	NULL
<b>NAND Flash Type</b>	MLC
<b>Capacity</b>	8GB~128GB
<b>Sustained Read Performance (MB/sec)</b>	Up to 90
<b>Sustained Write Performance (MB/sec)</b>	Up to 75
<b>ECC Engine</b>	Built-in 43-bit per 1K bytes BCH ECC
<b>Standard Operating Temperature ( °C )</b>	-
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>H/W Write Protect</b>	-
<b>Shock</b>	(Operating) 1,500G, 0.5ms
<b>Vibration</b>	Operating: 20Hz~80Hz/1.52mm (frequency/displacement) 80Hz~2000Hz/20G (frequency/displacement) X, Y, Z axis/60mins each
<b>Operating Voltage</b>	3.3 V ± 5%
<b>Power Consumption</b>	Active mode: 120mA ; Idle mode: 370 uA
<b>Dimension (L x W x H )</b>	15mm x 11mm x 1mm
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification



Unit: mm

**For more information,  
contact your Apacer representative**  
Global Presence

Taiwan (Headquarters)  
Apacer Technology Inc.  
Tel: +886-2-2267-8000  
Fax: +886-2-2267-2261

Europe  
Apacer Technology B.V.  
Tel: +31-40-267-0000  
Fax: +31-40-290-0686

U.S.A.  
Apacer Memory America, Inc.  
Tel: +1-408-518-8699  
Fax: 1-510-249-9551

China  
Apacer Electronic(Shanghai)  
Co., Ltd.  
Tel: +86-21-6228-9939

Japan  
Apacer Technology Corp.  
Tel: +81-3-5419-2668  
Fax: +81-3-5419-0018

India  
Apacer Technologies Pvt. Ltd.  
Tel: +91-80-41529061~3  
Fax: +91-80-41700215