

# The Most **Reliable** Storage For Industries

Industrial microSD R1



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### Overview

pacer

R1 microSD memory cards are built with original high-quality SLC 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 date security and integrity.

Compatible with the latest SD3.0 interface, the Apacer R1-series microSD memory cards are available in capacities of 1 to 8GB 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**

| Model                                 | Industrial microSD R1                                                                                                                                  |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface                             | SD3.0                                                                                                                                                  |
| Form Factor                           | microSD                                                                                                                                                |
| NAND Flash Type                       | SLC                                                                                                                                                    |
| Capacity                              | SD:1GB~2GB;SDHC:4~8GB                                                                                                                                  |
| Sustained Read Performance (MB/sec)   | Up to 43                                                                                                                                               |
| Sustained Write Performance (MB/sec)  | Up to 41                                                                                                                                               |
| ECC Engine                            | Built-in 43-bit per 1K bytes BCH ECC                                                                                                                   |
| Extended Operating Temperature ( °C ) | -40 ~ + 85                                                                                                                                             |
| Storage Temperature ( °C )            | -40 ~ + 100                                                                                                                                            |
| Shock                                 | (Operating) 1,500G, 0.5ms                                                                                                                              |
| Vibration                             | Operating: 7.69(Grms), 20~2000(Hz)/random (comply with<br>MIL-STD-810G)<br>Non-operating: 4.02(Grms), 15~2000(Hz)/random (comply<br>with MIL-STD-810G) |
| Operating Voltage                     | 3.3 V ± 5%                                                                                                                                             |
| Power Consumption                     | Active mode: 115 mA & Idle mode: 265 uA                                                                                                                |
| Dimension (L x W x H )                | 15x11x1 (mm)                                                                                                                                           |
| MTBF (hours)                          | >3,000,000                                                                                                                                             |

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Authorized Distributor

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