

SDM5A-M 7P/180D Slim2(H)



Apacer

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Overview

Apacer's SDM5A-M (SATA Disk Module 5A - M) is our next generation diskon-module (DOM) series that offers elevated speed boost and higher error correction capabilities. Built with SATA 6 Gb/s interface, SDM5A-M delivers exceptional performance in data transfer. With its SATA interface compliance and compact size, this high-speed disk module defines an ideal balance of performance, capacities, reliability and cost. SDM5A-M comes in moderate capacities that are suitable to boot industrial applications and light operating systems for specific operations, while with some extra memory space for data storage. The architectural nature of SATA disk module provides higher resistance to external environmental influences and better flexibility for motherboard space. Regarding data reliability, SDM5A-M is built in with powerful ECC engine that can correct up to 40-bit per 1KB data. In addition, the controller unit of this DOM device supports wear-leveling, SMART and power failure management for data integrity. Wit its trustable reliability, performance and cost effectiveness, Apacer's SDM5A-M is definitely the ideal storage or cache solution for embedded and industrial computers, servers and thin clients.





Feature

- 7-pin SATA connector
- Unique Hook Design
- Power Cable-less Solution
- TRIM Command Support
- Product Housing Selection (Optional)
- Built-in ATA Secure Erase and S.M.A.R.T. Functions
- · Global Wear-Leveling and Block Management

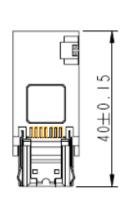


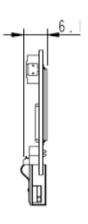
Specifications

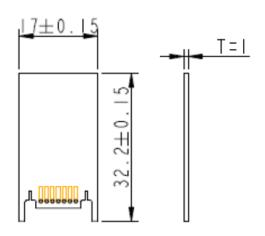
Model Interface SATA 3.0 (6Gb/s) Connector 7-pin Form Factor SATA Disk Module NAND Flash Type MLC Capacity 4GB~32GB External DRAM No Sustained Read Performance (MB/sec) Up to 120 Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) Housing H/W Write Protect No Cable-less Solution Operation: 50G, 11ms
Connector Form Factor SATA Disk Module NAND Flash Type MLC Capacity 4GB~32GB External DRAM No Sustained Read Performance (MB/sec) Up to 120 Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) Storage Temperature (°C) Housing Optional H/W Write Protect No Cable-less Solution Operation: 50G, 11ms
Form Factor NAND Flash Type MLC Capacity 4GB~32GB External DRAM No Sustained Read Performance (MB/sec) Up to 120 Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) Storage Temperature (°C) Housing H/W Write Protect No Cable-less Solution Optional (7+2 pin)
NAND Flash Type Capacity 4GB~32GB External DRAM No Sustained Read Performance (MB/sec) Up to 120 Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) -40~+85 Storage Temperature (°C) Housing Optional H/W Write Protect No Cable-less Solution Operation: 506, 11ms
Capacity External DRAM No Sustained Read Performance (MB/sec) Up to 120 Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) -40 ~ + 85 Storage Temperature (°C) Housing Optional H/W Write Protect No Screw Hole Optional (7+2 pin)
External DRAM Sustained Read Performance (MB/sec) Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) Storage Temperature (°C) Housing Optional H/W Write Protect No Cable-less Solution Operation: 506, 11ms
Sustained Read Performance (MB/sec) Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) Storage Temperature (°C) Housing Optional H/W Write Protect No Cable-less Solution Operation: 50G, 11ms
Sustained Write Performance (MB/sec) ECC Engine Built-in 40-bit per 1K bytes BCH ECC Standard Operating Temperature (°C) Extended Operating Temperature (°C) -40 ~ + 85 Storage Temperature (°C) Housing Optional H/W Write Protect No Screw Hole Optional (7+2 pin)
ECC Engine Built-in 40-bit per 1K bytes BCH ECC 0 ~ + 70 Extended Operating Temperature (°C) -40 ~ + 85 Storage Temperature (°C) Housing Optional H/W Write Protect No Cable-less Solution Built-in 40-bit per 1K bytes BCH ECC 0 ~ + 70 -40 ~ + 85 -40 ~ + 100 Optional No Optional Optional Optional (7+2 pin)
Standard Operating Temperature (°C) Extended Operating Temperature (°C) -40 ~ + 85 Storage Temperature (°C) -40 ~ + 100 Housing Optional H/W Write Protect No Screw Hole No Cable-less Solution Optional (7+2 pin)
Extended Operating Temperature (°C) -40 ~ + 85 Storage Temperature (°C) -40 ~ + 100 Optional H/W Write Protect No Screw Hole No Cable-less Solution Optional (7+2 pin)
Storage Temperature (°C) Housing Optional H/W Write Protect No Screw Hole No Cable-less Solution Optional (7+2 pin)
Housing Optional H/W Write Protect No Screw Hole No Cable-less Solution Optional (7+2 pin)
H/W Write Protect No Screw Hole No Cable-less Solution Optional (7+2 pin) Operation: 50G, 11ms
Screw Hole No Cable-less Solution Optional (7+2 pin) Operation: 50G, 11ms
Cable-less Solution Optional (7+2 pin) Operation: 50G, 11ms
Operation: 50G, 11ms
Operation: 50G, 11ms
Non-operation: 1500G, 0.5ms
Operation: 7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02 Grms, 15 ~ 2000 Hz/sine (compliant with MIL-STD-810G)
Operating Voltage 5.0 V±5%
Power Consumption Active mode: 160 mA & Idle mode: 80 mA
Dimension (L x W x H) Without housing: 17 x 40 x 6.1 mm With housing: 19.8 x 41.4 x 7.5 mm
MTBF (hours) >1,000,000

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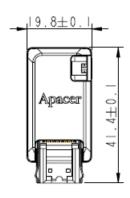
Mechanical Specification (Housing is optional)

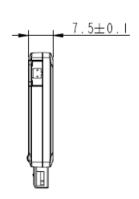






(Optional)





Unit: mm

For more information, contact your Apacer representative

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