The Most **Reliable** Storage For Industries

SM170-M280



Overview SM170-M280

Apacer SM170-25 is a well-balanced solid-state disk (SSD) with a standard form factor and excellent performance. Designed with a SATA 6 Gb/s interface, SM170-25 fully complies with the latest SATA Revision 3.2 specifications, delivering exceptional read/write speeds. This makes it an ideal companion for demanding industrial or server operations.



SM170-25 is built with a powerful SATA controller that supports on-the-module ECC for error correction as well as efficient wear leveling scheme for extended lifespan. Additionally, SM170-25 is equipped with a built-in thermal sensor (available on the wide-temp model only) to monitor the temperature of the SSD via S.M.A.R.T commands to prevent overheating. Operating under 6 Gb/s interface, SM170-25 is provided with Apacer latest S.M.A.R.T. that is primarily oriented for the latest SATA interface SSD, for drive lifetime monitoring and analysis.

In terms of reliability, SM170-25 features End-to-End Data Protection to ensure data integrity across the entire transfer path, delivering reliable and secure data transmission. It also incorporates a range of advanced technologies, including bad block management, power failure management, ATA secure erase, page mapping, TRIM support, powersaving modes, Hyper Cache technology, and Smart Read Refresh.

With exceptional performance and enhanced reliability, SM170-25 is the ideal storage or cache solution for a variety of applications, including industrial, imaging, computing, and enterprise markets.

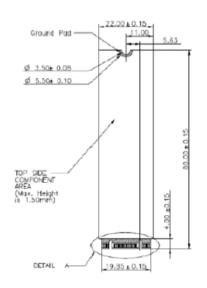
Features

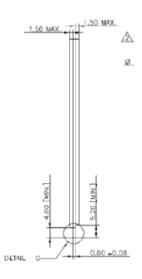
- · Low-Density Parity-Check (LDPC) Code
- · Global Wear-leveling
- · Flash Bad Block Management
- · Flash Translation Layer: Page Mapping
- · S.M.A.R.T.
- · TRIM
- · ATA Secure Erase
- · Power Failure Management
- · SSDWidget
- · Hyper Cache Technology
- · SMART Read RefreshTM

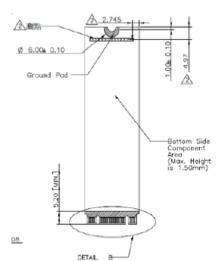
Specifications

| Model Name | SM170-M280 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface | SATA III |
| Connector | M.2 B & M Key |
| Form Factor | M.2 2280-D5-B-M |
| NAND Flash Type | 2D MLC |
| Capacity | 32GB~512GB |
| External DRAM | No |
| Sustained Read | Up to 550 |
| Performance (MB/sec.) | ορ το 330 |
| Sustained Write | Up to 480 |
| Performance (MB/sec.) | Ορ το 480 |
| ECC Engine | Low-Density Parity-Check (LDPC) Code |
| IOPS (4K Random Write) | 70K |
| Standard Operating | 0°C ~ 70°C |
| Temperature (°C) | 00 700 |
| Extended Operating | -40°C ~ 85°C |
| Temperature (°C) | -40 C 83 C |
| Storage Temperature (°C) | -55°C ~ 100°C |
| Housing | - |
| Thermal Sensor | - |
| Shock | 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) |
| Vibration | 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) |
| Operating Voltage | 3.3V ±5% |
| Power Consumption | Active Mode: 810 mA / Idle Mode: 100 mA |
| Dimension (L x W x H) | 22.00 x 80.00 x 3.88(max.), unit: mm |
| MTBF (Hours) | >2,000,000 |
| | |

Mechanical Specifications







For more information, contact your Apacer representative

Global Presence

Taiwan (Headquarter)
Apacer Technology Inc.

Tel: +886-2-2267-8000

Apacer Technology Corp. Tel: +81-3-5419-2668 Furone

Apacer Technology B.V. Tel: +31-40-267-0000

India

Apacer Technologies Pvt. Ltd. Tel: +91-80-35910296

U.S.A

Apacer Memory America, Inc. Tel: +1-408-518-8699 China

Apacer Electronic (Shanghai) Co., Ltd.

Tel: +86-21-6228-9939