

The Most **Reliable** Storage For Industries

SV240-M280



Overview

SV240-M280

Apacer SV240-M280 is the next generation Solid State Drive (SSD) with compact size and exceptional performance. Designed with a SATA 6 Gb/s interface, SV240-M280 fully complies with the latest SATA Revision 3.2 specifications, delivering remarkable read/write speeds. Its random performance is further enhanced by the integration of DRAM in the internal controller, establishing it as the leading add-in storage solution for future host computing systems.



Utilizing 3D NAND technology for capacities up to 1920GB, SV240-M280 offers greater power efficiency than 2D NAND. It is equipped with a powerful SATA controller that supports on-the-module ECC and an efficient wear-leveling scheme. The LDPC (Low Density Parity Check) ECC engine extends SSD endurance and increases data reliability. Additionally, SV240-M280 features a built-in thermal sensor that monitors the temperature of the SSD via S.M.A.R.T commands to prevent overheating. To ensure reliable performance under high vibration and extreme environmental changes, Apacer incorporates Sidefill technology to enhance product durability against thermal and mechanical stress. For highly intensive applications, End-to-End Data Protection ensures data integrity at multiple points in the path, enabling reliable data transfers.

In terms of security, Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal (optional) safeguard data, providing users with confidence that their data is protected against unauthorized access. SV240-M280 also includes numerous advanced features such as flash block management, page mapping, ATA secure erase, DataDefender, TRIM, device sleep, Hyper Cache technology, over-provisioning, power-saving modes, DataRAID, and SMART Read Refresh.

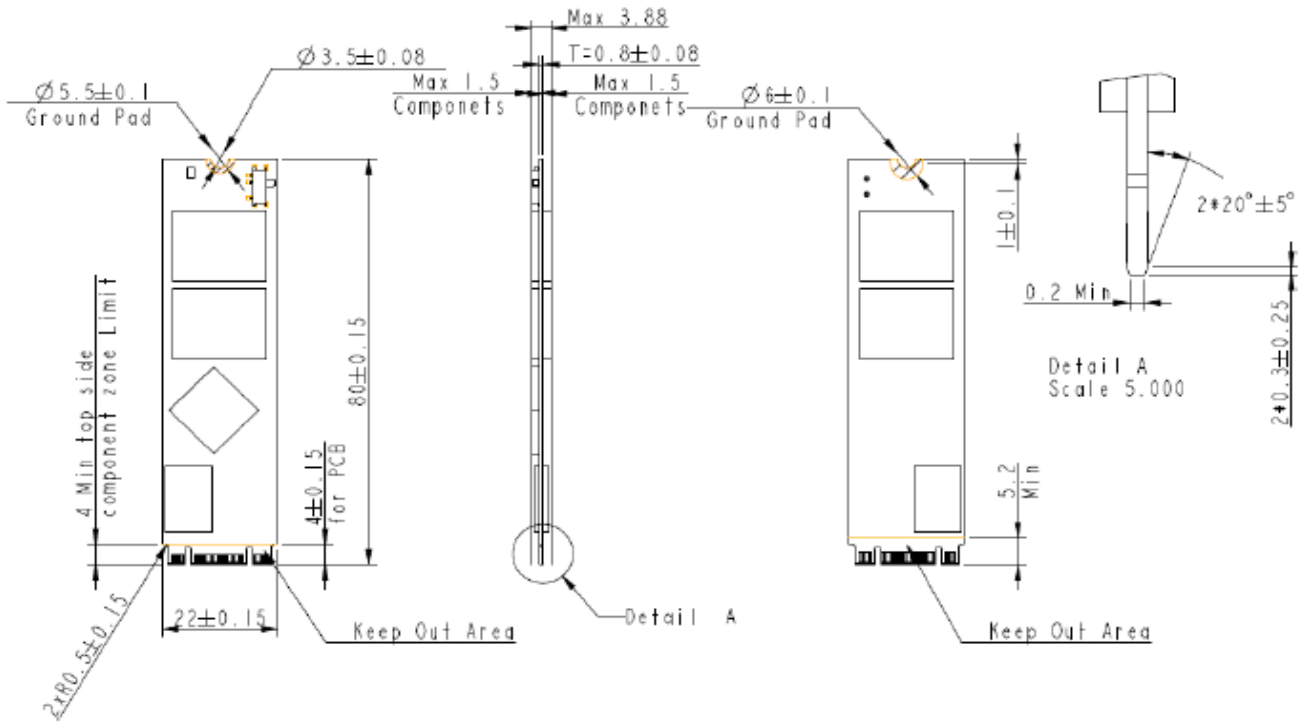
Features

- Low-Density Parity-Check (LDPC) Code
- Global Wear-leveling
- Flash Bad Block Management
- Flash Translation Layer: Page Mapping
- DataDefender™
- S.M.A.R.T.
- TRIM
- SMART Read Refresh™
- ATA Secure Erase
- Device Sleep
- SATA Power Management
- DataRAID™
- Hyper Cache Technology
- Over-provisioning

Specifications

Model Name	SV240-M280
Interface	SATA 3.2 (6Gb/s)
Connector	M.2 B & M Key
Form Factor	M.2 2280-D5-B-M
NAND Flash Type	3D TLC
Capacity	120GB~1920GB
External DRAM	Yes
Sustained Read Performance (MB/sec.)	Up to 560
Sustained Write Performance (MB/sec.)	Up to 505
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	76K
Standard Operating Temperature (°C)	0°C ~ 70°C
Extended Operating Temperature (°C)	-40°C ~ 85°C
Storage Temperature (°C)	-55°C ~ 100°C
Housing	-
Thermal Sensor	-
Shock	Operation: 50G/11ms (Compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (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/sine (Compliant with MIL-STD-810G)
Operating Voltage	3.3V ±5%
Power Consumption	Active Mode: 640 mA / Idle Mode: 85mA
Dimension (L x W x H)	80.00 x 22.00 x 3.88, unit: mm
MTBF (Hours)	>3,000,000

Mechanical Specifications



**For more information,
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