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.

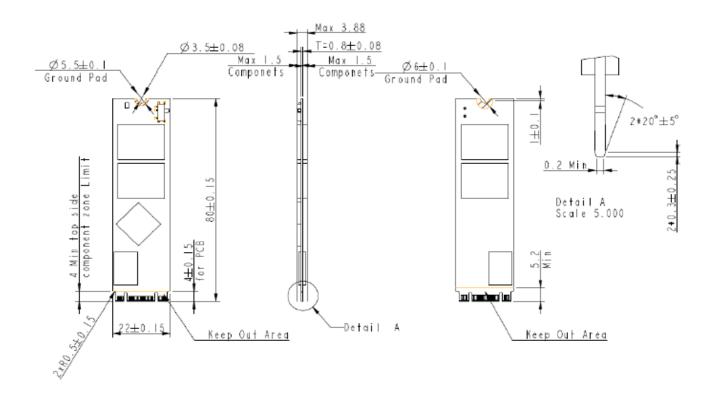
Features

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

Specifications

Model NameSV240-M280InterfaceSATA 3.2 (6Gb/s)ConnectorM.2 B & M KeyForm FactorM.2 2280-D5-B-MNAND Flash Type3D TLCCapacity120GB~1920GBExternal DRAMYesSustained ReadUp to 560Performance (MB/sec.)Up to 505Sustained WriteUp to 505ECC EngineLow-Density Parity-Check (LDPC) CodeIOPS (4K Random Write)76KStandard Operating0°C ~ 70°CTemperature (°C)-40°C ~ 85°CStorage Temperature (°C)-55°C ~ 100°CHousing-Thermal Sensor(Compliant with MIL-STD-202G) Non-operation: 50G/11ms (Compliant with MIL-STD-83K)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)VibrationOperation: 7.69 Grms, 20~2000 Hz/sine (Compliant with MIL-STD-810G) Non-operation: 4.02 Grms, 15~2000 Hz/sine (Compliant with MIL-STD-810G)Operating Voltage3.3V ±5%Power ConsumptionActive Mode: 640 mA / Idle Mode: 85mADimension (L x W x H)80.00 x 22.00 x 3.88, unit: mmMTBF (Hours)>3,000,000		
Connector M.2 B & M Key Form Factor M.2 D S M Key M.2 2280-D5-B-M MAND Flash Type 3D TLC Capacity 120GB~1920GB External DRAM Yes Sustained Read Performance (MB/sec.) Sustained Write Performance (MB/sec.) ECC Engine Low-Density Parity-Check (LDPC) Code IOPS (4K Random Write) Standard Operating Temperature (°C) Extended Operating Temperature (°C) Storage Temperature (°C) Thermal Sensor Operation: 50G/11ms (Compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (Compliant with MIL-STD-833K) Operation: 7.69 Grms, 15~2000 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 Dimension (L x W x H) 80.00 x 22.00 x 3.88, unit: mm		
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Temperature (°C) Storage Temperature (°C) Housing Thermal Sensor Operation: 50G/11ms (Compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (Compliant with MIL-STD-883K) 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 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	Temperature (°C)	00 700
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Dimension (L x W x H) 80.00 x 22.00 x 3.88, unit: mm		
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MTBF (Hours) >3,000,000		
	MTBF (Hours)	>3,000,000

Mechanical Specifications



For more information, contact your Apacer representative

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