The Most **Reliable** Storage For Industries

SV25V-M280





Overview

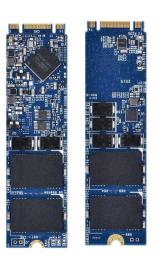
Apacer SV25V-M280 is a compact, high-performance SATA III solid-state drive designed for embedded systems and industrial applications that require reliable storage with advanced data protection. Compliant with SATA Revision 3.2 and built with cutting-edge NAND flash management technologies, SV25V-M280 supports LDPC ECC, bad block management, global wear leveling, page mapping, TRIM, Hyper Cache technology, and over-provisioning to enhance endurance, performance, and data integrity.

To ensure power stability in mission-critical environments, SV25V-M280 is equipped with Apacer's CoreVolt 2 technology. This intelligent voltage monitoring system detects real-time fluctuations in power supply and proactively logs abnormal events into S.M.A.R.T. data, including via a dedicated SMART ID203 attribute. Administrators can receive alerts through SSDWidget 2.0, enabling timely diagnostics and preventive action, ultimately enhancing system reliability.

The SSD also features DataDefenderTM Plus, a robust multi-layer protection system that ensures critical data is preserved during sudden power losses. By coordinating hardware, firmware, and software safeguards, this technology protects data in-flight and maintains drive stability in challenging operating conditions.

With added support for AES encryption, End-to-End Data Protection, and a built-in thermal sensor, Apacer SV25V-M280 offers a comprehensive storage solution engineered for reliability, security, and operational efficiency.

SV25V-M280



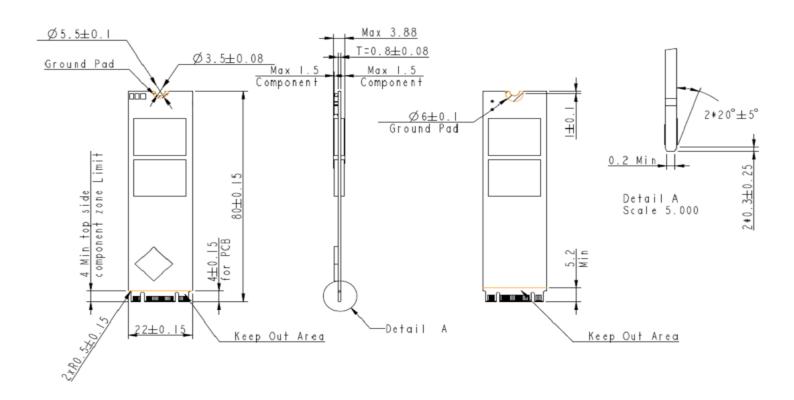
Features

- CoreVolt 2 Technology
- Low-Density Parity-Check (LDPC) Code
- Bad Block Management
- Global Wear Leveling
- Flash Translation Layer: Page Mapping
- TRIM
- DataDefenderTM Plus
- ATA Secure Erase
- SATA Power Management
- Device Sleep
- Hyper Cache Technology
- Over-provisioning
- DataRAIDTM
- SMART Read RefreshTM
- S.M.A.R.T.

Specifications

Model Name	SV25V-M280
Interface	SATA 3.2 (6Gb/s)
Connector	75-pin SATA-based M.2 module pinout
Form Factor	M.2 2280
NAND Flash Type	3D TLC
Capacity	120GB-1920GB
External DRAM	No
Sustained Read	Up to 555
Performance (MB/sec.)	ор to 333
Sustained Write	Up to 495
Performance (MB/sec.)	ορ το 4 33
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	67K
Standard Operating	0 ~ 70
Temperature (°C)	0 70
Extended Operating	-40 ~ 85
Temperature (°C)	
Storage Temperature (°C)	-55 ~ 100
Housing	-
Thermal Sensor	Yes
Shock	Operation: Acceleration, 50(G)/11(ms)/half sine
	(compliant with MIL-STD-202G)
	Acceleration, 1500(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	Max voltage: 3.42V/Min voltage: 3.22V
Power Consumption	Active mode: 445 mA / Idle mode: 80 mA
Dimension (L x W x H)	22.00 x 80 x 3.88mm
MTBF (Hours)	>3,000,000

Mechanical Specifications



For more information, contact your Apacer representative

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