

The Most **Reliable** Storage For Industries

PV25V-M280



Overview

PV25V-M280

Apacer PV25V-M280 is the fastest SSD designed with M.2 2280 mechanical dimensions, providing full compliance with PCIe Gen4 x4 interface and NVMe 2.0 specifications. This enables it to operate in power management modes and significantly reduce power consumption. Equipped with a powerful PCIe controller supporting on-the-module ECC and efficient wear leveling scheme, PV25V-M280 ensures exceptionally low latency and outstanding performance in data transfer. With its compact size and high-speed storage, PV25V-M280 is the ideal choice for larger, faster hosts deployed across a wide range of applications requiring top-notch performance.



To ensure power stability in mission-critical environments, PV25V-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 DataDefender™ 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-25 offers a comprehensive storage solution engineered for reliability, security, and operational efficiency.

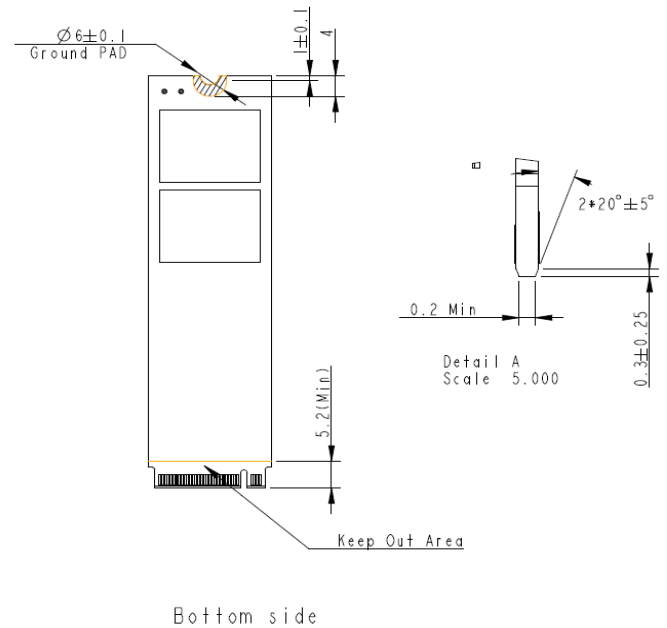
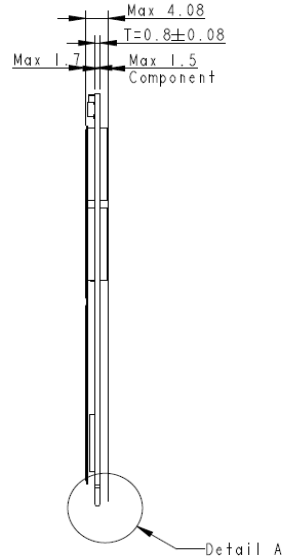
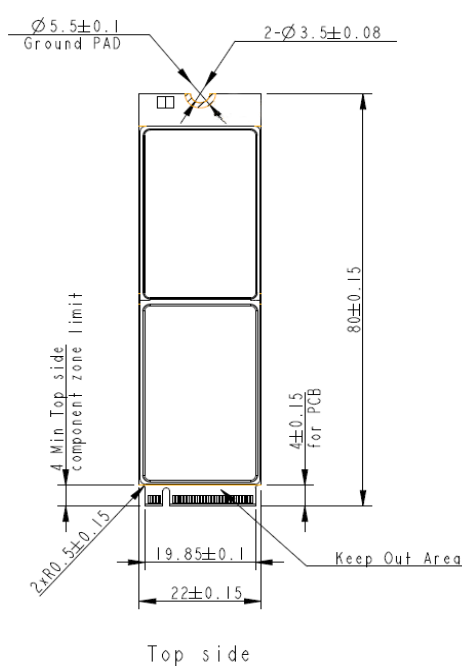
Features

- CoreVolt 2 Technology
- Low-Density Parity-Check (LDPC) Code
- Bad Block Management
- Global Wear Leveling
- Flash Translation Layer: Page Mapping
- DataDefender™ Plus
- S.M.A.R.T.
- TRIM
- SMART Read Refresh™
- NVMe Secure Erase

Specifications

Model Name	PV25V-M280
Interface	PCIe Gen4x4
Connector	Double-sided: M.2 2280 M key
Form Factor	M.2 2280
NAND Flash Type	3D TLC
Capacity	120GB-1920GB
External DRAM	No
Sustained Read Performance (MB/sec.)	Up to 3,740
Sustained Write Performance (MB/sec.)	Up to 3,340
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	669K
Standard Operating Temperature (°C)	0 ~ 70
Extended Operating Temperature (°C)	-40 ~ 85
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: 3.39V/Min voltage: 3.25V
Power Consumption	Active mode: 1290 mA / Idle mode: 250 mA
Dimension (L x W x H)	22.00 x 80 x 3.88mm
MTBF (Hours)	>3,000,000

Mechanical Specifications



**For more information,
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