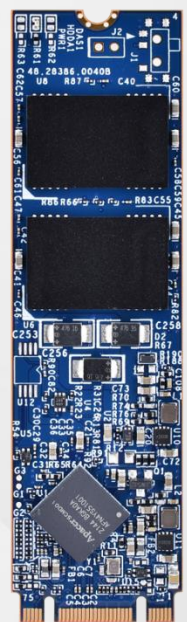


The Most **Reliable**  
Storage For Industries

SV25P-M280



### Overview

Apacer SV25P-M280 is the next generation Solid State Drive (SSD) with compact size and great performance. Designed in SATA 6 Gb/s interface, SV25P-M280 provides full compliance with the latest SATA Revision 3.2 interface specifications and delivers exceptional read/write speed, making it the leading add-in storage solution for future host computing systems.

Utilizing 3D NAND for higher capacity up to 960GB and providing more power efficiency than 2D NAND, SV25P-M280 is built with a powerful SATA controller that supports on-the-module ECC as well as efficient wear leveling scheme and implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability. Featuring CorePower technology, SV25P-M280 guarantees data integrity and stability of data transmission in the event of an unexpected power loss by implementing backup power supply with tantalum capacitors that allow sufficient time to move all cached data to NAND flash.

Furthermore, SV25P-M280 is equipped with a built-in thermal sensor to monitor the temperature of the SSD via S.M.A.R.T commands to prevent overheating. To ensure that products continue to operate normally in high vibration and under extreme environmental changes, Apacer provides Sidefill technology to increase product reliability and resistance to thermal and mechanical stress. For highly-intensive applications, End-to-End Data Protection ensures that data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers.

Security-wise, Advanced Encryption Standard (AES) ensures data security and provides users with peace of mind knowing their data is safeguarded against unauthorized use at all times. SV25P-M280 also adopts the latest page mapping file translation layer and comes with various implementations including flash block management, wear leveling, TRIM, power saving modes, over-provisioning, Hyper Cache technology, DataRAID, and SMART Read Refresh.

With exceptional performance, trustable reliability, and enhanced data protection, SV25P-M280 is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.



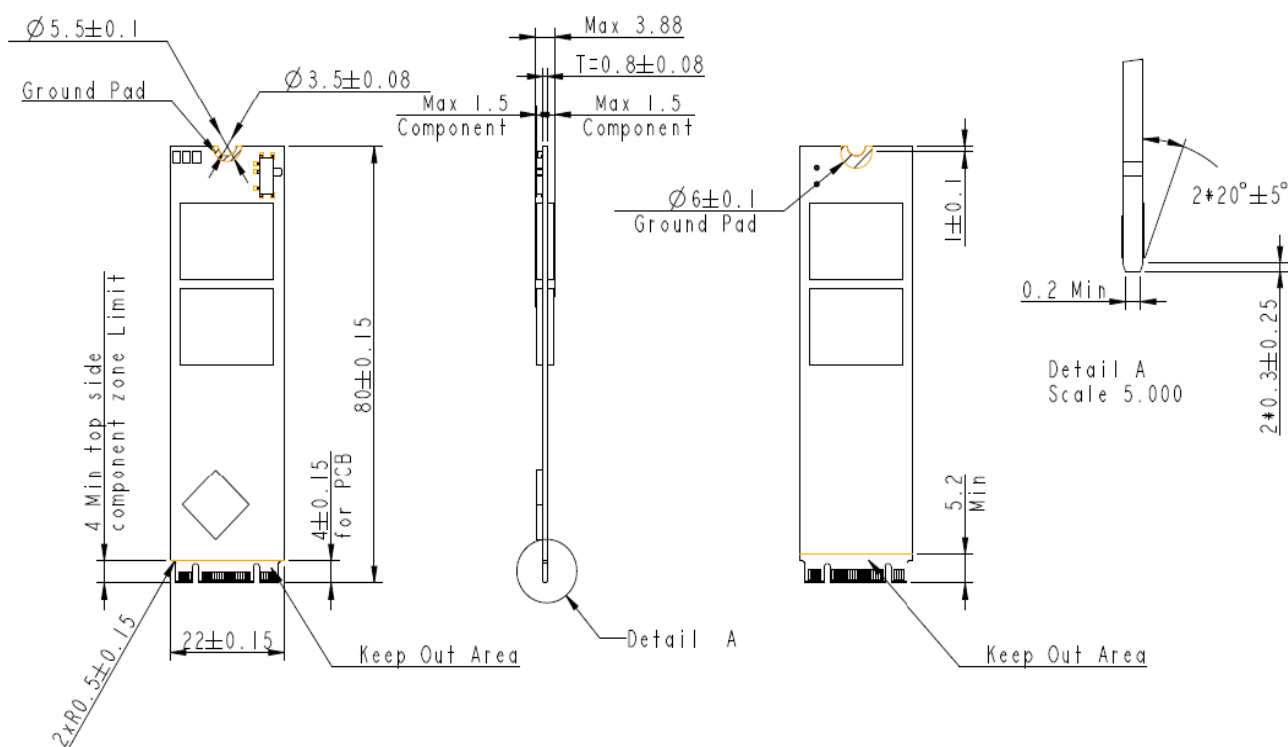
## Feature

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

## Specifications

<b>Model</b>	SV25P-M280
<b>Interface</b>	SATA 3.2 (6Gb/s)
<b>Connector</b>	M.2 B & M key
<b>Form Factor</b>	M.2 2280-D5-B-M
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	120GB~1920GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 560
<b>Sustained Write Performance (MB/sec)</b>	Up to 510
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPs (4K Random Write)</b>	71K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-55 ~ + 100
<b>Thermal sensor</b>	Yes
<b>Shock</b>	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
<b>Vibration</b>	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)
<b>Operating Voltage</b>	3.3 V ± 5%
<b>Power Consumption</b>	Active mode: 425 mA / Idle mode: 70 mA
<b>Dimension (L x W x H )</b>	Double side: 22.00 mm x 80.00 mm x 3.88 mm
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification



**Figure 9-1 Physical Dimensions**

Unit: mm

For more information,  
contact your Apacer representative

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