

# Apacer

The Most **Reliable**  
Storage For Industries

SV250-M280



### Overview

Apacer SV250-M280 is the next generation Solid State Drive (SSD) with compact size and great performance. Designed in SATA 6 Gb/s interface, SV250-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 480GB and providing more power efficiency than 2D NAND, SV250-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. Furthermore, SV250-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 you with peace of mind knowing your data is safeguarded against unauthorized use at all times.

On top of that, SV250-M280 features CoreRescue ASR (Auto Self Recovery), enabling the creation of the world's first SSD with automatic backup and recovery capabilities that can be activated and executed within seconds. With AI-driven detection and automated responses, your data is shielded from unexpected losses, offering truly unmanned management.



## Feature

- CoreRescue ASR (Auto Self Recovery)
- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T.
- DataDefender™
- Device Sleep
- ATA Secure Erase
- TRIM
- Hyper Cache Technology
- Over-provisioning
- SMART Read Refresh™

## Specifications

<b>Model</b>	SV250-M280 CoreRescue ASR
<b>Interface</b>	SATA 3.2 (6Gb/s)
<b>Connector</b>	75-pin SATA-based M.2 module pinout
<b>Form Factor</b>	Single-sided: M.2 2280-B-M S3 Double-sided: M.2 2280-B-M D5
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	Single-sided: 60, 120, 240 GB Double-sided: 480 GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 560
<b>Sustained Write Performance (MB/sec)</b>	Up to 505
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPs (4K Random Write)</b>	74K
<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: 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)
<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: 400 mA /Idle mode:65 mA
<b>Dimension (L x W x H )</b>	Single-sided: 22.00 x 80.00 x 2.38(max.)(unit: mm) Double-sided: 22.00 x 80.00 x 3.88(max.)(unit: mm)
<b>MTBF (hours)</b>	>3,000,000

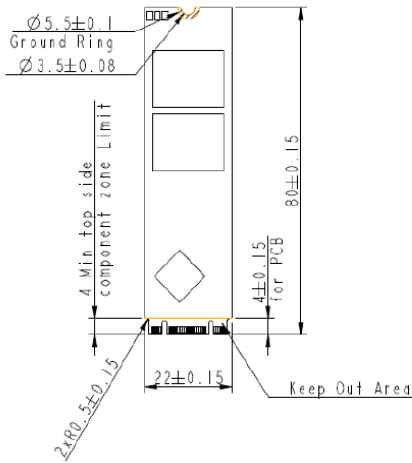
## Mechanical Specification

### 10.1 Single-sided Dimensions

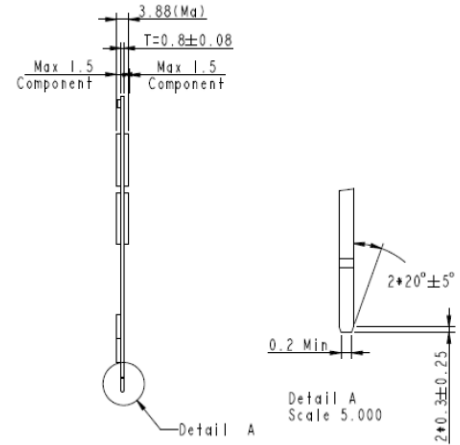
Table 10-1 Physical Information

Parameter	Unit	60 GB	120 GB	240 GB
Length	mm	80.00 ± 0.15		
Width		22.00 ± 0.15		
Height (Max.)		2.38		
Weight	g ± 5%	5.52	5.73	5.78

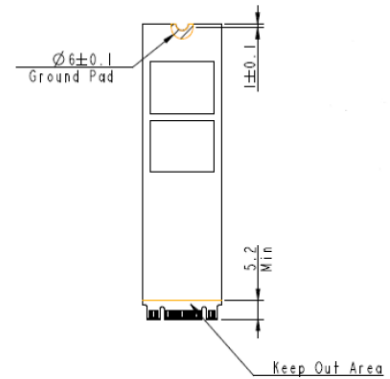
#### Top View



#### Side View



#### Bottom View



For more information,  
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### Global Presence

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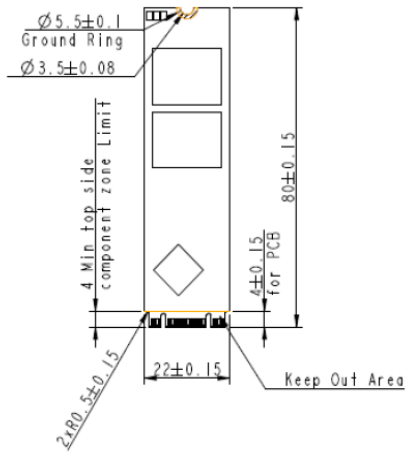
## Mechanical Specification

### 10.2 Double-sided Dimensions

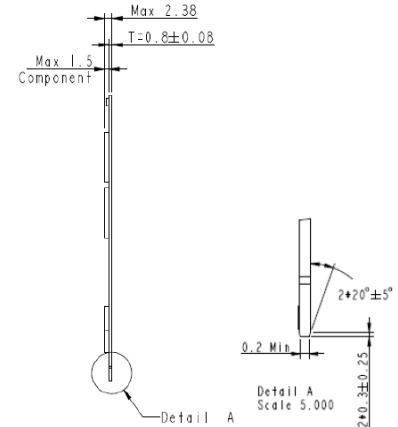
Table 10-2 Physical Information

Parameter	Unit	480 GB
Length	mm	80.00 ± 0.15
Width		22.00 ± 0.15
Height (Max.)		3.88
Weight	g ± 5%	6.84

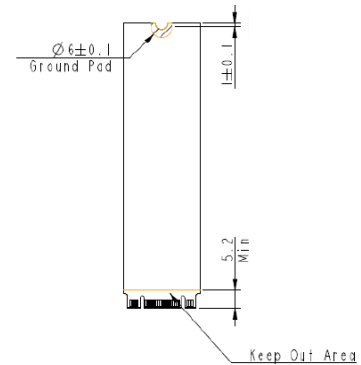
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