

The Most **Reliable**
Storage For Industries

SV24C-M280



Overview

Apacer's CoreRescue series SV24C-M280 with CoreSnapshot 3 technology is the next generation Solid State Drive (SSD) with a compact size and outstanding performance. Designed with a SATA 6 Gb/s interface, SV24C-M280 fully complies with the latest SATA Revision 3.2 interface specifications and delivers exceptional read/write speeds. These features make it the perfect choice for demanding industrial or server operations with heavy workloads.



Utilizing 3D NAND technology for higher capacities of up to 960GB and offering superior power efficiency than 2D NAND, SV24C-M280 is equipped with a robust SATA controller that supports on-the-module ECC, along with an efficient wear leveling scheme. Additionally, it features an LDPC (Low Density Parity Check) ECC engine to enhance SSD endurance and data reliability. Moreover, SV24C-M280 comes with a built-in thermal sensor, enabling it to monitor the SSD temperature via S.M.A.R.T commands to prevent overheating. To ensure consistent operation even in high-vibration and extreme environmental conditions, SV24C-M280 integrates Sidefill technology, enhancing product reliability and resistance to thermal and mechanical stress. For demanding applications, End-to-End Data Protection guarantees data integrity at various stages, facilitating reliable data transfers. From a security standpoint, Advanced Encryption Standard (AES) provides robust data security, offering users peace of mind by safeguarding their data against unauthorized access at all times.

On top of that, SV24C-M280 features CoreSnapshot 3 technology coupled with Double-barreled Solution and CoreRescue OOB Module (optional) to optimize the stability of system operation and management. CoreSnapshot 3 ensures that SV24C-M280 can function normally and return to normal operation in the event of unexpected system failures to reduce downtime and maximum output, while the DBS Cloud Edition or OOB Module extends the practical operating lifespan and integrates seamlessly with alternated RDM platforms, makes monitoring of a complex system much easier and more efficient through the Cloud.

With regard to flash management, SV24C-M280 incorporates numerous advanced features, including flash block management, DataDefender, ATA secure erase, TRIM, page mapping, Hyper Cache technology, over-provisioning, device sleep, power-saving modes, DataRAID, and SMART Read Refresh.

With its exceptional performance, proven reliability, and enhanced data protection, SV24C-M280 is an ideal storage or cache solution for a variety of applications, including industrial, imaging, computing, and enterprise markets.

Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear-leveling
- Flash Bad-block Management
- S.M.A.R.T.
- CoreSnapshot 3
- ATA Secure Erase
- TRIM
- Flash Translation Layer: Page Mapping
- Hyper Cache Technology
- Over-provisioning
- Device Sleep
- SATA Power Management
- DataRAID
- SMART Read Refresh
- DataDefender

Specifications

Model	SV24C-M280 CoreSnapshot 3 Cloud Edition
Interface	SATA 3.2 (6Gb/s)
Connector	M.2 B & M key
Form Factor	M.2 2280-D5-B-M
NAND Flash Type	3D TLC
Capacity	120GB~960GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 565
Sustained Write Performance (MB/sec)	Up to 395
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPs (4K Random Write)	68K
Standard Operating Temperature (°C)	0 ~ 70
Extended Operating Temperature (°C)	-40 ~ 85
Storage Temperature (°C)	-55 ~ 100
Housing	No
Thermal Sensor	Yes
Shock	Operation: 50G/11ms (Compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (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	3.3 V ± 5%
Power Consumption	Active Mode: 635 mA / Idle Mode: 85 mA
Dimension (L x W x H)	Double side: 22.00 mm x 80.00 mm x 4.53 mm
MTBF (hours)	>3,000,000

Mechanical Specification

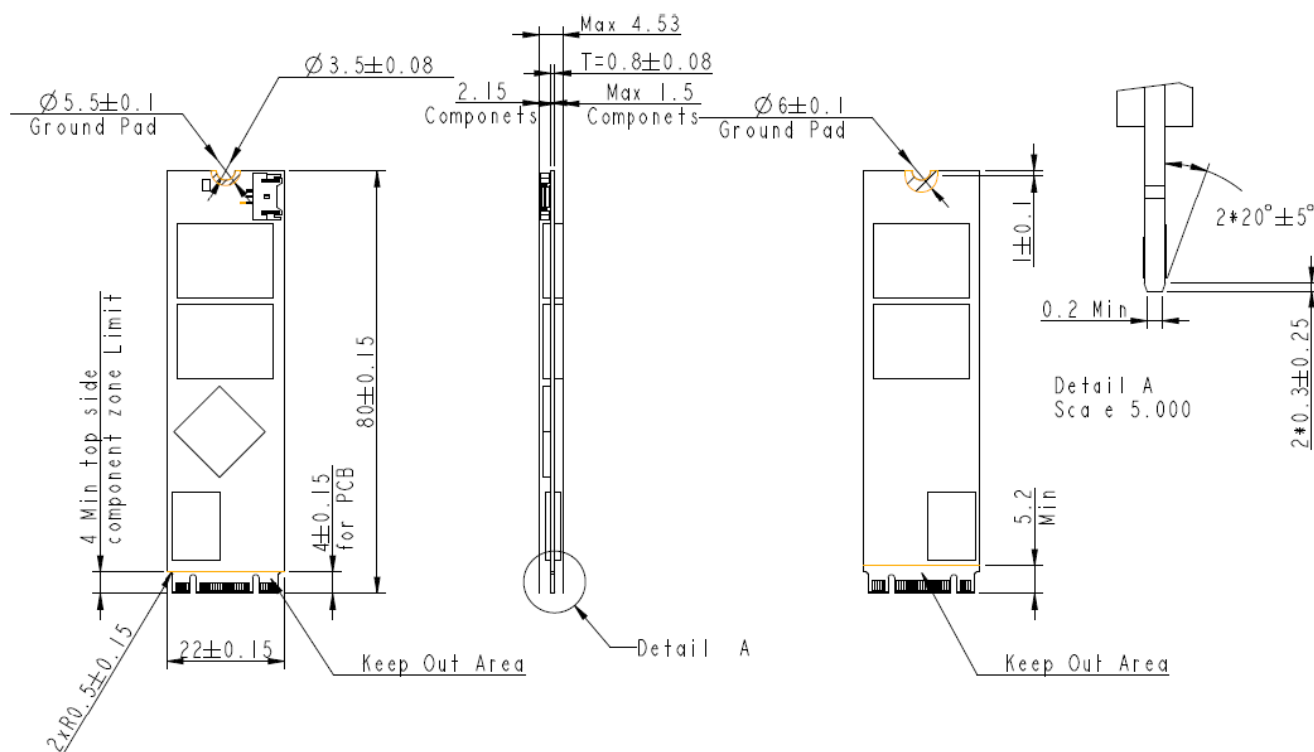


Figure 10-1 Physical Dimensions

For more information,
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