

The Most **Reliable** Storage For Industries

SV24E-M280





Apacer

SV24E-M280

Overview

Apacer's SV24E-M280 is a high performance and high endurance solidstate drive designed with compact M.2 form factor for enterprise applications. Utilizing 112-layer 3D TLC NAND Flash with the DDR4 for higher capacity up to 1920GB and providing more power efficiency, SV24E-M280 delivers outstanding, stable performance up to 560 MB/s for sequential read and 510 MB/s for sequential write and ultra-low latency with optimized QoS. SV24E-M280 also presents low power consumption compared with traditional hard drives, extended lifespan and all the advantages of NAND Flash management technologies to ensure data integrity and highest levels of reliability, making it the ideal solution for read-intensive, mixed-use server applications.



SV24E-M280 features enterprise-class reliability features implemented on both hardware and firmware levels. On the hardware level, SV24E-M280 is built with a powerful SATA controller that supports on-the-module ECC as well as LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability. In addition, SV24E-M280 supports CorePower technology which 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. On the firmware level, SV24E-M280 is designed with built-in thermal sensor to monitor the temperature of the SSD via S.M.A.R.T health monitoring to prevent overheating.

In addition to data reliability, SV24E-M280 also incorporates a variety of cutting-edge technologies featuring multiple approaches to data security and integrity. SV24E-M280 provides exceptional performance by offloading computational tasks to a dedicated processor with AES 256-bit hardware encryption and with the hardware-based technology, SV24E-M280 offers data security to safeguard the drive against unauthorized access at all times. To add an additional level of protection, SV24E-M280 supports SMART Read Refresh, developed particularly for read-intensive applications, to avoid read disturb errors from occurring to ensure health status of all blocks of NAND flash.

SV24E-M280 is an enterprise-class SSD designed for server applications that require consistent performance, low latency and continuous large file transfers for 24/7 uptime and reliability. With superior performance, instant responsiveness, advanced power loss protection technology and highest standard of reliability – whether in terms of data security, data integrity and data protection, SV24E-M280 is an ideal solution for enterprise servers, data centers and cloud service providers.

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Feature

- · Enterprise SSD SV24E Series
- · CorePower
- · TCG Opal 2.0 / AES 256-bit Encryption
- · QoS 99.9%
- · Warrany 5 years
- · DWPD>1
- · Thermal Sensor
- · Over-Provisioning
- · Low-Density Parity-Check (LDPC) Code
- · Global Wear Leveling
- · S.M.A.R.T.
- · SMART Read Refresh™

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Specifications

Model	SV24E-M280
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	240GB~1920GB
External DRAM	Yes
SequentialRead Performance (MB/sec)	Up to 560
Sequential Write Performance (MB/sec)	Up to 510
Sustained Read Performance (MB/sec)	Up to 530
Sustained Write Performance (MB/sec)	Up to 475
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPs (4K Random Write)	80K
Random R/W latency	65/42 μs
Random R/W QoS	0.29/11 ms
Standard Operating Temperature (°C)	0 ~ + 70
Storage Temperature (°C)	-55 ~ + 100
Thermal sensor	Yes
Shock	Operation: Acceleration, 50(G)/11(ms)/half sine (compliant with MIL-STD-202G) Non-operation: Acceleration,1,500(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	3.3V ± 10%
WHQL certified	Win Server 2019
Power Consumption	Active mode: 2.55 W/Idle mode: 0.28 W
Inrush current	1.459 A
Dimension (L x W x H)	22.00 x 80.00 x 3.88(max.),unit: mm
MTBF (hours)	>3,000,000



Mechanical Specification



Unit: mm

For more information, contact your Apacer representative

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