Apacer

The Most **Reliable** Storage For Industries

SV250-M242

SV250-M242

Overview

Apacer's SV250-M242, utilizing 3D NAND for higher capacity up to 960GB and providing more power efficiency than 2D NAND, is the next generation Solid State Drive (SSD) with compact and high-speed storage. Designed in SATA 6 Gb/s interface, SV250-M242 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.

SV250-M242 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-M242 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. Operating under 6 Gb/s interface, SV250-M242 is provided with Apacer latest S.M.A.R.T. that is primarily oriented for the latest SATA interface SSD, for drive lifetime monitoring and analysis. 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) and Trusted Computing Group (TCG) Opal (optional) ensure data security and provide users with peace of mind knowing their data is safeguarded against unauthorized use at all times. SV250-M242 also adopts the latest page mapping file translation layer and comes with various implementations including power saving modes, wear leveling, flash block management, S.M.A.R.T., TRIM, Hyper Cache technology, over-provisioning, DataDefender™, DataRAID™ and SMART Read Refresh™. With exceptional performance, trustable reliability and cost effectiveness, SV250-M242 is definitely the ideal storage or cache solution for a variety of applications ranging from industrial, imaging, computing to enterprise markets.

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SV250-M242

Feature

· 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 Support

· Hyper Cache Technology

· Over-provisioning

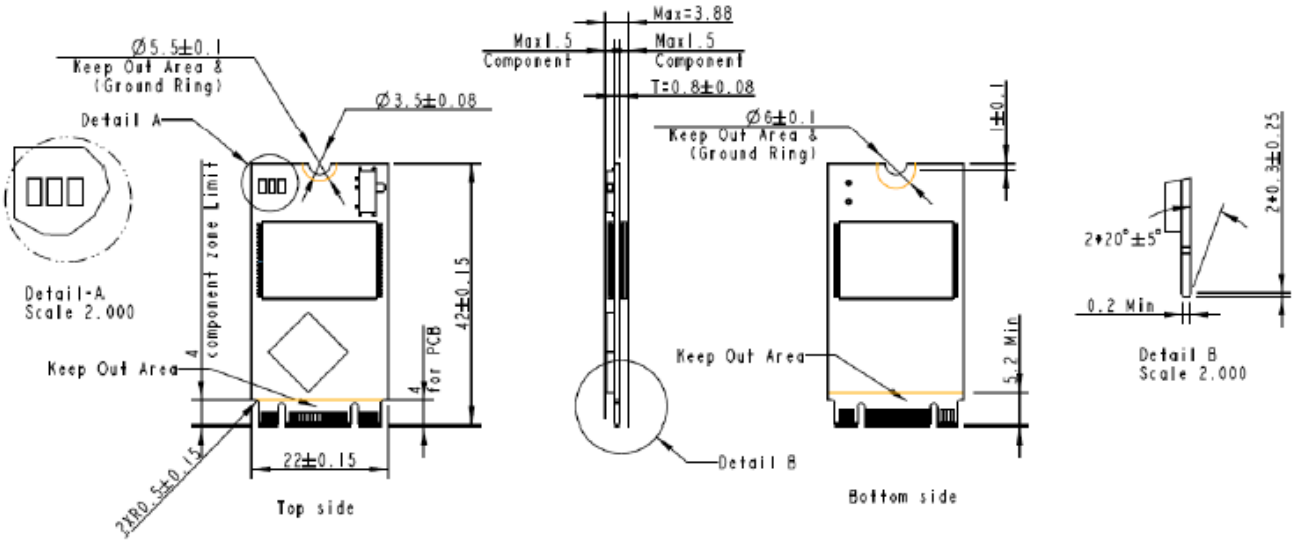
· DataRAID™

· SMART Read Refresh™ technology

Specifications

Model	SV250-M242
Interface	SATA 3.2 (6Gb/s)
Connector	M.2 B & M key
Form Factor	M.2 2242-D5-B-M
NAND Flash Type	3D TLC
Capacity	120GB~960GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 470
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
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	3.3V ± 5%
Power Consumption	Active mode: 380 mA / Idle mode: 60 mA
Dimension (L x W x H)	42.00 x 22.00 x 3.80 (mm)
MTBF (hours)	>3,000,000

Mechanical Specification



Unit: mm

For more information, contact your Apacer representative

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