# Apacer

### The Most **Reliable** Storage For Industries

SH250-M242





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### SH250-M242

#### **Overview**

Apacer's SH250-M242 is a well-balanced solid-state disk (SSD) drive with standard form factor and great performance. Designed in SATA 6.0 Gb/s interface, the SSD is able to deliver exceptional read/write speed, making it the ideal companion for heavy-loading industrial or server operations.



SH250-M242 utilizes 3D NAND for higher capacity up to 160GB and provides more power efficiency than 2D NAND. Regarding reliability, SH250-M242 is implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability while reading raw data inside a flash chip. In addition, the drive comes with various implementations including powerful hardware ECC engine, power saving modes, wear leveling, flash block management, S.M.A.R.T., TRIM, and DataDefender™.

In terms of security, Advanced Encryption Standard (AES) ensures data security provides users with a peace of mind. Furthermore, with End-to-End Data Protection, data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers.

#### **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™
- DEVLSP
- ATA Secure Frase
- TRIM
- Hyper Cache Technology
- Over-Provisioning
- SAMRT Read Refresh™
- SLC-liteX

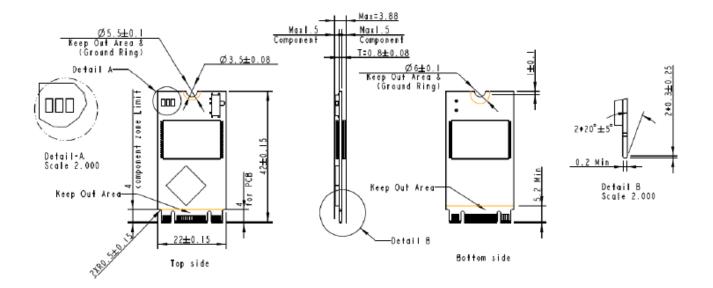


### **Specifications**

Model	SH250-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	10GB~160GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 520
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	75K
Standard Operating Temperature ( °C )	0 ~ + 70
Extended Operating Temperature ( °C )	-40 ~ + 85
Storage Temperature ( °C )	-40 ~ + 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/sine (compliant with MIL-STD-810G)
Operating Voltage	3.3V ± 5% (3.135-3.465V)
Power Consumption	Active mode: 440 mA / Idle mode: 65 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

#### **Global Presence**

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