

Apacer

The Most **Reliable**
Storage For Industries

SV170-M242



SV170-M242

Overview

Apacer's SV170-M242 (M.2 2242) utilizes 3D NAND for higher capacity up to 480 GB and provides more power efficiency than 2D NAND, with the aim of becoming more suitable for mobile and compact computers with standard width at only 22.00 mm. SV170-M242 appears in M.2 2242 mechanical dimensions and is believed to be the leading add-in storage solution for future host computing systems. Regarding reliability, SV170-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.



Feature

- Adopts advanced LDPC ECC engine with 3D NAND flash memory to improve reliability
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- Supports SSDWidget S.M.A.R.T function
- Power Failure Management
- End-to-End Data Protection
- TRIM Support
- ATA Secure Erase
- Hyper Cache Technology
- Over-Provision
- SMART Read Refresh™

Specifications

Model	SV170-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	30GB~480GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 495
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	85K
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: 450 mA / Idle mode: 95 mA
Dimension (L x W x H)	42.00 x 22.00 x 3.80 (mm)
MTBF (hours)	>3,000,000

