

The Most **Reliable** Storage For Industries

SH250-7LP2 180D



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Overview

Apacer SH250-7LP2 180D (SATA Disk Module 7Pin/180 Degree Low Profile 2) is a super-mini industrial SSD module, utilizing 3D NAND for higher capacity up to 80GB and provides more power efficiency than 2D NAND. Designed in SATA 6.0 Gb/s interface, SH250-7LP2 can deliver outstanding performance up to 560MB/s in reading and 510MB/s in writing, highly suitable to serve as operating system boot drive or storage media of important data.



For data efficiency, the internal controlling unit of the product is engineered with a DRAM as a write cache for enhanced random performance and endurance. With Apacer's SLC-liteX technology, SH250-7LP2 performs with higher number of P/E cycles up to 30,000 times. Besides, SH250-7LP2 features Apacer Multi-Power Path technology that provides three methods to supply power to the host either via a conventional cable or cable-less design via pin7 or state-of-art 7+2 pin connector, which in turn offers developers maximum flexibility when it comes to board design.

Moreover, the device adopts the latest page mapping file translation layer and thermal throttling function, making it a powerful yet compact solution for space-limited design. Regarding reliability, SH250-7LP2 is implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability.

*The actual available memory on the device is less than what is listed on the package. This is due to small discrepancies in file formats and algorithms used by various operating systems. In addition, a portion of memory space is reserved for system files and data sectors for better performance.

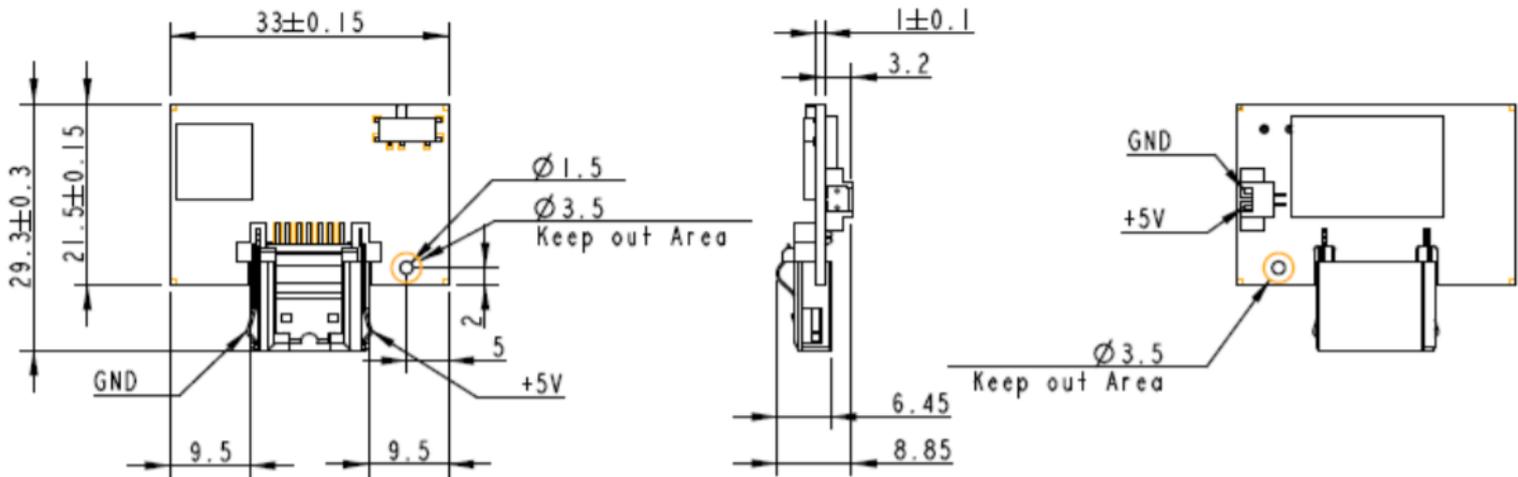
Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T.
- Power Failure Management
- ATA Secure Erase
- TRIM Support
- Hyper Cache Technology
- Over-Provisioning
- SMART Read Refresh™
- SLC-liteX

Specifications

Model	SH250-7LP2 180D
Interface	SATA 3.2 (6Gb/s)
Connector	7-pin
Form Factor	SATA Disk Module
NAND Flash Type	3D TLC
Capacity	20GB ~ 80GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 510
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPs (4K Random Write)	72K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-40 ~ + 100
Housing	Optional
H/W Write Protect	Optional
Cable-less Solution	Optional (7+2 cable-less, Pin 7 Power cable-less)
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	5.0 V ± 5%
Power Consumption	Active mode: 325 mA / Idle mode: 55 mA
Dimension (L x W x H)	33.00 mm x 29.30 mm x 8.85 mm
MTBF (hours)	>1,000,000

Mechanical Specification



Unit: mm

For more information,
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