

# Apacer

The Most **Reliable**  
Storage For Industries

**SH250-7LP2 90D**



## SH250-7LP2 90D

### Overview

Apacer SH250-7LP2 90D (SATA Disk Module 7Pin/90 Degree Low Profile 2) is a super-mini industrial SSD module, utilizing 3D NAND for higher capacity up to 40GB and provides more power efficiency than 2D NAND. Designed in SATA 6.0 Gb/s interface, SH250-7LP2 can deliver outstanding performance up to 310MB/s in reading and 305MB/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.

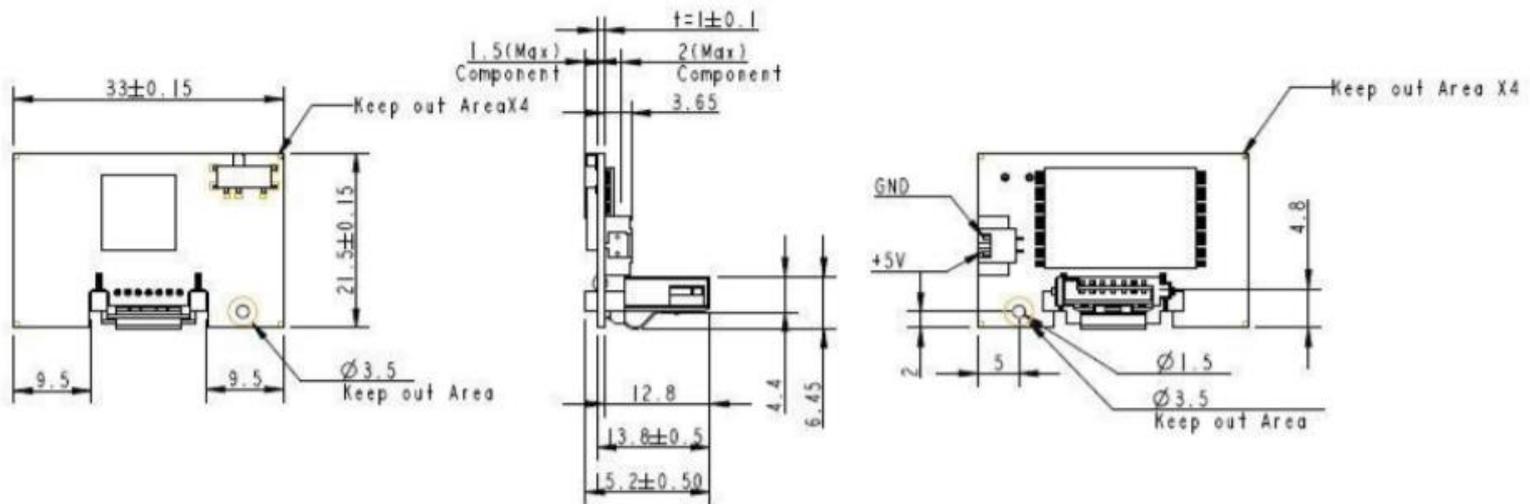
## Feature

- 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

<b>Model</b>	SH250-7LP2 90D
<b>Interface</b>	SATA 3.2 (6Gb/s)
<b>Connector</b>	7-pin
<b>Form Factor</b>	SATA Disk Module
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	10GB ~ 40GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 310
<b>Sustained Write Performance (MB/sec)</b>	Up to 305
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPs (4K Random Write)</b>	69K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>Housing</b>	Optional
<b>H/W Write Protect</b>	Optional
<b>Cable-less Solution</b>	Optional (7+2 cable-less, Pin 7 Power cable-less)
<b>Thermal Sensor</b>	Yes
<b>Shock</b>	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
<b>Vibration</b>	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)
<b>Operating Voltage</b>	5.0 V ± 5%
<b>Power Consumption</b>	Active mode: 235 mA / Idle mode: 55 mA
<b>Dimension (L x W x H)</b>	33.00 mm x 29.30 mm x 8.85 mm
<b>MTBF (hours)</b>	>1,000,000

## Mechanical Specification



Unit: mm

For more information,  
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