

# Apacer

The Most **Reliable**  
Storage For Industries

**ST170-7LP2**



## ST170-7LP2

### Overview

Apacer ST170-7LP2 (SATA Disk Module 7Pin/180 Degree Low Profile 2) is a super-mini industrial SSD module, utilizing 3D NAND for higher capacity up to 120 GB and provides more power efficiency than 2D NAND. Designed in SATA 6.0 Gb/s interface, ST170-7LP2 can deliver outstanding performance up to 335 MB/s in reading and 235 MB/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. Besides, ST170-7LP2 features Apacer Multi-PowerPath 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. Regarding reliability, ST170-7LP2 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.



## ST170-7LP2

### Feature

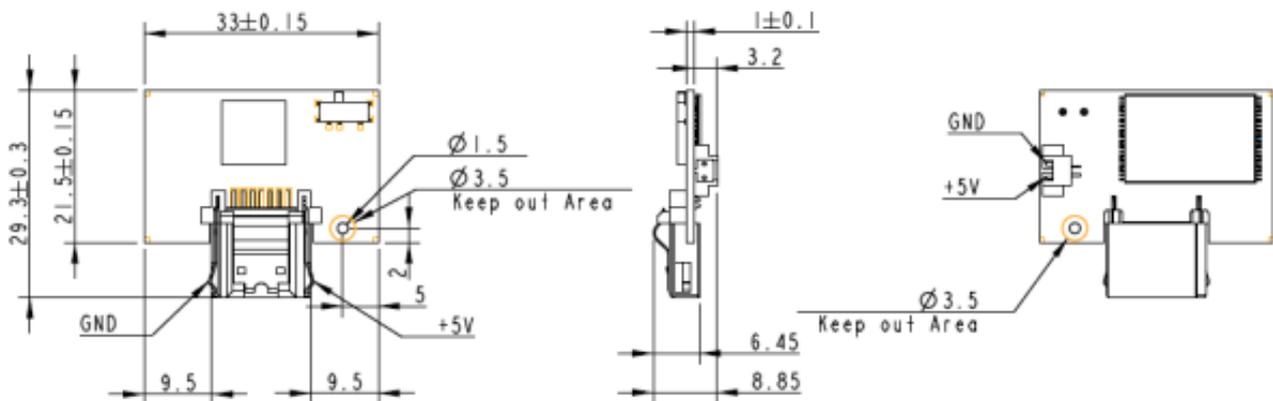
- Support LDPC ECC
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T. and SSD Widget
- Power Failure Management
- End-to-End Data Protection
- TRIM Support
- ATA Secure Erase
- Hyper Cache Technology
- Over-Provisioning



## Specifications

<b>Model</b>	ST170-7LP2
<b>Interface</b>	SATA 3.1 (6Gb/s)
<b>Connector</b>	7-pin
<b>Form Factor</b>	SATA Disk Module
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	30GB ~ 120GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 335
<b>Sustained Write Performance (MB/sec)</b>	Up to 235
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	55K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>H/W Write Protect</b>	Optional
<b>Screw Hole</b>	NO
<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 Non-operation: 1500G, 0.5ms
<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: 240 mA / Idle mode: 85 mA
<b>Dimension (L x W x H )</b>	33.00mm x 29.30mm x 8.85mm
<b>MTBF (hours)</b>	>1,000,000

## Mechanical Specification



Unit: mm

**For more information,  
contact your Apacer representative**

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