

Apacer

The Most **Reliable**
Storage For Industries

PT120-M280



PT120-M280

Overview

Apacer PT120-M280 is the next generation modularized Solid State Drive (SSD) with the shape of all new M.2 form factor, with the aim of becoming more suitable for mobile and compact computers with standard width at only 22.00 mm. PT120-M280 appears in M.2 2280 mechanical dimensions and is believed to be the leading add-in storage solution for future host computing systems.

PT120-M280 is designed with SATA-based connector pinouts, providing full compliance with the latest PCIe NVMe 1.2 Gen3 x2 interface specifications to optimize the access performance. In addition, the transmission efficiency of Gen3 x2 enables the sequential read to speed up to 1600MB/sec, far more efficient than the theoretical 600MB/sec transmission performance of SATAIII.

Aside from PCIe compliance, PT120-M280 delivers exceptional performance and power efficiency. On the other hand, the extreme thin and light form factor makes PT120-M280 the ideal choice for high-speed computing and real-time data processing.



Feature

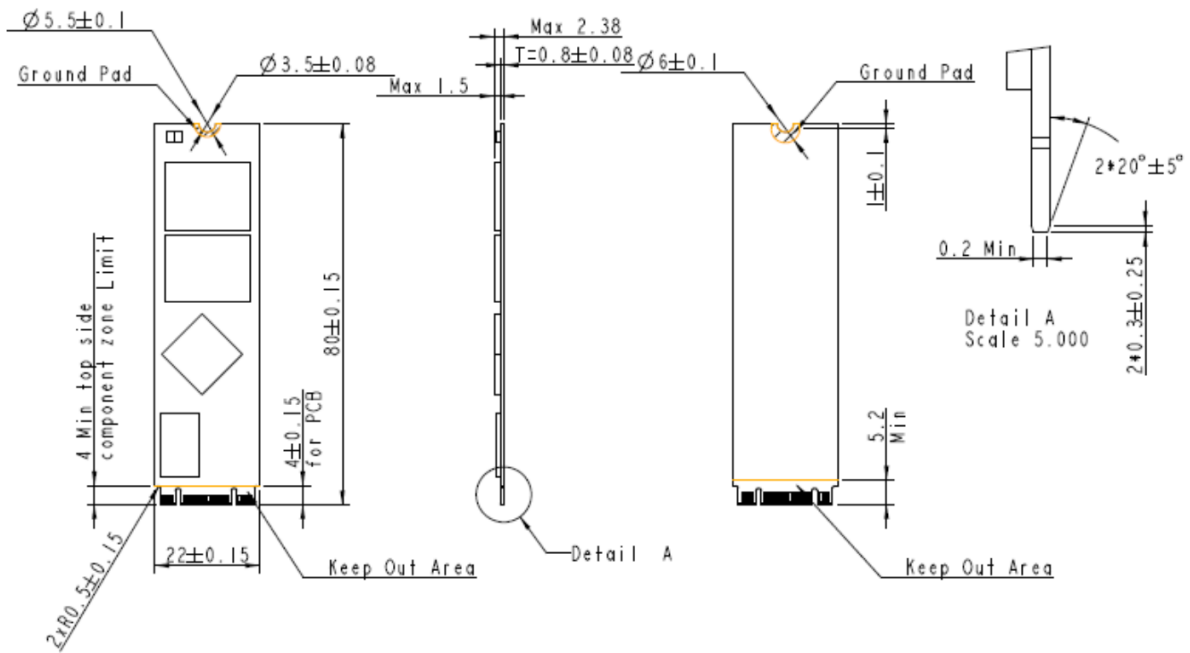
- Superb performance and low latency
- Supports LDPC ECC
- Global Wear Leveling
- Flash bad-block management
- Hyper Cache Technology
- Power Failure Management
- Thermal Management Technique
- End-to-End Data Protection
- TRIM Support
- Supports SSDWidget S.M.A.R.T function
- Over-Provisioning

Specifications

Model	PT120-M280
Interface	PCIe NVMe Gen3x2
Connector	M.2 B & M key
Form Factor	M.2 2280-S3-B-M: 120, 240 GB M.2 2280-D5-B-M: 480 GB
NAND Flash Type	3D TLC
Capacity	120GB~480GB
External DRAM	Yes
Sustained Read Performance (MB/sec)	Up to 1600
Sustained Write Performance (MB/sec)	Up to 1000
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	190K
Standard Operating Temperature (°C)	0 ~ + 70
Storage Temperature (°C)	-40 ~ + 100
Thermal Sensor	Yes
Shock	Operation: 50G, 11ms Non-operation: 1500G, 0.5ms
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%
Power Consumption	Active mode: 1010 mA / Idle mode: 155 mA
Dimension (L x W x H)	Single side: 80.00 mm x 22.00mm x 2.38mm Double side: 80.00 mm x 22.00mm x 3.88mm
MTBF (hours)	>1,000,000

Mechanical Specification

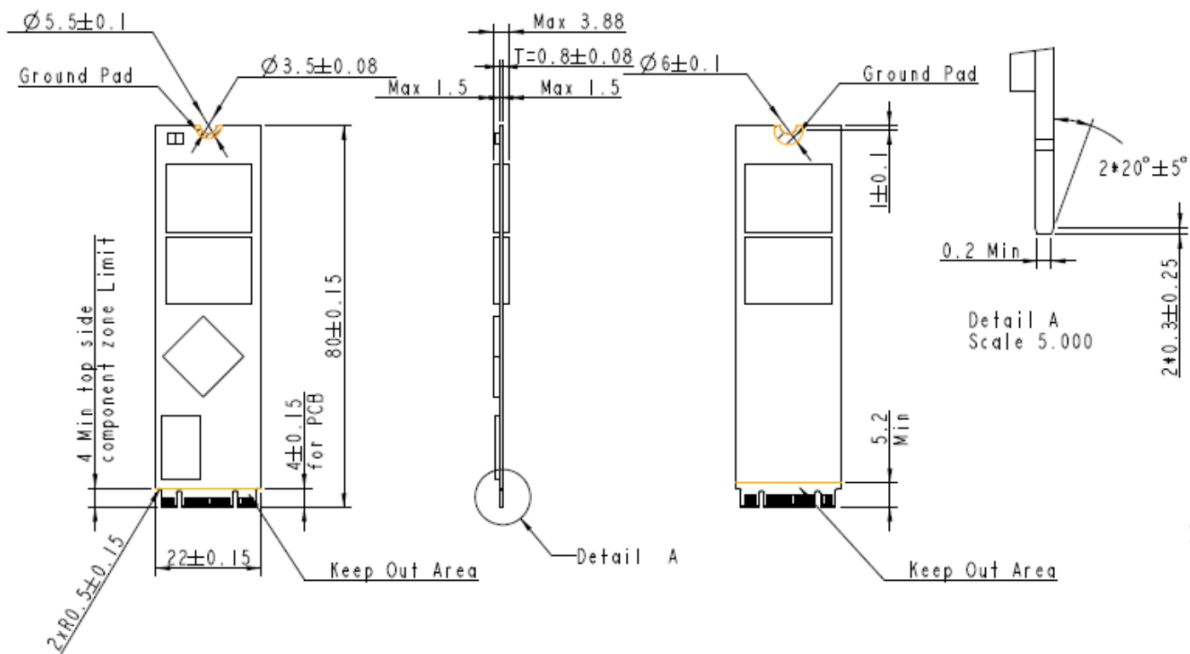
Single Side



Unit: mm

Mechanical Specification

Double Side



Unit: mm

For more information,
contact your Apacer representative

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