Apacer

The Most **Reliable**
Storage For Industries

SH250-M280

SH250-M280

Overview

Apacer's SH250-M280 is a well-balanced solid-state disk (SSD) drive with standard form factor and great performance. Designed in SATA 6.0 Gbps interface, the SSD is able to deliver exceptional read/write speed, making it the ideal companion for heavy-loading industrial or server operations.

SH250-M280 utilizes 3D NAND for higher capacity up to 320GB and provides more power efficiency than 2D NAND. Appearing in M.2 2280 mechanical dimensions, SH250-M280 is believed to be the leading add-in storage solution for future host computing systems.

With Apacer's SLC-liteX technology, SH250-M280 performs with higher number of P/E cycles up to 100,000 times. Regarding reliability, SH250-M280 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. In addition, the drive comes with various implementations including powerful hardware ECC engine, power saving modes, Wear Leveling, flash block management, S.M.A.R.T., TRIM and DataDefender™.

In terms of security, Advanced Encryption Standard (AES) ensures data security and provide users with a peace of mind knowing their data is safeguarded against unauthorized use at all times. Furthermore, with End-to-End Data Protection, data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers.

Feature

· Low-Density Parity-Check (LDPC) Code

· Global Wear Leveling

· Flash bad-block management

· Flash Translation Layer: Page Mapping

· S.M.A.R.T.

· DataDefender™

· Device Sleep

· ATA Secure Erase

· TRIM Support

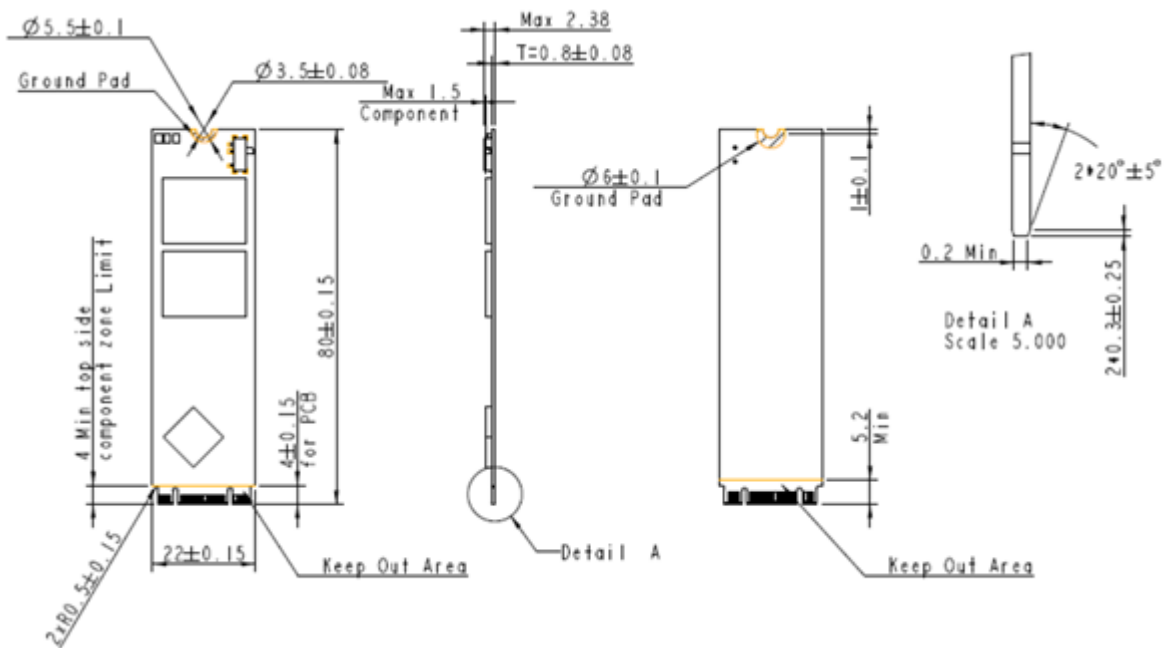· SAMRT Read Refresh™ technology

· SLC-liteX (P/E cycle: 100K)

Specifications

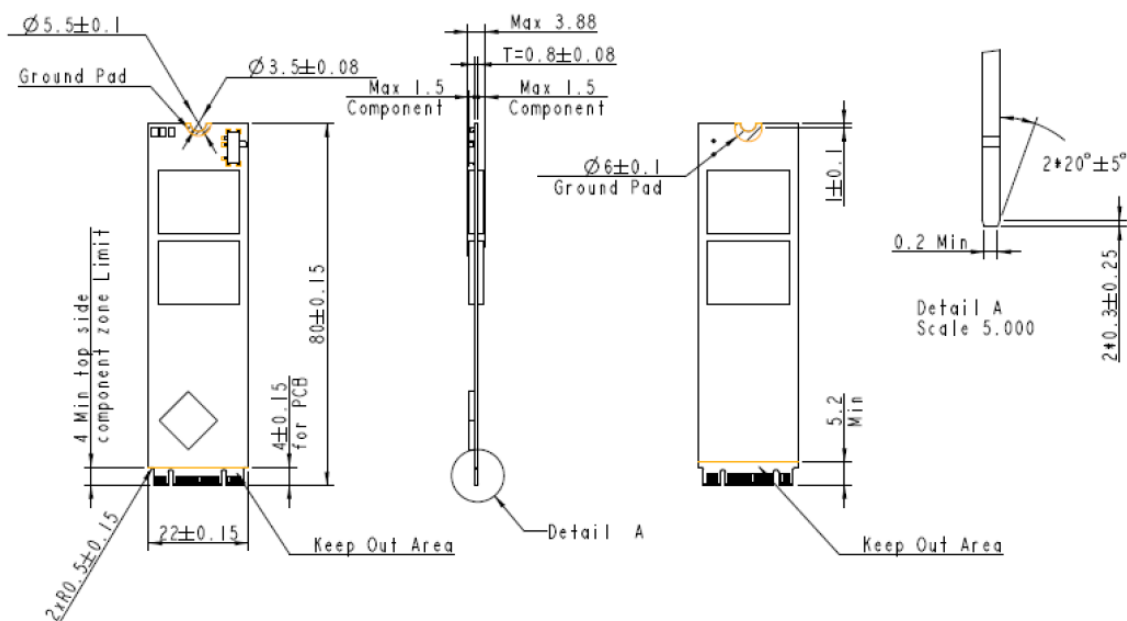| Model	SH250-M280
Interface	SATA 3.2 (6Gb/s)
Connector	M.2 B & M key
Form Factor	M.2 2280-D5-B-M
NAND Flash Type	3D TLC
Capacity	10GB~320GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 560
Sustained Write Performance (MB/sec)	Up to 510
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	70K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-40 ~ + 100
Thermal Sensor	Yes
Shock	Operation: 50G/11ms 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	3.3 V ± 5%
Power Consumption	Active mode:450 mA / Idle mode: 65 mA
Dimension (L x W x H)	Single side: 80.00 mm x 22.00 mm x 2.38 mm Double side: 80.00 mm x 22.00 mm x 3.88 mm
MTBF (hours)	>3,000,000

Mechanical Specification

BGA (120-960GB)

Single Side (120-480GB)

Double Side (960GB)

Unit: mm

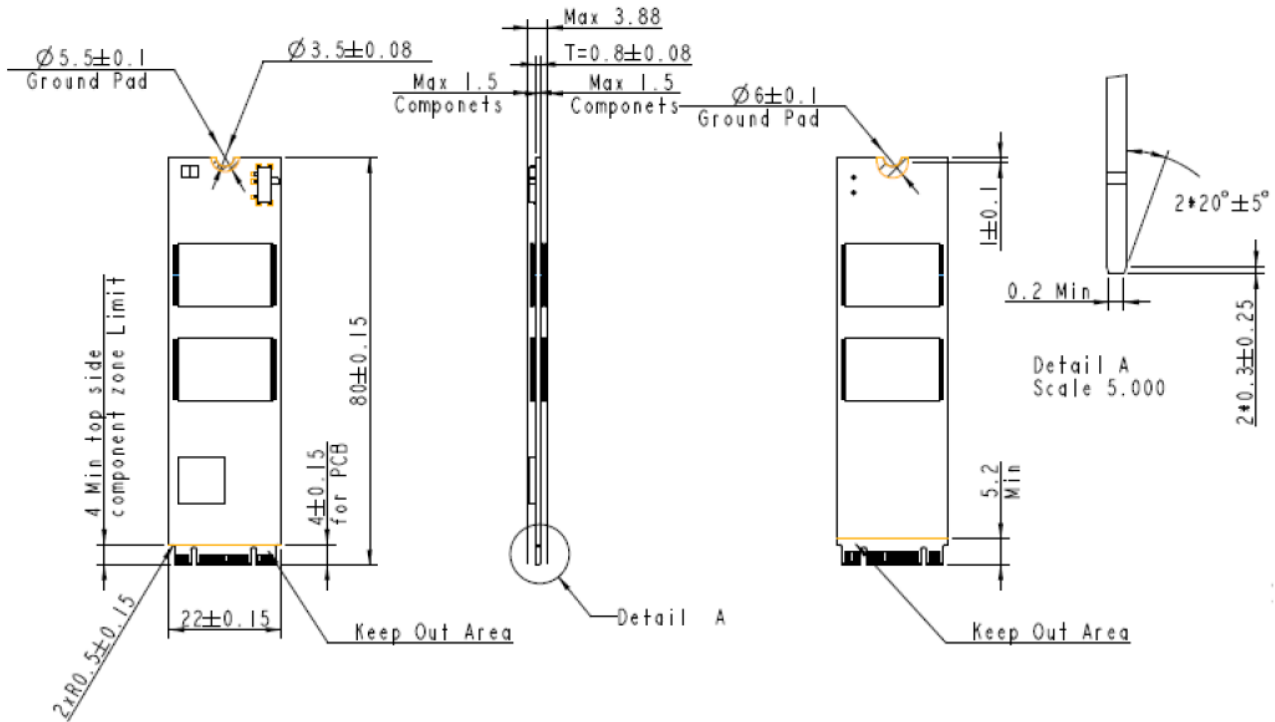# Mechanical Specification

TSOP Single Side (30-60GB)

Unit: mm

For more information,
contact your Apacer representative

Global Presence