The Most **Reliable**
Storage For Industries

ST250-M280

ST250-M280

Overview

Apacer's ST250-M280 is a well-balanced solid-state disk (SSD) drive with standard form factor and great performance. Designed in SATA 6.0 Gb/s interface, the SSD is able to deliver exceptional read/write speed, making it the ideal companion for heavy-loading industrial or server operations.

ST250-M280 utilizes 3D NAND for higher capacity up to 2TB and provides more power efficiency than 2D NAND. Appearing in M.2 2280 mechanical dimensions, ST250-M280 is believed to be the leading add-in storage solution for future host computing systems. Regarding reliability, ST250-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 provides users with a peace of mind. 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.
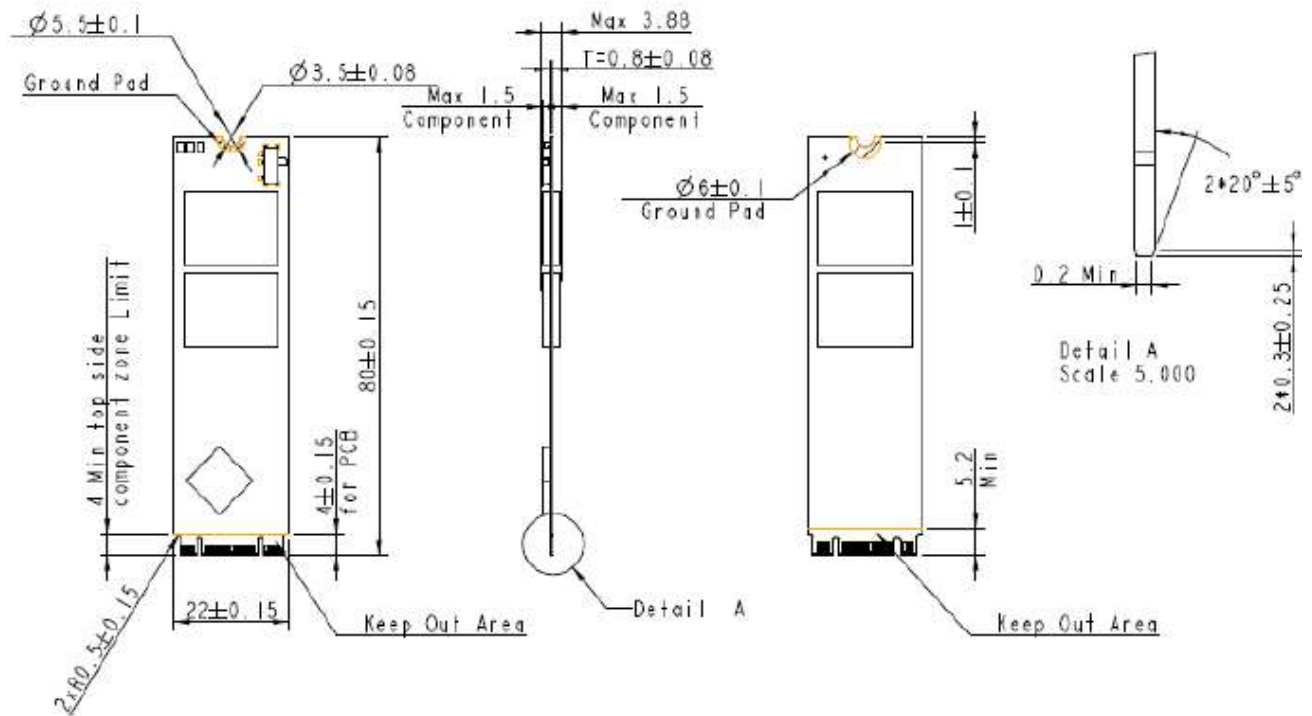
Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T.
- DataDefender™

- ATA Secure Erase
- Device Sleep
- TRIM
- Hyper Cache Technology
- SMART Read Refresh™

Specifications

Model	ST250-M280
Interface	SATA 3.2 (6Gb/s)
Connector	75-pin SATA-based M.2 module pinout
Form Factor	M.2 2280-D5-B-M
NAND Flash Type	3D TLC
Capacity	128GB ~ 2TB
External DRAM	No
Sequential Read Performance (MB/sec)	Up to 560
Sequential 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)	-
Storage Temperature (°C)	-55 ~ + 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: 380 mA Idle mode: 65 mA
Dimension (L x W x H)	80.00 x 22.00 x 3.58 (mm)
MTBF (hours)	>3,000,000

Mechanical Specification

Unit: mm

For more information,
contact your Apacer representative