Apacer

The Most **Reliable**
Storage For Industries

PT230-M280

Overview

Apacer PT230-M280 is a high-performance SSD designed with M.2 2280 mechanical dimensions, offering full compliance with the PCIe Gen3 x4 interface and NVMe 1.4 specifications. It supports power management modes, significantly reducing power consumption. Built with a powerful PCIe controller that features on-the-module ECC and an efficient wear leveling scheme, PT230-M280 delivers outstanding data transfer performance. Its compact design and high-speed storage make it an ideal choice for larger, faster hosts deployed in varied applications requiring exceptional performance.

Utilizing 3D NAND technology for capacities up to 2TB and offering greater power efficiency than 2D NAND, PT230-M280 is equipped with an LDPC (Low-Density Parity Check) ECC engine to enhance endurance and improve data reliability. It also features a built-in thermal sensor to monitor SSD temperature via S.M.A.R.T commands and incorporates thermal throttling to dynamically adjust frequency scaling, ensuring data reliability and sustained performance under overheating conditions.

Additionally, PT230-M280 integrates CoreGlacier technology with dual heat spreaders, demonstrating exceptional thermal dissipation to keep the drive cool while maintaining maximum performance. To further enhance durability and resilience against thermal and mechanical stresses, it is equipped with Sidefill technology, enabling stable operation even in environments with high vibration and extreme temperature fluctuations. For highly-intensive applications, End-to-End Data Protection ensures data integrity at multiple points along the data transfer path, providing reliable data delivery.

In terms of security, PT230-M280 offers robust data protection with Advanced Encryption Standard to safeguard against unauthorized access. It also incorporates various advanced features, including flash block management, DataDefender, TRIM, page mapping, Hyper Cache technology, DataRAID™, NVMe secure erase, and power saving modes.

With exceptional performance, proven reliability, and enhanced data protection, PT230-M280 is the ideal storage or cache solution for a variety of applications, including industrial, imaging, computing, and enterprise markets.
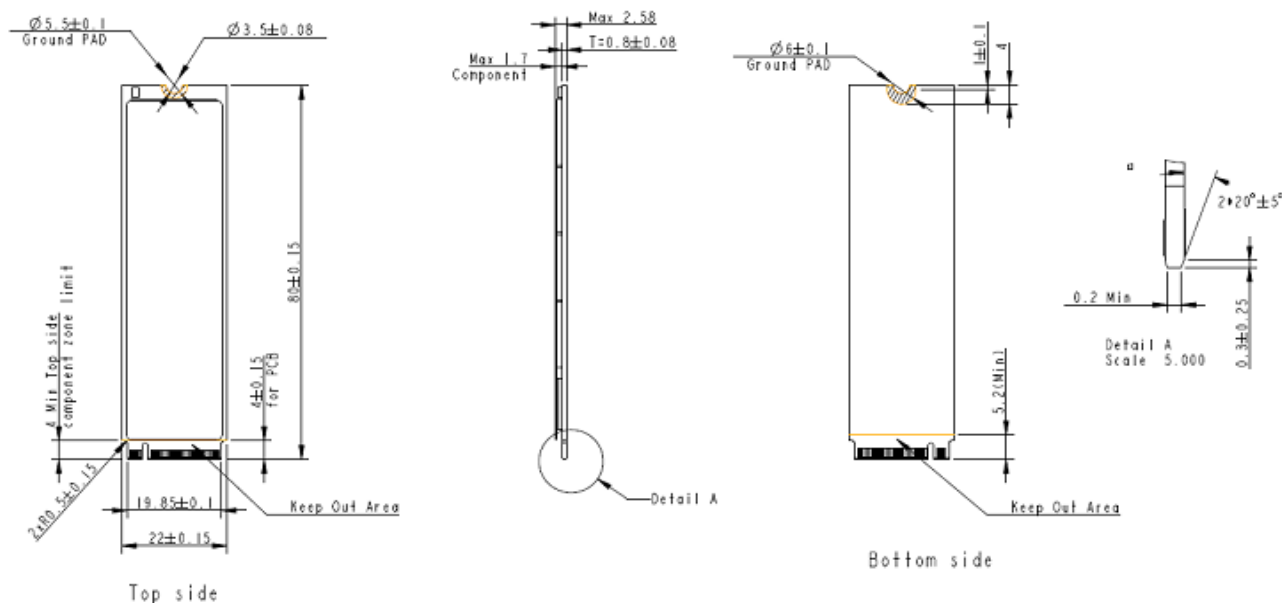
Feature

· Low-Density Parity-Check (LDPC) Code

· Global Wear Leveling

· Flash Bad-block Management

· End-to-End Data Protection

· Flash Translation Layer: Page Mapping

· DataDefender™

· SSDWidget

· TRIM

· Hyper Cache Technology

· S.M.A.R.T.

· DataRAID™

· NVMe Secure Erase

Specifications

Model	PT230-M280
Interface	PCIe Gen3x4
Connector	Single-sided M.2 2280-M
Form Factor	M.2 2280
NAND Flash Type	3D TLC
Capacity	128GB-2TB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 3560
Sustained Write Performance (MB/sec)	Up to 2705
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPs (4K Random Write)	325K
Standard Operating Temperature (°C)	0 ~ 70
Storage Temperature (°C)	-55 ~ 100
Housing	No
Thermal Sensor	Yes
Shock	Operation: Acceleration, 50(G)/11(ms)/half sine (Compliant with MIL-STD-202G) Non-operation: Acceleration, 1500(G)/0.5(ms)/half sine (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/random (Compliant with MIL-STD-810G)
Operating Voltage	3.3 V ± 5%
Power Consumption	Active Mode: 1840 mA / Idle Mode: 200mA
Dimension (L x W x H)	22.00 x 80.00 x 2.58 (max.)
MTBF (hours)	>3,000,000

Mechanical Specification

Top side

Bottom side

Detail A
Scale 5.000

For more information,
contact your Apacer representative

Global Presence