

Apacer

The Most **Reliable**
Storage For Industries

PV220-M280



PV220-M280

Overview

Apacer PV220-M280 is the fastest SSD designed as M.2 2280 mechanical dimensions, providing full compliance with PCIe Gen3 x4 interface and NVMe 1.3 specifications.

Built with a powerful PCIe controller, PV220-M280 delivers outstanding performance in data transfer, reaching up to 189,000/144,000 and 1,695/1,685 MB/s in IOPS and sequential read/write. The extreme thin and light form factor makes PV220-M280 the ideal choice for mobile computing systems, which appears to be the trend in near future.

In terms of security, data integrity can be assured at multiple points in the path to enable reliable delivery of data transfers with End-to-End Data Protection. Regarding reliability, PV220-M280 is built with a powerful PCIe controller that supports on-the-module ECC as well as efficient wear leveling scheme. In terms of power efficiency, PV220-M280 is compliant with PCIe Gen3 x4 interface standard so that it can operate on power management modes, which greatly save on power consumption.

Feature

- Adopts advanced LDPC ECC engine with 3D NAND flash memory to improve reliability
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- S.M.A.R.T.
- Power Failure Management
- TRIM support
- CoreGlacier™ heatsink technology for wide temp.
- Hyper Cache Technology
- Over-Provisioning
- DataRAID™
- NVMe Secure Erase

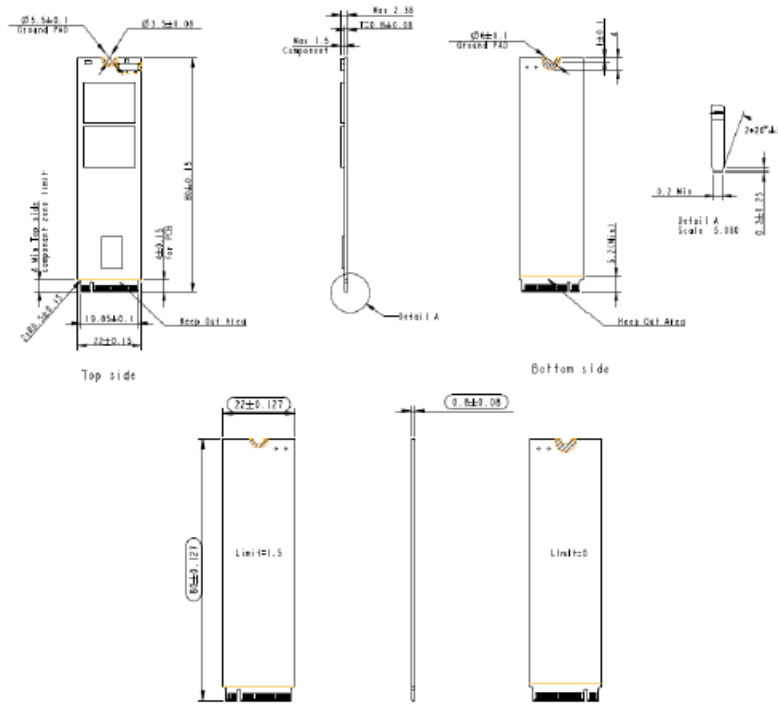


Specifications

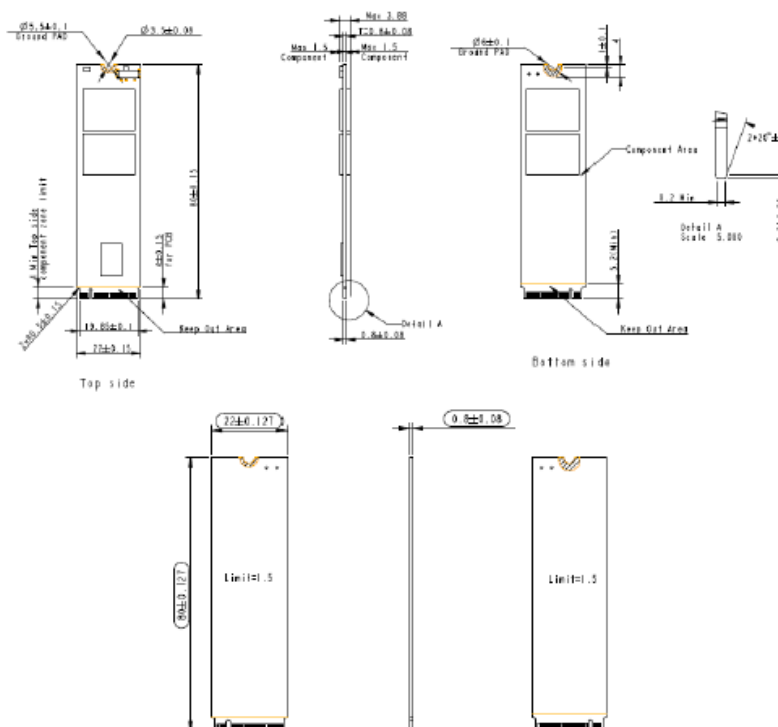
Model	PV220-M280
Interface	PCIe Gen3 x4
Connector	M.2 M Key
Form Factor	M.2 2280 Single side, M key: 120 GB M.2 2280 Double side, M key: 240/480/1920 GB
NAND Flash Type	3D TLC
Capacity	120GB~1920GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 1695
Sustained Write Performance (MB/sec)	Up to 1685
ECC Engine	Low-Density Parity-Check (LDPC) Code
IOPS (4K Random Write)	144K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-40 ~ + 100
Thermal Sensor	Yes
Shock	Operation: 50G/11ms (compliant with MIL-STD-202G) 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/random (compliant with MIL-STD-810G)
Operating Voltage	3.3V ±5%
Power Consumption	Active mode: 1205 mA / Idle mode: 245 mA
Dimension (L x W x H)	Single side: 22.00 x 80.00 x 2.38 (mm) Double side: 22.00 x 80.00 x 3.88 (mm) CoreGlacier: 22.00 x 80.00 x 4.08 (max) (mm)
MTBF (hours)	>3,000,000

Mechanical Specification

Single Side

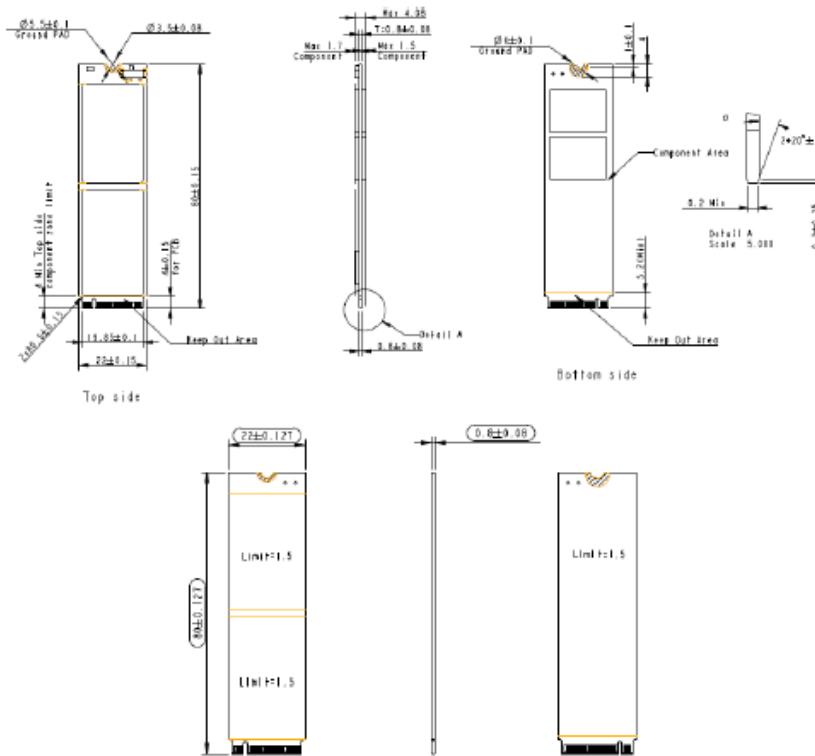


Double Side



Mechanical Specification

CoreGlacier™



Unit: mm

For more information,
contact your Apacer representative

Global Presence

Taiwan (Headquarters)
Apacer Technology Inc.
Tel: +886-2-2267-8000
Fax: +886-2-2267-2261

Europe
Apacer Technology B.V.
Tel: +31-40-267-0000
Fax: +31-40-290-0686

U.S.A.
Apacer Memory America, Inc.
Tel: +1-408-518-8699
Fax: 1-510-249-9551

China
Apacer Electronic(Shanghai)
Co., Ltd.
Tel: +86-21-6228-9939

Japan
Apacer Technology Corp.
Tel: +81-3-5419-2668
Fax: +81-3-5419-0018

India
Apacer Technologies Pvt. Ltd.
Tel: +91-80-41529061~3
Fax: +91-80-41700215