

# Apacer

The Most **Reliable**  
Storage For Industries

PT220-M280



## PT220-M280

### Overview

Apacer PT220-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, PT220-M280 delivers outstanding performance in data transfer, reaching up to 222,000/329,000 and 2,480/2,275 MB/s in IOPS and sequential read/write. The extreme thin and light form factor makes PT220-M280 the ideal choice for mobile computing systems, which appears to be the trend in near future.



Regarding reliability, PT220-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, PT220-M280 is compliant with PCIe Gen3 x4 interface standard so that it can operate on power management modes, which greatly save on power consumption.

In terms of security, Advanced Encryption Standard (AES) ensures data security and provides users with a peace of mind knowing their data is safeguarded. 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

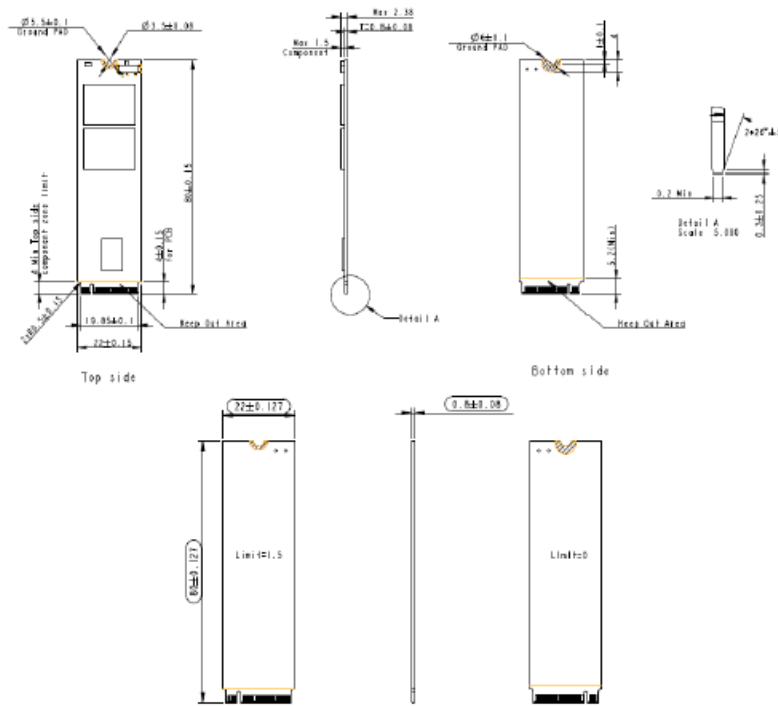
- Adopts advanced LDPC ECC engine with 3D NAND flash memory to improve reliability
- CoreGlacier™ heatsink technology
- Global Wear Leveling
- Flash bad-block management
- Flash translation layer: Page Mapping
- S.M.A.R.T.
- DataRAID™
- DataDefender™
- TRIM support
- Hyper Cache Technology
- NVMe Secure Erase

## Specifications

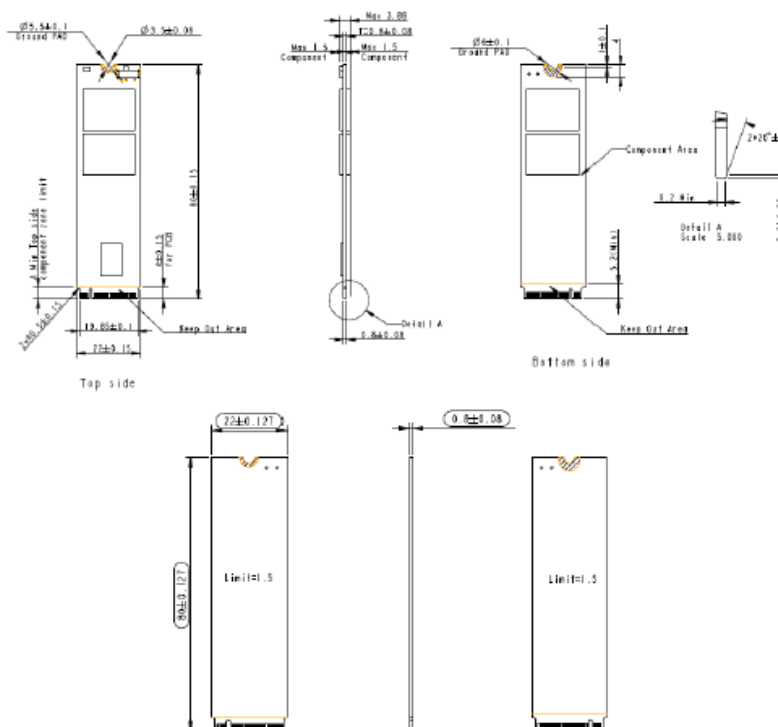
<b>Model</b>	PT220-M280
<b>Interface</b>	PCIe Gen3 x4
<b>Connector</b>	M.2 M Key
<b>Form Factor</b>	M.2 2280 single side, M Key: 256GB M.2 2280 double side, M Key: 512GB, 1TB
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	128GB ~ 1TB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 2480
<b>Sustained Write Performance (MB/sec)</b>	Up to 2275
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	222K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-
<b>Storage Temperature ( °C )</b>	-55 ~ + 100
<b>Thermal Sensor</b>	Yes
<b>Shock</b>	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
<b>Vibration</b>	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)
<b>Operating Voltage</b>	3.3V ±5%
<b>Power Consumption</b>	Active mode: 1270 mA / Idle mode: 240 mA
<b>Dimension (L x W x H )</b>	Single side: 22.00 x 80.00 x 2.38 (mm) Double side: 22.00 x 80.00 x 3.88 (mm)
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification

### Single Side



### Double Side



For more information,  
contact your Apacer representative

## Global Presence

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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

Shanghai  
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