

# Apacer

The Most **Reliable**  
Storage For Industries

PV930-M280



## PV930-M280

### Overview

Apacer PV930-M280 is the fastest SSD designed to M.2 2280 mechanical dimensions, providing full compliance with PCIe Gen4 x4 interface and NVMe 1.4 specifications.

Built with a powerful PCIe controller, PV930-M280 delivers outstanding performance in data transfer, reaching up to 713,000/633,000 and 5,080/4,735 MB/s in IOPS and sequential read/write. The extreme thin and light form factor makes PV930-M280 the ideal choice for mobile computing systems, which appears to be the trend in the near future.

Regarding reliability, PV930-M280 supports on-the-module ECC as well as an efficient Wear Leveling scheme. Furthermore, End-to-End Data Protection guarantees data integrity at multiple points in the path to enable reliable delivery of data transfers. Security-wise, Advanced Encryption Standard (AES) ensures data security and provides users with a peace of mind knowing their data is safeguarded. PV930-M280 is compliant with the PCIe Gen4 x4 interface standard so that it can operate in power management modes, which greatly saves on power consumption.



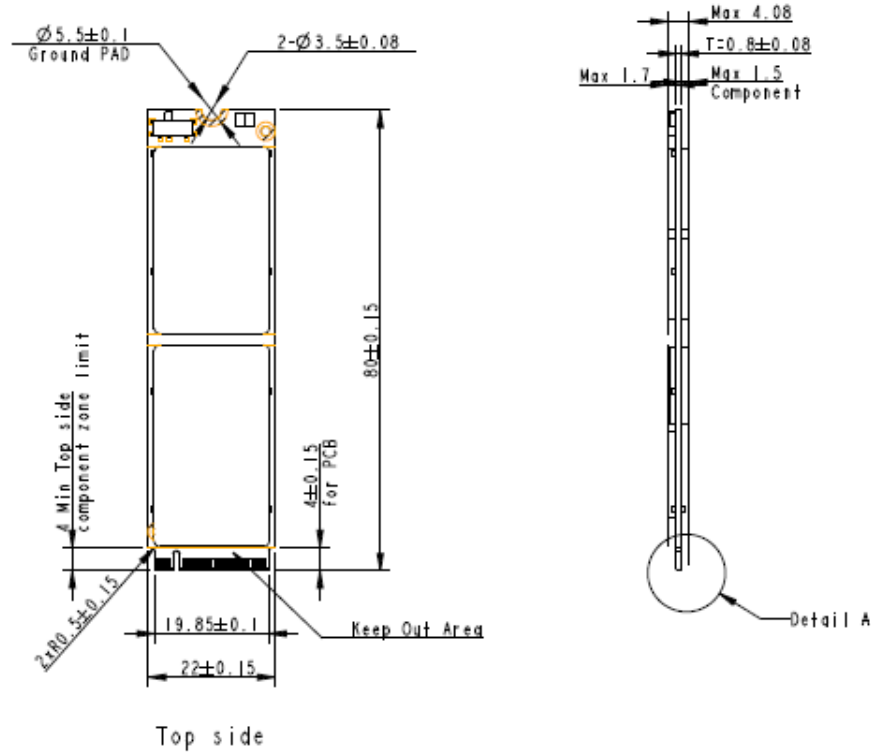
### Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- DataDefender™
- S.M.A.R.T.
- TRIM
- Hyper Cache Technology
- Over-Provisioning
- Smart Read Refresh™
- Signed Firmware

## Specifications

<b>Model</b>	PV930-M280
<b>Interface</b>	PCIe Gen4 x4
<b>Connector</b>	M.2 M Key
<b>Form Factor</b>	M.2 2280
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	480GB~1920GB
<b>External DRAM</b>	Yes
<b>Sustained Read Performance (MB/sec)</b>	Up to 5080
<b>Sustained Write Performance (MB/sec)</b>	Up to 4735
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	633K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Storage Temperature ( °C )</b>	-40 ~ + 100
<b>H/W Write Protect</b>	Yes
<b>Thermal Sensor</b>	Yes
<b>Shock</b>	Operation: Acceleration, 50(G)/11(ms)/half sine (compliant with MIL-STD-202G) Non-operation: Acceleration, 1,500(G)/0.5(ms)/half sine (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: 2785 mA / Idle mode: 565 mA
<b>Dimension (L x W x H )</b>	22.00 x 80.00 x 4.08 (max) (mm)
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification



Unit: mm

For more information,  
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### Global Presence

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