

# Apacer

The Most **Reliable**  
Storage For Industries

PV910-M280



## PV910-M280

### Overview

Apacer PV910-M280 (M.2 2280) is the next generation modularized Solid State Drive (SSD) with the shape of all new M.2 form factor, aimed to be the more suitable for mobile and compact computers with standard width at only 22.00 mm. PV910-M280 appears in M.2 2280 mechanical dimensions and is believed to be the leading add-in storage solution for future host computing systems.

The M.2 SSD is designed with PCIe-based connector pinouts, providing full compliance with the latest PCIe Gen3 x2 interface specifications. Aside from PCIe compliance, PV910-M280 delivers exceptional performance and power efficiency. On the other hand, the extreme thin and light form factor makes PV910-M280 the ideal choice for mobile computing systems, which appears to be the trend in near future.

Regarding reliability, PV910-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, PV910-M280 is compliant with PCIe Gen3 x2 interface standard so that it can operate on power management modes, which greatly save on power consumption.

### Feature

- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- Power Failure Management
- S.M.A.R.T.
- TRIM
- Hyper Cache Technology
- Over-Provisioning
- SMART Read Refresh™
- NVMe Secure Erase



## Specifications

<b>Model</b>	PV910-M280
<b>Interface</b>	PCIe Gen3 x2
<b>Connector</b>	M.2 B & M key
<b>Form Factor</b>	M.2 2280
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	120GB~960GB
<b>External DRAM</b>	No
<b>Sustained Read Performance (MB/sec)</b>	Up to 1775
<b>Sustained Write Performance (MB/sec)</b>	Up to 1295
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	130K
<b>Standard Operating Temperature ( °C )</b>	0 ~ + 70
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 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/sine (compliant with MIL-STD-810G)
<b>Operating Voltage</b>	3.3 V ± 5%
<b>Power Consumption</b>	Active mode: 755 mA / Idle mode: 145 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

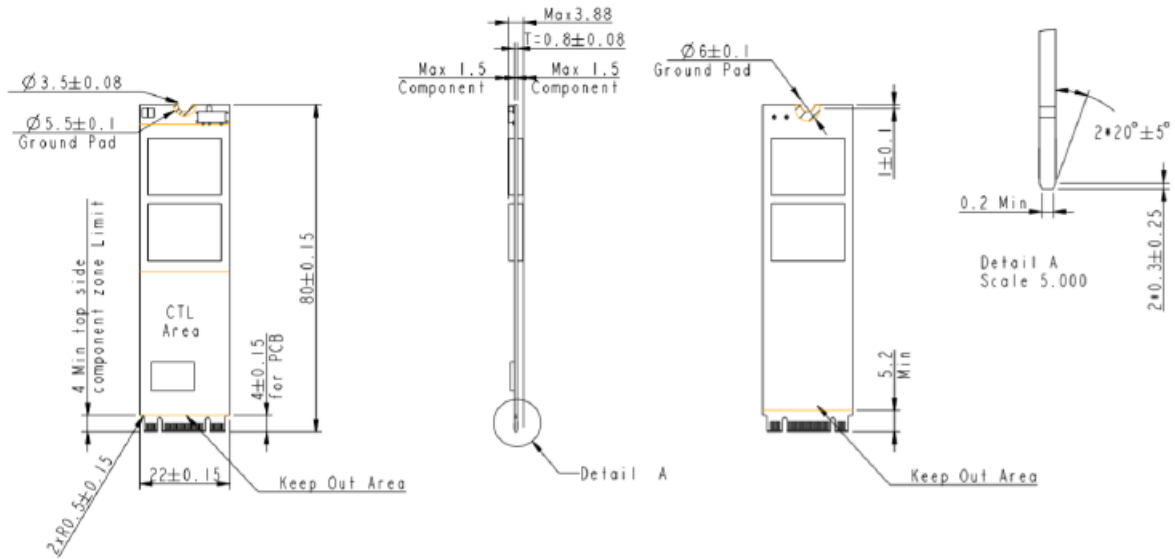


Figure 10-2 Dimensions – Double Side

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