

# Apacer

The Most **Reliable**  
Storage For Industries

PV920-uSSD



## PV920- $\mu$ SSD

### Overview

Apacer PCIe BGA SSD PV920- $\mu$ SSD (M.2 1620) presents a revolutionary breakthrough of NAND Flash storage technology. This micro sized SSD delivers all the technological benefits in NAND based storage solution with ultra speed PCIe Gen3 x4 interface in an embedded BGA form factor, compatible with JEDEC PCIe M.2 1620. Formed in a size of an IC chip, the performance level can reach up to 1400 MB/s for read and 1200 MB/s for write.

Apacer PCIe BGA SSD - PV920- $\mu$ SSD boasts micro size, high-speed performance, low power consumption, shock resistance, high stability and reliability. PV920- $\mu$ SSD will be adopted by many high-end industrial and 5G high-speed applications, including the Industrial IoT, cloud computing, servers and networking, defense, gaming, and high-performance computing.



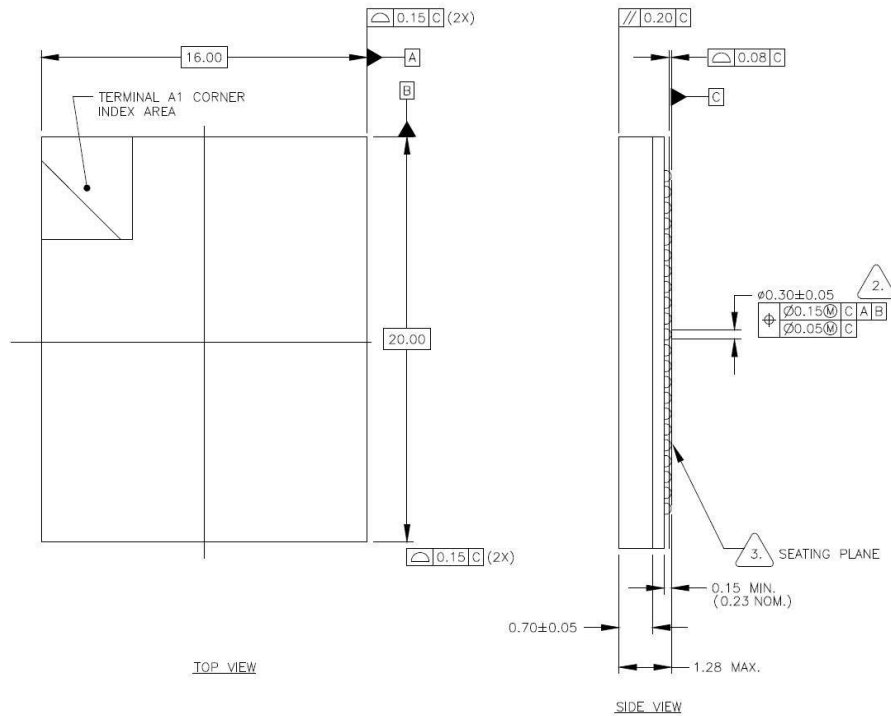
### Feature

- 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
- Hyper Cache Technology
- Over-Provisioning
- SMART Read Refresh™
- NVMe Secure Erase

## Specifications

<b>Model</b>	PV920-μSSD
<b>Interface</b>	PCIe Gen3 x4
<b>Connector</b>	BGA 291 Balls
<b>Form Factor</b>	PCIe M.2 1620
<b>NAND Flash Type</b>	3D TLC
<b>Capacity</b>	120GB~960GB
<b>Sustained Read Performance (MB/sec)</b>	Up to 1400
<b>Sustained Write Performance (MB/sec)</b>	Up to 1200
<b>ECC Engine</b>	Low-Density Parity-Check (LDPC) Code
<b>IOPS (4K Random Write)</b>	177K
<b>Standard Operating Temperature ( °C )</b>	-25 ~ + 85
<b>Extended Operating Temperature ( °C )</b>	-40 ~ + 85
<b>Storage Temperature ( °C )</b>	-40 ~ + 85
<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: 4.02Grms, 15~2000 Hz/sine (compliant with MIL-STD-810G)
<b>Operating Voltage</b>	3.3V ± 5% 1.8V ± 5% 1.2V ± 5%
<b>Power Consumption</b>	Active mode: 570 mA & Idle mode: 145 mA
<b>Dimension (L x W x H )</b>	16 x 20 x 1.28 (mm)
<b>MTBF (hours)</b>	>3,000,000

## Mechanical Specification



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