

The Most **Reliable** Storage For Industries

PV150-µSSD





Apacer

PV150-µSSD

Overview

Apacer PCIe BGA SSD PV150-µSSD (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 535 MB/s for read and 280 MB/s for write.



Regarding reliability, PV150- μ SSD is built with a powerful PCIe controller that supports on-the-module ECC as well as efficient wear leveling scheme, and implemented with LDPC (Low Density Parity Check) ECC engine to extend SSD endurance and increase data reliability. Furthermore, PV150- μ SSD is equipped with a built-in thermal sensor to monitor the temperature of the SSD via S.M.A.R.T commands and configured with thermal throttling to dynamically adjust frequency scaling to enhance data reliability and provide sustained performance while overheating. For highly-intensive applications, End-to-End Data Protection ensures that data integrity can be assured 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 peace of mind knowing their data is safeguarded against unauthorized use at all times. PV150-μSSD also adopts the latest page mapping file translation layer and comes with various implementations including power saving modes, flash block management, power failure management, S.M.A.R.T., TRIM, Hyper Cache technology, over-provisioning and DataRAIDTM.

Apacer PV150- μ SSD boasts micro size, high-speed performance, low power consumption, shock resistance, high stability and reliability. PV150- μ 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

- Support LDPC ECC
- Global Wear-Leveling Technology
- TRIM Support
- Hyper Cache Technology
- End-to-End Data Protection
- Thermal Sensor
- Power Failure Management
- S.M.A.R.T. and SSD Widget
- Write protect (Optional)



Specifications

Model	PV150-μSSD		
Interface	PCIe Gen3 x4		
Form Factor	PCIe BGA SSD (291 Ball)		
NAND Flash Type	3D eTLC		
Capacity	60GB~120GB		
External DRAM	No		
Sustained Read Performance (MB/sec)	Up to 1150		
Sustained Write Performance (MB/sec)	Up to 565		
ECC Engine	Low-Density Parity-Check (LDPC) Code		
IOPS (4K Random Write)	55K/123K		
Standard Operating Temperature (°C)	-40 ~ + 85		
Storage Temperature (°C)	-40 ~ + 85		
Thermal Sensor	Yes		
Operating Voltage	$3.3V \pm 5\%$ or $2.5V \pm 5\%$ $1.2V \pm 5\%$ $0.9V \pm 5\%$		
Power Consumption	Active mode: 510 mA / Idle mode: 260 mA		
Dimension (L x W x H)	16.00 x 20.00 x 1.15 (mm)		
MTBF (hours)	>2,000,000		



Mechanical Specification



Table 10-1 Physical Dimensions

Parameter	Unit	60 GB	120 GB
Length	20 mm 16		
Width			
Height		1.15	

For more information, contact your Apacer representative

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