PASCARI

ENTERPRISE B-SERIES

B100 Ultimate M.2 Boot Drive for Servers and Workstations

Phison's M.2 2280 enterprise SSD, the B100 features fast PCIe Gen4x4 speeds paired with the industry's latest 3D NAND, delivering industry-leading performance, reliability and efficiency.

Product Features

Reliability
The B100 SSD leverages Phison's 4th generation LDPC ECC engine which can correct bits in a two stage process using a hard decoder and soft decoder. This ensures customers' data is protected throughout the life of the SSD.

End-to-End Data Path Protection
From the moment data enters the B100 SSD, a parity bit is generated that follows each byte from the interface to the NAND storage area ensuring user data has the maximum protection in integrity.

PCIe Gen 4x4 and Backward Compatibility
The D100 SSD is designed with the PCIe Gen4x4 interface and the NVMe 1.4 command specification, making it an excellent performance upgrade for PCIe Gen3 and Gen4 M.2 2280 slots.

Security Features
The B100 supports the latest security and encryption standards defined by Pyrite, AES256, SHA512, and RSA4096.

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Solutions - B100P

M.2 2280			
	Capacity[1]	480GB	960GB
Performance[2,3]	Sequential Read	4000 MB/s	5000 MB/s
	Sequential Write	300 MB/s	700 MB/s
	4K Random Read	250K IOPS	450K IOPS
	4K Random Write	15K IOPS	30K IOPS
Power Consumption[4]	Max	8.8 W	9.5 W
	Idle	4W	4W
Latency	4K Random Read	75 us	80 us
	4K Random Write	40 us	35 us
Features			
	Interface	PCIe 4.0 x4	
	NAND Flash	3D TLC	
	DWPD[5]	1	
	UBER	1 in 10^{17}	
	Operating Temperature	0°C - 70°C	
	Non-Operating Temperature	-40°C - 85°C	

Key Features

- LDPC
- NVMe 1.4
- End-to-End Data Protection
- TCG Opal 2.0[6]
- Sanitize[6]
- NVME-MI[6]

(1) 1 GB = 1,000,000,000 bytes.
(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker , and test drive set as secondary.
(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.
(4) FIO with QD32 and worker 1 for 128KB sequential read/write 1min & QD32 and worker 8 for 4KB random read/write 1min test to measure the power of active read/write. (5) The results of DWPD are obtained in compliance with JESD219A Standards.
(6) Supported by a separate firmware setting. Further information available upon request.

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