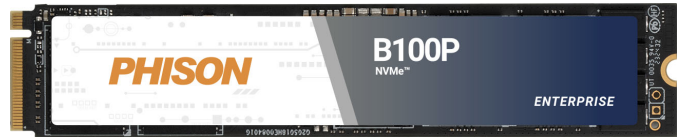**PHISON**

B100 Ultimate M.2 Boot Drive for Servers and Workstations

Phison's M.2 2280 / M.2 22110 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 the customers data is protected throughout the life of the SSD.

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.

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.

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

SOLUTIONS
B100P

M.2 2280			
Capacity [1]		480GB	960GB
Performance[2,3]	Sequential Read	5000 MB/s	4600 MB/s
	Sequential Write	700 MB/s	1100 MB/s
	4K Random Read	400K IOPS	400K IOPS
	4K Random Write	25K IOPS	50K IOPS
Power Consumption[4]	Max	9.5 W	10.5 W
	Idle	4 W	4 W
Latency	4K Random Read	75 us	75 us
	4K Random Write	40 us	35 us
M.2 22110			
Capacity [1]		480GB	960GB
Performance[2,3]	Sequential Read	5000 MB/s	4600 MB/s
	Sequential Write	700 MB/s	1100 MB/s
	4K Random Read	400K IOPS	400K IOPS
	4K Random Write	25K IOPS	50K IOPS
Power Consumption[4]	Max	9.5 W	10.5 W
	Idle	4 W	4 W
Latency	4K Random Read	75 us	75 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) Power consumption is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).
(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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Find more information and resources at: **phisonblog.com** and **phison.com**