

ENTERPRISE B-SERIES

B100 ULTIMATE M.2 BOOT DRIVE FOR SERVERS AND WORKSTATIONS

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

KEY FEATURES

Interface	PCIe 4.0 x4 (single port x4 lanes/dual port x2 lanes)
NAND Flash	3D TLC
DWPD	1
UBER	<1 sector per 10 bits
Operating Temperature	0°C - 70°C
Non-Operating Temperature	-40°C - 85°C
MTBF (million years)	2



PRODUCT FEATURES

Reliability

The MP-B100 SSD leverages MiPhi'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 MP-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 MP-B100 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 MP-B100 supports the latest security and encryption standards defined by Pyrite, AES256, SHA512, and RSA4096.

MP-B100P Specifications

M.2 2280			
	Capacity	480GB	960GB
Performance	Seq Read	4,000 MB/s	5,000 MB/s
	Seq Write	300 MB/s	700 MB/s
	Random Read	250K IOPS	450K IOPS
	Random Write	15K IOPS	30K IOPS
Power Consumption	Max	5.6 W	8.9 W
	Idle	3.5 W	3.5 W
Latency	Read Latency	75 us	75 us
	Write Latency	55 us	30 us

KEY FEATURES	
Enterprise Features Support List: <ul style="list-style-type: none">• Namespace• Dual port• Reservation• Metadata protection• Powerloss protection• Hardware AES-XTS 256-bit encryption• Support SMBbus	Compliance Support List <ul style="list-style-type: none">• PCIe 4.0• NVMe 1.4• Management Interface• Rev 1.1 TCG Opal 2.0(6)• Sanitize(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.



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