ENTERPRISE X-SERIES

MP-X100 SSD
OUTSTANDING OVERACHIEVER

The X100 SSD platform has unrivaled performance while also consuming the least amount of power for its class. This is accomplished utilizing MiPhi's unique and patented CPU architecture.

X100 is available up to 30.72 TB at only 21w. Full SED or FIPS is also supported through our IMAGIN+ customization service that allows you to pick the perfect solution for your requirements.

KEY FEATURES	
Interface	PCIe 4.0 x4 (single port x4 lanes/dual port x2 lanes)
NAND Flash	3D TLC
DWPD	3
UBER	<1 sector per 10 bits
Operating Temperature	0°C - 70°C
Non-Operating Temperature	-40°C - 85°C
MTBF (million years)	2.5

PRODUCT FEATURES

U.3 Compatibility

The MP-X100 SSD supports the latest U.3 interface and is backward compatible with U.2, ensuring seamless integration and maximum flexibility across rack storage systems.

Artificial Intelligence

Turning raw data into actionable intelligence demands powerful CPUs, GPUs, and ultra-fast storage. With up to 30% faster random read IOPs than competitors, the X100 SSD is ideal for AI workloads

Customizable

MiPhi's business model is to customize the X100 SSD platform for our customers' unique applications and brand requirements making the X100 SSD truly unique to our partners.

Applications Servers

In large computing environments with hundreds or thousands of users, lag is unacceptable. The new X100 SSD delivers unmatched speed and responsiveness, ensuring faster applications and greater productivity.

MP-X100E Specifications

U.3/U.2						
	Capacity	1600GB	3200GB	6400GB	12800GB	25600GB
Performance	Seq Read	7400 MB/s	7400 MB/s	7400 MB/s	7400 MB/s	7400 MB/s
	Seq Write	3600 MB/s	6900 MB/s	7000 MB/s	7000 MB/s	6000 MB/s
	Random Read	1750K IOPS	1750K IOPS	1750K IOPS	1750K IOPS	1750K IOPS
	Random Write	300K IOPS	430K IOPS	470K IOPS	480K IOPS	450K IOPS
Power Consumption	Max	13 W	18 W	19 W	21 W	20 W
	Idle	5.5 W	5.8 W	5.9 W	7.4 W	8.5 W
Latency	Read Latency	70 us	70 us	70 us	70 us	70 us
	Write Latency	7 us	7 us	7 us	7 us	7 us

KEY FEATURES

Enterprise Features Support List:
- Namespace
- Dual port
- Reservation
- Metadata protection
- Powerloss protection
- Hardware AES-XTS 256-bit encryption
- Support SMBbus

Compliance Support List
- 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.

MP-X100P Specifications

U.3/U.2						
	Capacity	1920GB	3840GB	7680GB	15360GB	30720GB
Performance	Seq Read	7400 MB/s	7400 MB/s	7400 MB/s	7400 MB/s	7400 MB/s
	Seq Write	3600 MB/s	6900 MB/s	7000 MB/s	7000 MB/s	6000 MB/s
	Random Read	1750K IOPS	1750K IOPS	1750K IOPS	1750K IOPS	1750K IOPS
	Random Write	126K IOPS	195K IOPS	190K IOPS	210K IOPS	210K IOPS
Power Consumption	Max	13 W	18 W	19 W	20 W	21 W
	Idle	5.4 W	5.6 W	5.8 W	7.3 W	8.6 W
Latency	Read Latency	70 us	70 us	70 us	70 us	70 us
	Write Latency	7 us	7 us	7 us	7 us	7 us

KEY FEATURES

Enterprise Features Support List:
- Namespace
- Dual port
- Reservation
- Metadata protection
- Powerloss protection
- Hardware AES-XTS 256-bit encryption
- Support SMBbus

Compliance Support List
- 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.