

ENTERPRISE X-SERIES

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.

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	1
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 X100 SSD supports the industry's new U.3 interface and is fully backward compatible with U.2 slots, while also supporting the new U.3 slots for maximum pluggability with rack storage manufacturers.

Artificial Intelligence

Transformation of raw data into actionable intelligence requires enormous CPU and GPU resources fed by the fastest storage devices available. With random read IOPs up to 30% faster than our competitors, the X100 SSD solution is the optimal storage device for use in artificial intelligence applications.

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 computing environments with tens to thousands of employees running similar programs from centralized servers, lag time while customers or employees are waiting is unacceptable. The new X100 SSD solution is the industry's best answer to provide the fastest application speeds to help accomplish more in the day.

X100P Specifications

Form Factor U.2/U.3 ⁽²⁾			
Capacity ⁽¹⁾	1.92TB	3.84TB	7.68TB
Interface	PCIe 4.0 1x4,	PCIe 4.0 1x4,	PCIe 4.0 1x4,
NVMe NAND	2x2 1.4	2x2 1.4	2x2 1.4
Flash	3D TLC	3D TLC	3D TLC
Performance ^(3,4,5)			
Sequential Read (MB/s)	7,400	7,400	7,400
Sequential Write (MB/s)	3,600	6,900	7,000
4K Random Read (IOPS)	1,750K	1,750K	1,750K
4K Random Write (IOPS)	126K	195K	190K
Read Latency (Typ., μs)	70	70	70
Write Latency (Typ., μs)	7	7	7
Power Consumption ⁽⁶⁾			
Active (W)	13	18	19
Idle (W)	5.4	5.6	5.8
Endurance/Reliability			
DWPD ⁽⁷⁾	1	1	1
UBER	< 1 sector per 10 ¹⁸ bits read	< 1 sector per 10 ¹⁸ bits read	< 1 sector per 10 ¹⁸ bits read
MTBF (million hours)	2.5	2.5	2.5
Limited Warranty (years)	5	5	5
Temperature			
Operating Temp. (°C)	0 - 70	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85	-40 - 85
Physical Dimension			
Length (mm)	100.10	100.10	100.10
Width (mm)	69.85	69.85	69.85
Height (mm)	15.00	15.00	15.00
Weight (g)	198	200	203
Part Number			
Single Port	MPiX100P1920G	MPiX100P3840G	MPiX100P7680G

(1) 1 TB = 10¹² bytes.

(2) U.3 form factor support is available through custom configurations for qualified OEM customers upon request.

(3) Sequential Performance is based on FIO on Linux, 512KB data size, with QD=32, 1 job.

(4) Random Performance is based on FIO on Linux, 4KB data size, QD=128, 8 jobs.

(5) Latency is measured with random workloads based on FIO on Linux, 4KB data size, QD=1, 1 job.

(6) Power consumption (average RMS) is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2) and (3).

(7) The results of DWPD are obtained in compliance with JESD219A standards.



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