

ENTERPRISE D-SERIES

FEATURE-RICH PCIE GEN 5 ENTERPRISE STORAGE SOLUTIONS

MiPhi's MP-D200 series meets the evolving demands of data center, cloud, and edge infrastructure. Built on PCIe Gen5, the MP-D200 delivers optimized performance, power efficiency, and enterprise-grade reliability. Available up to 7.68TB, the MP-D200 series offers E1.S 9.5mm and 15mm form factors. It also meets Open Compute Project (OCP) Datacenter NVMe® SSD Specification 2.0, ensuring seamless next-gen compatibility.

KEY FEATURES	
Interface	PCIe 5.0 x4
NAND Flash	3D TLC
DWPD	1, 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



- PCle PCle 5.0 x4
- NVMe 2.0
- Capacity up to 7.68TB
- Form Factor: U.2, E3.S, E3.L
- DWPD: 1, 3
- 128 Namespaces
- Power Loss Protection (PLP)
- ISE, TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-End Data Path Protection
- Metadata Protection
- SECDED
- Sanitize
- NVMe-MI (Management Interface)
- SMBus

Sequential Performance

Read 14,000 MB/s

Read 8,500K MB/s

Random Performance

Read 3,300K IOPS

Write 880K IOPS

MP-D200E Specifications

E1.S						
	Capacity	1600GB	3200GB	6400GB		
Performance	Seq Read	14,000 MB/s	14,000 MB/s	14,000 MB/s		
	Seq Write	4,200 MB/s	8,400 MB/s	8,500 MB/s		
	Random Read	2,350K IOPS	3,300K IOPS	3,200K IOPS		
	Random Write	390K IOPS	670K IOPS	880K IOPS		
Power Consumption	Max	17 W	20 W	22 W		
	Idle	4.9 W	4.9 W	4.9 W		
Latency	Read Latency	60 us	60 us	60 us		
	Write Latency	9 us	9 us	9 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

- PCle 5.0
- NVMe 2.0
- 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

(5) The results of DWPD are obtained in compliance with JESD219A Standards.



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MP-D200P Specifications

E1.S						
	Capacity	1920GB	3840GB	7680GB		
Performance	Seq Read	14,000 MB/s	14,000 MB/s	14,000 MB/s		
	Seq Write	4,200 MB/s	8,400 MB/s	8,500 MB/s		
	Random Read	2,350K IOPS	3,300K IOPS	3,200K IOPS		
	Random Write	140K IOPS	220K IOPS	420K IOPS		
Power Consumption	Max	16 W	19 W	23 W		
	Idle	4.9 W	4.9 W	4.9 W		
Latency	Read Latency	60 us	60 us	60 us		
	Write Latency	9 us	9 us	9 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

- PCle 5.0
- NVMe 2.0
- 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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