

ENTERPRISE D-SERIES

Ultra High Capacity PCIe Gen5 Data Center SSD to Reduce OPEX Costs

PASCARI D205V

Sequential Read

Up to 14,700 MB/s

Sequential Write

Up to 3,200 MB/s

Random Read

Up to 3,000K IOPS

Random Write

Up to 35K IOPS

Interface

PCIe 5.0 1x4, 2x2

Capacity

Up to 122.88TB

Form Factor

U.2, E3.S, E3.L, E1.L

DWPD

0.3

**Product Features**

- Power Loss Protection (PLP)
- ISE, TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-End Data Path Protection
- Metadata Protection

Solutions – D205V (U.2)

Form Factor U.2				
Capacity ²	15.36TB	30.72TB	61.44 TB	122.88TB
Interface	PCIe 5.0 1x4, 2x2	PCIe 5.0 1x4, 2x2	PCIe 5.0 1x4, 2x2	PCIe 5.0 1x4, 2x2
NVMe	2.0	2.0	2.0	2.0
NAND Flash	3D QLC	3D QLC	3D QLC	3D QLC
Performance ^{3,4,5}				
Sequential Read (MB/s)	14000	14000	14000	14000
Sequential Write (MB/s)	1900	1800	2700	2700
4K Random Read (IOPS)	2500K	2500K	2500K	2500K
16K Random Write (IOPS)	34K	34K	34K	34K
Read Latency (Typ., µs)	110	110	110	110
Write Latency (Typ., µs)	30	30	30	30
Power Consumption ⁶				
Active (W)	25	25	25	25
Idle (W)	5	5	5	5
Endurance/Reliability				
DWPD ⁷	0.3	0.3	0.3	0.3
UBER	< 1 sector per 10 ¹⁸ bits read	< 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	2.5
Limited Warranty (years)	5	5	5	5
Temperature				
Operating Temp. (°C)	0 - 70	0 - 70	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85	-40 - 85	-40 - 85
Physical Dimension				
Length (mm)	100	100	100	100
Width (mm)	69.85	69.85	69.85	69.85
Height (mm)	15.00	15.00	15.00	15.00
Weight (g)	<194	<194	<194	<194
Part Number				
Single Port – ISE	DP20JK0C15T3V3216T310	DP20JK0D30T7V3232T710	DP20JK0D61T4V3265T510	DP20JK0D122TV32131T10
Single Port – SED	DP20JK0C15T3V2216T310	DP20JK0D30T7V2232T710	DP20JK0D61T4V2265T510	DP20JK0D122TV22131T10
Dual Port – ISE	DX20JK0C15T3V3216T310	DX20JK0D30T7V3232T710	DX20JK0D61T4V3265T510	DX20JK0D122TV32131T10
Dual Port – SED	DX20JK0C15T3V2216T310	DX20JK0D30T7V2232T710	DX20JK0D61T4V2265T510	DX20JK0D122TV22131T10

(1) The product is still in development stage; all values are based on estimation.

(2) 1 TB = 10¹² bytes.

(3) Sequential Performance is based on FIO on Linux, 128KB data size, with QD=32, 1 job.

(4) Random Performance is based on FIO on Linux, random read 4KB, random write 16KB, 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 sequential and random read/write operations.

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



The data within this specification is subject to change by MiPhi without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2026 MiPhi Semiconductors Pvt Ltd. All rights reserved.

Find more information and resources at: miphi.in

Solutions – D205V (E3.S)

Form Factor E3.S		
Capacity ²	30.72 TB	61.44TB
Interface	PCIe 5.0 1x4, 2x2	PCIe 5.0 1x4, 2x2
NVMe	2.0	2.0
NAND Flash	3D QLC	3D QLC
Performance ^{3,4,5}		
Sequential Read (MB/s)	14000	14000
Sequential Write (MB/s)	3300	3300
4K Random Read (IOPS)	2,600K	2,600K
16K Random Write (IOPS)	35K	35K
Read Latency (Typ., µs)	110	110
Write Latency (Typ., µs)	30	30
Power Consumption ⁶		
Active (W)	25	25
Idle (W)	5	5
Endurance/Reliability		
DWPD ⁷	0.3	0.3
UBER	< 1 sector per 10 ¹⁸ bits read	< 1 sector per 10 ¹⁸ bits read
MTBF (million hours)	2.5	2.5
Limited Warranty (years)	5	5
Temperature		
Operating Temp. (°C)	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85
Physical Dimension		
Length (mm)	112.75	112.75
Width (mm)	76.00	76.00
Height (mm)	7.5	7.5
Weight (g)	<120	<120
Part Number		
Single Port – ISE	DP20KK0D30T7V3132T710	DP20KK0D61T4V3165T510
Single Port – SED	DP20KK0D30T7V2132T710	DP20KK0D61T4V2165T510
Dual Port – ISE	DX20KK0D30T7V3132T710	DX20KK0D61T4V3165T510
Dual Port – SED	DX20KK0D30T7V2132T710	DX20KK0D61T4V2165T510

(1) The product is still in development stage; all values are based on estimation.

(2) 1 TB = 10¹² bytes.

(3) Sequential Performance is based on FIO on Linux, 128KB data size, with QD=32, 1 job.

(4) Random Performance is based on FIO on Linux, random read 4KB, random write 16KB, 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 sequential and random read/write operations.

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



The data within this specification is subject to change by MiPhi without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2026 MiPhi Semiconductors Pvt Ltd. All rights reserved.

Find more information and resources at: miphi.in

Solutions – D205V (E3.L)

Form Factor E3.L	
Capacity ²	122.88TB
Interface	PCIe 5.0 1x4, 2x2
NVMe	2.0
NAND Flash	3D QLC
Performance ^{3,4,5}	
Sequential Read (MB/s)	14000
Sequential Write (MB/s)	3300
4K Random Read (IOPS)	2,600K
16K Random Write (IOPS)	35K
Read Latency (Typ., µs)	110
Write Latency (Typ., µs)	30
Power Consumption ⁶	
Active (W)	25
Idle (W)	5
Endurance/Reliability	
DWPD ⁷	0.3
UBER	< 1 sector per 10 ¹⁸ bits read
MTBF (million hours)	2.5
Limited Warranty (years)	5
Temperature	
Operating Temp. (°C)	0 - 70
Non-Operating Temp. (°C)	-40 - 85
Physical Dimension	
Length (mm)	142.20
Width (mm)	76.00
Height (mm)	7.50
Weight (g)	162
Part Number	
Single Port – ISE	DP20LK0D122TV31131T10
Single Port – SED	DP20LK0D122TV21131T10
Dual Port – ISE	DX20LK0D122TV31131T10
Dual Port – SED	DX20LK0D122TV21131T10

(1) The product is still in development stage; all values are based on estimation.

(2) 1 TB = 10¹² bytes.

(3) Sequential Performance is based on FIO on Linux, 128KB data size, with QD=32, 1 job.

(4) Random Performance is based on FIO on Linux, random read 4KB, random write 16KB, 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 sequential and random read/write operations.

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



The data within this specification is subject to change by MiPhi without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2026 MiPhi Semiconductors Pvt Ltd. All rights reserved.

Find more information and resources at: miphi.in

Solutions – D205V (E1.L)

Form Factor E1.L	
Capacity ²	122.88TB
Interface	PCIe 5.0 1x4, 2x2
NVMe	2.0
NAND Flash	3D QLC
Performance ^{3,4,5}	
Sequential Read (MB/s)	14000
Sequential Write (MB/s)	3300
4K Random Read (IOPS)	2,400K
16K Random Write (IOPS)	34K
Read Latency (Typ., µs)	110
Write Latency (Typ., µs)	30
Power Consumption ⁶	
Active (W)	25
Idle (W)	5
Endurance/Reliability	
DWPD ⁷	0.3
UBER	< 1 sector per 10 ¹⁸ bits read
MTBF (million hours)	2.5
Limited Warranty (years)	5
Temperature	
Operating Temp. (°C)	0 - 70
Non-Operating Temp. (°C)	-40 - 85
Physical Dimension	
Length (mm)	318.75
Width (mm)	38.4
Height (mm)	9.5
Weight (g)	220
Part Number	
Single Port – ISE	DP20MK0D122TV32131T10
Single Port – SED	DP20MK0D122TV22131T10
Dual Port – ISE	DX20MK0D122TV32131T10
Dual Port – SED	DX20MK0D122TV22131T10

(1) The product is still in development stage; all values are based on estimation.

(2) 1 TB = 10¹² bytes.

(3) Sequential Performance is based on FIO on Linux, 128KB data size, with QD=32, 1 job.

(4) Random Performance is based on FIO on Linux, random read 4KB, random write 16KB, 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 sequential and random read/write operations.

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



The data within this specification is subject to change by MiPhi without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2026 MiPhi Semiconductors Pvt Ltd. All rights reserved.

Find more information and resources at: miphi.in