



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 (4K)

Random Write

Up to 35K IOPS (16K)

Interface

PCIe 5.0 1x4 (Single port), 2x2 (Dual port)

Capacity

Up to 122.88TB

Form Factor

U.2, E3.S, E3.L

DWPD

0.3



Product Features

- NVMe 2.0
- OCP Datacenter NVMe[®] SSD Specification V2.0
- 128 Namespaces
- Power Loss Protection (PLP)
- ISE, TCG Opal 2.0 support
- AES-XTS 256-bit Encryption
- Data Integrity and Protection
- End-to-End Data Path Protection
- Metadata Protection
- SECDED
- Sanitize
- NVMe-MI (Management Interface)
- SMBus

PHISON

Solutions - D205V

Form Factor U.2	
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)	14,700
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., µs)	110
Write Latency (Typ., µs)	12
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)	100.10
Width (mm)	69.85
Height (mm)	15.00
Weight (g)	TBD
Part Number	
Single Port ISE FW	DP20JK0D122TV32131T10
Single Port SED FW	DP20JK0D122TV22131T10
Dual Port ISE FW	DX20JK0D122TV32131T10
Dual Port SED FW	DX20JK0D122TV22131T10

(1) The product is still in development stage, all values provided 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 data size, random write 16KB 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)(3).

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



The data within this specification is subject to change by Phison without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2025 Phison Electronics. All rights reserved.

Solutions - D205V

Form Factor E3.S	
Capacity ⁽²⁾	61.44TB
Interface	PCIe 5.0 1x4, 2x2
NVMe	2.0
NAND Flash	3D QLC
Performance ^(3,4,5)	
Sequential Read (MB/s)	14,700
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., µs)	110
Write Latency (Typ., µs)	12
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)	112.75
Width (mm)	76.00
Height (mm)	7.50
Weight (g)	TBD
Part Number	
Single Port ISE FW	DP20KK0D61T4V3165T510
Single Port SED FW	DP20KK0D61T4V2165T510
Dual Port ISE FW	DX20KK0D61T4V3165T510
Dual Port SED FW	DX20KK0D61T4V2165T510

(1) The product is still in development stage, all values provided 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 data size, random write 16KB 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)(3).

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



The data within this specification is subject to change by Phison without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2025 Phison Electronics. All rights reserved.

Solutions - D205V

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)	14,700
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., µs)	110
Write Latency (Typ., µs)	12
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)	TBD
Part Number	
Single Port ISE FW	DP20LK0D122TV31131T10
Single Port SED FW	DP20LK0D122TV21131T10
Dual Port ISE FW	DX20LK0D122TV31131T10
Dual Port SED FW	DX20LK0D122TV21131T10

(1) The product is still in development stage, all values provided 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 data size, random write 16KB 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)(3).

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



The data within this specification is subject to change by Phison without notice. Performance numbers may vary based on system configuration and testing conditions. Copyright © 2025 Phison Electronics. All rights reserved.