ENTERPRISE D-SERIES

High Capacity PCIe Gen5 Data Center Storage Solution

PASCARI D200V

Sequential Read

Up to 14,700 MB/s

Sequential Write

Up to 3,000 MB/s

Random Read

Up to 3,000K IOPS (4K)

Random Write

Up to 34K IOPS (16K)

Interface

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

Capacity

Up to 61.44TB

Form Factor

U.2, E3.S, E3.L

DWPD

0.3

Product Features

- NVMe 2.0
- 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 - D200V

Form Factor U.2		
Capacity[2]	30.72TB	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)	14,700	14,700
Sequential Write (MB/s)	3,000	3,000
4K Random Read (IOPS)	3,000K	3,000K
16K Random Write (IOPS)	34K	34K
Read Latency (Typ., µs)	110	110
Write Latency (Typ., µs)	12	12
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)	100.10	100.10
Width (mm)	69.85	69.85
Height (mm)	15.00	15.00
Weight (g)	TBD	TBD
Part Number		
Single Port ISE FW	DP20JK0930T7V3232T710	DP20JK0961T4V3265T510
Single Port SED FW	DP20JK0930T7V2232T710	DP20JK0961T4V2265T510
Dual Port ISE FW	DX20JK0930T7V3232T710	DX20JK0961T4V3265T510
Dual Port SED FW	DX20JK0930T7V2232T710	DX20JK0961T4V2265T510

(1) The product is still in the early development stage, all values provided are based on estimation.
(2) 1 TB = 10^{12} bytes.
(3) Sequential Performance is based on FIO on Linux, 128KB, 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.

Solutions - D200V

Form Factor E3.S	
Capacity[2]	30.72TB
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)	3,000
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	34K
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	DP20KK0930T7V3132T710
Single Port SED FW	DP20KK0930T7V2132T710
Dual Port ISE FW	DX20KK0930T7V3132T710
Dual Port SED FW	DX20KK0930T7V2132T710

(1) The product is still in the early development stage, all values provided are based on estimation.
(2) 1 TB = 10^{12} bytes.
(3) Sequential Performance is based on FIO on Linux, 128KB, 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.

Find more information and resources at: phisonenterprise.com

Solutions - D200V

Form Factor E3.L	
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)	3,000
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	34K
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	DP20LK0961T4V3165T510
Single Port SED FW	DP20LK0961T4V2165T510
Dual Port ISE FW	DX20LK0961T4V3165T510
Dual Port SED FW	DX20LK0961T4V2165T510

(1) The product is still in the early development stage, all values provided are based on estimation.
(2) 1 TB = 10^{12} bytes.
(3) Sequential Performance is based on FIO on Linux, 128KB, 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.