PASCARI

ENTERPRISE D-SERIES

High Capacity PCIe Gen5 Data Center Storage Solution

PASCARI D200V

Sequential Read

Up to 14,600 MB/s

Random Read

Up to 3,000K IOPS

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)	14,600	14,000
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
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

(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=64, 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.

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Solutions - D200V

Form Factor E3.S		
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)	14,600	14,600
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
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)	7.50	7.50

(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=64, 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.

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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)	14,600
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
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

(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=64, 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.

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