



ENTERPRISE D-SERIES

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

PASCARI D205V

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

122.88TB

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

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)	14,600
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., μ s)	110
Write Latency (Typ., μ s)	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. ($^{\circ}$ C)	0 - 70
Non-Operating Temp. ($^{\circ}$ C)	-40 - 85
Physical Dimension	
Length (mm)	100.10
Width (mm)	69.85
Height (mm)	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 - D205V

Form Factor E3.S	
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)	14,600
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., μ s)	110
Write Latency (Typ., μ s)	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. ($^{\circ}$ C)	0 - 70
Non-Operating Temp. ($^{\circ}$ C)	-40 - 85
Physical Dimension	
Length (mm)	112.75
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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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)	14,600
Sequential Write (MB/s)	3,200
4K Random Read (IOPS)	3,000K
16K Random Write (IOPS)	35K
Read Latency (Typ., μ s)	110
Write Latency (Typ., μ s)	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. ($^{\circ}$ C)	0 - 70
Non-Operating Temp. ($^{\circ}$ 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).

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