

ENTERPRISE D-SERIES

High-Performance PCIe Gen5 Data Center Enterprise SSD

PASCARI D250P

Sequential Read**Up to 14000 MB/s****Sequential Write****Up to 7600 MB/s****Random Read****Up to 2550K IOPS****Random Write****Up to 210K IOPS****Interface****PCIe Gen5 x4****Capacity****Up to 3840GB****Form Factor****E1.S 9.5mm / 15mm****DWPD****1****Product Features**

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

Solutions – D250P (E1.S 9.5mm)

Form Factor E1.S 9.5mm				
Capacity ¹	480GB	960GB	1920GB	3840GB
Interface	PCIe Gen5 x4	PCIe Gen5 x4	PCIe Gen5 x4	PCIe Gen5 x4
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC
Performance ²³⁴				
Sequential Read (MB/s)	6000	12000	13800	13800
Sequential Write (MB/s)	850	1700	3500	6900
4K Random Read (IOPS)	350K	700K	1500K	2200K
4K Random Write (IOPS)	30K	65K	155K	220K
Read Latency (Typ., µs)	60	60	60	60
Write Latency (Typ., µs)	25	15	9	9
Power Consumption ⁵				
Active (W)	<5	<5	<5	<5
Idle (W)	<5	<5	<5	<5
Endurance/Reliability				
DWPD ⁶	1	1	1	1
UBER	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read
MTBF (million hours)	2.0	2.0	2.0	2.0
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)	118.75	118.75	118.75	118.75
Width (mm)	33.75	33.75	33.75	33.75
Height (mm)	9.50	9.50	9.50	9.50
Weight (g)	-	-	-	-
Part Number				
Single Port – SED	D280AD0F480GP21512G10	D280AD0F960GP211T0210	D280AD0F1T92P212T0410	D280AD0F3T84P214T0910
Single Port – Non-SED	D280AD0F480GP01512G10	D280AD0F960GP011T0210	D280AD0F1T92P012T0410	D280AD0F3T84P014T0910

(1) 1 GB = 10⁹ bytes.

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

(3) Random Performance is based on FIO on Linux, 4KB data size, QD=32.

(4) Latency is measured with random workloads based on FIO on Linux, 4KB data size, QD=1, 1 job.

(5) Power consumption (average RMS) is measured during sequential and random read/write operations.

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



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Solutions – D250P (E1.S 15mm)

Form Factor E1.S 15mm				
Capacity ¹	480GB	960GB	1920GB	3840GB
Interface	PCIe Gen5 x4	PCIe Gen5 x4	PCIe Gen5 x4	PCIe Gen5 x4
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC
Performance ²³⁴				
Sequential Read (MB/s)	6000	12000	13800	13800
Sequential Write (MB/s)	850	1700	3500	6900
4K Random Read (IOPS)	350K	700K	1500K	2200K
4K Random Write (IOPS)	30K	65K	155K	220K
Read Latency (Typ., µs)	60	60	60	60
Write Latency (Typ., µs)	25	15	9	9
Power Consumption ⁵				
Active (W)	<5	<5	<5	<5
Idle (W)	<5	<5	<5	<5
Endurance/Reliability				
DWPD ⁶	1	1	1	1
UBER	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read
MTBF (million hours)	2.0	2.0	2.0	2.0
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)	118.75	118.75	118.75	118.75
Width (mm)	33.75	33.75	33.75	33.75
Height (mm)	15.00	15.00	15.00	15.00
Weight (g)	-	-	-	-
Part Number				
Single Port – SED	D280BD0F480GP21512G10	D280BD0F960GP211T0210	D280BD0F1T92P212T0410	D280BD0F3T84P214T0910
Single Port – Non-SED	D280BD0F480GP01512G10	D280BD0F960GP011T0210	D280BD0F1T92P012T0410	D280BD0F3T84P014T0910

(1) 1 GB = 10⁹ bytes.

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(3) Random Performance is based on FIO on Linux, 4KB data size, QD=32.

(4) Latency is measured with random workloads based on FIO on Linux, 4KB data size, QD=1, 1 job.

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