

ENTERPRISE B-SERIES

Ultimate M.2 Boot Drive for Servers and Workstations

PASCARI B100P

Sequential Read**Up to 5000 MB/s****Sequential Write****Up to 700 MB/s****Random Read****Up to 450K IOPS****Random Write****Up to 30K IOPS****Interface****PCIe Gen4 x4****Capacity****Up to 960GB****Form Factor****M.2 2280****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 – B100P (M.2 2280)

Form Factor M.2 2280		
Capacity ¹	480GB	960GB
Interface	PCIe Gen4 x4	PCIe Gen4 x4
NAND Flash	3D TLC	3D TLC
Performance ²³⁴		
Sequential Read (MB/s)	4000	5000
Sequential Write (MB/s)	300	700
4K Random Read (IOPS)	250K	450K
4K Random Write (IOPS)	15K	30K
Read Latency (Typ., µs)	75	75
Write Latency (Typ., µs)	55	30
Power Consumption ⁵		
Active (W)	5.6	8.9
Idle (W)	3.5	3.5
Endurance/Reliability		
DWPD ⁶	1	1
UBER	< 1 sector per 10 ¹⁷ bits read	< 1 sector per 10 ¹⁷ bits read
MTBF (million hours)	2.0	2.0
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)	80.00	80.00
Width (mm)	22.00	22.00
Height (mm)	4.00	4.00
Weight (g)	12.3	12.4
Part Number		
Non-SED FW	B1802K00480GP01512G00	B1802K00960GP011T0200
SED FW	B1802K00480GP21512G00	B1802K00960GP211T0200

(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 – B100P (E1.S)

Form Factor E1.S			
Capacity ¹	480GB	960GB	1920GB
Interface	PCIe Gen4 x4	PCIe Gen4 x4	PCIe Gen4 x4
NAND Flash	3D TLC	3D TLC	3D TLC
Performance ²³⁴			
Sequential Read (MB/s)	4000	6500	6500
Sequential Write (MB/s)	300	700	900
4K Random Read (IOPS)	250K	600K	600K
4K Random Write (IOPS)	15K	30K	30K
Read Latency (Typ., µs)	75	75	75
Write Latency (Typ., µs)	55	30	35
Power Consumption ⁵			
Active (W)	5.3	6.8	9.4
Idle (W)	4.0	4.0	4.2
Endurance/Reliability			
DWPD ⁶	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
MTBF (million hours)	2.0	2.0	2.0
Limited Warranty (years)	5	5	5
Temperature			
Operating Temp. (°C)	0 - 70	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85	-40 - 85
Physical Dimension			
Length (mm)	111.49	111.49	111.49
Width (mm)	31.50	31.50	31.50
Height (mm)	1.57	1.57	1.57
Weight (g)	28	28	28
Part Number			
Non-SED FW	B180AK00480GP01512G00	B180AK00960GP011T0200	B180AK001T92P012T0400
SED FW	B180AK00480GP21512G00	B180AK00960GP211T0200	B180AK001T92P212T0400

(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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