PASCARI

ENTERPRISE B-SERIES

Ultimate M.2 Boot Drive for Servers and Workstations

PASCARI B100

Sequential Read

Up to 5,000 MB/s

Sequential Write

Up to 700 MB/s

Random Read

Up to 450K IOPS

Random Write

Up to 30K IOPS

Interface

PCIe 4.0 x4

Capacity

Up to 960GB

Form Factor

M.2 2280

DWPD

1

Product Features

- NVMe 1.4
- 64 Namespaces
- Power Loss Protection (PLP)
- TCG Opal 2.0 support
- AES-XTS 256-bit Encryption
- Data Integrity and Protection
- End-to-End Data Path Protection
- SECDED
- Sanitize
- NVMe-MI (Management Interface)
- SMBus

Solutions - B100P

Form Factor M.2 2280		
Capacity[1]	480GB	960GB
Interface	PCIe 4.0 x4	PCIe 4.0 x4
NVMe	1.4	1.4
NAND Flash	3D TLC	3D TLC
Performance[2,3,4]		
Sequential Read (MB/s)	4,000	5,000
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)	4.08	4.08
Weight (g)	12.3	12.4
Part Number		
Non-SED FW	B1802K00480GP01512G00	B1802K00960GP011T0200
SED FW	B1802K00480GP21512G00	B1802K00960GP211T0200

(1) 1 GB = 10^9 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, 8 jobs.
(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 the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).
(6) The results of DWPD are obtained in compliance with JESD219A standards.