

Ultimate M.2 Boot Drive for Servers and Workstations



ENTERPRISE B-SERIES

NEUBE 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

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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
Performance ^(2,3) (Est.)	Sequential Read	4,000 MB/s	5,000 MB/s
	Sequential Write	300 MB/s	700 MB/s
	4K Random Read	250K IOPS	450K IOPS
	4K Random Write	15K IOPS	30K IOPS
Power ⁽⁵⁾ Consumption (Est.)	Active	5.6 W	8.9 W
	Idle	3.5 W	3.5 W
Latency (Est.) ⁽⁴⁾	4K Random Read	75 us	75 us
	4K Random Write	55 us	30 us
Features			
	Interface	PCIe 4.0 x4	PCIe 4.0 x4
	NAND Flash	3D TLC	3D TLC
	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
	Operating Temperature	0°C - 70°C	0°C - 70°C
	Non-Operating Temperature	-40°C - 85°C	-40°C - 85°C
Physical Dimension			
	Length (mm)	80	80
	Width (mm)	22.00	22.00
	Height (mm)	4.08	4.08
	Weight (g)	12.3	12.4

(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.