

ENTERPRISE B-SERIES

High-Quality SATA Boot Drive for Legacy Systems

PASCARI BA50P

Sequential Read

Up to 530 MB/s

Sequential Write

Up to 500 MB/s

Random Read

Up to 98K IOPS

Random Write

Up to 30K IOPS

Interface

SATA III

Capacity

Up to 960GB

Form Factor

2.5", 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



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Solutions - BA50P

Form Factor M.2 2280			
Capacity ⁽¹⁾	240GB	480GB	960GB
Interface	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC
Performance ^(2,3,4)			
Sequential Read (MB/s)	530	530	530
Sequential Write (MB/s)	290	480	500
4K Random Read (IOPS)	60K	90K	98K
4K Random Write (IOPS)	10K	15K	30K
Read Latency (Typ., μ s)	120	120	120
Write Latency (Typ., μ s)	80	50	30
Power Consumption ⁽⁵⁾			
Active (W)	2.2	2.8	2.8
Idle (W)	1.2	1.2	1.3
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)	80.00	80.00	80.00
Width (mm)	22.00	22.00	22.00
Height (mm)	3.50	3.50	3.50
Weight (g)	8	9	9
Part Number			
Non-SED FW	B1200K01240GP01256G00	B1200K01480GP01512G00	B1200K01960GP011T0200
SED FW	B1200K01240GP21256G00	B1200K01480GP21512G00	B1200K01960GP211T0200

(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, 1 job.

(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.

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



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Solutions - BA50P

Form Factor 2.5"			
Capacity ⁽¹⁾	240GB	480GB	960GB
Interface	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC
Performance ^(2,3,4)			
Sequential Read (MB/s)	530	530	530
Sequential Write (MB/s)	290	480	500
4K Random Read (IOPS)	60K	90K	98K
4K Random Write (IOPS)	10K	15K	30K
Read Latency (Typ., μ s)	120	120	120
Write Latency (Typ., μ s)	80	50	30
Power Consumption ⁽⁵⁾			
Active (W)	2.3	2.8	3.3
Idle (W)	1.2	1.3	1.3
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)	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00
Weight (g)	57	58	59
Part Number			
Non-SED FW	B1201K01240GP02256G00	B1201K01480GP02512G00	B1201K01960GP021T0200
SED FW	B1201K01240GP22256G00	B1201K01480GP22512G00	B1201K01960GP221T0200

(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, 1 job.

(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.

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