PASCARI

ENTERPRISE B-SERIES

Efficient SATA Boot Solution for Data Center Systems

PASCARI BA53P

Sequential Read

Up to 530 MB/s

Sequential Write

Up to 500 MB/s

Random Read

Up to 98K IOPS

Random Write

Up to 32K IOPS

Interface

SATA III

Capacity

Up to 960GB

Form Factor

M.2 2280

DWPD

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PHISON
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BA53P

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 - BA53P

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)	350	500	500
4K Random Read (IOPS)	90K	98K	98K
4K Random Write (IOPS)	12K	28K	32K
Read Latency (Typ., µs)	110	100	110
Write Latency (Typ., µs)	80	40	40
Power Consumption [5]			
Active (W)	2.2	2.5	2.8
Idle (W)	1.2	1.3	1.4
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)	4.10	4.10	4.10
Weight (g)	8	9	10
Part Number			
Non-SED FW	B1200Y03240GP02256G00	B1200Y03480GP02512G00	B1200Y03960GP021T0200
SED FW	B1200Y03240GP22256G00	B1200Y03480GP22512G00	B1200Y03960GP221T0200

(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.