PASCARI

ENTERPRISE S-SERIES

Efficient SATA Storage Solution for Data Center

PASCARI SA53P

Sequential Read

Up to 530 MB/s

Sequential Write

Up to 500 MB/s

Random Read

Up to 98K IOPS

Random Write

Up to 39K IOPS

Interface

SATA III

Capacity

Up to 3840GB

Form Factor

2.5"

DWPD

1

Product Features

- Power Loss Protection (PLP)
- TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-End Data Path Protection

PHISON

Solutions – SA53P

Form Factor 2.5”					
Capacity[1]	240GB	480GB	960GB	1920GB	3840GB
Interface	SATA III	SATA III	SATA III	SATA III	SATA III
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC	3D TLC
Performance[2,3,4]					
Sequential Read (MB/s)	530	530	530	530	530
Sequential Write (MB/s)	350	500	500	500	500
4K Random Read (IOPS)	90K	98K	98K	98K	98K
4K Random Write (IOPS)	12K	28K	32K	39K	35K
Read Latency (Typ., µs)	110	100	110	110	100
Write Latency (Typ., µs)	80	40	40	30	30
Power Consumption [5]					
Active (W)	2.3	2.9	2.8	3.3	2.9
Idle (W)	1.3	1.3	1.4	1.4	1.7
Endurance/Reliability					
DWPD[6]	1	1	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	< 1 sector per 10^{17} bits read	< 1 sector per 10^{17} bits read
MTBF (million hours)	2.0	2.0	2.0	2.0	2.0
Limited Warranty (years)	5	5	5	5	5
Temperature					
Operating Temp. (°C)	0 - 70	0 - 70	0 - 70	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-40 - 85
Physical Dimension					
Length (mm)	100.00	100.00	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00	7.00	7.00
Weight (g)	56	57	59	60	62
Part Number					
Non-SED FW	S1201Y03240G P02256G00	S1201Y03480G P02512G00	S1201Y03960G P021T0200	S1201Y031T92P 022T0400	S1201Y033T84P 024T0900
SED FW	S1201Y03240G P22256G00	S1201Y03480G P22512G00	S1201Y03960G P221T0200	S1201Y031T92P 222T0400	S1201Y033T84P 224T0900

(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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