TOSHIBA
Leading Innovation

SSD

PX04SLB SERIES
ENTERPRISE READ INTENSIVE SSD

Product image may represent a design model.

KEY FEATURES

- 2TB and 4TB Storage Capacity
- 12.0 Gbit/s Dual-Port SAS Interface
- 270K IOPS Sustained Random Read Performance
- 0.5 DWPD with 100% Random Workload
- Improved Read/Write Bandwidth and Random IOPS
- Power-Loss-Protection and End-to-End Data Protection including T10 DIF
- Pin-3 Power Disable Support
- Self-Encrypting (SED) Option (PX04SLQxxx)

APPLICATIONS

- Data Warehousing
- Web Servers
- Media Streaming
- Video on Demand (VOD)

MAIN SPECIFICATIONS

Model Number		PX04SLB400 PX04SLQ400	PX04SLB200 PX04SLQ200
Interface		SAS-3.0 (12.0 Gbit/s, 6.0 Gbit/s, 3.0 Gbit/s, 1.5 Gbit/s)	
Formatted Capacity		4,000 GB	2,000 GB
Performance	Interface Speed	12.0 Gbit/s Max.	
	Memory Type	MLC	
	Sustained 64KiB Sequential Read	1,500 MiB/s	1,900 MiB/s
	Sustained 64KiB Sequential Write	750 MiB/s	850 MiB/s
	Sustained 4KiB Random Read	270K IOPS	
	Sustained 4KiB Random Write	19K IOPS	
Supply Voltage		5 V ± 7% ,12 V ± 7 %	
Power Consumption		3.2 W Typ.	

RELIABILITY

Model Number	PX04SLBxxx PX04SLQxxx
MTTF	2,000,000 hours
DWPD	0.5
Warranty	5 years

MECHANICAL SPECIFICATIONS

Model Number	PX04SLBxxx PX04SLQxxx
Height	15.0 mm + 0, - 0.5 mm
Width	69.85 ± 0.25 mm
Length	100.45 mm Max.
Weight	150 g Max.

ENVIRONMENTAL LIMITS

Item		PX04SLBxxx PX04SLQxxx
Temperature	Operating	0 °C to 55 °C
Humidity	Operating	5 % to 95 % R.H. (No condensation)
Vibration	Operating	21.27 m/s^2 { 2.17 Grms } (5 to 800 Hz)
Shock	Operating	9,800 m/s^2 { 1,000 G } (0.5 ms duration)

Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = 2^{30} = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

A kibibyte (KiB) means 2^{10}, or 1,024 bytes, a mebibyte (MiB) means 2^{20}, or 1,048,576 bytes, and a gibibyte (GiB) means 2^{30}, or 1,073,471,824 bytes.

MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.

DWPD: Drive Write Per Day. One full drive write per day means the drive can be written and re-written to full capacity once a day every day for five years, the stated product warranty period. Actual results may vary due to system configuration, usage and other factors.

Read and write speed may vary depending on the host device, read and write conditions, and file size.

IOPS: Input Output Per Second (or the number of I/O operations per second)

PLP (Power Loss Protection): PLP supports to record data in buffer memory to NAND flash memory, utilizing back up power of solid capacitor in case of sudden supply shut down.