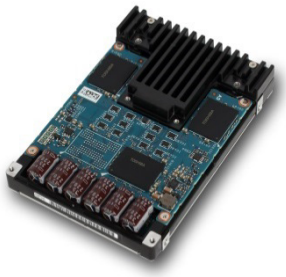
TOSHIBA
Leading Innovation

SSD

PX04SMB SERIES
ENTERPRISE MID ENDURANCE SSD



Product image may represent a design model.

KEY FEATURES

- Up to 3.2 TB Storage Capacity
- 270K IOPS random read
- 2.5-Inch Form-Factor, 15mm Z-Height
- 10 DWPD (Drive Writes Per Day) with 100% Random Workload
- Dual-Port 12.0 Gbit/s SAS Interface
- Improved Read/Write Bandwidth and Random IOPS
- Full Power-Loss-Protection and End-to- End Data Protection including T10 DIF
- Pin-3 Power Disable Support
- Self-Encrypting Option

APPLICATIONS

- Mixed-Use, Mission- Critical Enterprise Workloads
- Hyperscale and Virtualized Environments
- Online transaction processing
- E-commerce

MAIN SPECIFICATIONS

Model Number		PX04SMB320 PX04SMQ320	PX04SMB160 PX04SMQ160	PX04SMB080 PX04SMQ080	PX04SMB040 PX04SMQ040
Interface		SAS-3.0 (12.0 Gbit/s, 6.0 Gbit/s, 3.0 Gbit/s, 1.5 Gbit/s)			
Formatted Capacity		3.2 TB	1.6 TB	800 GB	400 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	85K IOPS	90K IOPS		
Supply Voltage	Allowable Voltage	5 V ± 7% 12 V ± 7 %			
Power Consumption		3.2 W Typ.			

RELIABILITY

Model Number	PX04SMBxxx PX04SMQxxx
MTTF	2,000,000 hours
DWPD	10
Warranty	5 years

MECHANICAL SPECIFICATIONS

Model Number	PX04SMBxxx PX04SMQxxx
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		PX04SMBxxx PX04SMQxxx
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)

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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.