

Brief Specification

End of Sales

Enterprise SSD

PX04SMB320 / PX04SMB160 / PX04SMB080 / PX04SMB040 / PX04SMQ320 / PX04SMQ160 / PX04SMQ080 / PX04SMQ040

PX04SMB320 PX04SMB360 PX04SMB080 PX04SMB040 PX04SMB040 PX04SMQ040 PX		i					
Sasion		PX04SMB320	PX04SMB160	PX04SMB080	PX04SMB040		
Interface SAS-3.0 Interface Speed 12.0 Gbit/s , 6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s Memory Type MLC Formatted Capacity 3,200 GB 1,600 GB 800 GB 400 GB Sustained 64KiB Sequential Read (12.0 Gbit/s Dual Port) 1,500 MiB/s 1,900 MiB/s		PX04SMQ320	PX04SMQ160	PX04SMQ080	PX04SMQ040		
Interface Speed 12.0 Gbit/s , 6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s	Basic Specification	Basic Specification					
Memory Type MU Formatted Capacity 3,200 GB 1,600 GB 800 GB 400 GB Sustained 64KiB Sequential Read (12.0 Gbit/s Dual Port) 1,500 MiB/s 1,900 MiB/s 850 MiB/s Sustained 64KiB Sequential Write (12.0 Gbit/s Dual Port) 750 MiB/s 850 MiB/s 850 MiB/s Sustained 4KiB Random Read (12.0 Gbit/s Dual Port) 270,000 IOPS 90,000 IOPS Sustained 4KiB Random Write (12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability 5 years DWPD 10 Power Requirements 5 V ±7 % , 12 V ±7 % Power Consumption (Ready) 3.2 W Typ. Dimensions Height 15.0 mm +0 , -0.5 mm Width	Interface	SAS-3.0					
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Sustained 64KiB Sequential Read (12.0 Gbit/s Dual Port) 1,500 MiB/s 1,900 MiB/s Sustained 64KiBSequential Write (12.0 Gbit/s Dual Port) 750 MiB/s 850 MiB/s Sustained 4KiB Random Read (12.0 Gbit/s Dual Port) 270,000 IOPS Sustained 4KiB Random Write (12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability 750 MiB/s 90,000 IOPS MTTF 2,000,000 hours 2,000,000 hours DWPD 10 10 Power Requirements 5 V ±7 % , 12 V ±7 % 2000,000 IOPS Power Consumption (Ready) 3.2 W Typ. 3.2 W Typ. Dimensions 15.0 mm +0 , -0.5 mm 69.85 ±0.25 mm	Memory Type	MLC					
(12.0 Gbit/s Dual Port) 1,500 MiB/s 1,900 MiB/s Sustained 64KiBSequential Write (12.0 Gbit/s Dual Port) 750 MiB/s 850 MiB/s Sustained 4KiB Random Read (12.0 Gbit/s Dual Port) 270,000 IOPS Sustained 4KiB Random Write (12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability 2,000,000 hours Warranty 5 years DWPD 10 Power Requirements Supply Voltage 5 V ± 7 % , 12 V ± 7 % Power Consumption (Ready) 3.2 W Typ. Dimensions Height 15.0 mm + 0 , -0.5 mm Width 69.85 ± 0.25 mm	Formatted Capacity	3,200 GB	1,600 GB	800 GB	400 GB		
(12.0 Gbit/s Dual Port) 750 MiB/s 850 MiB/s Sustained 4KiB Random Read (12.0 Gbit/s Dual Port) 270,000 IOPS Sustained 4KiB Random Write (12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability MTTF 2,000,000 hours Warranty 5 years DWPD 10 Power Requirements Supply Voltage 5 V ±7 % , 12 V ±7 % Power Consumption (Ready) 3.2 W Typ. Dimensions Height 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm	·	1,500 MiB/s	1,900 MiB/s				
(12.0 Gbit/s Dual Port) 270,000 IOPS Sustained 4KiB Random Write (12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability 2,000,000 hours Warranty 5 years DWPD 10 Power Requirements Supply Voltage 5 V ± 7 % , 12 V ± 7 % Power Consumption (Ready) 3.2 W Typ. Dimensions Height 15.0 mm + 0 , -0.5 mm Width 69.85 ± 0.25 mm	·	750 MiB/s	850 MiB/s				
(12.0 Gbit/s Dual Port) 85,000 IOPS 90,000 IOPS Reliability 2,000,000 hours Warranty 5 years DWPD 10 Power Requirements 5 V ±7 % , 12 V ±7 % Supply Voltage 5 V ±7 % , 12 V ±7 % Power Consumption (Ready) 3.2 W Typ. Dimensions 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm		270,000 IOPS					
MTTF 2,000,000 hours Warranty 5 years DWPD 10 Power Requirements 5 V ±7 % , 12 V ±7 % Supply Voltage 5 V ±7 % , 12 V ±7 % Power Consumption (Ready) 3.2 W Typ. Dimensions 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm		85,000 IOPS	90,000 IOPS				
Warranty5 yearsDWPD10Power Requirements $5 \vee \pm 7 \%$, $12 \vee \pm 7 \%$ Supply Voltage $5 \vee \pm 7 \%$, $12 \vee \pm 7 \%$ Power Consumption (Ready) $3.2 \vee 7 \%$.Dimensions $15.0 \times 10^{-0.5} \times 10^{-0.5} \times 10^{-0.5}$ Height $15.0 \times 10^{-0.5} \times 10^{-0.5} \times 10^{-0.5}$ Width $69.85 \pm 0.25 \times 10^{-0.5}$	Reliability						
DWPD 10 Power Requirements Supply Voltage $5 \lor \pm 7 \%$, $12 \lor \pm 7 \%$ Power Consumption (Ready) $3.2 \lor Typ$. Dimensions Height $15.0 \lor mm + 0$, $-0.5 \lor mm$ Width $69.85 \pm 0.25 \lor mm$	MTTF	2,000,000 hours					
Power Requirements Supply Voltage $5 \text{ V} \pm 7 \text{ %}$, $12 \text{ V} \pm 7 \text{ %}$ Power Consumption (Ready) 3.2 W Typ. Dimensions Height $15.0 \text{ mm} \pm 0$, $\pm 0.5 \text{ mm}$ Width $69.85 \pm 0.25 \text{ mm}$	Warranty	5 years					
Supply Voltage $5 \text{ V} \pm 7 \text{ %}$, $12 \text{ V} \pm 7 \text{ %}$ Power Consumption (Ready) 3.2 W Typ. Dimensions Height $15.0 \text{ mm} \pm 0$, -0.5 mm Width $69.85 \pm 0.25 \text{ mm}$	DWPD	10					
Power Consumption (Ready) 3.2 W Typ. Dimensions 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm	Power Requirements						
Dimensions Height 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm	Supply Voltage	5 V ±7 % , 12 V ±7 %					
Height 15.0 mm +0 , -0.5 mm Width 69.85 ±0.25 mm	Power Consumption (Ready)	3.2 W Typ.					
Width 69.85 ±0.25 mm	Dimensions						
	Height	15.0 mm +0 , -0.5 mm					
Length 100.45 mm Max.	Width	69.85 ±0.25 mm					
	Length	100.45 mm Max.					

Weight	150 g Max.		
Environmental Specifications			
Temperature (Operating)	0 to 55 °C		
Relative Humidity (Operating)	5 to 95 % R.H.		
Vibration (Operating)	21.27 m/s² { 2.17 Grms } (5 to 800 Hz)		
Shock (Operating)	9,800 m/s² { 1,000 G } (0.5 ms duration)		

- Product image may represent a design model.
- ▶ Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000,000 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 2¹⁰, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, or 1,073,741,824 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.