TOSHIBA

HK6-DC SERIES Data Center SATA SSD

The HK6-DC Series is Data Center SATA SSD and utilizes Toshiba Memory Corporation's 64-layer 3D flash memory BiCS FLASH™. The HK6-DC series is optimized for low latency and performance consistency in read-intensive workloads.

Further features of the impressive series include power-loss protection and data path protection.

The HK6-DC Series offer 0.6 DWPD (Drive Writes Per Day) with capacities of up to 3.84 TB and is designed to deliver high-levels of performance.



> KEY FEATURES

- Up to 3.84 TB Storage Capacity with 6.0Gbit/s SATA Interface
- Up to 85 KIOPS random read (4 KiB) performance
- Low Operating Power
- Latency Optimized
- 2.5-inch Form-Factor, 7.0mm Z-Height
- 0.6 DWPD with 100 % Random Write Workload
- Power-Loss-Protection and End-to-End Data Protection
- Sanitize Instant Erase (SIE) *Note1,2
- 5-year limited warranty

APPLICATIONS

- Read Intensive Enterprise Workloads
- Cloud applications
- NoSQL databases
- · Big data analytics
- · Streaming media

*Note 1: The Sanitize Instant Erase (SIE) option supports Crypto Erase, which is a standardized feature defined by the technical committees (T13) of INCITS (the InterNational Committee for Information Technology Standards).

For more details, please make inquiries through "Contact us" in each region's website, https://business.toshiba-memory.com/

> MAIN SPECIFICATIONS

Model Number		KHK6XLSE3T84	KHK6XLSE1T92	KHK6XLSE960G
Interface		SATA-3.3		
Formatted Capacity		3,840 GB	1,920 GB	960 GB
Performance	Interface Speed	6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s		
	Memory Type	BiCS FLASH™TLC		
	Sustained 128 KiB Sequential Read	550 MB/s		
	Sustained 128 KiB Sequential Write	495 MB/s 530MB/s		
	Sustained 4 KiB Random Read	85,000 IOPS		
	Sustained 4 KiB Random Write	19,000 IOPS	18,000 IOPS	16,000 IOPS
Supply Voltage	Allowable Voltage	5 V ±5 %		
Power Consumption		5.0 W Typ.		

^{*}Note 2: HK6-DC series is not available in all countries due to export and local regulations.

> RELIABILITY

Model Number	KHK6XLSExxxx
MTTF	2,000,000 hours
DWPD	0.6
Warranty	5 years

> MECHANICAL SPECIFICATIONS

Model Number	KHK6XLSExxxx
Height	7.0 mm + 0.2, - 0.50 mm
Width	69.85 ± 0.25 mm
Length	100.45 mm Max.
Weight	64 g Max.

> ENVIRONMENTAL LIMITS

ltem		KHK6XLSExxxx	
Temperature	Operating	0 °C to 70 °C	
Humidity	Operating	5 % to 95 % R.H. (No condensation)	
Vibration	Operating	21.27 m/s ² { 2.17 Grms } (7 to 800 Hz)	
Shock	Operating	9,800 m/s ² { 1,000 G } (0.5 ms duration)	

- Definition of capacity: Toshiba Memory Corporation 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 = 2³⁰ = 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.
- 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 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)