

SSD

**> HK3E2 SERIES
ENTERPRISE VALUE ENDURANCE SSD**

> KEY FEATURES

- SATA 6.0 Gbit/s Interface
- Capacities up to 800 GB
- 3 DWPD endurance for 5 years w/ full random 4 KiB workload
- Power Loss Protection and End-to-End Data Protection
- Quadruple Swing-By Code Technology (QSBC)



> APPLICATIONS

- Enterprise server and storage systems
- Exchange mail servers
- Web servers
- SQL databases
- Indexing
- Data center storage

> MAIN SPECIFICATIONS

Model Number		THNSNJ800PCSZ	THNSNJ400PCSZ	THNSNJ200PCSZ
Interface		SATA-3.2 (6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s)		
Formatted Capacity		800 GB	400 GB	200 GB
Performance	Interface Speed	6.0 Gbit/s Max.		
	Memory Type	MLC		
	Sustained 64KiB Sequential Read	500 MiB/s		
	Sustained 64KiB Sequential Write	400 MiB/s	270 MiB/s	
	Sustained 4KiB Random Read	75,000 IOPS		
Sustained 4KiB Random Write	30,000 IOPS	20,000 IOPS		
Supply Voltage	Allowable Voltage	5 V ± 5%		
Power Consumption (Operating)		4.5 W Typ		
Power Consumption (Ready)		1.0 W Typ		

> RELIABILITY

Model Number	HK3E2
MTTF	2,000,000 hours
DWPD	3
Warranty	5 years

> MECHANICAL SPECIFICATIONS

Model Number	HK3E2
Height	7.0 mm ± 0,5 mm
Width	69.85 ± 0.25 mm
Length	100.45 mm Max.
Weight	60 g Max.

> ENVIRONMENTAL LIMITS

Item	HK3E2
Temperature	Operating 0 °C to 55 °C
Humidity	Operating 5 % to 95 % R.H. (No condensation)
Vibration	Operating 21 m/s ² { 2.17 Grms } (100 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 = 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, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, 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.

"2.5-inch" and "3.5-inch" mean the form factor of HDDs or SSDs. They do not indicate drive's physical size.