

HK6-V Series

6Gbit/s Data Center SATA Mixed Use SSD

HK6-V Series is a 6 Gbit/s data center SATA SSD supporting a broad range of mixed use applications, such as transactional database, business intelligence and software defined storage. Designed for scale-out data centers, the HK6-V is designed for low latency, consistent performance and reduced power consumption.

Featuring KIOXIA Corporation's 64-layer BiCS™ 3D TLC memory, the HK6-V Series includes power-loss protection and data path protection. It comes with 3 DDPD (Drive Writes Per Day) endurance and capacities up to 3.84 TB.



Product image may differ from the actual product.

Key Features

- 6.0Gbit/s SATA 3.3 interface
- Capacities from 480 GB to 3.84 TB
- Up to 85 KIOPS random read (4 KiB)
- Low latency and operating power
- Consistent performance
- 2.5-inch form-factor, 7.0 mm Z-Height
- 3 DDPD with 100 % random write workload
- Power loss protection and end-to-end data protection

Key Applications

- Business intelligence
- Machine learning
- Transactional database (OLTP)
- Big data analytics
- Software defined storage

Specifications

Model Number	KHK61VSE3T84	KHK61VSE1T92	KHK61VSE960G	KHK61VSE480G
Physical				
Capacity	3,840 GB	1,920 GB	960 GB	480 GB
Interface	SATA-3.3			
Interface Speed	6.0 Gbit/s , 3.0 Gbit/s , 1.5 Gbit/s			
Memory Type	BiCS FLASH™ TLC			
Performance				
Sustained 128 KiB Sequential Read	550 MB/s			
Sustained 128 KiB Sequential Write	530 MB/s			450 MB/s
Sustained 4 KiB Random Read	83K IOPS	84K IOPS		82K IOPS
Sustained 4 KiB Random Write	54K IOPS	55K IOPS	54K IOPS	43K IOPS

Specifications (Continued)

Model Number	KHK61VSE3T84	KHK61VSE1T92	KHK61VSE960G	KHK61VSE480G
Capacity	3,840 GB	1,920 GB	960 GB	480 GB
Power Requirements				
Supply Voltage	5 V ± 5 %			
Power Consumption	5.5 W RMS	5.5 W RMS	5.0 W RMS	4.0 W RMS
Reliability				
MTTF	2,000,000 hours			
DWPD	3			
Mechanical				
Height	6.90 + 0.30 / -0.40 mm.			
Width	69.85 ± 0.25 mm.			
Length	100.4 mm Max.			
Wight	68 g Max.			
Environmental				
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)			

Product image may represent a design model.

Definition of capacity: KIOXIA Corporation 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 1,073,741,824 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 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)

There are some models of KIOXIA Corporation SSD Products which deliver various security functions as optional feature. For more information of security options, please contact your Toshiba Memory Corporation sales representative.