

# XD6 Series

## Data Center NVMe™ SSDs

KIOXIA XD6 Series E1.S SSDs are designed to the Enterprise and Datacenter Standard Form Factor (EDSFF) E1.S specification to address the specific requirements of hyperscale applications, including the performance, power and thermal requirements of the Open Compute Platform (OCP) NVMe™ Cloud SSD Specification.



Designed to optimize system density and efficiency, the XD6 Series SSDs represent the future of flash storage for servers and storage systems in cloud and hyperscale data centers.

### Key Features

- Compliant with PCIe® 4.0, NVMe™ 1.3c specifications
- E1.S form factor (9.5mm height)
- KIOXIA proprietary architecture: controller, firmware and BiCS FLASH™ 3D flash memory
- 1.92 TB / 3.84 TB capacity options
- Power loss protection (PLP) and end-to-end data protection
- Security option: SED (TCG-Opal 2.0)

### Key Applications

- Servers and storage systems for cloud and hyperscale data centers

### Specifications

SED Model Number	KXD6CRJJ3T84	KXD6CRJJ1T92
Capacity	3,840 GB	1,920 GB
<b>Basic Specifications</b>		
Interface	PCIe® 4.0, NVMe™ 1.3c	
Interface Speed	64 GT/s (PCIe® Gen4 x4)	
Flash Memory Type	BiCS FLASH™ TLC	
<b>Performance in single port (1x4) mode (Up to)</b>		
Sustained 128 KiB Sequential Read	6,500 MB/s	
Sustained 128 KiB Sequential Write	2,350 MB/s	1,200 MB/s
Sustained 4 KiB Random Read	880 K IOPS	660 K IOPS
Sustained 4 KiB Random Write	90 K IOPS	50 K IOPS
<b>Reliability</b>		
MTTF	2,000,000 hours	
DWPD	1	

## Specifications (Continued)

SED Model Number	KXD6CRJJ3T84	KXD6CRJJ1T92
Capacity	3,840 GB	1,920 GB
<b>Power Requirements</b>		
Supply Voltage	12 V ± 10 %	
Power Consumption (Active)	14 W Typ.	12 W Typ.
Power Consumption (Ready)	5 W Typ.	
<b>Dimensions</b>		
Height	9.5 mm ± 0.35 mm	
Width	33.75 ± 0.25 mm	
Length	118.75 ± 0.55 mm	
Weight	75 g Max.	
<b>Environmental</b>		
Temperature (Operating)	0 °C to 70 °C	
Temperature (Non-operating)	-40 °C to 85 °C	
Humidity (Operating)	10 % to 90 % [R.H.]	
Vibration (Operating)	21 m/s <sup>2</sup> { 2.17 Grms } ( 7 to 800 Hz )	
Vibration (Non-operating)	30 m/s <sup>2</sup> { 3.08 Grms } ( 7 to 800 Hz )	
Shock (Operating / Non-operating)	9,800 m/s <sup>2</sup> { 1,000 G } ( 0.5 ms duration )	

Product image may represent a design model.

Definition of capacity: KIOXIA 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<sup>30</sup> = 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.

GT/s: Giga Transfers per second.

A kibibyte (KiB) means 2<sup>10</sup>, or 1,024 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 the specified lifetime. Actual results may vary due to system configuration, usage and other factors.

Read and write performances 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).

SED supports TCG Opal. It has a few unsupported TCG Opal features. For more details, please make inquiries through "Contact us" .

Security feature compliant drives are not available in all countries due to the local regulations.

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