

# KIOXIA XG6-P Series (M.2)

### **Client NVMe<sup>™</sup> SSD**

Leveraging KIOXIA 96-layer BiCS FLASH™ 3D TLC (3-bit-per-cell) flash memory, KIOXIA XG6-P Series SSDs provide high storage capacity, while maintaining the promise of ultra-thin, highspeed storage with exceptional power efficiency.

It is best suited for video/CG contents production requiring high-speed access to high-cap data, Al/machine learning applications, workstations, and high-end PCs.

The XG6-P Series achieve 2,920 MB/s of sequential write performance, which is 32.7 % improvement vs our previous generation premium model KIOXIA XG5-P Series.

The 2,048 GB XG6-P SSD is available in a single-sided M.2 2280 (22 x 80mm) form factor and offers security options including TCG Pyrite Version 1.0 support for Non-SED (Self-Encrypting Drive) configurations and TCG Opal Version 2.01 support for SED.



Product image may represent a design model.

#### **Key Features**

- KIOXIA 96-Layer BiCS FLASH™
- PCle® Gen3 x4, NVMe™
- · Capacity: 2,048 GB
- M.2 2280 Single-sided
- TCG Opal 2.01 Optional for SED

#### **Key Applications**

- Workstation PCs
- · High-End PCs
- · Video/CG contents production
- · AI/Machine learning

## **Specifications**

Base Model Number	KXG60PNV2T04	
SED Model Number	KXG6APNV2T04	
Capacity	2,048 GB	
Basic Specifications		
Form Factor	M.2 2280-S2 Single-sided	
Interface	PCIe <sup>®</sup> 3.0, NVMe™ 1.3a	
Maximum Interface Speed	32 GT/s (PCle <sup>®</sup> Gen3 x4)	
Flash Memory Type	BiCS FLASH™ TLC	

## **Specifications (Continued)**

Capacity	2,048 GB	
Performance (Up to)		
Sequential Read	3,180 MB/s	
Sequential Write	2,920 MB/s	
Random Read	355K IOPS	
Random Write	365K IOPS	
Power Requirements		
Supply Voltage	3.3 V ± 5 %	
Power Consumption (Active)	4.9 W typ.	
Power Consumption (L1.2 mode)	3.0 mW typ.	
Reliability		
MTTF	1,500,000 hours	
TBW	600	
Dimensions		
Thickness	2.23 mm Max	
Width	22.0 mm ± 0.15 mm	
Length	80.0 mm ± 0.15 mm	
Weight	7.3 g Max	
Environmental		
Temperature (Operating)	0 °C to 95 °C (Controller Temperature)	
Temperature (Operating)	0 °C to 85 °C (Other Components Temperature)	
Temperature (Non-operating)	-40 °C to 85 °C	
Humidity (Operating)	0 % to 90 % R.H.	
Vibration (Operating)	196 m/s² { 20 Grms } ( 20 Hz to 2,000 Hz )	
Shock (Operating)	14.7 km/s² { 1,500 G } ( 0.5 ms )	

Availability of the SED model line-up may vary by region.

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 1 GB = 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, and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

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.

TBW: Terabytes Written. The number of terabytes that may be written to the SSD for the specified lifetime.

Read and write speed, tested on the state of "SLC cache=ON", may vary depending on the host device, read and write conditions, and file size.

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