KIOXIA

XG5-P Series End of Sales

Client SSD

The premium XG5-P series, maintaining the key features of the XG5 series such as NVMe™ revision 1.2.1, single-sided M.2 2280 form factor and low power consumption, delivers enhanced performance of up to 3000 MB/s sequential read, 2200 MB/s sequential write, 320,000 random read IOPS and 265,000 random write IOPS.

Thanks to in-house developed 64-layer, 3D flash memory BiCS FLASH™ and 1 TB package technology, KIOXIA Corporation maintains a single, ultra-thin form factor for all capacities across the XG5-P and XG5 product families, and offers dimensional compatibility to platforms that need flexible storage.

The XG5-P series is available in 1 TB and 2 TB large capacity models for workstation, high-end PCs, as well as read-intensive applications. Self-encrypting drive (SED) models supporting TCG Opal Version 2.01 are also available as an option for data security concerns.

Key Features

- KIOXIA 64-Layer BiCS FLASH™
- PCIe® Gen3 x4, NVMe™
- Capacities up to 2,048 GB
- M.2 2280 Single-sided
- TCG OPAL 2.01 Optional for SED

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

Key Applications

- Workstation PCs
- Gaming, Enthusiast PCs
- Embedded performance driven application
- Read-intensive enterprise use

Specifications

Model Number	KXG50PNV2T04	KXG50PNV1T02
SED Model Number	KXG5APNV2T04	KXG5APNV1T02
Physical		
Capacity[1]	2,048 GB	1,024 GB
Form Factor	M.2 2280-S2 Single-sided	
Interface	PCIe® Base Specification Revision 3.1 (PCIe®)	
Interface Speed	32 GT/s (PCIe® Gen3 ×4)	
Command	NVMe™ Revision 1.2.1 (NVMe™)	
Memory Type	BiCS FLASH™	
Connector Type	M.2 M	

Specifications (Continued)

Model Number	KXG50PNV2T04	KXG50PNV1T02
SED Model Number	KXG5APNV2T04	KXG5APNV1T02
Capacity[1]	2,048 GB	1,024 GB
Form Factor	M.2 2280-S2 Single-sided	
Performance[2] (Up to)		
Sequential Read	3,000 MB/s {2,900 MiB/s}	
Sequential Write	2,200 MB/s {2,100 MiB/s}	2,100 MB/s {2,000 MiB/s}
Power Requirements		
Supply Voltage	3.3 V ± 5 %	
Power Consumption — Active	4.9 W typ.	4.8 W typ.
Power Consumption — L1.2 mode	3 mW typ.	
Reliability[3]		
MTTF	1,500,000 hours Product Life: Approximately 5 years	
Mechanical		
Dimension (LxWxH)	22.0mm x 80.0 mm x 2.23 mm	
Weight (Typ.)	7.3 g typ.	
Environmental		
Temperature	Operating : 0 to 95 °C (Controller Temperature) 0 to 85 °C (Other Components Temperature)	
	Non-Operating: -40 °C to 85 °C	
Shock (Operating)	14.7 km/s2 {1.500 G} (0.5ms)	
Additional Features	• Device Self-test is supported. • Host Controlled Thermal Management (HCTM) is supported. • Strong & highly-efficient ECC named QSBCTM is supported. • TCG Pyrite Version 1.00 is supported. • Storage Interface Interactions Specification(SIIS) Version 1.06 is supported.	

[1] 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 = 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, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

[2] 1 MiB (mebibyte) = 2^20 bytes = 1,048,576 bytes, and 1 MB (megabyte) = 1,000,000 bytes.

[3] 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.

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*PCIe® is a registered trademark of PCI-SIG.
*NVMe™ is a trademark of NVM Express, Inc.
*Product image may represent a design model.
*Read and write speed may vary depending on the host device, read and write conditions, and file size.