



Client SSDs

Leveraging state-of-the-art BiCS FLASH™ 3D flash memory with in-house designed firmware, KIOXIA client SSDs come in a variety of form factors. They also offer a variety of capacities, performance and security options, and are well-suited for mobile computing, desktop PCs and workstations.



M.2 2280

XG8 Series
PCIe® / NVMe™ SSD



M.2 2230

BG6 Series
PCIe® / NVMe™ SSD



M.2 2280



M.2 2230

BG5 Series
PCIe® / NVMe™ SSD



M.2 2280

Product image may differ from the actual product.



BiCS FLASH™

KIOXIA XG8 Series

Utilizing 112-layer BiCS FLASH™ 3D flash memory (5th generation BiCS FLASH™ 3D flash memory), the XG8 Series is available in an M.2 2280, single-sided and double-sided form factor with a PCIe® 4.0 (Gen4 x4) interface, supporting the NVMe™ command set. This provides a powerful combination power efficiency and high performance, consuming 8.1 W or less with over 7,000 MB/s sequential read performance, respectively. The XG8 Series offers a Self-encrypting Drive (SED) option that supports TCG Opal version 2.01, under a different model number.

Model Number	Security Feature	Interface	Form Factor	User Capacity (GB) ^{*1}	Performance (up to) ^{*2}		Typical Power Consumption (W)	Operating Temperature (°C)	Dimensions ^{*3} H / W / L (mm)	Maximum Weight (g)	Power Supply Voltage (V)
					Sequential Read (MB/s)	Sequential Write (MB/s)					
KXG80ZN84T09	-	PCIe® Gen4 x4	M.2 2280	4,096	7,000	5,800	8.1	3.58max / 22 / 80	8.3	3.3	
KXG80ZNV2T04				2,048							
KXG80ZNV1T02				1,024		5,600	7.7	2.23max / 22 / 80	6.8		
KXG80ZNV512G				512		5,000			6.6		

KIOXIA BG6 Series

In a compact form factor and based on 6th generation BiCS FLASH™ 3D flash memory (2,048 GB & 1,024 GB), the BG6 Series is designed for thin and light performance-oriented use cases, such as ultra-mobile PCs, IoT devices and data center server boot. Available in capacities up to 2,048 GB, this series features Host Memory Buffer (HMB), PCIe® Gen4 x4 interface and supports the NVMe™ command set. The BG6 Series offers a Self-encrypting Drive (SED) option that supports TCG Opal version 2.01, under a different model number.

Model Number	Security Feature	Interface	Form Factor	User Capacity (GB) ^{*1}	Performance (up to) ^{*2}		Typical Power Consumption (W)	Operating Temperature (°C)	Dimensions H / W / L (mm) ^{*3}	Maximum Weight (g)	Power Supply Voltage (V)
					Sequential Read (MB/s)	Sequential Write (MB/s)					
KBG60ZNS2T04	-	PCIe® Gen4 x4	M.2 2230	2,048	6,000	5,300	4.4	2.38max / 22 / 30	3.0	3.3	
KBG60ZNS1T02				1,024							
KBG60ZNS512G				512	4,800	4,000	4.7				
KBG60ZNS256G				256	4,400	3,000	4.3				
KBG60ZNV2T04	-	PCIe® Gen4 x4	M.2 2280	2,048	6,000	5,300	4.4	2.38max / 22 / 80	6.0	3.3	
KBG60ZNV1T02				1,024							5,000
KBG60ZNV512G				512	4,800	4,000	4.7				
KBG60ZNV256G				256	4,400	3,000	4.3				

KIOXIA BG5 Series

In a compact form factor and based on 112-layer BiCS FLASH™ 3D flash memory (5th generation BiCS FLASH™ 3D flash memory), the BG5 Series is designed for thin and light performance-oriented use cases, such as ultra-mobile PCs, IoT devices and data center server boot. Available in capacities up to 1,024 GB, this series features Host Memory Buffer (HMB), PCIe® Gen4 x4 interface and supports the NVMe™ command set. The BG5 Series offers a Self-encrypting Drive (SED) option that supports TCG Opal version 2.01, under a different model number.

Model Number	Security Feature	Interface	Form Factor	User Capacity (GB) ^{*1}	Performance (up to) ^{*2}		Typical Power Consumption (W)	Operating Temperature (°C)	Dimensions H / W / L (mm) ^{*3}	Maximum Weight (g)	Power Supply Voltage (V)
					Sequential Read (MB/s)	Sequential Write (MB/s)					
KBG50ZNS1T02	-	PCIe® Gen4 x4	M.2 2230	1,024	3,500	2,900	4.3	2.23max / 22 / 30	3.0	3.3	
KBG50ZNS512G				512							2,700
KBG50ZNS256G				256	3,400	1,900	4.0				
KBG50ZNV1T02	-	PCIe® Gen4 x4	M.2 2280	1,024	3,500	2,900	4.3	2.23max / 22 / 80	6.0	3.3	
KBG50ZNV512G				512							2,700
KBG50ZNV256G				256	3,400	1,900	4.0				

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

*2 : Read and write speed may vary depending on various factors such as host devices, software (drivers, OS etc.), and read/write conditions.

*3 : Dimensions represent the nominal values.

- Optional security feature compliant drives are not available in all countries due to export control and local regulations.

All information provided in this catalog is subject to change without any prior notice. For the latest and detail specification, please send an inquiry through the "Contact us" form in each region's website, <https://www.kioxia.com/>.

- PCIe is a registered trademark of PCI-SIG.

- NVMe is a registered or unregistered mark of NVM Express, Inc. in the United States and other countries.

- Other company names, product names, and service names may be trademarks of third-party companies.