



Enterprise SSDs

Leveraging state-of-the-art BiCS FLASH™ 3D flash memory with in-house designed controllers and firmware, KIOXIA enterprise SSDs optimize high performance, endurance and reliability to run mission critical applications in enterprise data center environments. To meet the demands of highly transactional and high-bandwidth workloads, these SSDs feature high levels of performance and data protection with power-loss-protection (PLP)^{*1}. KIOXIA enterprise SSDs offer a range of security options^{*2} designed for business critical data storage.



Product image may differ from the actual product.



FL6 Series

The FL6 series is a dual-port PCIe® 4.0 / NVMe™ SSD utilizing low latency, high endurance KIOXIA XL-FLASH Storage Class Memory (SCM). It provides fast system response for latency-sensitive applications, such as server caching, write logging, and read / write cache for tiered storage in enterprises and hyperscale data centers.

Model Number	*2 Security Feature	*3 DWPD	Interface	Form Factor	*4 User Capacity (GB)	Performance (up to)				Typical Power Consumption (W)	*9 Operating Temperature (°C)	*10 Dimensions H / W / L (mm)	
						Sequential (128 KiB) *5 *6 *7		Random (4 KiB) *5 *6 *7 *8					
						Read	Write	Read	Write				
KFL61HUL800G	-	60	PCIe® Gen4 single x4, dual x2	2.5-inch	800	6,200	6,200	1,480	360	14	0 to 70	15.0 / 69.85 / 100.45	
KFL6XHUL3T20	SIE	60	PCIe® Gen4 single x4, dual x2	2.5-inch	3,200	6,200	6,200	1,500	400	19	0 to 70	15.0 / 69.85 / 100.45	
1,600					1,480								380
800													
KFL6DHUL3T20	SED	60	PCIe® Gen4 single x4, dual x2	2.5-inch	3,200	6,200	6,200	1,500	400	19	0 to 70	15.0 / 69.85 / 100.45	
1,600					1,480								380
800													
KFL6XHUL3T20	FIPS	60	PCIe® Gen4 single x4, dual x2	2.5-inch	3,200	6,200	6,200	1,500	400	19	0 to 70	15.0 / 69.85 / 100.45	
1,600					1,480								380
800													

CM6 Series

Based on 96-layer BiCS FLASH™ 3D flash memory, the CM6 Series of dual-port PCIe® 4.0/ NVMe™ SSDs is available in 2.5-inch (15 mm Z-height) form factor with capacities up to 30.72 TB. These SSDs feature Power Loss Protection (PLP) and offer a range of security/encryption options*2.

Model Number	DWPD	Interface	Form Factor	User Capacity (GB)	Performance (up to)				Typical Power Consumption (W)	Operating Temperature (°C)	Dimensions H / W / L (mm)
					Sequential (128 KiB) *5 *6 *7		Random (4 KiB) *5 *6 *7 *8				
					Read	Write	Read	Write			
KCM61VUL12T8	3	PCIe® Gen4 single x4, dual x2	2.5-inch	12,800	6,900	4,000	1,400	325	21	0 to 70	15.0 / 69.85 / 100.45
KCM61VUL6T40				6,400							
KCM61VUL3T20				3,200							
KCM61VUL1T60				1,600							
KCM61VUL800G				800							
KCM61RUL30T7	1	PCIe® Gen4 single x4, dual x2	2.5-inch	30,720	6,850	4,000	1,400	170	21	0 to 70	15.0 / 69.85 / 100.45
KCM61RUL15T3				15,360							
KCM61RUL7T68				7,680							
KCM61RUL3T84				3,840							
KCM61RUL1T92				1,920							
KCM61RUL960G				960							

PM7 Series

Based on 112-layer BiCS FLASH™ 3D flash memory, the PM6 Series of dual-port 24G SAS SSDs is available in a 2.5-inch (15 mm Z-height) form factor with capacities up to 30.72 TB. These SSDs feature Power Loss Protection (PLP) and offer a range of security/encryption options*2.

Model Number	DWPD	Interface	Form Factor	User Capacity (GB)	Performance (up to)				Power Consumption Mode (W)	Operating Temperature (°C)	Dimensions H / W / L (mm)
					Sequential (128 KiB) *5 *6 *7		Random (4 KiB) *5 *6 *7 *8				
					Read	Write	Read	Write			
KPM71VUG12T8	3	SAS-4 Narrow Single Narrow Dual	2.5-inch	12,800	4,200	4,100	720	330	9 / 12 / 14 / 18	0 to 70	15.0 / 69.85 / 100.45
KPM71VUG6T40				6,400							
KPM71VUG6T40				3,200							
KPM71VUG1T60				1,600							
KPM71RUG30T7	1	SAS-4 Narrow Single Narrow Dual	2.5-inch	30,720	4,150	3,200	720	80	9 / 12 / 14 / 18	0 to 70	15.0 / 69.85 / 100.45
KPM71RUG15T3				15,360							
KPM71RUG7T68				7,680							
KPM71RUG3T84				3,840							
KPM71RUG1T92				1,920							

*1 : PLP (Power Loss Protection): PLP allows to record data in buffer memory to flash memory, utilizing back up power of solid capacitor in case of sudden supply shut down.

*2 : Optional security features

- Drive models with different security options have different model numbers.
- CM6 and PM7 Series security options: The Sanitize Instant Erase (SIE), Self-Encrypting Drive (SED), FIPS (Federal Information Processing Standards) optional models are available.
- FL6 and CM6 Series: SED option supports TCG Opal and Ruby SSCs. It has a few unsupported TCG Opal features.
- PM7 Series: SED option supports TCG Enterprise SSC.
- SIE option supports Crypto Erase, which is a standardized feature defined by the technical committees (T10) of INCITS (the InterNational Committee for Information Technology Standards) or by NVMe Express Inc.
- FIPS drives utilize security modules designed to comply with FIPS 140-2 Level 2 and FIPS 140-3 Level 2, which define security requirements for cryptographic module by NIST (National Institute of Standards and Technology). The security modules utilized by CM6, PM7 and FL6 series have been validated for FIPS 140-2 Level 2.
- For more details and the latest validation status of each drive, please make inquiries through "Contact us" in each region's website, <https://business.kioxia.com/>
- Optional security feature compliant drives are not available in all countries due to export control and local regulations.

*3 : 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.

*4 : Definition of capacity: 1 terabyte (1 TB) = 1,000 gigabytes (GB), 1 GB = 1,000,000,000 (10⁹) bytes

*5 : A kibibyte (KiB) means 2¹⁰, or 1,024 bytes.

*6 : The performance of the CM6 Series is based on single-port mode (single x4). The performance specifications of the PM7 Series is based on testing in dual-port mode, running at 18 W of power.

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

*8 : IOPS: Input Output Per Second (or the number of I/O operations per second)

*9 : Case surface temperature

*10 : Dimensions represent the nominal values.

Customers must refer to and comply with the latest versions of all relevant KIOXIA information, including without limitation, this document, the specifications, the data sheets and application notes for Product and the precautions and conditions set forth in the KIOXIA Corporation Reliability Handbook and the instructions for the application with which the Product will be used with or for.

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 "Contact us" in each region's website, <https://business.kioxia.com/>

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