

EXCERIA PLUS G3 NVMe™ SSD

Upgrade Your PC's Potential



Capacity

1TB, 2TB

Max Sequential Read/Write Speed¹

5,000/3,900 MB/s

Max Random Read/Write Speed²

2TB: 680,000/950,000 IOPS

1TB: 770,000/950,000 IOPS

Features

BiCS FLASH™

NVMe™ 1.4 Technology

M.2 2280 Form Factor

PCIe® Gen4 x4

SSD Utility Management Software

The KIOXIA EXCERIA PLUS G3 SSD series features a powerful PCIe® 4.0 interface and delivers improved performance for gamers and video editors. With up to 2TB of capacity, this M.2 2280 single-sided series is excellent for mainstream desktops and notebooks that support the latest PCIe 4.0 standard.

Welcome to the world of PCIe 4.0

Designed to deliver an enhanced PC experience, the EXCERIA PLUS G3 SSD series is compatible with PCIe 4.0 and delivers exceptional transfer speeds of up to 5,000MB/s for sequential reads and 3,900MB/s for sequential writes. Whether you are gaming or video editing, this new series will provide the performance needed.

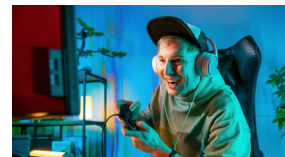


Storage Slimmed Down

Featuring a space-saving, single-sided M.2 2280 form factor, the EXCERIA PLUS G3 SSD series is compatible with a wider range of devices. These compact SSDs plug directly into the motherboard, removing cable clutter for a sleeker and an easy system upgrade.

Speed Ahead with PCIe 4.0

The EXCERIA PLUS G3 SSD series delivers improved performance without cutting corners. Supporting PCIe® 4.0 and NVMe™ 1.4, these SSDs take mainstream to the next level and offer an upgraded computing experience for gamers and video editors.



Cutting Edge 3D Flash Memory

Each EXCERIA SSD is built with BiCS FLASH™ and a vertically stacked cell structure, delivering a cutting edge storage experience.

SSD Utility Management Software

The SSD Utility management software was designed to help your KIOXIA drive thrive and lets you be in control of maintenance, monitoring, and more!

We highly recommend you install and update to the latest version to maximize your drive's performance and check its Percentage Life Left using the health gauge.



Specifications

Physical

| | |
|--|--|
| Capacity 1TB, 2TB | Form Factor M.2 Type 2280-S4-M |
| Interface PCI Express® Base Specification Revision 4.0 (PCIe®) | Flash Memory Type BiCS FLASH™ TLC |
| Interface Maximum Speed 64 GT/s (PCIe® Gen4 x4) | Dimension (Max: LxWxH) 80.15 mm x 22.15 mm x 2.63 mm |
| Interface Command NVM Express™ Revision 1.4 command set | Drive Weight 2TB: typ. 7.4 g 1TB: typ. 7.0 g |

Performance

| | |
|---|---|
| Max Sequential Read Speed¹ 5,000 MB/s | Max Sequential Write Speed¹ 3,900 MB/s |
| Max Random Read Speed² 2TB: 680,000 IOPS 1TB: 770,000 IOPS | Max Random Write Speed² 950,000 IOPS |
| Endurance: TBW (Total Bytes Written)³ 2TB: 1,200 TB 1TB: 600 TB | MTTF 1.5 million hours |

Environmental

| | |
|--|--|
| Operating Temperature 0 °C (Ta) to 85 °C (Tc) | Storage Temperature -40 °C to 85 °C |
| Certification RoHS compliant ⁴ | Shock Resistance 9.806 km/s ² {1,000 G} 0.5 ms half sine wave |
| Vibration 196 m/s ² {20 G} Peak, 10~2000 Hz, (20 min / Axis) x 3 Axis | Supply Voltage 3.3 V ±5 % |
| Power Consumption (Active) 2TB: 5.3 W 1TB: 4.9 W | Power Consumption PS3: 50 mW (typ.) PS4: 5 mW (typ.) |

Compatibility

PCI Express

“Compatible with PCI Express® Base Specification Revision 4.0 and NVMe Express™ Revision 1.4 command set

Connector Type

M.2 M key Socket

Target Applications

Client desktops and laptops

Additional Features

Services and Support

Up to 5-year manufacturer’s warranty

MANUFACTURER’S WARRANTY IS EFFECTIVE EITHER (I) WARRANTY PERIOD FROM THE DATE OF PURCHASE IN ITS ORIGINAL SEALED PACKAGING OR (II) FOR THE TIME PERIOD UNTIL THE “PERCENTAGE LIFE LEFT” WILL BE ZERO, WHICHEVER IS SHORTER. The “Percentage Life Left” can be found using “Health” gauge of the SSD Utility for KIOXIA products, which is available at [“personal.kioxia.com/support/”](https://personal.kioxia.com/support/).

Performance Optimization

TRIM, Idle Time Garbage Collection
Host Memory Buffer

SSD Management Software

Please visit our website for information on the required OS version at [“personal.kioxia.com”](https://personal.kioxia.com/).

¹ EXCERIA PLUS G3 SSD: Sequential speeds are measured with CrystalDiskMark 8.0.4 x64, Q=32, T=1. These values are the best values obtained in a specific test environment at KIOXIA Corporation and KIOXIA Corporation warrant neither read nor write speeds in individual devices. Read and write speed may vary depending on a device used and file size read or written.

² EXCERIA PLUS G3 SSD: 4KiB random performance is measured with CrystalDiskMark 8.0.4 x64, Q=32,T=16. These values are the best values obtained in a specific test environment at KIOXIA Corporation and KIOXIA Corporation warrant neither read nor write speeds in individual devices. Read and write speed may vary depending on a device used and file size read or written.

³ EXCERIA PLUS G3 SSD: Definition and conditions of TBW (Terabytes Written) are based on JEDEC standard: JESD219A Solid-State Drive (SSD) Endurance Workloads, July 2012, and defined for the service life.

⁴ KIOXIA Corporation defines “RoHS Compatible” products as products that either (1) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), bis(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP) and diisobutyl phthalate (DIBP) and of 0.01% by weight in Homogeneous Materials for cadmium; or (2) fall within any of the application exemptions set forth in the Annex to the RoHS Directive⁵. This does not mean that Kioxia Corporation products labeled “RoHS COMPATIBLE” are entirely free of substances controlled by the RoHS Directive and does not constitute a warranty or guarantee that such products will comply with the specific laws and/or regulations adopted in any particular jurisdiction. ⁵RoHS Directive: KIOXIA Corporation defines “RoHS Directive” as the DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

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 bytes = 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.

Read and write speed may vary depending on the host device, read and write conditions, and file size.

Product specifications and design are subject to change without prior notice.

Product images may represent design model. Actual product may vary.

A kilobyte (KiB) means 2¹⁰ bytes, or 1,024 bytes, a megabyte (MiB) means 2²⁰ bytes, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰ bytes, or 1,073,741,824 bytes.

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

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.

To protect against accidental data loss, back up your data frequently on other storage media. KIOXIA Corporation does not warrant any data stored on the product.

For safety instructions, please visit: personal.kioxia.com/support/

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The line up of personal product vary by country and region.