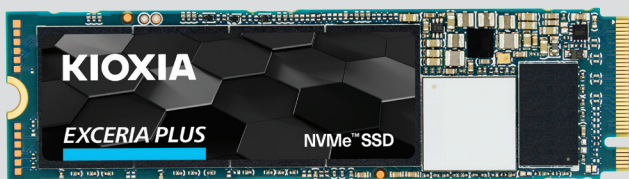


EXCERIA PLUS NVMe™ SSD

Upgrade Your Game



Capacity

500GB 1TB 2TB

Max Sequential Read/Write Speed¹

500GB: 3,400/2,500 MB/s
1TB,2TB: 3,400/3,200 MB/s

Max Random Read/Write Speed²

500GB: 420,000/570,000 IOPS
1TB,2TB: 680,000/620,000 IOPS

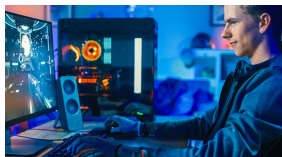
Features

BiCS FLASH™
NVMe™ 1.3c Technology
M.2 2280 Form Factor
PCIe® Gen3 x4 Lane
SSD Utility Management Software

Your high-performance gaming system needs high-performance storage. KIOXIA EXCERIA PLUS SSD series is built to deliver enthusiast-class PCIe® performance thanks to a newly designed 8-channel controller that brings out the full potential of its BiCS FLASH™ 3D flash memory. This new enthusiast-class SSD series offers up to 2TB of capacity in a M.2 2280 form factor suitable for both desktops and mobile systems.

Game-changing Storage

Don't let your storage be outclassed. The KIOXIA EXCERIA PLUS SSD series offer high performance storage for enthusiasts and hardcore gamers that feel held back by commodity storage hardware. With up to 3,400 MB/s sequential read speed¹ available to you, your system won't be deprived of the storage bandwidth it needs to excel.



Game On!

Why keep using an interface that was designed for hard drives? Utilizing the latest NVMe™ 1.3c technology, the EXCERIA PLUS SSD series reduces latency in your system's I/O path between your SSD and your CPU, resulting in smooth and responsive performance.

Small and Mighty

Featuring a thin and light M.2 2280 form factor, the EXCERIA PLUS SSD series plugs directly into the motherboard, reducing additional cable clutter for a sleeker system.



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, SSD tuning and more!



Specifications

Physical

Capacity

500GB, 1TB, 2TB

Form Factor

500GB: M.2 Type 2280-S3-M
1TB, 2TB: M.2 Type 2280-D3-M

Interface

PCI Express® Base Specification Revision 3.1a (PCIe®)

Flash Memory Type

BiCS FLASH™ TLC

Interface Maximum Speed

32 GT/s (PCIe® Gen3x4L)

Dimension (Max: LxWxH)

500GB: 80.15 mm x 22.15 mm x 2.38 mm
1TB, 2TB: 80.15 mm x 22.15 mm x 3.73 mm

Interface Command

NVM Express™ Revision 1.3c command set

Drive Weight

500GB: 8.0 g (typ.)
1TB, 2TB: 10.0 g (typ.)

Performance

Max Sequential Read Speed¹

3,400 MB/s

Max Sequential Write Speed¹

500GB: 2,500MB/s
1TB, 2TB 3,200 MB/s

Max Random Read Speed²

500GB: 420,000 IOPS
1TB, 2TB: 680,000 IOPS

Max Random Write Speed²

500GB: 570,000 IOPS
1TB, 2TB: 620,000 IOPS

Endurance: TBW (Total Bytes Written)³

500GB: 200 TB
1TB: 400 TB
2TB: 800 TB

MTTF

1.5 million hours

Environmental

Operating Temperature

0 °C (Ta) to 85 °C (Tc)

Storage Temperature

-40 °C to 85 °C

Shock Resistance

9.806 km/s² {1,000 G} 0.5 ms half sine wave

Vibration

196 m/s² {20 G} Peak, 10~2000 Hz, (20 min / Axis) x 3 Axis

Supply Voltage

3.3 V ±5 %

Power Consumption (Active)

500GB: 5.1 W (typ.)
1TB: 6.5 W (typ.)
2TB: 7.6 W (typ.)

Power Consumption

PS3: 50 mW (typ.)
PS4: 5 mW (typ.)

Compatibility

PCI Express

Compatible with PCI Express® Base Specification Revision 3.1a and NVMe Express™ Revision 1.3c command set

Connector Type

M.2 M key Socket

Target Applications

Client desktops and laptops

Additional Features

Services and Support

5-year manufacturer's warranty⁴

Performance Optimization

TRIM, Idle Time Garbage Collection

Ordering Information

Global Package:

500GB

PN: LRD10Z500GG8
EAN: 4582563851962

1TB

PN: LRD10Z001TG8
EAN: 4582563851979

2TB

PN: LRD10Z002TG8
EAN: 4582563851986

China Package:

500GB

PN: LRD10Z500GC8
EAN: 4582563851993

1TB

PN: LRD10Z001TC8
EAN: 4582563852006

2TB

PN: LRD10Z002TC8
EAN: 4582563852013

¹ EXCERIA PLUS SSD: Sequential speeds are measured with CrystalDiskMark 6.0.2 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 SSD: 4KiB random performance is measured with CrystalDiskMark 6.0.2 x64, Q=32, T=8. 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 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 MANUFACTURER'S WARRANTY IS EFFECTIVE EITHER (I) FIVE (5) YEARS 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/".

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, 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.

Subject to Change: While KIOXIA has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice.

Product image may represent design model. Images for illustration purpose only. The product appearance may differ from the actual product. Actual number of flash components differs by drive capacity.

A kibibyte (KiB) means 2¹⁰, or 1,024 bytes, a mebibyte (MiB) means 2²⁰, or 1,048,576 bytes, and a gibibyte (GiB) means 2³⁰, 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.

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