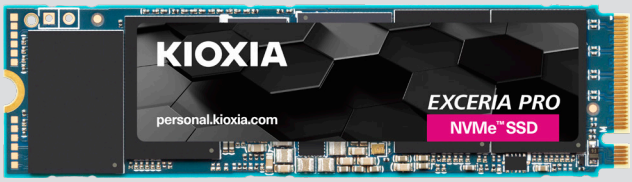
KIOXIA

EXCERIA PRO NVMe™ SSD

Next Generation Now



Capacity
1TB, 2TB

Max Sequential Read/Write Speed[1]
7,300/6,400 MB/s

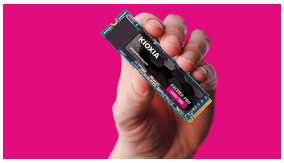
Max Random Read/Write Speed[2]
2TB: 800,000/1,300,000 IOPS
1TB: 1,000,000/1,100,000 IOPS

Features
BiCS FLASH™
NVMe™ 1.4 Technology
M.2 2280 Form Factor
PCIe® Gen4 x4
SSD Utility Management Software

The all-new KIOXIA EXCERIA PRO SSD Series uses next generation technology to take your high-end computing and gaming into a new realm of possibilities. Leveraging PCI Express® 4.0 technology, this M.2 2280 single-sided series now offers up to 2TB of capacity well-suited for both high performance desktops and notebooks needing maximum speed.

Game-Changing Performance

Imagine up to 7,300 MB/s of sequential read speed[1] and up to 6,400 MB/s sequential write speed[1], you have the KIOXIA EXCERIA PRO Series. Designed to reduce game loading, video editing and graphic rendering time, the EXCERIA PRO Series helps your content creation or gaming environment excel.

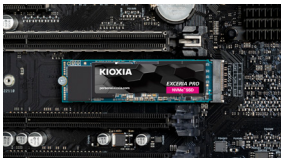


Small and Compact for an Easy Upgrade

Featuring a thin, single-sided M.2 2280 form factor, the EXCERIA PRO SSD series plugs directly into the motherboard, reducing additional cable clutter for a sleeker and an easy system upgrade.

PCIe® 4.0 Technology

This “hero” class KIOXIA SSD delivers powerful performance utilizing the PCIe® 4.0 and NVMe™ 1.4 technology. EXCERIA PRO SSD series push the boundaries of flash storage technology, offering enhanced real-world performance that will blow away hardcore gamers and content creators.



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-S2-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 2.23 mm

Interface Command
NVM Express™ Revision 1.4 command set

Drive Weight
2TB: 8.0g (typ.)
1TB: 7.6g (typ.)

Performance

Max Sequential Read Speed[1]
7,300 MB/s

Max Sequential Write Speed[1]
6,400 MB/s

Max Random Read Speed[2]
2TB: 800,000 IOPS
1TB: 1,000,000 IOPS

Max Random Write Speed[2]
2TB: 1,300,000 IOPS
1TB: 1,100,000 IOPS

Endurance: TBW[3]
2TB: 800TB
1TB: 400TB

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, 10~2,000 Hz, (20 min / Axis) x 3 Axis

Supply Voltage
3.3V ± 5%

Power Consumption (Active)
8.9W (typ.)

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

Compatibility

PCI Express
Compatible with PCI Express® Base Specification Revision 4.0 and NVM 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/".

Performance Optimization
TRIM, Idle Time Garbage Collection

SSD Management Software
Please visit our website for information on the required OS version at "personal.kioxia.com".

Ordering Information

Global Package:

1TB
PN: LSE10Z001TG8
EAN: 4582563854048

2TB
PN: LSE10Z002TG8
EAN: 4582563854055

China Package:

1TB
PN: LSE10Z001TC8
EAN: 4582563854062

2TB
PN: LSE10Z002TC8
EAN: 4582563854079

[1] EXCERIA PRO SSD : Sequential speeds are measured with CrystalDiskMark 8.0.1 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 PRO SSD: 4KiB random performance is measured with CrystalDiskMark 8.0.1 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 PRO 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 (i) 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 (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive(*). 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.
*RoHS 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 = 2^30 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 kibibyte (KiB) means 2^10 bytes, or 1,024 bytes, a mebibyte (MiB) means 2^20 bytes or 1,048,576 bytes, and a gibibyte (GiB) means 2^30, 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.