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Press Release

KIOXIA EDSFF E1.S SSDs Now Available for Hyperscale Data Centers

XD6 Series Data Center Class SSDs Address Performance, Power and Thermal Requirements for Hyperscale Applications

Düsseldorf, Germany, 10 November 2021 – Delivering on the promise of SSDs that address future enterprise infrastructure requirements KIOXIA Europe GmbH today announced production-ready availability of its 9.5mm XD6 Series Enterprise and Datacenter Standard Form Factor (EDSFF) E1.S data center class SSDs. Introduced in late 2020, KIOXIA XD6 drives were the first[1] EDSFF E1.S SSDs to address the specific requirements of hyperscale applications,

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including the performance, power and thermal requirements of the Open Compute Platform (OCP) NVMe® Cloud SSD Specification.

Representing the latest innovation in flash storage for servers in cloud and hyperscale data centers, KIOXIA EDSFF E1.S SSDs are designed to optimize system density, efficiency, and management. As defined by the EDSFF consortium and leveraging the OCP NVMe Cloud SSD Specification, the small form factor E1.S replaces the M.2 form factor and delivers greater density, performance, reliability, and thermal management. E1.S is also designed to be hot pluggable for increased serviceability, which is another benefit over M.2.

Utilizing KIOXIA BiCS FLASH™ 3D flash memory, the read-intensive XD6 Series features 1 DWPD endurance is compliant to NVMe 1.3c and PCIe® 4.0 specifications and is available in capacities of 1.92TB and 3.84TB. An option for TCG-Opal 2.0 encryption is included as well.

EDSFF E1.S is targeted at large-scale deployments in hyperscale data centers, due to its ability to scale in terms of capacity, power, performance, and thermals. Drives designed to the OCP NVMe Cloud SSD specification can be used in the new OCP Yosemite V3 platform developed by Meta (formerly Facebook).

"Microsoft and the OCP Storage workgroup demonstrated how an open collaboration across the industry could align hyperscalers, system designers and SSD vendors around next-generation storage form factors," said Jason Adrian, senior director of Azure Platform Architecture, Microsoft. "The EDSFF E1.S form factor is the future of flash storage in hyperscale data centers, including Azure platforms. Solid state disks designed to the OCP NVMe Cloud SSD specification, such as the KIOXIA XD6 Series, will power the next generation of EDSFF E1.S-based servers."

"We are pleased to offer our customers substantial advantages and subsequently an improvement in TCO through our new drives that are thermally more efficient, offer improved cooling while providing much higher performance," said Frederik Haak, Senior Manager SSD Marketing & Engineering at KIOXIA Europe GmbH. "New specifications and form factors, such as EDSFF are the advancements that datacentre and edge application need for more efficient, optimized flash memory deployment."

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KIOXIA is an active and contributing member to the industry development of EDSFF E1 and E3 solutions work group and is collaborating with leading server and storage system developers to unlock the full power of flash memory, NVMe and PCIe technologies.

For more information, please visit the KIOXIA website

Notes:

[1] Based on a survey of publicly available information as of November 3, 2020.

DWPD: Drive Write(s) 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 five years, the stated product warranty period. Actual results may vary due to system configuration, usage and other factors.

Definition of capacity: KIOXIA Corporation 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} bits **=** 1,073,741,824 bits, 1GB = 2^{30} bytes = 1,073,741,824 bytes and 1TB = 2^{40} bytes = 1,099,511,627,776 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.

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*Information in this document, including product prices and specifications, content of services and contact information, is correct on the date of the announcement but is subject to change without prior notice

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About KIOXIA Europe

KIOXIA Europe GmbH (formerly Toshiba Memory Europe GmbH) is the European based subsidiary of KIOXIA Corporation, a leading worldwide supplier of flash memory and solid-state drives (SSDs). From the invention of flash memory to today's breakthrough BiCS FLASH, KIOXIA continues to pioneer cutting-edge memory solutions and services that enrich people's lives and expand society's horizons. The company's innovative 3D flash memory technology, BiCS FLASH, is shaping the future of storage in high-density applications, including advanced smartphones, PCs, SSDs, automotive and data centers.

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Ref: KIE_SSD034/EN_XD6Series