

## Press Release

### **KIOXIA Introduces Next Generation e-MMC Ver. 5.1-Compliant Embedded Flash Memory Products**

*New Devices Feature Newer BiCS FLASH™ 3D Flash Memory, Improved Read and Write Performance*



**Düsseldorf, Germany, 27 September 2023** – [KIOXIA Europe GmbH](#) - a world leader in memory solutions, today announced sampling<sup>[1]</sup> of new, higher performing JEDEC e-MMC Ver. 5.1<sup>[2]</sup> compliant embedded flash memory products for consumer applications. The new products integrate the latest version of the company's BiCS FLASH™ 3D flash memory<sup>[3]</sup> and a controller in a single package, reducing processor workload and improving ease of use. Both 64 and 128 gigabytes (GB) products will be available.

As the market continues to shift to UFS<sup>[4]</sup>, there are cases where e-MMC may still be used. This includes consumer products with mid-range storage requirements such as tablets, personal computers, point-of-sale devices and other portable handheld devices, as well as smart TVs and smart NICs.



Axel Störmann, Vice President Memory Marketing & Engineering, KIOXIA Europe GmbH says, “KIOXIA continues to reinforce its market-leading position by delivering a broad, high-performance product lineup and expanding the available options for these applications.”

The new KIOXIA devices improve sequential and random write performance by approximately 2.5x and random read performance by approximately 2.7x over previous generation devices<sup>[3]</sup>. Additionally, terabytes written (TBW)<sup>[5]</sup> is improved by approximately 3.3x over previous generation devices, in correspondence with an enhanced area setting<sup>[6]</sup> for whole e-MMC area.

KIOXIA is now sampling its next-generation e-MMC devices, with mass production expected to start in the spring of 2024.

###

Notes:

[1]: The company's newest devices are supported in two capacities: 64 gigabytes (GB) and 128GB. Sample shipments of the 64GB device began this month, with the 128GB device scheduled to follow after October. Specification of the samples may differ from commercial products.

[2]: e-MMC(embedded Multi Media Card): One of standard specifications of embedded flash memory defined by JEDEC. The new product supports the command queuing and secure write protection functions which is specified as an option in JEDEC Ver. 5.1.

[3]: Compared to KIOXIA's previous generation devices "THGAMSG9T24BAIL", "THGAMST0T24BAIL".

[4]: Universal Flash Storage (UFS) is a product category for a class of embedded memory products built to the JEDEC UFS standard specification. Due to its serial interface, UFS supports full duplexing, which enables both concurrent reading and writing between the host processor and UFS device.

[5]: TBW or Terabytes Written measures how many cumulative writes that a drive can expect to complete over its lifespan.

[6]: If Enhanced Area is set, the total configurable consumer-usable capacity will be reduced.

\*Read, write speeds and TBW are the best values obtained in a specific test environment at KIOXIA and KIOXIA warrants neither read nor write speeds nor TBW in individual devices. Read, write speed and TBW may vary depending on device used and file size read or written.

\*In every mention of a KIOXIA product: Product density is identified based on the density of memory chip(s) within the Product, not the amount of memory capacity available for data storage by the end user. Consumer-usable capacity will be less due to overhead data areas, formatting, bad blocks, and other constraints, and may also vary based on the host device and application. For details, please refer to applicable product specifications. The definition of 1KB = 2<sup>10</sup> bytes = 1,024 bytes. The definition of 1Gb = 2<sup>30</sup> bits = 1,073,741,824 bits. The definition of 1GB = 2<sup>30</sup> bytes = 1,073,741,824 bytes. 1Tb = 2<sup>40</sup> bits = 1,099,511,627,776 bits.



\*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.

\*Company names, product names and service names may be trademarks of third party companies.

### **About KIOXIA Europe GmbH**

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 NAND flash memory to today's breakthrough BiCS FLASH™, KIOXIA continues to pioneer innovative memory solutions and services that enrich people's lives and expand society's horizons. The company's innovative BiCS FLASH™ 3D flash memory technology is shaping the future of storage in high-density applications, including advanced smartphones, PCs, SSDs, automotive and data centers.

Visit our [KIOXIA website](#)

### **Contact details for publication:**

KIOXIA Europe GmbH, Hansaallee 181, 40549 Düsseldorf, Germany

Tel: +49 (0)211 368 77-0

E-mail: [KIE-support@kioxia.com](mailto:KIE-support@kioxia.com)

### **Contact details for editorial enquiries:**

Lena Hoffmann, KIOXIA Europe GmbH

Tel: +49 (0) 211 36877 382

E-mail: [lena1.hoffmann@kioxia.com](mailto:lena1.hoffmann@kioxia.com)

### **Issued by:**

Birgit Schöniger, Publitek

Tel: +49 (0)4181 968098-13

E-mail: [birgit.schoeniger@publitek.com](mailto:birgit.schoeniger@publitek.com)

Web: [www.publitek.com](http://www.publitek.com)