

# **Press Release**

# KIOXIA First to Introduce Next-Generation UFS Embedded Flash Memory Devices Supporting MIPI M-PHY v5.0

New Devices Deliver Performance Boost to Mobile Applications



Düsseldorf, Germany, 24 February 2022 – <u>KIOXIA Europe GmbH</u>, a world leader in memory solutions, today announced that the sampling<sup>[1]</sup> of the industry's first<sup>[2]</sup> Universal Flash Storage (UFS)<sup>[3]</sup> embedded flash memory devices supporting MIPI M-PHY® v5.0<sup>[4]</sup> has started. The new line-up utilizes the company's BiCS FLASH<sup>™</sup> 3D flash memory and is available in three capacities: 128GB, 256GB and 512GB. The new devices deliver high speed read and write performance and are targeted to a variety of mobile applications, including leading-edge smartphones.

The new KIOXIA devices are next-generation UFS (MIPI M-PHY 5.0), which has a theoretical interface speed of up to 23.2Gbps per lane (x2 lanes = 46.4Gpbs) in HS-Gear5 mode. Sequential read and write performance of the 256GB device is improved by approximately 90 per cent and 70 per cent, respectively, over previous generation devices<sup>[5]</sup>. Also, the random read and write performance of the 256GB device is improved by approximately 35 per cent and 60 per cent, respectively, over previous generation devices<sup>[5]</sup>. This next generation of UFS provides significant performance increases, enabling next-generation smartphones and other products to enhance their capabilities and end user experiences in the 5G era and beyond.

"This UFS advancement will increase the performance and capabilities of next generation mobile applications, such as smartphones and other products. With this industry first UFS embedded flash memory device, KIOXIA again emphasizes its leadership position and commitment in UFS memory development," states Axel Stoermann, Vice President Memory Marketing & Engineering, KIOXIA Europe GmbH.

###

### Notes

1: Sample shipments of the 256GB device will start today with the rest of the line-up to gradually follow beginning in August. Specifications of the samples may differ from commercial products.

2: Source: KIOXIA Corporation, as of February 24, 2022.

3: 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 the UFS device. 4: MIPI Alliance Specification for M-PHY

5: KIOXIA Corporation's previous generation 256GB device "THGJFGT1E45BAIP".

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

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  $1KB = 2^{10}$  bytes = 1,024 bytes. The definition of  $1Gb = 2^{30}$  bits = 1,073,741,824 bits. The definition of  $1GB = 2^{30}$  bytes = 1,073,741,824 bytes.  $1Tb = 2^{40}$  bits = 1,099,511,627,776 bits.

All company names, product names and service names may be trademarks of their respective 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 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.

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

# Contact details for editorial enquiries:

Lena Hoffmann, KIOXIA Europe GmbH Tel: +49 (0) 211 36877 382 E-mail: <u>lena1.hoffmann@kioxia.com</u>

### Issued by:

Birgit Schöniger, Publitek Tel: +49 (0)4181 968098-13 E-mail: <u>birgit.schoeniger@publitek.com</u> Web: <u>www.publitek.com</u>

Ref. KIE060\_EN\_A