KIOXIA delivers flash-based products for next-generation storage applications. Having invented NAND flash over 30 years ago, KIOXIA is now one of the world’s largest flash memory suppliers – and continues to move the technology forward.

WHAT IS UFS?

UFS (Universal Flash Storage) is a JEDEC-standard, non-volatile managed flash device. It was developed to be the high-performance replacement to e-MMC for embedded memory solutions.

FEATURES

When compared to e-MMC, UFS delivers:
- A faster interface
- Higher performance for reads and writes
- Higher density offerings
- Better power efficiency
- Support for full duplexing

PERFORMANCE

UFS version 3.1 supports 2.33GB/s

e-MMC version 5.1 supports 400MB/s

APPLICATIONS

- Smartphones
- AR/VR
- Tablets/2-in-1
- Automotive
- Streaming Media
- Smart Speakers
- Many others

The Global Universal Flash Storage Market size is expected to reach $14.2 billion by 2023

LEADING THE WAY FOR UFS

Mar. 2021
- Introduced the thinnest 1TB UFS offering available, at just 1.1mm thick.

Feb. 2020
- UFS Ver. 3.1 introduced

Jan. 2019
- First to sample UFS Ver. 3.0

Feb. 2013
- First to introduce UFS samples

Jun. 2007
- First to announce 3D flash memory technology

1987
- NAND flash memory invented

[1] Universal Flash Storage (UFS) is a product category for a class of embedded memory products built to the JEDEC UFS standard specification. JEDEC is a registered trademark of JEDEC Solid State Technology Association.

[2] Product density is identified based on the density of memory chip(s) within the Product, not the amount of memory that can be programmed or erased. Consumer-capable capacity will be less due to overhead data areas, formatting, bad blocks, and other constraints, and may vary based on the host device and application. For details, please refer to applicable product specifications. The definition of 1Gb = 2^30 bits = 1,073,741,824 bits. The definition of 1GB = 2^30 bytes = 1,073,741,824 bytes.


[5] Performance comparison is based on e-MMC v5.1 and UFS v3.1 JEDEC specifications. Read/write speed may vary depending on host device, read and write conditions, and file size.


[7] Source: KIOXIA Corporation survey, as of March 2, 2021