

KIOXIA

Embedded Flash Memory

RAW NAND

MANAGED NAND

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Leading Supplier and Inventor of Flash Memory

Silica wafers are formed from highly pure, nearly defect-free single crystalline material: the starting point for any integrated circuits.

INNOVATION IS OUR TRADITION

In 1984 Toshiba invented a new type of semiconductor memory called flash memory. Later in 1987, NAND flash memory was developed that raised electronic equipment to the next level. The NAND flash market has grown rapidly, with flash memory becoming an internationally standardised memory device. KIOXIA, the inventor of flash memory, has thus carved out a path to a new era in which innovations are increased by the opportunities of NAND flash.

Under its new name, KIOXIA keeps this invention and continues to provide embedded memory solutions. Embedded memory connects us with the things that surround and serve us – for more efficiency, comfort and sustainability.

SPEED UP DIGITAL PROCESSES

Storing and processing data has always been an important aspect of all digital processes. But in the last years it increased to one of the key technologies for industry 4.0, smart mobility, cloud technology and artificial intelligence, because smart ideas and innovations have to be ready for markets right away – with high reliability of storage components.

With our embedded memory solutions, KIOXIA is the partner for all smart markets and fast moving industries. KIOXIA provides a highly grade of innovation combined with highly reliable security – now and in the future.

PARTNERSHIP IS OUR PASSION

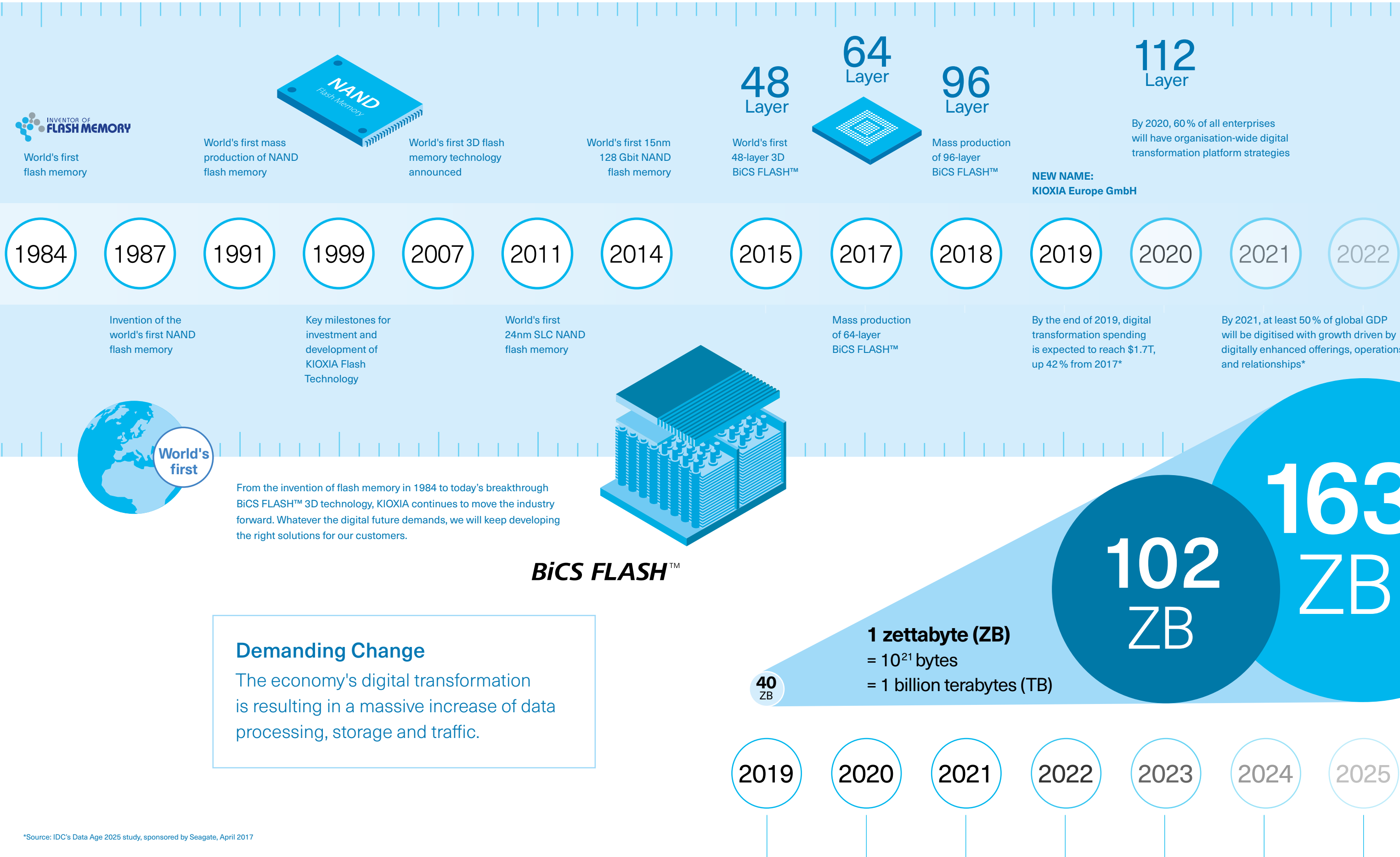
Our success is based on our strong customer focus: Your metrics are our metrics. The result is a broad range of industry-leading flash-based storage solutions. Our products are designed to meet your specific engineering demands.

**KIOXIA
EMBEDDED MEMORY –
THE KEY TO A
SMART FUTURE**

“With progressive memory technology at the core, we offer products, services, and systems that create choice and define the future.”



KIOXIA's Milestones



*Source: IDC's Data Age 2025 study, sponsored by Seagate, April 2017

Embedded Flash Memory

SLC NAND
BENAND™
Serial NAND

e-MMC
UFS

KIOXIA offers a wide range of advanced Flash Memory technology for all kind of applications like consumer electronics, mobile technology and industrial applications such as robotics.

NAND Flash Memory requires an appropriate management, which has to cover tasks like Bad Block Management, Wear Leveling, Garbage Collection and ECC Error Correction. Either these functions are supported by the host system in combination with raw NAND Memory, or it is covered instantly inside a managed NAND by utilizing an integrated memory controller.

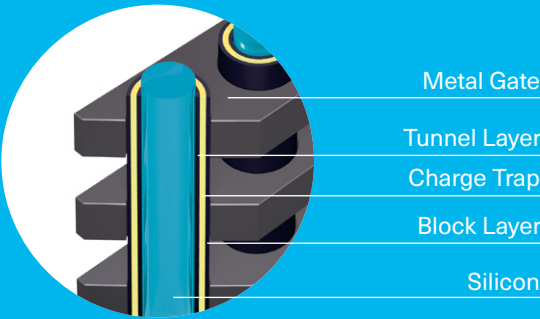
The selection between these basic different approaches to control a NAND memory defines the individual host requirements and interface options. For managed NAND there are JEDEC specified Standard-Interfaces supported, enabling the developer to easily design the required memory solution.

RAW NAND

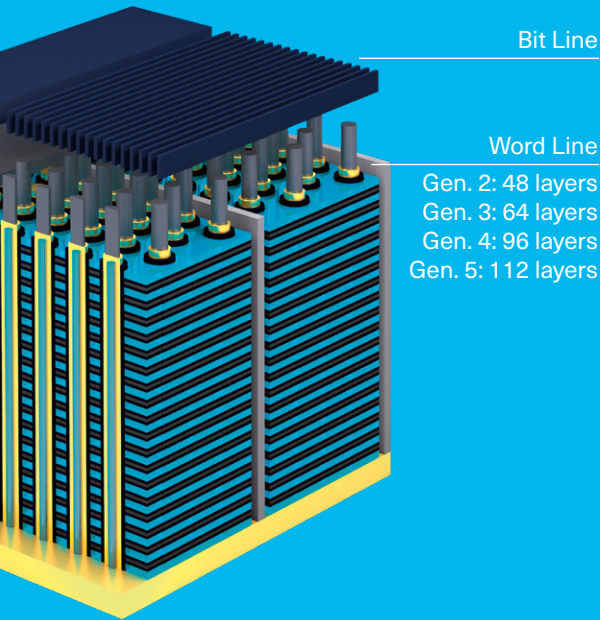
With raw NANDs like SLC NAND, BENAND™ and Serial NAND we provide high endurance and data retention for sensitive or frequently used data.

MANAGED NAND

For efficient and easy to integrate storage systems, managed NAND like e-MMC and UFS are the preferred solutions. Offering broadly accepted standard interfaces and packages, in combination with high speed interfaces, they are the optimal selection for many application in the industrial, mobile and automotive market.

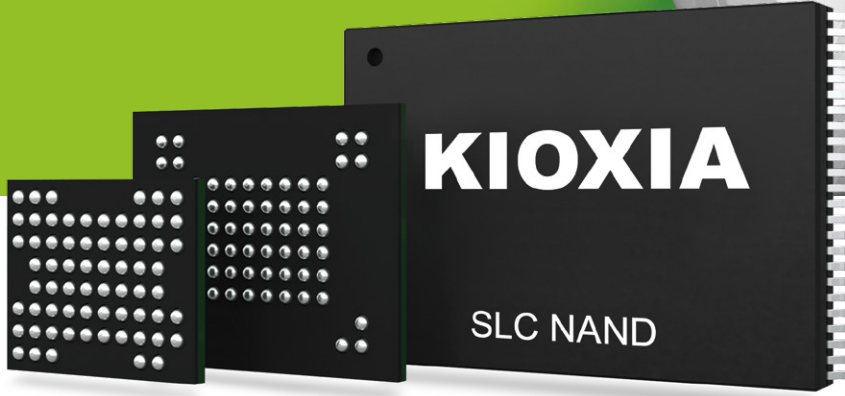


KIOXIA 3D-Technology BiCS FLASH™



Our BiCS FLASH™ technology with 64-, 96- and 112-layer stacking make a powerful memory solutions possible. It gives BiCS FLASH™ far higher die area density compared to 2D NAND. BiCS FLASH™ reduces the chip size by optimizing both circuit technology and the manufacturing process.

As a result, this technology can achieve similar reliability as 2D MLC (2bit/cell) while utilizing 3D TLC (3bit/cell) structure.



SLC NAND

Reliability and Performance

KIOXIA's advanced Flash Memory technology offers SLC NAND providing best in class endurance and data retention for sensitive or frequently used data in a system. For long lasting products or systems working with extremely high data throughput between the host and the memory, KIOXIA SLC is the optimal solution.

SPECIFICATIONS

FEATURES	SLC NAND
Density	1 Gbit – 128 Gbit
Technology	24nm
ECC (Error Correction Code)	Required on Host Side
Temperature	-40° C to 85° C 0° C to 70° C
Package	TSOP and BGA

CAPACITIES:

- 1 Gbit
- 2 Gbit
- 4 Gbit
- 8 Gbit
- 16 Gbit
- 32 Gbit
- 64 Gbit
- 128 Gbit

KEY FEATURES:

- 1 Gbit – 128 Gbit
- Extended temperature range
- TSOP and BGA package

ADVANTAGES

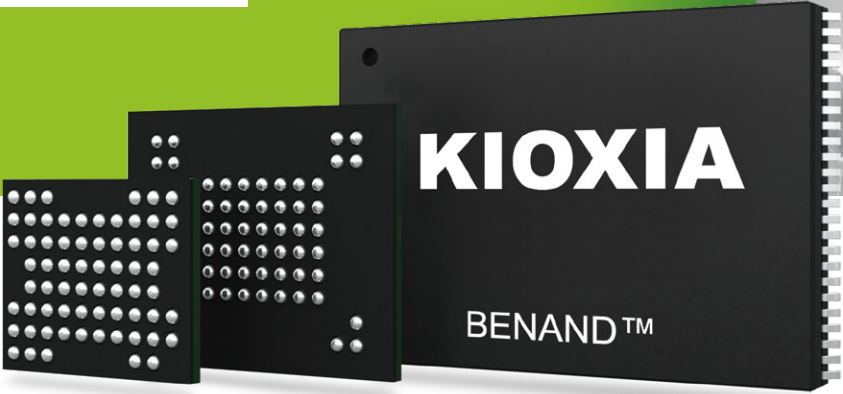
- Broad line up to cover customers' demands for different densities
- 24nm technology for cost optimisation
- Long data retention or high write/erase performance
- Small package variation available to reduce board space by 48 % (up to 8 Gbit)

APPLICATIONS:

- Industrial Applications
- Consumer Electronics
- Multimedia Applications
- Smart Metering & Intelligent Lighting
- Smart Applications



Product illustrations may present design models or previous versions. Actual product may vary.



BENAND™

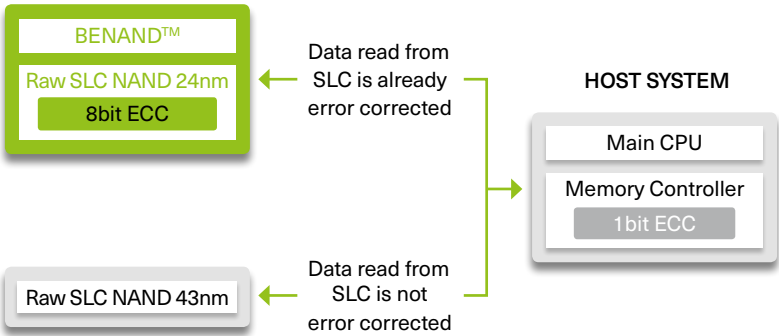
SLC NAND with embedded ECC

BENAND™ (Built-in ECC NAND) is a SLC NAND memory device which has an internal hardware ECC engine. Using BENAND™ it is possible for customers to use the 24nm SLC NAND flash memory technology even when their platform cannot support higher bit ECC.

SPECIFICATIONS

FEATURES	BENAND™ (SLC+ECC)
Density	1 Gbit – 8 Gbit
Technology	24nm
ECC (Error Correction Code)	Embedded on Memory Chip
Temperature	-40° C to 85° C 0° C to 70° C
Package	TSOP and BGA

BENAND™ – SLC WITH EMBEDDED ECC FOR BOM REDUCTION AND SYSTEM FLEXIBILITY



SERIAL NAND

SLC NAND with Serial Peripheral Interface (SPI)

KIOXIA's new line-up of 24nm-based Serial NAND flash memory products is compatible with the widely used Serial Peripheral Interface, giving users access to SLC NAND flash memory with a low pin count, small package and large capacity.

SPECIFICATIONS

FEATURES	SERIAL NAND
Density	1 Gbit – 8 Gbit
Technology	24nm
Interface	Quad-SPI (Serial Peripheral Interface)
ECC (Error Correction Code)	Embedded on Memory Chip
Temperature	-40° C to 85° C
Package	8 pin WSON

SERIAL NAND – SLC WITH ECC AND SPI



CAPACITIES:

- 1 Gbit
- 2 Gbit
- 4 Gbit
- 8 Gbit

KEY FEATURES:

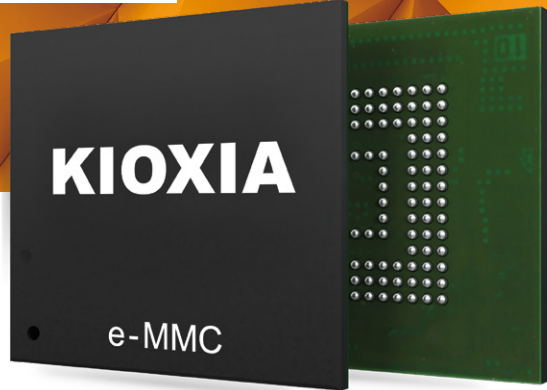
- 1 Gbit – 8 Gbit
- Compatible with SPI Standard
- Extended temperature range
- WSON package
- On-chip hardware ECC which can be turned off/on
- Unique Bit flip report function
- Data protection feature
- High speed sequential read mode
- SPI (x1, x2, x4) Mode 0, Mode 3

ADVANTAGES

- Broad line-up to cover customers' demands for different densities
- 24nm technology for cost optimization
- Long data retention or high write/erase performance
- Small package for reduced board space
- Standardised high-speed serial interface (SPI)
- No ECC operation is required on the host side

APPLICATIONS:

- Industrial Applications
- Consumer Electronics
- Multimedia Applications
- Smart Metering & Intelligent Lighting
- Smart Applications



e-MMC

Highly-efficient Storage

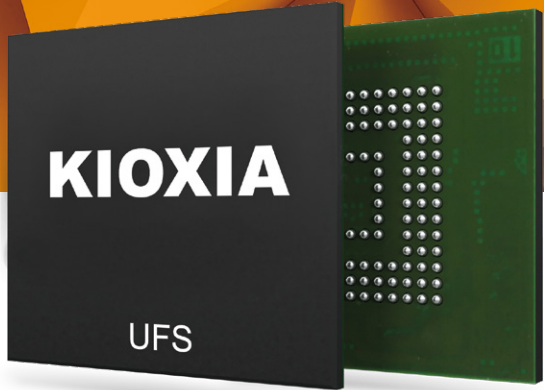
e-MMC is a family of advanced and highly efficient NAND flash memory with an integrated controller for enhanced memory management. Based on an interface standardised by JEDEC, KIOXIA's e-MMC offers the optimal solution for applications where higher data volumes need to be stored in an efficient way.

SPECIFICATIONS

FEATURES	e-MMC	EXTENDED TEMP. e-MMC
Density	4 GB – 128 GB	8 GB – 64 GB
Technology	15nm / BiCS FLASH™	15nm
JEDEC Version	5.0 / 5.1	5.1
Temperature	-25°C to 85°C	-40°C to 105°C
Package	153 ball FBGA (11.5 x 13 mm)	

e-MMC - NEW GENERATION WITH BiCS FLASH™

Utilizing the innovative BiCS FLASH™ technology in combination with the new Charge Trap cell structure, KIOXIA introduces the best-in-class family of reliable, easy to integrate, and efficient e-MMCs. These new e-MMCs (16 to 128 GB) represent an attractive alternative with superior price competitiveness, longevity, and higher performance.



UFS

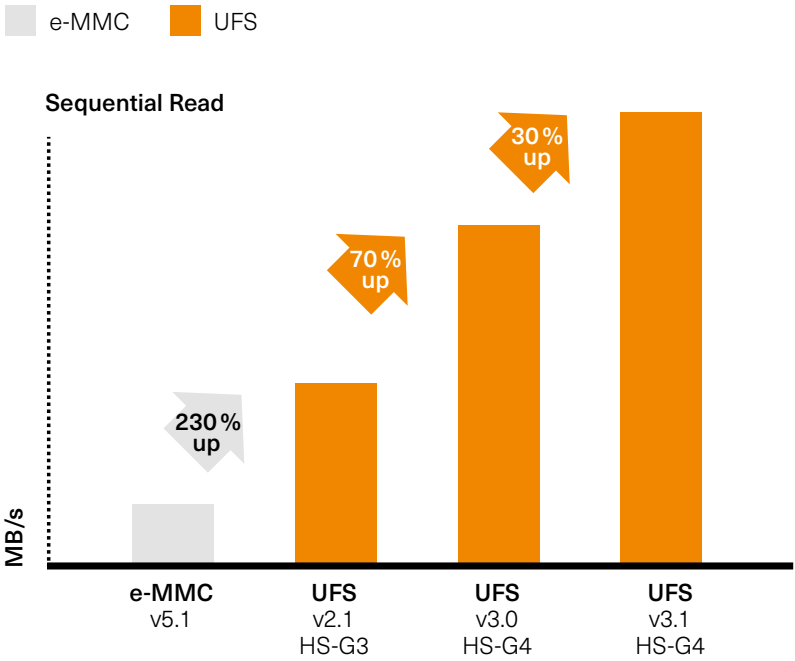
High Performance Storage

For applications demanding for superior interface performance, KIOXIA is offering a broad line-up of new UFS Memory products. Utilizing a full duplex serial high-speed interface, it is compliant with the latest UFS Version 2.1, 3.0 and 3.1. In combination with the embedded memory management, it offers a highly efficient and excellent performing storage solution. UFS memory with Version 3.1 enables next generation mobile devices to take full advantage of the connectivity benefits of 5G, leading to faster downloads and reduced lag time – and improved user experience.

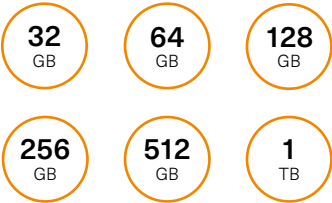
SPECIFICATIONS

FEATURES	UFS – UNIVERSAL FLASH STORAGE
Density	32 GB – 1 TB
Technology	BiCS FLASH™
JEDEC Version	2.1 / 3.0 / 3.1
Temperature	-25°C to 85°C
Package	153 ball FBGA (11.5 x 13 mm)

COMPARING THE PERFORMANCE:



CAPACITIES:



KEY FEATURES:

- 32 GB – 1 TB
- BiCS FLASH™
- 3D-TLC technology
- UFS Version 2.1 / 3.0 / 3.1
- Integrated memory management:
 - Error correction code
 - Bad block management
 - Wear-levelling
 - Garbage collection
- WriteBooster (Version 3.1): Enables significantly faster write speeds
- Standard temperature range up to 85°C
- FBGA package
- High Speed Serial interface

ADVANTAGES

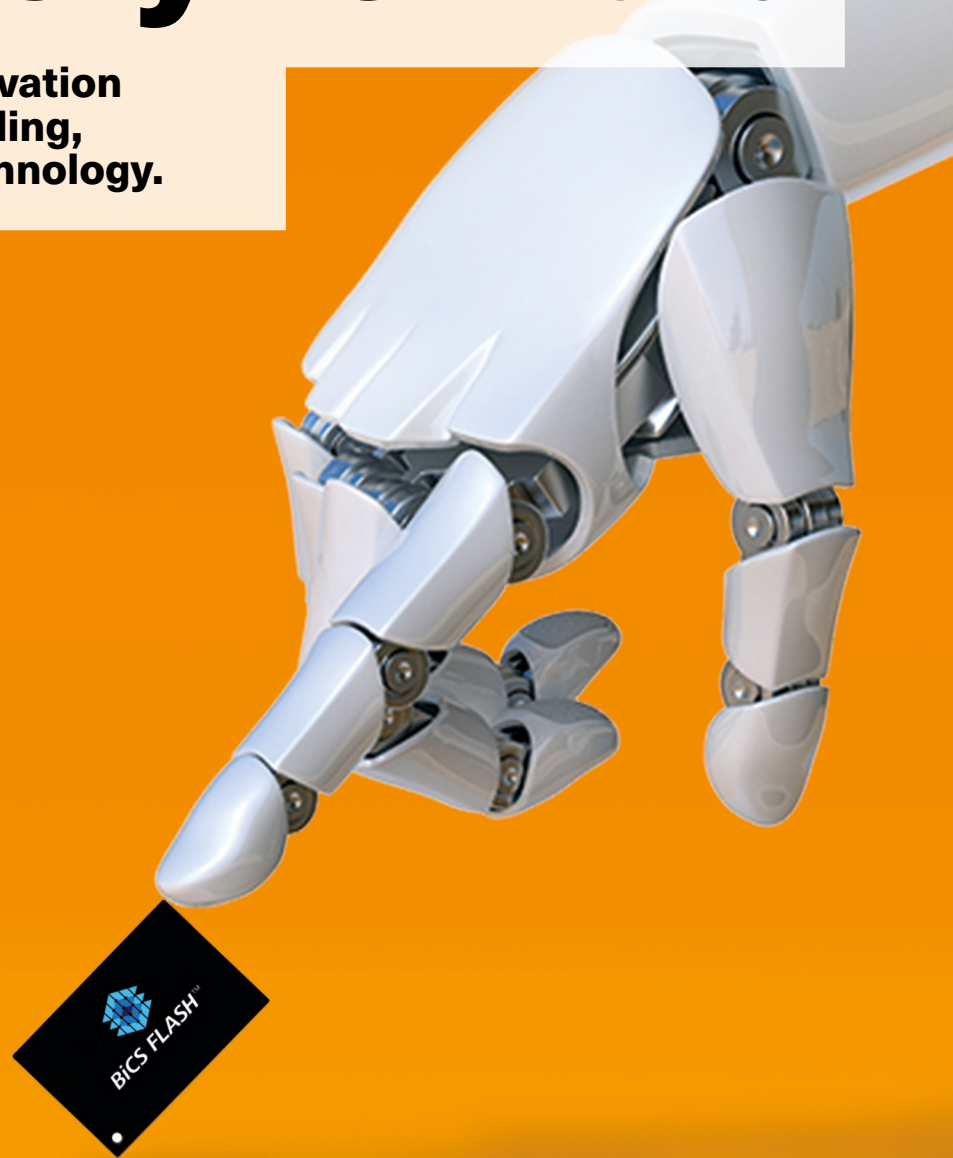
- High speed interface up to 1160 MB/sec / 2320 MB/sec
- Managed memory
- Package, interface, features, commands, etc. are standard
- Utilises high quality KIOXIA BiCS FLASH™ memory in combination with a KIOXIA origin developed controller

APPLICATIONS:

- Consumer Electronics
- Multimedia Applications
- Industrial Applications
- Smart Applications

Together, we move Memory Forward

Accelerating innovation
with industry-leading,
flash memory technology.

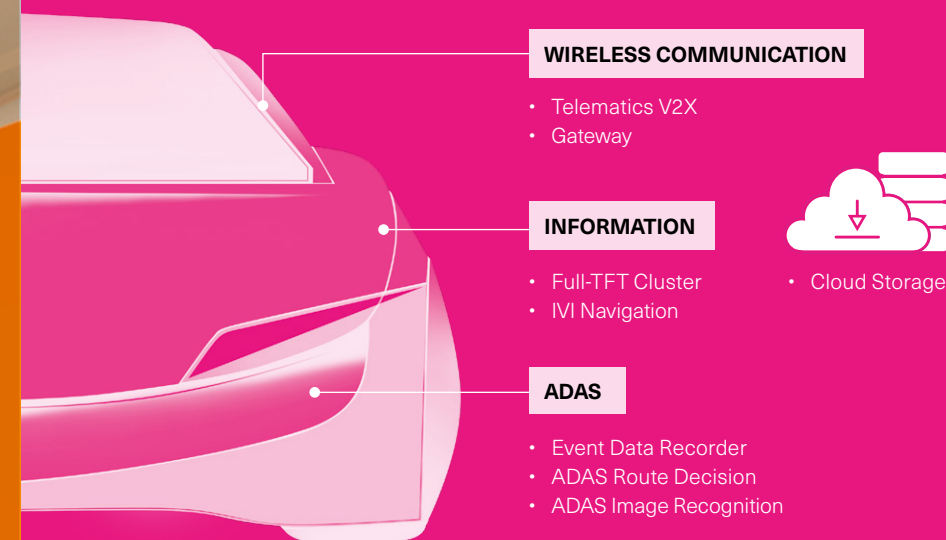
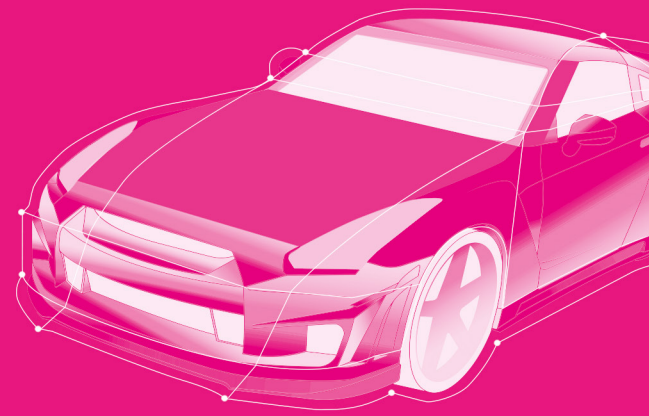


KIOXIA

e-MMC / UFS Automotive

e-MMC / UFS FOR AUTOMOTIVE DEMANDS

E-mobility, autonomous driving, higher demands on safety and sustainability – automotive industries are once more leading in innovation and technology. For these smart and connected vehicles, reliable storage solutions are mandatory. KIOXIA provides one of the key technologies for wireless communication, information systems and Advanced Driver Assistance Systems (ADAS).



KEY FEATURES:

- AEC-Q100 qualified
- Compliant with IATF16949
- Temperature range: Automotive Grade 2 (-40°C ~ +105°C)
- Confirms to eMMC 5.1 and UFS 2.1
- Highly reliable technology 15nm MLC and 3D-TLC
- Integrated memory management:
 - Error correction code
 - Bad block management
 - Wear-levelling
 - Garbage collection
- Automotive specific functions

e-MMC – AEC-Q100 GRADE 2

DENSITY	PART NUMBER	JEDEC VERSION	POWER SUPPLY VOLTAGE		TEMPERATURE	PACKAGE
			V _{cc} (V)	V _{ccq} (V)		
8 GB	THGBMJG6C1LBAB7	e-MMC 5.1	2.7 – 3.6	1.7 – 1.95 2.7 – 3.6	-40°C to 105°C	FBGA153
16 GB	THGBMJG7C2LBAB8					
32 GB	THGBMJG8C4LBAB8					
64 GB	THGBMJG9C8LBAB8					

UFS – AEC-Q100 GRADE 2

DENSITY	PART NUMBER	JEDEC VERSION	POWER SUPPLY VOLTAGE		TEMPERATURE	PACKAGE
			V _{cc} (V)	V _{ccq} (V)		
16 GB	THGAF9G7L1LBAB7	UFS 2.1	2.7 – 3.6	1.7 – 1.95	-40°C to 105°C	FBGA153
32 GB	THGAFBG8T13BAB7					
64 GB	THGAFBG9T23BAB8					
128 GB	THGAFT0T43BAB8					
256 GB	THGAFT1T83BAB5					
512 GB	THGAFT2T83BAB1					FBGA169

Product List

SLC NAND

DENSITY	PART NUMBER	TECHN.	PAGE SIZE	VCC	ECC	TEMPERATURE	PACKAGE
1 Gbit	TC58NVG0S3HTA00	24nm	(2048+128) x 8 bit	3.3V	8bit/512B	0°C to 70°C	48TSOP 12 x 20
	TC58NYG0S3HBAI4		(2048+128) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58NVG0S3HTAI0		(2048+128) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TC58NVG0S3HBAI4		(2048+128) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58NYG0S3HBAI6		(2048+128) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TC58NVG0S3HBAI6		(2048+128) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
2 Gbit	TC58NVG1S3HTA00	24nm	(2048+128) x 8 bit	3.3V	8bit/512B	0°C to 70°C	48TSOP 12 x 20
	TC58NYG1S3HBAI4		(2048+128) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58NVG1S3HTAI0		(2048+128) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TC58NVG1S3HBAI4		(2048+128) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58NYG1S3HBAI6		(2048+128) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TC58NVG1S3HBAI6		(2048+128) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
4 Gbit	TH58NVG2S3HTA00	24nm	(2048+128) x 8 bit	3.3V	8bit/512B	0°C to 70°C	48TSOP 12 x 20
	TC58NVG2S0HTA00		(4096+256) x 8 bit	3.3V		0°C to 70°C	48TSOP 12 x 20
	TC58NVG2S0HTAI0		(4096+256) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58NVG2S3HTAI0		(2048+128) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58NVG2S3HBAI4		(2048+128) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TH58NYG2S3HBAI4		(2048+128) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58NVG2S0HBAI4		(4096+256) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58NYG2S0HBAI4		(4096+256) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58NVG2S0HBAI6		(4096+256) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
	TC58NYG2S0HBAI6		(4096+256) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
8 Gbit	TH58NVG3S0HTA00	24nm	(4096+256) x 8 bit	3.3V	8bit/512B	0°C to 70°C	48TSOP 12 x 20
	TH58NVG3S0HBAI4		(4096+256) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TH58NYG3S0HBAI4		(4096+256) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TH58NVG3S0HTAI0		(4096+256) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58NVG3S0HBAI6		(4096+256) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
	TH58NYG3S0HBAI6		(4096+256) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
16 Gbit	TH58NVG4S0HTA20	24nm	(4096+256) x 8 bit	3.3V	8bit/512B	0°C to 70°C	48TSOP 12 x 20
	TH58NVG4S0HTAK0		(4096+256) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
32 Gbit	TC58NVG5H2HTA00	24nm	(8192+1024) x 8 bit	3.3V	24bit/1024B	0°C to 70°C	48TSOP 12 x 20
	TC58NVG5H2HTAI0		(8192+1024) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
64 Gbit	TH58NVG6H2HTAK0	24nm	(8192+1024) x 8 bit	3.3V	24bit/1024B	-40°C to 85°C	48TSOP 12 x 20
	TH58NVG6H2HTA20		(8192+1024) x 8 bit	3.3V		0°C to 70°C	48TSOP 12 x 20
128 Gbit	TH58NVG7H2HTAK0	24nm	(8192+1024) x 8 bit	3.3V	24bit/1024B	-40°C to 85°C	48TSOP 12 x 20
	TH58NVG7H2HTA20		(8192+1024) x 8 bit	3.3V		0°C to 70°C	48TSOP 12 x 20

SERIAL NAND

DENSITY	PART NUMBER	PAGE SIZE	VCC	TEMPERATURE	PACKAGE
1 Gbit	TC58CVG0S3HRAIJ	(2048+64) x 8 bit	3.3V	-40° C to 85° C	8WSON 6x8
	TC58CYG0S3HRAIJ		1.8V		
2 Gbit	TC58CVG1S3HRAIJ	(2048+64) x 8 bit	3.3V	-40° C to 85° C	8WSON 6x8
	TC58CYG1S3HRAIJ		1.8V		
4 Gbit	TC58CVG2S0HRAIJ	(4096+128) x 8 bit	3.3V	-40° C to 85° C	8WSON 6x8
	TC58CYG2S0HRAIJ		1.8V		
8 Gbit	TH58CVG3S0HRAIJ	(4096+128) x 8 bit	3.3V	-40° C to 85° C	8WSON 6x8
	TH58CYG3S0HRAIJ		1.8V		

Product List

BENAND™

DENSITY	PART NUMBER	TECHN.	PAGE SIZE	VCC	ECC	TEMPERATURE	PACKAGE
1 Gbit	TC58BVG0S3HTA00	24nm	(2048+64) x 8 bit	3.3V	internal ECC	0°C to 70°C	48TSOP 12 x 20
	TC58BYG0S3HBAI4		(2048+64) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58BVG0S3HTAI0		(2048+64) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TC58BVG0S3HBAI4		(2048+64) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58BYG0S3HBAI6		(2048+64) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TC58BVG0S3HBAI6		(2048+64) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
2 Gbit	TC58BVG1S3HTA00	24nm	(2048+64) x 8 bit	3.3V	internal ECC	0°C to 70°C	48TSOP 12 x 20
	TC58BYG1S3HBAI4		(2048+64) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58BVG1S3HTAI0		(2048+64) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TC58BVG1S3HBAI4		(2048+64) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58BYG1S3HBAI6		(2048+64) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TC58BVG1S3HBAI6		(2048+64) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
4 Gbit	TH58BVG2S3HTA00	24nm	(2048+64) x 8 bit	3.3V	internal ECC	0°C to 70°C	48TSOP 12 x 20
	TC58BVG2S0HTA00		(4096+128) x 8 bit	3.3V		0°C to 70°C	48TSOP 12 x 20
	TC58BVG2S0HTAI0		(4096+128) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58BVG2S3HTAI0		(2048+64) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58BVG2S3HBAI4		(2048+64) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TH58BYG2S3HBAI4		(2048+64) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58BVG2S0HBAI4		(4096+128) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TC58BYG2S0HBAI4		(4096+128) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TC58BVG2S0HBAI6		(4096+128) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
	TC58BYG2S0HBAI6		(4096+128) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TH58BYG2S3HBAI6		(2048+64) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
8 Gbit	TH58BVG3S0HTA00	24nm	(4096+128) x 8 bit	3.3V	internal ECC	0°C to 70°C	48TSOP 12 x 20
	TH58BYG3S0HBAI4		(4096+128) x 8 bit	1.8V		-40°C to 85°C	63BGA 9 x 11
	TH58BVG3S0HTAI0		(4096+128) x 8 bit	3.3V		-40°C to 85°C	48TSOP 12 x 20
	TH58BVG3S0HBAI4		(4096+128) x 8 bit	3.3V		-40°C to 85°C	63BGA 9 x 11
	TH58BVG3S0HBAI6		(4096+128) x 8 bit	3.3V		-40°C to 85°C	67BGA 6.5 x 8
	TH58BYG3S0HBAI6		(4096+128) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8
	TH58BYG3S0HBAI6		(4096+128) x 8 bit	1.8V		-40°C to 85°C	67BGA 6.5 x 8

e-MMC

DENSITY	PART NUMBER	TECHN.	JEDEC VERSION	TEMPERATURE	PACKAGE
4 GB	THGBMNG5D1LBAIT	2D MLC	e-MMC 5.0	-25°C to 85°C	153FBGA 11 x 10
	THGBMNG5D1BAIL			-25°C to 85°C	153FBGA 11.5 x 13
8 GB	THGBMJG6C1LBAIL	2D MLC	e-MMC 5.1	-25°C to 85°C	153FBGA 11.5 x 13
	THGBMJG6C1LBAU7			-40°C to 105°C	153FBGA 11.5 x 13
16 GB	THGBMJG7C1LBAIL	2D MLC	e-MMC 5.1	-25°C to 85°C	153FBGA 11.5 x 13
	THGBMJG7C2LBAU8			-40°C to 105°C	153FBGA 11.5 x 13
	THGAMRG7T13BAIL	3D TLC		-25°C to 85°C	153FBGA 11.5 x 13
32 GB	THGBMJG8C2LBAIL	2D MLC	e-MMC 5.1	-25°C to 85°C	153FBGA 11.5 x 13
	THGBMJG8C4LBAU8			-40°C to 105°C	153FBGA 11.5 x 13
	THGAMRG8T13BAIL	3D TLC		-25°C to 85°C	153FBGA 11.5 x 13
64 GB	THGBMJG9C8LBAU8	2D MLC	e-MMC 5.1	-40°C to 105°C	153FBGA 11.5 x 13
	THGAMRG9T23BAIL			-25°C to 85°C	153FBGA 11.5 x 13
128 GB	THGAMRT0T43BAIR	3D TLC	e-MMC 5.1	-25°C to 85°C	153FBGA 11.5 x 13

UFS

DENSITY	PART NUMBER	TECHNOLOGY	JEDEC VERSION	TEMPERATURE	PACKAGE
32 GB	THGAF8G8T23BAIL	3D TLC	UFS 2.1	-25°C to 85°C	153FBGA 11.5 x 13
64 GB	THGAF8G9T43BAIR	3D TLC	UFS 2.1	-25°C to 85°C	153FBGA 11.5 x 13
128 GB	THGAF8T0T43BAIR	3D TLC	UFS 2.1	-25°C to 85°C	153FBGA 11.5 x 13
	THGJFAT0T44BAIL		UFS 3.1		
256 GB	THGAF8T1T83BAIR	3D TLC	UFS 2.1	-25°C to 85°C	153FBGA 11.5 x 13
	THGJFAT1T84BAIR		UFS 3.1		
512 GB	THGJFAT2T84BAIR	3D TLC	UFS 3.1	-25°C to 85°C	153FBGA 11.5 x 13

KIOXIA

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