TOSHIBA
Leading Innovation >>>

NAND FLASH MEMORY

e•MMC™
Cost Effective Mass Storage

e·MMC™ is a family of advanced and highly efficient NAND flash memory with an integrated controller and enhanced memory management. Based on an interface standardized by JEDEC, Toshiba's e·MMC™ offers the optimal solution for applications where higher data volume needs to be stored in a cost efficient way. It is fully compliant with the Multimedia Card Association (MMCA) high speed memory interface standard.
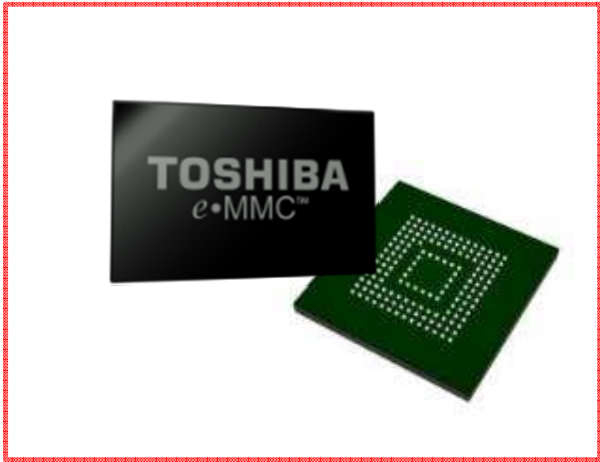
> APPLICATIONS

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

INVENTOR OF FLASH MEMORY

> FEATURES

- 4GByte – 64GByte
- 19nm and new advanced A19nm
- Multi level cell architecture
- Conforms to the latest JEDEC Version 4.5 and 5.0
- Integrated memory management
  - Error correction code
  - Bad block management
  - Wear-leveling
  - Garbage collection
- Standard and extended temperature range
- FBGA package

> ADVANTAGES

- Higher Interface speed according to JEDEC 5.0
  - Read Speed up to 275MB/s
  - Write Speed up to 90MB/s
- Managed memory
- Package, interface, features, commands etc. are standard
- Utilizing high quality Toshiba MLC NAND flash memory in combination with a Toshiba origin developed controller
- Produced in the world's largest, leading edge technology flash factory

> BENEFITS

- Easy to integrate storage solution due to established standards
- Cost efficient design in
- Optimal relation between price, density and performance
- Reliable storage solution based on high quality MLC memory and optimized controller
- Extended production capacity to fulfil customers demand

> SPECIFICATIONS

Product / Features	e·MMC™	Extended Temp. e·MMC™
Density	4GByte – 64GByte	4GByte – 32GByte
Technology	A19nm	19nm
JEDEC Version	5.0	4.5
Temperature	-25°C to +85°C	-40°C to +85°C
Package	FBGA	

❯ e・MMC™ – PRODUCT LIST

Density	Item Name	Technology	JEDEC Standard	Temperature	Package
4GByte	THGBMBG5D1KBAIT	A19nm	JEDEC 5.0	-25°C to 85°C	153FBGA 11x10
	THGBMAG5A1JBAWR	19nm	JEDEC 4.5	-40°C to 85°C	153FBGA 11.5x13
8GByte	THGBMBG6D1KBAIL	A19nm	JEDEC 5.0	-25°C to 85°C	153FBGA 11.5x13
	THGBMAG6A2JBAWR	19nm	JEDEC 4.5	-40°C to 85°C	153FBGA 11.5x13
16GByte	THGBMBG7D2KBAIL	A19nm	JEDEC 5.0	-25°C to 85°C	153FBGA 11.5x13
	THGBMAG7B2JBAWM	19nm	JEDEC 4.5	-40°C to 85°C	169FBGA 12x16
32GByte	THGBMBG8D4KBAIR	A19nm	JEDEC 5.0	-25°C to 85°C	153FBGA 11.5x13
	THGBMAG8B4JBAWM	19nm	JEDEC 4.5	-40°C to 85°C	169FBGA 12x16
64GByte	THGBMBG9D8KBAIG	A19nm	JEDEC 5.0	-25°C to 85°C	153FBGA 11.5x13

*Valid Q22014

❯ e・MMC™ – ENHANCED USER DATA AREA

Toshiba e·MMC™ products support the JEDEC compliant "Enhanced User Data Area", also called "Pseudo-SLC". For applications requiring a part of the memory to perform with higher write/erase cycles than MLC NAND, e·MMC™ provides the option to build a partition which offers "pseudo-SLC" performance. The normal MLC mode can be changed to the more reliable "pseudo SLC" mode.

❯ INNOVATION IS OUR TRADITION: FLASH MEMORY AND MORE

In 1984, Toshiba developed a new type of semiconductor memory called flash memory, leading the industry into the next generation ahead of its competitors.

Some time later in 1987, NAND flash memory was developed, and this has since been used in a variety of memory cards and electronic equipments. The NAND flash market has grown rapidly, with flash memory becoming an internationally standardized memory device. Toshiba, the inventor of flash memory, has carved out a path to a new era in which we are all able to carry videos, music and data with us wherever we go.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for toshiba *manufacturer:*

Other Similar products are found below :

TLP250(F) TC7W125FU(TE12L,F) TC7SBL384CFU,LF TLP183(GB,E 431392HB EMPP008Z TC58DVM92A5TA00 TLP291(TP,E) TLP705A(F) TLP5214(D4-TP,E TLP591B(C,F) 2SA1943N(S1,E,S) TLP5754(D4-TP,E TLP352(LF1,F) TLP2409(F) TLP109(TPR,E) TC4013BP(N,F TCK112G,LF TLP184(GB-TPL,E(O TLP185(GR-TPL,E(O TLP108 VFNC3S-2015PL VFS15-4007PL-W TLP7820(D4-A,E TPH4R10ANL,L1Q SSM3J35AMFV,L3F THRIVECOVER 1SS392(TE85L,F) TCK22971G,LF TK28A65W,S5X TK6A80E,S4X 058399HB TORX177F,T TK31A60W,S4VX TLP190B(U,C,F) VFS15S-2015PL-W TK39N60W5,S1VF TLP2362(E) 74VHC125FT TLP759(LF1,J,F) TLP5754(D4,E TLP4026G(F) TK8A65W,S5X TC7W14FUTE12LF TB6568KQ(O,8) TLP2662(F) 74HC138D SW89CN0-ZCC THGAF8T1T83BAIR SSM3K345R,LF