

e•MMC —

the perfect storage solution for mobile and embedded applications

Overview

Kingston's wide-temp $e \cdot \text{MMC}$ product offers JEDEC $e \cdot \text{MMC}$ 4.5 features and backward compatibility to previous $e \cdot \text{MMC}$ standards. It has all of the advantages of standard $e \cdot \text{MMC}$ and the operating temperature range of the device meets industrial operating temperature requirements (-40°C~85°C), making it an ideal storage solution for harsh outdoor environment applications.

Key Benefits

- Simplifies the system design and reduces the time to market. The standard interface makes the fast-changing NAND technology invisible to the host. The host processor doesn't have to keep changing its software to accommodate every NAND technology change and variation. This helps to significantly reduce the design-in complexity and shorten the qualification cycle.
- Helps to improve the whole system performance. The *e*•MMC controller frees up the host processor's valuable resources from NAND management, so the host processor can use its processing power on other tasks.
- Provides a cost-effective solution. As opposed to SLC NAND, *e*•MMC uses MLC NAND. It makes higher capacity storage in mobile devices much more affordable and enables today's mobile devices to meet the increasing storage need.
- Support industrial operating temperature range (-40°C~85°C)

Part Numbers and Specifications

Part Number	Capacity	19nm Description	e•MMC Standard	Package	Category
KE4CN2H5C	4GB	Industrial Operating Temperature Range e•MMC 4.5 153B 4GB	4.5	11.5x13x1.0	l-temp
KE4CN3H5C	8GB	Industrial Operating Temperature Range e•MMC 4.5 153B 8GB	4.5	11.5x13x1.0	l-temp
KE4CN3K6C	8GB	Industrial Operating Temperature Range e•MMC 4.5 169B 8GB	4.5	12x16x1.0	l-temp
KE4CN4A5C	16GB	Industrial Operating Temperature Range e•MMC 4.5 153B 16GB	4.5	11.5x13x1.2	l-temp
KE4CN4K6C	16GB	Industrial Operating Temperature Range e•MMC 4.5 169B 16GB	4.5	12x16x1.0	l-temp
KE4CN5B6C	32GB	Industrial Operating Temperature Range e•MMC 4.5 169B 32GB	4.5	12x16x1.2	l-temp
KE4CN6C6C	64GB	Industrial Operating Temperature Range e•MMC 4.5 169B 64GB	4.5	12x16x1.4	l-temp

Key Features

Features	e•MMC 4.5
Boot operation	√
Partitioning	√
Sleep mode	√
Replay protected memory block	√
Secure Trim	√
Hardware reset	√
Enhanced reliable write	√
Background operation	√
High prioritiy interrupt	√
DDR interface	√
Discard CMD	√
Sanitize CMD	√
Packed commands	√
Context IDs	√
Power off notification	√
Data Tag	√
RTC	√
HS200	√

For more information, please visit kingston.com/emmc



