

I-Temp e•MMC —

the perfect storage solution for mobile and embedded applications

Overview

Kingston I-Temp $e ext{-}MMC^{TM}$ Flash memory offers JEDEC $e ext{-}MMC5.0$ features and is backward compatible to earlier $e ext{-}MMC$ standards. It has all the advantages of standard $e ext{-}MMC$ plus the operating temperature range of the device meets industrial operating temperature requirements (-40°C \sim +85°C), which make it an ideal storage solution for outdoor and harsh environment applications.

Key Benefits

- Simplifies system design and reduces time to market. The standard interface makes fast-changing NAND technology invisible to the host and 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 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 so it makes higher capacity storage in mobile devices much more affordable and enables today's mobile devices to meet increasing demands for storage.
- Supports industrial operating temperature range (-40°C~+85°C)

A19 I-Temp e•MMC Part Numbers and Specifications

Part Number	Capacity	19nm Description	e•MMC Standard	Package	Category
EMMC04G-W100	4GB	Industrial Operating Temperature eMMC 5.0 (HS200) 153B 4GB	5.0 (HS200)	11.5x13x1.0	I-Temp
EMMC08G-W100	8GB	Industrial Operating Temperature eMMC 5.0 (HS200) 153B 8GB	5.0 (HS200)	11.5x13x1.0	I-Temp
EMMC16G-W110	16GB	Industrial Operating Temperature eMMC 5.0 (HS200) 153B 16GB	5.0 (HS200)	11.5x13x1.0	I-Temp
EMMC32G-W100	32GB	Industrial Operating Temperature eMMC 5.0 (HS200) 153B 32GB	5.0 (HS200)	11.5x13x1.0	I-Temp
EMMC64G-W100	64GB	Industrial Operating Temperature eMMC 5.0 (HS400) 153B 64GB	5.0 (HS400)	11.5x13x1.4	I-Temp

For more information, please visit kingston.com/emmc

Key Features

JEDEC Standard Features	e•MMC 5.0
Boot Operation	√
Partitioning	√
Sleep Mode	√
Replay Protected Memory Block	√
Secure Trim/Secure Erase	√
Hardware Reset	√
Reliable Write	√
Background Operation	√
High Priority Interrupt	√
DDR Interface	√
Discard/Sanitize CMD	√
Packed Commands, Context IDs	√
Power OFF Notification	√
Data Tag	√
Device Health Report	√
Field FW Update	√
Production State Awareness	√



