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Automotive-Temp eMMC

The perfect storage solution for extended higher temperature embedded applications

Kingston Automotive-Temp eMMC is designed to meet the needs of embedded applications that requires extended operating temperature range. It offers JEDEC eMMC 5.1 features and is backward compatible to earlier eMMC standards. It has all the advantages of standard eMMC plus the operating temperature range of the device is -40℃~+105℃, which make it an ideal memory solution for harsh environment, outdoor signage, surveillance, factory automation, transportation, server, touchscreen kiosks and other embedded applications that have extreme environmental conditions.

KEY BENEFITS

• Supports Automotive operating temperature range (-40°C~+105°C).

• 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.

• Short lead times – Availability regardless of market conditions

• Stable, proven & mature die process – One time qualification (no more die revisions)

• Compatibility - All major embedded SOC's (System on a chip) that support eMMC 5.1 standard

• Kingston brand - Recognized globally for quality, reliability, service and support

MARKET SEGMENTS

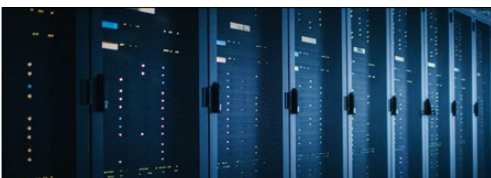Infotainment embedded applications

Outdoor applications: signage/kiosks/
solar inverters/chargers

Industrial IoT / Robotics & Factory Automation

High-Definition Video, Conference, and
Surveillance Systems

Data Center Servers

AUTOMOTIVE-TEMP *e*MMC PART NUMBERS AND SPECIFICATIONS

Part Number	Capacity	eMMC Standard	Package	NAND	Operating Temperature
EMMC04G-AR0A	4GB	5.1 (HS400)	11.5x13x1.0	MLC	-40ºC ~ +105ºC
EMMC08G-AR0A	8GB	5.1 (HS400)	11.5x13x1.0	MLC	-40ºC ~ +105ºC

KEY FEATURES

JEDEC Standard Features	eMMC 5.0	eMMC 5.1
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	√	√
CMD Queuing		√
Backward Compatibility	√	√

Learn more about the different eMMC versions:

eMMC 5.0: http://www.jedec.org/sites/default/files/docs/JESD84-B50.pdf

eMMC 5.1: http://www.jedec.org/sites/default/files/docs/JESD84-B51.pdf

For more information, including sample and quote requests, please visit kingston.com/emmc.

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