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 require an extended operating temperature range. It offers JEDEC eMMC 5.1 features and is backwards compatible to earlier eMMC standards. It has all the advantages of standard eMMC, plus the operating temperature range of the device is -40°C~+105°C, which makes it an ideal memory solution for harsh environments, outdoor signage, surveillance, factory automation, transportation, servers, touchscreen kiosks and other embedded applications subject to 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 SOCs (systems on a chip) that support eMMC 5.1 standard
- Kingston brand - Recognised globally for quality, reliability, service and support

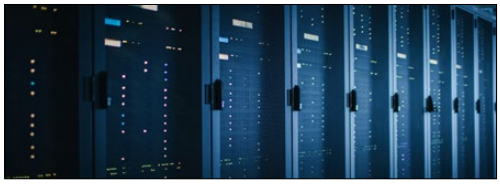
MARKET SEGMENTS

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	-40°C ~ +105°C
EMMC08G-AR0A	8GB	5.1 (HS400)	11.5x13x1.0	MLC	-40°C ~ +105°C

KEY FEATURES

JEDEC standard features	*e*MMC 5.0	*e*MMC 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/Sanitise CMD	√	√
Packed commands, context IDs	√	√
Power OFF notification	√	√
Data tag	√	√
Device health report	√	√
Field FW update	√	√
Production state awareness	√	√
CMD queuing		√
Backwards 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.