

Lexar

ENTERPRISE

AEC-Q100 Grade 2/3 Automotive eMMC 5.1 Product Brief



Capacities

**4GB, 8GB, 16GB,
32GB, 64GB, 128GB**

Advanced Features

- eMMC 5.1 specification
- HS400, HS200 performance modes
- Complies with AEC-Q100 standard (Grade 2, Grade 3)
- Meets industrial/automotive grade operating environment requirements
- Customizable firmware

Applications



**Dash Cams & In-Vehicle
DVRs**



**Advanced Driver
Assistance Systems (ADAS)**



Infotainment



**Streaming Rear-View
Mirrors**



Central Control Navigation



Vehicle Charging Stations

Essential Memory Solutions for Automotive Use

As data storage requirements for the automobile industry surge, accessible local data helps power things like predictive maintenance, over-the-air (OTA) updates, enhanced infotainment systems, and more. Designed to improve driver safety, advanced driver-assistance systems (ADAS) also have extensive requirements, which need solutions that meet their stringent standards. With Lexar Enterprise Automotive eMMC, you get a precision-crafted solution built to meet demanding environments and uses with superior efficiency, streamlined integration, and lasting endurance.

Key Benefits

Robust Durability and Reliability

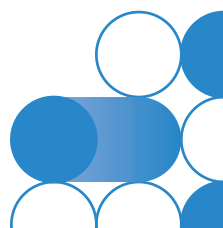
Tailored to function seamlessly in the extreme temperature variations typical of automotive conditions, our Automotive eMMC provides high reliability and prolonged service life. This translates to reduced downtime and lower maintenance costs, boosting your operational productivity.

Industry-Leading Endurance

Featuring a mean time between failures (MTBF) that surpasses 20 million hours, our eMMC leads in endurance, ensuring smooth operation over extended periods. This reliability makes our eMMC a cost-effective choice throughout the product's lifecycle.

Enhanced Performance and Easy Integration

Our eMMC not only delivers robust read/write capabilities and reliable performance but also facilitates easier SoC or AP development. This advantage minimizes development hurdles and accelerates your product's time-to-market, helping you maintain a competitive edge. It is important to ensure platform compatibility by referencing the SoC Approved Vendor List (AVL).



AEC-Q100 Automotive Grade 2

| Part Number | Capacity | NAND Flash | Package | Operating Temperature | Protocol | Operating Voltage | Size (mm) |
|-------------------------|----------|------------|---------|-----------------------|----------|------------------------------|----------------|
| FEMDME004G-A8A39 | 4GB | pSLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDME008G-A8A39 | 8GB | MLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDME008G-A8A43 | 8GB | pSLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDME016G-A8A43 | 16GB | MLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDME032G-D8A43 | 32GB | MLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.2 mm |
| FEMDME064G-D8H09 | 64GB | TLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDME128G-D8H09 | 128GB | TLC | BGA153 | -40°C to +105°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.2 mm |

AEC-Q100 Automotive Grade 3

| Part Number | Capacity | NAND Flash | Package | Operating Temperature | Protocol | Operating Voltage | Size (mm) |
|-------------------------|----------|------------|---------|-----------------------|----------|------------------------------|----------------|
| FEMDMW008G-88A39 | 8GB | MLC | BGA153 | -40°C to +85°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDMW016G-88A43 | 16GB | MLC | BGA153 | -40°C to +85°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDMW032G-88A19 | 32GB | TLC | BGA153 | -40°C to +85°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDMW064G-88A19 | 64GB | TLC | BGA153 | -40°C to +85°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.0 mm |
| FEMDMW128G-88A19 | 128GB | TLC | BGA153 | -40°C to +85°C | eMMC 5.1 | VCC 3.3V VCCQ 1.8V / 3.3V | 11.5x13x1.2 mm |

*Data based on internal testing. Actual performance may vary due to equipment differences.

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