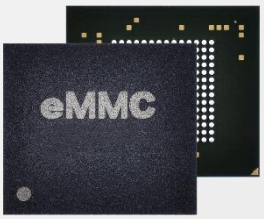
Apacer

The Most **Reliable** Storage For Industries

EM120-eMMC



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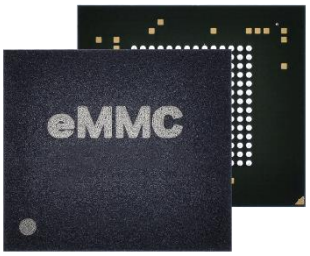
EM120-eMMC

Overview



Apacer EM120-eMMC is an embedded, non-volatile memory system that combines multi-level cell (MLC) NAND flash memory with an onboard eMMC controller, supporting the JEDEC Standard eMMC 5.1 interface. The integrated eMMC controller directly manages NAND flash media, freeing the host processor from various tasks, including ECC, wear-leveling, IOPS optimization, and read sensing.

EM120-eMMC serves as the ideal storage solution for a wide range of commercial applications, including digital TVs, set-top boxes, home automation, camera drones, body-worn cameras, AR/VR systems, wearable gadgets, electronic learning products, and more./ OR industrial applications, including embedded systems, factory automation, networking, transportation, aerospace and defense, surveillance, medical equipment, and more. Its compact BGA package sizes and minimal power consumption render eMMC an affordable and efficient memory solution for mobile and embedded products.

Offering capacities ranging from 8GB within a JEDEC-compatible form factor, EM120-eMMC provides an excellent solution for vendors looking for seamless integration, a quick market entry, and ample storage capacity.

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Feature

- Variable clock frequencies of 0-200MHz
- Ten-wire bus interface with a hardware reset
- Supports three different data bus widths: 1 bit (default), 4 bits, and 8 bits
- Internal error correction code (ECC)
- Internal enhanced data management algorithm
- Power-loss data protection during programming operations.
- Secure bad block erase commands
- Enhanced write protection with permanent and partial options.
- Field firmware update (FFU)
- Device Health Report
- Pre EOL information
- Optimal size
- Production state awareness
- Power-off notification for sleep

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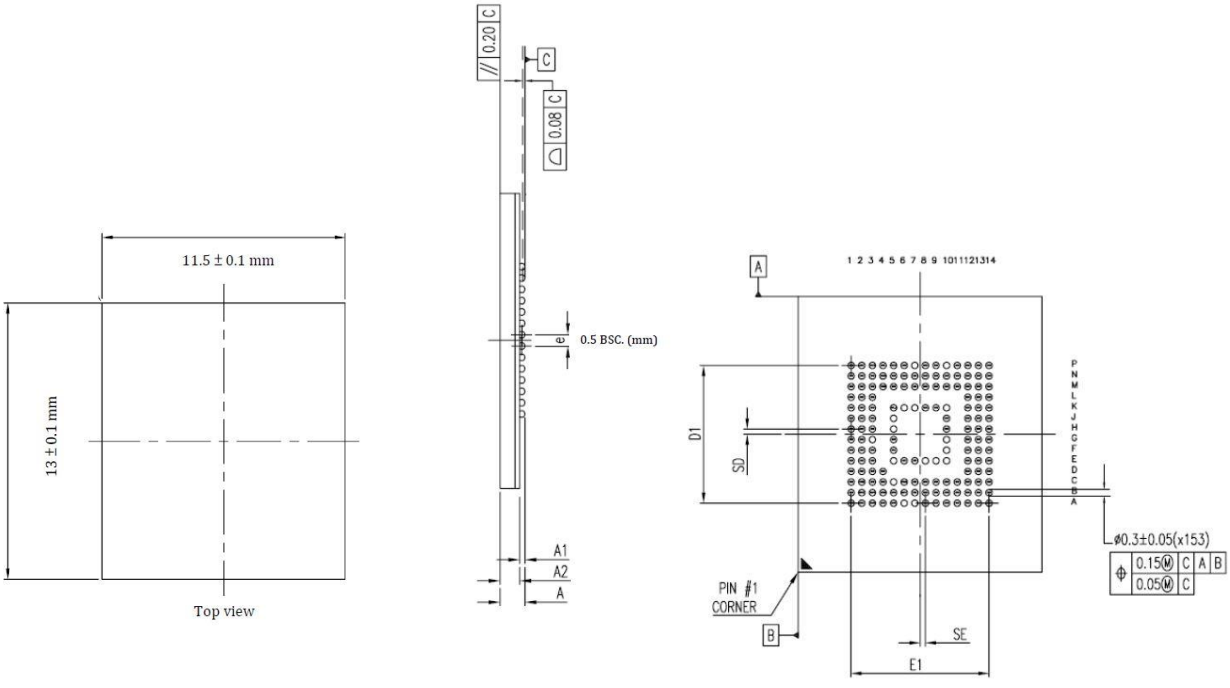
Specifications

Model	EM120-eMMC
Interface	eMMC5.1 HS400
Form Factor	153 Ball FBGA
NAND Flash Type	MLC
Capacity	8GB
Sequential Read Performance (MB/sec)	Up to 280
Sequential Write Performance (MB/sec)	Up to 105
Standard Operating Temperature (°C)	-25 ~ +85
Storage Temperature (°C)	-40 ~ +85
Thermal sensor	No
Operating Voltage	VCCQ=1.8V/3.3V VCC = 3.3V
Power Consumption	Read: VCCQ(1.8V) = 165mA / VCC(3.3V) = 80mA Write: VCCQ(1.8V) = 90mA / VCC(3.3V) = 50mA Sleep Current: VCCQ(1.8V) = 0.07mA / VCC(3.3V) = 0.07mA
Dimension (L x W x H)	11.50 x 13.00 x 1.00 (mm)

Mechanical Specification



BOTTOM VIEW

N	SE (MM)	SD (MM)	E1(MM)	D1(MM)	JEDEC(REF)
153	0.25 BSC.	0.25 BSC.	6.50 BSC.	6.50 BSC.	MO-276 BA

Unit: mm

For more information, contact your Apacer representative

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