



## DuraFlash™

# BGA E340 | eMMC | 153-ball

SMART's DuraFlash BGA E340 eMMC is an embedded memory solution that combines 2D-MLC NAND Flash Memory, an embedded MMC (MultiMediaCard) controller, and advanced firmware in a small BGA (Ball Grid Array) package that provides a stable, yet cost effective high-density embedded storage.

SMART's BGA E340 eMMC is compliant to eMMC v5.1 specifications and is available in the standard JEDEC 0.5mm pitch, 153-ball 11.5mm x 13mm BGA package. eMMC can simplify system design because of the widely adopted JEDEC® eMMC standard interface in host system chipsets and operating system software driver support.



### Features & Benefits

- Compliant to JEDEC v5.1 Standard
- Industrial Temp (-40°C to +85°C)
- Supports Write Protect and Secure Write Protection
- Supports eMMC Device Health Report

### Product Family Overview

Capacity	Sequential Performance
<b>BGA E340   eMMC   153-ball</b>	
4GB	Up to 170MB/s Read; Up to 10MB/s Write

### Applications

- Factory Automation
- IIoT
- Medical Devices
- Networking Appliances
- POS Terminals
- RFID Scanners
- Single-Board Computers
- Telecom Infrastructure

## Specifications

BGAE340   153-ball	
NAND Type	MLC
<b>Performance</b>	
Host Interface Rate (maximum)	eMMC v5.1 (HS400)
Capacities	4GB
Sequential Read (maximum)	Up to 170MB/s
Sequential Write (maximum)	Up to 10MB/s
Random Read (maximum)	Up to 5.3K IOPS
Random Write (maximum)	Up to 0.98K IOPS
<b>Reliability</b>	
Endurance (JEDEC Enterprise Workload)	4GB: 1.65 TBW
Data Retention	10 years
Error Correction	BCH
<b>Power</b>	
Input Voltage	3.3V ± 10%
<b>Environmental</b>	
Operating Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Operating Vibration	20G 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Operating Temperature	Industrial: -40°C to +85°C
Storage Temperature	-40°C to +85°C
<b>Physical</b>	
Length	11.5 mm
Width	13 mm
Height	0.8 mm

## Ordering Information

Part Number	Density
BGAE340   eMMC   153-ball Industrial Operating Temperature (-40°C to +85°C)	
SP9M4GH1AH101	4GB



For more information, please visit: [www.smartm.com](http://www.smartm.com)

*\*Product images are for promotional purposes only. Labels may not be representative of the actual product.*

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