MC Series

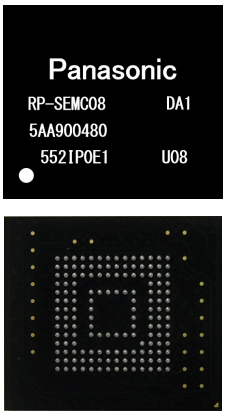
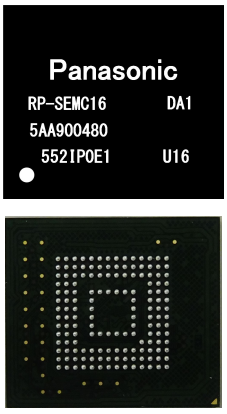
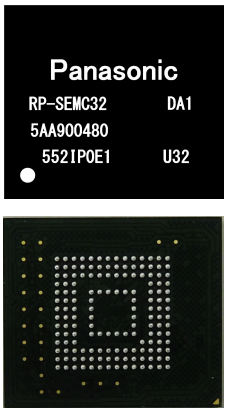
eMMC, Industrial/Automotive MLC Model

■ Product Outline

MC series are eMMC (Embedded Multi-Media Card) adopting built-in MLC NAND flash memory, and are suitable for industrial and Automotive applications where embedded reliability (resistance to mechanical vibration, shock, etc.) is required.

AEC-Q100 (which includes qualification standards by the Automotive Electronics Council) is certificated for this MC series.

■ Product Specification (specifications and appearances are subject to be changed without notice.)

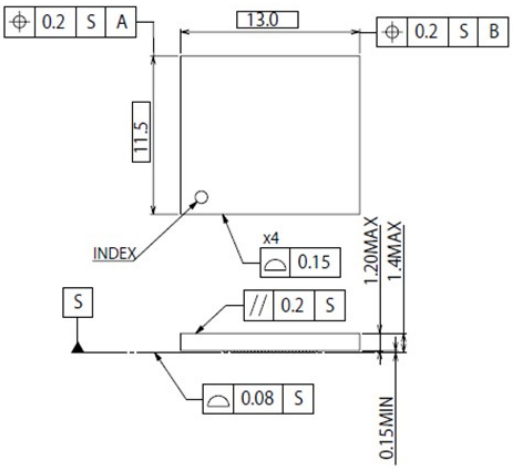
		8GB	16GB	32GB
Appearance				
Part Number		RP-SEMC08	RP-SEMC16	RP-SEMC32
Capacity	User data area capacity	7,818,182,656 byte	15,636,365,312 byte	31,272,730,624 byte
Compliant Specification	JEDEC Standard	eMMC 5.0		
	Bus Speed Modes	Backwards Compatibility with legacy MMC card, High Speed SDR, High Speed DDR, HS200, HS400		
Form Factor	Package	FBGA153 (153 balls / 0.5 mm pitch)		
	Dimensions	11.5 mm x 13.0 mm x Max 1.4 mm		
Read/Write Performance (up to)	Read	260 MB/s (HS400)	280 MB/s (HS400)	280 MB/s (HS400)
	Write	25 MB/s (HS400)	22 MB/s (HS400)	45 MB/s (HS400)
Power Supply Voltages	Supply Voltage for Core (VCC)	Min: 2.7 V, Max: 3.6 V		
	Supply Voltage for I/O (VCCQ)	Min: 2.7 V, Max: 3.6 V Min: 1.7 V, Max: 1.95 V		
Environmental Specification	Operating Temperature	-40 degree C to +85 degree C		
	Storage Temperature	-40 degree C to +85 degree C		
Recommended reflow condition		JEDEC J-STD-020D.1 / moisture sensitivity: LEVEL 3		

Products comply with EU RoHS directives.

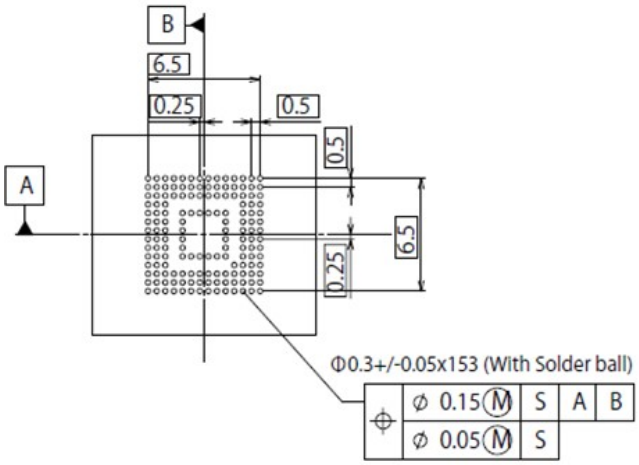
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■ Package specifications (FBGA153)

< Top View >



< Bottom View >



(Unit: mm)

■ System Reliability

a. Powerful error detecting and correcting function
b. Dynamic/Static wear leveling
c. Data recovery in case of power failure in writing
d. Automatic refresh function
e. Bad block management

■ Notice and Caution

If you think about the usage for which special quality or reliability of the products is needed and failure or malfunction of the products may directly threaten life or injury for the special usage (aeronautic or cosmic usage, military usage, combustion machine, life support applications or safety applications), please counsel with our contacts in advance.

Write frequency and storage temperature will affect data retention time. Please make a backup for important data.

■ Warranty

If the product cannot be used because of failure which is determined as defect in design or in production of the product, it is replaced by same product or equivalent one within 12 months from the delivery date of product.

(2017.04.27)