



Product Change Notice: Industrial/Automotive eMMC

PCN.PG61.02.07.2018REV1

02.07.2018

About This Notice:	Changes have been made to the Capacity Code printed on the front side of the eMMC casing. The code designates at which manufacturing location in Taiwan Panasonic's NAND flash is made. Parts will either be shipped with a "U**" or "W**" code that relates to the 8, 16, or 32GB capacity of the card. . "DA1" suffix has also been removed from the front markings on the cards.
Effective Date:	Immediate
Change Details:	Appearance change only; no BOM revision.
Affected Parts:	RP-SEMC08DA1, RP-SEMC16DA1, RP-SEMC32DA1
Datasheet(s):	See attached.
Notes:	

To: Panasonic Industrial Devices Sales Company of America

Product Specification

Name of product	Series Name	Part No.
eMMC Series (Industrial MLC Model)	RP-SEMC	RP-SEMC08DA1
		RP-SEMC16DA1
		RP-SEMC32DA1

Reception used column

Approved: _____

Prepared: Hideki Kawai

Storage Business Development Center
Connected Solutions Company
Panasonic Corporation

History of Specifications Changes

Date	Contents	Remarks
Nov 17, 2016	1st Version	PSD7102DA10
Nov 28, 2017	Appearance change Remove 'DA1' marking Capacity code : W** added	PSD7102DA11

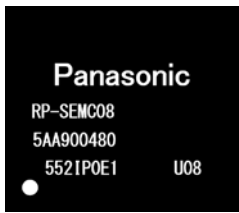
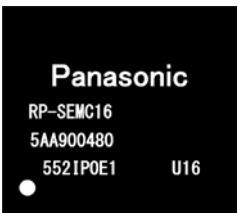
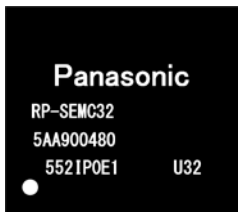
MC Series

eMMC, Industrial MLC Model

■ **Product Outline**

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

■ **Product Specification** (specifications and appearances may be changed without notice.)

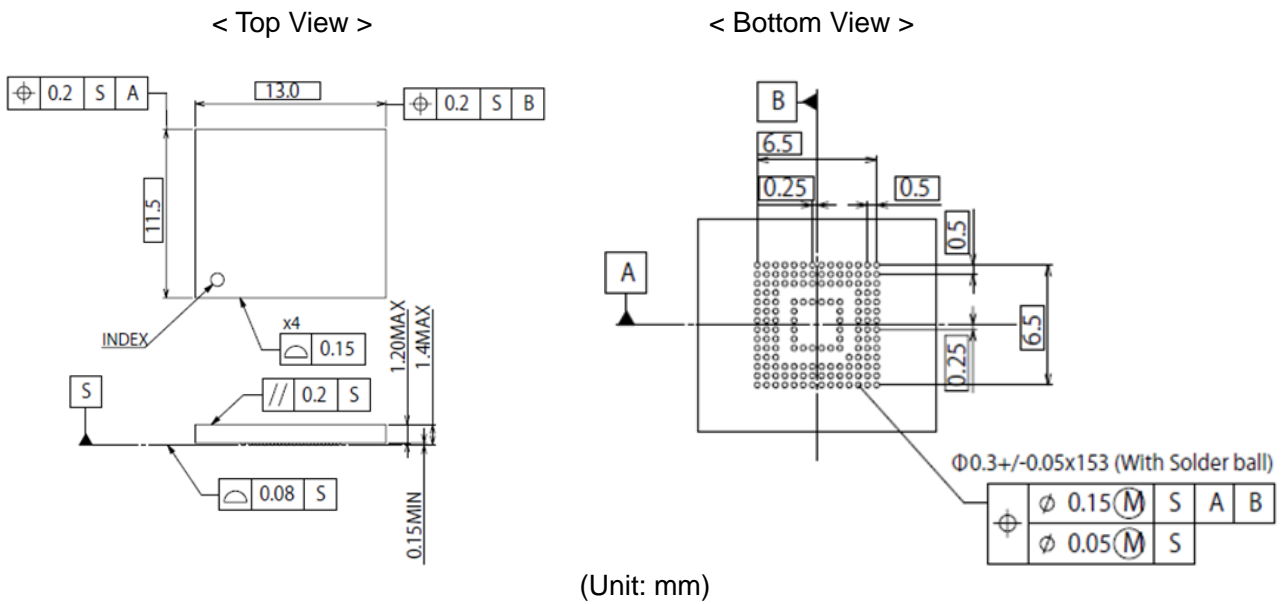
		8GB	16GB	32GB
Appearance				
Part Number		RP-SEMC08	RP-SEMC16	RP-SEMC32
Capacity	User data area capacity	7,818,182,656 byte	15,636,365,312 byte	31,272,730,624 byte
Compliant Specification	JEDEC Standard	eMMC 5.0		
	Bus Speed Modes	Backwards Compatibility with legacy MMC card, High Speed SDR, High Speed 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		
Absolute Maximum Ratings	Power Supply Voltage	Min: -0.5 V ; Max: 4.7 V		
	Input Voltage	Min: -0.5 V ; Max: 4.7 V		
	Output Voltage	Min: -0.5 V ; Max: 4.7 V		
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		

Absolute Maximum Ratings are the limit values that do not damage the product. Those values do not define operational ranges.

Products comply with EU RoHS directives.

Capacity code : U** or W** on right bottom area. ** shows capacity. Above pictures are for U**.

■ Package specifications (FBGA153)



■ System Reliability

- Powerful error detecting and correcting function
- Dynamic/Static wear leveling
- Data recovery in case of power failure in writing
- Automatic refresh function
- Bad block management

■ Notice and Caution

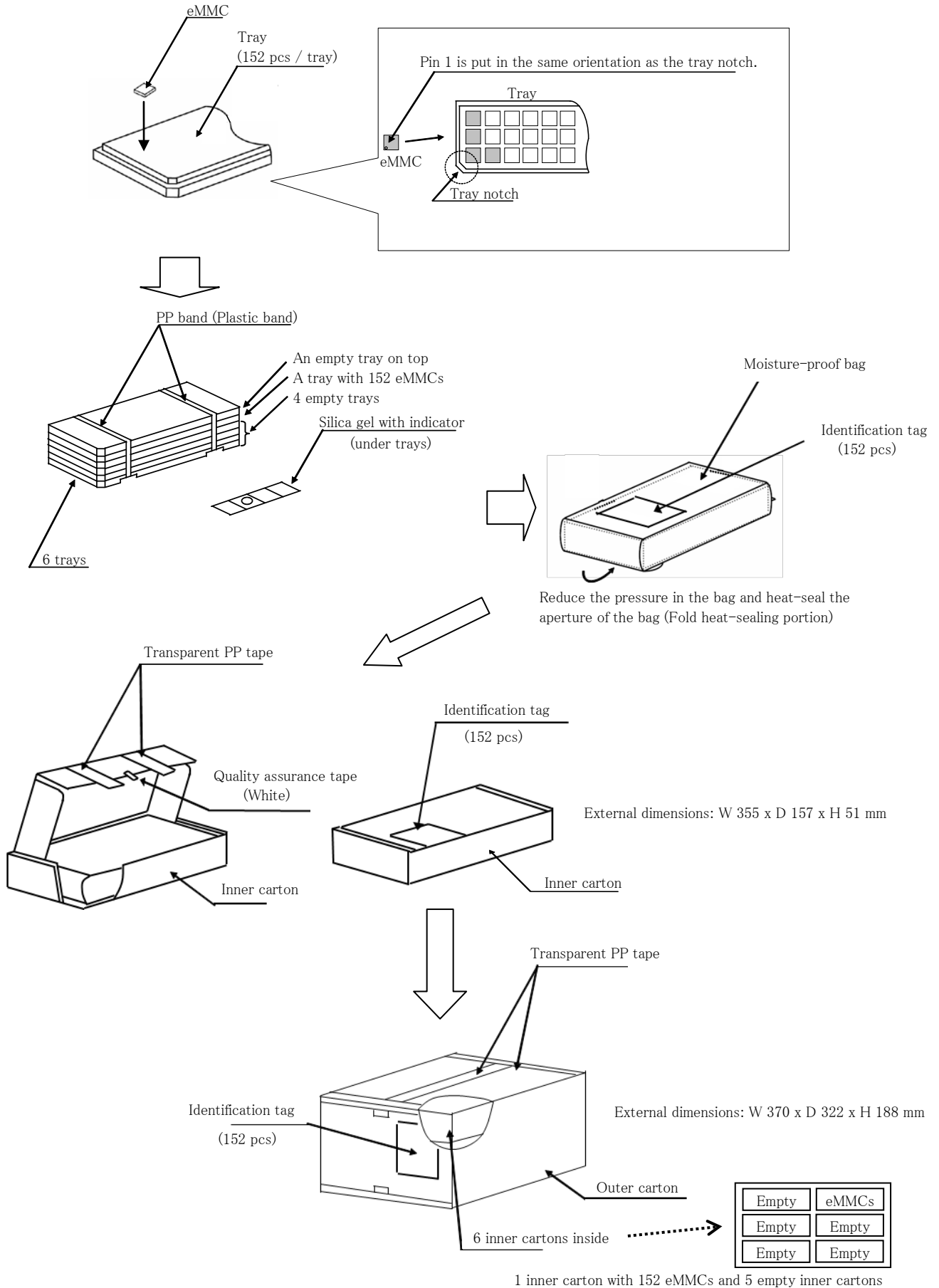
If you think about the usage for which special quality or reliability of the products is needed and failure or malfunction of the products may directly threaten life or injury for the special usage (aeronautic or cosmic usage, military usage, combustion machine, life support applications or safety applications),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

■ Packaging Specification





Embedded Multi Media Card Product Specification

eMMC 納入仕様書

Storage Business Development Center, Connected Solutions Company, Panasonic Corporation

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