





PE Series

microSD/SDHC Memory Card, Consumer Plus “SLC Lite” Model

■ **Product Outline**

PE series are microSD/SDHC memory cards adopting built-in consumer type MLC NAND flash memory using an SLC-like access mode. This enables higher endurance/data retention and power fail robustness than Panasonic Consumer Plus MLC model. They are formatted complying with SD card specification.

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

		2GB	4GB	8GB	16GB
Appearance					
Part Number		RP-SMPE02DA1	RP-SMPE04DA1	RP-SMPE08DA1	RP-SMPE16DA1
Capacity	Available user data area capacity *1)	1,981,480,920 byte	3,971,973,120 byte	7,960,756,224 byte	16,001,236,992 byte
Compliant Specification	SD Physical Specification	Ver. 3.01			
	SD speed class	CLASS 6	CLASS 10		
	UHS speed grade	---	U1		
	Speed mode	Default Speed mode, High Speed mode	Default Speed mode, High Speed mode SDR50, DDR50, SDR25, SDR12		
Backside mark	Control Code	---			
Read/Write Performance (up to)	Read	22MB/s (HS mode)	45MB/s (SDR50, DDR50 mode)	45MB/s (SDR50, DDR50 mode)	45MB/s (SDR50, DDR50 mode)
	Write	20MB/s (HS mode)	35MB/s (SDR50, DDR50 mode)	40MB/s (SDR50, DDR50 mode)	40MB/s (SDR50, DDR50 mode)
Absolute Maximum Ratings	Supply Voltage	Min : -0.3 V ; Max : +4.6 V			
	Input Voltage	Min : -0.3 V ; Max : VDD +0.3 V			
	Output Voltage	Min : -0.3 V ; Max : VDD +0.3 V			
	Output Current	Min : -24 mA ; Max : +24 mA			
Environmental Specification	Operating Temperature	-25 degree C to +85 degree C			
	Storage Temperature	-40 degree C to +85 degree C			
	Humidity	5 % RH to 95 % RH			
	Vibration	15 Gp-p			
	Shock	1,000 G			
	Mating Cycles	10,000 cycles			

*1) Free user area capacity after formatted.

Absolute Maximum Ratings are the values of limitation, which do not damage the card. So those values do not define the operational range.

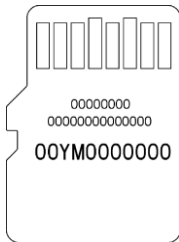
Products comply with EU RoHS directives.

■ Marking Specification (example; 4GB)



“4GB”
“MADE IN TAIWAN”

Card Capacity
Country of origin



“000000000”
“0000000000000000”

Internal control code
Internal control code

“00YM0000000”
Y
M

Serial Number
Last digit of Manufacture year
Manufacture month
(January->A, February->B,)

■ System Reliability

- a. Error detect and corrective function
- b. Static wear leveling
- c. 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.