




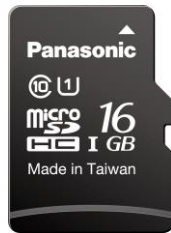
PE Series

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.

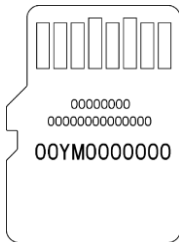
Products comply with EU RoHS directives.

■ 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.