# **Panasonic**

### MF Series

### SDHC/SDXC Memory Card, Consumer TLC Model

### ■ Product Outline

MF series are SDHC/SDXC memory cards adopting built-in consumer type TLC NAND flash memory. They are formatted complying with SD card specification.

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

Appearance		8GB	16GB	32GB	64GB
		Panasonic (A)	Panasonic © © 111111111111111111111111111111111	Panasonic © © 32GB	Panasonic © Control of the control o
Part Number		RP-SDMF08DA1	RP-SDMF16DA1	RP-SDMF32DA1	RP-SDMF64DA1
Capacity	Available user data area capacity *1)	7,736,360,960 byte	15,514,697,728 byte	31,092,342,784 byte	62,528,290,816 byte
Compliant Specification	SD Physical Specification	Ver. 3.01			
	SD speed class	CLASS 4	CLASS(()		
	UHS speed grade		<b>I</b> U		
	Speed mode	Default Speed Mode, High Speed Mode	Default Speed Mode, High Speed Mode, SDR12/SDR25/SDR50/DDR50/SDR104		
Backside mark	Control Code				
Read/Write Performance (up to)	Read	20 MB/s (High Speed)	80 MB/s (SDR104)		
	Write	$5~\mathrm{MB/s}$ (High Speed)	10 MB/s (SDR104)		
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			

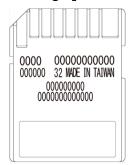
<sup>\*1)</sup> Free user area capacity after formatted.

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.

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### ■Marking Specification (example 32GB)



"0000" Control Code (Defined as product parts combination)

"00000000000" Serial Number

"000000" Internal Control Code 1

"32" Card Capacity

"MADE IN TAIWAN" Country of origin

"000000000", "000000000000" Internal control code 2

### ■ 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.