TT Series

<u>microSDHC/microSDXC Memory Card, Consumer Plus MLC Model</u> (Extended Temperature)

Product Outline

 $TT\ series\ are\ microSDHC/microSDXC\ memory\ cards\ adopting\ built-in\ MLC\ NAND\ flash\ memory.$ They are formatted complying with SD card specification.

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

		32GB	64GB
Appearance		Panasonic Micro (0) EICE I 3 32GB Made in Tatwan	Panasonic Micro (C) X I (2) Made in Tatwan
Part Number		RP-SMTT32DA1	RP-SMTT64DA1
Capacity	Available user data area capacity *1)	32,098,975,744 bytes	64,172,457,984 bytes
	SD Physical Specification	Ver. 4.20	
Compliant Specification	SD speed class	CLASS	
	UHS speed grade	I 3	
	Speed mode	Default Speed mode, High Speed mode, SDR12, SDR25, SDR50, DDR50, SDR104	
Backside mark	Control Code		
Read/Write	Read	95MB/s (SDR104 mode)	
Performance (up to)	Write	$\begin{array}{c} 90 \text{MB/s} \\ \text{(SDR104 mode)} \end{array}$	
	Supply Voltage	Min : -0.3 V ; Max : +4.6 V	
Absolute Maximum Ratings	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	-40 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.



RP-SMTTxxDA1

■Marking Specification (example: 32GB)

Panasonic Micro (0) EIII (3) <u>32GB</u> Made in Taiwan	"32GB" "Made in Taiwan"	Card Capacity Country of origin
	"000000000" "00000000000000"	Internal control code Internal control code
00000000 00000000000000000 00YM00000000	"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.