## **Industrial Grade SD Memory Cards**

#### **Product Leaflet**

	MLC JD Series Industry's first*2 bit-error-free SD card*3 with RAID technology		MLC P Series  Basic series suitable for various industrial equipment			MLC KC Series MicroSD series with power failure recovery suitable for embedded use			
Model	RP-SDJD32	RP-SDJD64	RP-SDPC04	RP-SDPC08	RP-SDPC16	RP-SMKC04	RP-SMKC08	RP-SMKC16	
	Parasonic 3268	Parasonic SE BU 64GB	Panasoric  & & & & & & & & & & & & & & & & & & &	Parassoric 8	Parassoric  8 16GB  MLC	Panasonic INFO CITIES I does index in Jugan	Panasonic myg cutes I 868 Water a agen	Panasoonic IPSTS CELINS I INCOME Whate to copyan	
Capacity*1	32GB	64GB	4GB	8GB	16GB	4GB	8GB	16GB	
Flash Memory/Type	Multi-Level Cell (MLC) NAND Flash Memory		Multi-Leve	l Cell (MLC) NAND Flas	sh Memory	Multi-Level Cell (MLC) NAND Flash Memory			
SD Physical Specification	Ver. 4.10 (UHS-II Compliant)		Ver. 3.01 (No UHS-I Compliant)			Ver. 3.01 (UHS-I Compliant)			
Speed Class	UHS Speed Class 1 Speed Class 10, UHS Speed Class 1			Speed Class 4		Speed Class 2 (No UHS Speed Class Compliant)			
Operating Temperature	-25 to +85°C		-40 to +85°C			-40 to +85°C			
Controller	Designed by Panasonic			Designed by Panasonic		Designed by Panasonic			
Functions	RAID Technology, Pov Error Correction Cod Static Wear Levelling, I	e, Refresh Function,		ry <sup>*4</sup> , Error Correction Co r Levelling, Intelligent D		Double Power Failure Recovery, Error Correction Code, Refresh Function, Static Wear Levelling, Intelligent Data Writing			
Write/Read Tests for All Memory Areas	Comp	leted	Completed			Completed			
Size (HxWxD)	32.0 x 24.0	) x 2.1mm	32.0 x 24.0 x 2.1mm			15.0 x 11.0 x 1.1mm			

<sup>\*1</sup> SD Card utilises a portion of the memory for copy protection and other purposes. Therefore the usable capacity will be less.
\*2 For Industrial SD Cards. As of April 1st, 2014.

#### **FEATURES**

- > Temperature Resistance
  Operation is assured even under harsh temperature conditions
- > Electrostatic Resistance
  IEC 61000-4-2 compliance: Clears Electrostatic Discharge Immunity Tests of 150pF
  energy storage capacitance, 15kV aerial discharge and 330Ω discharge resistance
- > Impact Resistance
  Bending load resistance: 20N (Newton) min., (SD standard: 10N)
  Twisting torque resistance: 0.3N~m (Newton meter) min.
  (SD standard: 0.15N~m) for a full size SD card only
- > Magnetic Resistance
  Operable after being set onto a 1,000-gauss DC magnetic field for approx. 1 minute

- > X-Ray Resistance
  ISO 7816-1 compliance: Operable after 0.1Gy (gray) of X-ray irradiation
- > Water Resistance
  JIS IPX7 compliance: Operable after submerging the product in water
  (tap water, 1m depth) for 30 minutes microSD only
- > Durability against Insertion / Removal
  Tested for 10,000 cycles of card insertion/removal using a card reader
- > Built-in Fuse
  The internal card fuse protects against excess current and abnormal heating

<sup>\*3</sup> All bit error correction cannot be guaranteed.

<sup>\*4</sup> Customisable.

# Industrial Grade SD Memory Cards

### **Product Leaflet**

	SLC FX Series  High grade series with superb rewriting durability suitable for long-term data storage					MLC GD Series Ideal for recording large-volume image data				
Model	RP-SDFC51	RP-SDF02G	RP-SDF04G	RP-SDF08G	RP-SDF16G	RP-SDGD04	RP-SDGD08	RP-SDGD16	RP-SDGD32	RP-SDGD64
	Parasonic  S> ®  512 <sub>MP</sub> SLC	Parasonic  S>®  2GB  SLC	Panasorio  S S S S S S S S S S S S S S S S S S S	Parasonic 8	Panasonic SS & 16GB SLC	Panasorio  Similario  4GB	Panasonic Se Se 1U 8GB	Panasonic ©	Panasonic Se 8 32GB	Perasonic & 8 1U 64GB
Capacity*1	512MB	2GB	4GB	8GB	16GB	4GB	8GB	16GB	32GB	64GB
Flash Memory/Type	Single-Level Cell (SLC) NAND Flash Memory					Multi-Level Cell (MLC) NAND Flash Memory				
SD Physical Specification	Ver. 3.01 (No UHS-I Compliant) Ver. 3.01 (UHS-I Compliant)			liant)	Ver. 3.01 (UHS-I Compliant)					
Speed Class	Speed Class 6 Speed Class 10, UHS Speed Class 1				Speed Class 10, UHS Speed Class 1					
Operating Temperature	-40 to +85°C					-25 to +85°C				
Controller	Designed by Panasonic					Designed by Panasonic				
Functions	Double Power Failure Recovery, Error Correction Code, Refresh Function, Static Wear Levelling, Intelligent Data Writing					Power Failure Recovery, Error Correction Code, Refresh Function, Static Wear Levelling, Intelligent Data Writing				
Write/Read Tests for All Memory Areas	Completed					Completed				
Size (HxWxD)	32.0 x 24.0 x 2.1mm					32.0 x 24.0 x 2.1mm				

<sup>\*1</sup> SD Card utilises a portion of the memory for copy protection and other purposes. Therefore the usable capacity will be less.

