



Features

- MLC-NAND flash technology
- Support SD mode and SPI mode
- Support CPRM
- Support UHS-1
- Write Protect switch
- Support S.M.A.R.T. command set and utility
- Capacities from 8GB up to 256GB

Specification

■ Compatibility	SDA3.0	➤ Humidity	10% ~ 95% non-condensing
➤ SDHC	8GB to 32GB: FAT16 file system	➤ Vibration	80 Hz to 2K Hz, 20G, 3axes
➤ SDXC	64GB to 256GB: exFAT	➤ Shock	0.5ms, 1500G, 3 axes
■ Declaration	RoHS & REACH compliant	➤ Altitude	70,000 feet
■ Flash technology	MLC-NAND flash technology	■ Power consumption	
■ Form-factor	Standard SD card form-factor	➤ Power requirement	+3.3V ± 10%
■ Host interface	9-pin connector	➤ Reading mode	400 mA (Max.)
■ Write Protection	Mechanical switch	➤ Writing mode	400 mA (Max.)
■ Performance		➤ Idle (Standby) mode	1000 uA (Max.)
➤ Data transfer rate	Class-10	■ Reliability	
➤ Sequential read	SDHC: 94.6 MB/sec (Max.) SDXC: 95.9 MB/sec (Max.)	➤ Wear-leveling	Static and Dynamic wear-leveling algorithms
➤ Sequential write	SDHC: 32.9 MB/sec (Max.) SDXC: 76.7 MB/sec (Max.)	➤ Erase counts	Up to 3,000 times
■ Environmental		➤ ECC	BCH ECC
➤ Operating temp.	Wide Temp. -40°C~+85°C	■ Physical specification	
➤ Non-operating temp.	Wide Temp. -50°C~+95°C	➤ Weight (Max.)	2.5g
		➤ Dimension (WxLxH)	24.0 x 32.0 x 2.1 (mm)
		■ Warranty	2 years or within 3,000 erasing counts

Part Number List

SDHC memory card				SDXC memory card			
Capacity	-40°C~+ 85°C			Capacity	-40°C~+ 85°C		
8GB	WPSDH008G-PFITMB			64GB	WPSDX064G-PFITMB		
16GB	WPSDH016G-PFITMB			128GB	WPSDX128G-PFITMB		
32GB	WPSDH032G-PFITMB			256GB	WPSDX256G-PFITMB		

Part Number Decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
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Example 1

W	P	S	D	H	0	3	2	G	—	P	F	I	T	M	B	—			
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Example 2

W	P	S	D	X	2	5	6	G	—	P	F	I	T	M	B	—			
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X1 Grade

W : Wide temp grade operating temp. -40°C~+85°C

X2 The material of casing

P : Plastic casing

X3 X4 X5 Product category

SDH : SDHC memory card

SDX : SDXC memory card

X6 X7 X8 X9 Capacity

008G : 8GB 064G : 64GB

016G : 16GB 128G : 128GB

032G : 32GB 256G : 256GB

X11 Controller

P : PHANES Series

X12 Controller version

A, B, C, D....

X13 Controller grade

I : Industrial grade

X14 Flash IC brand

T : Toshiba NAND flash IC

X15 Flash IC type

M : MLC-NAND Flash

X16 MLC Technology

B : Toshiba 15nm MLC

X18 X19 X20 Reserved for specific requirements