

SLC
aSLC
MLC
3D-NAND
DRAM Module
Adapter
Card-drive



- ### Features
- SLC-NAND flash technology
 - Support SD mode and SPI mode
 - Support CPRM
 - Write Protect switch
 - Capacities from 128MB up to 32GB

- ### Specification
- **Compatibility**
 ➤ SDC 128MB to 2GB: FAT file system
 ➤ SDHC 4GB to 32GB: FAT16 file system
 - **Declaration** RoHS & REACH compliant
 - **Flash technology** SLC-NAND flash technology
 - **Form-factor** Standard SD card form-factor
 - **Host interface** 9-pin connector
 - **Write Protection** Mechanical switch
 - **Performance**
 ➤ **Data transfer rate** Class-10
 ➤ **Sequential read** SDC: 22.1 MB/sec (Max.)
 SDHC: 22.3 MB/sec (Max.)
 ➤ **Sequential write** SDC: 16.8 MB/sec (Max.)
 SDHC: 18.7 MB/sec (Max.)
 - **Environmental**
 ➤ **Operating temp.** IND. -40°C~+85°C
 ➤ **Non-operating temp.** IND. -50°C~+95°C
 ➤ **Humidity** 10% ~ 95% non-condensing

- **Vibration** 70 Hz to 2K Hz, 20G, 3 axes
- **Shock** 0.5ms, 1,500 G, 3 axes
- **Altitude** 70,000 feet
- **Power consumption**
 ➤ **Power requirement** +3.3V ± 5%
- **Reading mode** 49.8 mA (Max.)
- **Writing mode** 52.2 mA (Max.)
- **Idle (Standby) mode** 0.2 mA (Max.)
- **Reliability**
 ➤ **Wear-leveling** Global wear-leveling algorithms
 ➤ **MTBF** > 3,000,000 hours
 ➤ **Erase counts** Up to 60,000 times
 ➤ **ECC** 16 bits per 1024 bytes
- **Physical specification**
 ➤ **Weight (Max.)** 2.5g
 ➤ **Dimension (WxLxH)** 24.0 x 32.0 x 2.1 (mm)
- **Warranty**
 ➤ **SLC IND. grade** 5 years or within 60,000 erasing counts

Part Number List

SD memory card			SDHC memory card		
Capacity	-40°C~+85°C		Capacity	-40°C~+85°C	
128MB	WPSDC128M-EAITI		4GB	WPSDH004G-EAITI	
256MB	WPSDC256M-EAITI		8GB	WPSDH008G-EAITI	
512MB	WPSDC512M-EAITI		16GB	WPSDH016G-EAITI	
1GB	WPSDC001G-EAITI		32GB	WPSDH032G-EAITI	
2GB	WPSDC002G-EAITI				

Part Number Decoder

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

Example

W	P	S	D	H	0	3	2	G	-	E	A	I	T	I	-				
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--

- X1 Grade**
W : Industrial grade operating temp. -40°C~+85°C
- X2 The material of casing**
P : Plastic casing
- X3 X4 X5 Product category**
SDC : SD memory card
SDH : SDHC memory card
- X6 X7 X8 X9 Capacity**
128M : 128MB 004G : 4GB
256M : 256MB 008G : 8GB
512M : 512MB 016G : 16GB
001G : 1GB 032G : 32GB
002G : 2GB

- X11 Controller**
E : THEMIS Series
- X12 Controller version**
A, B, C, D,....
- X13 Controller grade**
I : Industrial grade
- X14 Flash IC brand**
T : Toshiba SLC-NAND flash IC
- X15 Flash IC grade**
I : Industrial grade
- X17 X18 X19 X20 Reserved for specific requirements**