

Industrial SD/SDHC Card

■ SD / SDHC Solution

The CoreSolid Storage Industrial SD/SDHC Memory Card is a series of memory cards that adopt flash memory technology and content protection mechanism. It not only provides greater capacity and better performance but also meets the security and environment requirements for image, video and audio consumer electronics devices. The major feature of the CoreSolid Storage SD/SDHC Memory Card is the function of protecting intellectual property, which complies with the security of the SDMI standard. It offers a write-protect switch on the side and uses mutual authentication as well as a "new cipher algorithm" to protect the content stored in the card from illegal usage.


The CoreSolid Storage Industrial SD/SDHC Memory Card conforms to SD specifications 2.0, so it supports two alternative communication protocols: SD and SPI. Moreover, the CoreSolid Storage SD/SDHC Memory Cards offer higher capacities in order to meet the growing demand of mass storage in the market. The CoreSolid Storage SD/SDHC Memory Card is especially designed for portable devices, Gaming Industry and Industrial Embedded System, so it makes the CoreSolid Storage SD/SDHC Memory Card a user-friendly product.

Product Feature

- Compatible with SD 2.0 specification
- Support SD mode and SPI mode
- Built-in Hardware ECC Function
- NAND Flash SLC chip technology
- Wear-leveling and Block Management
- Supports Auto Standby and Sleep Mode
- Support Wide Operating Temperature



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Model	Industrial SD / SDHC Card
Capacity	1GB, 2GB and 4GB(SDHC class 6)
Power Requirement	Voltage : DC 2.7V ~ 3.6V
Interface	SD 2.0 Compliance
Flash Technology	NAND type SLC flash based
Standard Compliance	1GB, 2GB: SD 2.0 ; 4GB: SDHC class 6
Transfer Mode	SD Bus Mode and SPI Bus Mode.
Sequential Read (Est.)	22 MB/sec
Sequential Write (Est.)	14 MB/sec
Power Consumption	<35mA
Operating Temperature	0°C to 70°C (Industrial type) -25°C to 85°C, (Extended Temperature type)
ECC	8 bits Correction per 512 bytes
Wear Leveling	Global wear Leveling
Dimension (mm)	32.0 x 24.0 x 2.1
Weight	<2.5gram
Product Images	

Reliability Test

Operating Humidity	10% to 95% (30°C Max. Wet Bulb Temp)
MTTF	2,000,000 hours
Inserted Durability Test	Testing Condition: 3sec/cycle – Repeated Plug/Unplug 10,000 cycles
Vibration	Sine (Non-op) : 15Grms, 10 ~ 2000Hz, Random Vibration (op) : 6Grms, 10~500Hz
Drop	75 cm height
Data Retention	10 years without requiring power support

As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, megabit per second (Mb/s) = one million bits per second, and gigabit per second (Gb/s) = one billion bits per second.