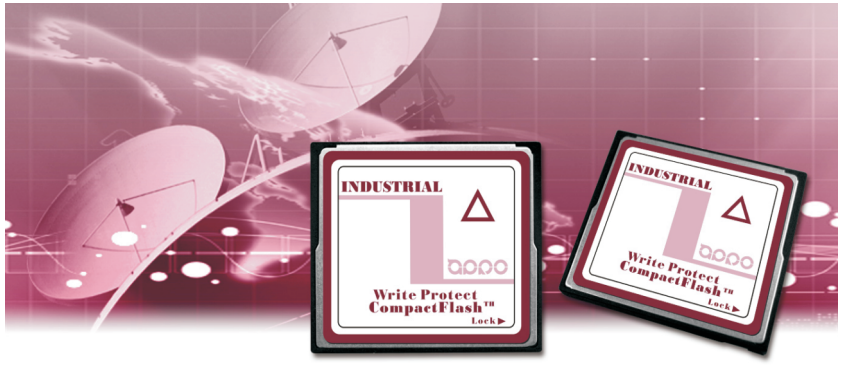
HERMIT Series

SLC Industrial CompactFlash (CF) Card supports Write Protect Function



Product features

- SLC - NAND type flash technology
- Compatible with CompactFlash® specification 3.0
- CompactFlash® Type I form-factor
- Compatible with ATA/ATAPI-6 standard
- S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- Support write protect function by switch
- Data transfer mode support PIO 0~4, MWDMA 0~2, UDMA 0~4
- Supports PC Card Memory mode or True IDE mode
- Performance up to: Read 40 MB/sec ; Write 20 MB/sec
- Capacities from 128MB up to 4GB

Product specifications

Compatibility	CompactFlash® specification 6.0	**Power consumption**	
	Compatible with ATA/ATAPI-6	Power requirement	+5V ± 10% / +3.3V ± 5%
Flash technology	SLC-NAND type flash based	Reading mode	124 mA (Max.)
Form-factor	CompactFlash type I	Writing mode	121 mA(Max.)
Host Interface	Female 50 pins	Idle mode	1.8 mA (Max.)
Performance		**Reliability**	
Data transfer rate	PIO 0~4, MWDMA 0~2, UDMA 0~4	Wear-leveling	Static wear-leveling algorithms
	66.6 MB/sec (ATA-5 / UDMA-4)	MTBF	> 3,000,000 hours
	16.6 MB/sec (ATA-3 / PIO-4)	Endurance	> 2,000,000 cycles
Sequential read	40 MB/sec (Max. /with dual flash)	ECC	4 bits per 512bytes block
Sequential write	20 MB/sec (Max. /with dual flash)	Data retention	10 Years
Random access time	0.2ms (estimated)	**Physical specification**	
Environmental specification		Weight (max.)	12.0 g / 0.42 oz.
Operating temp.	STD. 0°C~70°C/IND. -40°C~+85°C	Dimension(W x L x H)	42.8 x 36.4 x 3.3 (mm)
Non-operating temp.	STD. -20°C~+80°C/IND. -50°C~+95°C	**Conformal coating**	Option for special request
Humidity	10% ~ 95% non-condensing	**Warranty**	
Vibration	15G compliance to MIL-STD-810F	Standard grade	3 years
Shock	1,500G compliance to MIL-STD-810F	Industrial grade	5 years
Altitude	70,000 feet		

Write-protection switch

Operating temperature supports Standard grade 0°C ~ 70°C and Industrial Grade -40°C ~ +85°C

Part number list - Industrial Write Protect CF Card with standard plastic frame kit

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	16MB	SPCFW016M-HACSCN-UF(/C)	WPCFW016M-HAISIN-UF(/C)
	32MB	SPCFW032M-HACSCN-UF(/C)	WPCFW032M-HAISIN-UF(/C)
	64MB	SPCFW064M-HACSCN-UF(/C)	WPCFW064M-HAISIN-UF(/C)
	128MB	SPCFW128M-HACSCN-UF(/C)	WPCFW128M-HAISIN-UF(/C)
	256MB	SPCFW256M-HACSCN-UF(/C)	WPCFW256M-HAISIN-UF(/C)
	512MB	SPCFW512M-HACSCN-UF(/C)	WPCFW512M-HAISIN-UF(/C)
	1GB	SPCFW001G-HACSCN-UF(/C)	WPCFW001G-HAISIN-UF(/C)
	2GB	SPCFW002G-HACSCN-UF(/C)	WPCFW002G-HAISIN-UF(/C)
	4GB	SPCFW004G-HACSCN-UF(/C)	WPCFW004G-HAISIN-UF(/C)

Part number decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	—	X11	X12	X13	X14	X15	—	Z1	Z2	/	C

Example

W	P	C	F	W	0	0	4	G	—	H	A	I	H	I	N	—	U	F	/	C

X1 Grade
S : Standard grade operating temp. 0° C~70 ° C
W : Industrial grade operating temp. -40° C ~ +85 ° C

X2 The material of casing
P : Plastic frame

X3 X4 X5 Product category
CFW : CompactFlash (CF) card supports write protect

X6 X7 X8 X9 Capacity
128M : 128MB **001G :** 1GB
256M : 256MB **002G :** 2GB
512M : 512MB **004G :** 4GB

X11 Controller
H : Hyperstone (HERMIT Series)

X12 Controller version
A, B, C, D.....

X13 Controller grade
C : Commercial grade
I : Industrial grade

X14 Flash IC
S : Samsung SLC NAND flash IC

X15 Flash IC grade
C : Commercial grade
I : Industrial grade

Z1 Z2 Data transfer rate and disk types
PF: optional as PIO-4 mode / Fixed disk type
PR: optional as PIO-4 mode / Removable disk type
UF: defaulted as UDMA-4 mode / Fixed disk type
UR: optional as UDMA-4 mode / Removable disk type
AA: optional as UDMA & PIO mode auto-detection / Fixed disk & removable disk type auto-detection

C Reserved for specific requirement
C : Conformal-coating