

HERMIT Series

SLC Industrial CompactFlash (CF) Card Rugged Metal Frame



Product features

- SLC - NAND type flash technology
- Compatible with CompactFlash® specification 3.0
- CompactFlash® Type I form-factor
- Compatible with ATA/ATAPI-6 standard
- Optional for standard casing and rugged metal casing
- 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 32GB

Product specifications

Compatibility	➤ CompactFlash® specification 3.0 Compatible with ATA/ATAPI-6	Power consumption	➤ +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 ➤ 66.6 MB/sec (ATA-5 / UDMA-4) ➤ 16.6 MB/sec (ATA-3 / PIO-4)	Wear-leveling	➤ Static wear-leveling algorithms
Sequential read	➤ 40 MB/sec (Max. / 32GB)	MTBF	➤ > 3,000,000 hours
Sequential write	➤ 27.8 MB/sec (Max. / 32GB)	Endurance	➤ > 2,000,000 cycles
Random access time	➤ 0.2ms (estimated)	ECC	➤ 4 bits per 512bytes block
Environmental specification		Data retention	➤ 10 Years
Operating temp.	➤ STD. 0°C~70°C/IND. -40°C~+85°C	Physical specification	
Non-operating temp.	➤ STD. -20°C~+80°C/IND. -50°C~+95°C	Weight (max.)	➤ Standard casing 12.0 g / 0.42 oz. ➤ Metal casing 15.0 g / 0.53 oz.
Humidity	➤ 10% ~ 95% non-condensing	Dimension(W x L x H)	➤ 42.8 x 36.4 x 3.3 (mm)
Vibration	➤ 15G compliance to MIL-STD-810F	Conformal coating	➤ Option for special request
Shock	➤ 1,500G compliance to MIL-STD-810F	Warranty	
Altitude	➤ 70,000 feet	Standard grade	➤ 3 years
		Industrial grade	➤ 5 years

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

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

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	16MB	SPCFC016M-HACSCN-UF(/C)	WPCFC016M-HAISIN-UF(/C)
	32MB	SPCFC032M-HACSCN-UF(/C)	WPCFC032M-HAISIN-UF(/C)
	64MB	SPCFC064M-HACSCN-UF(/C)	WPCFC064M-HAISIN-UF(/C)
	128MB	SPCFC128M-HACSCN-UF(/C)	WPCFC128M-HAISIN-UF(/C)
	256MB	SPCFC256M-HACSCN-UF(/C)	WPCFC256M-HAISIN-UF(/C)
	512MB	SPCFC512M-HACSCN-UF(/C)	WPCFC512M-HAISIN-UF(/C)
	1GB	SPCFC001G-HACSCN-UF(/C)	WPCFC001G-HAISIN-UF(/C)
	2GB	SPCFC002G-HACSCN-UF(/C)	WPCFC002G-HAISIN-UF(/C)
	4GB	SPCFC004G-HACSCN-UF(/C)	WPCFC004G-HAISIN-UF(/C)
	8GB	SPCFC008G-HACSCN-UF(/C)	WPCFC008G-HAISIN-UF(/C)
	16GB	SPCFC016G-HACMC-UF(/C)	WPCFC016G-HAIMI-UF(/C)
	32GB	SPCFC032G-HACMC-UF(/C)	WPCFC032G-HAIMI-UF(/C)

Part number list - Industrial CF Card with rugged metal frame kit

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	16MB	SRCFC016M-HACSCN-UF(/C)	WRCFC016M-HAISIN-UF(/C)
	32MB	SRCFC032M-HACSCN-UF(/C)	WRCFC032M-HAISIN-UF(/C)
	64MB	SRCFC064M-HACSCN-UF(/C)	WRCFC064M-HAISIN-UF(/C)
	128MB	SRCFC128M-HACSCN-UF(/C)	WRCFC128M-HAISIN-UF(/C)
	256MB	SRCFC256M-HACSCN-UF(/C)	WRCFC256M-HAISIN-UF(/C)
	512MB	SRCFC512M-HACSCN-UF(/C)	WRCFC512M-HAISIN-UF(/C)
	1GB	SRCFC001G-HACSCN-UF(/C)	WRCFC001G-HAISIN-UF(/C)
	2GB	SRCFC002G-HACSCN-UF(/C)	WRCFC002G-HAISIN-UF(/C)
	4GB	SRCFC004G-HACSCN-UF(/C)	WRCFC004G-HAISIN-UF(/C)
	8GB	SRCFC008G-HACSCN-UF(/C)	WRCFC008G-HAISIN-UF(/C)
	16GB	SRCFC016G-HACMC-UF(/C)	WRCFC016G-HAIMI-UF(/C)
	32GB	SRCFC032G-HACMC-UF(/C)	WRCFC032G-HAIMI-UF(/C)

CFC Industrial CompactFlash Card

CFA Industrial CompactFlash Card

AFC Industrial PCMCIA ATA Card

MIF Industrial Micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCIe Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SDC/H Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CFC Industrial CompactFlash Card

CFA Industrial CompactFlash Card

AFC Industrial PCMCIA ATA Card

MIF Industrial Micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCIe Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SDC/H Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CFC
Industrial CompactFlash Card

CFA
Industrial Fast Card

AFC
Industrial PCMCIA ATA Card

MIF
Industrial micro IDE Flash Module

MSF
Industrial micro SATA Flash Module

MUM
Industrial micro USB Flash Module

MPM
Industrial mini PCIe Flash Module

MSM
Industrial mini SATA Flash Module

SSD
Industrial Solid State Disk

UFD
Industrial Rugged Metal USB Flash Disk

SDC/H
Industrial SD & SDHC Memory Card

AD
Industrial Adapter Card/Drive

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 C 0 3 2 G — H A I M I — 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

R : Rugged metal frame kit

X3 X4 X5 ➤ **Product category**

CFC : CompactFlash (CF) card

X6 X7 X8 X9 ➤ **Capacity**

016M : 16MB **001G** : 1GB

032M : 32MB **002G** : 2GB

064M : 64MB **004G** : 4GB

128M : 128MB **008G** : 8GB

256M : 256MB **016G** : 16GB

512M : 512MB **032G** : 32GB

X11 ➤ **Controller**

H : Hyperstone (HERMIT Series)

X12 ➤ **Controller version**

A,B,C,....

X13 ➤ **Controller grade**

C : Commercial grade

I : Industrial grade

X14 ➤ **Flash IC**

S : Samsung SLC-NAND flash IC

M : Micron 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