

HERCULES-N Series

Industrial SLC CompactFlash Card



Product Feature


- SLC - NAND type flash technology
- Optional rugged metal frame
- Supports PC Card Memory mode or True IDE mode
- S.M.A.R.T. supported
- RoHS & REACH compliant
- Capacities from 2GB up to 64GB

Product Specification


Compatibility	<ul style="list-style-type: none"> ▶ CompactFlash® specification 6.0 ▶ Compatible with ATA/ATAPI-8 	Power consumption	
Form-factor	<ul style="list-style-type: none"> ▶ CompactFlash® Type I 	Power requirement	<ul style="list-style-type: none"> ▶ +5V±10%/+3.3V±5%
Flash technology	<ul style="list-style-type: none"> ▶ SLC-NAND type flash memory 	Reading mode	<ul style="list-style-type: none"> ▶ 210 mA (Max.)
Performance		Writing mode	<ul style="list-style-type: none"> ▶ 210 mA(Max.)
Data transfer rate	<ul style="list-style-type: none"> ▶ PIO 0~6, MWDMA 0~4, UDMA 0~7 	Idle mode	<ul style="list-style-type: none"> ▶ 6.6 mA (Max.)
Sequential read	<ul style="list-style-type: none"> ▶ 113.5 MB/sec (Max.) 	Reliability	
Sequential write	<ul style="list-style-type: none"> ▶ 83.8 MB/sec (Max.) 	Wear-leveling	<ul style="list-style-type: none"> ▶ Global wear-leveling algorithms
Environmental specification		MTBF	<ul style="list-style-type: none"> ▶ > 3,000,000 hours
Operating temp.	<ul style="list-style-type: none"> ▶ STD. 0°C~70°C/IND.-40°C~+85°C 	Endurance	<ul style="list-style-type: none"> ▶ > 2,000,000 cycles
Non-operating temp.	<ul style="list-style-type: none"> ▶ STD. -20°C~+80°C/IND.-50°C~+95°C 	ECC	<ul style="list-style-type: none"> ▶ 72 bits per 1024 bytes block
Humidity	<ul style="list-style-type: none"> ▶ 10% - 95% non-condensing 	Physical specification	
Vibration	<ul style="list-style-type: none"> ▶ 7 Hz to 2K Hz, 20G, 3 axes 	Weight (max.)	<ul style="list-style-type: none"> ▶ Plastic frame CFC: 12.0 g / 0.42 oz. ▶ Rugged metal frame CFC: 15.0 g / 0.53 oz.
Shock	<ul style="list-style-type: none"> ▶ 0.5ms, 1500 G, 3 axes 	Dimension(W x L x H)	<ul style="list-style-type: none"> ▶ 42.8 x 36.4 x 3.3 (mm)
Altitude	<ul style="list-style-type: none"> ▶ 70,000 feet 	Conformal coating	<ul style="list-style-type: none"> ▶ Option
		Warranty	
		STD Grade SLC	<ul style="list-style-type: none"> ▶ 3 years or within 60k Erasing counts
		IND Grade SLC	<ul style="list-style-type: none"> ▶ 5 years or within 60k Erasing counts

Part Number List

Standard plastic frame CFC ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	2GB	SPCFC002G-MNCTC-JF	WPCFC002G-MNITI-UJF
	4GB	SPCFC004G-MNCTC-JF	WPCFC004G-MNITI-UJF
	8GB	SPCFC008G-MNCTC-JF	WPCFC008G-MNITI-UJF
	16GB	SPCFC016G-MNCTC-JF	WPCFC016G-MNITI-UJF
	32GB	SPCFC032G-MNCTC-JF	WPCFC032G-MNITI-UJF
	64GB	SPCFC064G-MNCTC-JF	WPCFC064G-MNITI-UJF

Optional rugged metal frame CFC ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	2GB	SRFCFC002G-MNCTC-JF	WRFCFC002G-MNITI-UJF
	4GB	SRFCFC004G-MNCTC-JF	WRFCFC004G-MNITI-UJF
	8GB	SRFCFC008G-MNCTC-JF	WRFCFC008G-MNITI-UJF
	16GB	SRFCFC016G-MNCTC-JF	WRFCFC016G-MNITI-UJF
	32GB	SRFCFC032G-MNCTC-JF	WRFCFC032G-MNITI-UJF
	64GB	SRFCFC064G-MNCTC-JF	WRFCFC064G-MNITI-UJF

Part Number Decoder

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

Example ▶

W P C F C 0 6 4 G — M N I T I — U F

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

X3 X4 X5 Product category

CFC : CompactFlash card

X6 X7 X8 X9 Capacity

002G : 2GB **016G** : 16GB
004G : 4GB **032G** : 32GB
008G : 8GB **064G** : 64GB

X11 Controller

M : HERCULES Series

X12 Controller version

A, B, C, D,....

X13 Controller grade

C : Commercial grade
I : Industrial grade

X14 Flash IC brand

T : Toshiba SLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade
I : Industrial grade

X17 X18 Data transfer rate and disk types

PF : optional as PIO-6 mode / Fixed disk type
PR : optional as PIO-6 mode / Removable disk type
UF : defaulted as UDMA-7 mode / Fixed disk type
UR : optional as UDMA-7 mode / Removable disk type
AA : optional as UDMA & PIO mode auto-detection /
Fixed disk & removable disk type auto-detection

X19 X20 Reserved for specific requirement

C : Conformal coating (option)