

# HERMES-F Series

Industrial SATA III CFast Card  
Optional Rugged Metal Frame



## PRODUCT FEATURES


- ▶ SLC - NAND type flash technology
- ▶ Compliant with CFast 2.0 Specification
- ▶ CFast Type I form-factor
- ▶ 7 pins (data) + 17 pins (power) CFast interface
- ▶ S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- ▶ Compliant with SATA 1.0a/2.6/3.0 specification
- ▶ Capacity from 4GB up to 64GB
- ▶ Performance up to 470 MB/sec (max.)

## PRODUCT SPECIFICATION


<b>Compatibility</b>	▶ CFast Specification V2.0	<b>Power consumption</b>	Power requirement ▶ +3.3V ± 5%
	▶ SATA 1.0a, SATA 2.6 and SATA3.0		Reading mode ▶ 240 mA (Max.)
	▶ Compatible with ATA/ATAPI-7		Writing mode ▶ 320 mA(Max.)
<b>Flash technology</b>	▶ SLC-NAND type flash based		Idle mode ▶ 110 mA (Max.)
<b>Form-factor</b>	▶ CFast Type I	<b>Reliability</b>	
<b>Host Interface</b>	▶ 7 pins (data) + 17 pins (power) CFast connector	Wear-leveling ▶ Static wear-leveling algorithms	
<b>Performance</b>		MTBF ▶ > 4,000,000 hours	
Data transfer rate	▶ Serial ATA Gen-I, Gen-II and Gen-III (1.5Gb/s, 3.0Gb/s, 6.0Gb/s)	Endurance ▶ > 3,000,000 cycles	
Sequential read	▶ 470 MB/sec (Max.)	ECC ▶ 8 bits per 512bytes block	
Sequential write	▶ 250 MB/sec (Max.)	Data retention ▶ 10 Years	
Random access time	▶ 0.1ms (estimated)	<b>Physical specification</b>	
<b>Environmental specification</b>		Weight ▶ Plastic frame: 10.0 g / 0.35 oz. Metal frame: 13.0 g / 0.46 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 3.5 (mm)	
Non-operating temp.	▶ STD. -20°C~+80°C/IND. -50°C~+95°C	<b>Warranty</b>	
Humidity	▶ 10% ~ 95% non-condensing	Standard grade ▶ 3 years	
Vibration	▶ 15G compliance to MIL-STD-810F	Industrial grade ▶ 5 years	
Shock	▶ 1,500G compliance to MIL-STD-810F		
Altitude	▶ 70,000 feet		

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

Part number list - SLC industrial CFast Card with standard plastic frame kit

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	<b>4GB</b>	SPCFA004G-JFCTC(/C)	WPCFA004G-JFITI(/C)
	<b>8GB</b>	SPCFA008G-JFCTC(/C)	WPCFA008G-JFITI(/C)
	<b>16GB</b>	SPCFA016G-JFCTC(/C)	WPCFA016G-JFITI(/C)
	<b>32GB</b>	SPCFA032G-JFCTC(/C)	WPCFA032G-JFITI(/C)
	<b>64GB</b>	SPCFA064G-JFCTC(/C)	WPCFA064G-JFITI(/C)

Part number list - SLC industrial CFast Card with rugged metal frame kit

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	<b>4GB</b>	SRCFA004G-JFCTC(/C)	WRCFA004G-JFITI(/C)
	<b>8GB</b>	SRCFA008G-JFCTC(/C)	WRCFA008G-JFITI(/C)
	<b>16GB</b>	SRCFA016G-JFCTC(/C)	WRCFA016G-JFITI(/C)
	<b>32GB</b>	SRCFA032G-JFCTC(/C)	WRCFA032G-JFITI(/C)
	<b>64GB</b>	SRCFA064G-JFCTC(/C)	WRCFA064G-JFITI(/C)

## PART NUMBER DECODER

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

### Example

W P C F A 0 1 6 G — J F I T I / 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 kit

**R** : Rugged metal frame kit

X3 X4 X5 ▶ **Product category**

**CFA** : CFast card

X6 X7 X8 X9 ▶ **Capacity**

**004G** : 4GB

**16GB** : 16GB

**008G** : 8GB

**032G** : 32GB

**064G** : 64GB

X11 ▶ **Controller**

**J** : JMicron (HERMES-F Series)

X12 ▶ **Controller version**

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

X13 ▶ **Controller grade**

**C** : Commercial grade

**I** : Industrial grade

X14 ▶ **Flash IC**

**T** : Toshiba SLC-NAND flash IC

X15 ▶ **Flash IC grade**

**C** : Commercial grade

**I** : Industrial grade

C ▶ **Reserved for specific requirement**

**C** : Conformal-coating