

HERMES-I Series

Industrial SLC SATA III CFast™ Card



Product Feature

- SLC - NAND type flash technology
- Optional rugged metal frame
- S.M.A.R.T. supported
- RoHS & REACH compliant
- Capacity from 4GB up to 64GB

Product Specification

Compatibility

- ▶ SATA Revision 3.1
- ▶ CFast™ Specification v2.0
- ▶ Compatible with ATA/ATAPI-7

Flash technology

- ▶ SLC-NAND type flash memory

Form-factor

- ▶ CFast™ Type I

Host Interface

- ▶ 7 pins (data) + 17 pins (power) connector

Performance

- Data transfer rate ▶ SATA 1.5Gbps/3.0Gbps/6.0Gbps data transfer rate
- Sequential read ▶ 330.0 MB/sec (Max.)
- Sequential write ▶ 190.0 MB/sec (Max.)
- 4KB random read ▶ 11.5K IOPS
- 4KB random write ▶ 14.2K IOPS

Environmental specification

- Operating temp. ▶ STD. 0°C~70°C/IND. -40°C~+85°C
- Non-operating temp. ▶ STD. -20°C~+80°C/IND. -50°C~+95°C
- Humidity ▶ 10% - 95% non-condensing
- Vibration ▶ 7 Hz to 2K Hz, 20G, 3 axes
- Shock ▶ 0.5ms, 1500 G, 3 axes
- Altitude ▶ 70,000 feet

Power consumption

- Power requirement ▶ +3.3V ± 5%
- Reading mode ▶ 305 mA (Max.)
- Writing mode ▶ 342 mA (Max.)
- Idle mode ▶ 128 mA (Max.)

Reliability

- Wear-leveling ▶ Static wearLeveling algorithms
- MTBF ▶ > 3,000,000 hours
- Erase counts ▶ Up to 60,000 times
- ECC ▶ 40 bits per 1024bytes block

Physical specification

- Weight ▶ Plastic frame CFA: 10.0 g / 0.35 oz.
▶ Rugged metal frame CFA: 13.0 g / 0.46 oz.
- Dimension(W x L x H) ▶ 42.8 x 36.4 x 3.5 (mm)

Conformal coating


- ▶ Option

Warranty


- STD Grade SLC ▶ 3 years or within 60k Erasing counts
- IND Grade SLC ▶ 5 years or within 60k Erasing counts

Part Number List

Standard plastic frame CFA ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	4GB	SPCFA004G-JICTC-(T)	WPCFA004G-JIITH-(T)C
	8GB	SPCFA008G-JICTC-(T)	WPCFA008G-JIITH-(T)C
	16GB	SPCFA016G-JICTC-(T)	WPCFA016G-JIITH-(T)C
	32GB	SPCFA032G-JICTC-(T)	WPCFA032G-JIITH-(T)C
	64GB	SPCFA064G-JICTC-(T)	WPCFA064G-JIITH-(T)C

Optional rugged metal frame CFA ▶

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	4GB	SRCFA004G-JICTC-(T)	WRCFA004G-JIITH-(T)C
	8GB	SRCFA008G-JICTC-(T)	WRCFA008G-JIITH-(T)C
	16GB	SRCFA016G-JICTC-(T)	WRCFA016G-JIITH-(T)C
	32GB	SRCFA032G-JICTC-(T)	WRCFA032G-JIITH-(T)C
	64GB	SRCFA064G-JICTC-(T)	WRCFA064G-JIITH-(T)C

Part Number Decoder

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

Example ▶

W R C F A 0 6 4 G — J I 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

R : Rugged metal frame

X3 X4 X5 Product category

CFA : CFast™ card

X6 X7 X8 X9 Capacity

004G : 4GB 032G : 32GB

008G : 8GB 064G : 64GB

016G : 16GB

X11 Controller

J : HERMES 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 X19 X20 Reserved for specific requirement

Blank : Standard product w/o thermal sensor and conformal-coating

T : Thermal Sensor.

C : Conformal-coating