

PHANES-K Series

MLC SATA III CFast Card



Product Feature

- MLC - NAND type flash technology
- Optional rugged metal frame
- S.M.A.R.T. supported
- RoHS & REACH compliant
- Capacity from 32GB up to 128GB

Product Specification

Compatibility

- CFast Specification V2.0
- SATA 1.0a, SATA 2.6 and SATA 3.0
- Compliant with ATA/ATAPI-8 ACS2

Flash technology

- MLC-NAND type flash memory

Form-factor

- CFast Type I

Host Interface

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

Performance

- Data transfer rate ■ SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s
- Sequential read ■ 555 MB/sec (Max.)
- Sequential write ■ 465 MB/sec (Max.)

Environmental specification

- Operating temp. ■ STD. 0 °C~70 °C/W.T. -40 °C~+85 °C
- Non-operating temp. ■ STD. -20 °C~+80 °C/W.T. -50 °C~+95 °C

Conformal coating

- For wide temperature

- Humidity ■ 10% ~ 95% non-condensing
- Vibration ■ 80 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 ■ 1090 mW (Max.)
- Writing mode ■ 1475 mW (Max.)
- Idle mode ■ 260 mW (Max.)

Reliability

- Wear-leveling ■ Static and Dynamic wear-leveling algorithms
- ECC ■ Designed with hardware LDPC ECC engine with hard-decision and soft-decision decoding.

Physical specification


- Weight ■ Plastic frame CFA : 10.0 ± 1 g / 0.40 oz.
■ Rugged metal frame CFA : 13.0 ± 1 g / 0.46 oz.
- Dimension(W x L x H) ■ 42.8 x 36.4 x 3.5 (mm)

Warranty


- MLC(standard/wide temp.) ■ 2 years or within 3K Erasing counts

Part Number List

Standard plastic frame CFA ▶

| Product Picture | Capacity | 0°C ~ 70°C | - 40°C ~ + 85°C |
|---|----------|-----------------|-------------------|
|  | 32GB | SPCFA032G-PKCTM | WPCFA032G-PKCTM-C |
| | 64GB | SPCFA064G-PKCTM | WPCFA064G-PKCTM-C |
| | 128GB | SPCFA128G-PKCTM | WPCFA128G-PKCTM-C |
| | | | |
| | | | |

Optional rugged metal frame CFA ▶

| Product Picture | Capacity | 0°C ~ 70°C | - 40°C ~ + 85°C |
|---|----------|-----------------|-------------------|
|  | 32GB | SRCFA032G-PKCTM | WRCFA032G-PKCTM-C |
| | 64GB | SRCFA064G-PKCTM | WRCFA064G-PKCTM-C |
| | 128GB | SRCFA128G-PKCTM | WRCFA128G-PKCTM-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 1 2 8 G — P K C T M — C

X1 Grade

S : Standard grade operating temp. 0° C~70 ° C
 W : Wide temp. 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

032G : 32GB

064G : 64GB

128G : 128GB

X11 Controller

P : PHANES Series

X12 Controller version

A, B, C, D,

X13 Controller grade

C : Commercial grade

X14 Flash IC brand

T : Toshiba NAND flash IC

X15 Flash IC type

M : MLC-NAND flash IC

X17 X18 X19 X20 Reserved for specific requirement

C : Conformal coating for wide temp. grade