



**Features**

- Enhanced MLC-NAND flash by sophisticated aSLC firmware
- Optional rugged metal frame
- Support Trim command set
- Support Native Command Queuing (NCQ)
- Support LDPC (Low Density Parity Check) ECC algorithm
- Support S.M.A.R.T. command set and utility
- Support Power Loss Protection
- Capacities from 16GB up to 64GB

**Specification**

- **Compatibility**  
SATA Revision 3.2  
CFast™ Specification v2.0  
ATA-8 ACS4 command set
- **Declarations**  
RoHS & REACH compliant
- **Flash technology**  
MLC-NAND flash technology
- **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**  
558 MB/sec (Max.)
  - **Sequential write**  
463 MB/sec (Max.)
- **Environmental**
  - **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
  - **Humidity**  
10% ~ 95% non-condensing
  - **Vibration**  
80 Hz to 2K Hz, 20G, 3axes
  - **Shock**  
0.5ms, 1500 G, 3 axes
  - **Altitude**  
70,000 feet

- **Power consumption**
  - **Power requirement**  
+3.3V ± 5%
  - **Reading mode**  
1,056 mW (Max.)
  - **Writing mode**  
1,320 mW (Max.)
  - **Idle mode**  
231 mW (Max.)
- **Reliability**
  - **Wear-leveling**  
Static and Dynamic wear-leveling algorithms  
Up to 215 TBW at 64GB Capacity  
(Client workload by JESD-219A)
  - **TBW**  
Up to 20,000 times
  - **Erase counts**  
LDPC (Low Density Parity Check)
- **Physical specification**
  - **Weight (Max.)**  
Plastic frame : 10g  
Rugged metal frame : 13g
  - **Dimension (WxLxH)**  
42.8 x 36.4 x 3.5 (mm)
- **Conformal coating**  
Optional
- **Warranty**  
2 years or within 20,000 erasing counts

**Part Number List**

Standard plastic frame CFA			Optional rugged metal CFA		
Capacity	0°C~+70°C	-40°C~+85°C	Capacity	0°C~+70°C	-40°C~+85°C
16GB	SPCFA016G-PKCTMAS-(T)	WPCFA016G-PKCTMAS-(T)C	16GB	SRCFA016G-PKCTMAS-(T)	WRCFA016G-PKCTMAS-(T)C
32GB	SPCFA032G-PKCTMAS-(T)	WPCFA032G-PKCTMAS-(T)C	32GB	SRCFA032G-PKCTMAS-(T)	WRCFA032G-PKCTMAS-(T)C
64GB	SPCFA064G-PKCTMAS-(T)	WPCFA064G-PKCTMAS-(T)C	64GB	SRCFA064G-PKCTMAS-(T)	WRCFA064G-PKCTMAS-(T)C

**Part Number Decoder**

X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X20
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**Example**

W	R	C	F	A	0	6	4	G	—	P	K	C	T	M	A	S	—	T	C
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**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**

016G : 16GB  
032G : 32GB  
064G : 64GB

**X11 Controller**

P : PHANES Series

**X12 Controller version**

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

**X13 Controller grade**

C : Commercial grade

**X14 Flash IC brand**

T : Toshiba NAND flash IC

**X15 Flash IC type**

M : MLC-NAND flash IC

**X16 X17 aSLC Technology**

AS : aSLC Technology extends MLC products' lifespan

**X19 X20 Reserved for specific requirements**

Blank : Standard product w/o thermal sensor and conformal-coating  
T : Thermal Sensor (optional)  
C : Conformal coating (optional)

SLC

aSLC

MLC

3D-NAND

DRAM Module

Adapter

Card-drive