



Features

- MLC-NAND flash technology
- Optional rugged metal frame
- Support Trim command set
- Support Native Command Queuing (NCQ)
- Support S.M.A.R.T. command set and utility
- Support Power Loss Protection
- Capacities from 4GB up to 256GB

Specification

- **Compatibility**
 - SATA Revision 3.1
 - CFAST™ Specification v2.0
 - ATA-8 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**
 - 229 MB/sec (Max.)
 - **Sequential write**
 - 131 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**
 - 70 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**
 - 213 mA (Max.)
 - **Writing mode**
 - 332 mA (Max.)
 - **Idle mode**
 - 125mA (Max.)
- **Reliability**
 - **Wear-leveling**
 - Static wear-leveling algorithms
 - Up to 76.8 TBW at 256GB Capacity (Client workload by JESD-219A)
 - **TBW**
 - Up to 3,000 times
 - **Erase counts**
 - 40 bits per 1024 bytes block
- **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 3,000 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
4GB	SPCFA004G-JJCTMB-(T)	WPCFA004G-JJCTMB-(T)C	4GB	SRCFA004G-JJCTMB-(T)	WRCFA004G-JJCTMB-(T)C
8GB	SPCFA008G-JJCTMB-(T)	WPCFA008G-JJCTMB-(T)C	8GB	SRCFA008G-JJCTMB-(T)	WRCFA008G-JJCTMB-(T)C
16GB	SPCFA016G-JJCTMB-(T)	WPCFA016G-JJCTMB-(T)C	16GB	SRCFA016G-JJCTMB-(T)	WRCFA016G-JJCTMB-(T)C
32GB	SPCFA032G-JJCTMB-(T)	WPCFA032G-JJCTMB-(T)C	32GB	SRCFA032G-JJCTMB-(T)	WRCFA032G-JJCTMB-(T)C
64GB	SPCFA064G-JJCTMB-(T)	WPCFA064G-JJCTMB-(T)C	64GB	SRCFA064G-JJCTMB-(T)	WRCFA064G-JJCTMB-(T)C
128GB	SPCFA128G-JJCTMB-(T)	WPCFA128G-JJCTMB-(T)C	128GB	SRCFA128G-JJCTMB-(T)	WRCFA128G-JJCTMB-(T)C
256GB	SPCFA256G-JJCTMB-(T)	WPCFA256G-JJCTMB-(T)C	256GB	SRCFA256G-JJCTMB-(T)	WRCFA256G-JJCTMB-(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
W	R	C	F	A	2	5	6	G	—	J	J	C	T	M	B	—	T	C	

Example

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

004G : 4GB 064G : 64GB
 008G : 8GB 128G : 128GB
 016G : 16GB 256G : 256GB
 032G : 32GB

X11 Controller

J : HERMES Series

X12 Controller version

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

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 MLC Technology

B : Toshiba 15nm MLC

X18 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