



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 LDPC (Low Density Parity Check) ECC algorithm.
- Ultra-high random read/write speed
- Capacities from 8GB 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** 530 MB/sec (Max.)
 - **Sequential write** 210 MB/sec (Max.)
 - **4KB random read** 32K IOPS (Max.)
 - **4KB random write** 26K IOPS (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** 115 mA (Max.)
- **Writing mode** 260 mA (Max.)
- **Idle mode** 100mA (Max.)
- **Reliability**
- **Wear-leveling** Static wear-leveling algorithms
- **TBW** Up to 416 TBW at 256GB Capacity (Client workload by JESD-219A)
- **Erase counts** Up to 3,000 times
- **ECC** 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 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
8GB	SPCFA008G-VDCTM-(T)	WPCFA008G-VDCTM-(T)C	8GB	SRCFA008G-VDCTM-(T)	WRCFA008G-VDCTM-(T)C
16GB	SPCFA016G-VDCTM-(T)	WPCFA016G-VDCTM-(T)C	16GB	SRCFA016G-VDCTM-(T)	WRCFA016G-VDCTM-(T)C
32GB	SPCFA032G-VDCTM-(T)	WPCFA032G-VDCTM-(T)C	32GB	SRCFA032G-VDCTM-(T)	WRCFA032G-VDCTM-(T)C
64GB	SPCFA064G-VDCTM-(T)	WPCFA064G-VDCTM-(T)C	64GB	SRCFA064G-VDCTM-(T)	WRCFA064G-VDCTM-(T)C
128GB	SPCFA128G-VDCTM-(T)	WPCFA128G-VDCTM-(T)C	128GB	SRCFA128G-VDCTM-(T)	WRCFA128G-VDCTM-(T)C
256GB	SPCFA256G-VDCTM-(T)	WPCFA256G-VDCTM-(T)C	256GB	SRCFA256G-VDCTM-(T)	WRCFA256G-VDCTM-(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	—	V	D	C	T	M	—	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

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

X11 Controller

V : MUSE 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 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