



Features

- SLC-NAND flash technology
- Optional thermal sensor to monitor SSD operating temperature
- 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 8GB up to 32GB

Specification

<ul style="list-style-type: none"> ■ Compatibility ■ Declarations ■ Flash technology ■ Form-factor ■ Host Interface ■ Performance ➤ Data transfer rate ➤ Sequential read ➤ Sequential write ■ Environmental ➤ Operating temp. ➤ Non-operating temp. ➤ Humidity ➤ Vibration ➤ Shock ➤ Altitude 	<p>SATA Revision 3.2 ATA-8 ACS4 command set RoHS & REACH compliant SLC-NAND flash technology Standard mSATA form factor Compliant with JEDEC MO-300A mini PCI-e connector with 52 pins SATA pin out</p> <p>SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s 510 MB/sec (Max.) 305 MB/sec (Max.)</p> <p>STD. 0°C~+70°C/IND. -40°C~+85°C STD. -20°C~+80°C/IND. -50°C~+95°C 10% ~ 95% non-condensing 80 Hz to 2K Hz, 20G, 3 axes 0.5ms, 1500 G, 3 axes 70,000 feet</p>	<ul style="list-style-type: none"> ■ Power consumption ➤ Power requirement ➤ Reading mode ➤ Writing mode ➤ Idle mode ■ Reliability ➤ Wear-leveling ➤ TBW ➤ MTBF ➤ Erase counts ➤ ECC ■ Physical specification ➤ Weight (Max.) ➤ Dimension (WxL) ➤ Conformal coating ■ Warranty ➤ SLC STD. grade ➤ SLC IND. grade <p>+3.3 V ± 5% 1,650mW (Max.) 1,730mW (Max.) 325mW (Max.)</p> <p>Static and Dynamic wear-leveling algorithms Up to 325 TBW at 32GB Capacity. (Client workload by JESD-219A) > 3,000,000 hours Up to 60,000 times LDPC (Low Density Parity Check)</p> <p>8g 29.85 x 50.80 (mm) Optional</p> <p>3 years or within 60,000 erasing counts 5 years or within 60,000 erasing counts</p>
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Part Number List

Capacity	0°C~+70°C	Capacity	-40°C~+85°C
8GB	SBMSM008G-PKCTC-(W/T/WT)	8GB	WBMSM008G-PKITI-(W/T/WT)C
16GB	SBMSM016G-PKCTC-(W/T/WT)	16GB	WBMSM016G-PKITI-(W/T/WT)C
32GB	SBMSM032G-PKCTC-(W/T/WT)	32GB	WBMSM032G-PKITI-(W/T/WT)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	B	M	S	M	0	3	2	G	-	P	K	I	T	I	-	W	T	C	
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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

B : Bare (without casing)

X3 X4 X5 Product category

MSM : Mini SATA Module (mSATA)

X6 X7 X8 X9 Capacity

008G : 8GB
016G : 16GB
032G : 32GB

X11 Controller

P : PHANES 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 requirements

Blank : Standard product w/o thermal sensor and conformal-coating
W : Write Protection Switch (optional)
T : Thermal Sensor (optional)
WT : Write Protection Switch + Thermal Sensor (optional)
C : Conformal coating (optional)