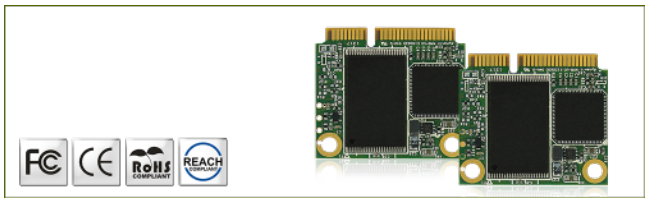

❖ Features

- MLC-NAND flash technology
- Support Trim command set
- Support Native Command Queuing (NCQ)
- Support S.M.A.R.T. command set and utility
- Capacities from 4GB up to 128GB

❖ Specification

■ **Compatibility**	SATA Revision 3.1
■ **Declarations**	RoHS & REACH compliant
■ **Flash technology**	MLC-NAND flash technology
■ **Form-factor**	mSATA mini form factor Compliant with JEDEC MO-300B
■ **Host Interface**	mini PCI-e connector with 52 pins SATA pin out
■ **Performance**	
➢ **Data transfer rate**	SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s
➢ **Sequential read**	230.9 MB/sec (Max.)
➢ **Sequential write**	79.4 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**	+3.3 V ± 5%
➢ **Reading mode**	197mA (Max.)
➢ **Writing mode**	241mA (Max.)
➢ **Idle mode**	155mA (Max.)
■ **Reliability**	
➢ **Wear-leveling**	Static wear-leveling algorithms
➢ **TBW**	Up to 38.4 TBW at 128GB Capacity (Client workload by JESD-219A)
➢ **Erase counts**	Up to 3,000 times
➢ **ECC**	40 bits per 1024 bytes block
■ **Physical specification**	
➢ **Weight (Max.)**	3.5g
➢ **Dimension (WxL)**	29.80 x 26.80 (mm)
■ **Conformal coating**	Optional
■ **Warranty**	2 years or within 3,000 erasing counts

❖ Part Number List

Capacity	0ºC~+70ºC	Capacity	-40ºC~+85ºC
4GB	SBMSH004G-JJCTMB-(T)	**4GB**	WBMSH004G-JJCTMB-(T)C
8GB	SBMSH008G-JJCTMB-(T)	**8GB**	WBMSH008G-JJCTMB-(T)C
16GB	SBMSH016G-JJCTMB-(T)	**16GB**	WBMSH016G-JJCTMB-(T)C
32GB	SBMSH032G-JJCTMB-(T)	**32GB**	WBMSH032G-JJCTMB-(T)C
64GB	SBMSH064G-JJCTMB-(T)	**64GB**	WBMSH064G-JJCTMB-(T)C
128GB	SBMSH128G-JJCTMB-(T)	**128GB**	WBMSH128G-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
Example																			
W	B	M	S	H	1	2	8	G	–	J	J	C	T	M	B	–	T	C	

X1 Grade

S : Standard grade operating temp. 0ºC~+70ºC
W : Wide temp. grade operating temp. -40ºC~+85ºC

X2 The material of casing

B : Bare (without casing)

X3 X4 X5 Product category

MSH : Mini SATA Module Half Size (mSATA mini)

X6 X7 X8 X9 Capacity

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

X11 Controller

J : HERMES 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

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)