



◆ Specification

■ Compatibility	SATA Revision 3.1 ATA-8 command set
■ Declarations	RoHS & REACH compliant
■ Flash technology	MLC-NAND flash technology
■ Form-factor	mSATA mini form factor Compliant with JEDEC MO-300B mini PCI-e connector with 52 pins SATA pin out
■ Host Interface	
■ Performance	
➢ Data transfer rate	SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s
➢ Sequential read	533 MB/sec (Max.)
➢ Sequential write	125 MB/sec (Max.)
➢ 4KB random read	30K 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

◆ Part Number List

Capacity	0°C~+70°C	Capacity	-40°C~+85°C
8GB	SBMSH008G-VDCTM-(T)	8GB	WBMSH008G-VDCTM-(T)C
16GB	SBMSH016G-VDCTM-(T)	16GB	WBMSH016G-VDCTM-(T)C
32GB	SBMSH032G-VDCTM-(T)	32GB	WBMSH032G-VDCTM-(T)C
64GB	SBMSH064G-VDCTM-(T)	64GB	WBMSH064G-VDCTM-(T)C
128GB	SBMSH128G-VDCTM-(T)	128GB	WBMSH128G-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
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Example

W	B	M	S	H	1	2	8	G	—	V	D	C	T	M	—	T	C		
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

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

B : Bare (without casing)

X3 X4 X5 Product category

MSH : Mini SATA Module Half Size (mSATA mini)

X6 X7 X8 X9 Capacity

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

X11 Controller

V : MUSE Series

◆ Features

- MLC-NAND flash technology
- 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
- Ultra-high random read/write speed
- Capacities from 8GB up to 128GB

➢ Altitude	70,000 feet
■ Power consumption	
➢ Power requirement	+3.3 V ± 5%
➢ Reading mode	130mA (Max.)
➢ Writing mode	200mA (Max.)
➢ Idle mode	80mA (Max.)
■ Reliability	
➢ Wear-leveling	Static wear-leveling algorithms
➢ TBW	Up to 210.5 TBW at 128GB Capacity (Client workload by JESD-219A)
➢ Erase counts	Up to 3,000 times
➢ ECC	LDPC (Low Density Parity Check)
■ Physical specification	
➢ Weight (Max.)	3.5g
➢ Dimension (WxL)	29.85 x 26.80 (mm)
■ Conformal coating	Optional
■ Warranty	2 years or within 3,000 erasing counts