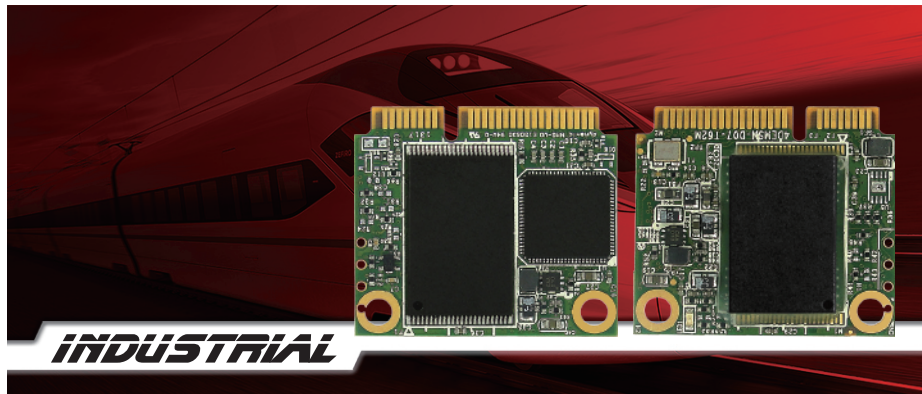


HERMES-J Series

MLC mini SATA III Module Half Size (MSH) / mSATA mini



Product Feature

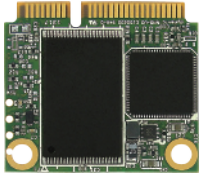
- MLC - NAND type flash technology
- mSATA module compatible with JEDEC Standard : MO-300B specification
- Compliant with SATA 1.0a/ 2.6/ 3.0 specification
- Capacity from 4GB up to 128GB
- S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- Bootable for O.S. Installation
- Maximum sequential read speed 220 MB/sec
- Maximum sequential write speed 80 MB/sec

Product Specification

Compatibility	▷ SATA 1.0a, SATA 2.6 and SATA 3.0 Specification compliance	Power consumption	Power requirement ▷ +3.3 V ± 5%
Form-factor	▷ mSATA mini form factor Compliant with JEDEC MO-300B	Reading mode	▷ 370mA (Max.)
Flash technology	▷ MLC-NAND type flash based	Writing mode	▷ 430mA (Max.)
Host Interface	▷ mini PCI-e connector with 52 pins SATA pin out	Idle mode	▷ 70mA (Max.)
Performance		Reliability	
Data transfer rate	▷ SATA 1.5Gb/s, 3.0Gb/s, 6.0Gb/s	Wear-leveling	▷ Static wear-leveling algorithms
Sequential read	▷ 220 MB/sec (Max.)	ECC	▷ 40 bits per 1024 bytes block
Sequential write	▷ 80 MB/sec (Max.)	Physical specification	
Random access time	▷ 0.1ms (estimated)	Weight	▷ 4.0 g ± 0.5 g / 0.14 oz.
Environmental specification		Dimension(W x L x H)	▷ 29.80 x 26.8 x 3.20 (mm)
Operating temp.	▷ STD. 0°C~70°C/W.T. -40°C~+85°C	Warranty	
Non-operating temp.	▷ STD. -20°C~+80°C/W.T. -50°C~+95°C	MLC(standard/wide temp.)	▷ 2 years / Within 3k Erasing counts
Conformal coating	▷ Option for wide temperature		
Humidity	▷ 10% ~ 95% non-condensing		
Vibration	▷ 7 Hz to 2K Hz, 20G, 3 axes		
Shock	▷ 0.5ms, 1500 G, 3 axes		
Altitude	▷ 70,000 feet		

Operating temperature supports standard grade 0°C ~ 70°C and wide temp. grade -40°C ~ +85°C

Part number list - MLC mSATA mini

Product Picture	Capacity	0°C ~ 70°C	- 40°C ~ + 85°C
	4GB	SBMSH004G-JJCTMB	WBMSH004G-JJCTMB-C
	8GB	SBMSH008G-JJCTMB	WBMSH008G-JJCTMB-C
	16GB	SBMSH016G-JJCTMB	WBMSH016G-JJCTMB-C
	32GB	SBMSH032G-JJCTMB	WBMSH032G-JJCTMB-C
	64GB	SBMSH064G-JJCTMB	WBMSH064G-JJCTMB-C
	128GB	SBMSH128G-JJCTMB	WBMSH128G-JJCTMB-C

Remarks : Wide temperature grade -40°C ~ +85°C with special conformal coating treatment on PCBA.

J : 4GB ~128GB

Part Number Decoder



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

B : Bare (without casing)

X3 X4 X5 Product category

MSH : mSATA 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

T : Toshiba flash IC

X15 Flash IC grade

M : MLC-NAND flash IC

X16 Generation

B : 15 nm

C Reserved for specific requirement

C : Conformal-coating