

HERMES-D Series

MLC mini SATA Flash Module (MSM)
supports Write Protect Function



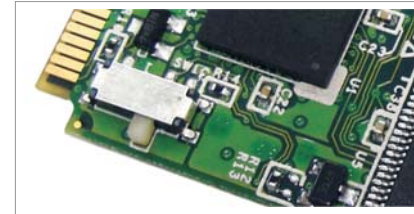
Product features

- ✦ MLC - NAND type flash technology
- ✦ S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- ✦ mSATA module compatible with JEDEC Standard : MO-300A specification
- ✦ Bootable for O.S. Installation
- ✦ Compliant with SATA 1.0a and SATA 2.6 specification
- ✦ Maximum sequential read speed 122.5MB/sec
- ✦ Supports write protect function by switch
- ✦ Maximum sequential write speed 78.5MB/sec
- ✦ Capacity from 4GB up to 128GB

Product specifications

Compatibility	✦ SATA 1.0a and SATA 2.6 Specification compliance	Write protect function	Mechanism design ✦ By switch
Form-factor	✦ Standard mSATA form factor	Power consumption	Power requirement ✦ +3.3 V 5%
	Compliant with JEDEC MO-300A	Reading mode	✦ 240mA (Max.)
Flash technology	✦ MLC-NAND type flash based	Writing mode	✦ 240mA (Max.)
Host Interface	✦ mini PCI-e connector with 52 pins	Idle mode	✦ 170mA (Max.)
	SATA-II pin out	Reliability	
Performance		Wear-leveling	✦ Static wear-leveling algorithms
Data transfer rate	✦ Serial ATA Gen-I and Gen-II	ECC	✦ 24 bits per 1024 bytes block
Sequential read	✦ 122.5 MB/sec (Max.)	Physical specification	
Sequential write	✦ 78.5 MB/sec (Max.)	Weight	✦ 8.0 g 1 g / 0.3 oz.
Random access time	✦ 0.2ms (estimated)	Dimension(W x L x H)	✦ 50.80 x 29.8 x 3.20 (mm)
Environmental specification		Warranty	✦ 2 years
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		
Conformal coating	✦ Option for wide temperature		
Humidity	✦ 10% ~ 95% non-condensing		
Vibration	✦ 15G compliance to MIL-STD-810F		
Shock	✦ 1,500G compliance to MIL-STD-810F		
Altitude	✦ 70,000 feet		

Write-protection switch



Operating temperature supports Standard grade 0° C ~ 70° C and Wide temp. Grade -40° C ~ +85° C
Part number list - MLC mini SATA flash module supports write protection

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	4GB	SBMSM004G-JDCMM	WBMSM004G-JDCMM/C
	8GB	SBMSM008G-JDCMM	WBMSM008G-JDCMM/C
	16GB	SBMSM016G-JDCMM	WBMSM016G-JDCMM/C
	32GB	SBMSM032G-JDCMM	WBMSM032G-JDCMM/C
	64GB	SBMSM064G-JDCMM	WBMSM064G-JDCMM/C
	128GB	SBMSM128G-JDCMM	WBMSM128G-JDCMM/C

Remarks:

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

Part number decoder

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 / C

Example

W B M S M 1 2 8 G — J D C M M / C

X1 ✦ Grade

S : Standard grade operating temp. 0° C ~ 70° C

W : Wide temp. Grade operating temp. -40° C ~ +85° C

X12 ✦ Controller version

A,B,C,.....

X2 ✦ The material of casing

B : Bare (without casing)

X13 ✦ Controller grade

C : Commercial grade

X3 X4 X5 ✦ Product category

MSM : mini SATA flash module

X14 ✦ Flash IC

M : Micron flash IC

X6 X7 X8 X9 ✦ Capacity

004G : 4GB 032G : 32GB

008G : 8GB 064G : 64GB

016G : 16GB 128G : 128GB

X15 ✦ Flash IC grade

M : MLC-NAND flash IC

C ✦ Reserved for specific requirement

C : Conformal-coating

X11 ✦ Controller

J : JMicron (HERMES Series)

CFC
CompactFlash
Card

CFA
CFast Card

AFC
PCMCIA ATA
Card

MIF
micro IDE Flash
Module

MSF
micro SATA Flash
Module

MUM
micro USB Flash
Module

MPM
mini PCI-e Flash
Module

MSM
mini SATA Flash
Module

SSD
Solid State
Disk

UFD
Rugged Metal
USB Flash Disk

SDC/H
SD & SDHC
Memory Card

AD
Adaptor
Card-Drive

CFC
CompactFlash
Card

CFA
CFast Card

AFC
PCMCIA ATA
Card

MIF
micro IDE Flash
Module

MSF
micro SATA Flash
Module

MUM
micro USB Flash
Module

MPM
mini PCI-e Flash
Module

MSM
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