HERMES Series

1.8” micro SATA II MLC SSD

Product features

- MLC - NAND type flash technology
- 1.8” SATA SSD form-factor in 5 mm height
- Micro SATA 7-pin (data) + 9-pin (power) host interface
- Compliant with SATA 1.0a and SATA 2.6 specification
- Capacity from 8GB up to 128GB
- Performance up to 163.5MB/sec (Max.)
- Support static wear-leveling algorithms

Product specifications

Compatibility	SATA 1.0a and SATA 2.6 specification compliance
Flash technology	MLC-NAND type flash based
Form-factor	1.8” SATA SSD
Host Interface	Micro SATA II 7-pin (data) + 9-pin (power connector)
Performance	
Data transfer rate	Serial ATA Gen-I and II (1.5Gb/s and 3.0Gb/s)
Sequential read	163.5 MB/sec (Max.)
Sequential write	90.9 MB/sec (Max.)
Average access time	0.1ms (estimated)
Environmental specification	
Operating temp.	STD. 0˚C ~ 70˚C / IND. -40˚C ~ +85˚C
Non-operating temp.	STD. -20˚C ~ +80˚C / IND. -50˚C ~ +95˚C
Humidity	10% ~ 95% non-condensing
Acoustic noise	0dB
Vibration	15G compliance to MIL-STD-810F
Shock	1,500G compliance to MIL-STD-810F
Altitude	70,000 feet

Power consumption	
Power requirement	+5V ± 10% / +3.3V ± 5%
Reading mode	350mA (Max.)
Writing mode	500mA (Max.)
Sleeping mode	150mA (Max.)
Reliability	
Wear-leveling	Static wear-leveling algorithms
ECC	Enhanced managament 8-bits per 512bytes block
Endurance	Endurance management enables 5 years minimal useful life
Physical specification	
Weight (max.)	25g ± 5g /0.88 oz.
Dimension(W x L x H)	54.00 x 78.50 x 5.00 (mm)
Warranty	
Standard grade	1 year
Industrial grade	3 years

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Advanced Performance & Rugged Orientation

Operating temperature supports Standard grade 0˚C ~ 70˚C and Industrial grade -40˚C ~ +85˚C

Part number list - 1.8” micro SATA II MLC SSD

Product Picture	Capacity	0˚C ~ 70˚C	-40˚C ~ +85˚C
	8GB	SP8SF008G-JACMC	WP8SF008G-JACMC/C
	16GB	SP8SF016G-JACMC	WP8SF016G-JACMC/C
	32GB	SP8SF032G-JACMC	WP8SF032G-JACMC/C
	64GB	SP8SF064G-JACMC	WP8SF064G-JACMC/C
	128GB	SP8SF128G-JACMC	WP8SF128G-JACMC/C

Remarks:

Industrial 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	/	Y					

Example

S	P	8	S	F	0	3	2	G	—	J	A	C	M	C							

X1 Grade

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

W : Industrial grade operating temp. -40° C ~ +85 ° C

X2 The material of frame kit

P : Plastic frame kit

X3 X4 X5 Product category

8SF : 1.8” micro SATA II SSD

X6 X7 X8 X9 Capacity

008G : 8GB

016G : 16GB

032G : 32GB

064G : 64GB

128G : 128GB

X11 Controller

J : JMicron (HERMES Series)

X12 Controller version

A,B,C.....

X13 Controller grade

C : Commercial grade

X14 Flash IC

M : MLC-NAND flash IC

X15 Flash IC grade

C : Commercial grade

Y Reserved for specific requirement

Y : Reserved for special request

C : Conformal-coating