BON Series

1.8” Slim Lite SATA II MLC SSD supports Fast Erase and Secure Erase

Product features

- MLC - NAND type flash technology
- 1.8" Slim Lite SATA II SSD compatible with JEDEC Standard: MO-297A physical specification
- Compliant with SATA 1.0a and SATA 2.6 specification
- Support Fast Erase by Hardware and Software definition
- Support Secure Erase by Software ATA command vendor code
- Maximum sequential read speed 97.9MB/sec
- Maximum sequential write speed 54.5MB/sec
- Capacity from 4GB up to 64GB

Product specifications

Compatibility	SATA 1.0a and SATA 2.6 specification compliance
	1.8" Slim Lite SATA II SSD compatible with JEDEC Standard: MO-297A specification
Flash technology	MLC-NAND type flash based
Host Interface	Standard SATA 7-pin (data) + 15-pin (power)
Performance	
Data transfer rate	Serial ATA Gen-I (1.5Gbits) and Gen-II (3.0Gbits)
Sequential read	97.9MB/sec (Max.)
Sequential write	54.5MB/sec (Max.)
Ramdom access time	0.2ms
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
Vibration	15G compliance to MIL-STD-810F
Shock	1,500G compliance to MIL-STD-810F
Altitude	70,000 feet
Functionality	
Hardware	Fast Erase the media data by hardware trigger
Software	Fast Erase the media data by ATA command vender code Secure Erase the media data by ATA command vender code
Sanitization Procedure	Default sanitizing by erase block data to 0xFF on file table for Fast Erase Sanitizing Based on NSA Manual 130-2 for Secure Erase Sanitizing Based on USA Air Force AFSSI 5020 for Secure Erase

Power consumption	
Power requirement	+5V ± 10%
Reading mode	220mA (Max.)
Writing mode	290mA (Max.)
Sleeping mode	150mA (Max.)
Reliability	
Wear-leveling	Static wear-leveling algorithms
ECC	8 bits or 15 bits per 512bytes block
Physical specification	
Weight (max.)	15 g ± 2 g /0.53 oz.
Dimension(W x L x H)	54.00 x 40.10 x 5.45 (mm)
Conformal coating	Option for wide temperature
Warranty	1 year

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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” Slim Lite SATA II MLC SSD supports FE/SE

Product Picture	Capacity	0˚C ~ 70˚C	-40˚C ~ +85˚C
	4GB	SB8SJ004G-JACMC-UFE(USE)	WB8SJ004G-JACMC-UFE(USE)C
	8GB	SB8SJ008G-JACMC-UFE(USE)	WB8SJ008G-JACMC-UFE(USE)C
	16GB	SB8SJ016G-JACMC-UFE(USE)	WB8SJ016G-JACMC-UFE(USE)C
	32GB	SB8SJ032G-JACMC-UFE(USE)	WB8SJ032G-JACMC-UFE(USE)C
	64GB	SB8SJ064G-JACMC-UFE(USE)	WB8SJ064G-JACMC-UFE(USE)C

Remarks:

UFE - Hardware and software ATA command code for Fast Erase function

USE - Secure Erase Procedure by Project Base

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	—	Z1	Z2	Z3	C

Example

W	B	8	S	J	0	6	4	G	—	J	A	C	M	C	—	U	F	E	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 casing

B : Bare (without casing)

X3 X4 X5 Product category

8SJ : 1.8" Slim Lite SATA II SSD

X6 X7 X8 X9 Capacity

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

X11 Controller

J : JMicron (BON Series supports FE/SE)

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

Z1 Z2 Z3 Special function

UFE : Hardware and software ATA command code for Fast Erase function
USE : Secure Erase procedure by project base

C Reserved for specific requirement

C : Conformal-coating

BON Series SFD V1-101012