

BON Series

Industrial 1.8" Slim Lite SATA II SLC SSD

supports Fast Erase and Secure Erase



Product features

- SLC - 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
- Supports Fast Erase by Hardware and Software definition
- Supports Secure Erase by Software ATA command vendor code
- Maximum sequential read speed 106.3 MB/sec
- Maximum sequential write speed 100.4 MB/sec
- Capacity from 4GB up to 32GB

Product specifications

Compatibility	 SATA 1.0a and SATA 2.6 specification compliance	Power consumption	 +5V ± 10%
Form-factor	 1.8" Slim Lite SATA II SSD compatible with JEDEC Standard: MO-297A specification	Reading mode	 230 mA (Max.)
Flash technology	 SLC-NAND type flash based	Writing mode	 270 mA (Max.)
Host Interface	 Standard SATA 7 pins (data) + 15 pins (power)	Idle mode	 160 mA (Max.)
Performance		Reliability	
Data transfer rate	 Serial ATA Gen-I (1.5Gbits) and Gen-II (3.0Gbits)	Wear-leveling	 Static wear-leveling algorithms
Sequential read	 106.3 MB/sec (Max.)	MTBF	 > 3,000,000 hours
Sequential write	 100.4 MB/sec (Max.)	ECC	 8 bits or 15 bits per 512 bytes block
Random access time	 0.2 ms	Endurance	 > 2,000,000 cycles
Environmental specification		Data retention	 10 years
Operating temp.	 STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	Physical specification	
Non-operating temp.	 STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	Weight (max.)	 15 g ± 2 g / 0.53 oz.
Humidity	 10% ~ 95% non-condensing	Dimension(W x L x H)	 54.00 x 39.00 x 5.45 (mm)
Vibration	 15 G compliance to MIL-STD-810F	Conformal coating	 Option for special request
Shock	 1,500 G compliance to MIL-STD-810F	Warranty	
Altitude	 70,000 feet	Standard grade	 3 years
Functionality		Industrial grade	 5 years
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		

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

Part number list - Industrial 1.8" Slim Lite SATA II SLC SSD supports FE/SE

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	4GB	SB8SJ004G-JACSC-UFE(USE)	WB8SJ004G-JAISI-UFE(USE)
	8GB	SB8SJ008G-JACSC-UFE(USE)	WB8SJ008G-JAISI-UFE(USE)
	16GB	SB8SJ016G-JACSC-UFE(USE)	WB8SJ016G-JAISI-UFE(USE)
	32GB	SB8SJ032G-JACSC-UFE(USE)	WB8SJ032G-JAISI-UFE(USE)

Remarks:

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

USE - Secure Erase Procedure by Project Base

Part number decoder

X1	X2	X3	X4	X5	X6	X7	X8	X9	—	X11	X12	X13	X14	X15	—	Z1	Z2	Z3	C
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Example

S	B	8	S	J	0	3	2	G	—	J	A	C	S	C	—	U	F	E	
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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 **016G** : 16GB
008G : 8GB **032G** : 32GB

X11 ➤ Controller

J : JMicron (BON Series supports FE/SE)

X12 ➤ Controller version

A,B,C.....

X13 ➤ Controller grade

C : Commercial grade
I : Industrial grade

X14 ➤ Flash IC

S : Samsung SLC-NAND flash IC

X15 ➤ Flash IC grade

C : Commercial grade

I : Industrial 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