

# BON Series

Industrial 1.8" Slim Lite SATA II SLC SSD supports Fast Erase and Secure Erase



**BON Series Fast Erase / Secure Erase**  
Industrial 1.8" Slim Lite SATA II SLC SSD  
(JEDEC form-factor)

## Product features

- SLC - NAND type flash technology
- Support Fast Erase by Hardware and Software definition
- Support Secure Erase by Software command Vender code
- Compatible with JEDEC MO-297A physical specification
- Performance up to 106.3MB/sec
- Capacity from 4GB up to 32GB

## Product specifications

<b>Compatibility</b>	<ul style="list-style-type: none"> <li>SATA 1.0a and SATA 2.6 Specification compliance</li> <li>1.8" Slim Lite SATA II SSD JEDEC MO-297A Specification compliance</li> </ul>	<b>Power consumption</b>	<ul style="list-style-type: none"> <li>Power requirement: +5V ± 10%</li> <li>Reading mode: 230mA (Max.)</li> <li>Writing mode: 270mA (Max.)</li> <li>Idle mode: 160mA (Max.)</li> </ul>
<b>Flash technology</b>	SLC-NAND type flash based	<b>Reliability</b>	<ul style="list-style-type: none"> <li>Wear-Leveling: Static wear-leveling algorithms</li> <li>MTBF: &gt; 3,000,000 hours</li> <li>Endurance: &gt; 2,000,000 cycles</li> <li>ECC: 8 bits or 15 bits per 512 bytes block</li> </ul>
<b>Host Interface</b>	SATA 7-pin (data) + 15-pin (power)	<b>Environmental specification</b>	<ul style="list-style-type: none"> <li>Operating temp.: STD. 0°C~70°C/IND. -40°C~+85°C</li> <li>Non-operating temp.: STD. -20°C~+80°C/IND. -50°C~+95°C</li> <li>Humidity: 10% ~ 95% non-condensing</li> <li>Vibration: 15G compliance to MIL-STD-810F</li> <li>Shock: 1,500G compliance to MIL-STD-810F</li> <li>Altitude: 70,000 feet</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>Data transfer rate: Serial ATA Gen-I and Gen-II</li> <li>Sequential read: 106.3MB/sec (Max.)</li> <li>Sequential write: 100.4MB/sec (Max.)</li> <li>Random access time: 0.2ms (estimated)</li> </ul>	<b>Physical specification</b>	<ul style="list-style-type: none"> <li>Weight: 15g ± 2g / 0.53 oz.</li> <li>Dimension(W x L x H): 54.00 x 39.00 x 5.45 (mm)</li> </ul>
<b>Environmental specification</b>		<b>Conformal coating</b>	Option for special request
<b>Functionality</b>	<ul style="list-style-type: none"> <li>Hardware: Fast Erase the media data by hardware trigger</li> <li>Software: Fast Erase the media data by ATA command vender code Secure Erase the media data by ATA command vender code</li> <li>Sanitization Procedure: Default sanitizing by erase block data to 0xFF on file table for Fast Erase Sanitizing Based on NSA Manual 130-2 / USA Air Force AFSSI 5020 DoD 5220.22-M / IREC(IRIG)106 for Secure Erase</li> </ul>	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Standard grade: 3 years</li> <li>Industrial grade: 5 years</li> </ul>

Advanced Performance & Rugged Orientation



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
	<b>4GB</b>	SB8SJ004G-JACSC-UFE(USE)/(C)	WB8SJ004G-JAISH-UFE(USE)/(C)
	<b>8GB</b>	SB8SJ008G-JACSC-UFE(USE)/(C)	WB8SJ008G-JAISH-UFE(USE)/(C)
	<b>16GB</b>	SB8SJ016G-JACSC-UFE(USE)/(C)	WB8SJ016G-JAISH-UFE(USE)/(C)
	<b>32GB</b>	SB8SJ032G-JACSC-UFE(USE)/(C)	WB8SJ032G-JAISH-UFE(USE)/(C)

## 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
S	B	8	S	J	0	3	2	G	—	J	A	C	S	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

**008G** : 8GB    **064G** : 64GB

**016G** : 16GB

**032G** : 32GB

**X11** Controller

**J** : JMicon (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