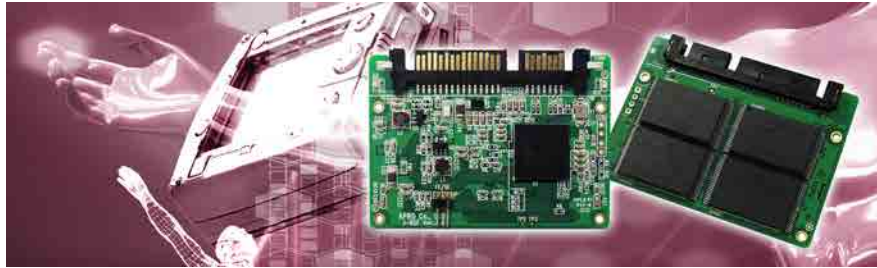


# BON Series

## 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

<b>Compatibility</b>	<ul style="list-style-type: none"> <li>SATA 1.0a and SATA 2.6 specification compliance</li> </ul>	<b>Power consumption</b>	<ul style="list-style-type: none"> <li>Power requirement +5V ± 10%</li> <li>Reading mode 230 mA (Max.)</li> <li>Writing mode 270 mA (Max.)</li> <li>Idle mode 160 mA (Max.)</li> </ul>
<b>Form-factor</b>	<ul style="list-style-type: none"> <li>1.8" Slim Lite SATA II SSD compatible with JEDEC Standard: MO-297A specification</li> </ul>	<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>ECC 8 bits or 15 bits per 512 bytes block</li> <li>Endurance &gt; 2,000,000 cycles</li> <li>Data retention 10 years</li> </ul>
<b>Flash technology</b>	<ul style="list-style-type: none"> <li>SLC-NAND type flash based</li> </ul>	<b>Physical specification</b>	<ul style="list-style-type: none"> <li>Weight (max.) 15 g ± 2 g / 0.53 oz.</li> <li>Dimension(W x L x H) 54.00 x 40.10 x 5.45 (mm)</li> </ul>
<b>Host Interface</b>	<ul style="list-style-type: none"> <li>Standard SATA 7 pins (data) + 15 pins (power)</li> </ul>	<b>Conformal coating</b>	<ul style="list-style-type: none"> <li>Option for special request</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>Data transfer rate Serial ATA Gen-I (1.5Gbits) and Gen-II (3.0Gbits)</li> <li>Sequential read 106.3 MB/sec (Max.)</li> <li>Sequential write 100.4 MB/sec (Max.)</li> <li>Random access time 0.2 ms</li> </ul>	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Standard grade 3 years</li> <li>Industrial grade 5 years</li> </ul>
<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 15 G compliance to MIL-STD-810F</li> <li>Shock 1,500 G compliance to MIL-STD-810F</li> <li>Altitude 70,000 feet</li> </ul>	<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 vendor code</li> <li>Secure Erase the media data by ATA command vendor code</li> <li>Sanitization Procedure Default sanitizing by erase block data to 0xFF on file table for Fast Erase</li> <li>Sanitizing Based on NSA Manual 130-2 for Secure Erase</li> <li>Sanitizing Based on USA Air Force AFSSI 5020 for Secure Erase</li> </ul>

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

### Example

S B 8 S J 0 3 2 G — J A C S C — U F E

**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