

# 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 97.9 MB/sec
- Maximum sequential write speed 54.5 MB/sec
- Capacity from 4GB up to 64GB

### 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 compatible with JEDEC Standard: MO-297A specification</li> </ul>	<b>Power consumption</b>	<ul style="list-style-type: none"> <li>Power requirement +5V ± 10%</li> <li>Reading mode 220 mA (Max.)</li> <li>Writing mode 290 mA (Max.)</li> <li>Idle mode 150 mA (Max.)</li> </ul>
<b>Flash technology</b>	<ul style="list-style-type: none"> <li>MLC-NAND type flash based</li> </ul>	<b>Reliability</b>	<ul style="list-style-type: none"> <li>Wear-leveling Static wear-leveling algorithms</li> <li>ECC 8 bits or 15 bits per 512bytes block</li> </ul>
<b>Host Interface</b>	<ul style="list-style-type: none"> <li>Standard SATA 7-pin (data) + 15-pin (power)</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>Performance</b>	<ul style="list-style-type: none"> <li>Data transfer rate Serial ATA Gen-I (1.5 Gbits) and Gen-II (3.0 Gbits)</li> <li>Sequential read 97.9 MB/sec (Max.)</li> <li>Sequential write 54.5 MB/sec (Max.)</li> <li>Random access time 0.2 ms</li> </ul>	<b>Conformal coating</b>	<ul style="list-style-type: none"> <li>Option for wide temperature</li> </ul>
<b>Environmental specification</b>	<ul style="list-style-type: none"> <li>Operating temp. STD. 0°C ~ 70°C / WID. -40°C ~ +85°C</li> <li>Non-operating temp. STD. -20°C ~ +80°C / WID. -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>Warranty</b>	<ul style="list-style-type: none"> <li>1 year</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> </ul>	<b>Sanitization Procedure</b>	<ul style="list-style-type: none"> <li>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 Wide temperature -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

Wide temperature -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
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** : Wide temperature 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      **032G** : 32GB  
**008G** : 8GB      **064G** : 64GB  
**016G** : 16GB

**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

**CF**  
Industrial CompactFlash Card

**CFast**  
Industrial CFast Card

**ATA**  
Industrial PCMCIA ATA Card

**MIF**  
Industrial micro IDE Flash Module

**MSF**  
Industrial micro SATA Flash Module

**MUM**  
Industrial micro USB Flash Module

**MPM**  
Industrial mini PCIe Flash Module

**MSM**  
Industrial mini SATA Flash Module

**SSD**  
Industrial Solid State Disk

**UED**  
Industrial Rugged Metal USB Flash Disk

**SD**  
Industrial SD & SDHC Memory Card

**AD**  
Industrial Adapter Card-Drive

**CF**  
Industrial CompactFlash Card

**CFast**  
Industrial CFast Card

**ATA**  
Industrial PCMCIA ATA Card

**MIF**  
Industrial micro IDE Flash Module

**MSF**  
Industrial micro SATA Flash Module

**MUM**  
Industrial micro USB Flash Module

**MPM**  
Industrial mini PCIe Flash Module

**MSM**  
Industrial mini SATA Flash Module

**SSD**  
Industrial Solid State Disk

**UED**  
Industrial Rugged Metal USB Flash Disk

**SD**  
Industrial SD & SDHC Memory Card

**AD**  
Industrial Adapter Card-Drive