

BON Series

Industrial Rugged Metal 1.8" SATA II SLC SSD
supports Fast Erase and Secure Erase



Product features

- SLC - NAND type flash technology
- Extremely rugged metal casing to endure harsh environments
- Supports Fast Erase by Hardware and Software definition
- Performance up to 184.3 MB/sec (1200X)
- Supports Secure Erase by Software ATA command vendor code
- Capacity from 8GB up to 64GB

Product specifications

Compatibility	SATA 1.0a and SATA 2.6 specification compliance	Power consumption	- Power requirement +5V ± 10% - Reading mode 280 mA (Max.) - Writing mode 340 mA (Max.) - Idle mode 150 mA (Max.)
Flash technology	SLC-NAND type flash based	Reliability	- Wear-leveling Static wear-leveling algorithms - MTBF > 3,000,000 hours - ECC 8 bits or 15 bits per 512 bytes block - Endurance > 2,000,000 cycles - Data retention 10 years
Form-factor	Rugged Metal 1.8" SATA SSD	Physical specification	- Weight (max.) 55 g ± 5 g / 1.94 oz. - Dimension(W x L x H) 69.80 x 59.90 x 9.50 (mm)
Host Interface	Standard SATA 7 pins (data) + 15 pins (power)	Conformal coating	Option for special request
Performance		Warranty	- Standard grade 3 years - Industrial grade 5 years
Data transfer rate	Serial ATA Gen-I and Gen-II (1.5 Gb/s and 3.0 Gb/s)		
Sequential read	184.2 MB/sec (Max.)		
Sequential write	153.3 MB/sec (Max.)		
Random access time	0.2 ms		
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	15 G compliance to MIL-STD-810F		
Shock	1,500 G 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 vendor code - Secure Erase the media data by ATA command vendor 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" rugged metal SATA II SLC SSD supports FE/SE

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SR8SF008G-JACSC-UFE(USE)	WR8SF008G-JAISI-UFE(USE)
	16GB	SR8SF016G-JACSC-UFE(USE)	WR8SF016G-JAISI-UFE(USE)
	32GB	SR8SF032G-JACSC-UFE(USE)	WR8SF032G-JAISI-UFE(USE)
	64GB	SR8SF064G-JACSC-UFE(USE)	WR8SF064G-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	R	8	S	F	0	6	4	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

R : Rugged metal casing

X3 X4 X5 ➤ Product category

8SF : 1.8" SATA II SSD

X6 X7 X8 X9 ➤ Capacity

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

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