

BON Series

Industrial Rugged Metal 2.5" 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 128GB

Product specifications

Compatibility	SATA 1.0a and SATA 2.6 specification compliance	Power consumption	Power requirement	+5V ± 10%
Flash technology	SLC-NAND type flash based	Reading mode	320 mA (Max.)	
Form-factor	Rugged Metal 2.5" SATA SSD	Writing mode	360 mA (Max.)	
Host Interface	Standard SATA 7 pins (data) + 15 pins (power)	Sleeping mode	160 mA (Max.)	
Performance		Reliability		
Data transfer rate	Serial ATA Gen-I and Gen-II (1.5Gb/s and 3.0Gb/s)	Wear-leveling	Static wear-leveling algorithms	
Sequential read	184.3 MB/sec (Max.)	MTBF	> 3,000,000 hours	
Sequential write	153.4 MB/sec (Max.)	ECC	8 bits or 15 bits per 512 bytes block	
Average 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.)	115 g ± 5 g / 4.06 oz.	
Humidity	10% ~ 95% non-condensing	Dimension(W x L x H)	69.90 x 99.70 x 9.50 (mm)	
Vibration	15G compliance to MIL-STD-810F	Conformal coating	Option for special request	
Shock	1,500G 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 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 2.5" rugged metal SATA II SLC SSD supports FE/SE

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SR2SF008G-JACSC-UFE(USE)	WR2SF008G-JAISI-UFE(USE)
	16GB	SR2SF016G-JACSC-UFE(USE)	WR2SF016G-JAISI-UFE(USE)
	32GB	SR2SF032G-JACSC-UFE(USE)	WR2SF032G-JAISI-UFE(USE)
	64GB	SR2SF064G-JACSC-UFE(USE)	WR2SF064G-JAISI-UFE(USE)
	128GB	SR2SF128G-JACSC-UFE(USE)	WR2SF128G-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
S	R	2	S	F	1	2	8	G	—	J	A	C	S	C	—	U	F	E	

Example

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

2SF : 2.5" SATA II SSD

X6 X7 X8 X9 Capacity

008G : 8GB **064G** : 64GB

016G : 16GB **128G** : 128GB

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

CF
Industrial CompactFlash Card

CFast
Industrial CFast Card

ATA
Industrial PCMCIA ATA Card

MIF
Industrial micro IDE Flash Module

MSE
Industrial micro SATA Flash Module

MUM
Industrial micro USB Module

MPM
Industrial mini PCI-e 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

MSE
Industrial micro SATA Flash Module

MUM
Industrial micro USB Module

MPM
Industrial mini PCI-e Module

SSD
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