

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
- ✦ Support Fast Erase by Hardware and Software definition
- ✦ Performance up to 178.3MB/sec (1200X)
- ✦ Support 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	
Flash technology	✦ SLC-NAND type flash based	Power requirement	✦ +5V ± 10%
Form-factor	✦ Rugged Metal 2.5" SATA SSD	Reading mode	✦ 320mA (Max.)
Host Interface	✦ SATA 7-pin (data) + 15-pin (power)	Writing mode	✦ 360mA (Max.)
Performance		Sleeping mode	✦ 160mA (Max.)
Data transfer rate	✦ Serial ATA Gen-I and Gen-II (1.5Gb/s and 3.0Gb/s)	Reliability	
Sequential read	✦ 184.3 MB/sec (Max.)	Wear-leveling	✦ Static wear-leveling algorithms
Sequential write	✦ 154.3 MB/sec (Max.)	MTBF	✦ > 3,000,000 hours
Average access time	✦ 0.2ms	ECC	✦ 8 bits or 15 bits per 512bytes block
Environmental specification		Endurance	✦ > 2,000,000 cycles
Operating temp.	✦ STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	Data retention	✦ 10 years
Non-operating temp.	✦ STD. -20°C ~ +80°C / IND. -50°C ~ +95°C	Physical specification	
Humidity	✦ 10% ~ 95% non-condensing	Weight (max.)	✦ 115g ± 5g /4.06 oz.
Vibration	✦ 15G compliance to MIL-STD-810F	Dimension(W x L x H)	✦ 69.90 x 99.70 x 9.50 (mm)
Shock	✦ 1,500G compliance to MIL-STD-810F	Conformal coating	✦ Option for special request
Altitude	✦ 70,000 feet	Warranty	
Functionality		Standard grade	✦ 3 years
Hardware	✦ Fast Erase the media data by hardware trigger	Industrial grade	✦ 5 years
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		



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Advanced Performance & Rugged Orientation

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	WR2SF008G-JAISI-UFE
	16GB	SR2SF016G-JACSC-UFE	WR2SF016G-JAISI-UFE
	32GB	SR2SF032G-JACSC-UFE	WR2SF032G-JAISI-UFE
	64GB	SR2SF064G-JACSC-UFE	WR2SF064G-JAISI-UFE
	128GB	SR2SF128G-JACSC-UFE	WR2SF128G-JAISI-UFE

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 R 2 S F 1 2 8 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

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 : 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

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

SSD

Industrial Solid State Disk

USB

Industrial Rugged Metal USB Flash Disk

SD

Industrial SD & SDHC Memory Card

AD

Industrial Adapter Card-Drive