

BON-II Series

Industrial 2.5" Rugged Metal SATA III SLC SSD
Supports Fast Erase and Secure Erase



PRODUCT FEATURES


- ▶ SLC - NAND type flash technology
- ▶ 2.5" SATA SSD form-factor
- ▶ Supports Windows-7 TRIM Command
- ▶ Supports DDRIII SDRAM cache for Extreme performance
- ▶ Support power protection by Tantalum Capacitors
- ▶ Compliant with SATA 1.0a/ 2.6/ 3.0 specification
- ▶ Extremely rugged metal casing to endure harsh environments
- ▶ Maximum sequential read speed 523.7 MB/sec (Max.)
- ▶ Maximum sequential write speed 371.9 MB/sec (Max.)
- ▶ Capacity from 8GB up to 256GB
- ▶ Supports Fast Erase and Secure Erase Function

PRODUCT SPECIFICATION

Compatibility	▶ SATA 1.0a, SATA 2.6 and SATA 3.0 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	▶ 460 mA (Max.)
Host Interface	▶ SATA 7-pin (data) + 15-pin (power)	Writing mode	▶ 650 mA (Max.)
Performance		Idle mode	▶ 190 mA (Max.)
Data transfer rate	▶ Serial ATA Gen-I, Gen-II and Gen-III (1.5Gb/s, 3.0Gb/s and 6.0Gb/s)	Reliability	
Sequential read	▶ 523.7 MB/sec (Max.)	Wear-leveling	▶ Static wear-leveling algorithms
Sequential write	▶ 371.9 MB/sec (Max.)	MTBF	▶ > 4,000,000 hours
Random access time	▶ 0.1ms (estimated)	Endurance	▶ > 2,000,000 cycles
Environmental specification		ECC	▶ 40 bits per 1024 bytes block
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	▶ 115g ± 5g /4.06 oz.
Vibration	▶ 7 Hz to 2K Hz, 20G, 3 axes	Dimension(W x L x H)	▶ 69.90 x 99.70 x 9.50 (mm)
Shock	▶ 0.5ms, 1500G, 3 axes	Conformal coating	▶ Option for special request
Altitude	▶ 70,000 feet	Warranty	
		Standard grade	▶ 3 years
		Industrial grade	▶ 5 years

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 III SLC SSD supports Fast Erase and Secure Erase

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SR2SR008G-JHCTC-UFE(USE)	WR2SR008G-JHITI-UFE(USE)
	16GB	SR2SR016G-JHCTC-UFE(USE)	WR2SR016G-JHITI-UFE(USE)
	32GB	SR2SR032G-JHCTC-UFE(USE)	WR2SR032G-JHITI-UFE(USE)
	64GB	SR2SR064G-JHCTC-UFE(USE)	WR2SR064G-JHITI-UFE(USE)
	128GB	SR2SR128G-JHCTC-UFE(USE)	WR2SR128G-JHITI-UFE(USE)
	256GB	SR2SR256G-JHCTC-UFE(USE)	WR2SR256G-JHITI-UFE(USE)

PART NUMBER DECODER

X1 X2 X3 X4 X5 X6 X7 X8 X9 — X11 X12 X13 X14 X15 / Z1 Z2 Z3 C

Example

W R 2 S R 2 5 6 G — J H I T I / U F E C

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

2SR : 2.5" SATA III SSD supports DDRIII SDRAM cache

X6 X7 X8 X9 ▶ Capacity

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

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

032G : 32GB **256G** : 256GB

X11 ▶ Controller

J : JMicron supports Fast Erase/Secure Erase (BON-II Series)

X12 ▶ Controller version

A, B, C, D.....

X13 ▶ Controller grade

C : Commercial grade

I : Industrial grade

X14 ▶ Flash IC

T : Toshiba 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