

BON Series

Rugged Metal 2.5" SATA II MLC SSD supports Fast Erase and Secure Erase



Product features


- MLC - NAND type flash technology
- Extremely rugged metal casing to endure harsh environments
- Supports Fast Erase by Hardware and Software definition
- Performance up to 167.8 MB/sec
- Supports Secure Erase by Software ATA command vendor code
- Capacity from 8GB up to 256GB

Product specifications

- Compatibility**
- SATA 1.0a and SATA 2.6 specification compliance
- Flash technology**
- MLC-NAND type flash based
- Form-factor**
- Rugged Metal 2.5" SATA SSD
- Host Interface**
- Standard SATA 7 pins (data) + 15 pins (power)
- Performance**
- Data transfer rate: Serial ATA Gen-I and Gen-II (1.5 Gb/s and 3.0 Gb/s)
 - Sequential read: 167.8 MB/sec (Max.)
 - Sequential write: 92.1 MB/sec (Max.)
 - Random access time: 0.2 ms
- Environmental specification**
- Operating temp.: STD. 0°C ~ 70°C / WID. -40°C ~ +85°C
 - Non-operating temp.: STD. -20°C ~ +80°C / WID. -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
- Power consumption**
- Power requirement: +5V ± 10%
 - Reading mode: 450 mA (Max.)
 - Writing mode: 500 mA (Max.)
 - Idle mode: 320 mA (Max.)
- Reliability**
- Wear-leveling: Static wear-leveling algorithms
 - ECC: 8 bits or 15 bits per 512 bytes block
- Physical specification**
- Weight (max.): 115 g ± 5 g / 4.06 oz.
 - Dimension(W x L x H): 69.90 x 99.70 x 9.50 (mm)
- Conformal coating**
- Option for wide temperature
- Warranty**
- 1 year

Operating temperature supports Standard grade 0°C ~ 70°C and Wide temperature -40°C ~ +85°C

Part number list - 2.5" rugged metal SATA II MLC SSD supports FE/SE

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	8GB	SR2SF008G-JACMC-UFE(USE)	WR2SF008G-JACMC-UFE(USE)C
	16GB	SR2SF016G-JACMC-UFE(USE)	WR2SF016G-JACMC-UFE(USE)C
	32GB	SR2SF032G-JACMC-UFE(USE)	WR2SF032G-JACMC-UFE(USE)C
	64GB	SR2SF064G-JACMC-UFE(USE)	WR2SF064G-JACMC-UFE(USE)C
	128GB	SR2SF128G-JACMC-UFE(USE)	WR2SF128G-JACMC-UFE(USE)C
	256GB	SR2SF256G-JACMC-UFE(USE)	WR2SF256G-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

Example

S R 2 S F 1 2 8 G — J A C M C — U F E

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

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 **256G** : 256GB

X11 Controller

J : JMicon (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
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