

# BON Series

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



## Product features

- MLC - NAND type flash technology
- Performance up to 167.8MB/sec
- Support Fast Erase by Hardware and Software definition
- Capacity from 8GB up to 256GB
- Support Secure Erase by Software ATA command vendor code

## Product specifications

<b>Compatibility</b>	SATA 1.0a and SATA 2.6 specification compliance	<b>Power consumption</b>	Power requirement +5V ± 10%
<b>Flash technology</b>	MLC-NAND type flash based	Reading mode	450mA (Max.)
<b>Form-factor</b>	Rugged Metal 2.5" SATA SSD	Writing mode	500mA (Max.)
<b>Host Interface</b>	SATA 7-pin (data) + 15-pin (power)	Sleeping mode	320mA (Max.)
<b>Performance</b>		<b>Reliability</b>	
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	167.8 MB/sec (Max.)	ECC	8 bits or 15 bits per 512bytes block
Sequential write	92.1 MB/sec (Max.)	<b>Physical specification</b>	
Average access time	0.1ms (estimated)	Weight (max.)	115g ± 5g /4.06 oz.
<b>Environmental specification</b>		Dimension(W x L x H)	69.90 x 99.70 x 9.50 (mm)
Operating temp.	STD. 0°C ~ 70°C / IND. -40°C ~ +85°C	<b>Conformal coating</b>	Option for wide temperature
Non-operating temp.	STD. -20°C ~ +80°C /IND. -50°C ~ +95°C	<b>Warranty</b>	1 year
Humidity	10% ~ 95% non-condensing		
Vibration	15G compliance to MIL-STD-810F		
Shock	1,500G compliance to MIL-STD-810F		
Altitude	70,000 feet		
<b>Functionality</b>			
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 - 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

Industrial grade -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** : Industrial grade operating temp. -40° C ~ +85° C

**X12** Controller version

**A,B,C,....**

**X13** Controller grade

**C** : Commercial grade

**X2** The material of casing

**R** : Rugged metal casing

**X14** Flash IC

**M** : MLC-NAND flash IC

**X3 X4 X5** Product category

**2SF** : 2.5" SATA II SSD

**X15** Flash IC grade

**C** : Commercial grade

**X6 X7 X8 X9** Capacity

**008G** : 8GB

**064G** : 64GB

**016G** : 16GB

**128G** : 128GB

**032G** : 32GB

**256G** : 256GB

**Z1 Z2 Z3** Special function

**UFE** : Hardware and software ATA command code for Fast Erase function

**USE** : Secure Erase procedure by project base

**X11** Controller

**J** : JMicon (BON Series supports FE/SE)

**C** Reserved for specific requirement

**C** : Conformal-coating

MLC CF

MLC CompactFlash Card

MLC CFast

MLC CFast Card

MLC ATA

MLC PCMCIA ATA Card

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC Rugged Metal USB Flash Disk

MLC SD

MLC SD & SDHC Memory Card

AD

Industrial Adapter Card-Drive

MLC CF

MLC CompactFlash Card

MLC CFast

MLC CFast Card

MLC ATA

MLC PCMCIA ATA Card

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC micro IDE Flash Module

MLC MIF

MLC Rugged Metal USB Flash Disk

MLC SD

MLC SD & SDHC Memory Card

AD

Industrial Adapter Card-Drive