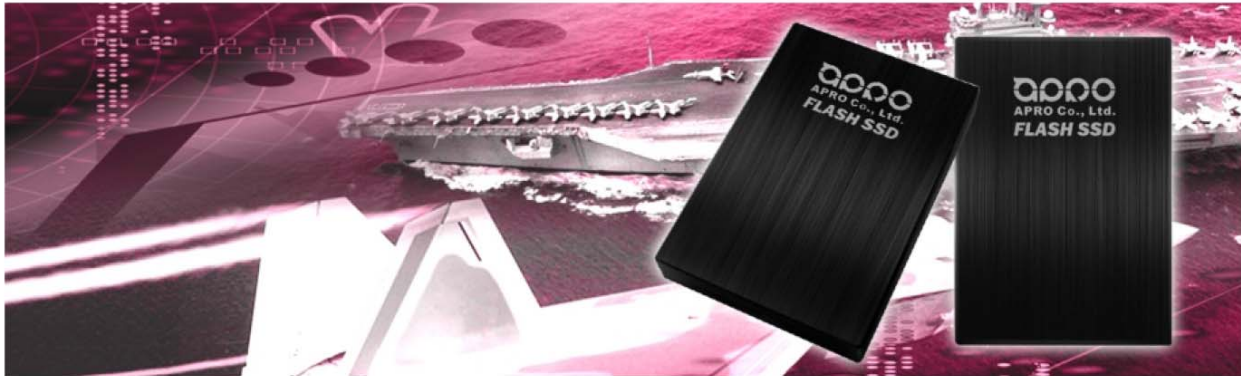




BON Series

Industrial Rugged Metal 2.5" PATA (IDE) SLC SSD
supports Fast Erase and Secure Erase



Product features

- ❑ SLC - NAND type flash technology
- ❑ 2.5" standard PATA (IDE) SSD form-factor
- ❑ Extremely rugged metal casing to endure harsh environments
- ❑ Compatible with ATA/ATAPI-7 standard
- ❑ Data transfer mode support PIO 0~4 and UDMA 0~6
- ❑ Support Fast Erase by Hardware and Software definition
- ❑ Support Secure Erase by Software ATA command vendor code
- ❑ Capacity from 8GB up to 128GB
- ❑ Performance up to 105MB/sec

Product specifications

Compatibility	❑ ATA/ATAPI-7 and True IDE mode
Flash technology	❑ SLC-NAND type flash based
Form-factor	❑ Rugged Metal 2.5" PATA (IDE) SSD
Host Interface	❑ Standard 44-pin PATA (IDE) male connector
Master/Slave setting	❑ By jumper
Performance	
Data transfer mode	❑ PIO-4 mode or UDMA-6 mode (def.)
Sequential read	❑ 105.0 MB/sec (Max.)
Sequential write	❑ 100.3 MB/sec (Max.)
Average access time	❑ 0.2ms
Environmental specification	
Operating temp.	❑ STD. 0°C ~ 70°C / IND. -40°C ~ +85°C
Non-operating temp.	❑ STD. -20°C ~ +80°C / IND. -50°C ~ +95°C
Humidity	❑ 10% ~ 95% non-condensing
Acoustic noise	❑ 0dB
Vibration	❑ 15G peak-to-peak max
Shock	❑ 1,500G (Max.)
Altitude	❑ 70,000 feet

Power consumption

Power requirement	❑ +5V ± 10%
Reading mode	❑ 360.0 mA(Max.)
Writing mode	❑ 390.0 mA(Max.)
Sleeping mode	❑ 240.0 mA(Max.)

Reliability

Wear-leveling	❑ Static wear-leveling algorithms
MTBF	❑ > 3,000,000 hours
ECC	❑ Supports BCH ECC 8 bits or 15 bits in 512bytes
Endurance	❑ > 2,000,000 cycles
Data retention	❑ 10 years

Physical specification

Weight (max.)	❑ 115g ± 5g /4.06 oz.
Dimension(W x L x H)	❑ 69.90 x 99.70 x 9.50 (mm)
Conformal coating	❑ Option for special request

Warranty

Standard grade	❑ 3 years
Industrial grade	❑ 5 years

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

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 Module

SSD
Industrial Solid State Disk

USB
Industrial Rugged Metal USB Flash Disk

SD
Industrial SD & SDHC Memory Card

AD
Industrial Adapter Card-Drive



APRO Co., Ltd.

Advanced Performance & Rugged Orientation

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 Module

SSD

Industrial Solid State Disk

USB

Industrial Rugged Metal USB Flash Disk

SD


Industrial SD & SDHC Memory Card

AD

Industrial Adapter Card-Drive

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

Part number list - Industrial 2.5" rugged metal PATA (IDE) SLC SSD supports FE/SE

Product Picture	Capacity	0°C ~ 70°C	-40°C ~ +85°C
	8GB	SR2IF008G-JACSC-UFE	WR2IF008G-JAISI-UFE
	16GB	SR2IF016G-JACSC-UFE	WR2IF016G-JAISI-UFE
	32GB	SR2IF032G-JACSC-UFE	WR2IF032G-JAISI-UFE
	64GB	SR2IF064G-JACSC-UFE	WR2IF064G-JAISI-UFE
	128GB	SR2IF128G-JACSC-UFE	WR2IF128G-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	I	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

2IF : 2.5" PATA (IDE) 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

V3-100525

7-23

BON Series IFD

2, rue Jean Mermoz - TREMBLAY EN FRANCE - 93290
tél: +33 (0)1 48 61 95 28 - fax: +33 (0)1 48 61 94 03
http://www.naelcom.com - APRO-Flash@naelcom.com

