![InnoDisk logo] **iNNODISK**®
Beyond your imagination

innoRobust® II

innoRobust® II
2.5" SATA SSD
Wide Temp.

WARNING!
Warranty is void if label, cover or screws are removed.
Carefully handle avoid Electrostatic Discharge(ESD).

FC CE ☒ RoHS

Rugged Design for Military Application

www.innodisk.com

Overview

● InnoRobust brings you to experience the most advanced flash storage series. InnoRobust provides SSD with extreme reliability and outstanding performance, and also provides data security features which are targeted for military, defense and aerospace applications.

● Taking military, defense and aerospace applications in mind, InnoRobust provides specifications which can be customized based on customers' demand, including environmental condition in order to be compliant with MIL-STD-810 F/G standard and data secure erase standards as well.

● InnoDisk can ensure long term and flexible support for customers as we understand the applications are focused on military and aerospace, which are of great concern for reliability, performance and data security. InnoRobust is the right solution for military and aerospace application customers who are looking for flash storage.
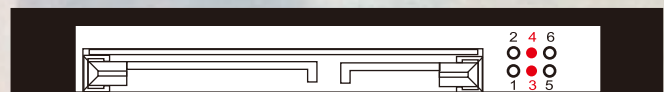
Data Security Function

	Standard	Description
QEraser (Faster)	**Ultra SpeedQuick Erase**	3.5 times quicker erase rate. (For InnoRobust II SSD only)*
	Quick Erase	Quick erase.
SEraser	**DoD 5220.22-M**	Erase, overwrite with a single character, and then erase again.
	USA-AF AFSSI 5020	Erase, and overwrite with random data.
	USA Navy NAVSO P-5239-26	Erase, overwrite with random data, and then erase again.
	NSA Manual 130-2	Erase, overwrite with random data twice, and then erase and overwrite with one character.
	USA-Army 380-19	Erase and overwrite with random data, erase and overwrite with one character,and then erase and overwrite with complement of the character.
	NISPOMSUP Chap 8,Sect. 8-501	Overwrite all locations with one character, its complement, and then random data.
Destroy	**InnoDisk Destroy**	Ultra speed erase user data/ MBR/ FAT table / Firmware

*E.g. InnoRobust II SATA SSD 128GB QEraser:10 sec; InnoRobust Ultra SATA SSD 128GB QEraser:35 sec.
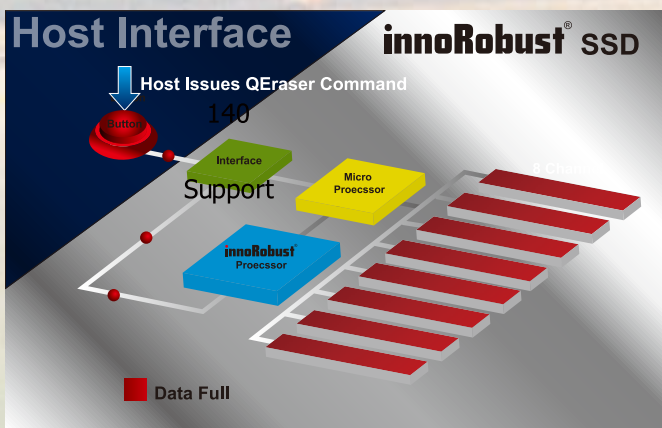
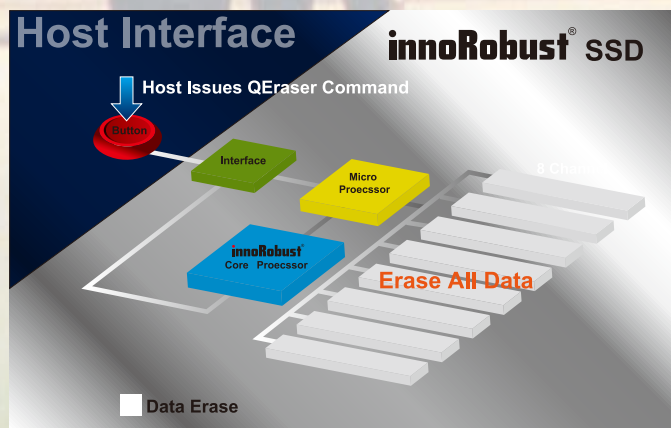## Data Security Pin Definition

Default

SEraser

QEraser/Destroy

Write Protect

Before Erase

Host Interface   innoRobust® SSD

Host Issues QEraser Command

140

Support

Data Full

After Erase

Host Interface   innoRobust® SSD

Host Issues QEraser Command

Erase All Data

Data Erase

Application

Military and Aerospace

Government Business Intelligence

Enterprise System

Embedded/ Industrial

Features

MIL-STD-810 standard

Environmental Reliability
· Compliant with MIL-STD-810-F/G standard

Data Security
· Qeraser   · Destroy
· SEraser   · Write Protect

High IOPS

Performance
· Sustained Read/Write: 200/150 MB/sec.
· Random 4KB performance:
  -Read:3200 (max)
  -Write:1700 (max)

Conformal Coating
· Compliant with MIL-I-46058C Silicon

Data

Data Protection
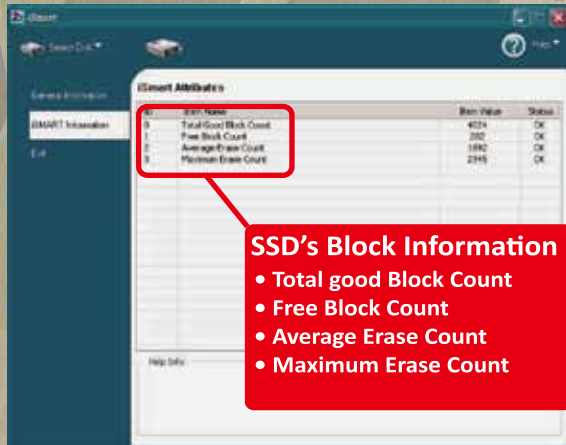· iCell technology

Security | Reliability | Quality

Specification

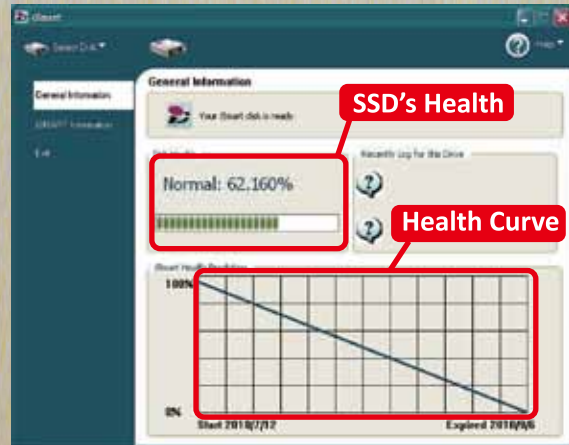|	InnoRobust II SATA	InnoRobust Ultra SATA	InnoRobust SATA	InnoRobust PATA
Interface	2.5" SATA II	2.5" SATA II	2.5" SATA II	PATA/IDE 44pin
Capacity	16GB ~ 512GB	16GB ~ 256GB	8GB ~ 128GB	8GB ~ 128GB
Performance				
Sustained Read	Read: 200 MB/sec	Read: 175 MB/sec	Read: 155 MB/sec	Read: 85 MB/sec
Sustained Write	Write: 150 MB/sec	Write: 90 MB/sec	Write: 55 MB/sec	Write: 45 MB/sec
IOPS @ 4KB Random Read	3200	Read: 2400	Read: 1700	Read: 170
IOPS @ 4KB Random Write	1700	Write: 150	Write: 140	Write: 140
ConsumptionPerformance				
Read	210mA (max.)	670mA (max.)	350mA (max.)	350mA (max.)
Write	450mA (max.)	750mA (max.)	400mA (max.)	400mA (max.)
Idle	550mA (max.)	480mA (max.)	150mA (max.)	150mA (max.)
Environmental				
Altitude	80,000 ft			
Operating Temperature	0°C to +70°C (Standard) ; -40°C to +85°C (Industrial)			
Storage Temperature	-55ºC to 95ºC			
Mechanical Shock	1500G			
Vibration	20G			
Humidity	5-95%, non-condensing			
Conformal Coating	Optional			
Write Protect	Supported			
DATA Retention	>10 years			
Dimension				
LxWxH (mm)	100.10x69.85x9.30	100.10x69.85x9.30	100.10x69.85x9.30	100.10x69.85x9.50

SMART Function

SSD's Block Information
• Total good Block Count
• Free Block Count
• Average Erase Count
• Maximum Erase Count

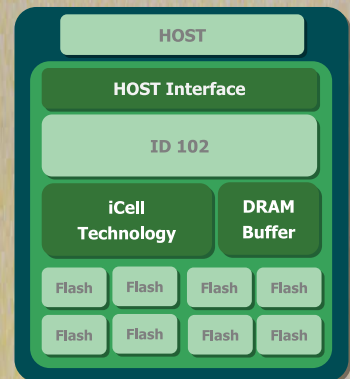**SSD's Health**

Health Curve

Normal: 62.160%

Tip: When lifespan is under 10%, InnoDisk SMART software will inform user to replace SSD.

iCell Technology

iCell technology is equipped with several capacitors to be able to provide power after host power off. The SSD controller can write all DRAM buffer data to flash, so that is why InnoRobust II SATA SSD can ensure all data is written to disk without any data loss.

| HOST |
| HOST Interface |
| ID 102 |
iCell Technology	DRAM Buffer
Flash	Flash	Flash	Flash
Flash	Flash	Flash	Flash

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Beyond your imagination
Quality • Reliability • Performance

FC CE 🚮 **RoHS**