3.5" SCSI 68-Pin Wide Solid State Drive (SSD)

RRT-35SCSI-SW

Red Rock Technologies, Inc. offers a proprietary FPGA-based design that provides a long-term solution for replacement of obsolete SCSI drives.

FEATURES

- ❖ Drop in replacement for obsolete SCSI drives
- ❖ 68-pin Wide 16-bit Single Ended (SE) Ultra SCSI interface
- ❖ Built-in debug monitor for diagnostics and updates to firmware
- ❖ Transfer rates up to 40 MB/s
- ❖ Capacities up to 8TB
- ❖ Military secure erase options available
- ❖ Commercial and Extended temperature versions available
- ❖ Rugged versions available
- ❖ SCSI termination can be enabled within unit
- ❖ Customizable firmware (modified to work in your system)
- ❖ RoHS compliant
- ❖ US-Based Engineering and Manufacturing
- ❖ In-house Technical Support

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3.5" SCSI 68-pin Wide SSD Specifications

PERFORMANCE				
Version	SLC	MLC	Secure Erase	Secure Erase
Capacities[1]	Up to 480GB	Up to 8TB	Up to 480GB	Up to 8TB
NAND Flash Type	SLC	MLC	SLC	MLC
SCSI Interface	SCA Wide 16-bit Single Ended (SE), Ultra (Fast-20) Ultra (Fast-40)			
Sustained Throughput Read/Write	60 MB/s			
Sector Size	512 byte default, custom sector sizes available			
RELIABILITY				
MTBF (hours)[2]	2 million	1 million	1.24 million	1 million
Endurance (100GB SSD) Total Bytes Written	350TBW	70TBW	350TBW	70TBW
Data Retention	10 years[3]	1 year[4]	10 years[3]	1 year[3]
POWER				
Voltage	+5V ± 5%			
Watts-idle	3W			
Watts-active	4W max			
ENVIRONMENTAL				
Operating Temperature	0°C to 70°C			
Storage Temperature	-40°C to 85°C			
Extended Operating Temperature[5]	-40°C to 85°C			
Extended Storage Temperature	-40°C to 85°C			
Relative Humidity[6]	5% to 95% non-condensing			
Altitude[7]	80,000 ft (24,000 meters)			
Shock	50g 11 millisecond			
Shock - Rugged[8]	1500g 0.5 millisecond			
Vibration	12.0g 20 Hz to 2000 Hz			
Vibration - Rugged[9]	16.3g 20 Hz to 2000 Hz			
PHYSICAL				
Form Factor	3.5" drive			
Weight	15 oz. max (420g)			
Dimensions (W x L x H)	4.0" x 5.75" x 1.0" (101.6mm x 146.1mm x 25.4mm)			

(1) Larger capacities available as new COTS 2.5" drives released
(2) Telcordia SR-332, Issue 3, operating temp. (40°C), electrical stress (50%), environmental factor (1.0)
(3) SLC   10 years at 10% TBW ramping down to 1 year at 100% TBW
(4) MLC   10 years at 0% TBW ramping down to 1 year at 100% TBW
(5) Thermal qualification   MIL-STD-810F, Method 501, Procedure II, and MIL-STD-810F, Method 502, Procedure II
(6) Relative Humidity qualification   MIL-STD-810F, Method 507
(7) Altitude qualification   MIL-STD-810F, Method 500, Procedure II
(8) Shock qualification   MIL-STD-810F, Method 516, Procedure I, terminal peak saw tooth
(9) Vibration qualification   MIL-STD-810F, Method 514, Procedure I

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Security Options

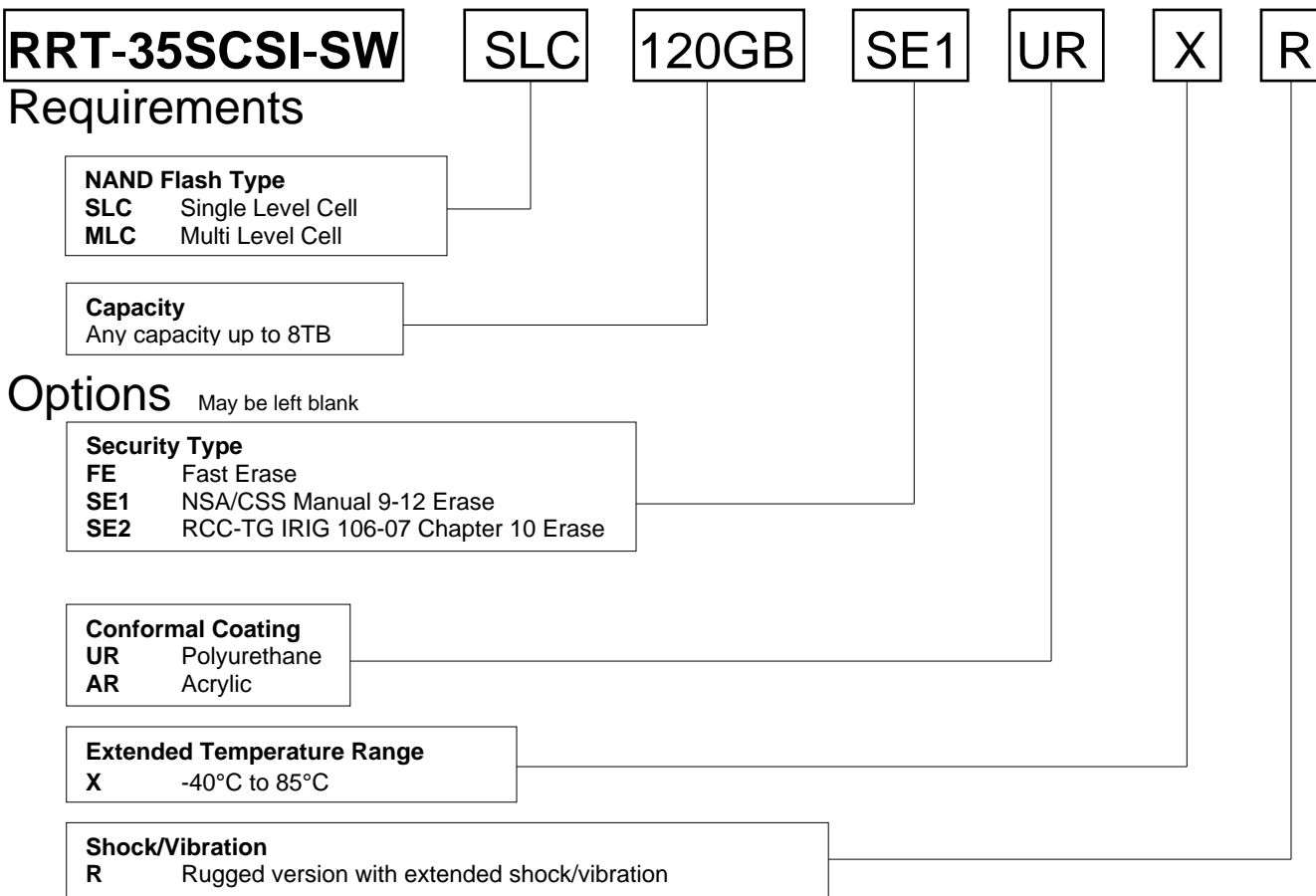## ERASE OPTIONS INVOKED BY COMMAND OR BY DISCRETE INPUT

Fast Erase (FE): Sets all locations to set value.

NSA/CSS Manual 9-12 Erase (SE1): Erases all locations, including bad blocks, then sets all locations to 0x55, then internal verification is performed reading 1% of capacity confirming data pattern.

RCC-TG IRIG 106-07 Chapter 10 Erase (SE2): Erases all locations, including bad blocks, then sets all locations to 0x55, then sets all locations to 0xAA, and then, finally erased.

---MORE MILITARY ERASE OPTIONS AVAILABLE---

Ordering Information

| RRT-35SCSI-SW | SLC | 120GB | SE1 | UR | X | R |

Requirements

NAND Flash Type
SLC   Single Level Cell
MLC   Multi Level Cell

Capacity
Any capacity up to 8TB

Options   May be left blank

Security Type
FE   Fast Erase
SE1   NSA/CSS Manual 9-12 Erase
SE2   RCC-TG IRIG 106-07 Chapter 10 Erase

Conformal Coating
UR   Polyurethane
AR   Acrylic

Extended Temperature Range
X   -40°C to 85°C

Shock/Vibration
R   Rugged version with extended shock/vibration

Part Order Examples: RRT-35SCSI-SW-SLC-120GB-SE1-UR-X-R
    RRT-35SCSI-SW-MLC-4.3GB

info@redrocktech.com
www.redrocktech.com

Tempe Arizona USA

480-483-3777
800-808-7837

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