3.5" SCSI SCA 80-Pin Wide Solid State Drive (SSD)

RRT-35SFS-SC



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 SCA SCSI drives
- ❖ 80-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 960GB
- Military secure erase and drive destroy 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



3.5" SCSI SCA 80-pin Wide SSD Specifications

PERFORMANCE				
Version	SLC	MLC	Secure Erase	Drive Destroy
Capacities ⁽¹⁾	Up to 240GB	Up to 960GB	Up to 480GB	Up to 240GB
NAND Flash Type	SLC	MLC	SLC	SLC
Interface	Wide 16-bit Single Ended (SE), SCSI1, SCSI2, Ultra SCSI			
Sustained Throughput				
Read/Write	38 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)	250TD	ZOTD	250TD	OFOTO
Total Bytes Written	350TB	70TB	350TB	350TB
Data Retention	10 years(3)	1 year(4)	10 years(3)	10 years(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	-40°C to 85°C			
Temperature ⁽⁵⁾				
Extended Storage	-40°C to 85°C -50°C to 95°C			
Temperature				
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 qualif				
(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				



Security Options

ERASE/DESTROY OPTIONS INVOKED BY COMMAND OR BY DISCRETE INPUT

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

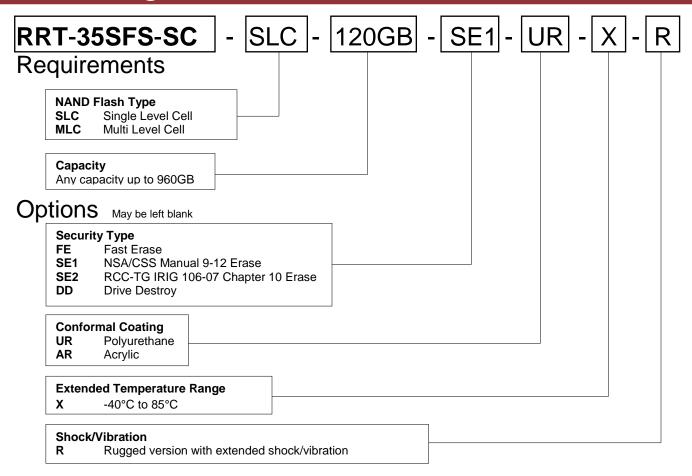
NSA/CSS Manual 9-12 Erase (SE1): Erases all locations, including bad blocks, then sets all locations to 0x55, then internal verification is performed reading 1% of capacity confirming data pattern.

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.

Drive Destroy (DD): Performs erase of all NAND flash including internal SSD firmware, file system, and tables which makes the drive unusable and unreadable.

---MORE MILITARY ERASE OPTIONS AVAILABLE---

Ordering Information



Part Order Examples: RRT-35SFS-SC-SLC-120GB-SE1-UR-X-R

RRT-35SFS-SC-MLC-4.3GB

Red Rock Technologies, Inc. reserves the right to modify, change or discontinue specific products within its product line at its own discretion. Red Rock Technologies, Inc. does not assume any liability resulting from the application or use of its products. The information contained herein has been checked and is believed to be entirely accurate, however, no responsibility is assumed for inaccuracies. Printed and/or downloaded copies of this document are not controlled.

"Red Rock Technologies" and the mountain logo are registered trademarks of Red Rock Technologies, Inc.

© Copyright 2018 Red Rock Technologies, Inc. All rights reserved. (Rev. 08/28/2018_RevA)

