

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



## RRT-35SCSI-LW

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 LVD SCSI drives
- ❖ 68-pin 16-bit Wide Low Voltage Differential (LVD) Ultra 2 SCSI interface
- ❖ Built-in debug monitor for diagnostics and updates to firmware
- ❖ Transfer rates up to 80 MB/s
- ❖ Capacities up to 8TB
- ❖ Military secure erase options available
- ❖ Commercial and Extended temperature versions available
- ❖ Rugged versions available
- ❖ Optional onboard SCSI termination
- ❖ Customizable firmware (modified to work in your system)
- ❖ RoHS compliant
- ❖ US-Based Engineering and Manufacturing
- ❖ In-house Technical Support

# 3.5" SCSI 68-pin Wide LVD SSD Specifications

PERFORMANCE				
Version	SLC	MLC	Secure Erase	Secure Erase
Capacities <sup>(1)</sup>	Up to 256GB	Up to 8TB	Up to 480GB	Up to 8TB
NAND Flash Type	SLC	MLC	SLC	MLC
SCSI Interface	16-bit Wide LVD (Low Voltage Differential) Ultra (Fast-20), Ultra 2 (Fast-40)			
Sustained Throughput Read/Write	60 MB/s			
Sector Size	512 byte default, custom sector sizes available			
RELIABILITY				
MTBF (hours) <sup>(2)</sup>	2 million	1 million	1.24 million	1 million
Endurance (100GB SSD) Total Bytes Written	350TBW	70TBW	350TBW	70TBW
Data Retention	10 years <sup>(3)</sup>	1 year <sup>(4)</sup>	10 years <sup>(3)</sup>	1 year <sup>(3)</sup>
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 <sup>(5)</sup>	-40°C to 85°C			
Extended Storage Temperature	-40°C to 85°C			
Relative Humidity <sup>(6)</sup>	5% to 95% non-condensing			
Altitude <sup>(7)</sup>	80,000 ft (24,000 meters)			
Shock	50g 11 millisecond			
Shock - Rugged <sup>(8)</sup>	1500g 0.5 millisecond			
Vibration	12.0g 20 Hz to 2000 Hz			
Vibration - Rugged <sup>(9)</sup>	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		

# Security Options

## ERASE OPTIONS INVOKED BY COMMAND OR BY DISCRETE INPUT

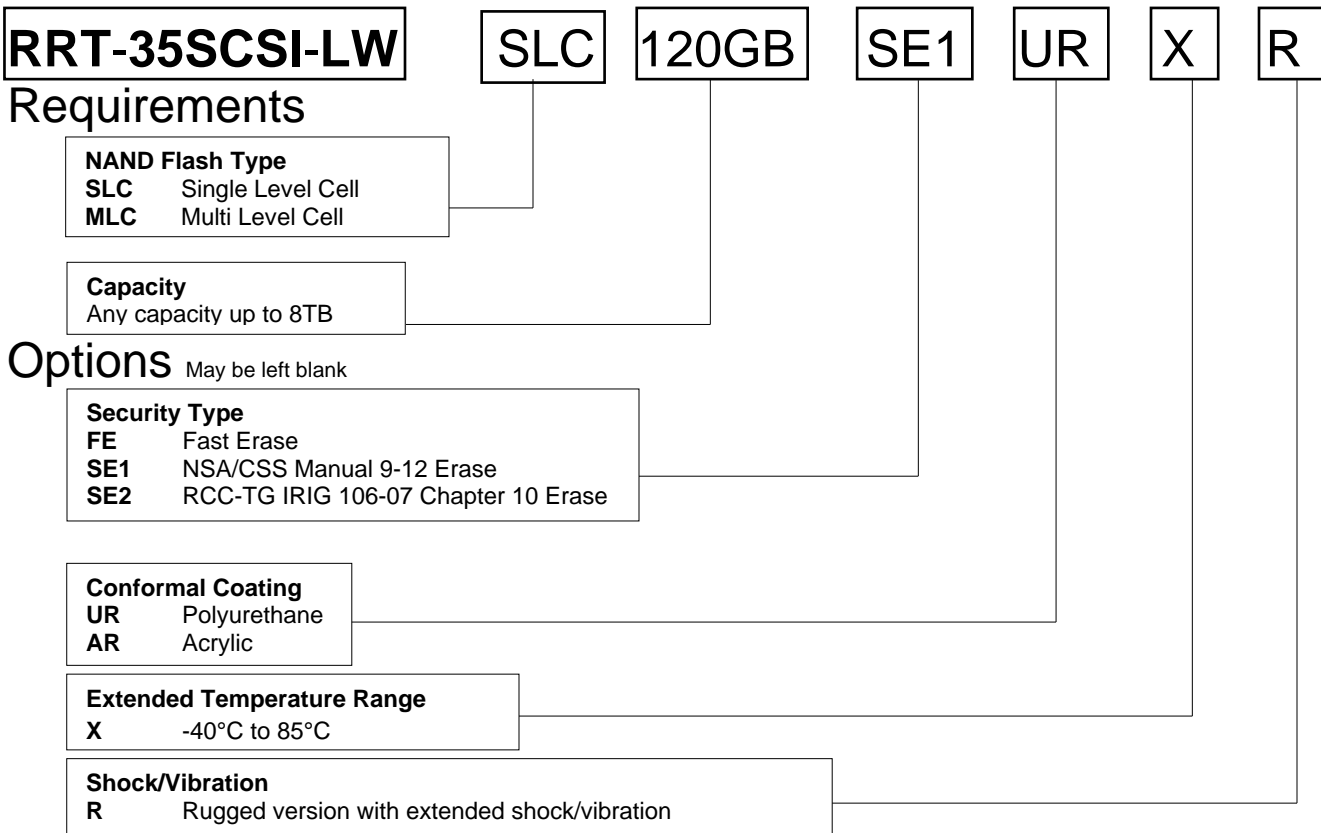
**Fast Erase (FE):** Sets all locations to set value.

**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



Part Order Examples:    RRT-35SCSI-LW-SLC-512MB-FE  
                                  RRT-35SCSI-LW-SLC-120GB-AR-X-R

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 2020 Red Rock Technologies, Inc. All rights reserved. (Rev. 20201118a)

info@redrocktech.com  
www.redrocktech.com

Tempe Arizona USA

480-483-3777  
800-808-7837

