

3.5" 68-Pin SCSI Wide LVD Solid State Drive

RRT-35SFS-LW

The 3.5" 68-pin Wide SCSI Low Voltage Differential (LVD) Solid State Drive (SSD) is a proprietary FPGA based design that provides a long term solution for replacement of obsolete SCSI drives.



The design provides a transparent interface from the SCSI bus to a COTS 2.5" SATA SSD.

The drive can be configured to provide specific capacities for applications that only work with low capacity drives.

FEATURES INCLUDE

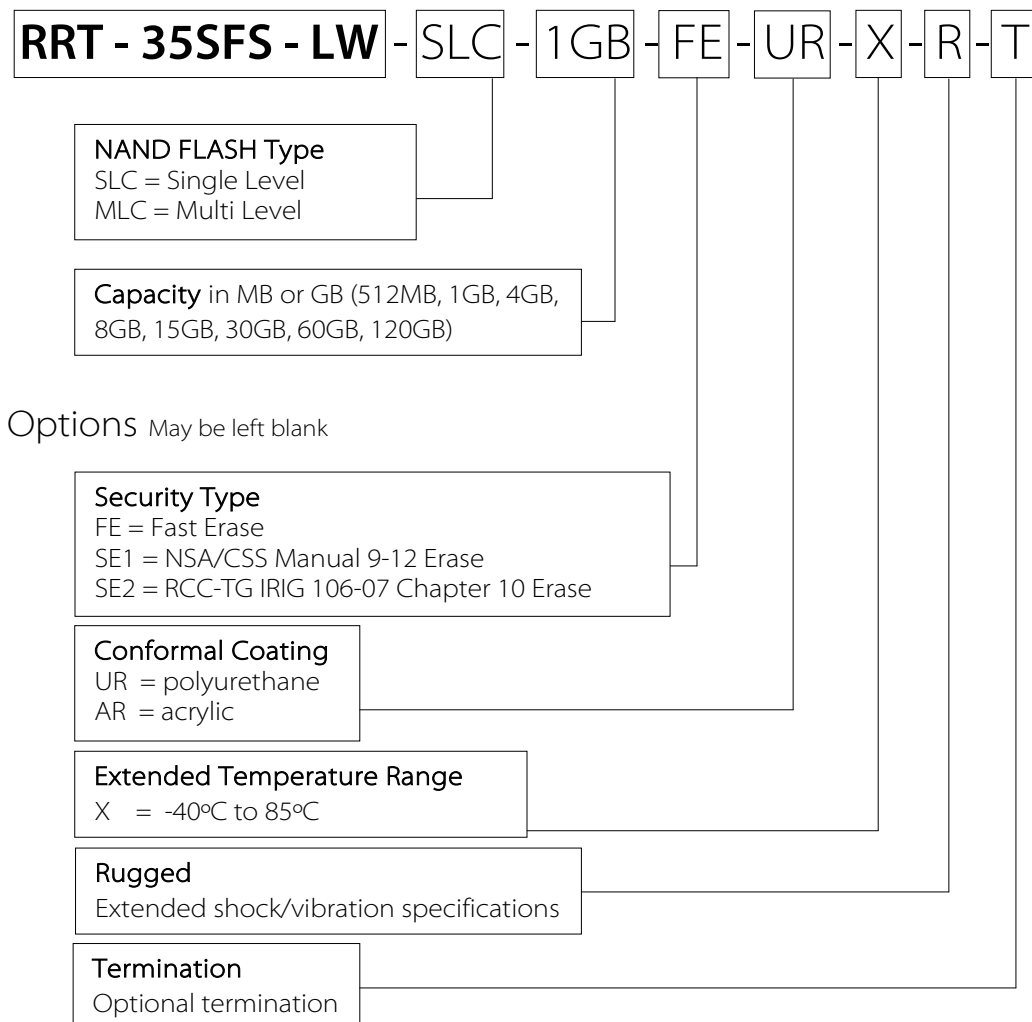
- Drop in replacement for 68-pin SCSI Wide drives with Low Voltage Differential (LVD) interface
- Capacities currently up to 960GB. Larger capacities available as 2.5" COTS SSD capacities increase
- Wide SCSI LVD Interface provides transfer rates up to 40 MB/S
- Robust design for high temperature, shock & vibration environments
- Lower power consumption than mechanical hard drive equivalent
- Fast, efficient field replacement
- High density mass storage in 3.5" form factor
- Commercial and extended temperature versions
- Options for discrete controlled secure erase, purge, and drive destroy
- 35% lighter than standard 3.5" SCSI drive
- Compatible with CPU's with a SCSI LVD controller
- Optional onboard termination
- No additional software required
- SCSI ID selection 0 – 15

Security Options

Several security options are available. Erase/destroy options invoked by command or by discrete input.

- *Fast Erase* sets all locations to set value.
- *NSA/CSS Manual 9-12 Erase* 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-106-7 Chapter 10 Erase* erases all locations, including bad blocks, then sets all locations to 0x55, then sets all locations to 0xAA, and finally erased.
- *Drive Destroy* performs erase of all NAND flash including internal SSD firmware, file system, and tables which makes the drive unusable and unreadable.

Ordering Information



Example: RRT-35SFS-LW-SLC-512MB-FE-T

Example: RRT-35SFS-LW-SLC-120GB-AR-X-R

3.5" 68-Pin SCSI Wide LVD SSD Specifications

Performance				
Version	SLC	MLC	Secure Erase	Drive Destroy
Capacities (1)	4MB - 256GB	4MB - 960GB	4MB - 256GB	4MB - 256GB
NAND FLASH Type	SLC	MLC	SLC	SLC
Interface	LVD Ultra SCSI, SCSI2, SCSI1			
Sustained Throughput				
Read	38 MB/s			
Write	38 MB/s			
Sector Size	512 bytes			
Reliability				
MTBF - Drive	2 million hours	1 million hours	1 million hours	1 million hours
MTBF - Drive Carrier (2)	3 million hours			
Endurance (100GB SSD) Total Bytes Written	1750TB	175TB	525TB	1750TB
Power				
Voltage	+5V +/- 5%			
Watts-idle	3W			
Watts-active	4W max			
Environmental				
Temperature Operating	0° to 70°C			
Extended Temperature Operating (3)	-40° to 85°C			
Temperature Storage	-50° to 95°C			
Relative Humidity (4)	5% to 95%			
Altitude (5)	80,000 ft (24,000 meters)			
Shock (6)	50g 11 millisecond			
Shock - Rugged (6)	1500g 0.5 millisecond			
Vibration	12.0Grms 20 Hz to 2000 Hz			
Vibration - Rugged (7)	16.3 Grms 20 Hz to 2000 Hz			
Physical				
Form Factor	3.5" drive			
Weight	15 oz. max (420g)			
(1) Larger capacities available as new COTS 2.5" drives are released (2) Telcordia SR-322, Issue 3, operating temp (40° C), electrical stress (50%), environmental factor (1.0) (3) Thermal qualification per MIL-STD-810F, Method 501 Procedure II, and MIL-STD-810F, Method 502 Procedure II (4) Relative Humidity qualification per MIL-STD-810F, Method 507 (5) Altitude qualification per MIL-STD-810F, Method 500, , Procedure II (6) Shock qualification per MIL-STD-810F, Method 516 Procedure I (7) Vibration qualification per MIL-STD-810F, Method 514 Procedure I				

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.

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

© Copyright 2015 Red Rock Technologies, Inc. All rights reserved. (Rev. 5/17/2016)

