

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

## RRT-35SCSI-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 4TB
- ❖ 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

# 3.5" SCSI SCA 80-pin Wide SSD Specifications

PERFORMANCE				
Version	SLC	MLC	Secure Erase	Secure Erase
Capacities <sup>(1)</sup>	Up to 480GB	Up to 4TB	Up to 480GB	Up to 4TB
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) <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

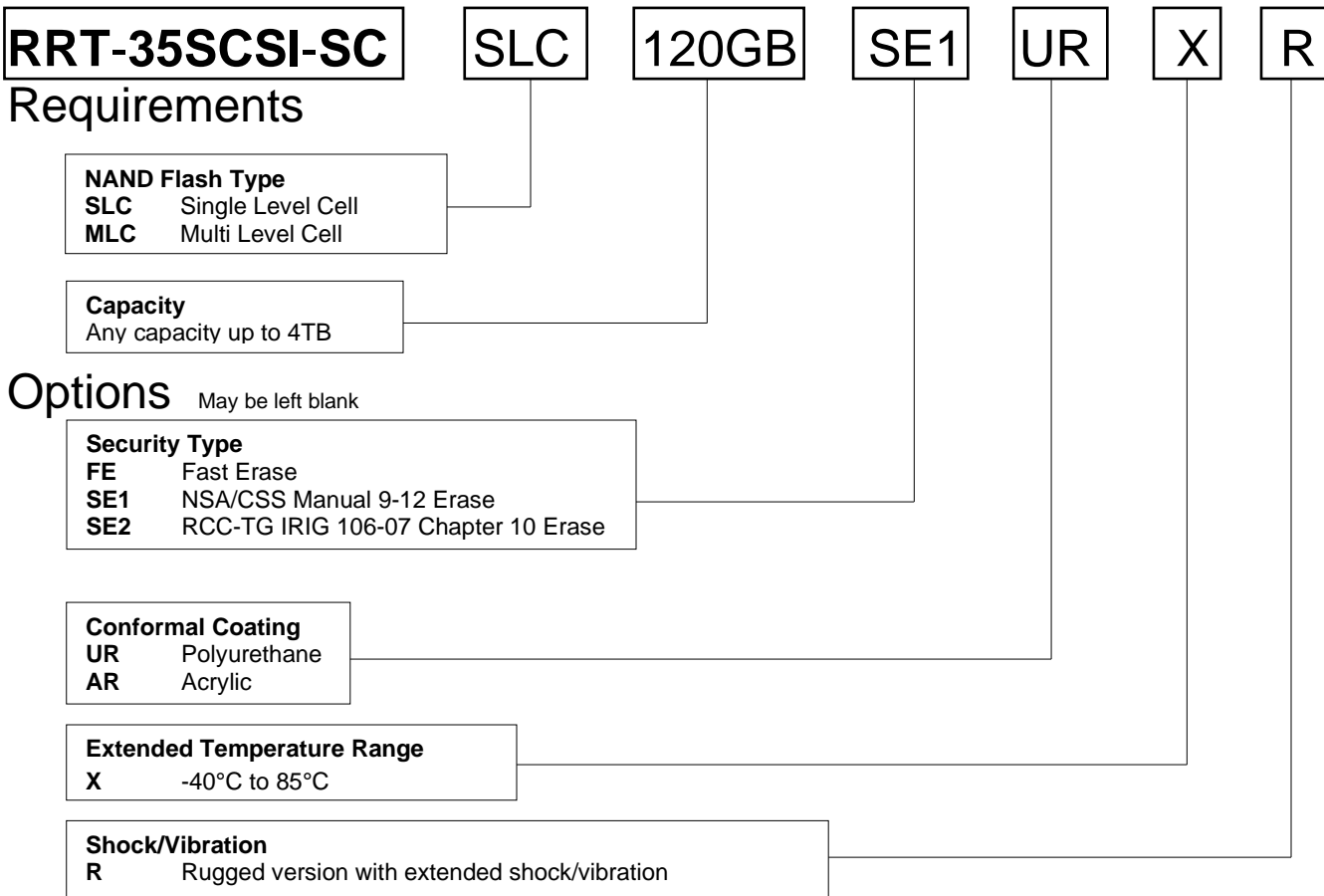
**Fast Erase (FE):** Sets all locations to set value.

**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-SC-SLC-120GB-SE1-UR-X-R  
                                  RRT-35SCSI-SC-MLC-4.3GB

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info@redrocktech.com  
www.redrocktech.com

Tempe Arizona USA

480-483-3777  
800-808-7837

