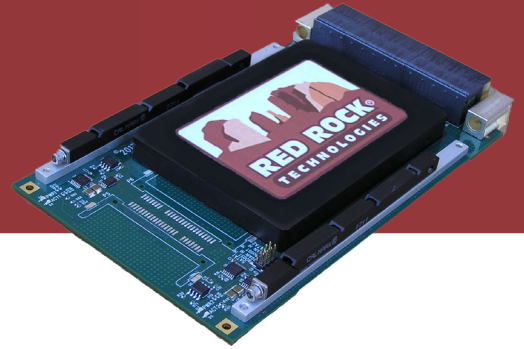


3U VPX SATA Drive Module Conduction Cooled



RRT-3UVPX-SATA-C

The 3U VPX SATA conduction cooled drive module provides storage using COTS 2.5" Hard Disk Drives (HDDs) or Solid State Drives (SSDs) with a range of capacity, speed, environmental, security and cost options.

Options for discrete controlled secure erase, destroy and write protect.

FEATURES INCLUDE

- SATA interface to VPX backplane
- OpenVPX Ultra Thin Pipe (UTP) storage module profile MOD3-STO-1U-16.5.1-1, 2 or 3
- 3U VPX Storage VITA 46, 47, 48, 65
- Provides boot disk and/or disk storage
- Conduction cooled
- Uses COTS 2.5" SATA drives for wide range of options
- Options for discrete controlled secure erase, drive destroy and write protect
- Robust design for extreme temperature, shock and vibration environments
- SATA interface per OpenVpx storage module profile, MOD3-STO-1U-16.5.1-x or optional rear transition module
- High performance SATA2 (SATA300) transfer rates. Compatible with SATA1
- Compatible with all CPU's with a SATA controller
- Current limited
- No additional software required
- Power supplied from VPX backplane

Security Options

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 IRIG 106-07 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

RRT-3UVPX-SATA-C - SLC - 480GB - 1 - FE - UR - X

Requirements

SATA Drive Type

SLC = Single Level Cell SSD
MLC = Multi Level Cell SSD

Capacity

Any capacity up to 2TB

Speed Grade

1 = >100MB/S, 2 = >200MB/S

Options May be left blank

Erase Types

FE = Fast Erase
SE1 = NSA/CSS Manual 9-12 Erase
SE2 = RCC-TG IRIG 106-07 Chapter 10 Erase
DD = Drive Destroy

Conformal Coating

UR = polyurethane
AR = acrylic

Extended Temperature Range

X = -40°C to 85°C

Example: RRT-3UVPX-SATA-C-MLC-2TB

Example: RRT-3UVPX-SATA-C-SLC-120GB-2-SE1-UR-X

3U VPX SATA DRIVE MODULE SPECIFICATIONS

Performance			
Version	SSD-SLC	SSD-MLC	SSD-Secure Erase
Capacities (1)	Up to 480GB	Up to 2TB	Up to 480GB
FLASH Type	SLC	MLC	SLC
Interface (2)	SATA2	SATA2	SATA2
Sustained Throughput	220 MB/S	220 MB/S	220 MB/S
Sector Size	512		
Reliability			
MTBF-Drive	3 million hours	1 million hours	1.2 million hours
MTBF-Drive Module (6)	3 million hours		
Power			
Voltage	+5V +/- 5%, 3.3V +/- 5%		
Watts-Idle	1.2	1.2	1
Watts-active	2.5	2.5	2
Environmental			
Temperature – operating (3), VITA 47 Class	-40 to 85C CC4, AC3 for –X option 0 to 60C, CC1, AC1 for Standard SSD		
Temperature – storage	-40 to 85C		
Relative Humidity	5% to 95%		
Altitude	80,000 ft 24,000 meters		
Shock (4), VITA 47 Class	40g, OS2		
Vibration (5), VITA 47 Class	0.04 g ² /Hz ²		
Physical			
Form Factor	3U VPX		
Weight	10 oz. max		
Pitch	0.8"		
<p>(1) Larger capacities available as new COTS 2.5" drives released</p> <p>(2) Interface connected via compatible slot profile SLT3-STO-2U-14.5x or rear transition module</p> <p>(3) Thermal qualification per MIL-STD-810, Method 501, Procedure II, and MIL-STD-810, Method 502, Procedure II</p> <p>(4) Shock qualification per MIL-STD-810F, Method 516, Procedure I</p> <p>(5) Vibration qualification per MIL-STD-810F, Method 514, Procedure 1</p> <p>(6) Telcordia SR-322, Issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0)</p>			

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 2016 Red Rock Technologies, Inc. All rights reserved. (Rev. 12.12/2016)

206 West Julie Drive - Suite 2, Tempe, AZ 85283 | United States of America

Tel: 480-483-3777 | Toll Free: 1-800-808-7837

www.redrocktech.com | info@redrocktech.com

© Copyright 2016 Red Rock Technologies, Inc.

