



RRT-3UVPX-SATA-C 3U VPX Conduction Cooled SSD Module with SATA Interface

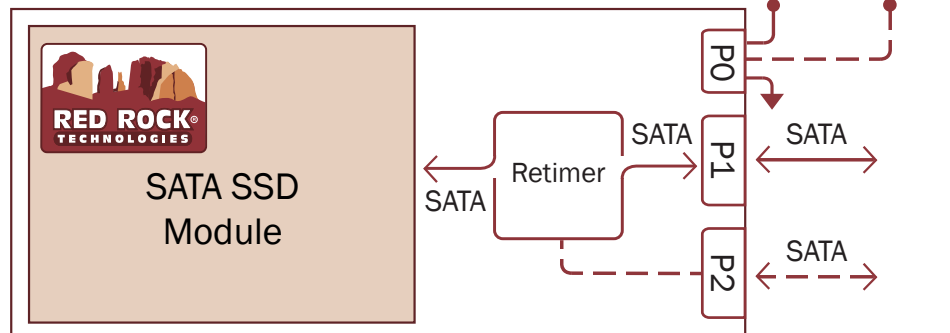
3U VPX CONDUCTION COOLED SSD MODULE WITH SATA INTERFACE to VPX backplane adds SSD to a VPX system using one 3U VPX slot with COTS 2.5" SATA Solid State Drives (SSDs) providing capacities up to 20TB and transfer rates of up to 600MB/S. Options for FIPS140-2, FIPS197, TCG Opal, and military erase.

- Capacities up to 20TB
- 600MB/S transfer rates
- SATA3 (SATA600) interface to VPX backplane
- VITA 65 Slot Profiles:
 - SLT3-STO-1U-16.5.1
- VITA 46, 47, 48, 65
- Boot and/or storage disk
- Conduction cooled
- Compatible with SATA1, 2
- COTS 2.5" SATA SSDs
- Military erase options
- FIPS140-2, FIPS197, TCG Opal options
- VPX Rear Transition module available for SATA interface



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VITA 65 Slot Profile: SLT3-STO-1U-16.5.1



Ordering Information

3U VPX Conduction Cooled SSD Module with SATA Interface

RRT-3UVPX-SATA-C-MLC - 20TB - UR - X - SE1

Requirements

NAND Flash Type

HDD	Hard Disk Drive
TLC	3D NAND
MLC	Multi Level Cell
SLC	Single Level Cell

Capacity

1TB - 5TB	For HDD
120GB - 8TB	For TLC
60GB - 20TB	For MLC
7GB - 240GB	For SLC

Options May be left blank

Conformal Coating

UR	Polyurethane
AR	Acrylic

Extended Temperature Range

X	-40°C to 85°C
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Security

FE	Fast Erase
SE1	NSA/CSS Manual 9-12 Erase
SE2	RCC-TG IRIG 106-107 Chapter 10 Erase
OPAL	TCG OPAL Compliant SSD
FIPS140-2	FIPS 140-2 Compliant SSD
FIPS197	FIPS 197 Compliant SSD

ORDER EXAMPLES

- RRT-3UVPX-SATA-C-MLC-20TB-UR-X-SE1
- RRT-3UVPX-SATA-C-SLC-240GB
- RRT-3UVPX-SATA-C-TLC-8TB
- RRT-3UVPX-SATA-C-HDD-1TB-FIPS140-2



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Product Specifications

3U VPX CONDUCTION COOLED SSD MODULE WITH SATA INTERFACE

PERFORMANCE					
NAND FLASH TYPE	HDD	SSD: TLC	SSD: MLC	SSD: MLC-X	SSD: SLC
CAPACITIES ¹	Up to 5TB	Up to 8TB	Up to 20TB		Up to 240GB
INTERFACE ²	SATA3				
THROUGHPUT - SUSTAINED	130 MB/S	400 MB/S			
RELIABILITY					
MTBF-DRIVE	500,000 hours	1 million hours	2 million hours		3 million hours
MTBF-VPX BOARD ³	3 million hours				
DATA RETENTION	Not applicable	1 year			10 years
ENDURANCE (100GB) TOTAL BYTES WRITTEN	Not applicable	70 TBW			350 TBW
CFAST CONNECTOR MATING CYCLES	10,000 mating cycles				
POWER					
VOLTAGE-STORAGE	+5V +/- 5%				
WATTS (IDLE)	1 W	1.2 W	3.5 W	1 W	
WATTS (ACTIVE)	2.5 W	4 W	10 W	2.5 W	
ENVIRONMENTAL					
OPERATING TEMP., VITA 47 CLASS	5°C to 55°C	0°C to 60°C, CC1	0°C to 70°C, CC1	See MLC	0°C to 70°C, CC1
EXTENDED OPERATING TEMP., VITA 47 CLASS ⁴	Not available		See MLC-X	-40°C to 85°C, CC4	
STORAGE TEMP.	-40°C to 70°C	-40°C to 85°C			
ALTITUDE	10,000 ft. (3,000 meters)			80,000 ft. (24,000 meters)	
RELATIVE HUMIDITY	5% to 95% non-condensing				
SHOCK, VITA 47 CLASS ⁵	20g, 11 millisecond terminal sawtooth pulse, OS1			40g, 11 millisecond terminal sawtooth pulse, OS2	
VIBRATION, VITA 47 CLASS ⁶	0.04 g ² /Hz, 5 Hz to 100 Hz, V1			0.1 g ² /Hz, 100 Hz to 1000 Hz, V3	
PHYSICAL					
FORM FACTOR	3U VPX				
WEIGHT	10 oz. max				
PITCH	0.8"				
NOTES					
<p>(1) Larger capacities available as new COTS 2.5" drives released</p> <p>(2) Interface connected via compatible slot profile SLT3-STO-1U-16.5.1</p> <p>(3) Telcordia SR-322, Issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0)</p> <p>(4) Thermal qualification per MIL-STD-810, Method 501, Procedure II, and MIL-STD-810, Method 502, Procedure II</p> <p>(5) Shock qualification per MIL-STD-810F, Method 516, Procedure I</p> <p>(6) Vibration qualification per MIL-STD-810F, Method 514, Procedure I</p>					



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