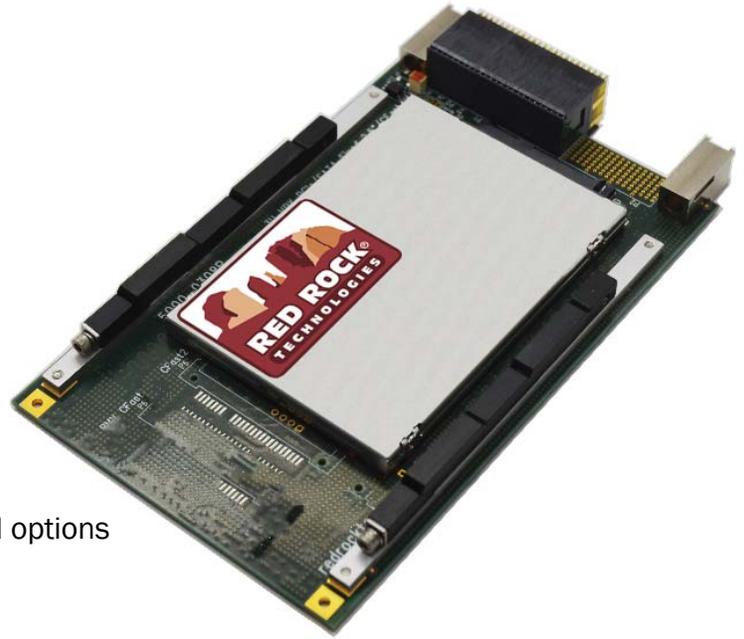




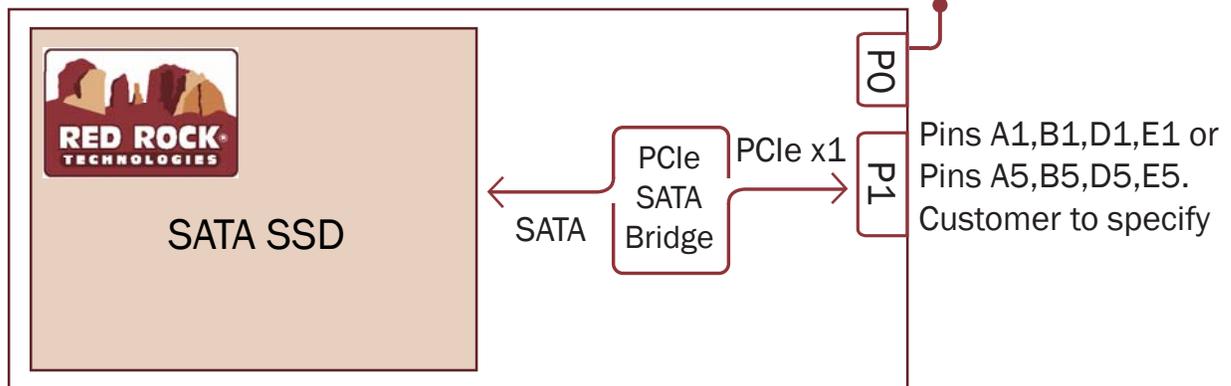
# RRT-3UVPX-PCIe-C 3U VPX Conduction Cooled SSD Module with PCIe Interface

THE 3U VPX CONDUCTION COOLED SSD MODULE WITH PCIe 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 1TB storage and transfer rates of up to 600MB/S.

- Capacities up to 20TB
- 600MB/S transfer rates
- OpenVPX Thin Pipe (TP) PCIe x1 interface
- VITA 65 Slot Profiles:
  - SLT3-PER-1T-14.3.3
- VITA 46, 47, 48, 65
- Boot and/or storage disk
- Conduction cooled
- COTS 2.5" SATA SSDs
- SATA3 (SATA600) Interface to SSD
- Military erase options, FIPS140-2, FIPS197, TCG Opal options
- IDE or AHCI Mode
- VPX board injectors/ejectors



Module Profile: MOD3-PER-1U-14.3.3



## 3U VPX Conduction Cooled SSD Module with PCIe Interface

RRT-3UVPX-PCIe-C- **PER** - **MLC** - **20TB** - **UR** - **X** - **SE1**

### Requirements

#### VPX Interface

PER Peripheral Slot

#### 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

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

# Product Specifications

## 3U VPX CONDUCTION COOLED SSD MODULE WITH PCIe INTERFACE

PERFORMANCE					
NAND FLASH TYPE	HDD	SSD: TLC	SSD: MLC	SSD: MLC-X	SSD: SLC
CAPACITIES <sup>1</sup>	Up to 5TB	Up to 8TB	Up to 20TB		Up to 240GB
INTERFACE <sup>2</sup>	PCIe Gen 2 x 1				
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 <sup>3</sup>	3 million hours				
DATA RETENTION	Not applicable	1 year			10 years
ENDURANCE (100GB) TOTAL BYTES WRITTEN	Not applicable	70 TBW			350 TBW
POWER					
VOLTAGE-PAYLOAD SLOT	+12V, +3.3V Aux				
VOLTAGE-PERIPHERAL SLOT	+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 <sup>4</sup>	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 <sup>5</sup>	20g, 11 millisecond terminal sawtooth pulse, OS1			40g, 11 millisecond terminal sawtooth pulse, OS2	
VIBRATION, VITA 47 CLASS <sup>6</sup>	0.04 g2/Hz, 5 Hz to 100 Hz, V1				
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-PAY-1F1U1S1S1U1U2F1H-14.6.11 or SLT3-PER-1F-14.3.2</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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