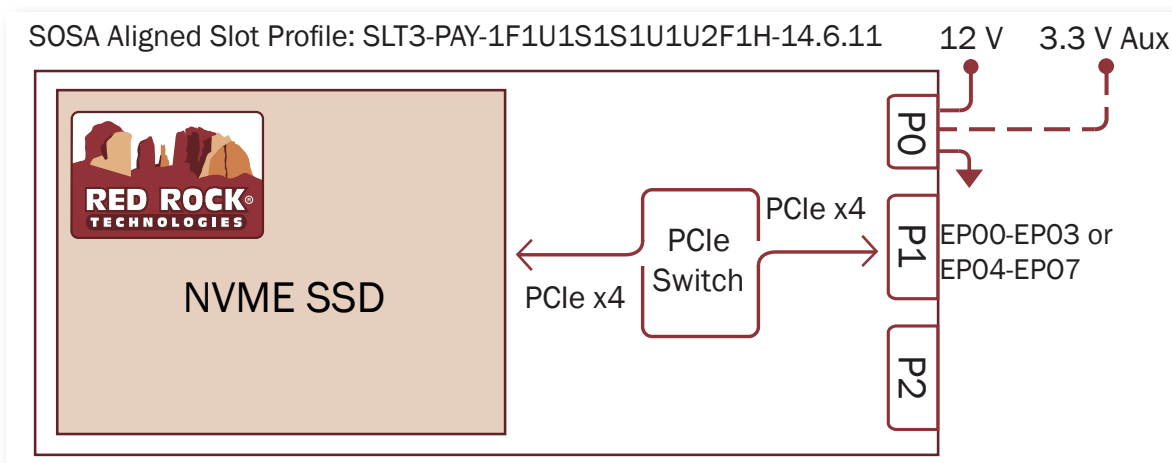
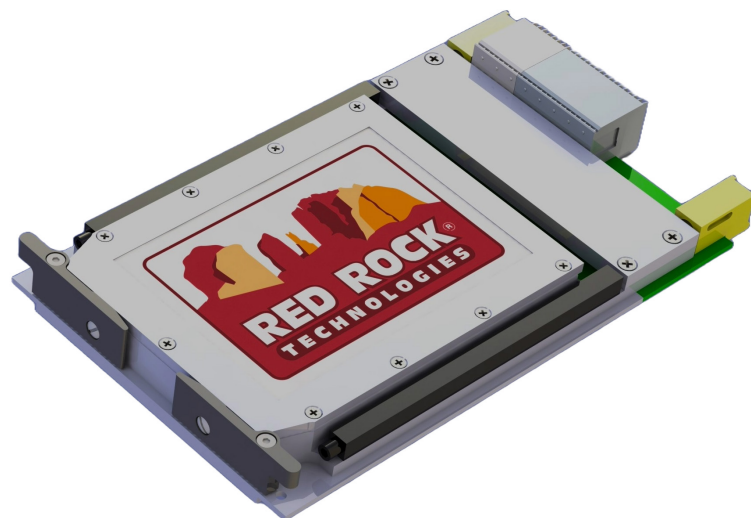




RRT-3UVPX-NVME-C 3U VPX Conduction Cooled NVME SSD Module with PCIe Interface

THE 3U VPX CONDUCTION COOLED NVME SSD MODULE WITH PCIe INTERFACE to VPX backplane adds SSD to a VPX system using one 3U VPX slot with COTS U.3/U.2 NVME Solid State Drives (SSDs) providing capacities up to 30TB and transfer rates of up to 6800MB/S. Options for FIPS140-2, FIPS197, TCG Opal, and military erase.

- Capacities up to 30TB
- 6800MB/S transfer rates
- OpenVPX Fat Pipe (FP) PCIe x4 interface
- VITA 65 Slot Profiles:
 - SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11
 - VPX P1 EP00EP03 OR
 - VPX P1 EP04EP07
 - SLT3-PER-1F-14.3.2
- VITA 46, 47, 48, 65
- Boot and/or storage disk
- Conduction cooled
- COTS U.3/U.2 NVME SSDs
- Military erase options, FIPS140-2, FIPS197, TCG Opal options
- Injectors/ejectors for easy insertion and removal of VPX board



Ordering Information

3U VPX Conduction Cooled NVME SSD Module with PCIe Interface

RRT-3UVPX-NVME-C- P1EP00EP03 - MLC - 20TB - UR - X - SE1

Requirements

VPX Interface

P1EP00EP03	Payload Slot EP00-EP03 (SOSA Aligned)
P1EP04EP07	Payload Slot EP04-EP07 (SOSA Aligned)
PER	Peripheral Slot

NAND Flash Type

TLC	3D NAND
MLC	Multi Level Cell
pSLC	Pseudo Single Level Cell

Capacity

500GB - 30TB	For TLC
500GB - 8TB	For TLC-X
1TB - 16TB	For MLC
1TB - 4TB	For pSLC

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-NVME-C-P1EP00EP03-TLC-30TB
RRT-3UVPX-NVME-C-PER-pSLC-1TB-UR-X-SE1
RRT-3UVPX-NVME-C-P1EP00EP03-MLC-16TB



Product Specifications

3U VPX CONDUCTION COOLED NVME SSD MODULE WITH PCIE INTERFACE

PERFORMANCE				
NAND FLASH TYPE	TLC	MLC	pSLC	TLC-X
CAPACITIES ¹	Up to 30TB	Up to 16TB	Up to 4TB	Up to 8TB
INTERFACE ²	PCIe Gen 3/4 x4	PCIe Gen 2 x 4		PCIe Gen 3 x4
THROUGHPUT - SUSTAINED	3500MB/S (Gen3), 5000MB/S (Gen4)	800 MB/S	1000 MB/S	1500MB/S
RELIABILITY				
MTBF-DRIVE	1 million hours		2 million hours	
MTBF-VPX BOARD ³	3 million hours			
DATA RETENTION	1 year		5 years	1 year
ENDURANCE (100GB) TOTAL BYTES WRITTEN	70 TBW		250 TBW	70 TBW
POWER				
VOLTAGE-PAYLOAD SLOT	+12V, +3.3V Aux			
VOLTAGE-PERIPHERAL SLOT	12V +/- 5%, +5V +/- 5%, +3.3V +/- 5%			
WATTS (IDLE)	7 W	1.5 W		
WATTS (ACTIVE)	20 W	10 W		
ENVIRONMENTAL				
OPERATING TEMP., VITA 47 CLASS ⁴	0 °C to 55 °C, CC1		0 °C to 60 °C, CC1	See TLC
EXT. OPERATING TEMP., VITA 47 CLASS ⁴	See TLC-X	Not available	-40 °C to 85 °C, CC4	
STORAGE TEMP.	-40 °C to 85 °C			
ALTITUDE	10,000 ft. (3,000 meters)		80,000 ft. (24,000 meters)	
RELATIVE HUMIDITY	5% to 95%			
SHOCK, VITA 47 CLASS ⁵	20g, 11 millisecond terminal sawtooth pulse, OS		40g, 11 millisecond terminal sawtooth pulse, OS2	
VIBRATION, VITA 47 CLASS ⁶	0.4 g2/Hz, 5 Hz to 100 Hz, V1		0.1 g2/Hz, 100 Hz to 1000 Hz, V3	
PHYSICAL				
FORM FACTOR	3U VPX			
WEIGHT	14 oz. max			
PITCH	0.8"			
NOTES				
(1) Larger capacities available as new COTS U.3/U.2 NVMe drives released				
(2) Interface connected via compatible slot profile SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11 or SLT3-PER-1F-14.3.2				
(3) Telcordia SR-322, Issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0)				
(4) Thermal qualification per MIL-STD-810F, Method 501, Procedure II, and MIL-STD-810F, Method 502, Procedure II				
(5) Shock qualification per MIL-STD-810F, Method 516, Procedure I				
(6) Vibration qualification per MIL-STD-810F, Method 514, Procedure I				



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