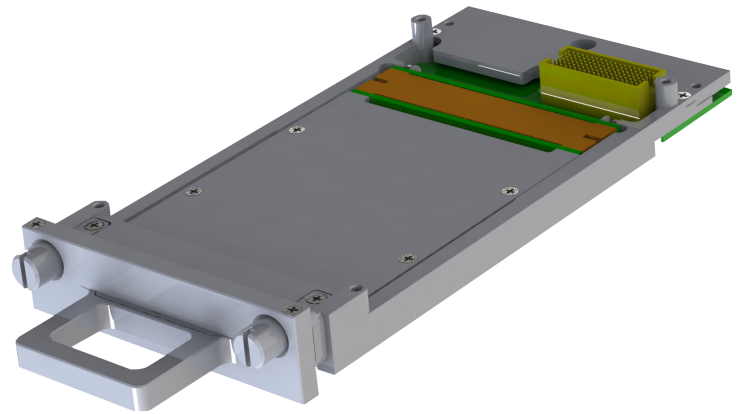




RRT-XMC-R-A XMC with Removable NVMe SSD Module

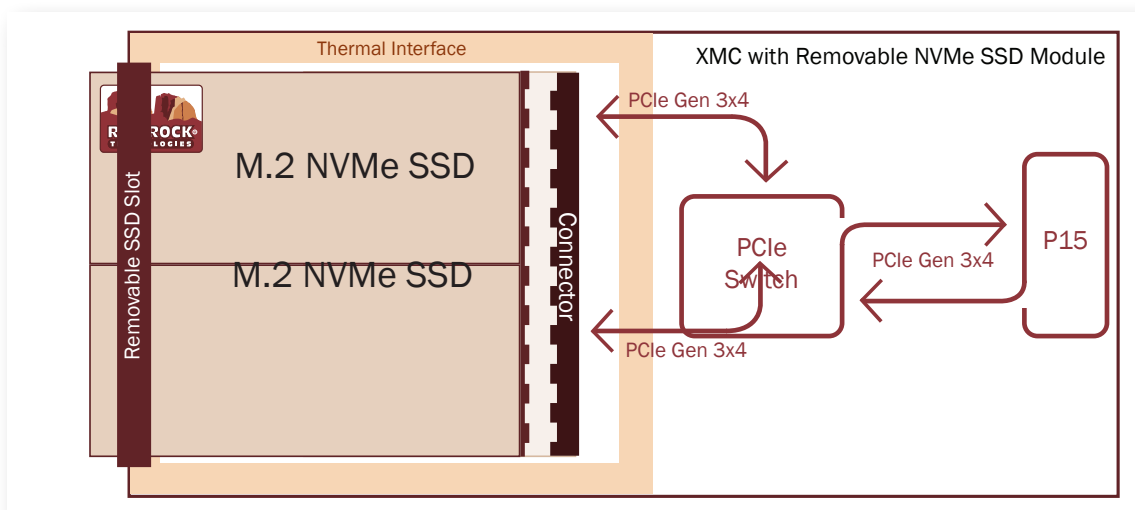
- XMC PCIe Gen 3x4 interface per VITA 42.3
- Transfer rates up to 3000 MB/s (0 to 70C), 1500MB/S (-40 to 85C)
- Capacities up to 16TB (0 to 70C) and 8TB (-40 to 85C)
- Removable SSD module connectors rated for 100,000 mating cycles
- Air cooled
- Wide range of COTS NVME M.2 SSD options
- Meets XMC VITA 42 height requirements
- -X version rated for -40°C to 85°C
- Military erase, FIPS140-2, FIPS197, TCG Opal options
- ROHS compliant



THE XMC WITH REMOVABLE NVME SSD MODULE is a mezzanine storage module that uses PCI Express interface for two M.2 NVME SSDs contained in a removable module.

Provides boot drive and/or disk storage for VPX, VME, cPCI and ATCA single board computers (SBCs) with XMC Slot.

The removable SSD module connectors are rated for 100,000 mating cycles to support frequent insertions/removals.



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Ordering Information

XMC with Removable NVMe SSD Module

RRT-XMC-R-A-UR-X

Options May be left blank

Conformal Coating
 UR Polyurethane
 AR Acrylic

Extended Temperature Range
 X -40°C to 85°C

ORDER EXAMPLES

RRT-XMC-R-A
 RRT-XMC-R-A-UR-X

Removable NVMe SSD Drive Module

RRT-DM-NVME-pSLC-DUAL-4TB-UR-X-FE-TS

Requirements

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

Drive Quantity
 SINGLE 1 drive included
 DUAL 2 drives included

Capacity
 8GB - 8TB For TLC
 500GB - 4TB For MLC
 500GB - 2TB For pSLC

Options May be left blank

No Tools
 TS Thumbscrews

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

Extended Temperature Range
 X -40°C to 85°C

Conformal Coating
 UR Polyurethane
 AR Acrylic

ORDER EXAMPLES

RRT-DM-NVMe-TLC-SINGLE-8TB-TS
 RRT-DM-NVMe-TLC-DUAL-64GB-UR-X-SE1
 RRT-DM-NVMe-MLC-DUAL-16TB-FIPS197
 RRT-DM-NVMe-pSLC-SINGLE-1TB-UR-X-SE1



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Product Specifications

XMC WITH REMOVABLE NVME SSD MODULE

PERFORMANCE XMC MODULE

XMC INTERFACE	VITA42.3 PCIe Gen3 x4
XMC INTERFACE SPEED	3.938GB/s

PERFORMANCE SSD

NAND FLASH TYPE	TLC	MLC	pSLC	TLC-X
CAPACITIES ¹	Up to 16TB (8TB x 2)	Up to 16TB (8TB x 2)	Up to 2.56TB (1.28TB x 2)	Up to 7.68TB (3.84TB x 2)
INTERFACE ²	PCIe Gen 3 x 4	PCIe Gen 2 x 4		PCIe Gen 3 x 4
THROUGHPUT - SUSTAINED	3000MB/S (Gen3)	800 MB/S	1000 MB/S	1500MB/S

RELIABILITY

MTBF - SSD	1 million hours	2 million hours	
MTBF - XMC MODULE 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	VPWR +5V +/- 5% or +12V +/- 5%, +3.3+/- 0.3V		
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, AC1	0° C to 60° C, AC1	See TLC
EXT. OPERATING TEMP., VITA 47 CLASS ⁴	See TLC-X	Not available	-40° C to 85° C, AC3
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, OS1	40g, 11 millisecond terminal sawtooth pulse, OS2	
VIBRATION, VITA 47 CLASS ⁶	0.04 g2/Hz, 5 Hz to 100 Hz, V1	0.1 g2/Hz, 100 Hz to 1000 Hz, V3	

PHYSICAL

FORM FACTOR	XMC
WEIGHT	14 oz. max

NOTES

- (1) Larger capacities available as new COTS U.2 NVMe SSDs released
- (2) Interface connected via compatible slot profile SLT3-PAY-1F1U1S1S1U1U2F1H-14.6.11 OR SLT3-PER-1F-14.3.2
- (3) Telcordia SR-332, 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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