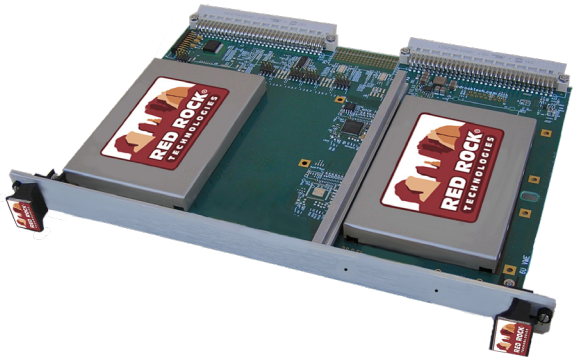
RED ROCK TECHNOLOGIES

RRT-6UVME-SATA
6U VME SSD Module with SATA Interface

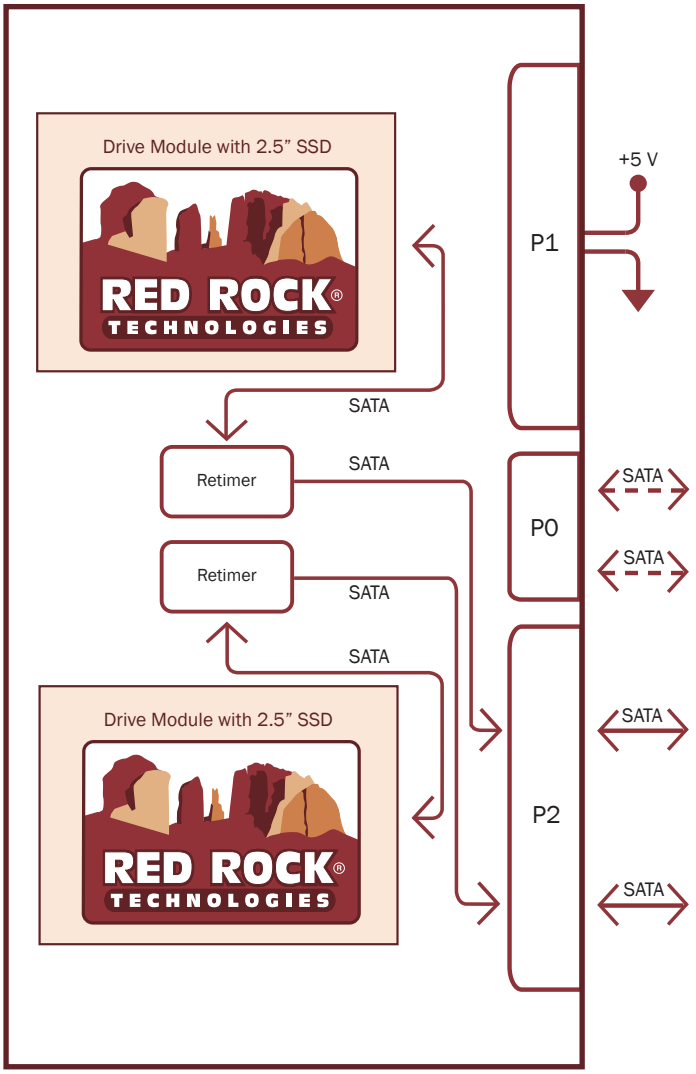
6U VME SSD MODULE WITH SATA INTERFACE 6U VME SSD Module with SATA Interface adds one or two HDDs or SSDs to a VME system using one VME slot.

The drive module can use any COTS 2.5" SATA Solid State Drive (SSD) providing capacities up to 40TB (20TBx2) and transfer rates of up to 200MB/S. Options for FIPS140-2, FIPS197, TCG Opal, and military erase. Each drive has a separate SATA interface.



- Capacities up to 40TB (2x20TB)
- 200 MB/s transfer rates
- SATA interfaces via VME P0 or P2
- Removable SSD modules
- Boot and/or storage disk
- COTS 2.5" SATA SSDs
- Military erase options
- FIPS 140-2, FIPS 197, TCG Opal options
- P2 adapter with SATA interface available

6U VME SSD Module with SATA Interface



PARHELIA

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Ordering Information

6U VME SSD Module with SATA Interface

RRT-6UVME-SATA- [P2] - [F2] - [MLC] - [20TB] - [UR] - [X] - [FE]

Requirements

SATA Interface

P0	VME P0 Connector
P2	VME P2 Connector

Drives

F1	1 fixed drive
F2	2 fixed drive

Disk Type

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

Capacity

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

Options May be left blank

Conformal Coat

UR	Polyurethane
AR	Acrylic

Extended Temperature Range

X	-40°C to 85°C

Erase Types

FE	Fast Erase
SE1	NSA/CSS Manual 9-12 Erase
SE2	RCC-TG IRIG 106-07 Chapter 10 Erase
FIPS197	FIPS197 Compliant
Opal	TCG Opal Compliant

ORDER EXAMPLES

RRT-6UVME-SATA-P2-F2-MLC-480GB-UR-X-SE1
RRT-6UVME-SATA-P0-F2-SLC-240GB
RRT-6UVME-SATA-P0-F1-HDD-1TB-FIPS140-2

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Product Specifications

6U VME 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]	SATA2 (SATA 300)				
THROUGHPUT - SUSTAINED	130 MB/S	400 MB/S			
SECTOR SIZE	512 bytes				
RELIABILITY					
MTBF - DRIVE	500,000 hours	1 million hours	2 million hours		3 million hours
MTBF - DRIVE MODULE	3 million hours				
MTBF - CARRIER[3]	3 million hours				
DATA RETENTION	Not applicable	1 year[4]			10 years[5]
ENDURANCE (100GB) TOTAL BYTES WRITTEN	Not applicable	70 TBW			350 TBW
POWER					
VOLTAGE	+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.	5°C to 55°C	0°C to 60°C	0°C to 70°C	See MLC	0°C to 70°C
EXTENDED OPERATING TEMP.	Not available		See MLC-X	-40°C to 85°C	
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	20g, 11 millisecond terminal sawtooth pulse, OS1			40g, 11 millisecond terminal sawtooth pulse, OS2	
VIBRATION	0.04 g2/Hz, 5 Hz to 100 Hz, V1			0.1 g2/Hz, 100 Hz to 1000 Hz, V3	
PHYSICAL					
FORM FACTOR	6U VME				
WEIGHT	7.9 oz. (222 g) max for carrier, 3.3 oz. (93 g) max per drive module 14.5 oz. (408 g) max total (carrier + 2 drive modules)				
PITCH	1.0”				
NOTES					
(1) Larger capacities available as new COTS 2.5” drives released.					
(2) Interface connected via front panel or P2.					
(3) Telcordia SR-322, issue 3, operating temp (40°C), electrical stress (50%), environmental factor (1.0)					
(4) MLC	10 years at 0% TBW ramping down to 1 year at 100% TBW				
(5) SLC	10 years at 10% TBW ramping down to 1 year at 100% TBW				

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