

RRT-3UVPX-PCIe-A

3U VPX Air Cooled SSD Module with PCIe Interface

The 3U VPX Air 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 a wide range of capacity, speed, environmental and security options.

Optional removable CFast port on front panel with CFast secured by a rugged retainer clip. CFast is the same form factor as Compact Flash but has a SATA interface for faster speeds.



FEATURES

- Capacities up to 16TB
- 600MB/S transfer rates
- PCIe Gen 2x2 interface
- Open VPX Thin Pipe (TP) MOD3-PER- IT-16.3.3.x
- VITA 46, 47, 48, 65
- Boot and/or storage disk
- Air cooled
- COTS 2.5" SATA SSDs
- SATA3 (SATA600) Interface to SSD
- Military erase options
- FIPS197, FIPS140-2, TCG Opal options
- Rugged design
- IDE or AHCI Mode
- Current limited
- Power supplied from VPX backplane
- VxWorks, Linux, Windows Support
- Option for removable CFast port

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RRT-3UVPX-PCIe-A-□-□-□-□-□-□-□

REQUIREMENTS	
PITCH	
080	0.80" PITCH
085	0.85" PITCH
100	1.00" PITCH
NAND FLASH TYPE	
TLC	TRI LEVEL CELL (3D)
MLC	MULTI LEVEL CELL
SLC	SINGLE LEVEL CELL
CAPACITY	
CAPACITIES UP TO 16TB	

OPTIONS (MAY BE LEFT BLANK)	
CONFORMAL COATING	
UR	POLYURETHANE
AR	ACRYLIC
EXTENDED TEMP. RANGE	
X	-40°C to 85°C
SECURITY	
FE	FAST ERASE
SE1	NSA/CSS MANUAL 9-12 ERASE
SE2	RCC-TG IRIG 106-07 CHAPTER 10 ERASE
OPAL	TCG OPAL COMPLIANT SSD
FIPS140-2	FIPS140-2 COMPLIANT SSD
FIPS197	FIPS197 COMPLIANT SSD
CFAST FRONT PANEL PORT	
CFAST	REMOVABLE CFAST

EXAMPLES

RRT-3UVPX-PCIe-A-080-MLC-8TB-UR-X-SE1
RRT-3UVPX-PCIe-A-085-SLC-120GB
RRT-3UVPX-PCIe-A-100-TLC-16TB
RRT-3UVPX-PCIe-A-100-MLC-480GB-CFAST

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PERFORMANCE			
NAND FLASH TYPE	TLC	MLC	SLC
CAPACITIES ¹	UP TO 16TB	UP TO 16TB	UP TO 480GB
INTERFACE ²	PCIe Gen 2x2	PCIe Gen 2x2	PCIe Gen 2x2
THROUGHPUT - SUSTAINED	450 MB/S	400 MB/S	400 MB/S
RELIABILITY			
MTBF-DRIVE	1 MILLION HOURS	1 MILLION HOURS	2 MILLION HOURS
MTBF-VPX BOARD ⁶	3 MILLION HOURS	3 MILLION HOURS	3 MILLION HOURS
DATA RETENTION	1 YEAR	1 YEAR	10 YEARS
ENDURANCE (100GB) TOTAL BYTES WRITTEN	70 TBW	70 TBW	350 TBW
CFAST CONNECTOR MATING CYCLES	10,000	10,000	10,000
POWER			
VOLTAGE	+5V +/- 5%, +3.3V +/- 5%	+5V +/- 5%, +3.3V +/- 5%	+5V +/- 5%, +3.3V +/- 5%
WATTS (IDLE)	1.2 W	1.2 W	1.2 W
WATTS (ACTIVE)	2.5 W	2.5 W	2.5 W
ENVIRONMENTAL			
OPERATING TEMP., VITA 47 CLASS ³	0° to 60°C, AC1	0° to 60°C, AC1 -40° to 85°C, AC3 for -X option	0° to 60°C, AC1 -40° to 85°C, AC3 for -X option
STORAGE TEMP.	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
ALTITUDE	80,000 FT (24,000 METERS)	80,000 FT (24,000 METERS)	80,000 FT (24,000 METERS)
RELATIVE HUMIDITY	5% TO 95%	5% TO 95%	5% TO 95%
SHOCK, VITA 47 CLASS ⁴	40 g 11 MILLISECOND HALF-SINE, OS2	40 g 11 MILLISECOND HALF-SINE, OS2	40 g 11 MILLISECOND HALF-SINE, OS2
VIBRATION, VITA 47 CLASS ⁵	0.1 g ² /HZ 100 HZ TO 1000 HZ, V3	0.1 g ² /HZ 100 HZ TO 1000 HZ, V3	0.1 g ² /HZ 100 HZ TO 1000 HZ, V3
PHYSICAL			
FORM FACTOR	3U VPX	3U VPX	3U VPX
WEIGHT	10 OZ MAX	10 OZ MAX	10 OZ MAX
PITCH	0.8", 0.85", and 1.0" options	0.8", 0.85", and 1.0" options	0.8", 0.85", and 1.0" options
NOTES			
<p>(1) Larger capacities available as new COTS 2.5" drives released (2) Interface connected via compatible slot profile SLT3-STO-2U-14.5x or rear transition module (3) Thermal qualification per MIL-STD-810, Method 501, Procedure II, and MIL-STD-810, Method 502, Procedure II (4) Shock qualification per MIL-STD-810F, Method 516, Procedure I (5) Vibration qualification per MIL-STD-810F, Method 514, Procedure 1 (6) Telcordia SR-322, Issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0)</p>			

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