

XMC Removable 1.8" SATA Drive Module



RRT-XMC-18S-R

The XMC Removable 1.8" SATA drive module is a XMC mezzanine storage module with a PCI Express PCIe to SATA 3 controller that supports a removable 1.8" Solid State Drive (SSD)

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

FEATURES INCLUDE

- XMC PCIe Gen2 x1 interface per VITA 42.3
- Transfer rates up to 500 MB/s
- Uses COTS 1.8" SATA drives for wide range of options.
- Capacities currently up to 1TB
- Removable 1.8" SATA drive secured by rugged retainer clip
- Options for discrete controlled secure erase
- Robust design for extreme temperature, shock & vibration environments
- High performance SATA3 transfer rates.
- Backwards compatible with SATA1 and SATA2
- Compatible with all SBCs with XMC slot
- Meets XMC VITA 42 height requirements
- For -X version all parts rated for -40C to 85C. No parts derating.
- VxWorks™, Linux and Windows™ drivers available
- ROHS compliant

Ordering Information – XMC Removable 1.8" SATA Drive Module

RRT-XMC-18S-R - **UR** - **X** - **SH12MM**

Options May be Left Blank

Conformal Coating

UR = polyurethane
AR = acrylic

Extended Temperature Range

X = -40°C to 85°C

Stack Height

SH12MM = Stack Height of 12mm (10 mm Stack Height standard)

Example: RRT-XMC-18S-R

Example: RRT-XMC-18S-R-UR-X-SH12MM

Ordering Information – 1.8" SATA Drive

RRT-18S - **SLC** - **120GB** - **50** - **UR** - **X**

Requirements

NAND FLASH Type

SLC = Single Level Cell
MLC = Multi Level Cell

Capacity

Any capacity up to 1TB

Options May be left blank

Write Performance

50 = 50MB/s, 100 = 100MB/s, 150 = 150MB/s,
200 = 200MB/s, 300 = 300MB/s

Conformal Coating

UR = polyurethane
AR = acrylic

Extended Temperature Range

X = -40°C to 85°C

Example: RRT-18S-SLC-120GB-50

Example: RRT-18S-MLC-1TB

Example: RRT-18S-MLC-480GB-150-UR-X



XMC Removable 1.8" SATA Drive Module Specifications

Performance	
Capacities	8GB-1TB per COTS availability
XMC Interface	VITA 42.3/PCIe 2.0x1 Compliant
XMC Interface Speed Read/Write (PCIe Gen1/Gen2)	2.5/5Gbits/s
SATA Interface	SATA 3 backwards compatible with SATA 1/2
Sector Size	512
Reliability	
MTBF - Drive Carrier (1)	3 million hours
Power	
Voltage	VPWR +5V +/- 5% or +12V +/- 5% +3.3+/- 0.3V
Watts-idle	1.2
Watts-active	2.5
Environmental	
Temperature Operating, VITA 47 Class	0° to 70°C , AC1, CC1
Temperature Operating (2), VITA 47 Class	-40° to 85°C , CC4, AC3
Temperature Storage	-55° to 95°C
Relative Humidity	5% to 95%
Altitude	80,000 ft (26,000 meters)
Shock (3), VITA 47 Class 0S2	40g, 11 millisecond terminal sawtooth pulse
Vibration (4)	0.1g ² /Hz
Physical	
Weight	3.5 oz; 100 g max

- 1) Telcordia SR-322, Issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0).
- 2) Thermal qualification per MIL-STD-810, Method 501 Procedure II, and MIL-STD-810, Method 502, Procedure II.
- 3) Shock qualification per MIL-STD-810F, Method 516, Procedure I.
- 4) Vibration qualification per MIL-STD-810F, Method 514, Procedure I.

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