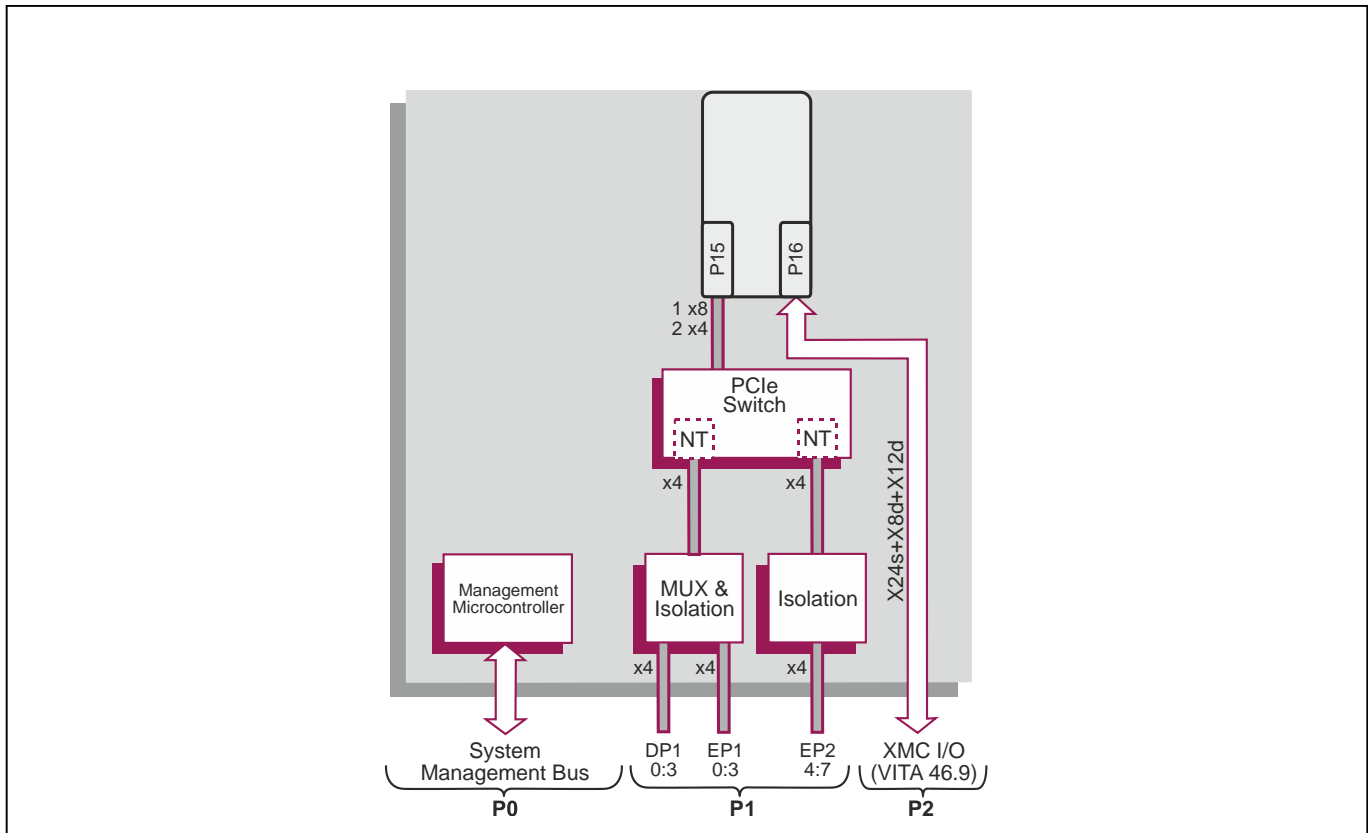
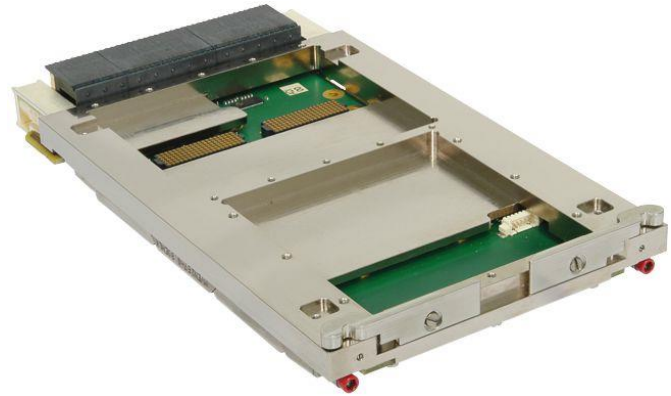


Rugged conduction-cooled 3U VPX™ XMC Carrier Board

Key Features

TR XMC/311-RCx is a rugged, conduction-cooled 3U VPX-REDI™ carrier for an XMC module.

- PCI Express® (PCIe®) Gen 3 capable for high bandwidth connectivity
- Simple switch configuration enabling data or expansion plane connection/isolation
- Supports 24 single ended and 20 differential XMC I/O
- Includes PCIe switch with optional non-transparent ports for use in multi-processor configurations
- Optionally available fitted with covers to support two level maintenance
- VITA 46.11 management controller



VPX-REDI XMC Carrier

- conduction-cooled 3U VPX-REDI™ XMC Carrier supports:
 - a single size conduction-cooled XMC module
 - End-Point Processor XMC modules
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001
- XMC P16 and P15 connectors (build option), select:
 - VITA 42 XMC (color black)
 - VITA 61 XMC 2.0 (color white)
- air-cooled VPX™ variants available:
 - see TR XMC/m11 datasheet

XMC Data and I/O Interfaces

- XMC module interface supports:
 - 1 x8 or 2 x4 PCI Express® (PCIe®)
 - PCIe Gen 1, Gen 2 and Gen 3
 - root complex mode
- XMC connector type (build option) determines the maximum PCIe operational speed:
 - up to Gen 2, VITA 42 connector
 - up to Gen 3, VITA 61 connector
- XMC VPWR +5V or +12V (build option)
- supports rear I/O via VPX P2 connector (VITA 46.9):
 - via XMC P16 connector
 - P2 pinout conforms to X24s+X8d+X12d

System Management

- Tier 2 IPMC via SM0-1 and SM2-3:
 - board temperature and voltage monitor accessed via system management

Compatible VPX System Processor Board

- conduction-cooled 3U VPX-REDI Intel® processor based board examples:
 - TR C4x/3sd-RCx board (System on Chip based on Intel® Xeon® Processor D-1500)
 - TR G4x/3sd-RCx board (System on Chip based on Intel® Xeon® Processor D-1500)
 - TR E5x/3sd-RCx board (6th generation Intel® Core™ Processor)
- contact your local sales office for the latest range of boards supported
- supported operating systems depend on the processor board used

VPX Backplane Interface

- P0, P1 and P2 support OpenVPX configuration
- configurable PCI Express fabric interface supports:
 - x4 PCIe port to either Data Plane 1 (DP1) or Expansion Plane 1 (EP1) (also called Data Plane 2 on some profiles)
 - x4 PCIe port to Expansion Plane 2 (EP2)
 - x8 PCIe port mode (EP1 and EP2)
 - PCIe Gen 1, Gen 2 and Gen 3
 - port isolation from PCIe Switch
 - upstream or downstream ports
 - transparent or non-transparent bridging
- compatible with OpenVPX™ (VITA 65) module:
 - BKP3-CEN06-15.2.2-3
 - SLT3-PAY-1F2F2U
- for advanced PCIe configurations use VPX PCIe Switch Configuration software (SW VSC/001)

Electrical Specification

- typical current consumption (XMC not fitted):
 - +5V VS3 @ 0.8A, voltage +5% / -2.5%
 - +3.3V VS2 @ 0.4A, voltage +5% / -2%
 - +3.3V AUX @ 0.12A, voltage +5% / -5%
 - +12V AUX and -12V AUX routed to XMC site

Safety

- PCB (PWB) manufactured with flammability rating of UL94V-0

Environmental Specification

- conduction-cooled (VITA 48.2)
- conformally coated
- operating temperature at card edge :
 - VITA 47 Class CC4, -40°C to +85°C
- non-operating temperature:
 - VITA 47 Class C4, -55°C to +105°C
- operating altitude:
 - -1,000 to 50,000 feet (-305 to 15,240 meters)
- 5% to 95% Relative Humidity, non-condensing

Mechanical Specification

- 3U VPX form-factor (VITA 46.0, VITA 48.0)
- 3.9 inches x 6.3 inches (100mm x 160mm)
- slot widths (VITA 48.0):
 - 0.8 inches VPX-REDI Type 2, RCT-Series
 - 0.85 inches VPX-REDI Type 1, RCS-Series, Type 1 Two Level Maintenance (VITA 48.2)
- connectors to VITA 46.0 for P0, P1 and P2
- operating mechanical:
 - shock - VITA 47 Class OS2, 40g
 - random vibration - VITA 47 Class V3, 0.1g²/Hz

