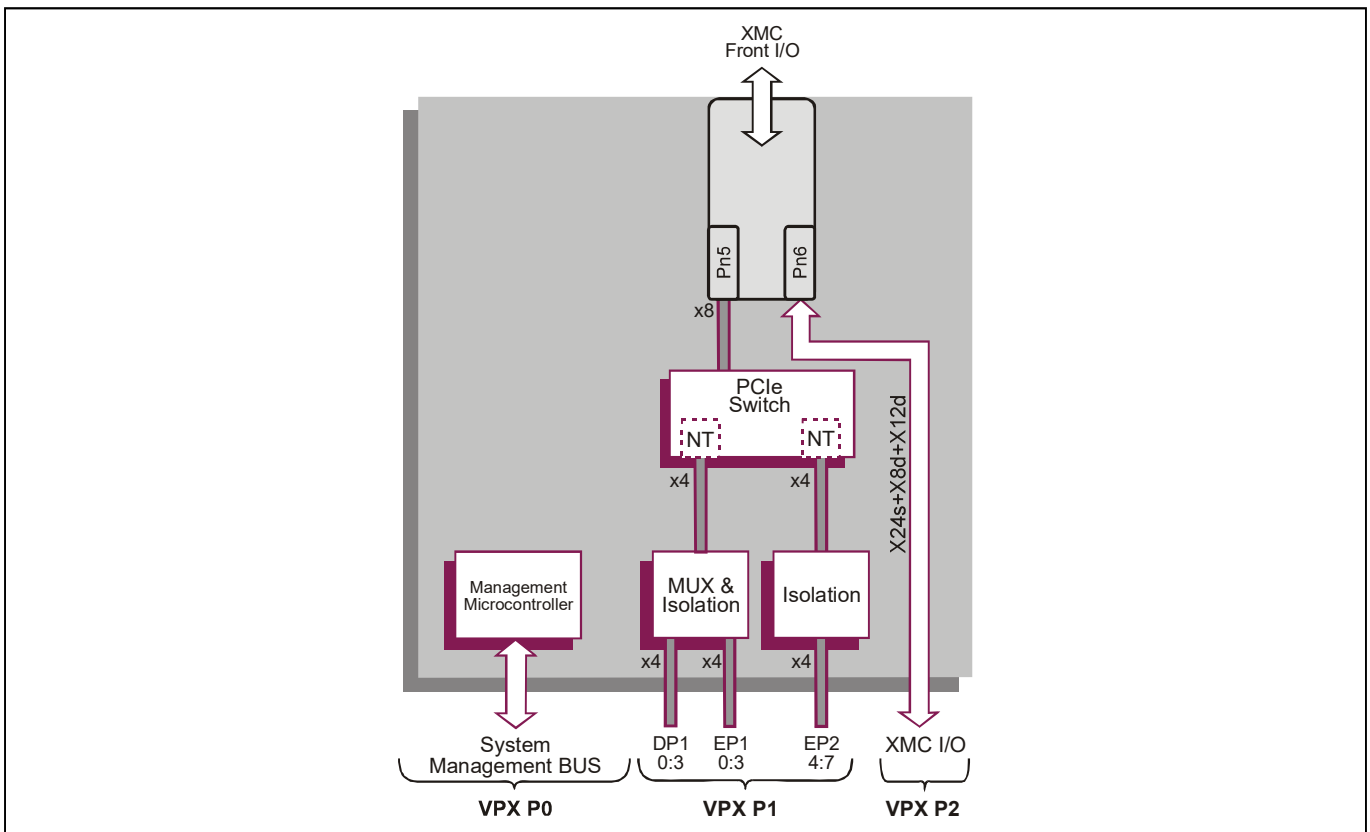
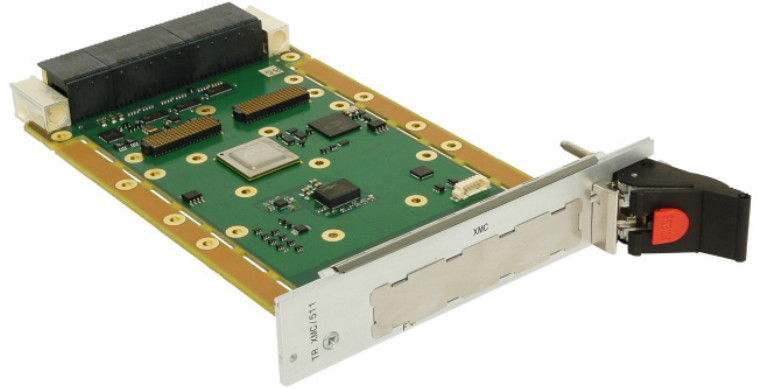


3U VPX™ XMC Carrier Board

Key Features

TR XMC/m11 is a carrier for a single-size XMC module.

- PCI Express® (PCIe®) Gen 3 capable for high bandwidth connection to controller board
- Simple switch configuration for data or expansion plane connection/isolation for wide VPX compatibility
- Supports up to 24 single ended and 20 differential XMC I/O signals to the rear
- Includes PCIe switch with optional non-transparent ports for use in multi-processor configurations
- Front and rear XMC I/O options
- Air-cooled and conduction-cooled options
- VITA 46.11 management controller



VPX XMC Carrier

- 3U VPX XMC Carrier supports:
 - a single size XMC module
 - End-Point Processor XMC modules
- compatible with several OpenVPX module profiles
- front panel interface aperture
- optional rear panel transition module

XMC Data and I/O Interfaces

- XMC module interface:
 - supports x8 PCI Express
 - PCI Express Gen 1, Gen 2 and Gen 3
 - VITA 42 or VITA 61 connectors (build option)
- XMC VPWR +5V or +12V (build option)
- supports front panel I/O
- rear I/O via VPX P2 connector:
 - via XMC Pn6 connector
 - P2 pinout conforms to P2w1-X24s+X8d+X12d (VITA 46.9)

Compatible VPX System Processor Board

- 3U VPX Intel processor based board examples:
 - TR C4x/msd board (System on Chip based on Intel Xeon Processor D-1500)
 - TR E5x/msd 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 (PCIe) fabric interface supports:
 - x4 PCIe port to either Data Plane 1 (DP1) or Expansion Plane 1 (EPI) (also called Data Plane 2 on some profiles)
 - x4 PCIe port to Expansion Plane 2
 - ports can be isolated from PCIe Switch
 - ports can be upstream or downstream
 - ports can use transparent or non-transparent bridging
 - supports single x8 PCIe port mode (EPI and EP2)
 - PCI Express Gen 1, Gen 2 and Gen 3
- for advanced PCIe configurations use Fabric Switch Configuration software:
 - see datasheet SW FSC/001
- compatible with OpenVPX (VITA 65) profiles:
 - BKP3-CEN06-15.2.2-3 and SLT3-PAY-1F2F2U

System Management

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

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

- operating temperatures:
 - VITA 47 Class AC1, 0 C to +55 C (N-Series)
 - -25 C to +70 C (E-Series)
 - air-cooled
- non-operating temperature:
 - VITA 47 Class C1, -40 C to +85 C
- operating altitude:
 - 0 to 15,000 feet (0 to 4,572 meters)
- relative humidity:
 - 5% to 95%, non-condensing
- for rugged VPX-RED (RCx-Series) versions:
 - conduction-cooled to VITA 48.2
 - -40 C to +85 C at card edge
 - conformal coated
 - see separate datasheet

Mechanical Specification

- 3U VPX form-factor (VITA 46.0, VITA 48.0)
- 3.9 inches x 6.3 inches (100mm x 160mm)
- optional slot widths:
 - 1.0-inch (IEEE 1101.10 as per VITA 46.0)
 - 1.0-inch (VITA 48.0 as per VITA 65)
- connectors to VITA 46.0 for P0, P1 and P2
- operating mechanical:
 - shock - VITA 47 Class OS1, 20g
- random vibration - 0.002g/Hz