

Intel® Processor Based 3-Slot 3U VPX™ System

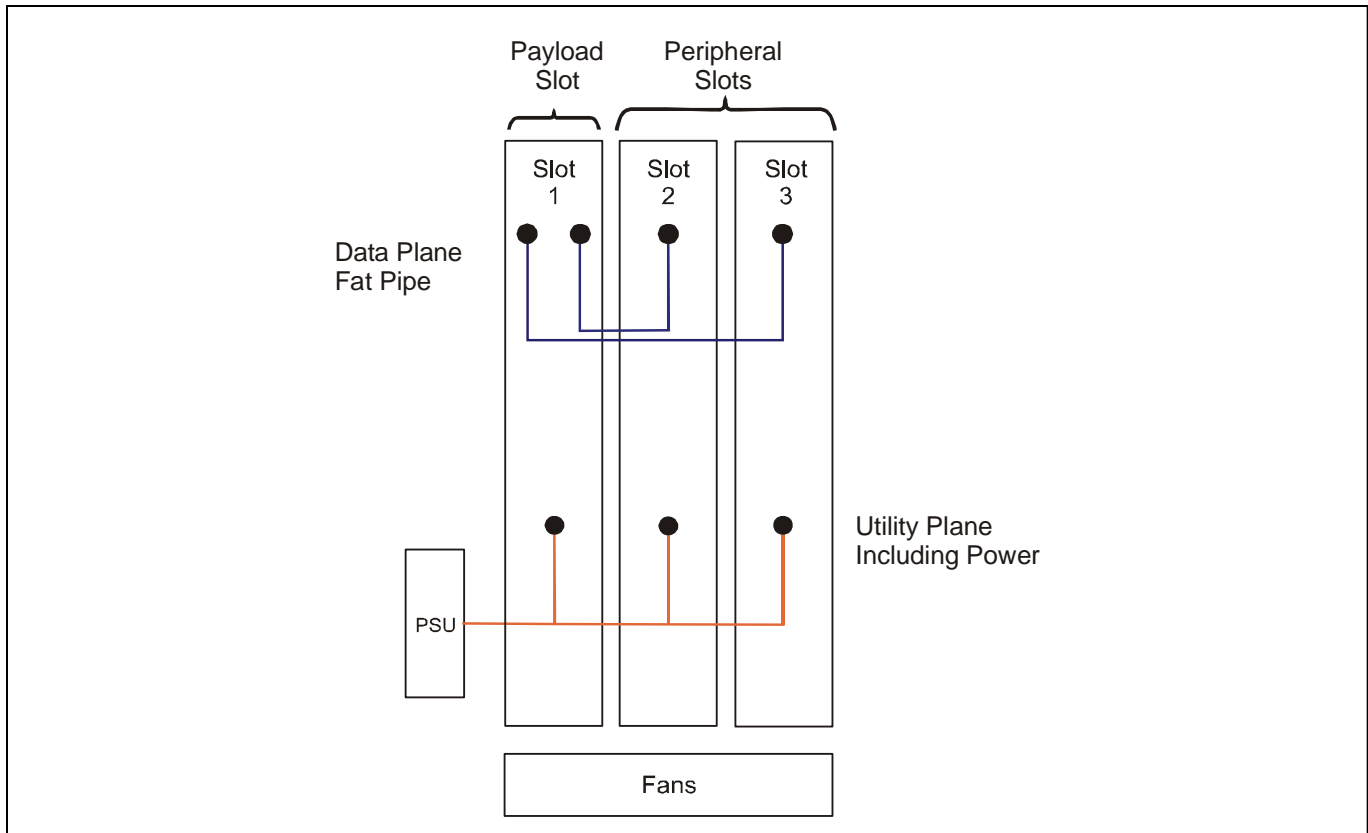
Key Features

SY TR1/523 is a ready-to-use solution for customers starting VPX™ projects based on Intel® processors.

- Popular 3U form factor
- Supplied with built in AC power supply, backplane and cooling fans for ease of use
- To suit application requirements, includes a processor board based on an Intel® Xeon®, Intel® Core™ or Intel® Atom™ processor:
 - board support packages available for popular operating systems
 - optional software packages to improve security, boot times and backplane communication dependent on processor selection
- Has two free slots for application specific peripheral boards
- Optional PMC/XMC carrier peripheral board for user I/O



Option Example: Development System
(with a processor board)



3U VPX Development System

- 3U VPX™ Development System:
 - 3 vertically mounted 3U VPX slots
 - option for pre-installed Intel® processor based board
 - cooling air intake at the bottom of the system
 - air exhaust at top of the system
- VPX backplane provides:
 - 1 x payload slot (SLT3-PAY-2F-14.2.7)
 - 2 x peripheral slots (SLT3-PER-1F-14.3.2)
 - Fat Pipe data plane connection between system controller slot and each peripheral slot
 - compatibility with OpenVPX™ (VITA 65) BKP3-CEN03-15.2.9-4 profile
- all pre-installed processor boards include:
 - on-board SATA Flash Module for application software
 - software support packages
 - Rear Transition Module (RTM)
- contact your local Concurrent Technologies sales office for further details on other board options

Example: Empty Development System

- option for empty system (chassis) without processor board

Example: PCI Express (Gen 2) System

- option for PCI Express® data plane with a choice of pre-installed processor board:
 - 1 x TR D24/512 board (4-core Intel® Atom™ processor)
- plus option for a VPX PMC/XMC carrier board (TR XMC/501)
- plus option for a VPX XMC carrier board (TR XMC/511)

Example: PCI Express (Gen 3) System

- option for PCI Express data plane with a choice of pre-installed processor board:
 - 1 x TR B12/533 board (4th generation 4-core Intel® Core™ processor)
 - 1 x TR E54/571 board (6th generation 4-core Intel® Xeon® processor)
- plus option for a VPX PMC/XMC carrier board (TR XMC/501)
- plus option for a VPX XMC carrier board (TR XMC/511)

Example: Ethernet 10GBASE-KR System

- option for Ethernet 10GBASE-KR data plane with a choice of pre-installed processor board:
 - 1 x TR C48/582 board (System on Chip based on 8-core Intel® Xeon® processor D-1500, 32G DRAM)
 - 1 x TR G4C/543 board (System on Chip based on 12-core Intel® Xeon® processor D-1500, 64G DRAM)
- the option for the VPX PMC/XMC carrier board is not supported (because PCI Express is required)

Software Support

- supports Linux®, Windows® and VxWorks®:
 - system supplied with Board Support Package
 - operating system not supplied
- VITA 46.11 compatible Tier 1 Chassis Manager included in firmware on processor board

Power Supply

- integrated 250W modular power supply:
 - +12V output (5.5A max)
 - +5V output (33A max, 0A min)
 - +3.3V output (33A max, 0A min)
 - rated power 250 Watt
 - AC 90-264V, 47Hz to 63Hz input

Environmental Specification

- operating temperatures:
 - +5°C to +40°C (operating)
 - -25°C to +65°C (non-operating)
- relative humidity, non-condensing:
 - 10% to 90% (operating)
 - 5% to 90% (non-operating)

Mechanical Specification

- chassis weight including processor board and PMC/XMC Carrier is less than 13.2lbs (6kg)
- 5HP (1.0-inch) backplane slot pitch supports:
 - 0.8-inch and 1.0-inch
 - IEEE 1101.10 as per VITA 46.0
- chassis dimensions:
 - total chassis height is 4U
 - width 9.2-inch (342mm) x depth 11.6-inch (295mm) x height 7.5-inch (190mm) (feet retracted)
 - height 8.9-inch (227mm) (feet extended)

Safety

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

Optional Accessories

TR XMC/501 VPX PMC/XMC Carrier

- optional PMC/XMC carrier board:
 - uses either peripheral slot
 - x4 PCIe interface (up to Gen 2)
- PMC site supports:
 - 32/64-bit, 33/66MHz PCI bus
 - 64-bit PCI-X bus up to 133MHz
 - 5V and 3.3V signaling
- XMC site supports:
 - x4 PCIe interface (VITA 42.3)
 - +5V VPWR
- front panel I/O
- rear I/O options via PMC (Pn4) or XMC (Pn6) connector:
 - rear I/O mapping (VITA 46.9)
 - optional Rear Transition Module available

TR XMC/511 VPX XMC Carrier

- optional PMC carrier board:
 - x4 PCIe interface (up to Gen 3)
 - using data plane supported in any payload slot
- XMC site supports:
 - x4 PCIe interface (VITA 42.3)
 - +5V VPWR or +12V VPWR
- front panel I/O
- rear I/O via XMC (Pn6) connector:
 - rear I/O mapping (VITA 46.9)
 - optional Rear Transition Module available

