# 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)

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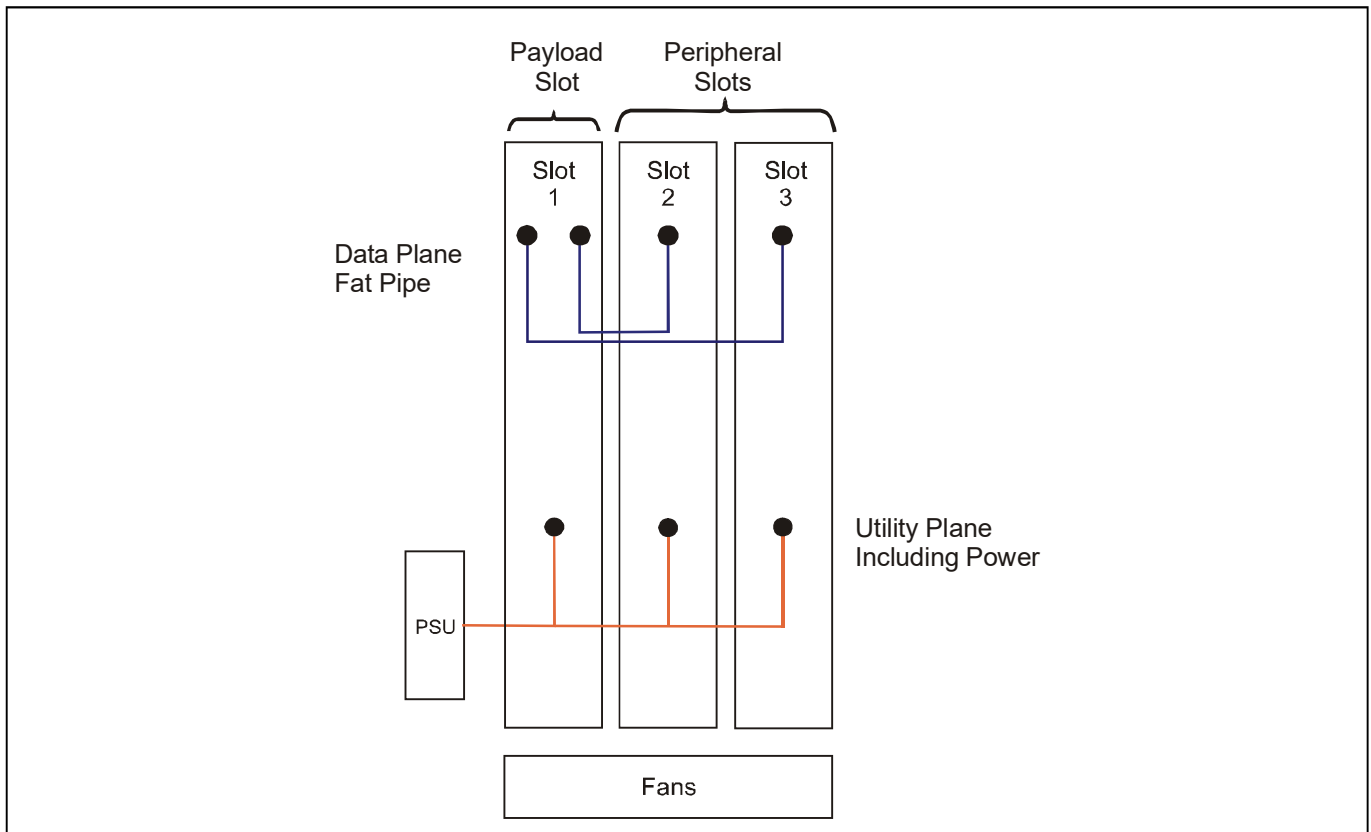
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3U VPX Development System

- 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-CEN03-15.2.9-3 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 3) System

- option for PCI Express data plane with a choice of pre-installed processor board:
  - 1 x TR D24/512 board (Intel® Atom™ processor)
  - 1 x TR B12/533 board (4th generation Intel® Core™ processor)
  - 1 x TR E54/571 board (6th generation Intel® Core™ Processor)
- plus option for a VPX PMC/XMC carrier board (TR XMC/501)

Example: Ethernet 10GBASE-KR System

- option for Ethernet 10GBASE-KR data plane with pre-installed processor board:
  - 1 x TR C48/582 board (System on Chip based on Intel® Xeon® Processor D-1500)

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 Accessory

TR XMC/501 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)
- 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

Please contact your local Concurrent Technologies sales office for further details on board build options and accessories.

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