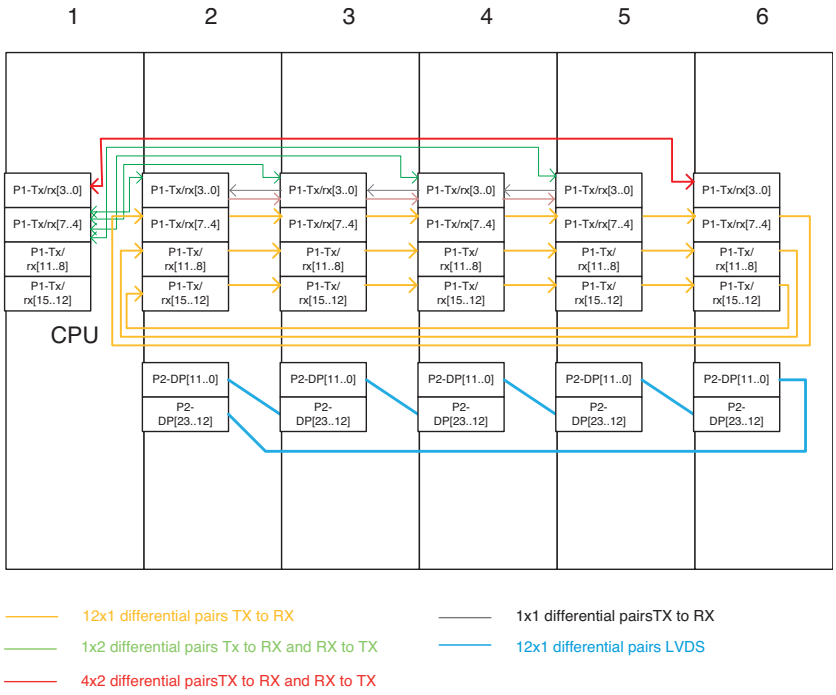
6-slot system with integrated Single Board Computer

3U VPX System

Description

The VPX360 is a 3U VPX 6-slot system dedicated to high-speed signal processing and computing applications. The VPX360 system slot is populated with an SBC comprising a dual core i7 Intel processor, up to 8GB of DDR3 SDRAM, two Ethernet ports, and a DVI Display Port. All remaining five expansion slots communicate with the host via PCIe and can be used for high-end, 3U, OpenVPX-compliant cards. With a backplane optimized for fast inter-slot communication in excess of 6 GB/s between any two adjacent slots in the system, the VPX360 offers a combination of flexibility and high performance in a small footprint.
Open VPX cards from third-party vendors or 3U VPX products from 4DSP can be used in the VPX360. Specifically, the VP780 with a Virtex-7 FPGA and an FMC site offers I/O versatility and processing power that makes it suitable for any application.



Features

- **System**
  - 3U OpenVPX embedded system
  - High-speed inter-slot communication via independent links
  - 4U
  - Optionally ruggedized
  - Compatible with 0.8-inch, 0.85-inch, and 1.0-inch modules
  - Rear Transition Module support for additional storage or I/Os
  - 300W Power Supply
  - Five user-defined OpenVPX (VITA 65)-compliant expansion slots
  - PCIe communication from each slot with Single Board Computer
  - Supports multiple VP780 Virtex-7 FPGA boards

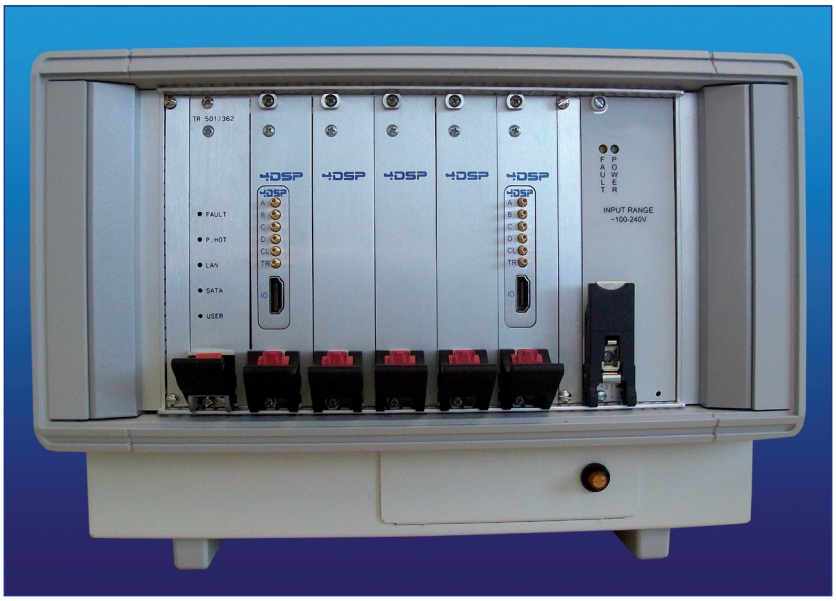
- **Single Board Computer-System controller**
  - Dual Core i7 CPU
  - Supports Windows, Linux or VxWorks
  - Up to 8GB DDR3-1333 SDRAM
  - 2x Gigabit Ethernet ports
  - 2x SATA300 ports
  - 512 GB HDD
  - DVI-D Display port

- **Backplane**
  - Slot 6 with 4-lane Gen 2 PCIe connected to SBC
  - Slot 2-5 with 1-lane Gen 2 PCIe connected to SBC
  - 6GB/s fast pipe between any two adjacent slots (except slot 1)

www.4dsp.com/VPX360

Ordering information

Build your part number online on the product page
http://www.4dsp.com/part_num/vpx360.html



	Air-cooled	Conduction-cooled
Operating temperature	0C to +55C	-40C to +70C
Storage temperature	-40C to +85C	-50C to +100C
Humidity	95%	95%
Operating vibration	5Hz to 100Hz PSD = 0.04g2/Hz 100Hz to 1000Hz PSD = 0.04 gs^2/Hz 1000Hz to 2000Hz PSD decreasing at 6 dB/ octave	5Hz to 100Hz PSD = 0.04g2/Hz 100 Hz to 1000 Hz PSD = 0.04 gs^2/Hz 1000 Hz to 2000Hz PSD decreasing at 6 dB/ octave
Operating shock	20g, 11 millisecond, half-sine or 20g, 11 millisecond, terminal sawtooth shock pulses in all three axes	20g, 11 millisecond, half-sine or 20g, 11 millisecond, terminal sawtooth shock pulses in all three axes
Operating altitude	-1500 ft to 60,000 ft (with airflow)	-1500 ft to 60,000 ft (with airflow)
Conformal coating	Optional	Optional

Talk to us about your algorithmic requirements, 4DSP is a full-service firmware and software development house. We are a specialist at high performance FFT and Video Processing. Check with us, we may have IP Cores that meet requirements for your application, right off the shelf.