PCI-ADI

Compro's **Peripheral Component Interconnect - Analog Digital Interface** (PCI-ADI) interface provides an easy-to-install, Commercial off the Shelf (COTS) solution for replacing your system's legacy SelBUS ADI board. The PCI-ADI connects a PCI-based host to one or more legacy RTP Corporation analog/digital subsystems.

Communication to the subsystems is via the existing RTP Serial Interface.

Serial ports on the dual-channel PCI-ADI connect to RTP serial interface boards using existing coaxial cables. The PCI-ADI faceplate contains 6 LEDs indicating the power, operational, and transmission status.

The PCI-ADI plugs into a 32-bit PCI bus slot up to 66 MHz and is compatible with 3.3V and 5V PCI signaling levels. The edge connector of the PCI-ADI is keyed as a universal add-in board.

Features

- Compatible with legacy RTP ADI devices
- Uses existing RTP I/O cables
- RoHS compliant
- PCI Local bus-compliant with PCI revision 2.3
- Eliminates ADI application code rewrite under LCRS

Benefits

- Low Host CPU overhead
- Fast deployment
- Low-risk/ low-cost replacement solution

Characteristics

Compro's PCI-ADI has the following characteristics:

- Complete compatibility with RTP Serial Interface 1 and 2 boards
- ROM simulator port pin compatibility with legacy ROM simulator and diagnostic processor boards
- ADI FPGA is functionally identical to the legacy SelBUS ADI board (part numbers 160-103054-00x and 160-103813-001)
- Two 10-megabit per second serial ports
- Drive and receive capabilities for coaxial cable lengths up to 250 feet
- Communication to the host system via mailbox registers accessible from the PCI bus
- Access to host memory through PCI initiator memory access
- PCI target interface receives commands from host system
- Automatic status posting
- Support for command chaining, transfer in channel, continue on non-present memory error, random mode, sequential mode, and repeat mode
- PCI scatter/gather support accomplished by host-programmed page table entries
- Operates in a 32-bit 3.3V/5V PCI expansion slot
- LCRS interrupt state support

Compro Part Number: 160-113470-001

PCI-ADI

Interfaces

Supports any combination of the following ADI interface buss classes:

- Analog Input (AI)
- Analog Output (AO)
- Digital Input (DI)
- Digital Output (DO)
- Connects with one to eight RTP subsystems

Fully supports all standard RTP chassis cards including:

- Digital Input/Output
- Universal Input/Output
- Analog Output
- High-Level Analog Input
- Low-Level Analog Input
- Programmable Pulse, Frequency and Delay Counters
- Gates and Relays

Specifications

Compliances:

- RoHS compliant
- PCI local bus-compliant with PCI revision 2.3

Physical Characteristics:

- Depth: 4.2 inches (10.67 centimeters)
- Height: 6.95 inches (17.65 centimeters)
- Weight: 1.2 lbs. (0.54 kilograms)

Environmental Characteristics:

Operating:

- Temperature: 32° F to 131° F (0° C to 55° C)
- Relative Humidity: 0% to 90%
- Altitude: 0 to 10,000 AMSL (0 to 3,048 meters)

Storage:

- Temperature: -40° F to 176° F (-40° C to 80° C)
- Relative Humidity: 0% to 90%
- Altitude: 0 to 40,000 AMSL (0 to 12,192 meters)

Electrical:

- Voltage: 5.0 VDC ± 5% 3.3 VDC ± 5%

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