



# **PCI-ADI**

## 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

COMPRO's 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 <u>existing</u> 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.



## 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-ADI (Cont'd)

- PCI scatter/gather support accomplished by hostprogrammed page table entries
- Operates in a 32-bit 3.3V/5V PCI expansion slot
- LCRS interrupt state support

### 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**

S	pecification	Description		
COMPRO Part Number				
	160-113470-001			
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	3)	
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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