

PCI-A032™

Digital to Analog Converter Board

Description

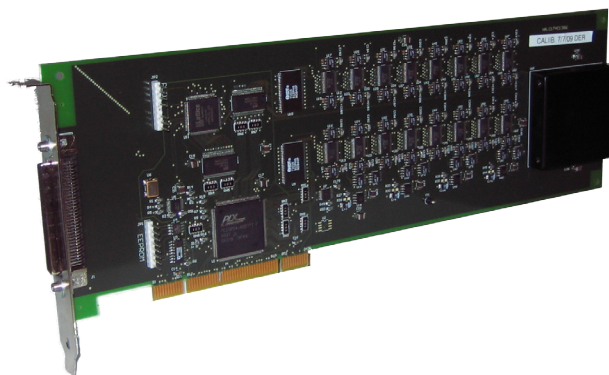
The PCI-A032 board is a standard PCI board containing 32 channels of high speed Digital-to-Analog Converters (DACs). Each DAC is a 16-bit device with 500 nanosecond conversion time. The board was designed for minimum PCI bus latency with an on-board DMA engine and configuration memory. Output voltage range is +/-10V, with up to 10 mA drive. Any combination of channels can be updated simultaneously.

Each board is calibrated at the factory and calibration data is stored in non-volatile memory for real-time application.

Software Support Package

The software support package for the rtX PCI-A032 board provides a logical device for ADI's AdvantEdge Framework and real-time drivers for the rtX's QNX operating system.

The rtX PCI-A032 can easily be connected to models or interactively controlled via user interface or test scripts.



Features

- PCI form factor; Universal PCI Interface
- 32 digital-to-analog channels - individual ground for each channel
- 16-bit high-speed individual DACs
- On-board DMA engine reduces load on main processor
- 68-pin SCSI connector on front panel for analog outputs
- Minimized PCI bus latency to support high-speed real-time applications

Specifications

- Outputs: 32 channels, 1 DAC per channel
- DAC resolution: 16 bits
- DAC conversion time: 500 nanoseconds
- Overall Board Accuracy: ± 2 mV max
- DAC Conversion Rate: 2M samples per second
- Voltage range: ± 10 V
- Output Drive: 10 mA max
- Simultaneous update of all channels or a selected subset
- Dimensions: Full length PCI form factor - 4.200H x 12.283L x 0.062T PCB (106.7H x 312.0L x 1.57T mm)
- Power requirement: PCI +5V & ± 12 V rails
- Weight: ~ 1.1 lbs

Environmental

- Temperature:
- Altitude:
- Humidity:

Operating:

- 0°C to +50°C
- 6,000 ft
- 5% to 95% non-condensing

rtX - The expandable Real-Time Simulator