

# PCI-DI and PCI-DO

## Isolated Discrete Inputs & Outputs

### Description

The PCI-DI provides 32 Isolated discrete input sensing circuits where each sensing circuit features an independently adjustable threshold for determining the On / Off state of the input signal.

Each of these circuits is protected against faults to any voltage in the +50 Volt range.

The PCI-DO provides 32 isolated, discrete output drive circuits. This board features output drivers that can be individually configured by the user to be either highside or low-side switches.

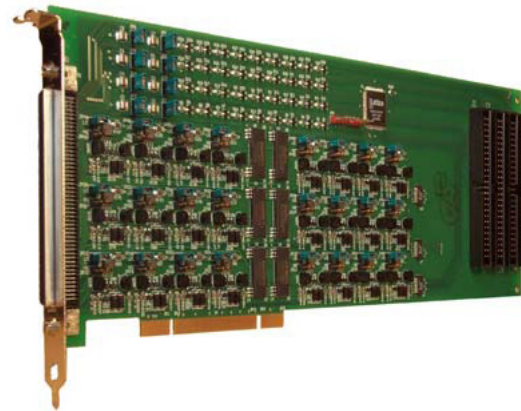
Each high-side driver will operate with a high-rail voltage in the range of 8 to 42 Volts; each low-side driver will operate between ground and a high-rail voltage up to 42 Volts. Each driver is capable of sourcing or sinking 100 mA as appropriate for the driver configuration.

Both high-side and low-side drivers are protected by internal current limiting and thermal overload protection circuitry.

### Software Support Package

The software support packages for the PCI-DI and PCI-DO are provided with a logical device for ADI's ADvantage Framework and real-time device drivers for the rtX's QNX operating system.

The PCI-DI and PCI-DO can easily be connected to models or interactively controlled via user interface or test scripts.



### Features

- PCI-DI Board provides 32 isolated, discrete inputs
- PCI-DO Board provides 32 isolated, discrete outputs
- Jumper-selectable high-side, low-side configurable
- Supports rails up to 42V
- Fault-protected I/O; short to voltages
- Over-current protected I/O

### Specifications

- High-side driver: high-rail threshold voltage: 8 to 42V
- Low-side driver: ground and high-rail threshold voltage to 42V
- Source or sink current: 100mA
- High-side switch: 140 microseconds for turn-on or turn-off
- Low-side switch: 20 microseconds for turn-on or turn-off

rtX - The expandable Real-Time Simulator