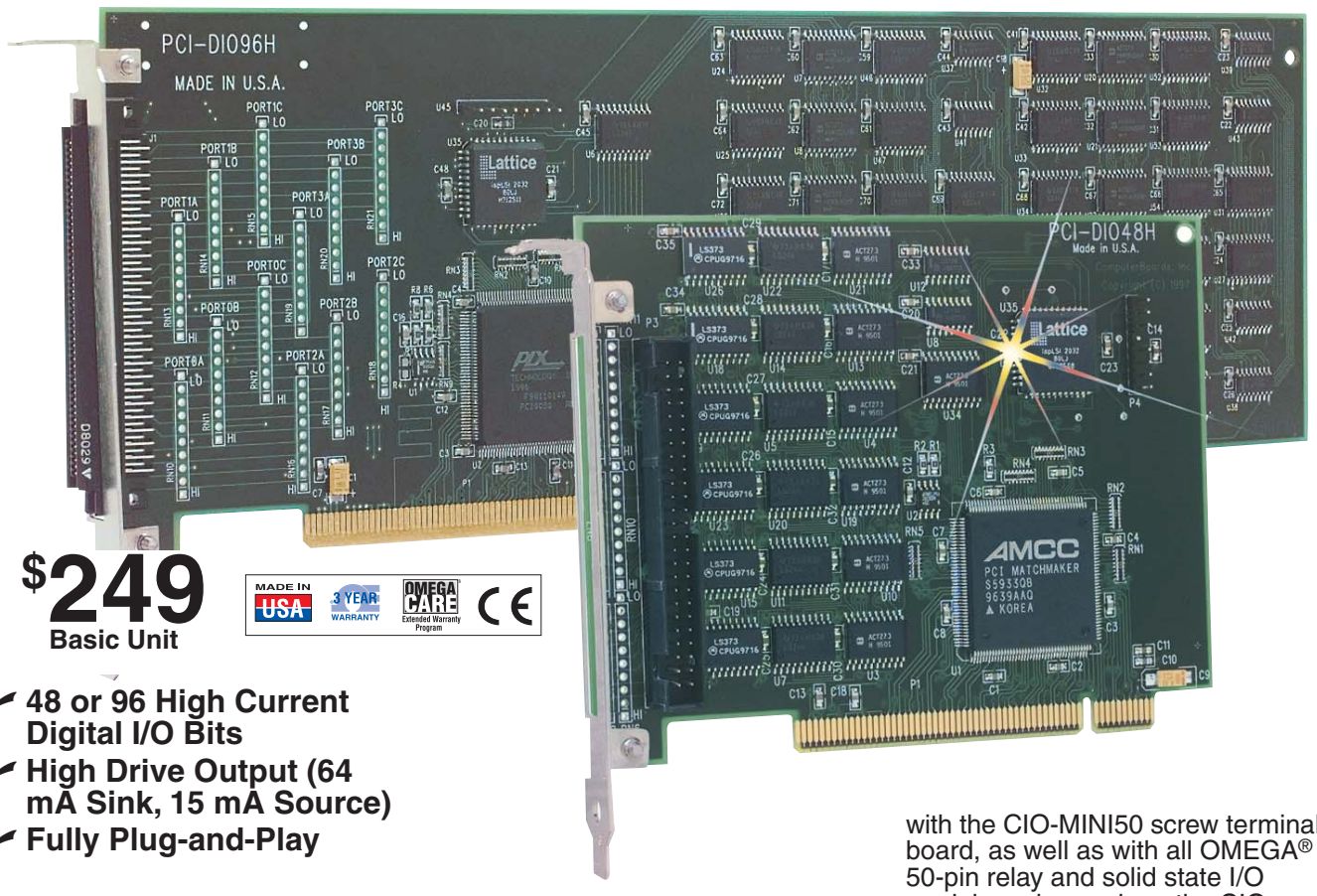
PCI-DIO96H and PCI-DIO48H

96-Bit and 48-Bit High Current Digital I/O Boards for the PCI Bus



$249
Basic Unit

MADE IN USA | 3 YEAR WARRANTY | OMEGA CARE Extended Warranty Program | CE

- **48 or 96 High Current Digital I/O Bits**
- **High Drive Output (64 mA Sink, 15 mA Source)**
- **Fully Plug-and-Play**

The PCI-DIO96H and PCI-DIO48H are high density, logic level, digital I/O boards for IBM or compatible PC's with a PCI bus. The PCI-DIO96H offers 96 bits of digital I/O, while the PCI-DIO48H has 48. For both boards, the I/O, in 24-bit groups, is based on an 82C55, mode 0 emulation.

Each group provides an 8-bit port A and port B, as well as an 8-bit port C that can be split into a 4-bit port C-HI and a 4-bit port C-LO.

The digital output drivers are 74S244 chips, and provide 64 mA sink and 15 mA source output capabilities. The input buffers are 74LS373 and offer the high standard input impedance of the 74LS series.

On power up and reset, all I/O bits are set to input mode. Like all members of the 74LS series, unconnected inputs will typically float high.

If you are using the board to control items that must be OFF on reset, you will need to install pull-down resistors. Provisions have been made on the board to allow users to install SIP resistor networks quickly and easily in either pull-up or pull-down configurations.

The PCI-DIO48H and PCI-DIO96H are completely plug-and-play. There are no switches or jumpers on the board. All board addresses are set by your computer's plug-and-play software.

All PCI-DIO96H I/O signals are brought out through a 100-pin high-density connector. The C100FF-2 cable splits the 100 pins into two separate 50-pin cables.

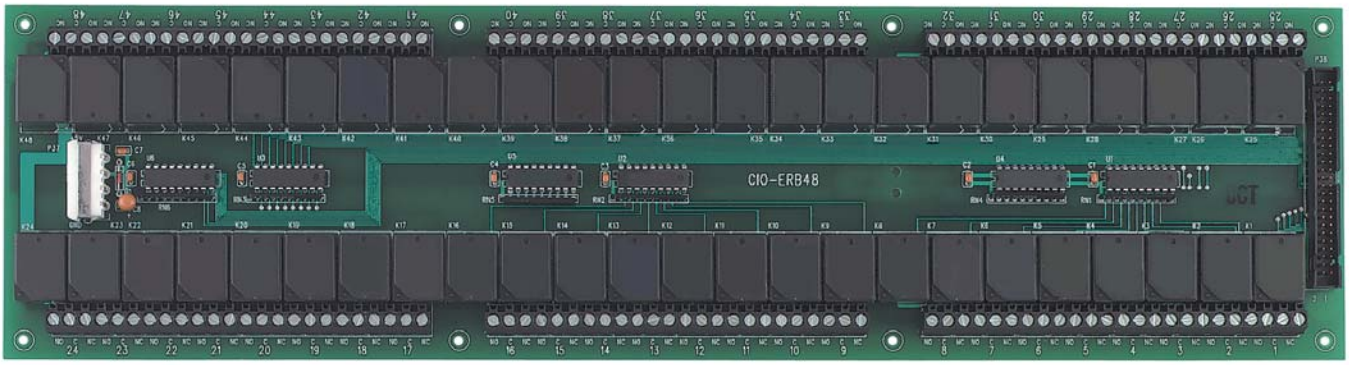
The first 50-pin cable contains the signals from pins 1-50 (the first group of 48 I/O), while the second cable carries pins 51-100 (the second group of 48 I/O). These 50-pin cables are fully compatible with the CIO-MINI50 screw terminal board, as well as with all OMEGA® 50-pin relay and solid state I/O module racks, such as the CIO-ERB48 or SSR-RACK-48 (see section H for details).

The PCI-DIO48H signals are brought out through a 50-pin connector. The C50FF-2 cable connects the board to the CIO-MINI50 screw terminal board or any of our 50-pin compatible digital signal conditioning boards.

Software Support

The PCI-DIO series is supplied with InstaCal software for configuration and testing. In addition, it is also supported by the optional Universal Library.

The Universal Library is a set of I/O libraries and drivers for users creating their own custom programs. The Universal Library is compatible with most Windows-based (32-bit) languages, and it supports the entire CIO family of boards. An optional driver for LabVIEW is also available.



The CIO-ERB48 48-channel relay rack

Specifications

DIGITAL I/O

PCI-DIO48H Configuration:
48 I/O bits: 4 banks of 8, 4 banks of 4, programmable by bank as input or output

PCI-DIO96H Configuration:
96 I/O bits: 8 banks of 8, 8 banks of 4, programmable by bank as input or output

Output High: 2.4 volts @ -15 mA min

Output Low: 0.5 volts @ 64 mA min

Input High: 2.0 volts min, 7 volts absolute max

Input Low: 0.8 volts max, -0.5 volts absolute min

Power On/Reset State:
All ports to input mode

POWER CONSUMPTION

PCI-DIO48H: +5 V: 1.2 A typical, 1.6 A max

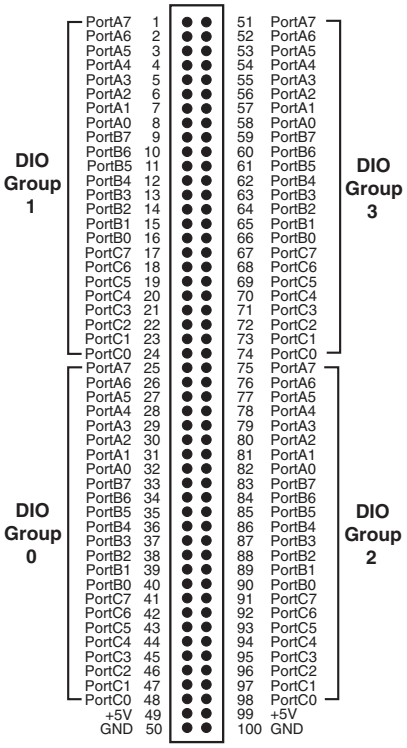
PCI-DIO96H: +5 V: 2.2 A typical, 3.35 A max

ENVIRONMENTAL

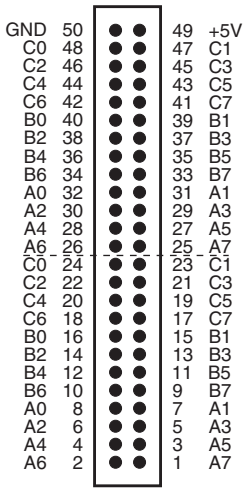
Operating Temperature:
0 to 70°C (32 to 158°F)

Storage Temperature:
-40 to 100°C (-40 to 212°F)

Humidity: 0 to 90% non-condensing



PCI-DIO96H Connector Diagram



CIO-DIO192 Connector Diagram

PCI-DIO48H Connector Diagram

MOST POPULAR MODELS HIGHLIGHTED

To Order *(Specify Model Number)*		
Model No.	**Price**	**Description**
PCI-DIO48H	**$229**	48-bit, high current, logic level digital I/O board for PCI bus
PCI-DIO96H	**249**	96-bit, high current, logic level digital I/O board for PCI bus
CIO-ERB48	**349**	48-channel relay rack with 6 amp, form C relays (see Section H for details)
CIO-MINI50	**69**	50-pin, screw terminal board (one required for PCI-DIO48H, two required for PCI-DIO96H)
C50FF-2	**25**	50-pin ribbon cable, 2' long (use for PCI-DIO48H)
C100FF-2	**49**	100-pin ribbon cable, 2' long. Splits 100-pin connector into two 50-pin connectors (one is required for PCI-DIO96H)
UNIV-DRVR	**49**	Universal Software Library
CIO-LABVIEW -DRVR	**49**	LabVIEW drivers

*The **PCI-DIO** series comes with InstaCal test software and a complete operator's manual*

***Note:** Screw terminal panels are not required when using relay racks.*

Ordering Example: PCI-DIO48H** card, **C50FF-2** cable, **CIO-ERB48** relay panel, **UNIV-DRVR** universal software libraries and **OMEGACARE**℠ 1-year extended warranty for PCI-DIO48H (adds 1 year to standard 1-year warranty), $229 + 25 + 349 + 49 + 25 = **$677.

omega.com®

Your One-Stop Source for Process Measurement and Control!

One Omega Drive | Stamford, CT 06907 | 1-888-TC-OMEGA (1-888-826-6342) | info@omega.com

www.omega.com

UNITED STATES
www.omega.com
1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM
www. omega.co.uk
Manchester, England
0800-488-488

CANADA
www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

FRANCE
www.omega.fr
Guyancourt, France
088-466-342

GERMANY
www.omega.de
Deckenpfronn, Germany
0800-8266342

CZECH REPUBLIC
www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX
www.omega.nl
Amstelveen, NL
0800-099-33-44

More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters

• *click here to go to the omega.com home page* •