

DATA ACQUISITION PLUG-IN CARDS

OMG-PCI-DIO Digital I/O Boards for PCI Bus Computers

OMG-PCI-DIO32, OMG-PCI-DIO48 and OMG-PCI-DIO96



- ✓ Models with 32, 48 and 96 Channels of Buffered Digital I/O
- ✓ 8255 Compatible
- ✓ 10K Pull Up Resistors On Each Port Bit
- ✓ Provides 50-Pin IDC Connectors to Industry Standard Relay Racks
- ✓ Includes Driver and Utility Software for Windows XP/SP3/VISTA/7 32- and 64-bit) and Linux

The OMG-PCI-DIO series provide 32, 48, and 96-channels of buffered digital I/O emulating 8255s for industrial control applications. 10K pull up resistors are included on each port bit.

Each board contains 8-bit I/O ports configurable as inputs or outputs. This gives the user the ability to customize the combination inputs or outputs as needed. In addition, the low order bit of the first port can be set to generate an interrupt for status monitoring applications.

A special factory configurable interrupt feature allows the user to request conditional I/O combinations for interrupt generation. When the I/O combinations occurs, a hardware interrupt is triggered.



OMG-PCI-DIO48, shown smaller than actual size

Software

The OMG-PCI-DIO includes drivers, utilities, and programming samples for Windows XP/SP3/VISTA/7 32- and 64-bit) and Linux to aid in the development of reliable applications for the OMG-PCI-DIO family of digital I/O boards.

Connectors and Terminal Panels

All of the I/O signals are accessed through a standard 50-pin connector. The 32-channel boards contain one connector, the 48 channel board contains two connectors and the 96 channel board has four connectors. OMEGA provides an optional OMG-TB07 terminal panel for wiring to the I/O connector. One terminal panel is required for each I/O connector. An OMG-CA167 is also needed for each terminal panel. The I/O connector is also compatible with industry standard relay racks. A OMG-CA135 cable can be used to connect each I/O connector to a relay rack.

Specifications

- Channels:** 32, 48, 96
- Operating Temperature:** 0 to 50°C (32 to 122°F)
- Storage Temperature:** -20 to 70°C (-4 to 158°F)
- Humidity Range:** 10 to 90% RH
- Output:** 24mA (sink), 15mA (source)
- Power:**
 - OMG-PCI-DIO32 +5V @ 500mA
 - OMG-PCI-DIO48 +5V @ 794mA
 - OMG-PCI-DIO96 +5V @ 1000mA
- Connectors:** 50-Pin IDC with cable lock. The OMG-PCI-DIO32 have one connector, the OMG-PCI-DIO48 has two connectors, and the OMG-PCI-DIO96 has four connectors.
- Physical Dimensions:**
 - OMG-PCI-DIO32:** 12 cm L x 9.39 cm H (4.72 x 3.7") and
 - OMG-PCI-DIO48 and OMG-PCI-DIO96:** 15.49 cm L x 10.41 cm H (6.1 x 4.1")

To Order

Model Number	Description
OMG-PCI-DIO32	32-channel digital I/O board
OMG-PCI-DIO48	48-channel digital I/O board
OMG-PCI-DIO96	96-channel digital I/O board
OMG-TB07	50-pin terminal block (requires OMG-CA167)
OMG-CA167	40 inch 50-pin IDC cable, connects OMG-PCI-DIO boards to OMB-TB07
OMG-CA135	40 inch 50-pin edge cable, connects OMG-PCI-DIO to industry standard solid state relay racks

All boards include utility software and a complete user's manual on CD-ROM.

Ordering Example: OMG-PCI-DIO48 48-channel digital I/O board, two OMG-TB07 terminal panels and two OMG-CA167 cables.