

# PIO-D56/D24

PCI bus 56/24-bit DIO board



PIO-D56

PIO-D24

## Functional Description

The PIO-D56/D24 consists of one 24-bit port, one 16-bit input port and one 16-bit output port (only for PIO-D56). The 24-bit port emulate mode 0 of the industry standard 8255 programmable peripheral interface (PPI) chip. Each PPI offers three 8-bit ports, Port A, Port B and Port C. The Port C is divided into 2 nibble-wide (4-bit) ports. The 24-bit bi-directional ports are configured as inputs upon power-up or reset.

## Applications

- Factory automation
- Laboratory automation
- Communication switching
- Industrial automation

## Specifications

### Digital Input

- All inputs are TTL compatible
- Logic high voltage: 2.4V min
- Logic low voltage: 0.8V max

### Digital Output

- All outputs are TTL compatible
- OPTO-22 output (CN3)
  - Sink current: 64 mA max
  - Source current: 32 mA max
- 16-channel output (CN1)
  - Sink current: 8 mA max
  - Source current: 0.4 mA max

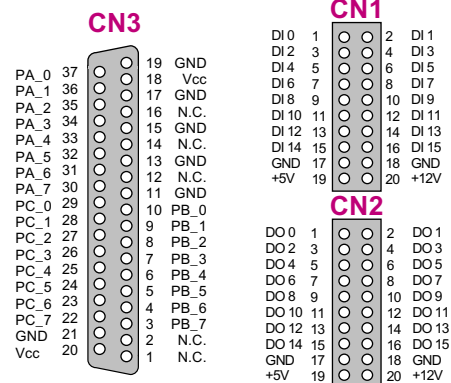
### General Specifications

- I/O connector: one D-sub 37-pin female two 20-pin ribbon male (PIO-D56)
- Power requirements: +5V@580 mA (PIO-D56) +5V@420 mA (PIO-D24)
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 80°C
- Dimensions: 143 mm x 105 mm

## Features

- 32-bit +5V PCI bus, Plug & Play
- 56-bit digital I/O (PIO-D56)  
24-bit digital I/O (PIO-D24)
- High driving capability
- Four interrupt sources: PC0, PC1, PC2, PC3

## Pin Assignment



## Ordering Information

### Standard

- PIO-D56:** PCI bus 56-bit DIO board
- PIO-D24:** PCI bus 24-bit DIO board

### Optional

- DB-24PD:** 24-channel isolated D/I board
- DB-24RD:** 24-channel relay board
- DB-24PRD:** 24-channel power relay board
- DB-16P8R:** 16-channel isolated D/I and 8-channel relay output board
- DB-24POR:** 24-channel PhotoMOS relay output board
- DB-24SSR:** 24-channel solid state relay output board
- DB-24C:** 24-channel open-collector output board
- DB-24OD:** 24-channel open-drain output board
- DB-16P:** 16-channel OPTO-isolated digital input board
- DB-16R:** 16-channel relay output board
- DN-20:** 2x20 pin header DIN-rail mounting terminal board
- DN-37:** 2x37 pin header DIN-rail mounting terminal board
- ADP-20/PCI:** 20-pin extender