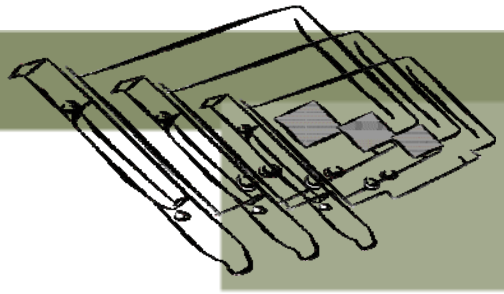
I/O CARD QUICK START GUIDE



for PIO-D168U

English / Oct. 2010 / Version 1.0

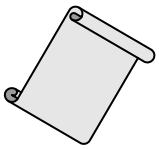
PCI Bus Digital I/O Boards

1 What's in the shipping package?

- One PIO-D168U series card
- One software utility PCI CD (V4.9 or later)
- One Quick Start Guide (This document)

PIO-D168U Series Card

Software Utility CD



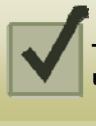
Quick Start Guide

2 Installing Windows Driver

Follow these steps:

1. **Setup the Windows driver. The driver is located at:**
   - The UniDAQ driver supports 32-bit/64-bit Windows XP/2003/Vista/2008/7; it is recommended to install this driver for new user:

     CD:\NAPDOS\PCI\UniDAQ\DLL\Driver\
     http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/driver/

     
     This example uses this driver

   - The PIO-DIO driver supports Windows 98/NT/2K and 32-bit XP/2003/Vista/7. Recommended to install this driver for have been used PIO-DIO series boards of regular user, please refer to:

     CD:\NAPDOS\PCI\PIO-DIO\manual\QuickStart\PID-D144_168_QuickStart_Eng.pdf
     http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-dio/manual/quickstart/pio-d144_168_quickstart_eng.pdf

2. **Click the "Next>" button to start the installation.**
3. **Click the "Next>" button to install the driver into the default folder.**
4. **Click the "Install" button to continue the installation.**
5. **Select "NO, I will restart my computer later" and then click the "Finish" button.**

3 Installing Hardware on PC

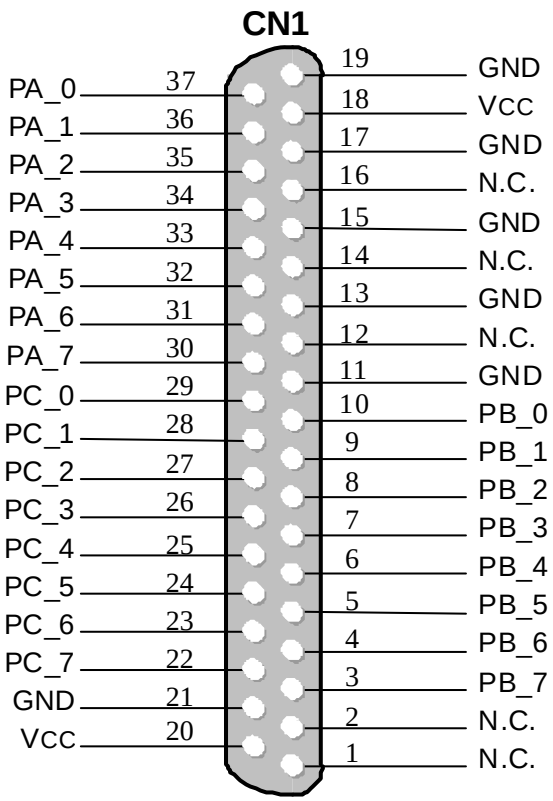
Follow these steps:

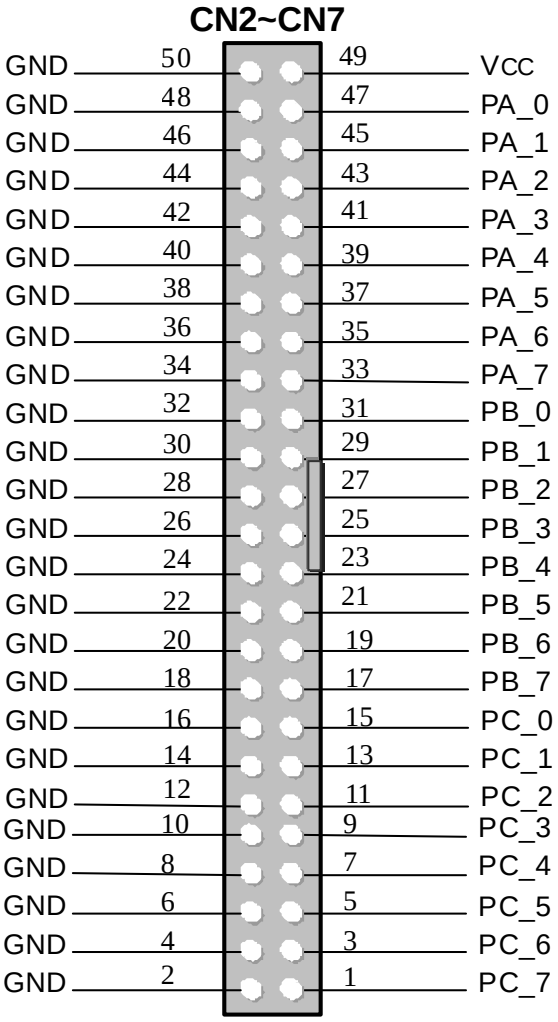
1. **Shut down and power off your computer.**
2. **Remove the cover from the computer.**
3. **Select an unused PCI slot.**
4. **Carefully insert your I/O card into the PCI slot.**
5. **Replace the PC cover.**
6. **Power on the computer.**

After powering-on the computer, please finish the Plug&Play steps according to the prompted messages.

4 Pin Assignments

- **CN1: 37-pin D-type female connector** (Port 0~Port 2)
- **CN2/CN3/CN4/CN5/CN6/CN7: 50-pin flat-cable connector** (Port 3~Port 20)



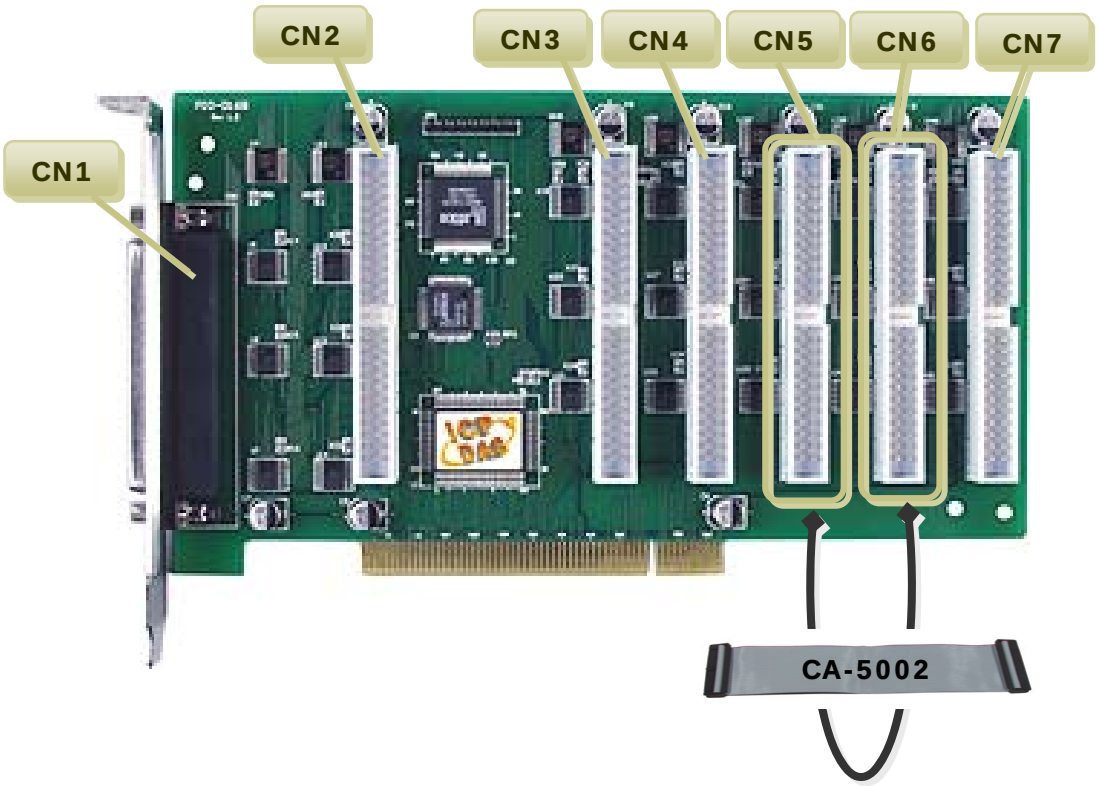


All Signals are TTL Compatible	
High (1)	2.0 ~ 5.0 V(Voltage over 5.0V will damage the device)
None Define	2.0 V ~ 0.8 V
Low(0)	Under 0.8 V

5 Self Test

DIO Test Wiring:

1. Use CA-5002 (optional) **to connect the CN5 with CN6.**
(Connect the Port 12,13,14 with Port 15,16,17)



Execute the Digital IO sample program:

2. The sample program is contained in:

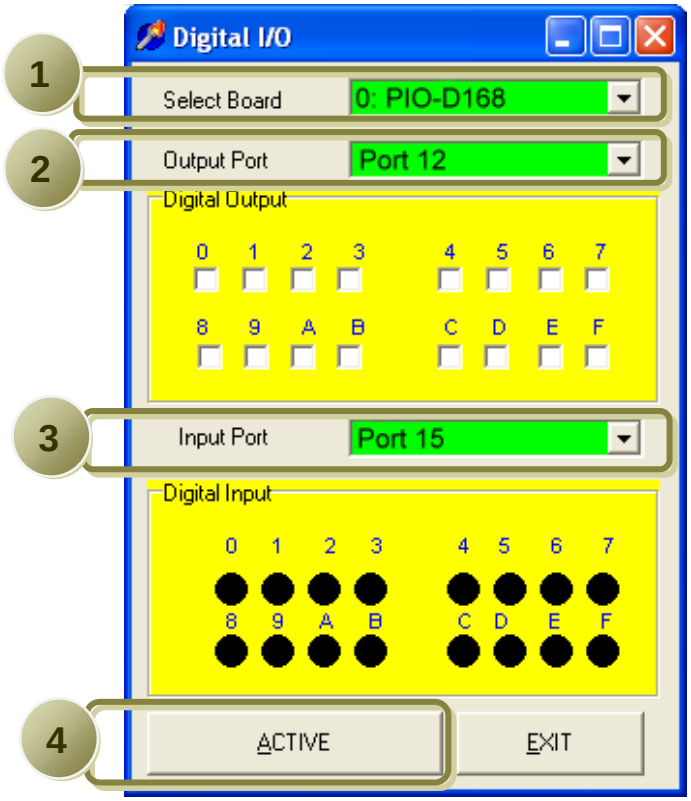
CD:\NAPDOS\PCI\UniDAQ\DLL\Demo\
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/demo/

3. The following sample program is written in Delphi4.

File: DLL_delphi4_xxxxxx.exe
Path: ....\ DLL_Delphi4\Digital_IO\
Double click the “Digital_IO.exe”

4. Set the test program.

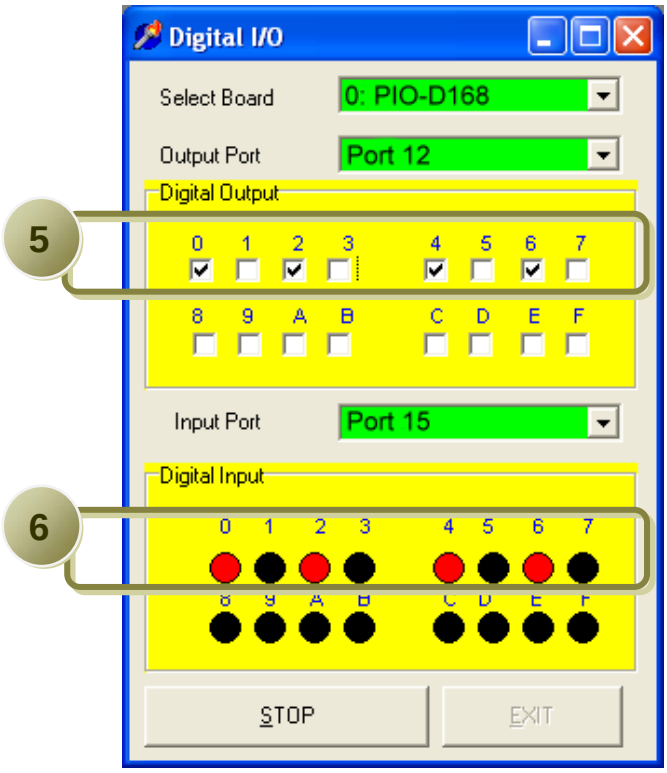
1. Select the board number for the PIO-D168 to activate. (It ranges form 0 to total board number subtracting one)
2. Select Port 12 in the Output port drop down list.
3. Select the Port 15 in the Input port drop down list.
4. Click this button to start test.



5. Get DIO function test result.

5 Click channel 0、2、4、6 in Digital Output field.

6 The Digital Input status should show current status-- channel 0、2、4、6 now in high state. (Red light)



Related Information

- **PIO-D168U Series Card product page:**
  http://www.icpdas.com/products/DAQ/pc_based/pio_d168.htm
- **CA-5002 page (optional):**
  http://www.icpdas.com/products/Accessories/cable/cable_selection.htm
- **Documentation:**
  CD:\NAPDOS\PCI\PIO-DIO\Manual
  http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-dio/manual/
  CD:\NAPDOS\PCI\UniDAQ\Manual
  http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/maunal/
- **Software:**
  CD:\NAPDOS\PCI\UniDAQ\DLL
  http://www.icpdas.com/download/pci/pio-dio.htm