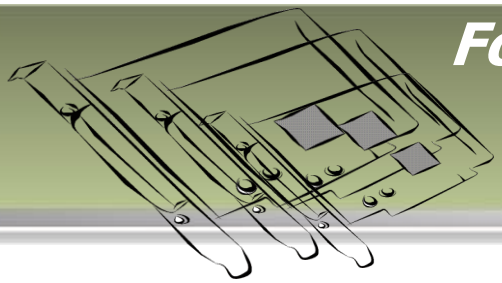
I/O CARD QUICK START GUIDE



For PEX-C64
PISO-C64U/A64 Series

English/ Oct. 2013/ Version 1.3

PCI Bus Digital I/O Boards

1 What's in the shipping package?

The package includes the following items:

	One PEX-C64, PISO-C64U or PISO-A64 PCI Board.
	One Software Utility CD (V5.2 or later)
	One Quick Start Guide (This Document)
 One CA-4037B Cable	 Two CA-4002 D-Sub connectors

2 Installing Windows Driver

Step 1: Setup the Windows driver. The driver is located at:

☑ The UniDAQ driver supports 32-/64-bit Windows 2K/XP/2003/Vista/7/8; 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/

☐ The PISO-DIO Series classic driver supports Windows 98/NT/2K and 32-bit XP/ 2003/ Vista/7/8. Recommended to install this driver for have been used PISO-DIO series boards of regular user, please refer to : http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-dio/manual/quickstart/classic/

Step 2: Click the "Next>" button to start the installation.
Step 3: Check your DAQ Card is or not on supported list, then click the "Next>" button.
Step 4: Select the installed folder, the default path is C:\ICPDAS\UniDAQ , confirm and click the "Next>" button.
Step 5: Check your DAQ Card on list, then click the "Next>" button.
Step 6: Click the "Next>" button on the Select Additional Tasks window.
Step 7: Click the "Next>" button on the Download Information window.
Step 8: Select "No, I will restart my computer later" and then click the "Finish" button.

For detailed information about the driver installation, please refer to Chapter 2.1 "Getting the UniDAQ Driver DLL Installer package" of the UniDAQ SDK user manual.

3 Installing Hardware on PC

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

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

4 Pin Assignments

Pin Assign-ment CON2	Pin Assign-ment CON1	Terminal No.		Pin Assign-ment CON1	Pin Assign-ment CON2
Ext.GND2	Ext.GND0	01	20	Ext.GND1	Ext.GND3
DO_32	DO_0	02	21	DO_16	DO_48
DO_33	DO_1	03	22	DO_17	DO_49
DO_34	DO_2	04	23	DO_18	DO_50
DO_35	DO_3	05	24	DO_19	DO_51
DO_36	DO_4	06	25	DO_20	DO_52
DO_37	DO_5	07	26	DO_21	DO_53
DO_38	DO_6	08	27	DO_22	DO_54
DO_39	DO_7	09	28	DO_23	DO_55
DO_40	DO_8	10	29	DO_24	DO_56
DO_41	DO_9	11	30	DO_25	DO_57
DO_42	DO_10	12	31	DO_26	DO_58
DO_43	DO_11	13	32	DO_27	DO_59
DO_44	DO_12	14	33	DO_28	DO_60
DO_45	DO_13	15	34	DO_29	DO_61
DO_46	DO_14	16	35	DO_30	DO_62
DO_47	DO_15	17	36	DO_31	DO_63
Ext. PWR2	Ext. PWR0	18	37	Ext. PWR1	Ext. PWR3
N.C.	N.C.	19			

CON1 (Female DB-37)

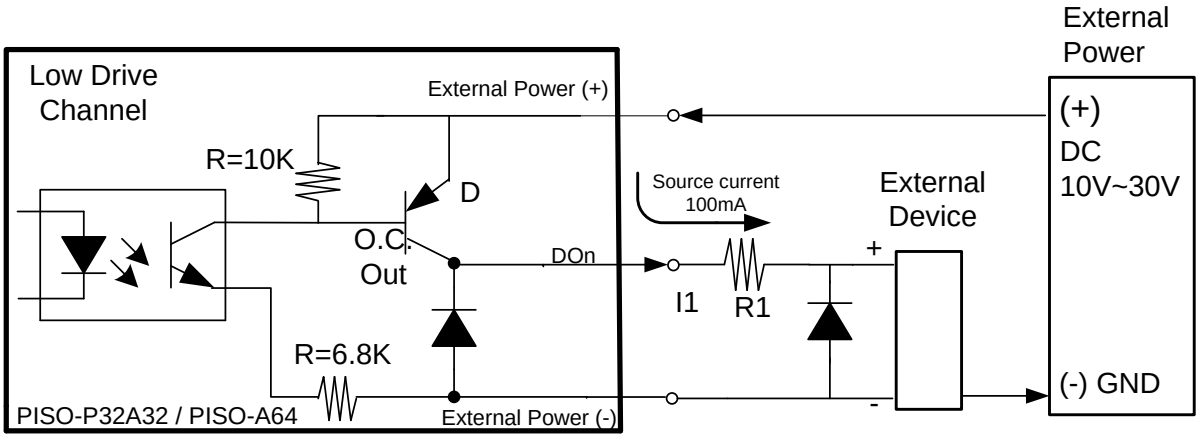
Pin Assign-ment	Terminal No.		Pin Assign-ment
Ext.GND2	01	02	Ext.GND3
DO_32	03	04	DO_48
DO_33	05	06	DO_49
DO_34	07	08	DO_50
DO_35	09	10	DO_51
DO_36	11	12	DO_52
DO_37	13	14	DO_53
DO_38	15	16	DO_54
DO_39	17	18	DO_55
DO_40	19	20	DO_56
DO_41	21	22	DO_57
DO_42	23	24	DO_58
DO_43	25	26	DO_59
DO_44	27	28	DO_60
DO_45	29	30	DO_61
DO_46	31	32	DO_62
DO_47	33	34	DO_63
Ext. PWR2	35	36	Ext. PWR3
N.C.	37	38	N.C.
N.C.	39	40	N.C.

CON2 (40-pin box header)

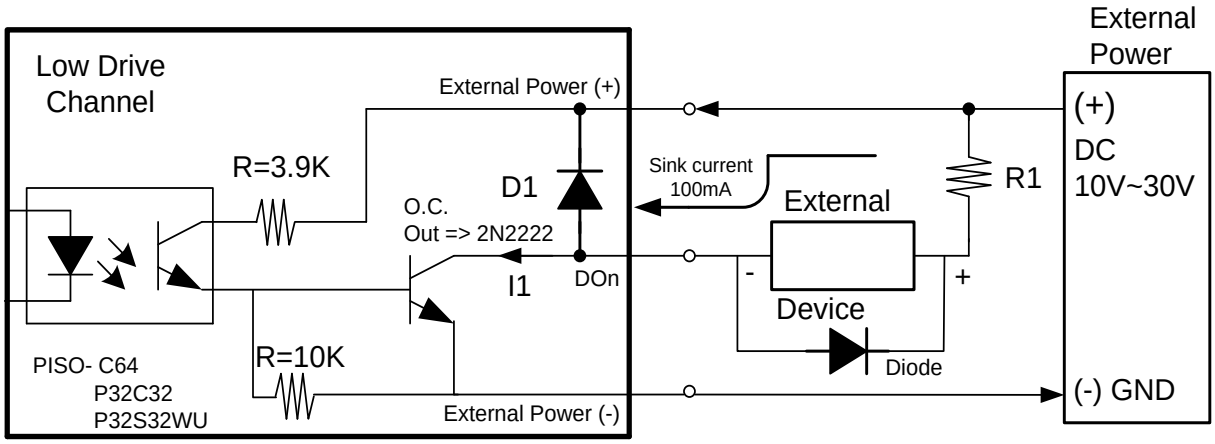
Extension Cable (CA-4037B):
DB-40-Pin conversion DB-37-Pin

5 Wiring Note

The wiring note of the PISO-A64 is illustrated in the figure below:



The wiring note of the PEX-C64/PISO-C64 series is illustrated in the figure below:



※Recommend: It is necessary to connect a diode in the external device end as means of preventing damage form the counter emf. If your external device is inductive Load, Ex. Relay…

To prevent the board damaged forever by overload, the GND pins (CON1: pin 1/20, CON2: pin 1/20) all must be connected with GND of External Power.

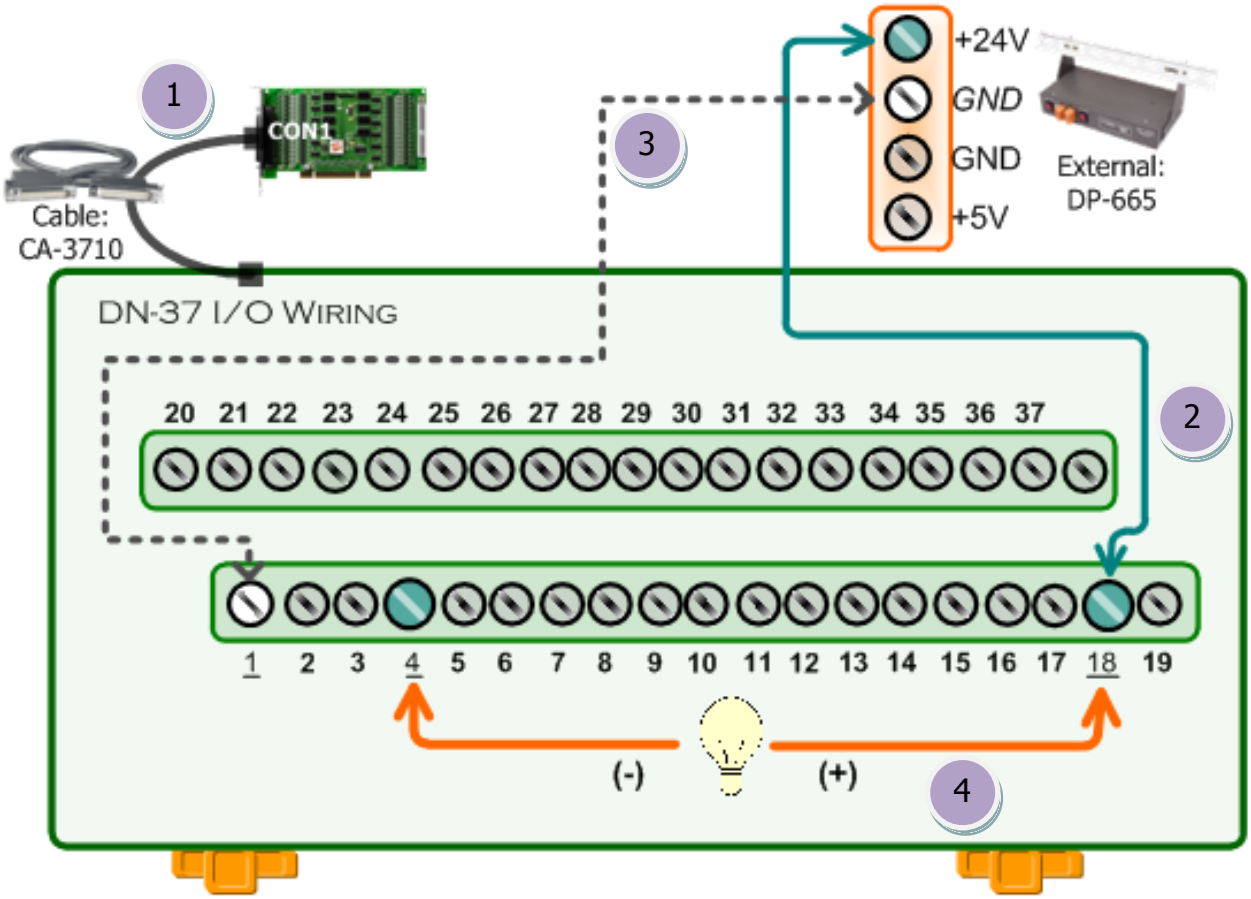
6 Self-Test

Prepare for device:

- ☑ DN-37 (optional) wiring terminal board.
- ☑ Exterior power supply device. For example: DP-665 (optional)

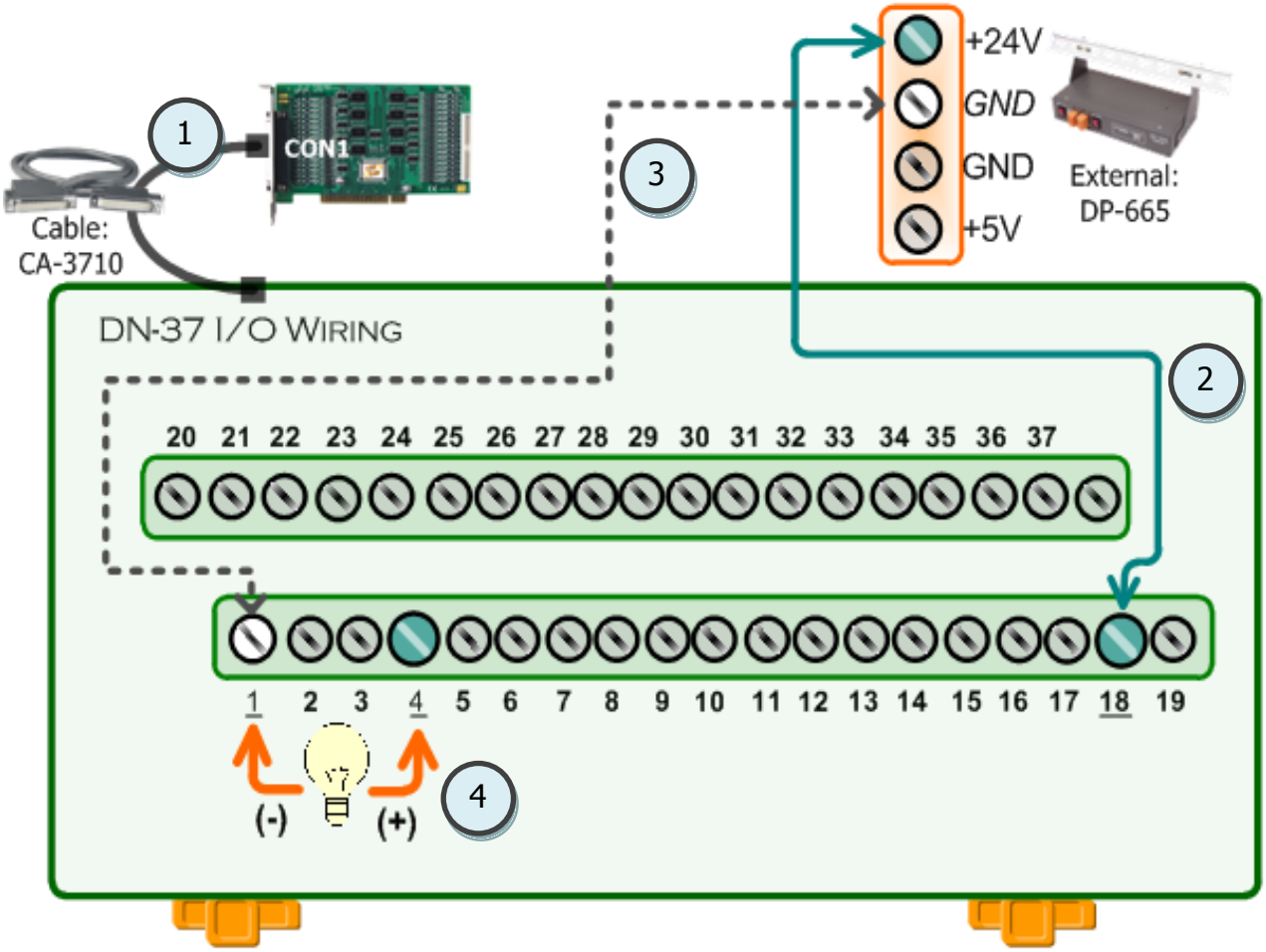
PEX-C64/PISO-C64U(Current Sinking) wiring as follows:

1. **Use the DN-37 to connect the CON1 on board.**
2. External Power +24V **connect to** Ext.PWR0(Pin 18)**.**
3. External Power GND **connect to** Ext.GND0 (Pin 1)**.**
4. **Use output LED to connect the** DO2 (Pin 4) **and** Ext.PWR0(Pin 18).



■ PISO-A64(Current Sourcing) wiring as follows:

1. **Use the DN-37 to connect the CON1 on board.**
2. External Power +24V **connect to** Ext.PWR0 (Pin 18)**.**
3. External Power GND **connect to** Ext.GND0 (Pin 1)**.**
4. **Use output LED to connect the** Ext.GND0 (Pin 1) **and** DO2 (Pin 4)**.**

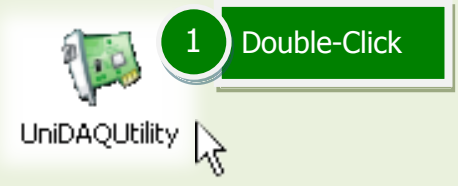


5. **The UniDAQ Utility.exe is located in:**

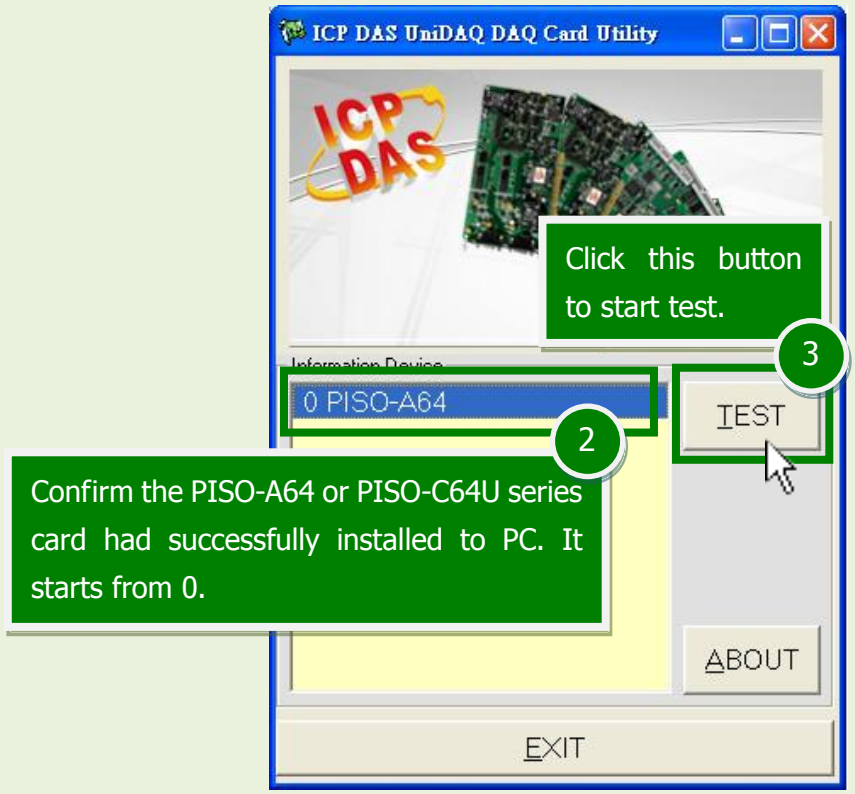
This program (UniDAQ Utility) will be placed in the default path after completing installation.

Default Path: C:\ICPDAS\UniDAQ\Driver\

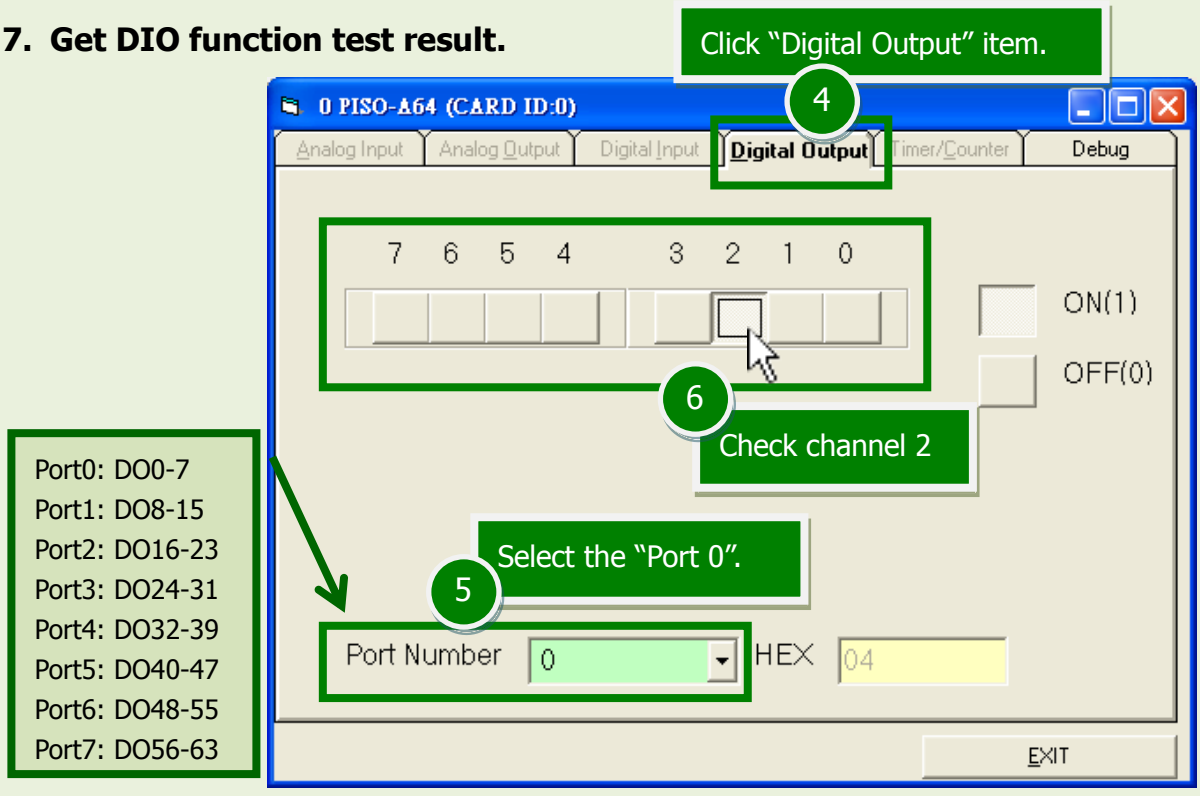
Double click the "UniDAQUtility.exe"

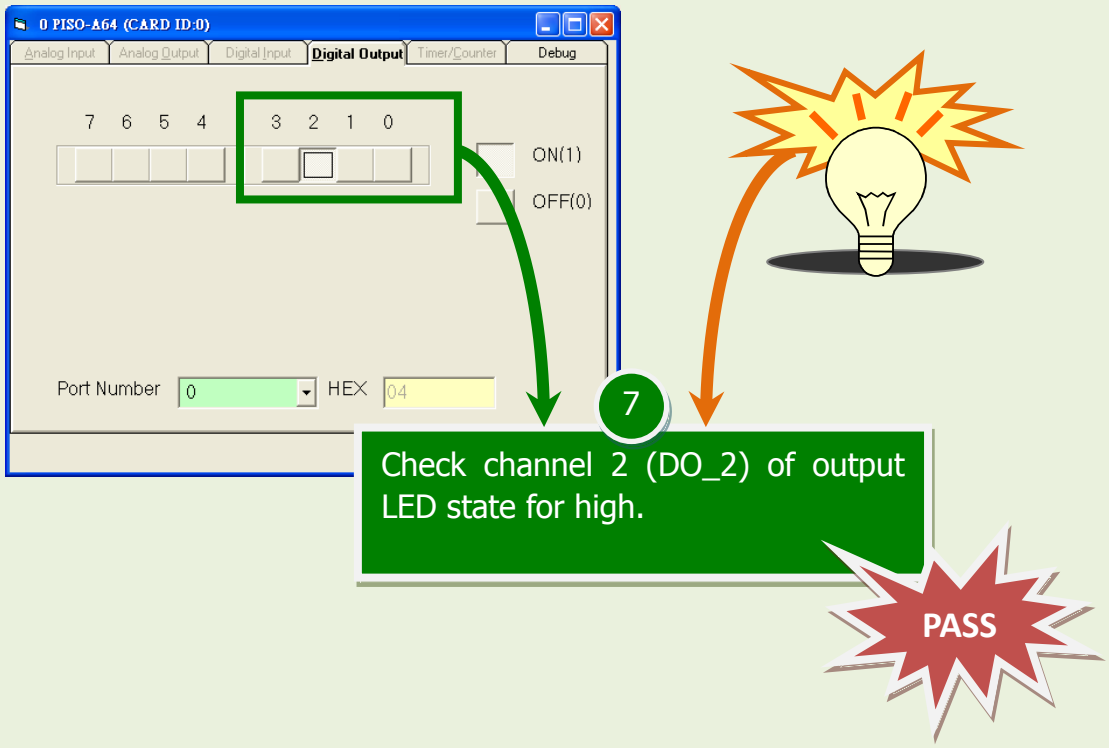


6. Execute the UniDAQ Utility Program.



7. Get DIO function test result.





7 Related Information

- PEX-C64 and PISO-C64U Series Card Product Page:
  http://www.icpdas.com/root/product/solutions/pc_based_io_board/pci/piso-c64.html
- PISO-A64 Series Card Product Page:
  http://www.icpdas.com/root/product/solutions/pc_based_io_board/pci/piso-a64.html
- DN-37, CA-3710 and DP-665 page (optional):
  http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm
  http://www.icpdas.com/products/Accessories/power_supply/dp-665.htm
  http://www.icpdas.com/products/Accessories/cable/cable_selection.htm
- Documentation and Software:
  CD:\NAPDOS\PCI\UniDAQ\
  http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/