PCI-D96SU/D128SU Quick Start

What's in the box?

The package includes the following items:

PCI-D96SU   PCI-D128SU
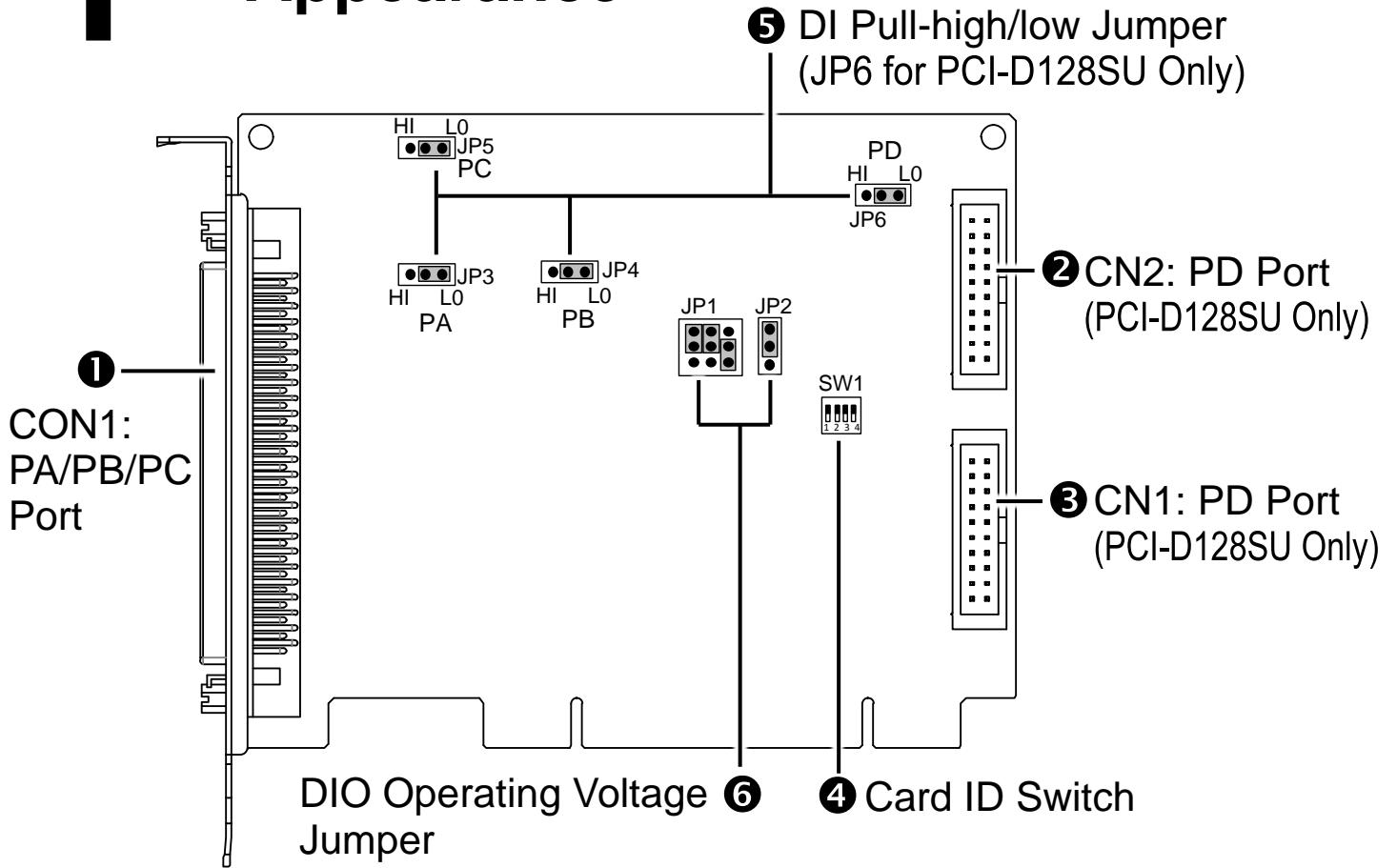
or
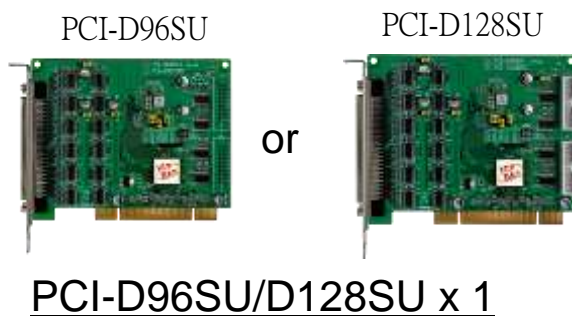
PCI-D96SU/D128SU x 1

Quick Start x 1
(This Document)

Related Information

- For more detailed information related to the user manual and software for UniDAQ Driver & SDK:
  http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/

- For more detailed information related to the hardware settings for PCI-D96SU/D128SU Card:
  http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pci-d96su/manual/

- DN-100 and CA-SCSI100-15 Product Page (optional):
  http://www.icpdas.com/root/product/solutions/pc_based_io_board/daughter_boards/dn-100.html
  http://www.icpdas.com/products/Accessories/cable/cable_selection.htm

1 Appearance

❺ DI Pull-high/low Jumper
(JP6 for PCI-D128SU Only)

❶ CON1: PA/PB/PC Port

❷ CN2: PD Port
(PCI-D128SU Only)

❸ CN1: PD Port
(PCI-D128SU Only)

DIO Operating Voltage ❻ Jumper

❹ Card ID Switch

2 Jumper Settings

➢ **DI Pull-high/low Jumper**

Jumpers JP3 to JP6 are used to specify whether the Digital Input is either Pull-high or Pull-low. **NOTE: Ensure that Jumpers JP3 to JP6 are in the default position before performing a self-test.**

| ☑ Pull-Low (Default)	Pull- High
HI LO ① ② ③	HI LO ① ② ③

➢ DIO Operating Voltage Jumper

Jumpers JP1 and JP2 are used to specify the DIO operating voltage levels. **NOTE: Ensure that Jumpers JP1 and JP2 are in the default position before performing a self-test.**
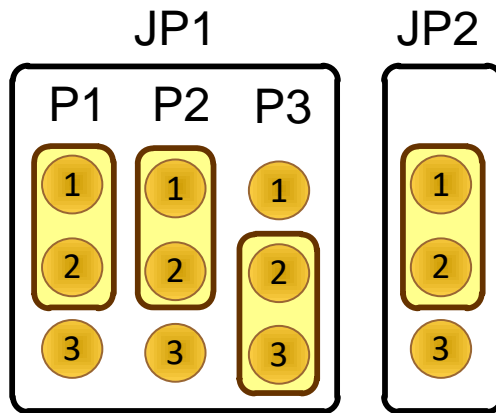
JP1			JP2	Voltage
P1	**P2**	**P3**		
2-3	1-2	1-2	2-3	+1.5 V
1-2	2-3	1-2	2-3	+1.8 V
1-2	1-2	1-2	2-3	+2.5 V
1-2	1-2	2-3	2-3	+3.3 V
X	X	X	1-2	**+5.0 V (Default)**

3   Installing Hardware on PC

1) Shut down and power off your Computer.
2) Remove all covers from the Computer.
3) Select an unused PCI slot.
4) Carefully insert the PCI-D96SU/D128SU Card into PCI slot.
4) Replace the Computer Covers.
5) Power on the Computer.
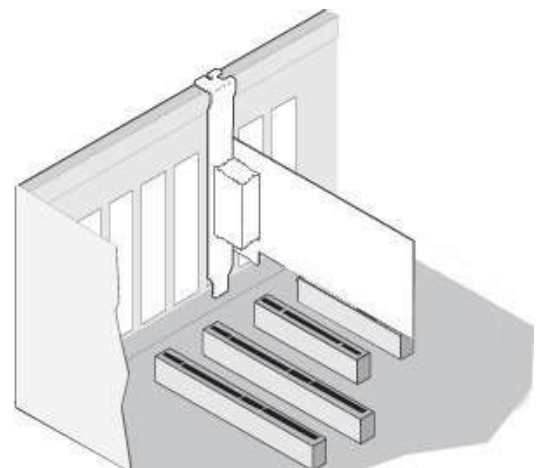
4 Installing Windows Driver

1) Setup the UniDAQ driver under Windows 10.
The UniDAQ driver supports 32-/64-bit Windows XP/2003/2008/7/8/10 which can be found in the
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/driver/.

2) Setup the UniDAQ Driver DLL, click the **"Next>"** button for all dialogs.
NOTE: For more detailed information related to driver installation, refer to Chapter 2 "Starting" in the UniDAQ SDK user manual.

3) The operating system will automatically detect the new hardware and install the necessary drivers after reboot the PC.

4) Open the **"Device Manager"** to verify that the PCI-D96SU/D128SU Card has been correctly installed and is in the Device Manager, as illustrated on below.
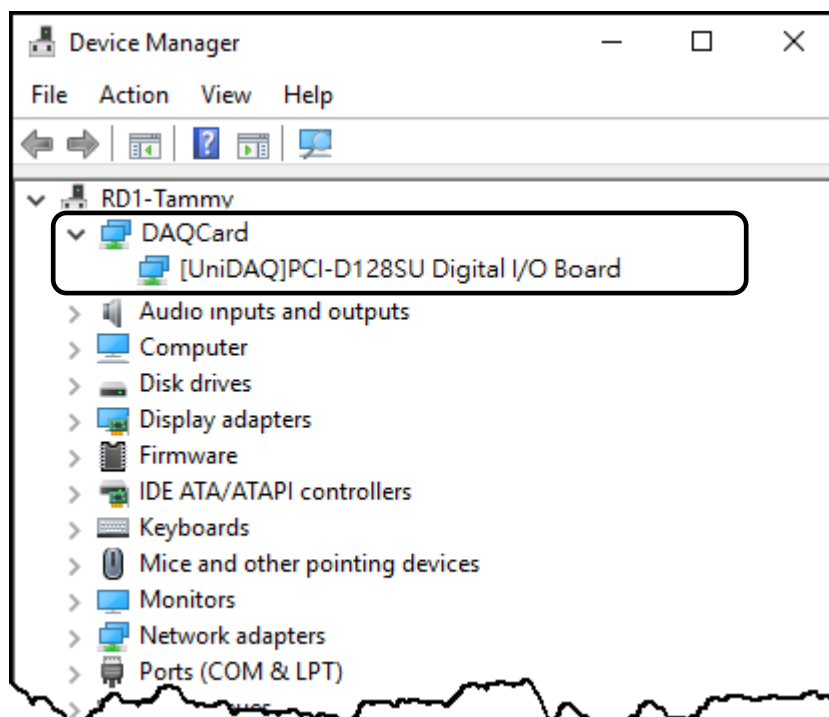
5 Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
PA_00	01	51	PB_00
PA_01	02	52	PB_01
PA_02	03	53	PB_02
PA_03	04	54	PB_03
PA_04	05	55	PB_04
PA_05	06	56	PB_05
PA_06	07	57	PB_06
PA_07	08	58	PB_07
PA_08	09	59	PB_08
PA_09	10	60	PB_09
PA_10	11	61	PB_10
PA_11	12	62	PB_11
PA_12	13	63	PB_12
PA_13	14	64	PB_13
PA_14	15	65	PB_14
PA_15	16	66	PB_15
PA_16	17	67	PB_16
PA_17	18	68	PB_17
PA_18	19	69	PB_18
PA_19	20	70	PB_19
PA_20	21	71	PB_20
PA_21	22	72	PB_21
PA_22	23	73	PB_22
PA_23	24	74	PB_23
GND	25	75	GND
PA_24	26	76	PB_24
PA_25	27	77	PB_25
PA_26	28	78	PB_26
PA_27	29	79	PB_27
PA_28	30	80	PB_28
PA_29	31	81	PB_29
PA_30	32	82	PB_30
PA_31	33	83	PB_31
PC_00	34	84	PC_16
PC_01	35	85	PC_17
PC_02	36	86	PC_18
PC_03	37	87	PC_19
PC_04	38	88	PC_20
PC_05	39	89	PC_21
PC_06	40	90	PC_22
PC_07	41	91	PC_23
PC_08	42	92	PC_24
PC_09	43	93	PC_25
PC_10	44	94	PC_26
PC_11	45	95	PC_27
PC_12	46	96	PC_28
PC_13	47	97	PC_29
PC_14	48	98	PC_30
PC_15	49	99	PC_31
VCC	50	100	VCC

CON1

Pin Assignment	Terminal No.		Pin Assignment
PD_16	01	02	PD_24
PD_17	03	04	PD_25
PD_18	05	06	PD_26
PD_19	07	08	PD_27
PD_20	09	10	PD_28
PD_21	10	12	PD_29
PD_22	12	14	PD_30
PD_23	14	16	PD_31
GND	16	18	GND
VCC	18	20	--

CN2 (PCI-D128SU only)

| Pin Assignment	Terminal No.		Pin Assignment
PD_00	01	02	PD_08
PD_01	03	04	PD_09
PD_02	05	06	PD_10
PD_03	07	08	PD_11
PD_04	09	10	PD_12
PD_05	11	12	PD_13
PD_06	13	14	PD_14
PD_07	15	16	PD_15
GND	17	18	GND
VCC	19	20	--

CN1 (PCI-D128SU only)

6 Self-test Wiring

1) Verify that Jumpers **DI Pull-high/low (JP3 ~ JP6)** on the PCI-D96SU/D128SU are set to the **"Pull-Low (default)"** position.
NOTE: Refer to Chapter 2 "Jumper Settings" above (P2).

2) Connect the DN-100 terminal board (optional) to the CON1 on the PCI-D96SU/D128SU Card using the CA-SCSI100-15 cable (optional).
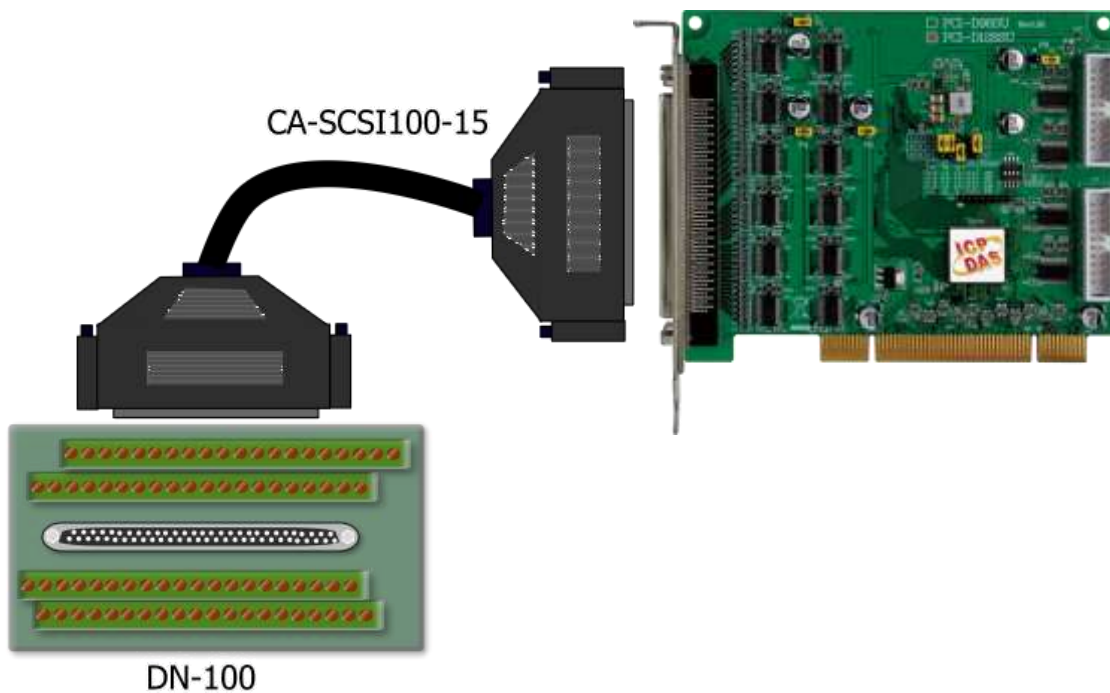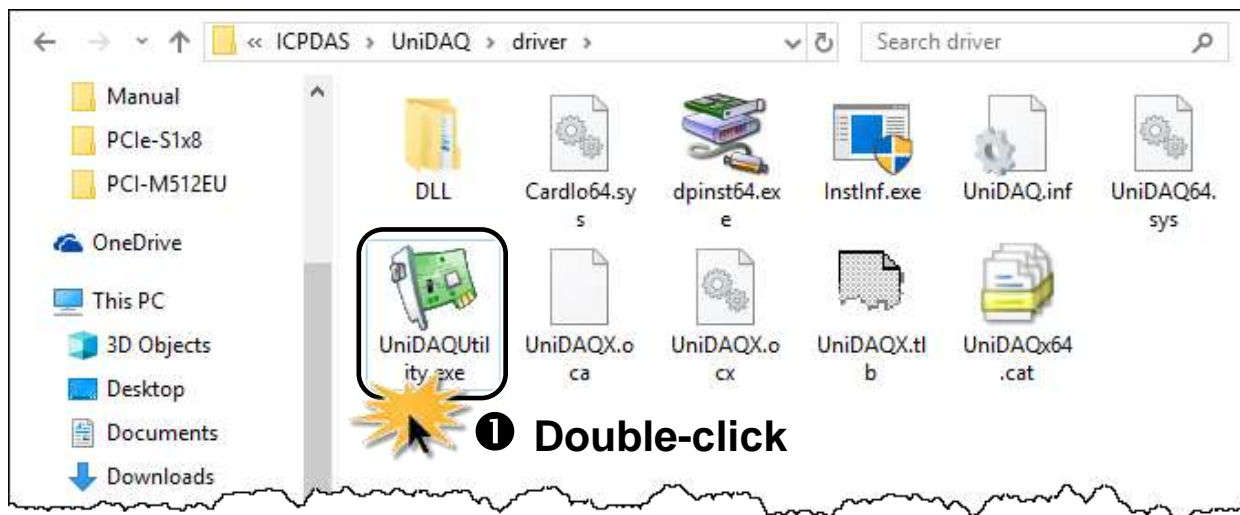

3) Connect the Port0 (PA00~PA07) with Port1 (PB00~PB07).
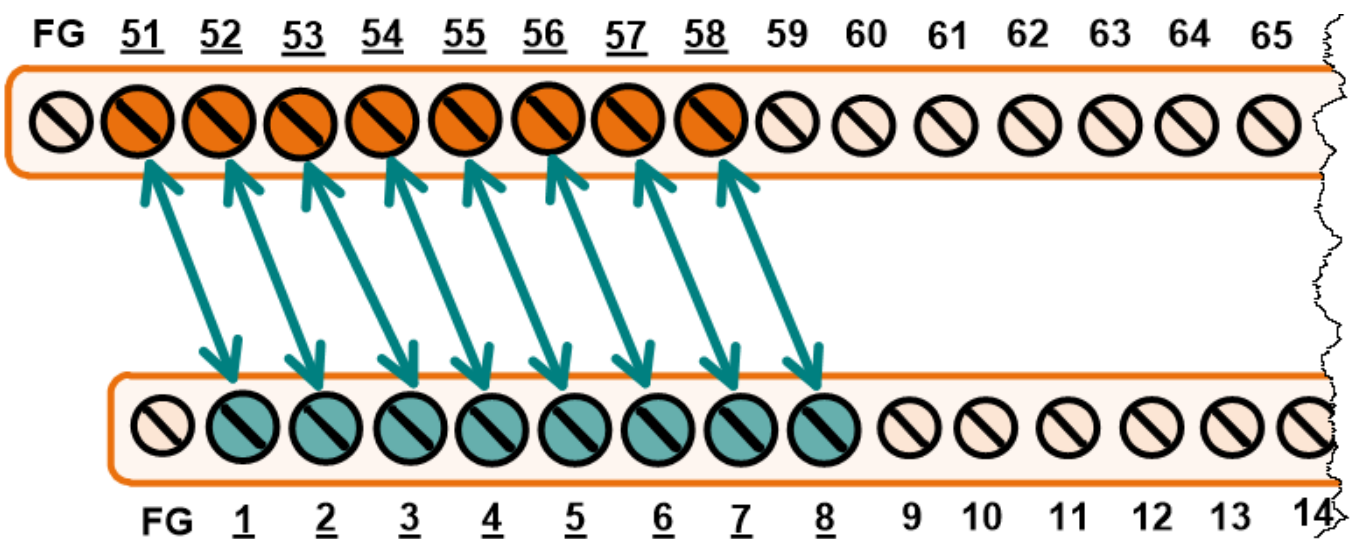
7 Execute the Test Program

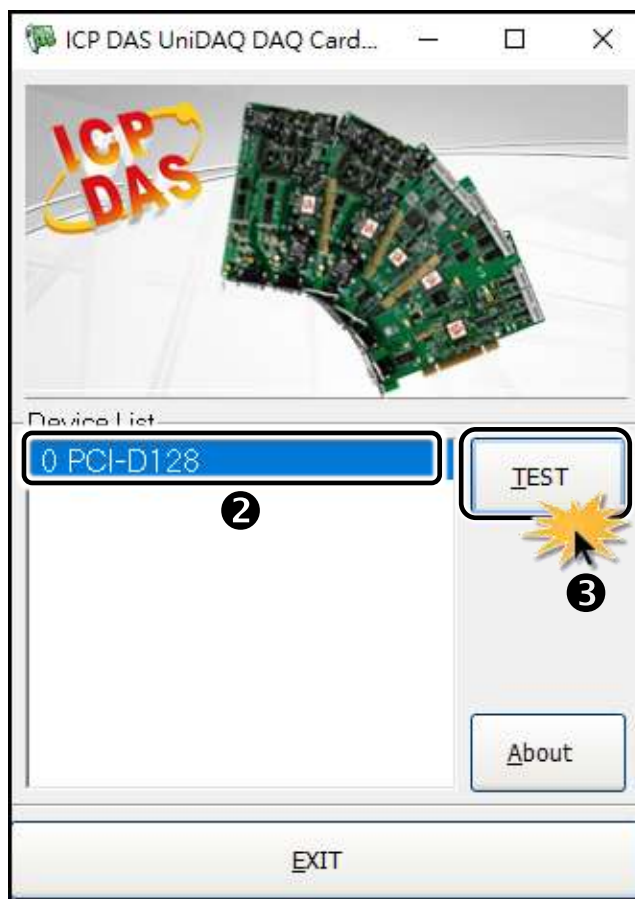1) Launch the **UniDAQ Utility** software.
   If the UniDAQ Utility was installed in the default folder, it will be located
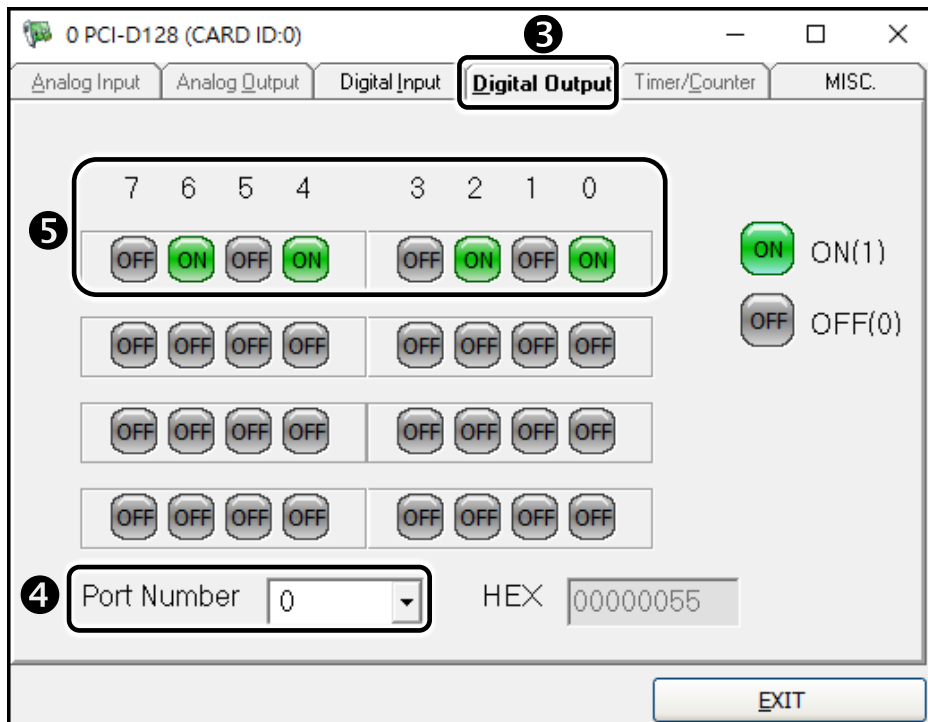   at **"C:\ICPDAS\UniDAQ\Driver"**.

❶ **Double-click**

2) Confirm that the PCI-D96SU/D128SU Card has been successfully
   installed in the Host system.
   **<u>NOTE:</u> The device numbers
   start from 0.**

3) Click the **"<u>T</u>EST"** button to start
   the test.

3) Click the **"Digital Output"** tab.

4) Select **"Port0"** from the **"Port Number"** drop-down options.

5) Click the **DO channels 0, 2, 4 and 6 buttons**.

6) Click the **"Digital Input"** tab.

7) Select **"Port1"** from the **"Port Number"** drop-down options.

8) The DI indicators will turn **red** when the corresponding **DO channels 0, 2, 4 and 6 are ON**.