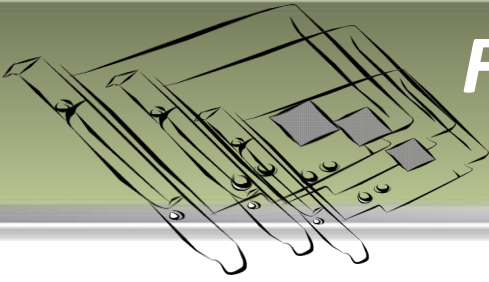


# I/O CARD QUICK START GUIDE

*For FRB-200U/FRe-200*

English/Apr. 2015/Version 1.0



## 1

### Check the Supplied Items

**The shipping package includes the following items:**



One FRB-200U/FRe-200 Series Card



One Software Utility DVD (V3.5 or later)



One Quick Start Guide (This Document)

# 2

## Installing Windows Driver

The FRB Series card driver supports Windows 98/NT/2K and 32/64-bit Windows XP/2003/7/2008/8. The driver installation package for FRB Series cards can be found on the companion CD-ROM, or can be obtained from the ICP DAS FTP web site. The driver is located at:



CD: \NAPDOS\FR\_Net\FR\_PCI\_Card\DLL\_OCX\Drvier\



[http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr\\_net/fr\\_pci\\_card/dll\\_ocx/driver/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr_net/fr_pci_card/dll_ocx/driver/)

Please follow the following steps to setup software:

**Step 1:** Double click the “FRB\_Win\_steup\_xxx.exe” to setup it.

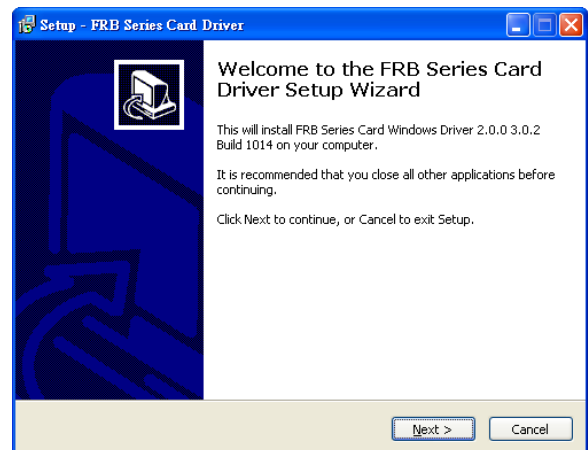
**Step 2:** When the Setup Wizard screen is displayed, click the “Next>” button.

**Step 3:** Select the folder where the drivers are to install. The **default path is**

**C:\DAQPro\FRB**. But if you wish to install the drivers to a different location , click the “Browse...” button and select the relevant folder and then click the “Next>” button.

**Step 4:** Click the “Install>” button on the “Ready to Install” window.

**Step 5:** Select “**No, I will restart my computer later**” and then click the “Finish” button.



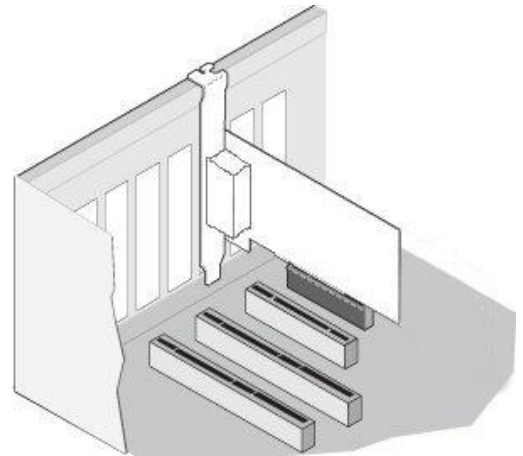
# 3 Installing Hardware on PC

**Step 1:** Shut down and power off the computer.

**Step 2:** Remove all the covers from the computer.

**Step 3:** Select an unused PCI/PCI Express slot.

**Step 4:** Carefully insert the FRB Series card into the PCI/PCI Express slot and secure the board in place.

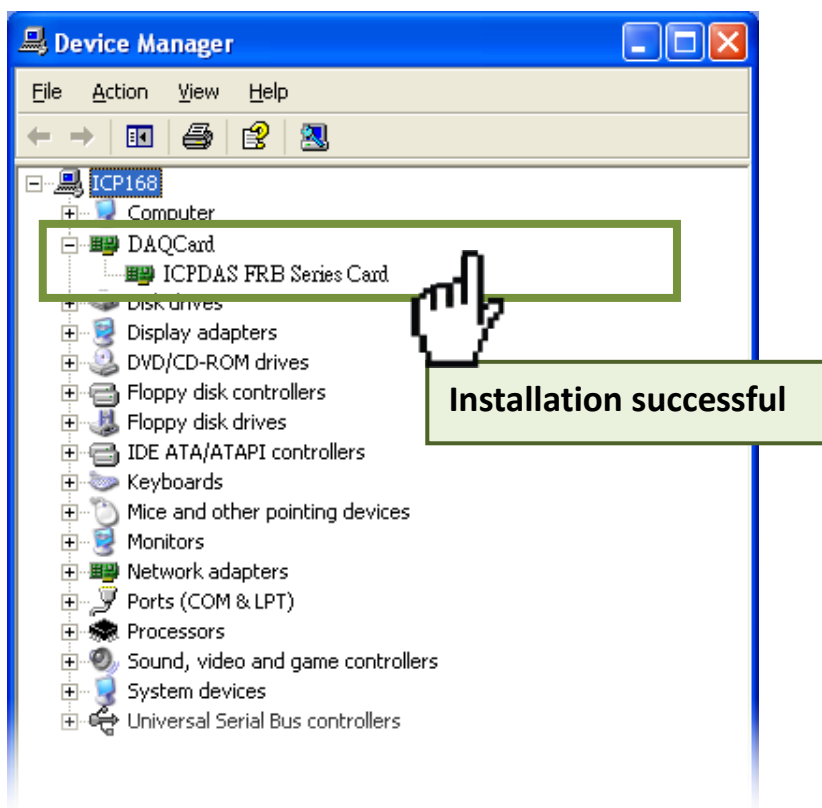


**Step 5:** Replace the covers on the computer.

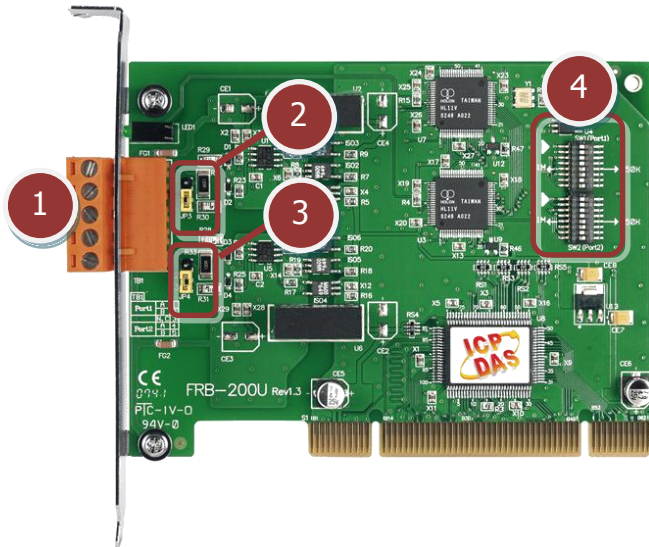
**Step 6:** Reconnect the power supply and power on the computer.

**Step 7:** Once the computer reboots, follow any messages that may be displayed to complete the Plug and Play installation procedure.

**Step 8:** Open the “**Device Manager**” in the Control Panel and verify that the FRB Series card is listed correctly, as illustrated below.

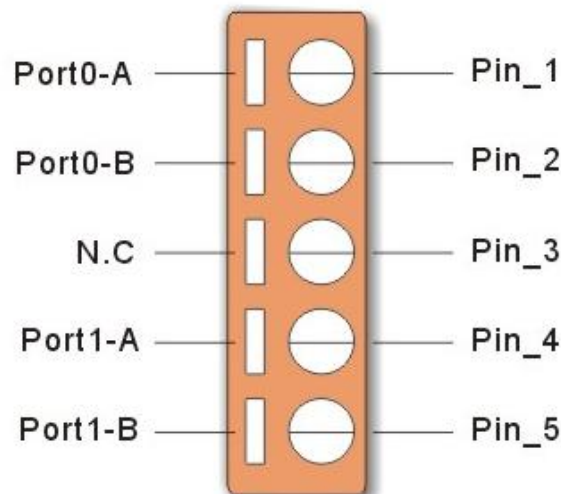


# 4 Board Layout



- ❶ **TB1:** Communication Connector  
(See Chapter 5 Pin Assignments)
- ❷ **JP3:** Terminating Resistors for Port 0
- ❸ **JP4:** Terminating Resistors for Port 1
- ❹ **SW1, SW2:** CLK/Node Setting  
(SW1 and SW2 are designed for feature extension, so do not change the default setting.)

# 5 Pin Assignments



# 6 Self-Test

## ■ Prepare for device:

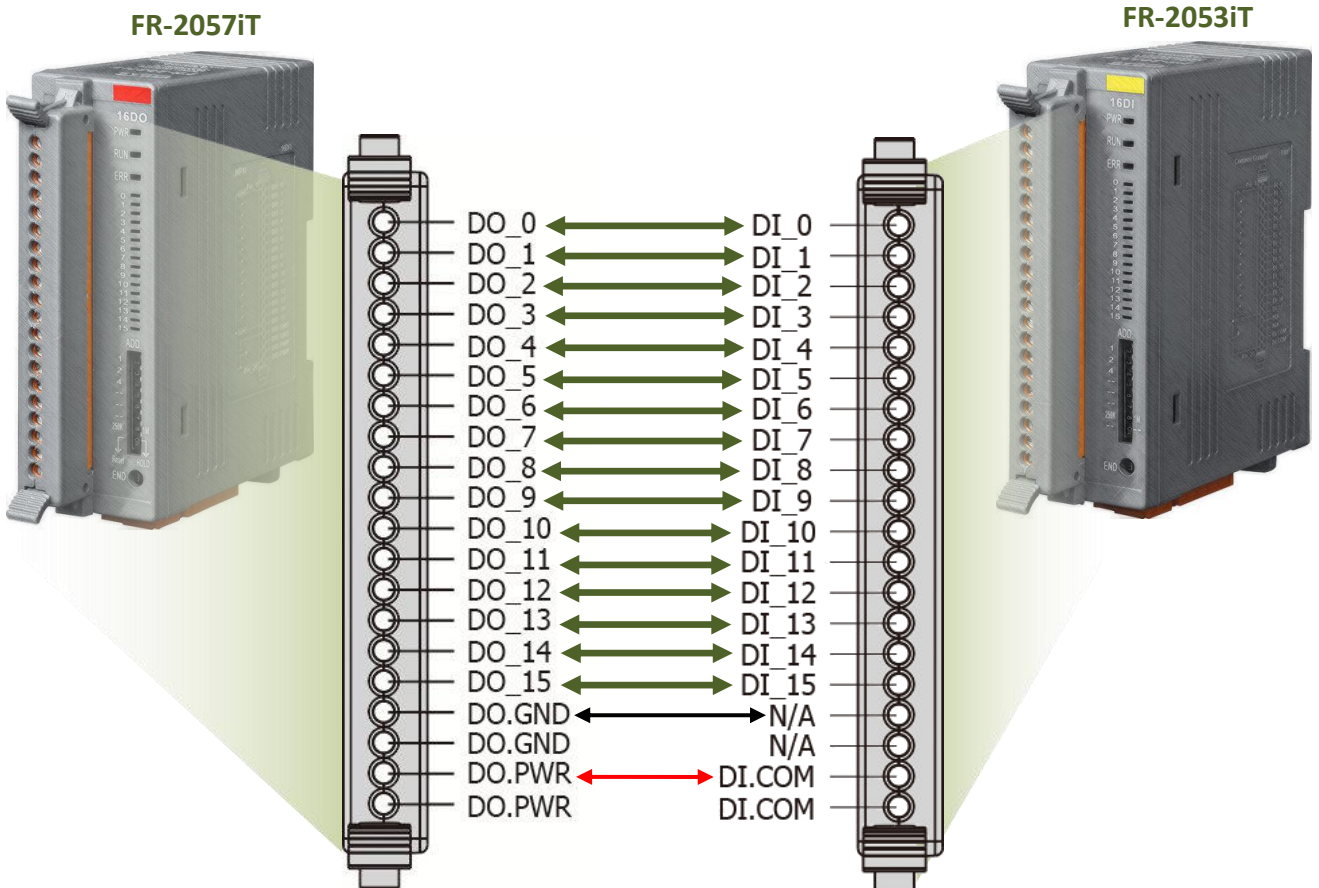
- ☑ FR-2053iT Series (16-channel Isolated DI Module, optional)
- ☑ FR-2057iT Series (16-channel Isolated DO Module, optional)
- ☑ External Power Supply Device. (e.g. DP-665, optional)

## ■ Self-test wiring as follows:

**Step 1:** Connect the **DO0 to DO15 (Pin 1 to Pin 16)** on the FR-2057iT to **DI0 to DI15 (Pin 1 to Pin 16)** on the FR-2053iT.

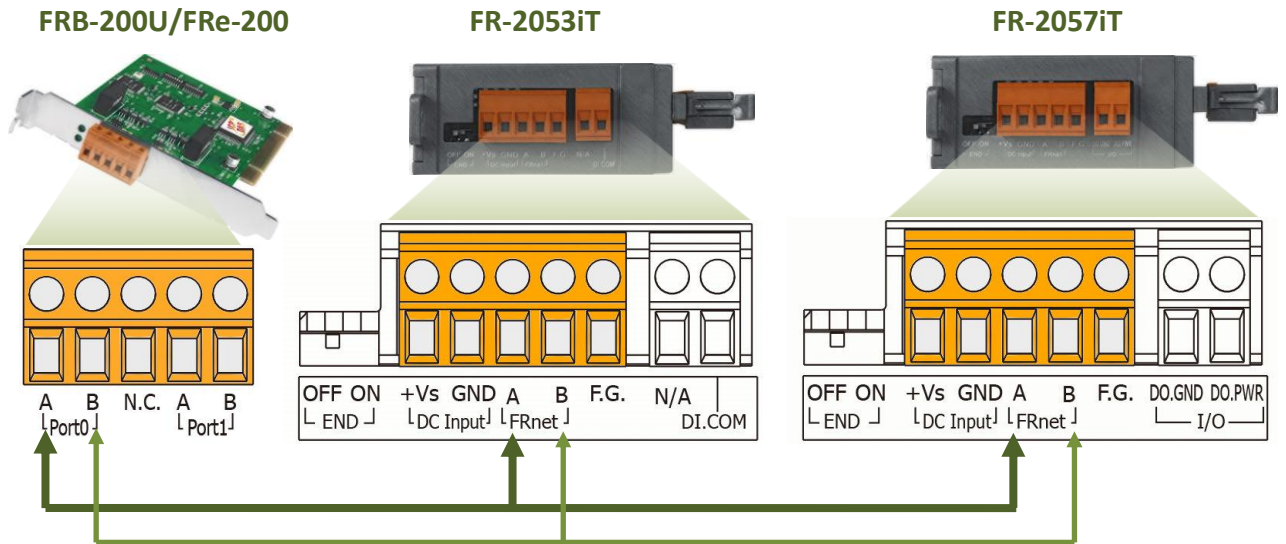
**Step 2:** Connect the **DO.GND(Pin 17)** on the FR-2057iT to **N/A (Pin 17)** on the FR-2053iT.

**Step 3:** Connect the **DO.PWR(Pin 19)** on the FR-2057iT to **DI.COM (Pin 19)** on the FR-2053iT.



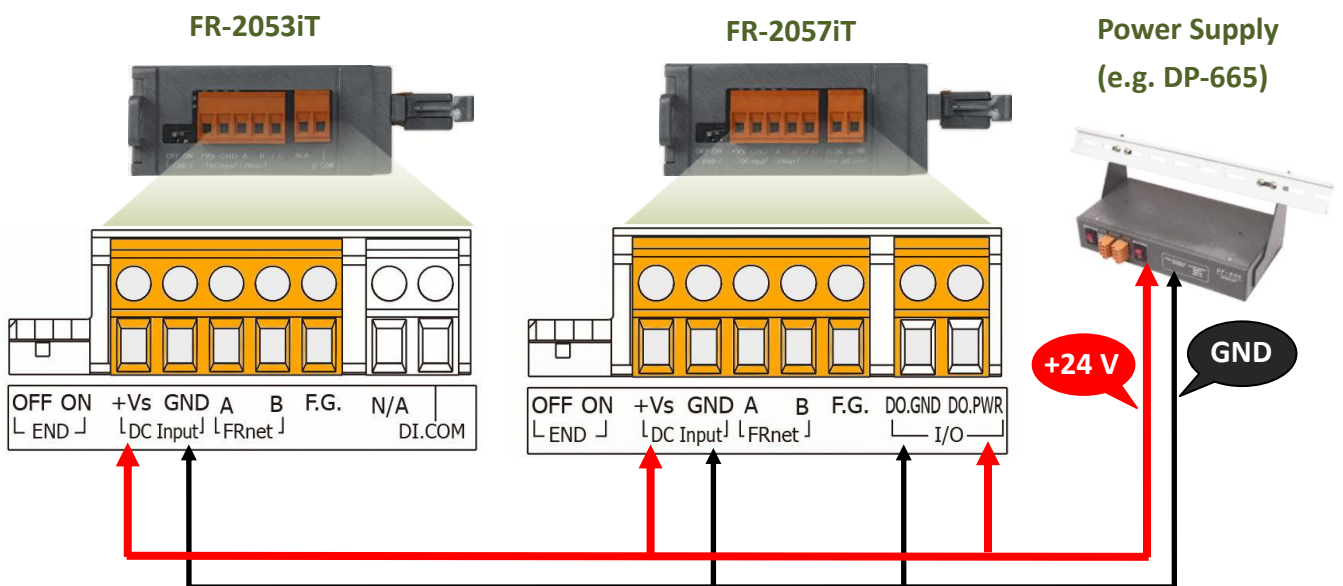
**Step 4:** Connect the **Port0-A** on the FRB-200U/FRe-200 to the **FRnet-A** on the FR-2053iT and FB-2057iT.

**Step 5:** Connect the **Port0-B** on the FRB-200U/FRe-200 to the **FRnet-B** on the FR-2053iT and FB-2057iT.



**Step 6:** Connect the **DO.PWR/+Vs pins** on the FR-2057iT and **+Vs pin** on the FR-2053iT to the **External Power Supply (+24 V)**.

**Step 7:** Connect the **DO.GND/GND pins** on the FR-2057iT and **GND pin** on the FR-2053iT to the **GND pin on the Power Supply**.



■ The DIO sample program is located in:

The sample programs for FRB-200U/FRe-200 card can be found in the following:



CD:\\ NAPDOS\\FR-Net\\FR\_PCI\_Card\\DLL\_OCX\\Demo\\



[http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr\\_net/fr\\_pci\\_card/dll\\_ocx/demo/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr_net/fr_pci_card/dll_ocx/demo/)

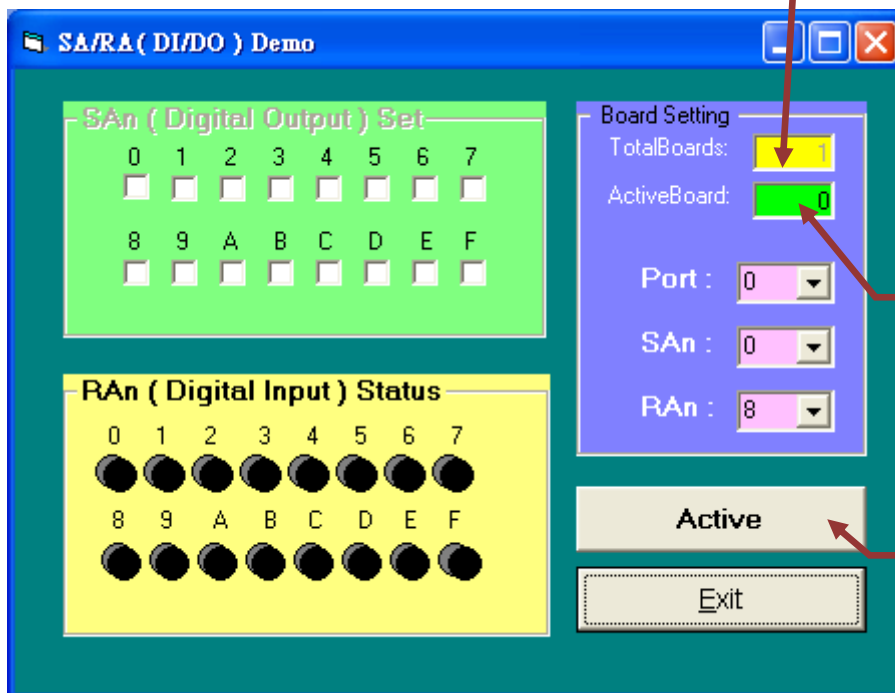
■ The following sample program is written in VB.

**Step 1:** Double click the “Demo2.exe” to execute the DIO sample program from the ...\\DLL\_VB6\\DIO folder.

**Step 2:** Confirm the FRB-200U/FRe-200 card has been successfully installed in the PC.

**Step 3:** Enter the card number for the RB-200U/FRe-200 card.

**Step 4:** Click the “Active” button to start the test.



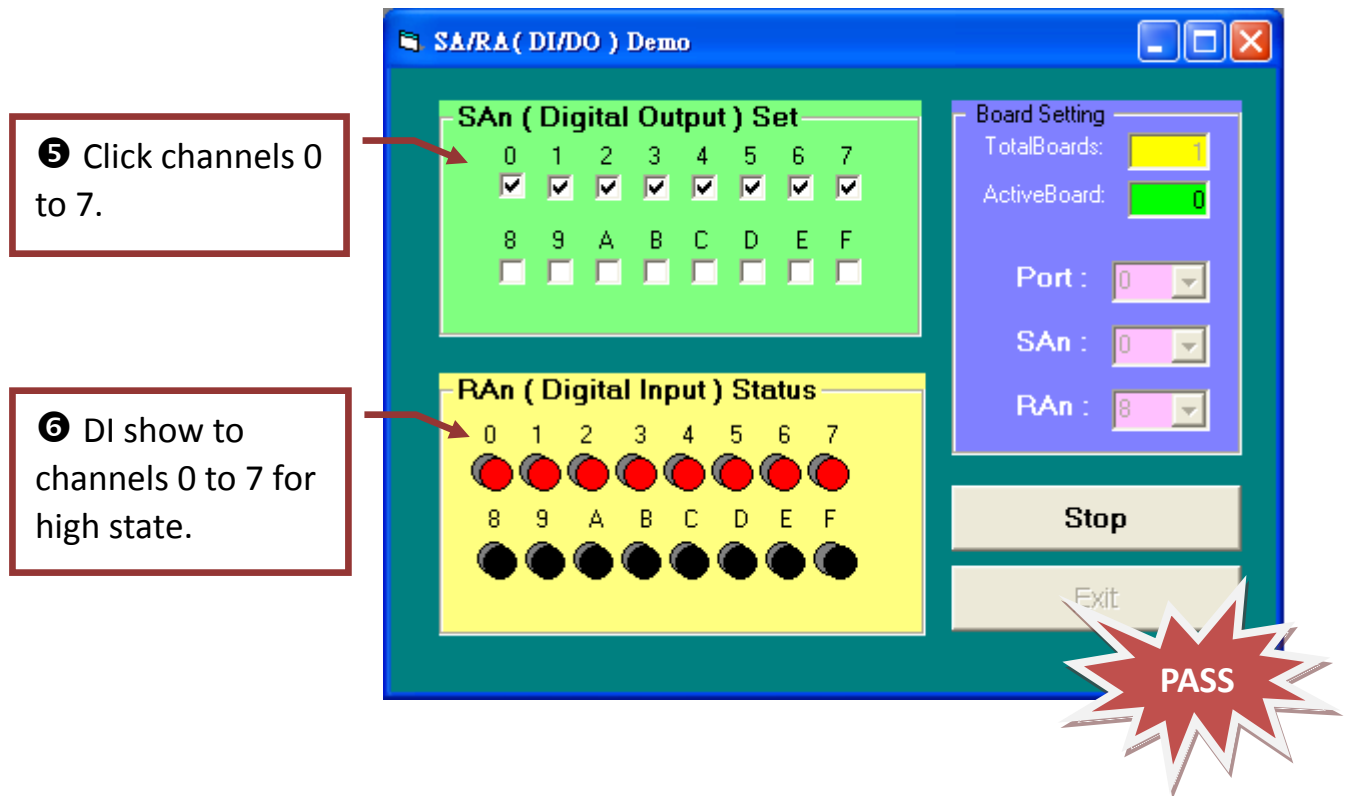
② One FRB-200U/FRe-200 card has been successfully installed in PC.

③ The card numbers start from 0.

④ Click this button.

**Step 5:** Click channels 0 to 7 in the **SAn (Digital Output) Set** field.

**Step 6:** The corresponding Digital Input becomes red for channels 0 to 7 of Digital Output is ON.



## 7 Related Information

- FRB-200/200U Series Card Product Page:  
[http://www.icpdas.com/products/Remote\\_IO/frnet/frb-200.htm](http://www.icpdas.com/products/Remote_IO/frnet/frb-200.htm)
- FR-2053iT, FR-2057iT and DP-665 page (optional):  
[http://www.icpdas.com/products/Remote\\_IO/frnet/fr-2053it.htm](http://www.icpdas.com/products/Remote_IO/frnet/fr-2053it.htm)  
[http://www.icpdas.com/products/Remote\\_IO/frnet/fr-2057it.htm](http://www.icpdas.com/products/Remote_IO/frnet/fr-2057it.htm)  
[http://www.icpdas.com/products/Accessories/power\\_supply/dp-665.htm](http://www.icpdas.com/products/Accessories/power_supply/dp-665.htm)
- Documentation and Software:  
CD:\NAPDOS\FR\_Net\FR\_PCI\_Card\  
[http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr\\_net/fr\\_pci\\_card/](http://ftp.icpdas.com/pub/cd/8000cd/napdos/fr_net/fr_pci_card/)