Advanced Card Systems Ltd.
Card & Reader Technologies

ACR3901U-S User Manual

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Version History

Date	By	Changes	Version
2014-06-07	Danny Deng	● Initial released	1.00.00
		●	

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This section introduces ACR3901U-S Reader using in USB Mode

Tools Requirement:
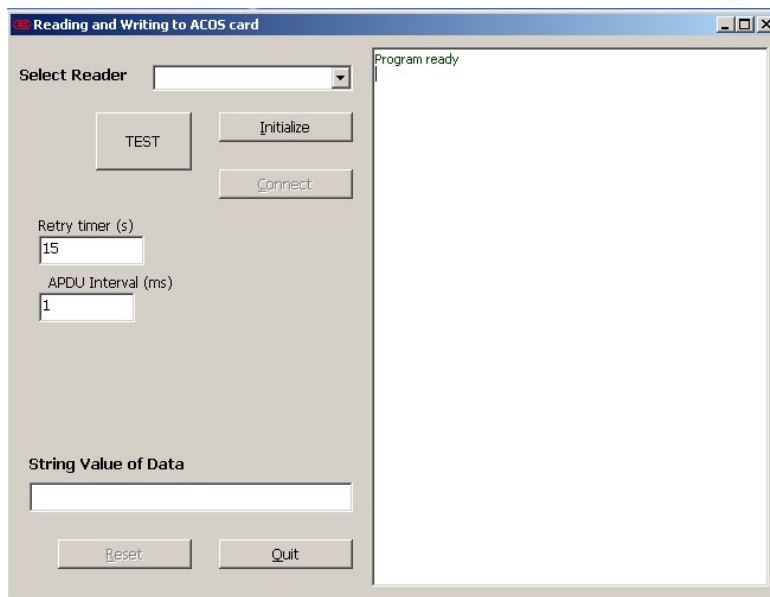
    a.   ACR3901U-S reader

    b.   ACOS3 Card

    c.   USB Cable

    d.   PC & USB Mode loopback program "ESD4.exe"

Test Procedure:

1.   Plug the ACR3901U-S reader into PC through USB cable

2.   Turn the switch on reader to "USB Mode" (as the picture). *__For the first time of use, user needs to install a reader driver on PC. If the Windows could not install the__ "Microsoft Usbccid Smartcard Reader (WUDF)" __driver automatically, please refer to section 3.0 – ACR3901U-S USB Mode Driver Installation to install the reader driver.__*

3.   Under the path ACR3901U-S1_TestProgram/USB_Mode, Double-click ESD4.exe, you will see the following interface
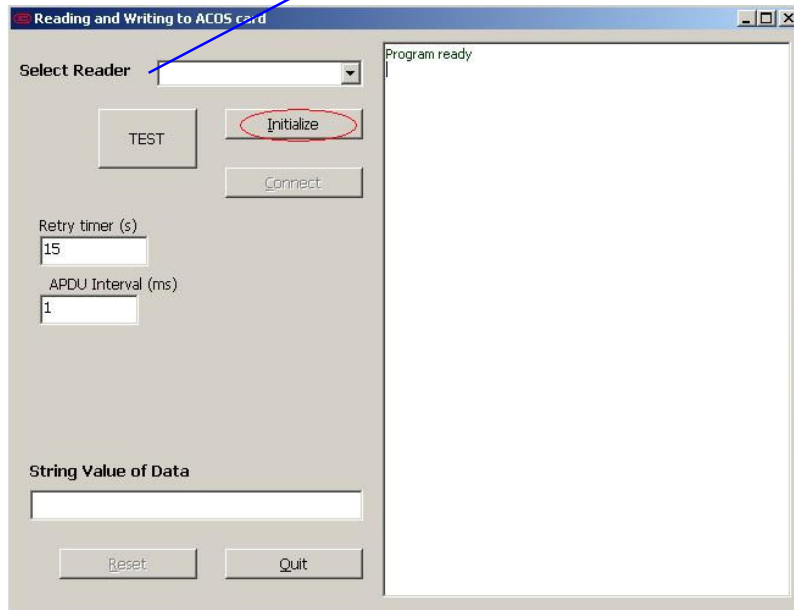

    __The test program needs "Visual Basic 6.0 run time files" on PC, if "ESD4.exe" could not be opened, please install "vbrun60sp5.exe" first under the path: "ACR3901U-S1_TestProgram\USB_Mode\", before running the program.__
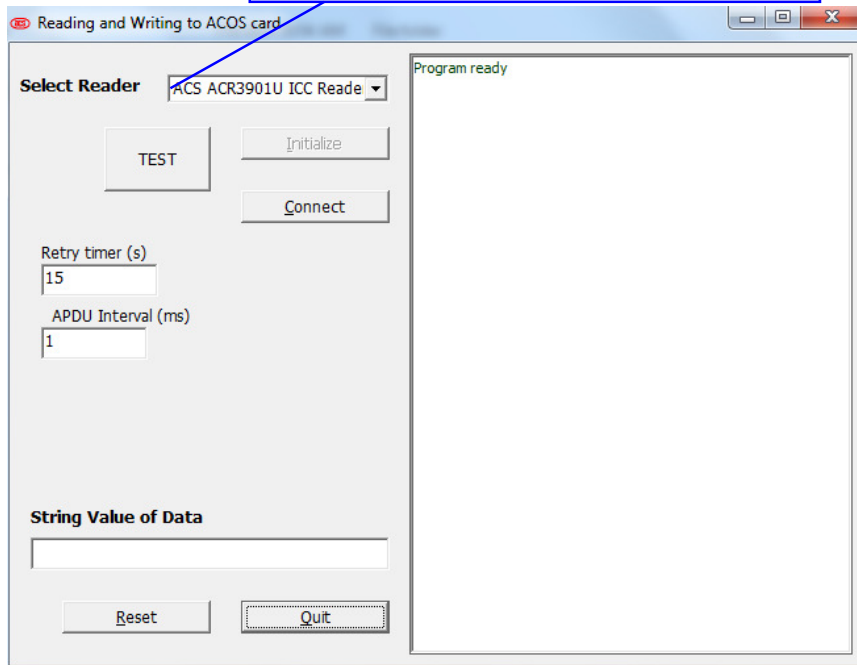
4. Step1

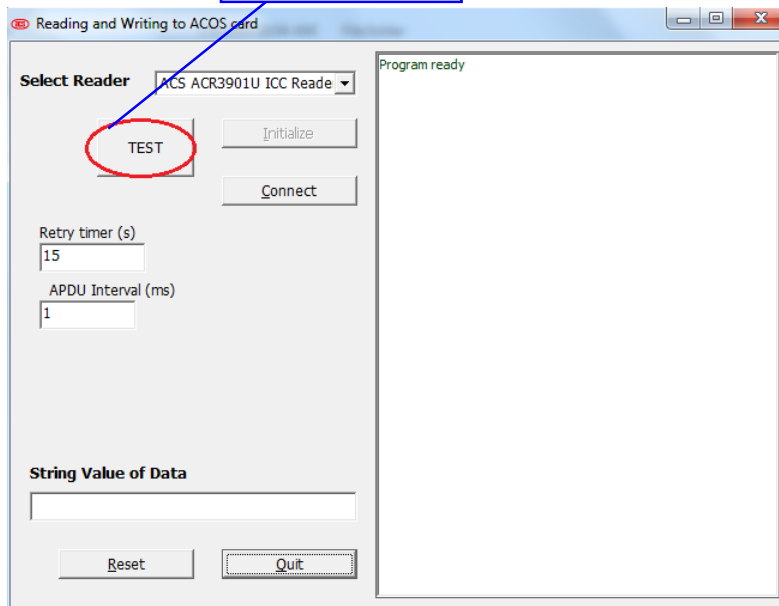Press "**Initialize**" button to Search the smart card reader name

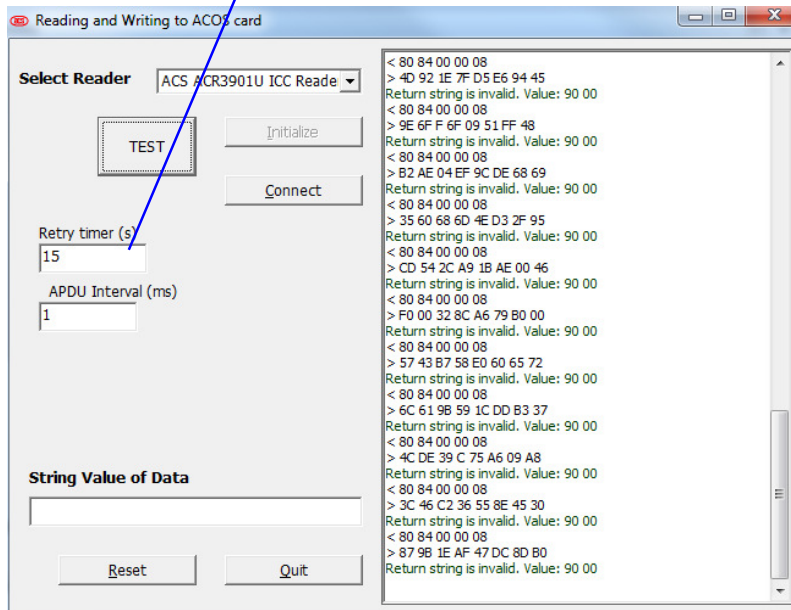Then you will find the "**ACS ACR3901U ICC Reader 0**"
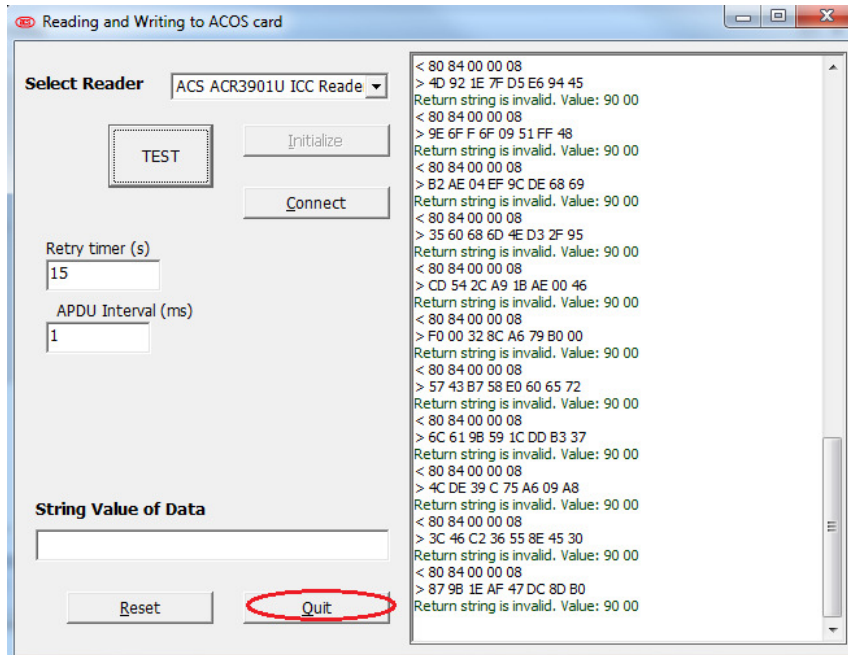
5. Step2

Press "**test**" button

6. Now you will see that the program is working

The retry interval should be set to 15

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7. Step3: After the testing, please press "Quit" button.

8. Unplug the reader cable and then switch the reader to "OFF".
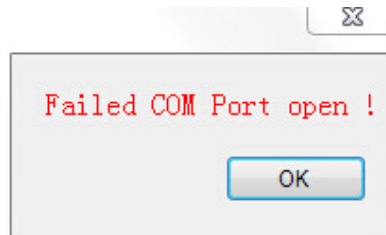
2.0. Bluetooth Mode Loopback program

This section introduces ACR3901U-S Reader using in Bluetooth Mode
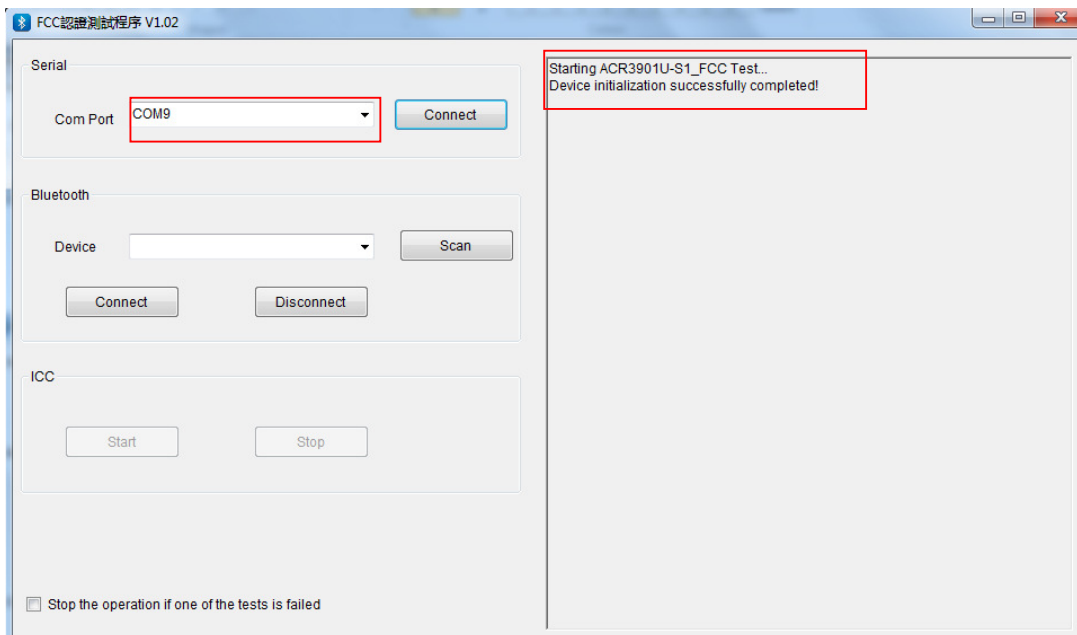
Tools Requirement:

- a. ACR3901U-S reader
- b. ACOS3 Card
- c. USB Cable
- d. Bluetooth 4.0 USB Adaptor Dongle
- e. PC & Bluetooth Mode loopback program "ACR3901U-S1_BT.exe"

Test Procedure:

1. Plug in the Bluetooth 4.0 Dongle into PC **(*For the first time of use, please install the driver, please refer to section 4.0 – Bluetooth Adaptor Driver Installation)**

2. Run "ACR3901U-S1_BT_Test.exe" in folder ACR3901U-S1_TestProgram/BT_Mode/

3. If a message "Failed COM Port open" shows, press "OK" to enter program.

4. The program will be shown as the picture below. In "Com Port" selection column, select the suitable com port and then press "Connect" to initialize the Bluetooth adaptor. "Device initialization successfully completed!" will be shown if success. (please refer to section 4.0 to confirm which com port should be selected)
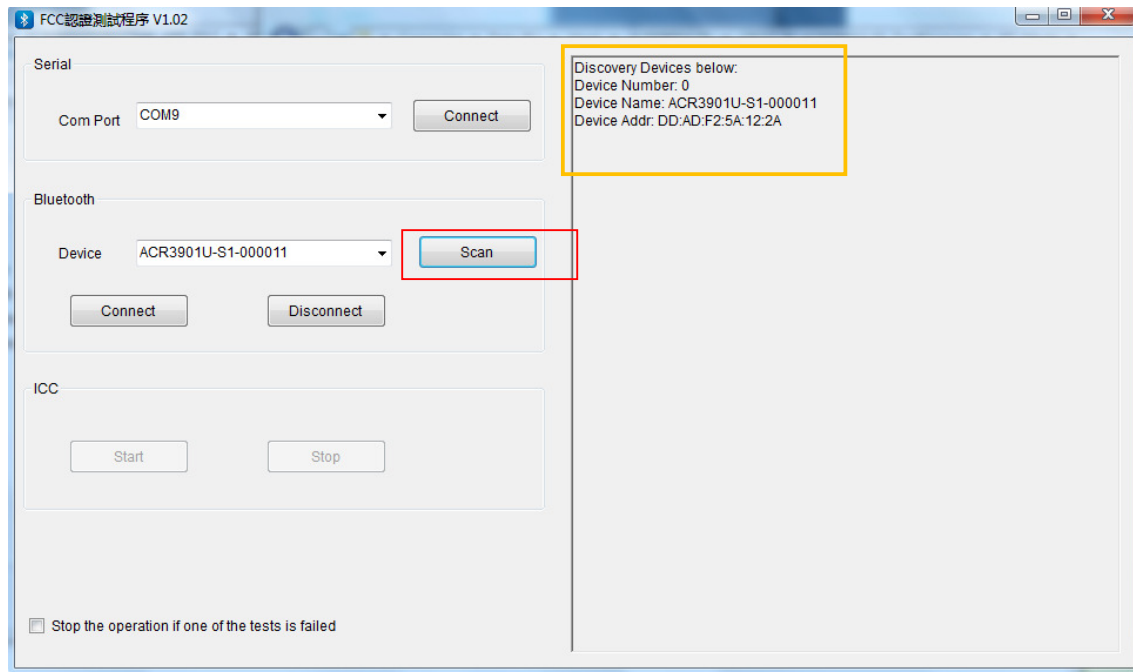
5. Insert the "ACOS3" test card into the ACR3901U-S reader.

6. Plug the ACR3901U-S reader into PC through USB cable for providing power.

7. Turn the ACR3901U-S reader to "Bluetooth Mode" and check that the green LED on the reader will slowly flash. It means the reader is ready to be paired with.
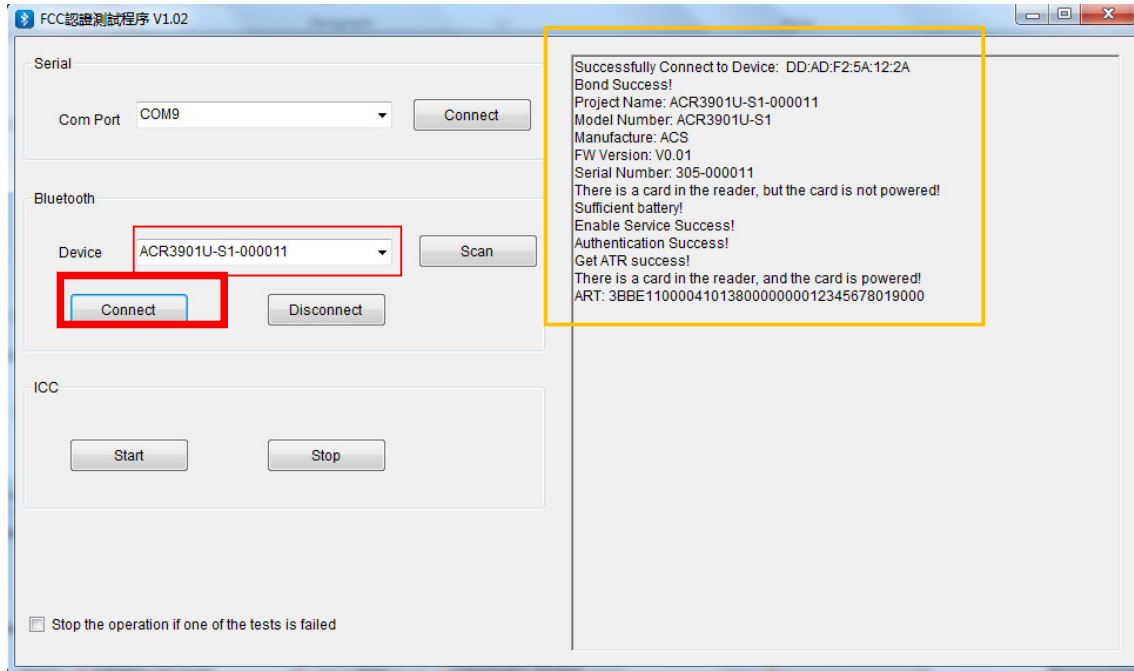

8. Press the "Scan" button to scan the Bluetooth device. If a pairing ACR3901U-S reader is discovered, it will display the reader information as the picture below:
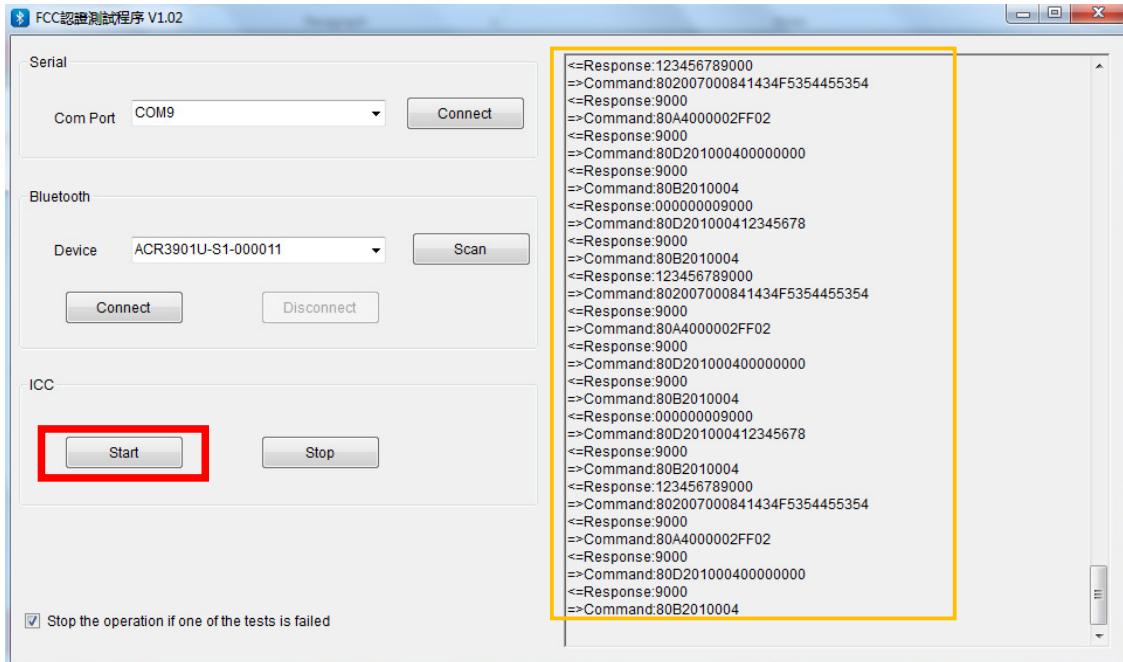
9. Select the corresponding ACR3901U-S reader and then press "Connect" under Bluetooth device. If connection is successful, there will be the messages showing that the connection is successfully, as the picture below:
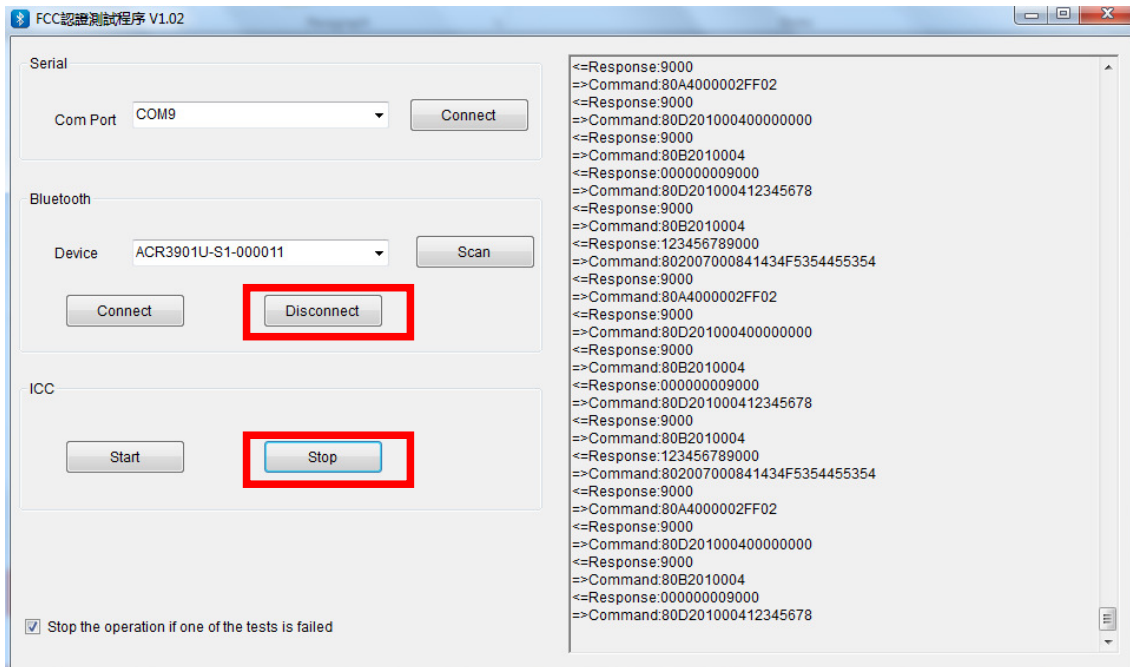

10. When the ACR3901U-S reader is successfully connected to the program, the blue LED and the green LED on the reader will flash slowly at the same time.

11. Press "Start" button to start the test, now you will see the program is running for reading/writing card. The program running information will be shown on the message window.
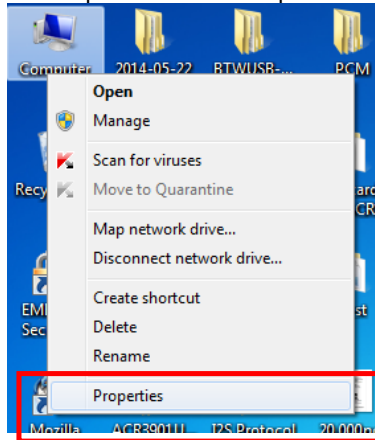

12. After the testing, press "Stop" to stop the card test; and then press "Disconnect" to disconnect the ACR3901U-S reader and the program. There will be a popup window to show the device successfully disconnected, press "OK".
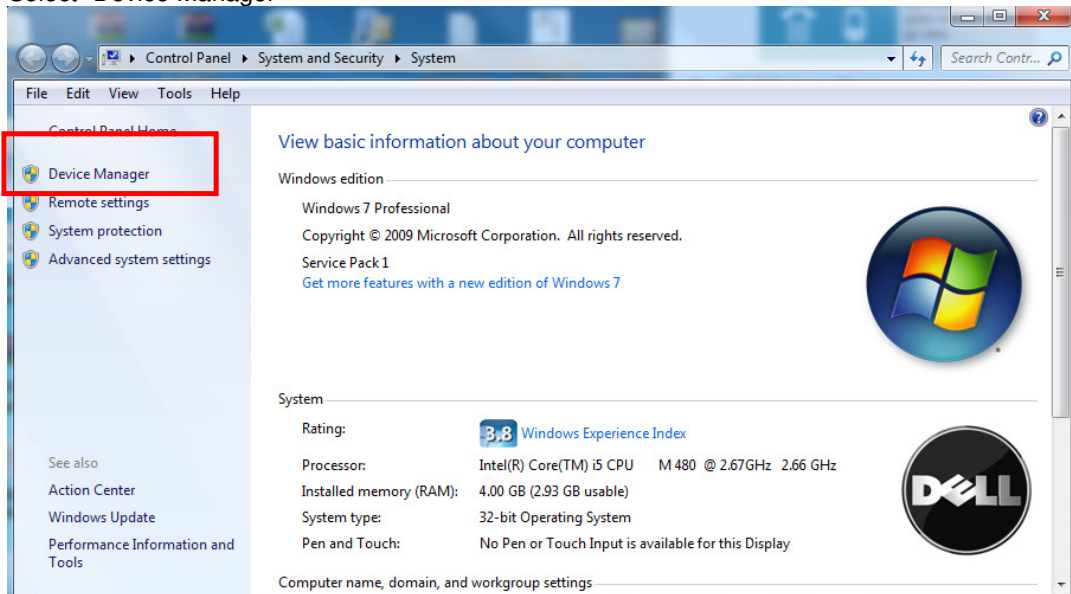

13. Close the test program; turn the reader to "OFF" and unplug it from PC.

3.0. USB Mode Driver Installation

1. Connect the ACR3901U-S Reader and plug the USB cable into PC, if the PC could not install the driver "Microsoft Usbccid Smartcard Reader (WUDF)" automatically. User needs to unzip and use the driver under ACR3901U-S1_TestProgram\USB_Mode\USBModeDriver\

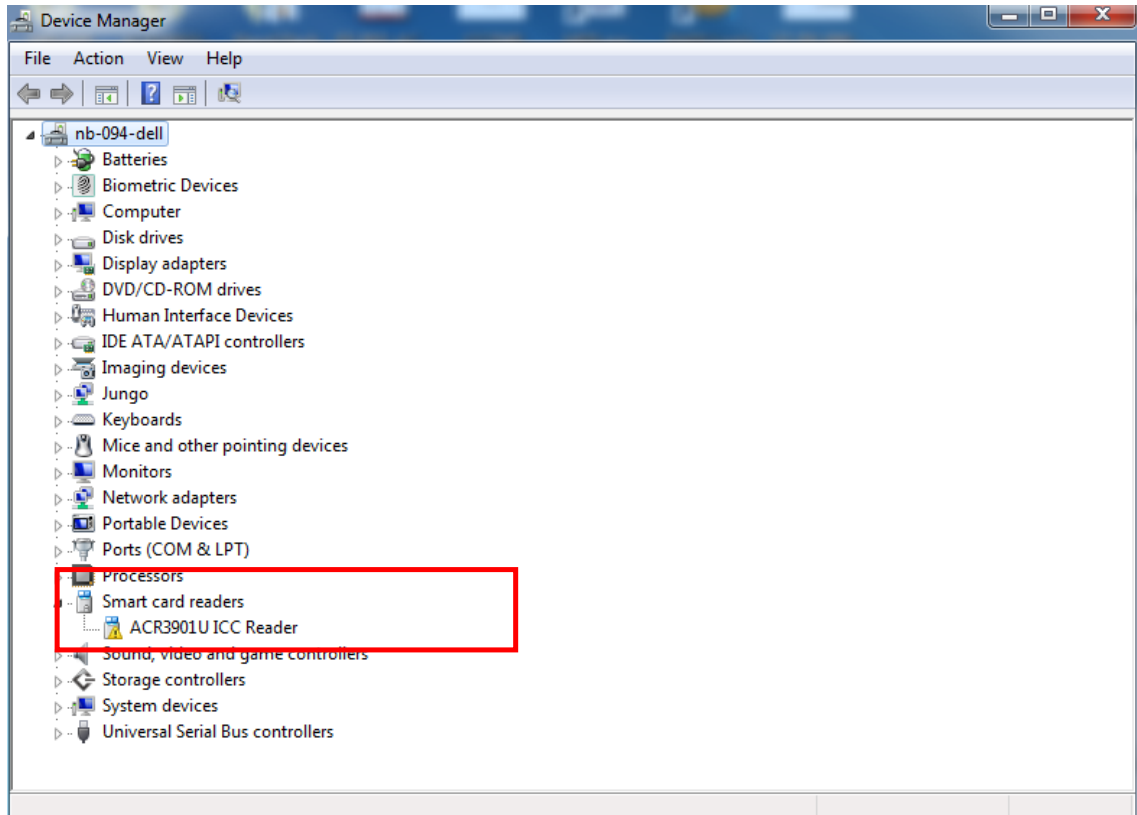2. At Computer icon, right click on "Computer" select "Properties"
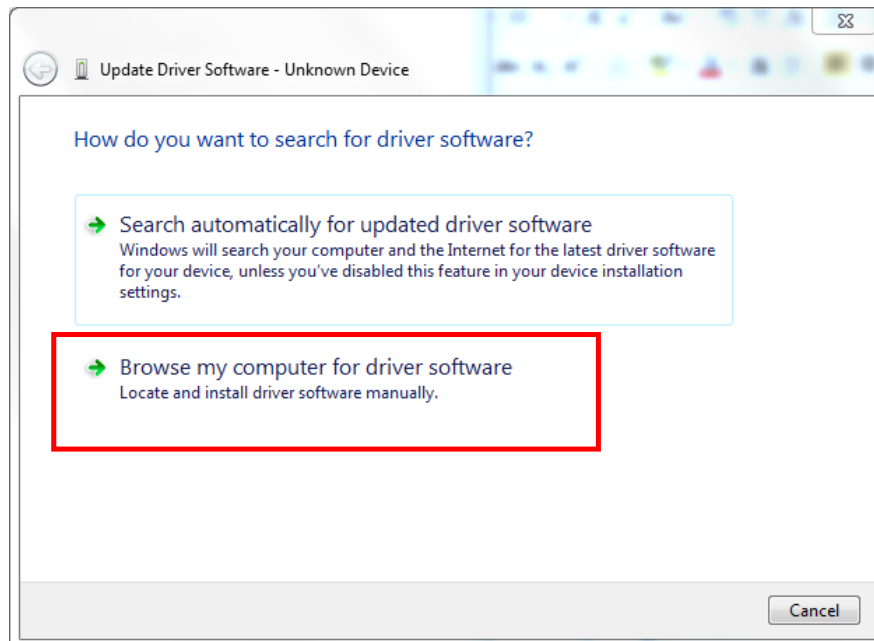

3. Select "Device Manager"

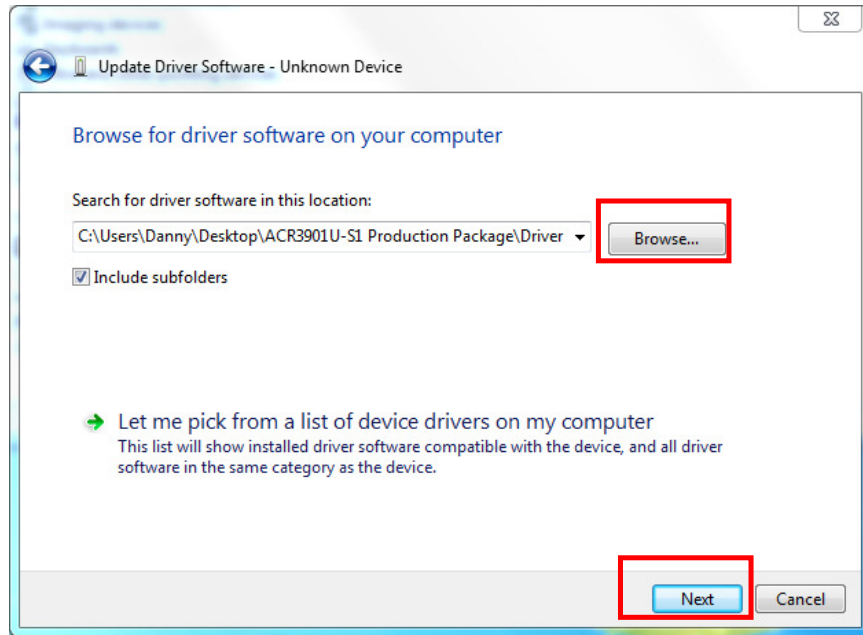4. Check Smart card reader, use the mouse to right click "ACR3901U ICC Reader", and select "Update device software…"

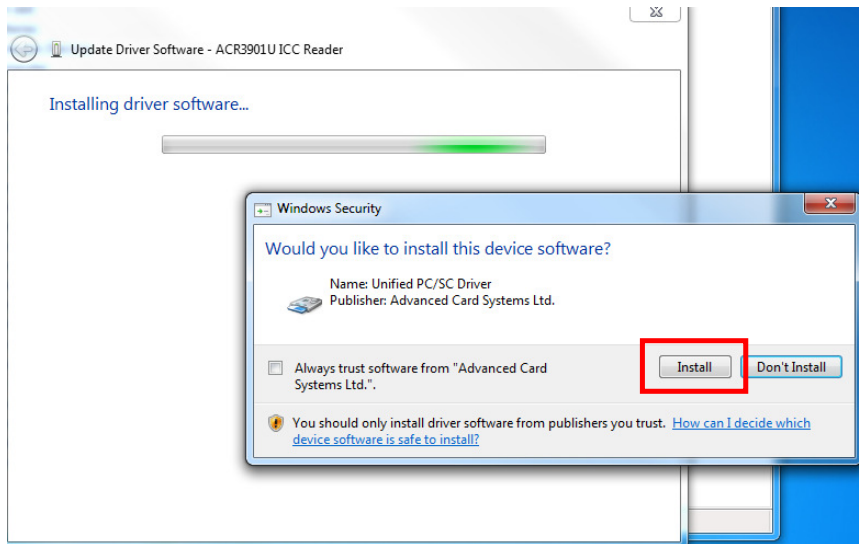5. Select "Browse my computer for driver software"

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6. Press "Browse" and select the unziped USB Mode driver under the path:
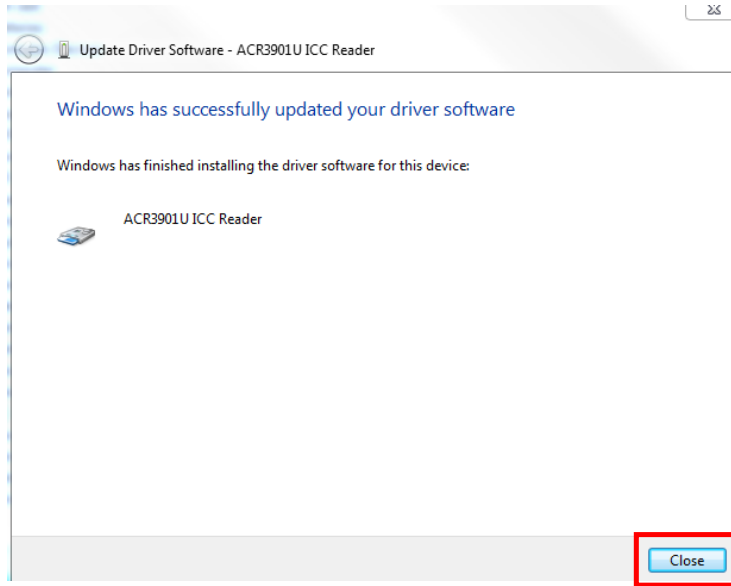
\ACR3901U-S1_TestProgram\USB_Mode\USBModeDriver

7. Press "Next"to install the driver.

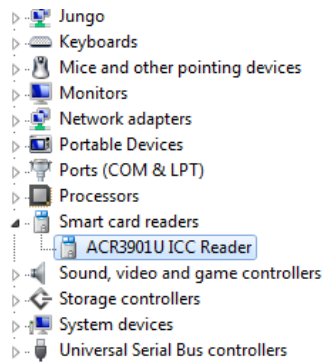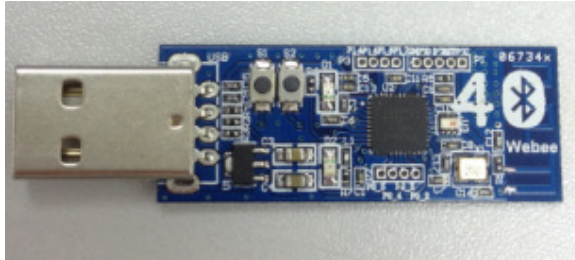8. The security window may popup and asks to confirm installation. Press "Install"

9. When the driver has finished installation, Press "Close"

10. In device manager, user could check the reader driver with name "ACR3901U ICC Reader" is ready.
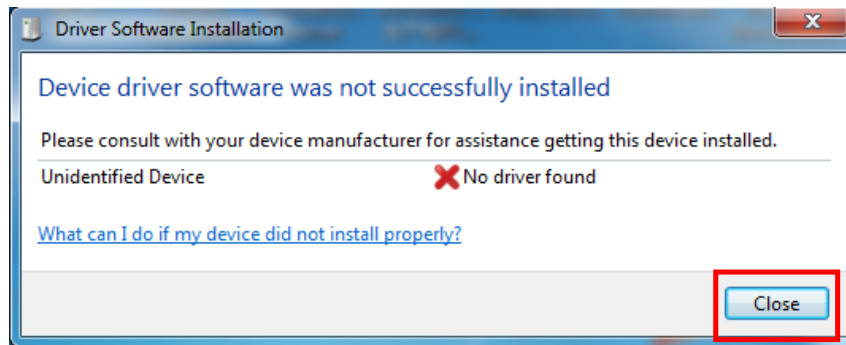
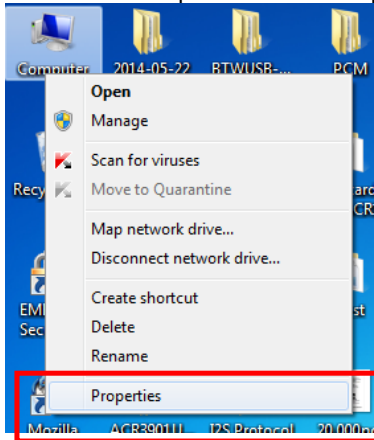## 4.0. Bluetooth Adaptor Driver Installation

Bluetooth 4.0 USB Dongle

1. Insert the Bluetooth Adaptor into PC, if the PC automatically popups the driver software installation window, just wait until the driver not successfully installed, press "Close".
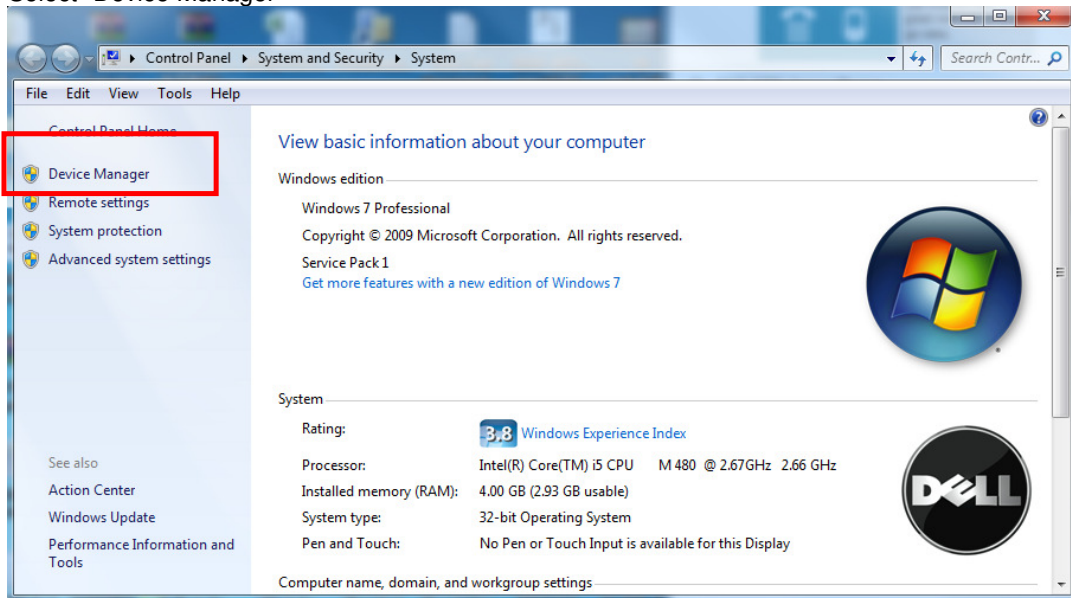

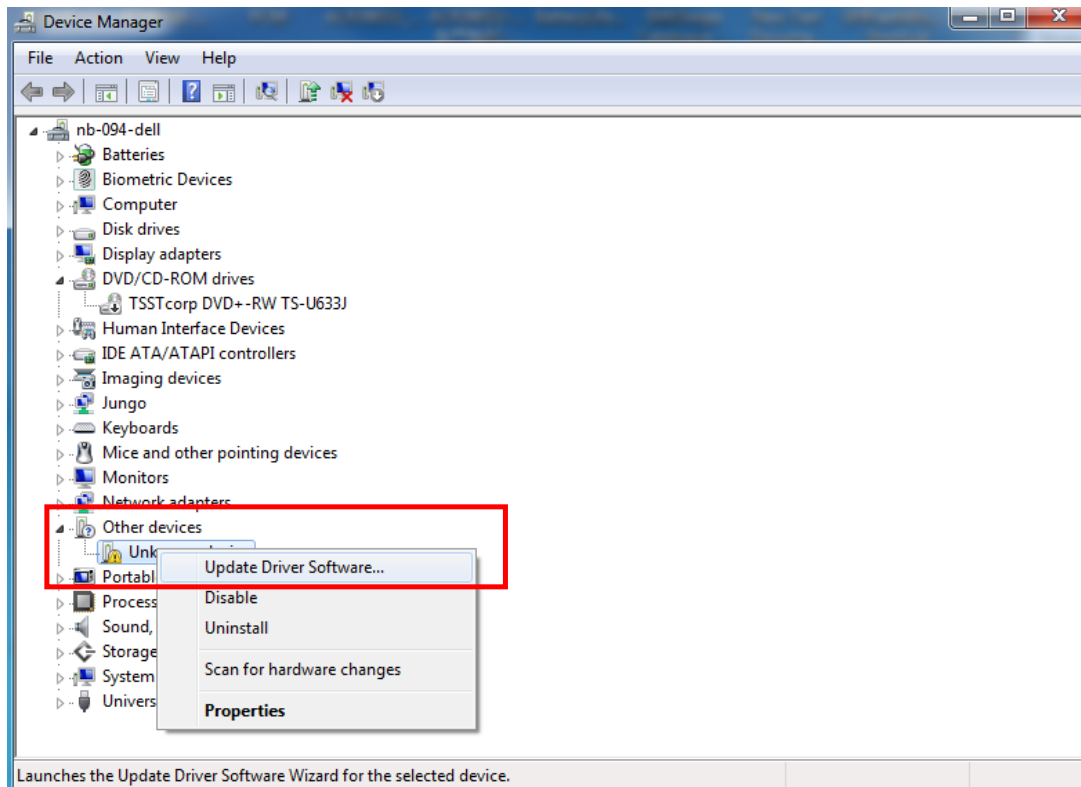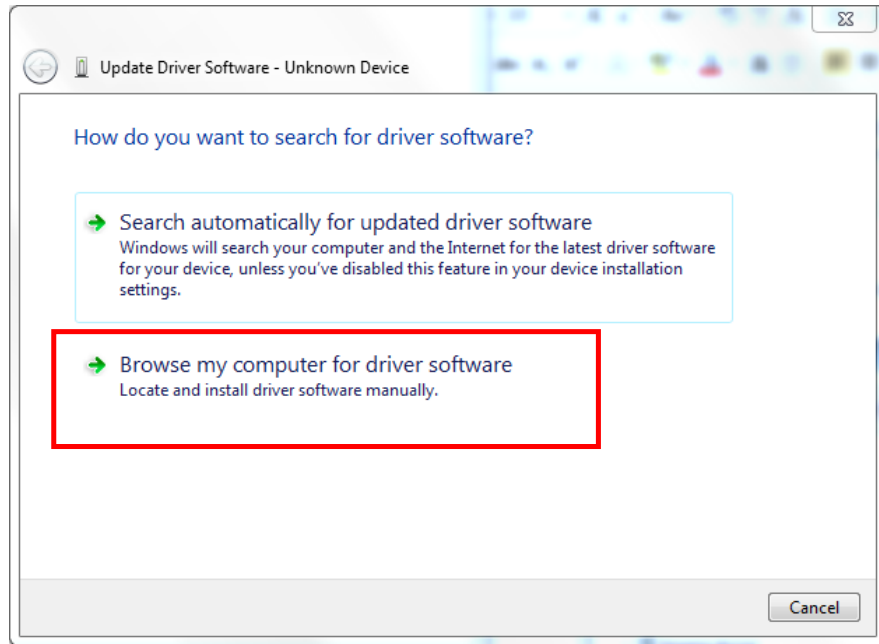2. Mouse move to Computer, right click on "Computer" select "Properties"

3. Select "Device Manager"

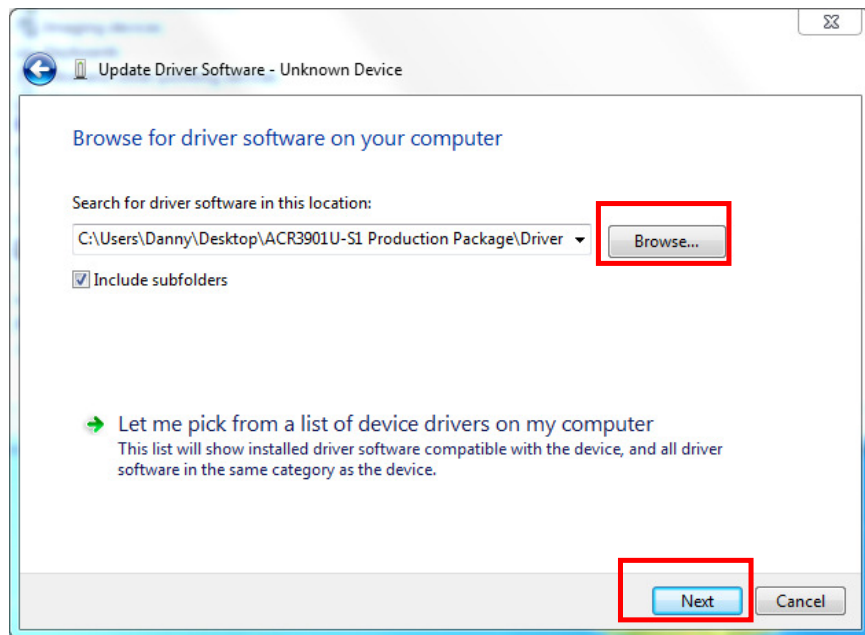4. Check "Other devices", use the mouse to right click "Unknown device", Select "Update device software…"

5. Select "Browse my computer for driver software"
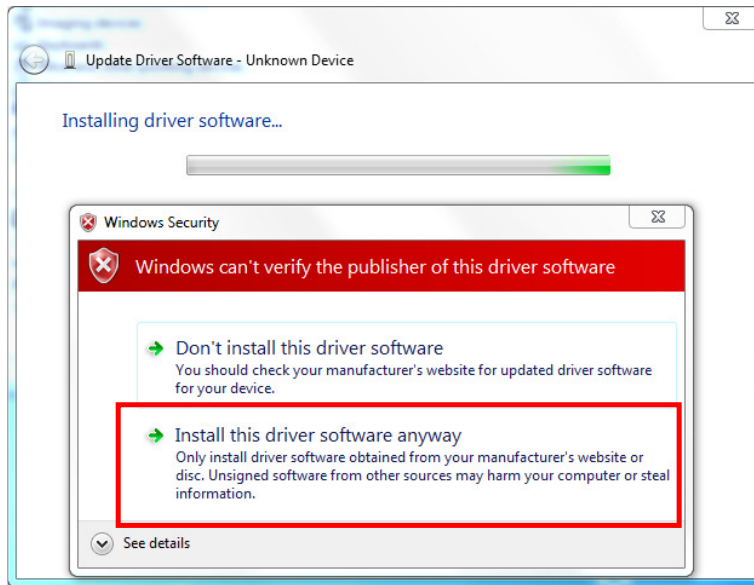

6. Press "Browse" and select the Bluetooth adaptor driver "ccxxxx_usb_cdc.inf"under the following path:

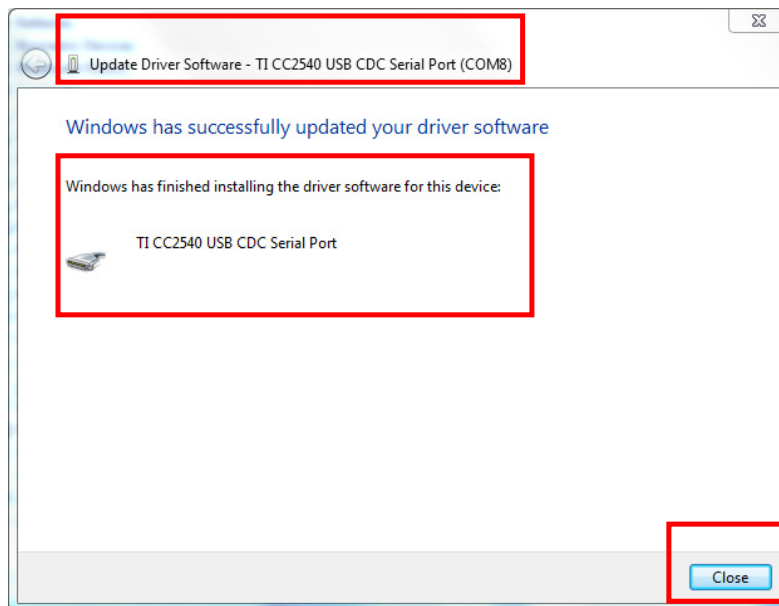   \ACR3901U-S1_TestProgram\BT_Mode\AdaptorDriver\ccxxxx_usb_cdc.inf

7. Press "Next"to install the driver.

8. It the windows security warning message shows as below，select "Install this driver software anyway "to continue the installation.
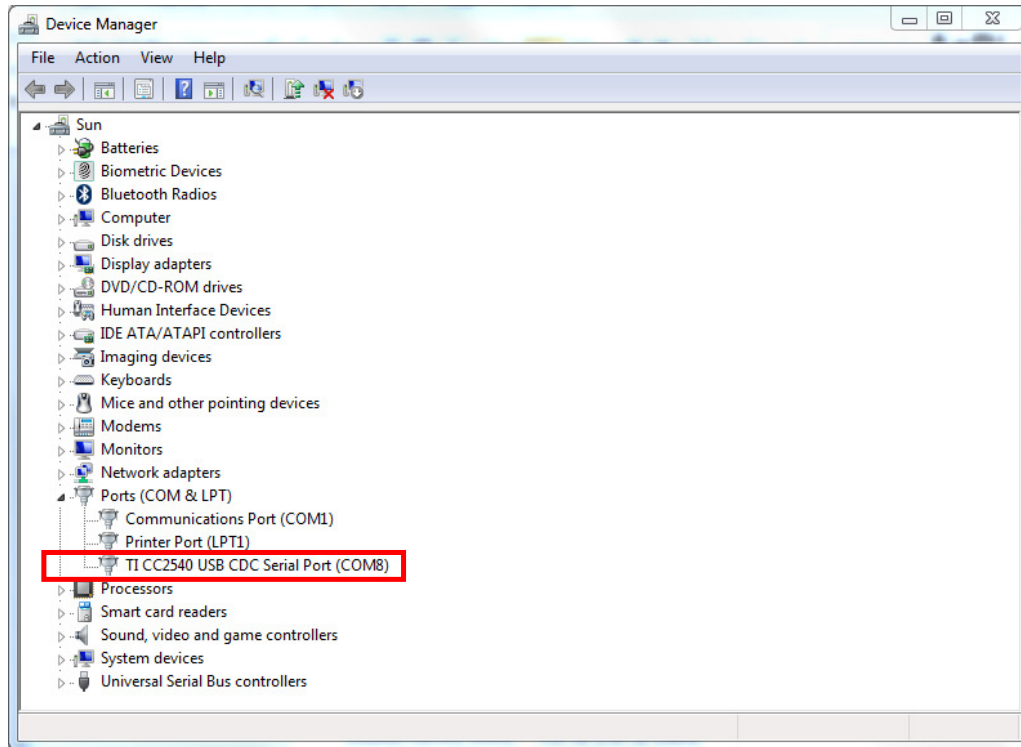

9. Wait until the driver updates successfully, the message will shows which COM Port is assigned to the Bluetooth adaptor. (*As the example below, the assigned com port is COM8.) Press "Close" to finish the installation.

10.   After driver installation successfully finish, user can check the assigned com port again from "Device Manager"

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.