Z-RS-DC001 Manual

List

1. Introduction:

   Thanks for purchasing Zoll's dual band 802.11 a/b/g/n embedded TCP/IP stack Wifi CF card, R Series Data Comm. The Wifi CF card provides a Wifi interface only to the CF interface of Zoll's R Series Defibrillator. Because the CF card has a fully self-contained CF-to-Wifi functionality, it won't use the processor bandwidth of the Defibrillator to do data transfer.

   1.1 Features:

   1.30dBi/1.97dBi Embedded PCB printed Antenna @ 2.4GHz/5GHz

   Compliant to 802.11 a/b/g/ and single stream 802.11n

   2.4/5 GHz, 802.11n RF transceiver

   Fully Self-contained CF-to-wireless functionality – does not require any host processor bandwidth

   Support the data rate up to 65Mbps

   Support WPA/WPA2-PSK/WEP (64 and 128 bits) and TKIP mode of security in infrastructure mode

   Terminates TCP and UDP connections

   Support Windows XP/7

   Support CF Interface

   1.2 Specification:

   Standard: 802.11 a/b/g/n

   Interface: CF Interface

   Bandwidth: 2.412 ~ 2.462 GHz @ 2.4GHz band and 5.180 ~ 5.825GHz @ 5GHz band

   Modulation: OFDM with BPSK, QPSK, 16QAM, 64QAM, BPSK, QPSK, CCK

   Data Rate: 65/58.5/52/39/26/19.5/13/6/5/54/48/36/24/12/9/6/11/5.5/2/1 Mbps

   Security: WPA/WPA2-PSK/WEP (64 and 128 bits) and TKIP mode

   Antenna: 1.30dBi/1.97dBi Embedded PCB printed Antenna @ 2.4GHz/5GHz

   OS: Windows XP and Windows 7

   LDE Indicator: Power on/off

   TX power: 9dBm @ 802.11a, 14dBm @ 802.11b, 11dBm @ 802.11g, 10dBm @ 802.11n, 8dBm @ 802.11a/an

   Sensitivity: -70dBm @ 802.11a, -75dBm @ 802.11b, -70dBm @ 802.11g, -69dBm @ 802.11n, -67 dBm @ 802.11an

   Dimension: 60.5 x 41.7 x 6.45/5 mm

   Temperature: 0 - 55°C

Humidity: 20% - 95%

Certification: FCC, IC

2. Installation Procedure

Note1: Please notify if the desktop or laptop PC include the PCMCIA interface or CF interface.

Note2: Please notify if the CF card is installed in the desktop or laptop PC.

2.1 Open the device manager

a. Press right button and select "Management" to the Computer Management.

b. Select the device management to open it, which is showed as follows:
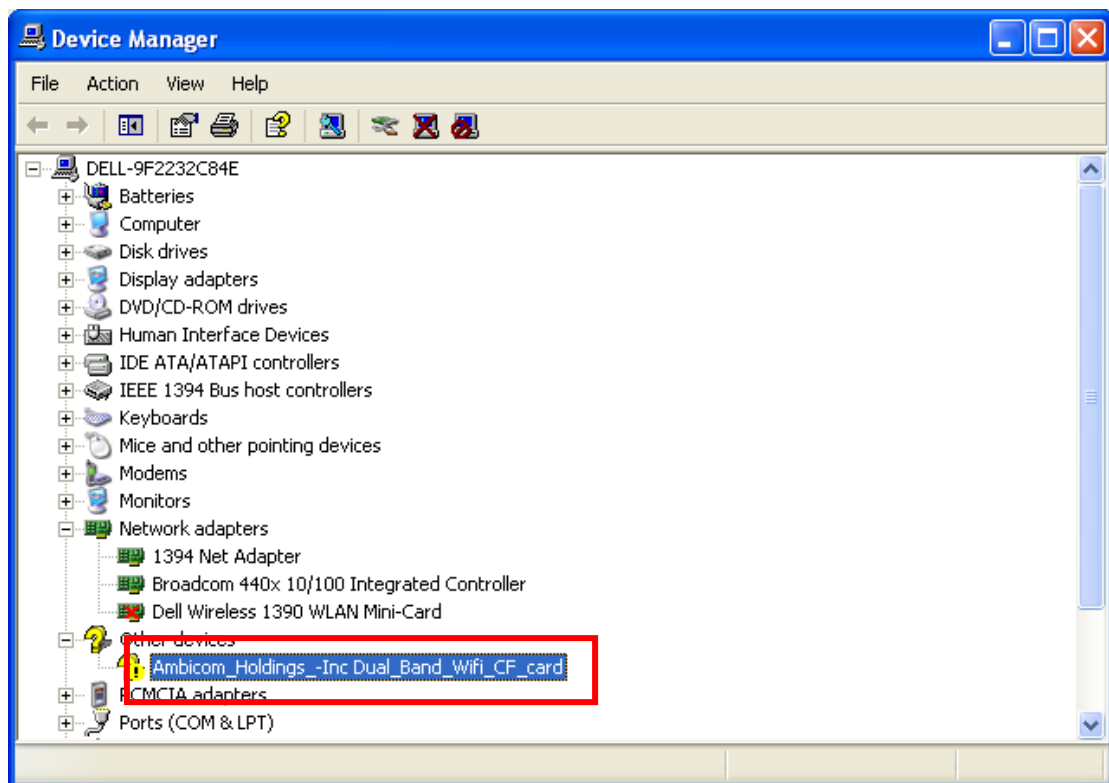
2.2 Install the driver

a. Press the left button on the PCMCIA interface to show all PCMICA devices.

b. Press the right button on the "Ambicom_Holdings –Inc dual_Band_Wifi_CF_card" and select "Modify Driver".

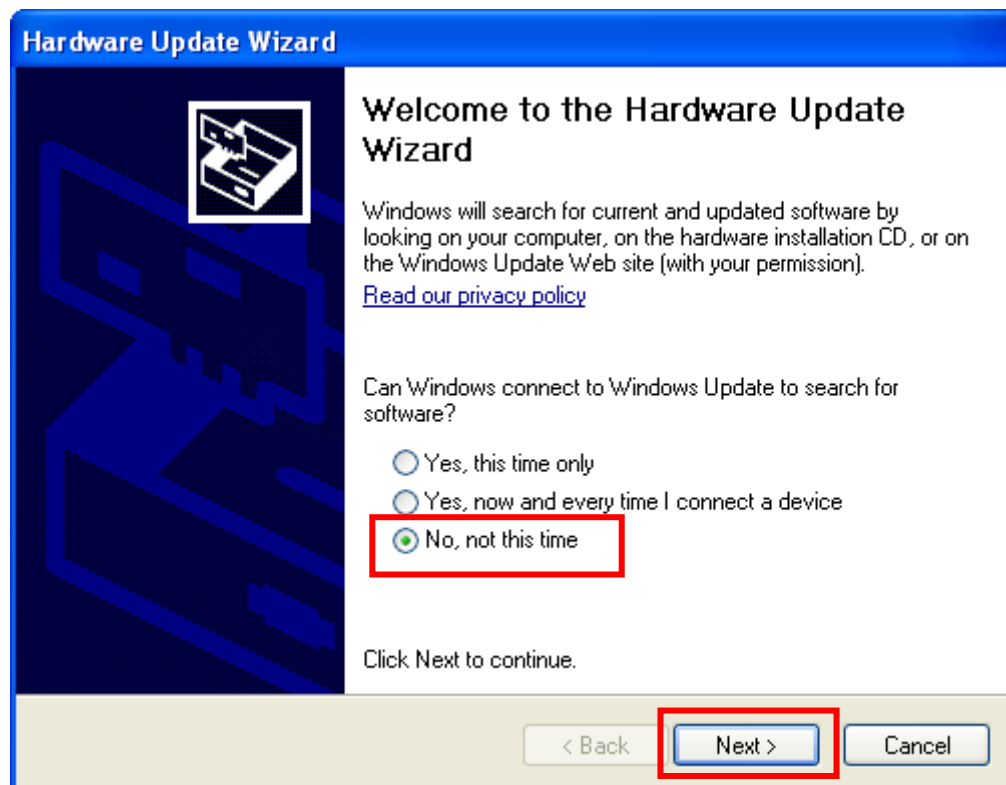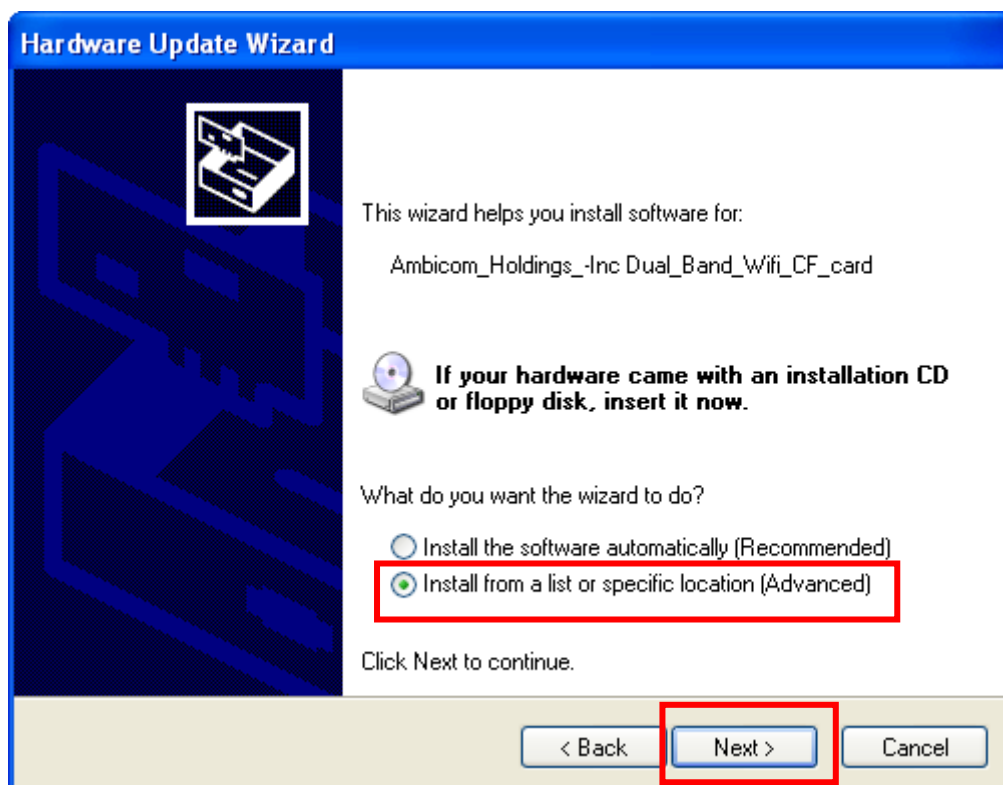c. Please refer the figure 1 to figure 12 and follow the instruction of the Wizard to complete the driver installation.
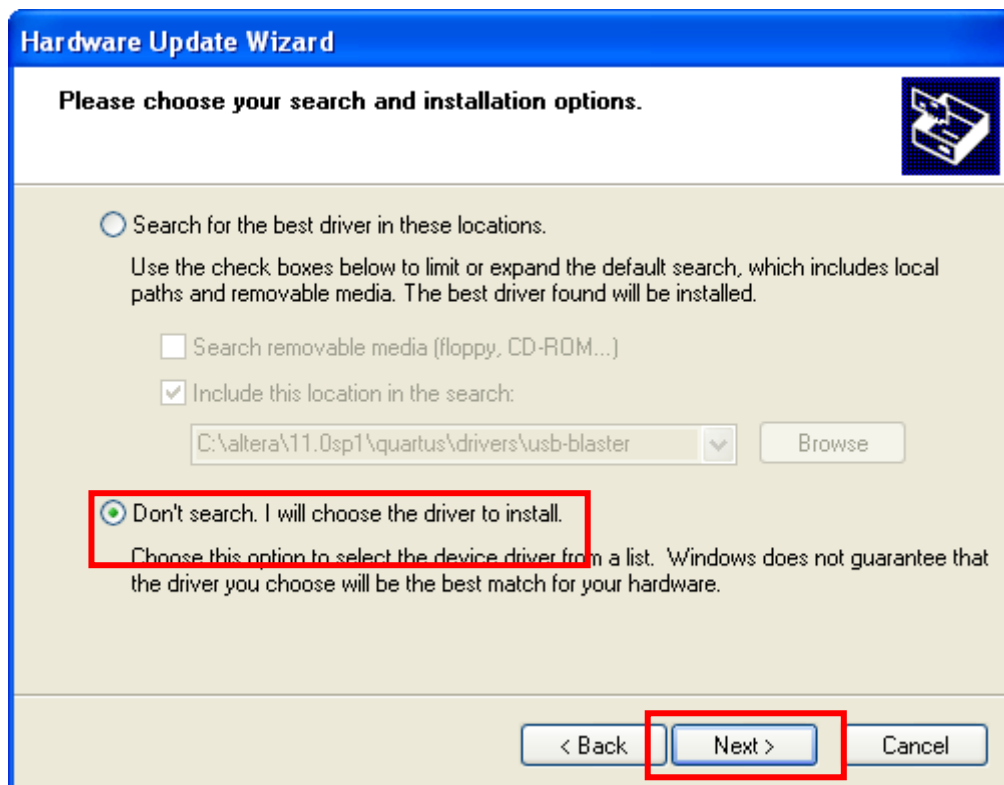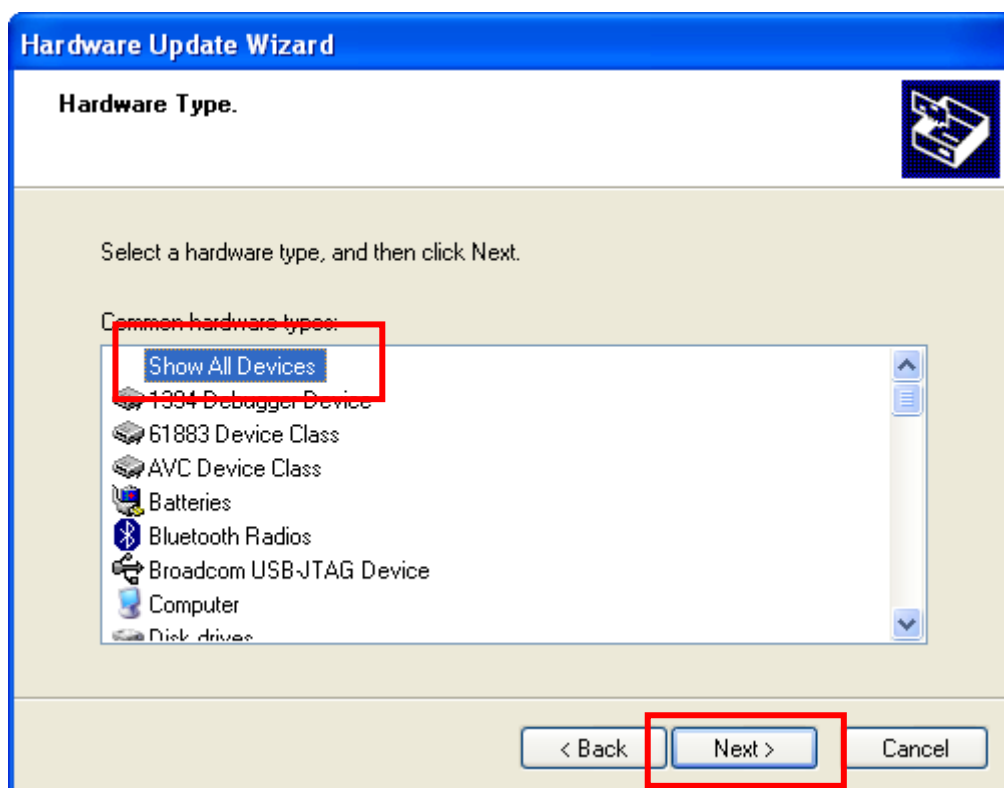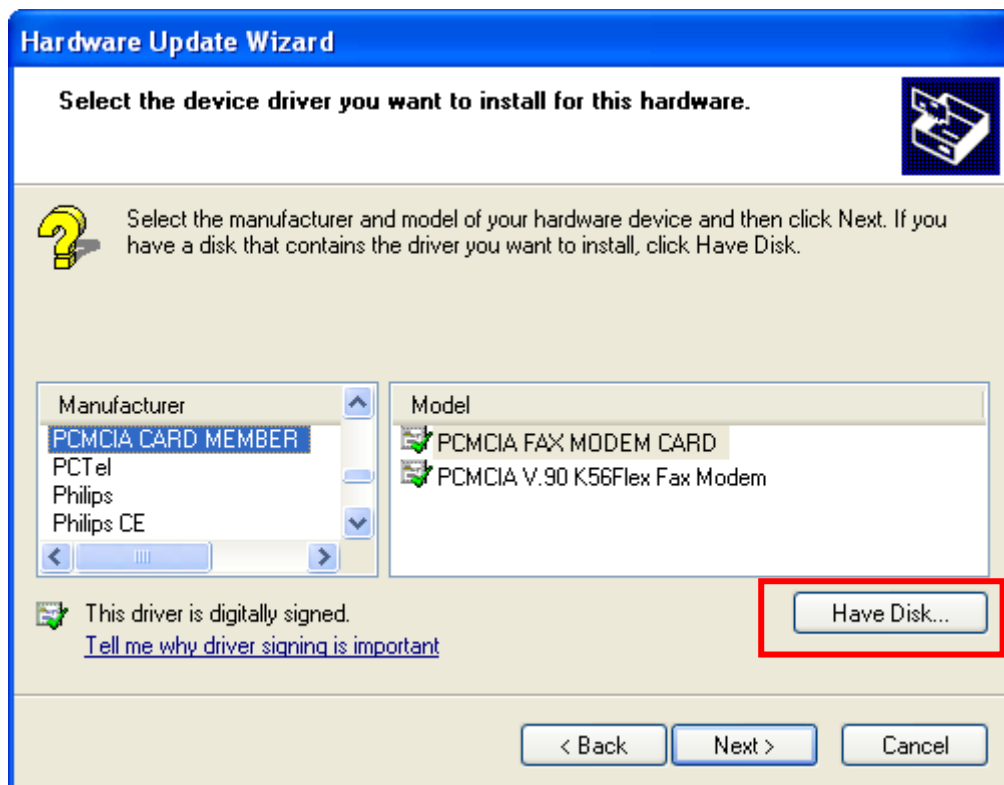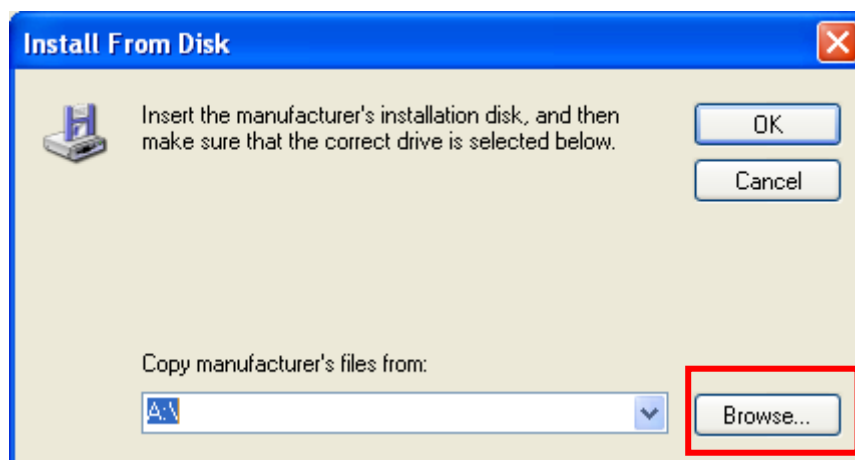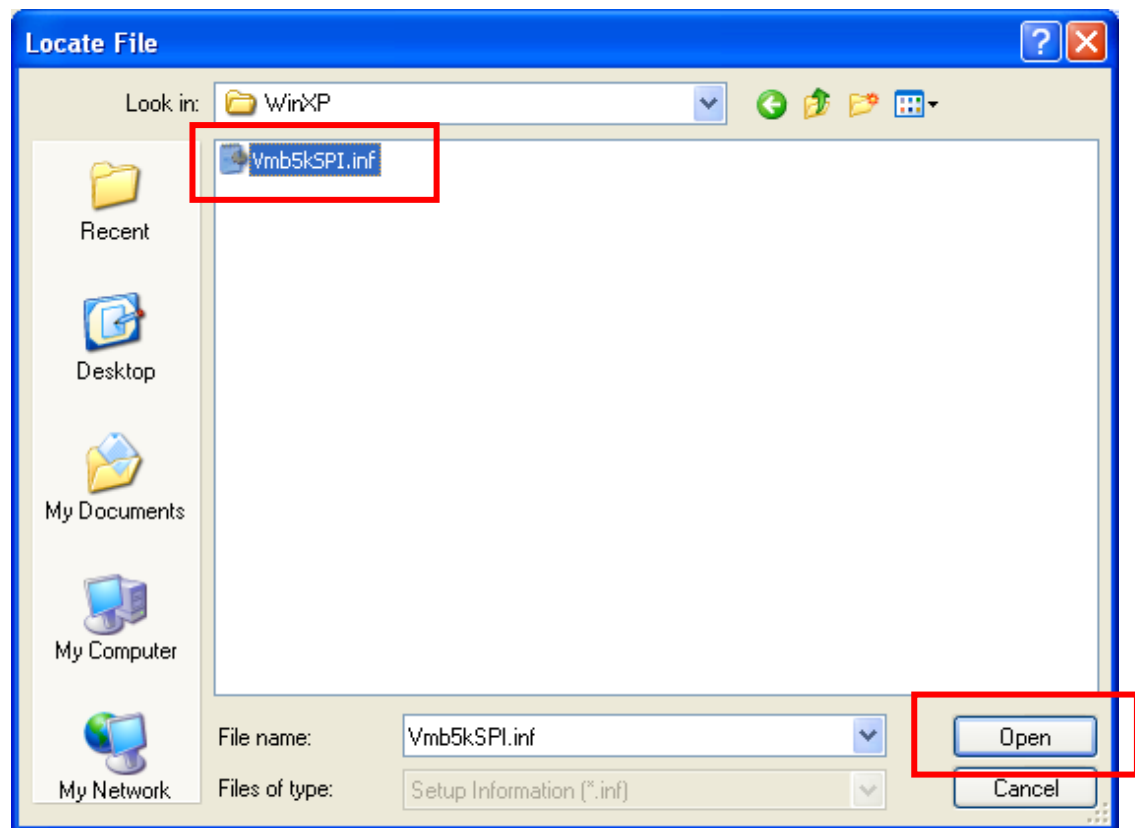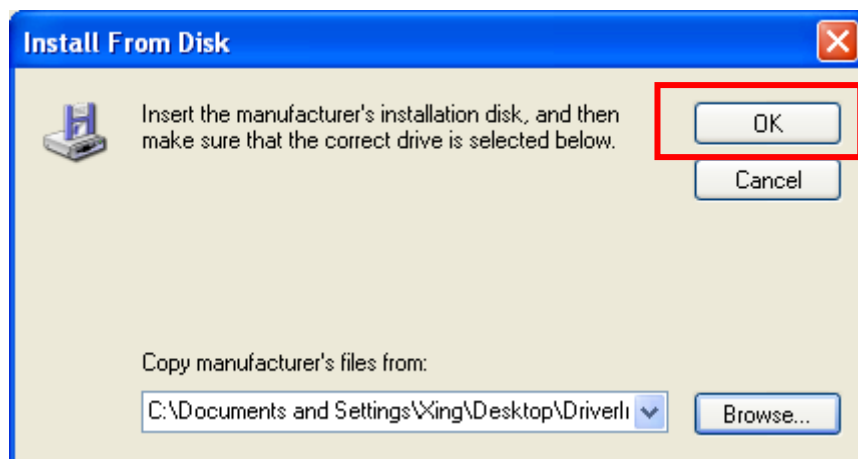
Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

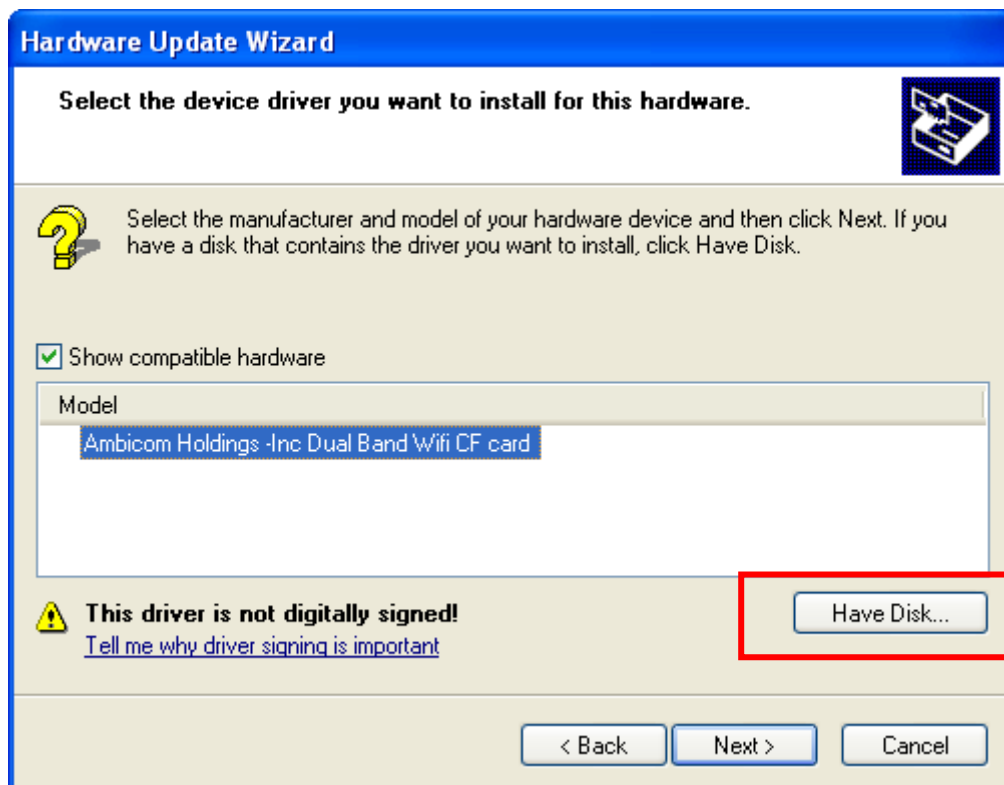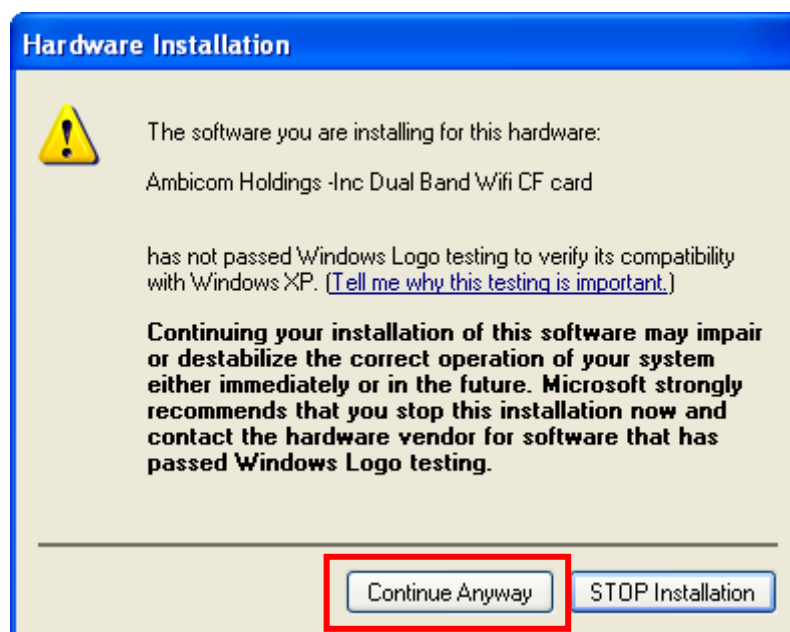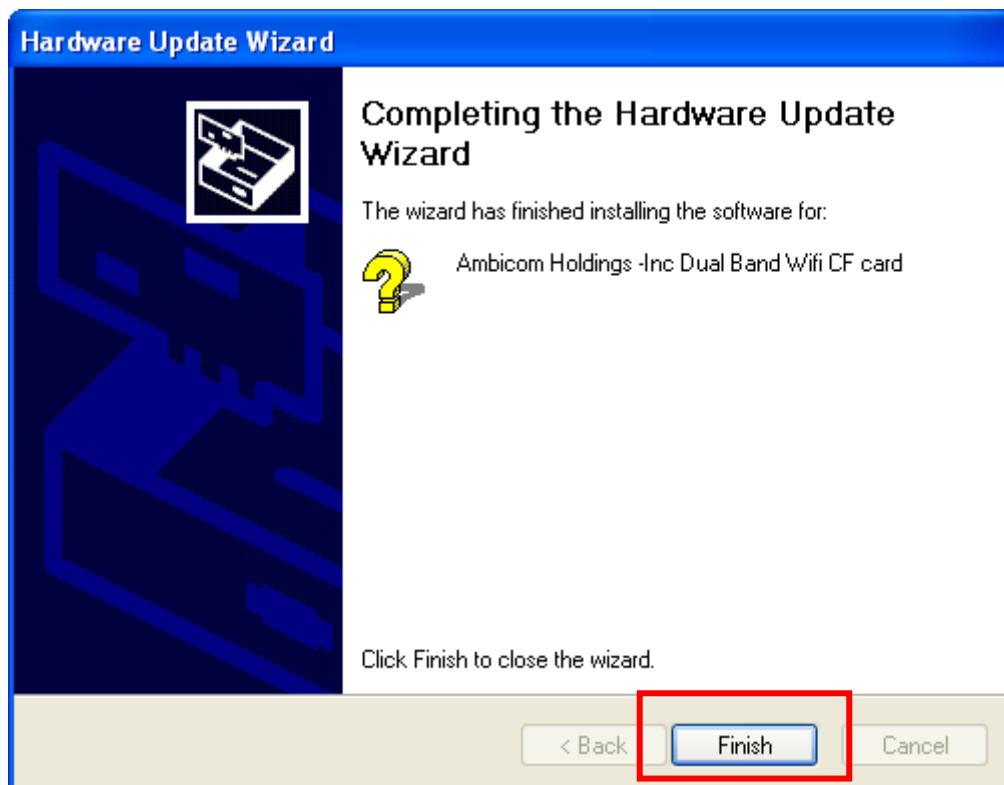Figure 9

Figure 10

Figure 11
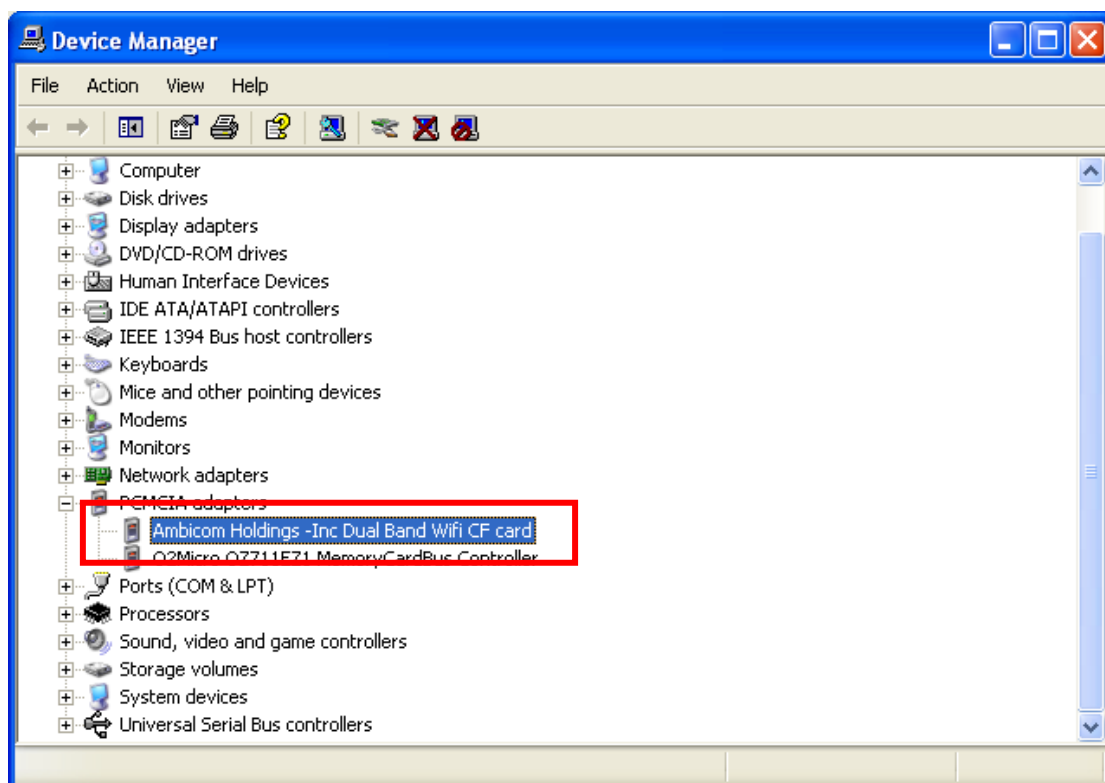
Figure 12

3   Application Software and Data Transfer

3.1 Install RSeries WifiConfigure.exe

a. The PC has to be installed .Net 3.5 framework before run WifiConfigure.exe
b. Copy the WifiConfigure.exe in the CD to your PC.

3.2 Data Transfer

a. Please refer the figure 13 to fill the setting
b. Select DHCP or Static
c. If you select Static, you have to key in the IP address in "Local IP Address"
d. Check "Use DNS" and fill the IP address of DNS server to the "Primary DNS" and "Secondary DNS"
e. In Wifi Radio of Wifi Setting, select "b/g/n (2.4GHz)" or "a/n (5GHz)"
f. Enter a SSID you want to join in "Network Profile 1".
g. Enter the Server IP and Server port in Defib History Transfer.
h. Enter the port number of the Upload Server
i. In network connection, select "Network Profile 1" to connect the upload server via "Network Profile 1".
j. If the connection is OK, the "File Transfer" will enable without any symbol.
k. Press the "File Transfer" to upload file.

Figure 13

Federal Communication Commission Interference Statement

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 has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.   These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.   If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that
  to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device is intended only for OEM integrators under the following conditions:

1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further <u>transmitter</u> test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE: In the event that these conditions <u>can not be met</u> (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID <u>can not</u> be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: ZKP-RDC001. The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.