



孕龍科技股份有限公司
ZeroPlus Technology Co., Ltd.

SPECIFICATION

MODEL: B08008-LAP-DigRF-M

PART NO: _____

VERSION: V1.11

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to ZeroPlus Technology after signing.

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1 Software Download

Please install the software as the following steps:

Remark: We won't have additional notice for you, when there is any modification of the module specification. If there is some unconformity caused by the module version upgrade, users should take the module software as the standard.

STEP 1. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

STEP 2. Click the **English** in the Instrument Division part on the Homepage.

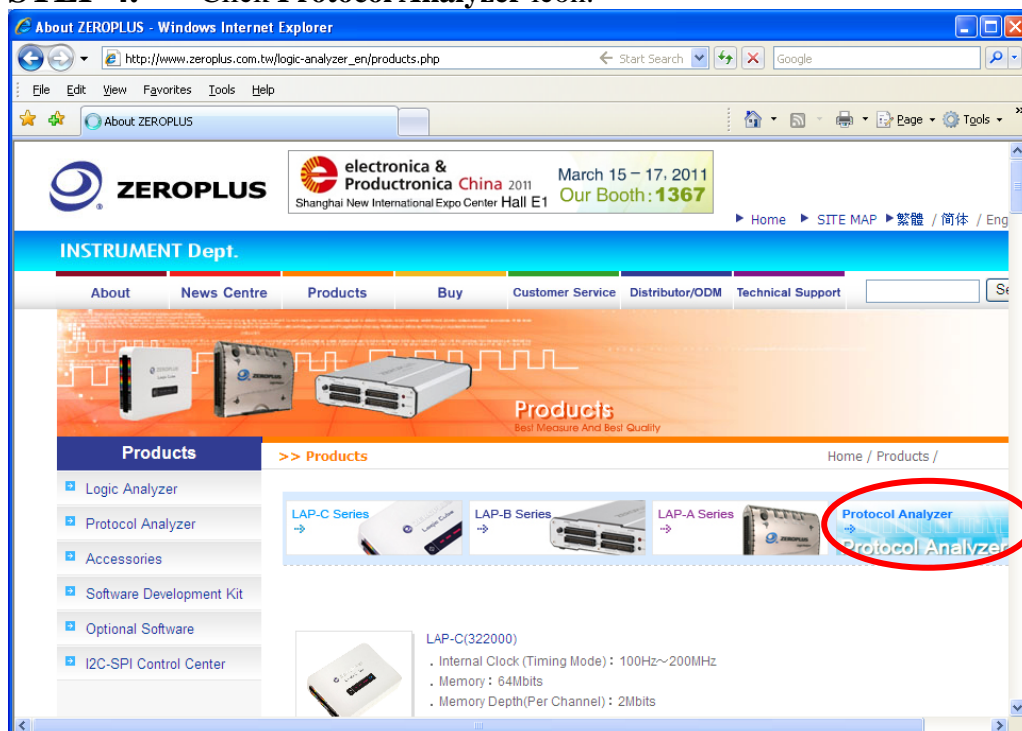




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

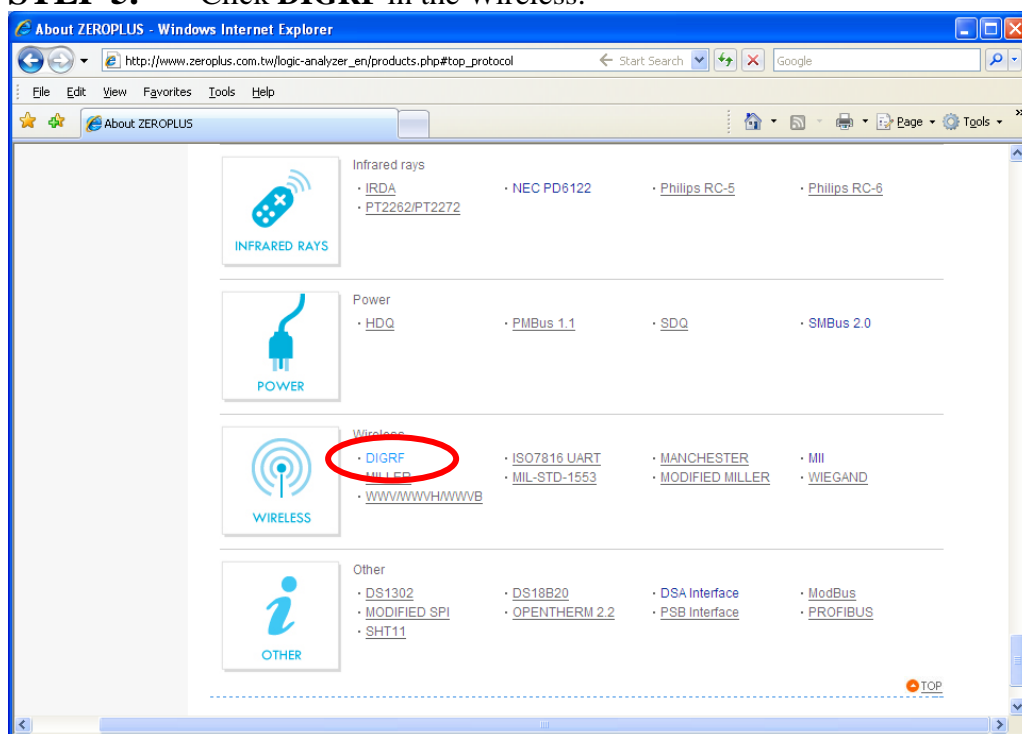


STEP 4. Click **Protocol Analyzer** icon.

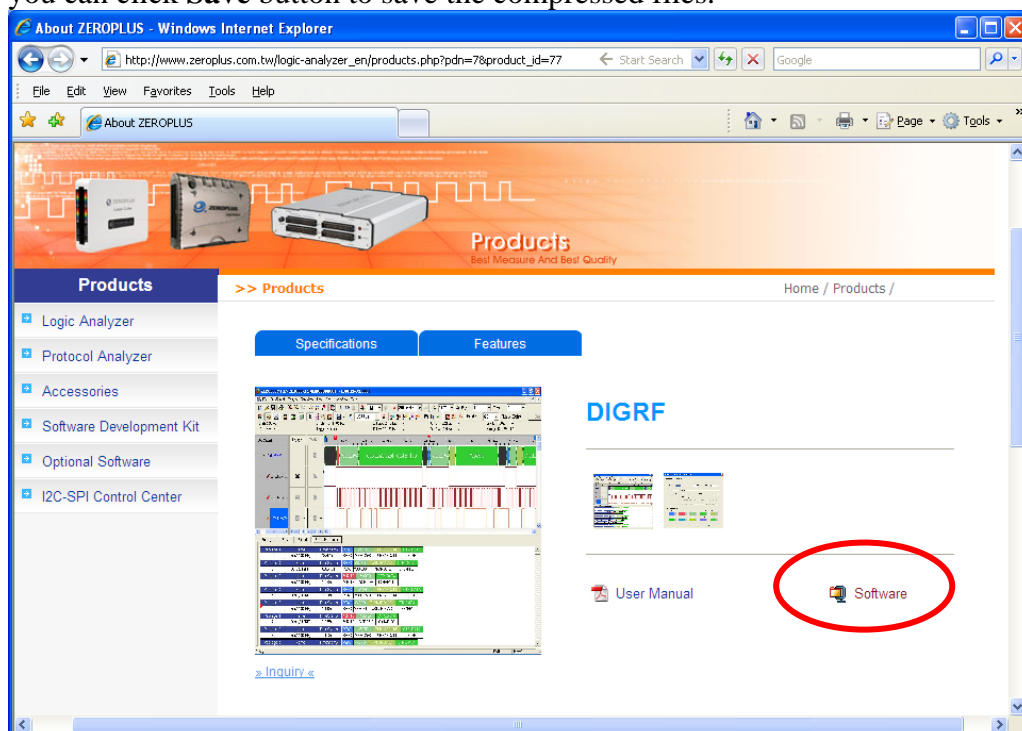




STEP 5. Click **DIGRF** in the Wireless.



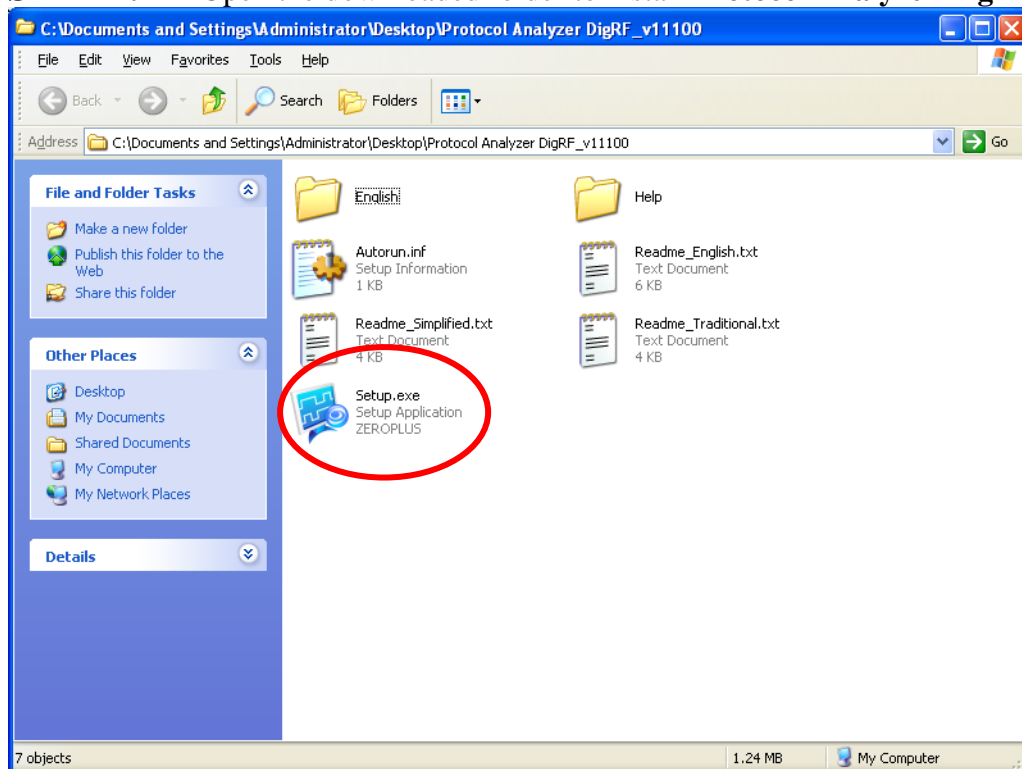
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



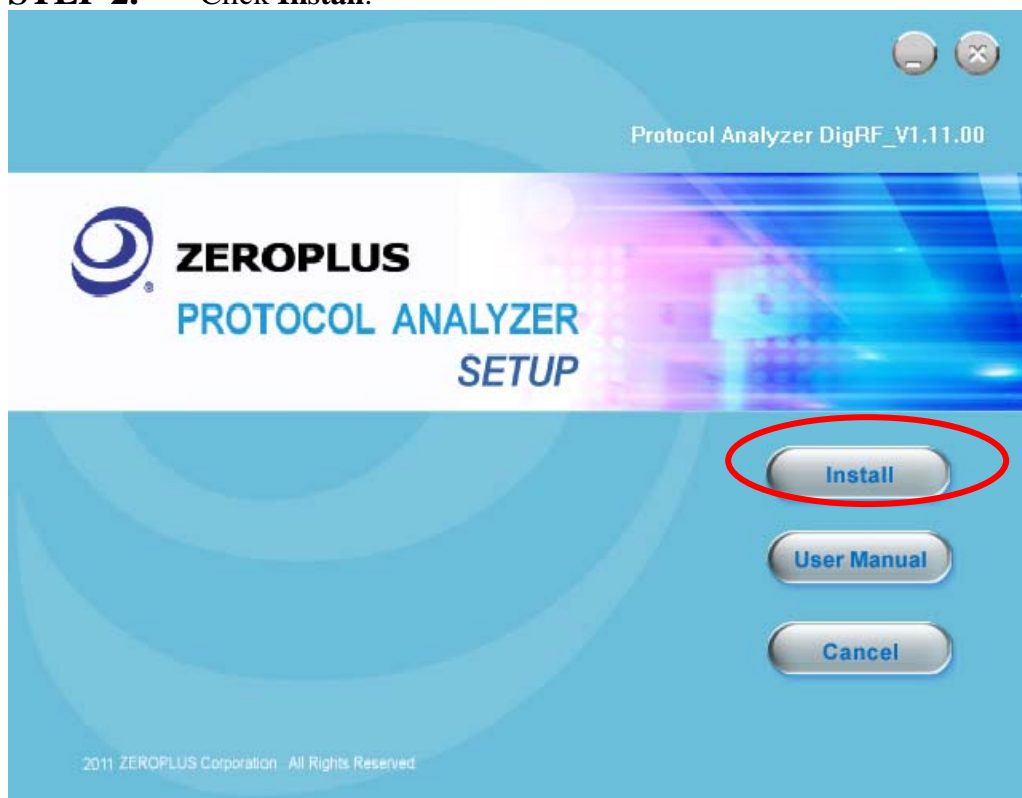


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer DigRF**.

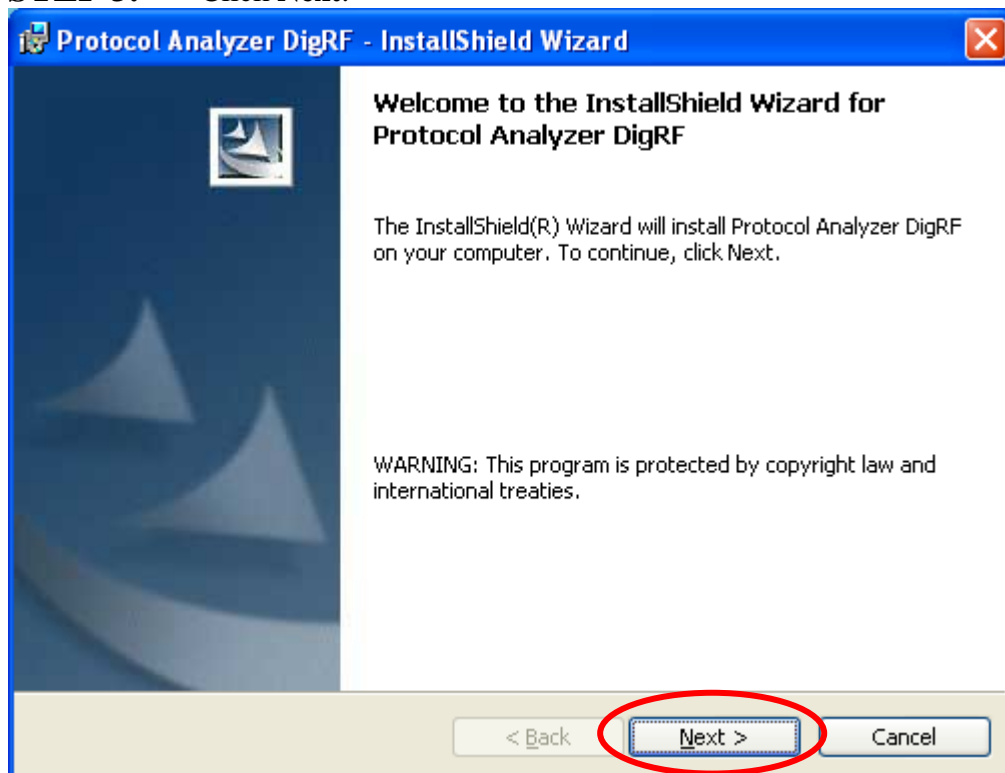


STEP 2. Click **Install**.





STEP 3. Click Next.



STEP 4. Select **I accept the terms in the license agreement**, and then press **Next**.





STEP 5. Fill in users' information in the below dialog box and click **Next**.

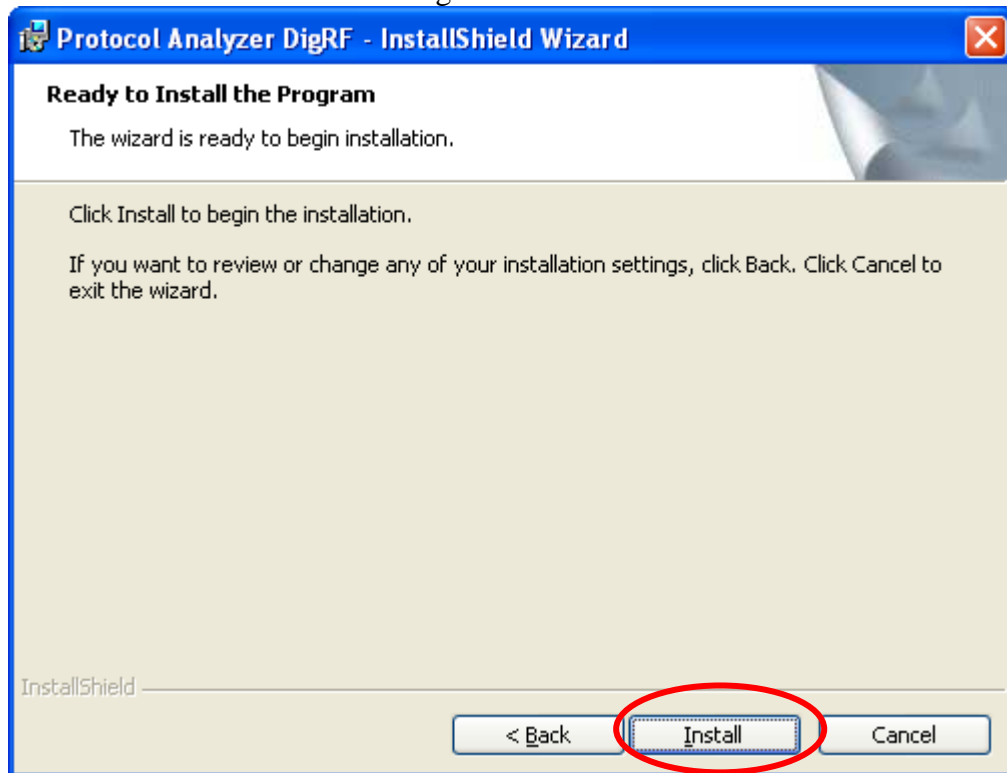
The dialog box is titled "Protocol Analyzer DigRF - InstallShield Wizard". It has a blue header bar with a close button (X) in the top right corner. The main area is titled "Customer Information" and contains the text "Please enter your information." Below this, there are two text input fields: "User Name:" with "Microsoft" entered, and "Organization:" with "User" entered. Below these fields, there is a section titled "Install this application for:" with two radio button options: "Anyone who uses this computer (all users)" (which is selected) and "Only for me (Microsoft)". At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

STEP 6. Select **Complete** and then click **Next**.

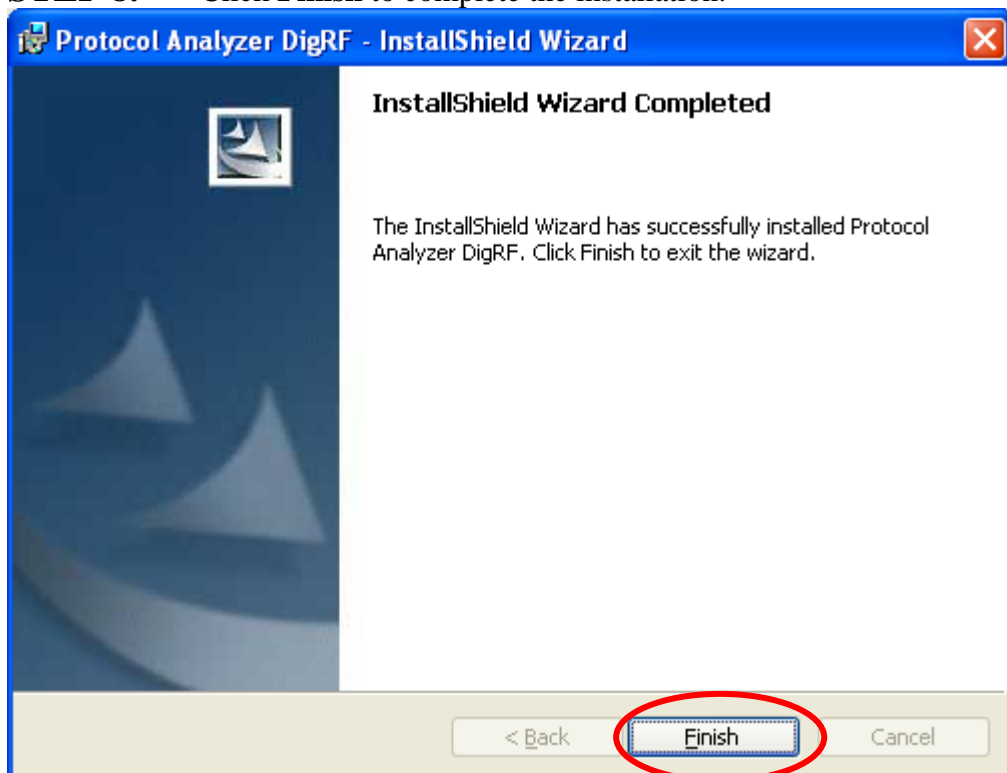
The dialog box is titled "Protocol Analyzer DigRF - InstallShield Wizard". It has a blue header bar with a close button (X) in the top right corner. The main area is titled "Setup Type" and contains the text "Choose the setup type that best suits your needs." Below this, there is a section titled "Please select a setup type." with two radio button options: "Complete" (which is selected) and "Custom". Each option has a small icon of a computer with a red checkmark. The "Complete" option has the text "All program features will be installed. (Requires the most disk space.)" and the "Custom" option has the text "Choose which program features you want installed and where they will be installed. Recommended for advanced users." At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.



STEP 7. Click **Install** to begin the installation.



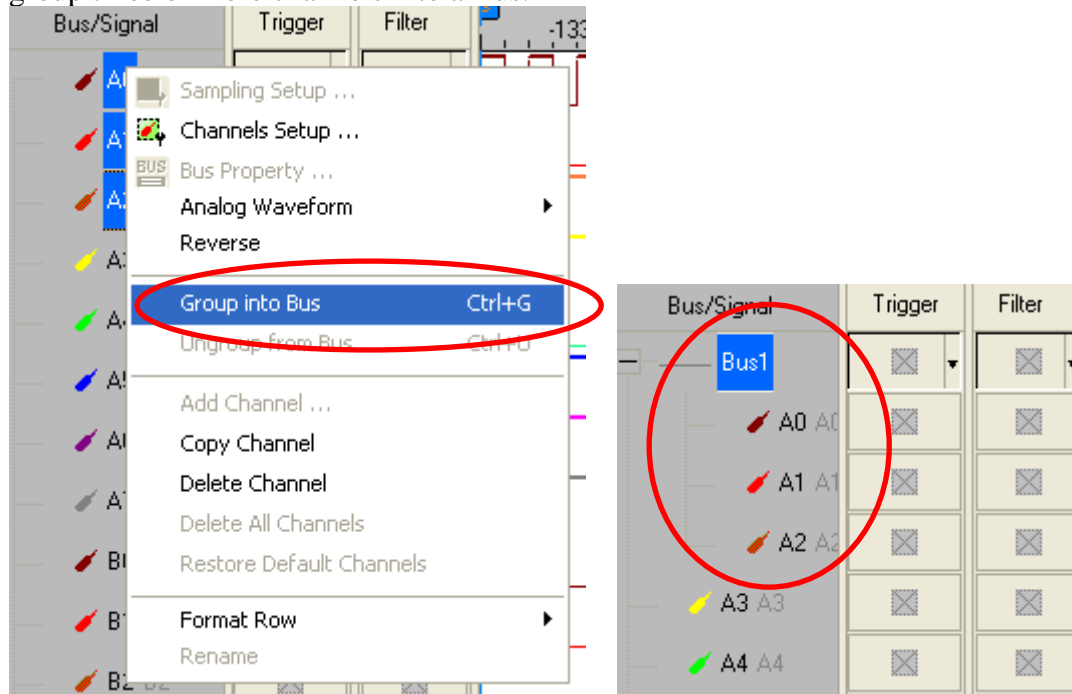
STEP 8. Click **Finish** to complete the installation.



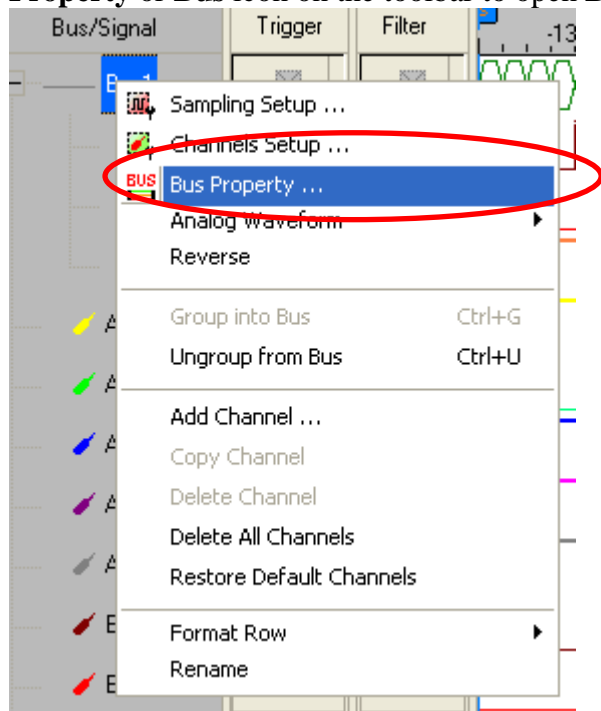


3 Software Register

STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **DigRF** needs three channels to decode signals, so it is necessary to group three or more channels into a Bus.

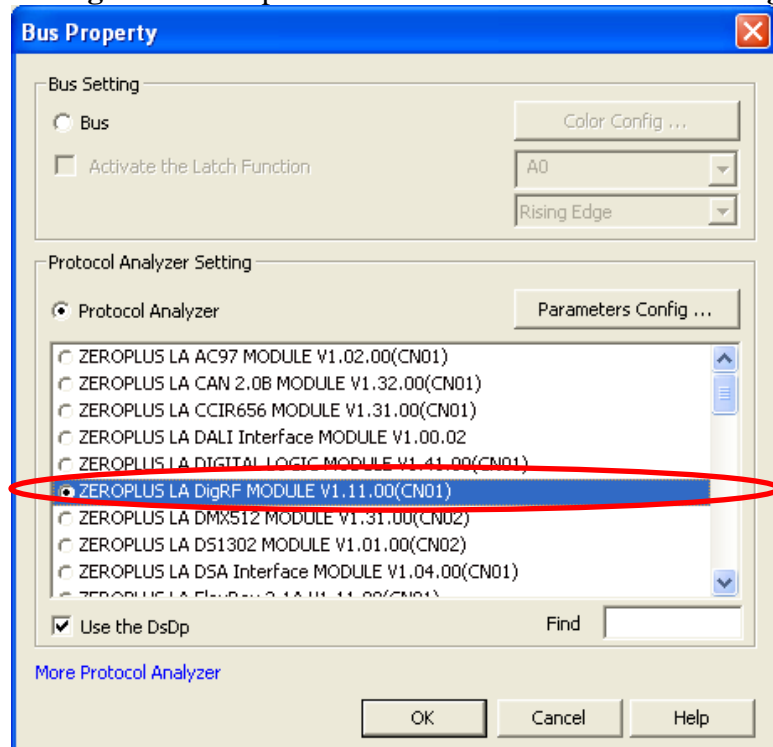


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

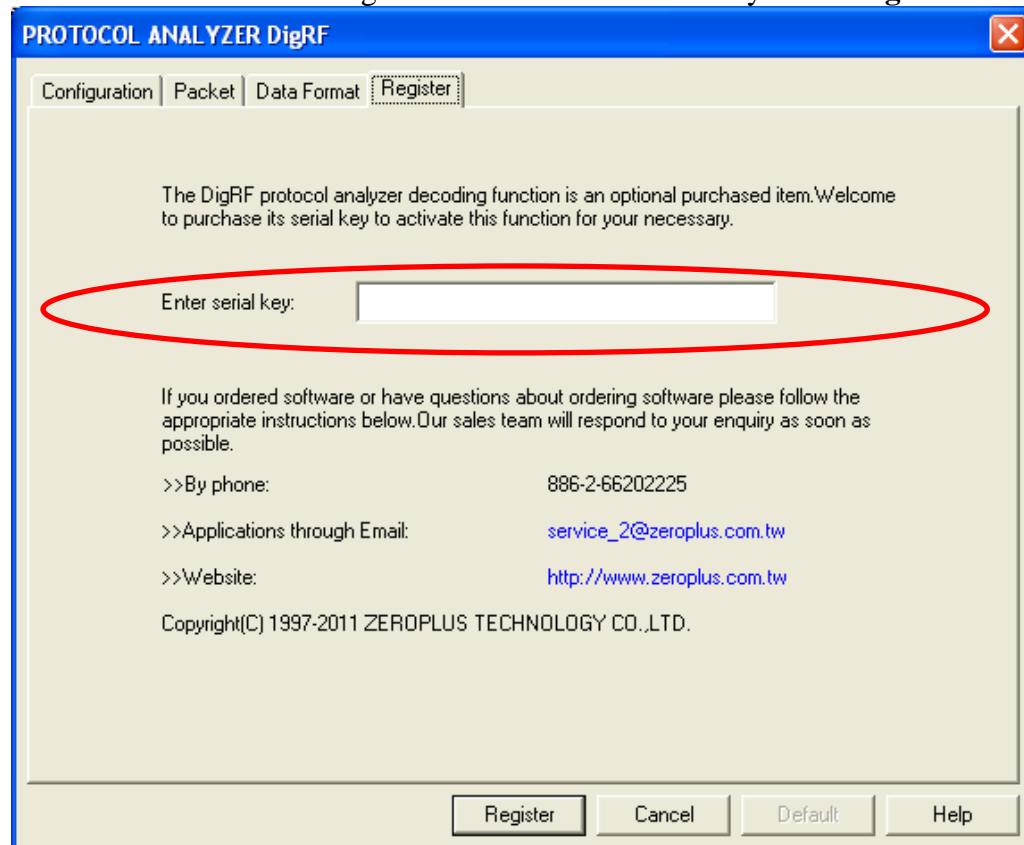




STEP 3. For Protocol Analyzer **DigRF** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA DigRF MODULE V1.11.00(CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER DigRF** dialog box.

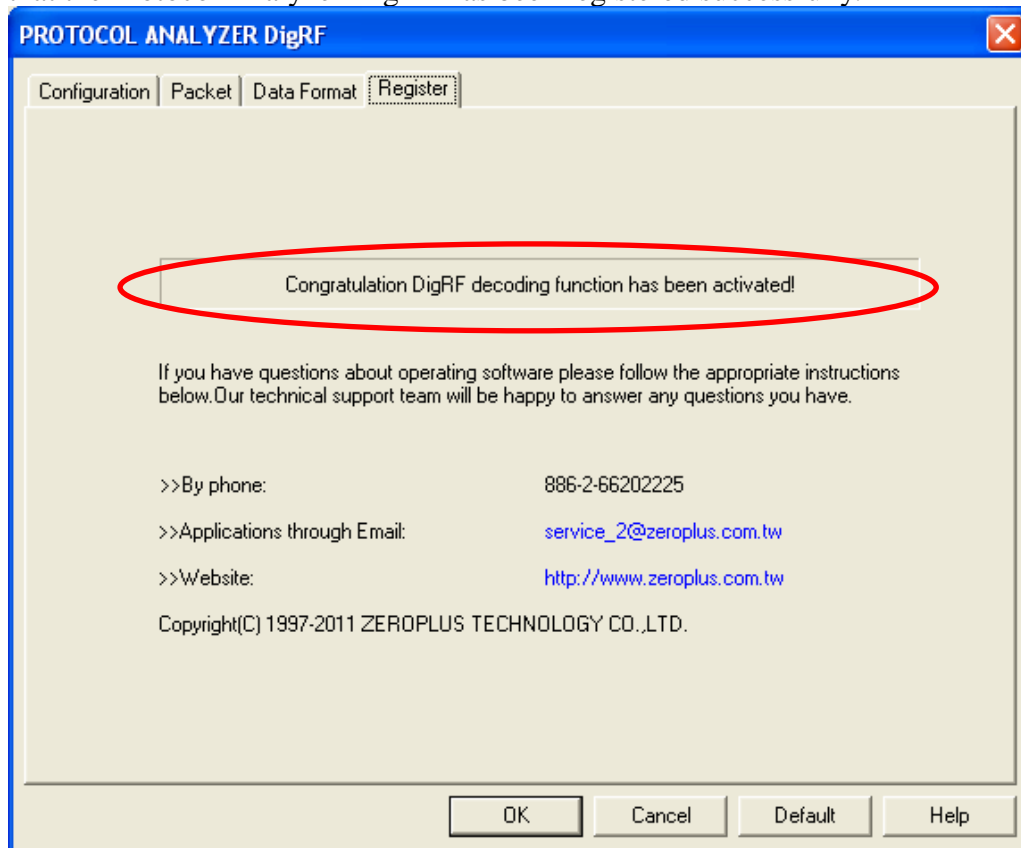


STEP 4. Press the Register tab to enter the serial key of the **DigRF**. Then, press **Register**.





STEP 5. After pressing the Register button, the following dialog box will appear; it denotes that the Protocol Analyzer DigRF has been registered successfully.

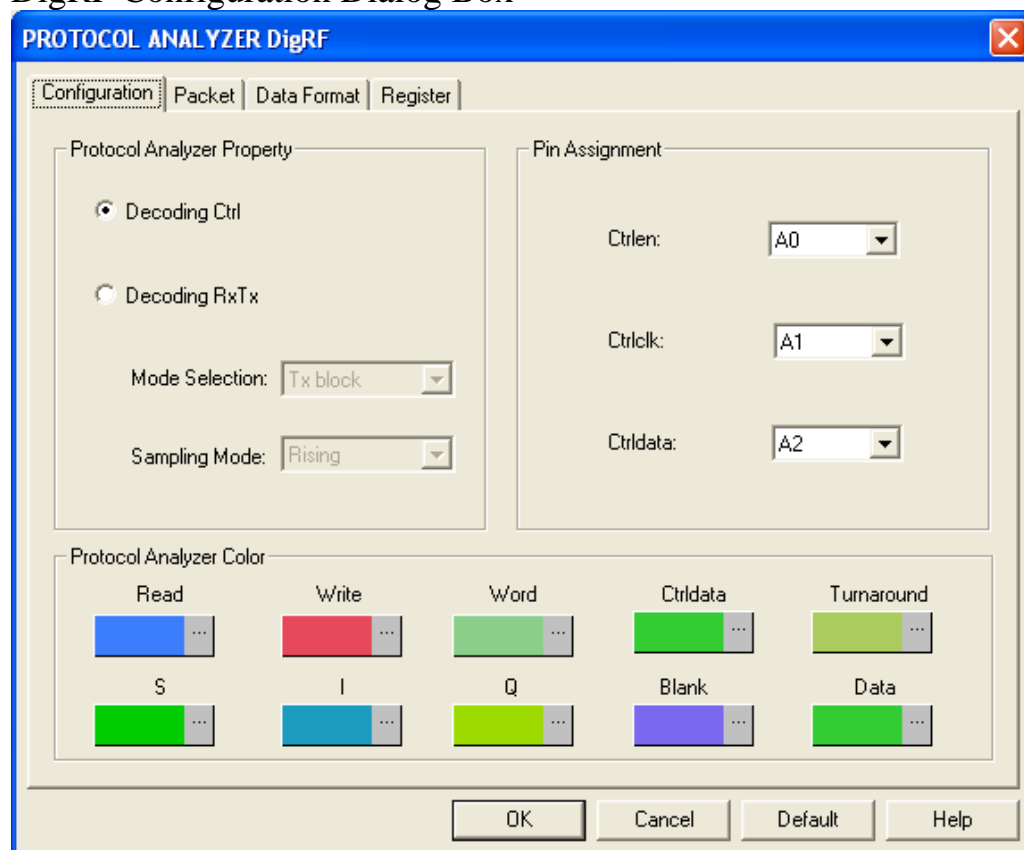




4 User Interface

Please refer to the below images to select options of setting **DigRF** module.

DigRF Configuration Dialog Box



Pin Assignment:

Ctrlcn: Set the usable Enable channel (The channel is Rxtxen in the RxTx Decoding).

Ctrlclk: Set the usable CLK channel (The channel is Sysclk in the RxTx Decoding).

Ctrldata: Set the usable data channel (The channel is Rtxdata in the RxTx Decoding).

Protocol Analyzer Property:

Decoding Ctrl: When it is enabled, the Ctrlcn, Ctrlclk and Ctrldata can be set only.

Decoding RxTx: When it is enabled, the Rxtxen, Sysclk, Rtxdata, Mode Selection and Sampling Mode can be set.

Mode Selection: Set the Mode to Tx block, Tx stream, X1 OSR, X2 OSR, 8 BITS or 16 BITS.

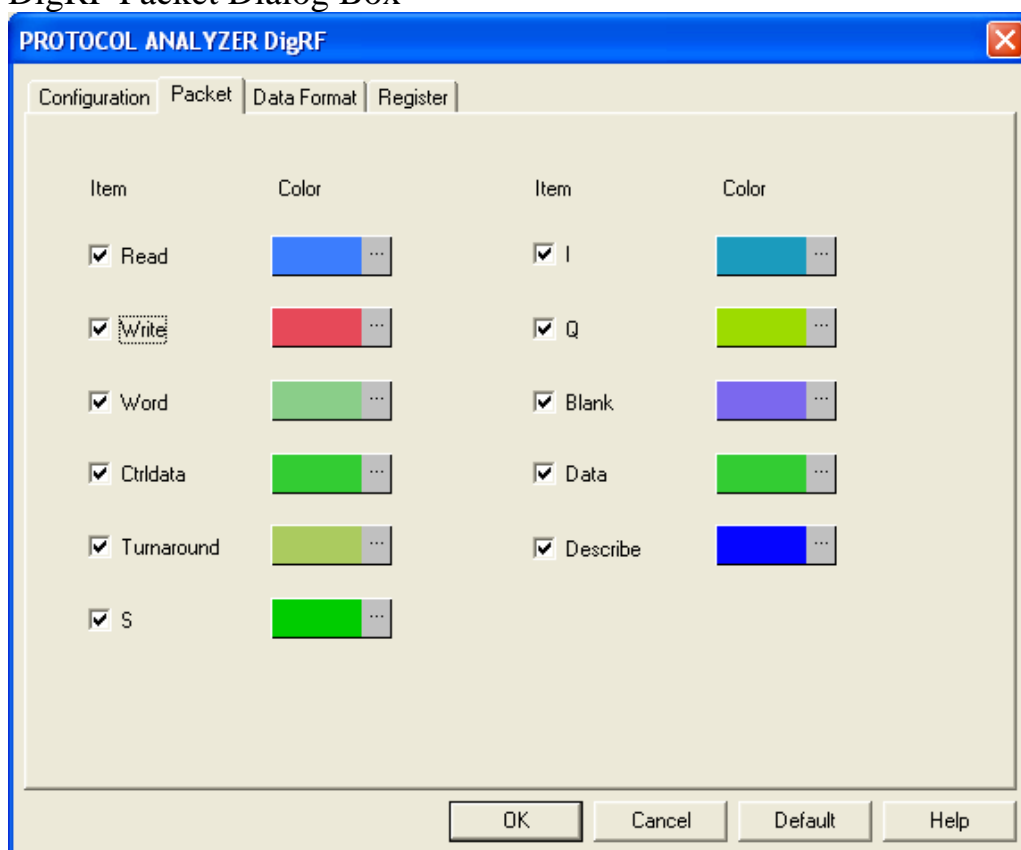
Sampling Mode: Set the Mode to Rising or Falling.

Protocol Analyzer Color

Users can vary the color of the items.

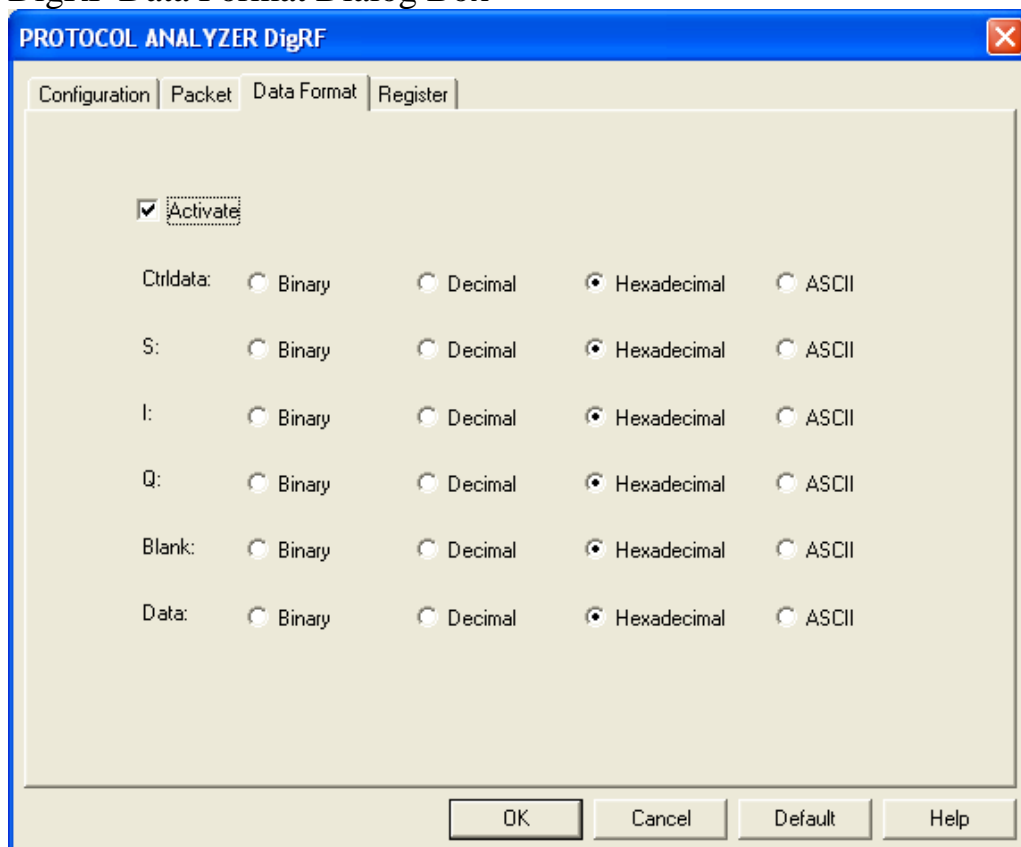


DigRF Packet Dialog Box



In the Packet part, users can vary the displayed items and set the item to be displayed.

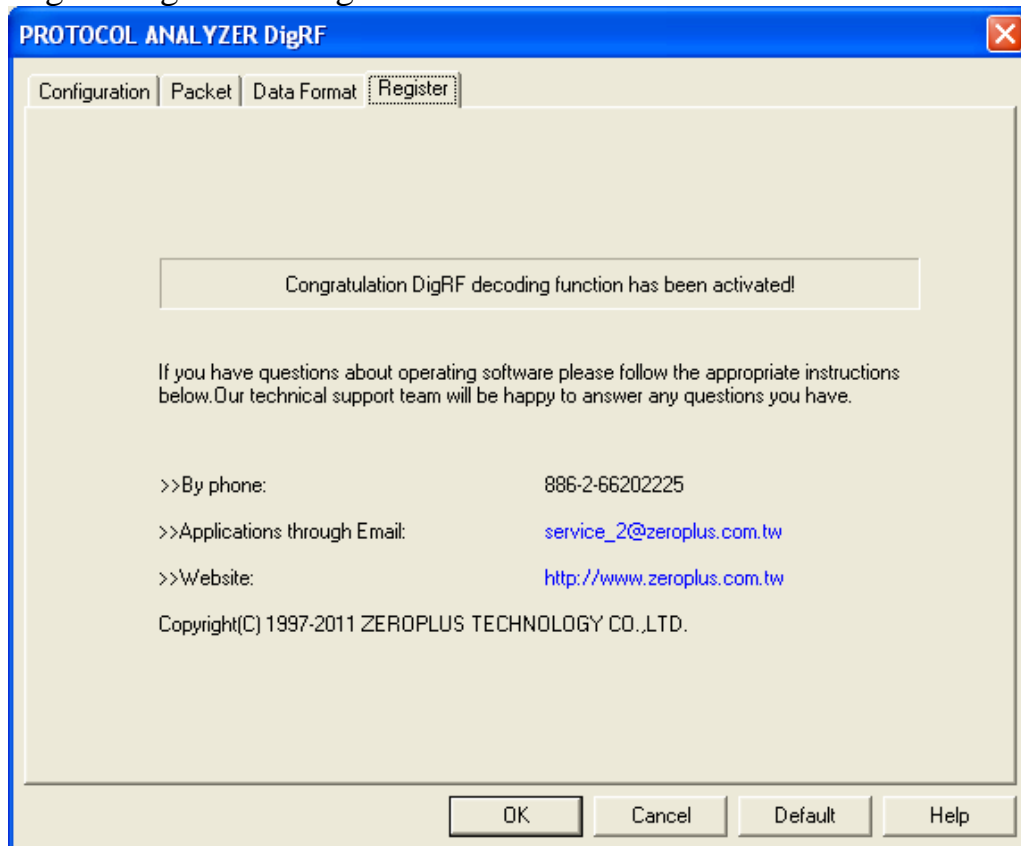
DigRF Data Format Dialog Box





Users can set the Data Format of the Ctrldata, S, I, Q, Blank and Data as their requirements. When selecting the option, Activate, the data format is decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data format is decided by the settings in the main program.

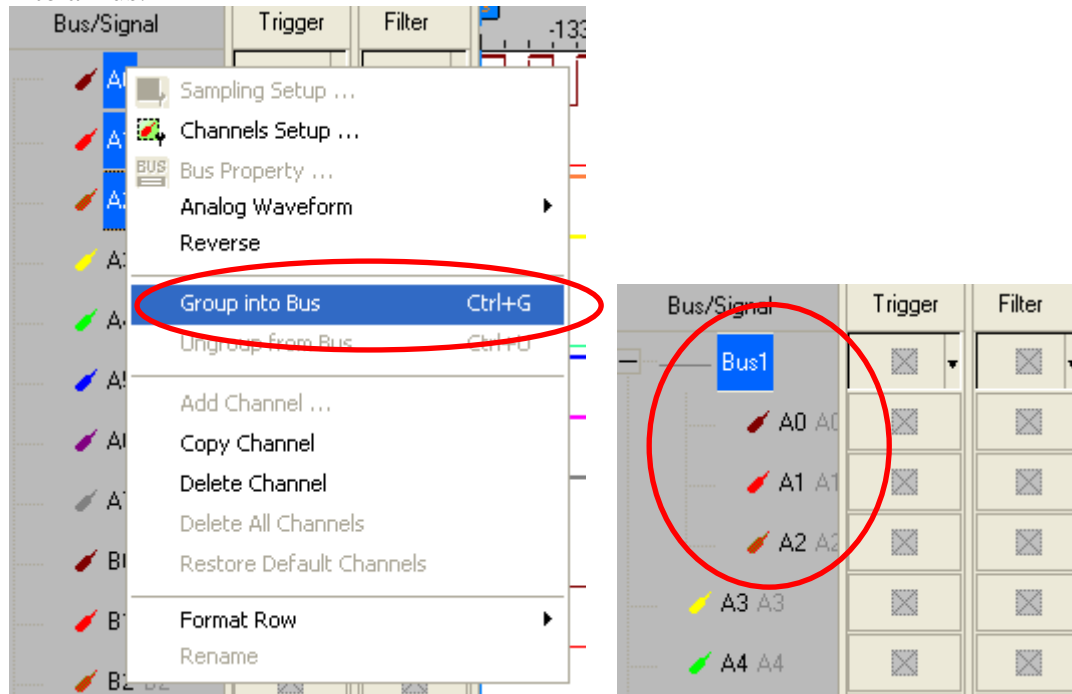
DigRF Register Dialog Box



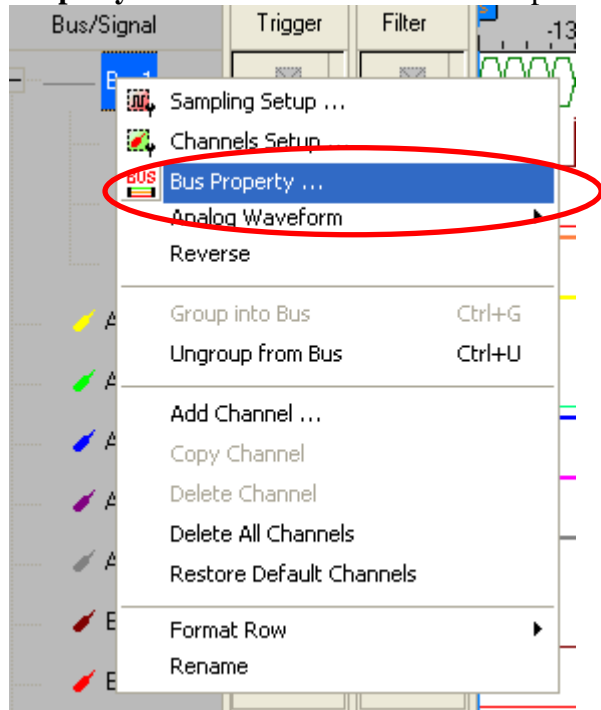
There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

5 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **DigRF** needs three channels to decode signals, so it is necessary to group three or more channels into a Bus.

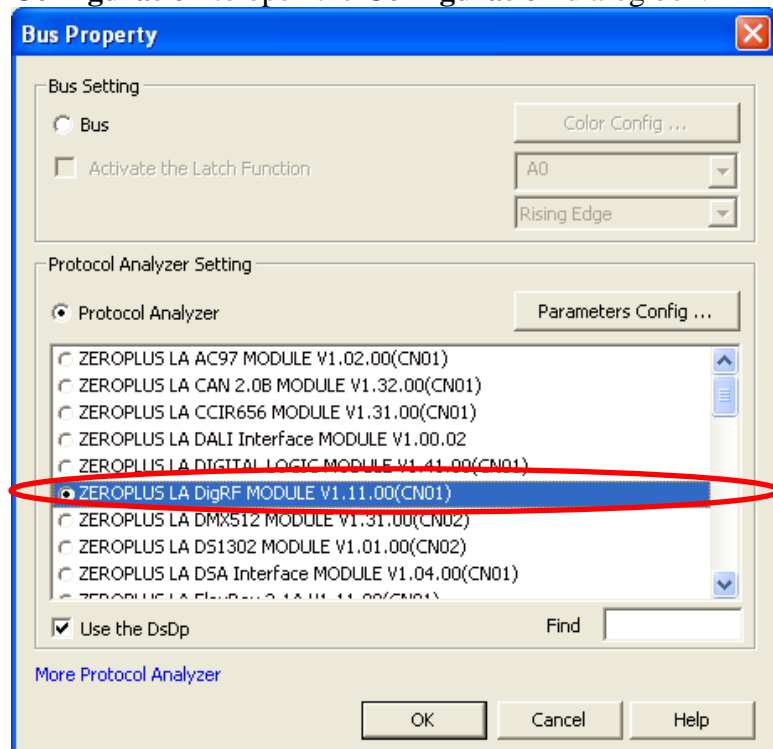


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

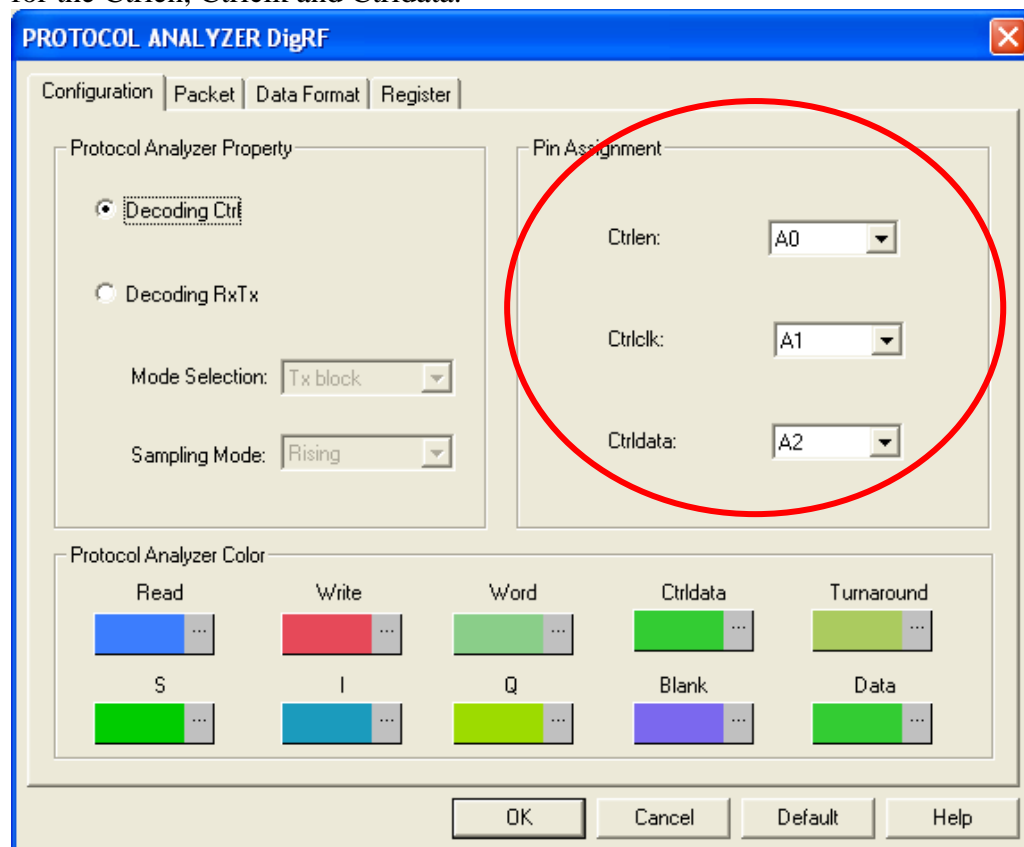




STEP 3. For Protocol Analyzer **DigRF** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA DigRF MODULE V1.11.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

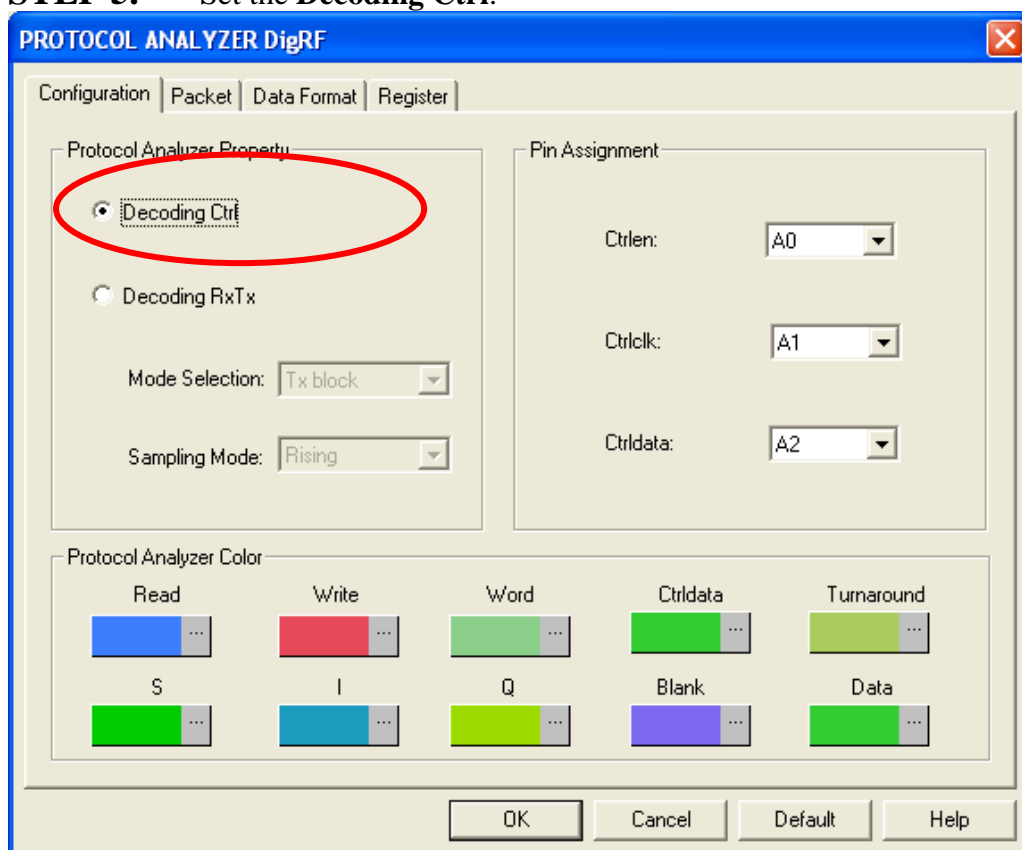


STEP 4. Set the channels for DigRF. Take the Decoding Ctrl for an example, set the channels for the Ctrlclk, Ctrlclk and Ctrldata.

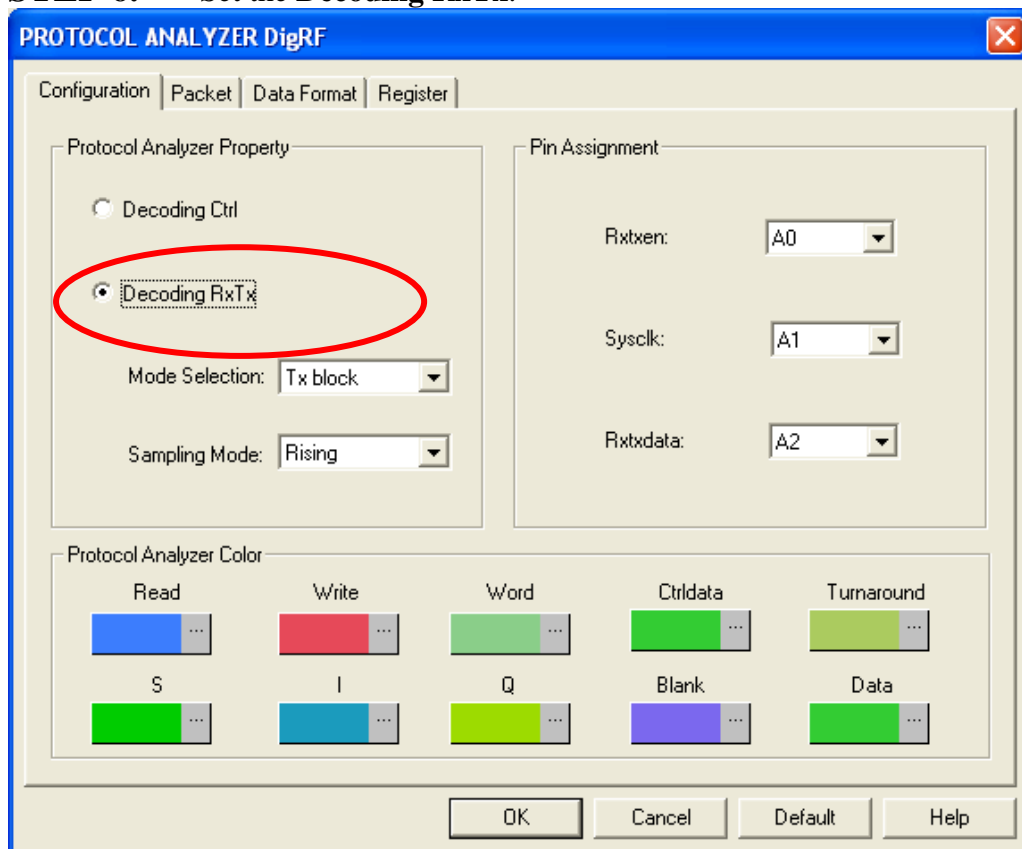




STEP 5. Set the **Decoding Ctrl.**

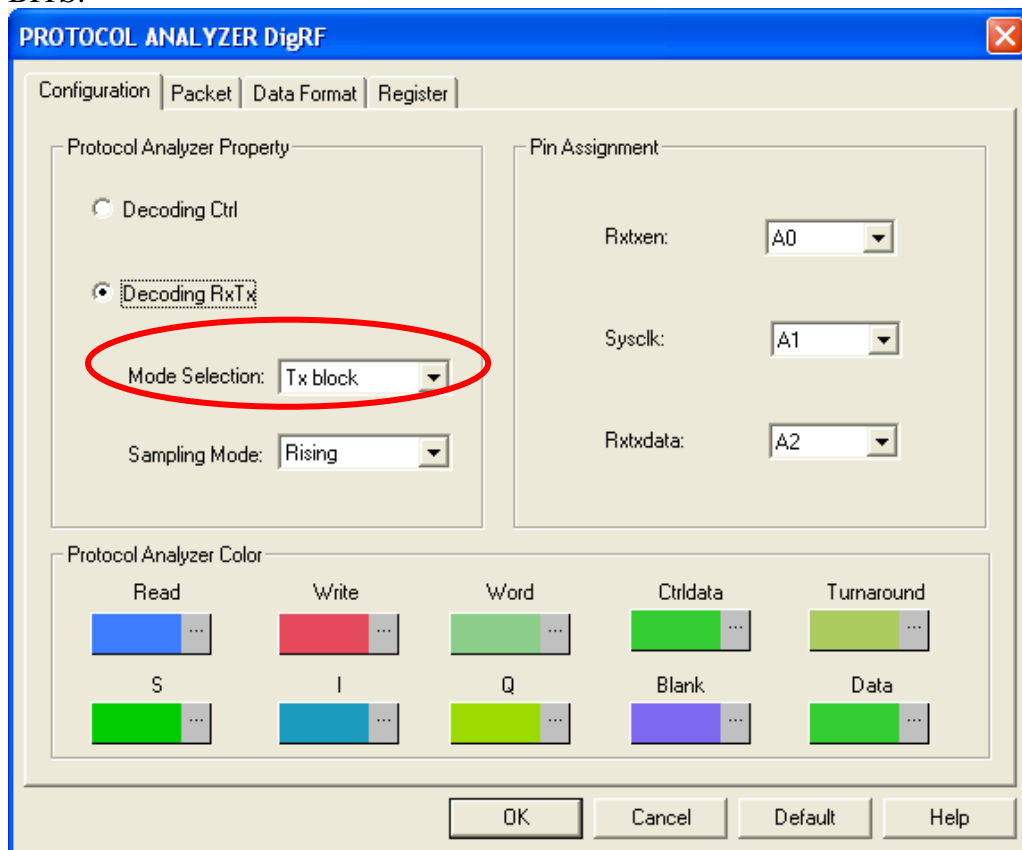


STEP 6. Set the **Decoding RxTx.**

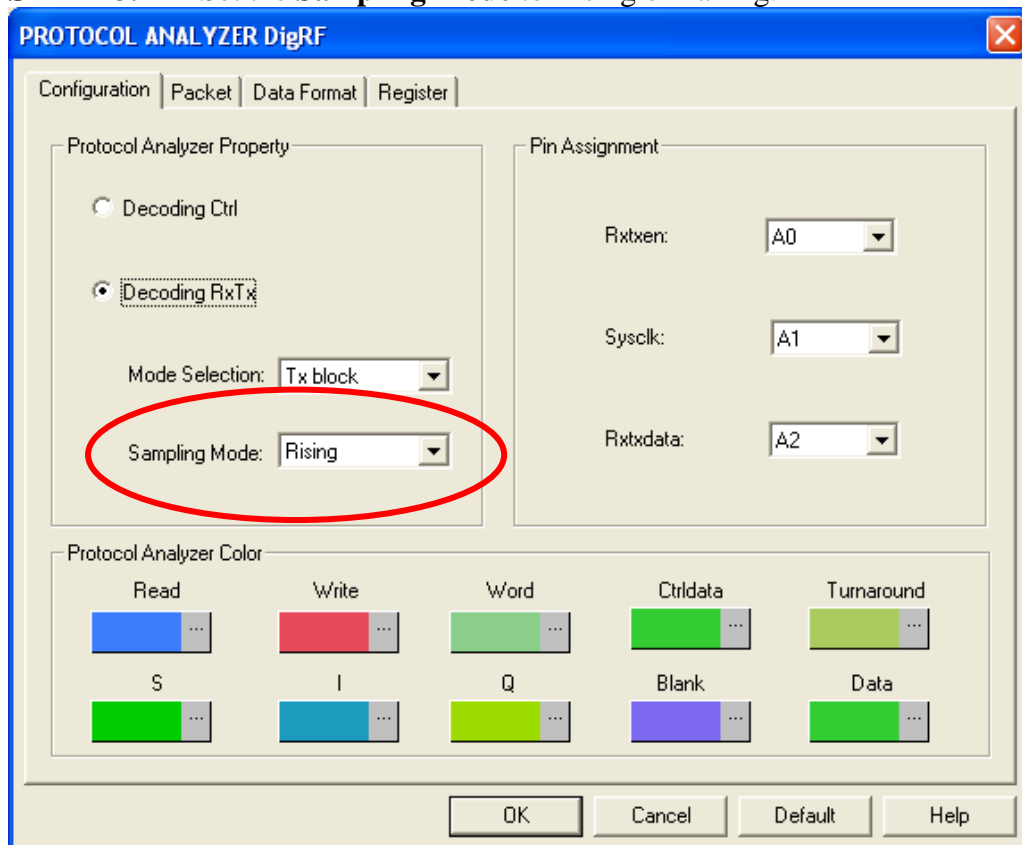




STEP 7. Set the **Mode Selection** to Tx block, Tx stream, X1 OSR, X2 OSR, 8 BITS or 16 BITS.

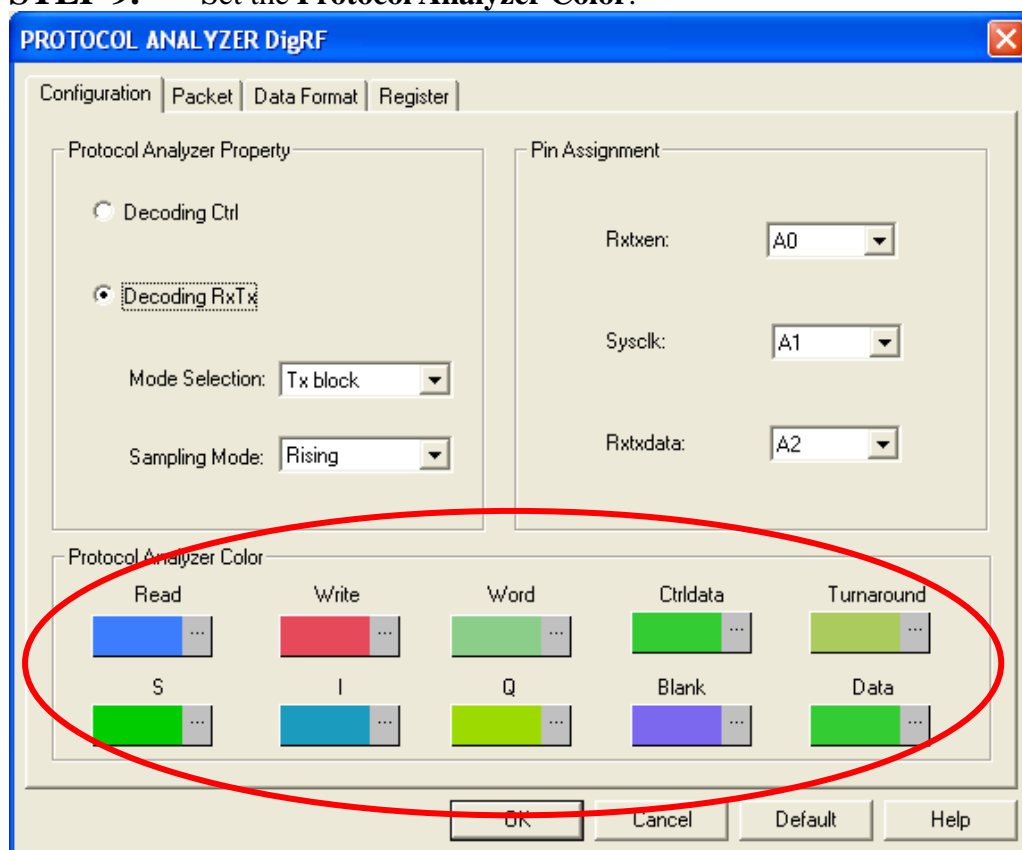


STEP 8. Set the **Sampling Mode** to Rising or Falling.



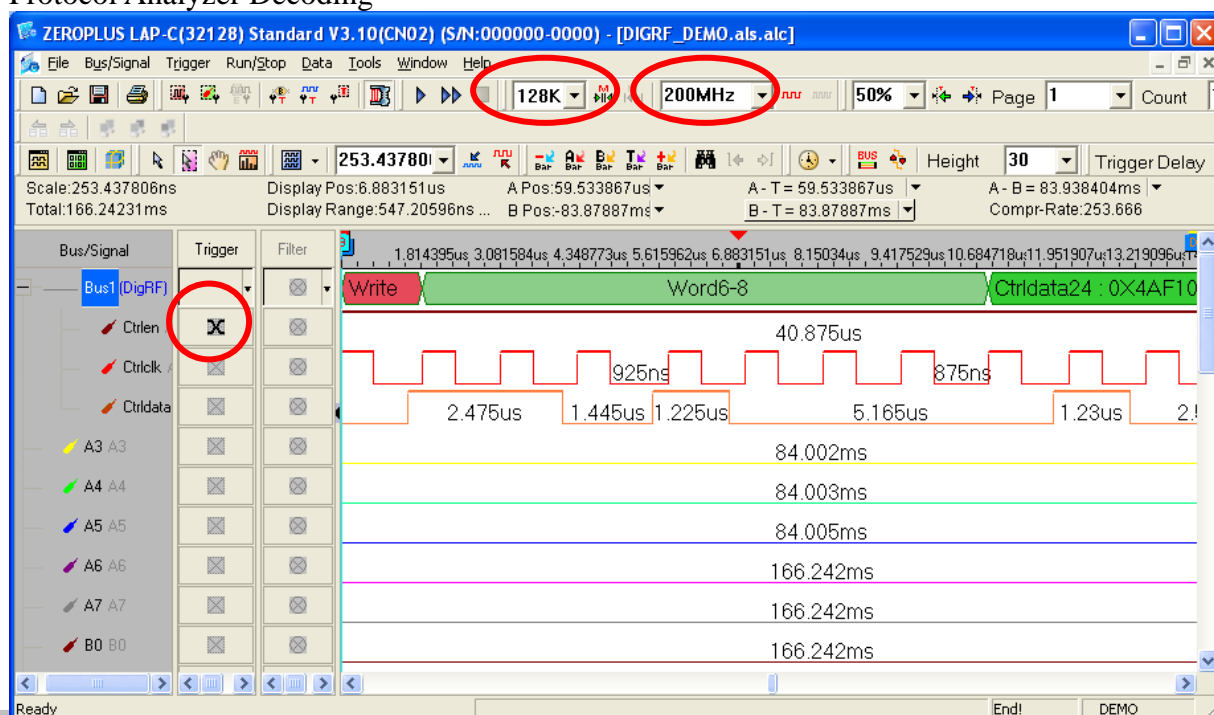


STEP 9. Set the Protocol Analyzer Color.



STEP 10. Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Either Edge; the memory depth is 128K; the sampling frequency is 200MHz (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding





Packet List

