



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

# SPECIFICATION

**MODEL: 023-LAP-LPC-SERIRQ-M**

**PART NO:** \_\_\_\_\_

**VERSION:** V1.05

Approver		Check	Design
GM	PM		

Customer Confirm

\*Please fax the file to Zeroplus Technology after signing.

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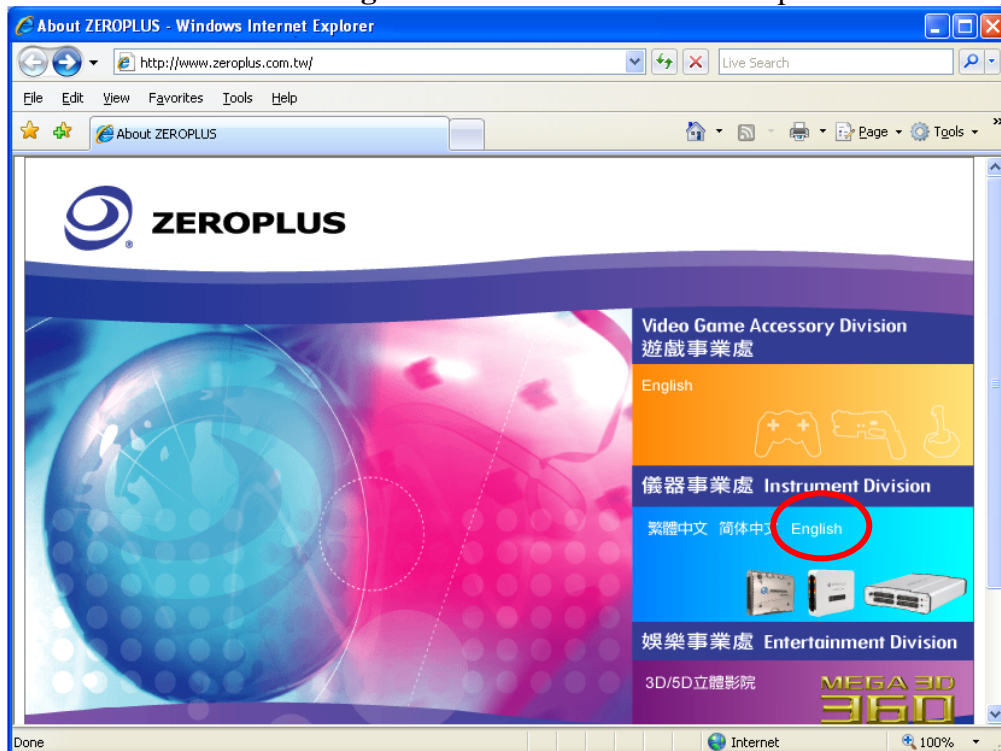
## 1 Software Download

Please download 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.

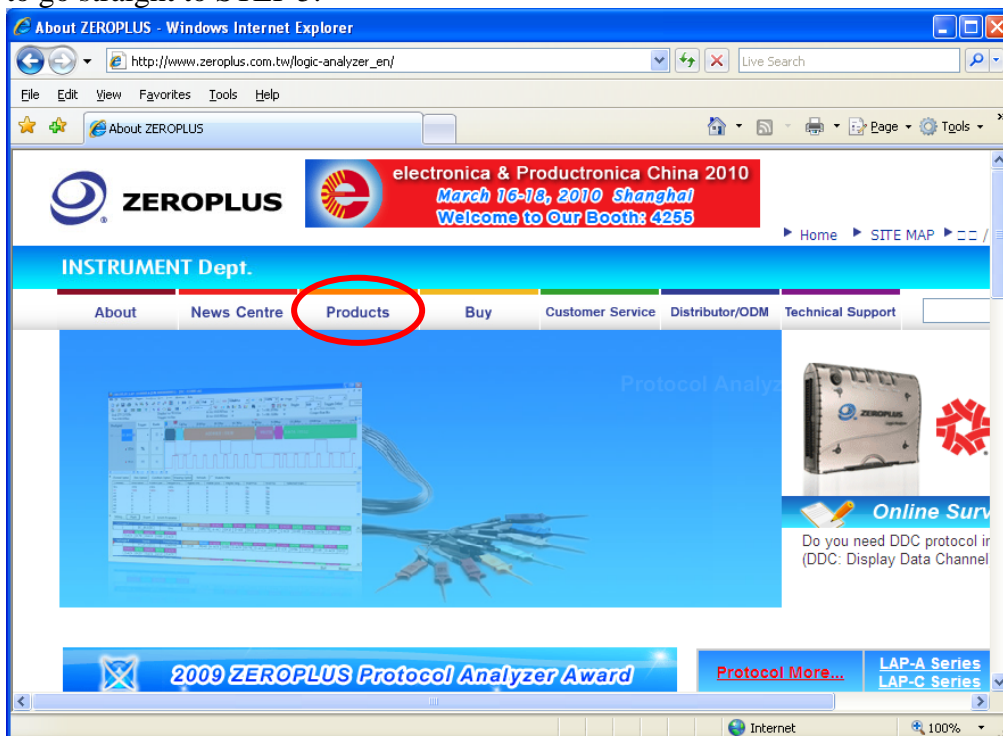
**STEP 1.** Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

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

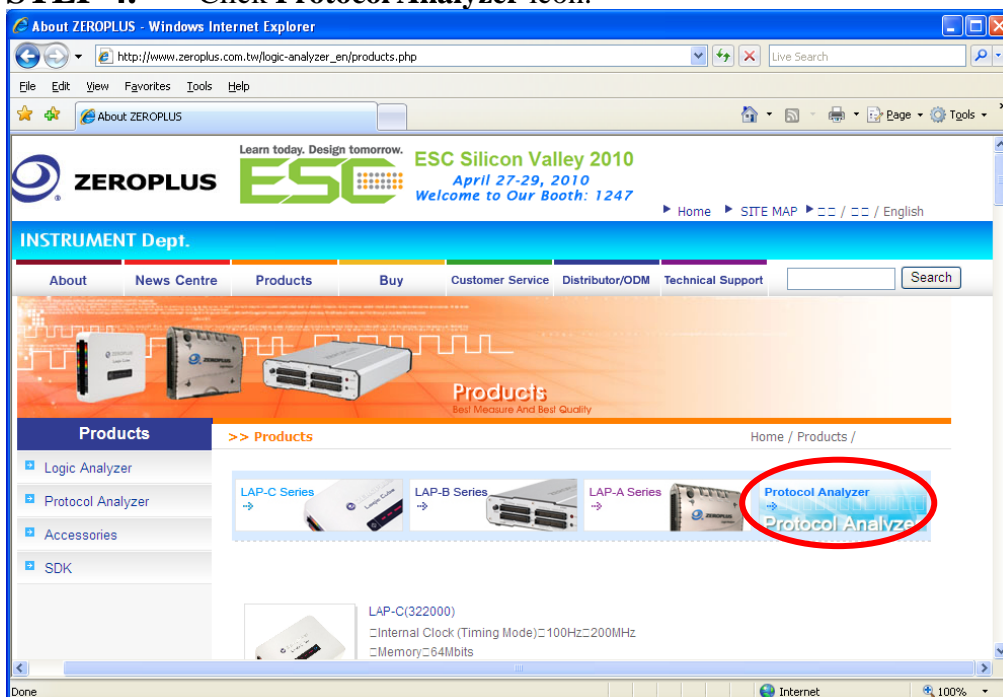




**STEP 3.** Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

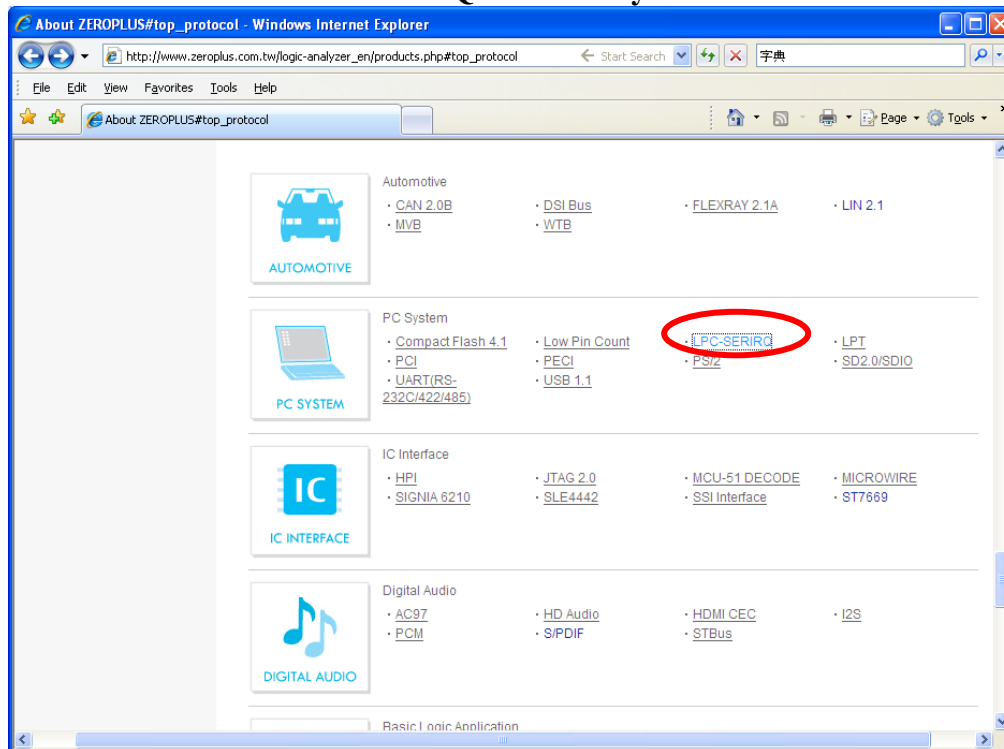


**STEP 4.** Click **Protocol Analyzer** icon.

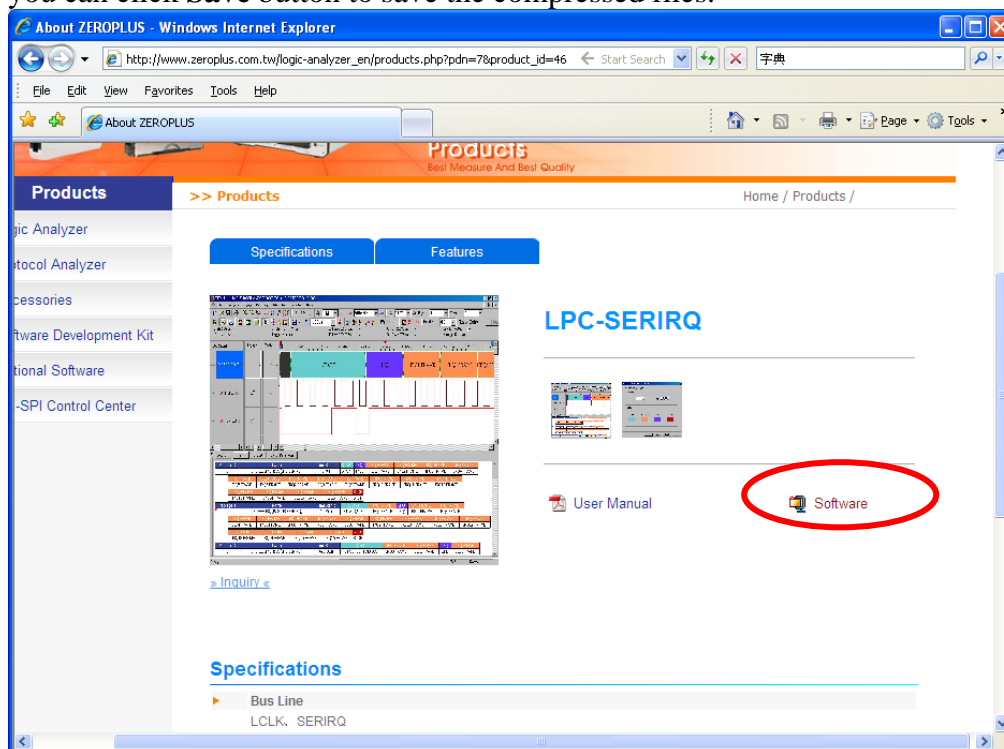




## STEP 5. Click LPC-SERIRQ in the PC System.



## 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.



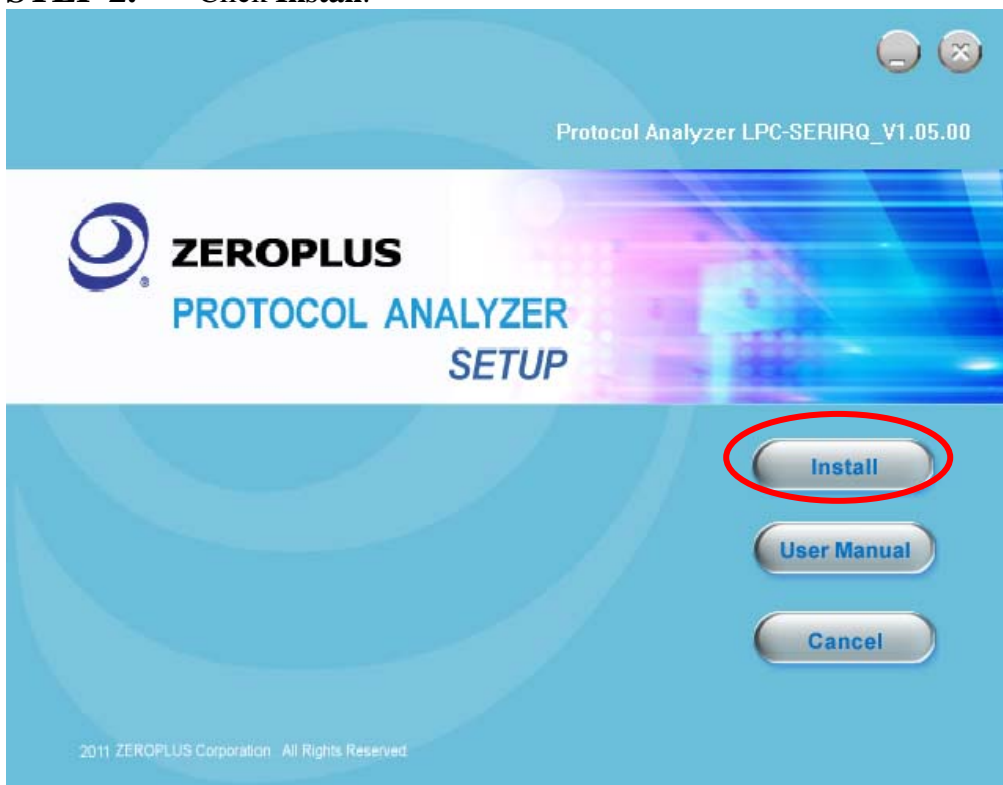


## 2 Software Installation

**STEP 1.** Open the downloaded folder to install **Protocol Analyzer LPC-SERIRQ**.

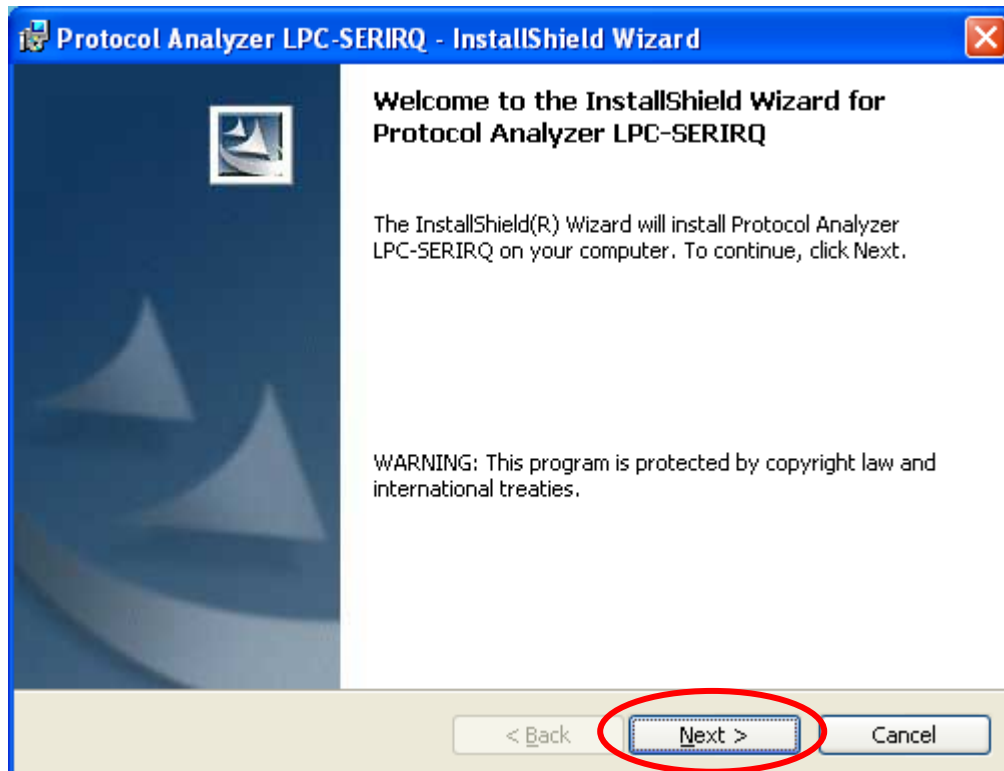


**STEP 2.** Click **Install**.

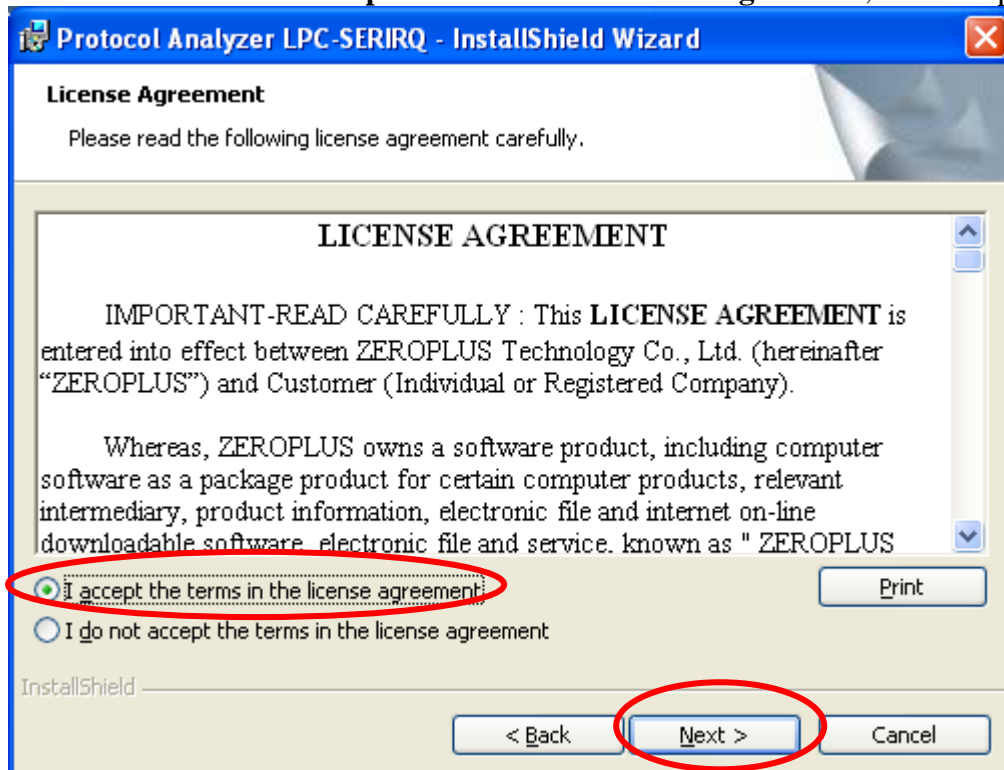




**STEP 3.** Click Next.



**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 LPC-SERIRQ - InstallShield Wizard". It has a "Customer Information" section with the instruction "Please enter your information." Below this, there are two text input fields: "User Name:" with "Microsoft" entered, and "Organization:" with "User" entered. Further down, there is a section "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, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

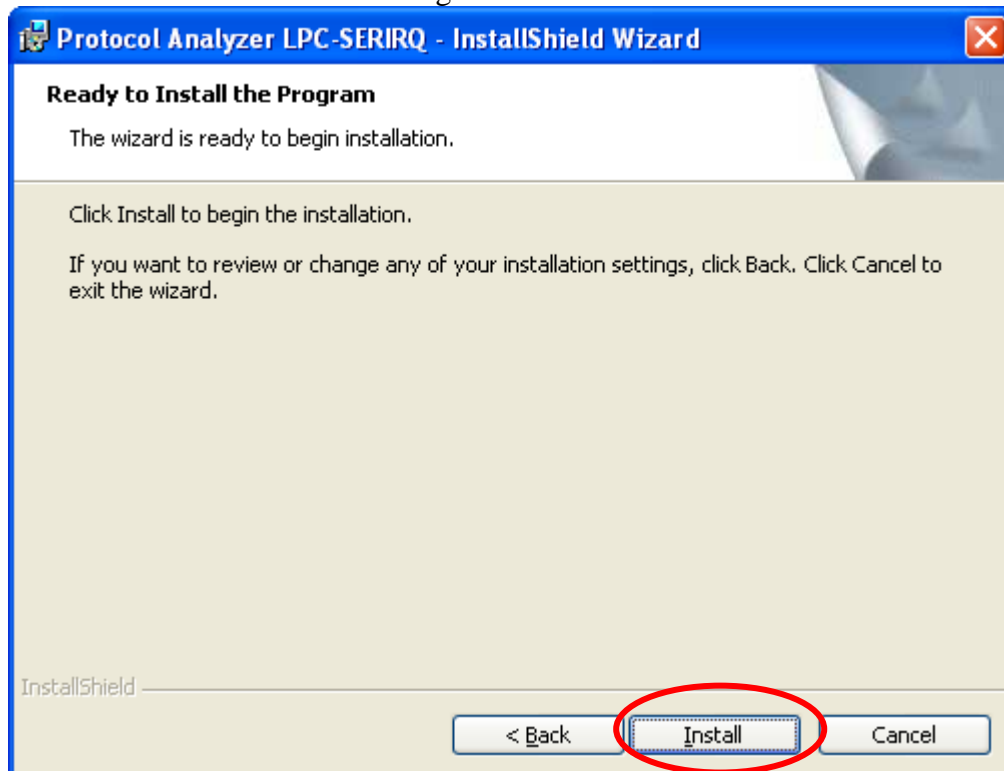
**STEP 6.** Select **Complete** and then click **Next**.

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

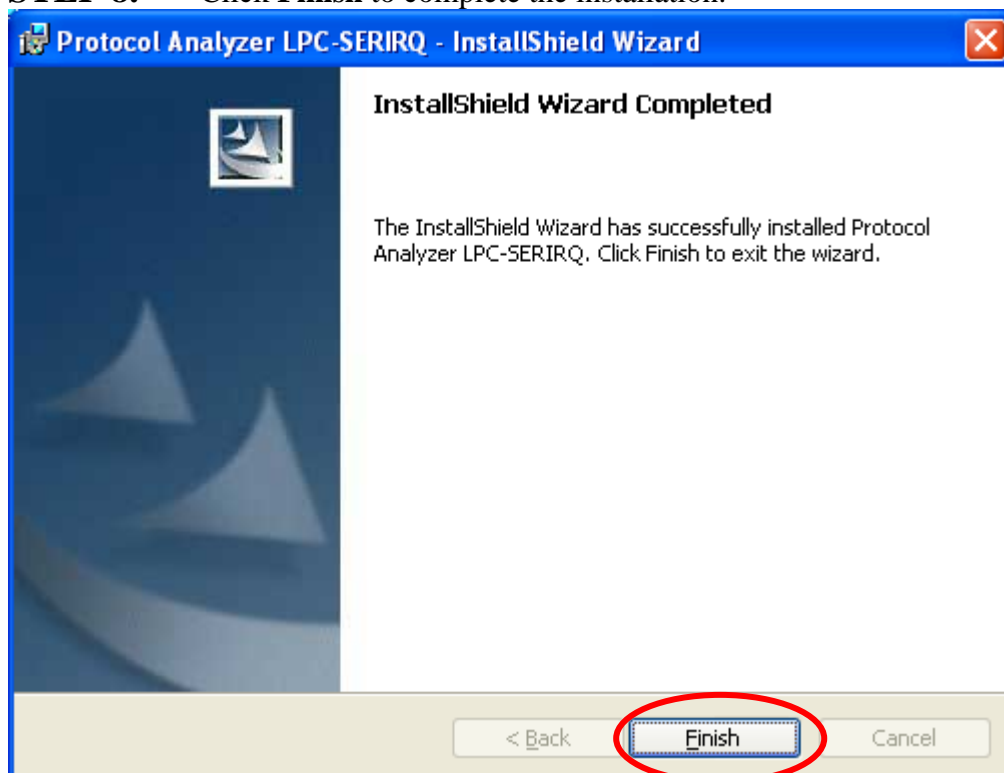




**STEP 7.** Click **Install** to begin the installation.



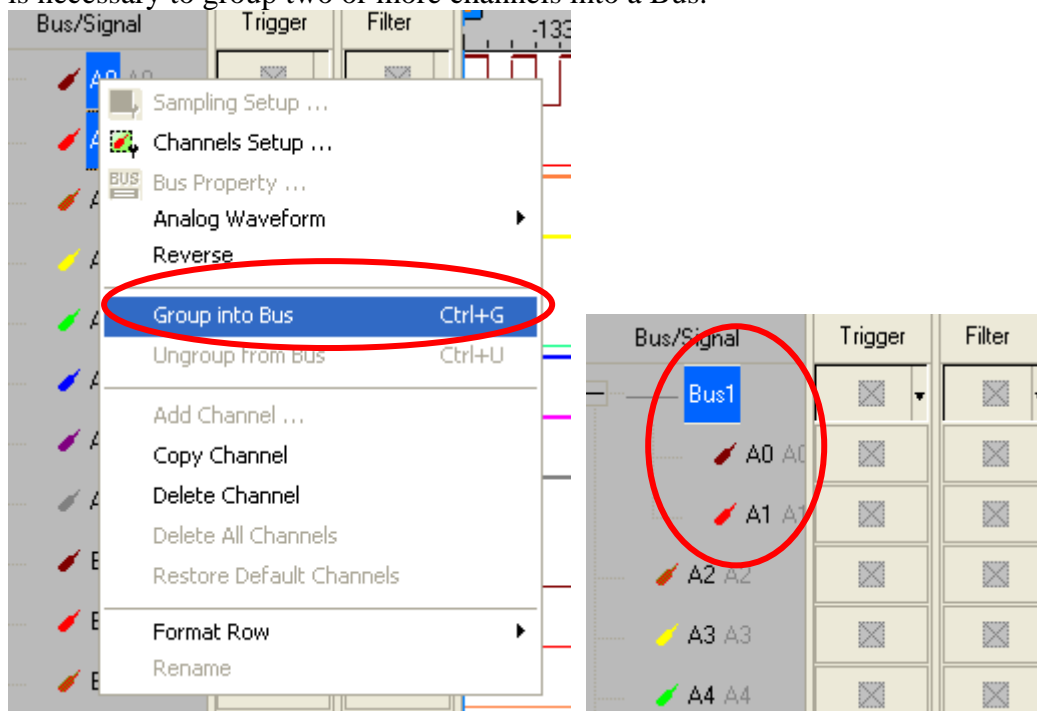
**STEP 8.** Click **Finish** to complete the installation.



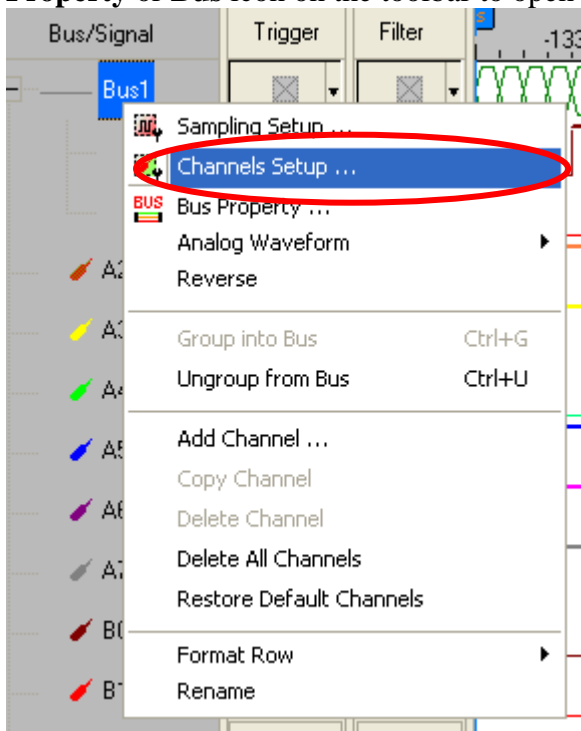


### 3 Software Register

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

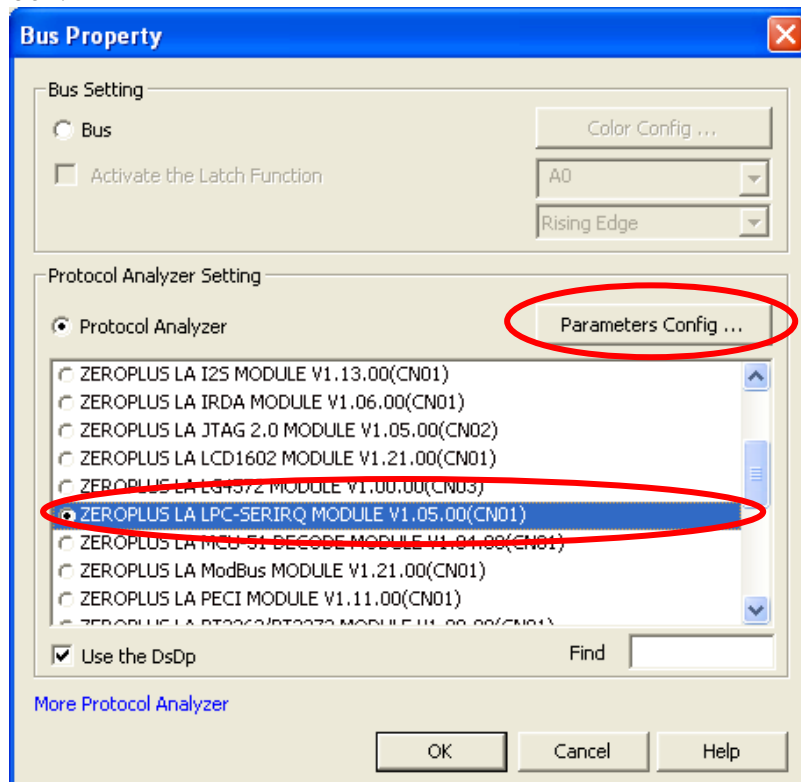


**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

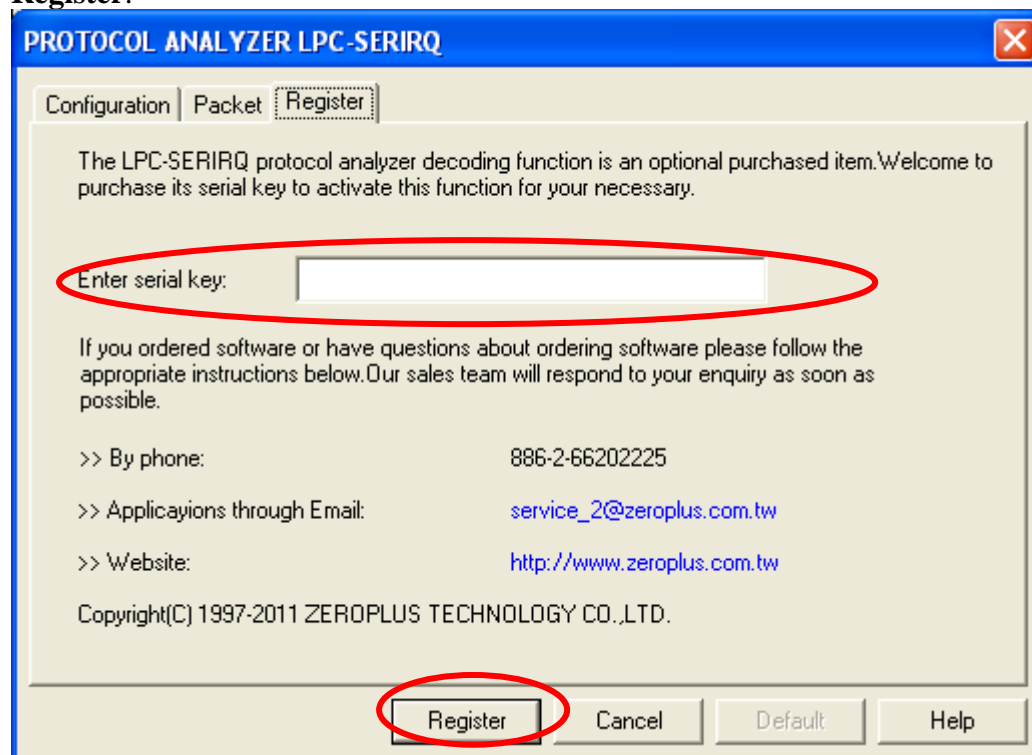




**STEP 3.** For Protocol Analyzer LPC-SERIRQ Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA LPC-SERIRQ MODULE V1.05.00(CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER LPC-SERIRQ** dialog box.

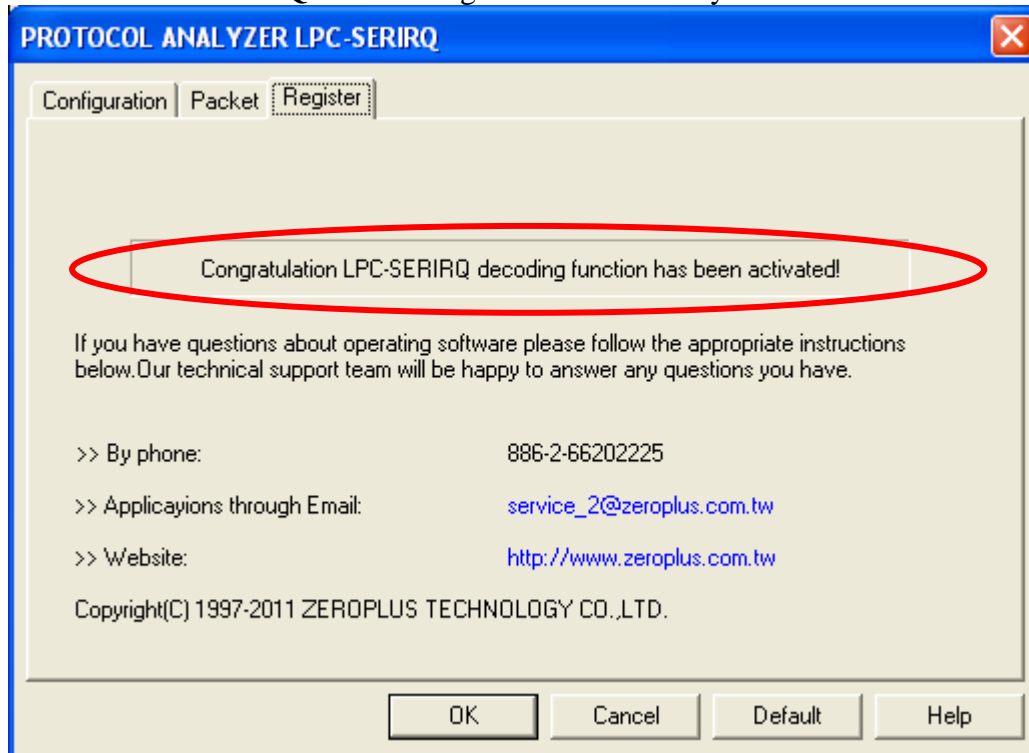


**STEP 4.** Press the Register tab to type the serial key number of **LPC-SERIRQ**. Then, press **Register**.





**STEP 5.** After pressing the Register button, the following dialog box will appear; it denotes that the **LPC-SERIRQ** has been registered successfully.

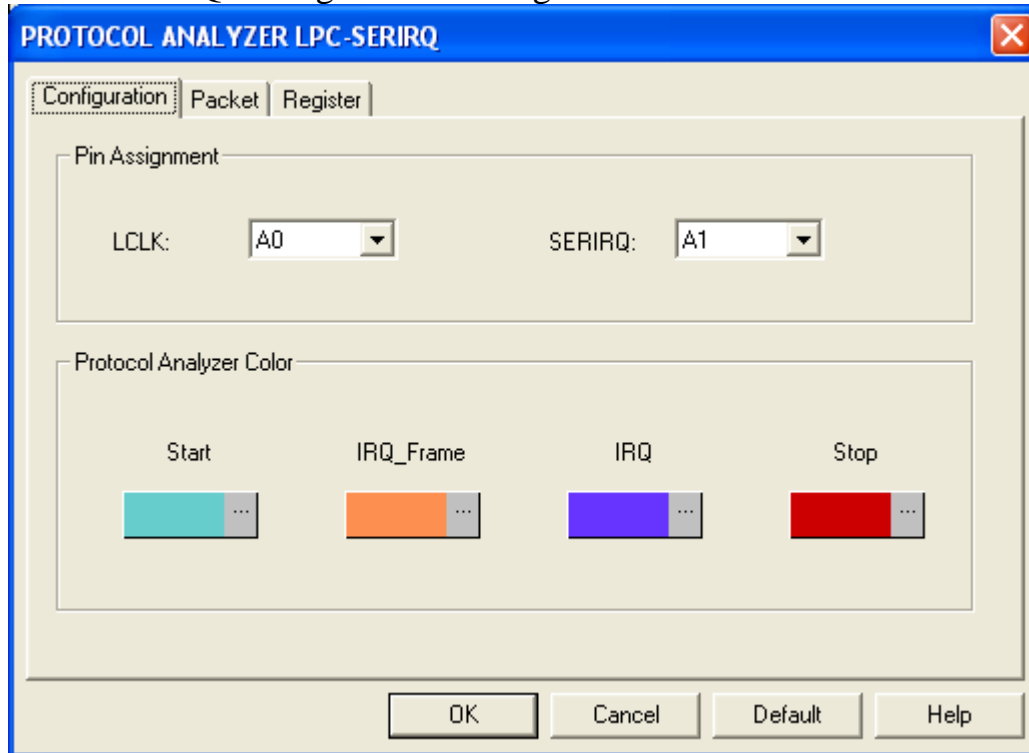




## 4 User Interface

Please refer to the below images to select options of setting **LPC-SERIRQ** Module.

### LPC-SERIRQ Configuration Dialog Box



#### Pin Assignment:

**LCLK:** It is the Clock channel, and the default is A0.

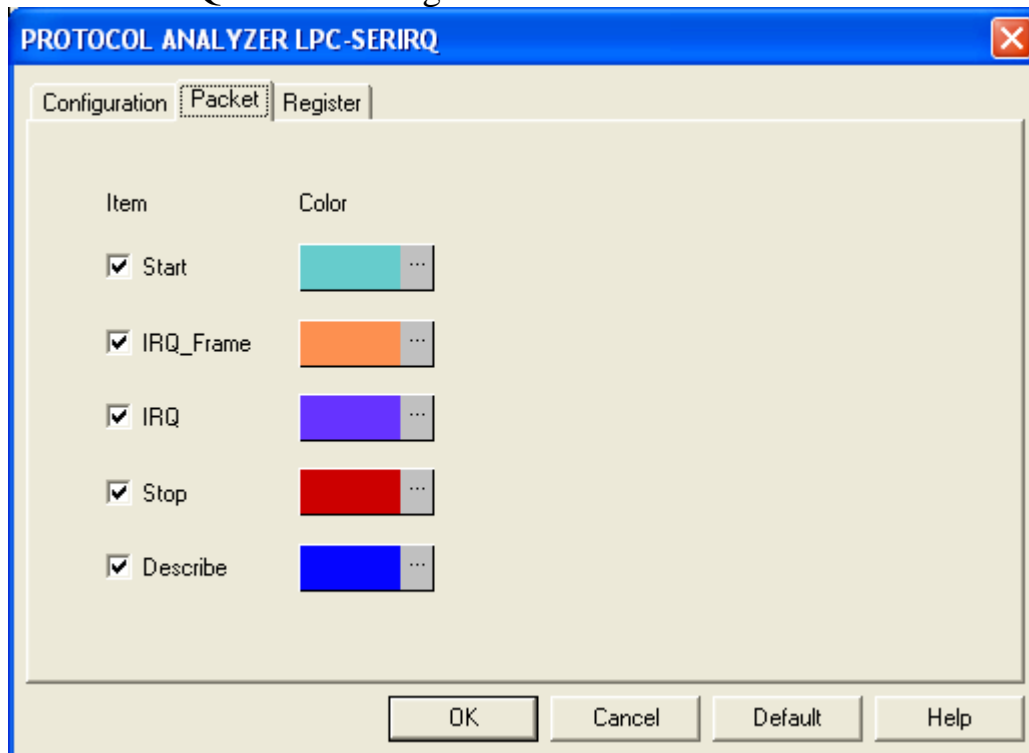
**SERIRQ:** It is the Interrupt Request channel, and the default is A1.

#### Protocol Analyzer Color:

The protocol analyzer color can be varied by users.

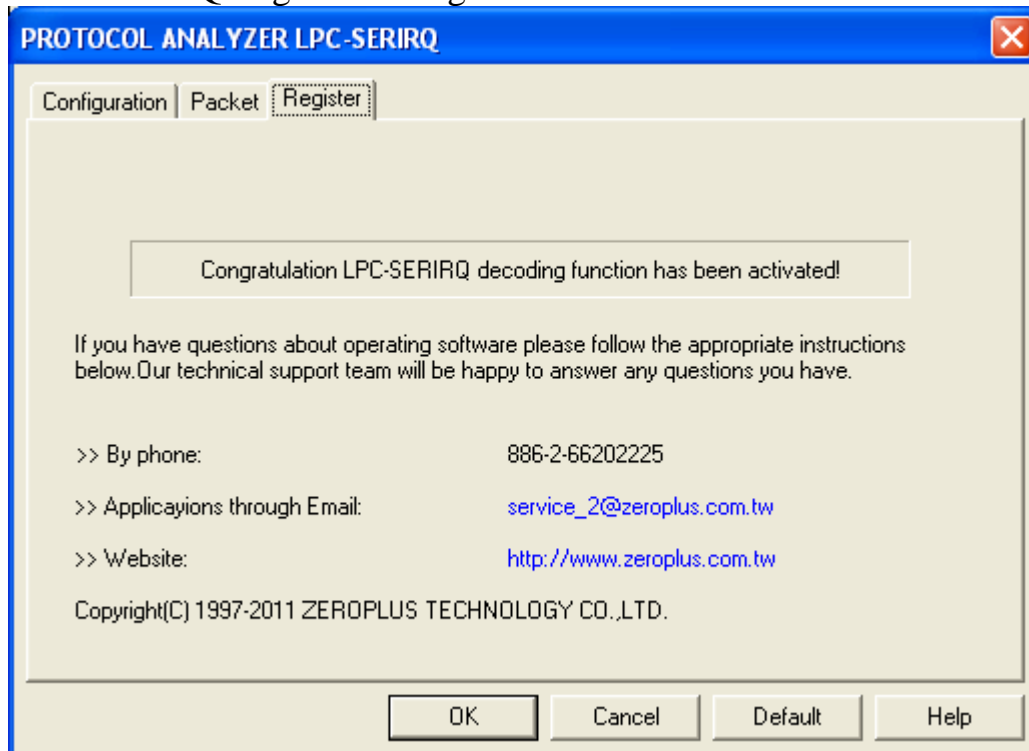


## LPC-SERIRQ Packet Dialog Box



In the Packet dialog box, users can vary the color of items and set the item to be displayed.

## LPC-SERIRQ Register Dialog Box

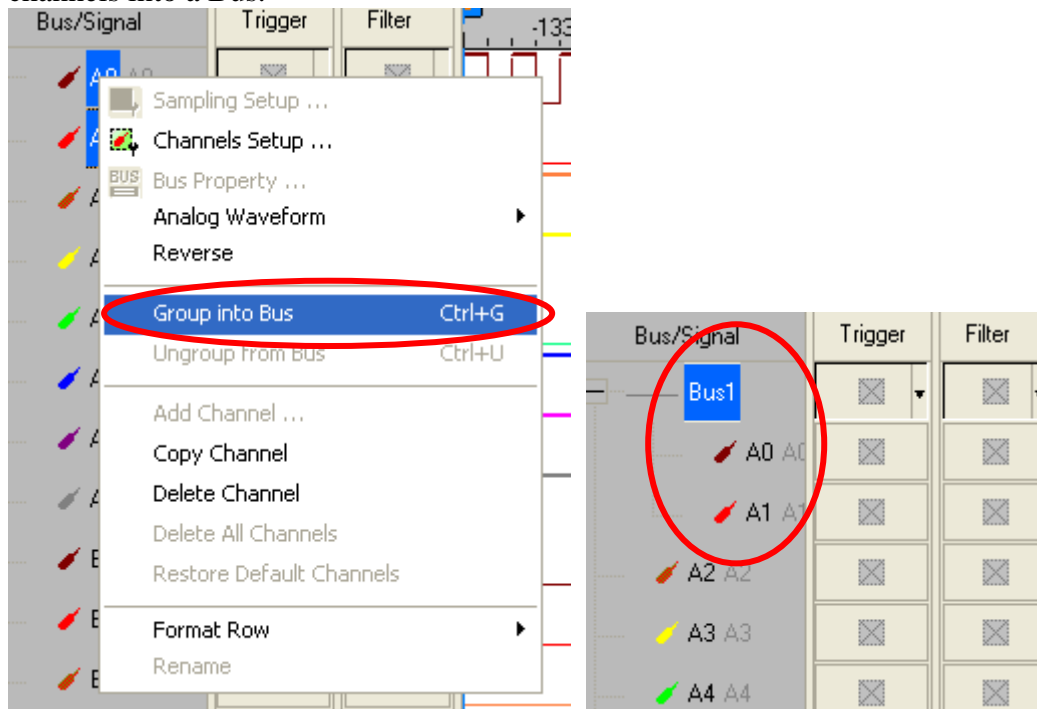


There is ZeroPlus company information. If users have questions about software operations, they can contact ZeroPlus by Telephone or Email.

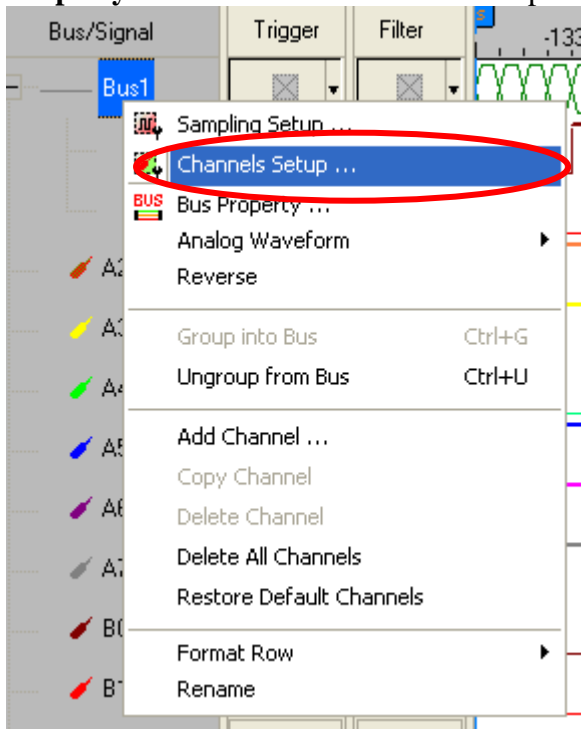


## 5 Operating Instructions

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



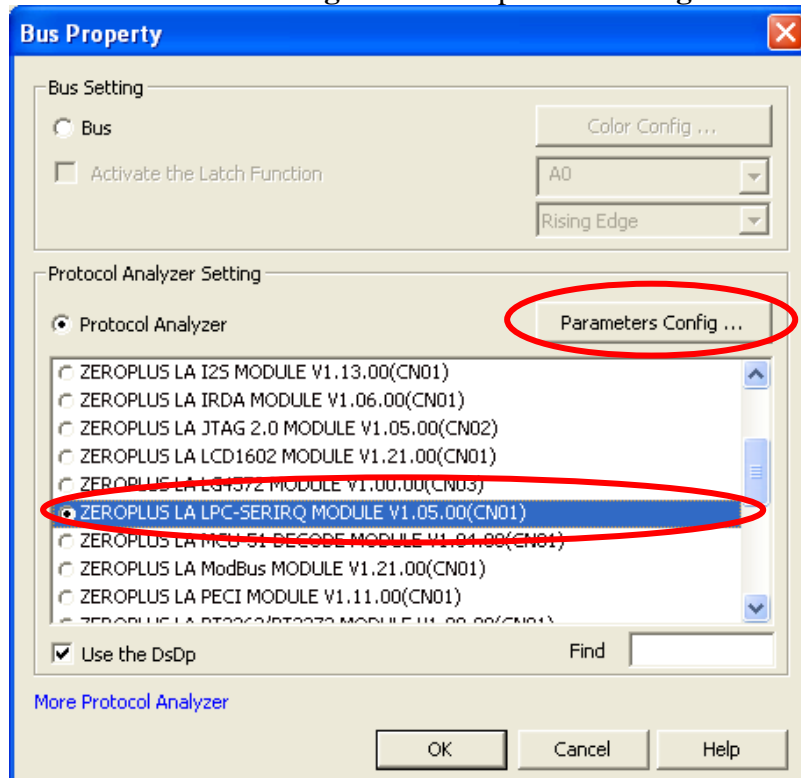
**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



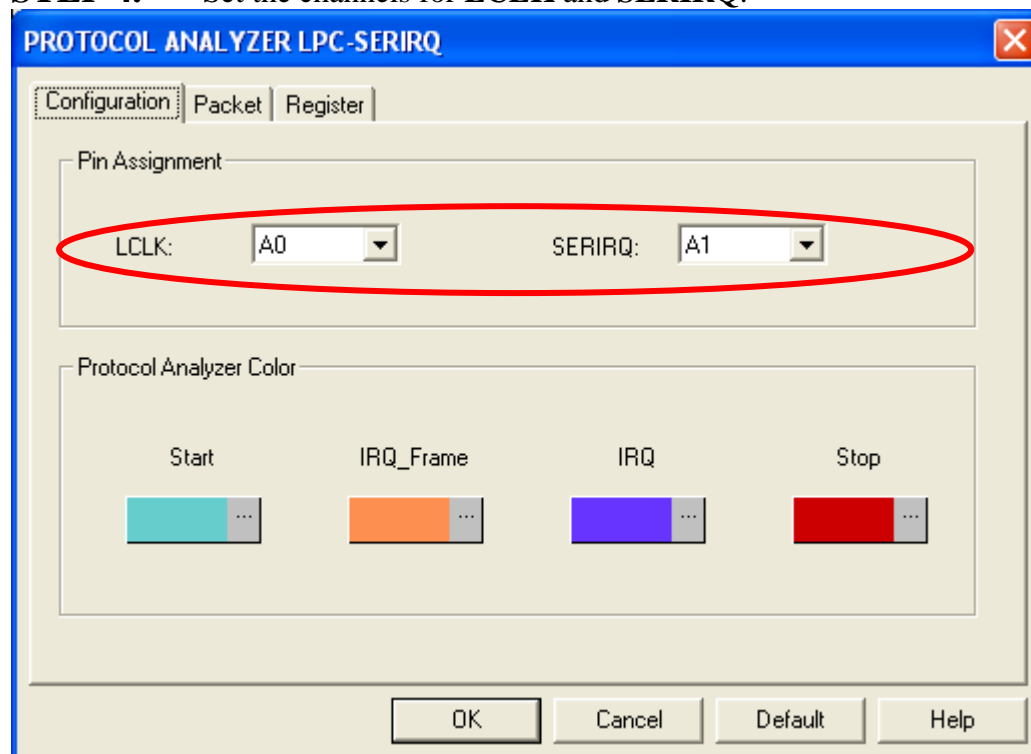




**STEP 3.** For Protocol Analyzer LPC-SERIRQ Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA LPC-SERIRQ MODULE V1.05.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

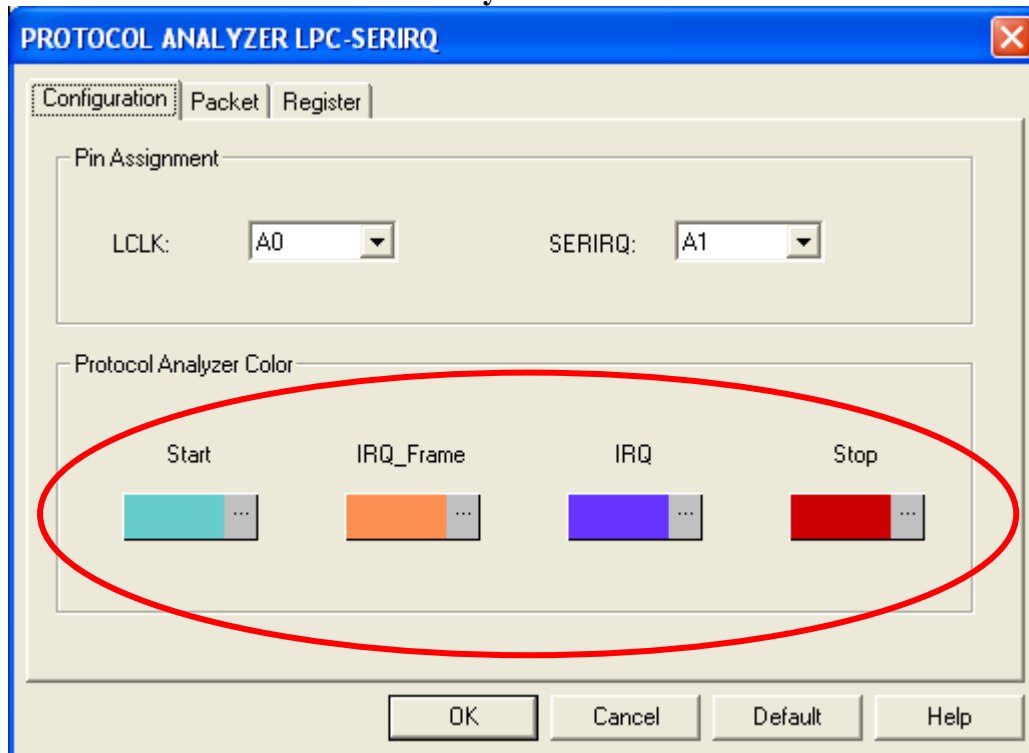


**STEP 4.** Set the channels for **LCLK** and **SERIRQ**.



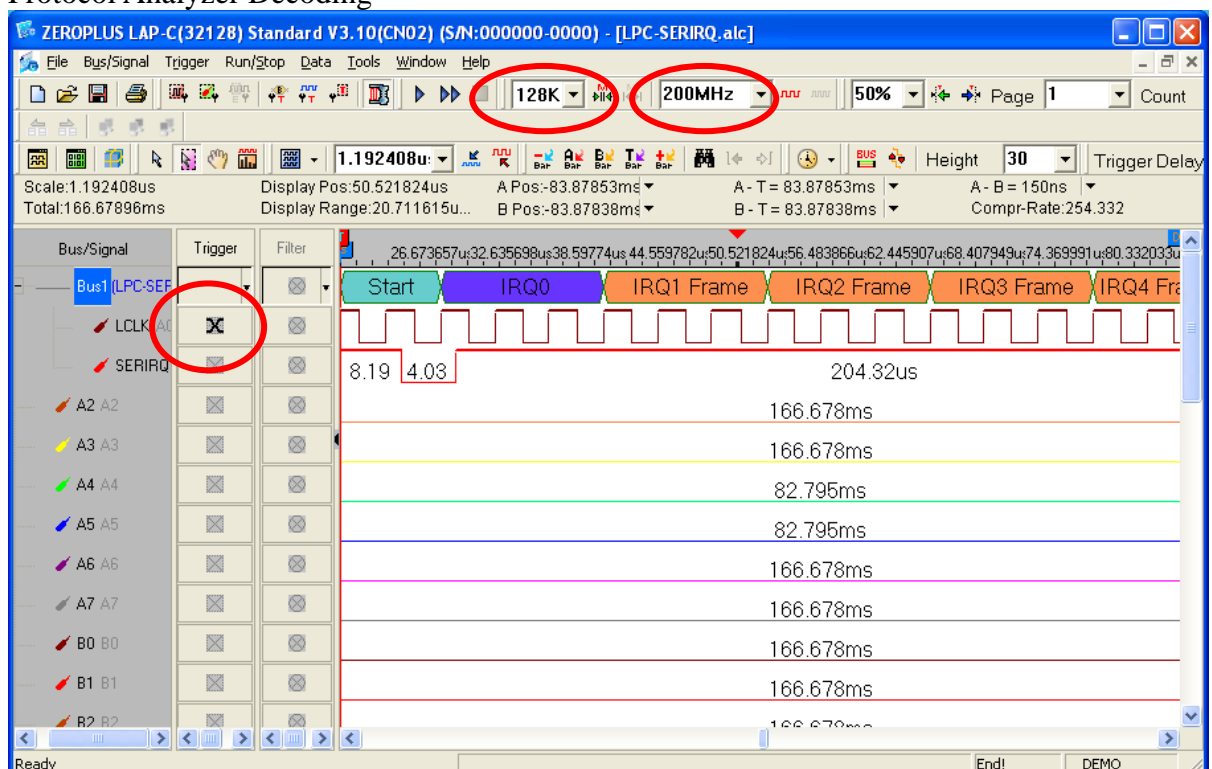


## STEP 5. Set the Protocol Analyzer Color.



**STEP 6.** 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 six times higher than the signal to be tested).

## Protocol Analyzer Decoding





## Packet List

