



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

SPECIFICATION

MODEL: B08028-LAP- Low Pin Count-M

PART NO: _____

VERSION: V1.09

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.

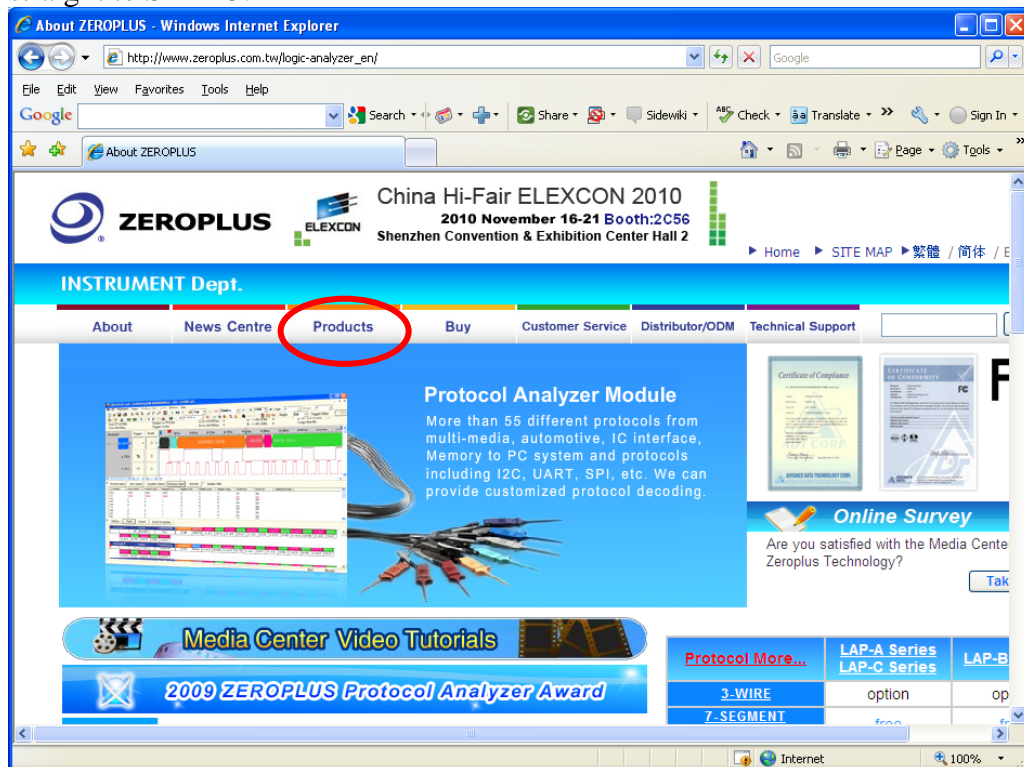
STEP 1. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

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

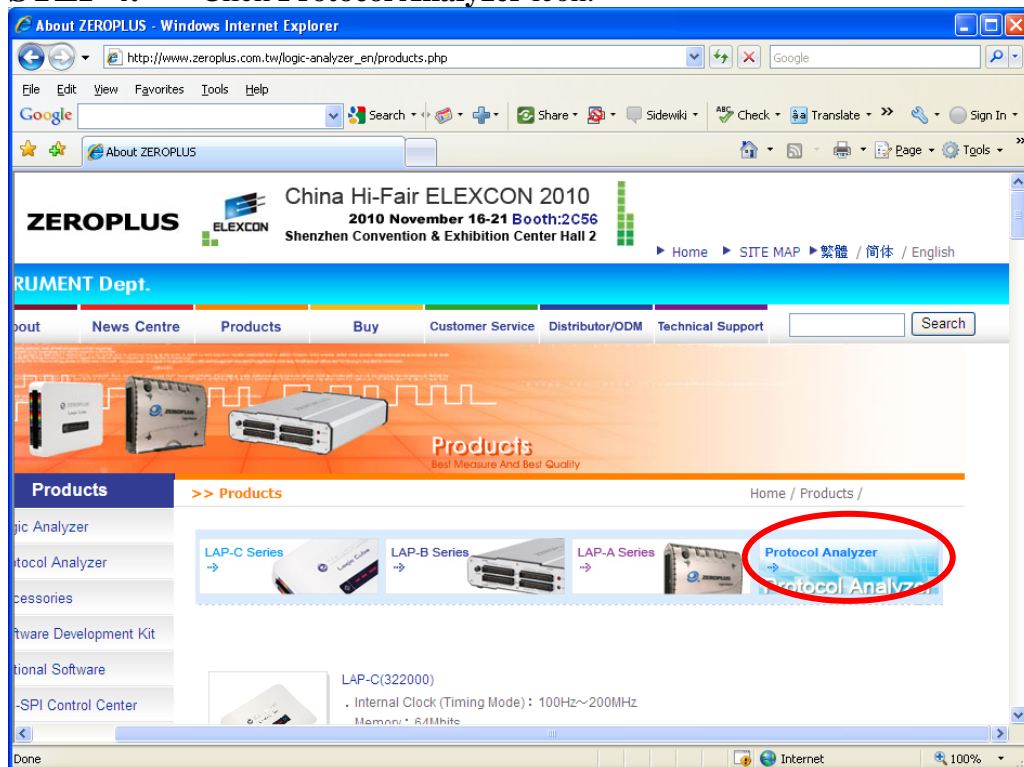




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

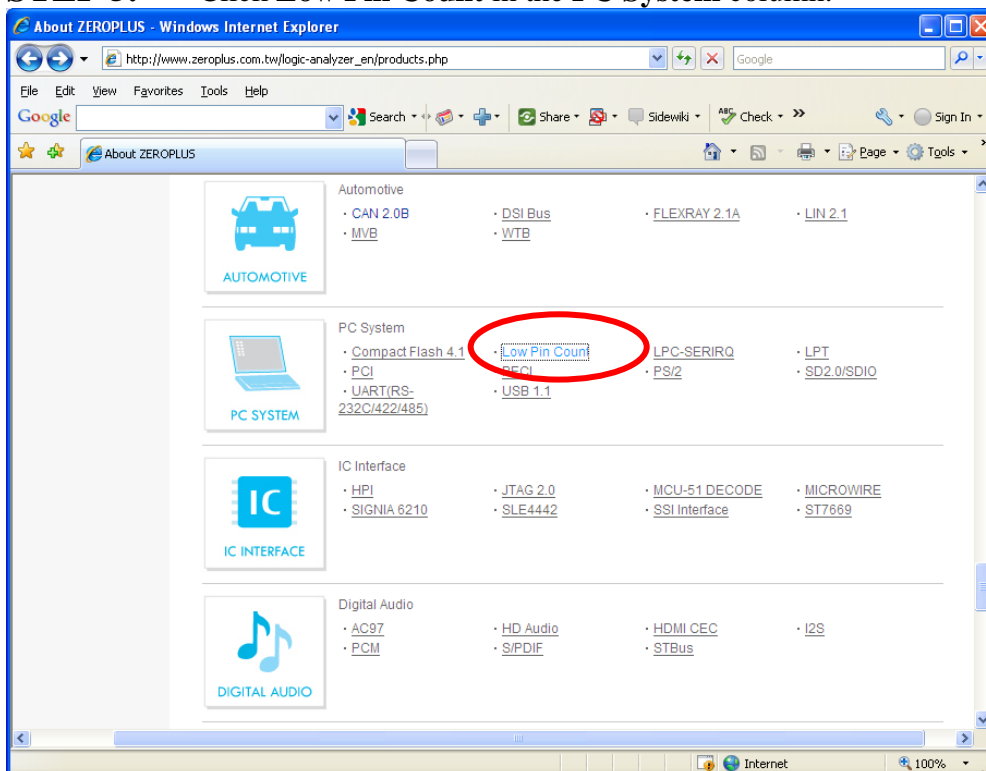


STEP 4. Click **Protocol Analyzer** icon.

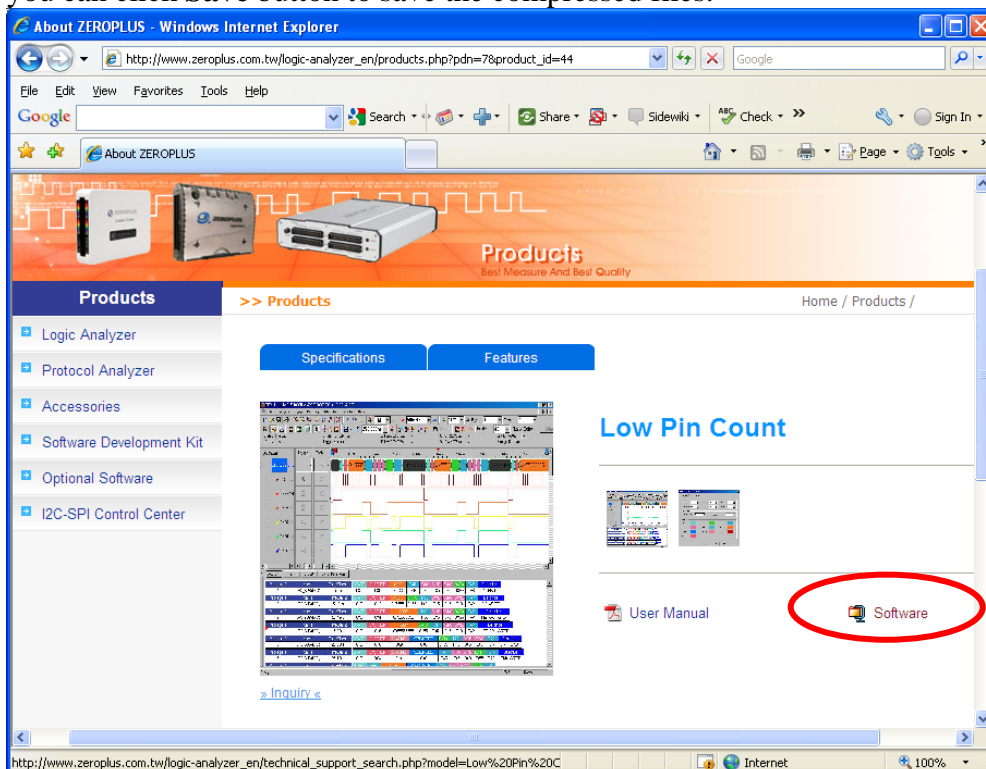




STEP 5. Click **Low Pin Count** in the **PC System** column.



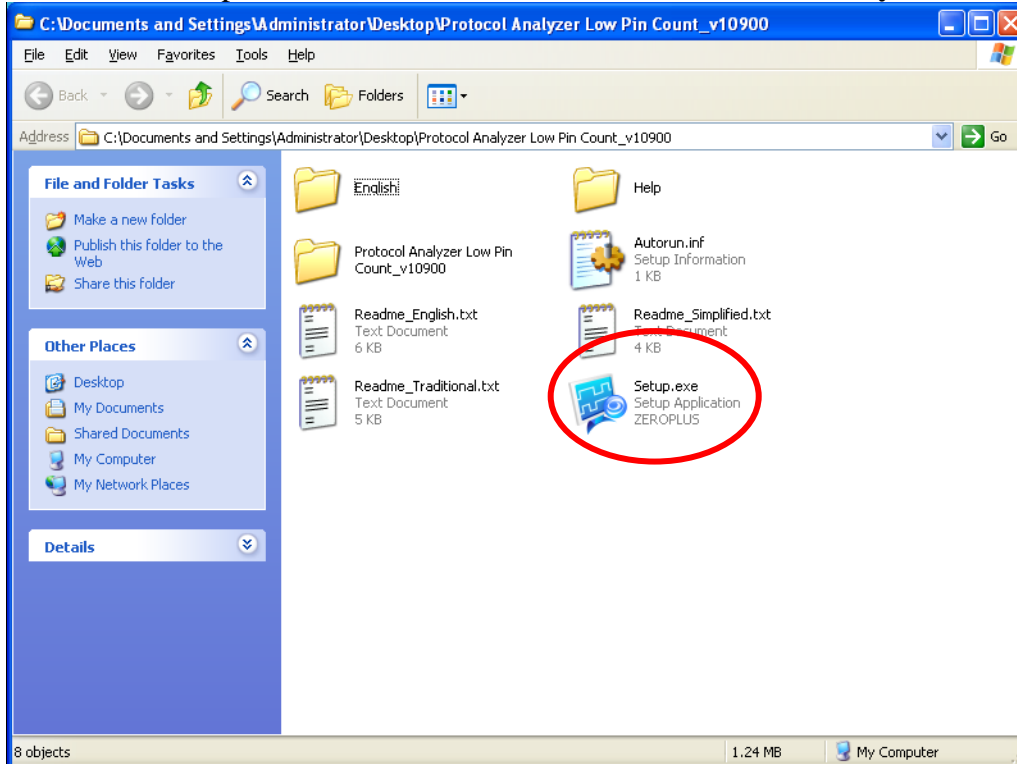
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



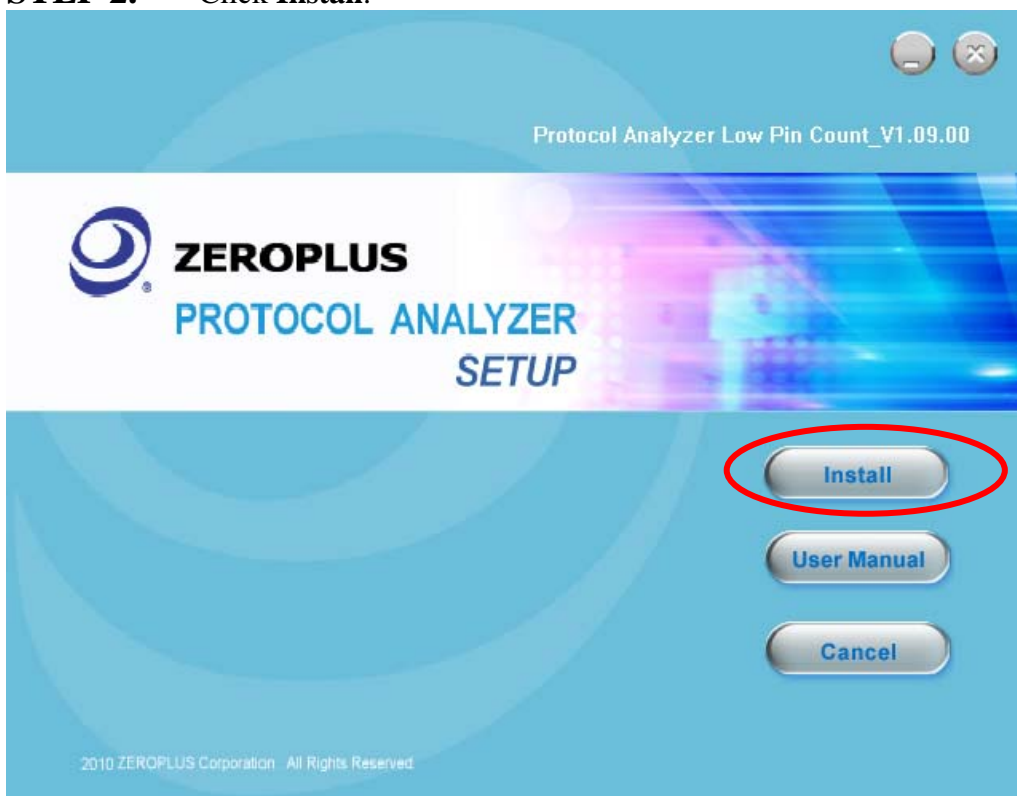


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer Low Pin Count**.

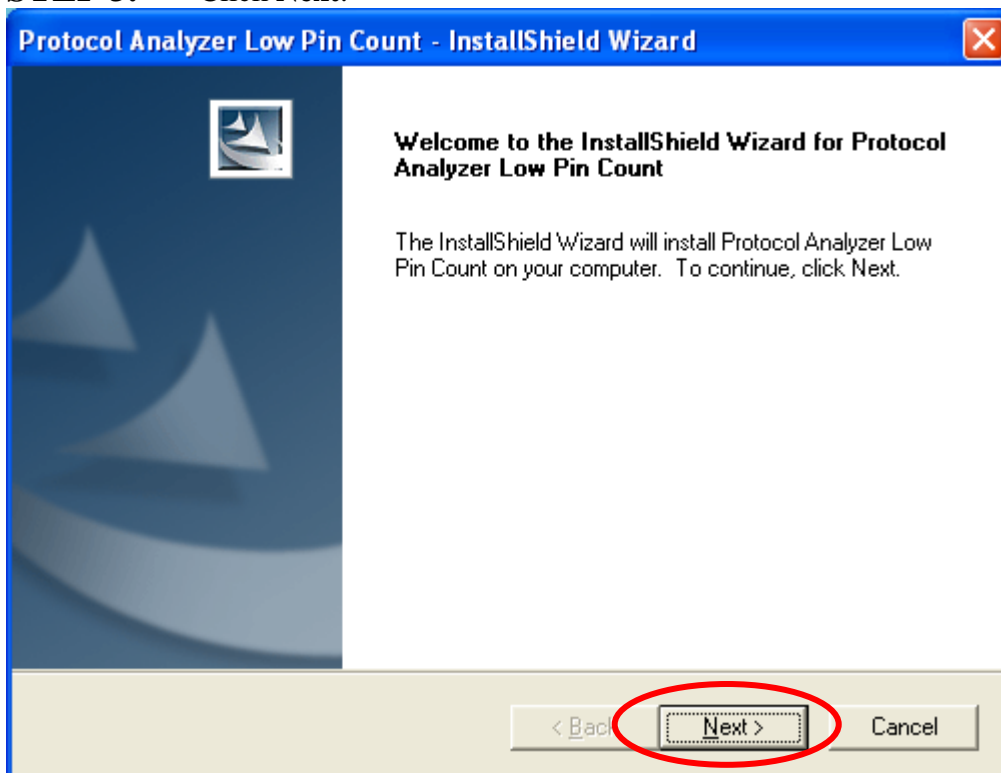


STEP 2. Click **Install**.

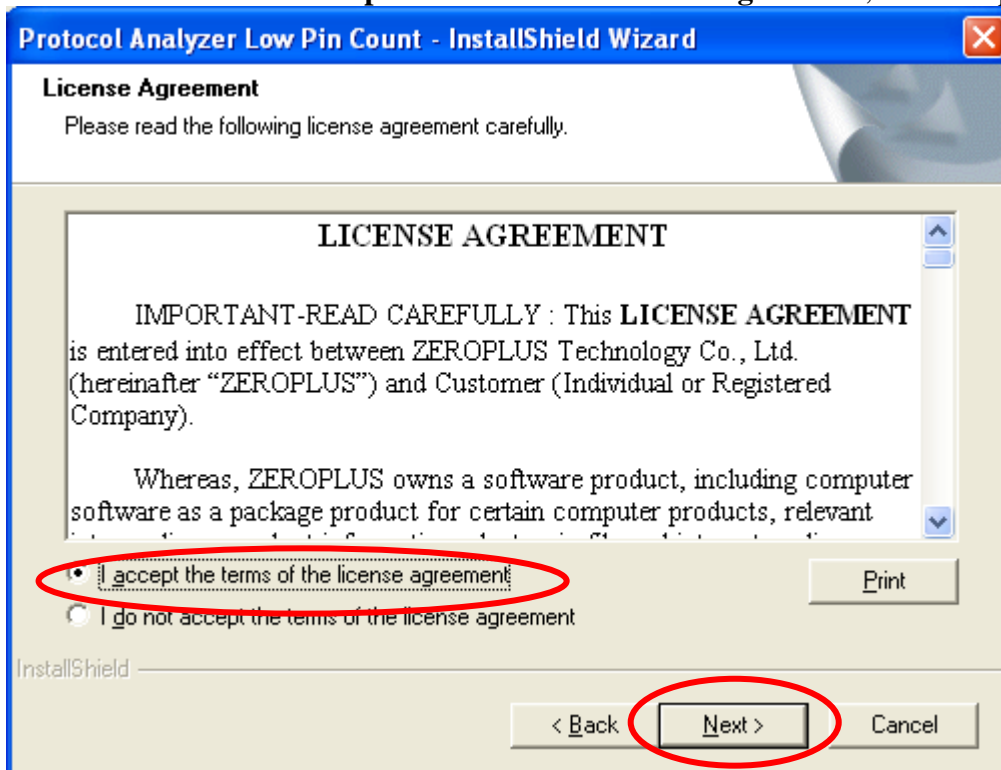




STEP 3. Click Next.



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





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

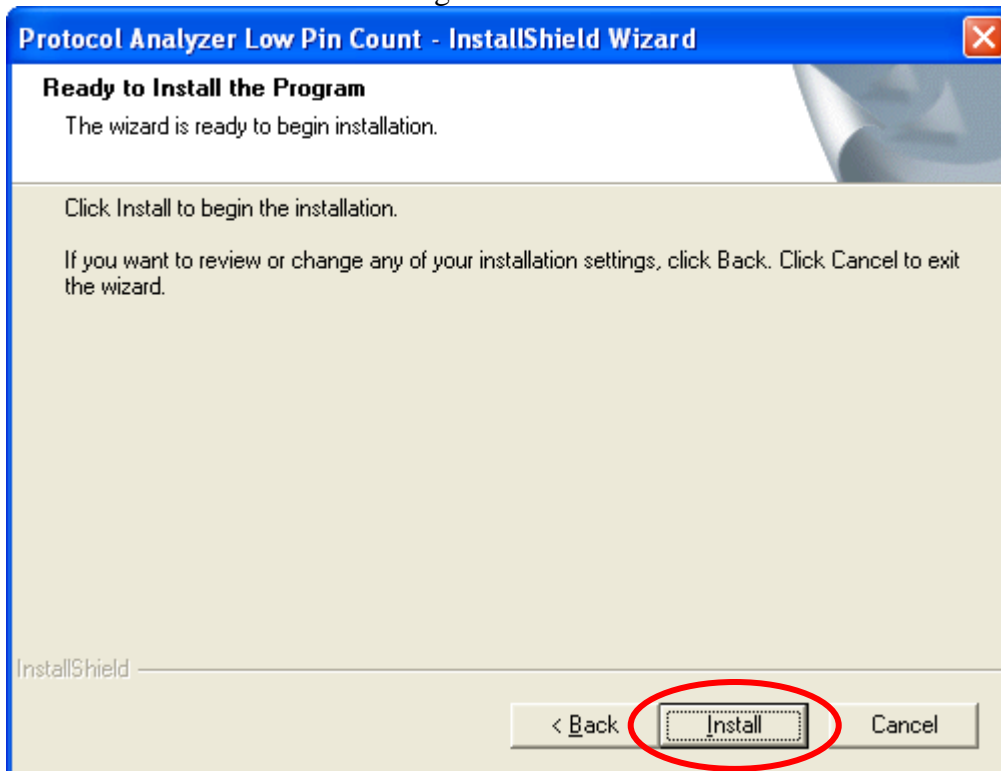
The dialog box is titled "Protocol Analyzer Low Pin Count - InstallShield Wizard". It has a blue title bar with a close button. The main area is titled "Customer Information" and contains the text "Please enter your information." Below this are two text input fields: "User Name:" with "Microsoft" entered,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

STEP 6. First, select **Complete** and then click **Next**.

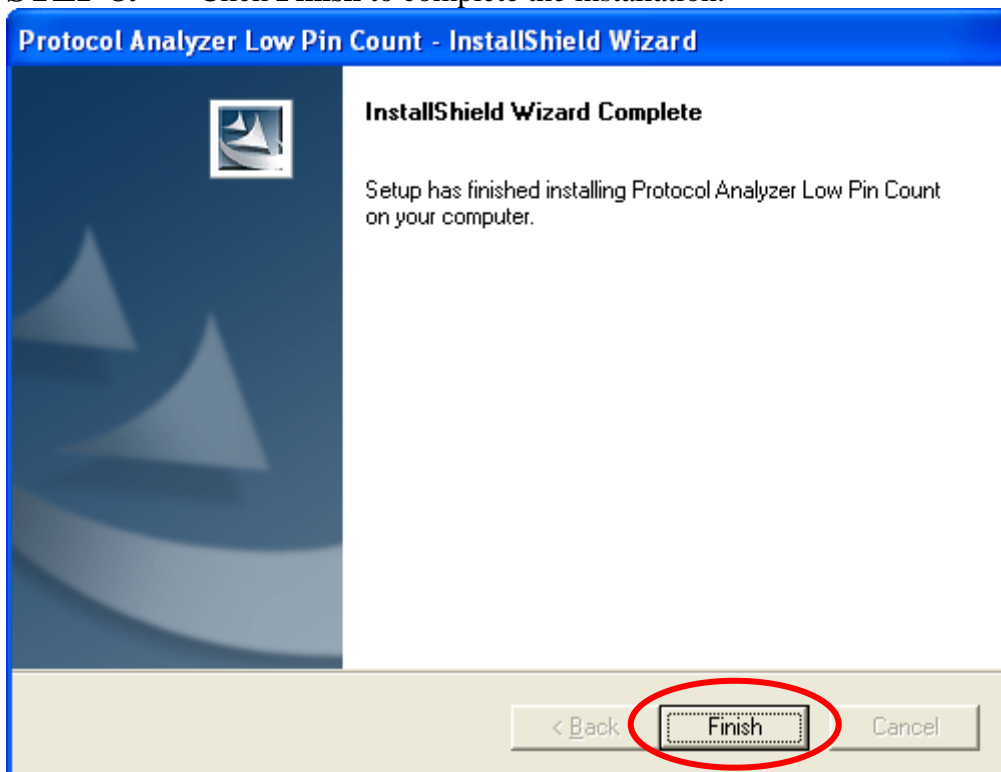
The dialog box is titled "Protocol Analyzer Low Pin Count - InstallShield Wizard". It has a blue title bar with a close button. The main area is titled "Setup Type" and contains the text "Select the setup type to install." Below this is the text "Please select a setup type." There are two radio button options: "Complete" (selected) and "Custom". The "Complete" option has a description: "All program features will be installed. (Requires the most disk space.)" and an icon of a computer with a red checkmark. The "Custom" option has a description: "Select which program features you want installed. Recommended for advanced users." and an icon of a computer with a red checkmark. At the bottom, there is a "Next >" button circled in red, along with "< Back" and "Cancel" buttons. The "InstallShield" logo is visible in the bottom left corner.



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

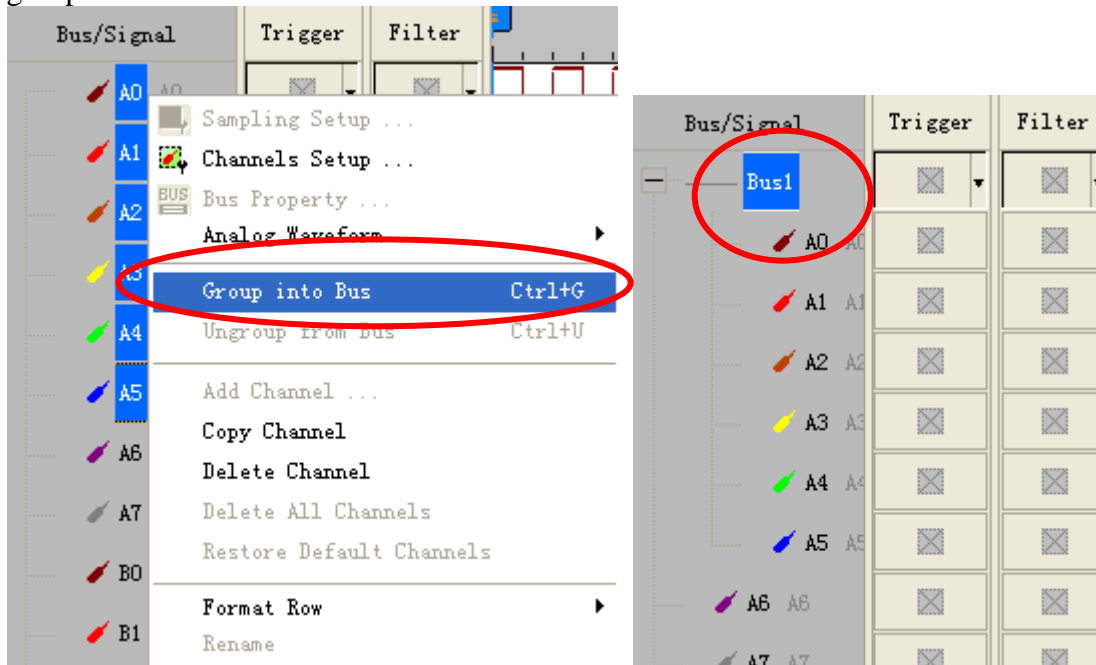


STEP 8. Click **Finish** to complete the installation.

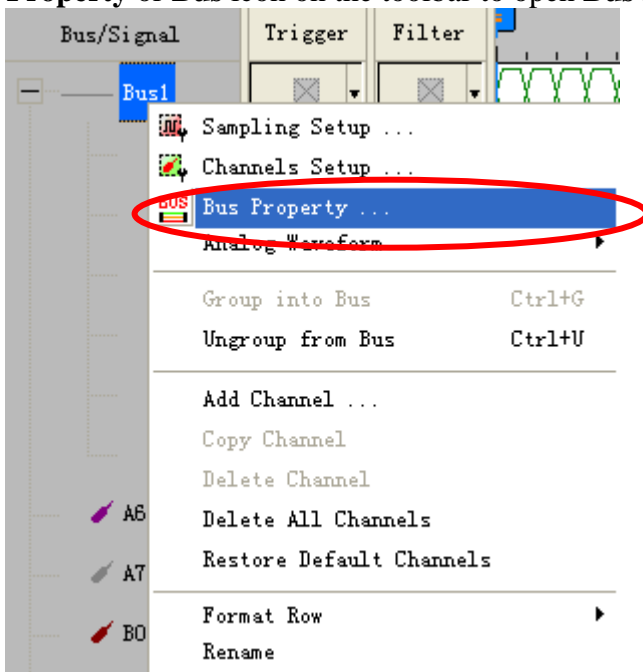


3 Software Register

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

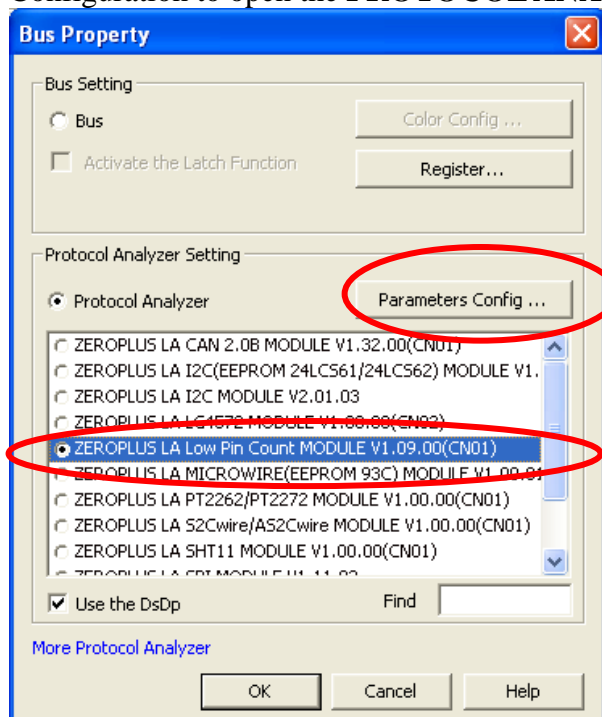


STEP 2. Select **Bus1**, then press **Right Key** on the mouse to list the menu, next press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

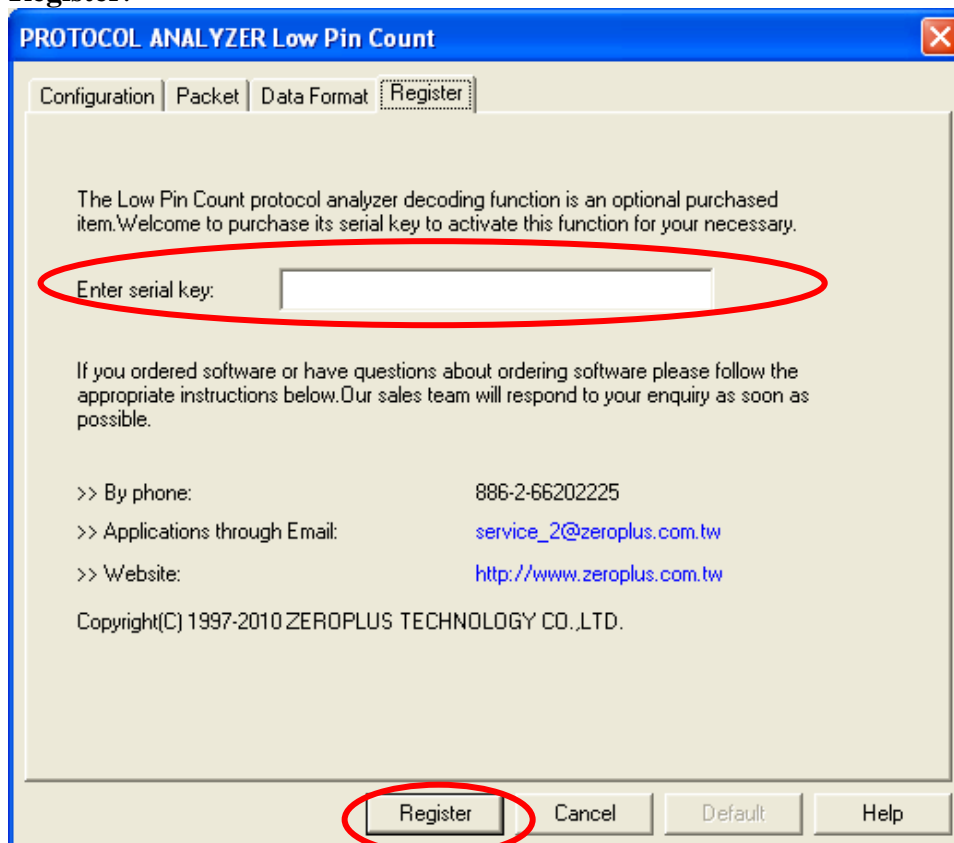




STEP 3. For Protocol Analyzer Low Pin Count Parameters, select Protocol Analyzer, and then choose **ZEROPLUS LA Low Pin Count MODULE V1.09.00(CN01)**. Next click Parameters Configuration to open the **PROTOCOL ANALYZER Low Pin Count** dialog box

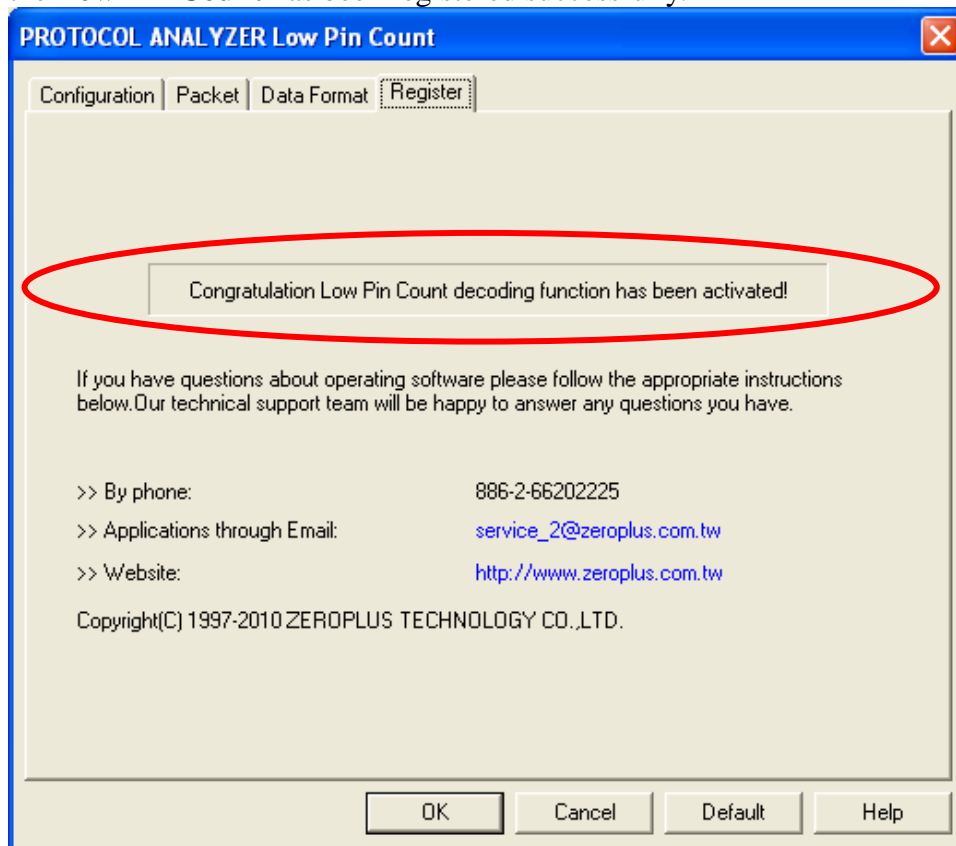


STEP 4. Press Register tab to type the serial key number of **Low Pin Count**. Then, press **Register**.





STEP 5. After pressing the Register button, the following dialog box will appear; it denotes that the **Low Pin Count** has been registered successfully.





4 User Interface

In the configuration, please refer to images below to select options of setting **Low Pin Count** module.

Low Pin Count Configuration Dialog Box

Low Pin Count Pin Assignment:

LCLK: It is a clock channel and, its frequency is 33MHz. The default is A0.

L/FAME: It is Start/Stop channel and its default is A1.

LAD[3]: It is the highest bit of the data signal line and its default is A2.

LAD[2]: It is the second bit of the data signal line and its default is A3.

LAD[1]: It is the third bit of the data signal line and its default is A4.

LAD[0]: It is the lowest bit of the data signal line and its default is A5.

Protocol Analyzer Property:

Sampling Mode: Two options are listed, Falling Edge and Rising Edge. The default is Falling Edge.

Transmission Direction: Two options are listed, LSB->MSB and MSB->LSB. The default is LSB->MSB.

Decoding Address is the 0X:

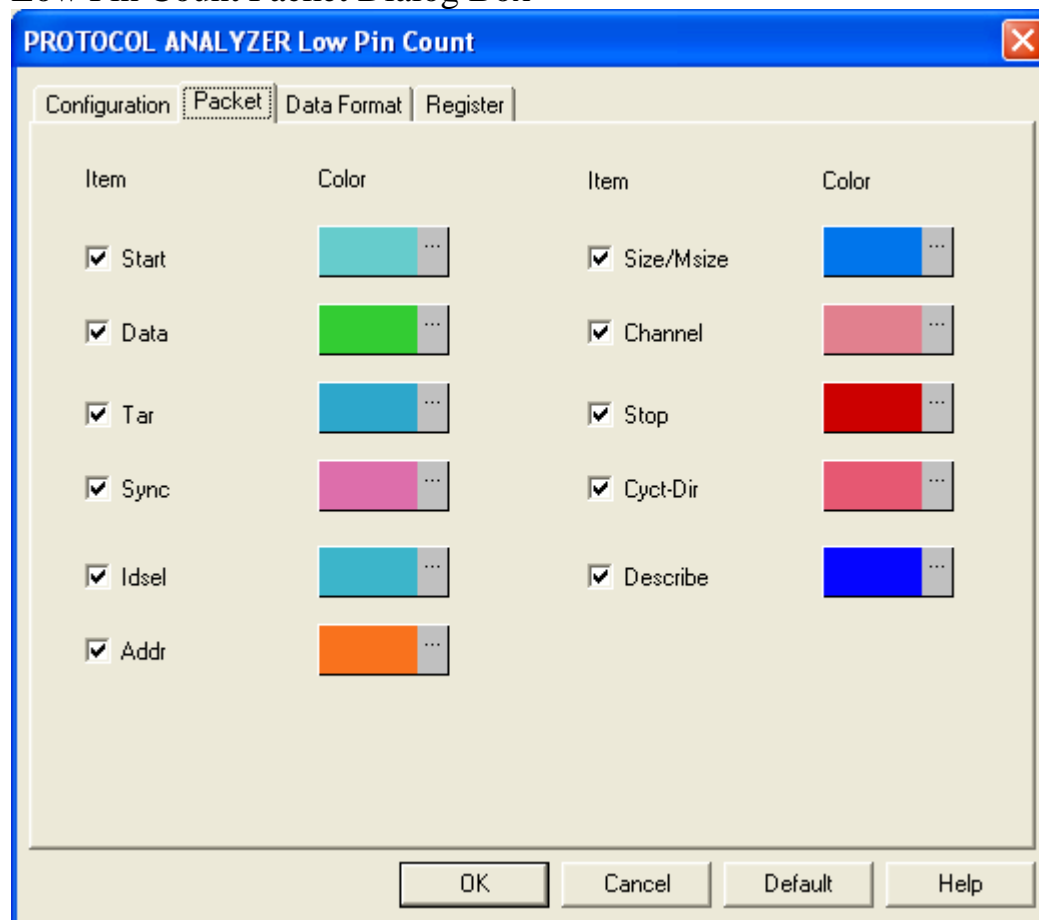
When the Item is selected, the value can be entered from 0 to 0xFFFFFFFF. When the value of Address is the entered value, the decoding will be displayed. The default is not selected.

Protocol Analyzer Color:

The protocol analyzer colors can be varied by users.



Low Pin Count Packet Dialog Box



In the packet dialog box, users can vary the color of items.



Low Pin Count Data Format Dialog Box

PROTOCOL ANALYZER Low Pin Count

Configuration | Packet | **Data Format** | Register

☒ Activate

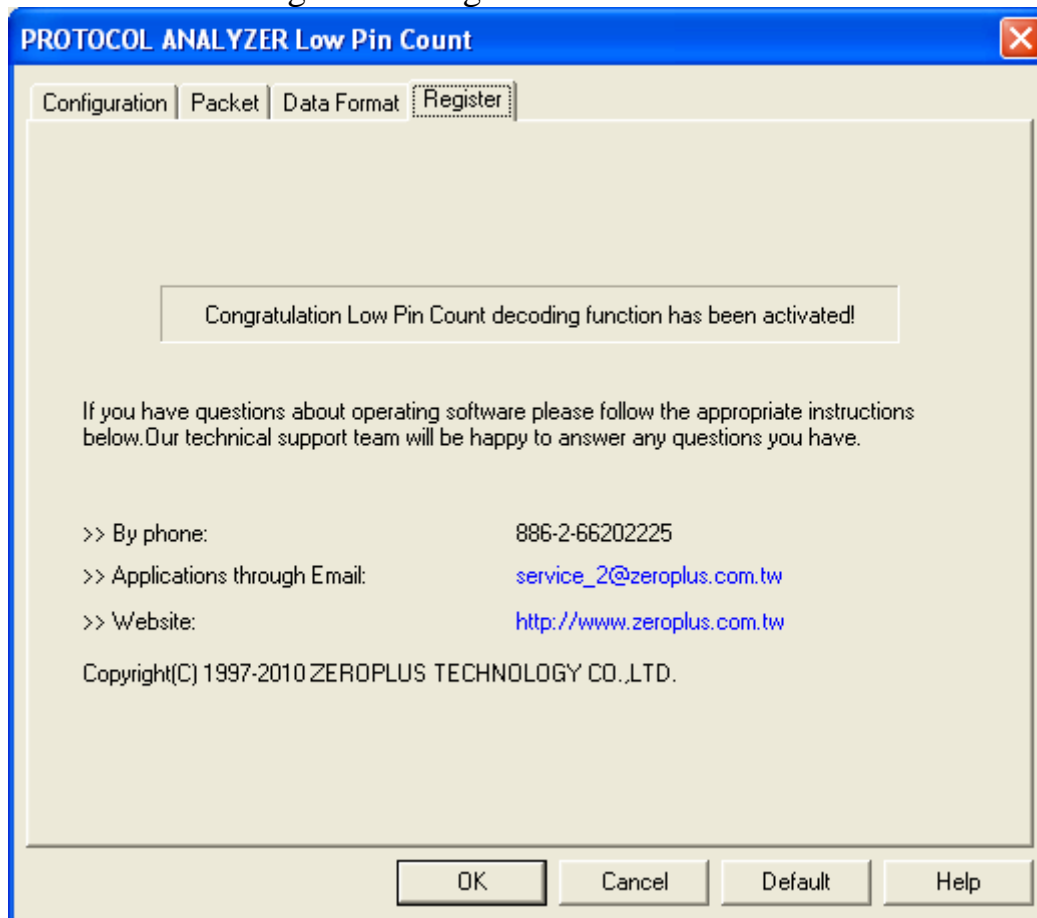
Start:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Data:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Sync:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Idsel:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Addr:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Size/Msize:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Channel:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Cyct-Dir:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII

OK Cancel Default Help

Users can set the Data Format of the Start, Data, Sync, Idsel, Addr, Size/Msize, Channel and Cyct-Dir as their requirements. When selecting the option, Activate, the data formats are decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data formats are decided by the settings in the main program.



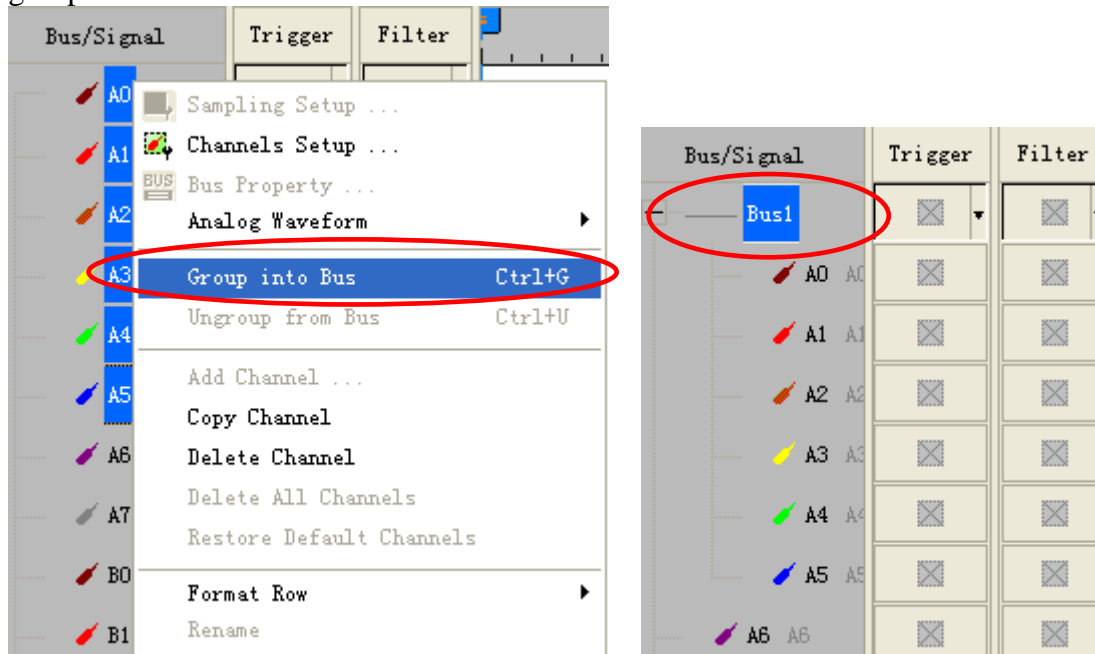
Low Pin Count Register Dialog Box



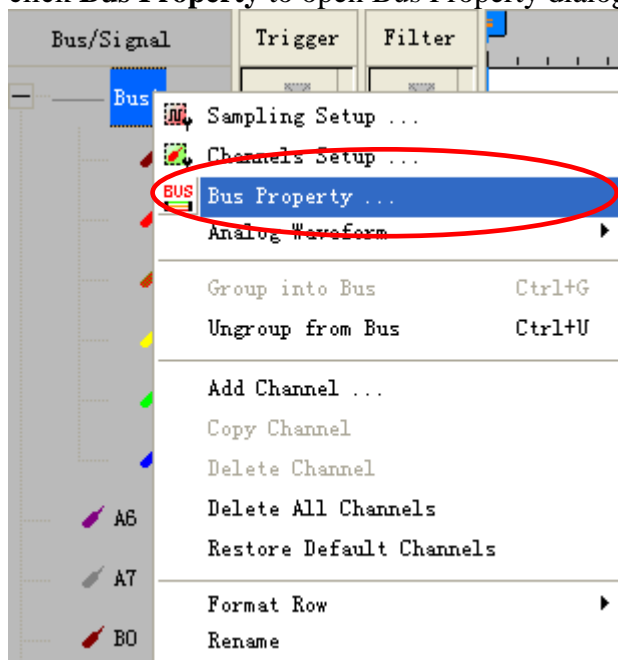
There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

5 Operating Instructions

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

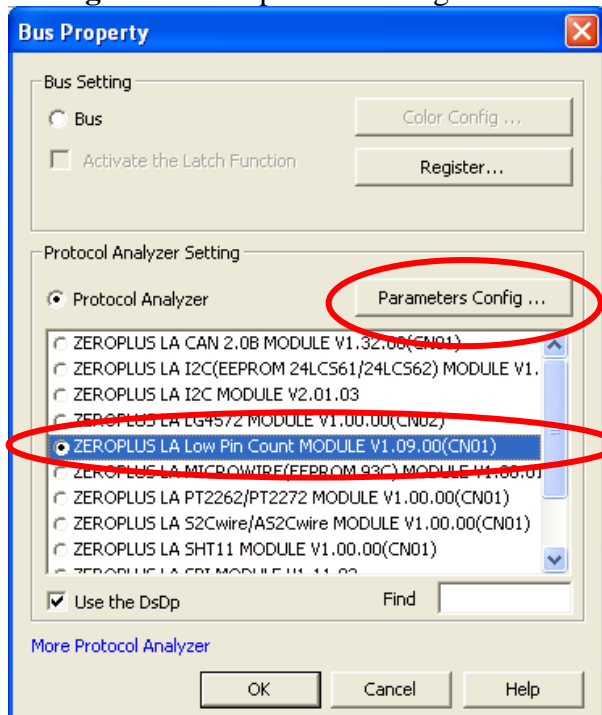


STEP 2. Select **Bus1**, and then press the **Right Key** on the mouse to list the menu, next click **Bus Property** to open Bus Property dialog box.

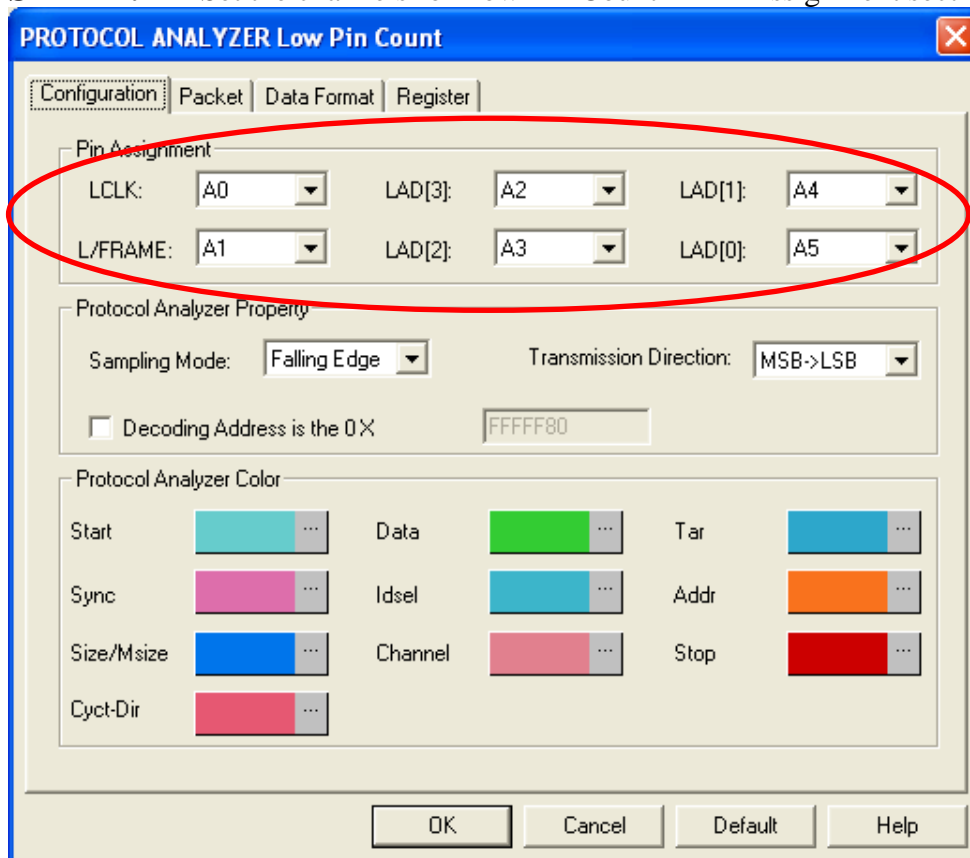




STEP 3. For Protocol Analyzer Parameters Configuration, select Protocol Analyzer. Then, choose **ZEROPLUS LA Low Pin Count MODULE V1.09.00(CN01)**. Next click **Parameters Configuration** to open the Configuration dialog box.

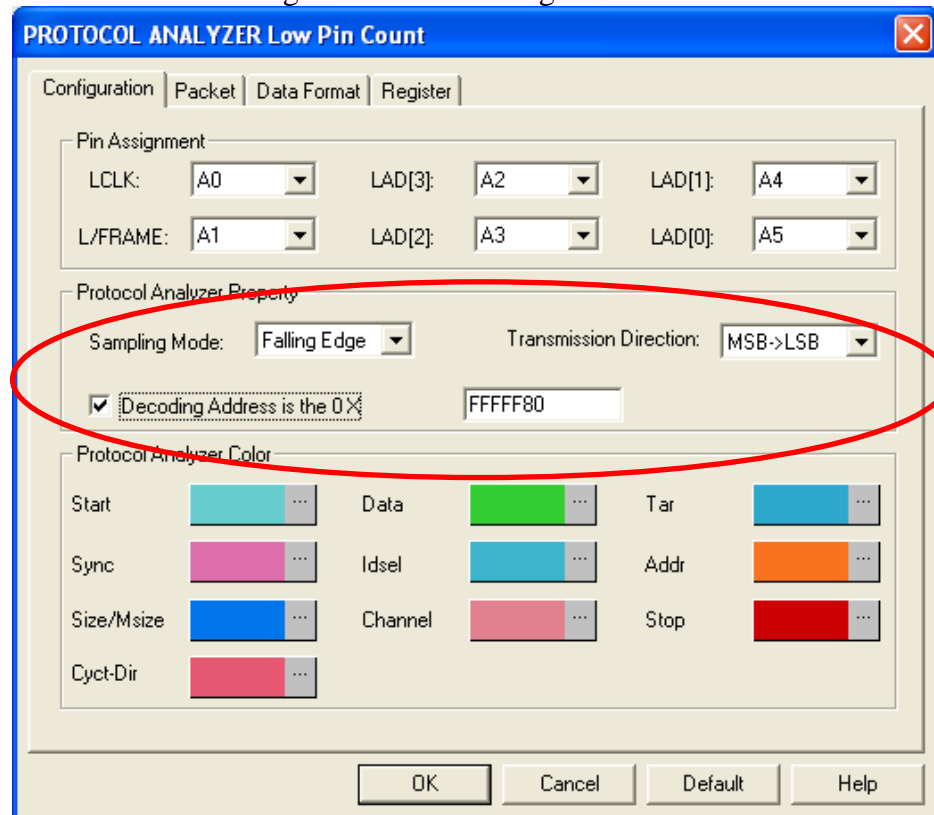


STEP 4. Set the channels for Low Pin Count in Pin Assignment section.

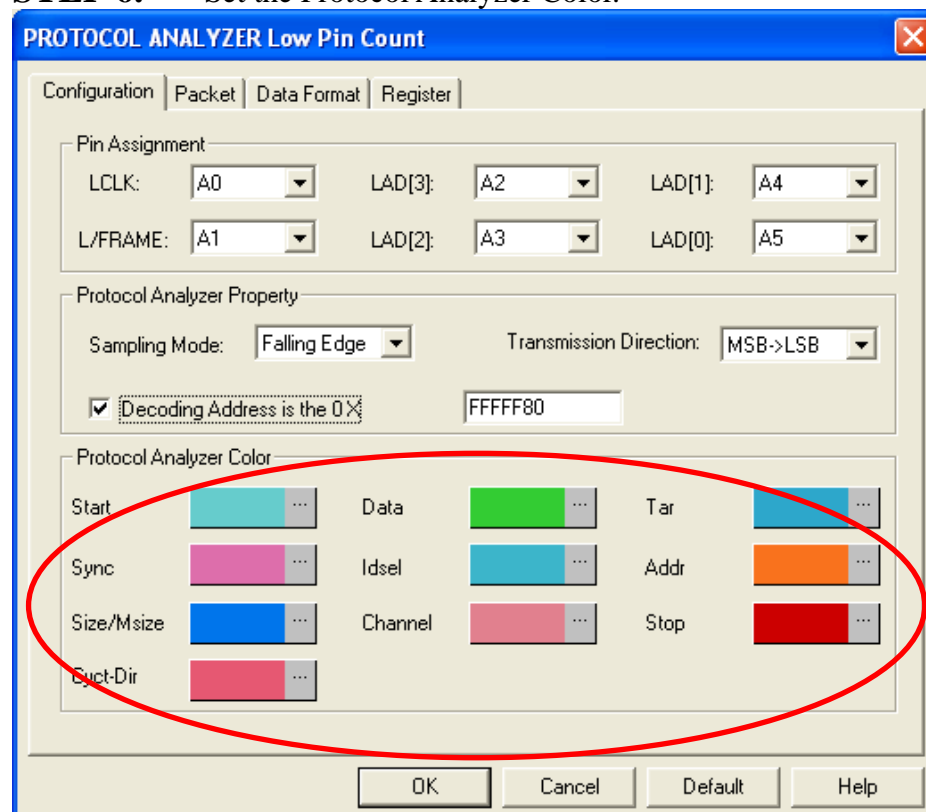




STEP 5. For Protocol Analyzer Property, choose either Falling Edge or Rising Edge as the Sampling Mode. Then, choose LSB->MSB or MSB->LSB as the Transmission Direction. Next, set the Value of Decoding Address in the range from 0 to 0xFFFFFFFF.



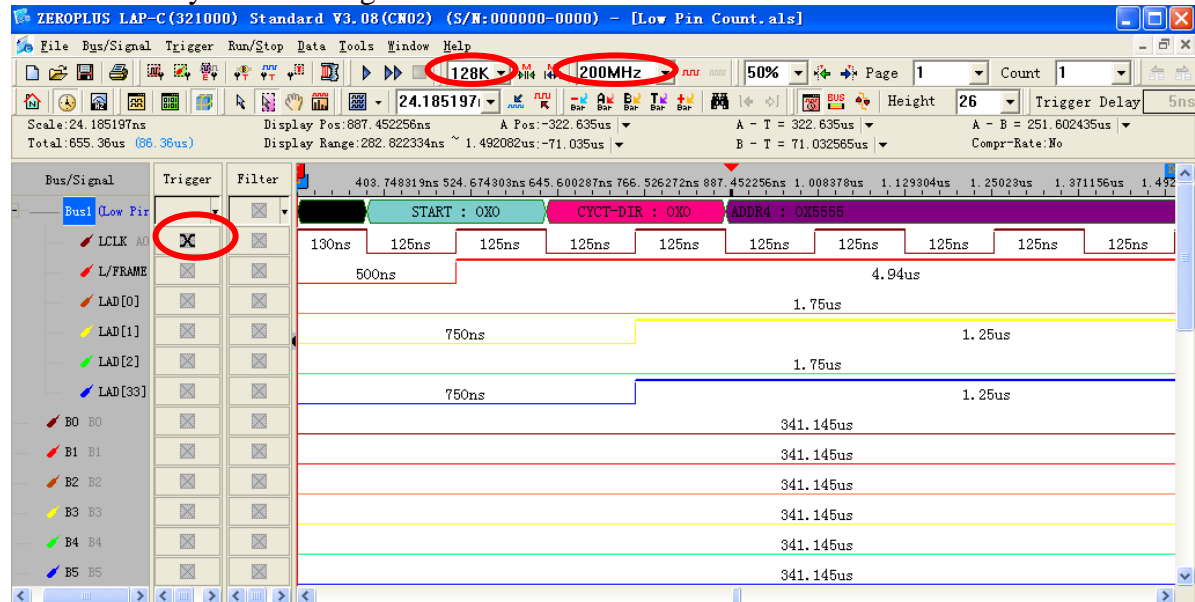
STEP 6. Set the Protocol Analyzer Color.





STEP 7. Following picture shows the completion of the protocol analyzer decoding. 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 4 times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

