



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

# SPECIFICATION

**MODEL: B11002-LAP-GPIB-M**

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

**VERSION:** V1.00

Approver		Check	Design
GM	PM		

Customer Confirm

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

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## Content

1	Software Download .....	3
2	Software Installation.....	6
3	Software Register .....	10
4	User Interface .....	13
5	Operating Instructions .....	16



## 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.

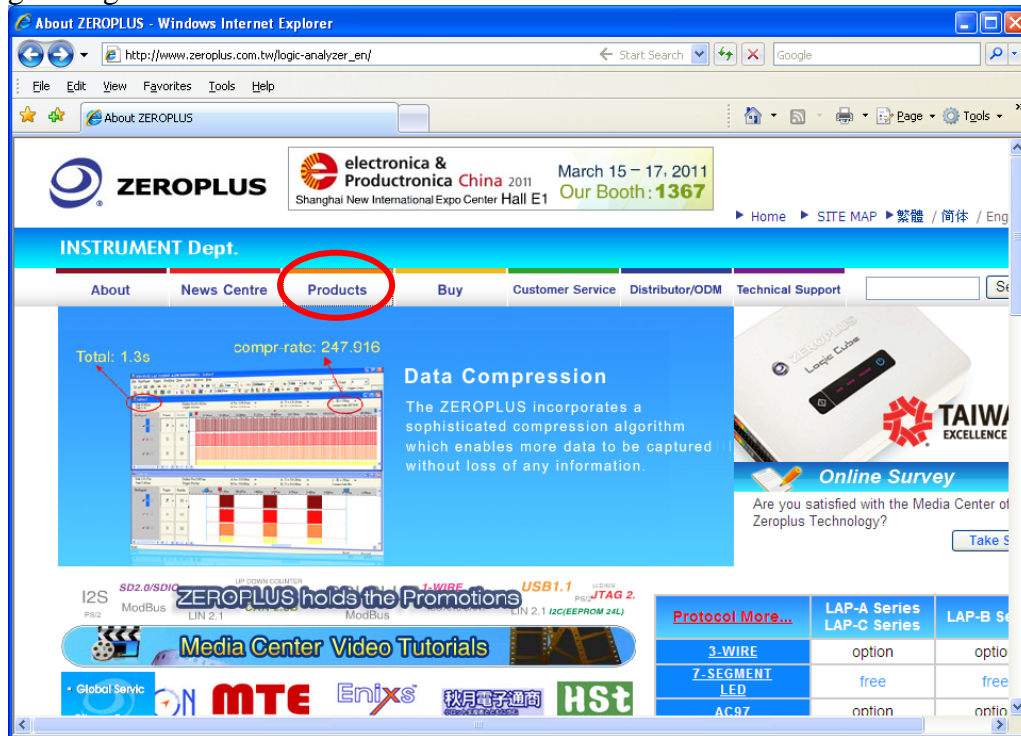
**STEP 1.** Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

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

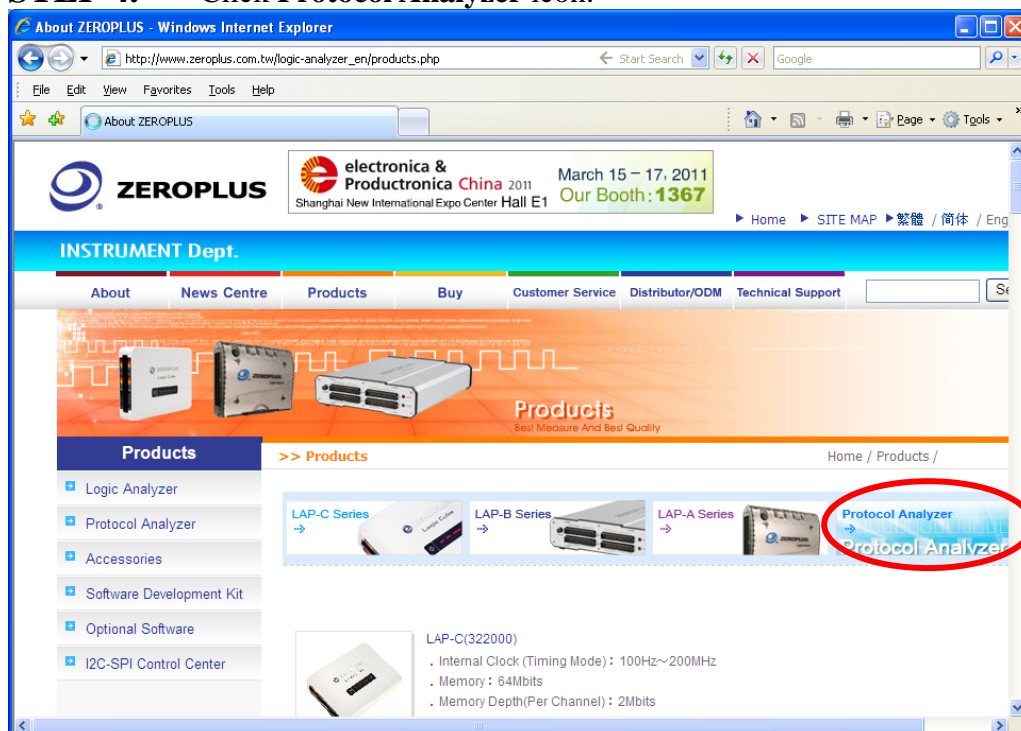




**STEP 3.** Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

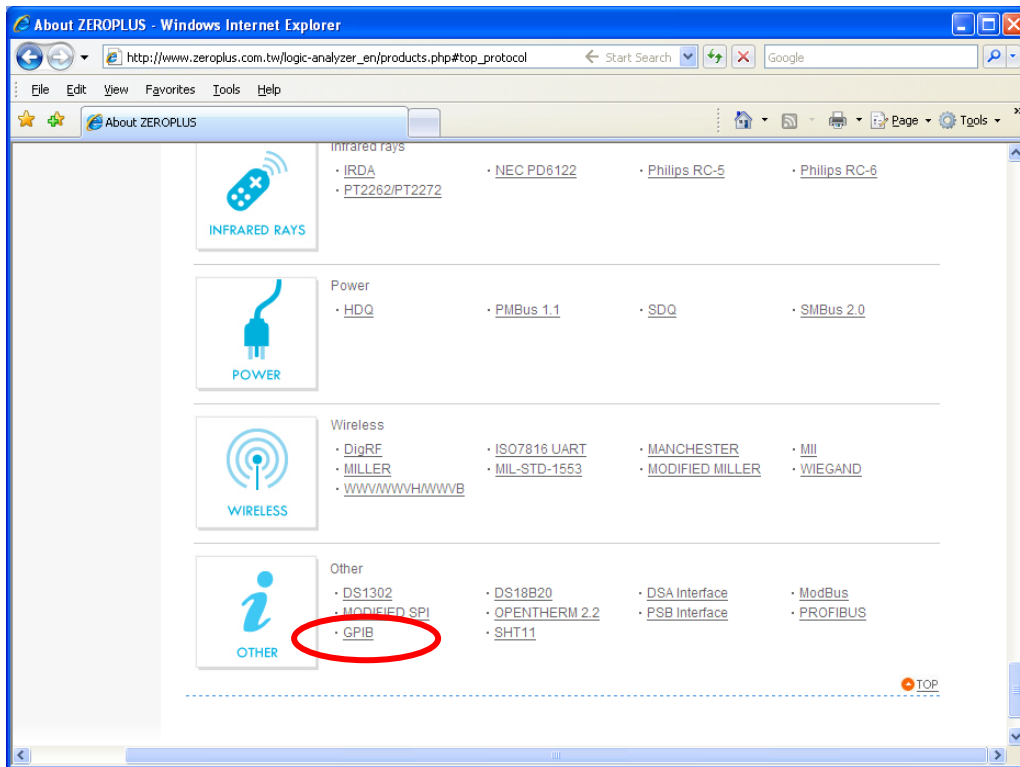


**STEP 4.** Click **Protocol Analyzer** icon.

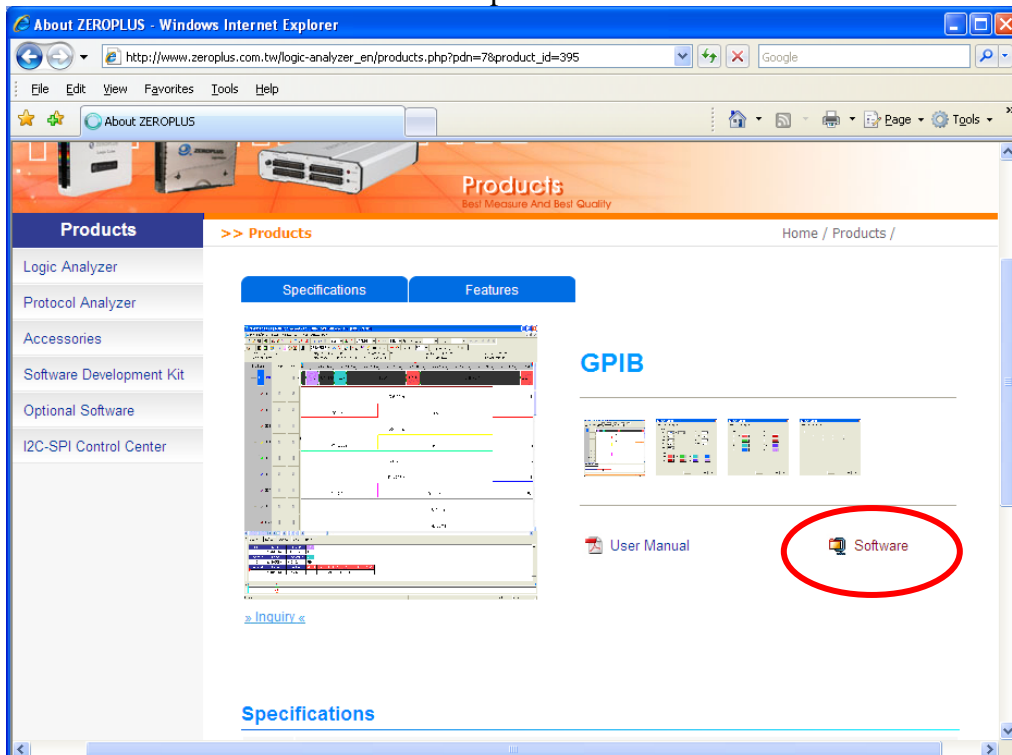




**STEP 5.** Click **GPIO** in the Other.



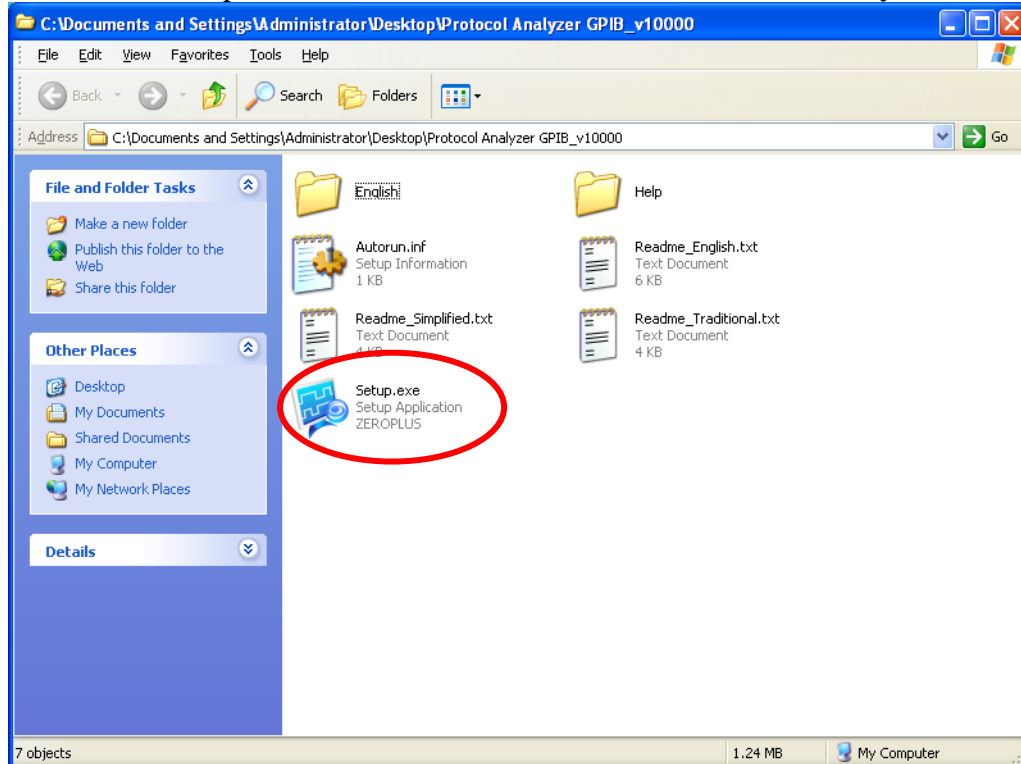
**STEP 6.** Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



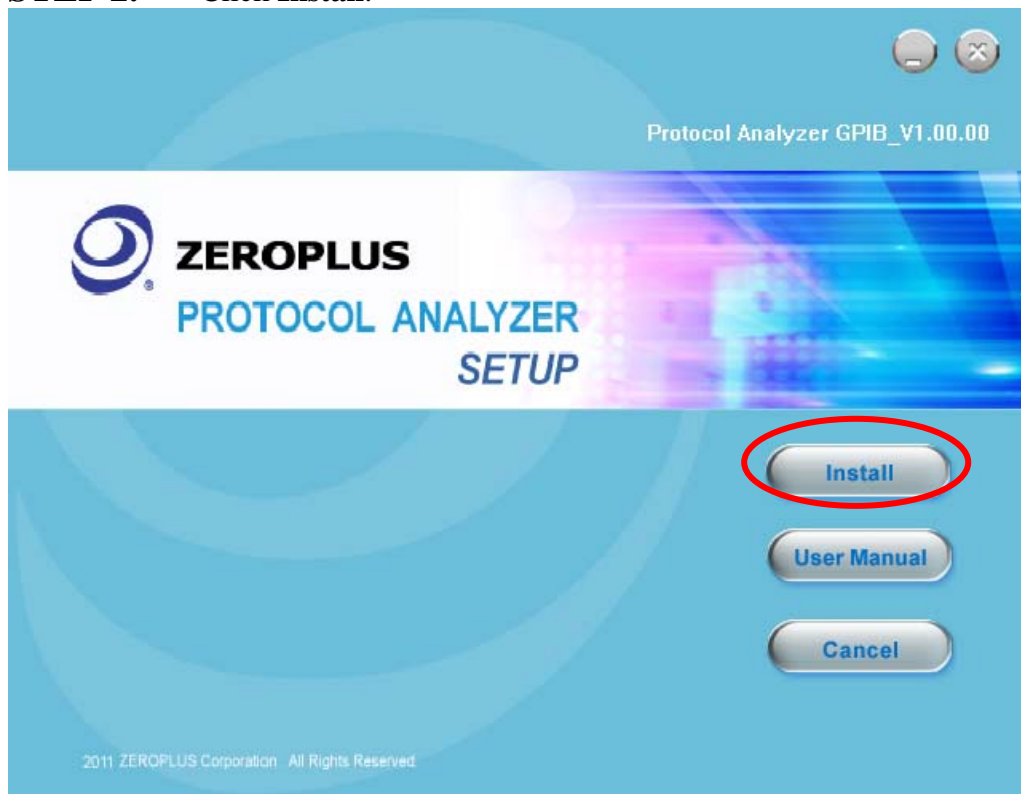


## 2 Software Installation

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

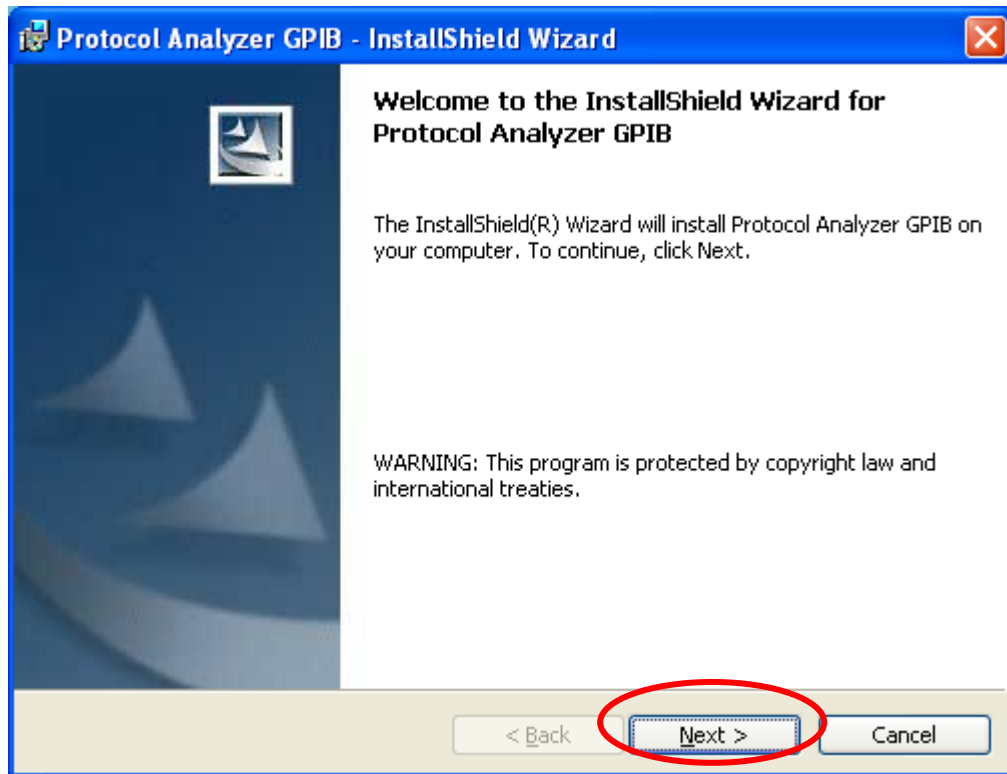


**STEP 2.** Click **Install**.

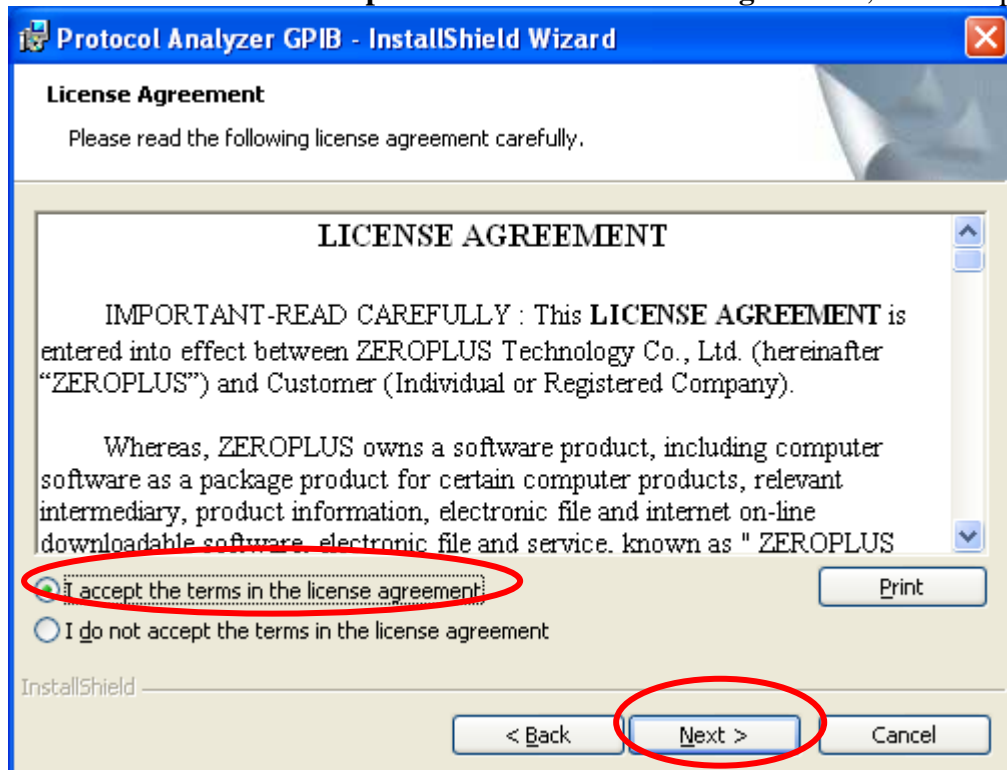




**STEP 3.** Click Next.



**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 then click Next.

The dialog box is titled "Protocol Analyzer GPIB - 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 the text "Microsoft" and "Organization:" with the text "User". 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 are three buttons: "< Back", "Next >" (circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

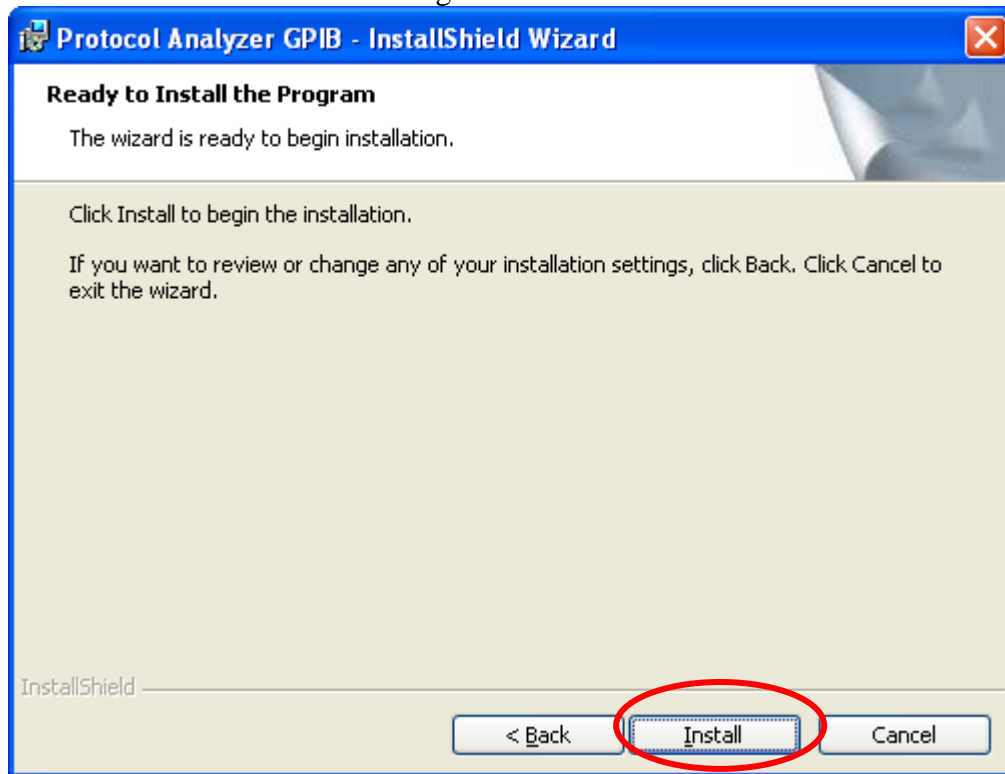
**STEP 6.** Select **Complete** and then click **Next**.

The dialog box is titled "Protocol Analyzer GPIB - InstallShield Wizard". It has a blue title bar with a close button. The main area is titled "Setup Type" and contains the text "Choose the setup type that best suits your needs." 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.)". The "Custom" option has a description: "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 >" (circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

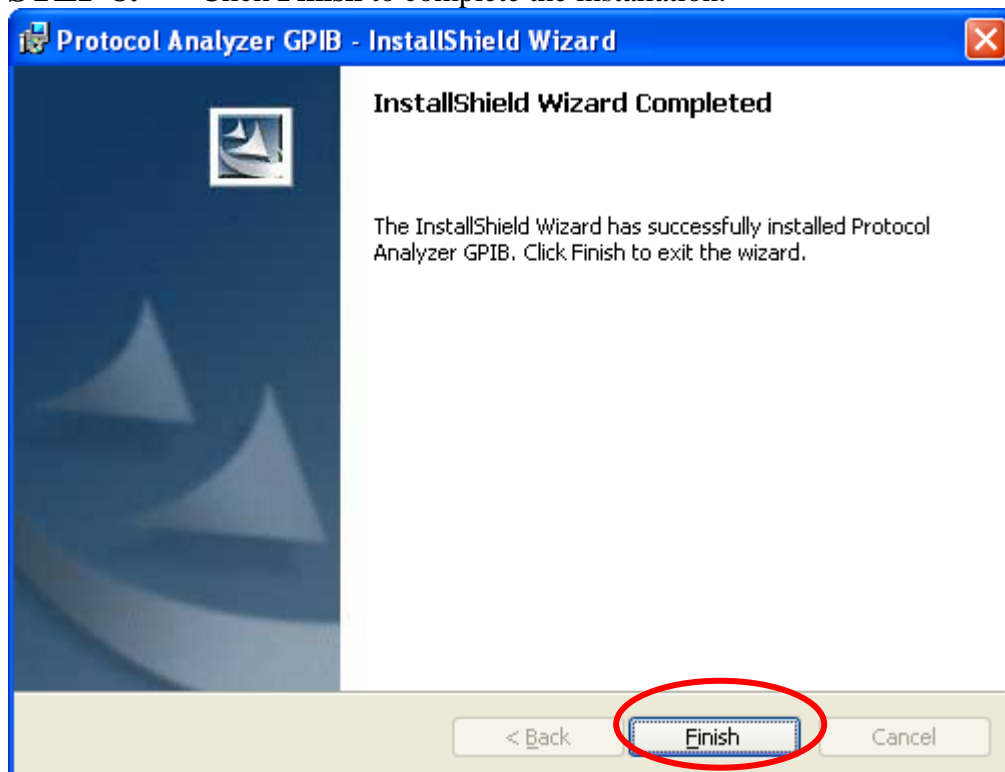




**STEP 7.** Click **Install** to begin the installation.



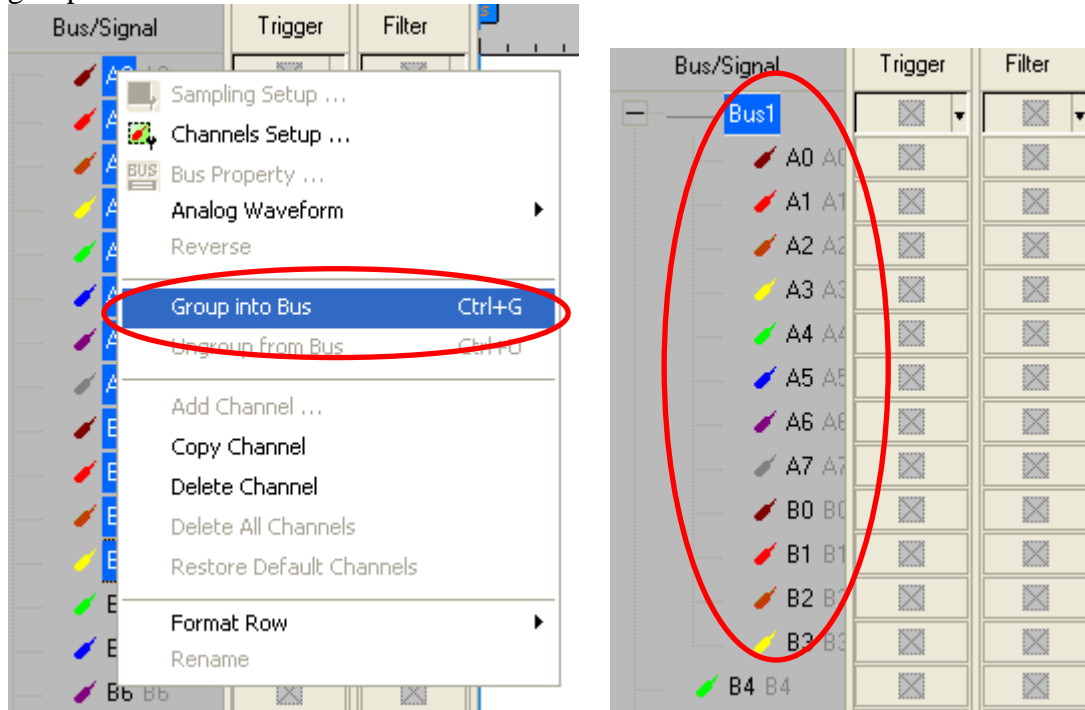
**STEP 8.** Click **Finish** to complete the installation.



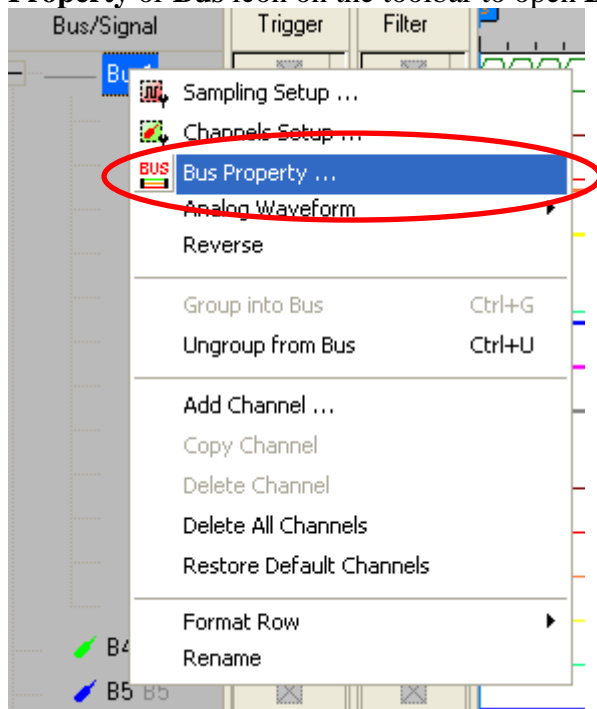


### 3 Software Register

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

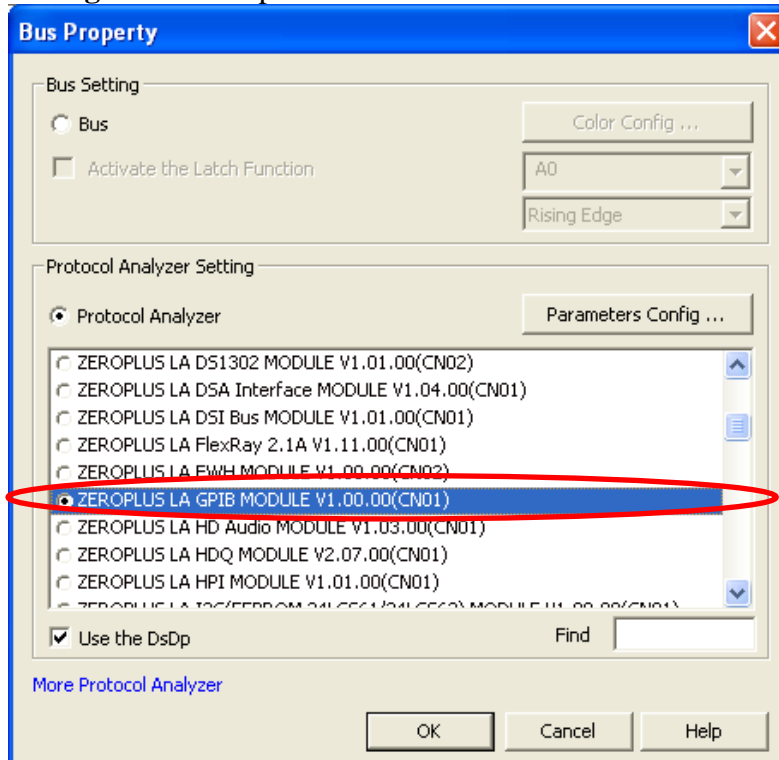


**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

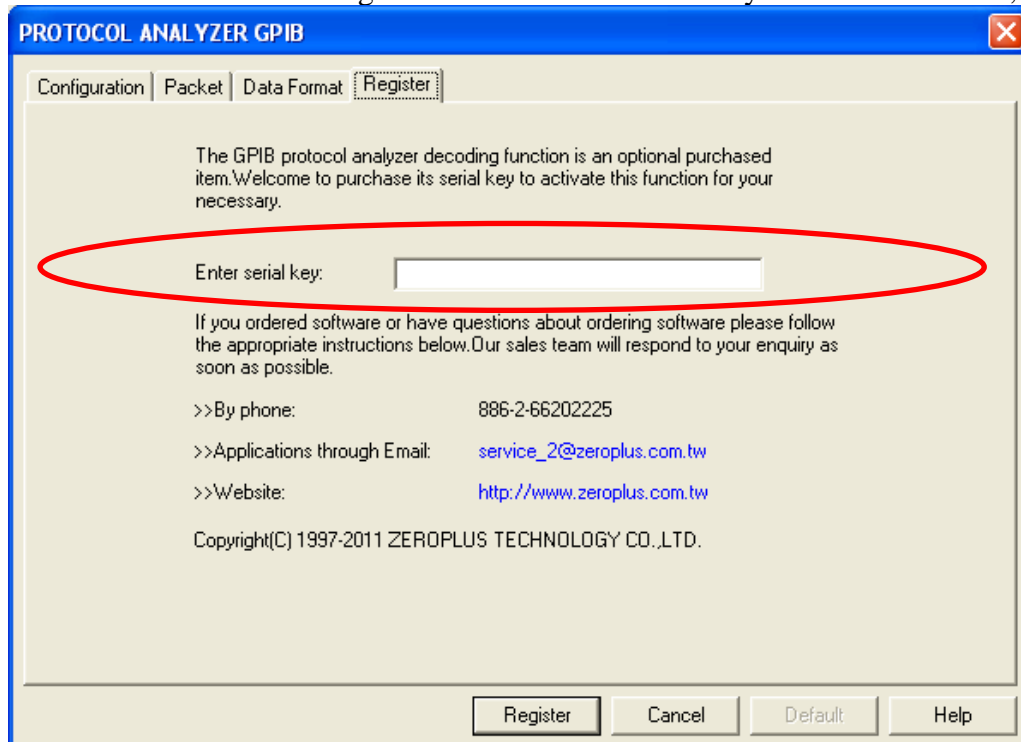




**STEP 3.** For Protocol Analyzer GPIB Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA GPIB MODULE V1.00.00(CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER GPIB** dialog box.

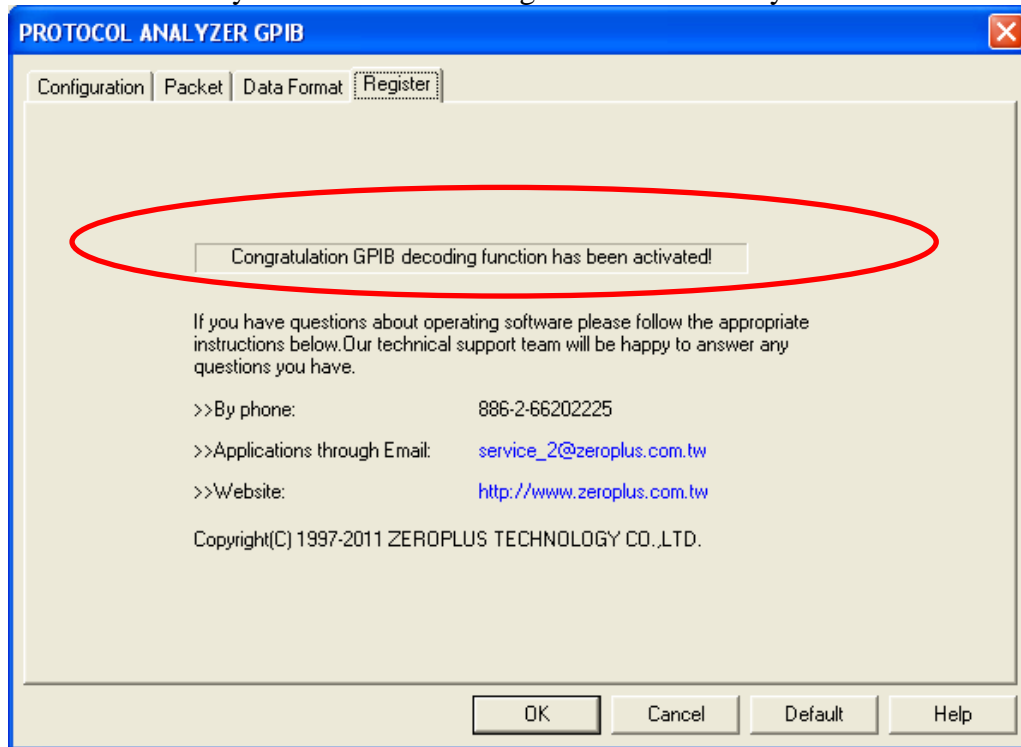


**STEP 4.** Press the Register tab to enter the serial key of the GPIB. Then, press **Register**.





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

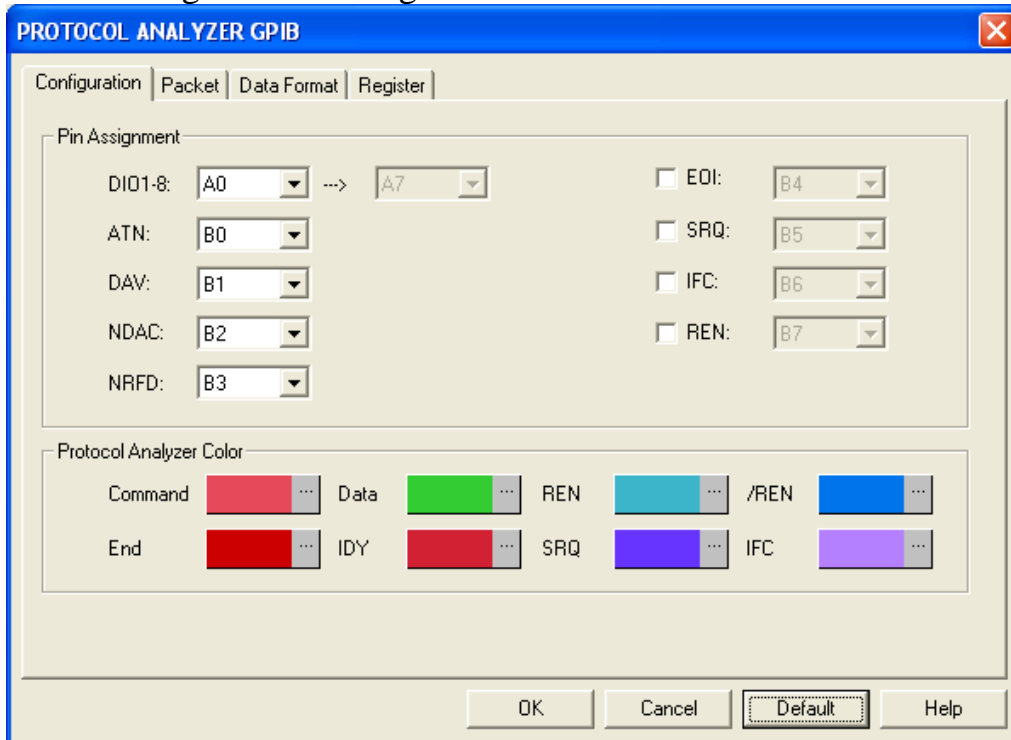




## 4 User Interface

Please refer to the below images to select options of setting **GPIB** Module.

### GPIB Configuration Dialog Box



#### Pin Assignment:

DIO1-8: There are eight Data channels in total.

ATN: It is the Data Command Switch channel.

DAV: It is available for the Low Level.

NDAC: The Data can't be received when it is the Low Level.

NRFD: The Data isn't prepared well when it is the Low Level.

EOI: It is the End Identification channel, and it is disabled by default.

SRQ: It is the Service Request channel, and it is disabled by default.

IFC: It is the Interface Clearance channel, and it is disabled by default.

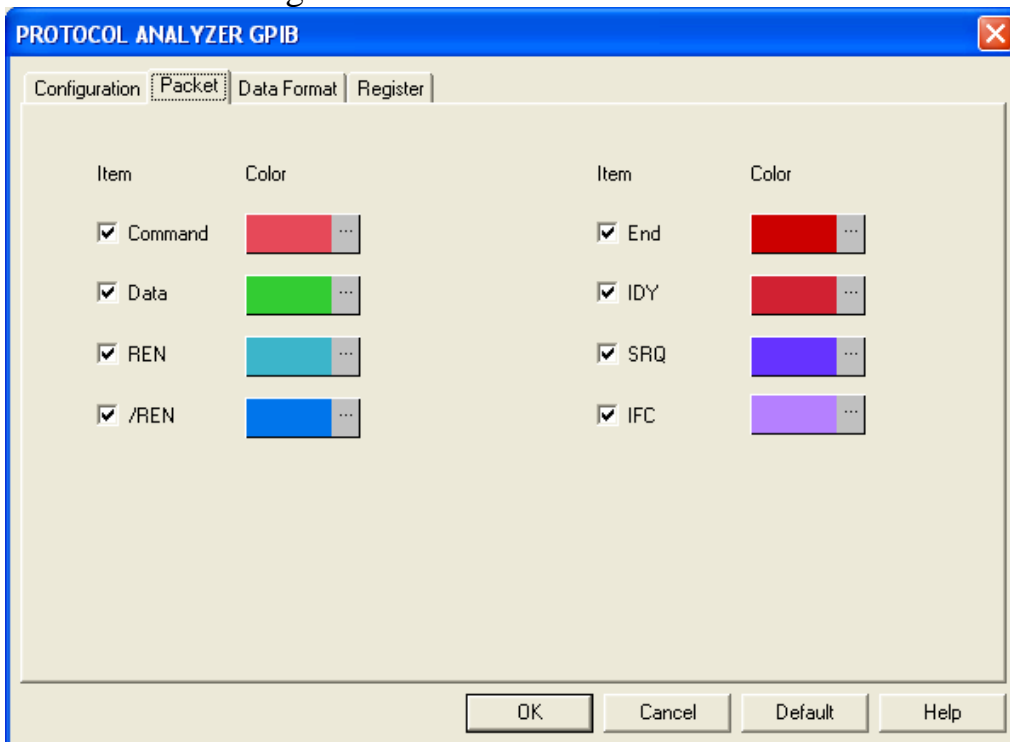
REN: It is the Remote Control channel, and it is disabled by default.

#### Protocol Analyzer Color:

Users can vary the color of the items.

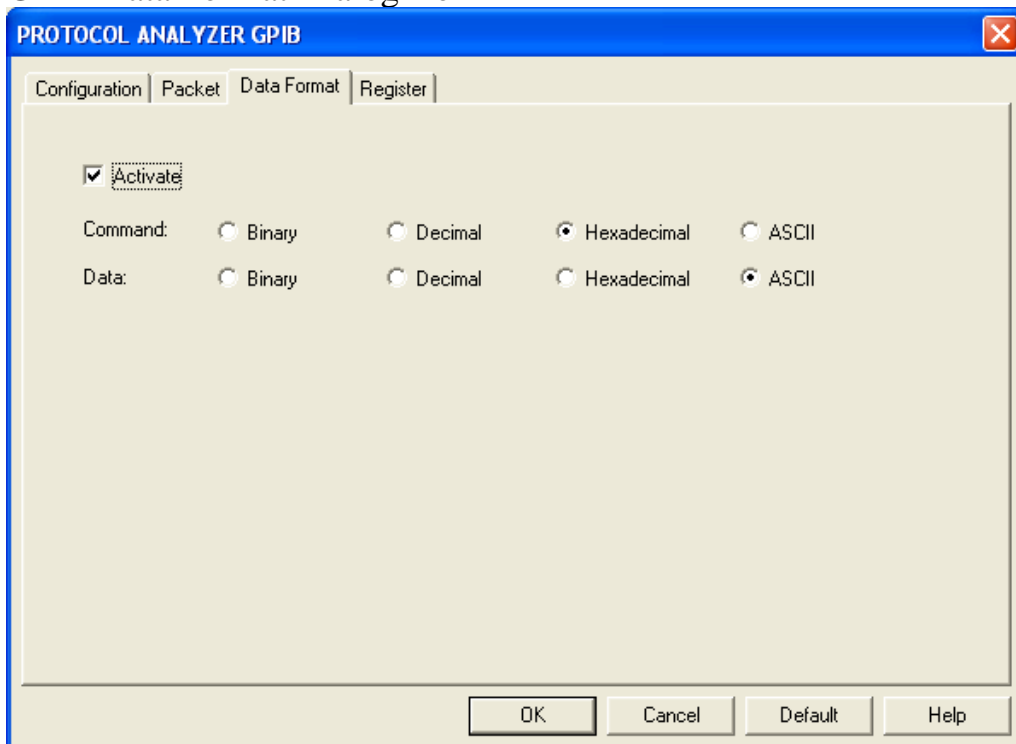


## GPIO Packet Dialog Box



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

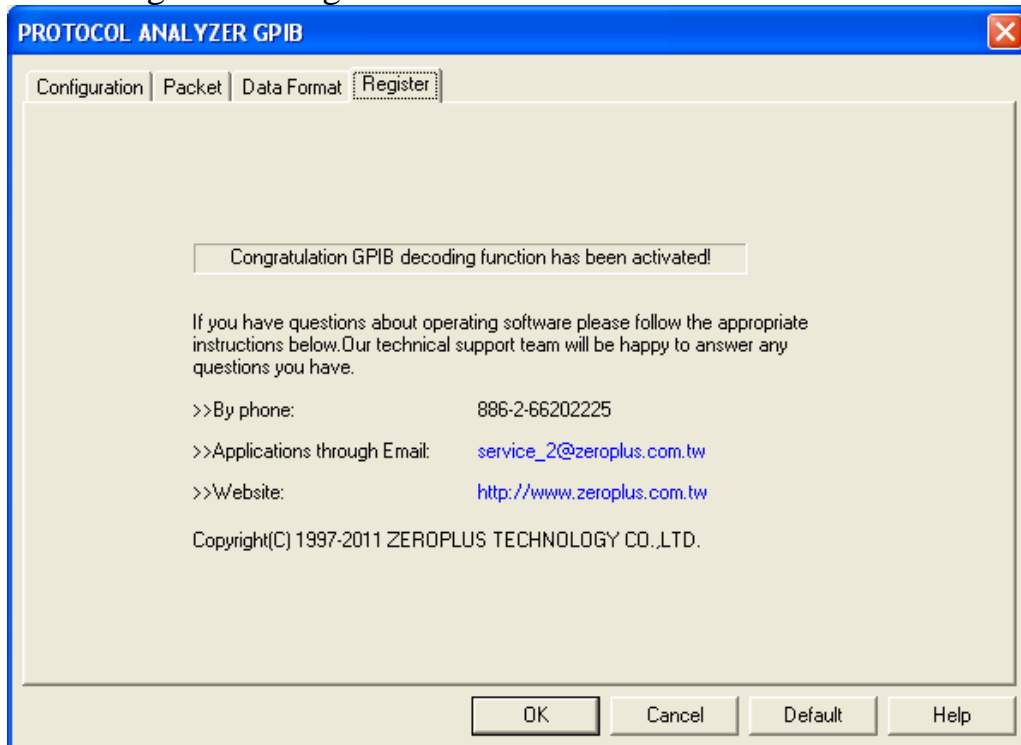
## GPIO Data Format Dialog Box



Users can set the Data Format of the Command 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.



## GPB Register Dialog Box



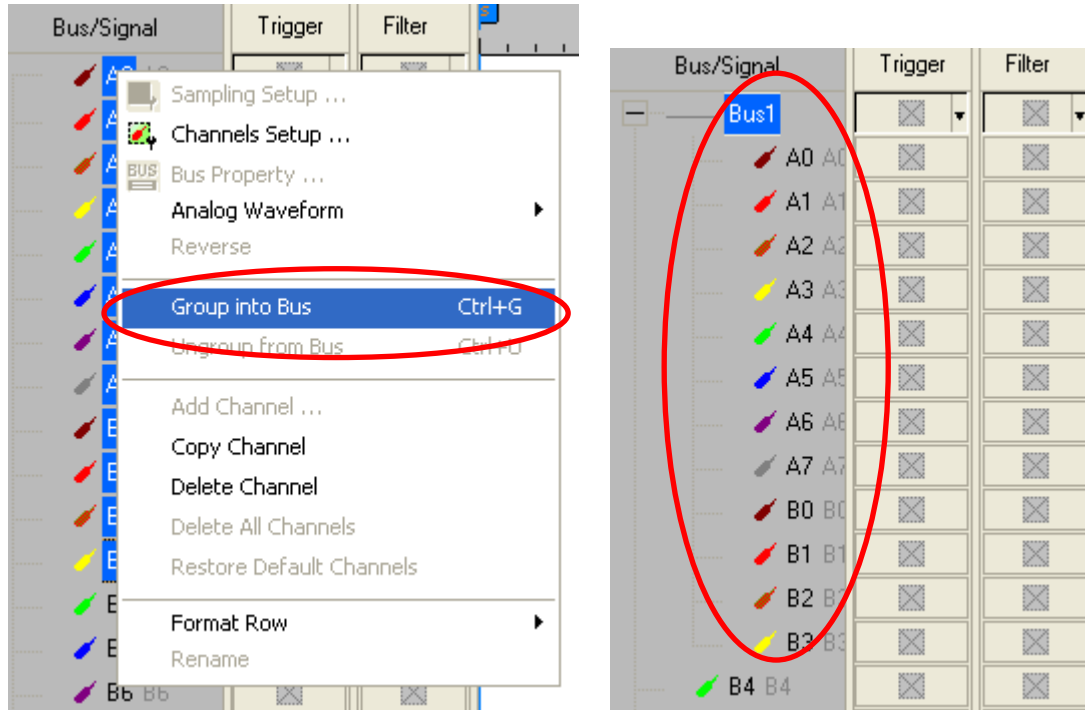
There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.



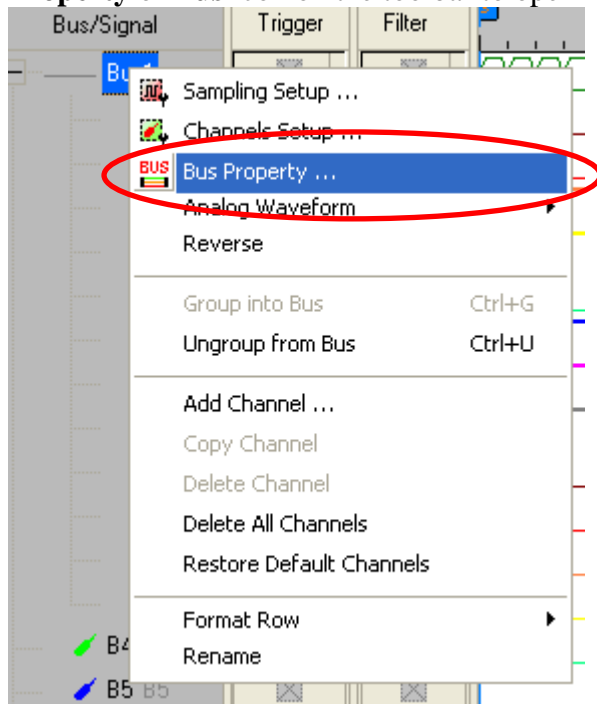


## 5 Operating Instructions

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

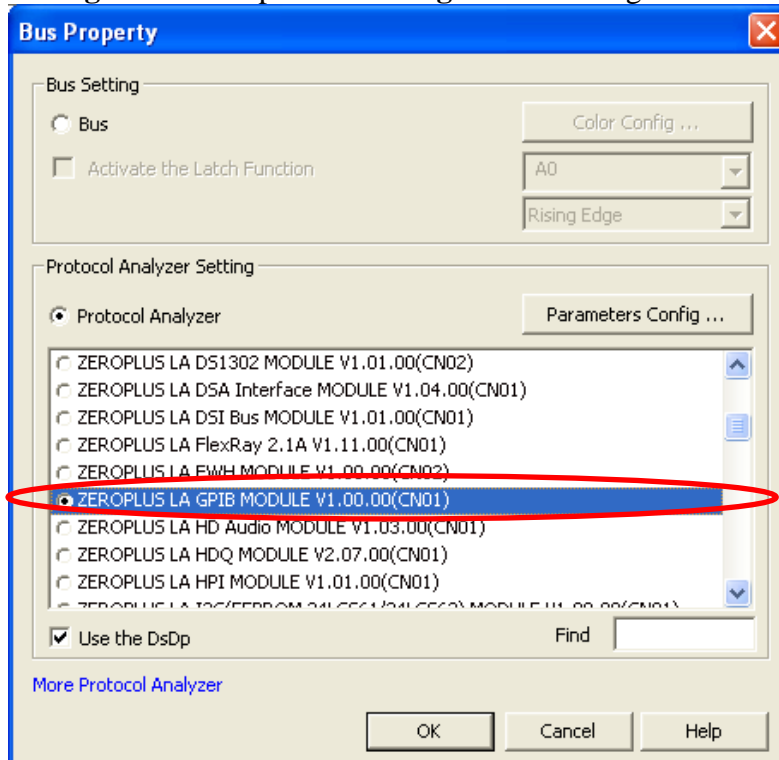


**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

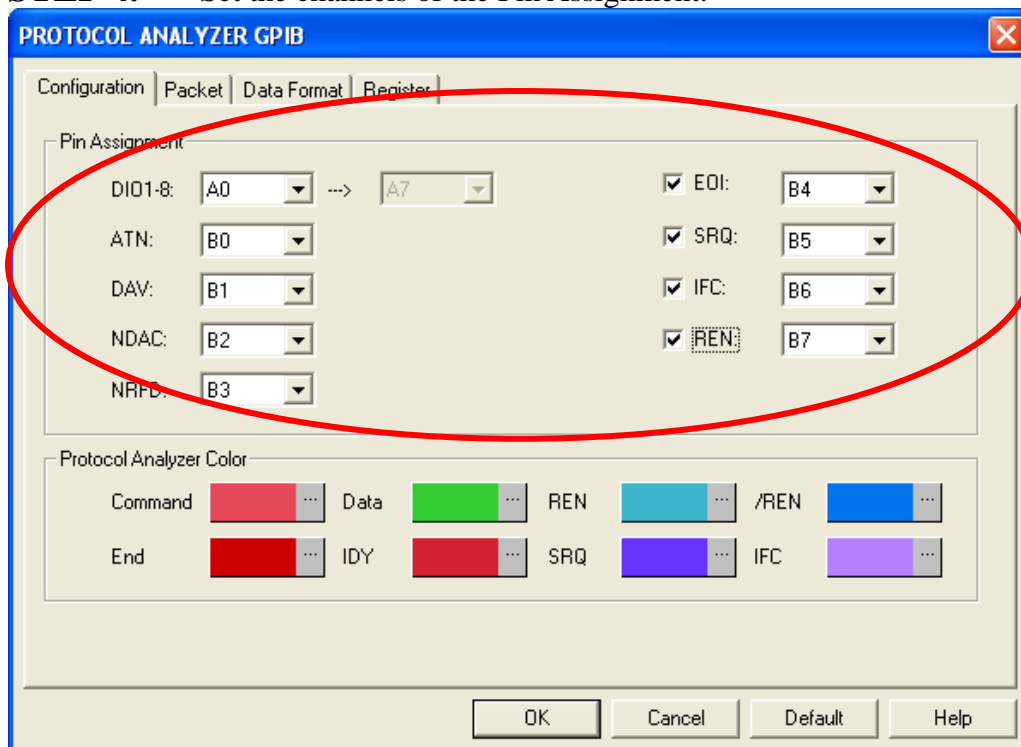




**STEP 3.** For Protocol Analyzer GPIB Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA GPIB MODULE V1.00.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

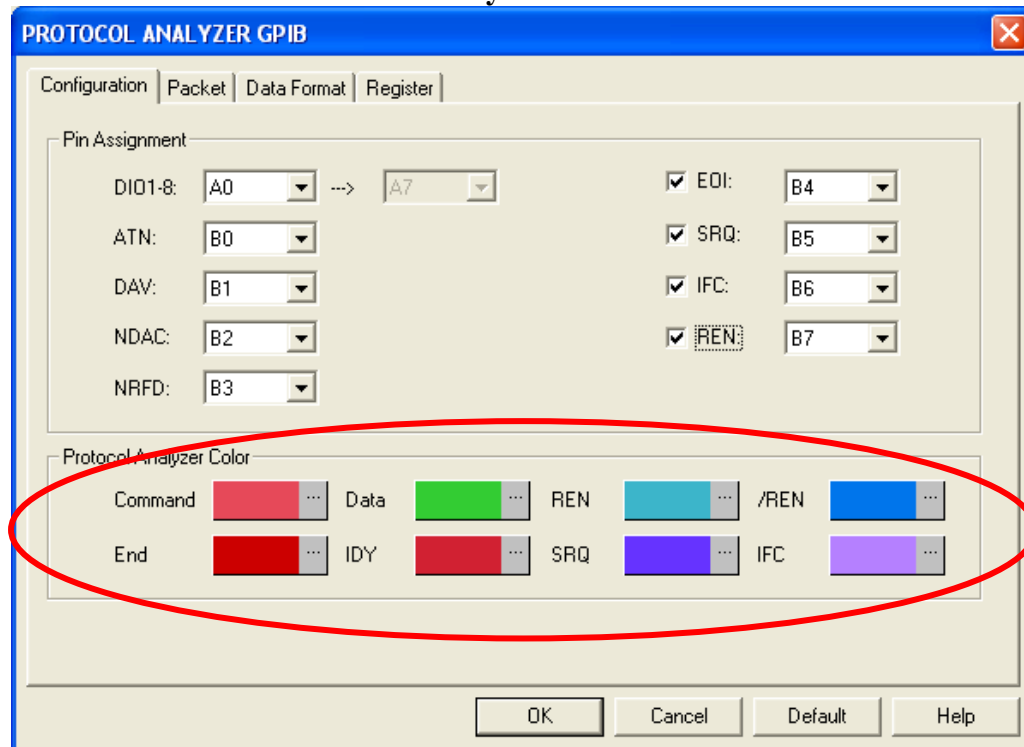


**STEP 4.** Set the channels of the Pin Assignment.



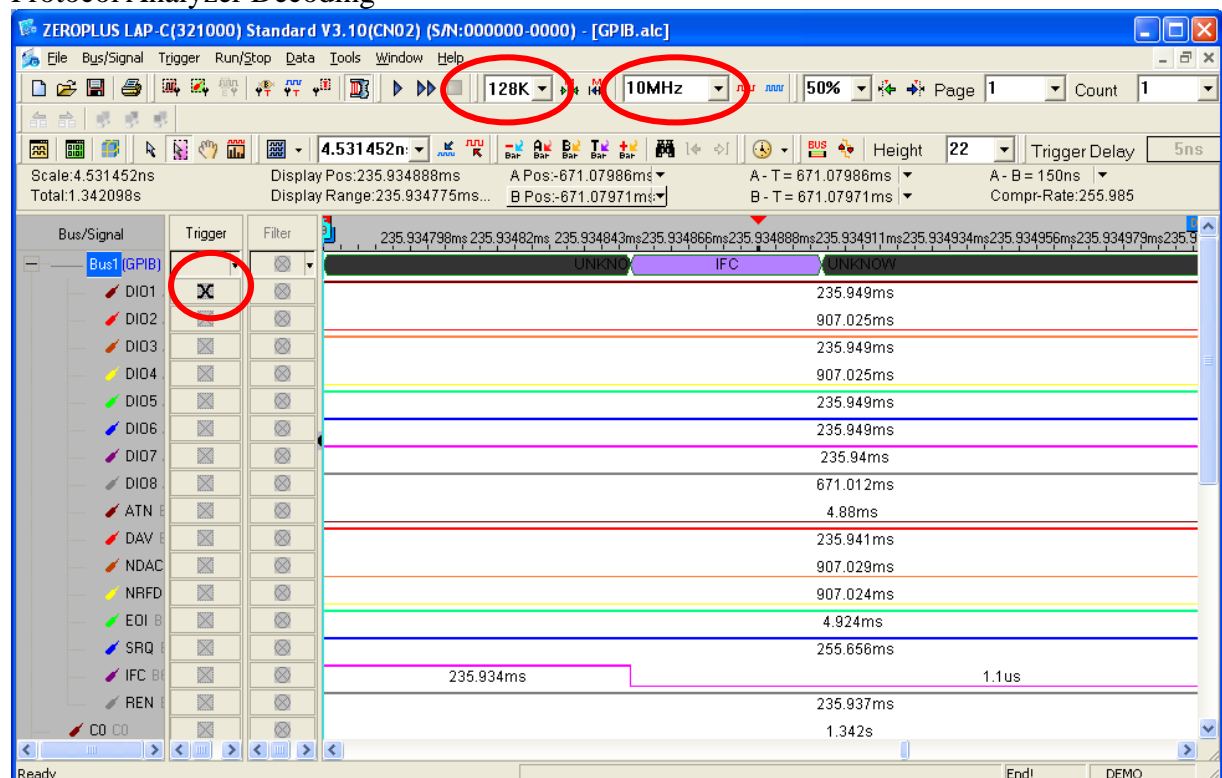


## STEP 5. Set the Protocol Analyzer Color.



**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 10MHz (the sampling frequency should be more than ten times higher than the signal to be tested).

## Protocol Analyzer Decoding





## Packet List

