



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

SPECIFICATION

MODEL: B09021-LAP-OPENTHERM 2.2-M

PART NO: _____

VERSION: **V1.01**

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

2F, NO.123, Jian Ba Rd,
Chung Ho City, Taipei Hsian, R.O.C.

Tel: +886-2-66202225
Fax: +886-2-22234362



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.

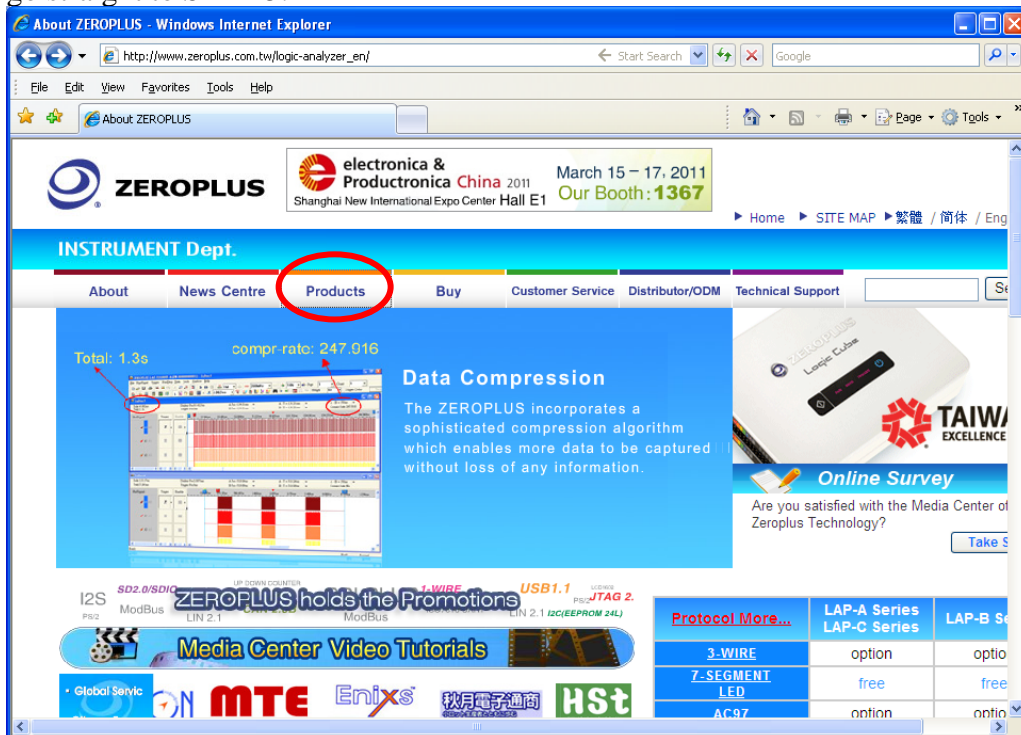
STEP 1. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

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

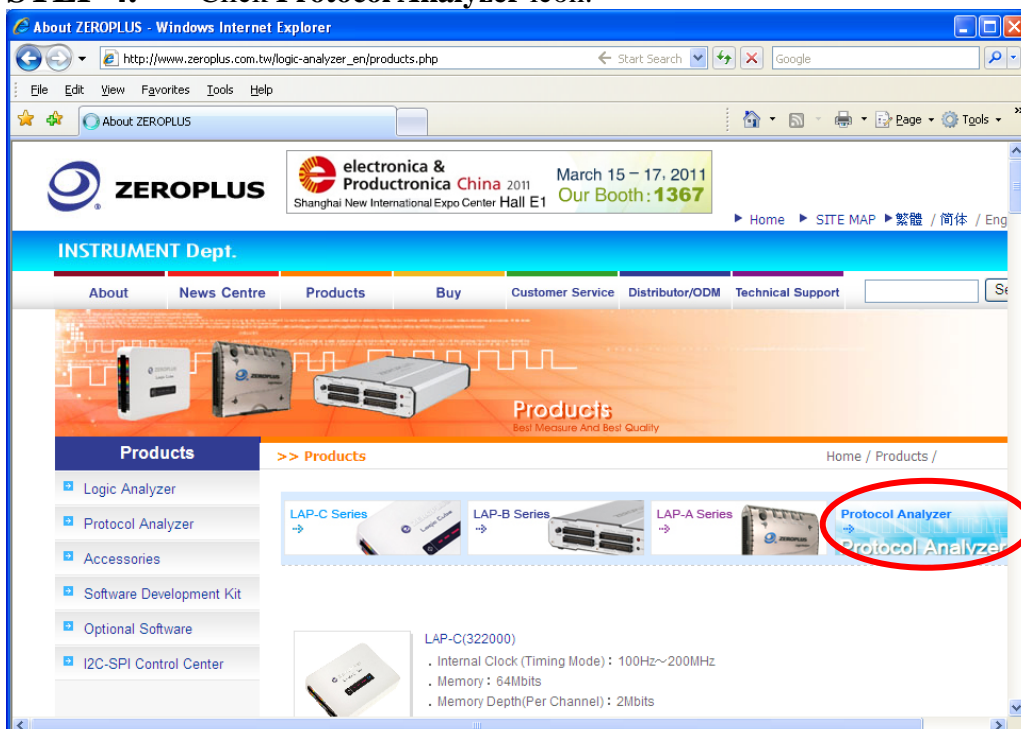




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

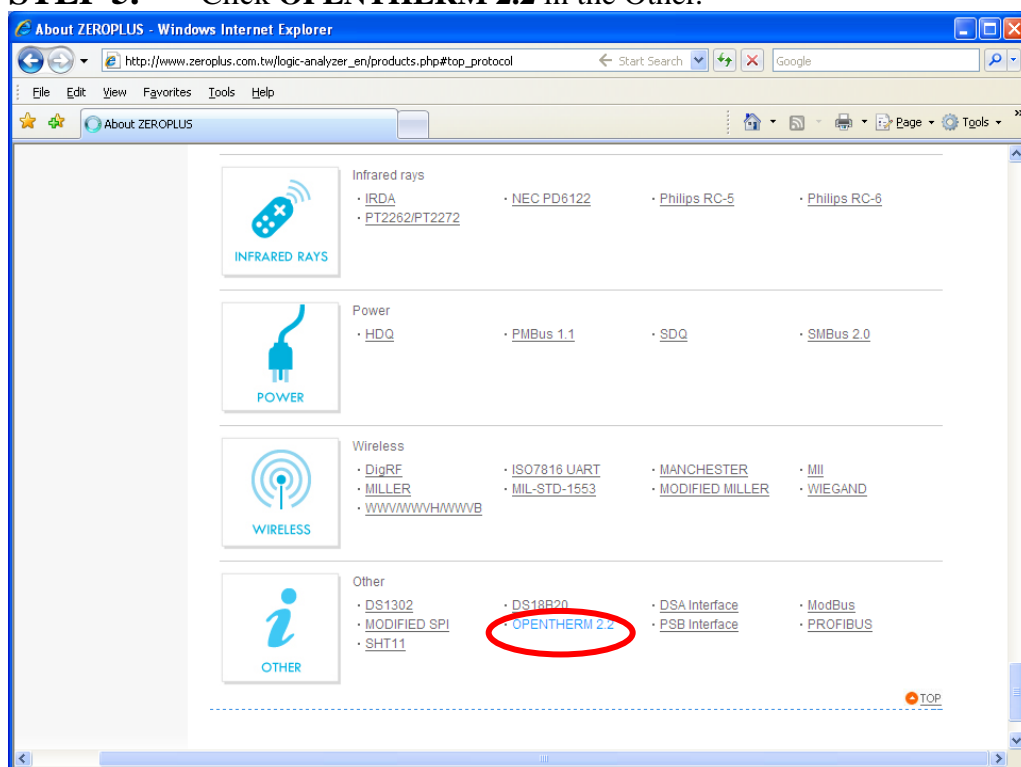


STEP 4. Click **Protocol Analyzer** icon.

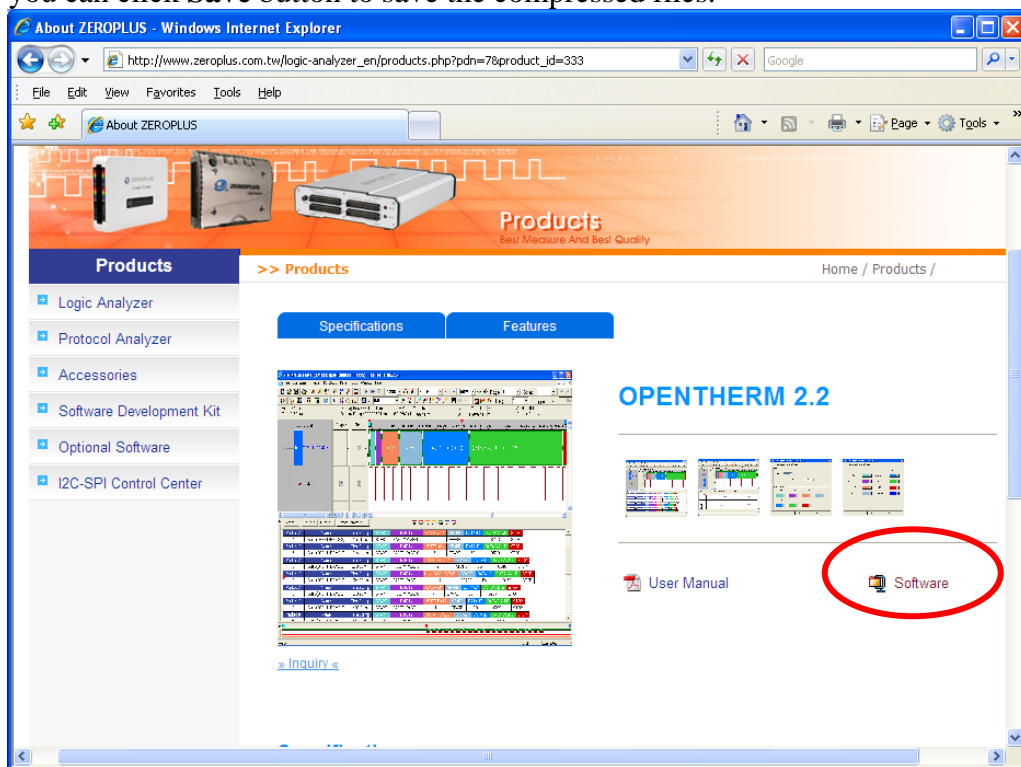




STEP 5. Click **OPENTHERM 2.2** in the Other.



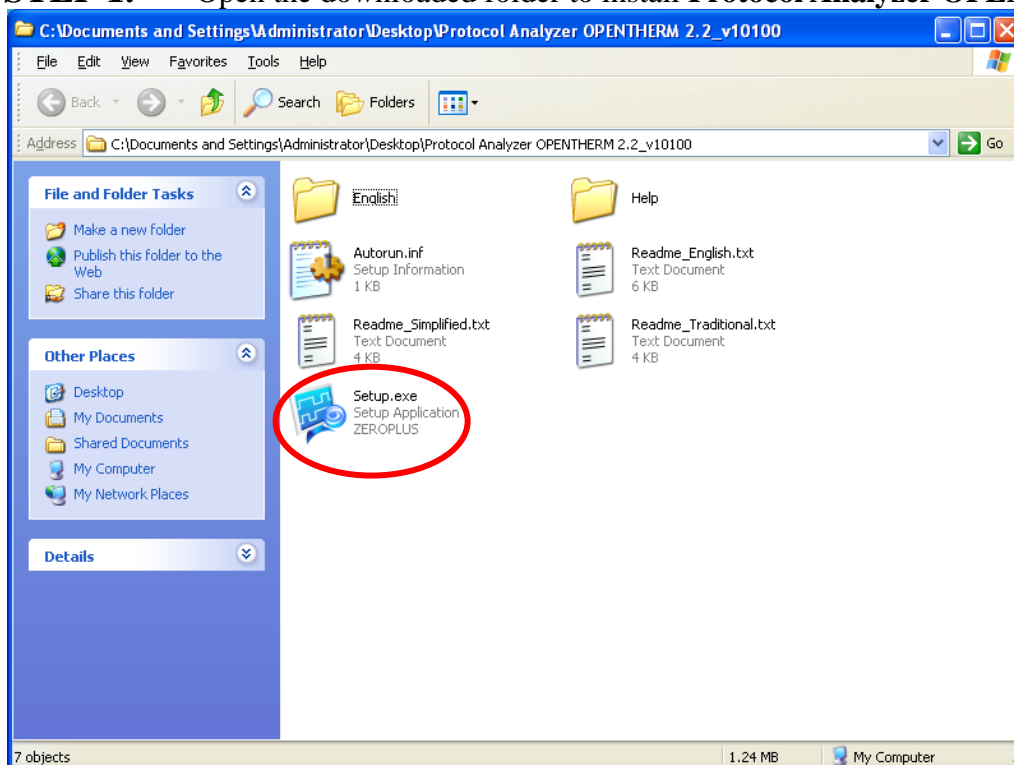
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



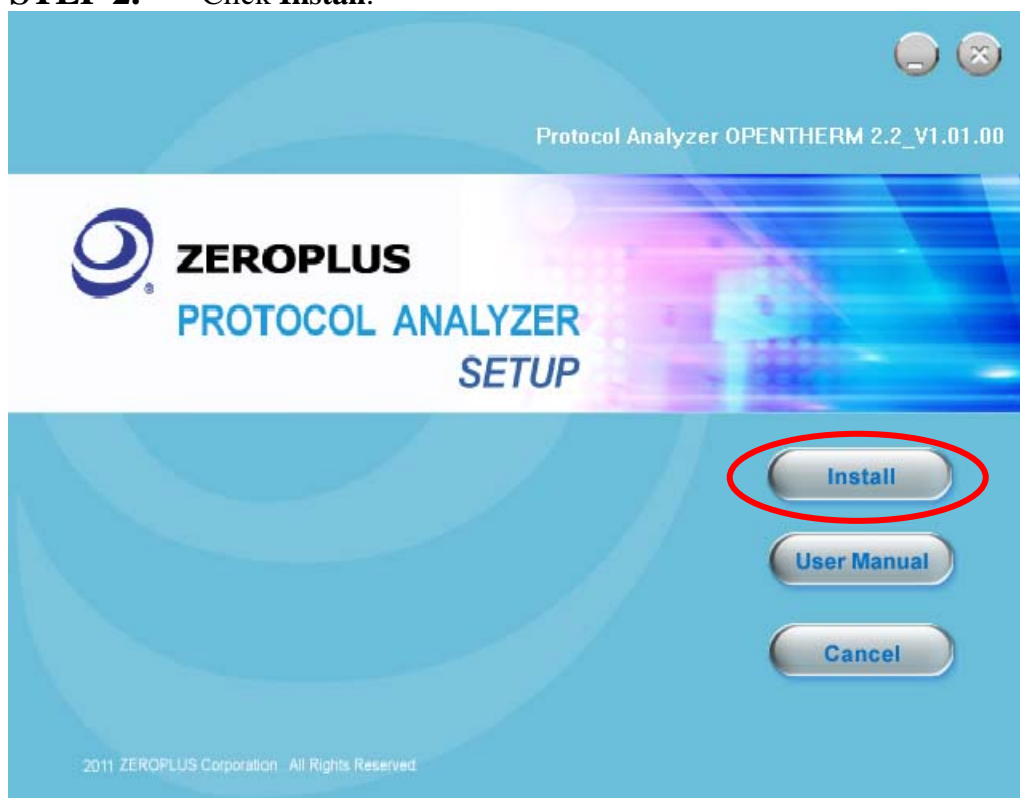


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer OPENTHERM 2.2.**

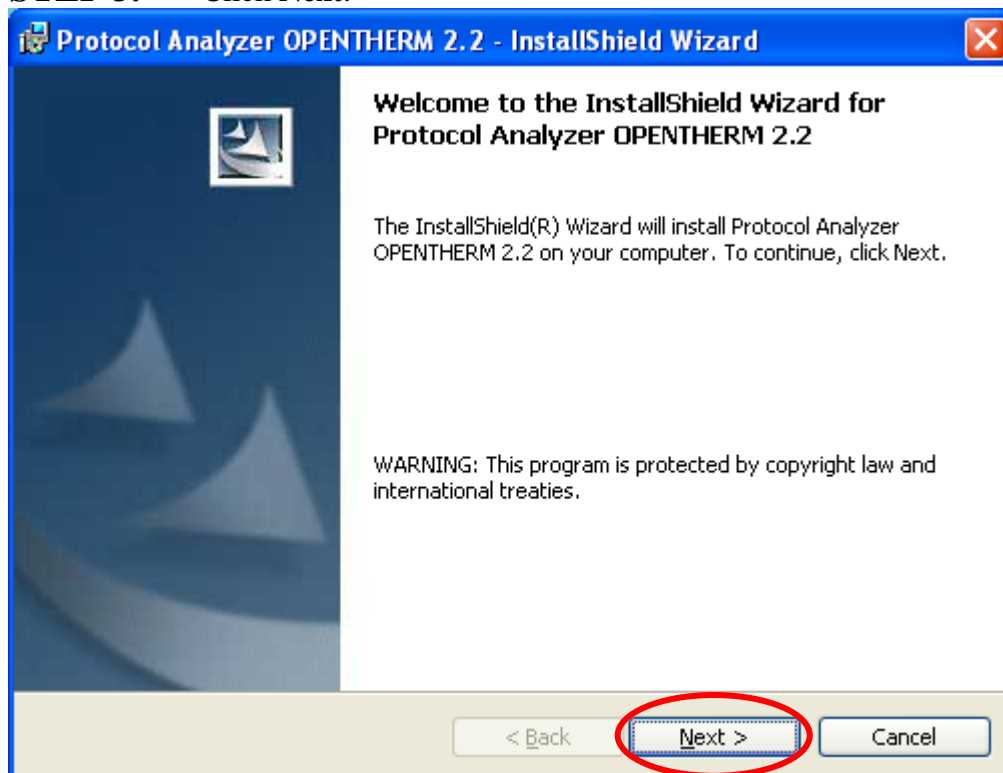


STEP 2. Click **Install**.

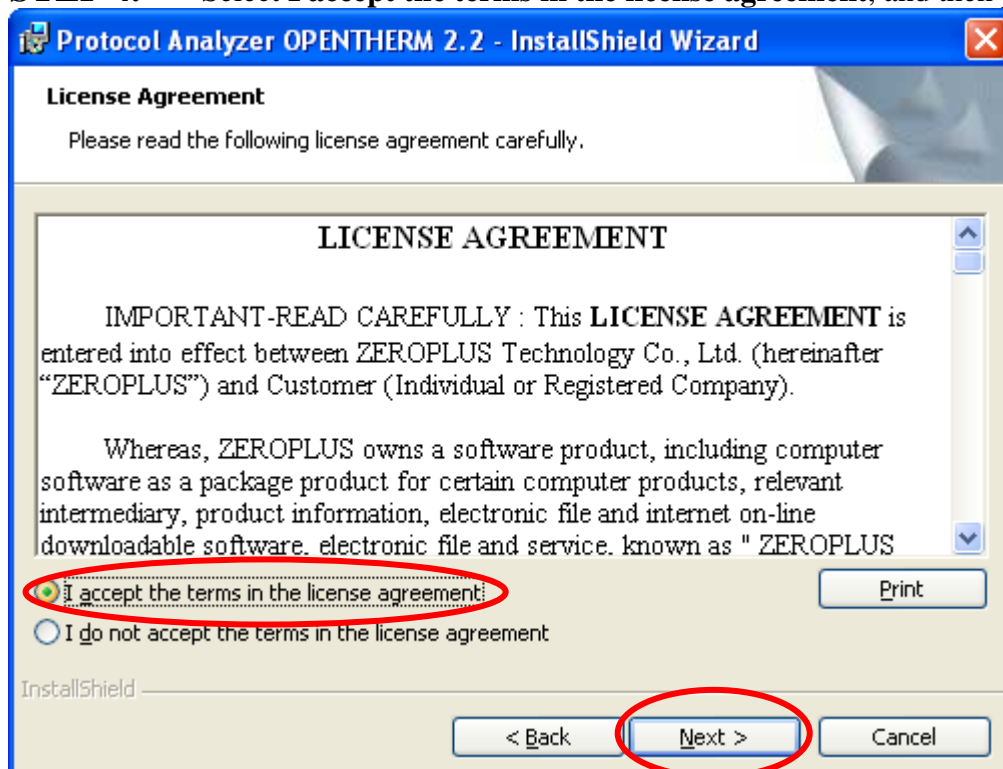




STEP 3. Click Next.



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**.

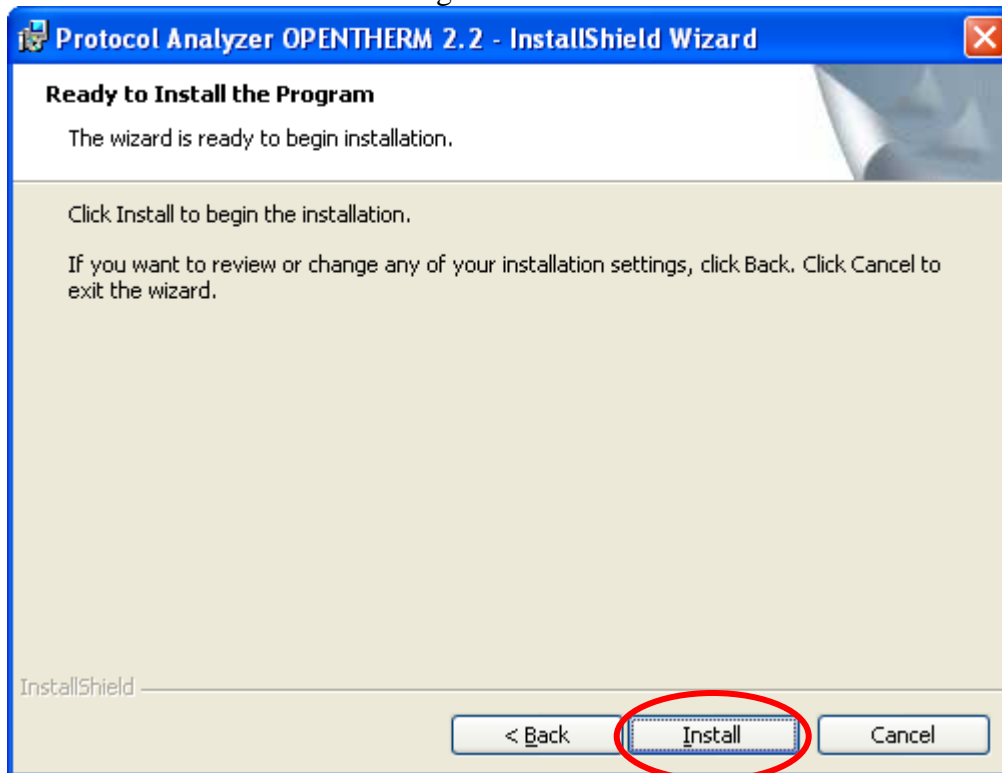
The dialog box is titled "Protocol Analyzer OPENTHERM 2.2 - InstallShield Wizard". It has a "Customer Information" section with the instruction "Please enter your information." Below this, there are two text input fields: "User Name:" with "Microsoft" entered, and "Organization:" with "User" entered. 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".

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

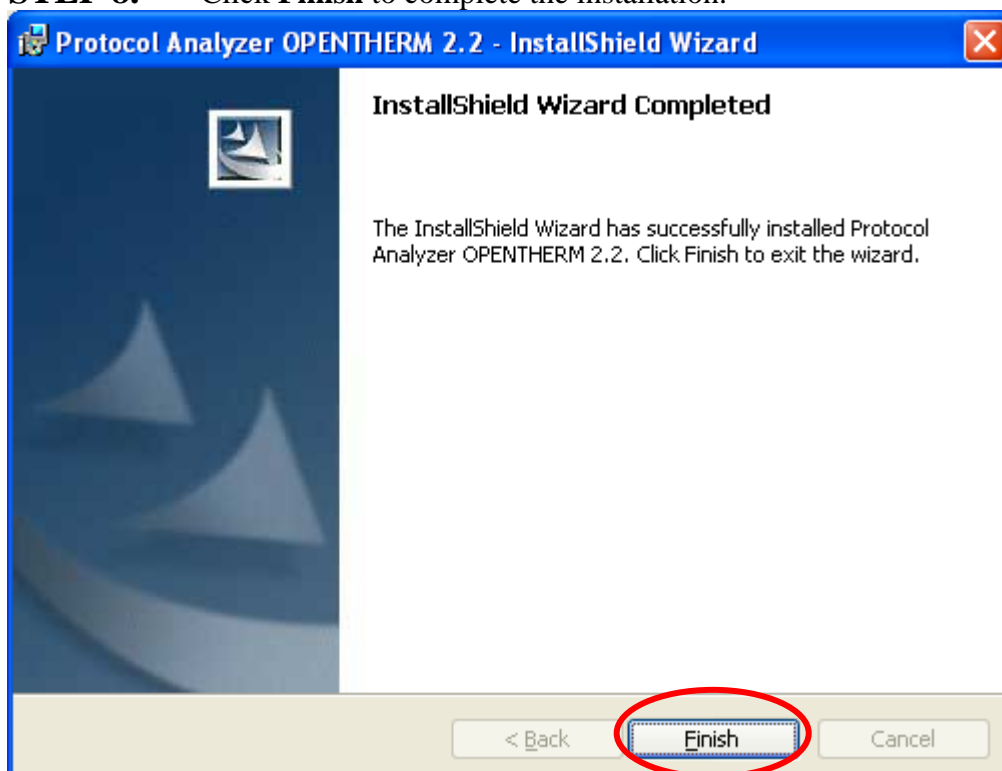
The dialog box is titled "Protocol Analyzer OPENTHERM 2.2 - InstallShield Wizard". It has a "Setup Type" section with the instruction "Choose the setup type that best suits your needs." Below this, there is a text input field with "Please select a setup type." There are two radio button options: "Complete" (which is 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 >" (which is circled in red), and "Cancel".



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



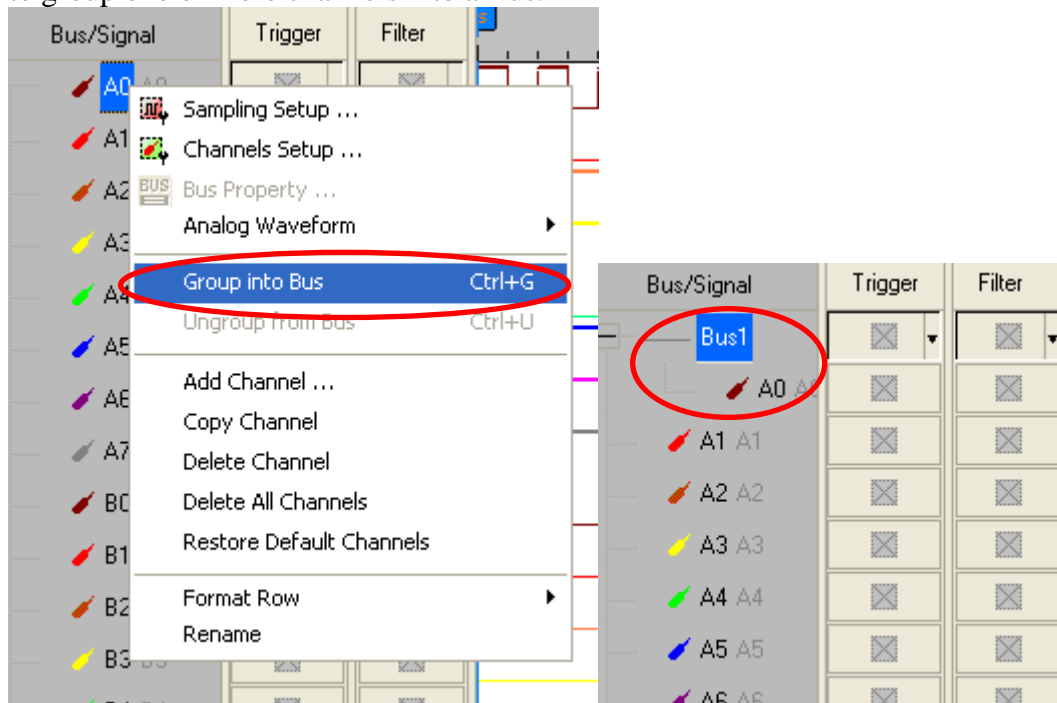
STEP 8. Click **Finish** to complete the installation.



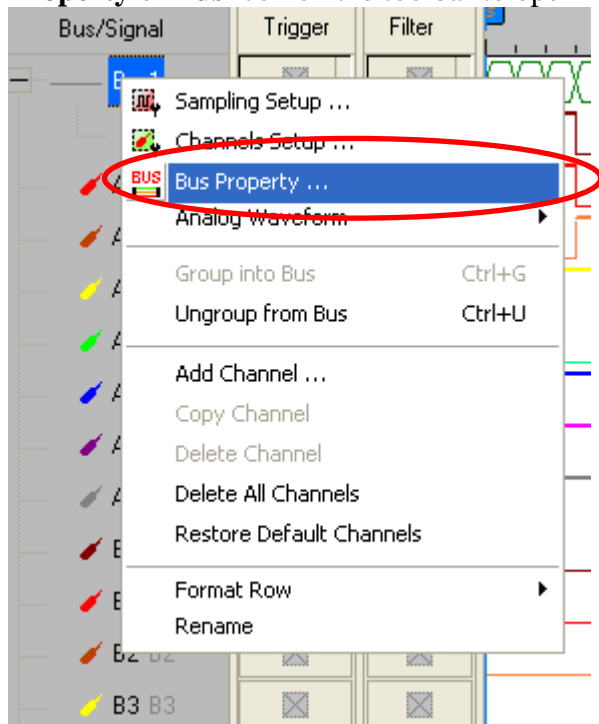


3 Software Register

STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **OPENTHERM 2.2** needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

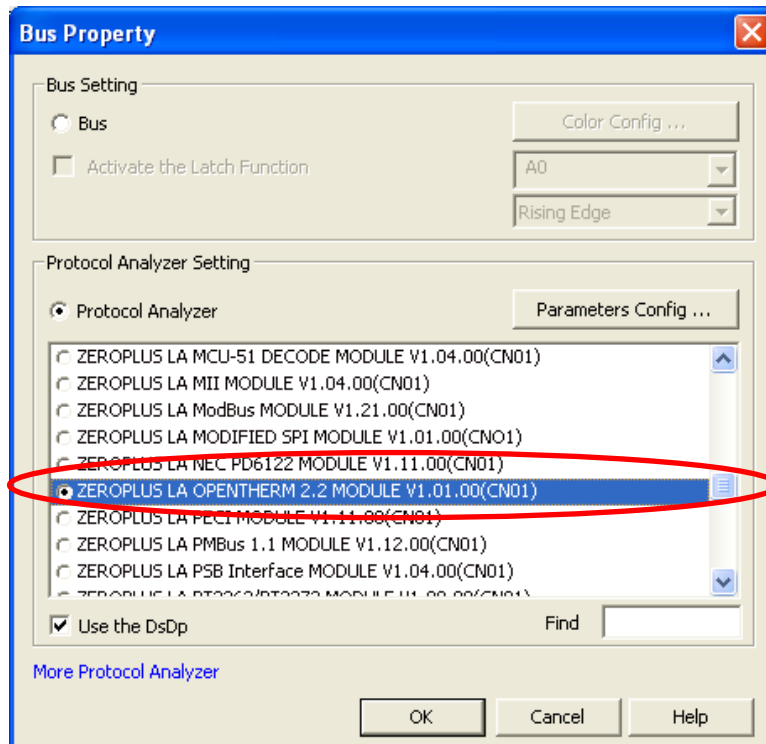


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

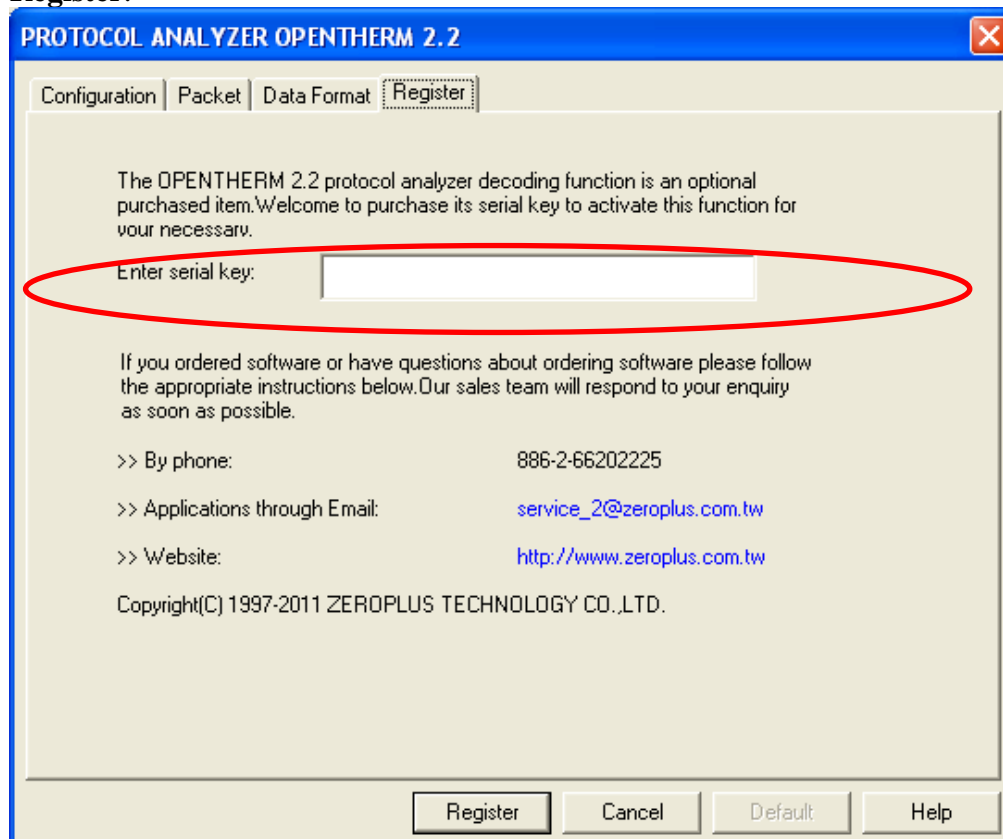




STEP 3. For Protocol Analyzer **OPENTHERM 2.2** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA OPENTHERM 2.2 MODULE V1.01.00(CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER OPENTHERM 2.2** dialog box.

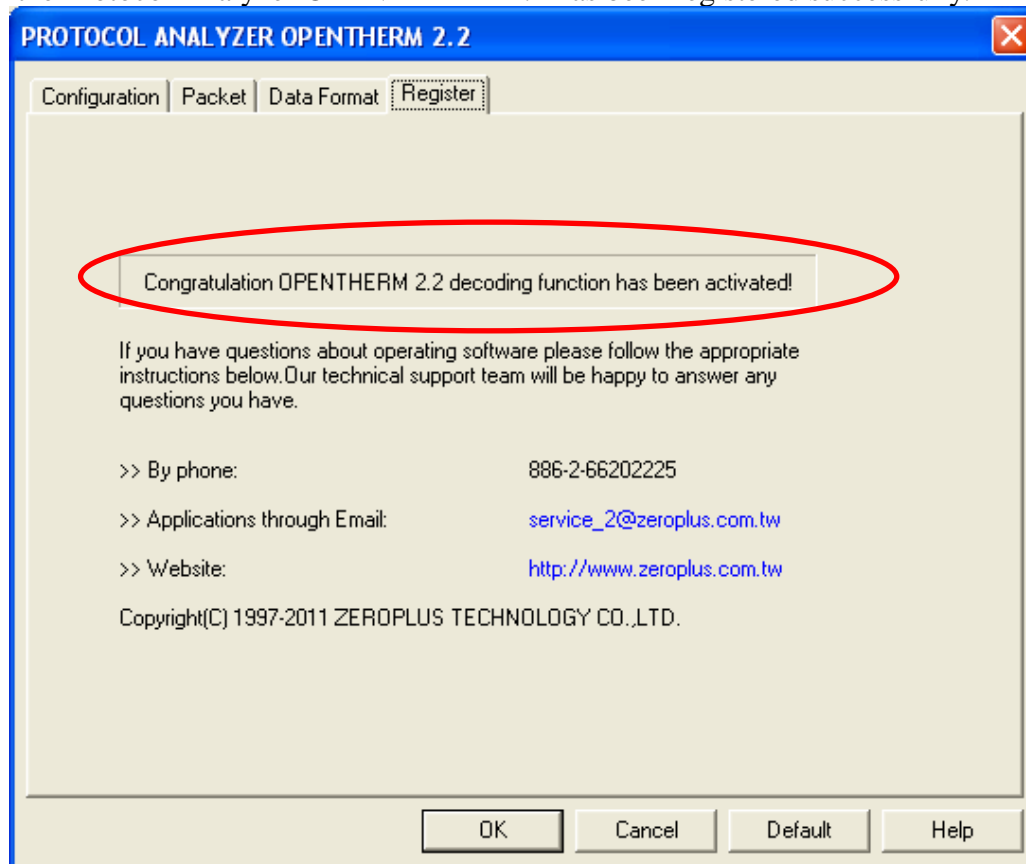


STEP 4. Press the Register tab to enter the serial key of the **OPENTHERM 2.2**. Then, press **Register**.





STEP 5. After pressing the Register button, the following dialog box will appear; it denotes that the Protocol Analyzer OPENTHERM 2.2 has been registered successfully.

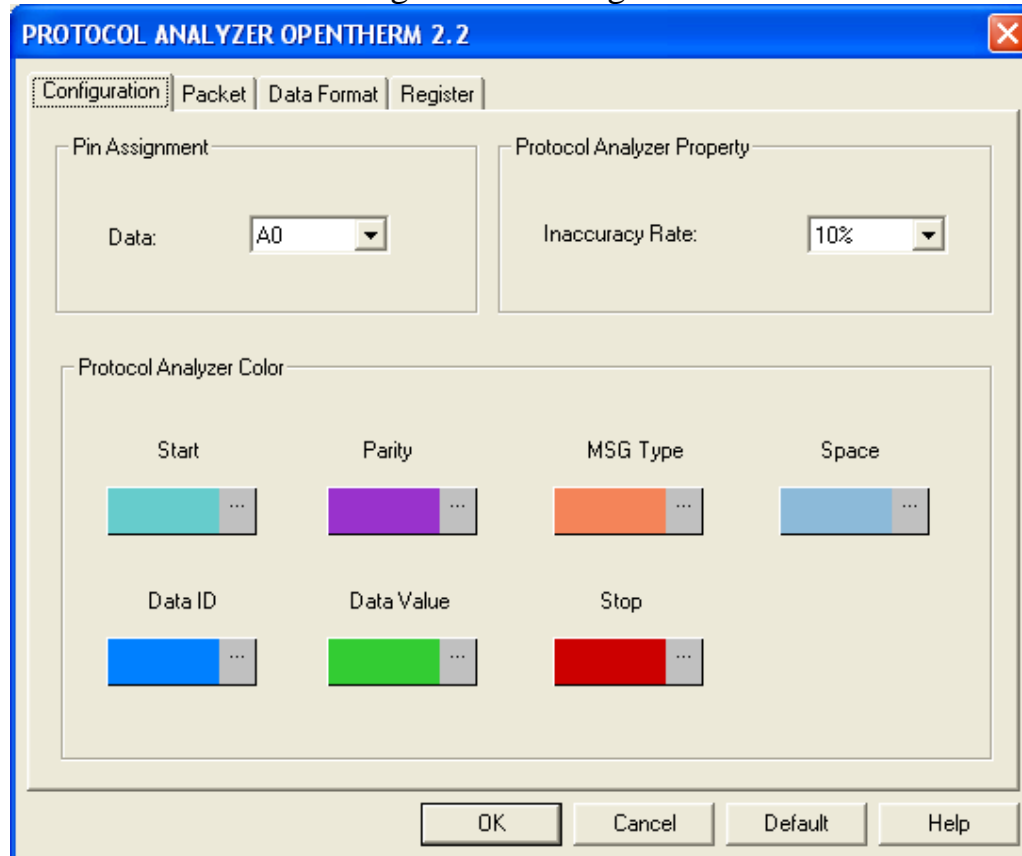




4 User Interface

In the configuration, please refer to the below images to select options of setting OPENTHERM 2.2 module.

OPENTHERM 2.2 Configuration Dialog Box



Pin Assignment:

Data: It is the Data Signal Line, and it needs only one channel.

Protocol Analyzer Property:

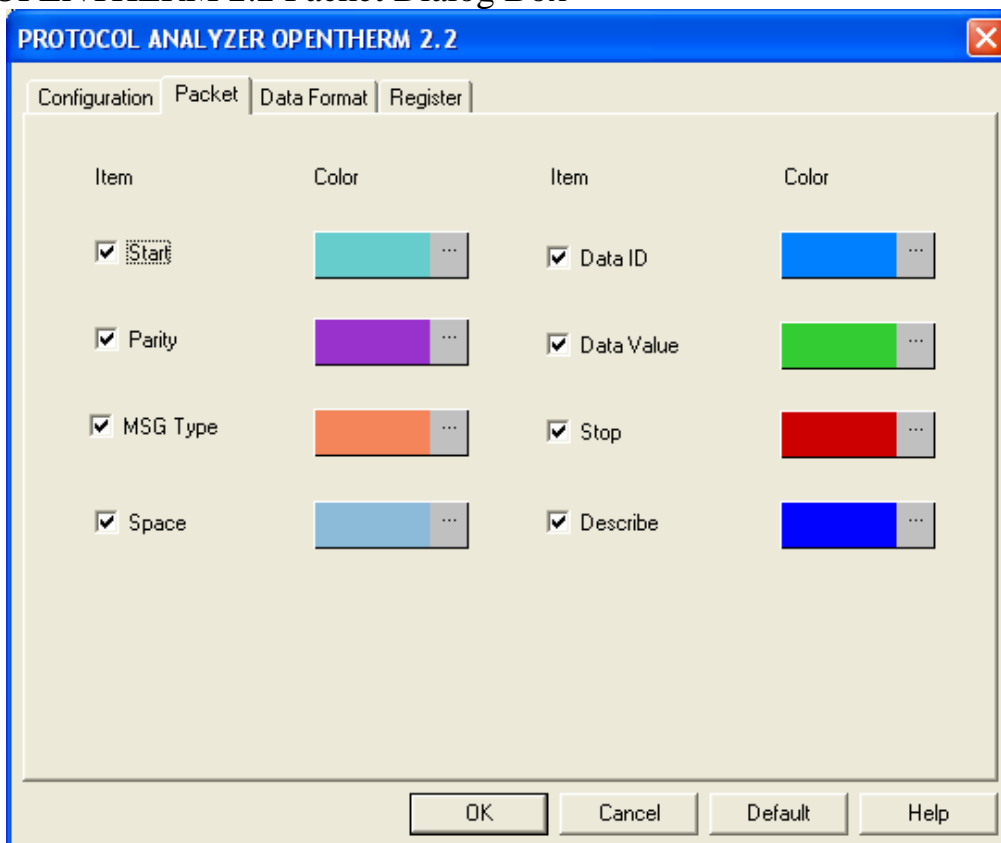
Inaccuracy Rate: It is the allowable tolerance value for the time width of one bit; the default is 10%. The standard Bit Width of the OPENTHERM 2.2 is 1ms, and the 10% tolerance means that the Bit Width can be among 0.9ms-1.1ms. Otherwise, there are other two options, 5% and 15%, which can be selected from the pull-down menu.

Protocol Analyzer Color:

The **Protocol Analyzer Color** can be varied by users.

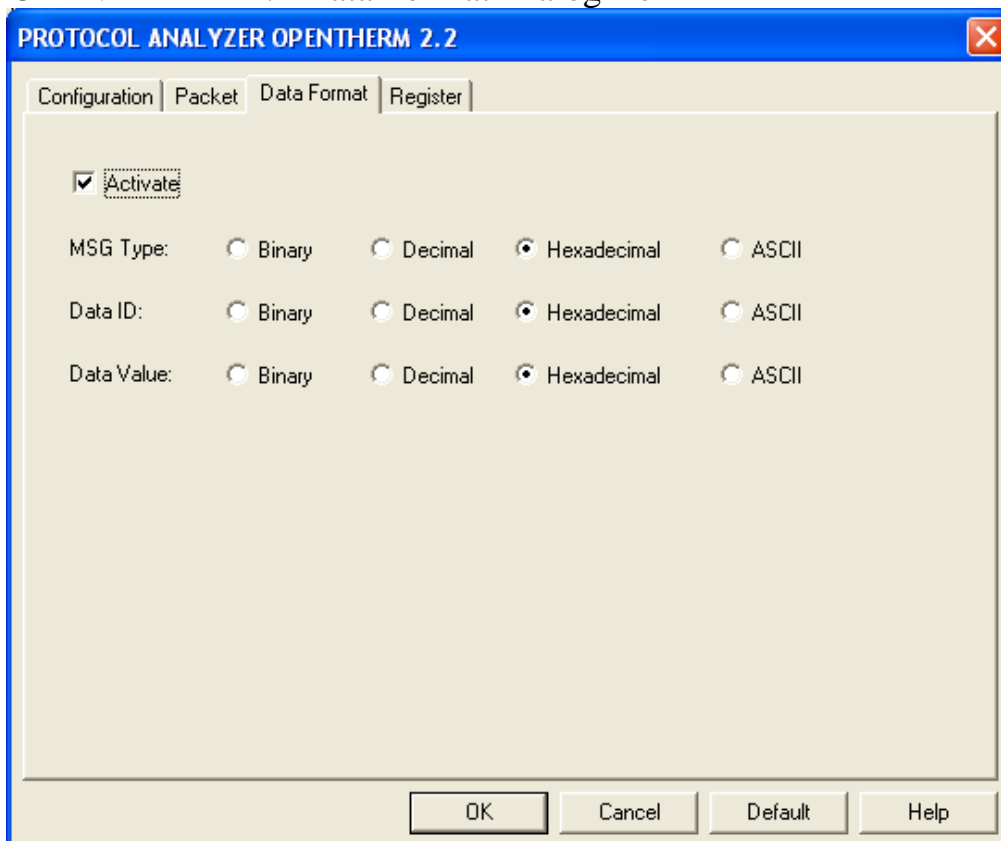


OPENTHERM 2.2 Packet Dialog Box



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

OPENTHERM 2.2 Data Format Dialog Box

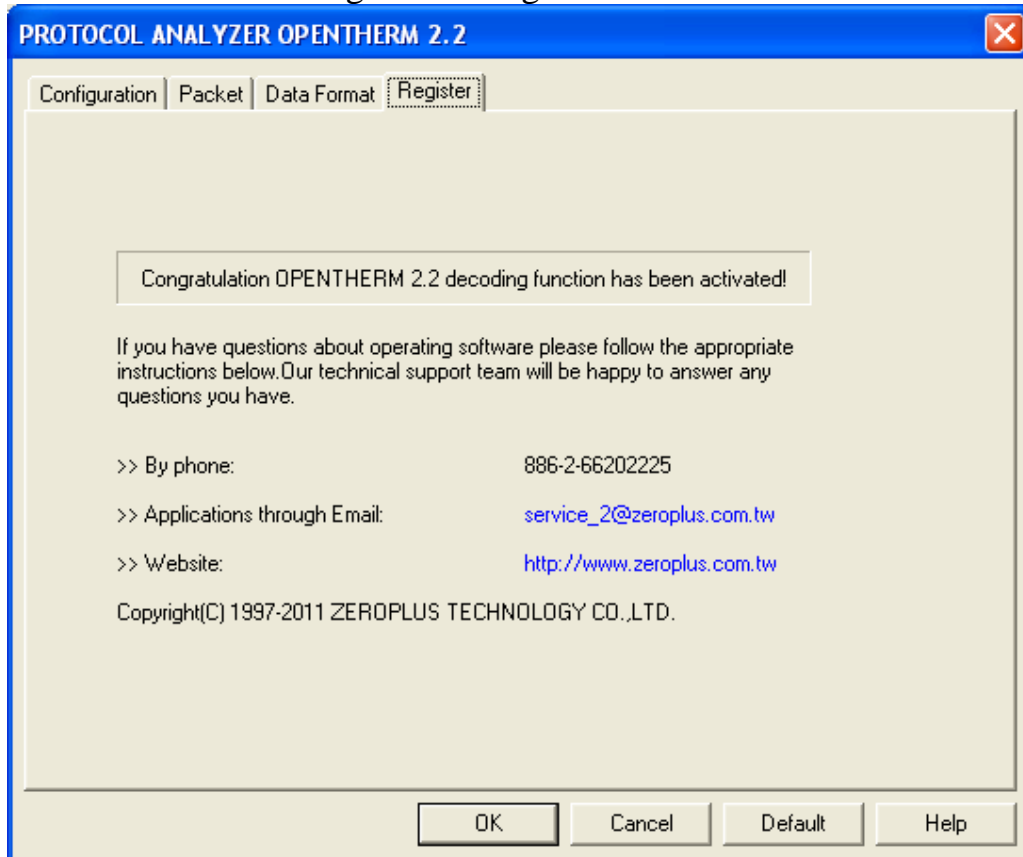


Users can set the Data Format of the MSG Type, Data ID and Data Value as their requirements. When



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.

OPENTHERM 2.2 Register Dialog Box

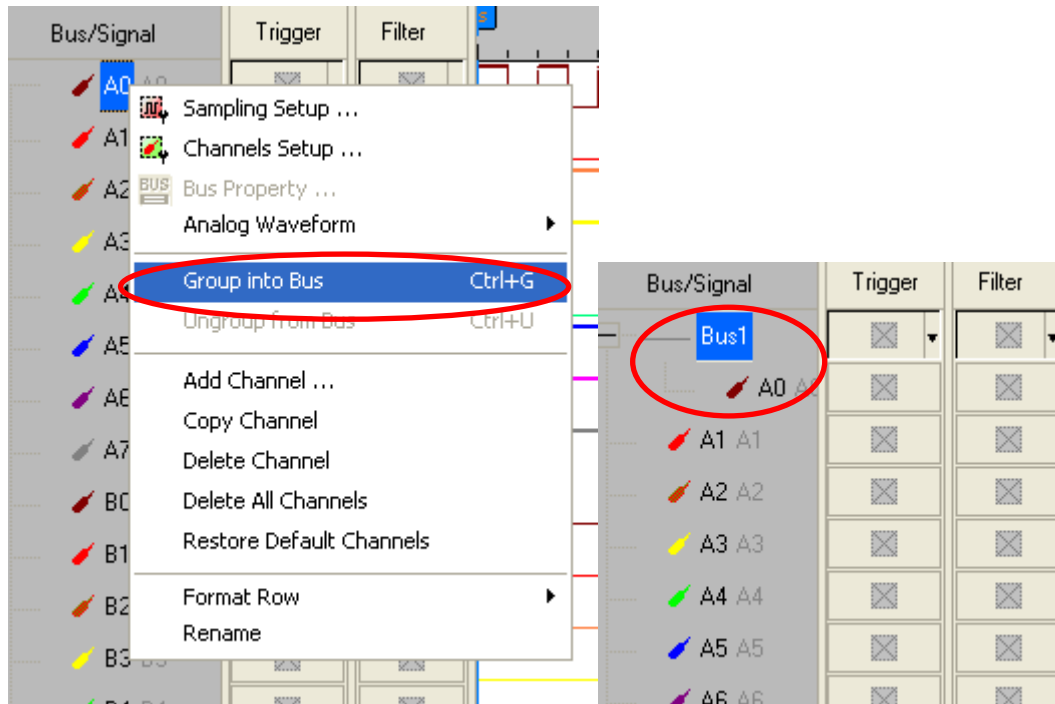


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

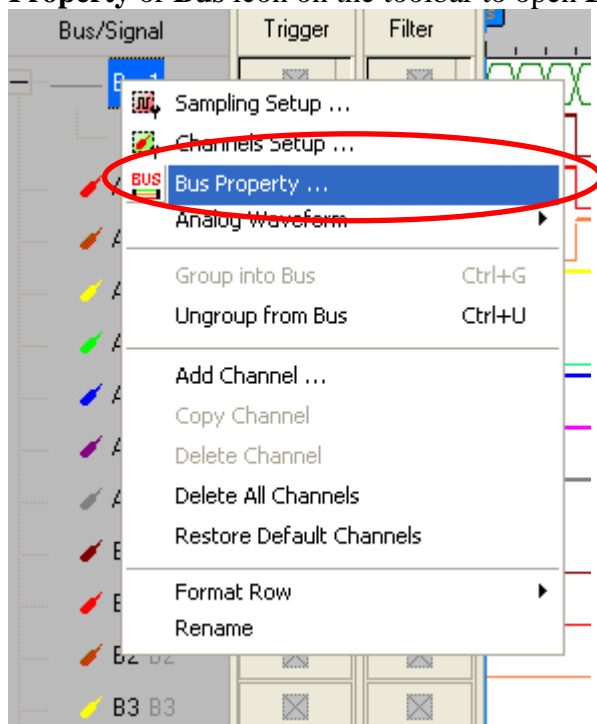


5 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **OPENTHERM 2.2** needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

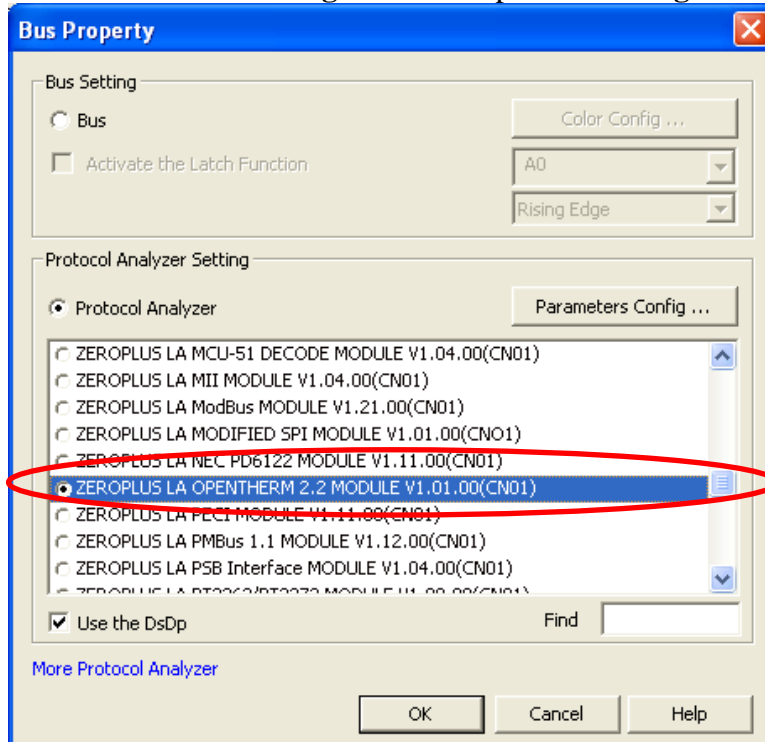


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

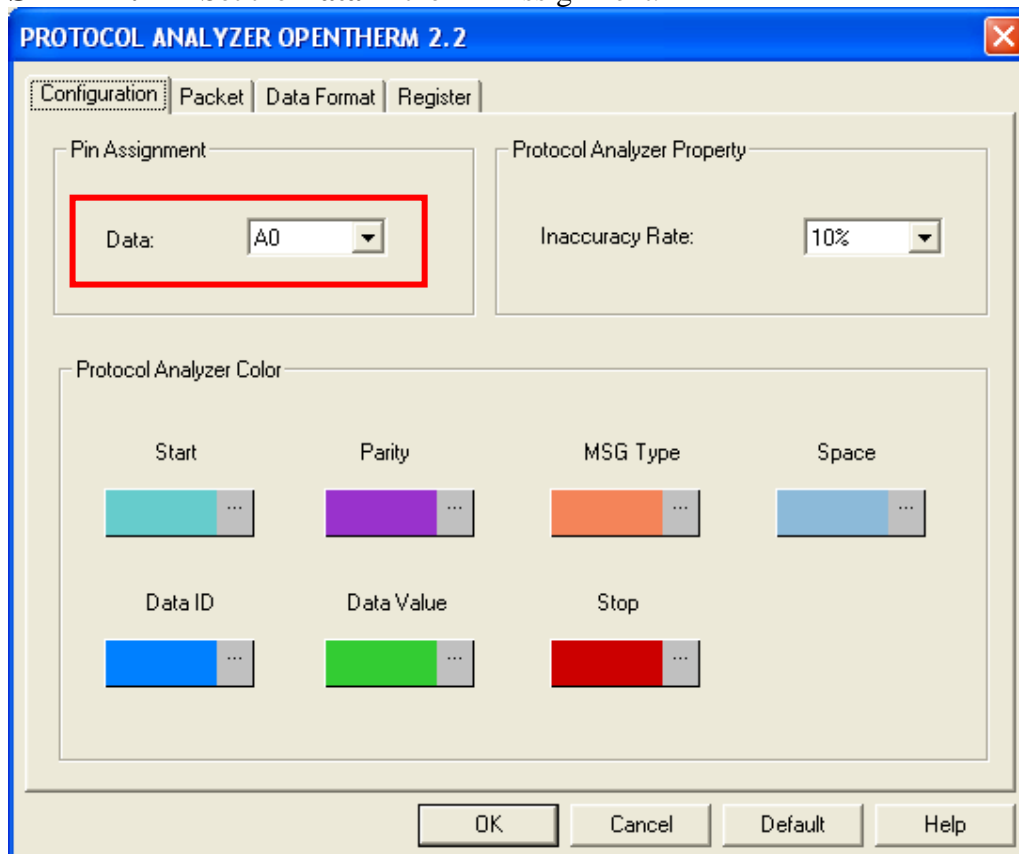




STEP 3. For Protocol Analyzer **OPENTHERM 2.2** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA OPENTHERM 2.2 MODULE V1.01.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

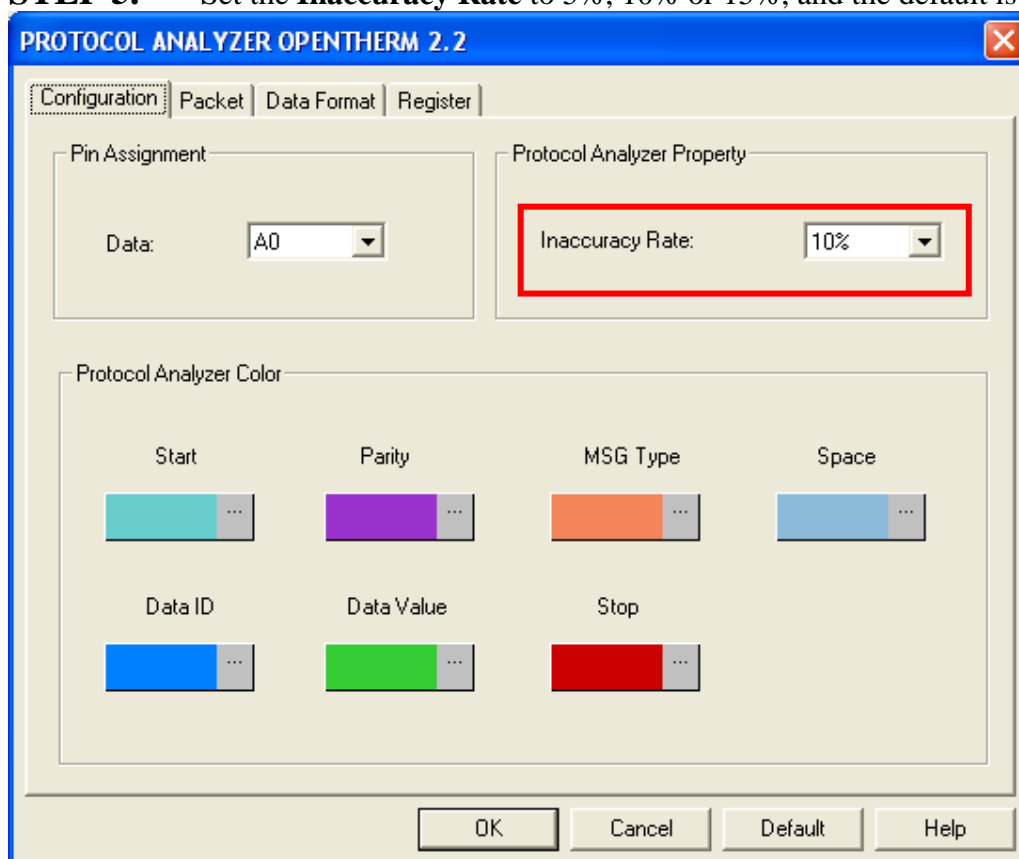


STEP 4. Set the **Data** in the Pin Assignment.

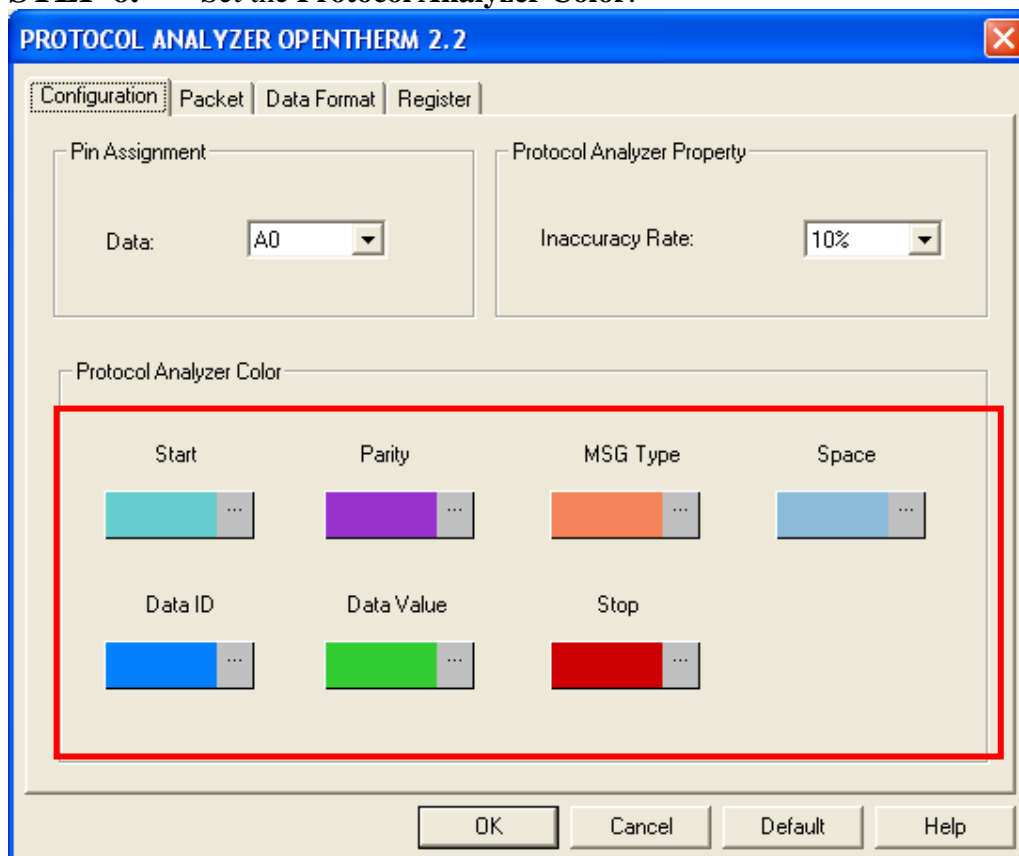




STEP 5. Set the **Inaccuracy Rate** to 5%, 10% or 15%, and the default is 10%.



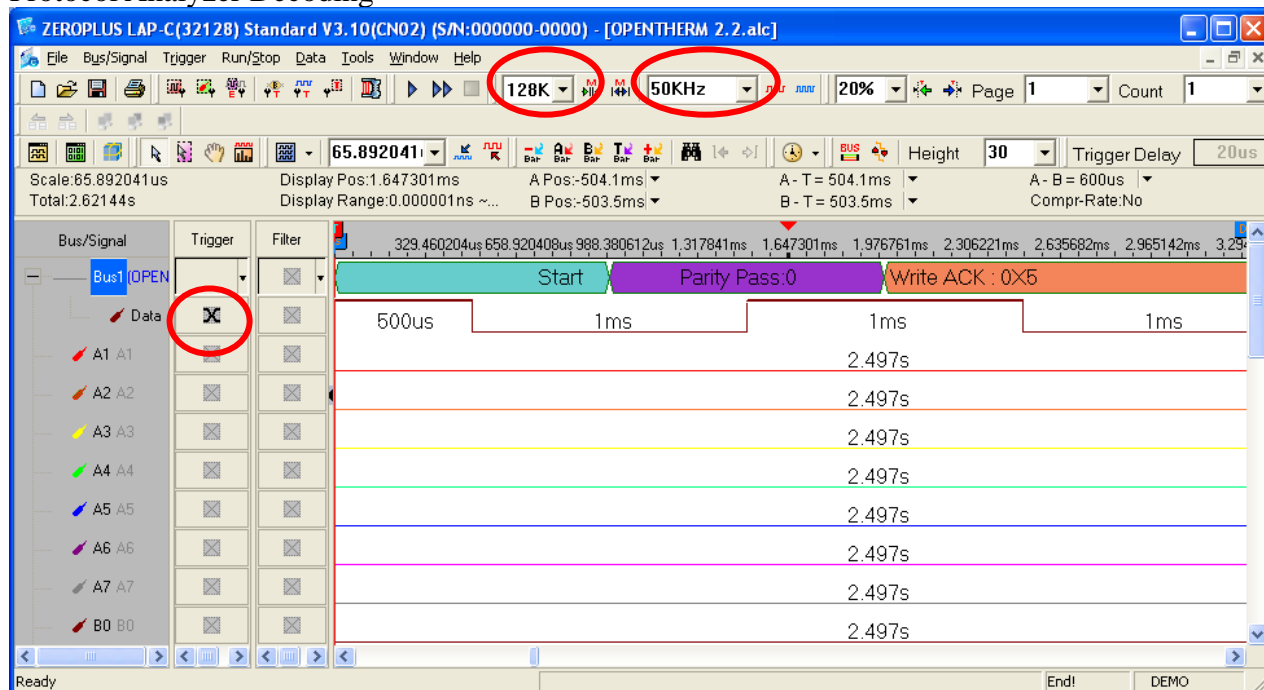
STEP 6. Set the **Protocol Analyzer Color**.





STEP 7. 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 50 KHz (the sampling frequency should be more than eight times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

