



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

# SPECIFICATION

**MODEL: B10013-LAP-MIL-STD-1553-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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## 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.

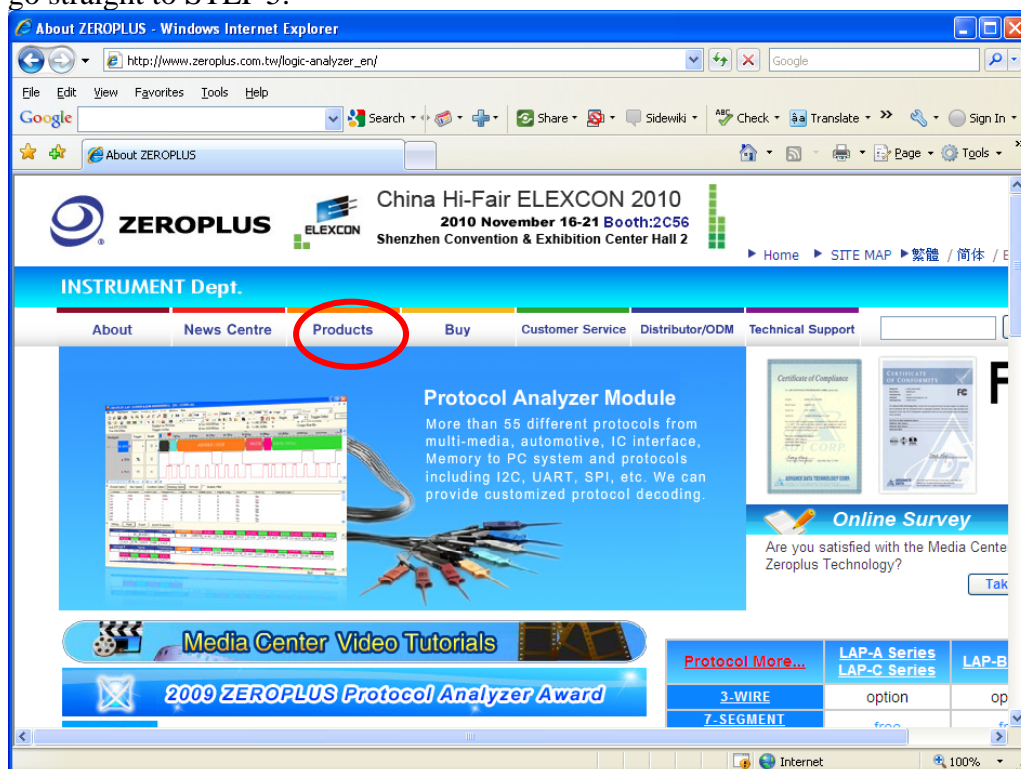
**STEP 1.** Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

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

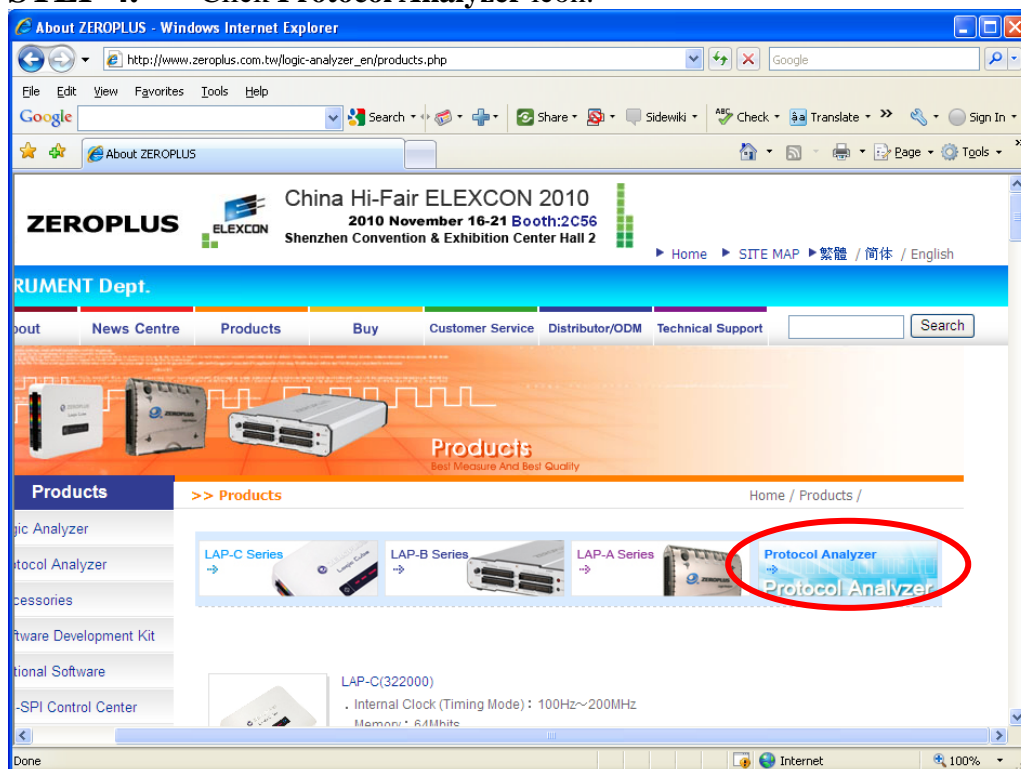




**STEP 3.** Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

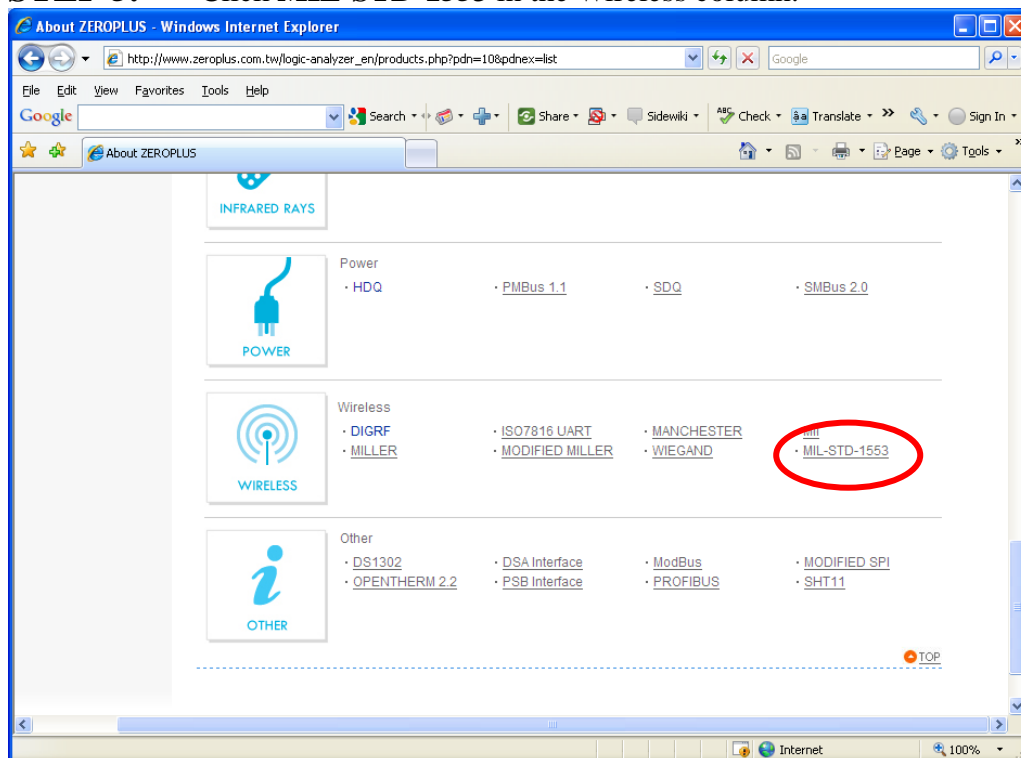


**STEP 4.** Click **Protocol Analyzer** icon.

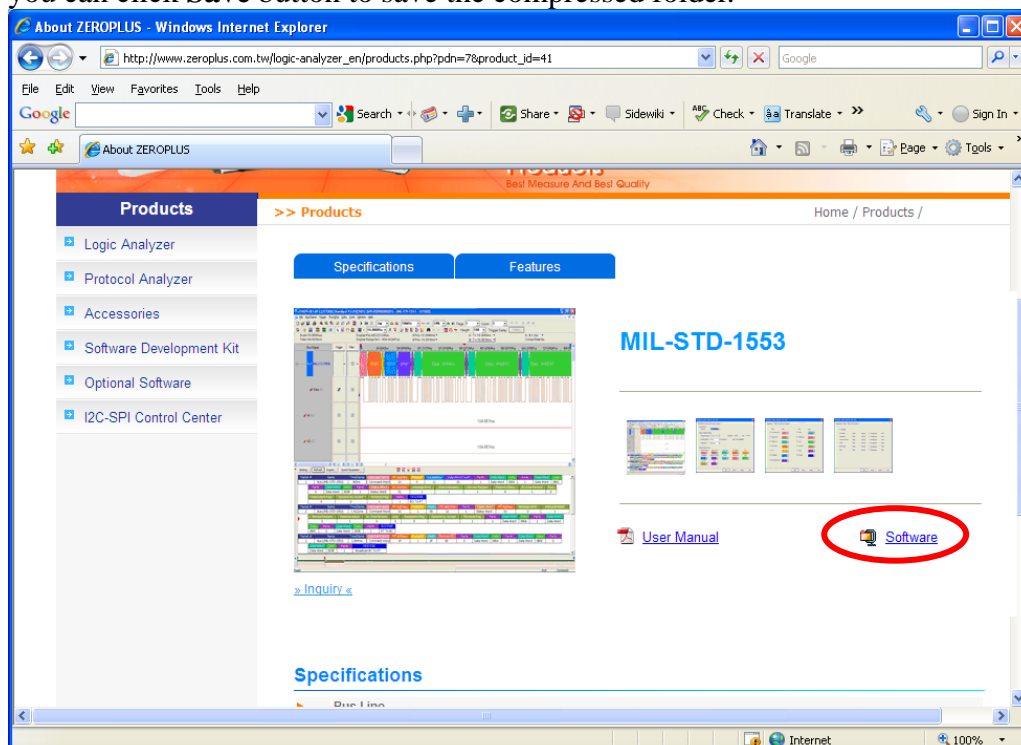




**STEP 5.** Click **MIL-STD-1553** in the Wireless column.



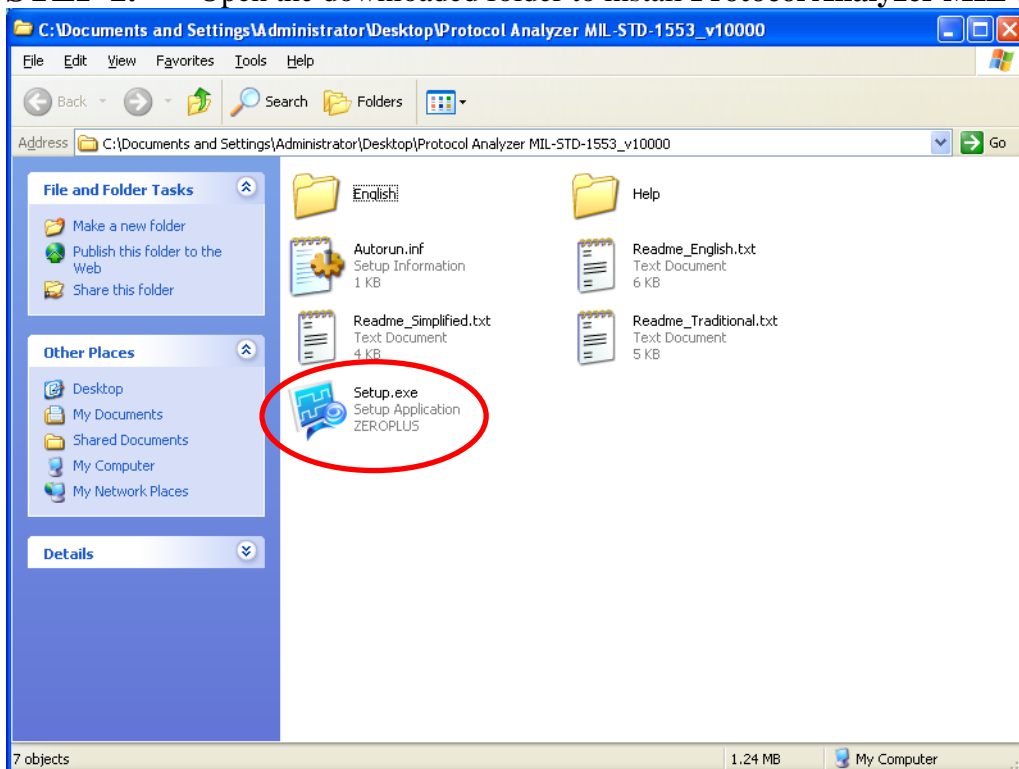
**STEP 6.** Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed folder.



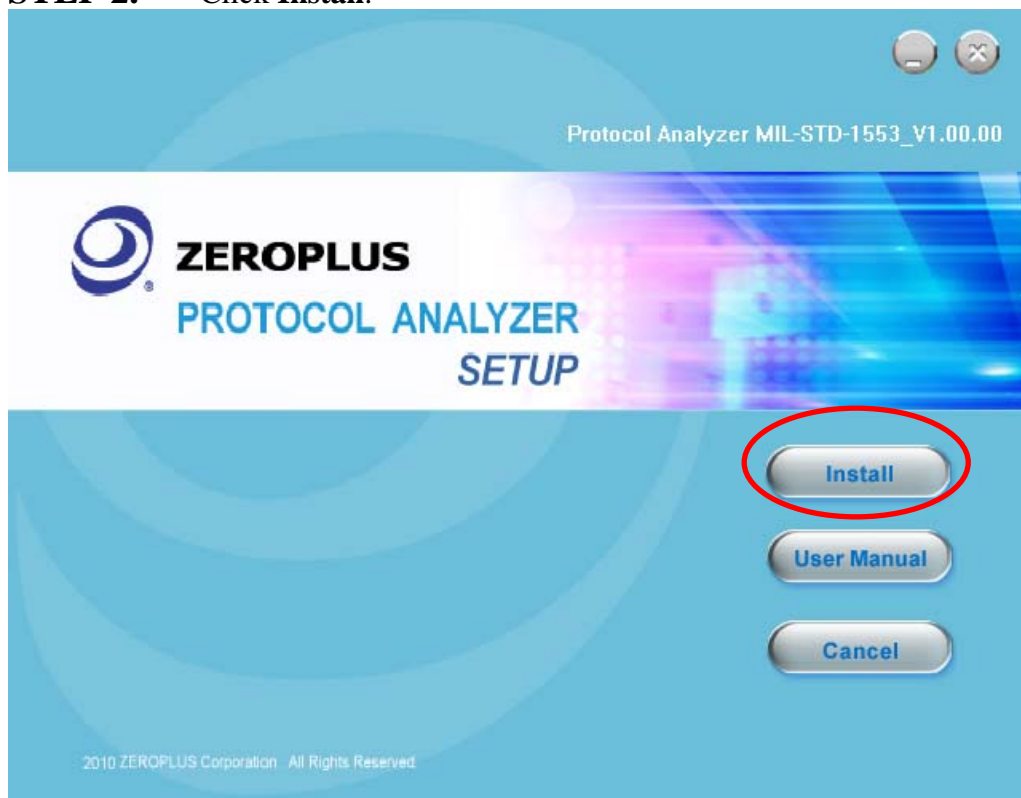


## 2 Software Installation

**STEP 1.** Open the downloaded folder to install **Protocol Analyzer MIL-STD-1553**.

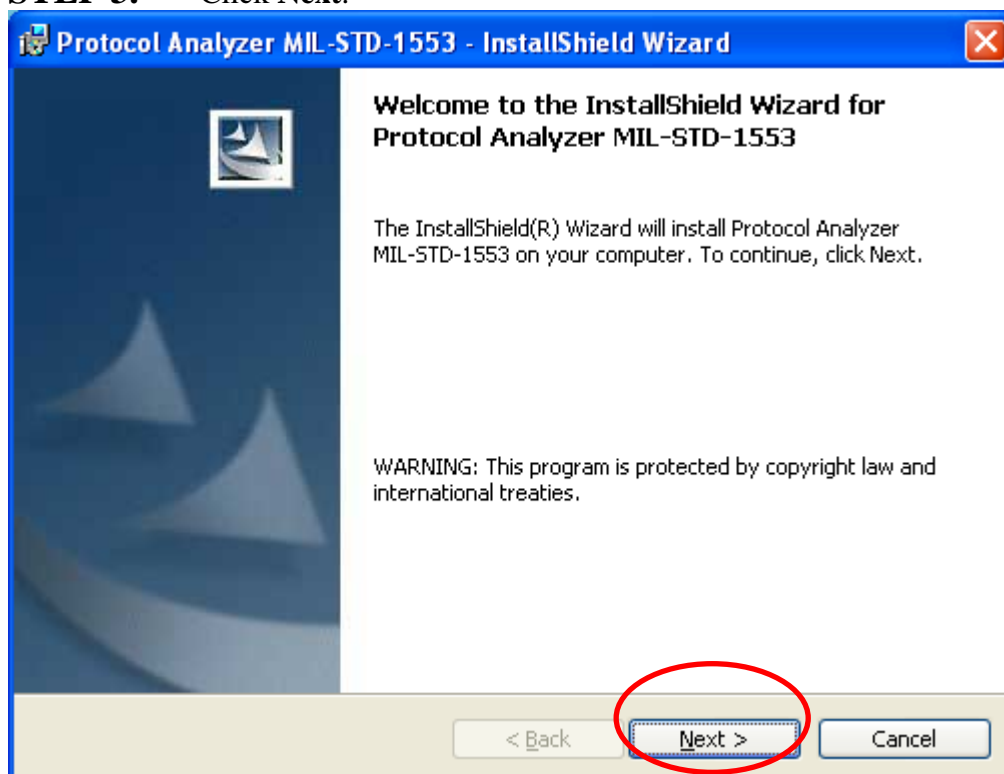


**STEP 2.** Click **Install**.

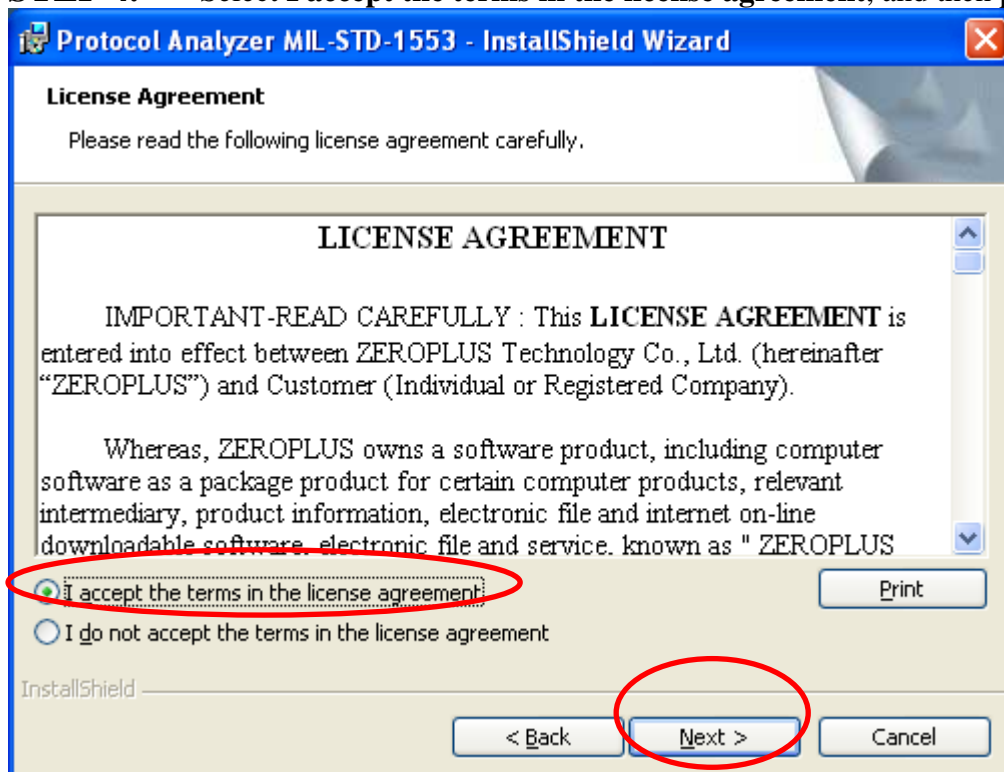




**STEP 3.** Click Next.



**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**.

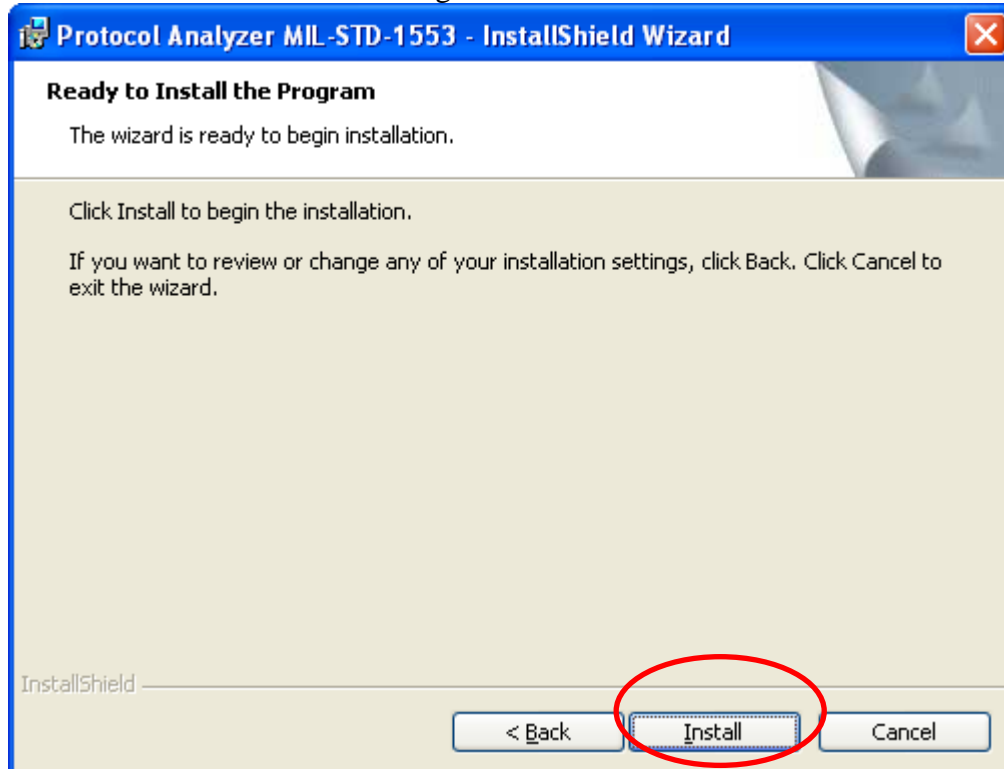
The screenshot shows the 'Customer Information' screen of the 'Protocol Analyzer MIL-STD-1553 - InstallShield Wizard'. The title bar is blue with the application icon and text. The main area has a light beige background. At the top, it says 'Customer Information' and 'Please enter your information.' Below this are two text input fields: 'User Name:' with 'Microsoft' entered, and 'Organization:' with 'User' entered. Further down, it says 'Install this application for:' followed by 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 >', and 'Cancel'. The 'Next >' button is circled in red. The 'InstallShield' logo is visible in the bottom left corner.

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

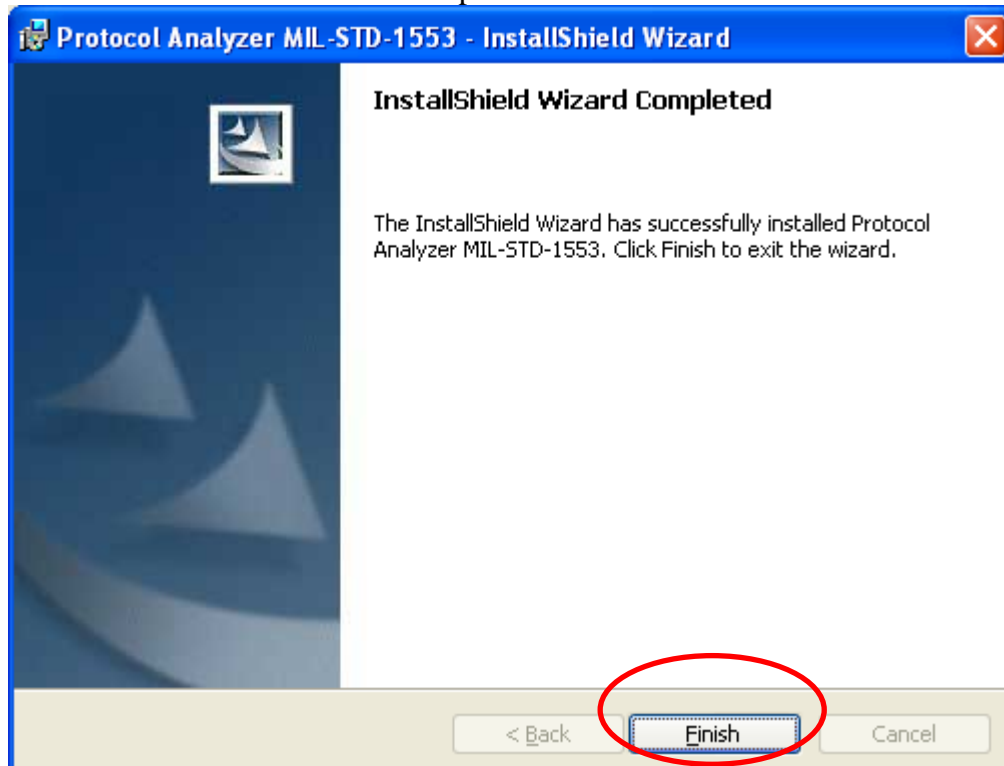
The screenshot shows the 'Setup Type' screen of the 'Protocol Analyzer MIL-STD-1553 - InstallShield Wizard'. The title bar is blue with the application icon and text. The main area has a light beige background. At the top, it says 'Setup Type' and 'Choose the setup type that best suits your needs.' Below this, it says 'Please select a setup type.' There are two radio button options: 'Complete' (which is selected) and 'Custom'. Each option has a small icon of a computer with a red 'X' and a description. The 'Complete' option says 'All program features will be installed. (Requires the most disk space.)' and the 'Custom' option says '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 >', and 'Cancel'. The 'Next >' button is circled in red. The 'InstallShield' logo is visible in the bottom left corner.



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



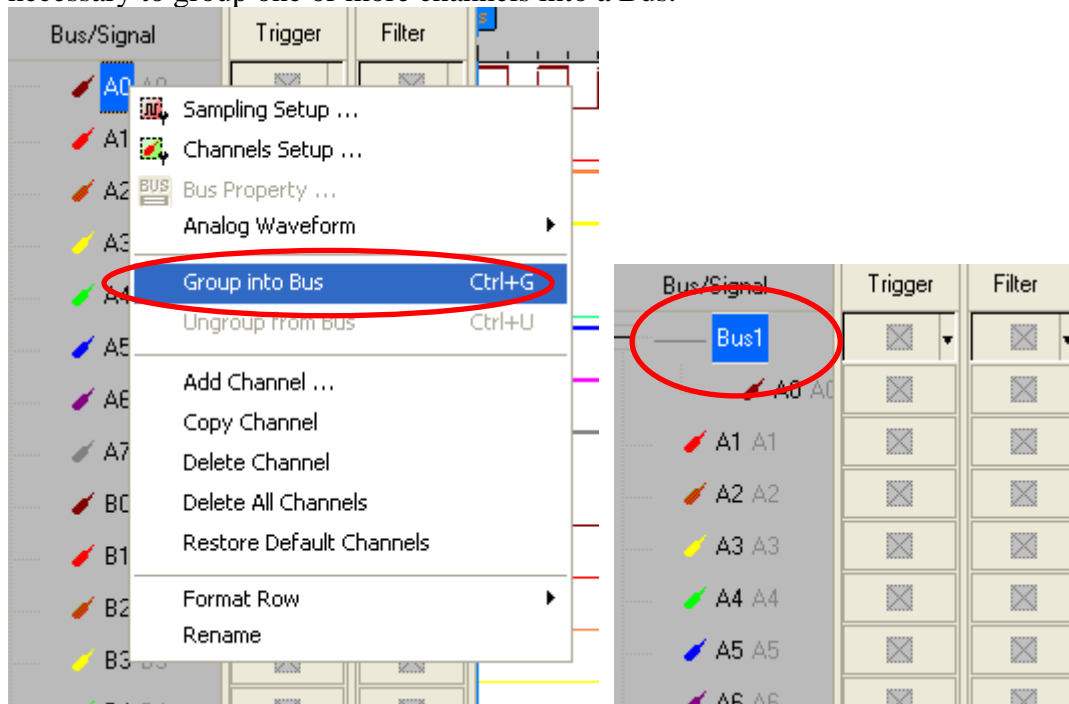
**STEP 8.** Click **Finish** to complete the installation.



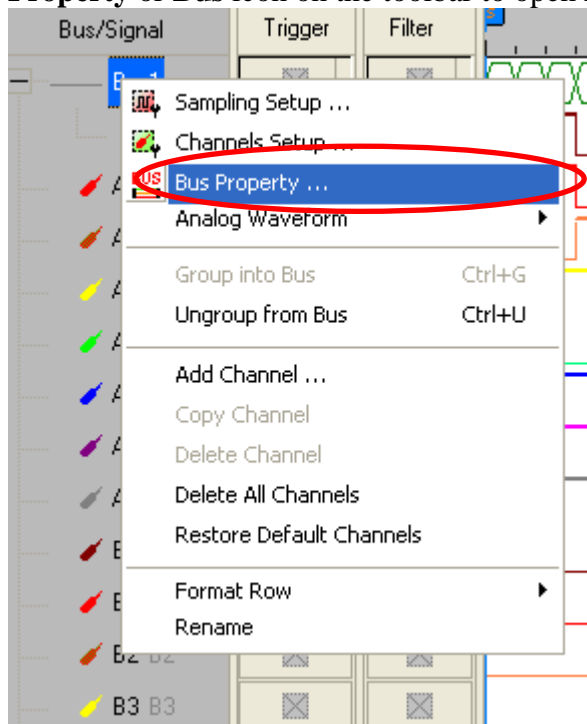


### 3 Software Register

**STEP 1.** Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **MIL-STD-1553** only needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

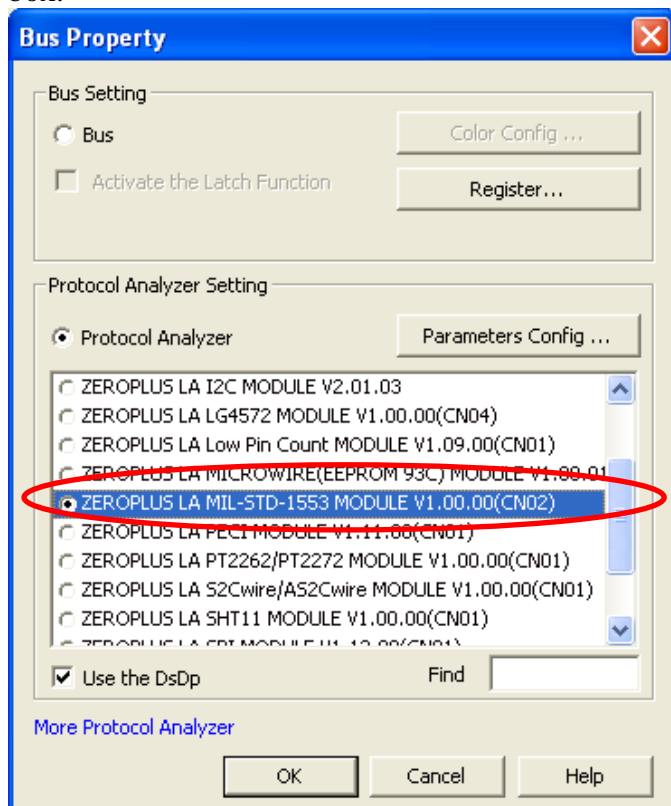


**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

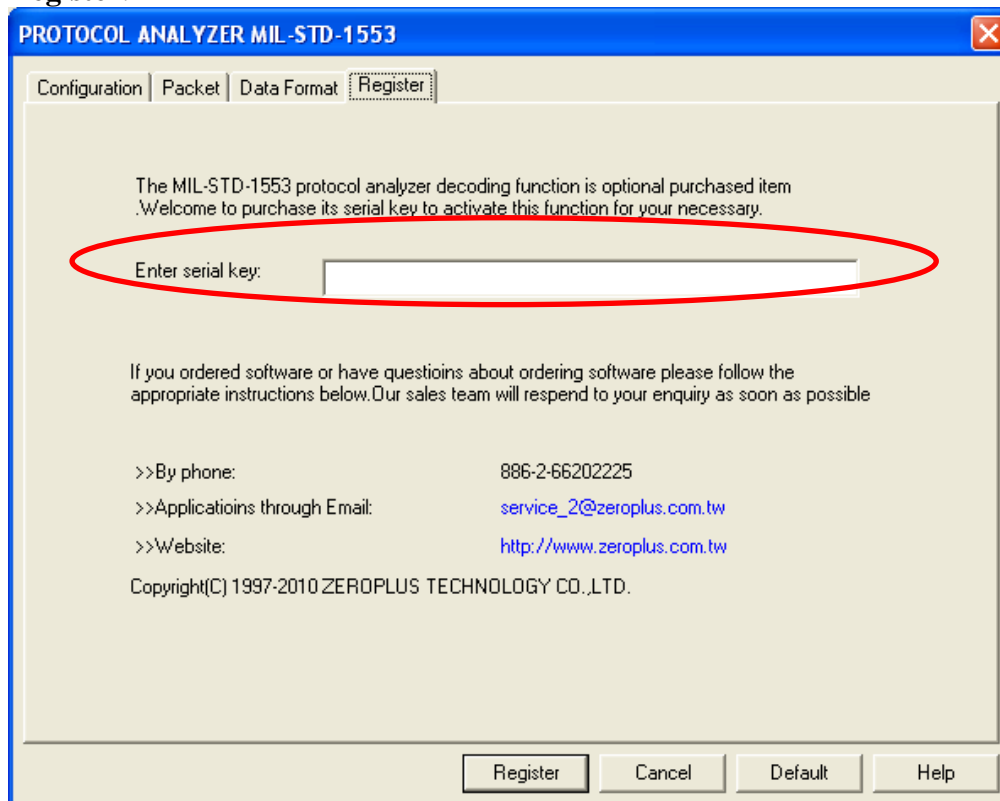




**STEP 3.** For Protocol Analyzer MIL-STD-1553 Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA MIL-STD-1553 MODULE V1.00.00(CN02)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER MIL-STD-1553** dialog box.

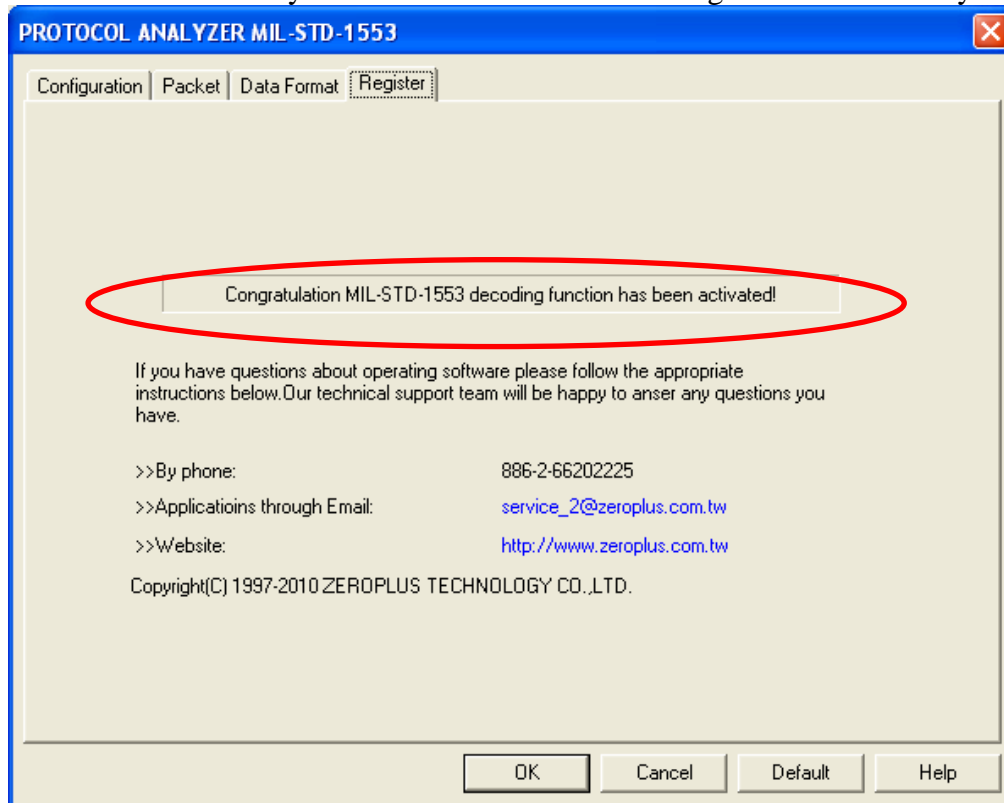


**STEP 4.** Press the Register tab to enter the serial key of the **MIL-STD-1553**. Then, press **Register**.





**STEP 5.** After pressing the Register button, the following dialog box will appear; it denotes that the Protocol Analyzer MIL-STD-1553 has been registered successfully.

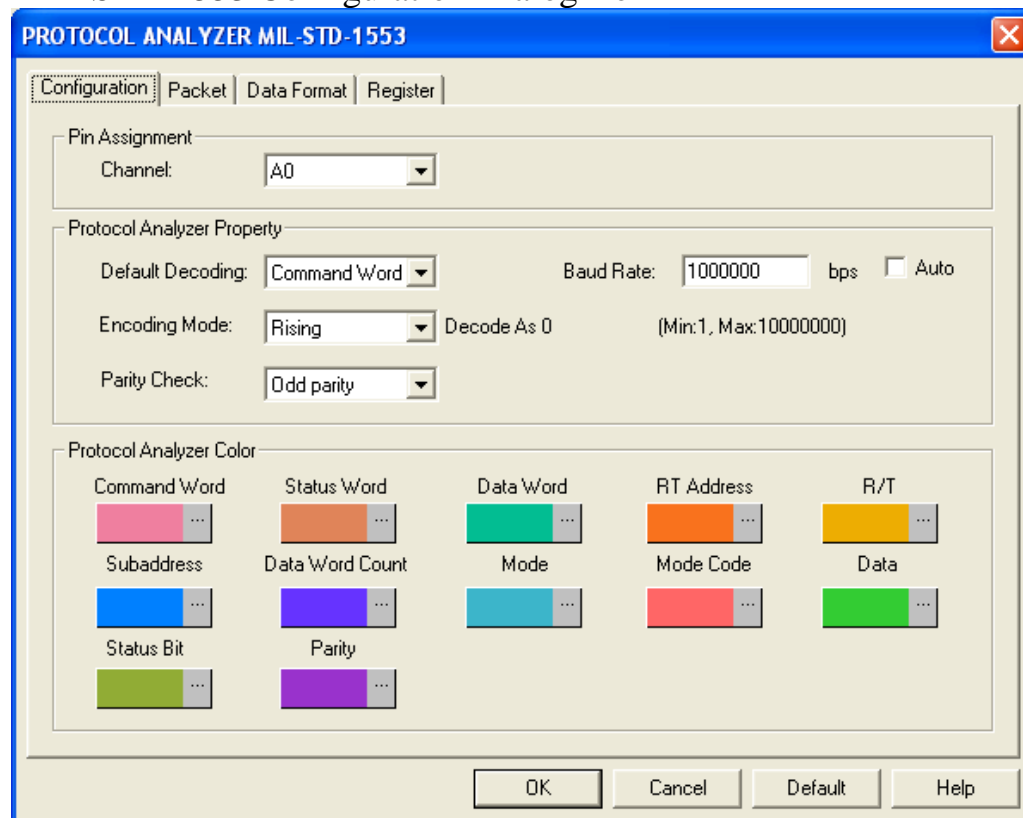




## 4 User Interface

In the configuration, please refer to below images to select options of the MIL-STD-1553 module.

### MIL-STD-1553 Configuration Dialog Box



#### Pin Assignment:

The MIL-STD-1553 only needs one channel to decode the signals, the default is A0.

#### Protocol Analyzer Property:

**Default Decoding:** The Default Decoding mode can be selected from the two options (Command Word and Status Word) on the pull-down menu to decode the initial word, and the default is Command Word.

**Encoding Mode:** Two options (Rising and Falling) can be selected to decode as 0, the default is Rising.

**Parity Check:** There are two options on the pull-down menu: Odd parity and Even parity, and the default is Odd parity.

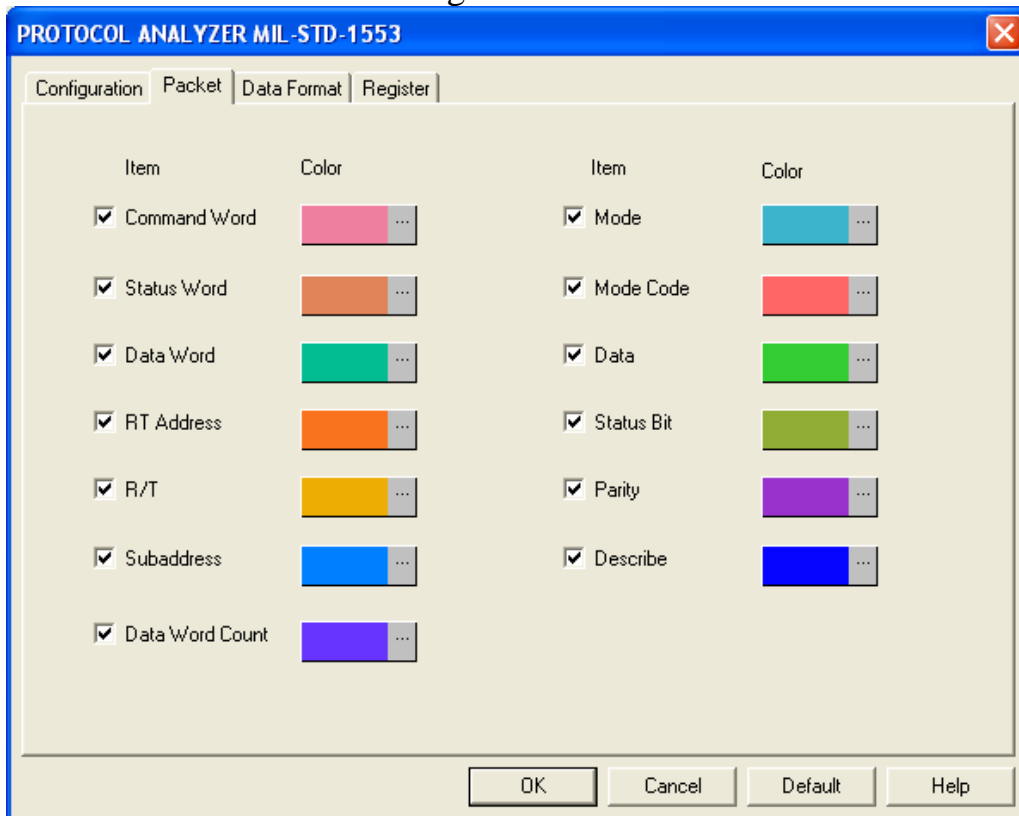
**Baud Rate:** Users can enter the baud rate in the range from 1bps to 10Mbps or select a value from the pull-down menu as their requirements. At the same time, when the option, **Auto**, is activated, the baud rate can be calculated and displayed by the main program automatically.

#### Protocol Analyzer Color:

Users can vary the colors of the decoded packet.

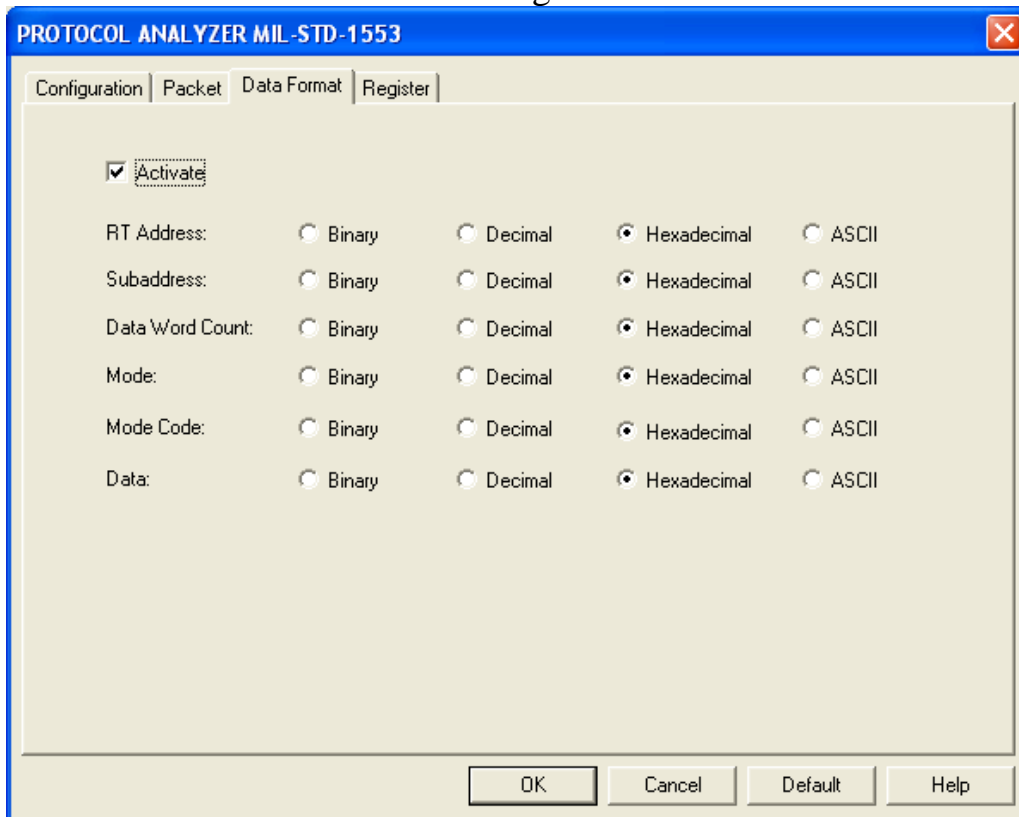


## MIL-STD-1553 Packet Dialog Box



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

## MIL-STD-1553 Data Format Dialog Box

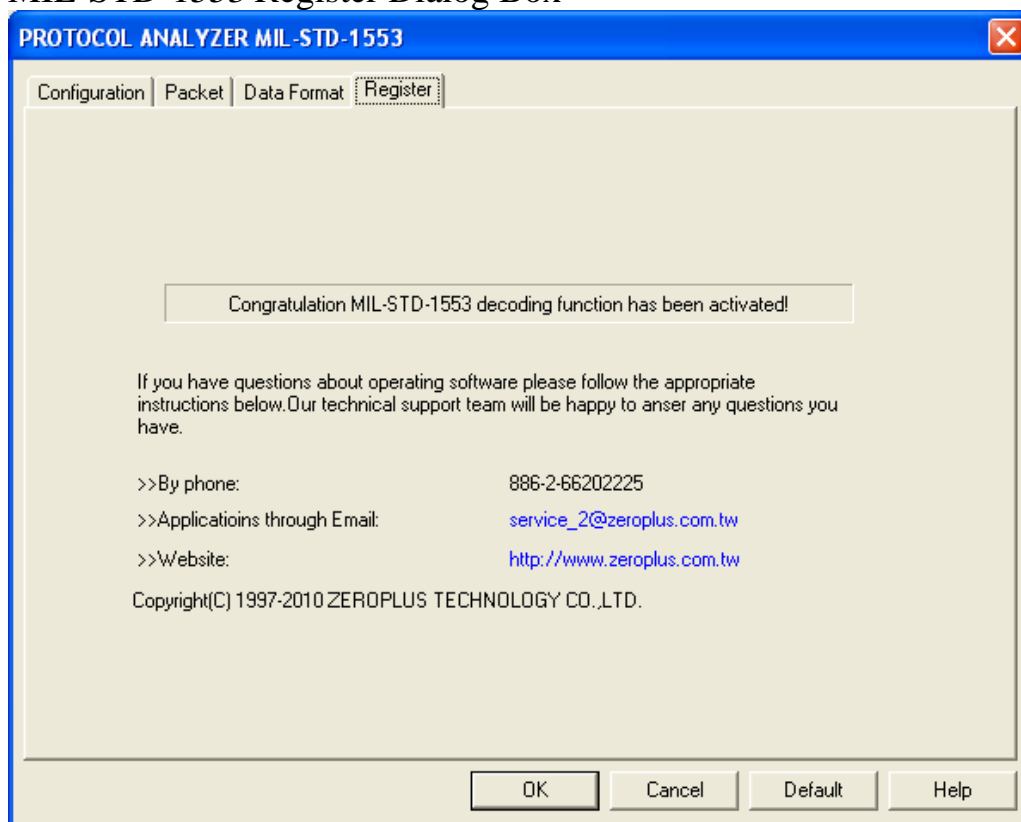


Users can set the Data Format of the RT Address, Subaddress, Data Word Count, Mode, Mode Code and Data as their requirements. When selecting the option, Activate, the data formats are decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data



formats are decided by the settings in the main program.

## MIL-STD-1553 Register Dialog Box

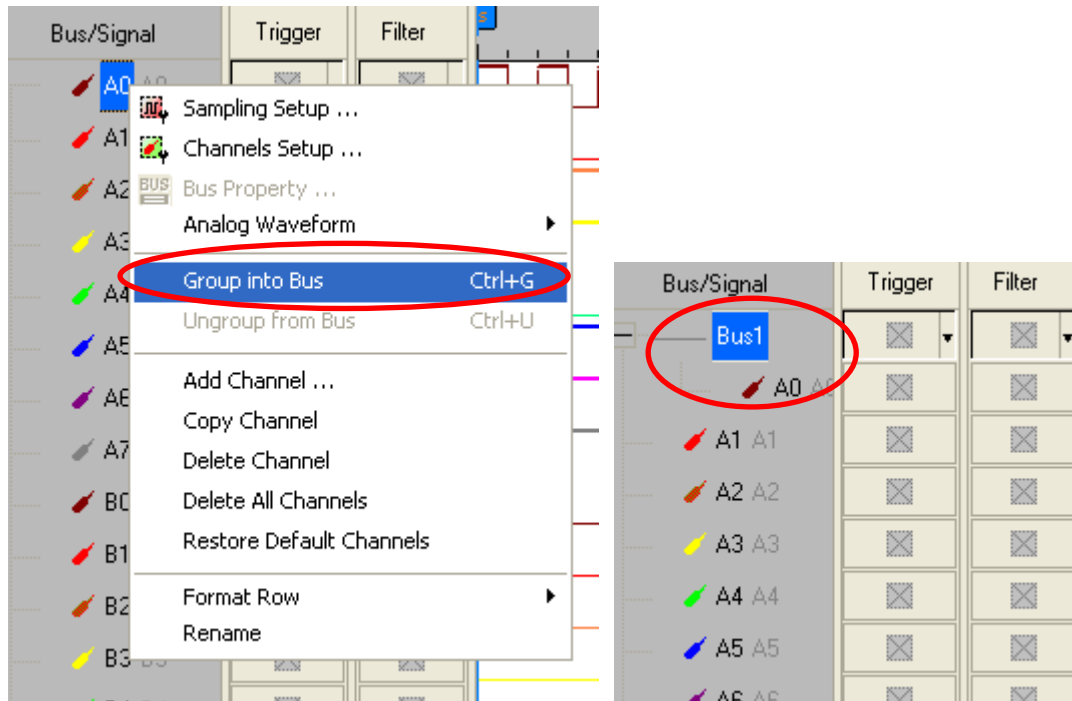


There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

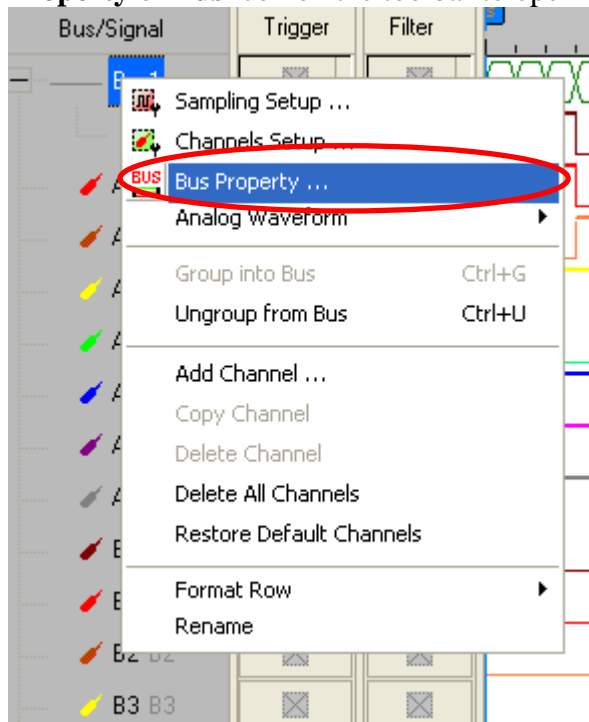


## 5 Operating Instructions

**STEP 1.** Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. MIL-STD-1553 only needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

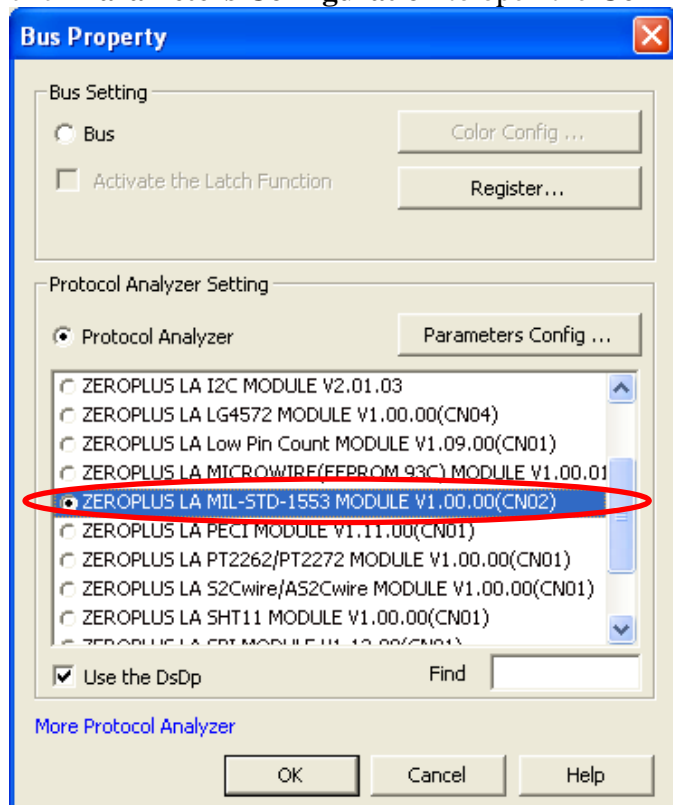


**STEP 2.** Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

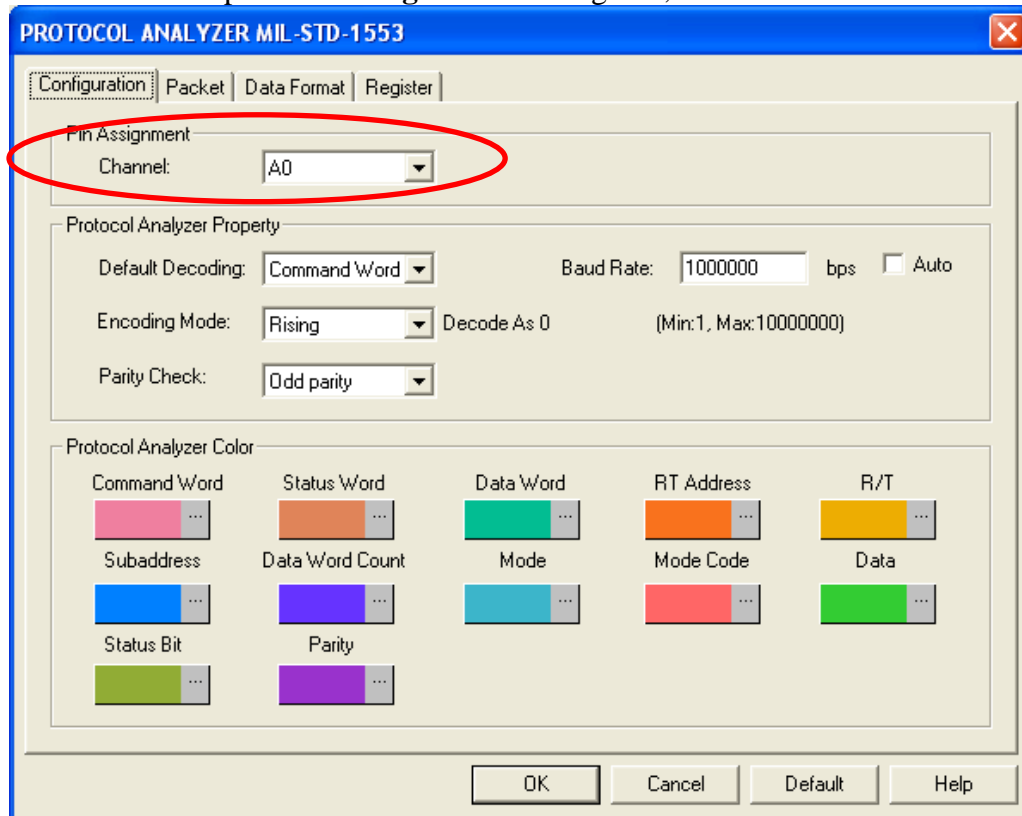




**STEP 3.** For Protocol Analyzer MIL-STD-1553 Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA MIL-STD-1553 MODULE V1.00.00(CN02)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

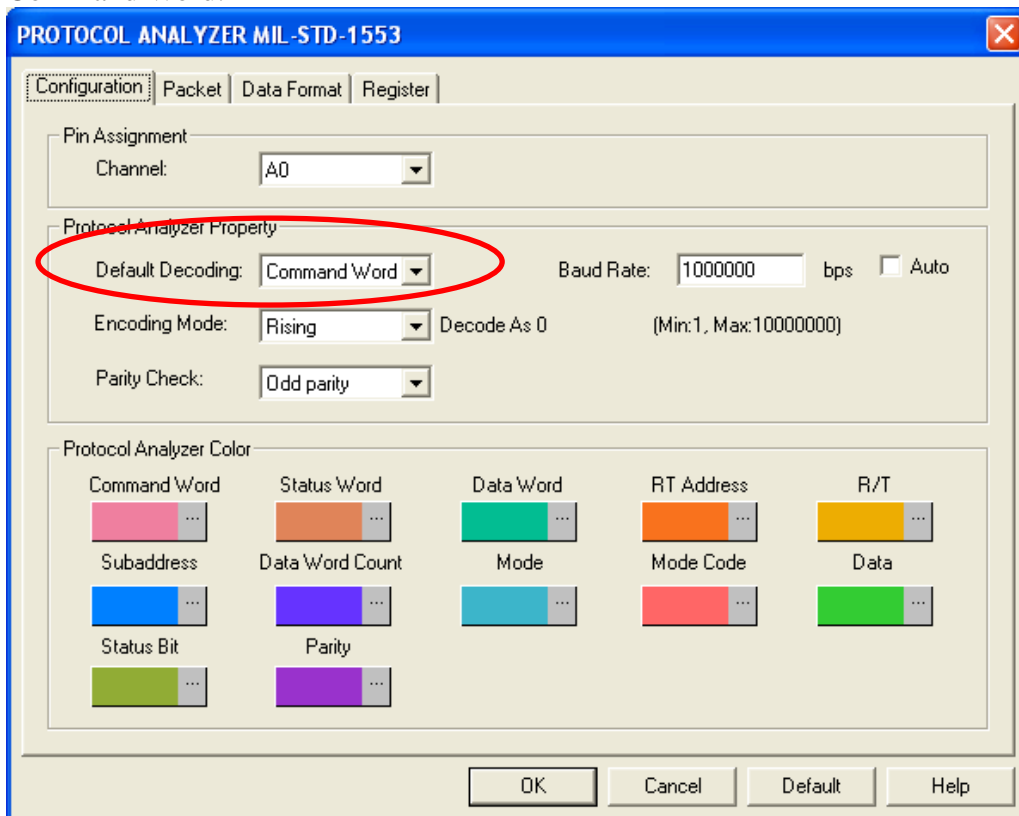


**STEP 4.** Open the **Configuration** dialog box, and set the Channel in the Pin Assignment.

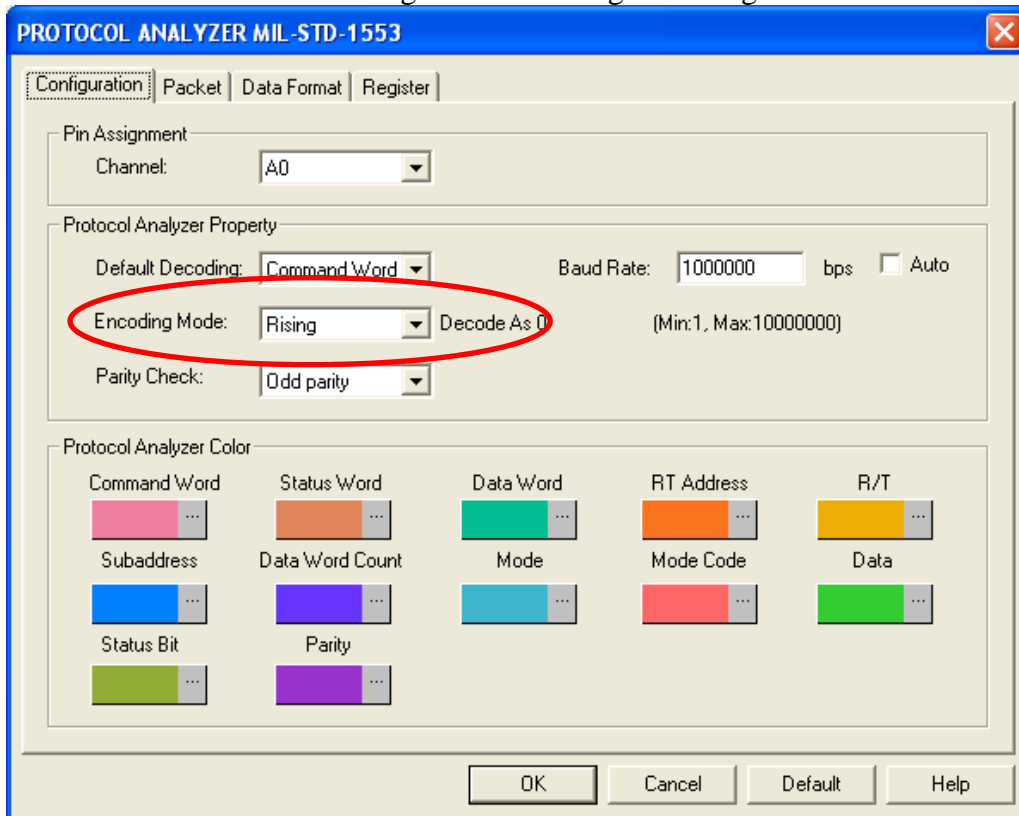




**STEP 5.** Set the Default Decoding to Command Word or Status Word, and the default is Command Word.

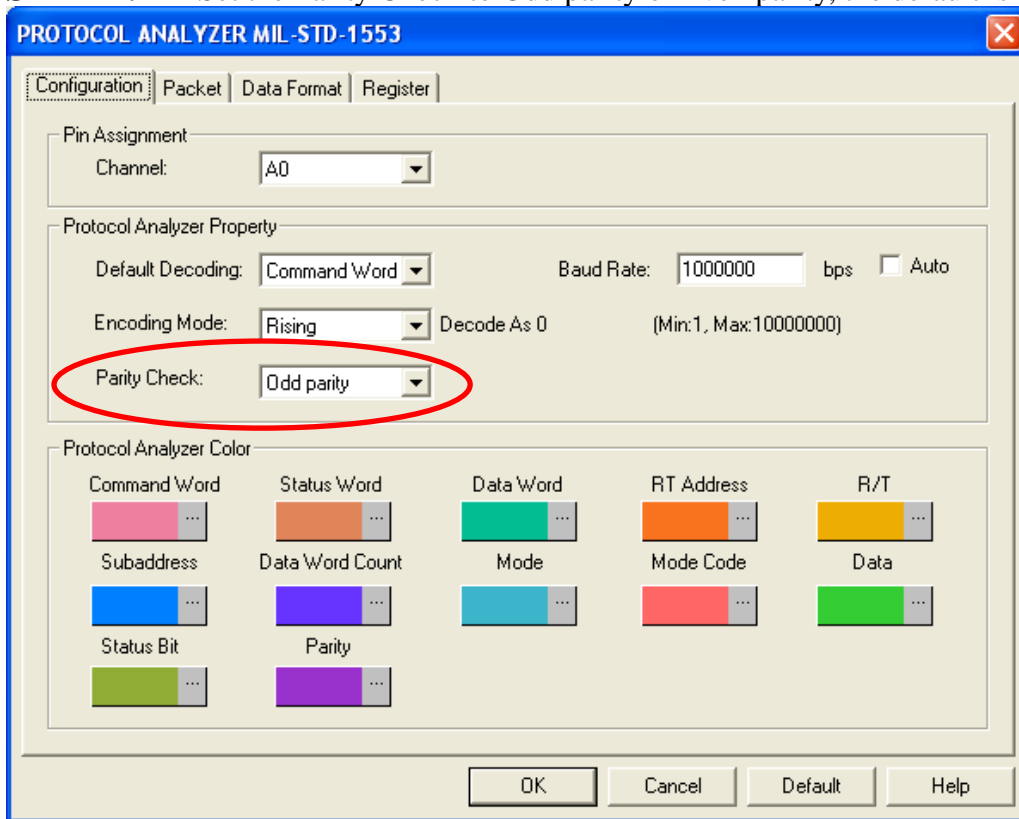


**STEP 6.** Set the Encoding Mode to Rising or Falling to decode as 0.

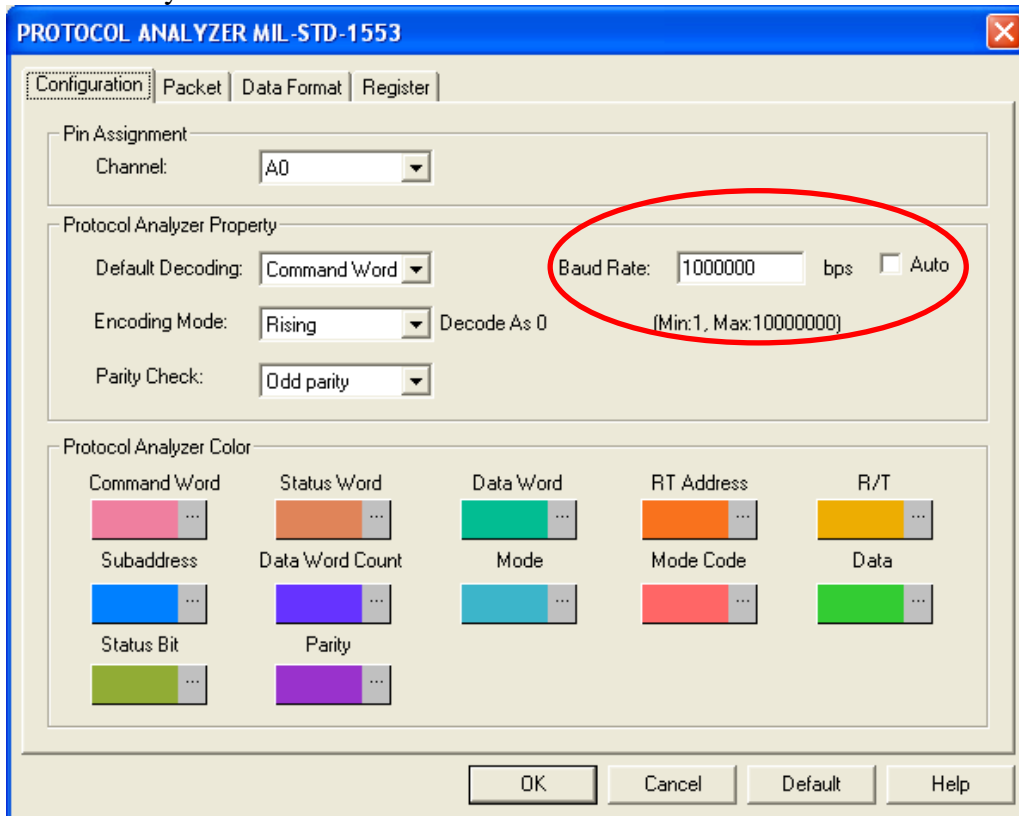




**STEP 7.** Set the Parity Check to Odd parity or Even parity, the default is Odd parity.

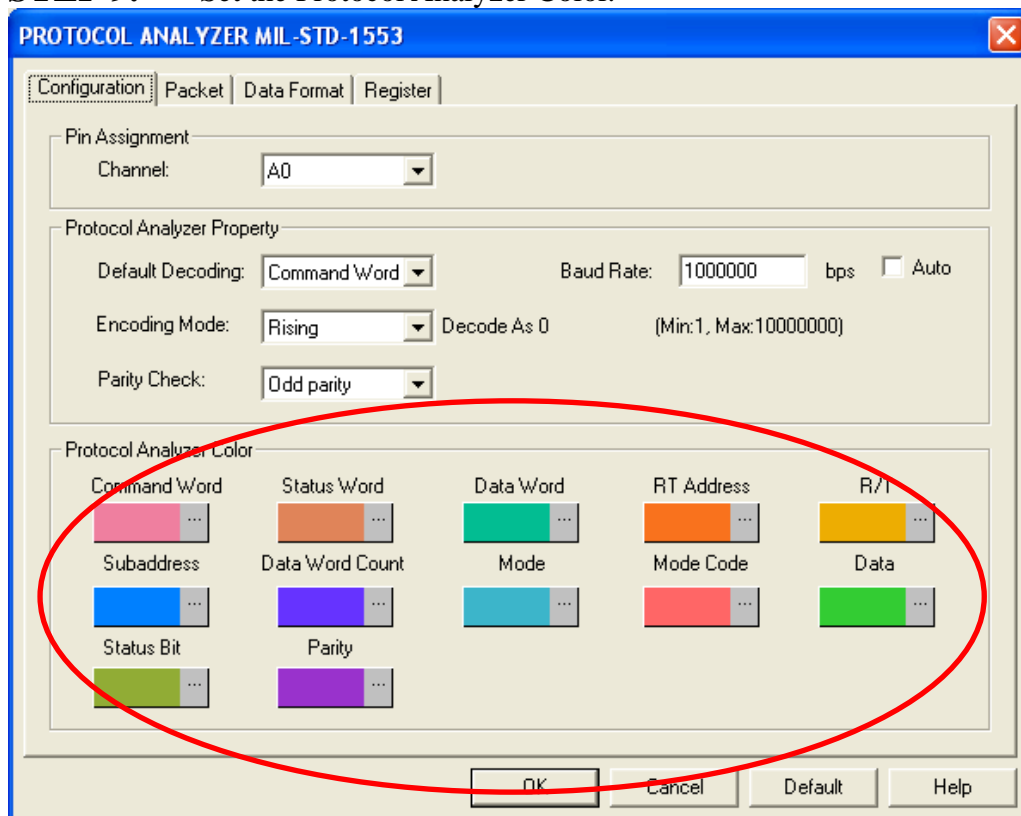


**STEP 8.** Set the **Baud Rate** or select the **Auto** to calculate and display the Baud Rate automatically.





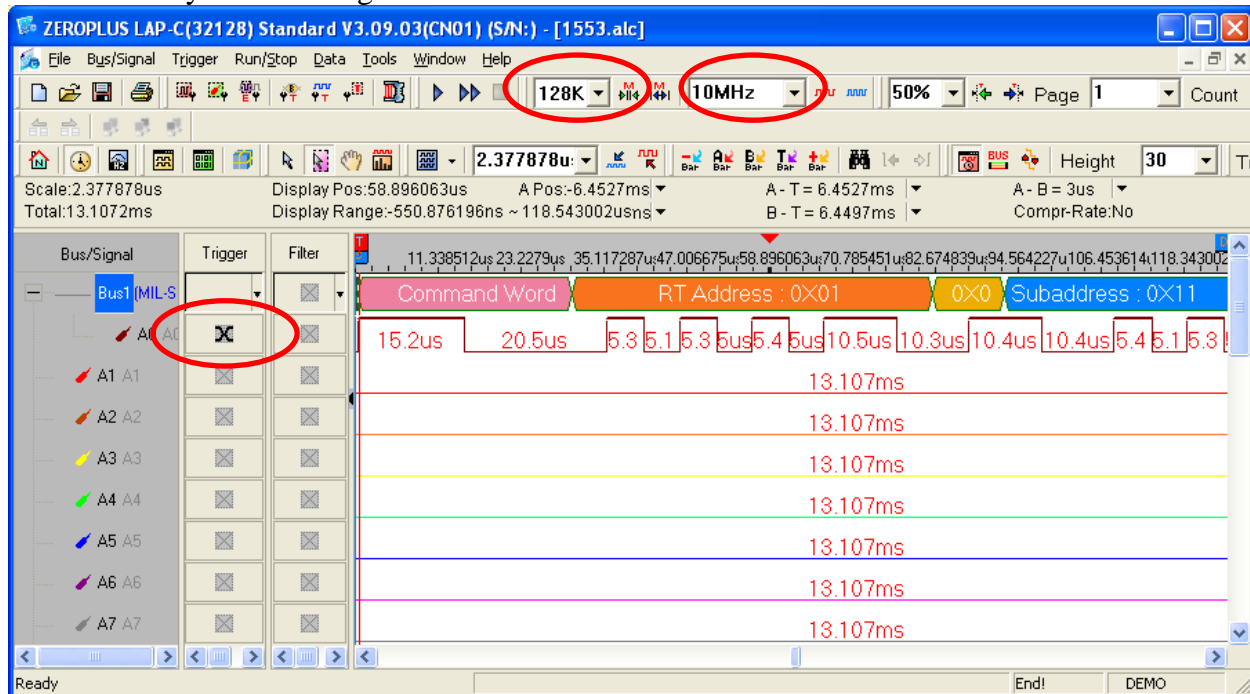
**STEP 9.** Set the Protocol Analyzer Color.





**STEP 10.** Following pictures show the completion of the protocol analyzer decoding and packet list. The trigger condition is set to 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

