



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

SPECIFICATION

MODEL: UART Specification

PART NO : 002 _____

VERSION : V2.10 _____

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
ZeroPlus Technology after
signing .

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Content

1 Software Installation.....	3
2 User Interface	7
3 Operating Instructions	9



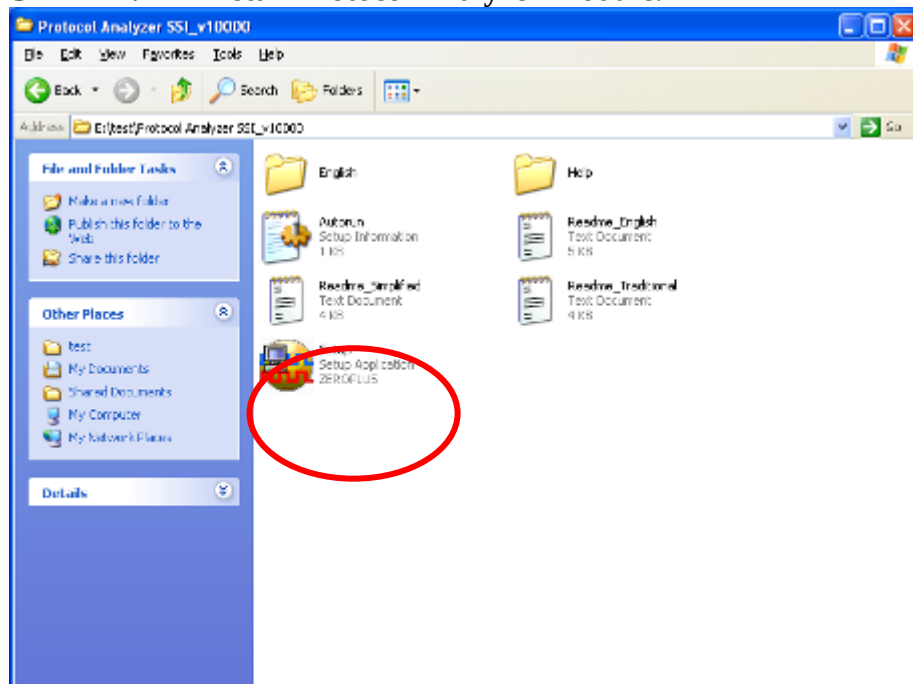
1 Software Installation

Please install the software as the following steps:

※ Remark: 1. The installation steps for all protocol analyzers are the same; you can complete the installation by following procedures. Following is an example on how to install protocol analyzer SSI.

※ Remark: 2. 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. Install Protocol Analyzer Module.

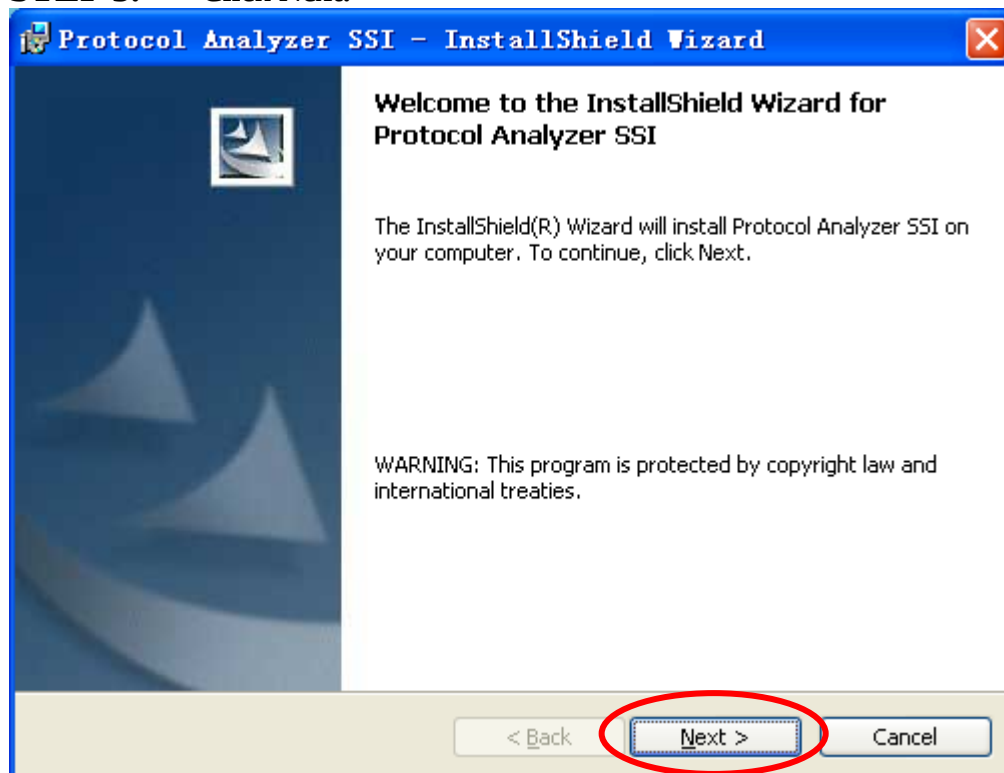


STEP 2. Click Install.

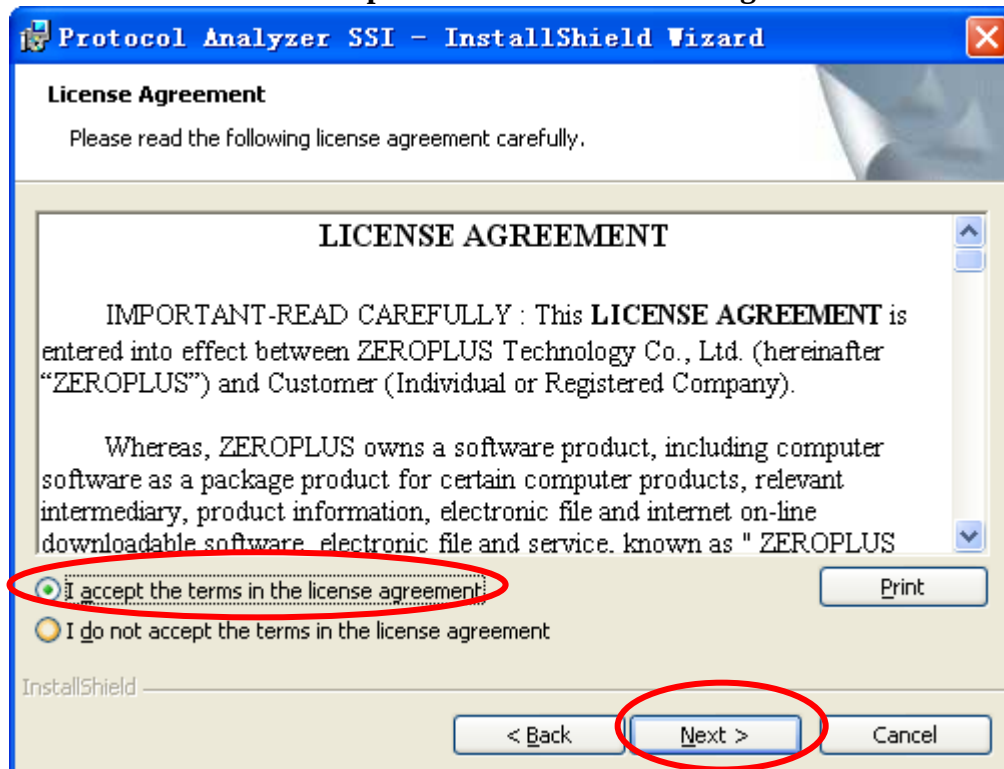




STEP 3. Click Next.



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**.

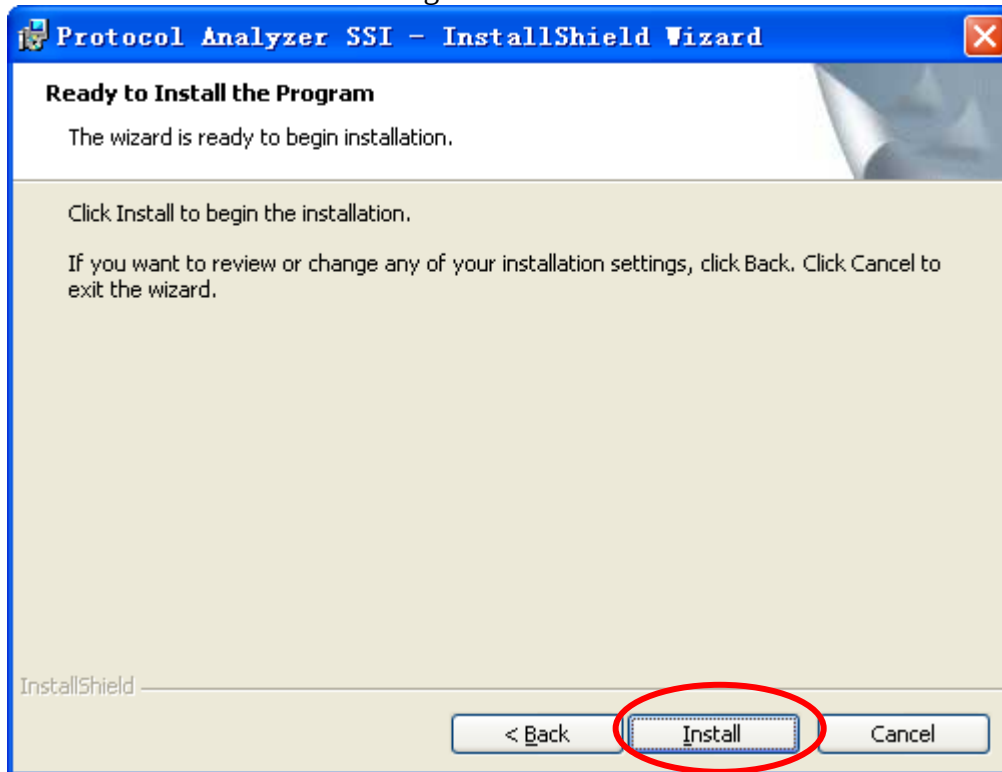
The dialog box is titled "Protocol Analyzer SSI - InstallShield Wizard". It has a "Customer Information" section with the instruction "Please enter your information." Below this are two text input fields: "User Name:" with the text "sunshine" and "Organization:" with the text "zeroplus". There is a section "Install this application for:" with two radio button options: "Anyone who uses this computer (all users)" (which is selected) and "Only for me (sunshine)". At the bottom, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel".

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

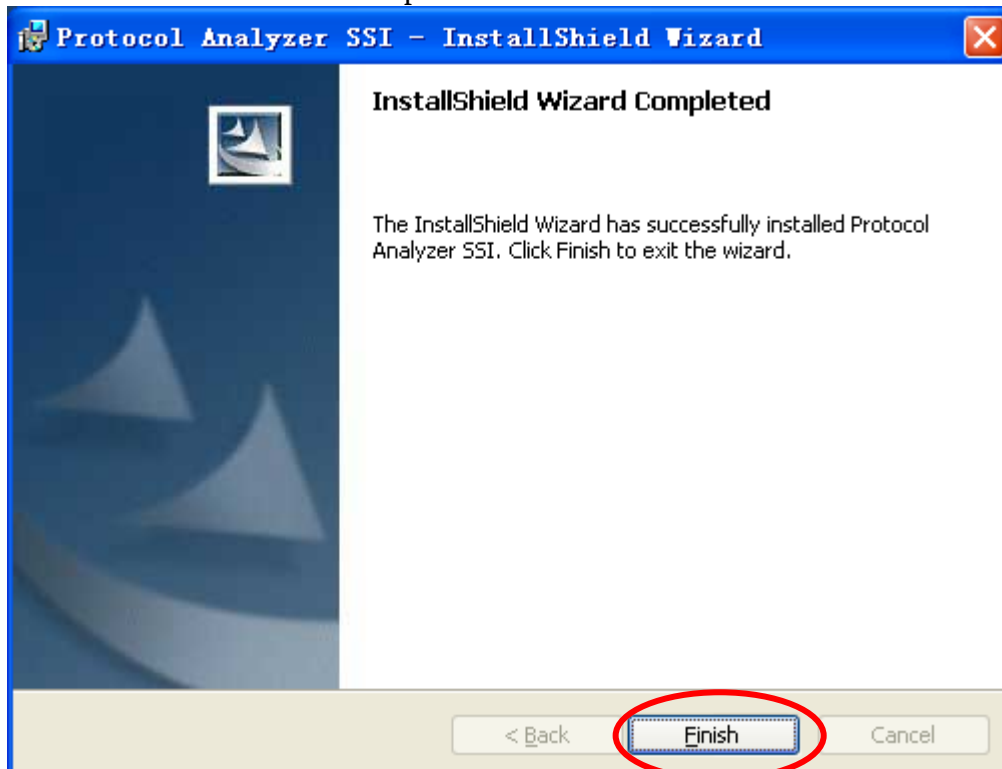
The dialog box is titled "Protocol Analyzer SSI - InstallShield Wizard". It has a "Setup Type" section with the instruction "Choose the setup type that best suits your needs." Below this is the instruction "Please select a setup type." There are two radio button options: "Complete" (which is selected) 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.



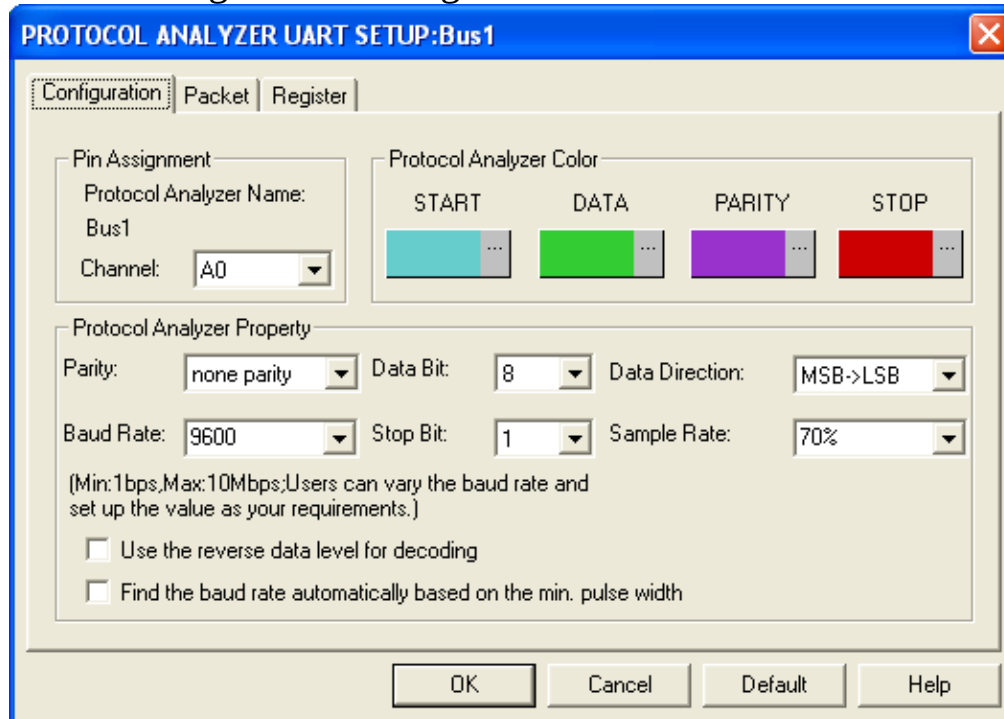
STEP 8. Click **Finish** to complete the installation.



2 User Interface

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

UART Configuration Dialog Box



Pin Assignment: Select the protocol analyzer name for setting protocol analyzer UART presently.
Channel: Select the channel that needs to be analyzed from the dropdown menu.

Protocol Analyzer Color: Set colors for every section.

Protocol Analyzer Property:

Baud Rate: The dropdown menu has options as below:

110, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800 and 921600.
Users can select the desired value from the menu; if the baud rate does not meet users' needs, users can customize a value within the range 1~10M BPS as users' requirements.

Parity : There are three options on the dropdown menu: none parity, odd parity and even parity.

Data Bit: Select the data bit within the range 4~8 bit from the dropdown menu.

Stop Bit: Select the stop bit from the three options: 1, 1.5 and 2 bit.

Data Direction : MSB->LSB and LSB->MSB

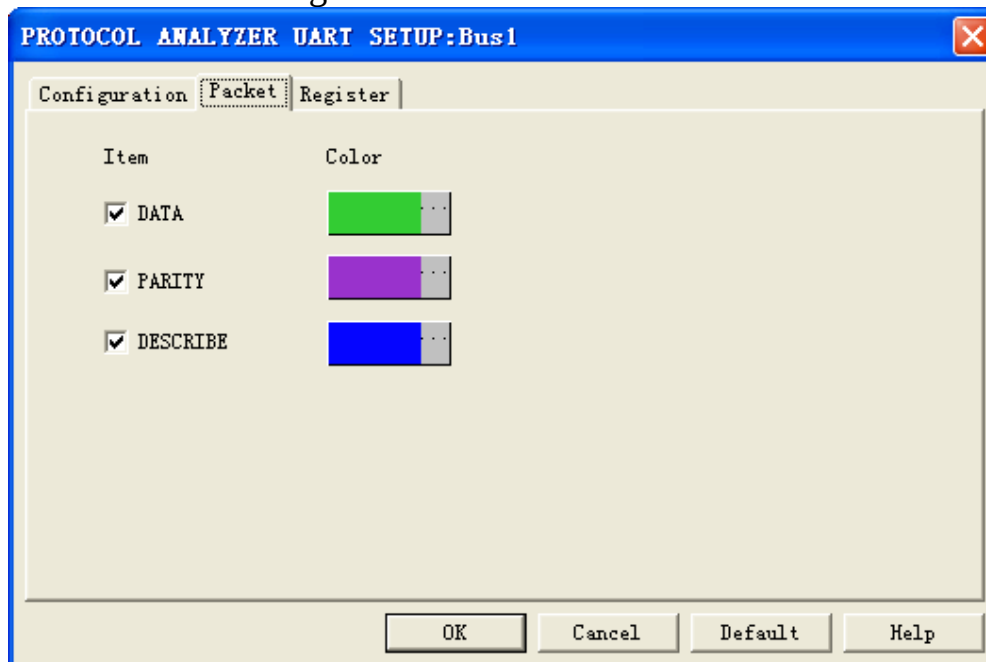
Sample Rate: The default values are 50%, 60%, 70%, 80% and 90%; if the value does not meet users' needs, users can customize a value within the range 50%~90%, and the precision is 1%.

Use the reverse data level for decoding: When selecting this option, it will be activated.

Find the baud rate automatically based on the min.pulse width: When selecting it, the program will judge the baud rate automatically to display the value of the baud rate on the dialog box.



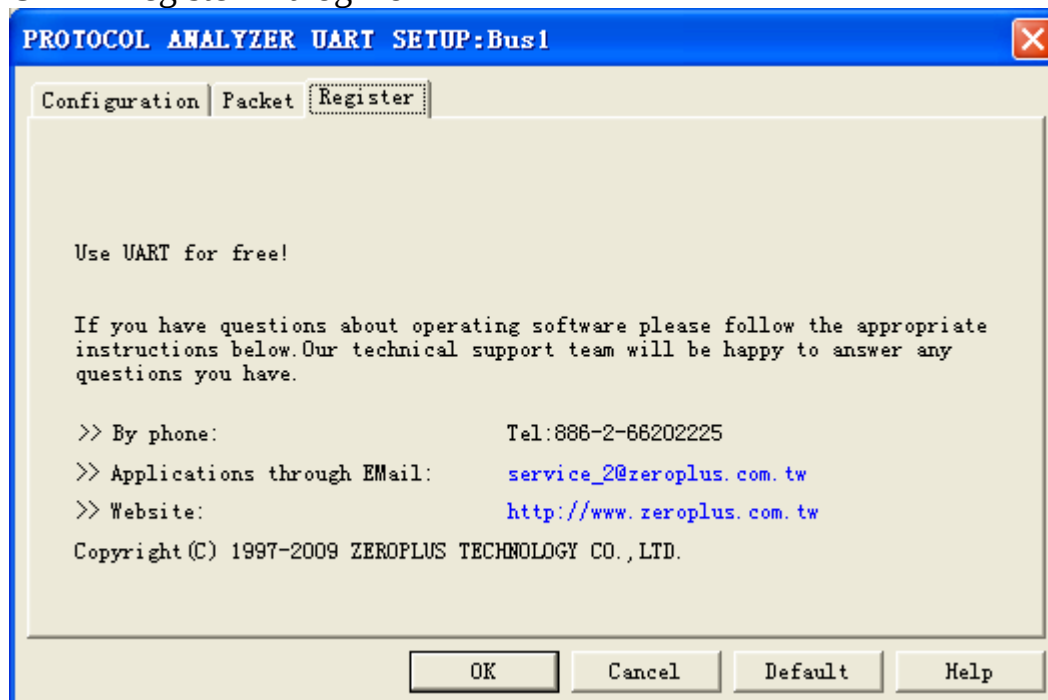
UART Packet Dialog Box



Item: Select the displayed items in the packet list, including DATA, PARITY and DESCRIBE.

Color: Set the color of the item displayed in the packet list.

UART Register Dialog Box

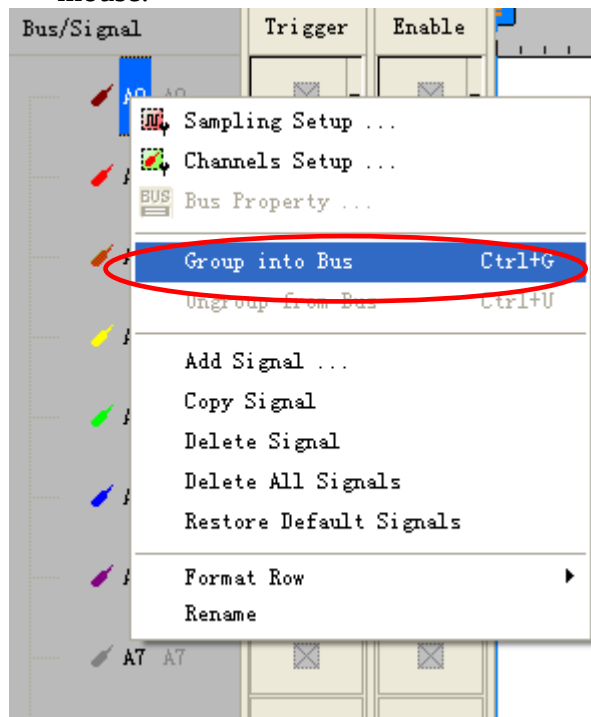


There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

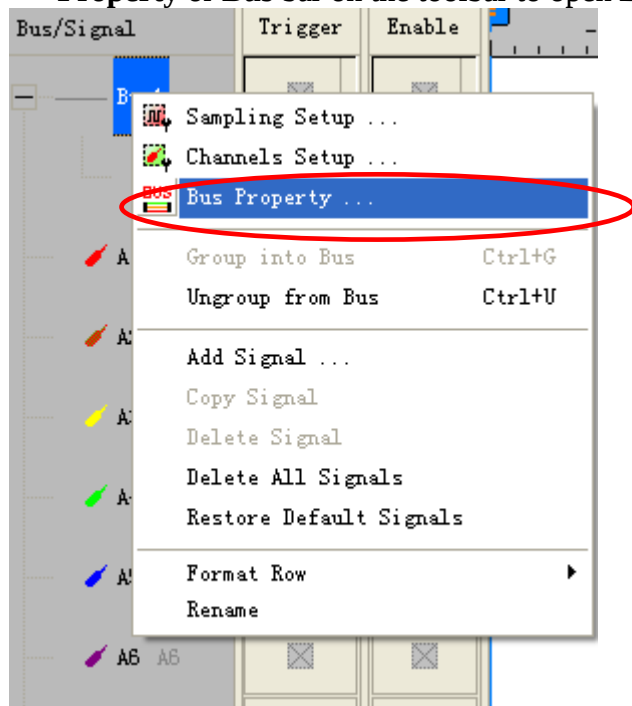


3 Operating Instructions

STEP 1. At first, group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse.

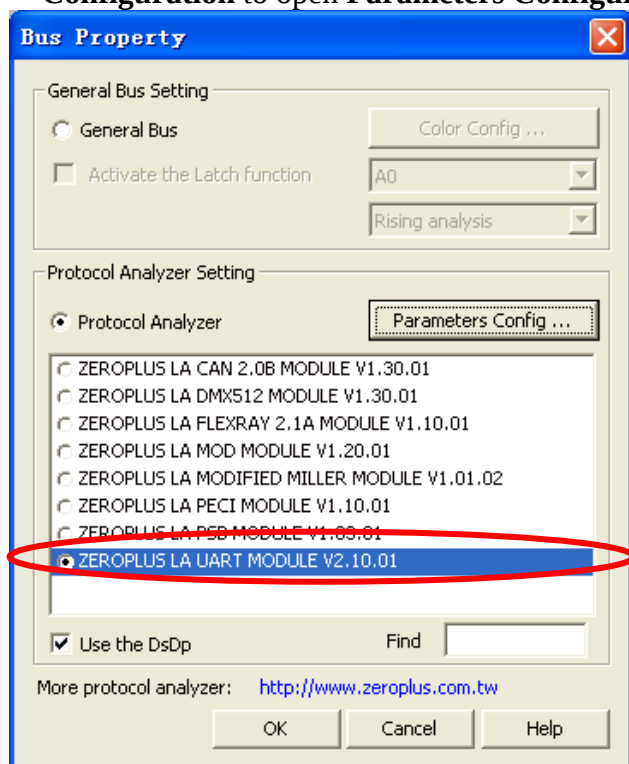


STEP 2. Select **Bus1**, then press **Right key** on the mouse to list menu, then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.

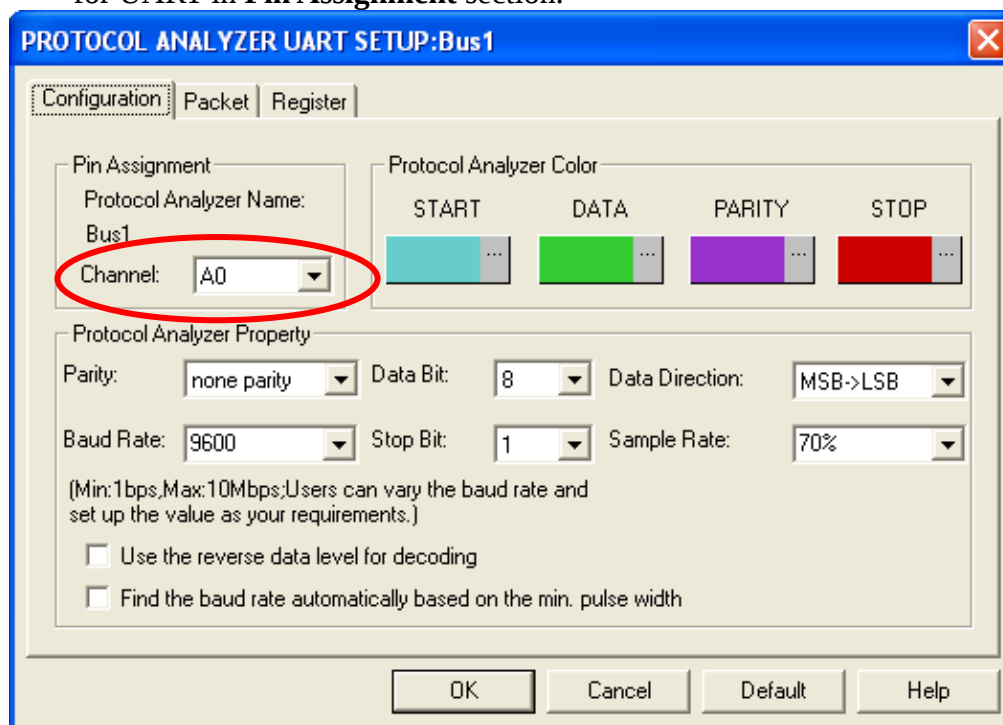




STEP 3. For Protocol Analyzer UART Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA UART MODULE V2.10.01**. Next click **Parameters Configuration** to open **Parameters Configuration** dialog box.

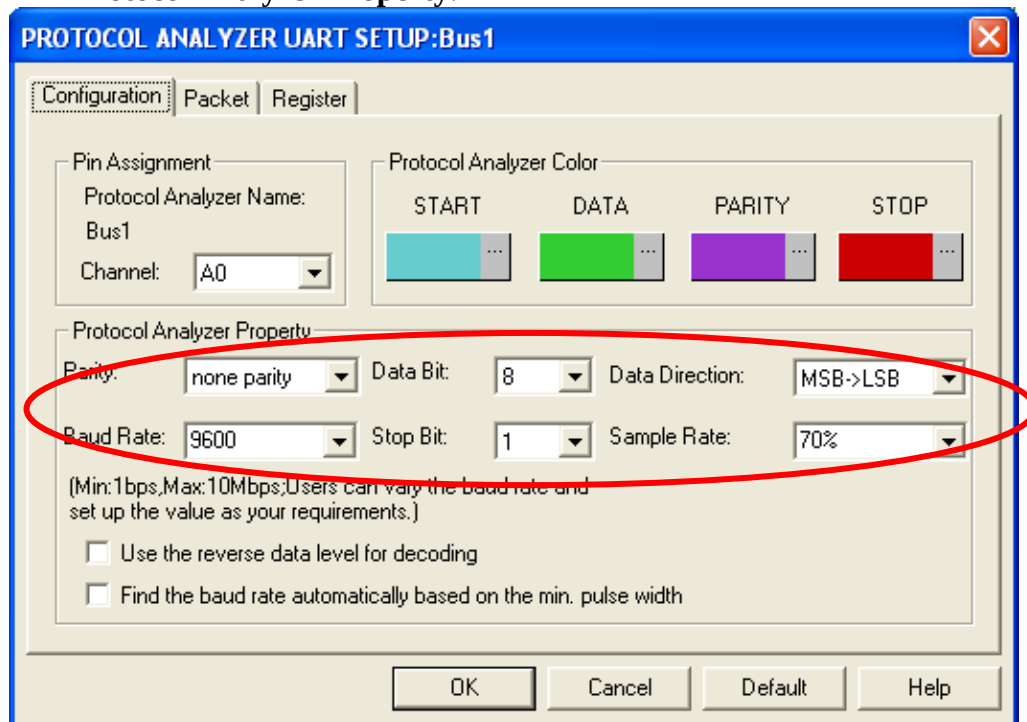


STEP 4. Click **Configuration** to open the configuration dialog box, and then set the channel for UART in **Pin Assignment** section.

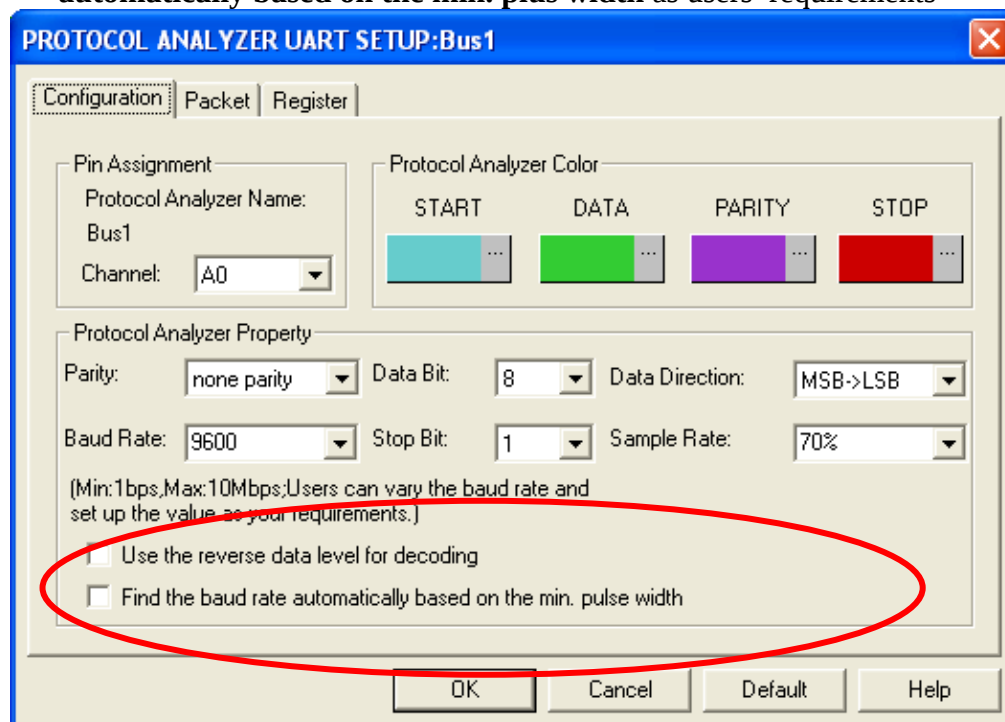




STEP 5. Set Parity, Data Bit, Data Direction, Baud Rate, Stop Bit and Sample Rate for **Protocol Analyzer Property**.

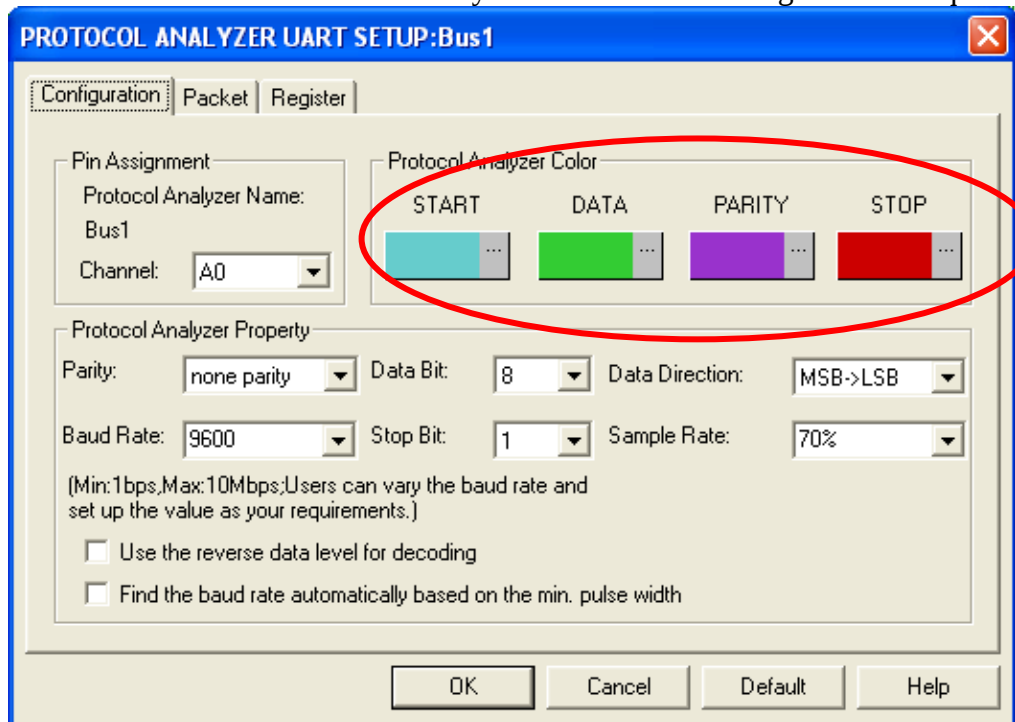


STEP 6. Select **Use the reverse data level for decoding** and **Find the baud rate automatically based on the min. pulse width** as users' requirements

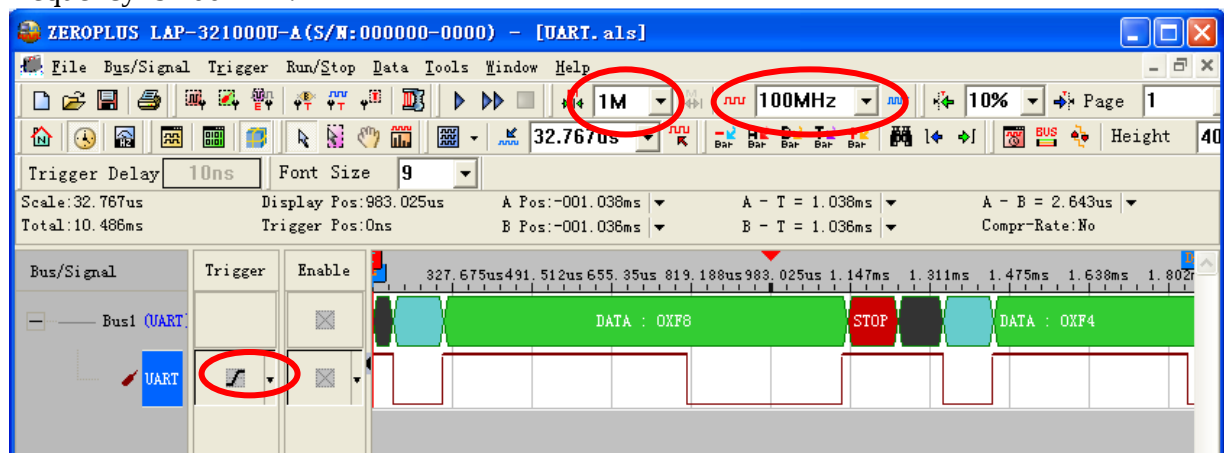




STEP 7. Set the color for every item in Bus1 according to users' requirements.



STEP 8. Following pictures show that the completion of the protocol analyzer decoding and the packet list. The Trigger condition is Rising Edge; the Memory depth is 1M; the Sampling frequency is 100MHz.





Following picture shows the waveforms display with the packet list.

