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

SPECIFICATION

MODEL: 004-LAP-1-WIRE-M

PART NO: _____

VERSION: V1.12

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

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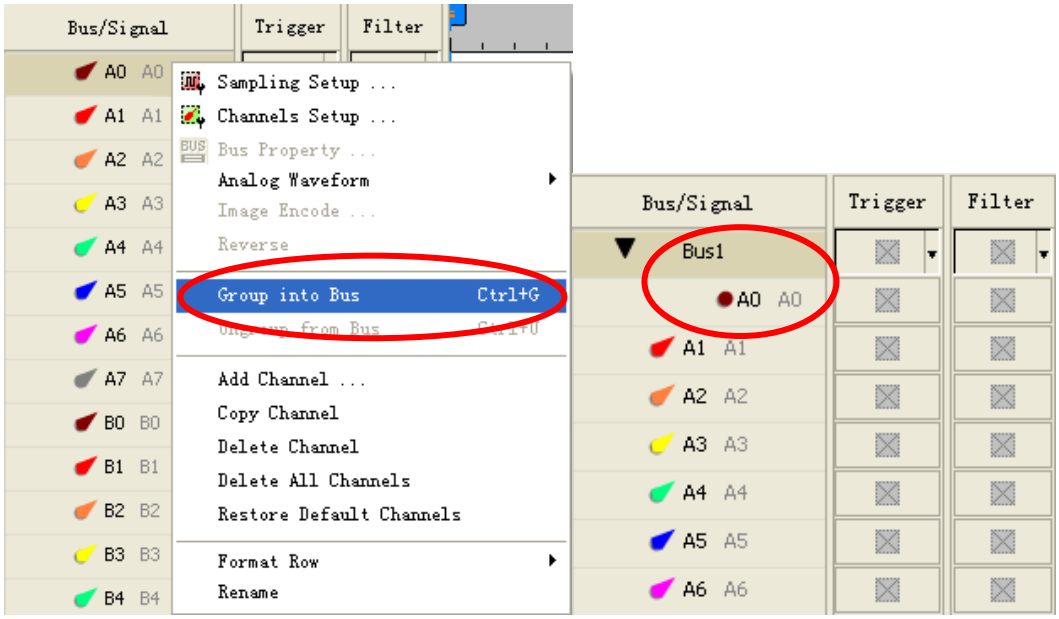
1. Software Register

Please register the software as the following steps:

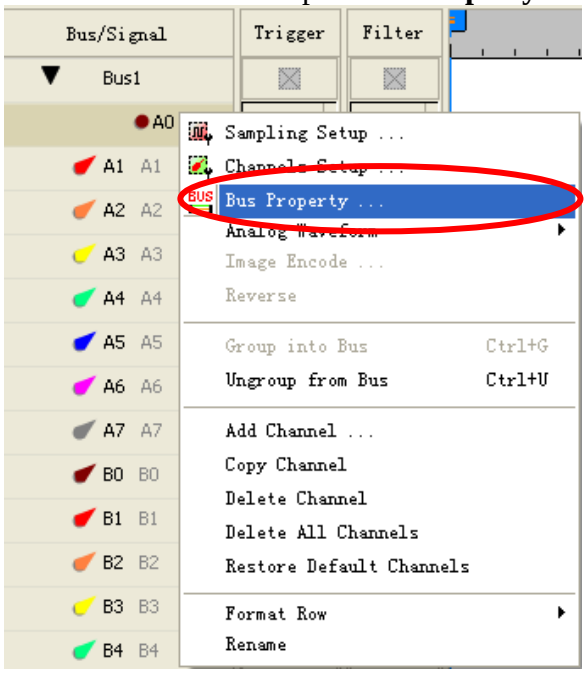
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ Remark2: 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. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse.



STEP 2. Select **Bus 1**, then 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.



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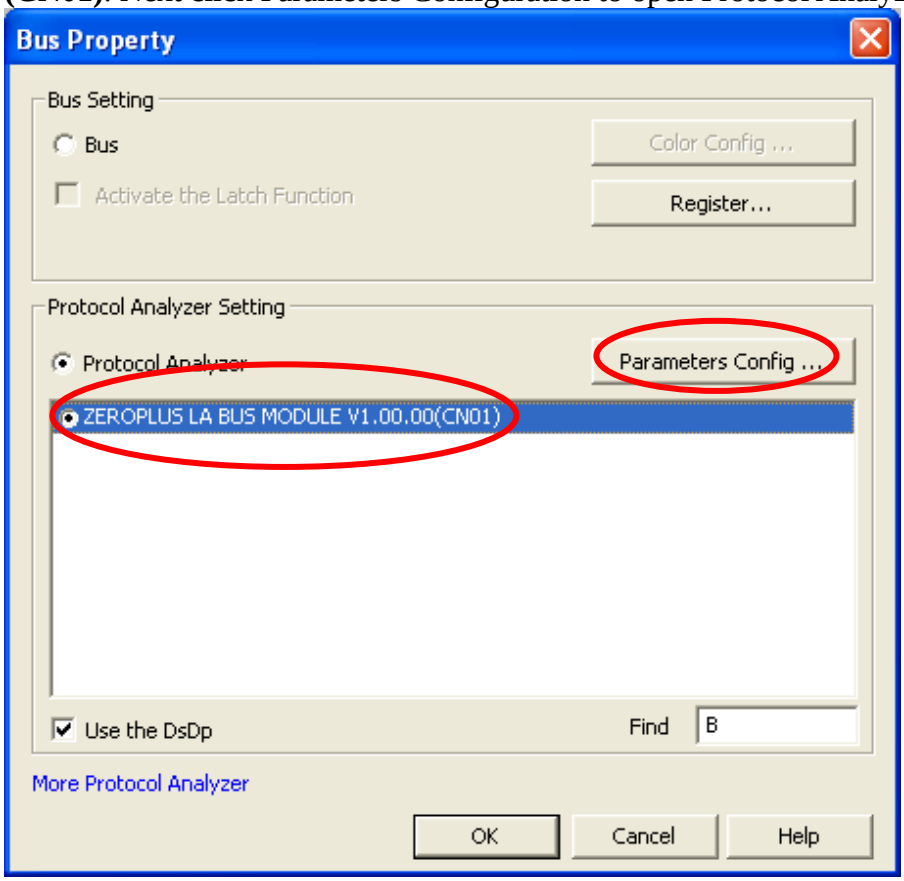
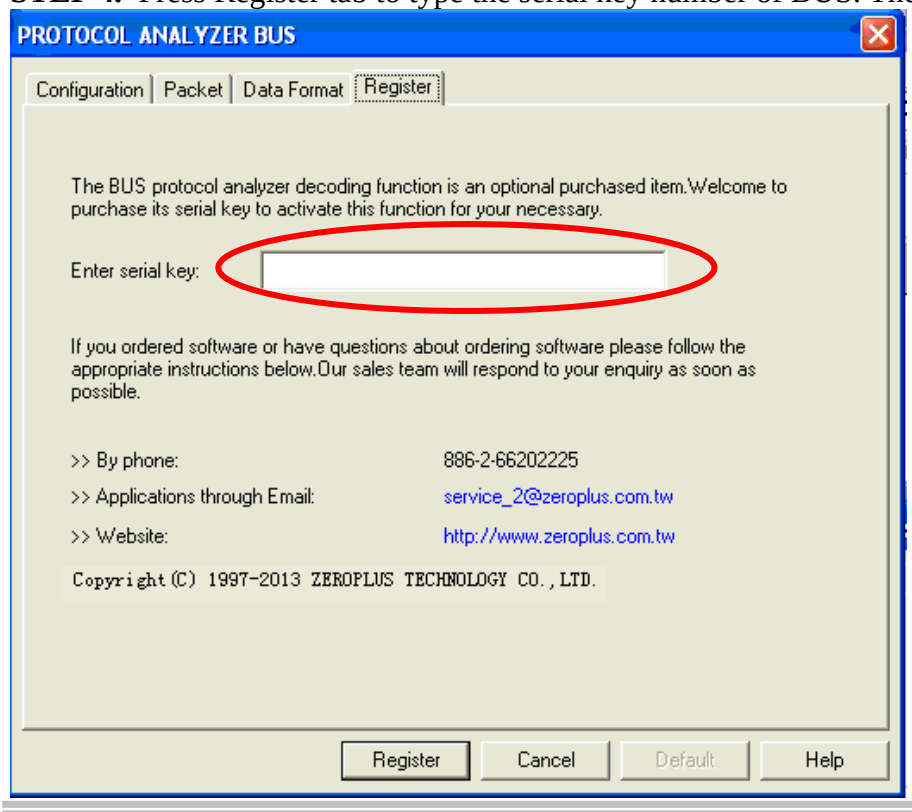
STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.



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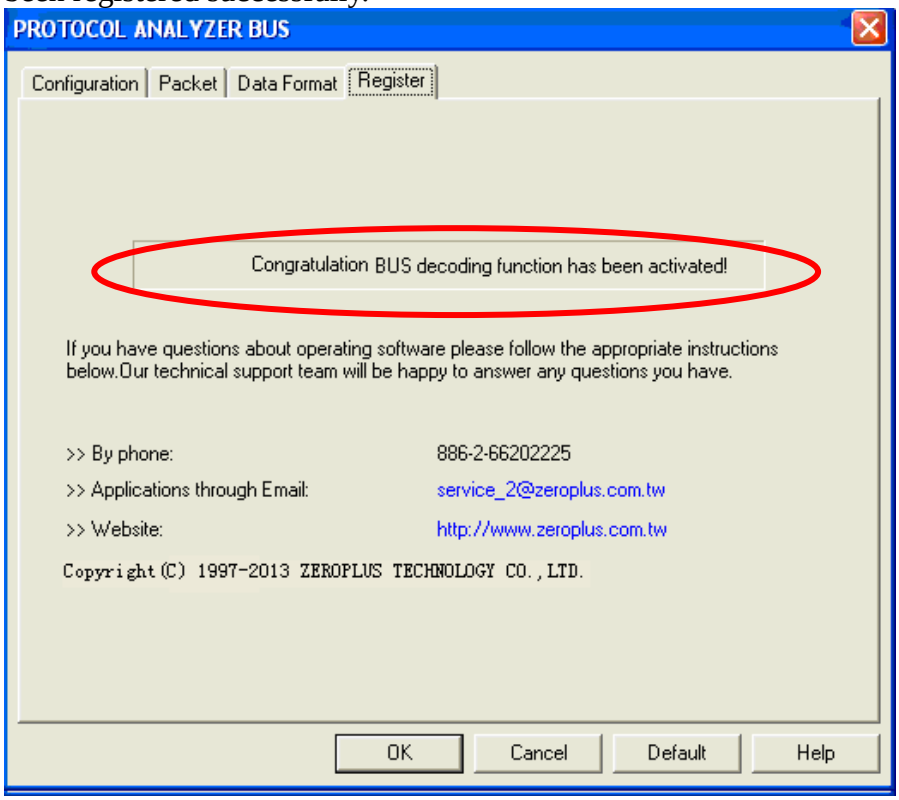
STEP 5. After pressing the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



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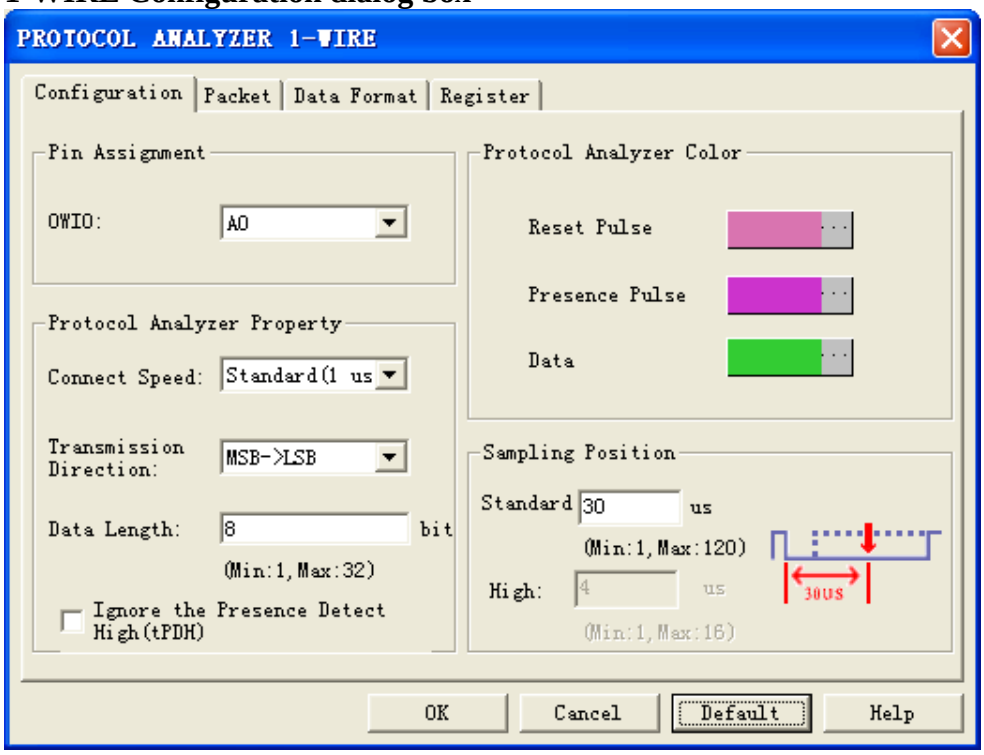
2. User Interface

Please refer to the below images to select options of **1-WIRE** Module.

1-WIRE Configuration dialog box



Pin Assignment:
1-WIRE only needs one channel to decode signal, and it is A0 by default.

Protocol Analyzer Property:
Connect Speed:
It can be set as Standard (1 us), High (0.2 us) or Auto, and it is the Standard (1 us) by default.

Transmission Direction:
It can be set as MSB->LSB or LSB->MSB, and it is MSB->LSB by default.
MSB->LSB: From High Level to Low Level.
LSB->MSB: From Low Level to High Level.

Data Length:
It can be set in the range between 1 and 32 bit, and it is 8 bit by default.

Ignore the Presence Detect High (tPDH):
When decoding the Presence Pulse, the time width of High Level is not limited. The option is not activated by default.

Protocol Analyzer Color:
The protocol analyzer colors can be varied by users.

Sampling Position:
It can be set as Standard or High. In the Standard, the Sampling Position is between 1us and 120us,

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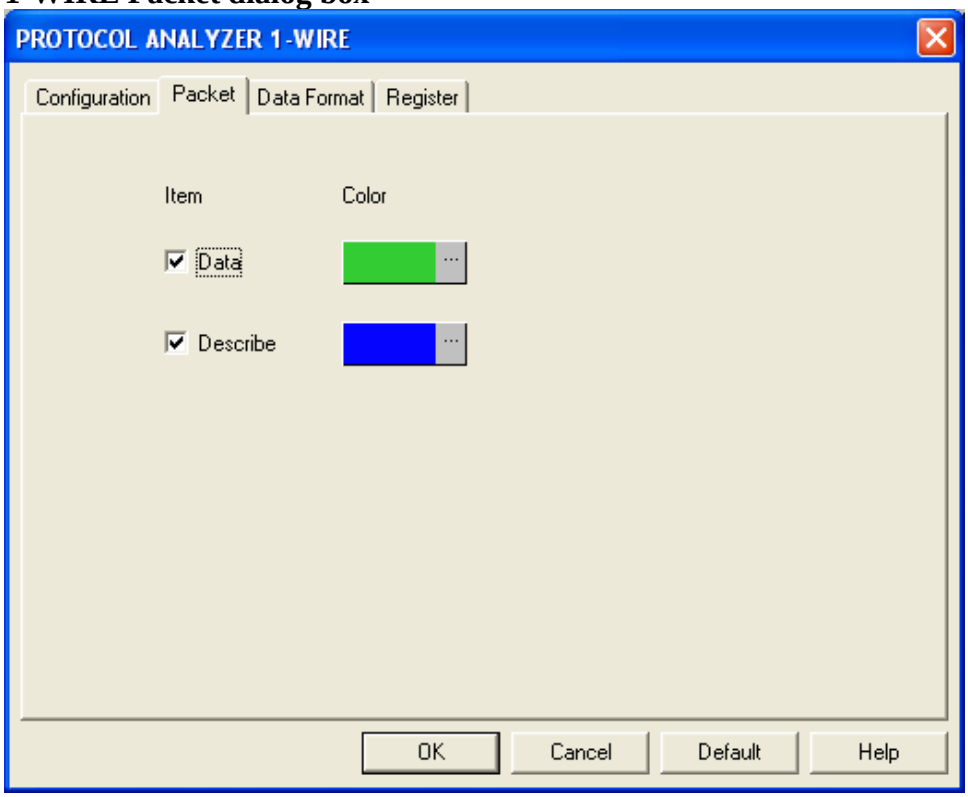
and it is 30us by default. In the High, the Sampling Position is between 1us and 16us, and it is 4us by default.

1-WIRE Packet dialog box



In the Packet part, users can set the items and colors as their requirements.

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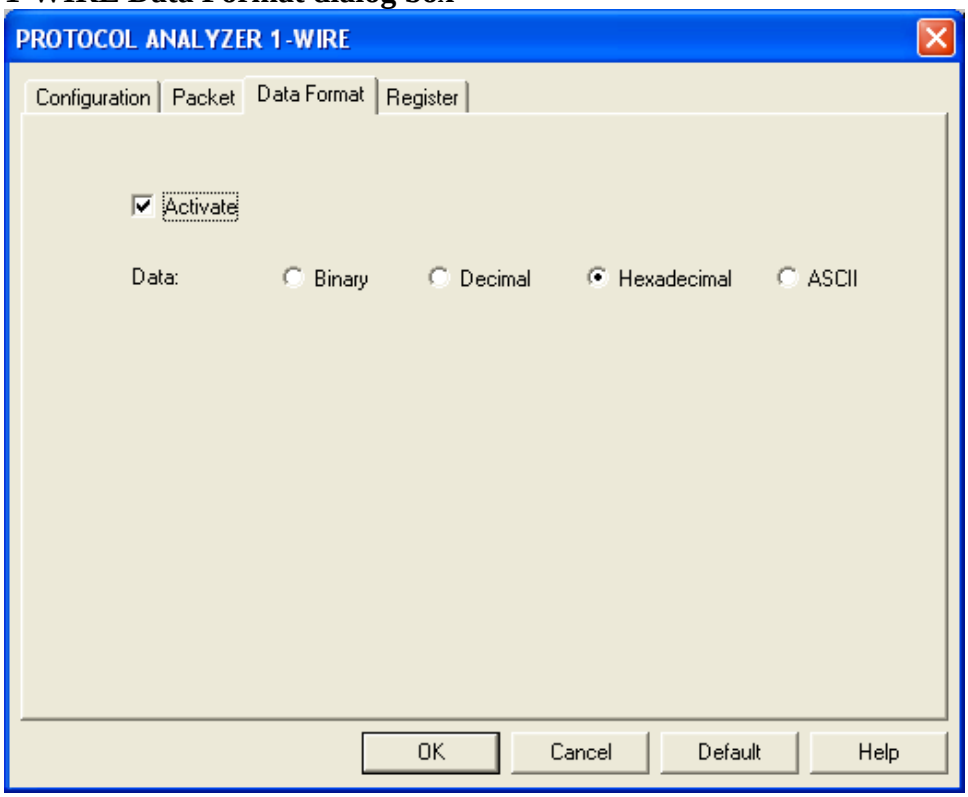
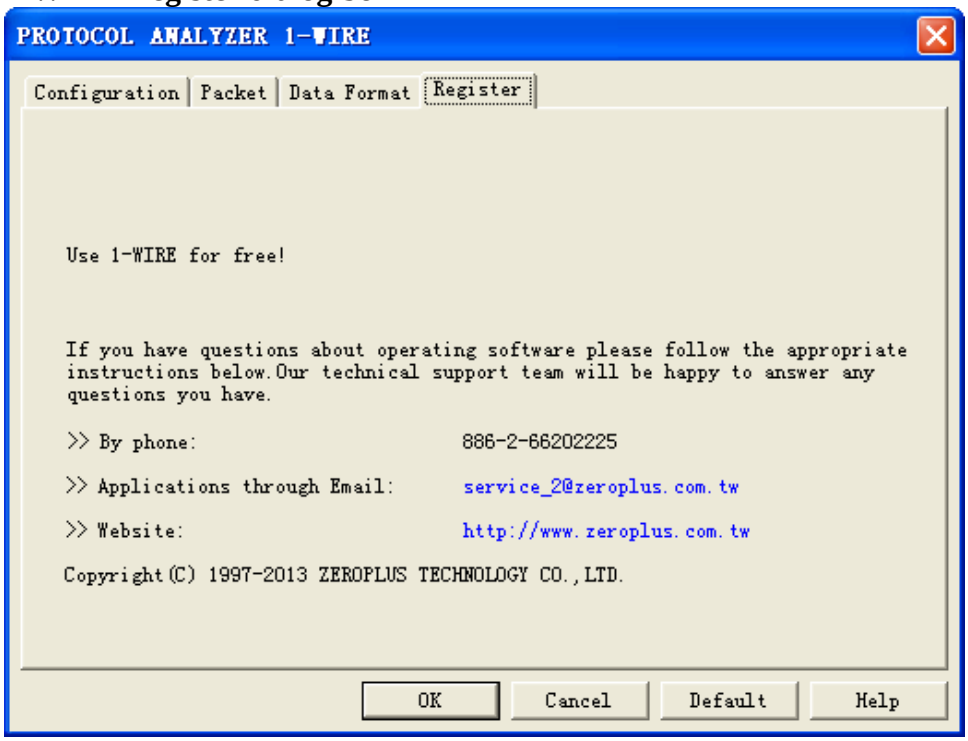
1-WIRE Data Format dialog box



Users can set the Data Format of the 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.

1-WIRE Register dialog box



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

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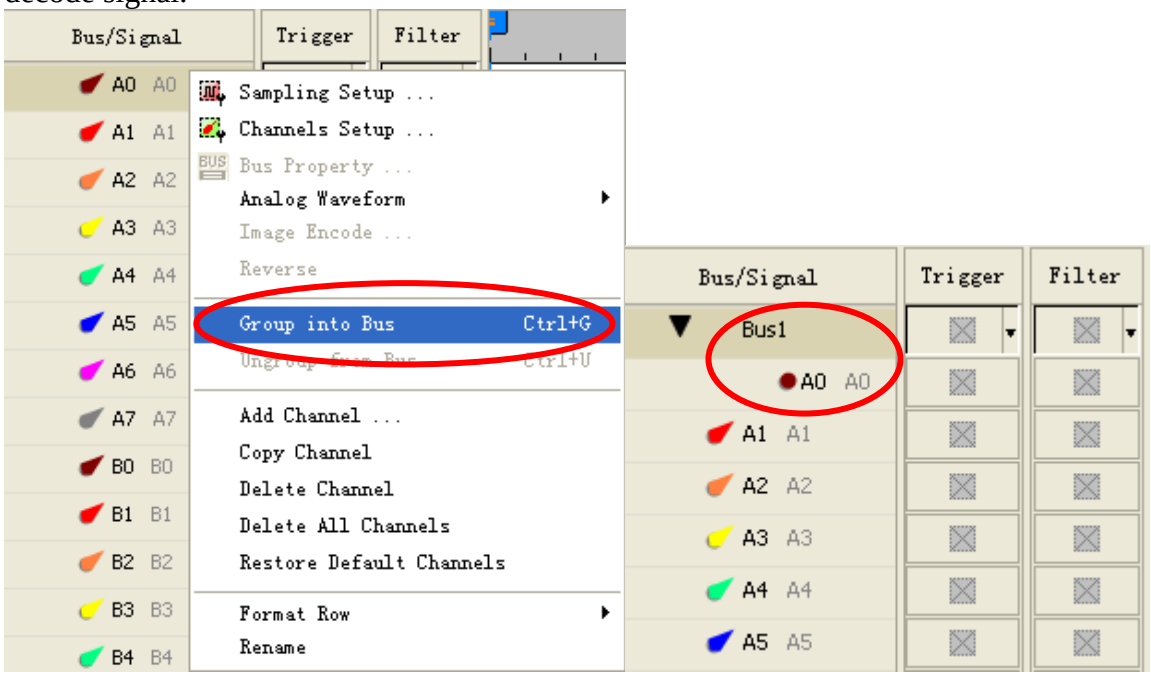
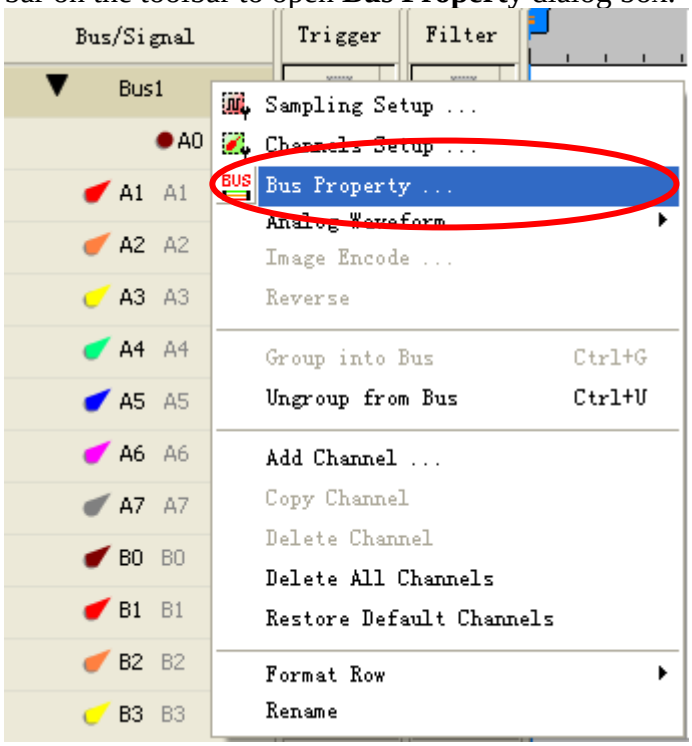
3. Operating Instructions

STEP 1. Group A0 into **Bus1** by pressing the **Right Key** on the mouse. **1-WIRE** only needs one channel to decode signal.



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



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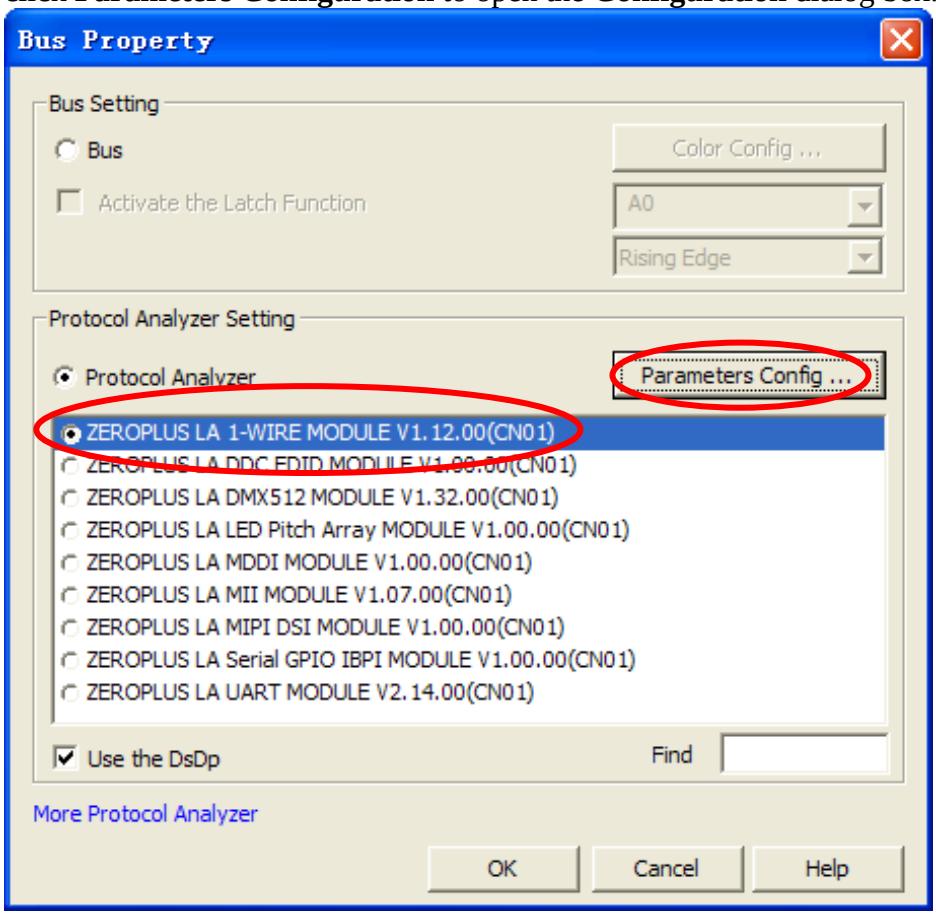
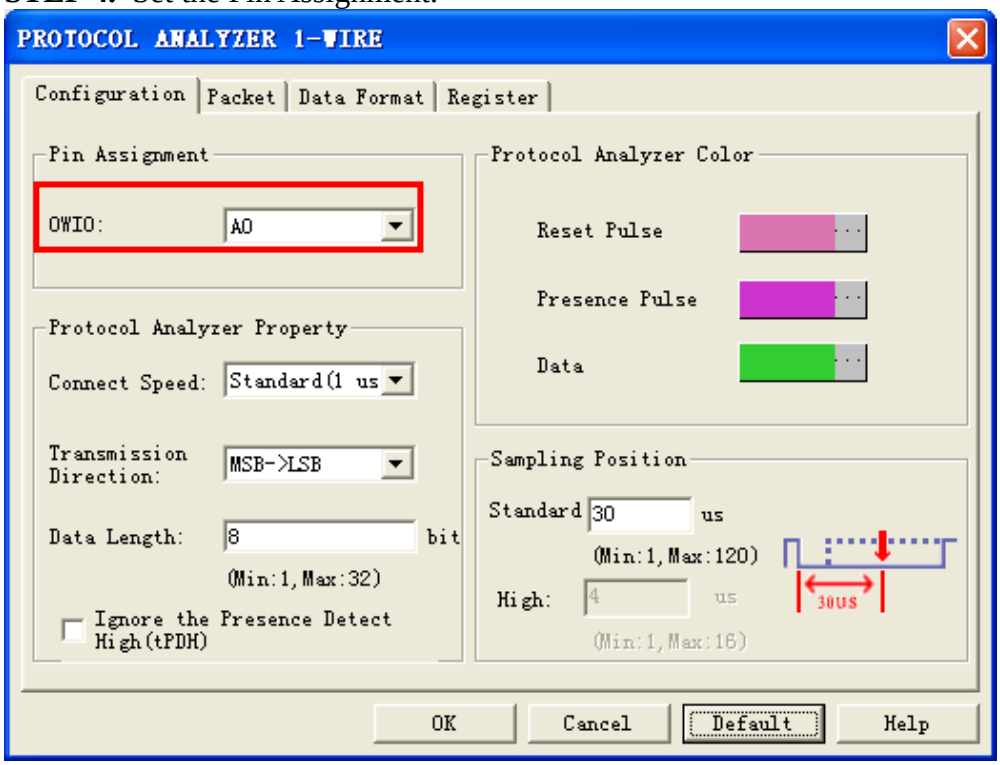
STEP 3. Select Protocol Analyzer, and select **ZEROPLUS LA 1-WIRE MODULE V1.12.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.



STEP 4. Set the Pin Assignment.



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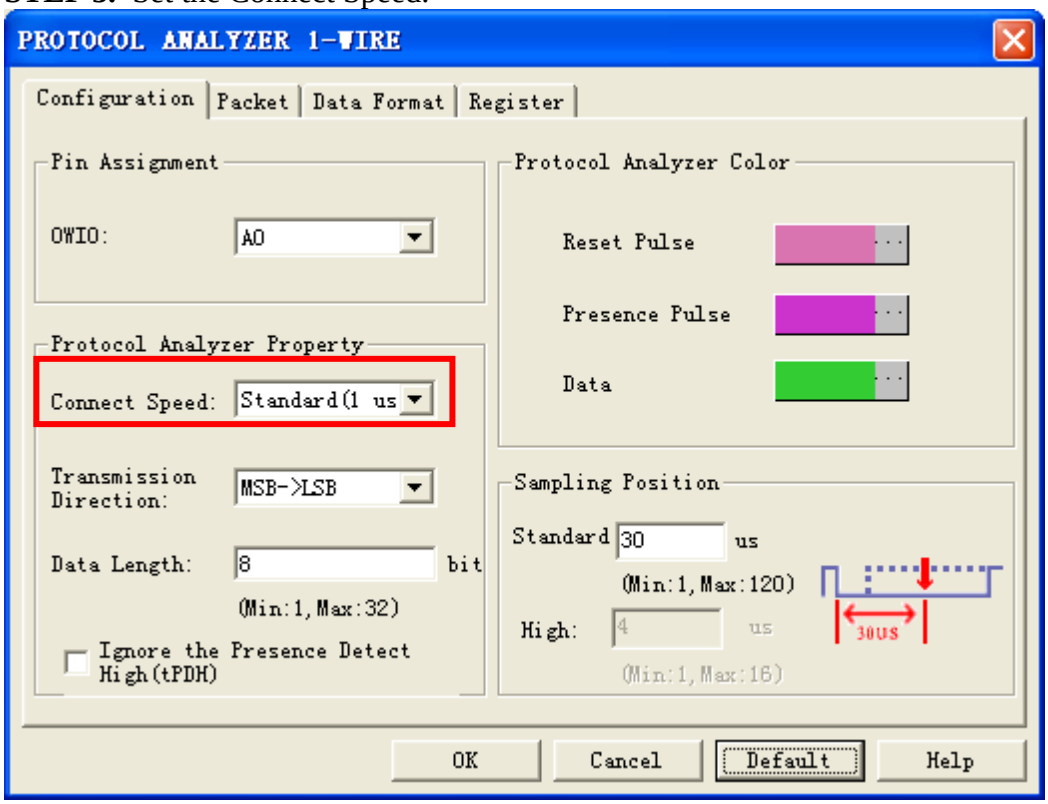
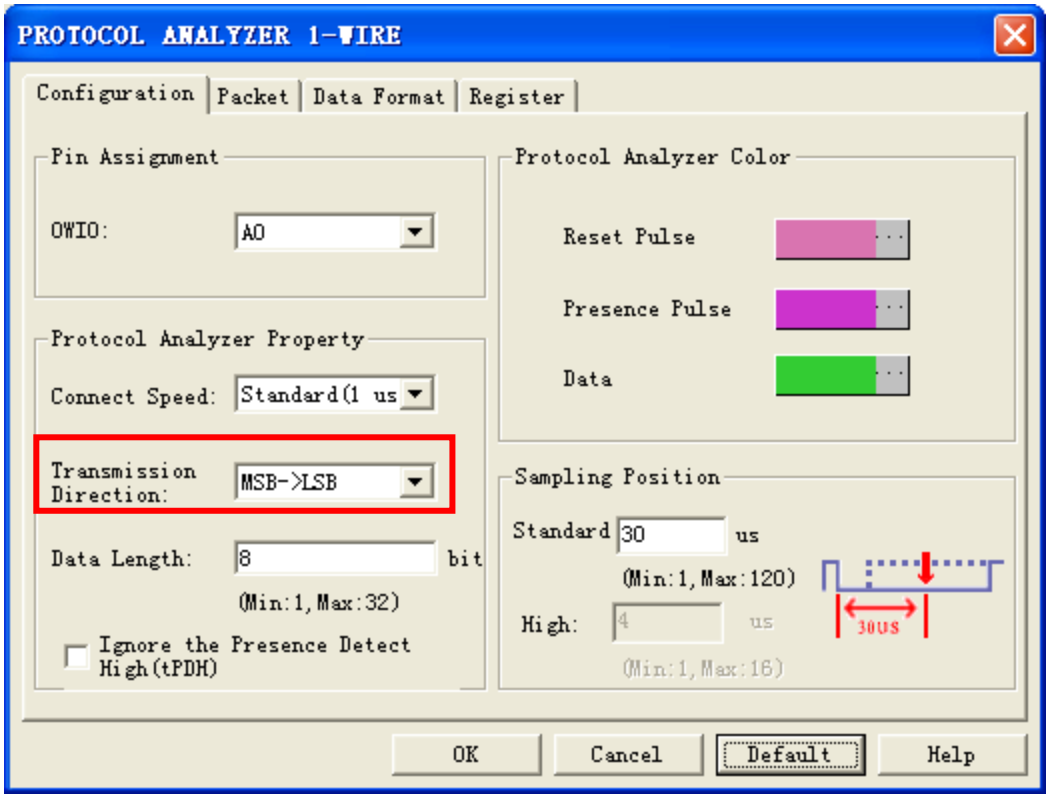
STEP 5. Set the Connect Speed.



STEP 6. Set the Transmission Direction.



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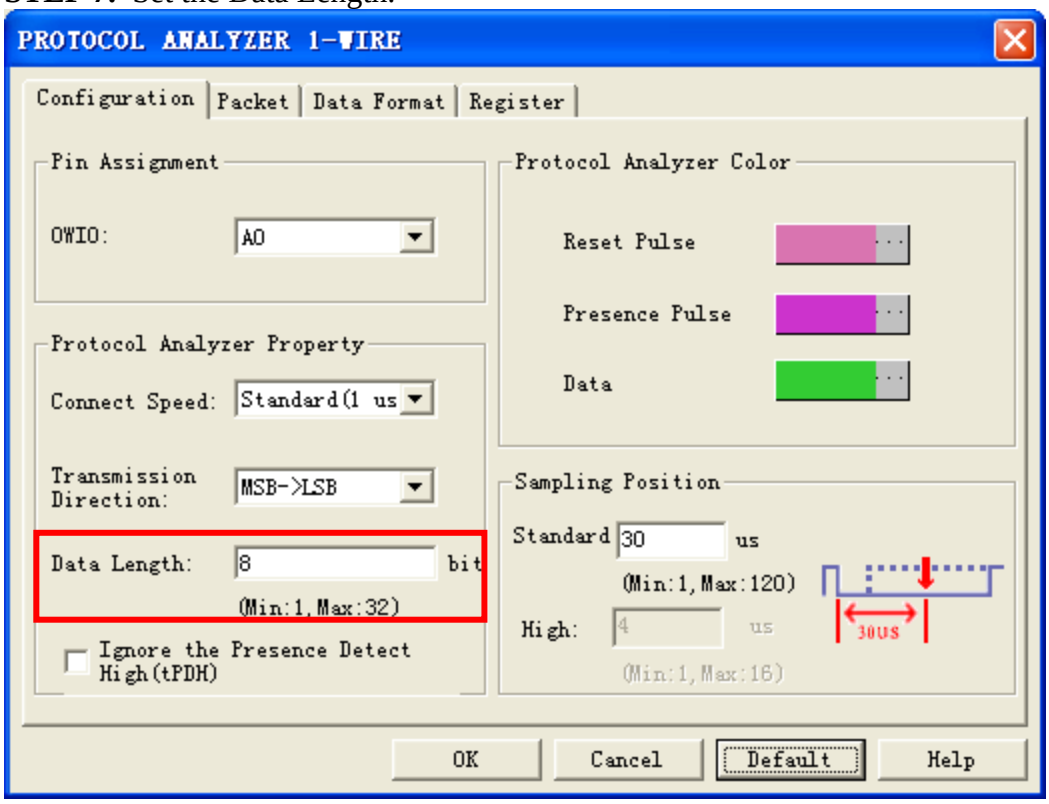
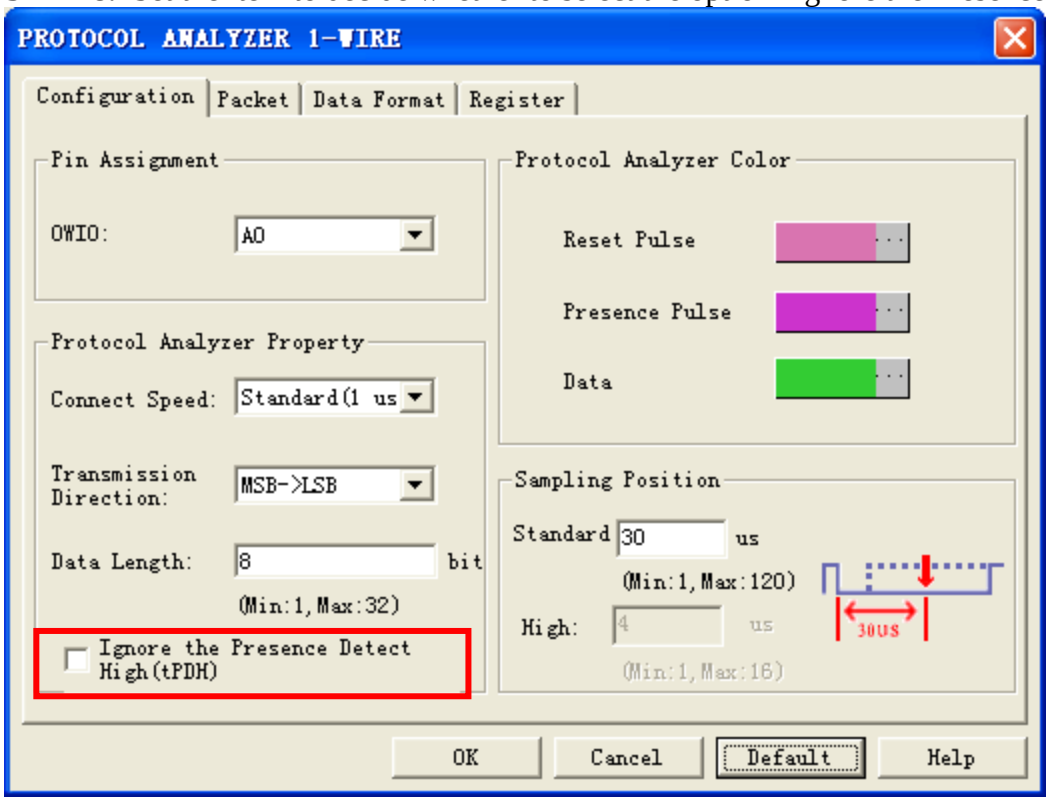
STEP 7. Set the Data Length.



STEP 8. Set the item to decide whether to select the option “Ignore the Presence Detect High (tPDH)”.



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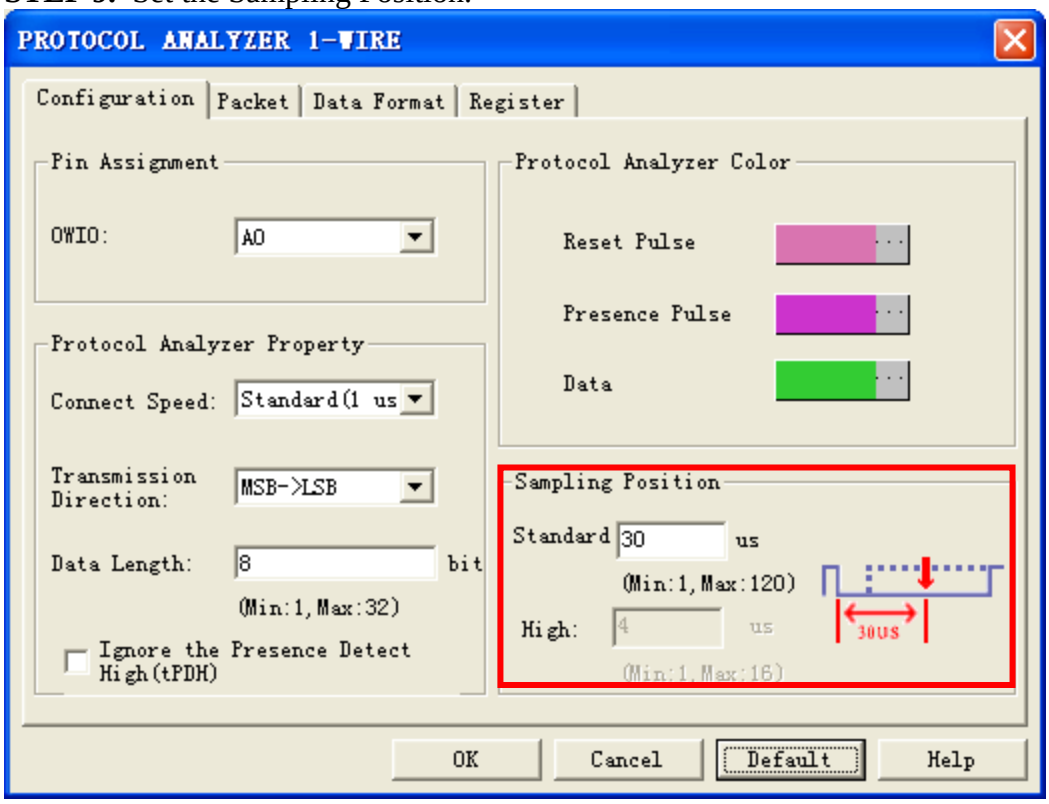
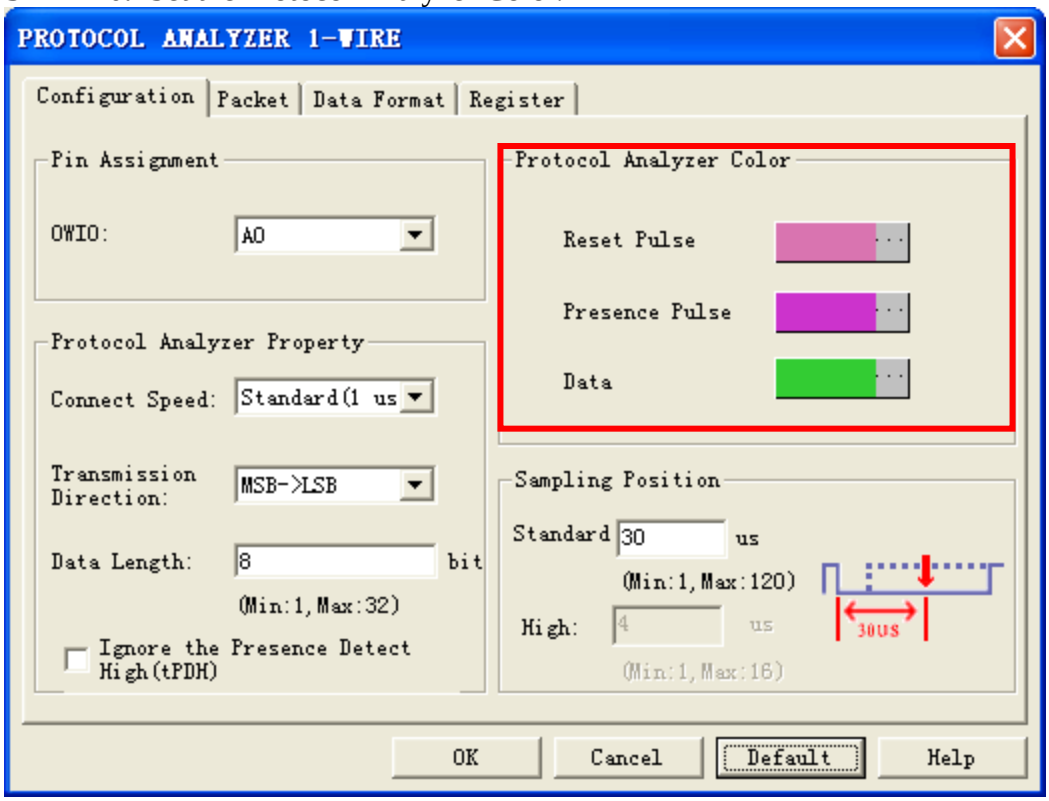
STEP 9. Set the Sampling Position.



STEP 10. Set the Protocol Analyzer Color.



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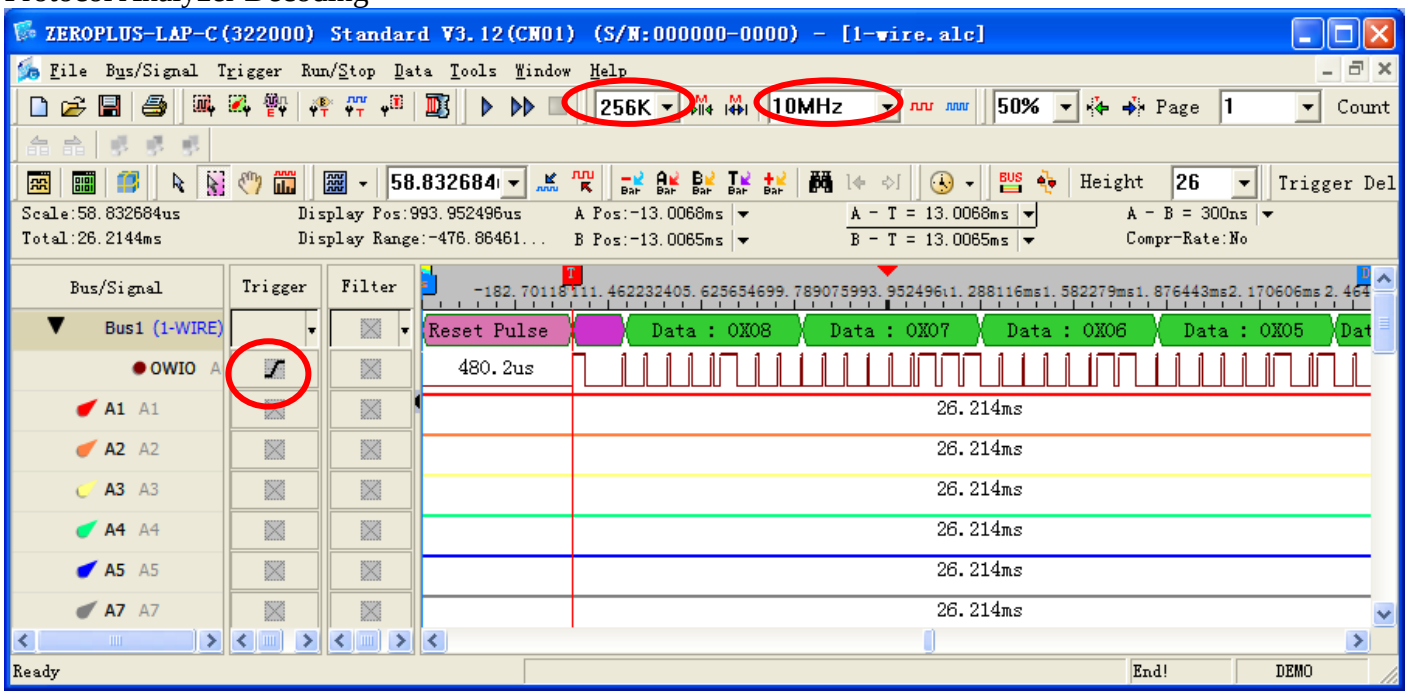
STEP 11. Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Rising Edge, the memory depth is 256K and the sampling frequency is 10MHz (the sampling frequency should be more than ten times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List