



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

SPECIFICATION

MODEL: 030-LAP-PCM-M

PART NO: _____

VERSION: V1.21

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to ZeroPlus Technology after signing.

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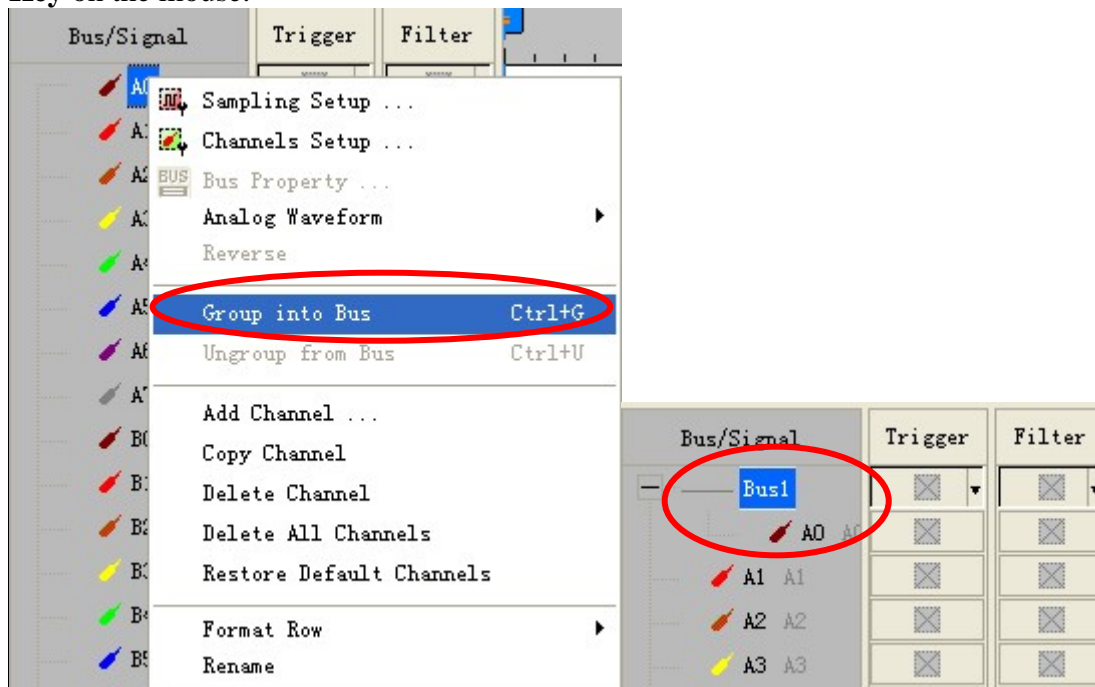
1 Software Register

Please register the software as the following steps:

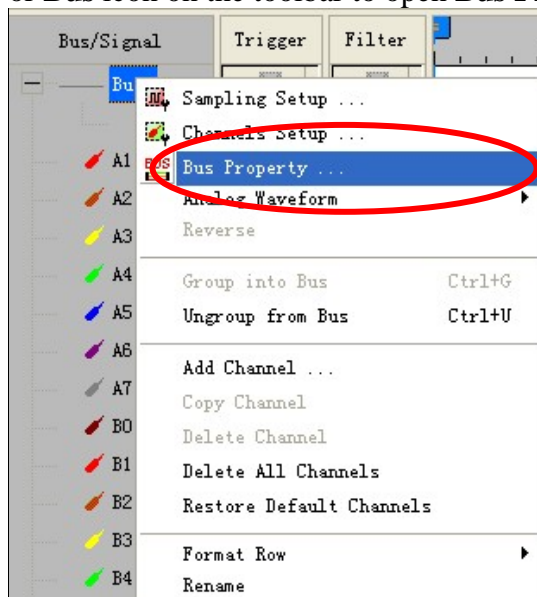
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

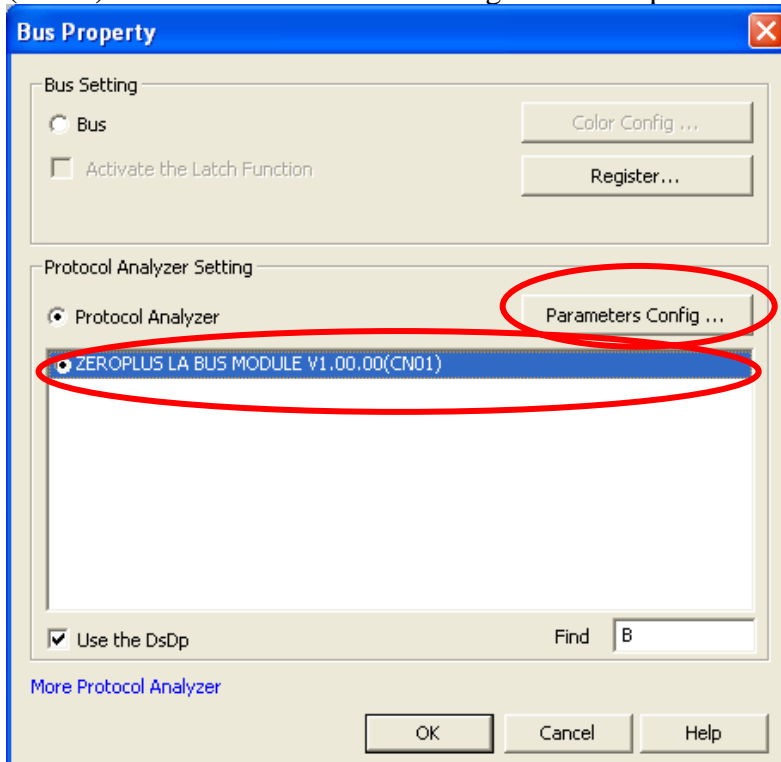


STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

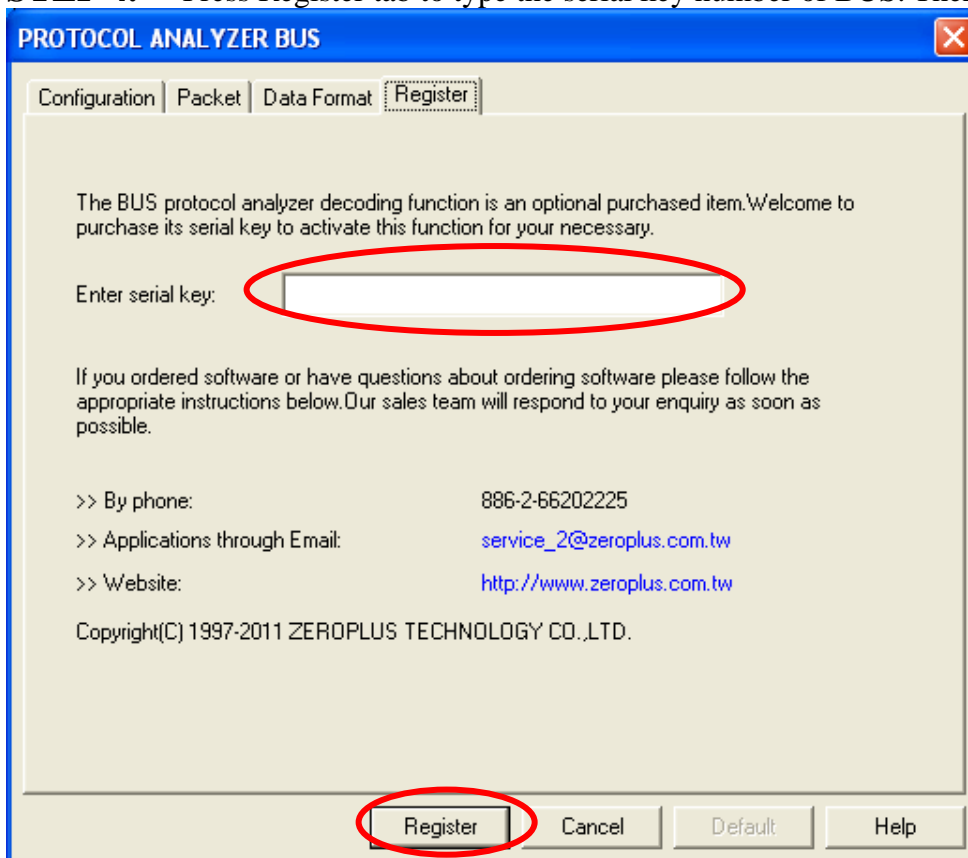




STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

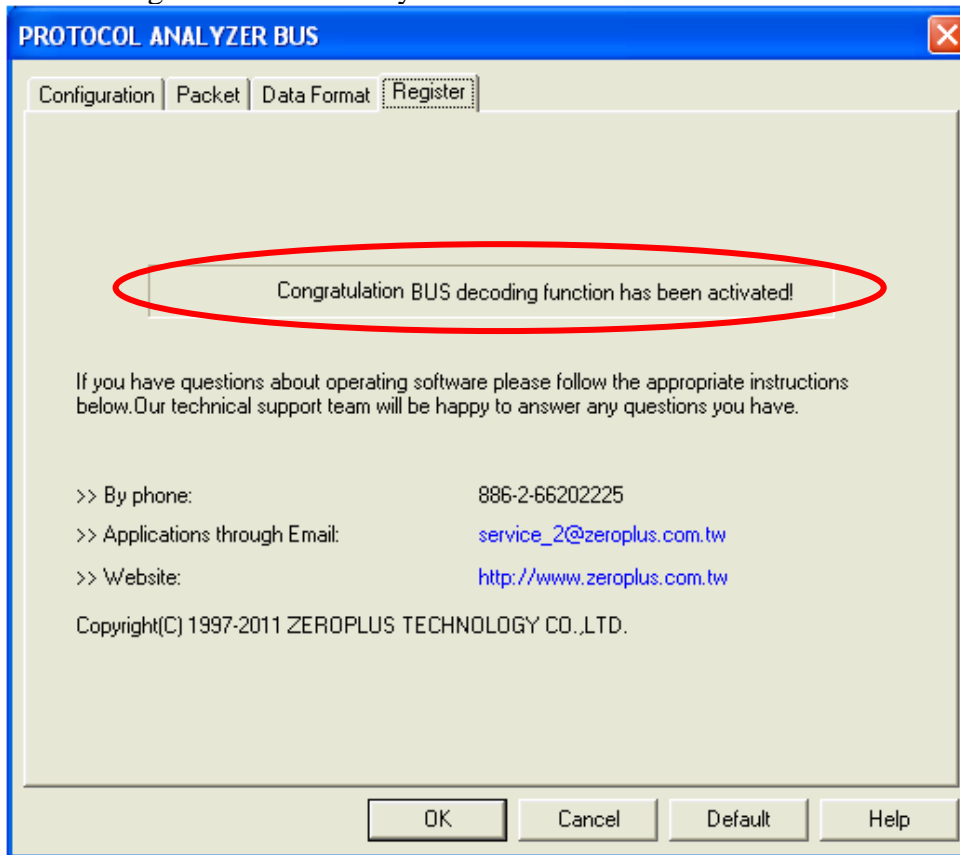


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





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

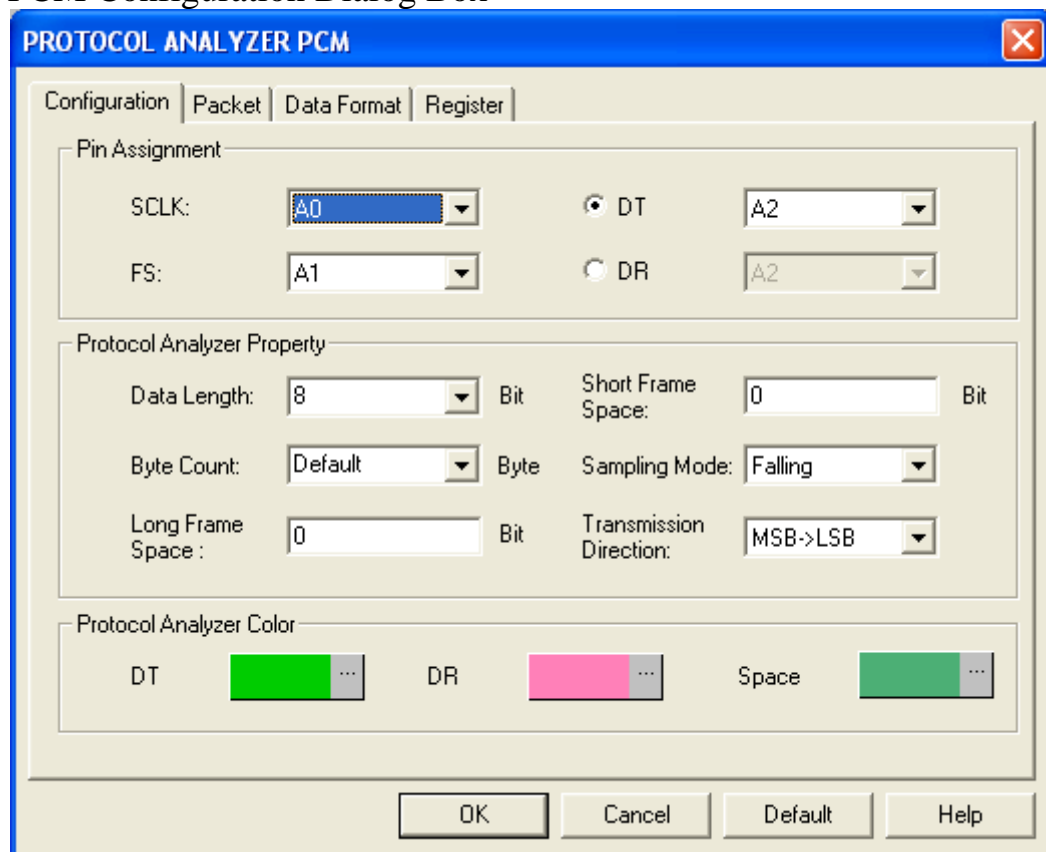




2 User Interface

In the configuration, please refer to below images to select options of setting **PCM** module.

PCM Configuration Dialog Box



Pin Assignment:

SCLK: It is the Frequency channel, the default is A0.

FS: It is the Synchron channel, the default is A1.

DR/DT: It is the Data channel, the default is A2.

Protocol Analyzer Property:

Data Length: The max value of **Data Length** is 56 Bit.

Byte Count: The max value of **Byte Count** is 128 Byte.

Long Frame Space: The max value of **Long Frame Space** is 255 Bit.

Short Frame Space: The max value of **Short Frame Space** is 255 Bit.

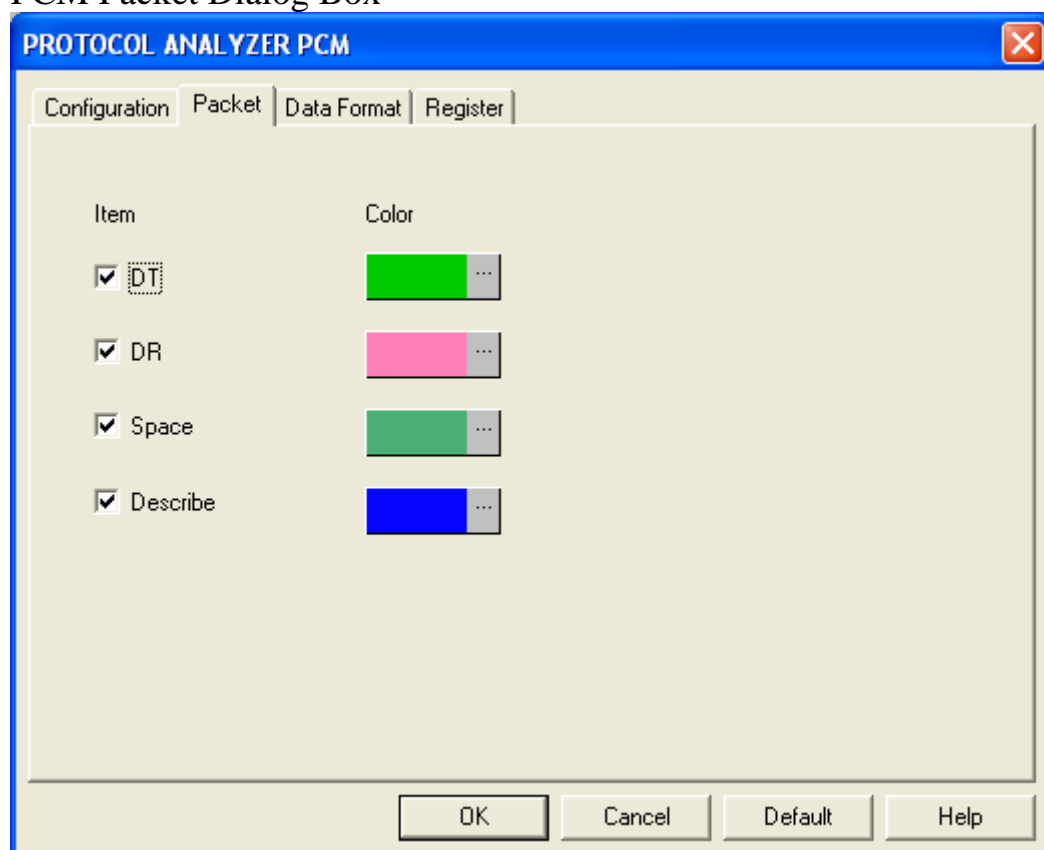
Sampling Mode: Users can set Rising or Falling as the sampling mode for **SCLK**.

Transmission Direction: Users can set MSB->LSB or LSB->MSB as the transmission direction.

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

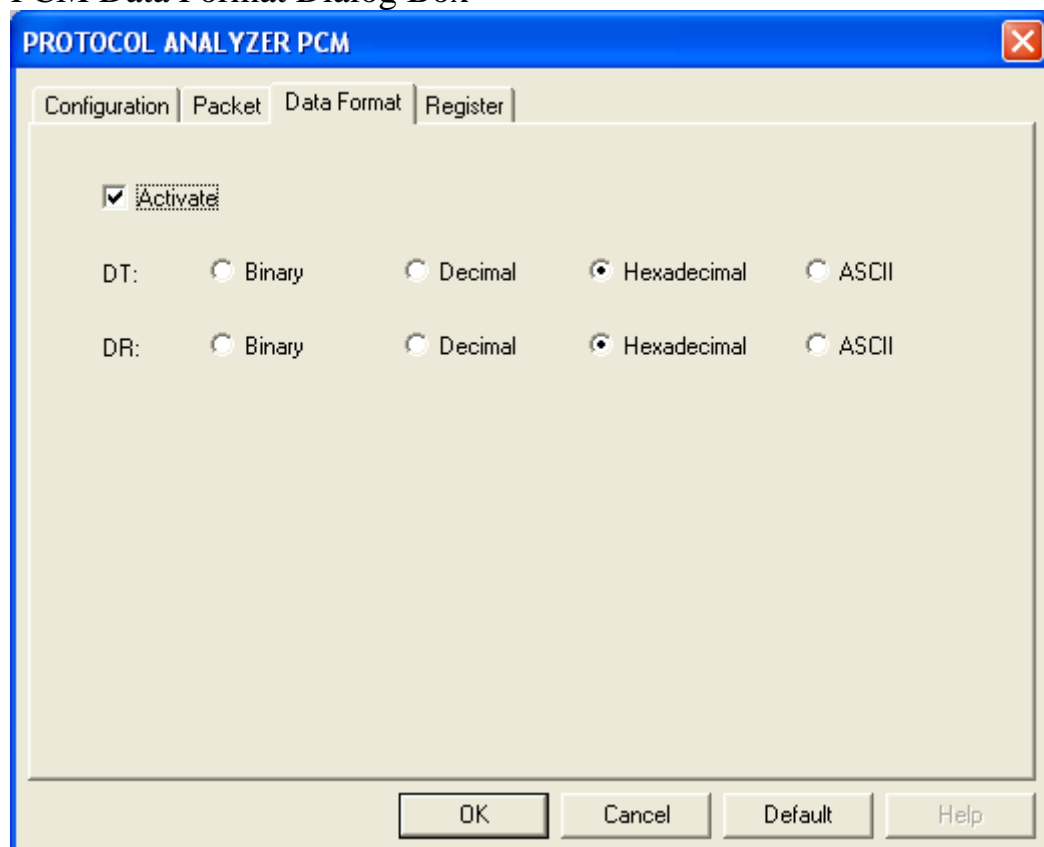


PCM Packet Dialog Box



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

PCM Data Format Dialog Box

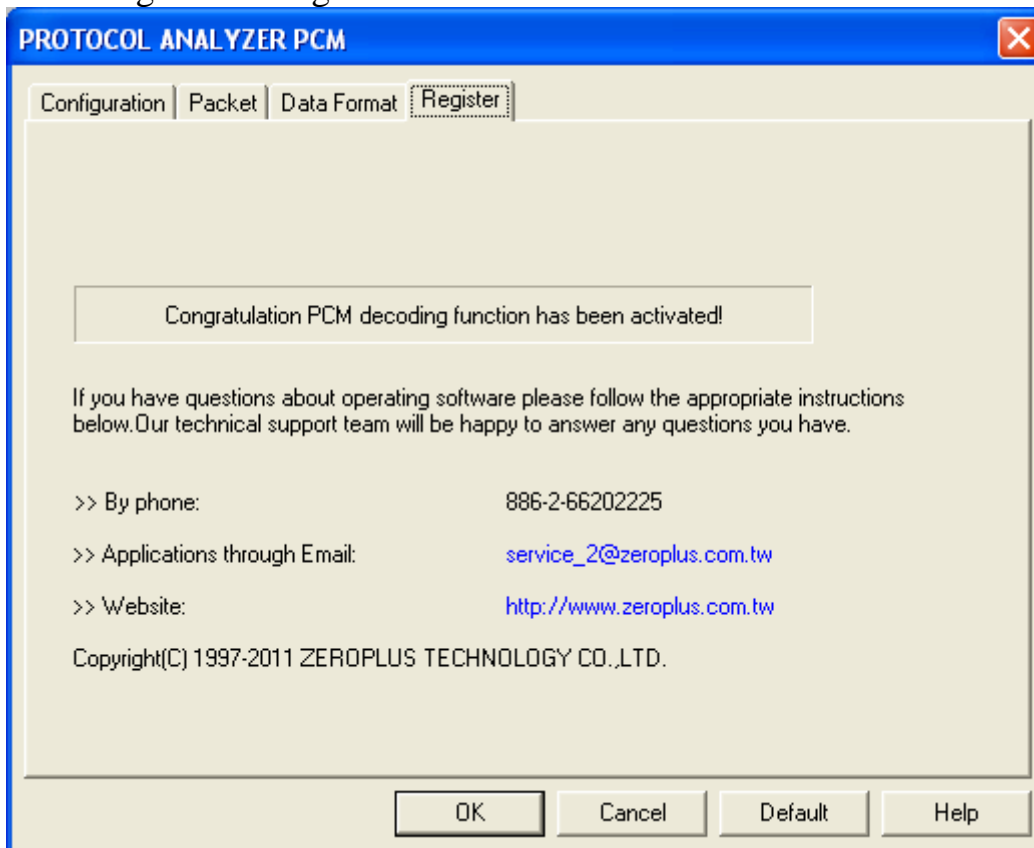


Users can set the Data Format of the DT and DR as their requirements. When selecting the option, Activate,



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.

PCM Register Dialog Box

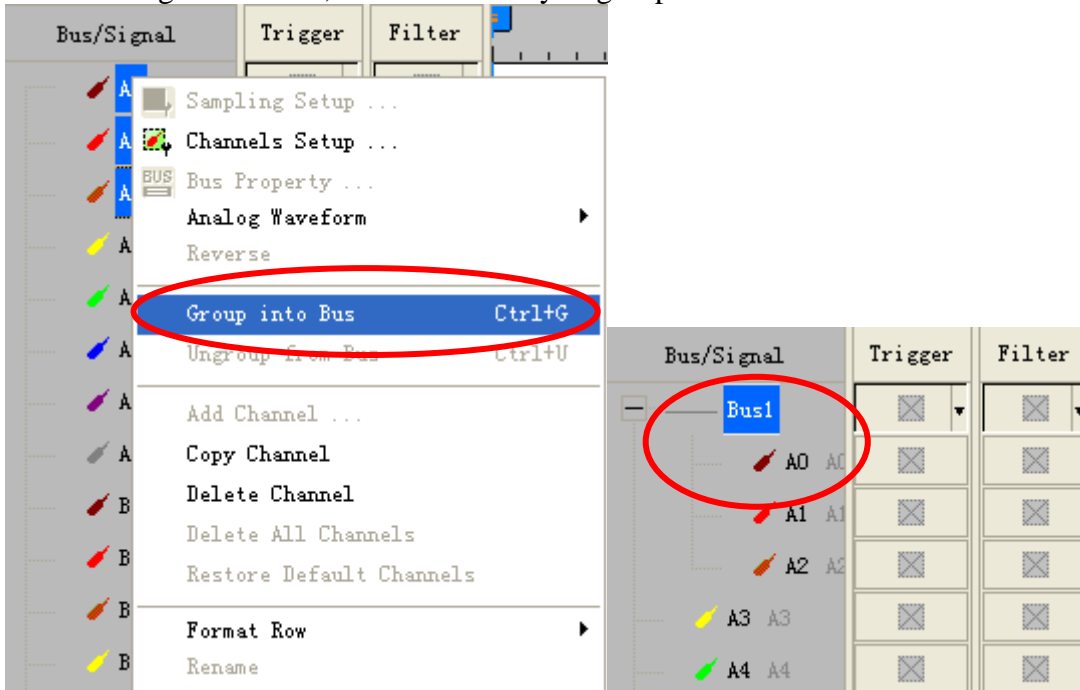


There is Zeroplus company information. If you have any questions about software operations, you can contact Zeroplus by Telephone or Email.

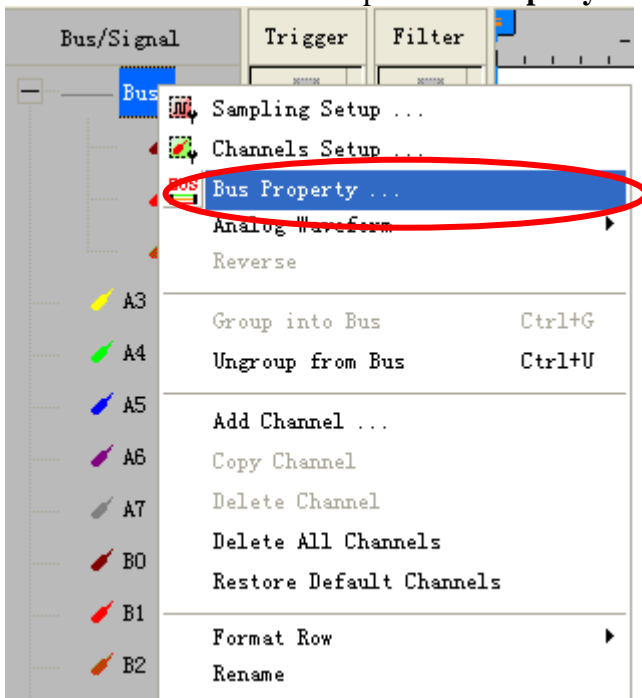


3 Operating Instructions

STEP 1. Group A0-A2 into **Bus1** by pressing the **Right Key** on the mouse. PCM needs three channels to decode signals at least, so it is necessary to group three or more channels into a Bus.

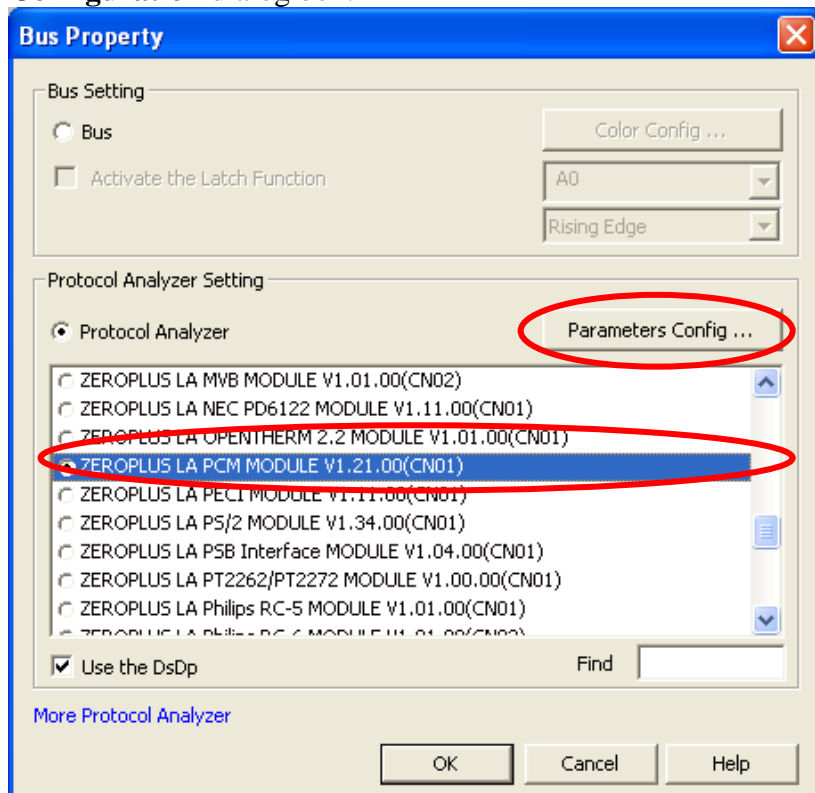


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

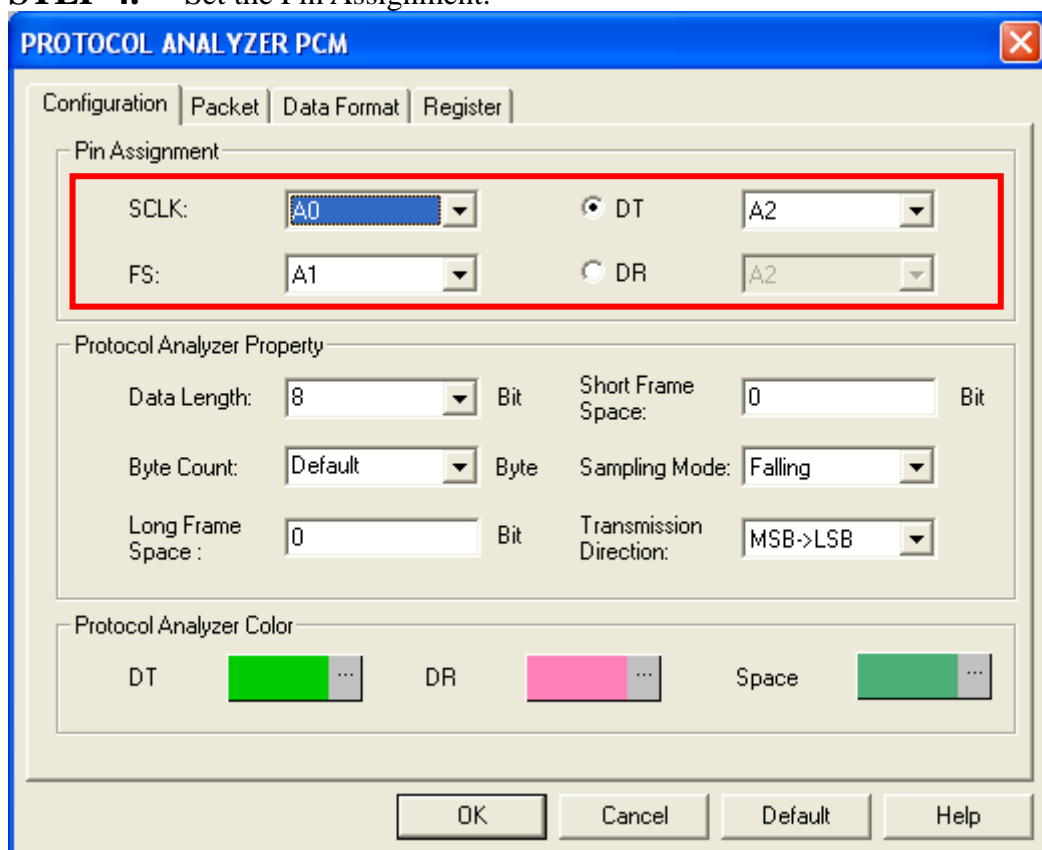




STEP 3. For Protocol Analyzer PCM Parameters Configuration, select Protocol Analyzer, and then **ZEROPLUS LA PCM MODULE V1.21.00 (CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.



STEP 4. Set the Pin Assignment.





STEP 5. Set the Protocol Analyzer Property.

The screenshot shows the 'PROTOCOL ANALYZER PCM' dialog box with the 'Configuration' tab selected. The 'Pin Assignment' section has SCLK set to A0 and FS set to A1. The 'Protocol Analyzer Property' section is highlighted with a red rectangle and contains the following settings: Data Length: 8 Bit, Short Frame Space: 0 Bit, Byte Count: Default Byte, Sampling Mode: Falling, Long Frame Space: 0 Bit, and Transmission Direction: MSB->LSB. The 'Protocol Analyzer Color' section shows DT as green, DR as pink, and Space as green. At the bottom are buttons for OK, Cancel, Default, and Help.

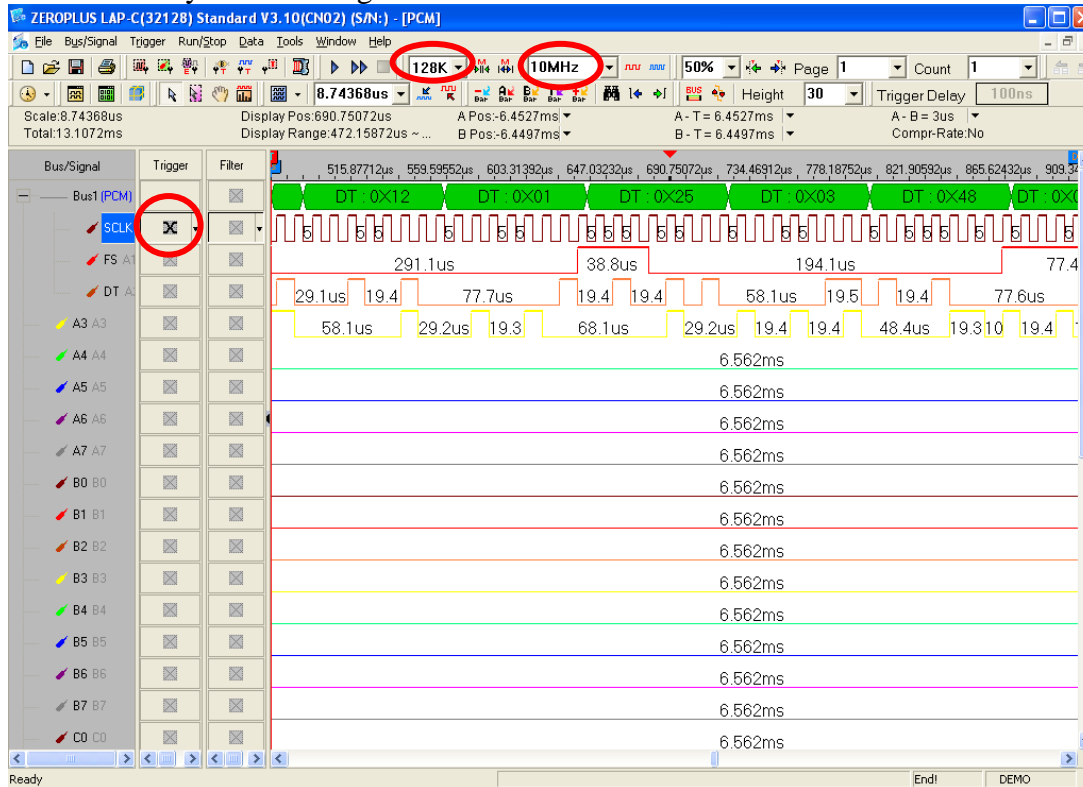
STEP 6. Set the Protocol Analyzer Color.

This screenshot is identical to the previous one, but the 'Protocol Analyzer Color' section at the bottom is highlighted with a red rectangle. It shows the color selection for DT (green), DR (pink), and Space (green). The buttons at the bottom are OK, Cancel, Default, and Help.



STEP 7. Following pictures show the completion of the protocol analyzer decoding and 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 4 times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

