



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

SPECIFICATION

MODEL: B09007-LAP-MODIFIED SPI-M

PART NO : _____

VERSION : V1.01

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
ZeroPlus Technology after
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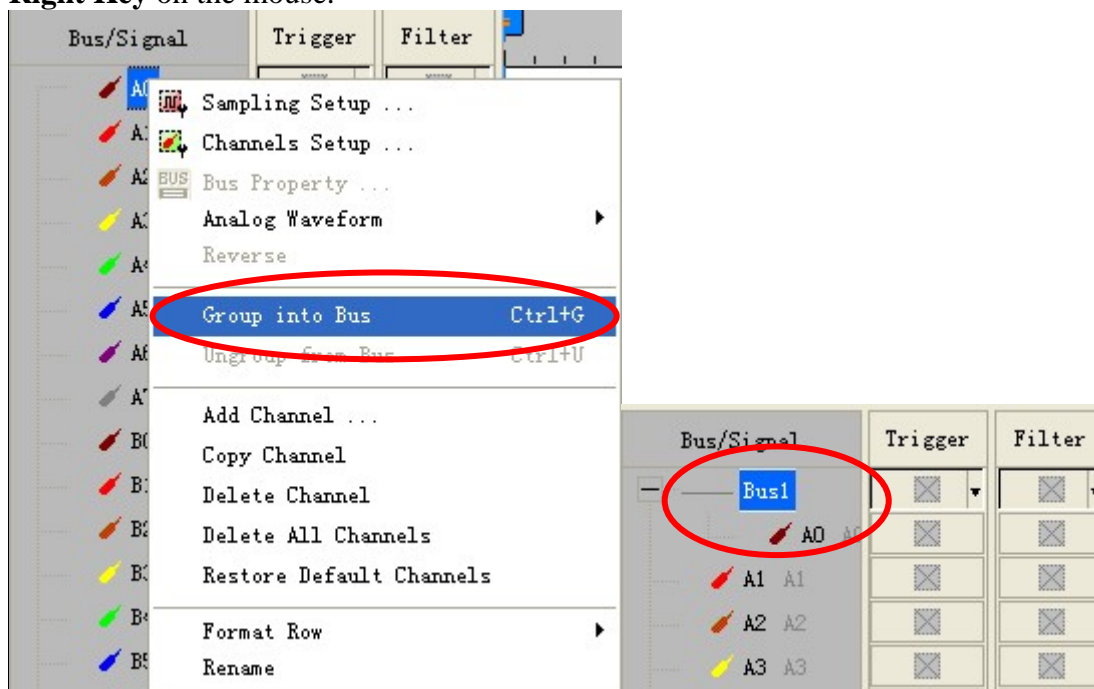
1 Software Register

Please register the software as the following steps:

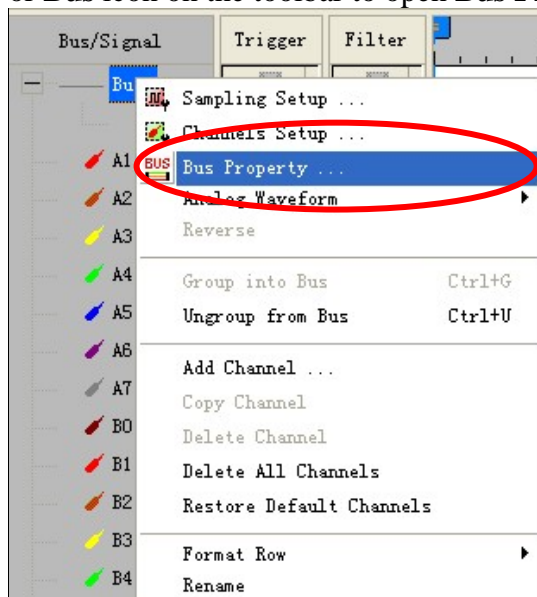
※ Remark1: The registration steps for all protocol analyzers are the same, you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

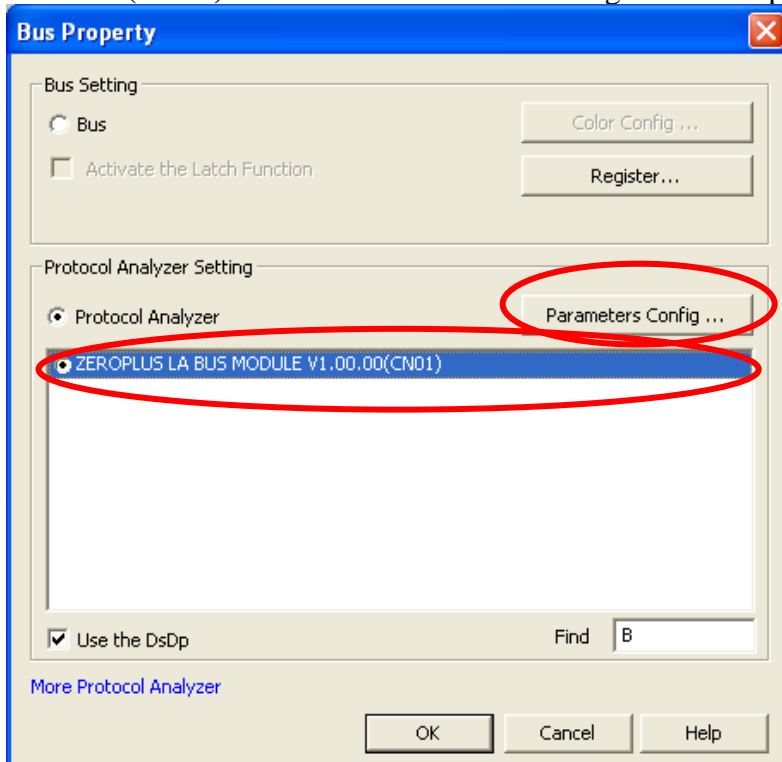


STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

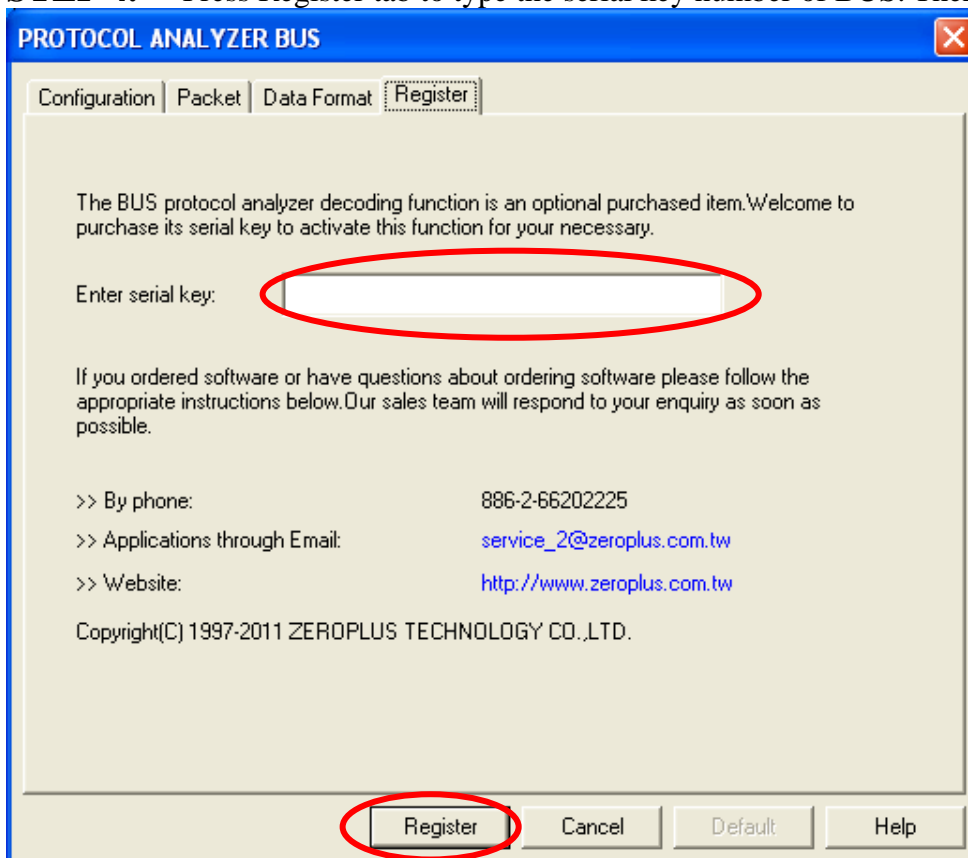




STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00(CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

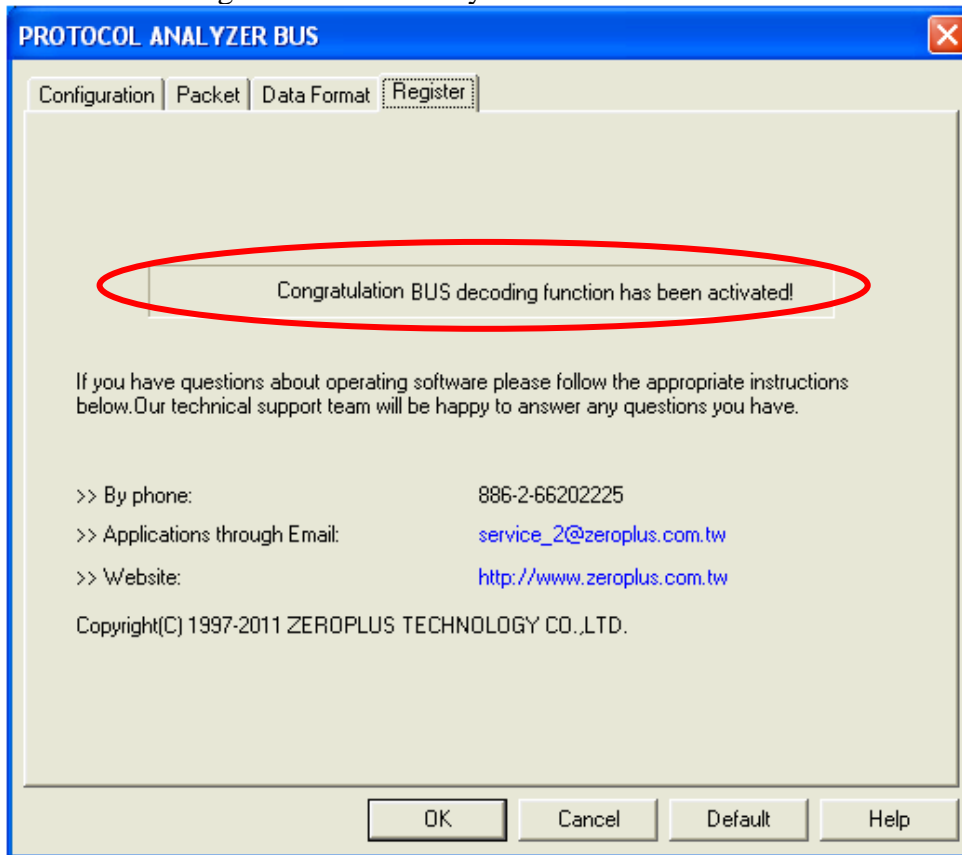


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





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

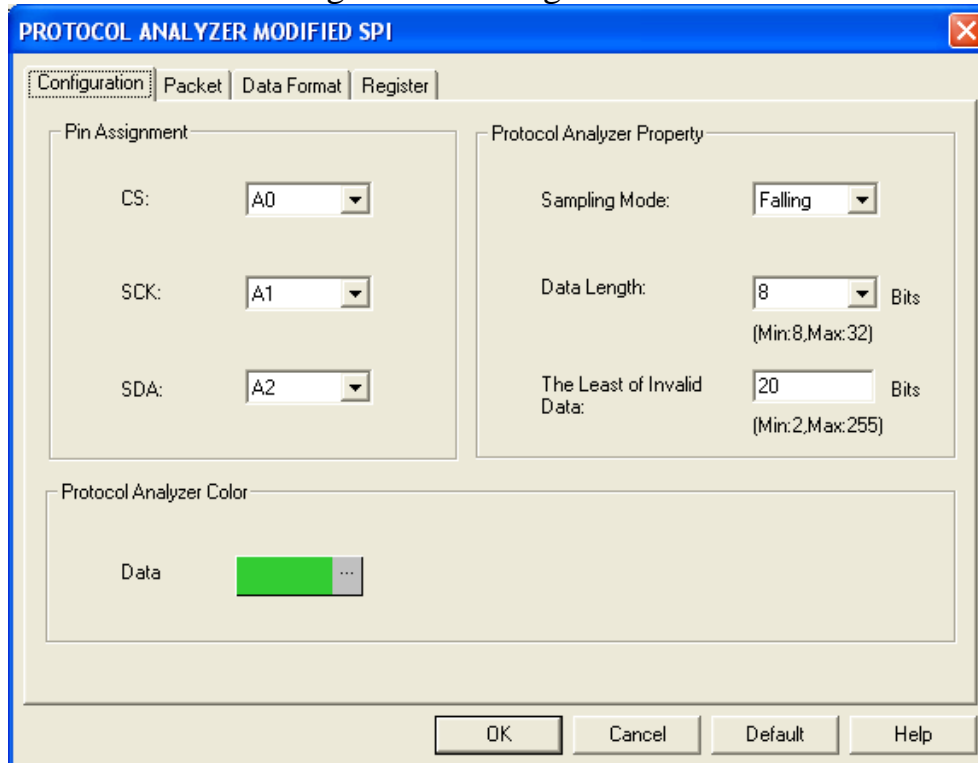




2 User Interface

In the configuration, please refer to the below images to select options of setting MODIFIED SPI module.

MODIFIED SPI Configuration Dialog Box



Pin Assignment:

CS: It is the Chip Select channel, the default is A0.

SCK: It is the Clock Signal channel, the default is A1.

SDA: It is the Data Signal channel, the default is A2.

Protocol Analyzer Property:

Sampling Mode: There are two options, Rising Edge and Falling Edge, and the default is Falling Edge.

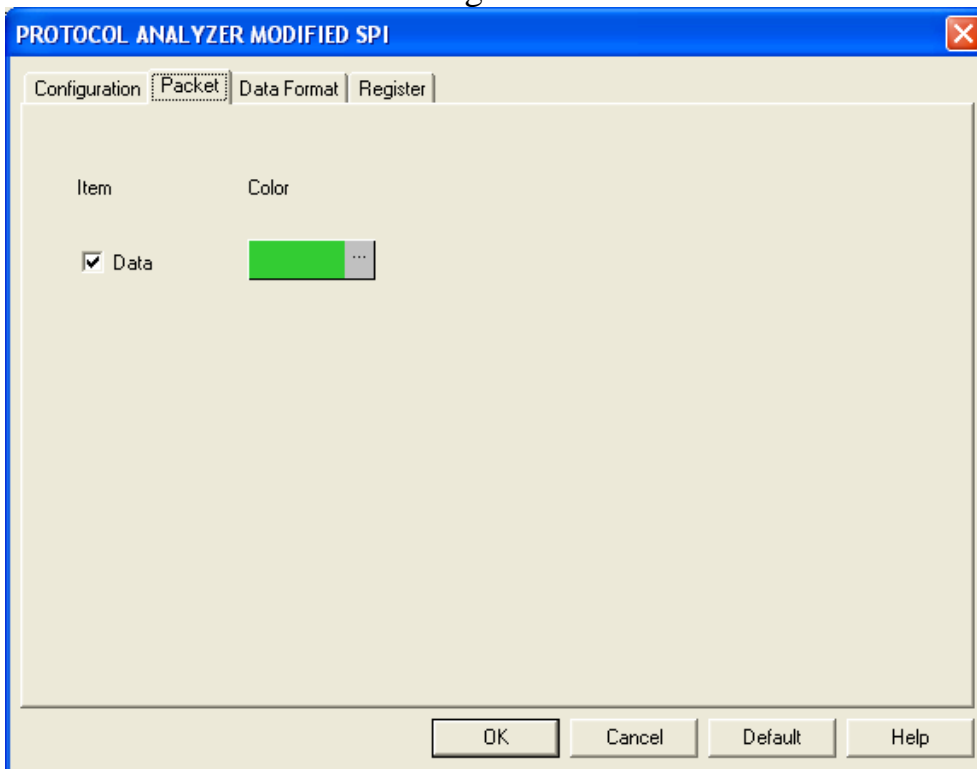
Data Width: Users can set the width of one Data; the value (8, 16, 24, 32) can be selected from the pull-down menu. Meanwhile, users can set the value as their requirements; the range is from 8 to 32.

The Least of Invalid Data: It can set a lot of continuous Sampling Value which follows one DATA as "0" which can compose the min. value of the invalid data, and the default is 20Bits. The range of **The Least of Invalid Data** is an integer from 2 to 255.

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

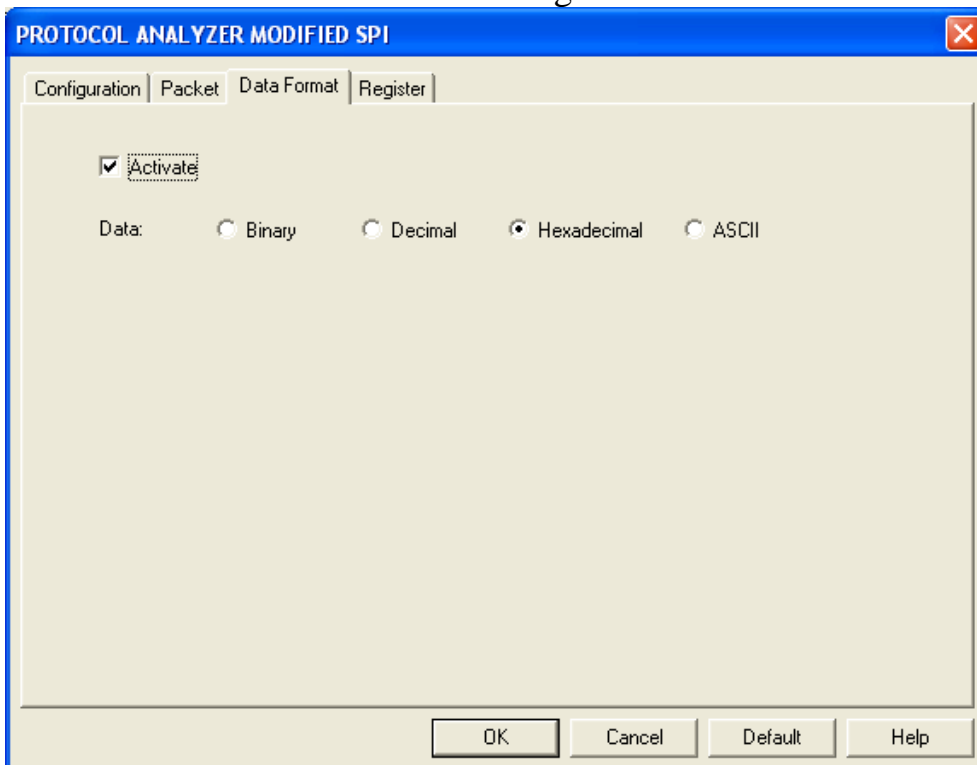


MODIFIED SPI Packet Dialog Box



In the Packet part, users can set the item and color as users' requirements.

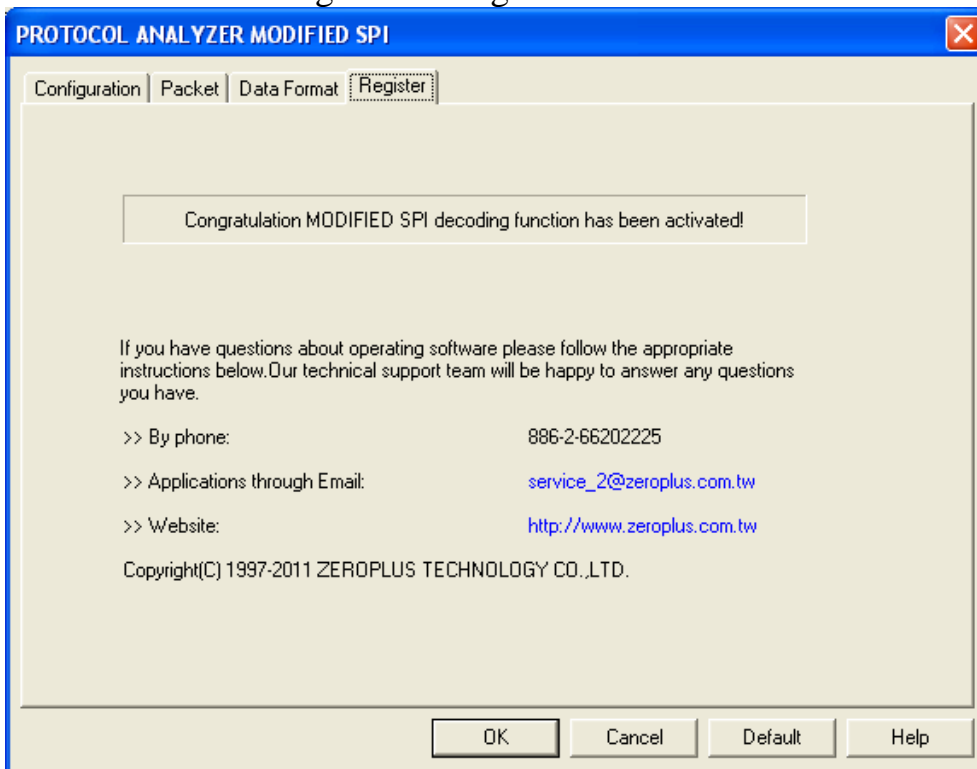
MODIFIED SPI Data Format Dialog Box



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.



MODIFIED SPI Register Dialog Box

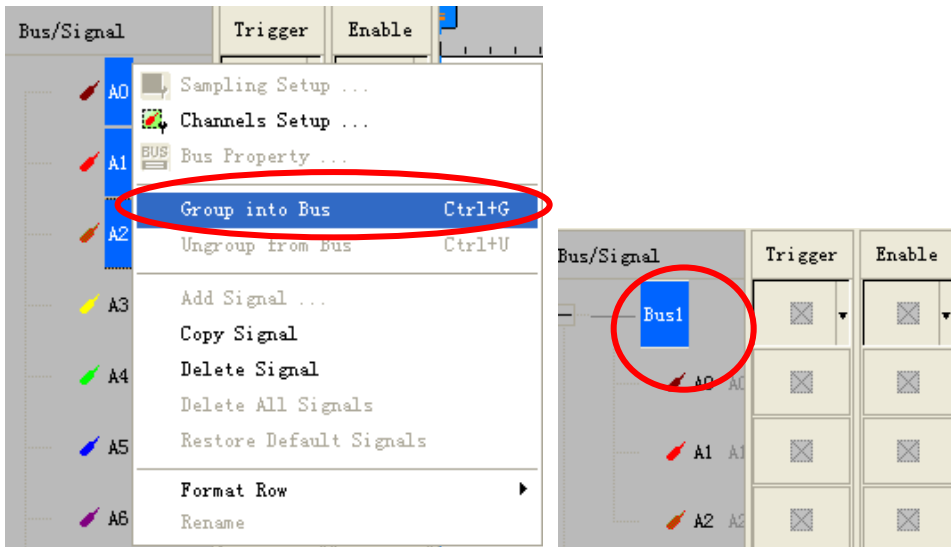


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

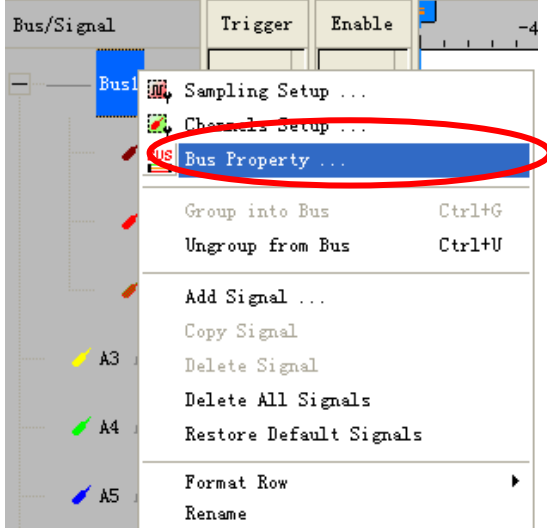


3 Operating Instructions

STEP 1. Group the unanalyzed channel into **Bus1** by pressing the **Right Key** on the mouse. MODIFIED SPI needs three channels to decode, so it is necessary to group three or more channels into a BUS.

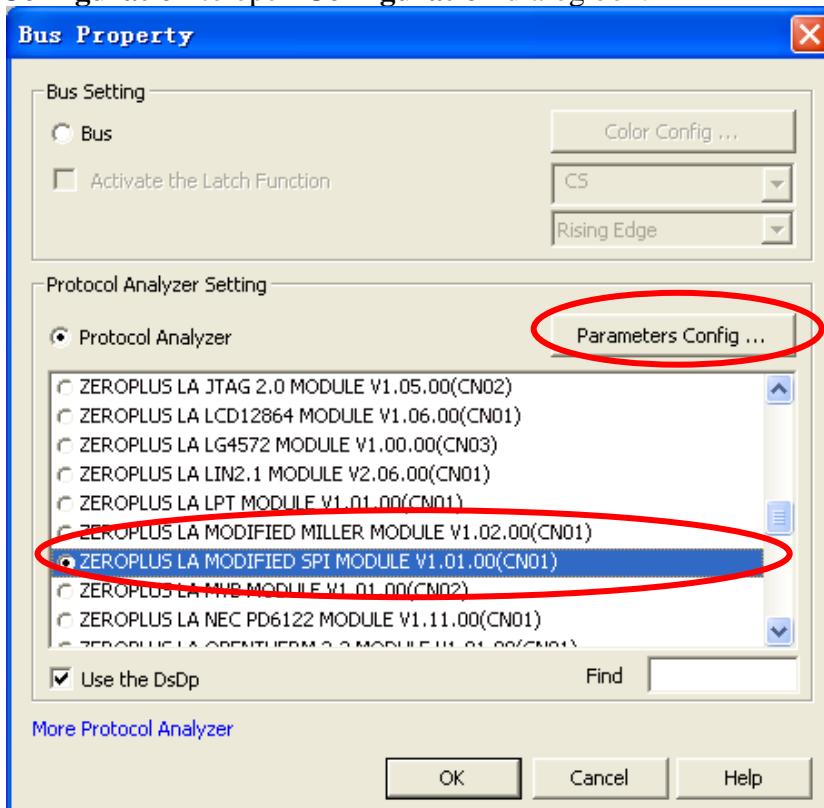


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus bar** on the toolbar to open **Bus Property** dialog box.

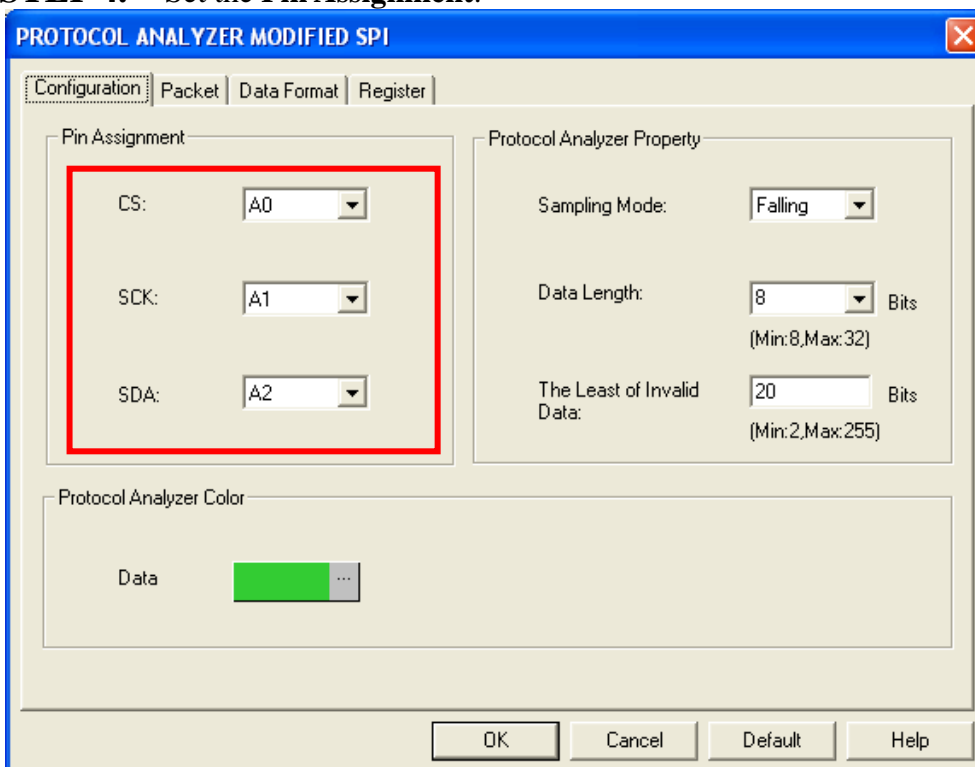




STEP 3. For Protocol Analyzer MODIFIED SPI Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA MODIFIED SPI MODULE V1.01.00(CN01)**. Next click **Parameters Configuration** to open **Configuration** dialog box.

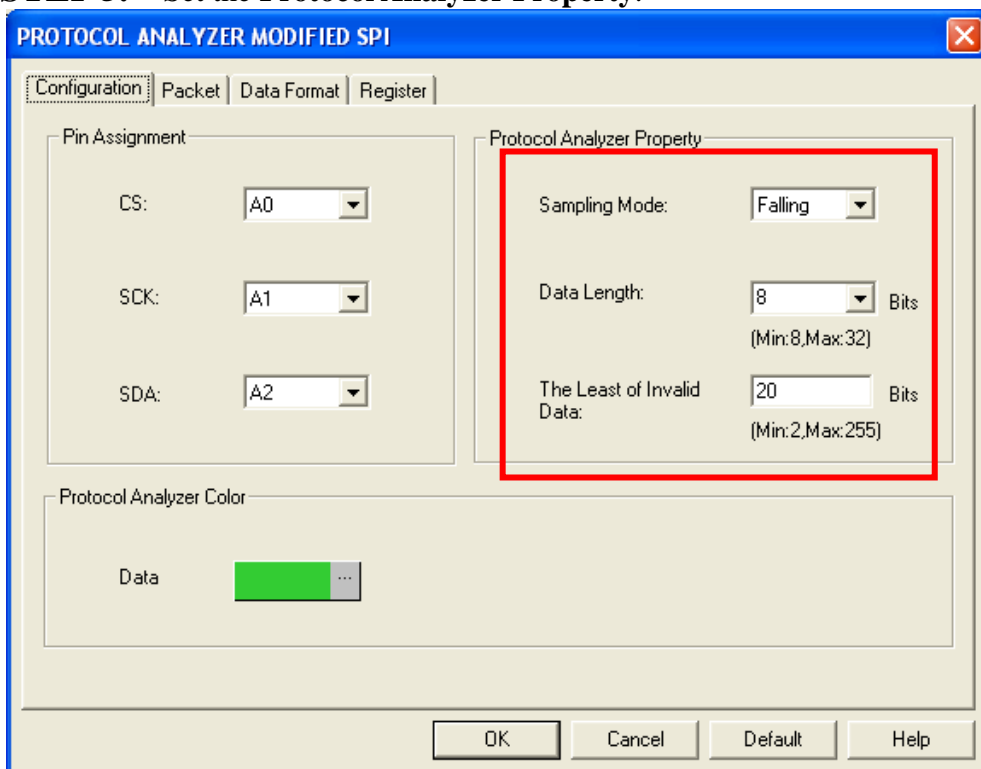


STEP 4. Set the **Pin Assignment**.

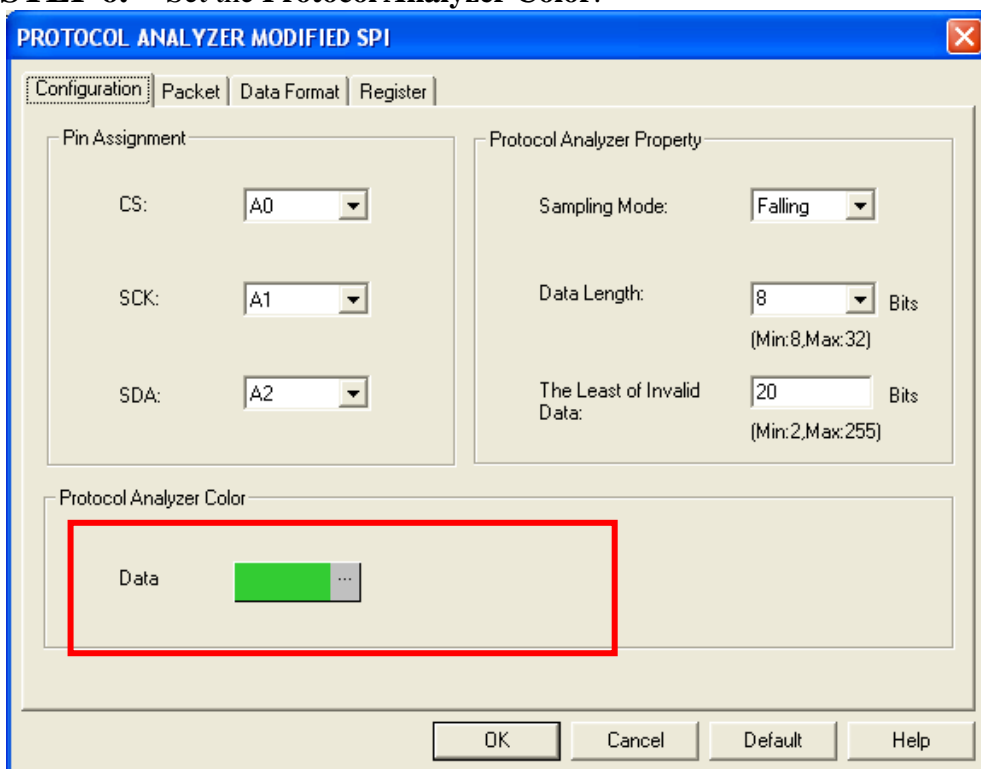




STEP 5. Set the Protocol Analyzer Property.



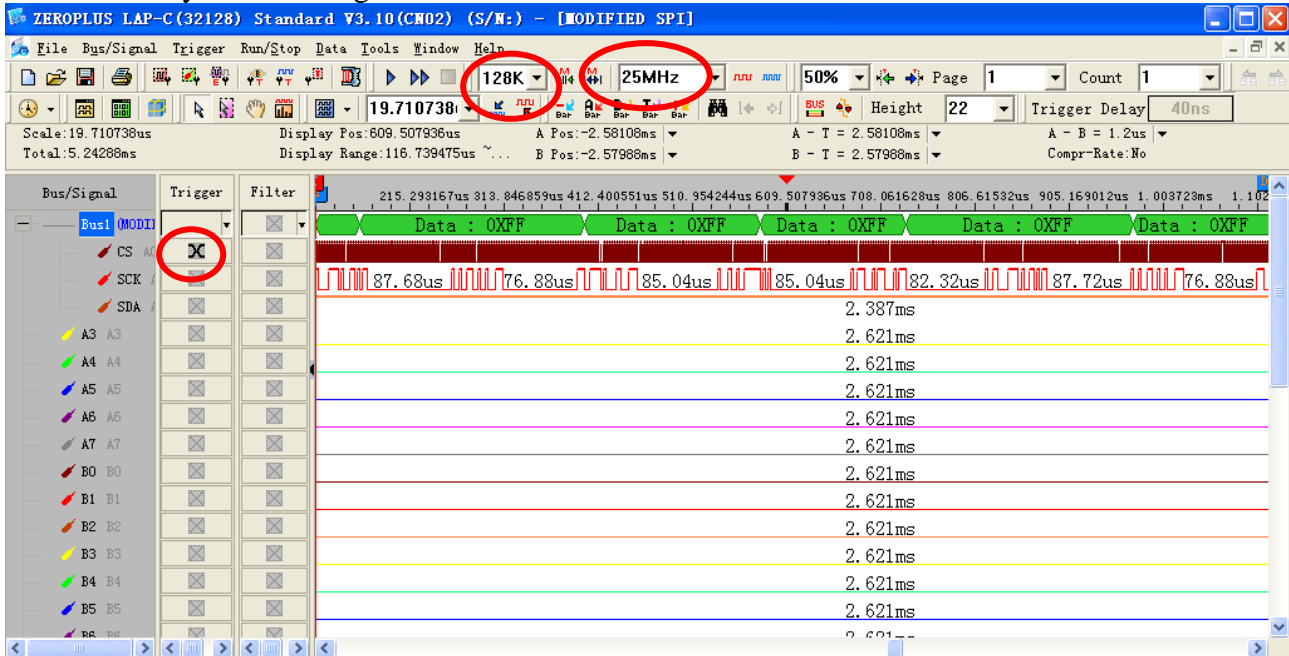
STEP 6. Set the Protocol Analyzer Color.





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 25MHz. (the sampling frequency should be more than 10 times higher than the signal to be tested)

Protocol Analyzer Decoding



Packet List

