



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

SPECIFICATION

MODEL: B09013-LAP-SPI PLUS-M

PART NO: _____

VERSION: V1.01

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
Zeroplus Technology after
signing.

2F, NO.123, Jian Ba Rd,
Chung Ho City, Taipei Hsian, R.O.C.

Tel:+886-2-66202225
Fax:+886-2-22234362



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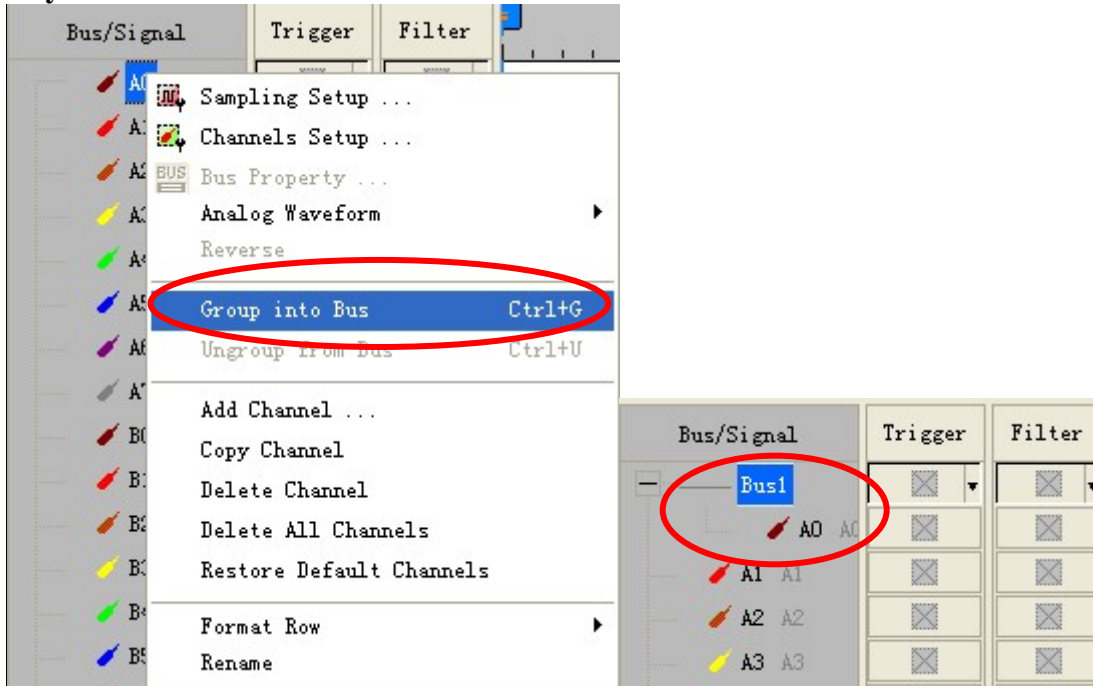
1 Software Register

Please register the software as the following steps:

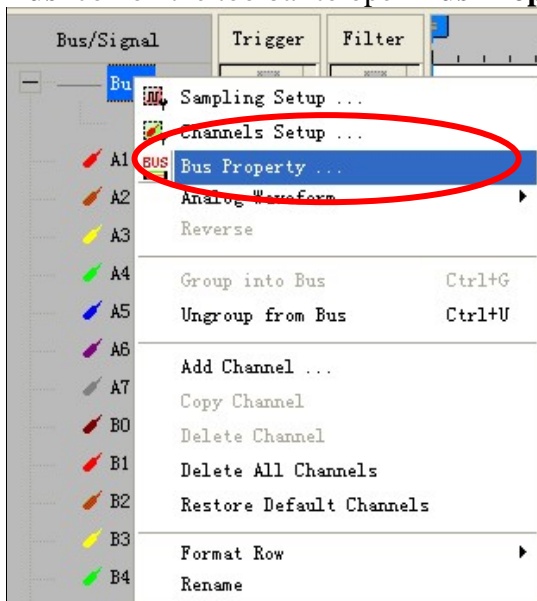
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

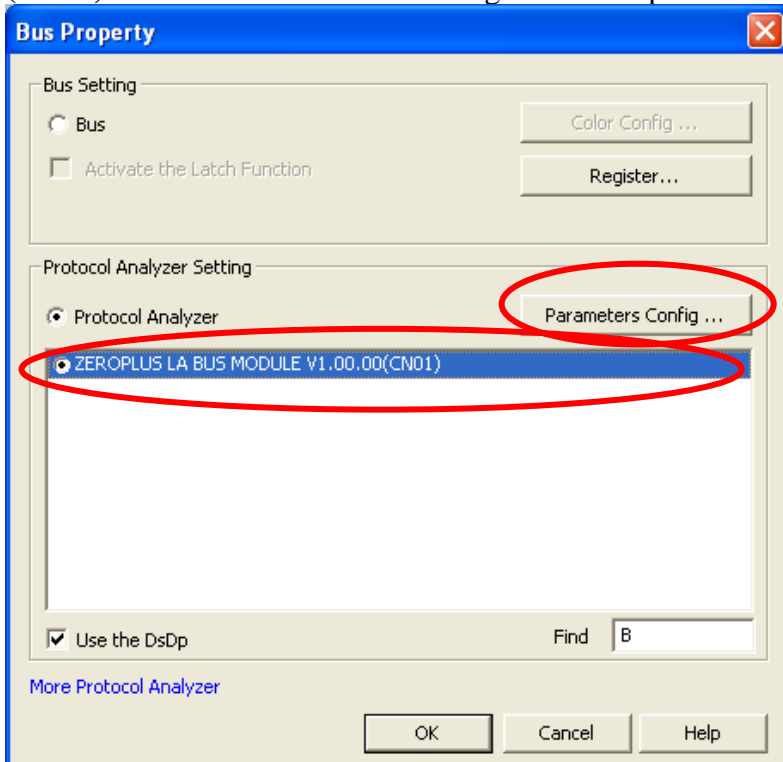


STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

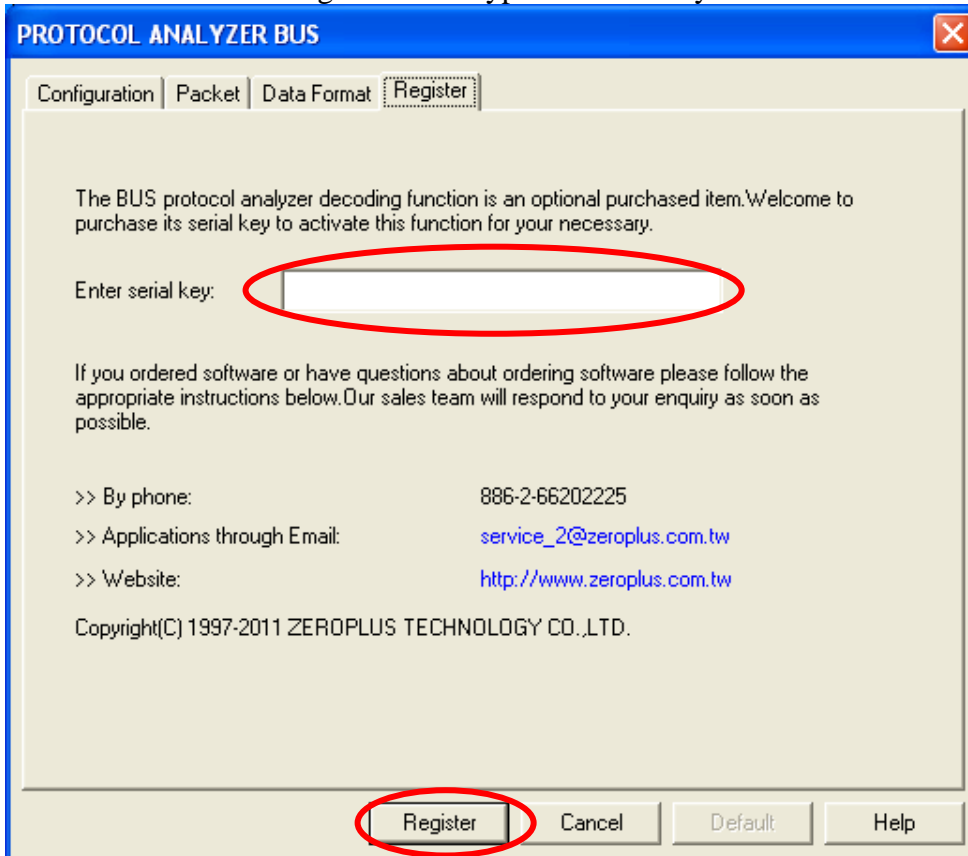




STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

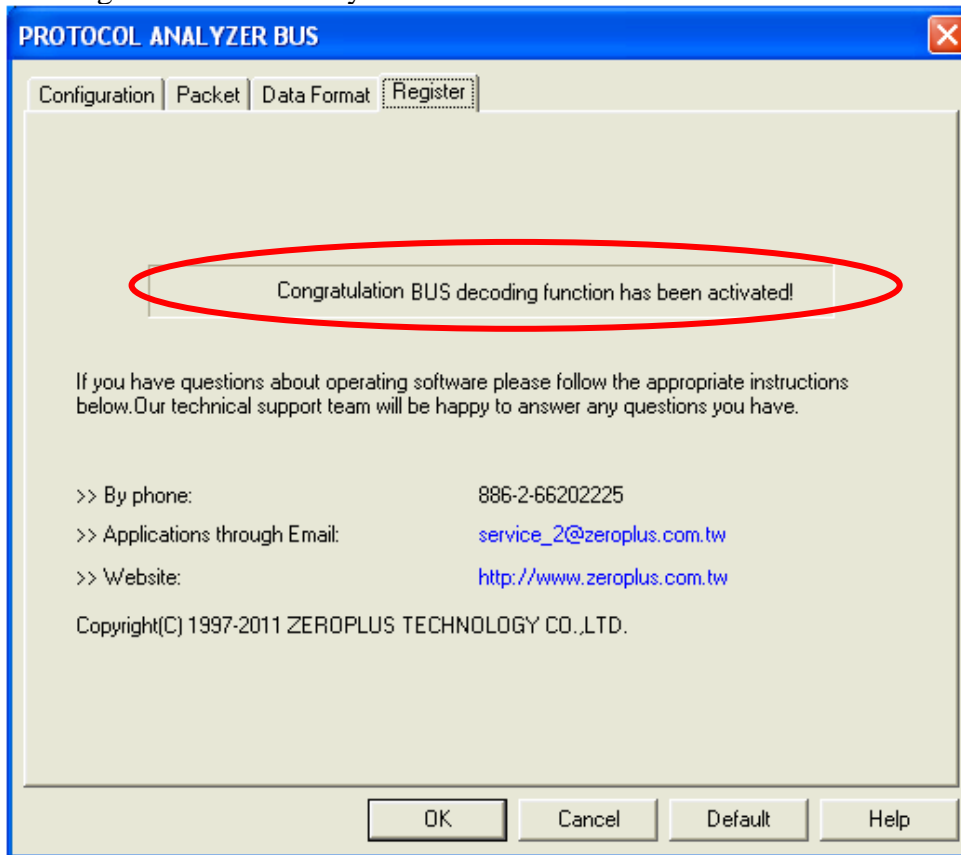


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





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

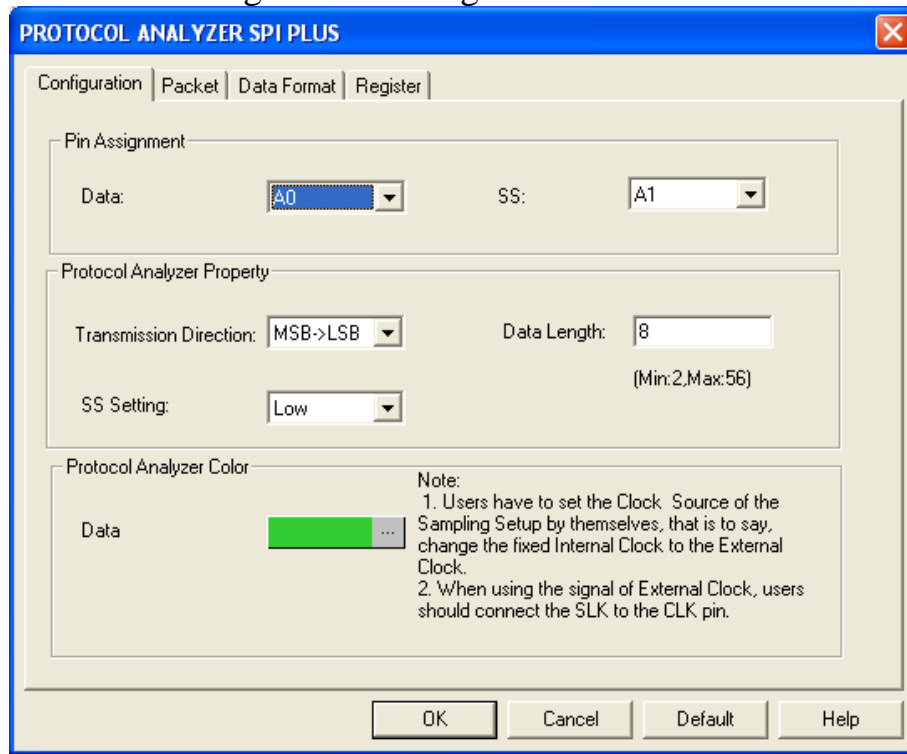




2 User Interface

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

SPI PLUS Configuration Dialog Box



Pin Assignment:

SPI: There are 4 signal channels for SPI, but SPI PLUS only needs 2 channels to decode, here only shows the signal channel's name and selection mark.

Protocol Analyzer Property:

Transmission Direction: Users can choose MSB->LSB or LSB->MSB as the Transmission Direction.

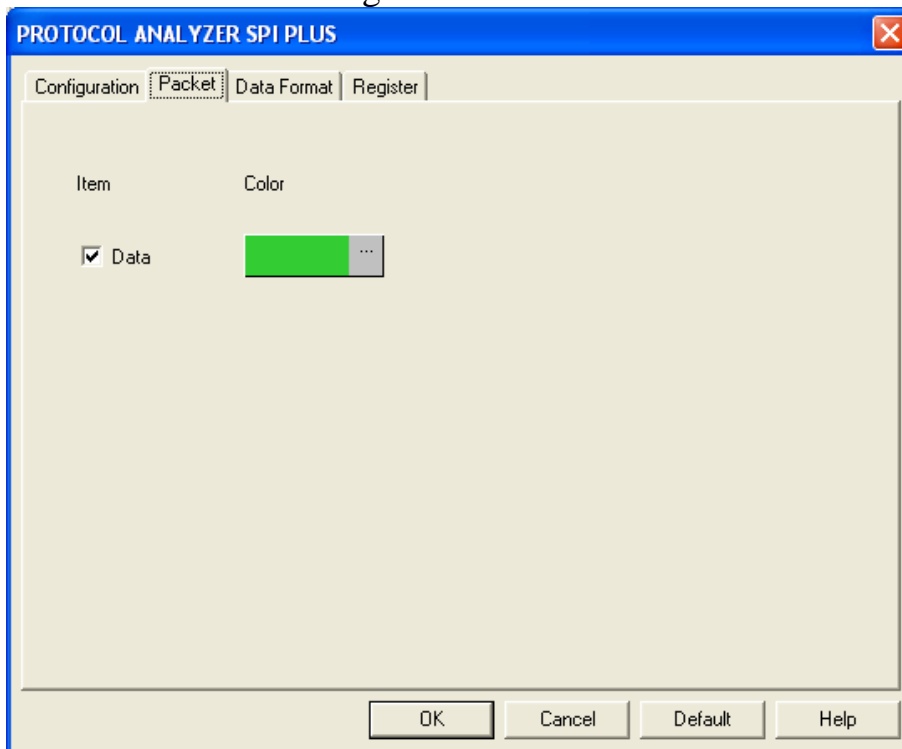
SS Setting: The default is that the decoding is valid in low level.

Data Length: Users can key in the number from 2 to 56, the default is 8.

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

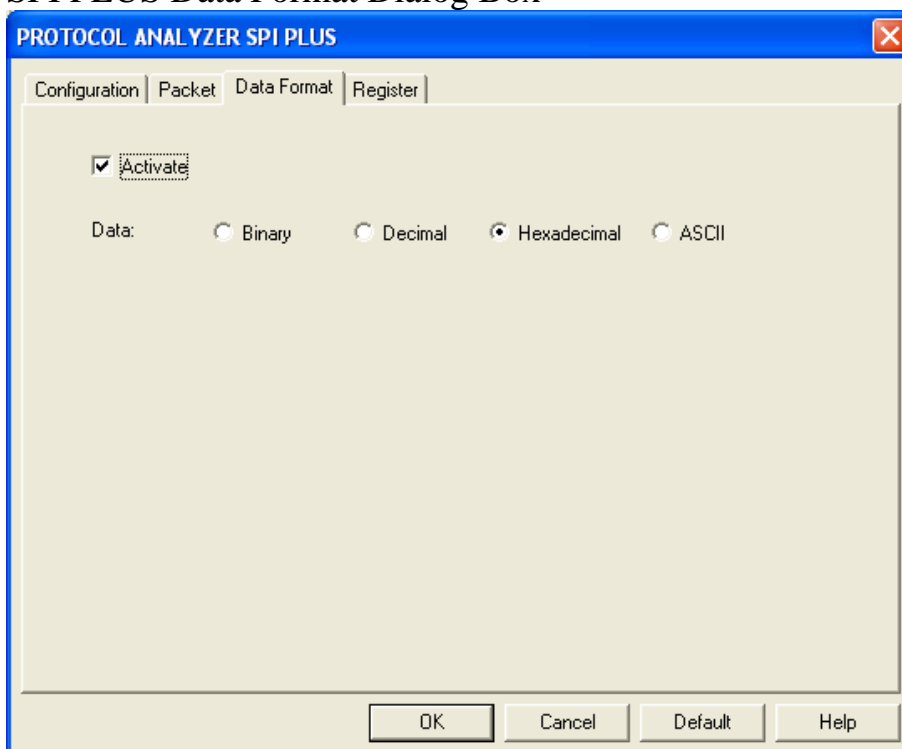


SPI PLUS Packet Dialog Box



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

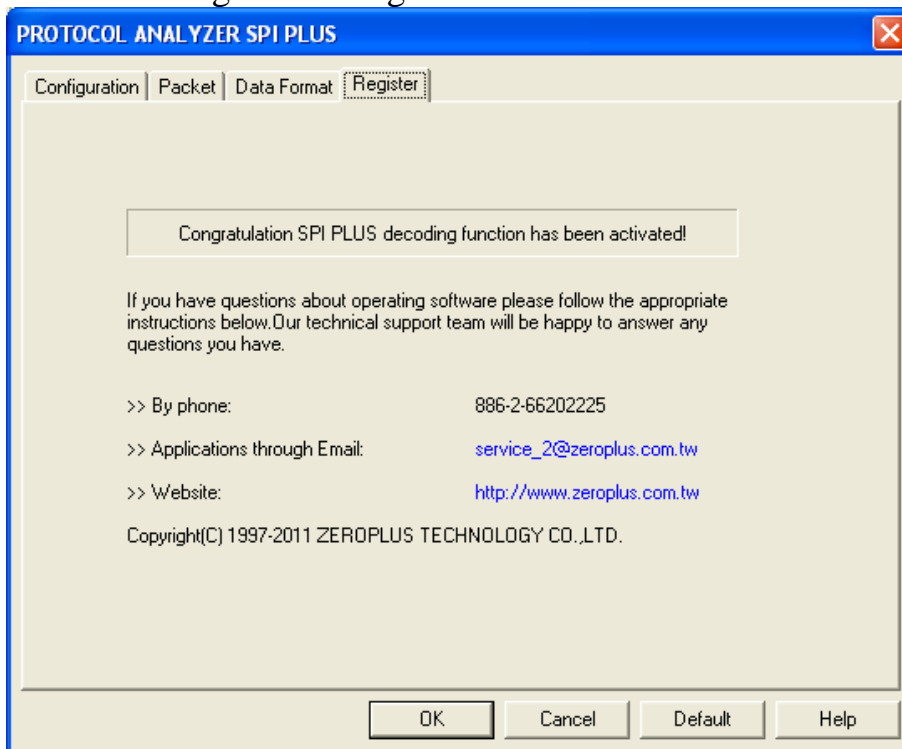
SPI PLUS Data Format Dialog Box



Users can set the Data Format of 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.



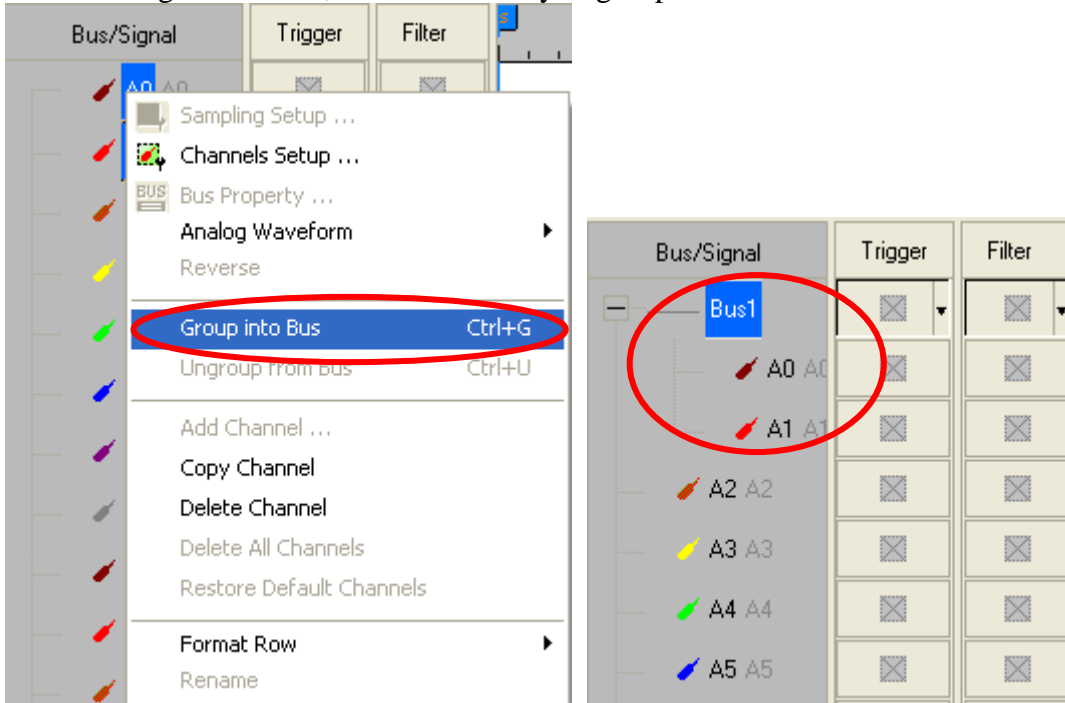
SPI PLUS Register Dialog Box



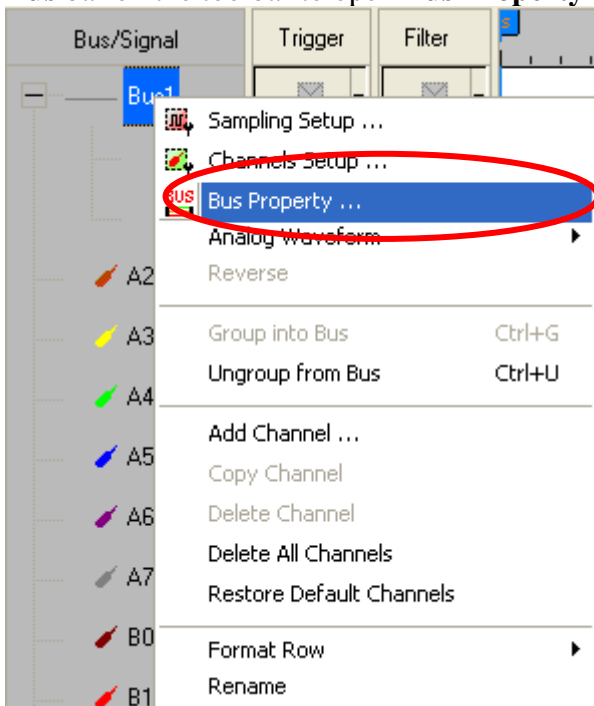
There is written Zeroplus company information. If you have any questions about software operations, you can contact Zeroplus by Telephone or Email.

3 Operating Instructions

STEP 1. Group A0-A1 into **Bus1** by pressing the **Right Key** on the mouse. SPI PLUS needs two channels to decode signals at least, so it is necessary to group two or more channels into a Bus.

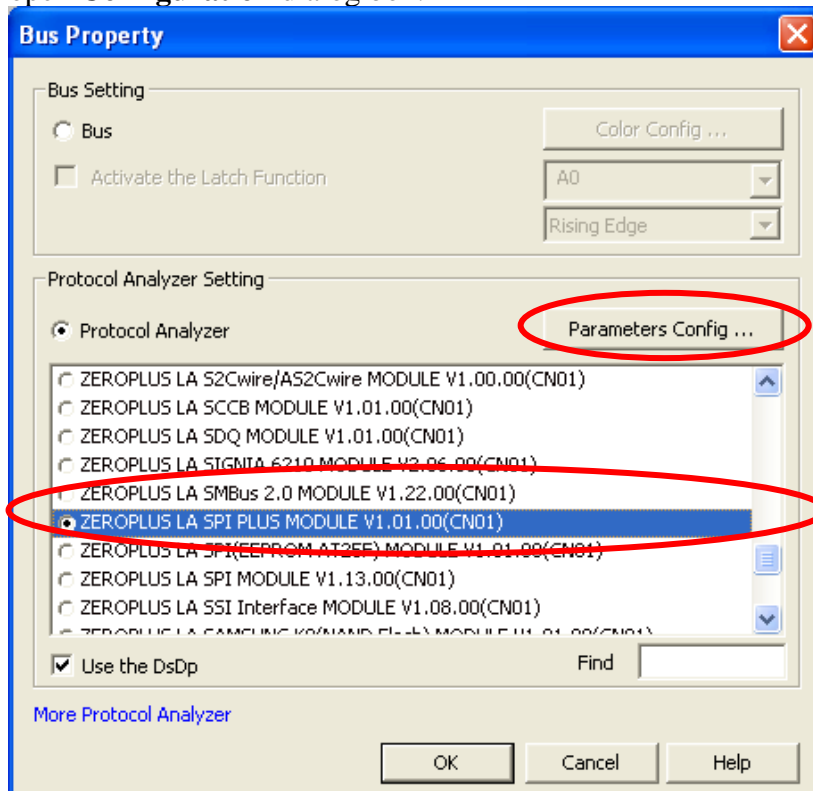


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.

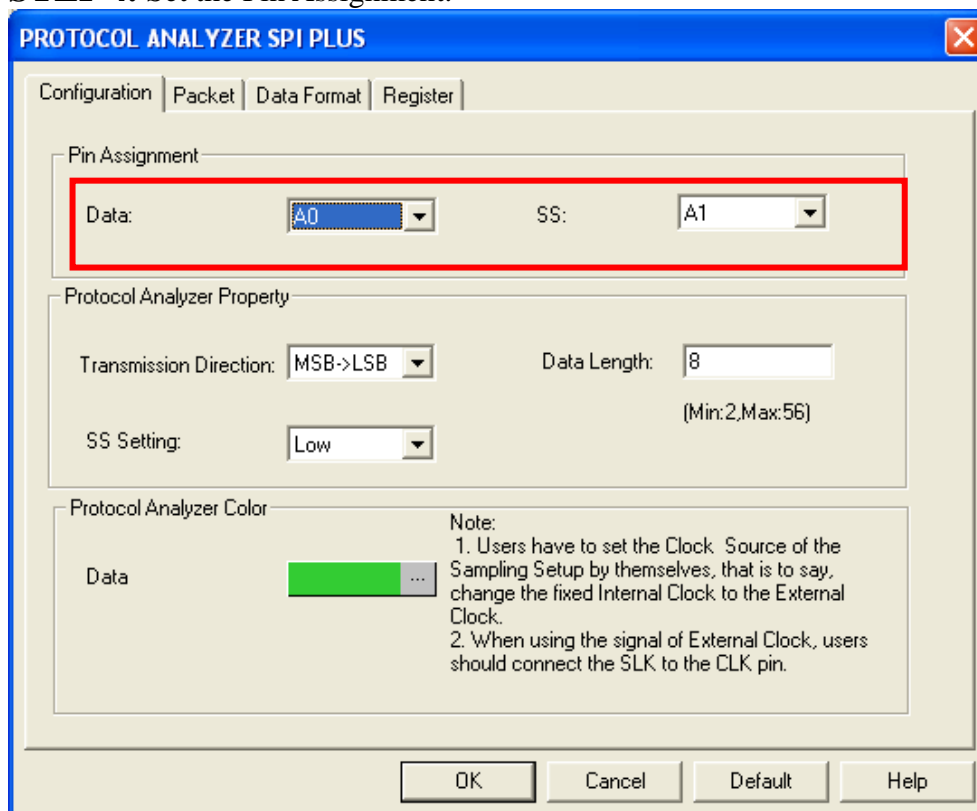




STEP 3. For Protocol Analyzer SPI PLUS Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA SPI PLUS MODULE V1.01.00 (CN01)**. Next click **Parameters Configuration** to open **Configuration** dialog box.



STEP 4. Set the Pin Assignment.





STEP 5. Set the Protocol Analyzer Property.

PROTOCOL ANALYZER SPI PLUS

Configuration | Packet | Data Format | Register

Pin Assignment

Data: A0 SS: A1

Protocol Analyzer Property

Transmission Direction: MSB->LSB Data Length: 8 (Min:2,Max:56)

SS Setting: Low

Protocol Analyzer Color

Data [Green Color Swatch]

Note:
1. Users have to set the Clock Source of the Sampling Setup by themselves, that is to say, change the fixed Internal Clock to the External Clock.
2. When using the signal of External Clock, users should connect the SLK to the CLK pin.

OK Cancel Default Help

STEP 6. Set the Protocol Analyzer Color

PROTOCOL ANALYZER SPI PLUS

Configuration | Packet | Data Format | Register

Pin Assignment

Data: A0 SS: A1

Protocol Analyzer Property

Transmission Direction: MSB->LSB Data Length: 8 (Min:2,Max:56)

SS Setting: Low

Protocol Analyzer Color

Data [Green Color Swatch]

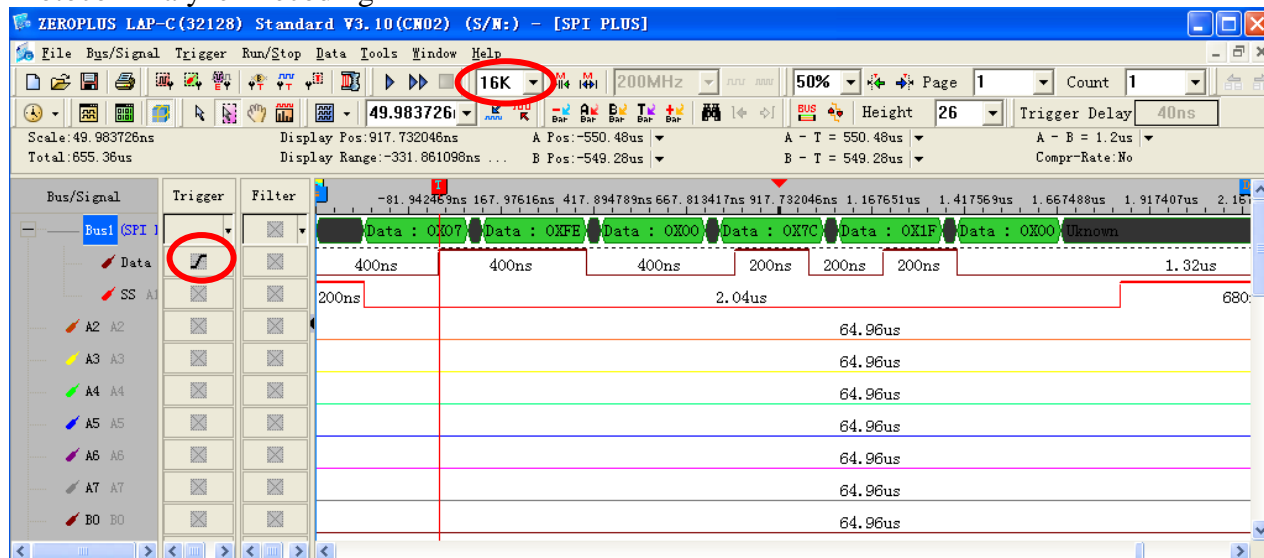
Note:
1. Users have to set the Clock Source of the Sampling Setup by themselves, that is to say, change the fixed Internal Clock to the External Clock.
2. When using the signal of External Clock, users should connect the SLK to the CLK pin.

OK Cancel Default Help



STEP 7. 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 16K; the external sampling frequency is 25MHz.

Protocol Analyzer Decoding



Packet List

