



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

SPECIFICATION

**MODEL: B10005-LAP-SPI (EEPROM
AT25F)-M**

PART NO: _____

VERSION: V1.01

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.



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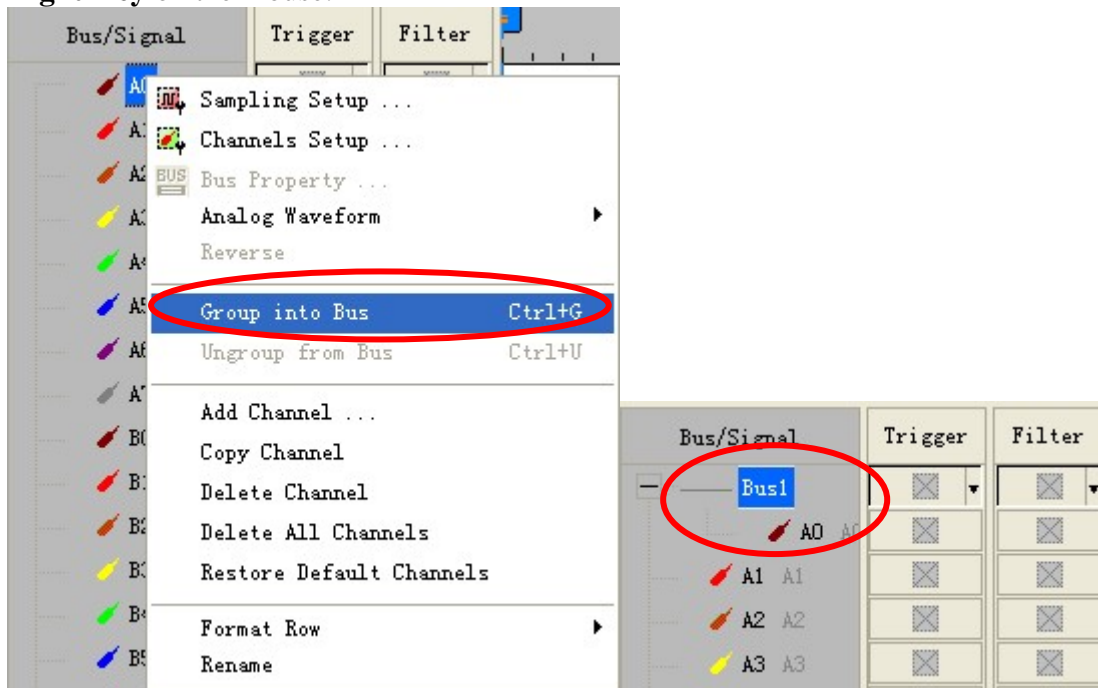
1 Software Register

Please register the software as the following steps:

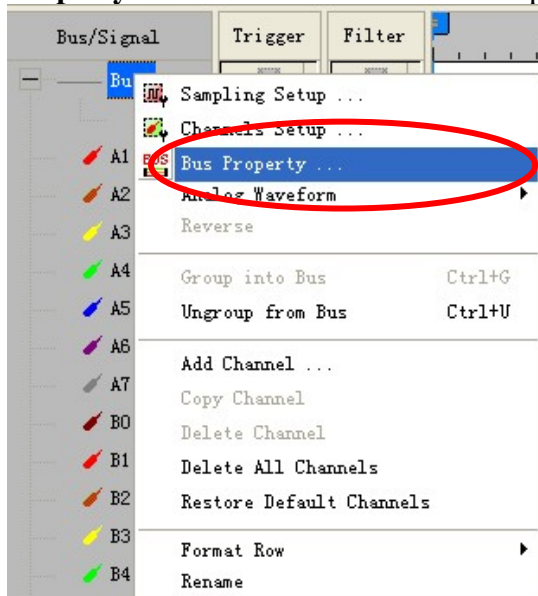
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

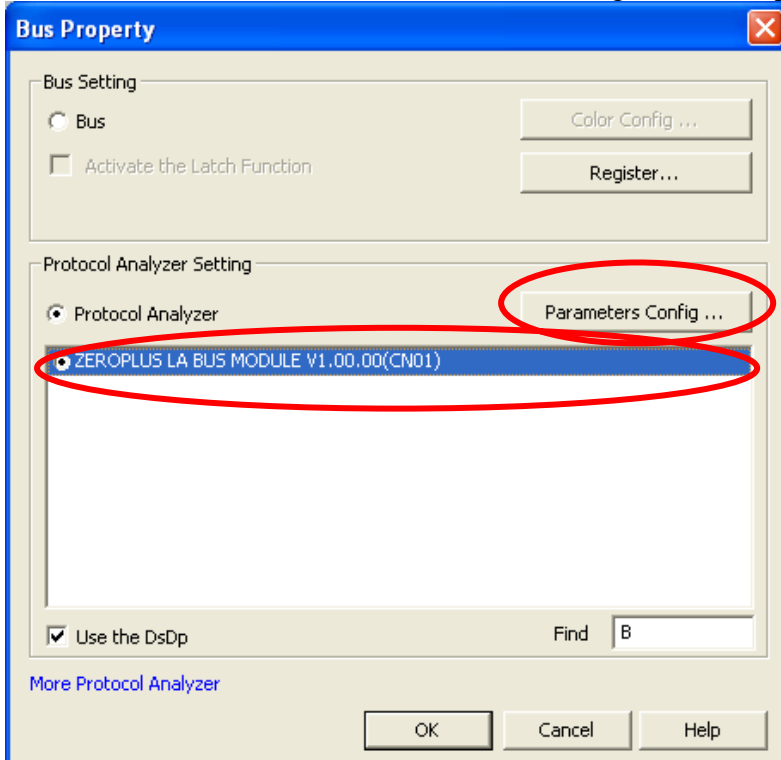


STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

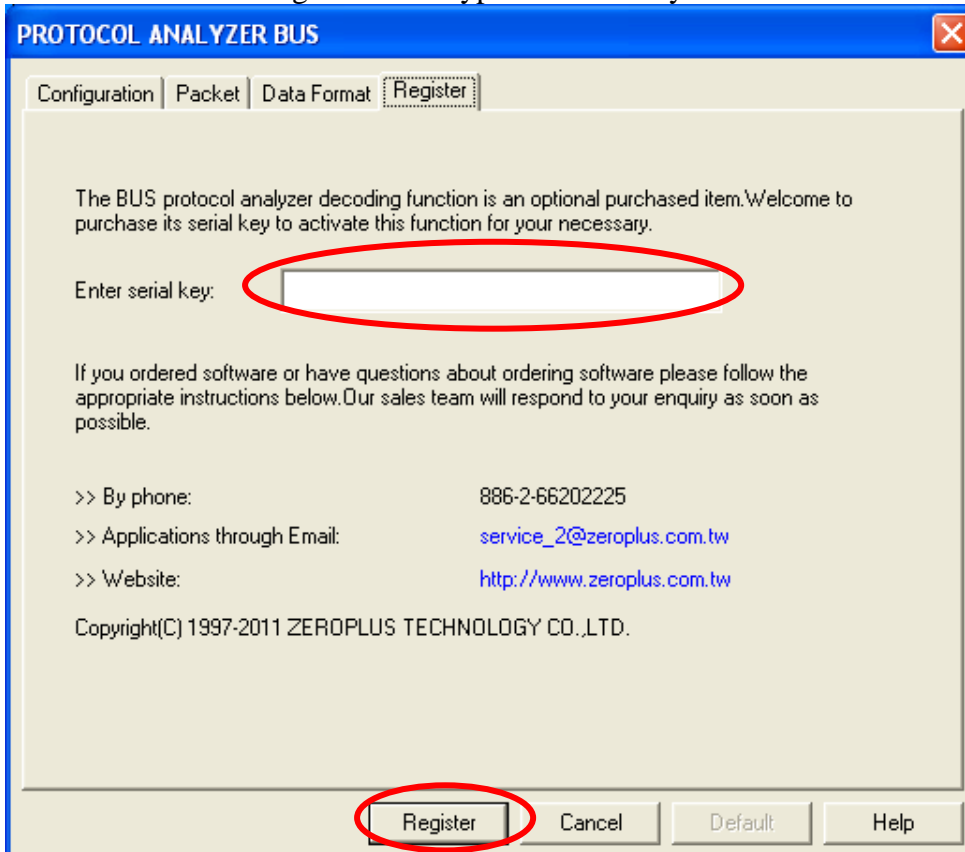




STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

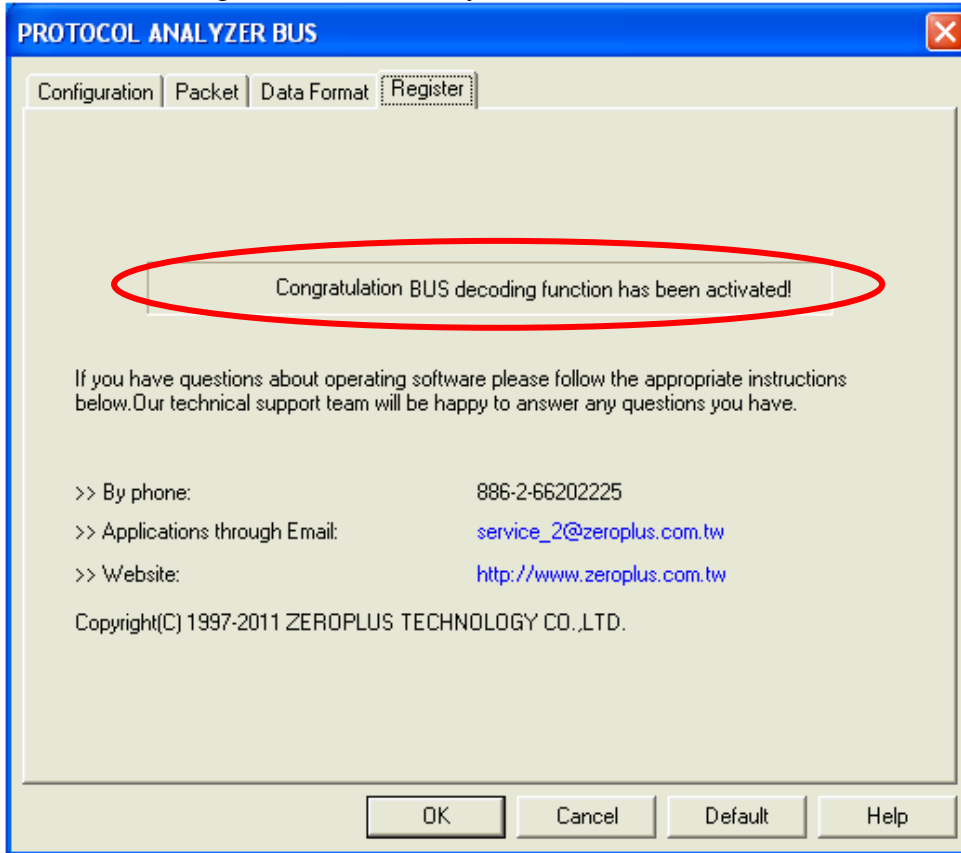


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





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

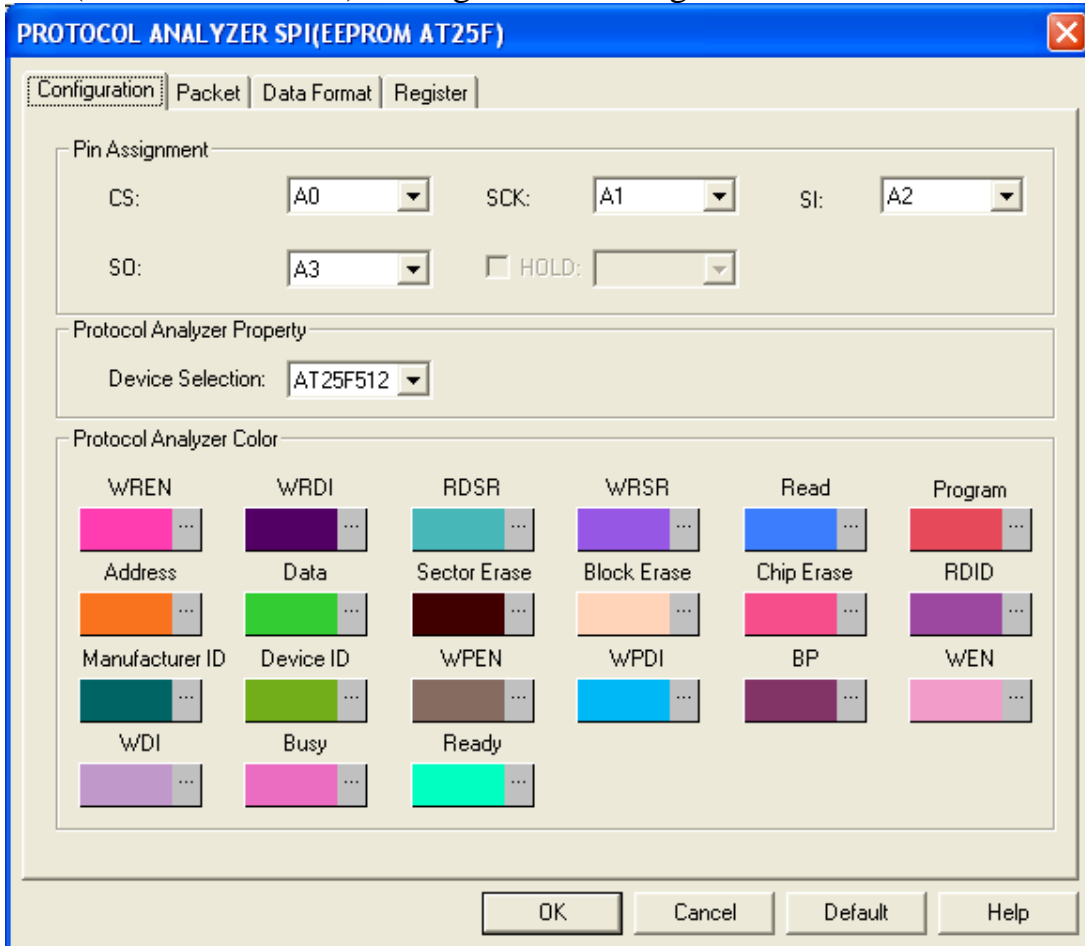




2 User Interface

In the configuration, please refer to below images to select options of setting **SPI (EEPROM AT25F)** module.

SPI (EEPROM AT25F) Configuration Dialog Box



Pin Assignment:

Four or five channels are required for SPI (EEPROM AT25F) to decode the signal.

CS: It is the Chip Select channel and it is available for the Low Level.

SCK: It is the Serial Clock channel, which is triggered at the Rising Edge.

SI: It is the Command, Address and Data Input channel.

SO: It is the Data Output channel.

HOLD: It is the Data Transmission Hold channel, and it is available for the Low Level. Notice: It is not activated in general, which is denoted in grey. If it is activated, SPI (EEPROM AT25F) will require 5 channels to decode; if it is not activated, SPI (EEPROM AT25F) will require 4 channels to decode.

Protocol Analyzer Setting:

Device Select: There are six Devices for selecting that are AT25F512, AT25F1024, AT25F2048, AT25F4096, AT25FS010 and AT25FS040. And the Default is AT25F512.

Protocol Analyzer Color:

The protocol analyzer colors can be varied by users.



SPI (EEPROM AT25F) Packet Dialog Box

PROTOCOL ANALYZER SPI(EEPROM AT25F)

Configuration Packet Data Format Register

Item	Color	Item	Color
<input checked="" type="checkbox"/> WREN		<input checked="" type="checkbox"/> RDID	
<input checked="" type="checkbox"/> WRDI		<input checked="" type="checkbox"/> Manufacturer ID	
<input checked="" type="checkbox"/> RDSR		<input checked="" type="checkbox"/> Device ID	
<input checked="" type="checkbox"/> WRSR		<input checked="" type="checkbox"/> WPEN	
<input checked="" type="checkbox"/> Read		<input checked="" type="checkbox"/> WPDI	
<input checked="" type="checkbox"/> Program		<input checked="" type="checkbox"/> BP	
<input checked="" type="checkbox"/> Address		<input checked="" type="checkbox"/> WEN	
<input checked="" type="checkbox"/> Data		<input checked="" type="checkbox"/> WDI	
<input checked="" type="checkbox"/> Sector Erase		<input checked="" type="checkbox"/> Busy	
<input checked="" type="checkbox"/> Block Erase		<input checked="" type="checkbox"/> Ready	
<input checked="" type="checkbox"/> Chip Erase			

OK Cancel Default Help

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



SPI (EEPROM AT25F) Data Format Dialog Box

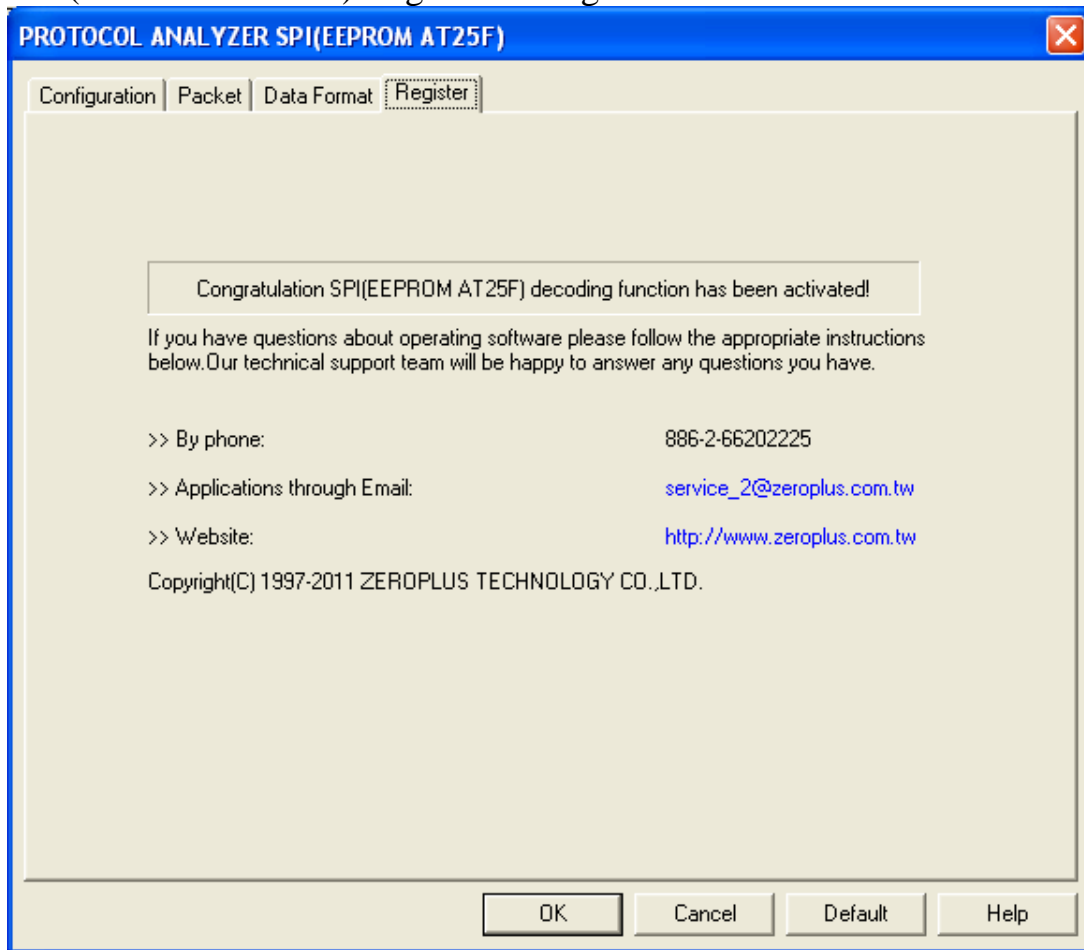
Command	Binary	Decimal	Hexadecimal	ASCII
WREN:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
WRDI:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
RDSR:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
WRSR:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Read:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Program:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Address:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Data:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Sector Erase:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Block Erase:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Chip Erase:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
RDID:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Manufacturer ID:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Device ID:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Buttons: OK, Cancel, Default, Help

Users can set the Data Format of the WREN, WRDI, RDSR, WRSR, Read, Program, Address, Data, Sector Erase, Block Erase, Chip Erase, RDID, Manufacturer ID and Device ID 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 (EEPROM AT25F) Register Dialog Box

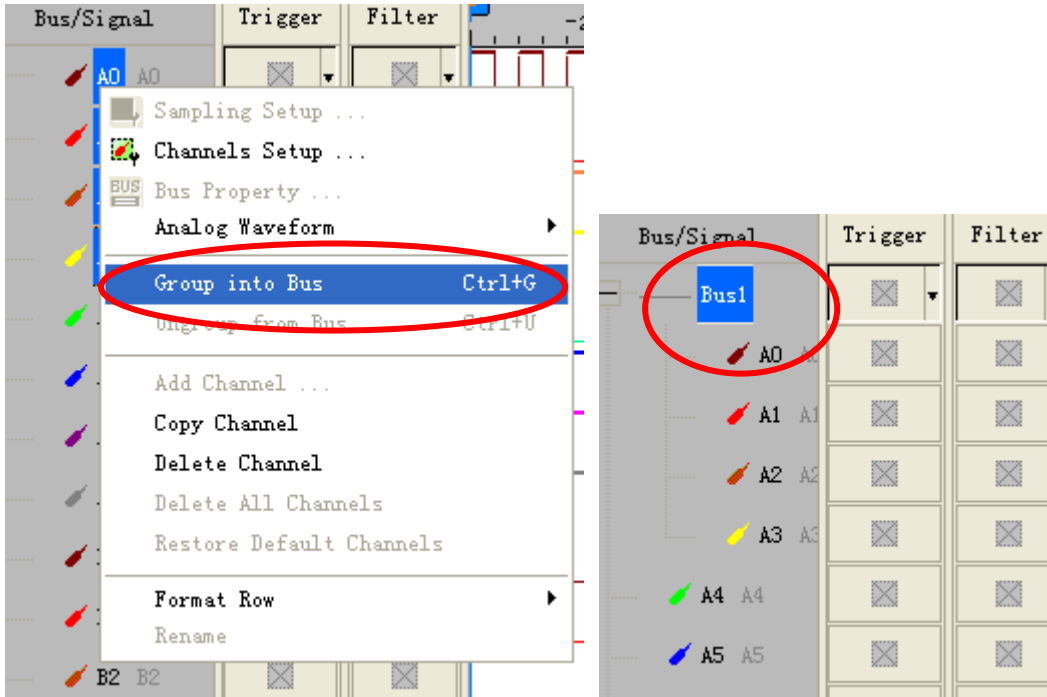


There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

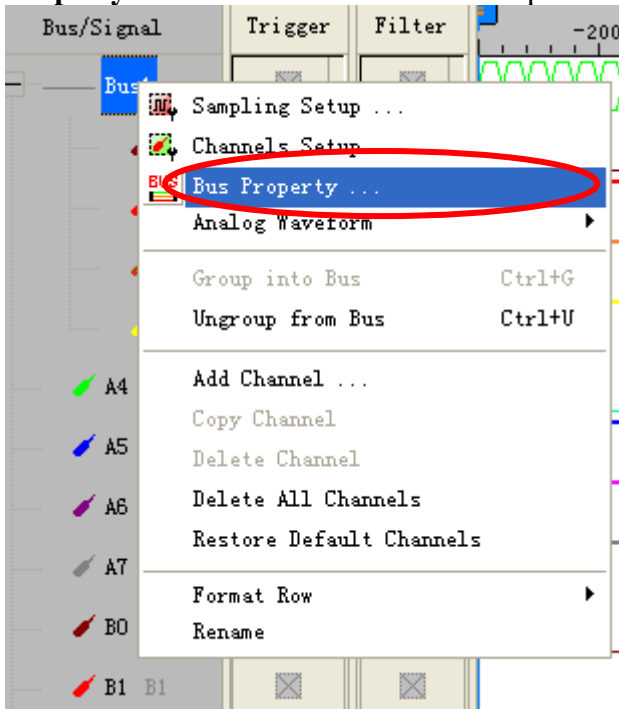


3 Operating Instructions

STEP 1. Group A0-A3 into **Bus1** by pressing the **Right Key** on the mouse. SPI (EEPROM AT25F) needs four channels to decode signals at least, so it is necessary to group four or more channels into a Bus.

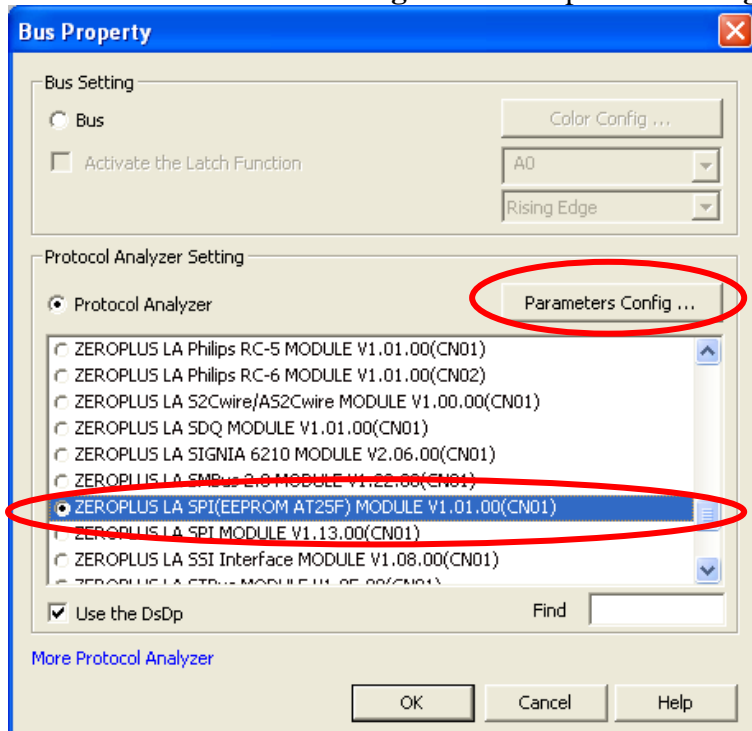


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

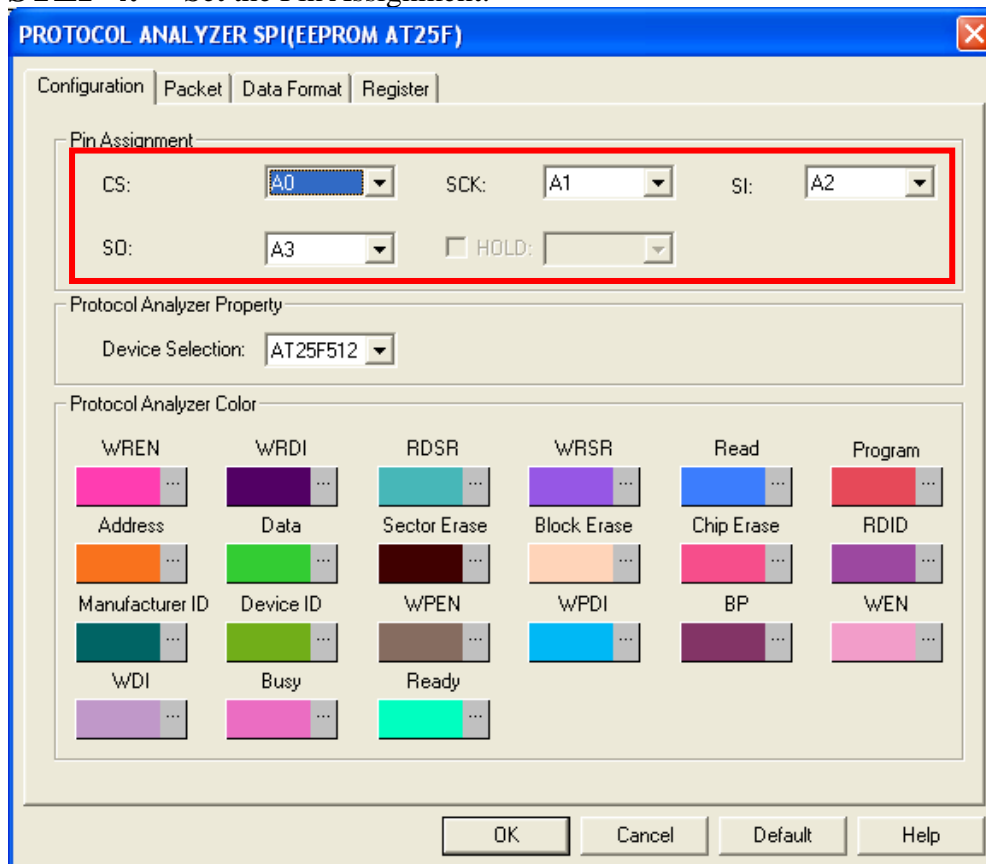




STEP 3. For Protocol Analyzer SPI (EEPROM AT25F) Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA SPI (EEPROM AT25F) MODULE V1.01.00 (CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

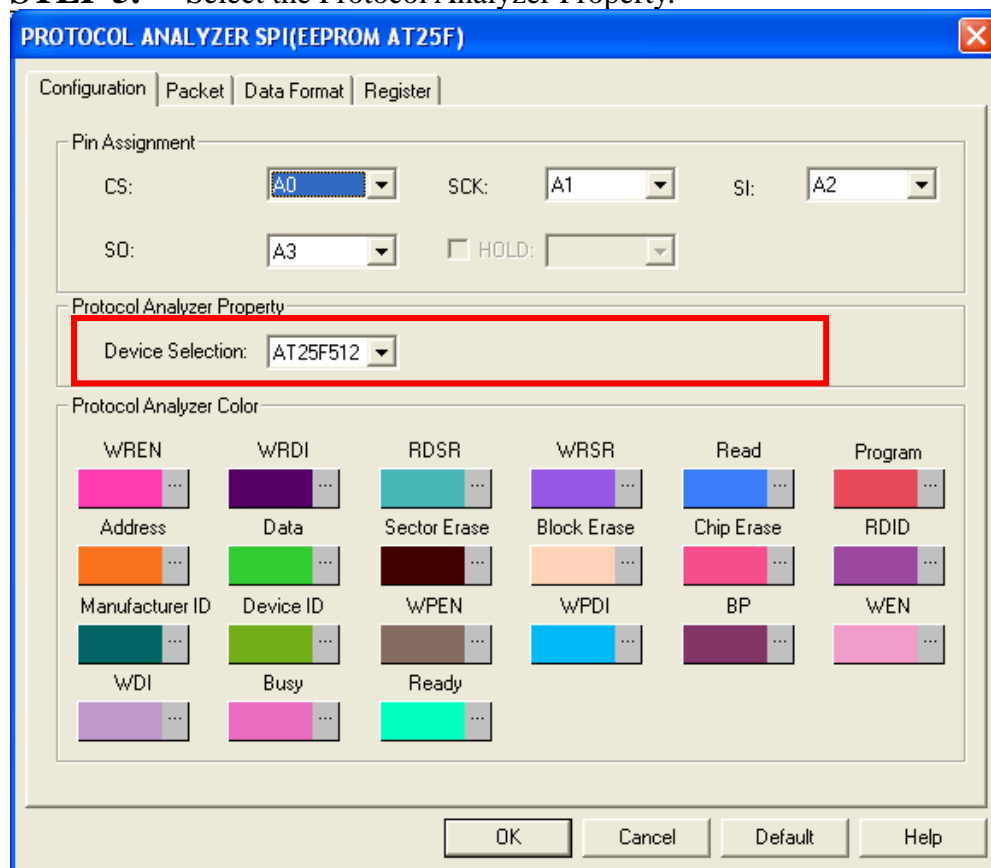


STEP 4. Set the Pin Assignment.

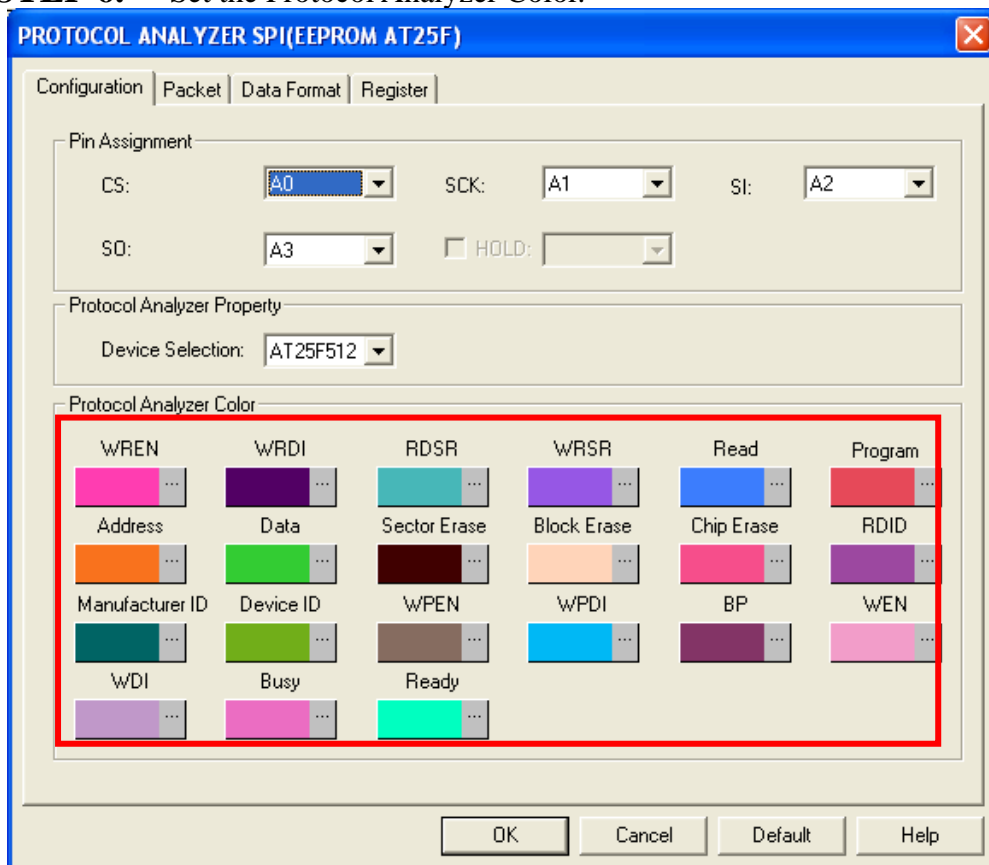




STEP 5. Select the Protocol Analyzer Property.



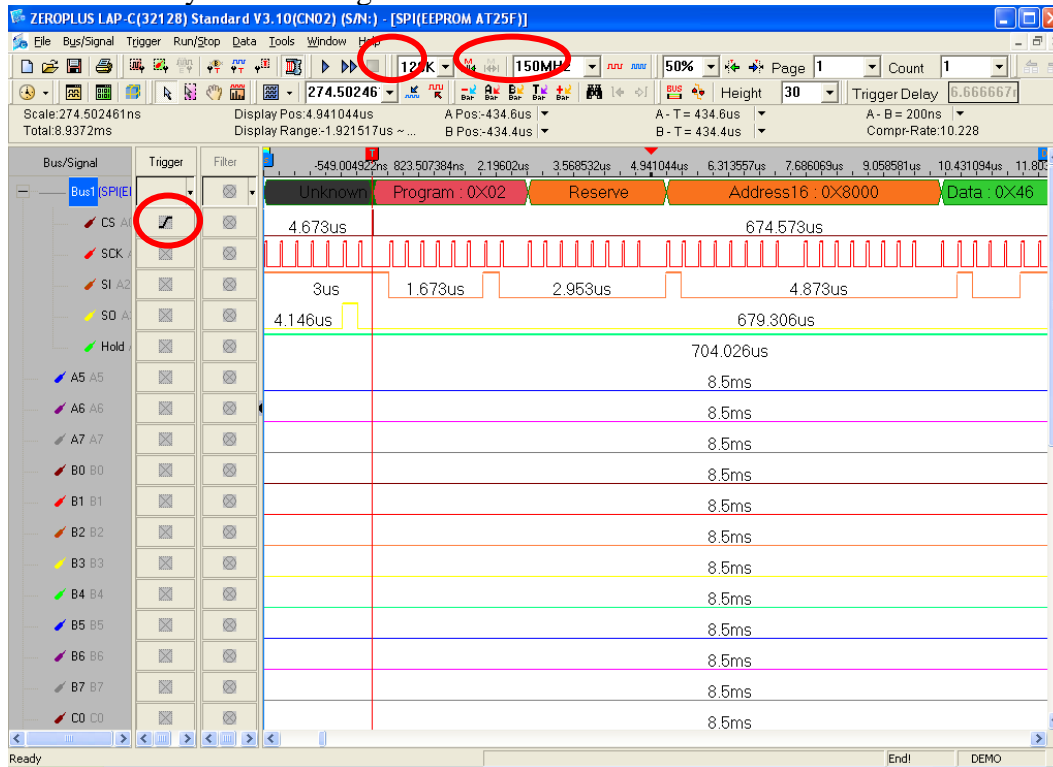
STEP 6. Set the Protocol Analyzer Color.





STEP 7. Following pictures show the completion of the protocol analyzer decoding and packet list. The trigger condition is set as Rising Edge, the memory depth is 128K; the sampling frequency is 150MHz (the sampling frequency should be more than eight times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

