



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

SPECIFICATION

MODEL: I2C (SERIAL EEPROM 24L SERIES)
Specification

PART NO : _____

VERSION : **V1.01**

Approver		Check	Design
GM	PM		

Customer Confirm

* After signature you fax to zeroplus company ,
please .



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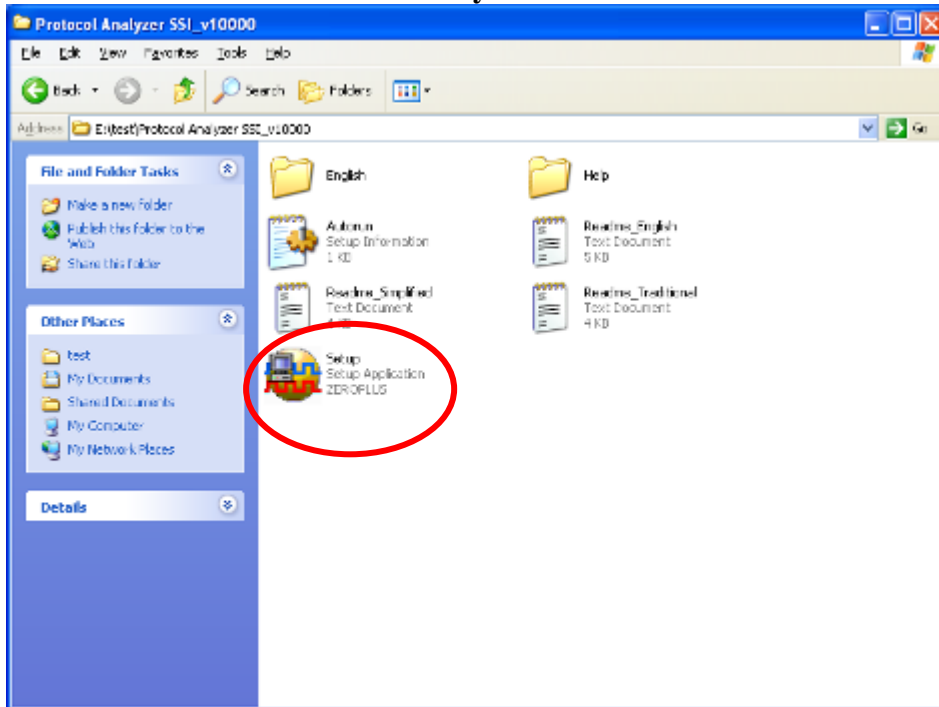
1 Software Installation

Please install the software as the following steps:

※ Remark: 1. The installation steps for all protocol analyzers are the same; you can complete the installation by following procedures. Following is an example on how to install protocol analyzer SSI.

※ Remark: 2. 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. Install Protocol Analyzer Module.

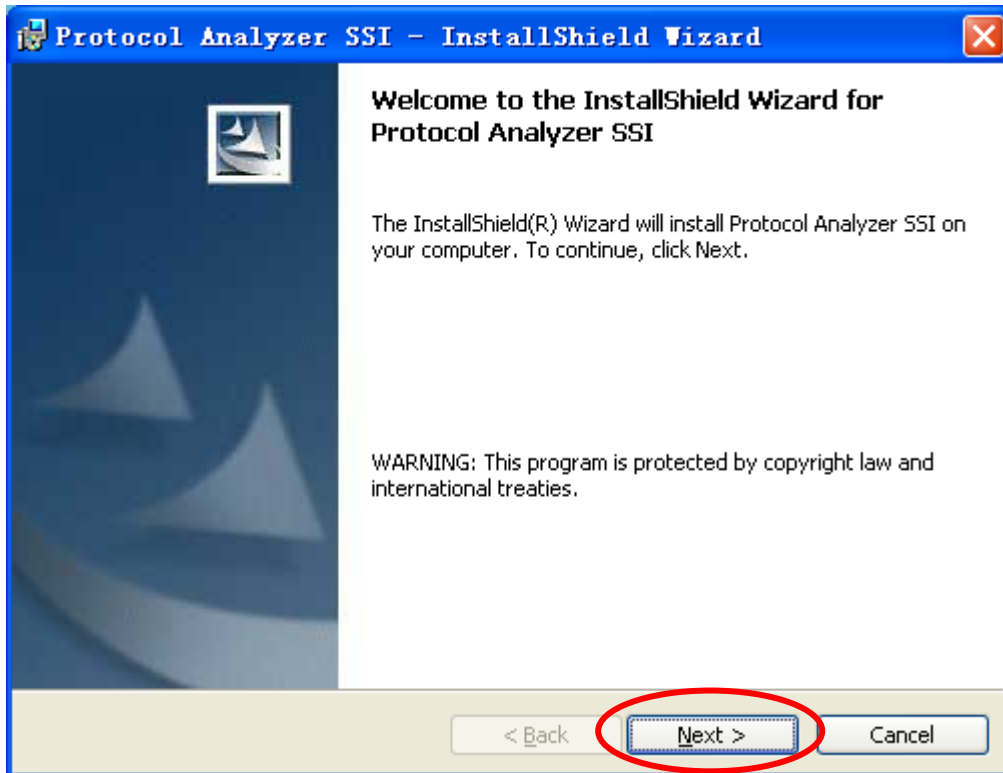


STEP 2. Click Install.

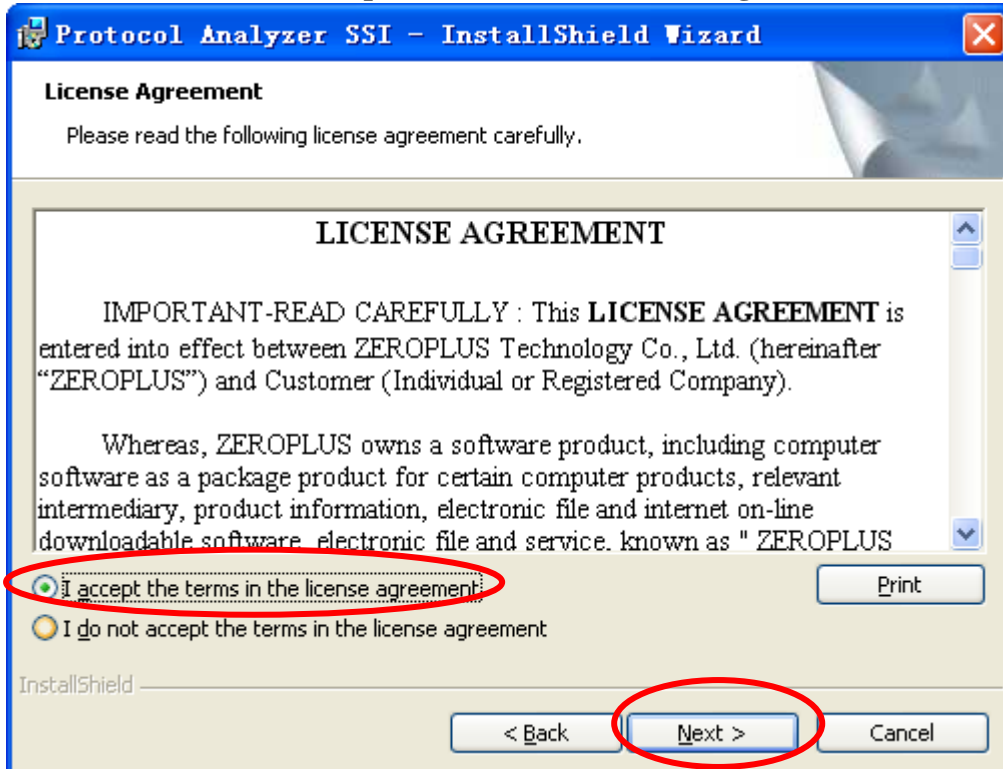




STEP 3. Click Next.

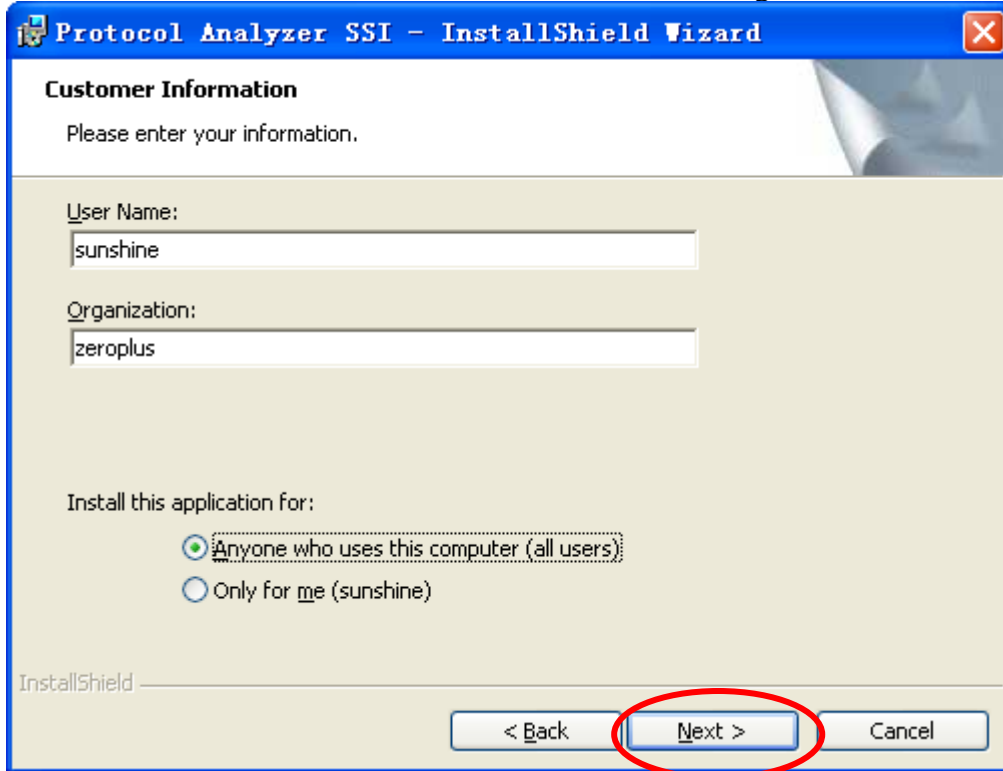


STEP 4. Select **I accept the terms in the license agreement**, and then press Next.

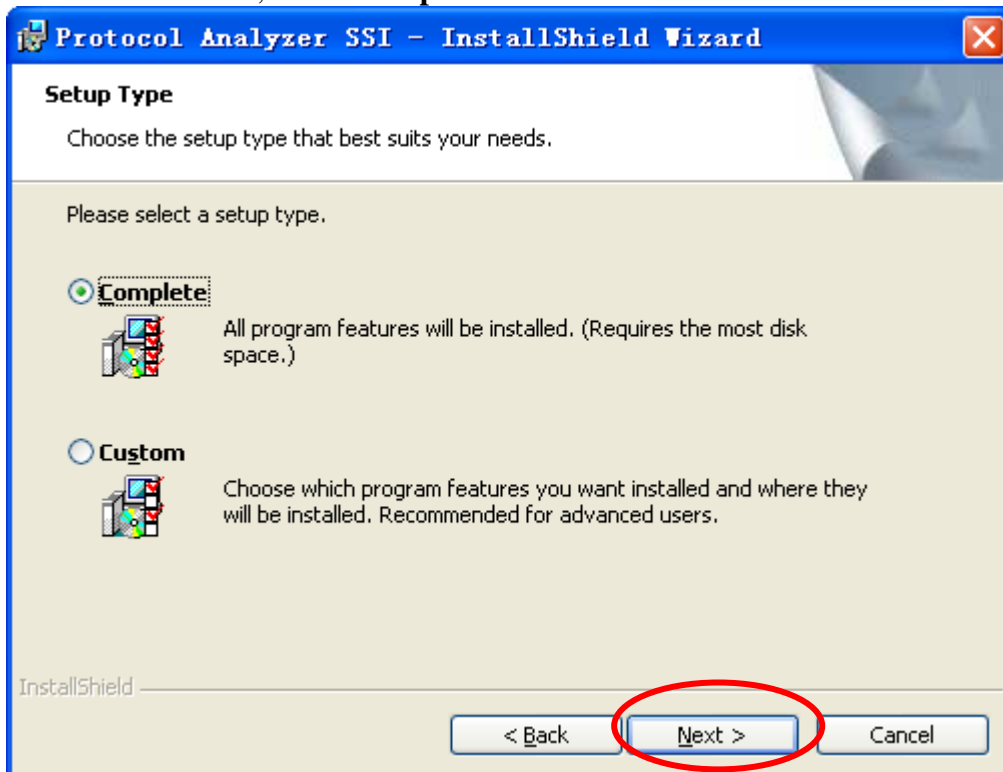




STEP 5. Fill in users' information in the below dialog box and click **Next**.

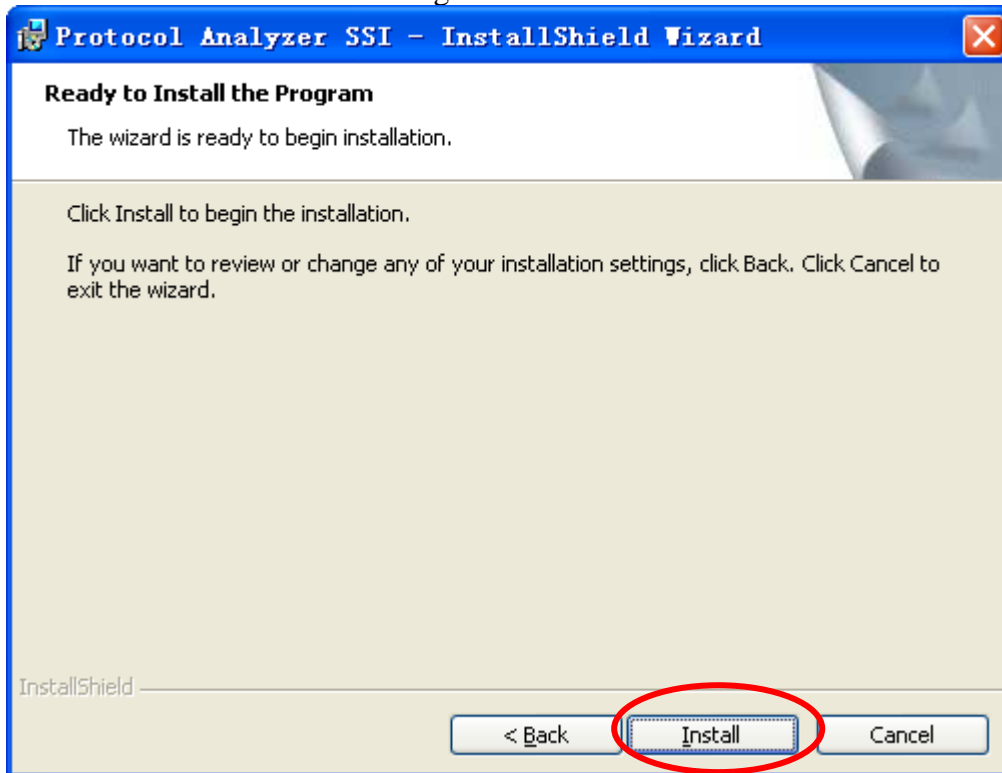


STEP 6. First, select **Complete** and then click **Next**.

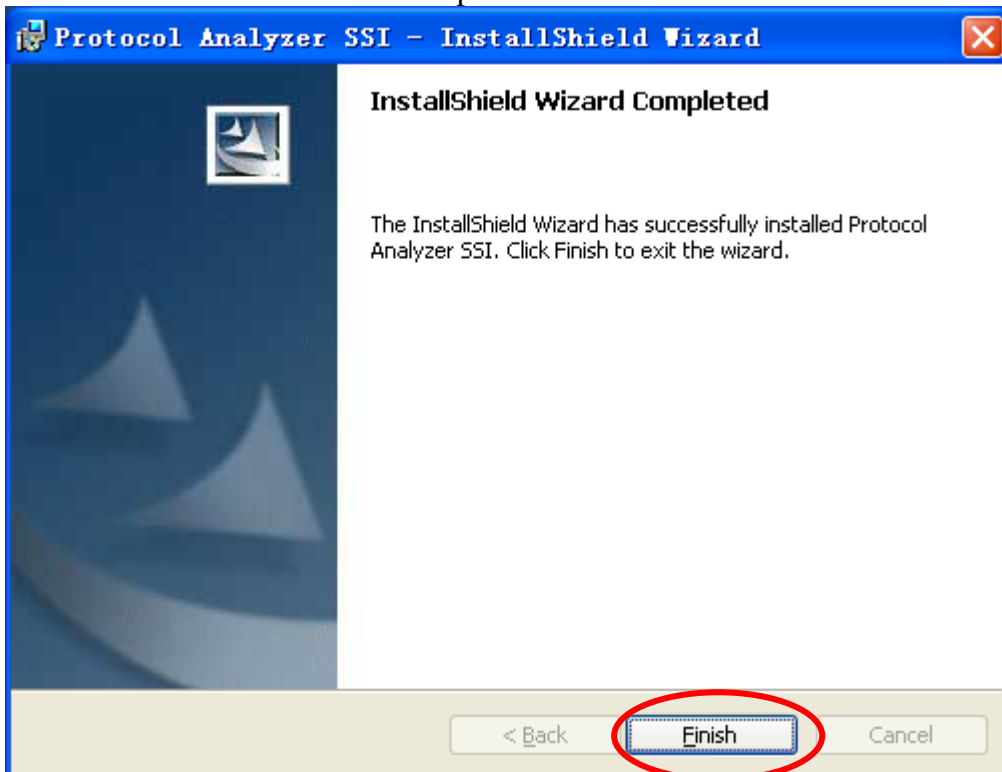




STEP 7. Click **Install** to begin the installation.



STEP 8. Click **Finish** to complete the installation.

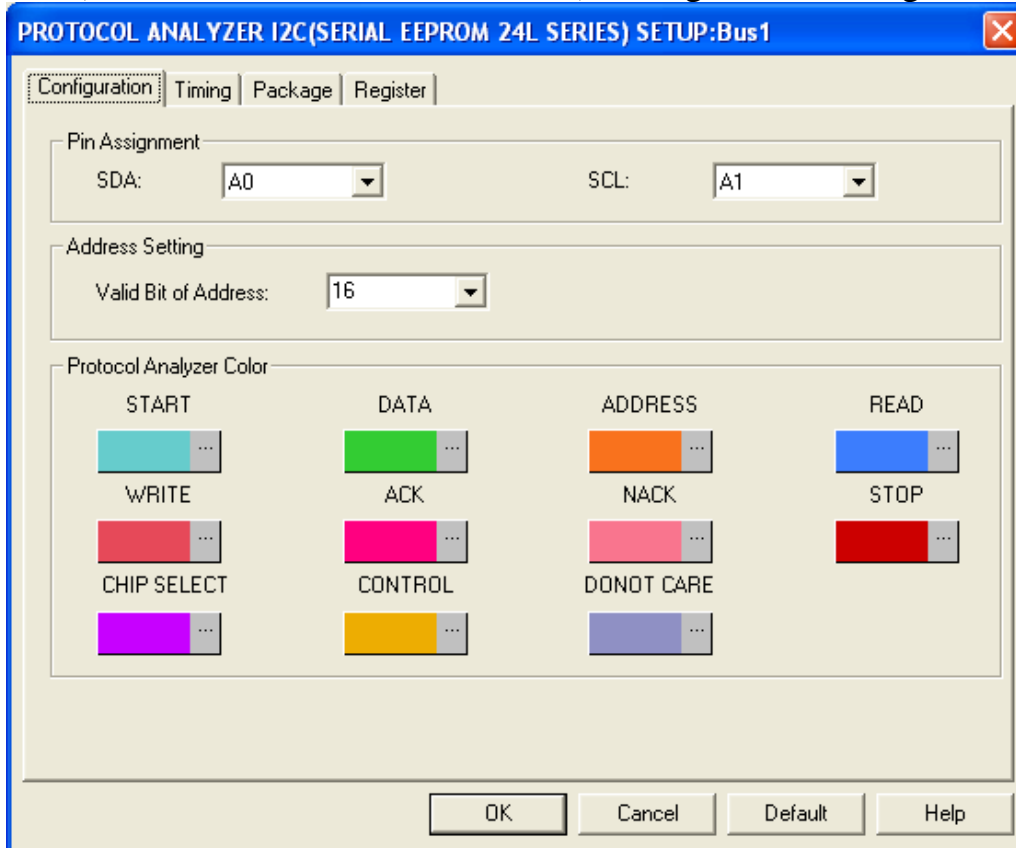




2 User Interface

In the configuration dialog box, please refer to the below images to select options of setting **I2C (SERIAL EEPROM 24L SERIES) MODULE**.

I2C (SERIAL EEPROM 24L SERIES) Configuration Dialog Box



Pin Assignment: There are two channels, SDA and SCL; users can set the channels for them as their requirements, and the set result will affect the correctness of the decoding.

SDA: Its default is A0; it is the data transmission channel when decoding.

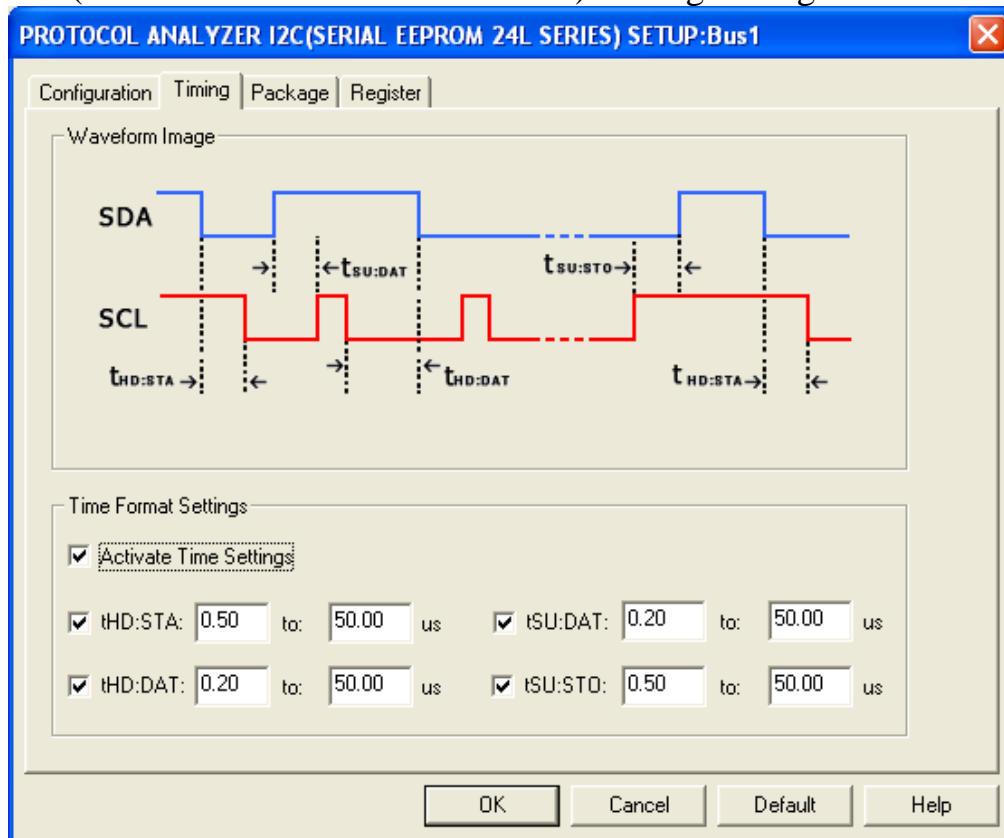
SCL: Its default is A1; it is the clock transmission channel when decoding.

Valid Bit of Address: It is used to set the length of ADDRESS; users can set the length within the range from 4 to 16; therein, the length must be an integer.

Protocol Analyzer Color: It is used to set the colors of the items; users can vary the color as their requirements.



I2C (SERIAL EEPROM 24L SERIES) Timing Dialog Box



Timing: It can make the analysis of the data within the flexible time according to the different Timing settings.

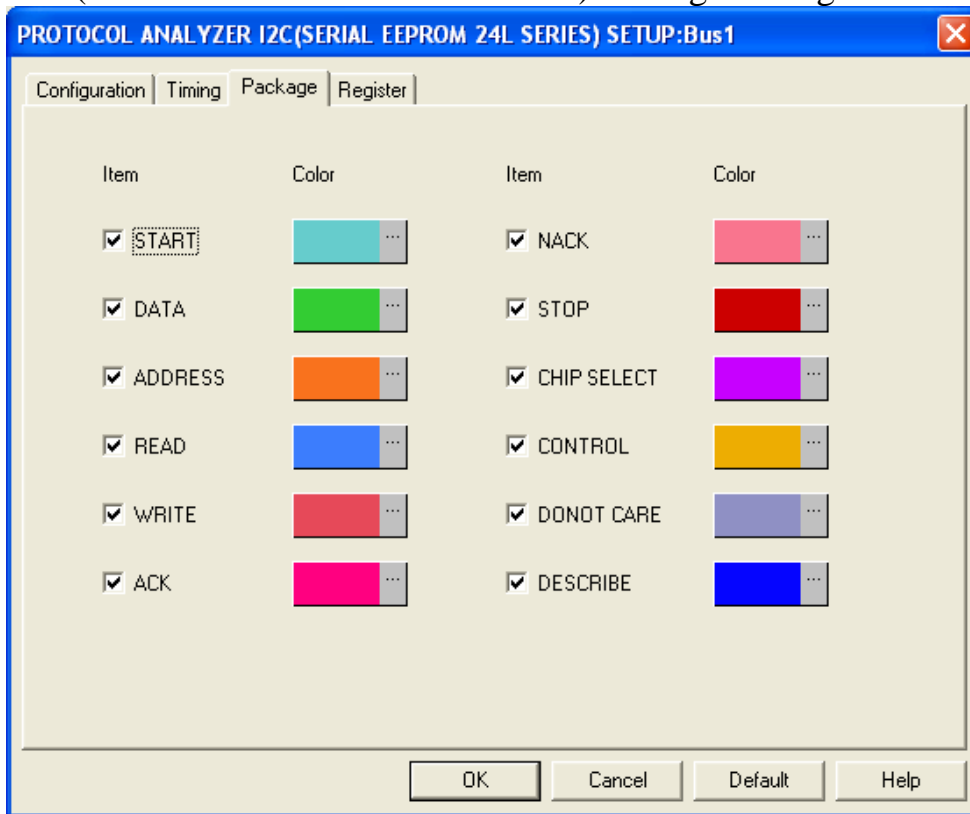
Waveform Image: Describe the position of the set time.

Time Format Settings:

It can set the time after activating time settings. The set time can be taken as the conditions of judging decoding. For example, decoding START, firstly judge whether the conditions of START is coincident or not, then judge whether the set time of tHD: Whether the set time of STA coincides with the factual waveform. It can start decoding START when both of the two conditions are coincident. The other package segments are the same with the above theory.

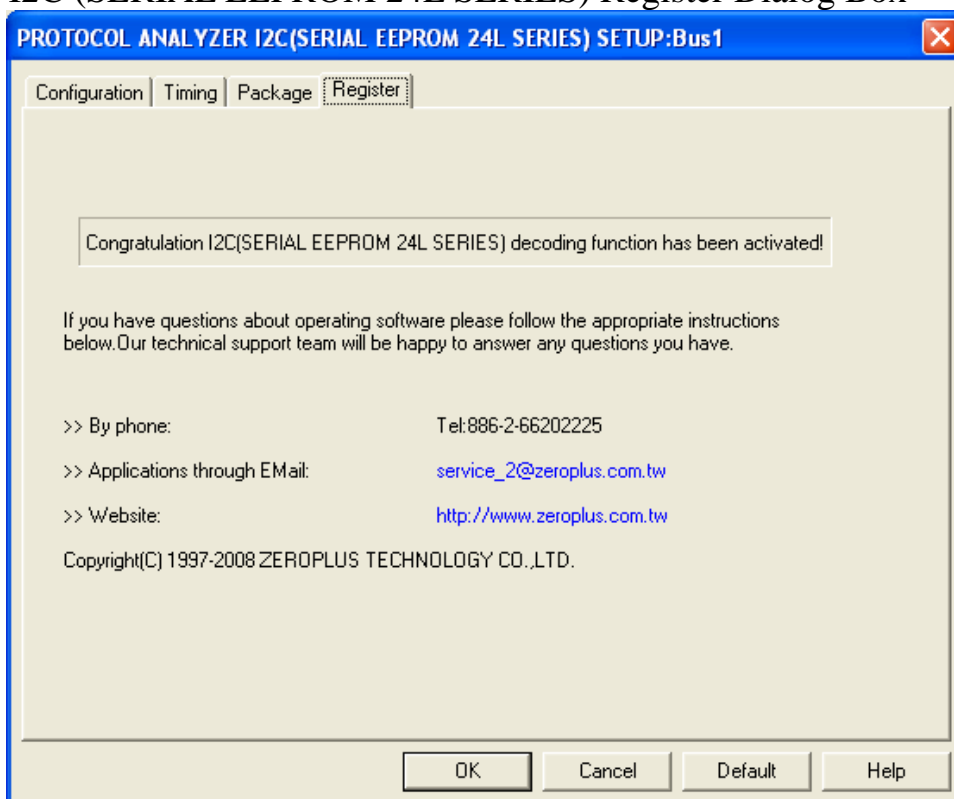


I2C (SERIAL EEPROM 24L SERIES) Package Dialog Box



Users can vary the color of the package as their requirements.

I2C (SERIAL EEPROM 24L SERIES) Register Dialog Box

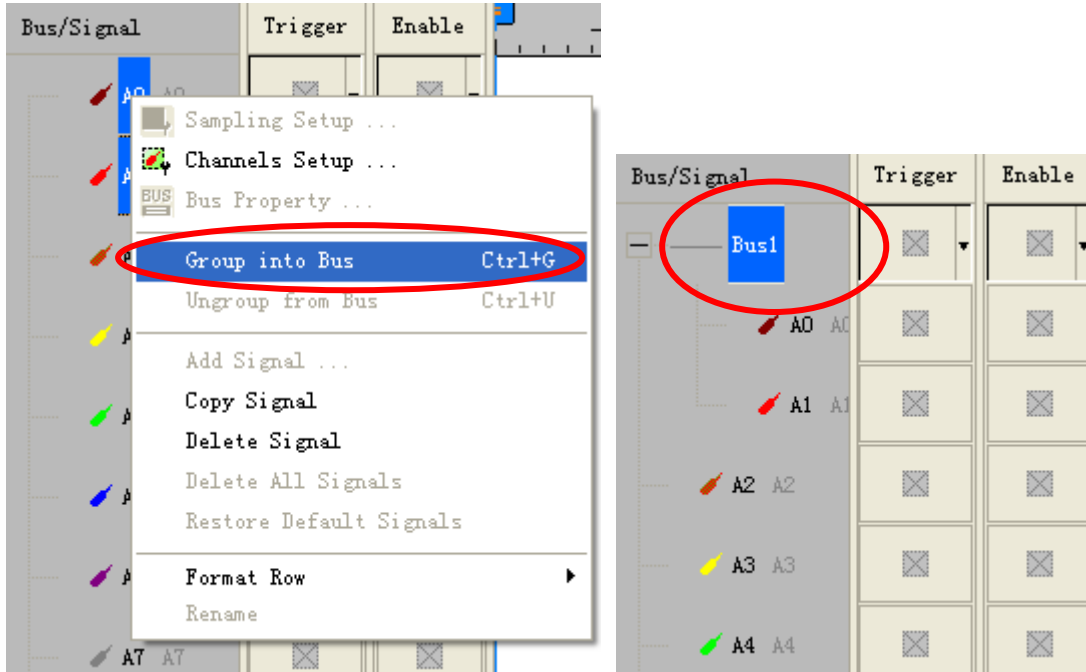


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

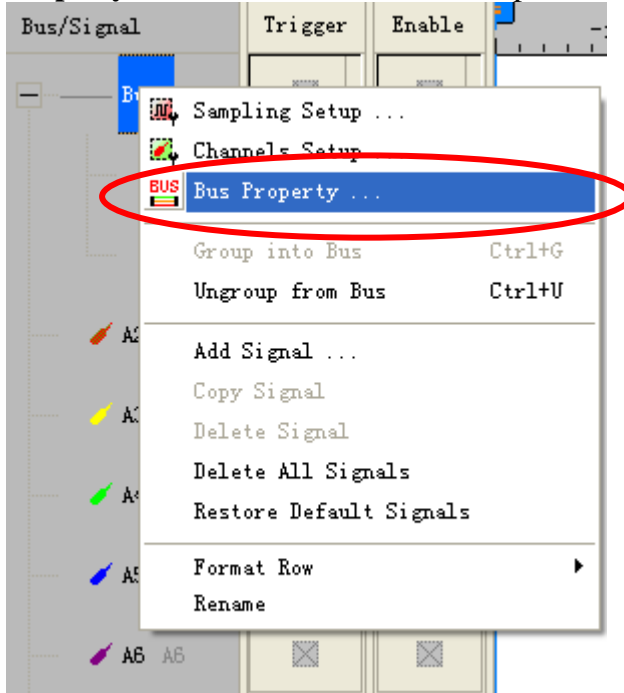


3 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse.

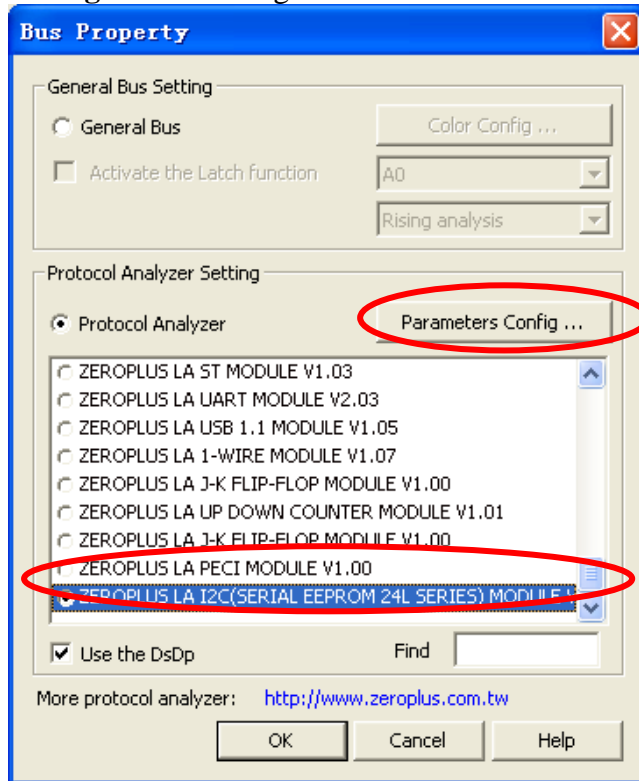


STEP 2. Select **Bus1**, then press **Right Key** on the mouse to list menu, then press **Bus Property** or **Bus bar** on the toolbar to open **Bus Property** dialog box.

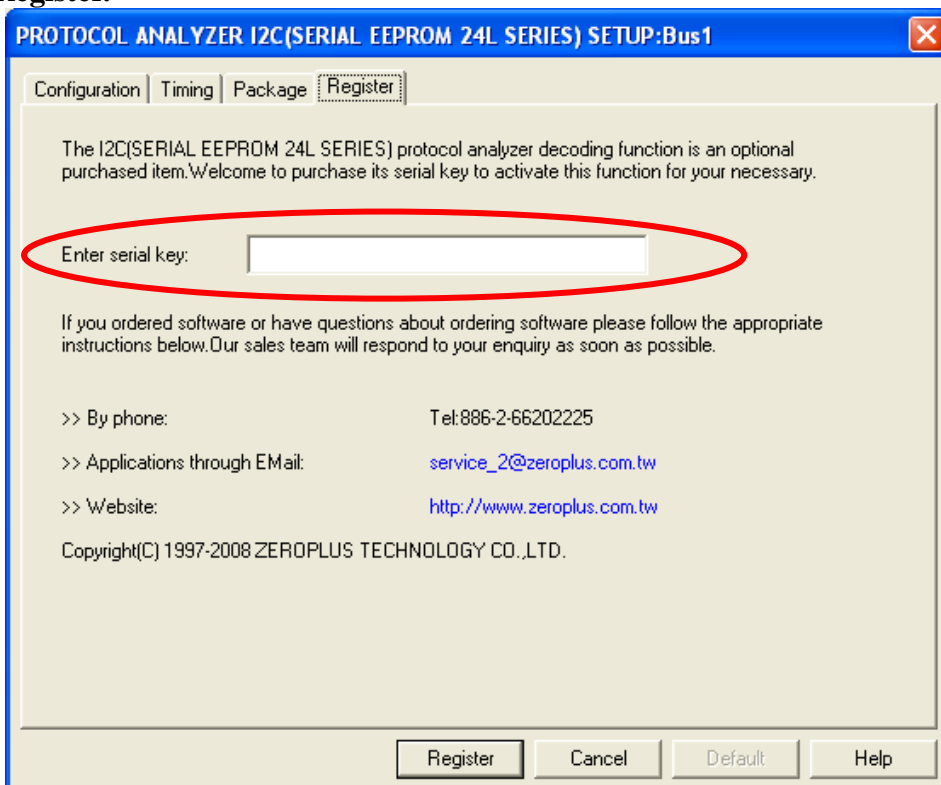




STEP 3. For Protocol Analyzer I2C (SERIAL EEPROM 24L SERIES) Parameters Configuration, select Protocol Analyzer, and then select **ZEROPLUS LA I2C (SERIAL EEPROM 24L SERIES) MODULE V1.01**. Next click **Parameters Configuration** to open **Configuration** dialog box.

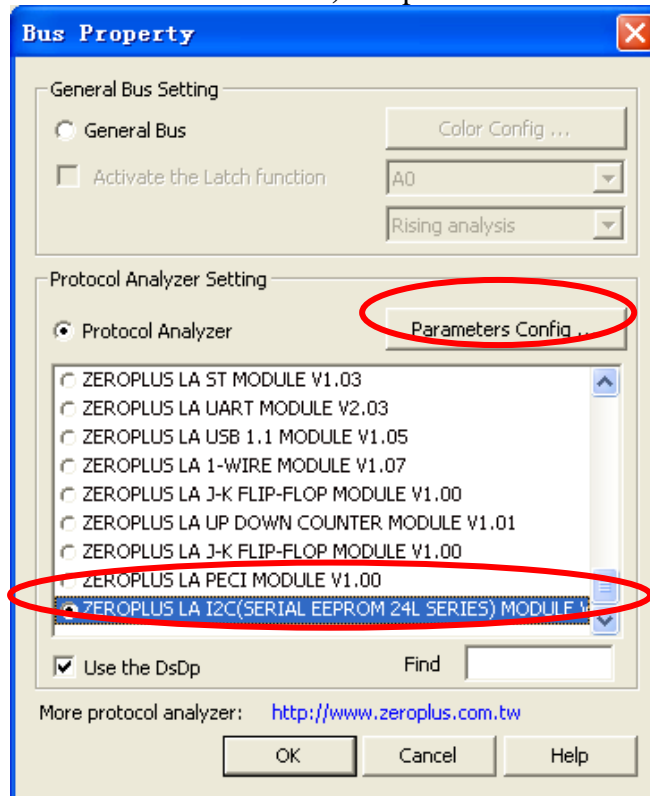


STEP 4. Click Register tab to type the serial key number of **I2C (24L)**. Then, press **Register**.

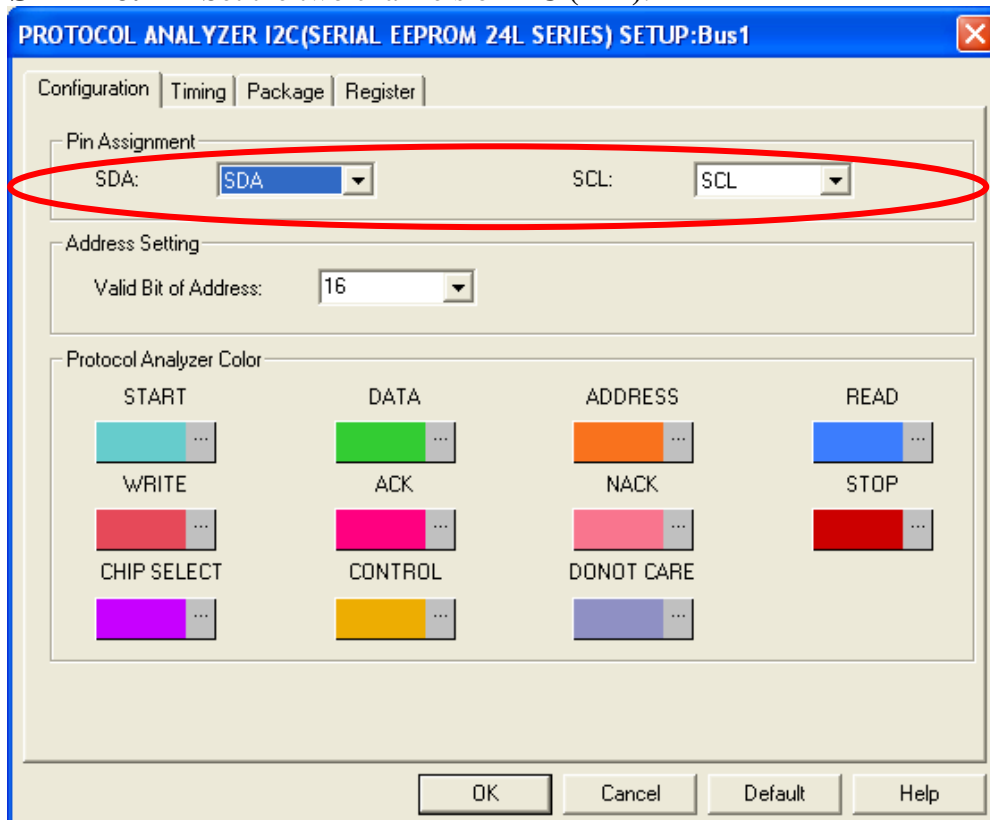




STEP 5. After completing **Register**, come back to the **Bus Property** dialog box, and then click the **Parameters Configuration** to start the Protocol Analyzer **I2C (SERIAL EEPROM 24L SERIES)** setup.

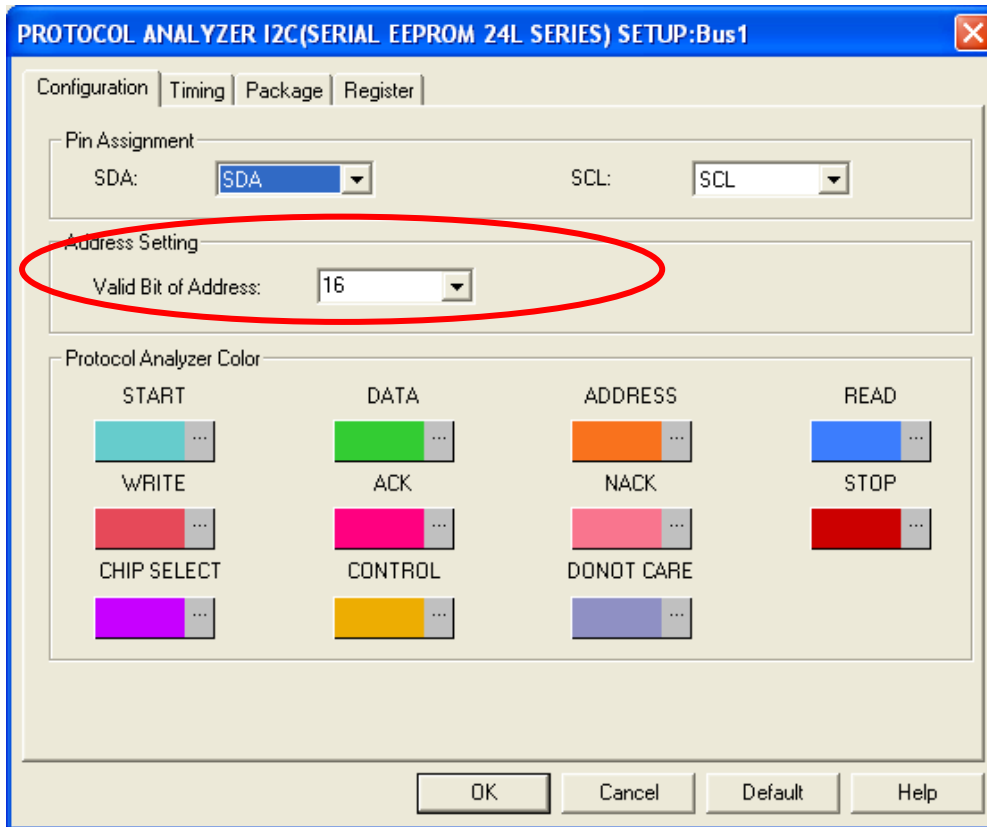


STEP 6. Set the two channels of **I2C (24L)**.

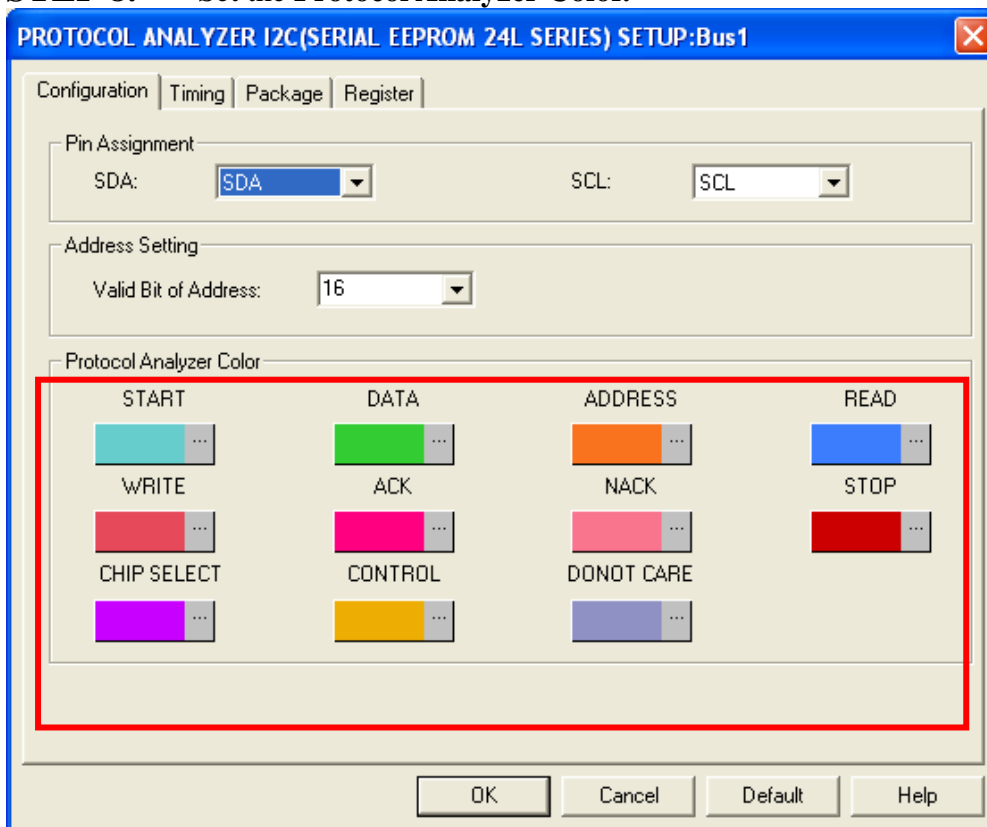




STEP 7. Set the Valid Bit of Address.

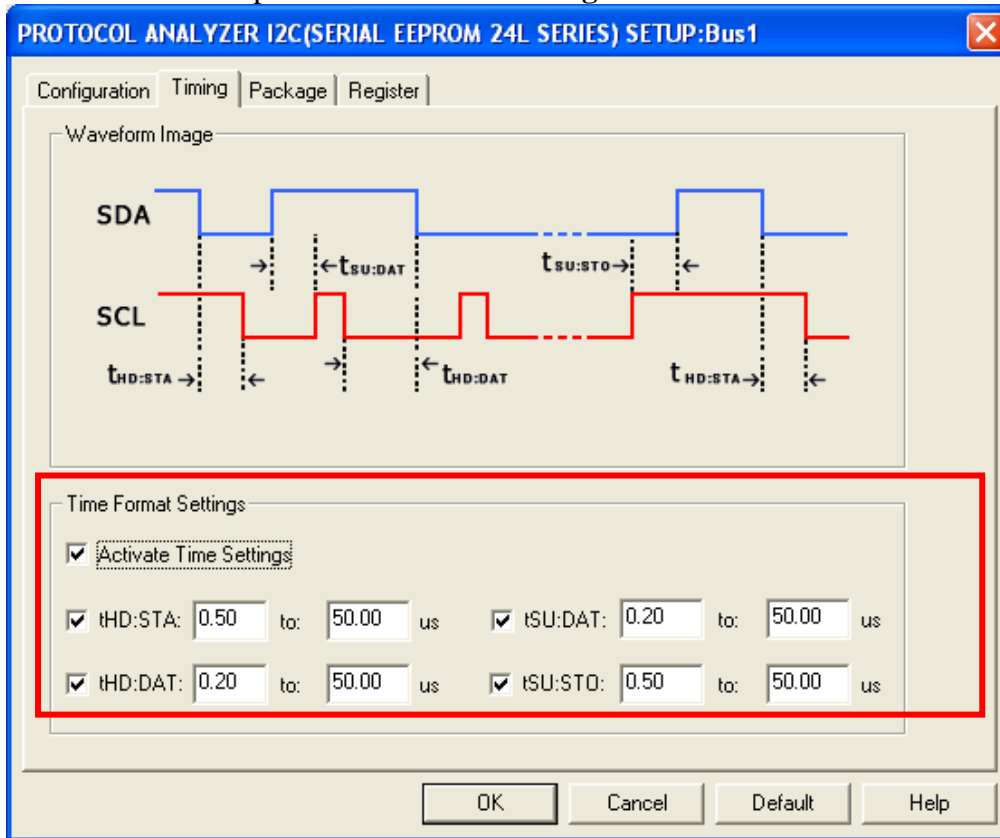


STEP 8. Set the Protocol Analyzer Color.



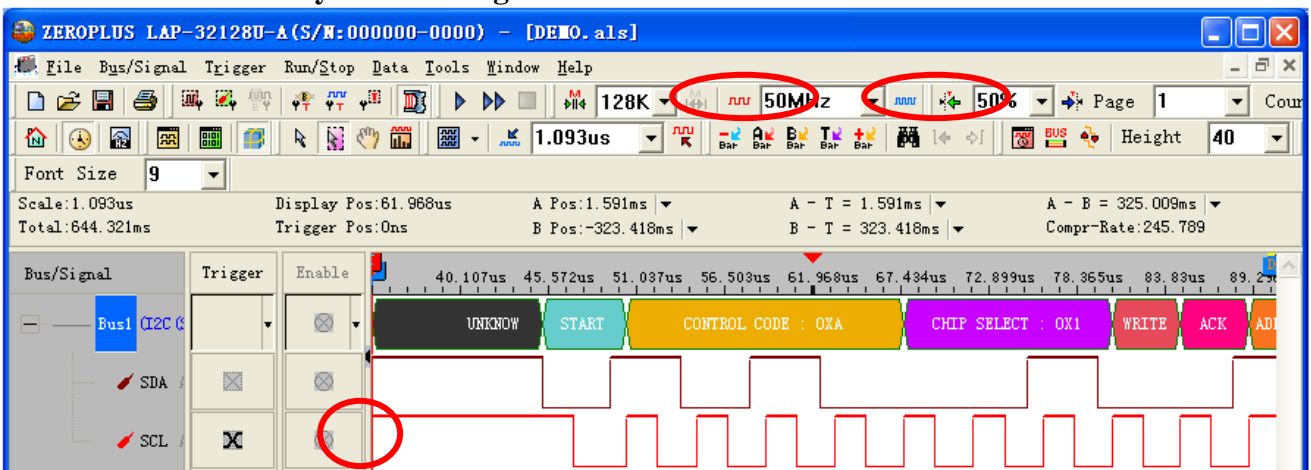


STEP 9. The setup of Time Format Settings.



STEP 10. Following pictures show the completion of the protocol analyzer decoding and the package list. The trigger condition is set as Either Edge; the memory depth is 128K; the sampling frequency is 50MHz.

Protocol Analyzer Decoding





Package List

The screenshot shows the ZeroPlus software interface for a device with S/N: 000000-0000. The main window displays a signal trace for Bus1 (I2C) with a scale of 1.093us and a trigger position of 61.968us. The trace shows a sequence of events: UNKNOWN, START, CONTROL CODE: 0XA, CHIP SELECT: 0X1, WRITE, ACK, and ADDRESS. Below the trace is a table listing the detected packages.

Package #	Name	TimeStamp	START	CONTROL CODE	CHIP SELECT													
1	Bus1(I2C(SERIAL EEPROM 24L SERIES))	45.24us	START	0XA	0X1													
	WRITE	ACK	ADDRESS_H	ACK	ADDRESS_L	ACK	DATA	ACK	STOP									
	WRITE	ACK	0X96	ACK	0X47	ACK	0X01	ACK	STOP									
2	Bus1(I2C(SERIAL EEPROM 24L SERIES))	254.68us	START	0XA	0X1													
	WRITE	ACK	ADDRESS_H	ACK	ADDRESS_L	ACK	DATA	ACK	DATA	ACK	DATA	ACK	DATA	ACK	DATA	ACK		
	WRITE	ACK	0X47	ACK	0X75	ACK	0X00	ACK	0X00	ACK	0X00	ACK	0X00	ACK	0XFF	ACK	0X23	ACK
	DATA	ACK	DATA	ACK	DATA	ACK	STOP											
	0XDF	ACK	0X3E	ACK	0X00	ACK	STOP											