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

SPECIFICATION

MODEL: IIC Specification

PART NO： B08015

VERSION： V1.07

Approver		Check	Design	Customer Confirm
GM	**PM**			

＊After signature you fax to zeroplus company , please .

Content

Publication Release:

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. Below 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.
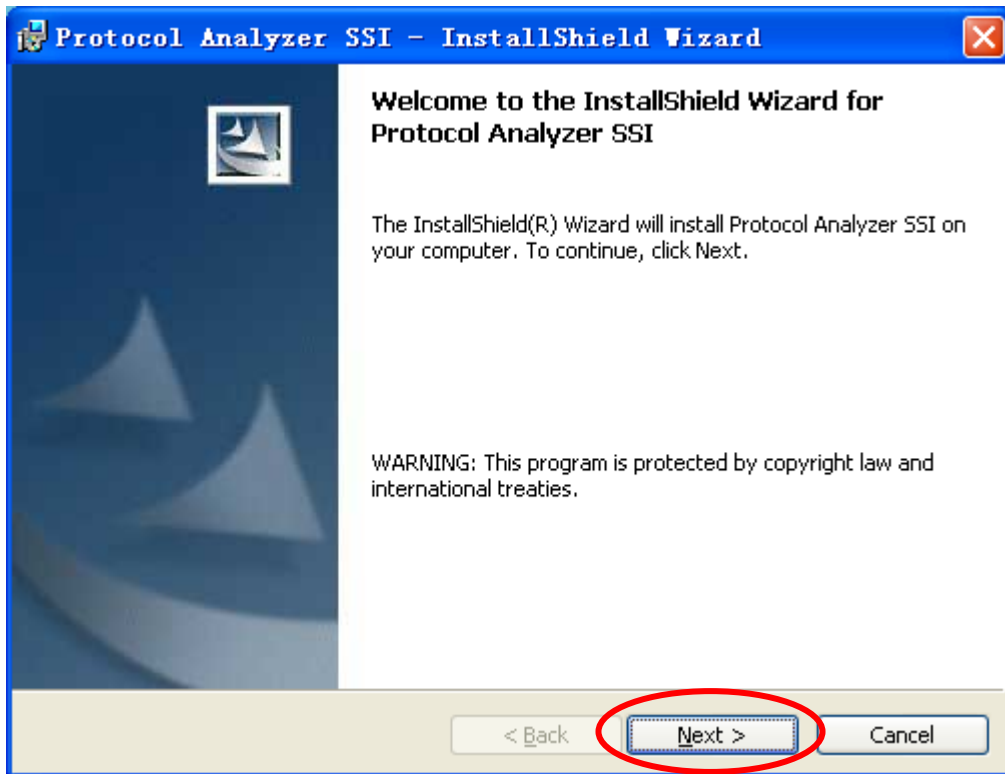
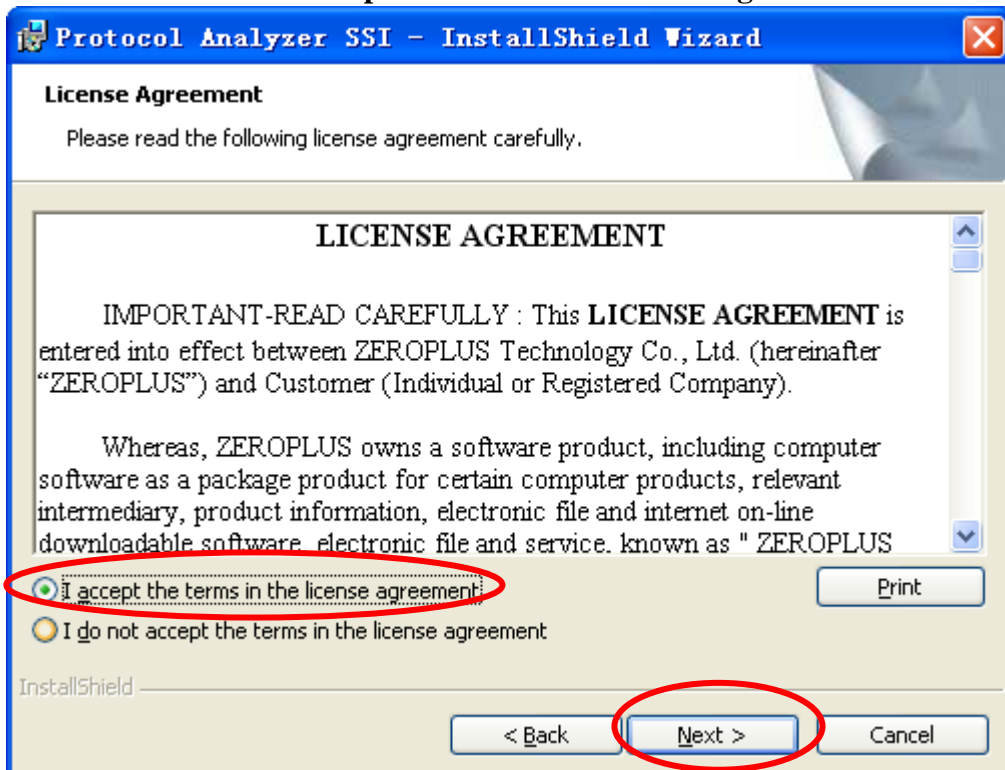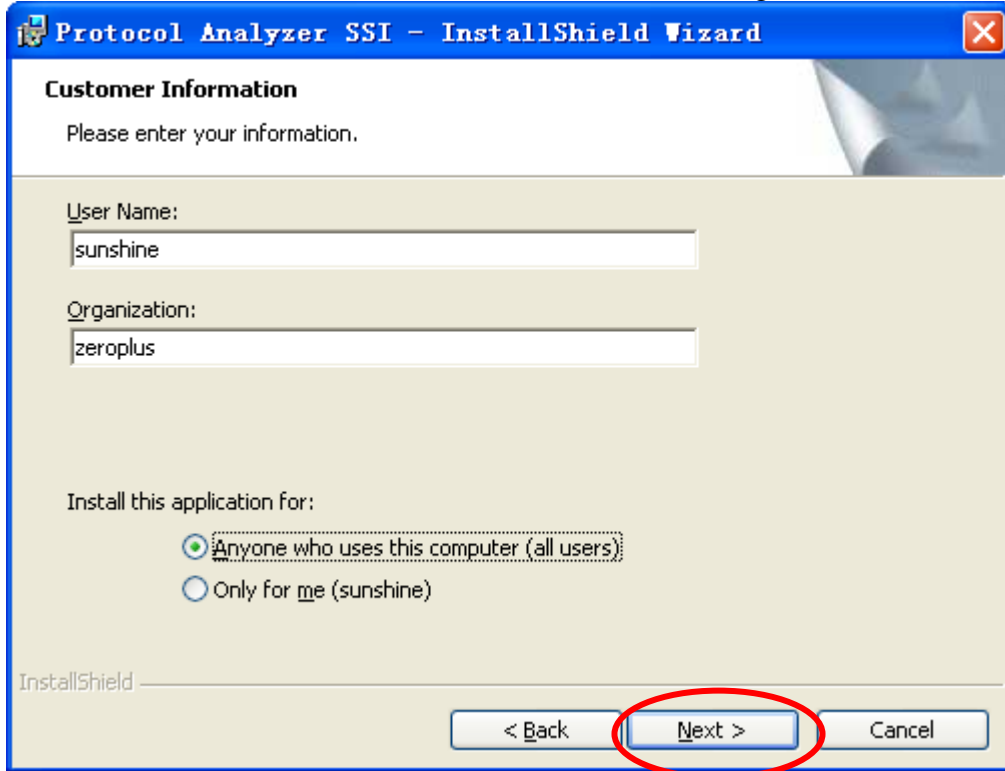**STEP 1.** Install **Protocol Analyzer Module.**

STEP 2. Click **Install.**

孕龍科技股份有限公司
Zeroplus Technology Co., Ltd.
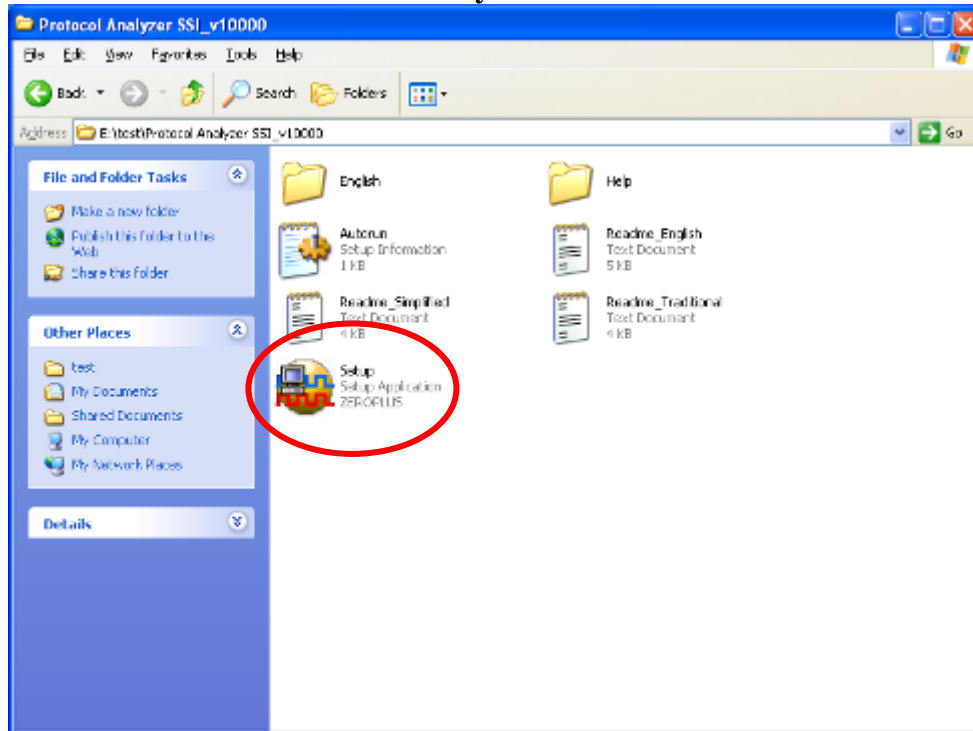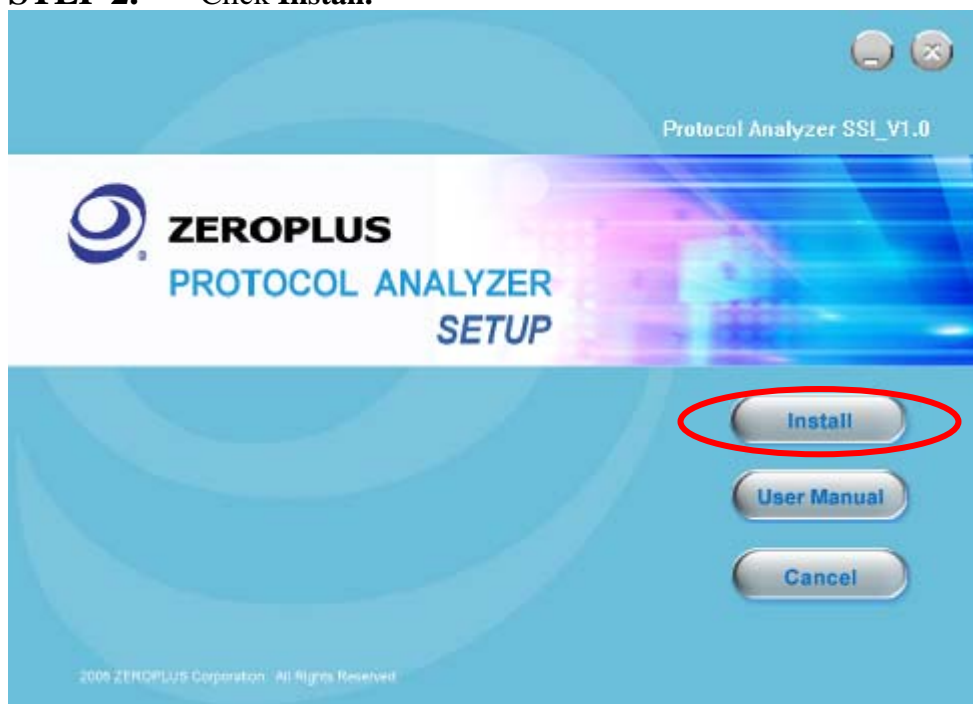
STEP 3.   Click **Next.**

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

Copyright © Zeroplus technology CO., LTD.   All rights reserved.   FM07F1A
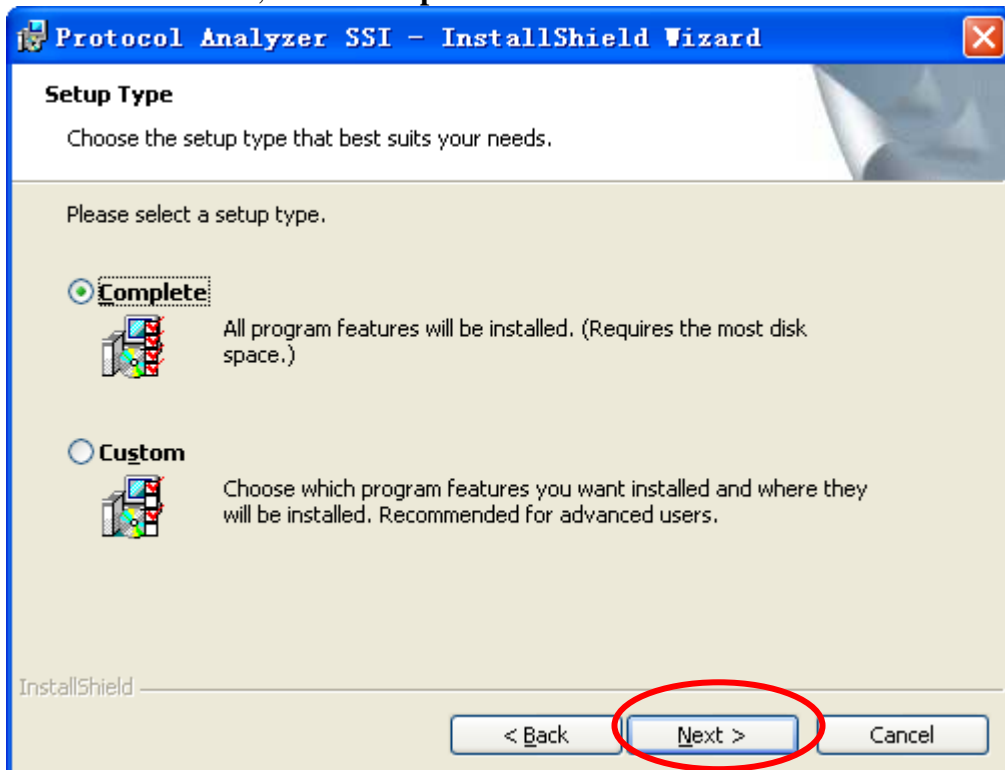Publication Release:

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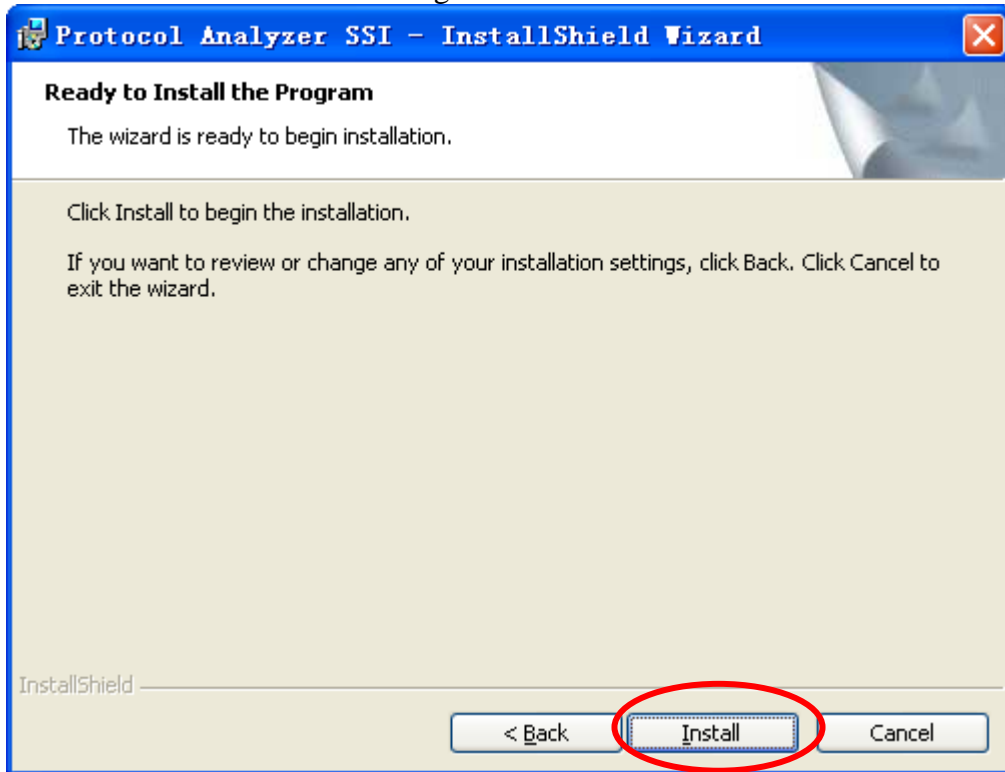

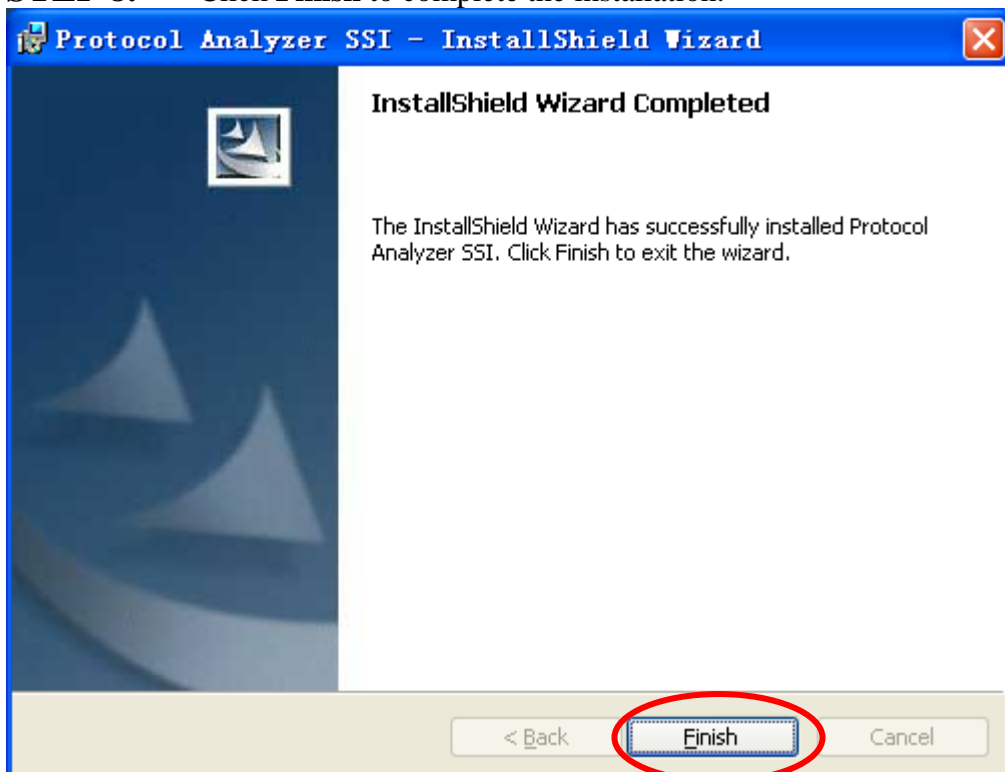**STEP 6.**   First, select **Complete** and then click **Next.**

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

STEP 8.   Click **Finish** to complete the installation.
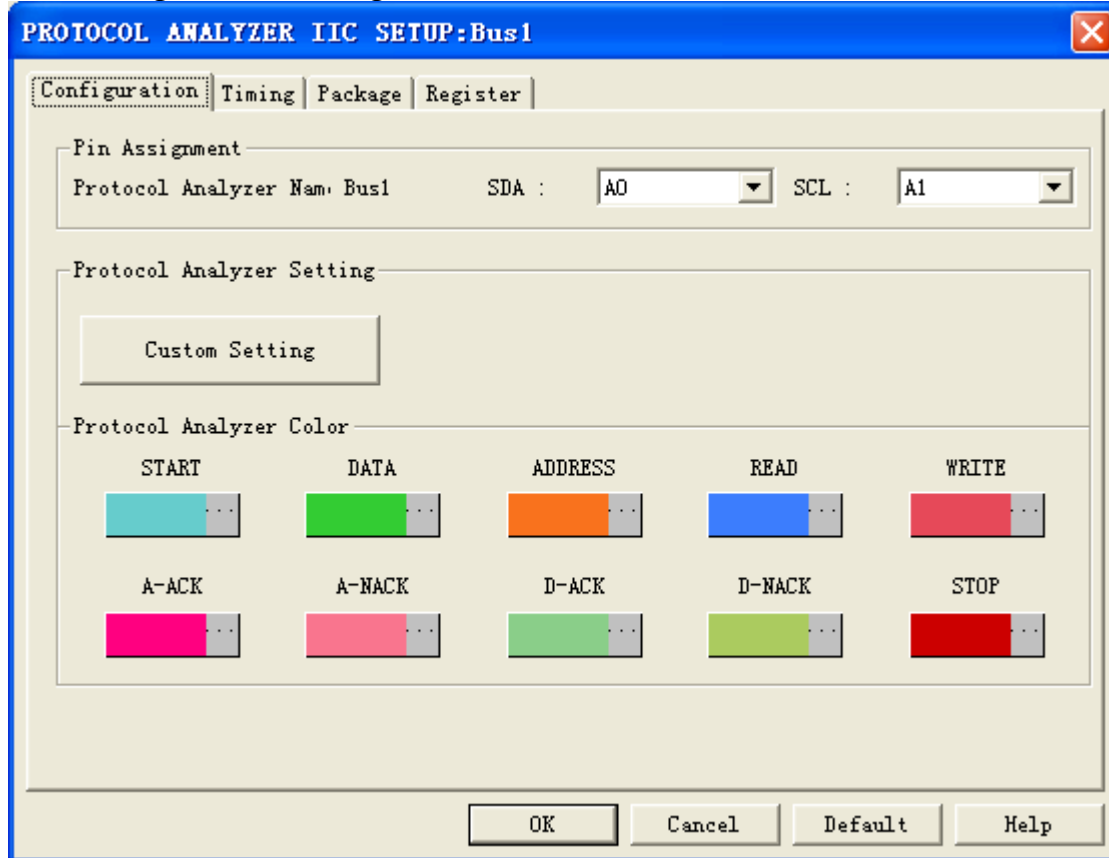
Publication Release:

2 User Interface

Please refer to the below images to select options of setting **IIC MODULE**.

IIC Configuration Dialog Box

Pin Assignment: Select the displayed name for Protocol Analyzer IIC presently.

**SDA Channel**: Select SDA channel in IIC protocol.

SCL Channel: Select SCL channel in IIC protocol.

Custom Setting: Open the protocol analyzer IIC **Custom Setting** dialog box.

Protocol Analyzer Color: Set the displayed colors of all sections, including DATA/ADDRESS,

START, READ, WRITE, A-ACK, A-NACK, D-ACK, D-NACK and STOP.

Publication Release:

IIC Protocol Analyzer Customize Dialog Box.
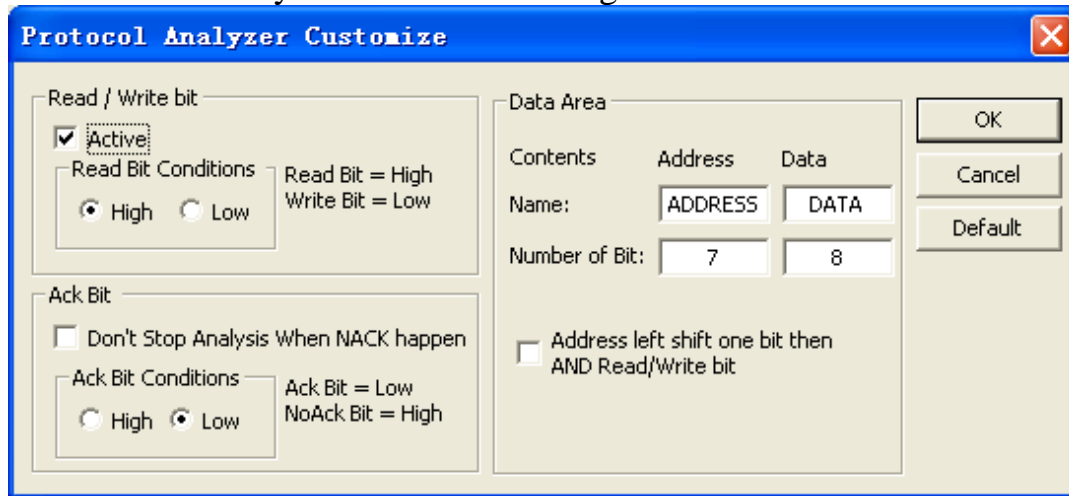
Regarding judging the data in protocol analyzer IIC, judge SDA data when SCL performs as **Rising Edge**. For example, when SCL is **Rising Edge**, SDA is 0(Low Level), and the data captured in protocol analyzer IIC is 0(Low Level).

Read/Write bit: Set the judgement condition of **Read/Write** bit. The default **Read** condition is high level, and the default **Write** condition is low level. That is to say, the default judgement of **Read/Write** bit is that when SDA is equal to 0, it denotes WRITE; when SDA is equal to 1, it denotes READ.

Ack Bit: Set the judgement conditions for Ack Bit. The default of Ack Bit is Low; the default of NoACK Bit is High. That is to say, when SDA is equal to 0, it denotes ACK; when SDA is equal to 1, it denotes NACK.
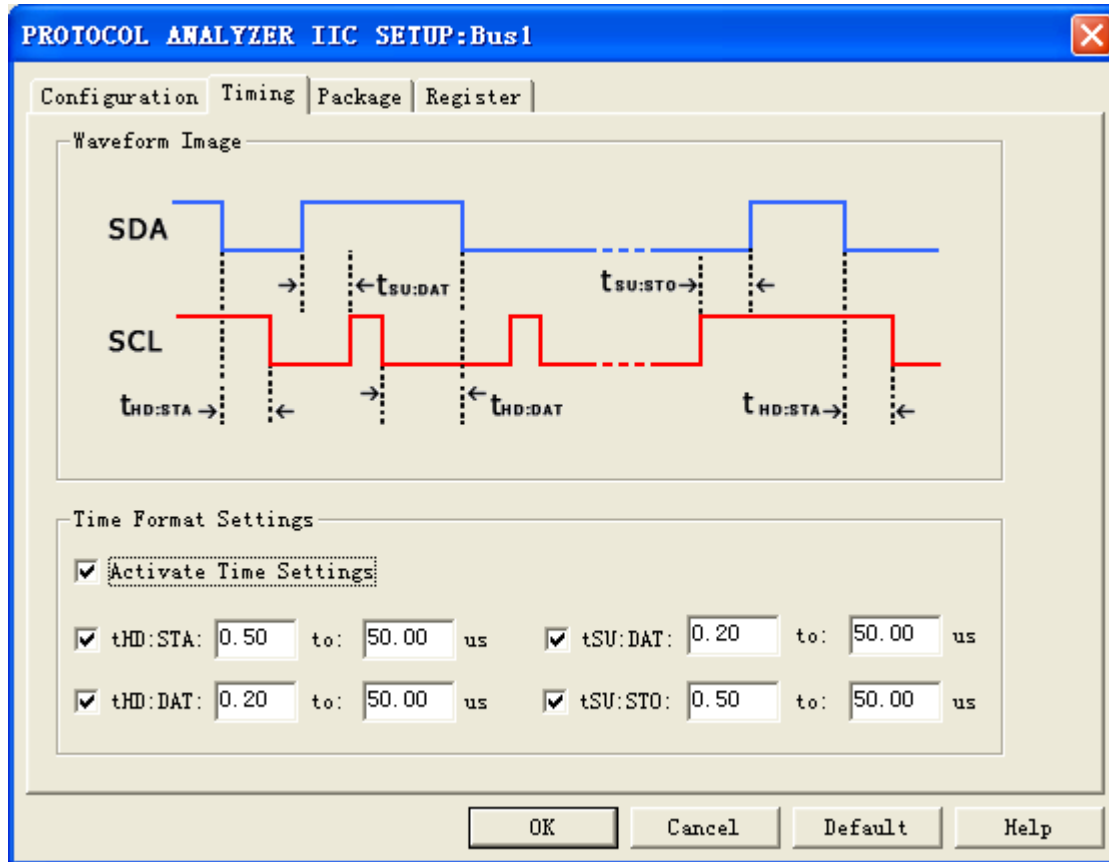
Data Area:

Name: The name can be edited; the defaults on the image are ADDRESS and DATA.

Number of Bit: Bit number can be edited. The defaults on the image are that ADDRESS is 7bit and DATA is 8bit.

Publication Release:

IIC Timing Dialog Box

Waveform Image: Describe the position of the set time.

Time Format Settings: When the Time Settings are activated, the set time will become the condition of judging decoding. For example, when you want to decode START, you should judge whether the conditions of START is satisfied firstly, and then judge whether the set time of tHD: STA is coincident with the factual waveform. If the two conditions are satisfied, the START can be decoded. Other segments decoding of the package are the same as START decoding.

Publication Release:

IIC Package Dialog Box
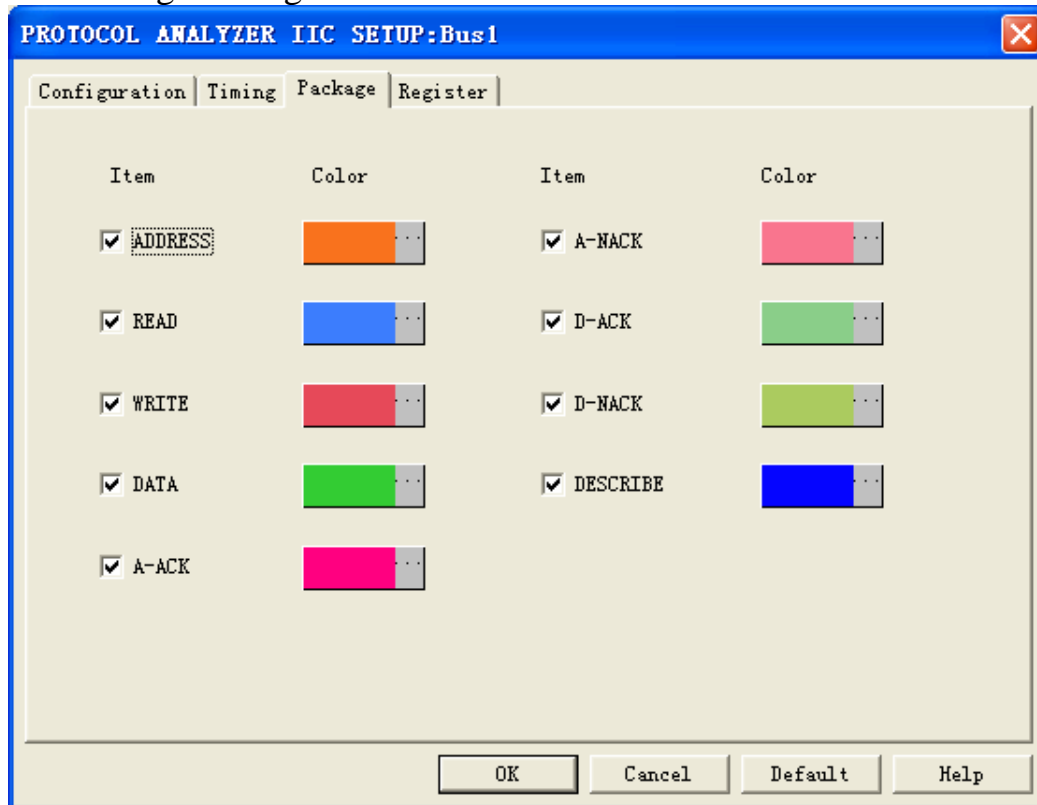
In the package part, users can select the displayed items and set their colors.

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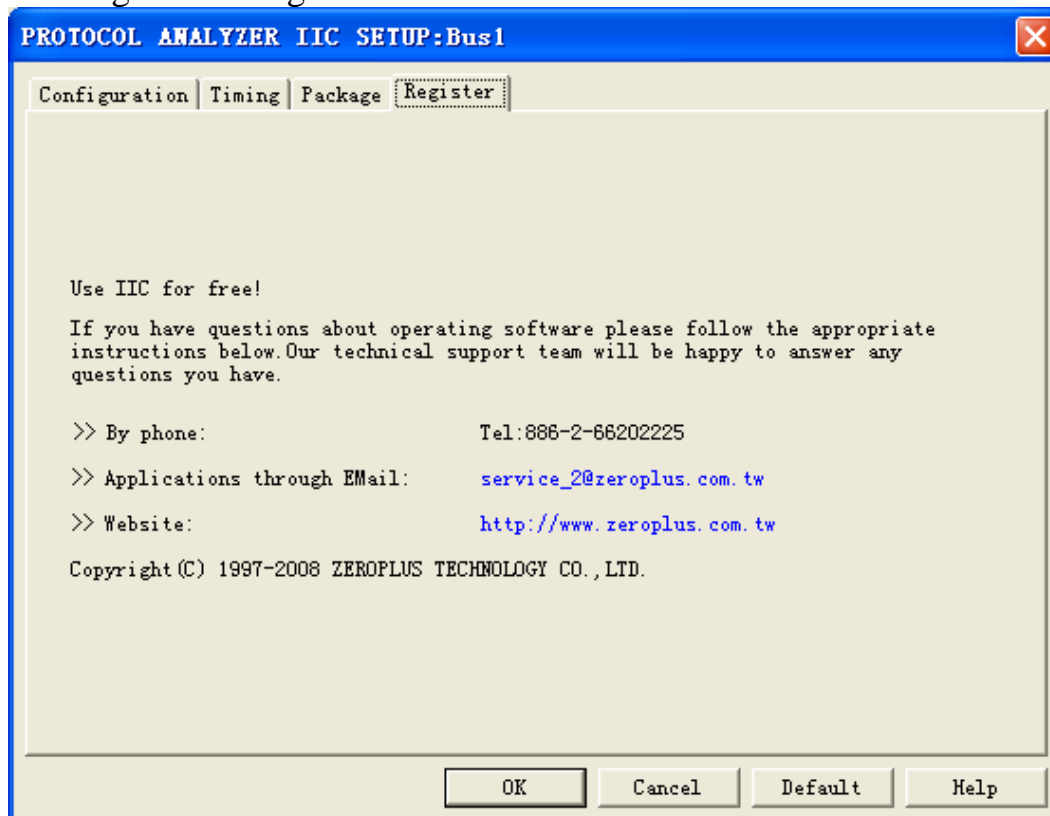
There is Zeroplus company information. If you have any questions about software operations, you can contact Zeroplus by Telephone or Email.

3 Operating Instructions

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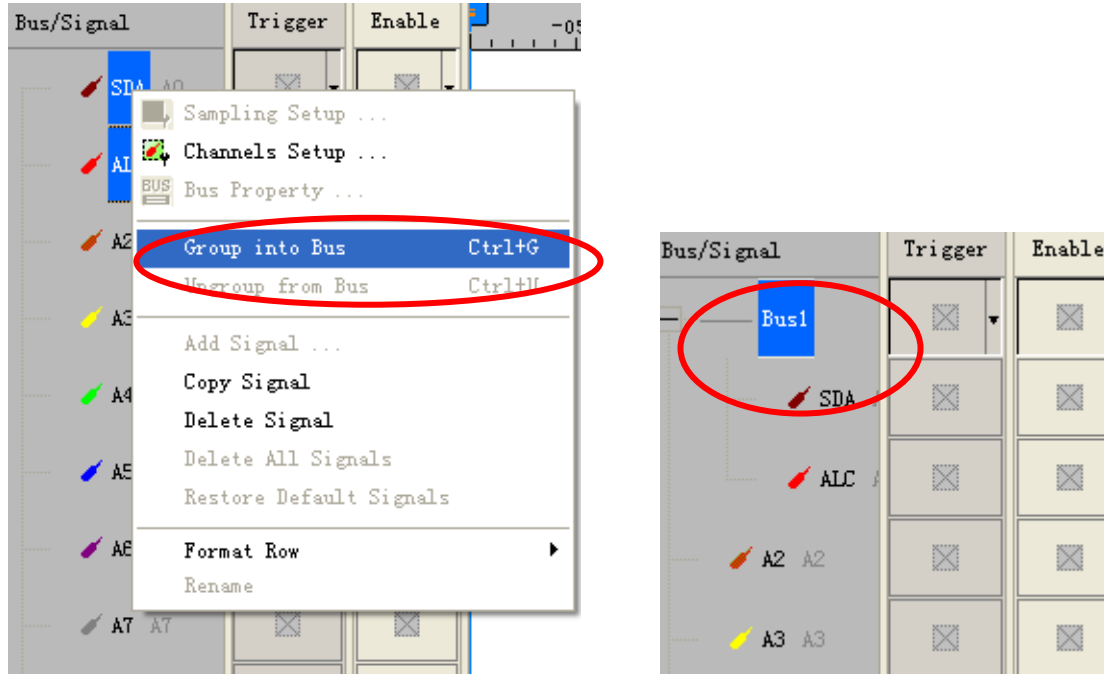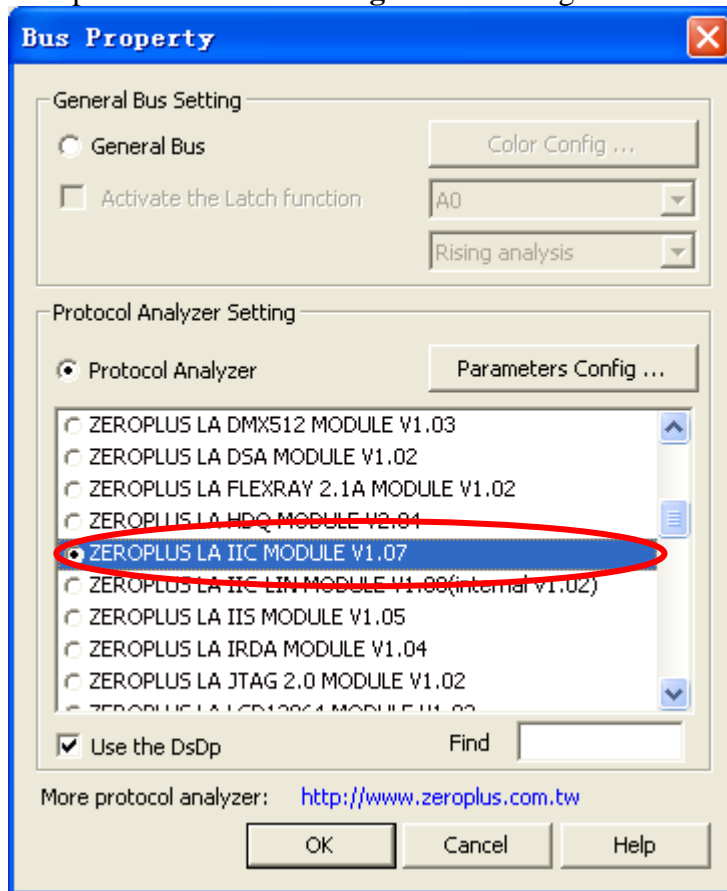

STEP 2.   Select **Bus1**, then press **Right Key** on the mouse to list menu, then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.
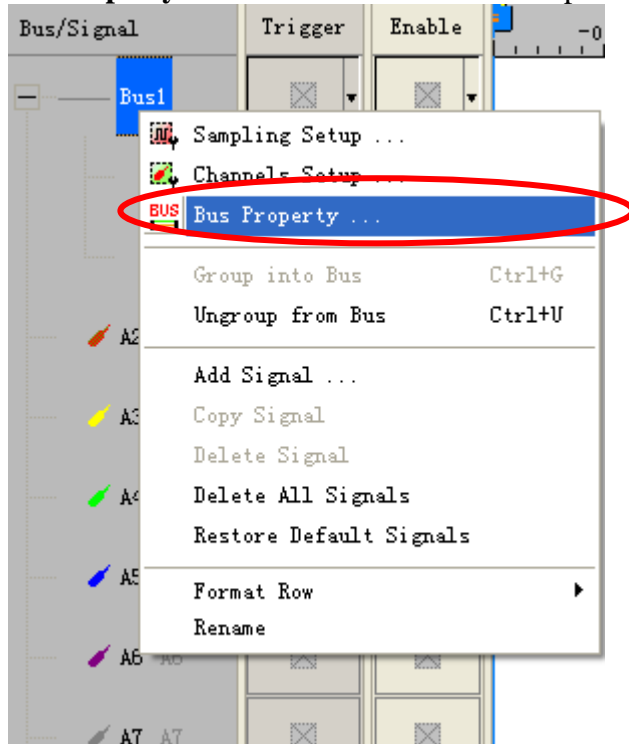
STEP 3. For Protocol Analyzer IIC Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA IIC MODULE V1.07.** Next click **Parameters Configuration** to open **Parameters Configuration** dialog box.

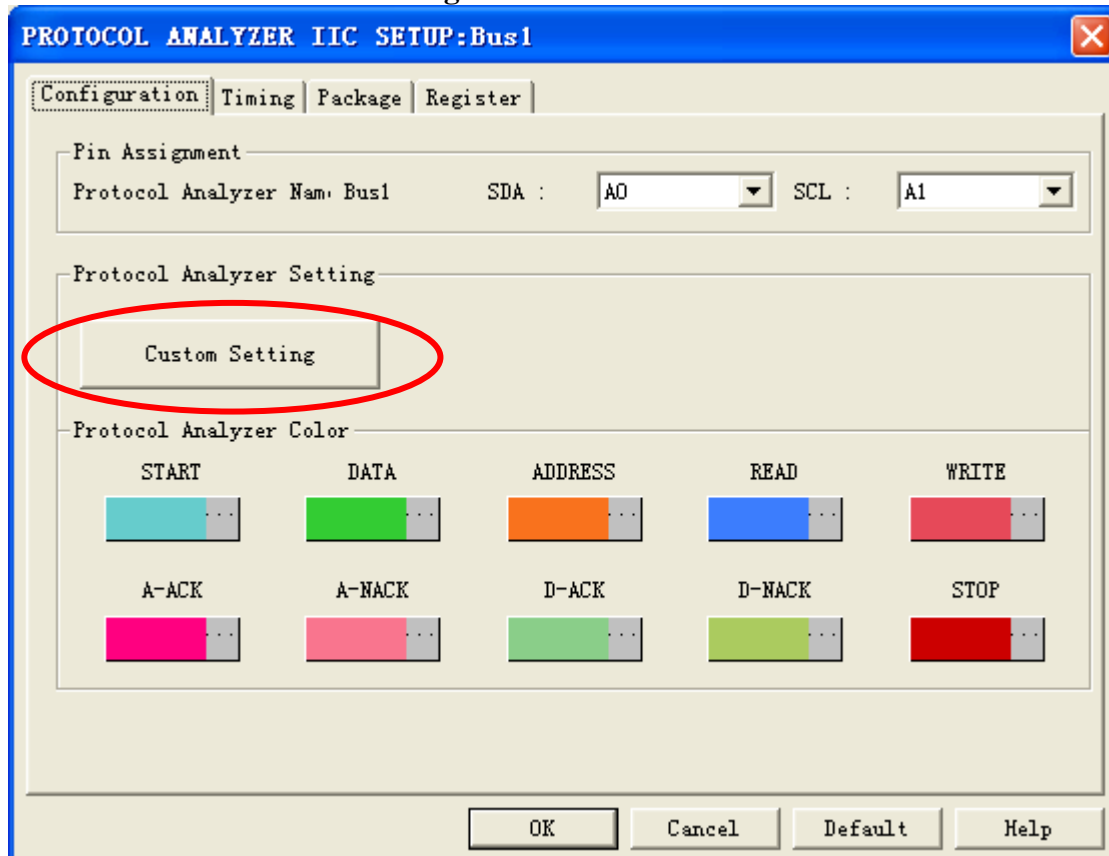**STEP 4.** Click **Parameters Configuration** to open the **IIC Configuration** dialog box as following.
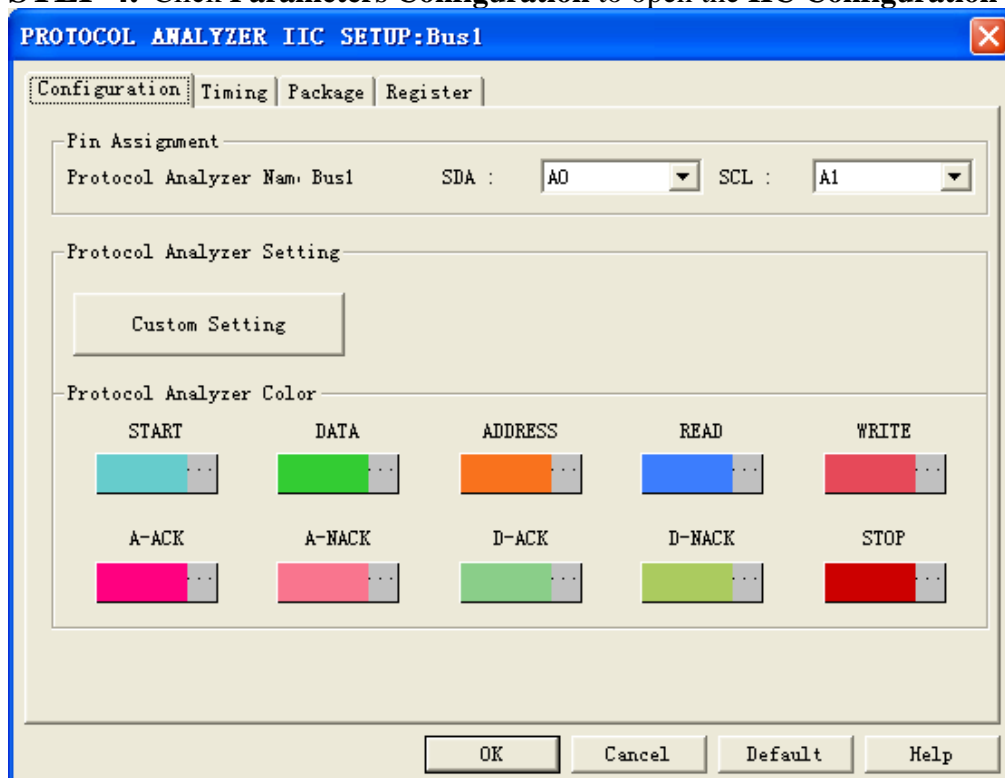
STEP 5. Set the channels of **SDA** and **SCL** in Pin Assignment section.
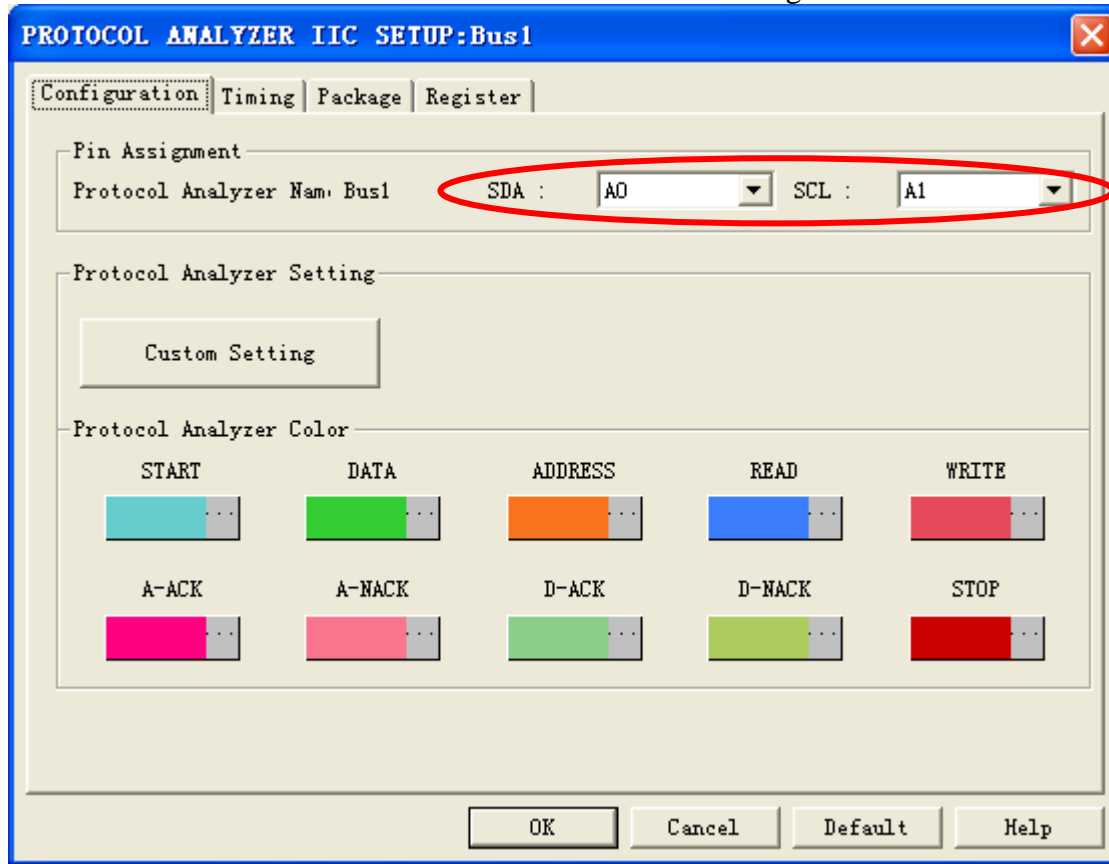
STEP 6. Set **Custom Setting**.

STEP 7.　　Set **Read/Write bit**.

STEP 8.　　Set **Ack Bit.**

STEP 9.　　Set **Data Area**.

Copyright © Zeroplus technology CO., LTD.　All rights reserved.　　　　FM07F1A
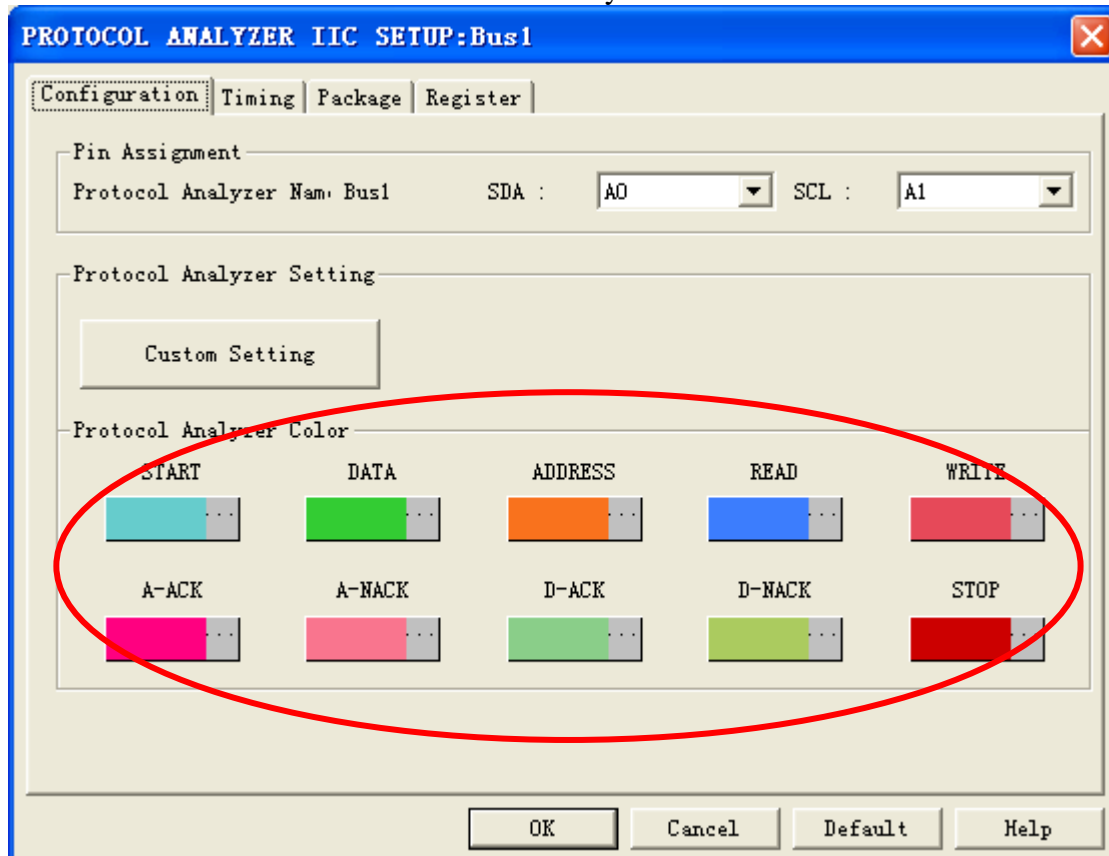Publication Release:

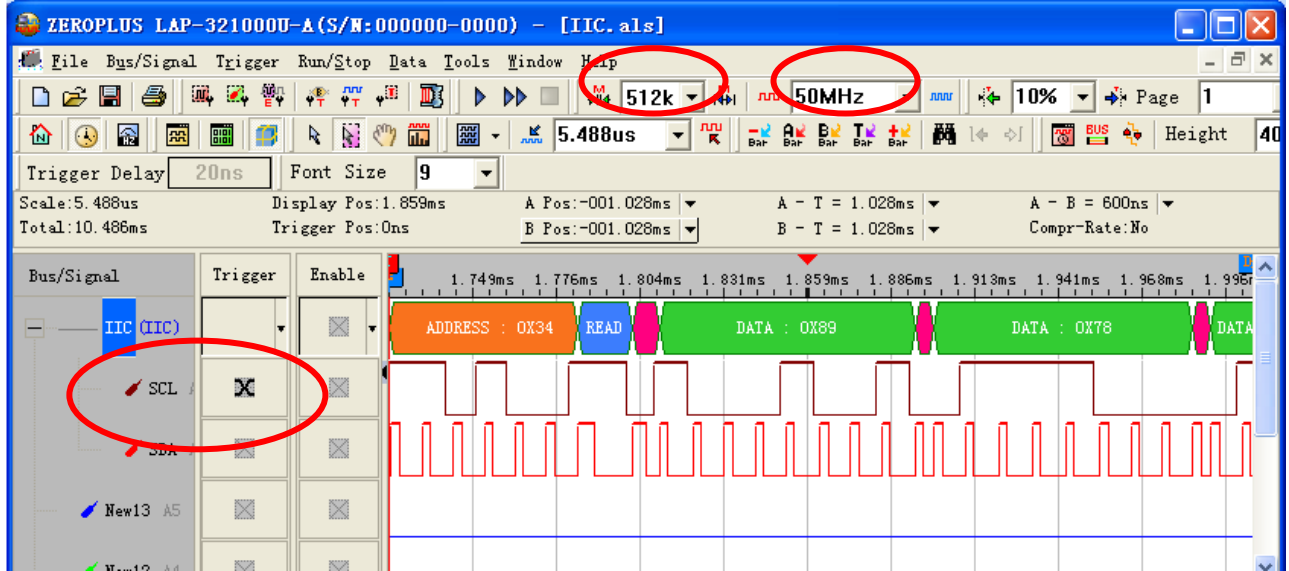**STEP 10.**   Set **Timing.**

STEP 11.   Set the colors for Protocol Analyzer IIC.

15/16

STEP 12. Following pictures show the completion of the protocol analyzer decoding and the package list. The trigger condition is Either Edge; the memory depth is 512K; the sampling frequency is 50MHz.

Protocol Analyzer Decoding

Package List

Publication Release: