



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

# SPECIFICATION

**MODEL: UP DOWN COUNTER Specification**

**PART NO : B08022**

**VERSION : V1.00**

Approver		Check	Design
GM	PM		

Customer Confirm

\* After signature you fax to zeroplus company , please .



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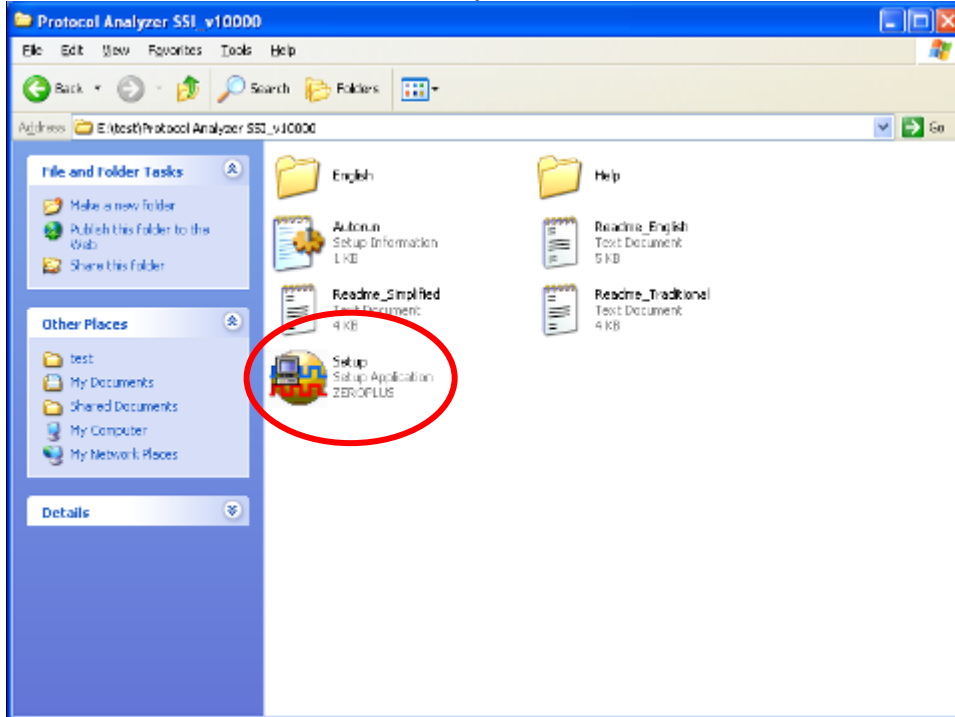


# 1 Software Installation

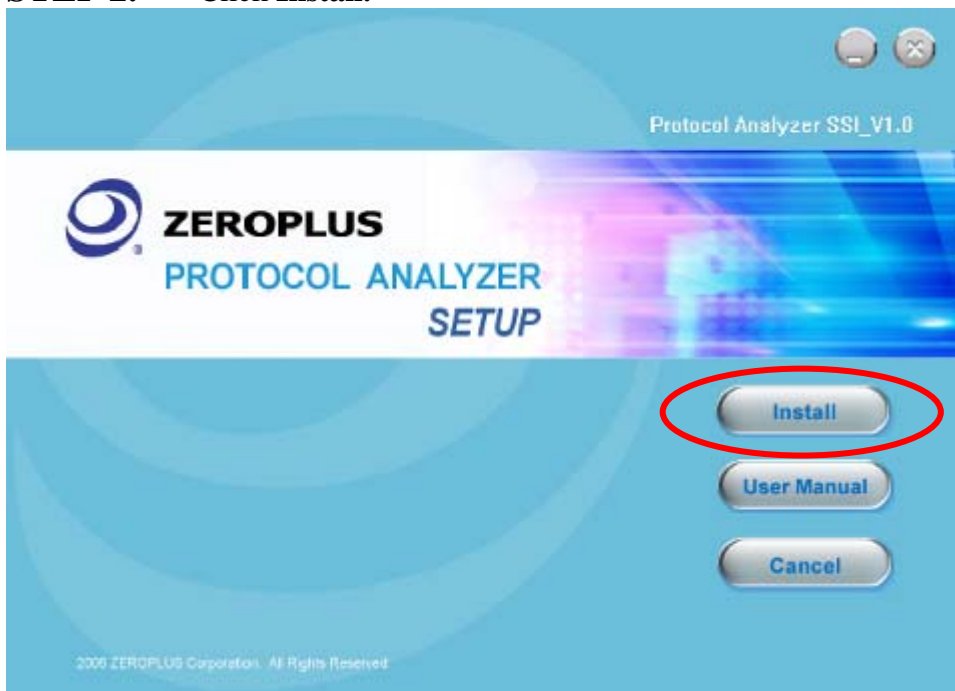
Please install the software as the following steps:

- ※ 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.

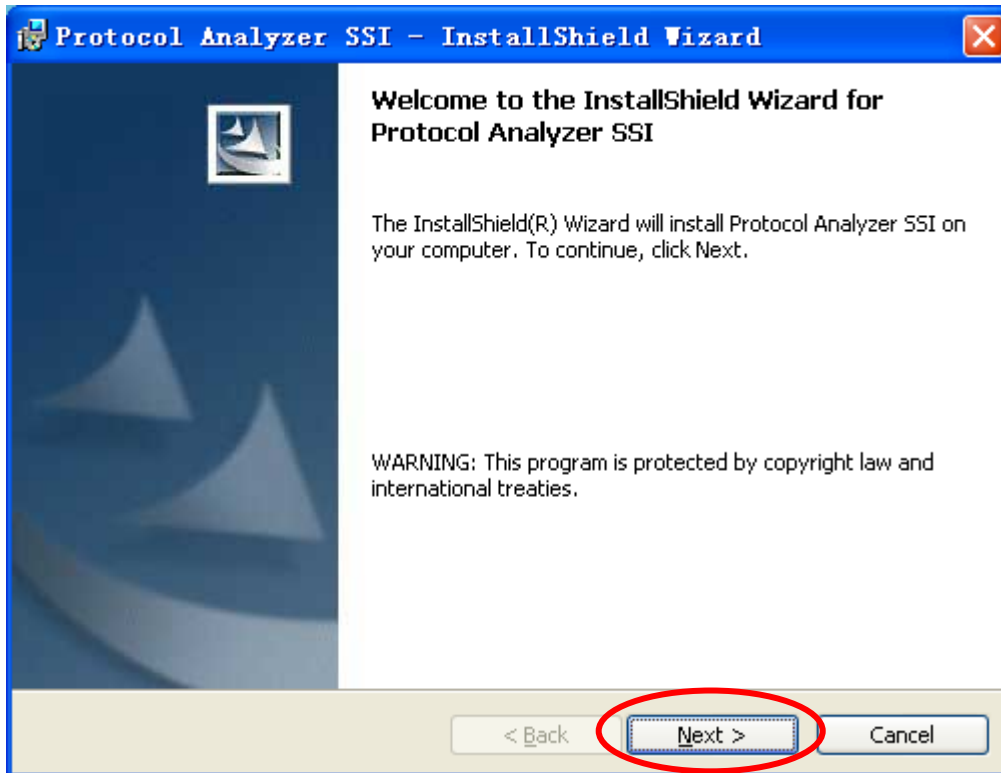


## STEP 2. Click Install.

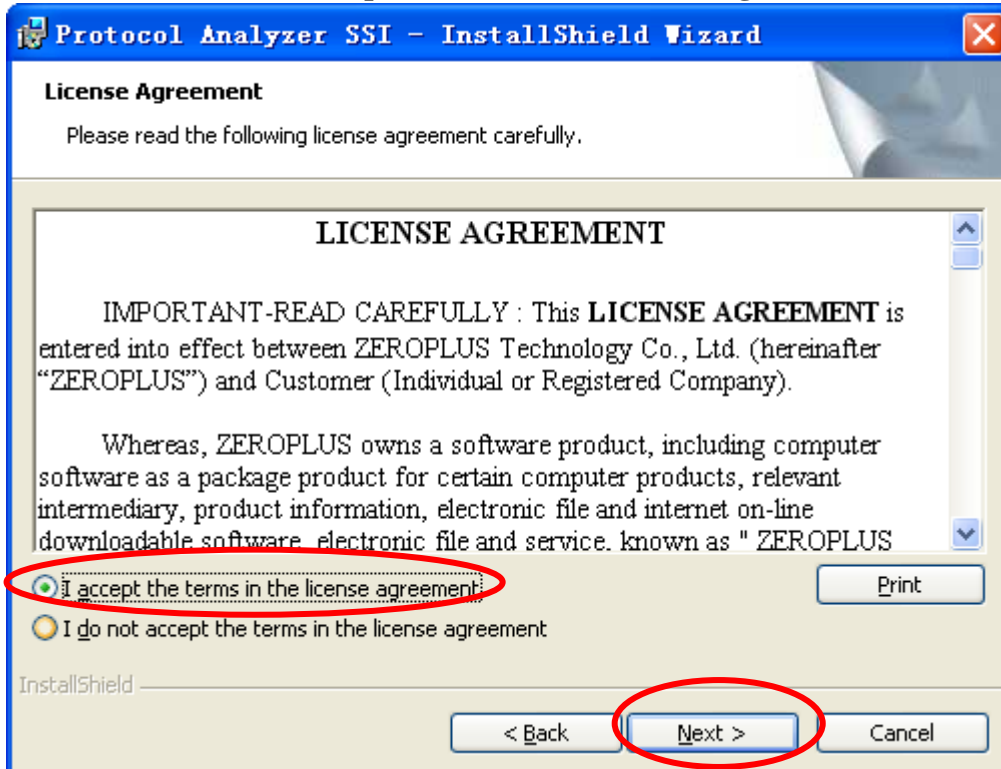




**STEP 3.** Click Next.



**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**.

**Protocol Analyzer SSI - InstallShield Wizard**

**Customer Information**

Please enter your information.

User Name:  
sunshine

Organization:  
zeroplus

Install this application for:

Anyone who uses this computer (all users)

Only for me (sunshine)

InstallShield

< Back   **Next >**   Cancel

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

**Protocol Analyzer SSI - InstallShield Wizard**

**Setup Type**

Choose the setup type that best suits your needs.

Please select a setup type.

**Complete**  
All program features will be installed. (Requires the most disk space.)

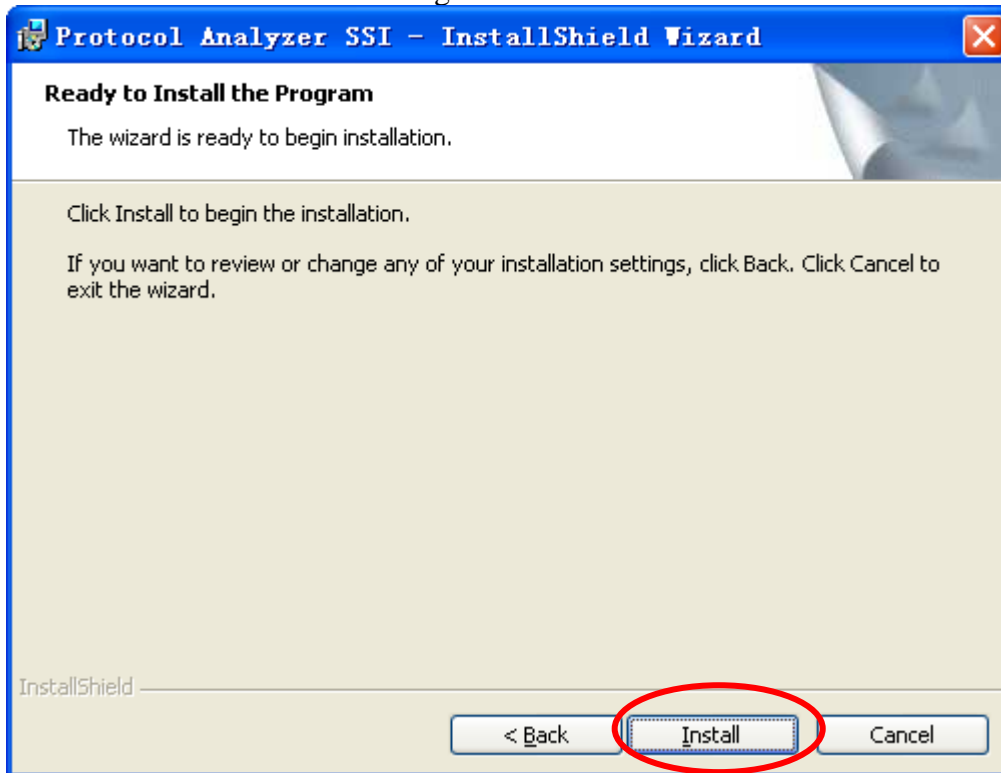
**Custom**  
Choose which program features you want installed and where they will be installed. Recommended for advanced users.

InstallShield

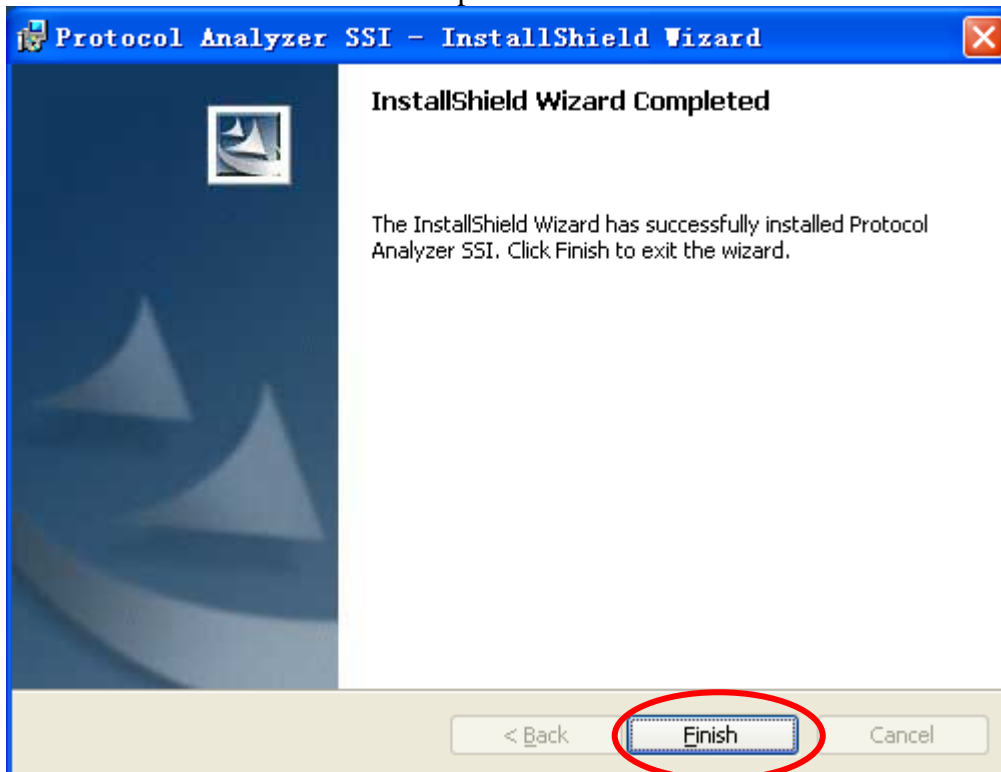
< Back   **Next >**   Cancel



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



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

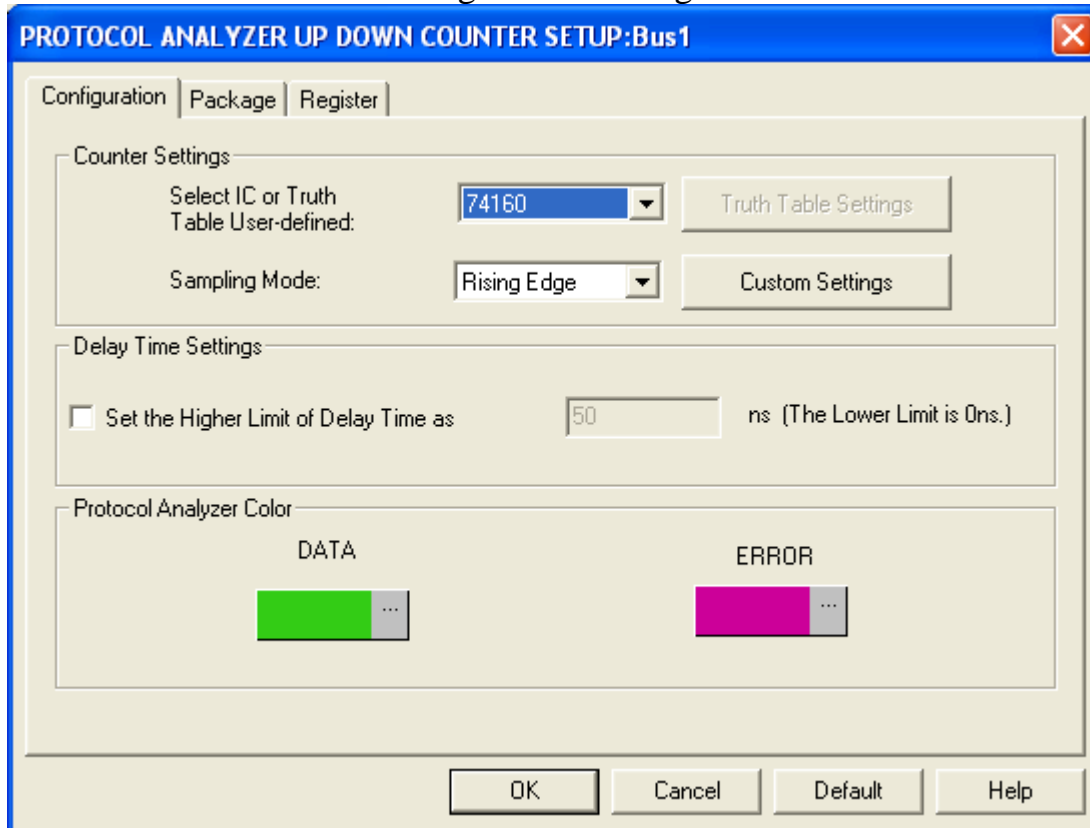




## 2 User Interface

In the configuration dialog box, please refer to the below images to select options of setting **UP DOWN COUNTER MODULE**.

### UP DOWN COUNTER Configuration Dialog Box



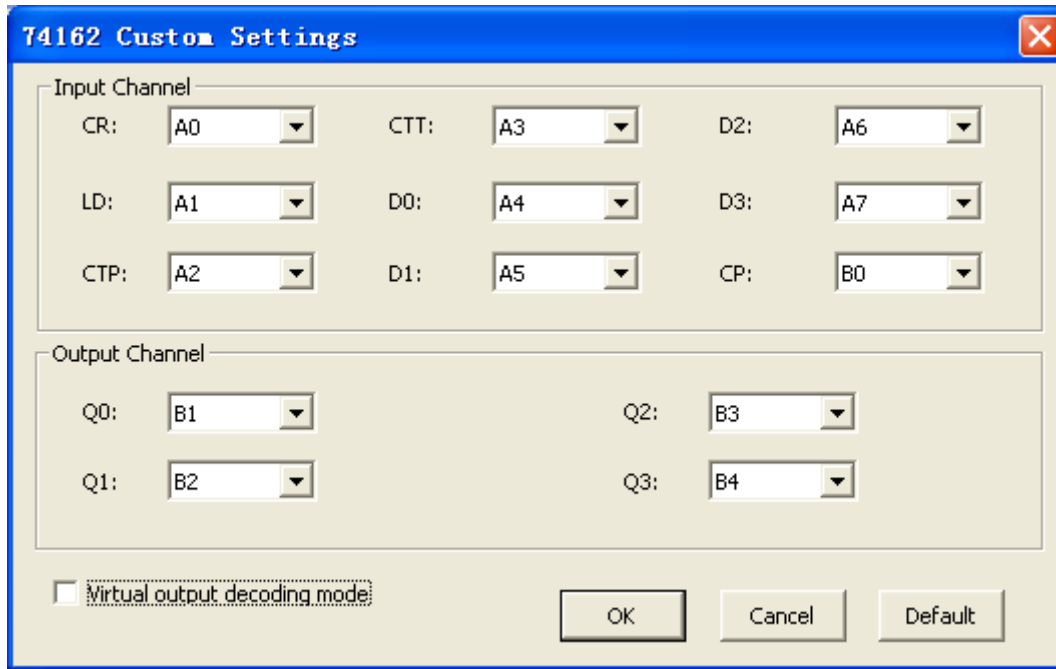
**Select IC or Truth Table User-defined:** Select the required type of IC, or select the Truth Table User-defined. As long as the User Defined is selected, the button, the Truth Table Settings, is enabled. The default of IC is 74160.

**Sampling Mode:** Set the CLK sampling mode as Rising Edge or Falling Edge.

**Delay Time Settings:** The default of the **Higher Limit of Delay Time** is 50ns, and the max. Higher Limit is 1000ns.

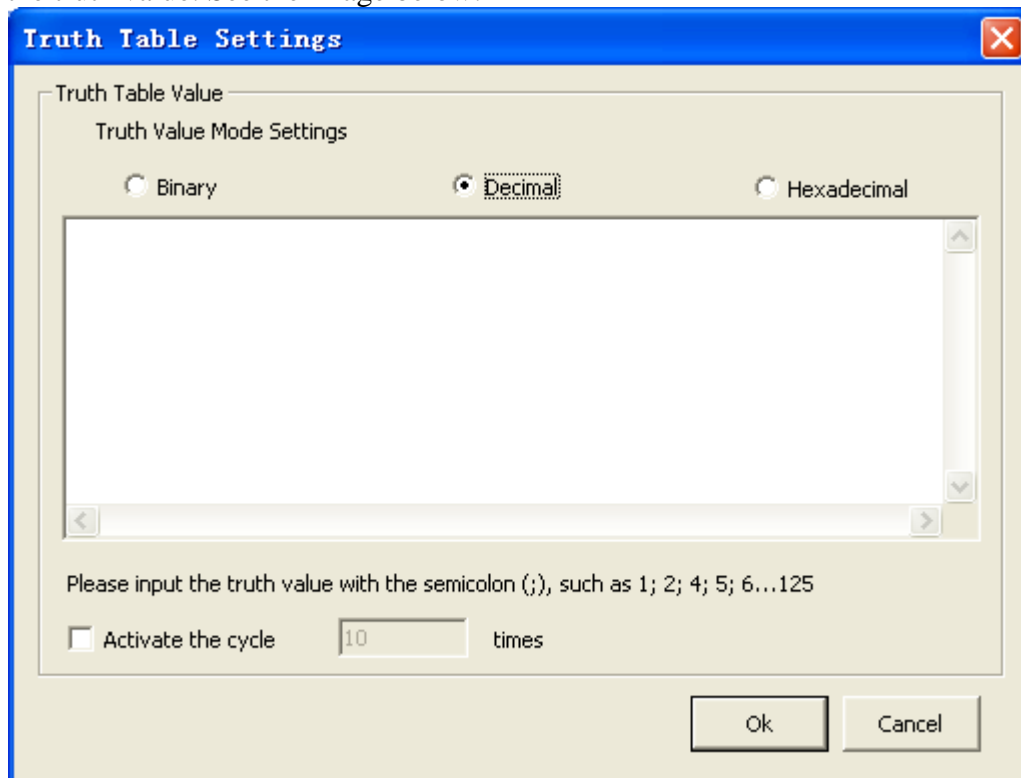
**Protocol Analyzer Color:** Users can vary the color of the items according to their requirements.

**Custom Settings:** Set the channel as users' requirements. When the different IC is selected, the corresponding dialog box of Custom Settings will present, for instance, select 74162 in the column (Select IC or Truth Table User-defined).



**Virtual output decoding mode:** There is a **Virtual output decoding mode** in the bottom of all the custom settings dialog boxes. When it is selected, all output channels will be disabled.

**Truth Table Settings:** When the User Defined is selected, the Truth Table Settings will be enabled. Click the Truth Table Settings; the dialog box of Truth Table Settings will present, then users can edit the truth value. See the image below:



**Binary:** It indicates that the input value in the below column is a binary value.

**Decimal:** It indicates that the input value in the below column is a decimal value.

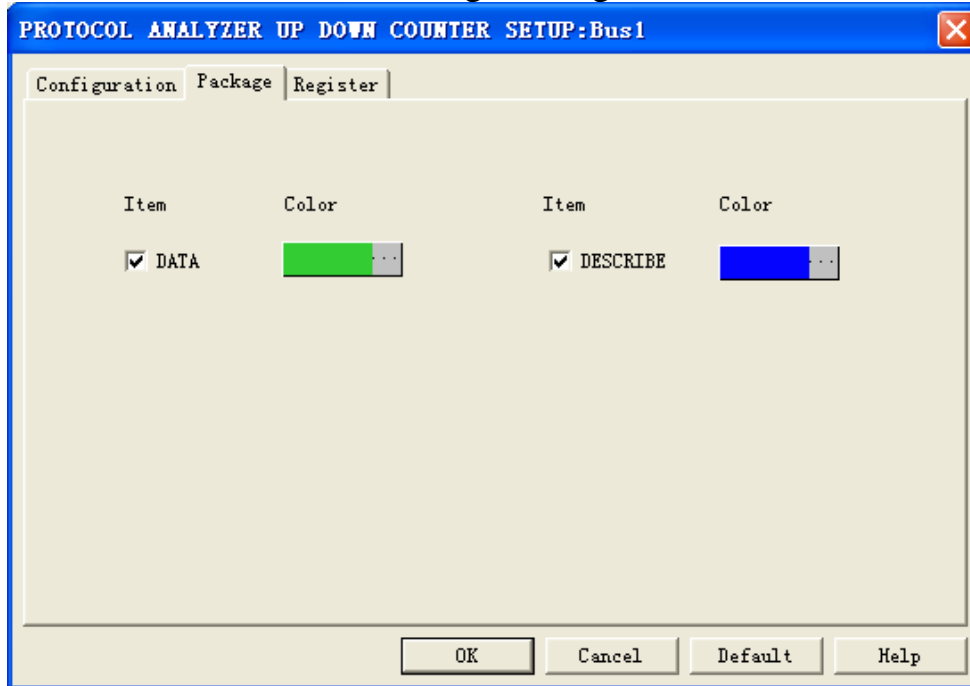




**Hexadecimal:** It indicates that the input value in the below column is a hexadecimal value.

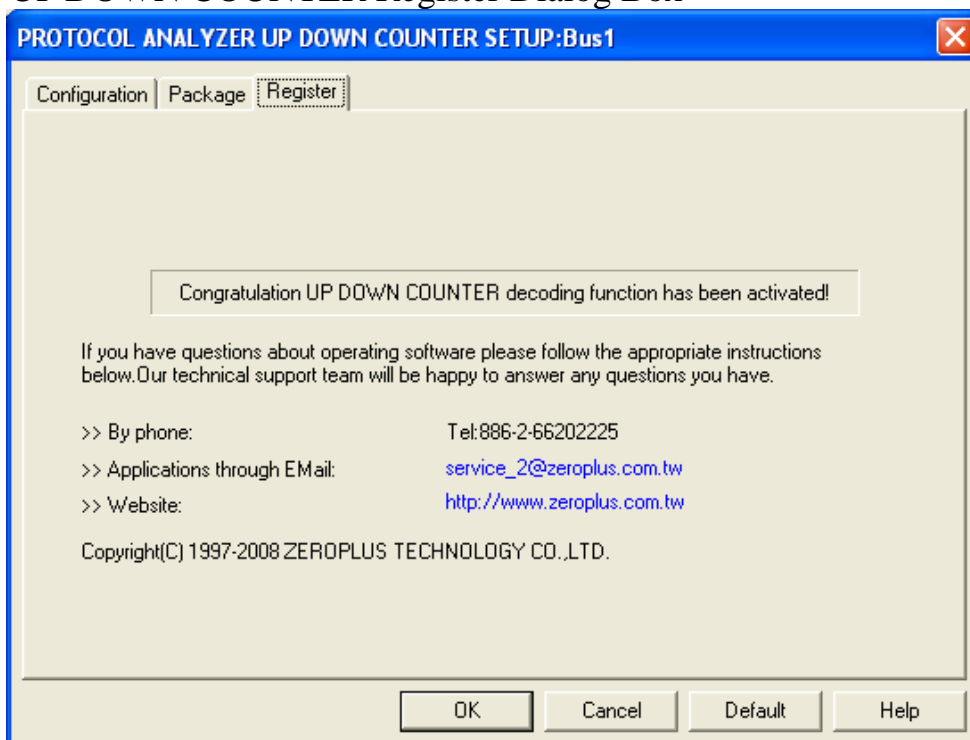
**Activate the cycle:** When the data has the character of cycling, users only need input a group of data, and fill in the times of the cycle after activating the check box.

### UP DOWN COUNTER Package Dialog Box



Users can choose the displayed items and set the protocol analyzer color as their requirements.

### UP DOWN COUNTER Register Dialog Box

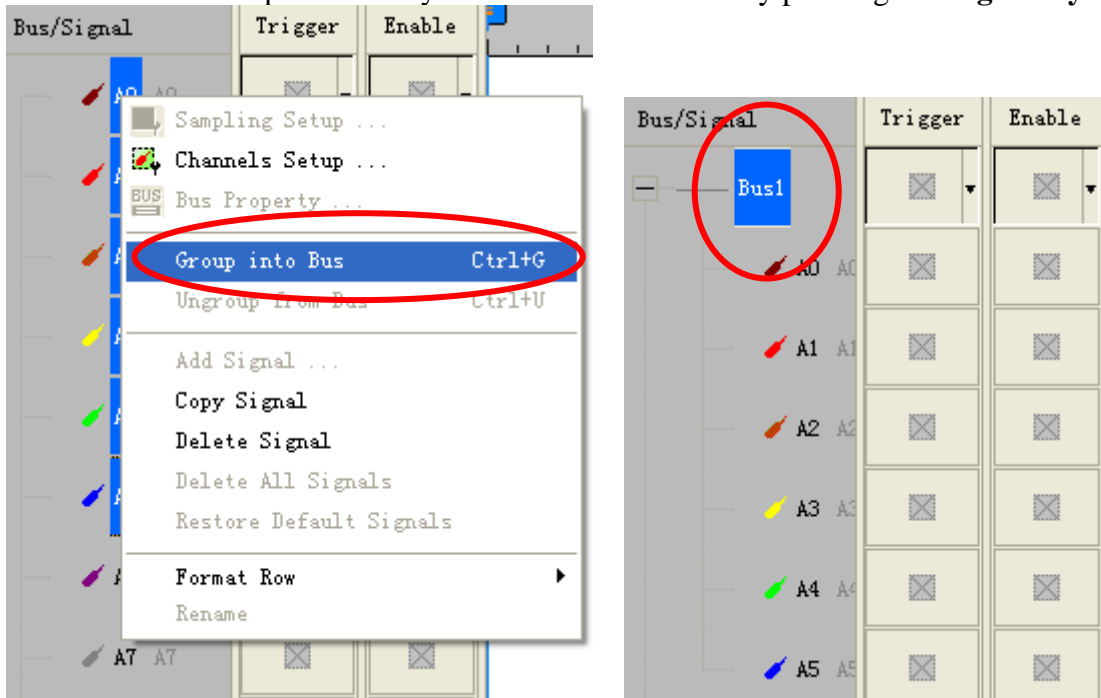


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

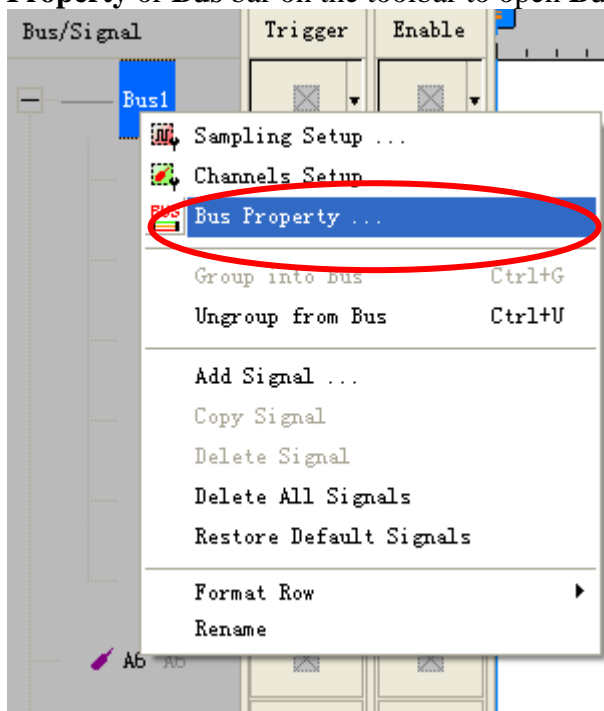


### 3 Operating Instructions

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

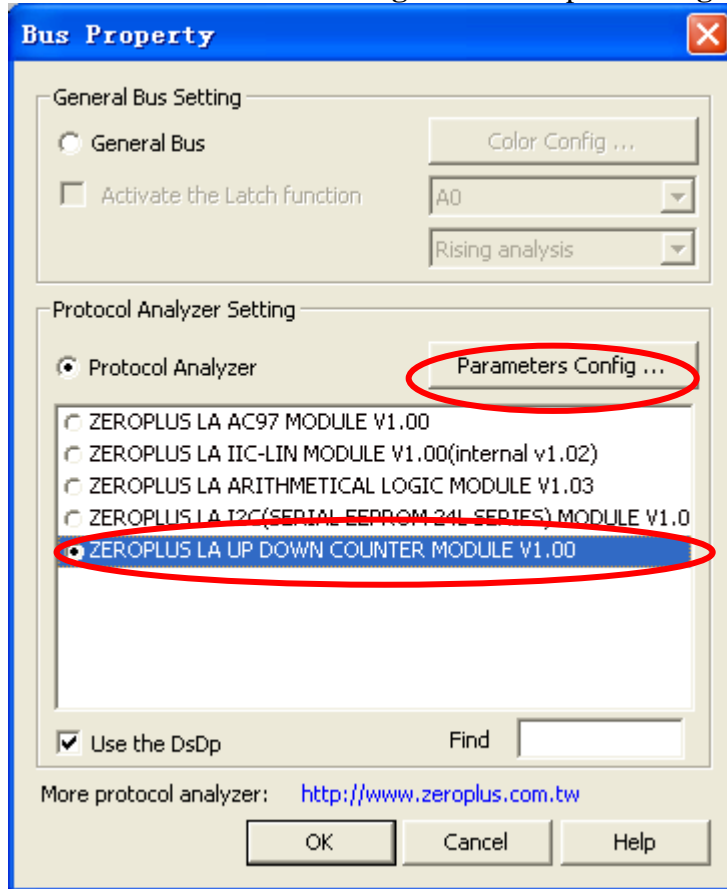


**STEP 2.** Select **Bus1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.

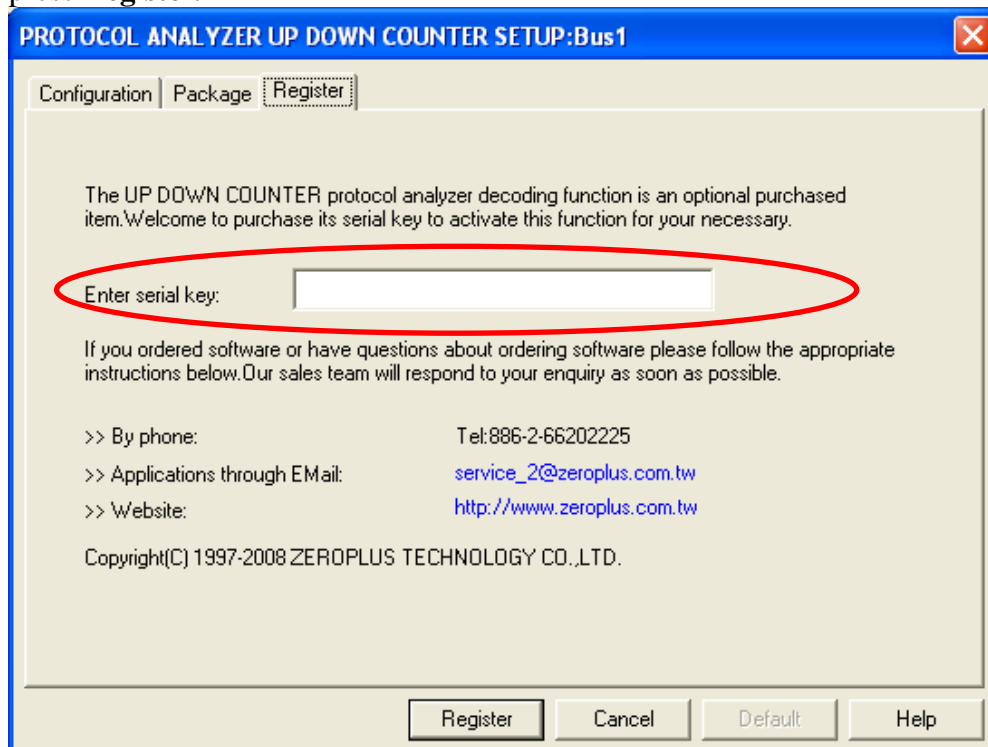




**STEP 3.** For Protocol Analyzer UP DOWN COUNTER Parameters Configuration, select Protocol Analyzer, and then select **ZEROPLUS LA UP DOWN COUNTER MODULE V1.00**. Next click **Parameters Configuration** to open **Configuration** dialog box.

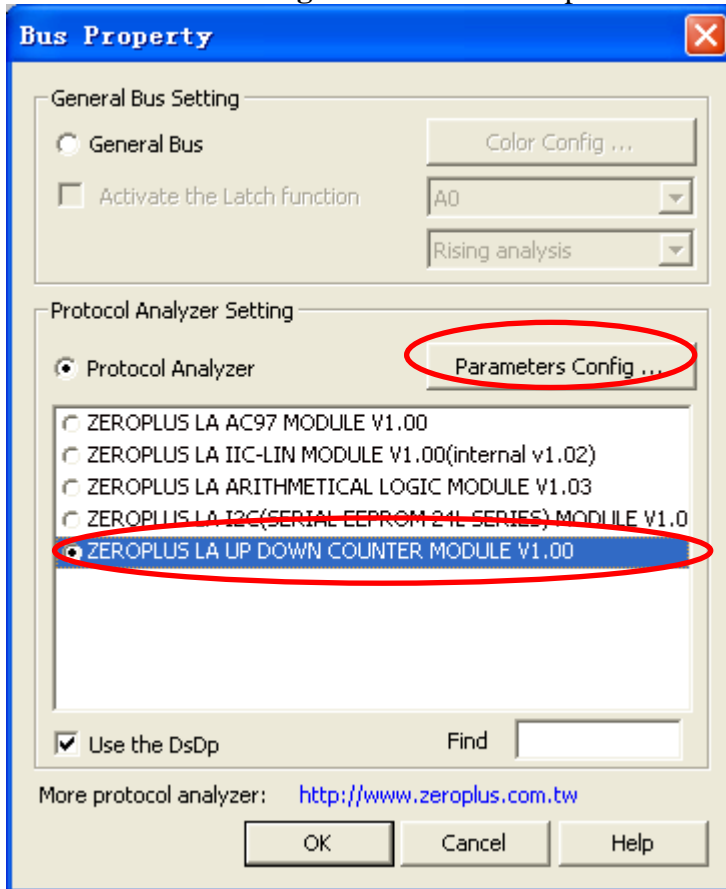


**STEP 4.** Click Register tab to type the serial key number of **UP DOWN COUNTER**. Then, press **Register**.

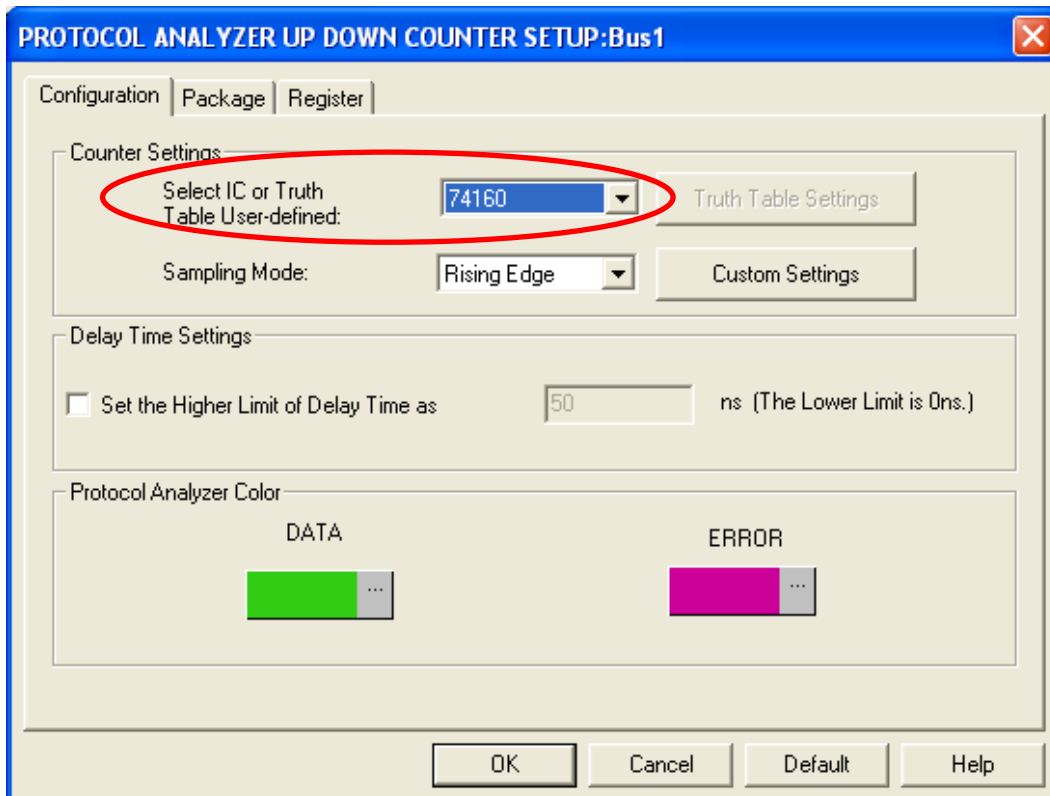




**STEP 5.** After completing **Register**, come back to the **Bus Property** dialog box, and then click the **Parameters Configuration** to start the protocol analyzer UP DOWN COUNTER setup.

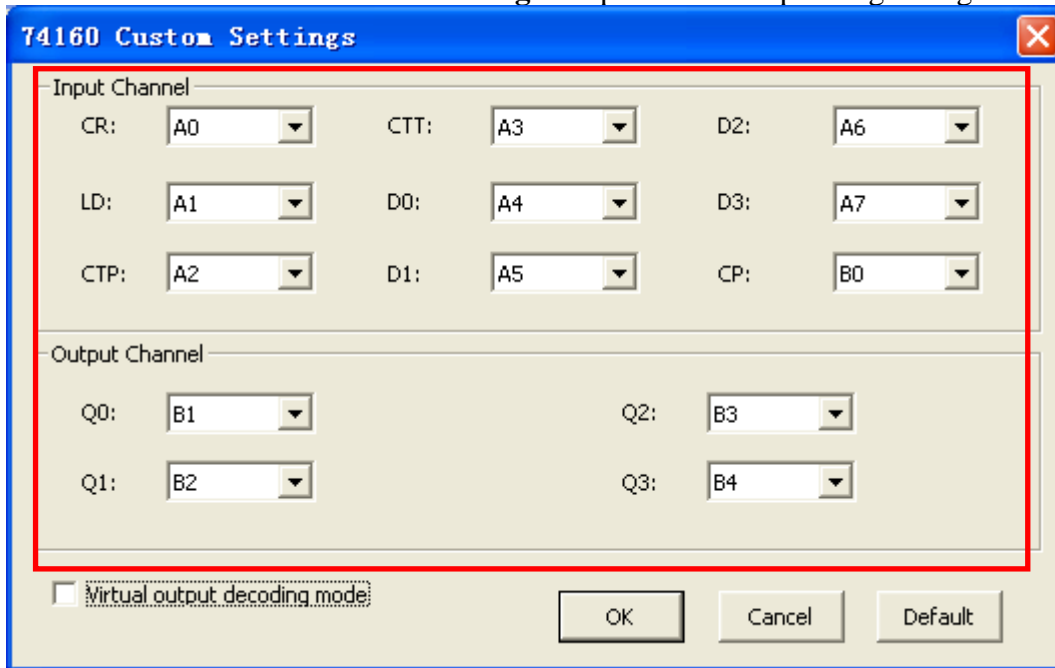


**STEP 6.** Select IC or Truth Table User-defined.

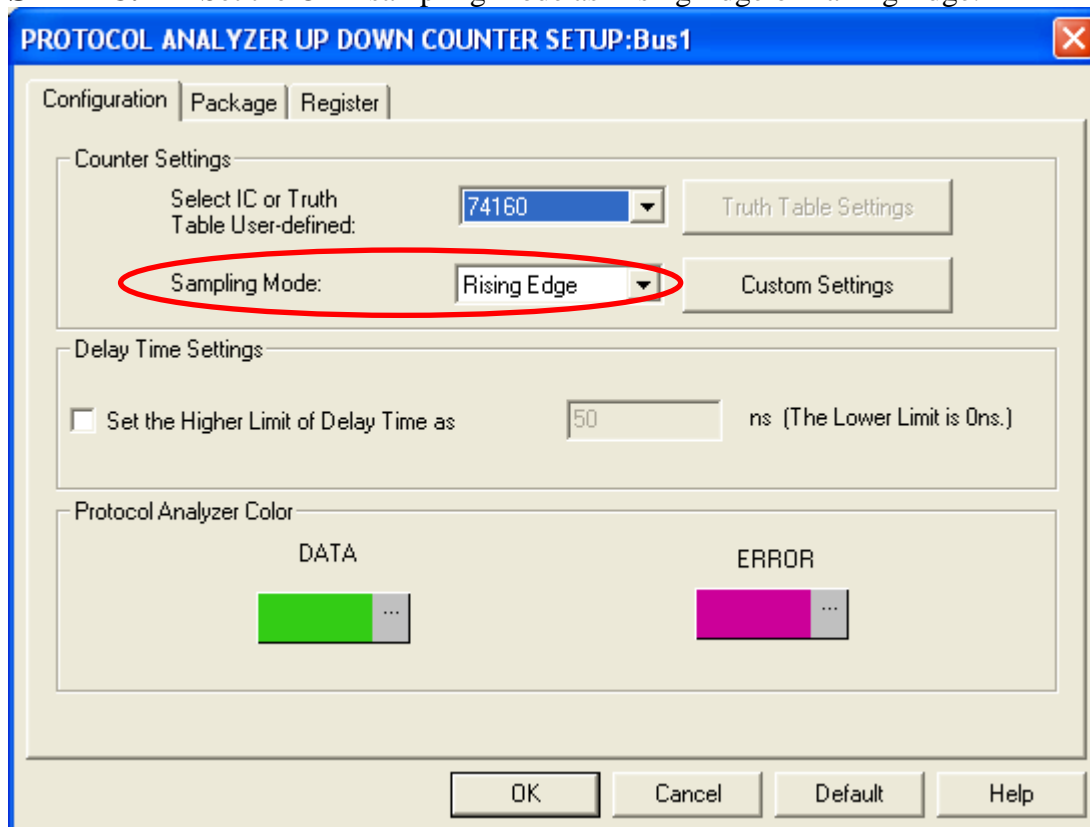




**STEP 7.** Click the **Custom Settings** to open the corresponding dialog box of Custom Settings.

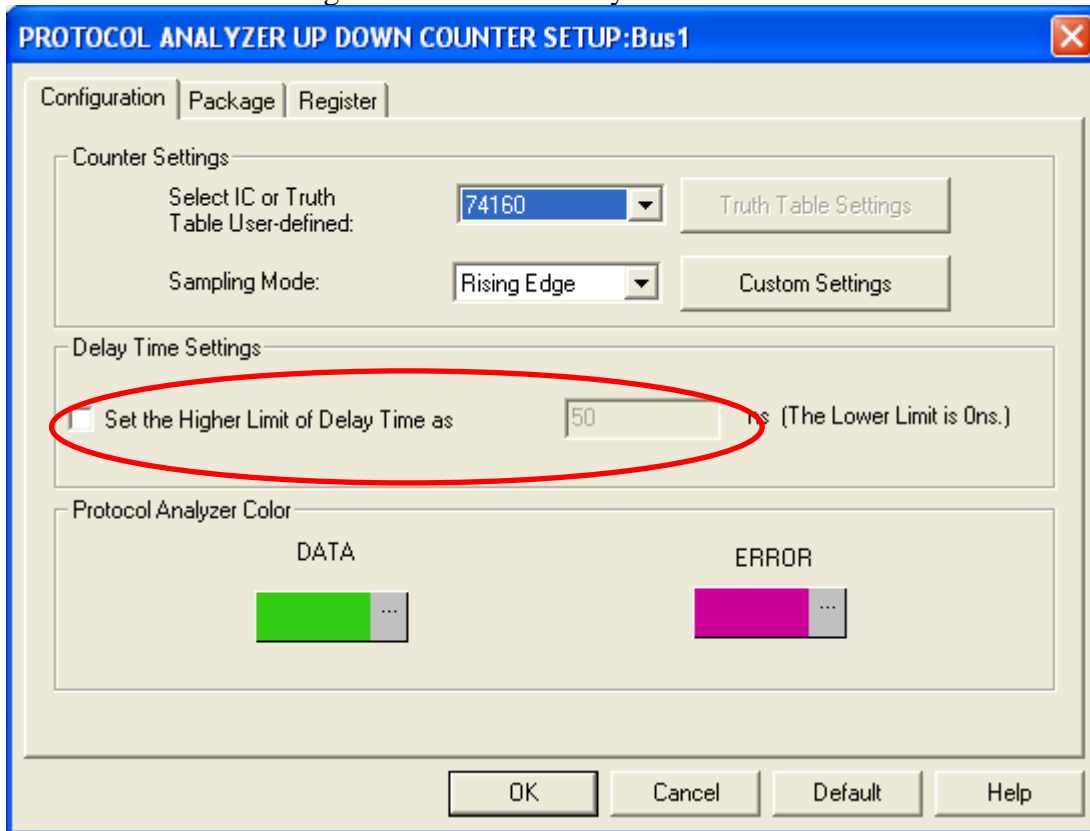


**STEP 8.** Set the CLK sampling mode as Rising Edge or Falling Edge.

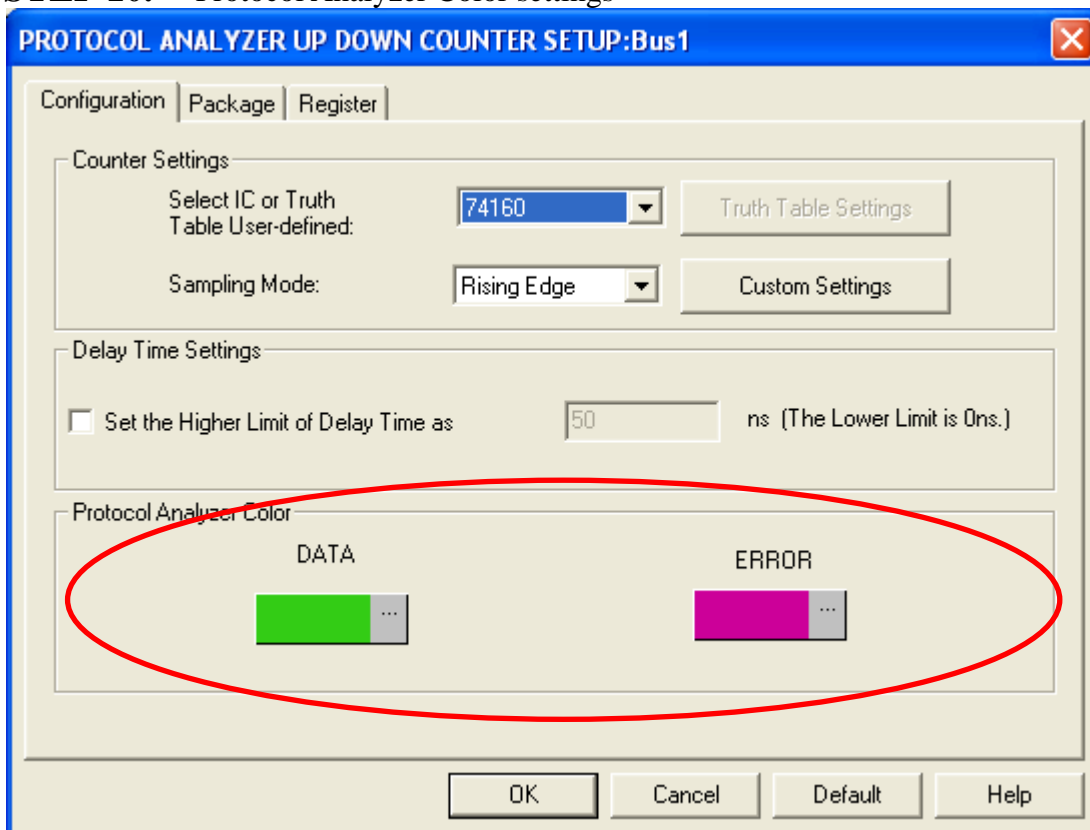




**STEP 9.** Set the Higher Limit of the Delay Time.



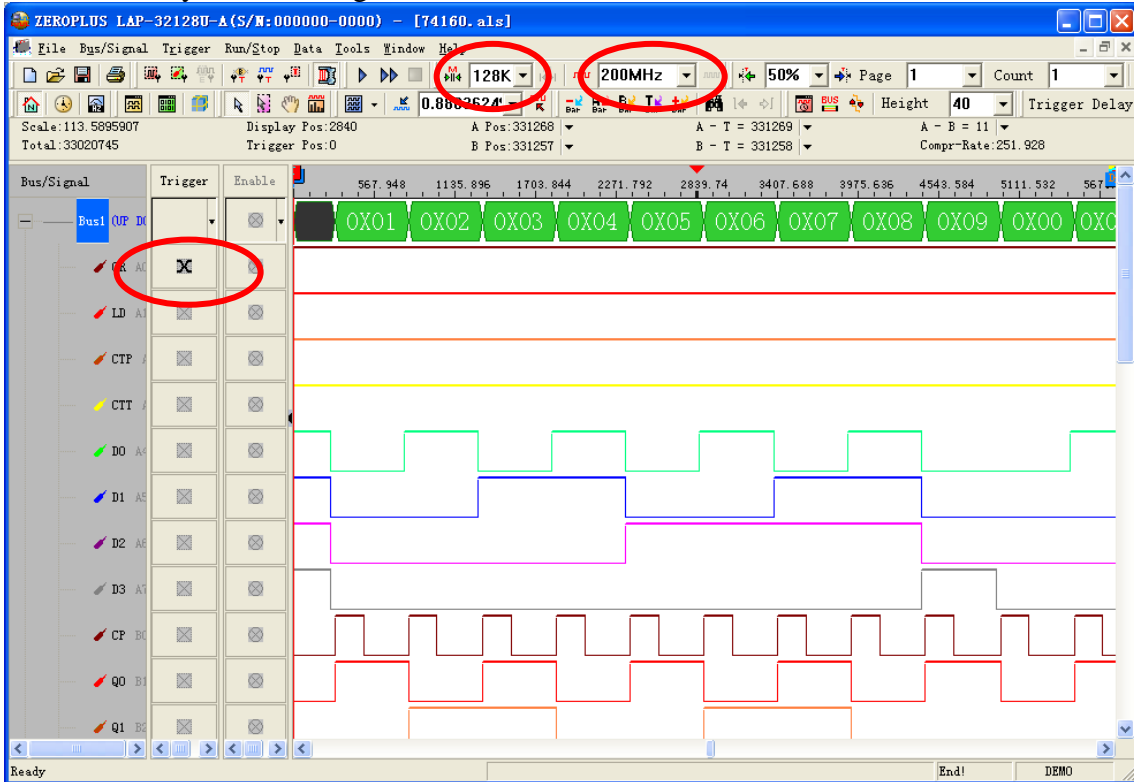
**STEP 10.** Protocol Analyzer Color settings





**STEP 11.** 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 200MHz.

Protocol Analyzer Decoding



Package List

