



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

SPECIFICATION

MODEL: DIGITAL LOGIC Specification

PART NO : B08001

VERSION : V1.40

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to ZeroPlus Technology after signing.

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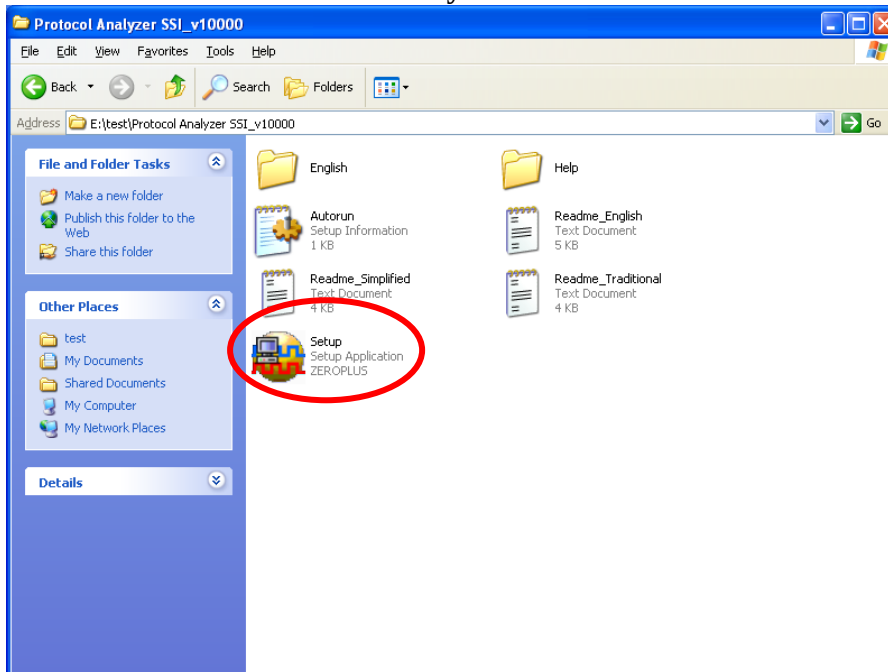
1 Software Installation

Please install the software as the following steps:

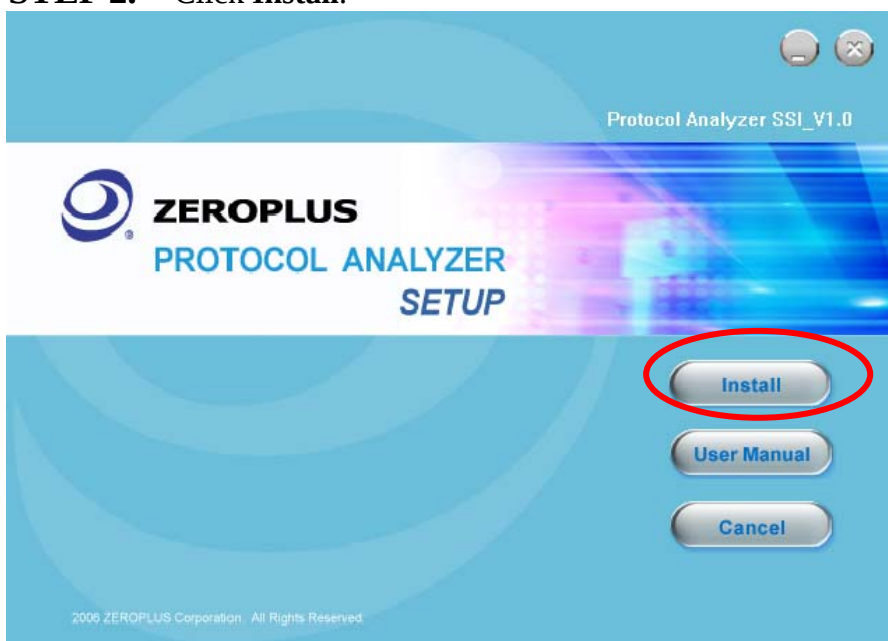
※ Remark: 1. The installation steps for all protocol analyzers are the same; you can complete the installation by following procedures. The following is an example on how to install protocol analyzer SSI.

※ 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.

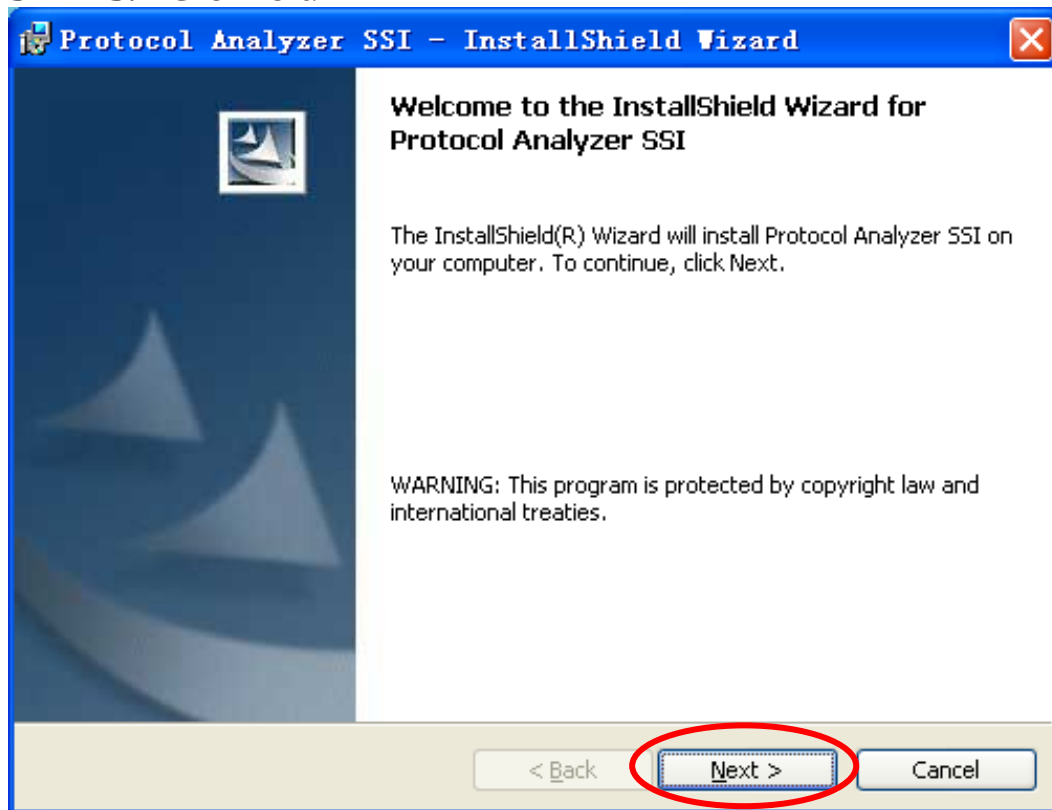


STEP 2. Click Install.

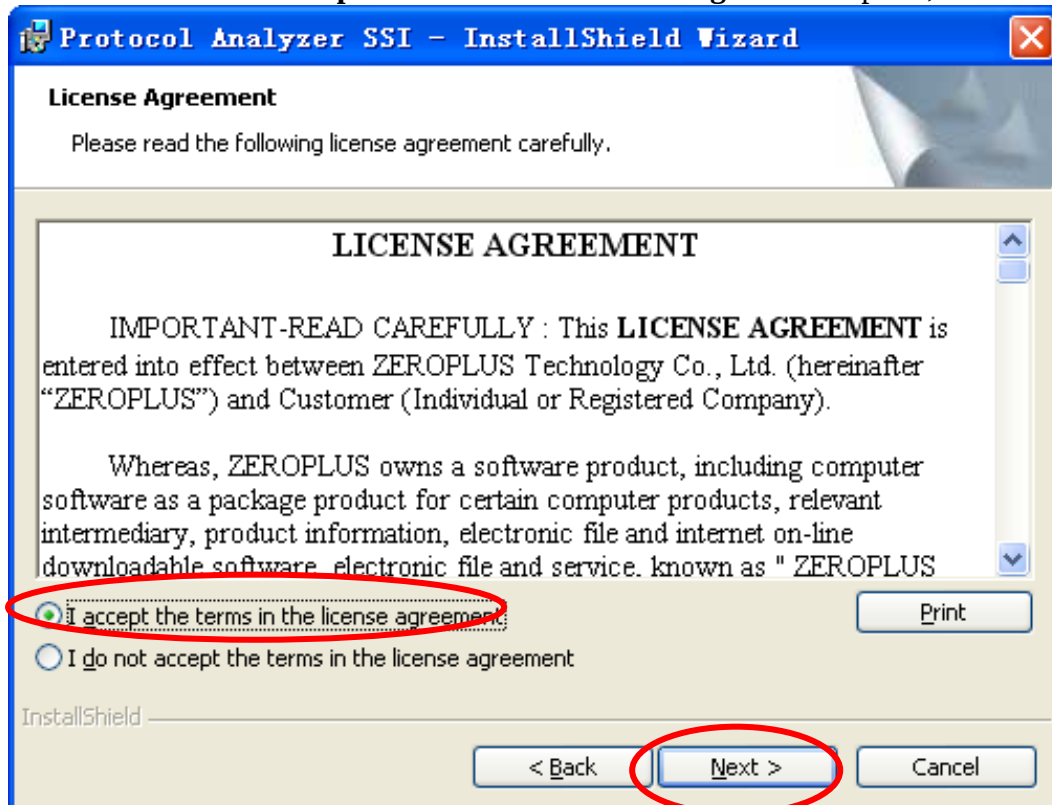




STEP 3. Click Next.



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





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

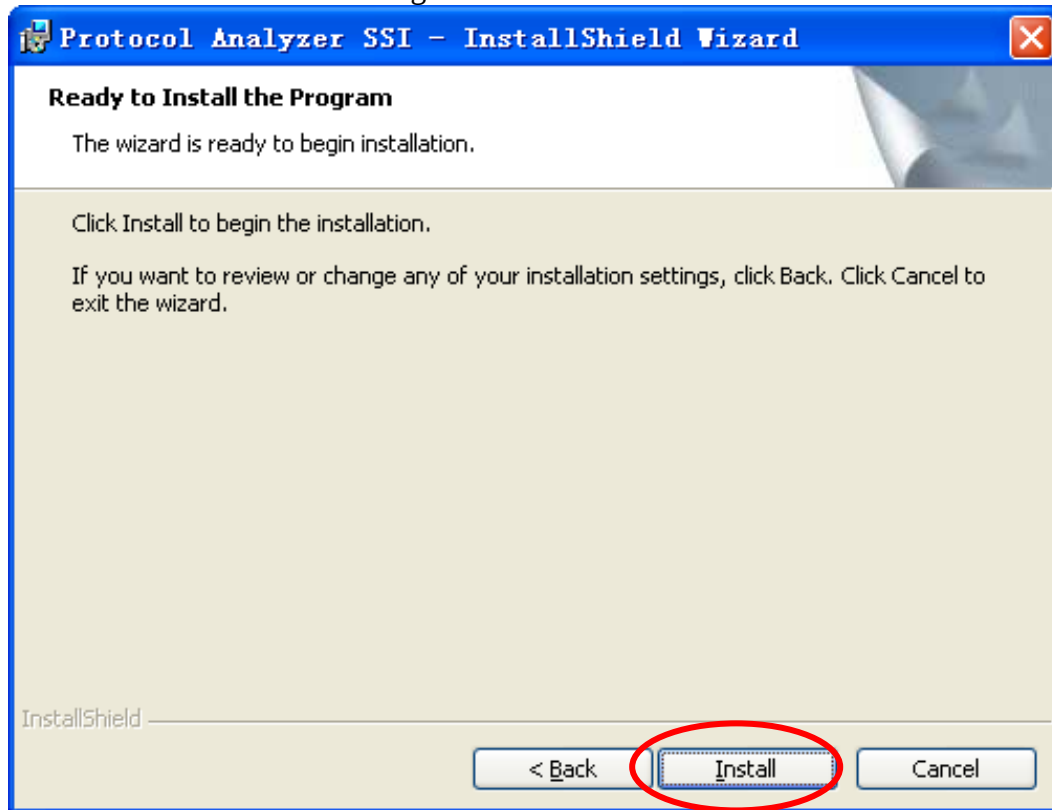
The dialog box is titled "Protocol Analyzer SSI - InstallShield Wizard". It contains a section "Customer Information" with the instruction "Please enter your information." Below this are two text input fields: "User Name:" with the text "sunshine" and "Organization:" with the text "zeroplus". There are two radio button options: "Anyone who uses this computer (all users)" (selected) and "Only for me (微软用户)". At the bottom, there are three buttons: "< Back", "Next >" (circled in red), and "Cancel".

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

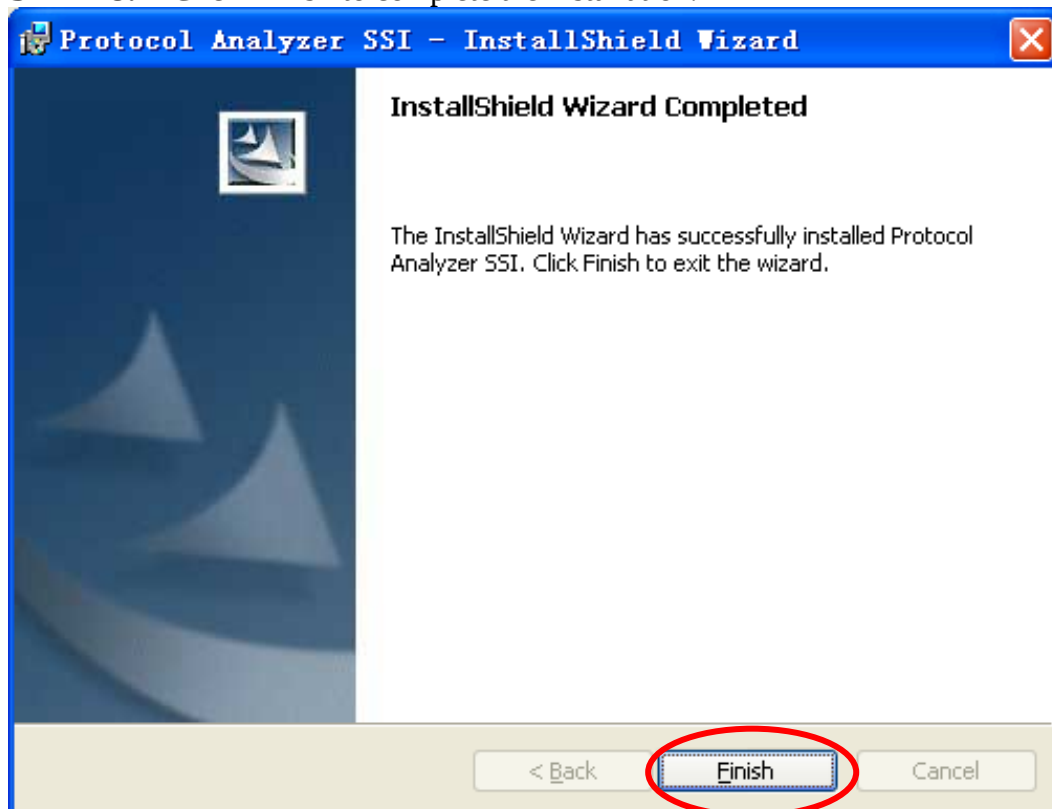
The dialog box is titled "Protocol Analyzer SSI - InstallShield Wizard". It contains a section "Setup Type" with the instruction "Choose the setup type that best suits your needs." Below this is the text "Please select a setup type." There are two radio button options: "Complete" (selected) and "Custom". The "Complete" option has a description: "All program features will be installed. (Requires the most disk space.)". The "Custom" option has a description: "Choose which program features you want installed and where they will be installed. Recommended for advanced users." At the bottom, there are three buttons: "< Back", "Next >" (circled in red), and "Cancel".



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



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

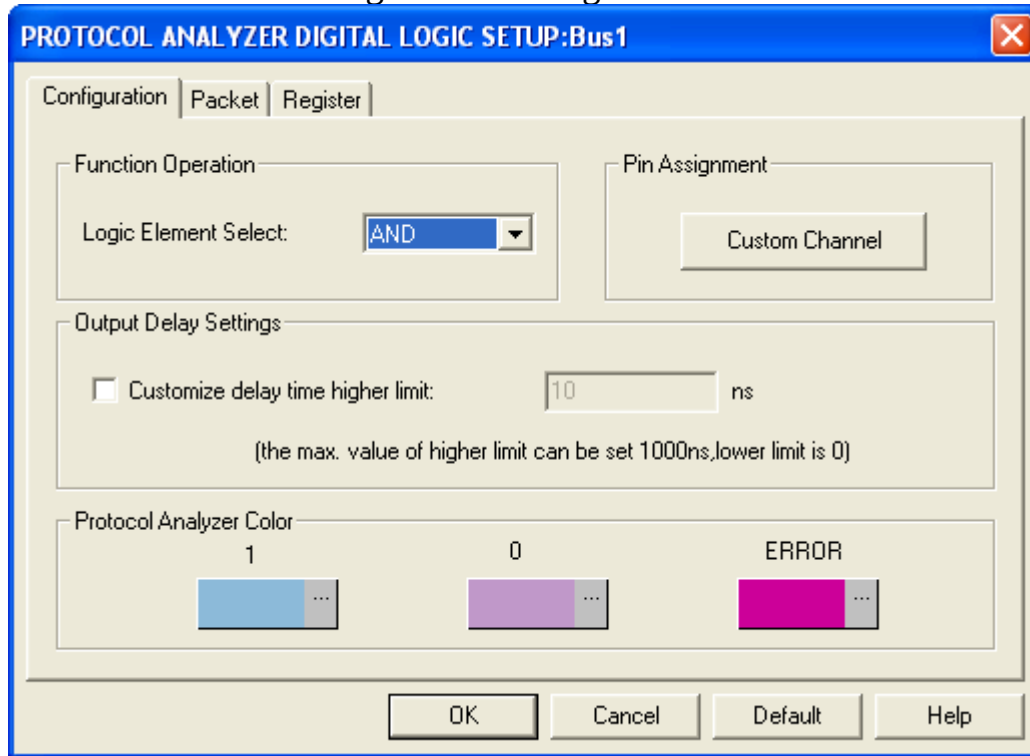




2 User Interface

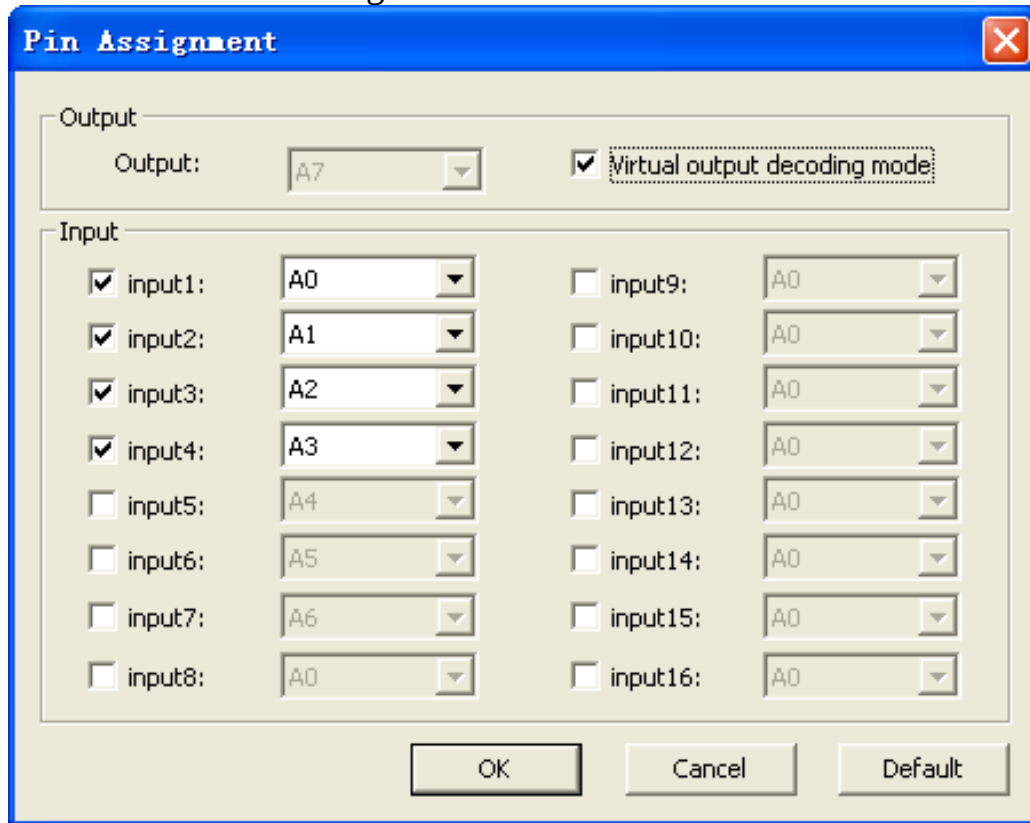
In the configuration dialog box, please refer to the below images to select options of setting **DIGITAL LOGIC MODULE**.

DIGITAL LOGIC Configuration Dialog Box





Custom Channel Settings



The **Pin Assignment** dialog box is used for configuring signal channels. It features a blue title bar with a close button. The main area is divided into two sections: **Output** and **Input**.

Output Section: Contains a dropdown menu for 'Output' set to 'A7' and a checked checkbox for 'Virtual output decoding mode'.

Input Section: A table of 16 input channels, each with a checkbox and a dropdown menu.

Input	Value
☒ input1:	A0
☒ input2:	A1
☒ input3:	A2
☒ input4:	A3
☐ input5:	A4
☐ input6:	A5
☐ input7:	A6
☐ input8:	A0
☐ input9:	A0
☐ input10:	A0
☐ input11:	A0
☐ input12:	A0
☐ input13:	A0
☐ input14:	A0
☐ input15:	A0
☐ input16:	A0

At the bottom are three buttons: **OK**, **Cancel**, and **Default**.

Function Operation

Logic Element Select:

Select the necessary Logic Element for analyzing, which include AND, OR, NAND, NOR, XOR, XNOR and NOT.

Pin Assignment

Custom Channel: Set signal channels that are used and its number.

Virtual output decoding mode: users can use the Virtual output decoding mode to decode, and it is not necessary for users to select Output.

Output Delay Settings

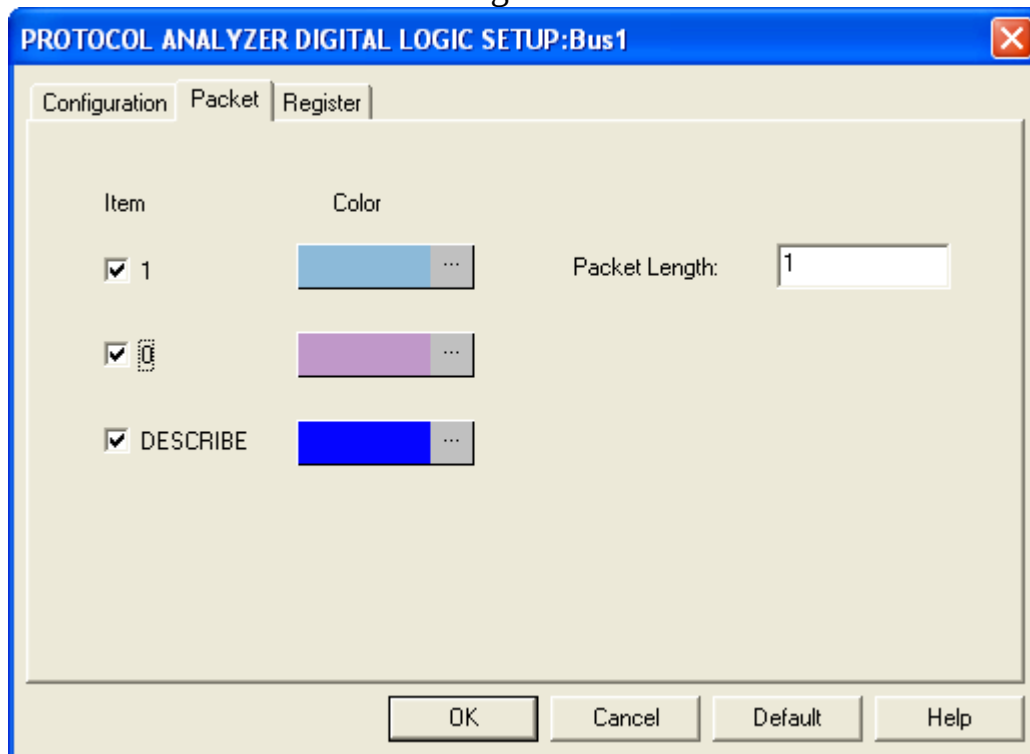
Customize delay time higher limit: Set the default of higher limit of delay time as 10ns.

Protocol Analyzer Color

Users can set and vary the color of the items according to their own requirements.

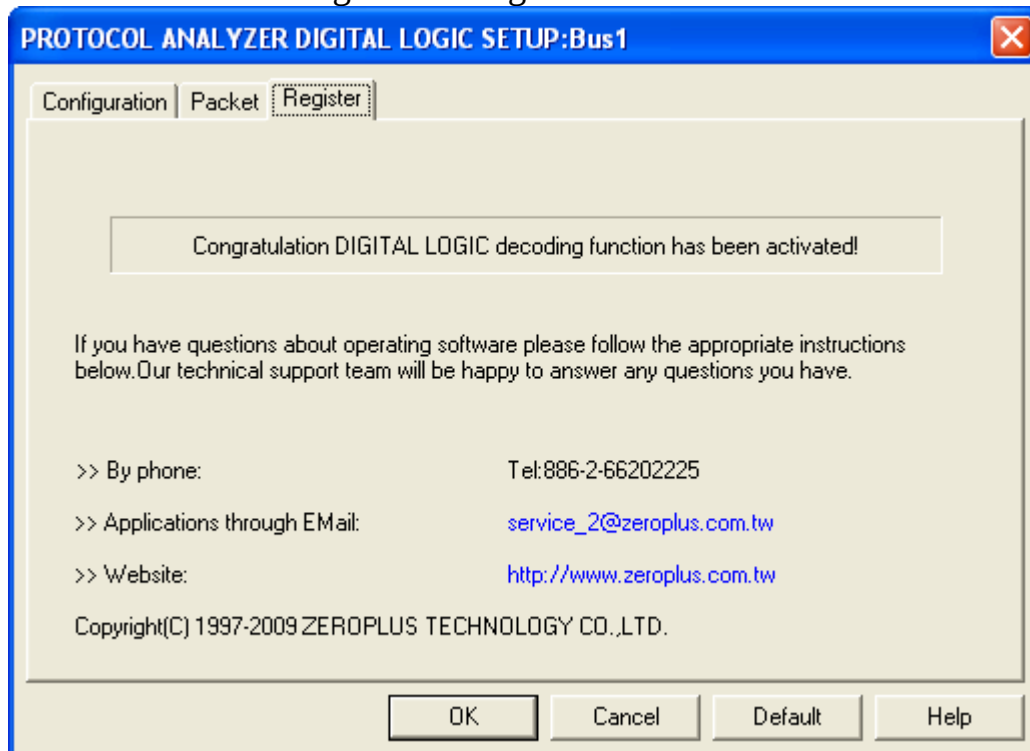


DIGITAL LOGIC Packet Dialog Box



In the packet dialog box, users can choose any or all items and set the color and Packet Length according to their own requirements.

DIGITAL LOGIC Register Dialog Box

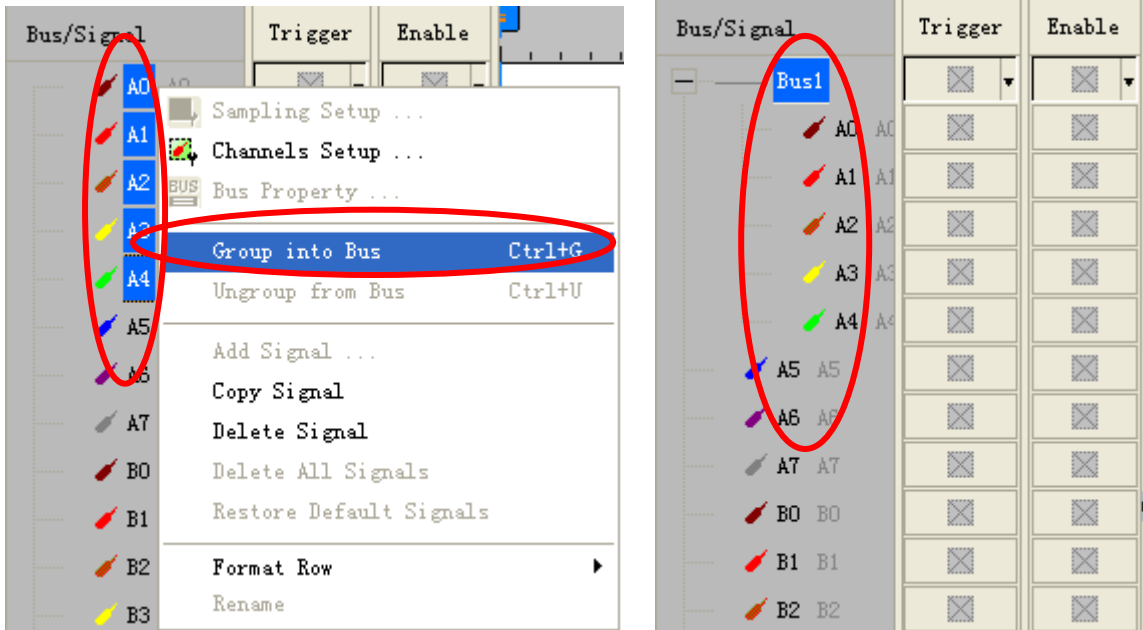


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

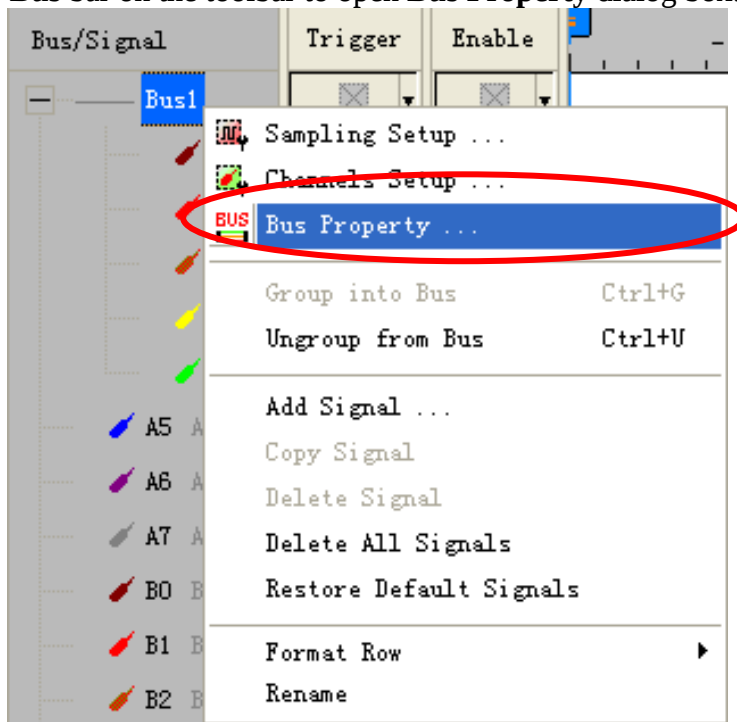


3 Operating Instructions

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

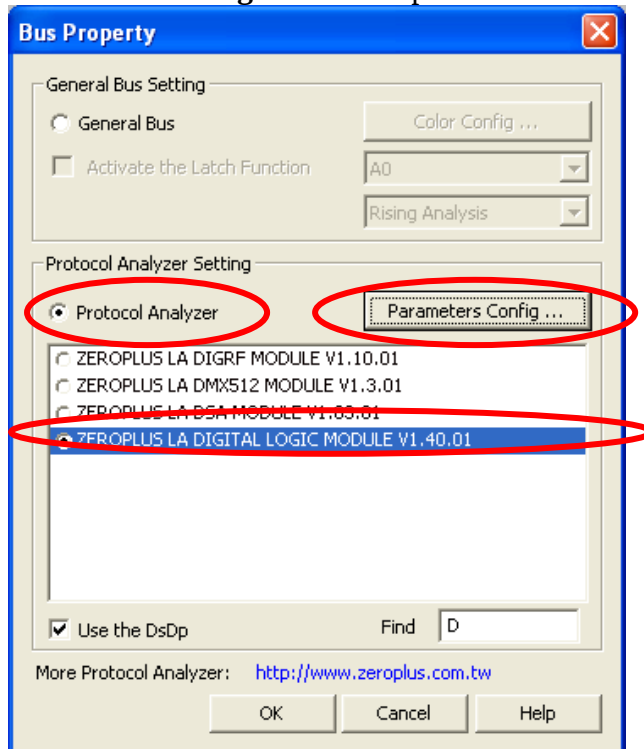


STEP 2. Select **Bus1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.

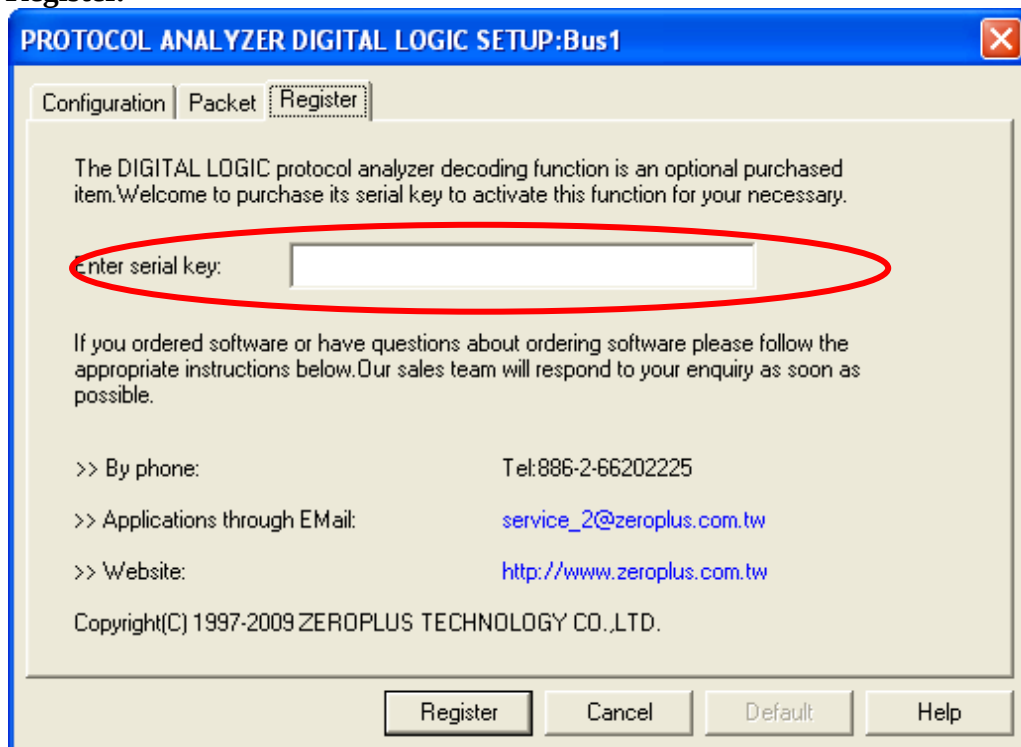




STEP 3. For Protocol Analyzer DIGITAL LOGIC Parameters Configuration, select Protocol Analyzer, and then select **ZEROPLUS LA DIGITAL LOGIC MODULE V1.40.01**. Next click **Parameters Configuration** to open **Parameters Configuration** dialog box.

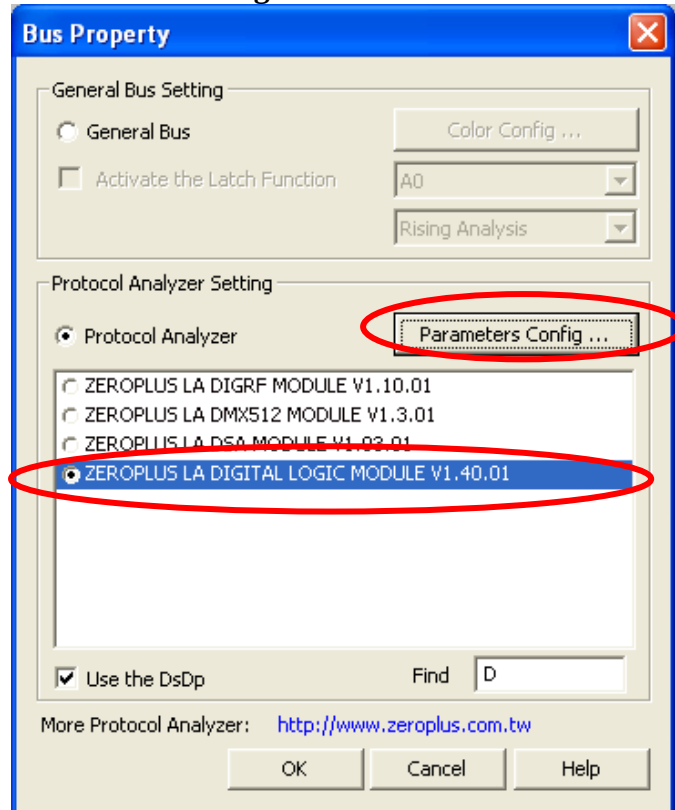


STEP 4. Click Register tab to type the serial key number of **DIGITAL LOGIC**. Then, press **Register**.

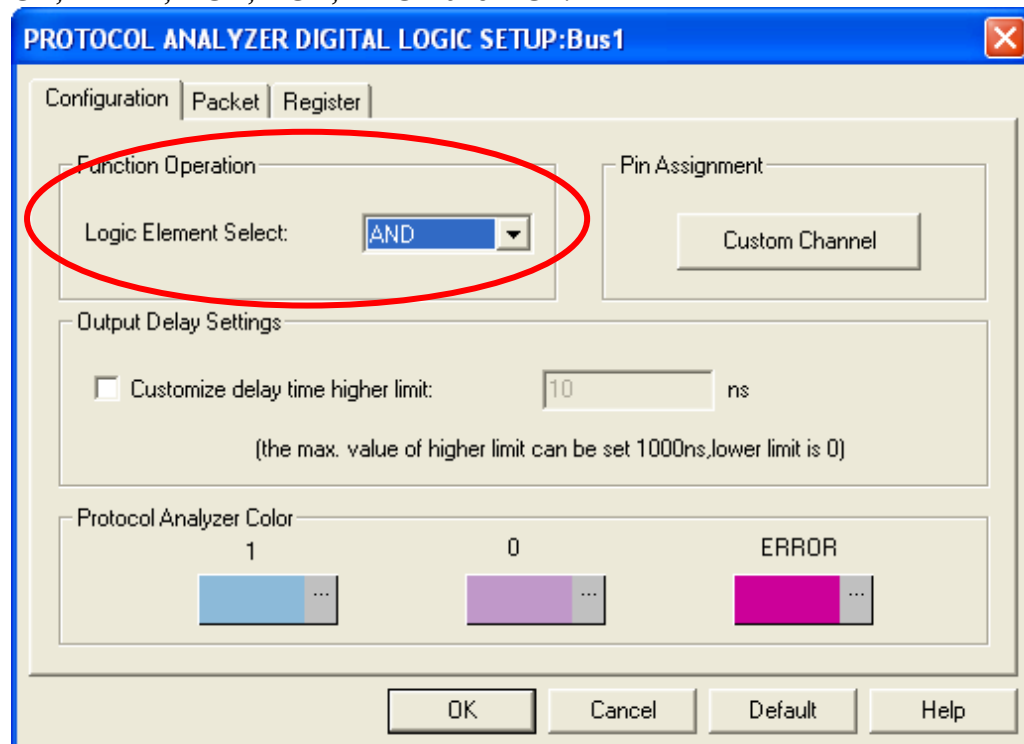




STEP 5. After completing **Register**, come back to the **Bus Property** dialog box, then click the **Parameters Configuration** to start the Protocol Analyzer DIGITAL LOGIC setup.

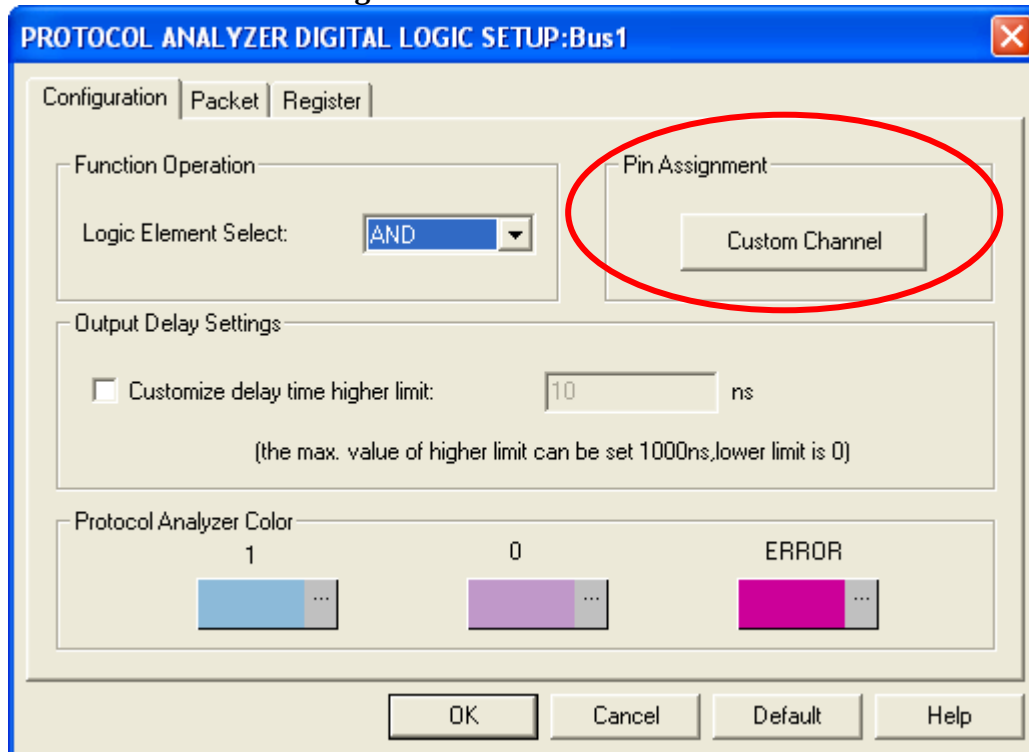


STEP 6. Set **Function Operation**. Users can set the useable logic elements, which are AND, OR, NAND, NOR, XOR, XNOR and NOT.

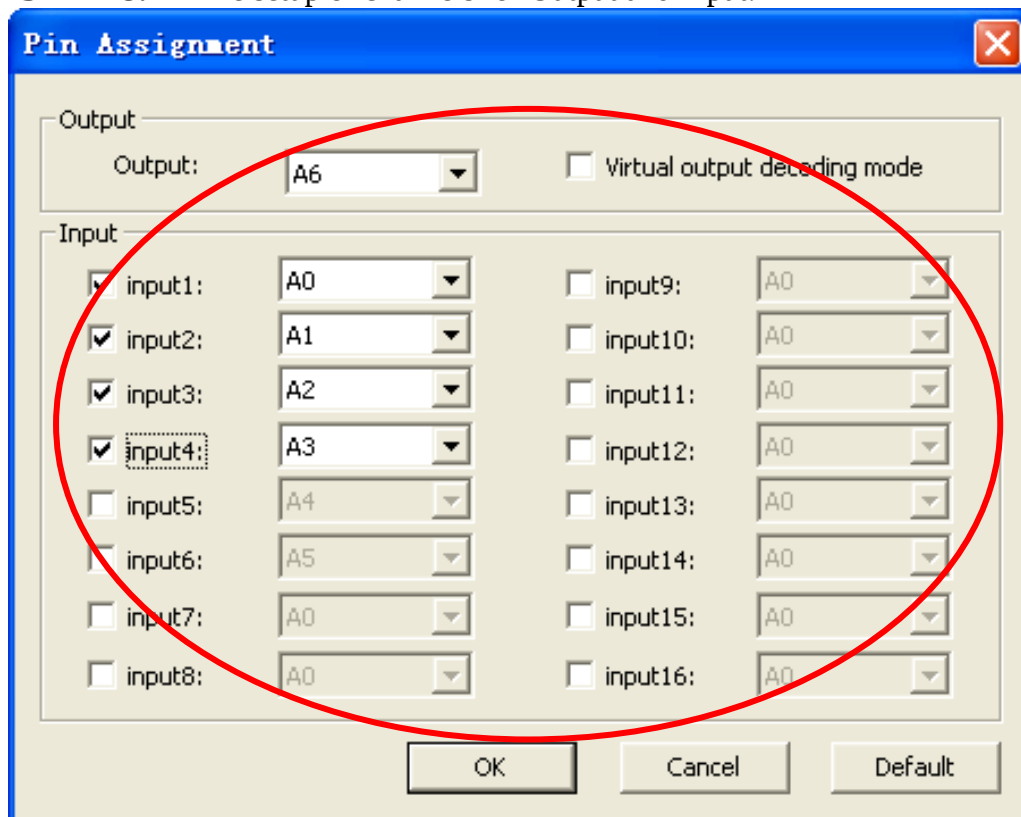




STEP 7. Set **Pin Assignment**. Click the Custom Channel to set the contents of channels.

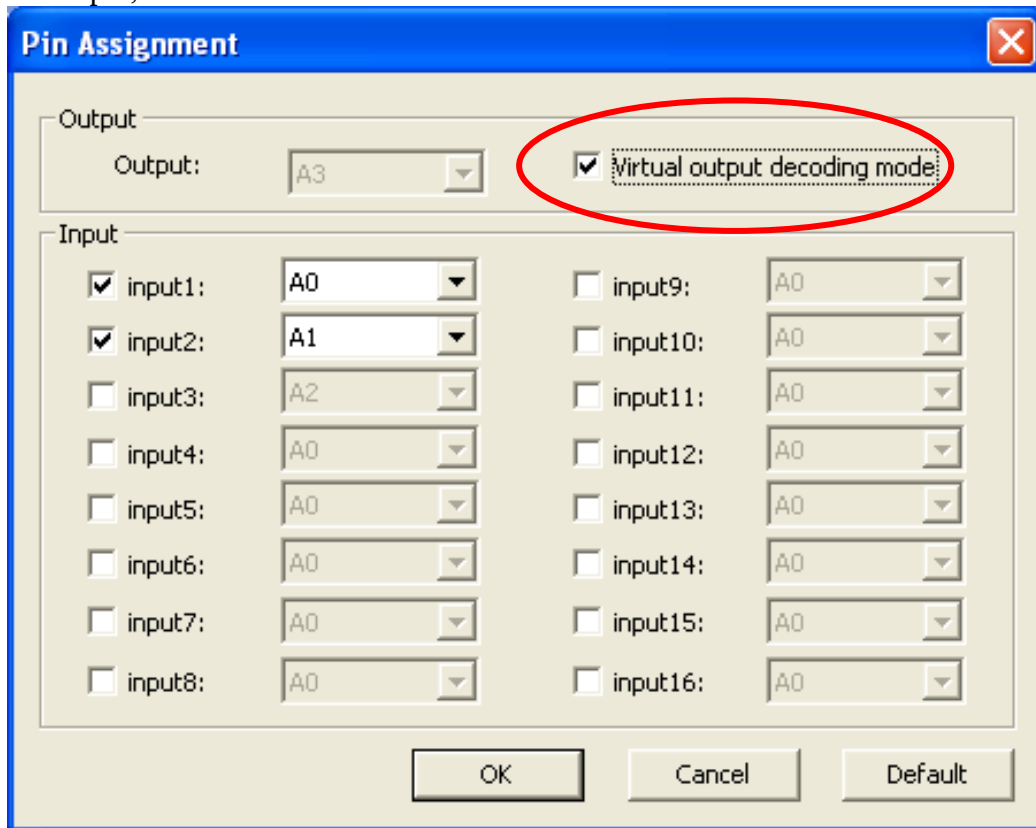


STEP 8. The setup of channels for Output and Input.



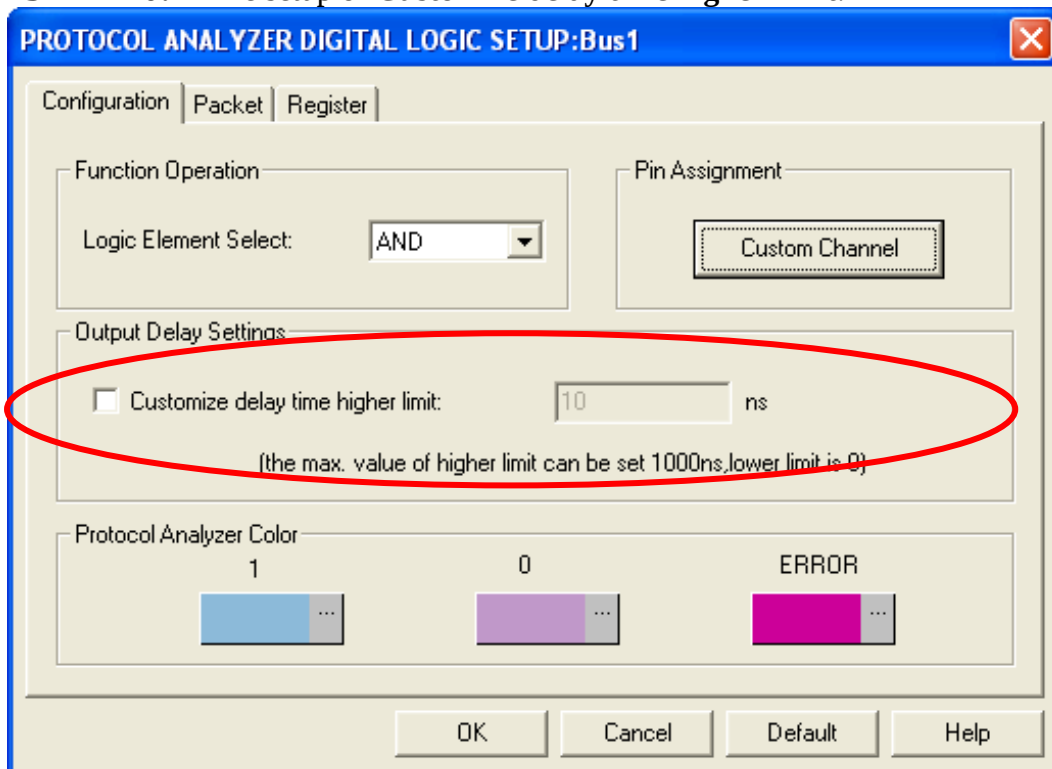


STEP 9. If selecting the Virtual output decoding mode, there is no need for users to set the part of Output, and it also can decode.



The Pin Assignment dialog box is shown. The 'Output' section has a dropdown menu set to 'A3'. The 'Virtual output decoding mode' checkbox is checked and circled in red. The 'Input' section contains 16 input fields, each with a checkbox and a dropdown menu. The first two inputs are checked and set to 'A0'. The remaining 14 inputs are unchecked and set to 'A0'. At the bottom are 'OK', 'Cancel', and 'Default' buttons.

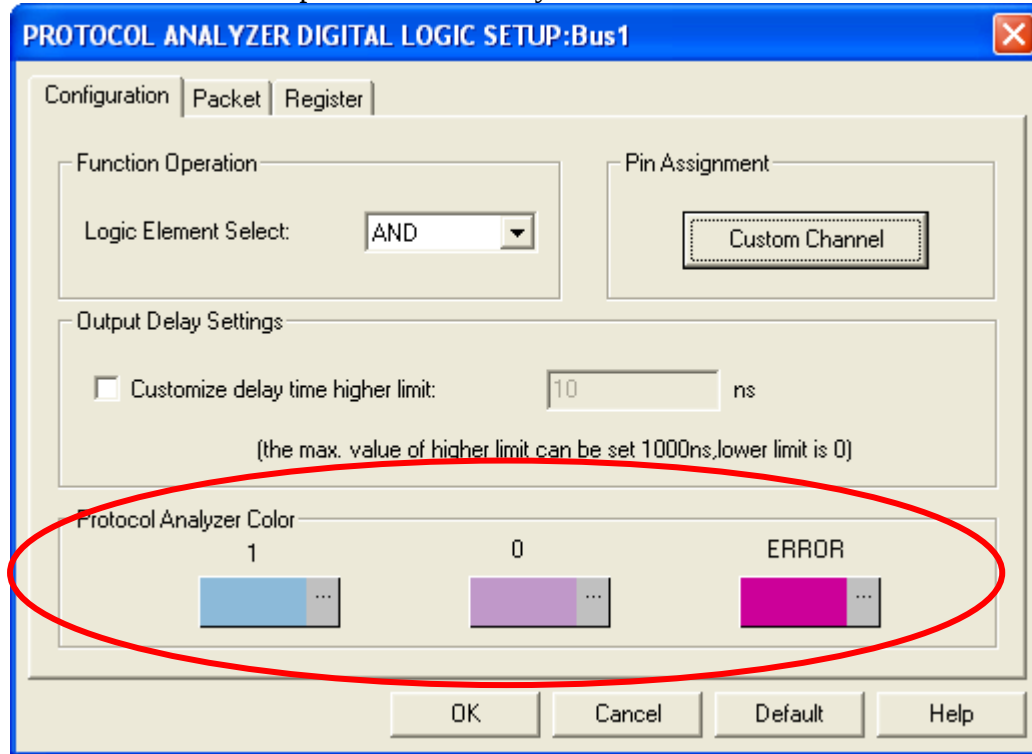
STEP 10. The setup of Customize delay time higher limit.



The PROTOCOL ANALYZER DIGITAL LOGIC SETUP:Bus1 dialog box is shown. The 'Configuration' tab is selected. The 'Function Operation' section has a 'Logic Element Select' dropdown set to 'AND'. The 'Pin Assignment' section has a 'Custom Channel' button. The 'Output Delay Settings' section has a 'Customize delay time higher limit' checkbox checked and circled in red, with a value of '10' ns. Below this, a note states: '(the max. value of higher limit can be set 1000ns, lower limit is 0)'. The 'Protocol Analyzer Color' section shows three color swatches: '1' (blue), '0' (purple), and 'ERROR' (magenta). At the bottom are 'OK', 'Cancel', 'Default', and 'Help' buttons.

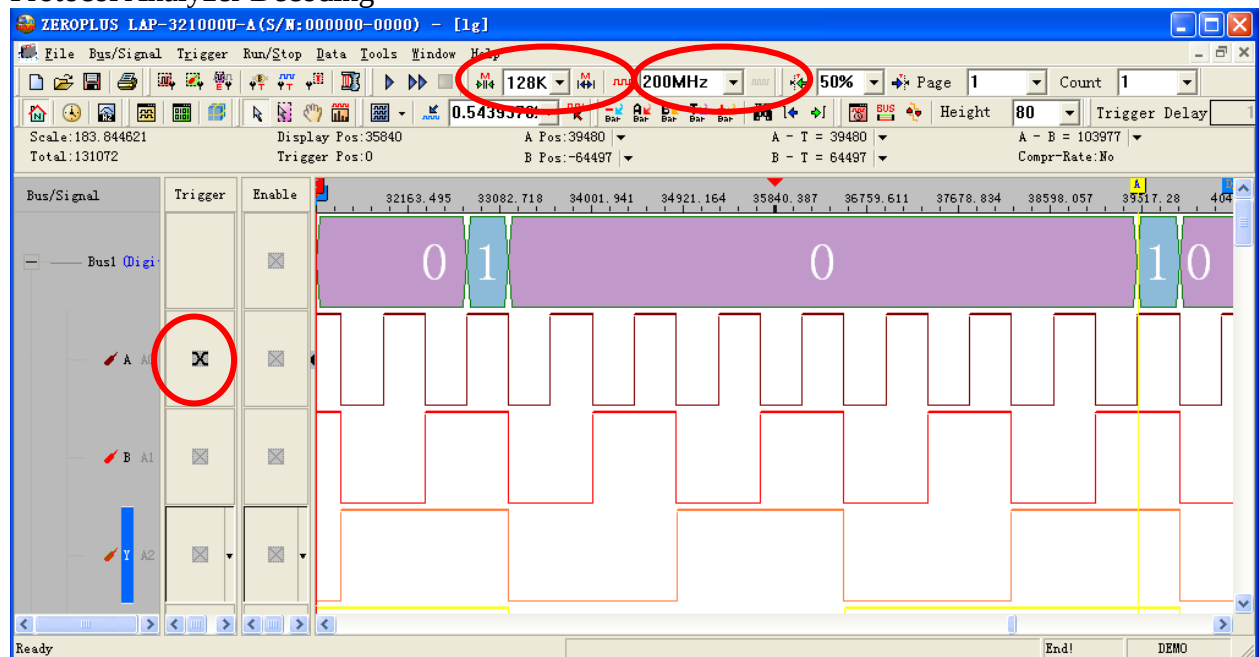


STEP 11. The setup of Protocol Analyzer Color.



STEP 12. Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Either Edge; the memory depth is 128K; the sampling frequency is 200MHZ.

Protocol Analyzer Decoding





Packet List

