



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

SPECIFICATION

MODEL: B08038-LAP-HD Audio-M

PART NO: _____

VERSION: V1.03

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to ZeroPlus Technology after signing.

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1 Software Download

Please install the software as the following steps:

Remark: 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. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

STEP 2. Click the **English** in the Instrument Division part on the Homepage.

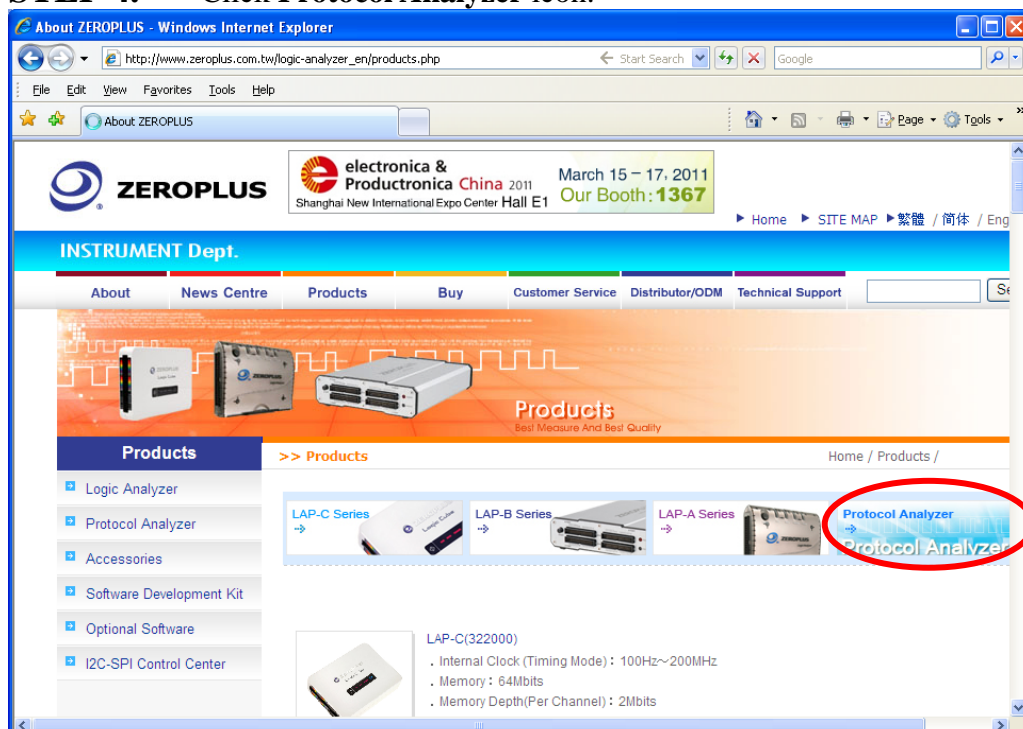




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

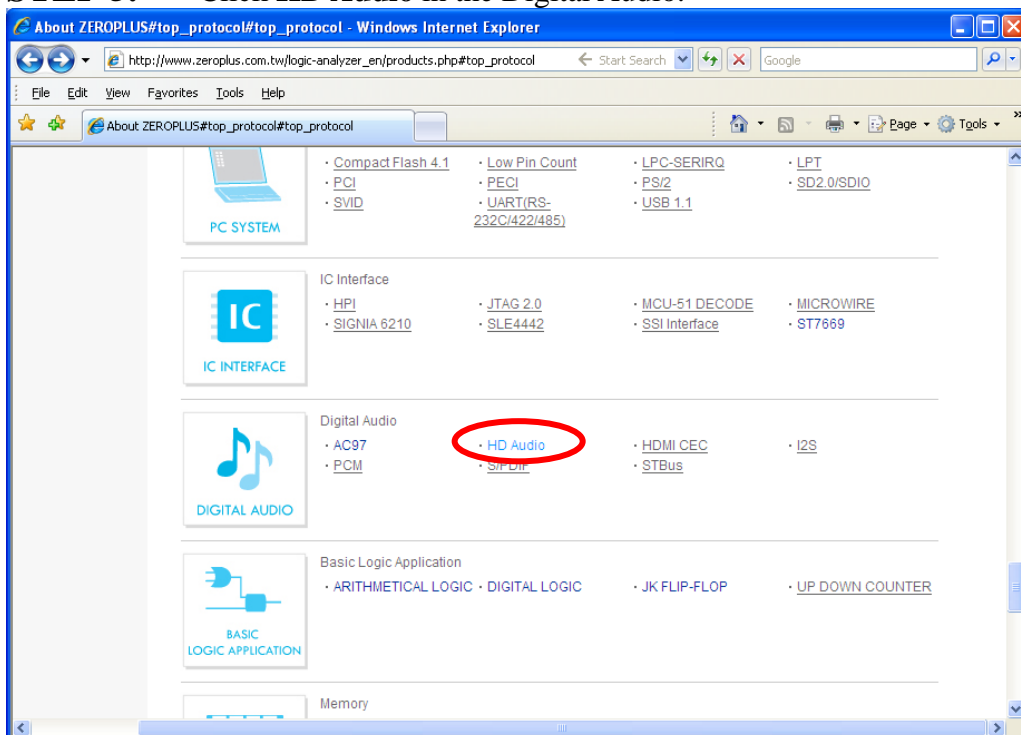


STEP 4. Click **Protocol Analyzer** icon.

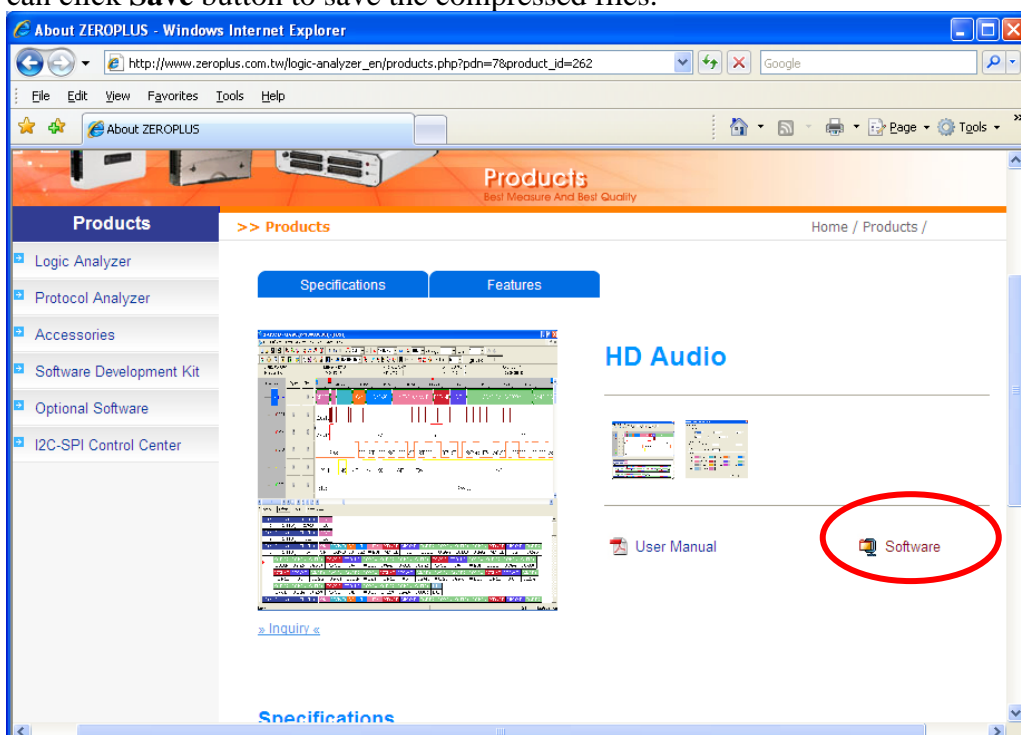




STEP 5. Click **HD Audio** in the Digital Audio.



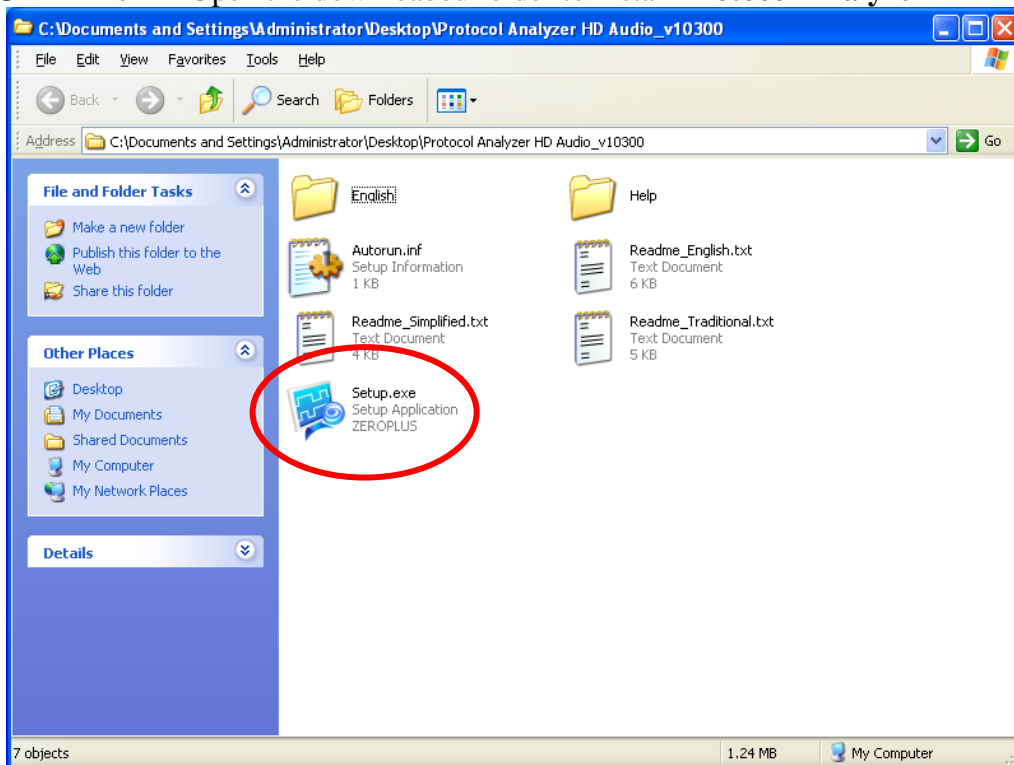
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



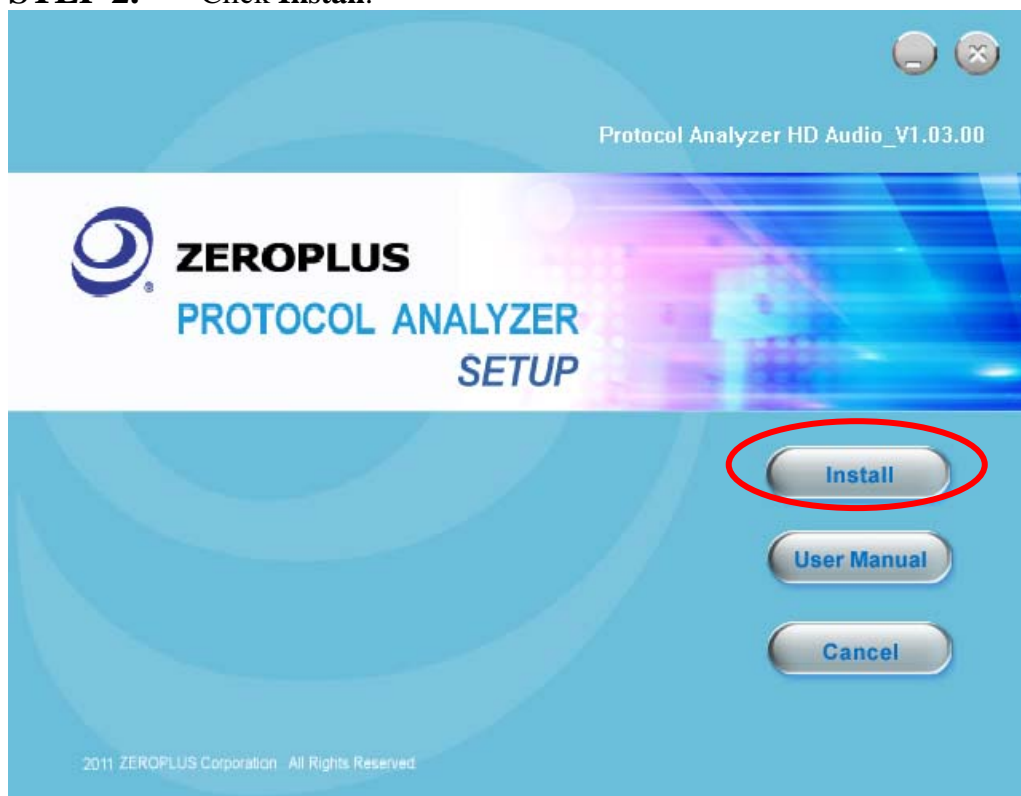


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer HD Audio**.

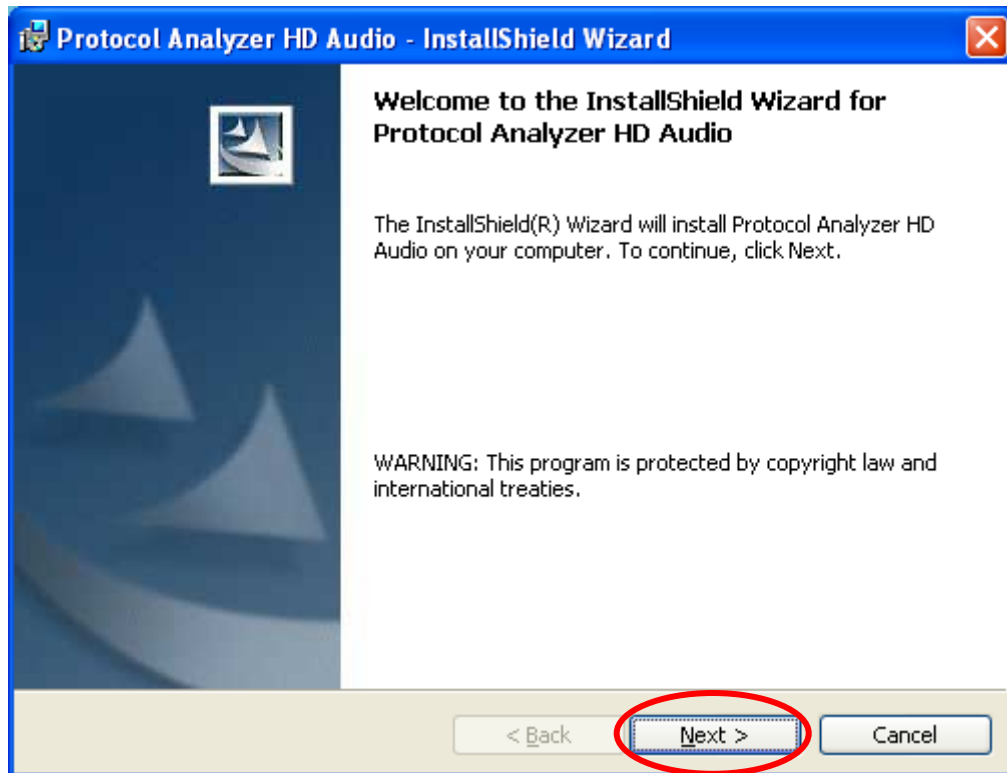


STEP 2. Click **Install**.

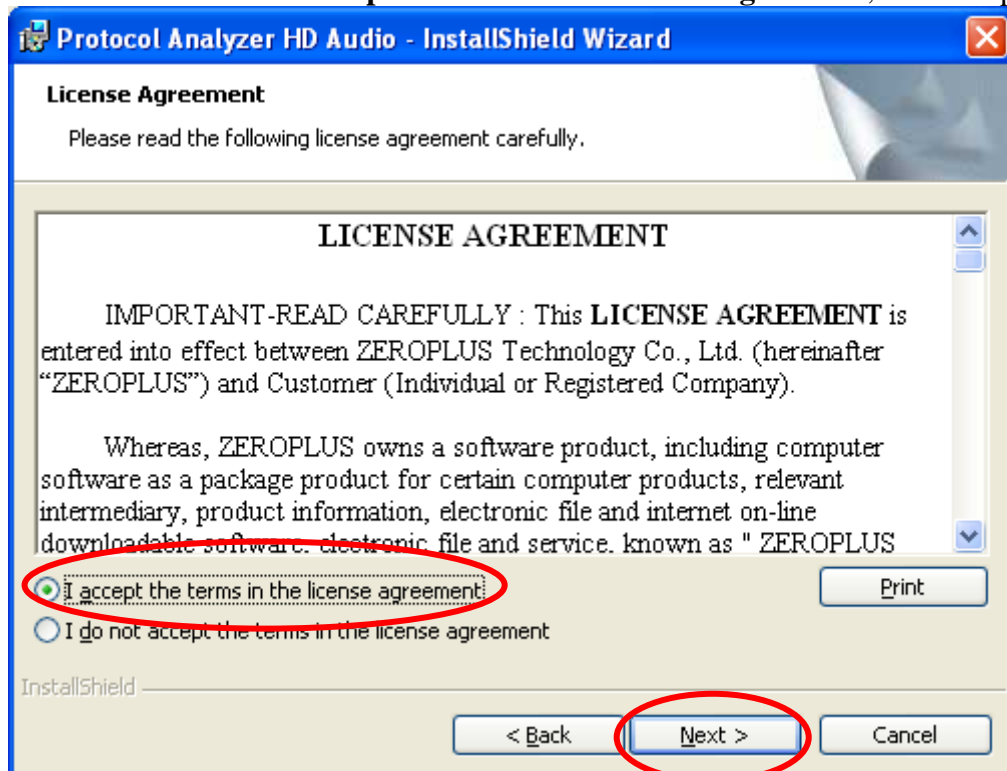




STEP 3. Click Next.



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 HD Audio - InstallShield Wizard

Customer Information

Please enter your information.

User Name:
Microsoft

Organization:
User

Install this application for:

☒ Anyone who uses this computer (all users)

☐ Only for me (Microsoft)

InstallShield

< Back Next > Cancel

STEP 6. Select **Complete** and then click **Next**.

Protocol Analyzer HD Audio - 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.)

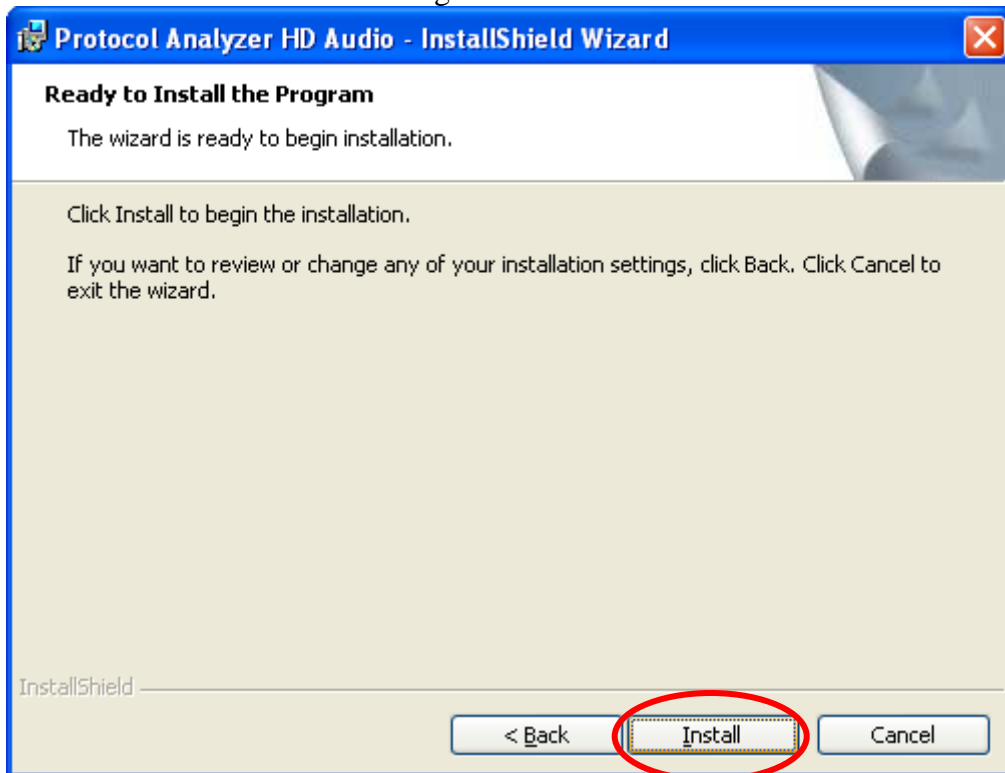
☐ **Custom**
Choose which program features you want installed and where they will be installed. Recommended for advanced users.

InstallShield

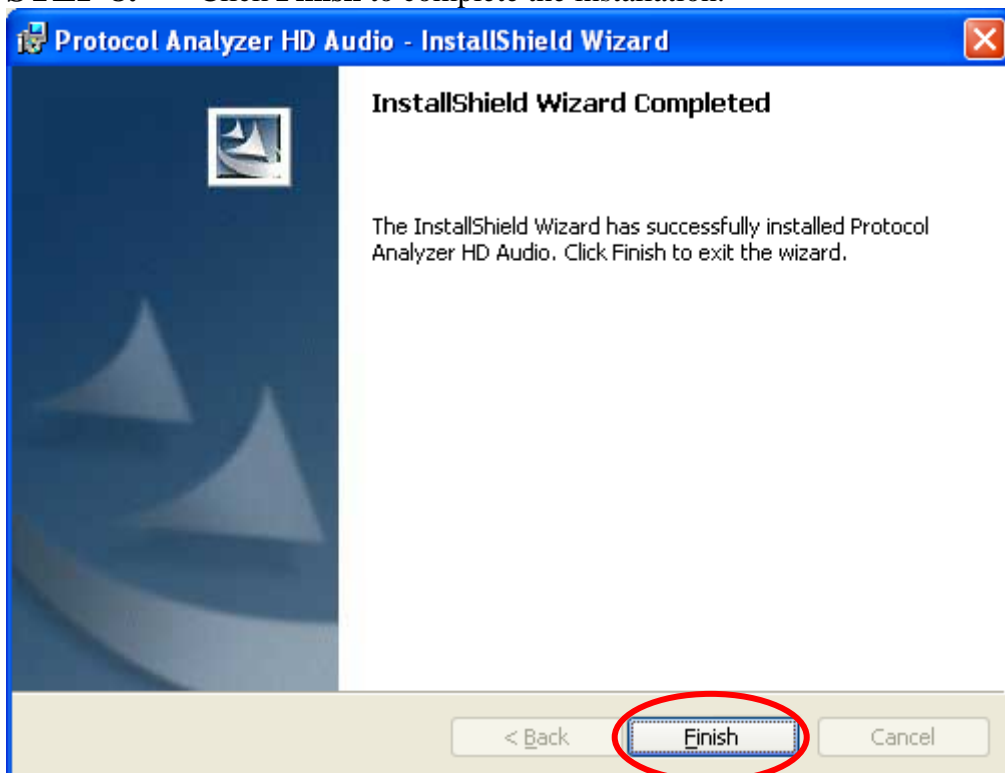
< Back Next > Cancel



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



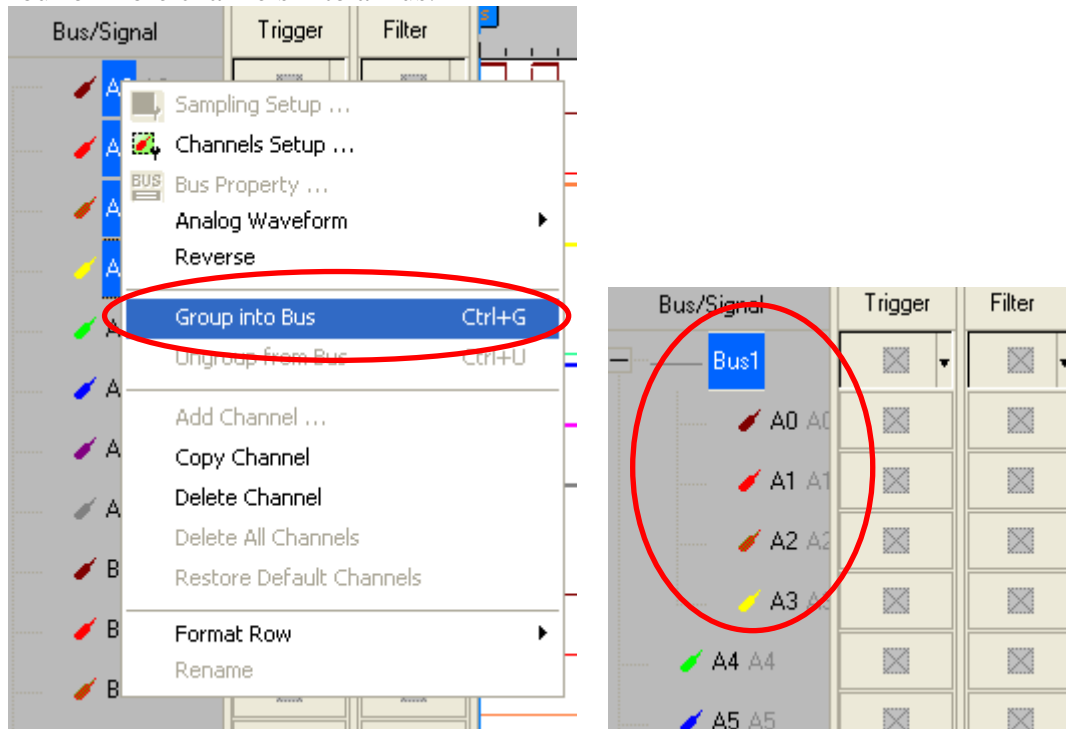
STEP 8. Click **Finish** to complete the installation.



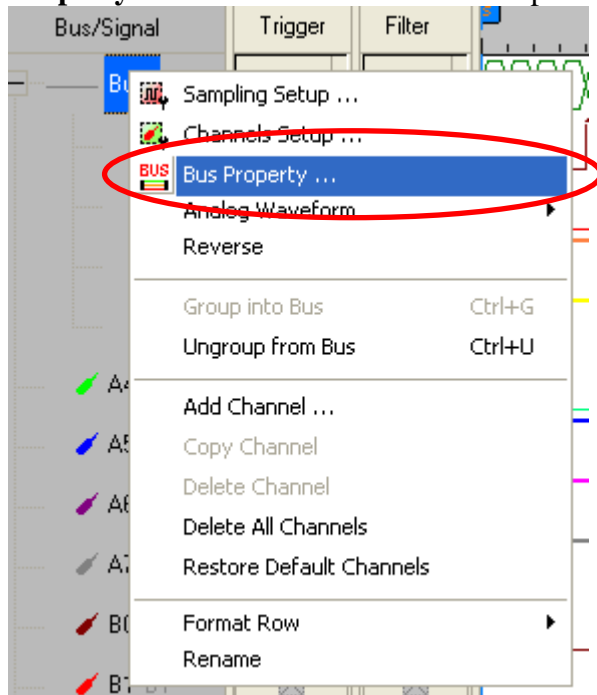


3 Software Register

STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **HD Audio** needs four channels to decode signals, so it is necessary to group four or more channels into a Bus.

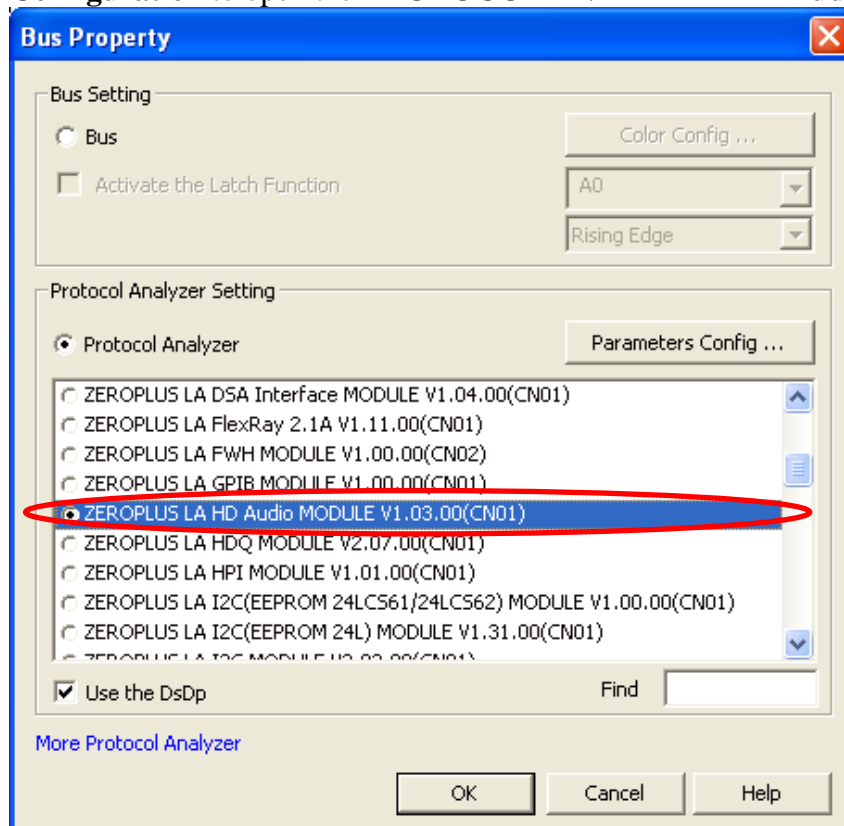


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

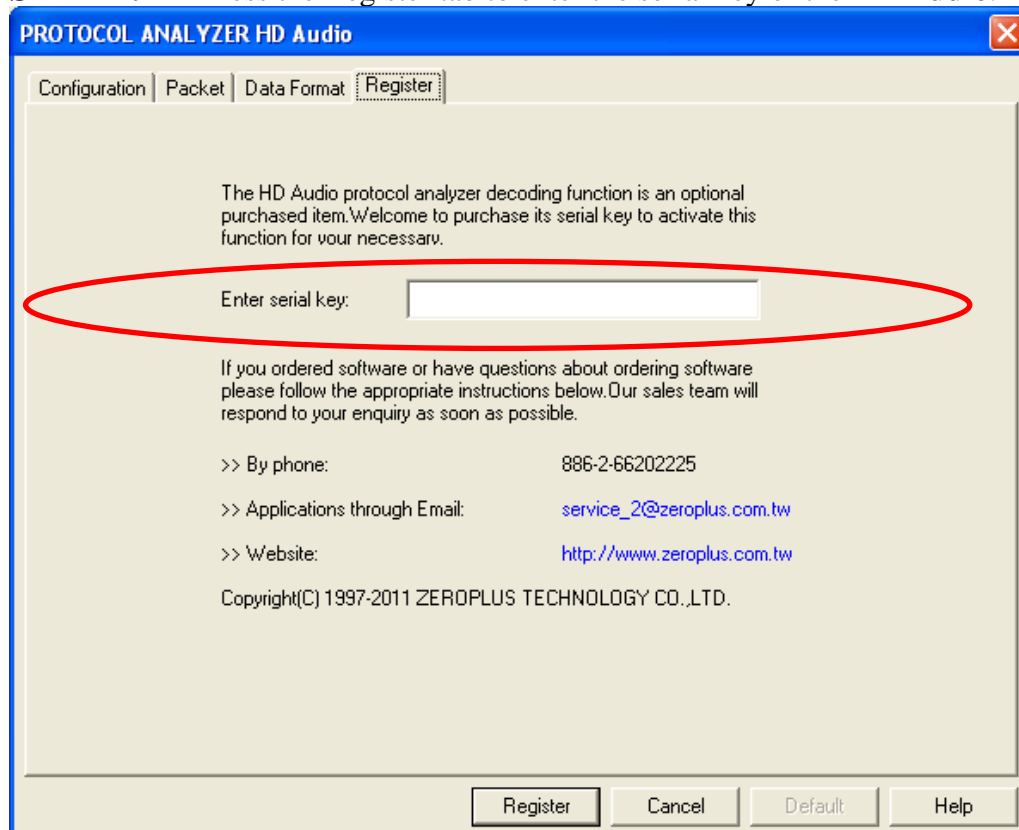




STEP 3. For Protocol Analyzer **HD Audio** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA HD Audio MODULE V1.03.00(CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER HD Audio** dialog box.

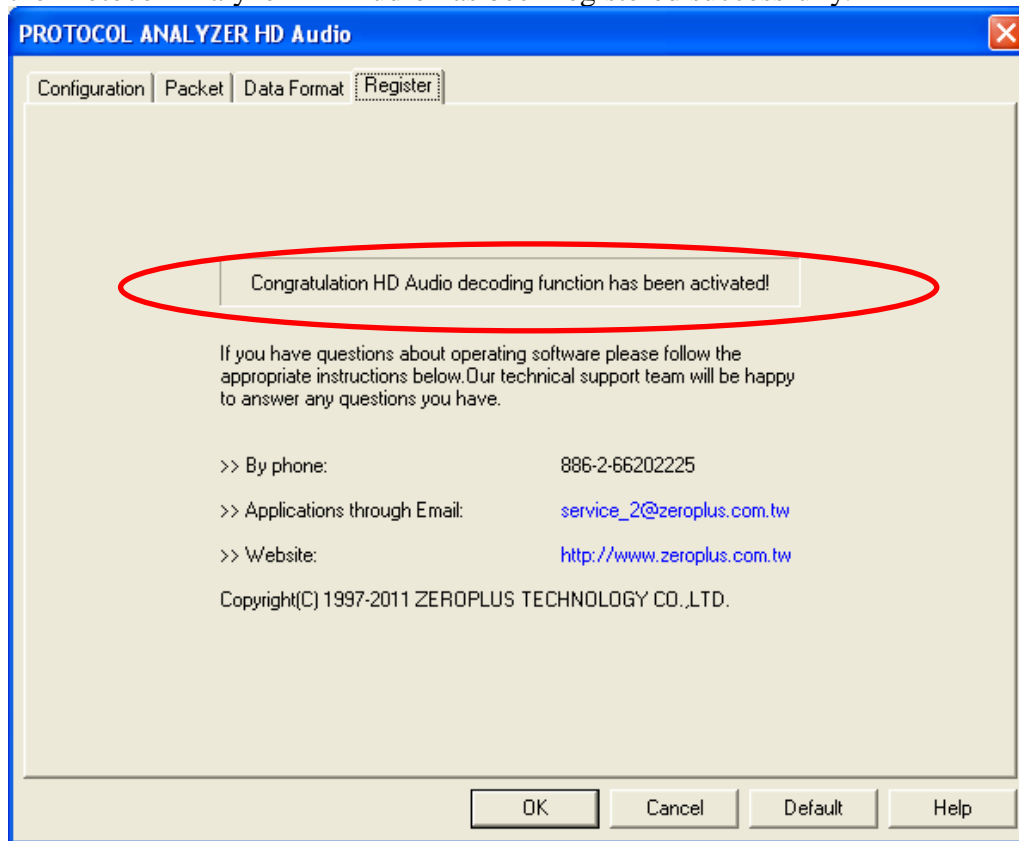


STEP 4. Press the Register tab to enter the serial key of the **HD Audio**. Then, press **Register**.





STEP 5. After pressing the Register button, the following dialog box will appear; it denotes that the Protocol Analyzer HD Audio has been registered successfully.

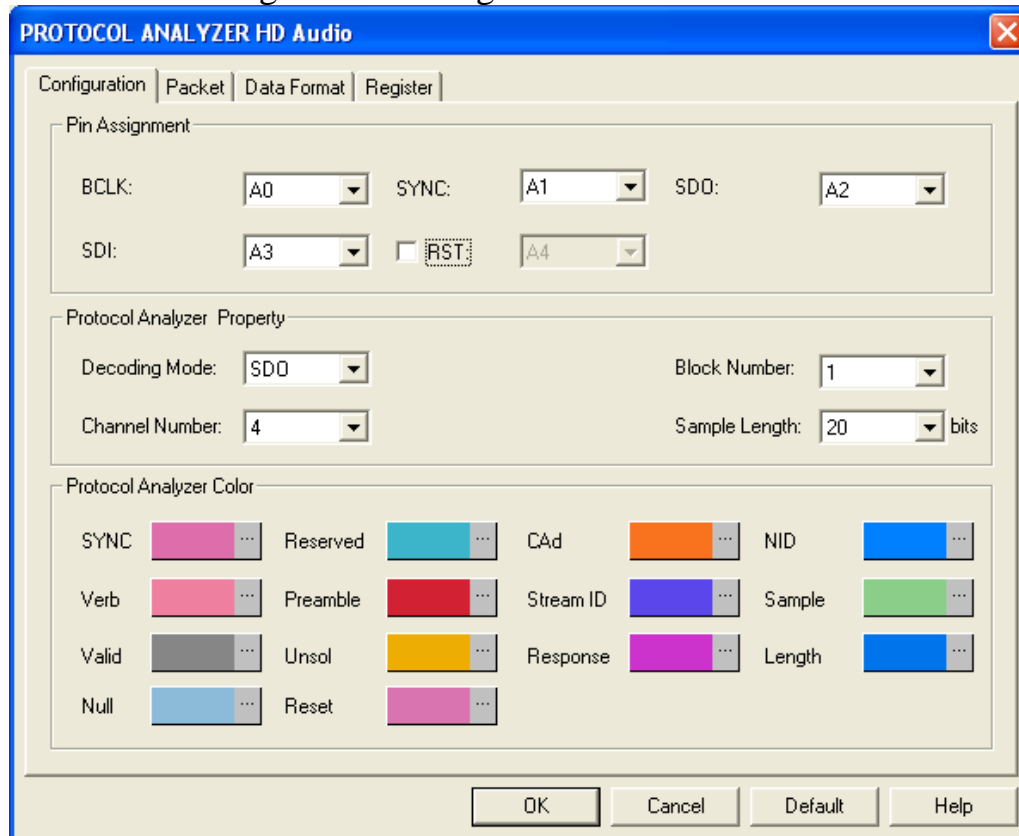




4 User Interface

In the configuration, please refer to the below images to select options of setting **HD Audio** module.

HD Audio Configuration Dialog Box



Pin Assignment:

BCLK: It is the Clock signal channel, and the default is A0.

SYCN: It is the Data Synchronization channel, and the default is A1.

SDO: It is the Data Output channel, and the default is A2.

SDI: It is the Data Input channel, and the default is A3.

RST: It is the Reset channel; RST can have effect when the RST is at the Low Level. There is also the selectable channel, and the default is A4.

Protocol Analyzer Property:

Decoding Mode: Set the Mode to SDO or SDI. It can decode the Output Data or Input Data. When the SDI is selected, the two options of Block Count and Channel Count can't be set.

Block Count: It is used for setting the number of Sample Block in a Stream Packet of the Output Data; the selectable is 1, 2 or 4.

Channel Number: It is used for setting the number of channels in a Block, that's to say, the number of Sample Unit; the selectable value is from 1 to 16.

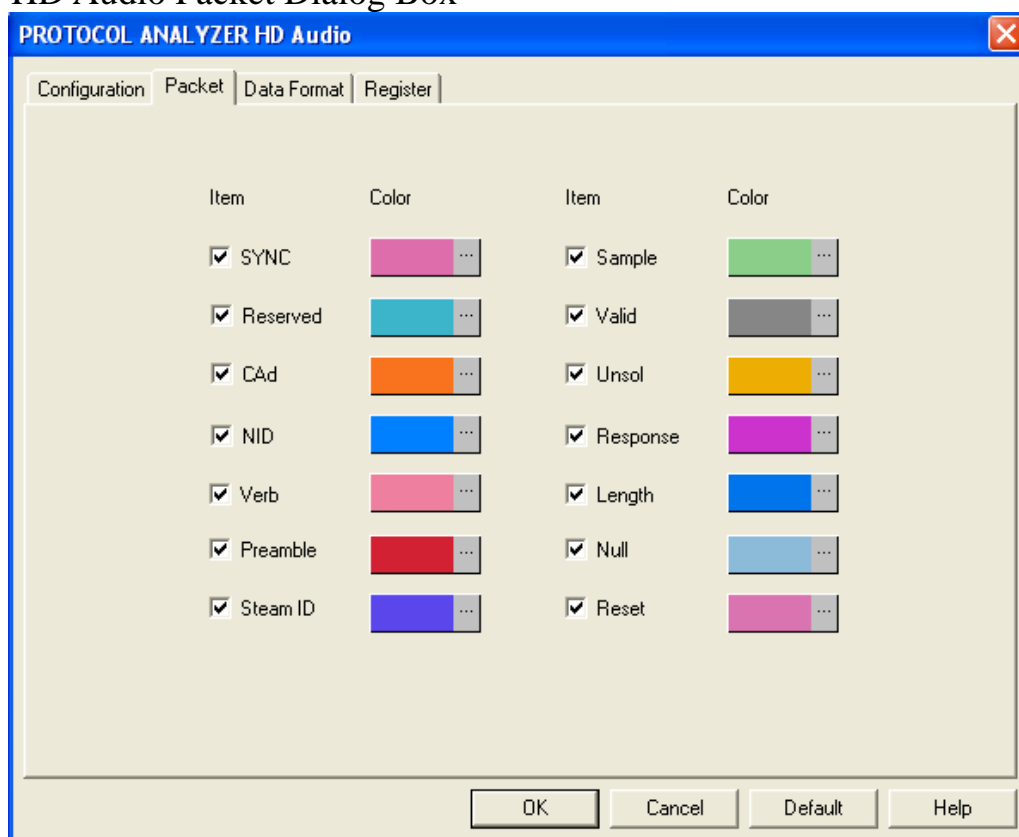
Sample Length: It is used for setting the Length of a Sample; the selectable value is 8, 16, 20, 24 or 32bits.

Protocol Analyzer Color:

The Protocol Analyzer Color can be varied by users.

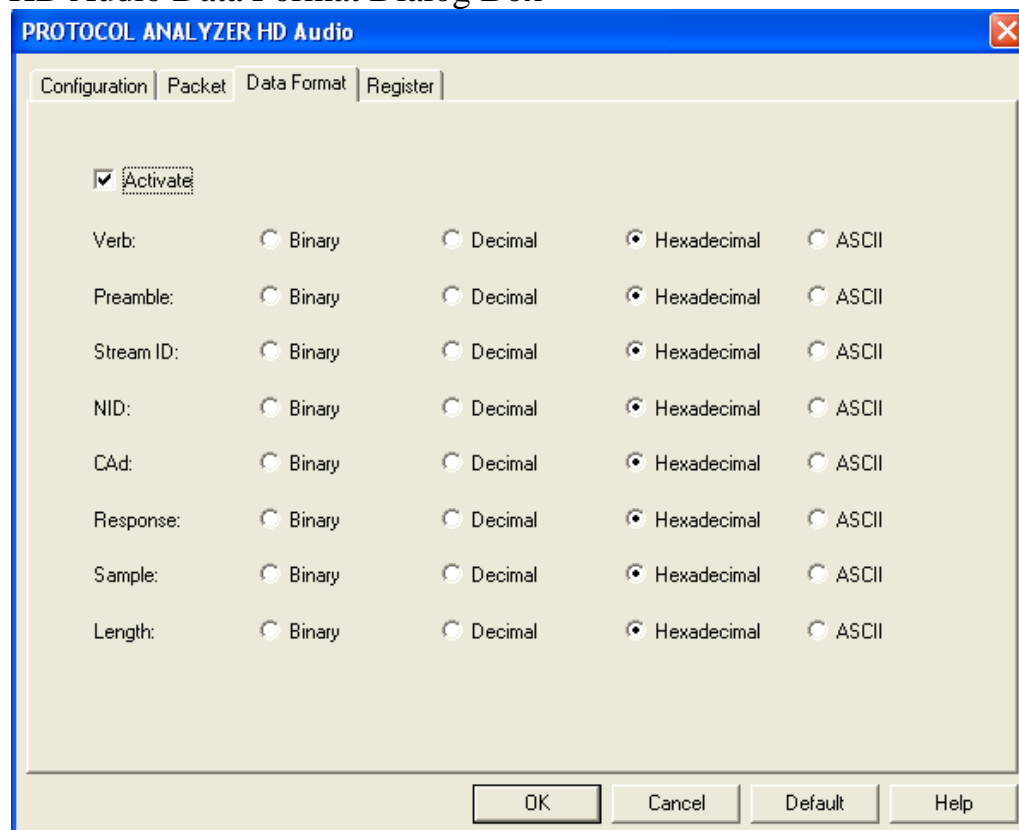


HD Audio Packet Dialog Box



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

HD Audio Data Format Dialog Box

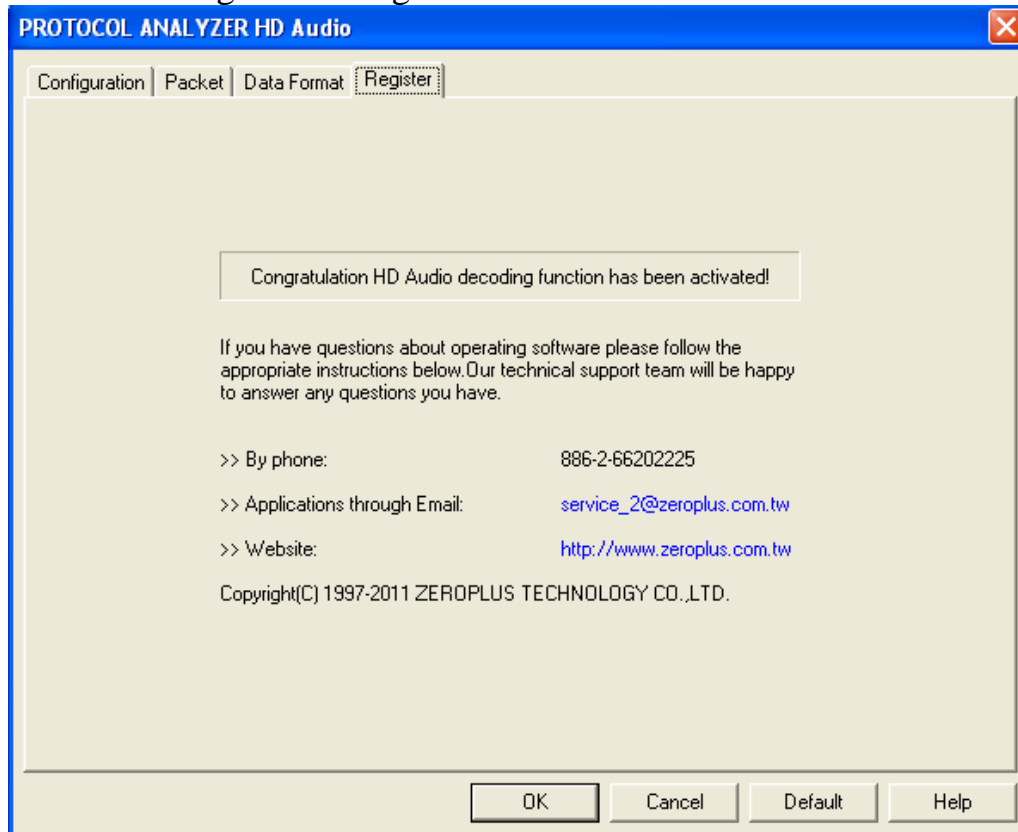


Users can set the Data Format of the Verb, Preamble, Stream ID, NID, CAd, Response, Sample and



Length 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.

HD Audio Register Dialog Box

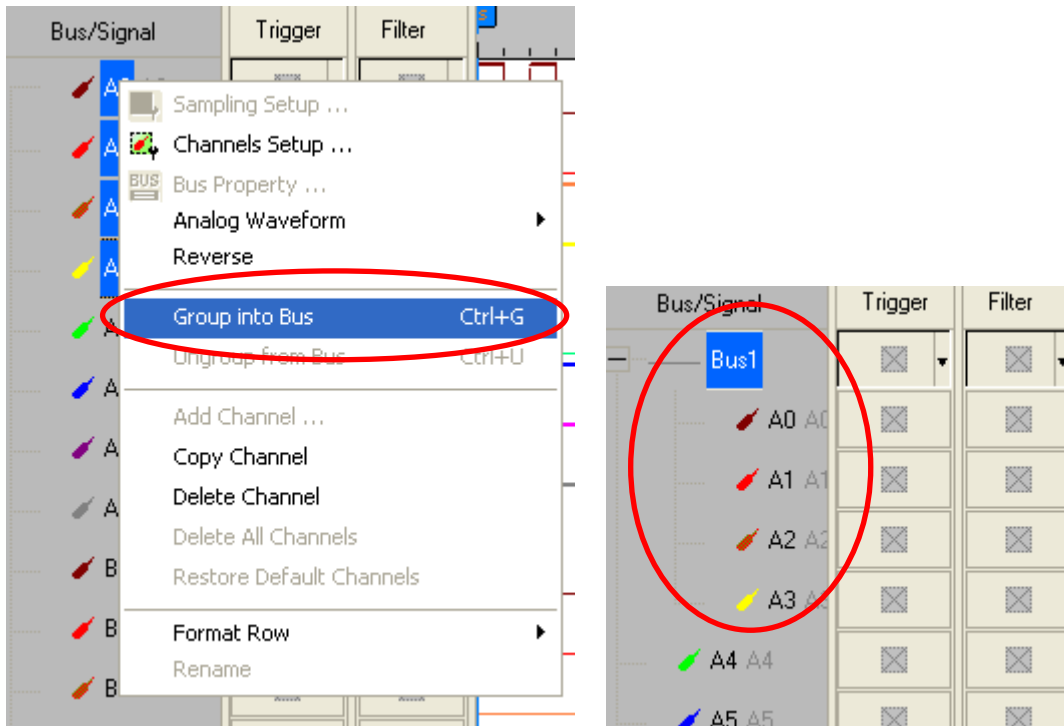


There is written ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

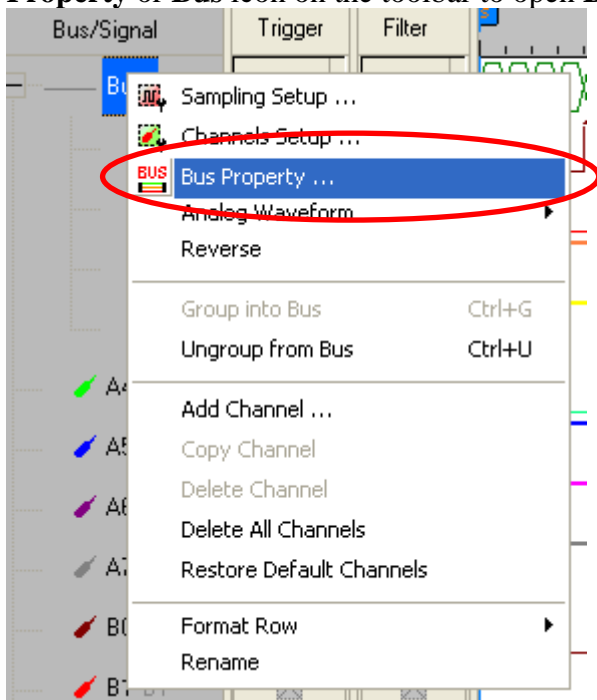


5 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. **HD Audio** needs four channels to decode signals, so it is necessary to group four or more channels into a Bus.

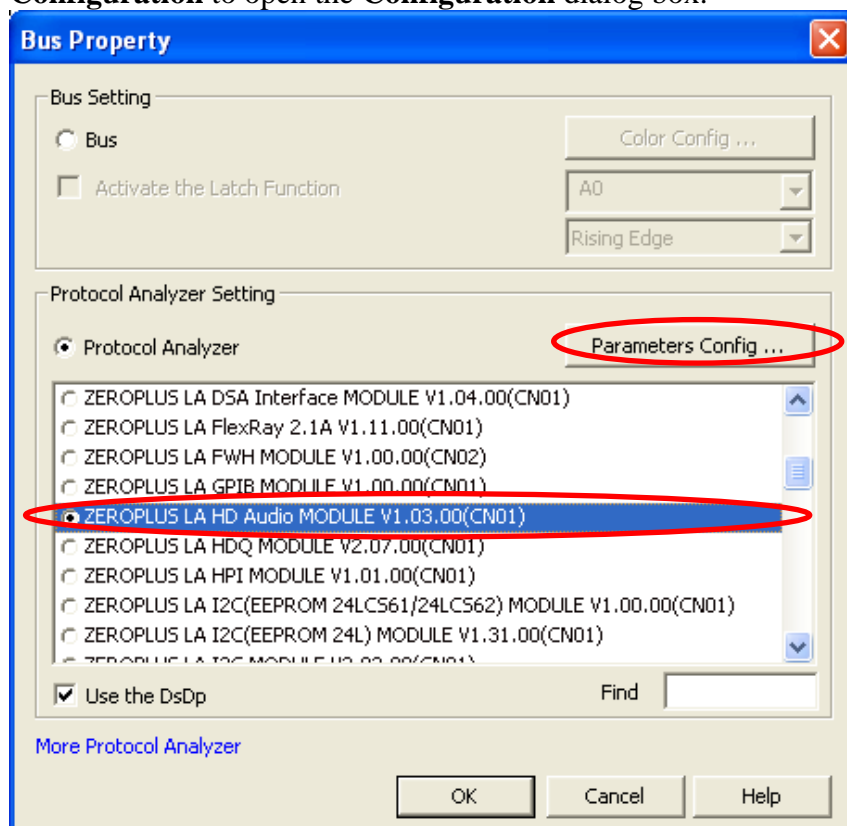


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

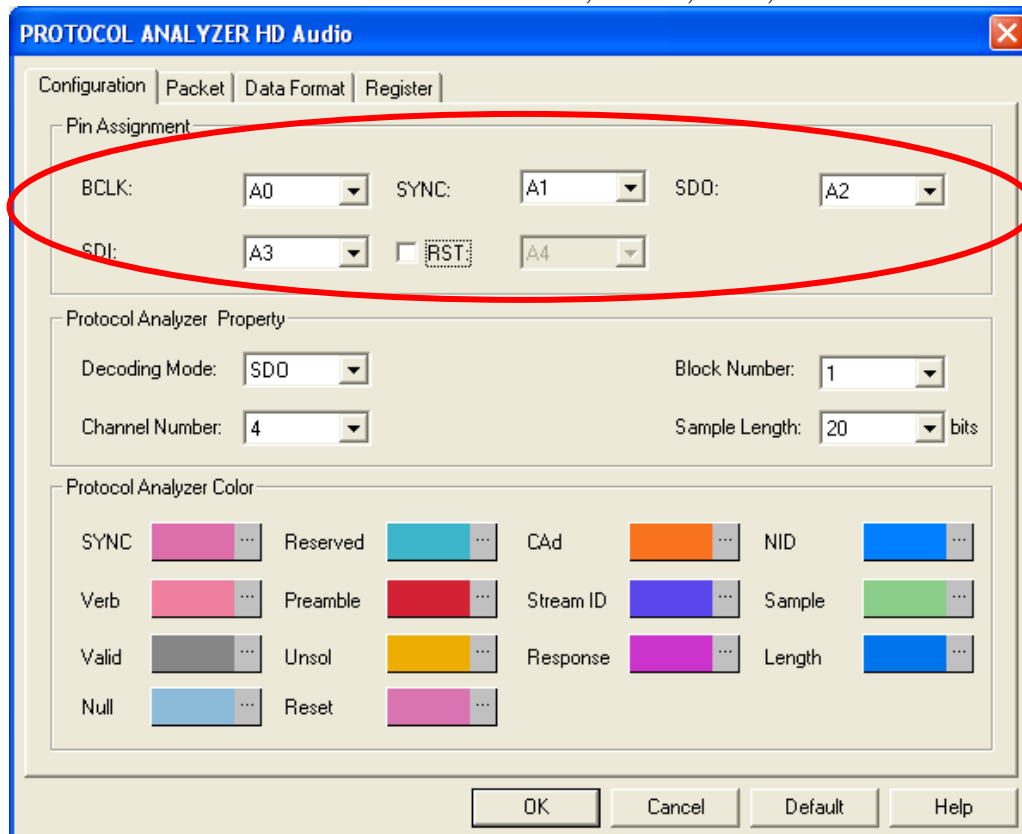




STEP 3. For Protocol Analyzer **HD Audio** Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA HD Audio MODULE V1.03.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

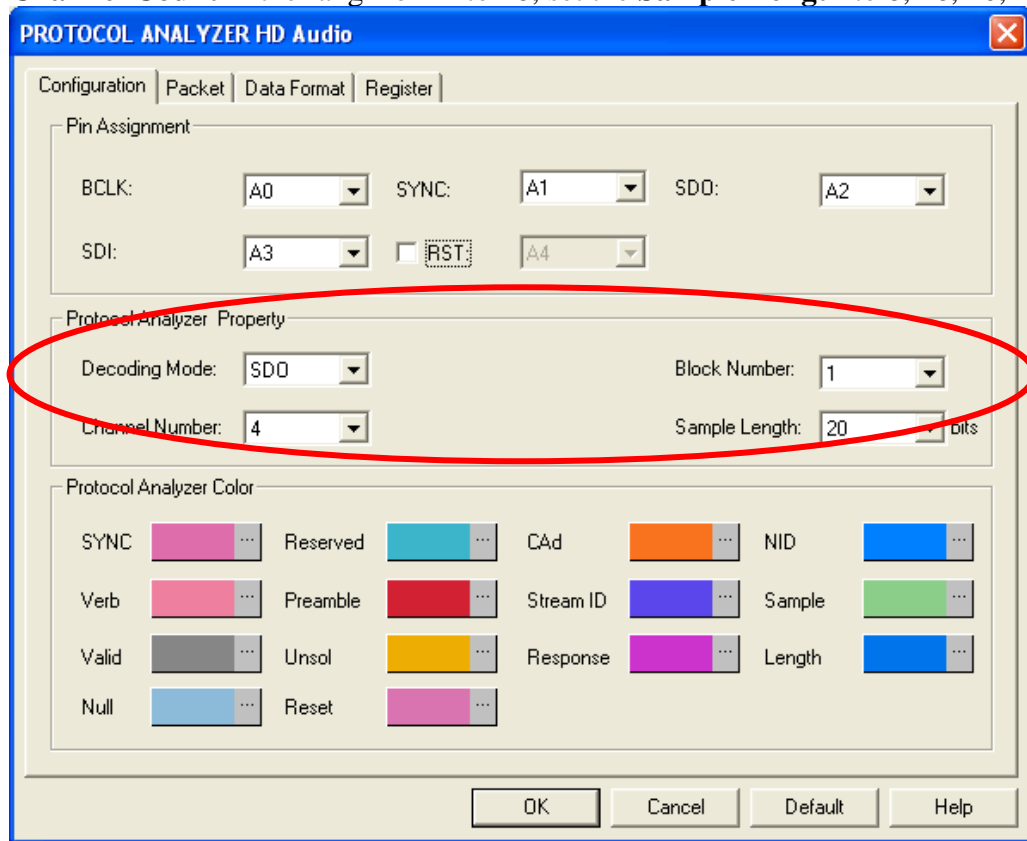


STEP 4. Set the channels of the BCLK, SYNC, SDO, SDI and RST.

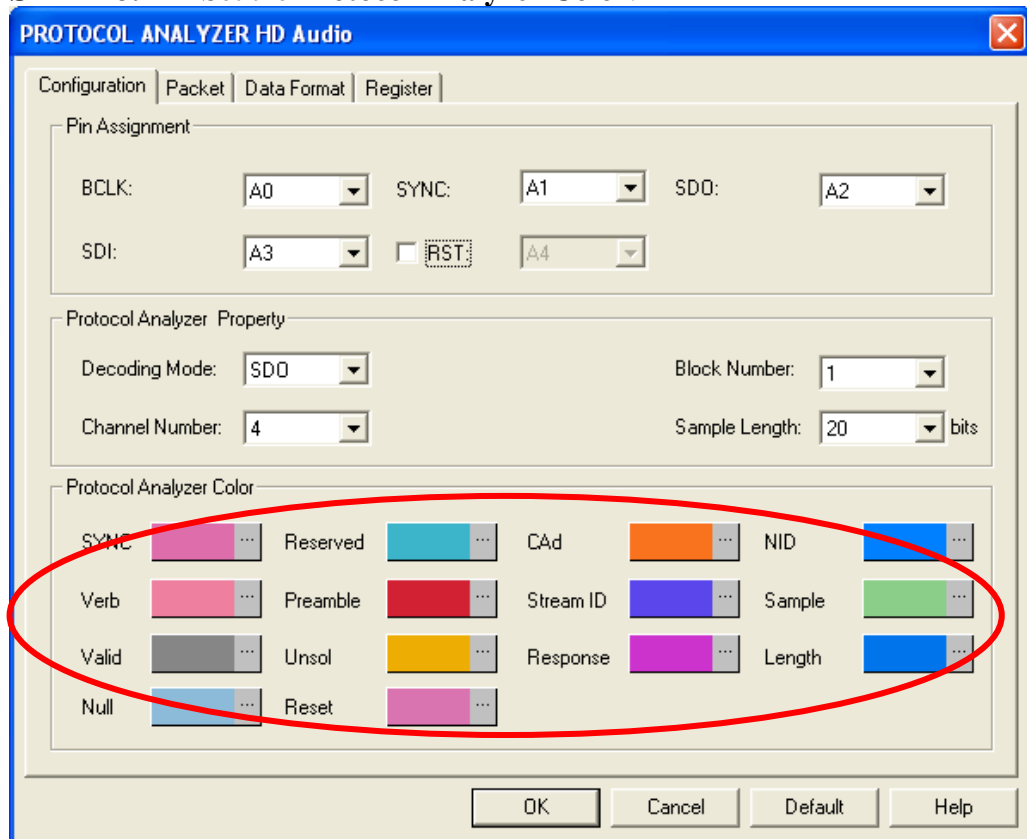




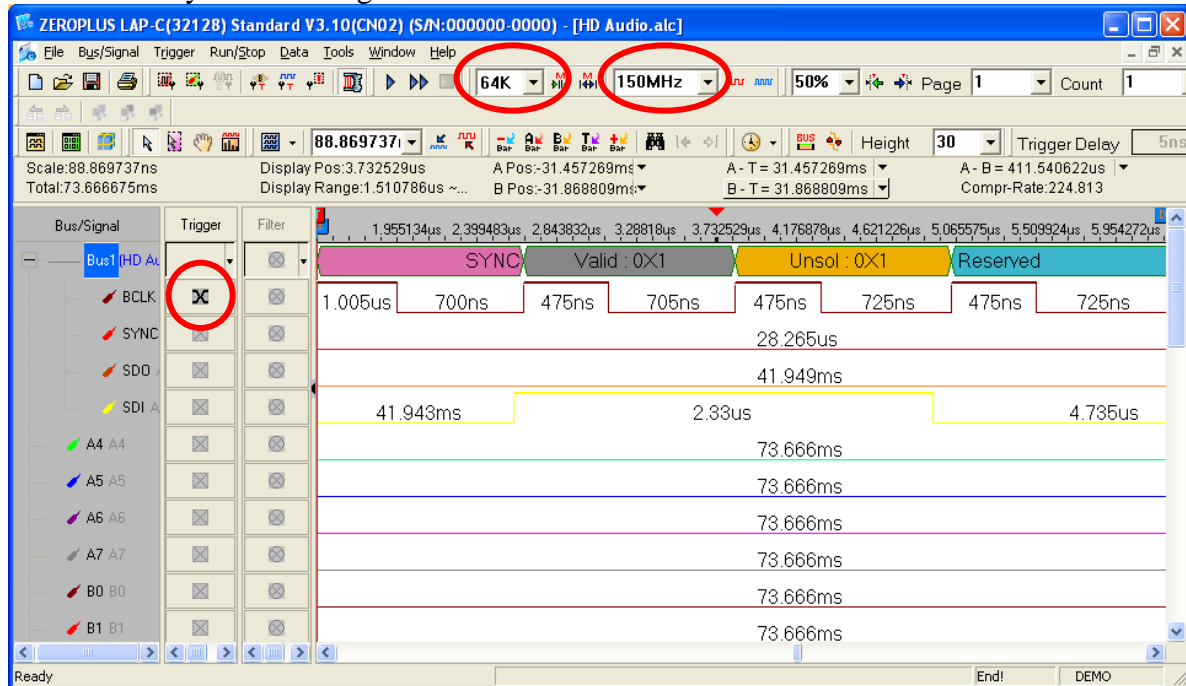
STEP 5. Set the **Decoding Mode** to SDO or SDI; set the **Block Count** to 1, 2 or 4; set the **Channel Count** in the rang from 1 to 16; set the **Sample Length** to 8, 16, 20, 24 or 32bits.



STEP 6. Set the **Protocol Analyzer Color**.



Protocol Analyzer Decoding



Packet List

