



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

SPECIFICATION

MODEL: 029-LAP-CCIR656-M

PART NO: _____

VERSION: V1.32

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

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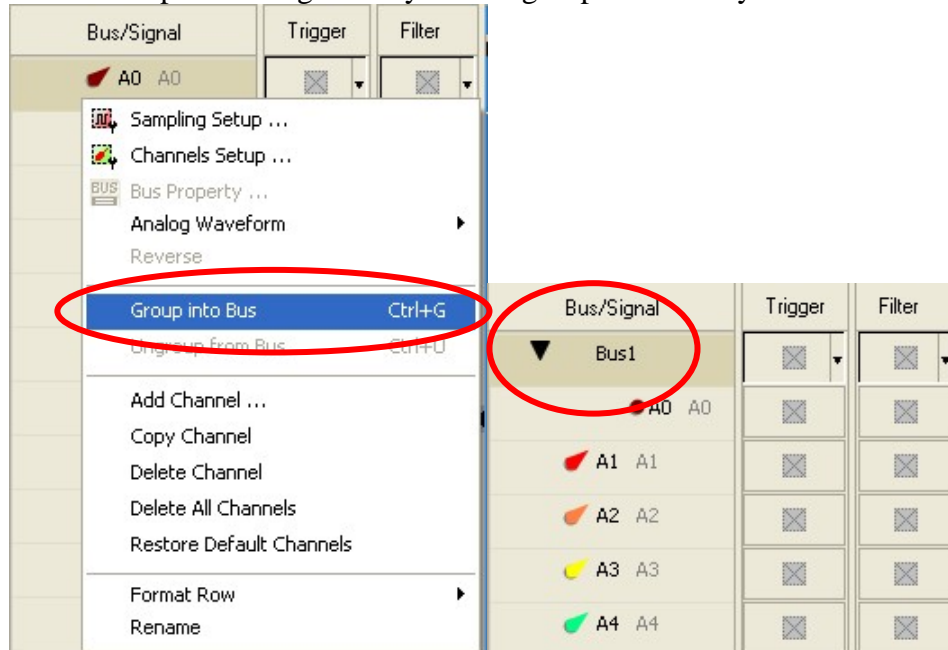
1 Software Register

Please register the software as the following steps:

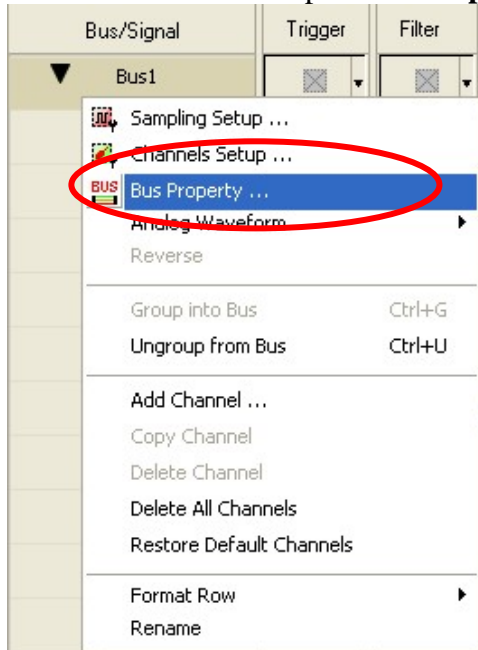
※ **Remark1:** The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ **Remark2:** 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.

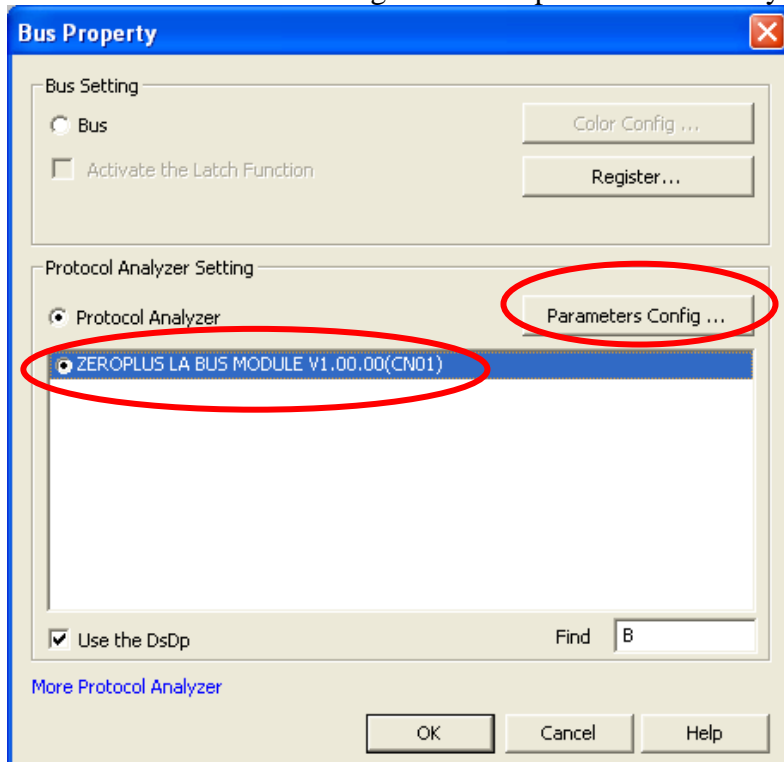
STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key**.



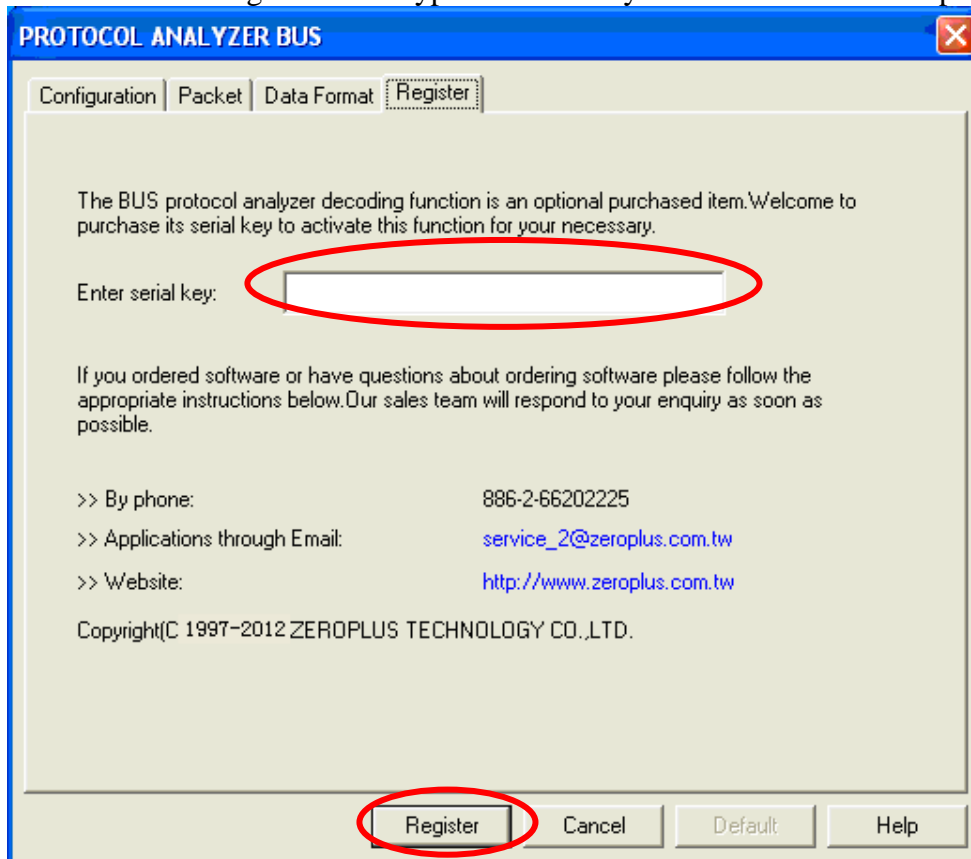
STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

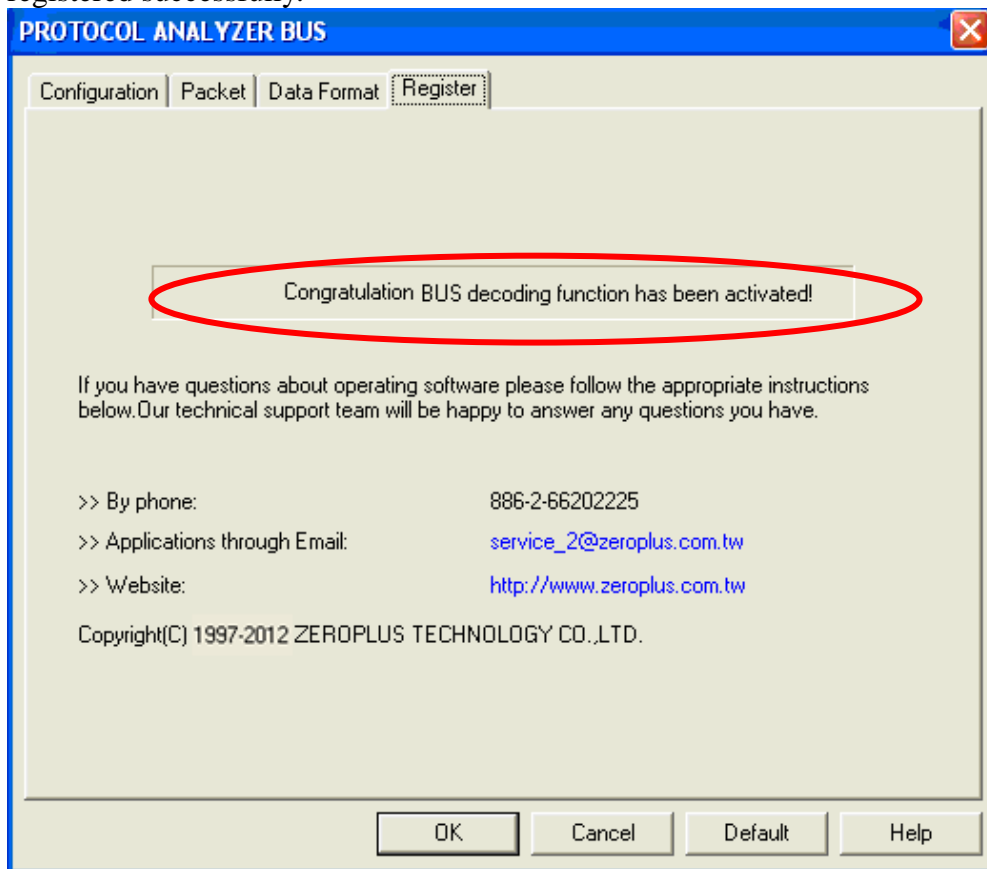


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





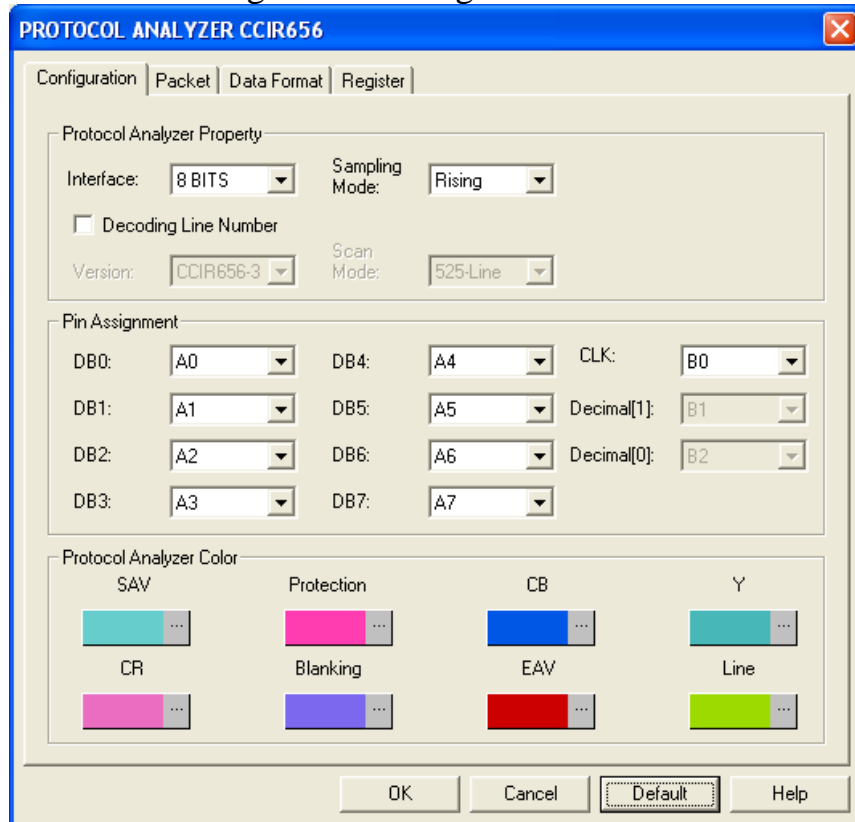
STEP 5. After pressing the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



2 User Interface

Please refer to the below images to select options of setting **CCIR656 Module**.

CCIR656 Configuration dialog box



Protocol Analyzer Property:

Interface: Set the Interface to 8 BITS and 10BITS.

Sampling Mode: Set the Mode to Rising or Falling.

Decoding Line Number: When the Option is activated, the different Line Segments will be decoded in the Packets; but if the values of all the Line Segments are the same, the Line Segments will not be decoded.

Version: When the Decoding Line Number is activated, the Version is enabled and can be set to CCIR656-3 or CCIR656-4. Notice that the decoded values of the Line Segments may be different for the different Versions.

Scan Mode: When the Decoding Line Number is activated, the Scan Mode is enabled and the Mode can be set to 525-Line or 625-Line. Notice that the decoded values of the Line Segments may be different for the different Scan Modes.

Pin Assignment:

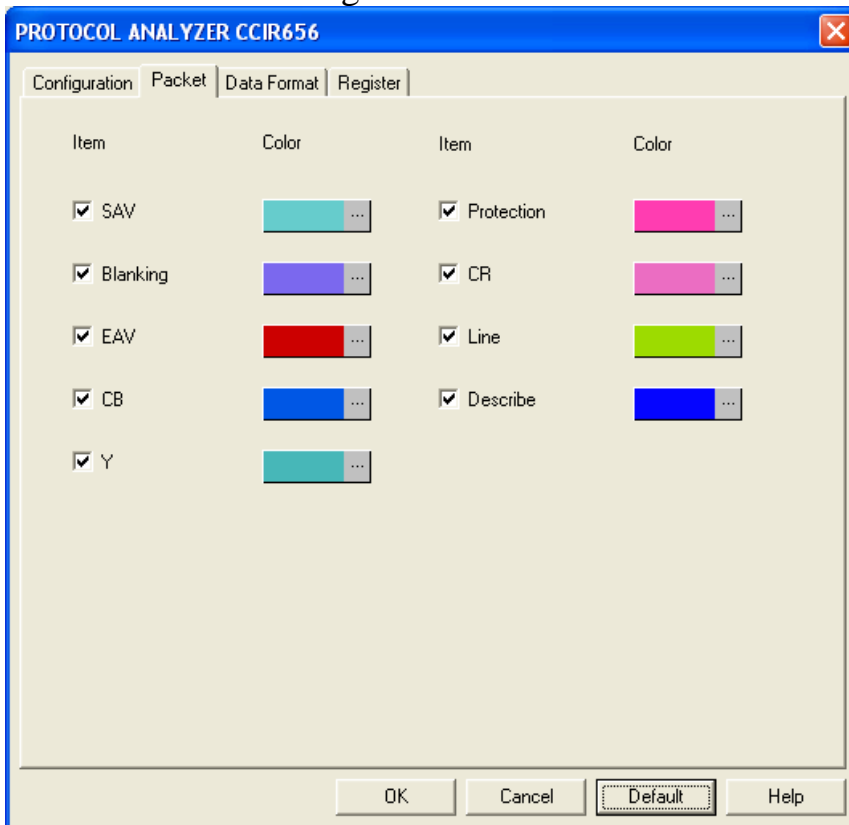
The CCIR656 has two kinds of the Interface, 8 BITS and 10 BITS. When the Version is set to 8 BITS, there are eight Data Lines that are from DB0 to DB7 and one CLK line; when the Version is set to 10 BITS, besides the above-mentioned nine lines, the two Decimal Lines (Decimal [1] and Decimal [2]) should be added.

Protocol Analyzer Color:

The color can be varied by users.

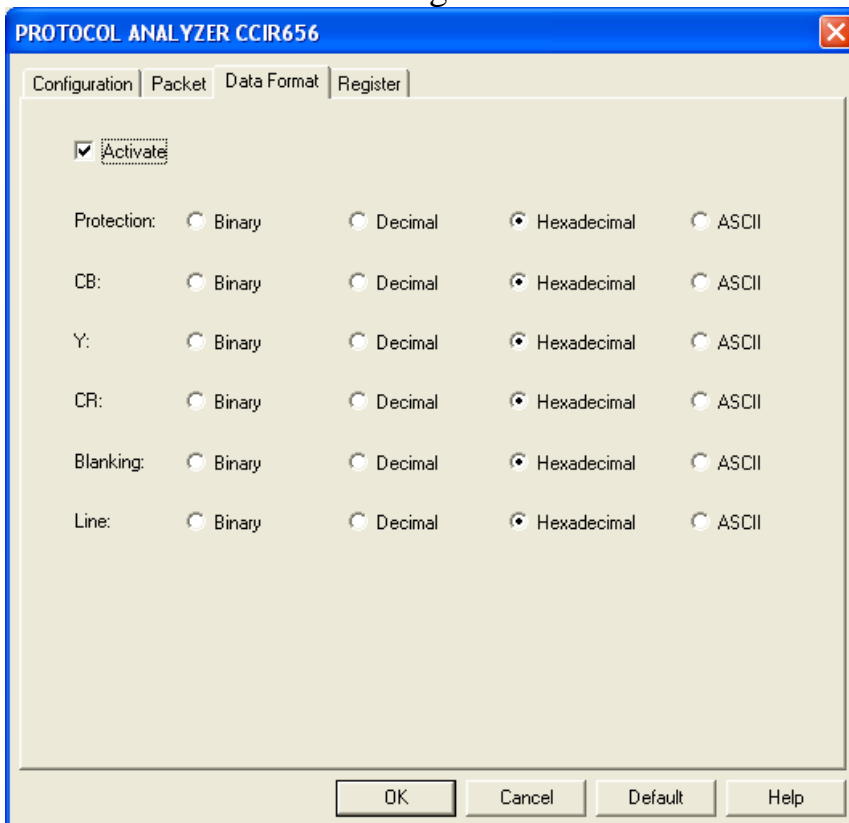


CCIR656 Packet dialog box



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

CCIR656 Data Format dialog box

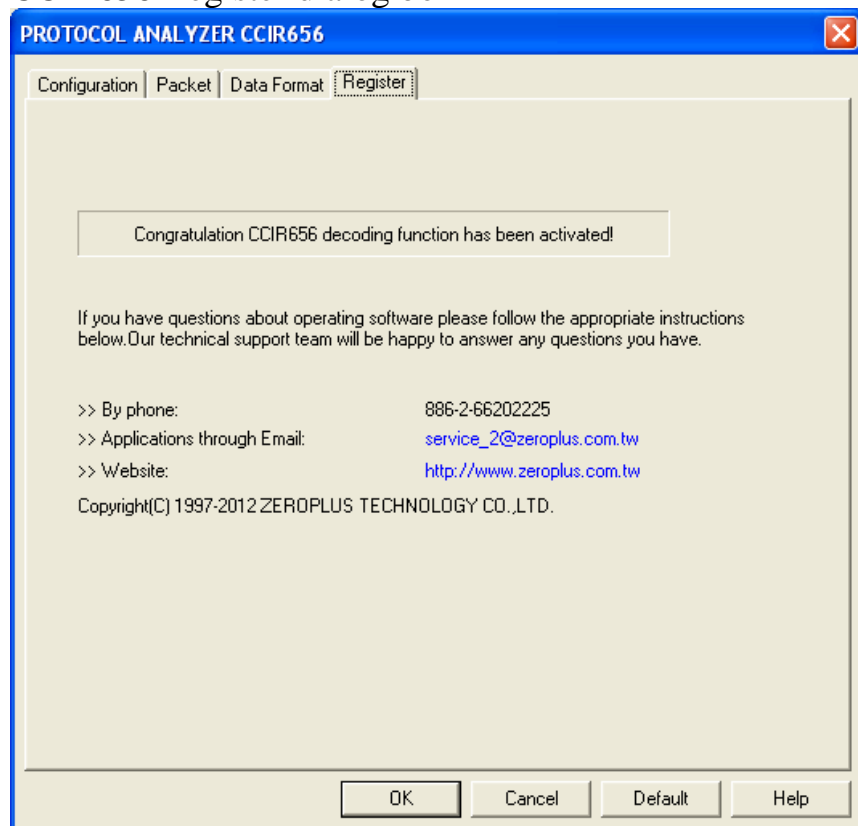


Users can set the Data Format of the Protection, CB, Y, CR, Blanking and Line as their requirements. When



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.

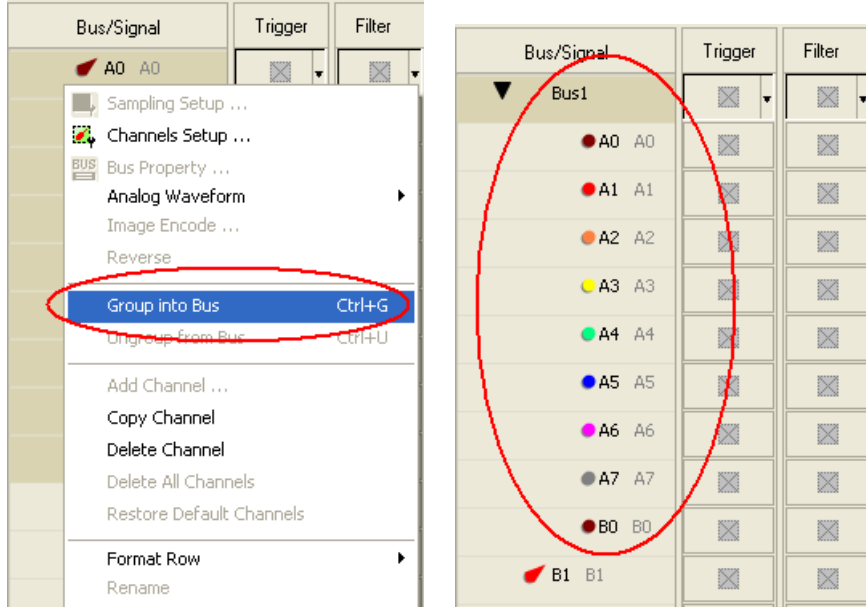
CCIR656 Register dialog box



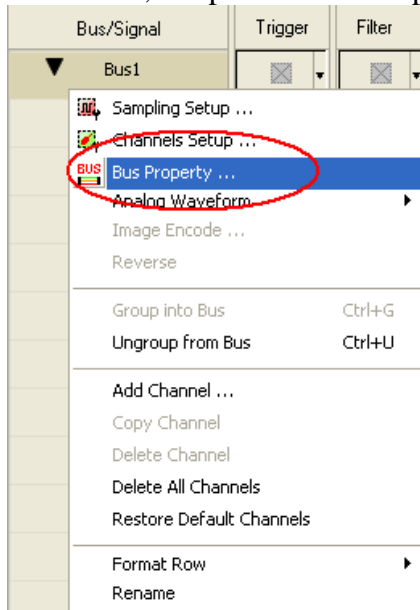
There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

3 Operating Instructions

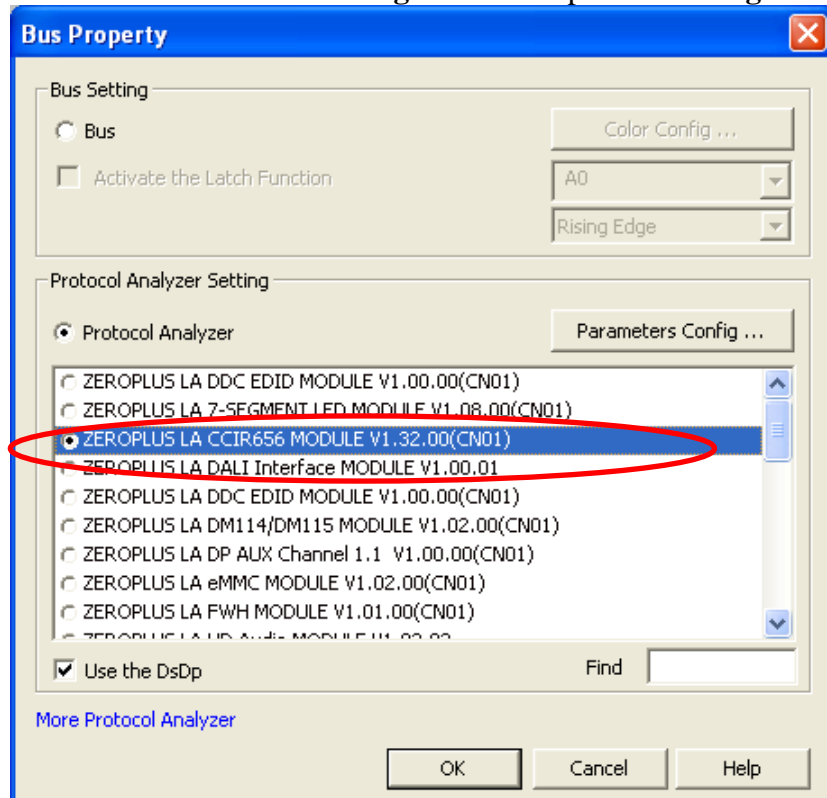
STEP 1. Group A0-B0 into **Bus1** by pressing the **Right Key** on the mouse. **CCIR656** needs nine or more channels to decode signal, so it is necessary to group nine or more channels into a Bus.



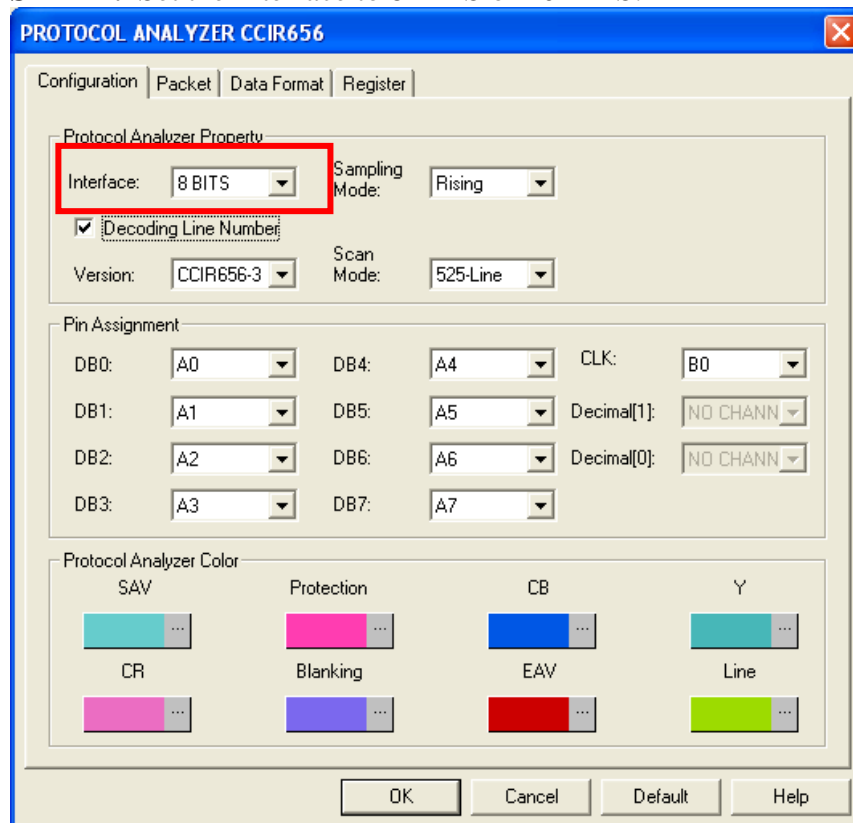
STEP 2. Select Bus1, press right key and select Bus Property from the popped menu, or click the Bus icon on the toolbar, to open the Bus Property dialog box.



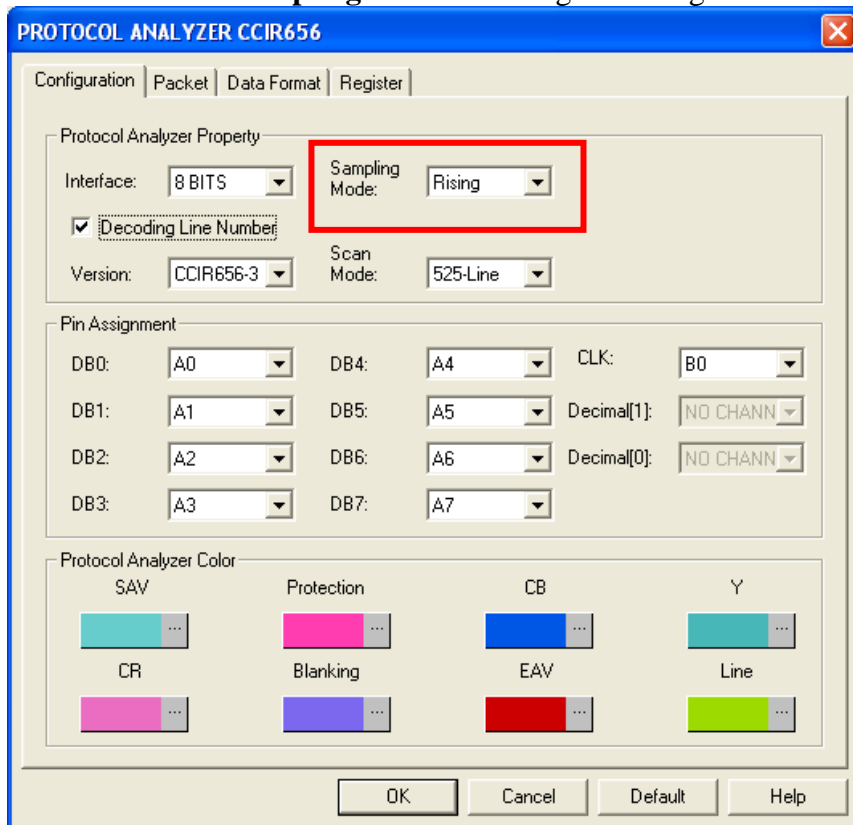
STEP 3. Select Protocol Analyzer, and then choose **ZEROPLUS LA CCIR656 MODULE V1.32.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.



STEP 4. Set the Interface to 8 BITS or 10 BITS.



STEP 5. Set the Sampling Mode to Rising or Falling.



PROTOCOL ANALYZER CCIR656

Configuration | Packet | Data Format | Register

Protocol Analyzer Property

Interface: 8 BITS Sampling Mode: Rising

☒ Decoding Line Number

Version: CCIR656-3 Scan Mode: 525-Line

Pin Assignment

DB0: A0 DB4: A4 CLK: B0

DB1: A1 DB5: A5 Decimal[1]: NO CHANN

DB2: A2 DB6: A6 Decimal[0]: NO CHANN

DB3: A3 DB7: A7

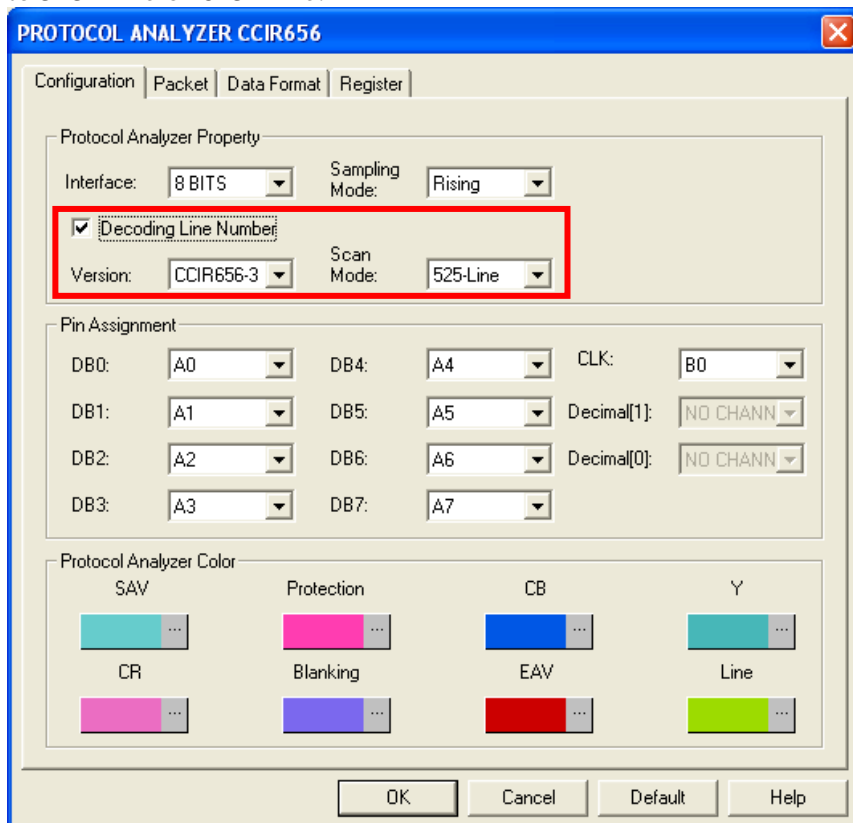
Protocol Analyzer Color

SAV Protection CB Y

CR Blanking EAV Line

OK Cancel Default Help

STEP 6. Select the Decoding Line Number, set the Version to CCIR656-3 or CCIR656-4 and the Scan Mode to 525-Line or 625-Line.



PROTOCOL ANALYZER CCIR656

Configuration | Packet | Data Format | Register

Protocol Analyzer Property

Interface: 8 BITS Sampling Mode: Rising

☒ Decoding Line Number

Version: CCIR656-3 Scan Mode: 525-Line

Pin Assignment

DB0: A0 DB4: A4 CLK: B0

DB1: A1 DB5: A5 Decimal[1]: NO CHANN

DB2: A2 DB6: A6 Decimal[0]: NO CHANN

DB3: A3 DB7: A7

Protocol Analyzer Color

SAV Protection CB Y

CR Blanking EAV Line

OK Cancel Default Help



STEP 7. Set the Channels for the CCIR656 in the Pin Assignment.

PROTOCOL ANALYZER CCIR656

Configuration | Packet | Data Format | Register

Protocol Analyzer Property

Interface: 8 BITS Sampling Mode: Rising

☒ Decoding Line Number

Version: CCIR656-3 Scan Mode: 525-Line

Pin Assignment

DB0: A0 DB4: A4 CLK: B0

DB1: A1 DB5: A5 Decimal[1]: NO CHANN

DB2: A2 DB6: A6 Decimal[0]: NO CHANN

DB3: A3 DB7: A7

Protocol Analyzer Color

SAV Protection CB Y

CR Blanking EAV Line

OK Cancel Default Help

STEP 8. Set the Protocol Analyzer Color.

PROTOCOL ANALYZER CCIR656

Configuration | Packet | Data Format | Register

Protocol Analyzer Property

Interface: 8 BITS Sampling Mode: Rising

☒ Decoding Line Number

Version: CCIR656-3 Scan Mode: 525-Line

Pin Assignment

DB0: A0 DB4: A4 CLK: B0

DB1: A1 DB5: A5 Decimal[1]: NO CHANN

DB2: A2 DB6: A6 Decimal[0]: NO CHANN

DB3: A3 DB7: A7

Protocol Analyzer Color

SAV Protection CB Y

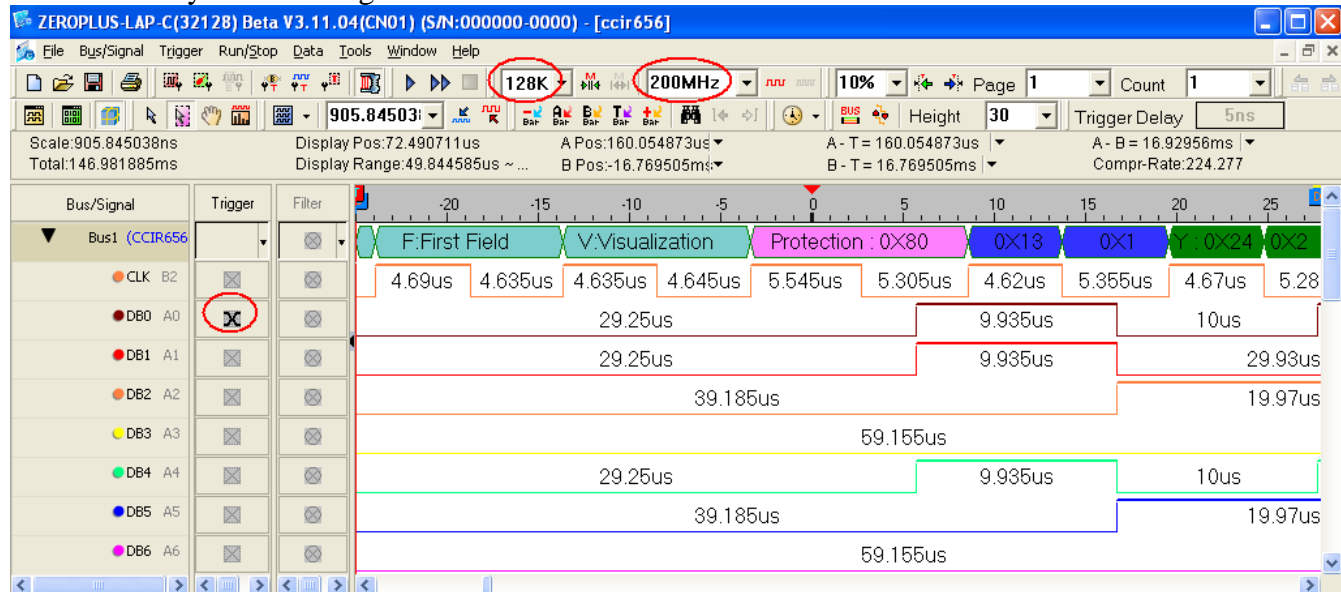
CR Blanking EAV Line

OK Cancel Default Help



STEP 9. 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 (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

