



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

SPECIFICATION

MODEL: B09026-LAP-HDMI CEC-M

PART NO: _____

VERSION: V1.02

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

2F, NO.123, Jian Ba Rd,
Chung Ho City, Taipei Hsian, R.O.C.

Tel:+886-2-66202225
Fax:+886-2-22234362



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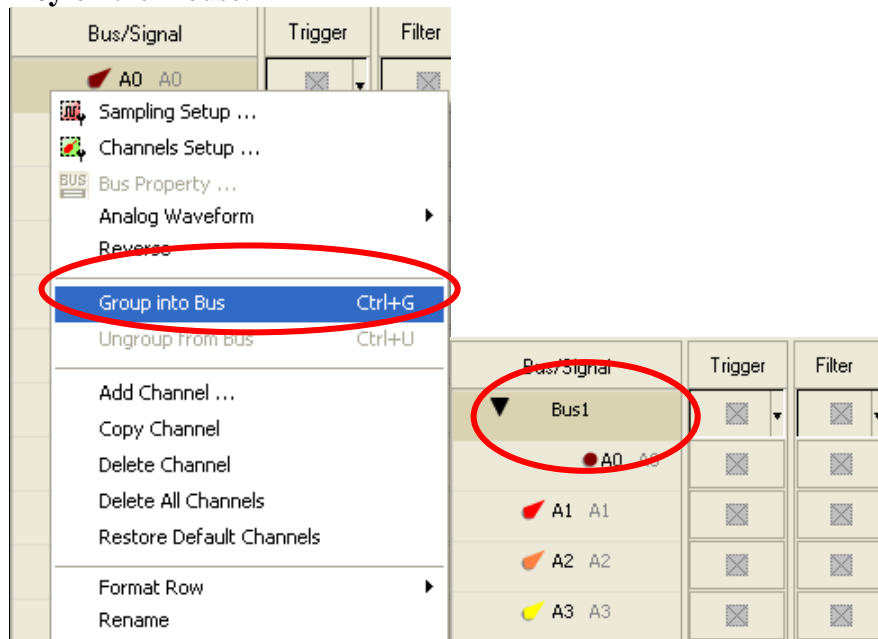
1. Software Register

Please register the software as the following steps:

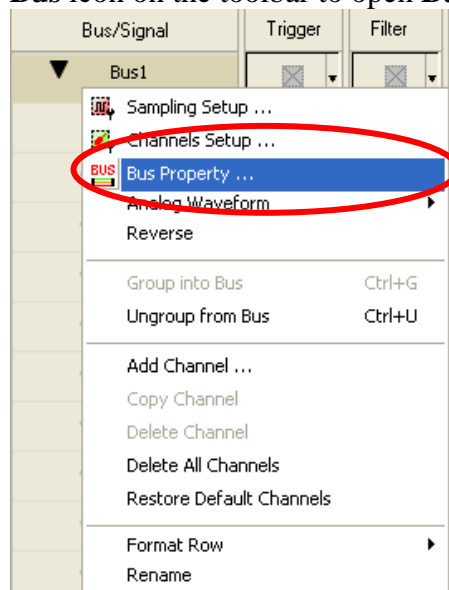
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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** on the mouse.

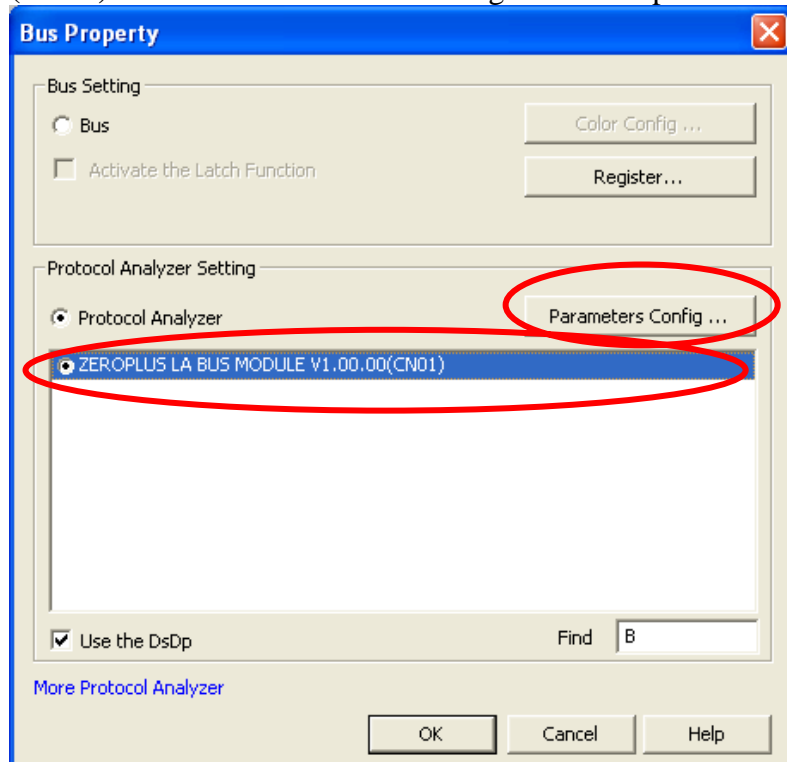


STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

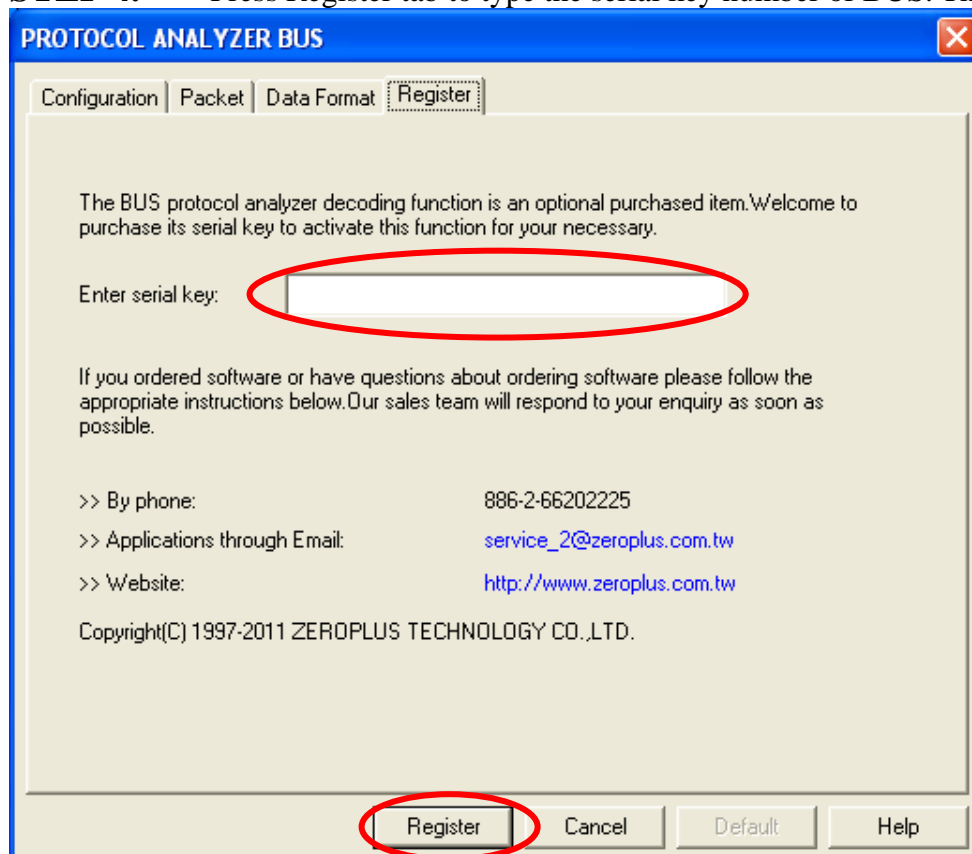




STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.

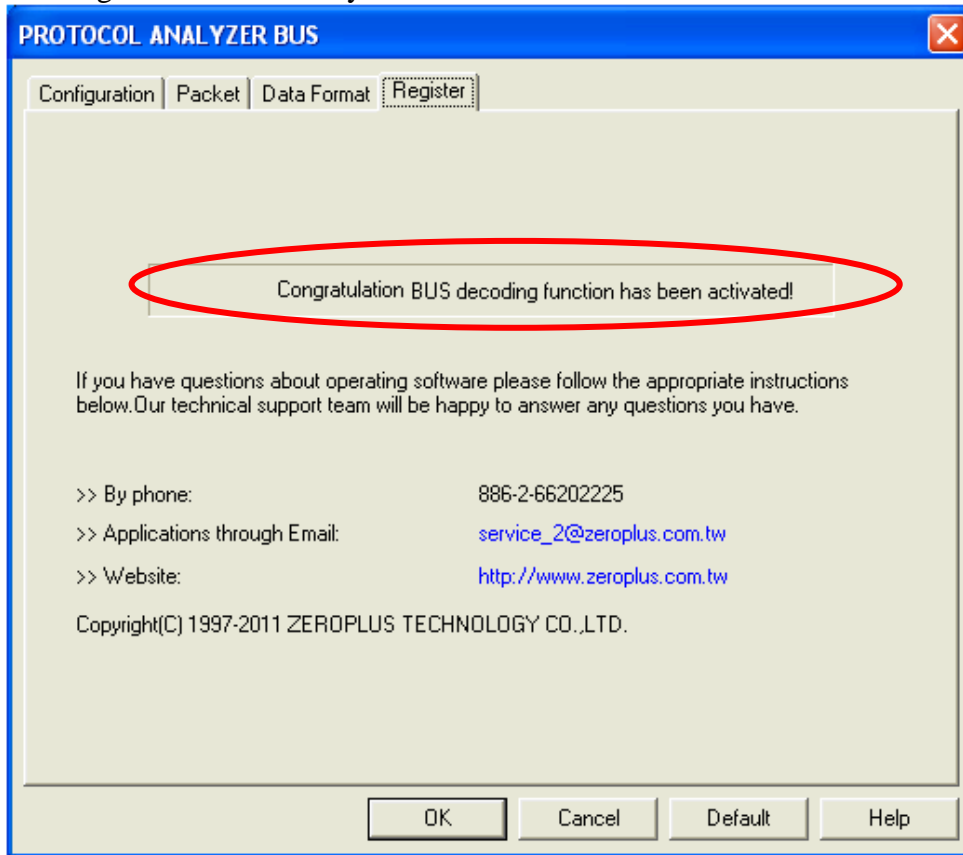


STEP 4. Press Register tab to type the serial key number of BUS. Then press Register.





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

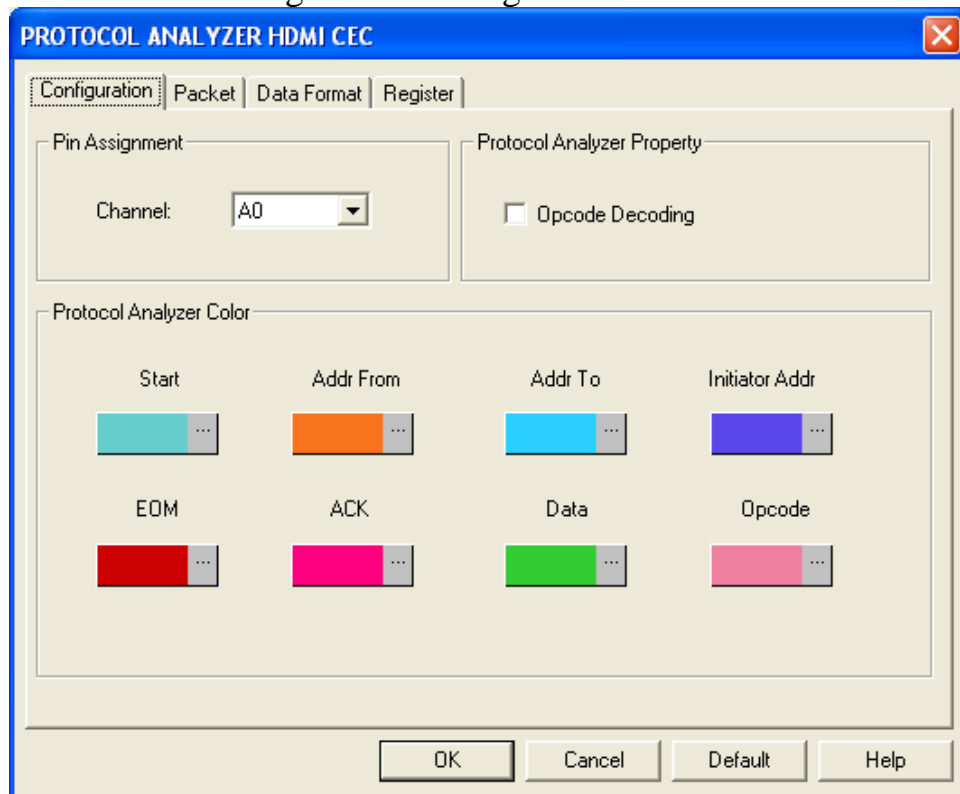




2. User Interface

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

HDMI CEC Configuration Dialog Box



Pin Assignment:

HDMI CEC only needs one channel to decode the signals.

Protocol Analyzer Property:

Opcode Decoding: Users can select the Opcode Decoding or not, the default is not selected.

Protocol Analyzer Color:

The Protocol Analyzer Colors can be varied by users.



HDMI CEC Packet Dialog Box

Item	Color	Item	Color
<input checked="" type="checkbox"/> Start	<div style="background-color: #00FFFF; width: 20px; height: 10px;"></div>	<input checked="" type="checkbox"/> ACK	<div style="background-color: #FF00FF; width: 20px; height: 10px;"></div>
<input checked="" type="checkbox"/> Addr From	<div style="background-color: #FFA500; width: 20px; height: 10px;"></div>	<input checked="" type="checkbox"/> Data	<div style="background-color: #00FF00; width: 20px; height: 10px;"></div>
<input checked="" type="checkbox"/> Addr To	<div style="background-color: #00FFFF; width: 20px; height: 10px;"></div>	<input checked="" type="checkbox"/> Initiator Addr	<div style="background-color: #8000FF; width: 20px; height: 10px;"></div>
<input checked="" type="checkbox"/> EOM	<div style="background-color: #FF0000; width: 20px; height: 10px;"></div>	<input checked="" type="checkbox"/> Opcode	<div style="background-color: #FF69B4; width: 20px; height: 10px;"></div>

In the Packet part, users can set the items and colors as users' requirements.

HDMI CEC Data Format Dialog Box

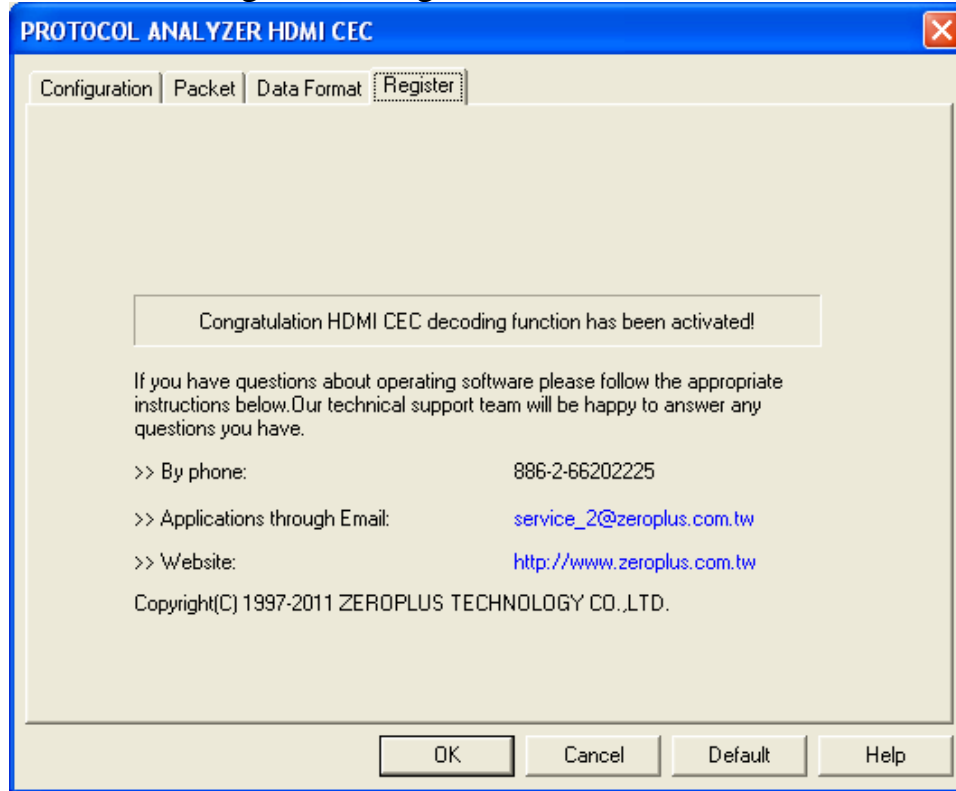
Item	Binary	Decimal	Hexadecimal	ASCII
<input checked="" type="checkbox"/> Activate				
Addr From:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Addr To:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Data:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Initiator Addr:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Opcode:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Users can set the Data Format of the Addr From, Addr To, Data, Initiator Addr and Opcode as their



requirements. When selecting the option, Activate, the data formats are decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data formats are decided by the settings in the main program.

HDMI CEC Register Dialog Box

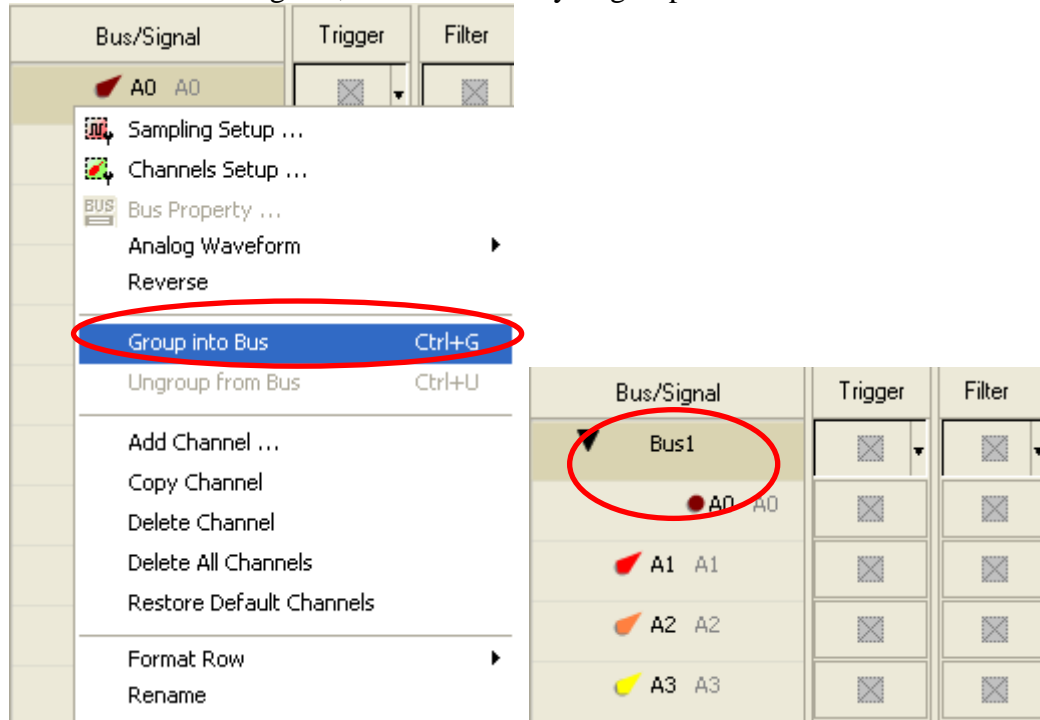


There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

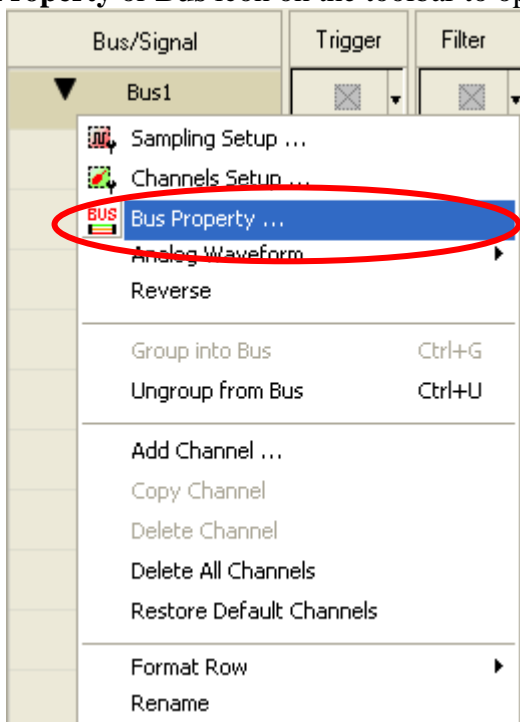


3. Operating Instructions

STEP 1. Group the A0 into **Bus1** by pressing the **Right Key** on the mouse. HDMI CEC only needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

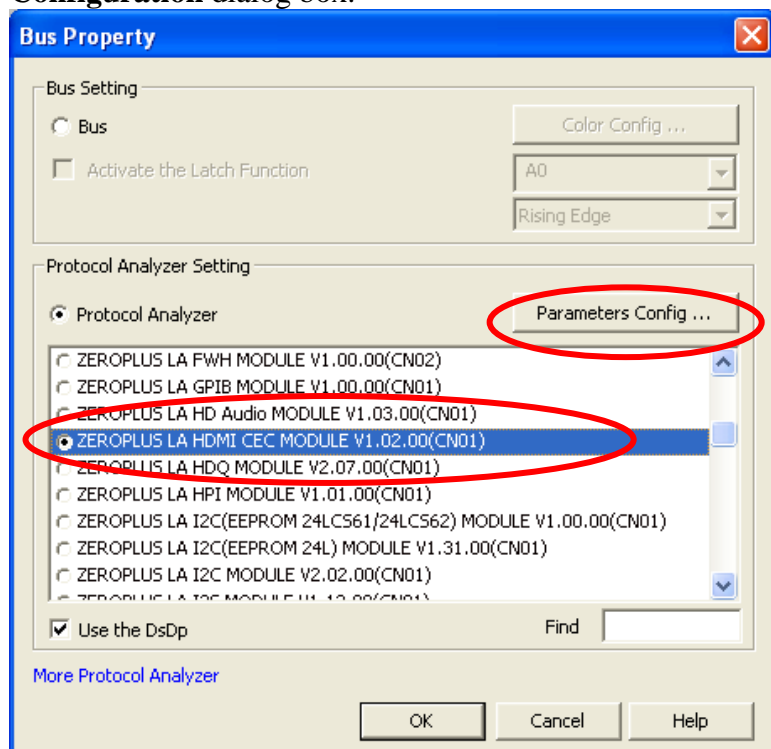


STEP 2. Select **Bus1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

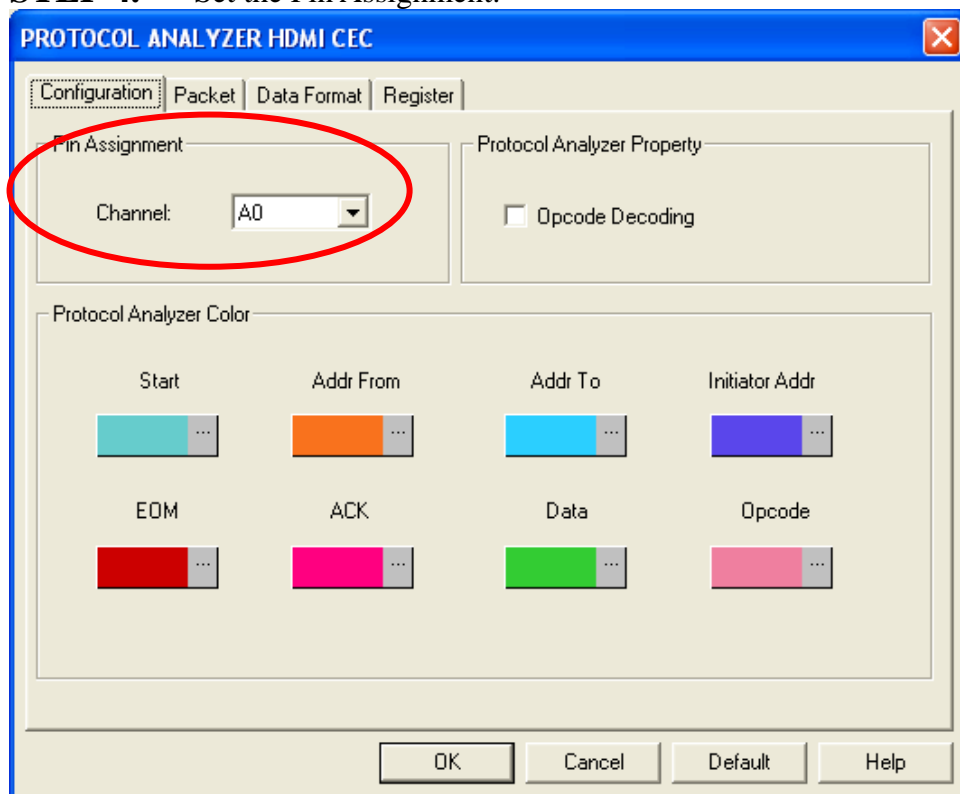




STEP 3. For Protocol Analyzer HDMI CEC Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA HDMI CEC MODULE V1.02.00(CN01)** click **Parameters Configuration** to open **Configuration** dialog box.

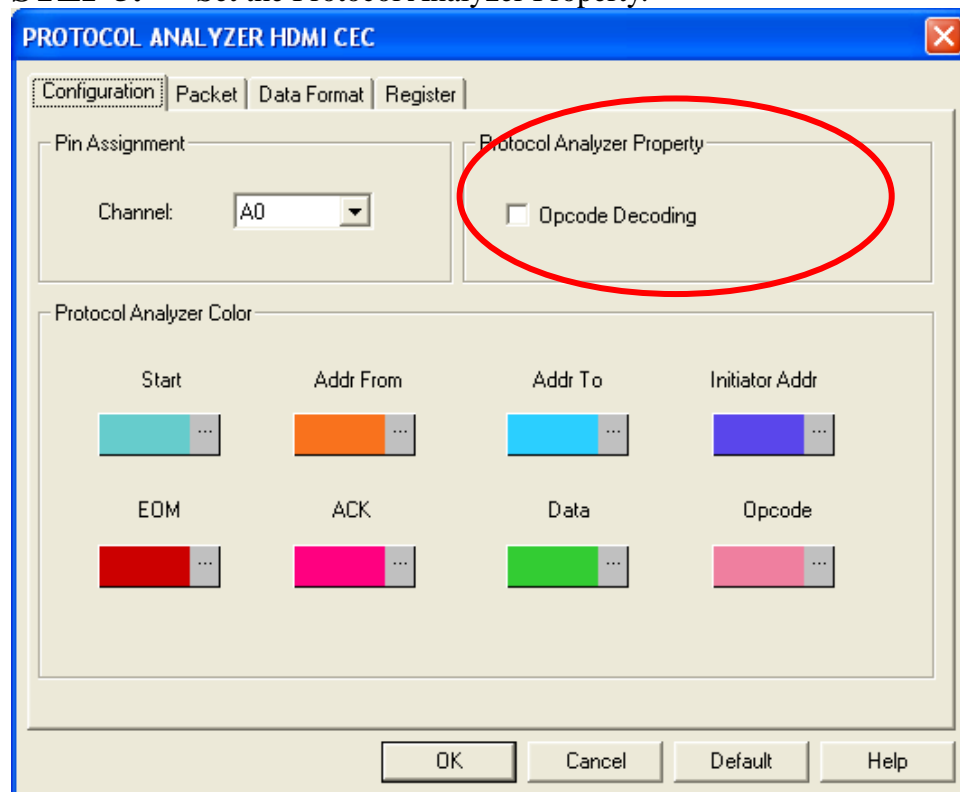


STEP 4. Set the Pin Assignment.

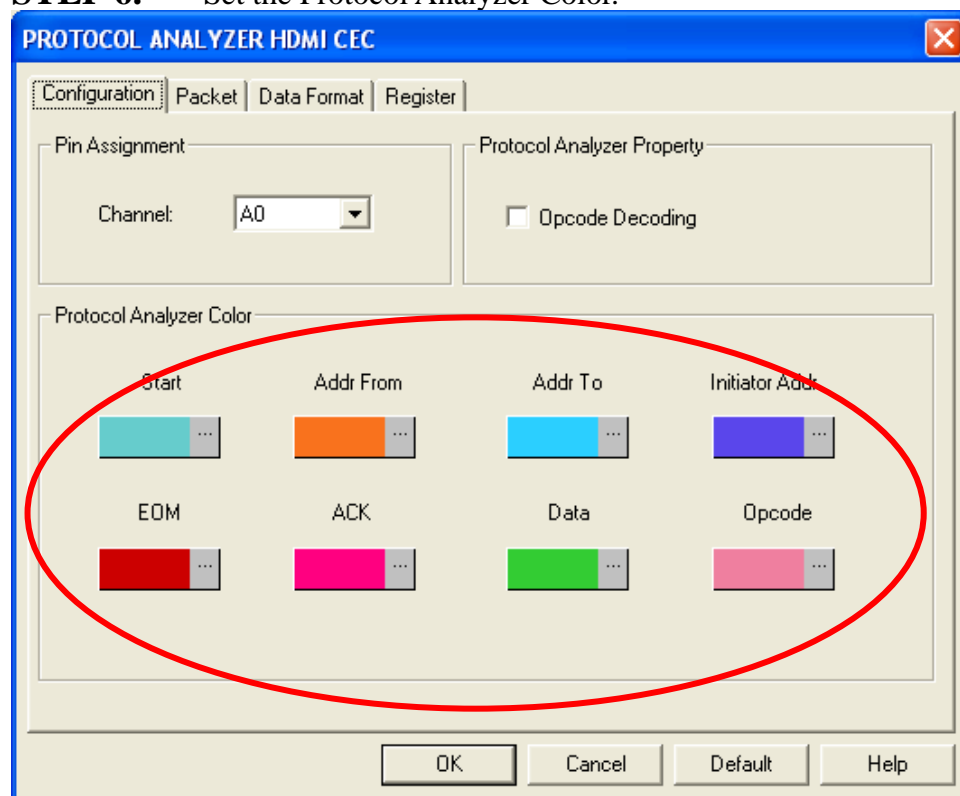




STEP 5. Set the Protocol Analyzer Property.



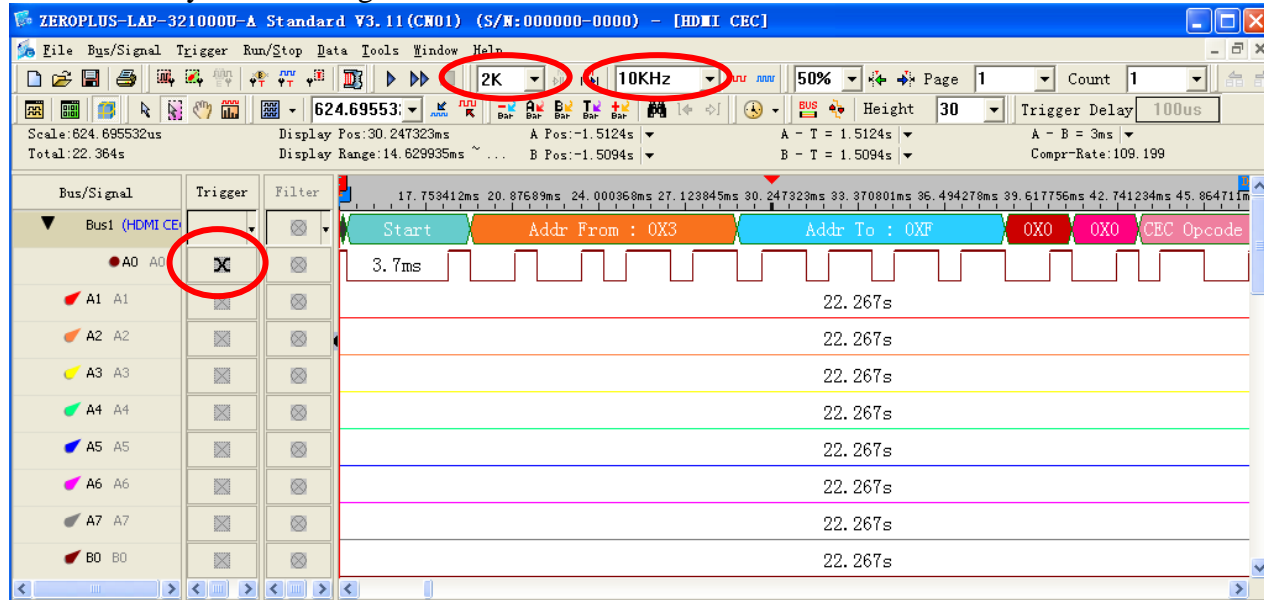
STEP 6. Set the Protocol Analyzer Color.





STEP 7. Following pictures show the completion of the protocol analyzer decoding and packet list. The trigger condition is set as Either Edge; the memory depth is 2K; the sampling frequency is 10KHz (the sampling frequency should be more than 4 times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

