

# SPECIFICATION

**MODEL: B12005-MHL-CBUS**

**PART NO:** \_\_\_\_\_

**VERSION:** V1.03

Approver		Check	Design
GM	PM		

Customer Confirm

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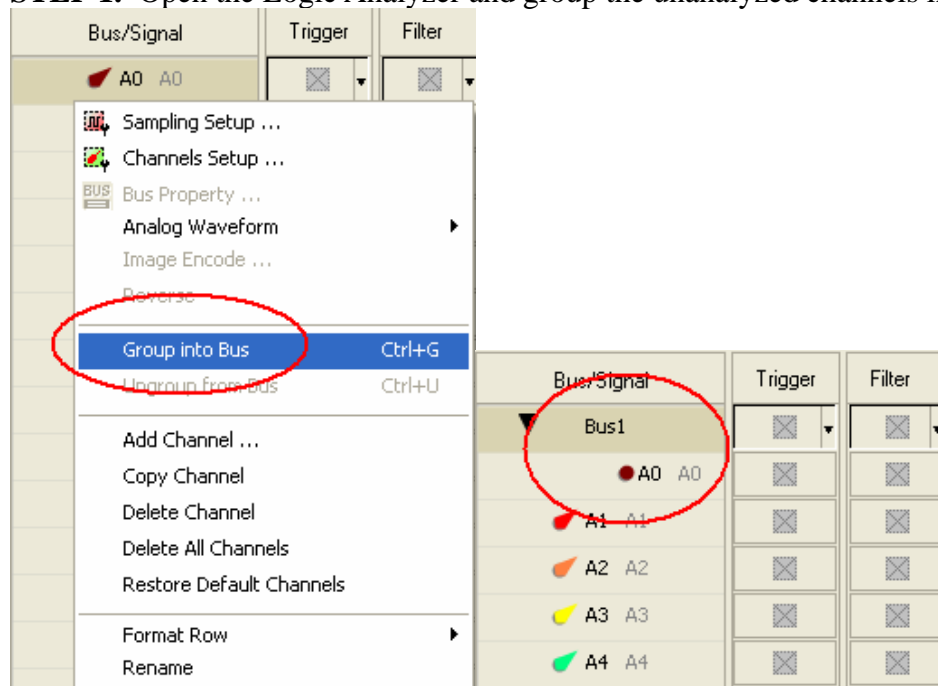
# 1 Software Register

Please register the software as the following steps:

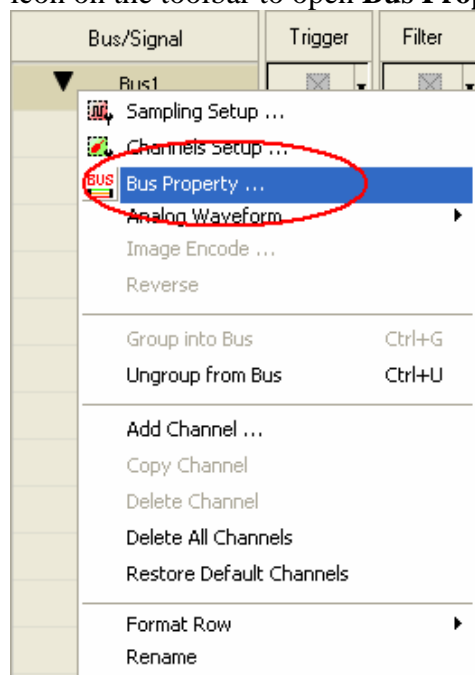
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

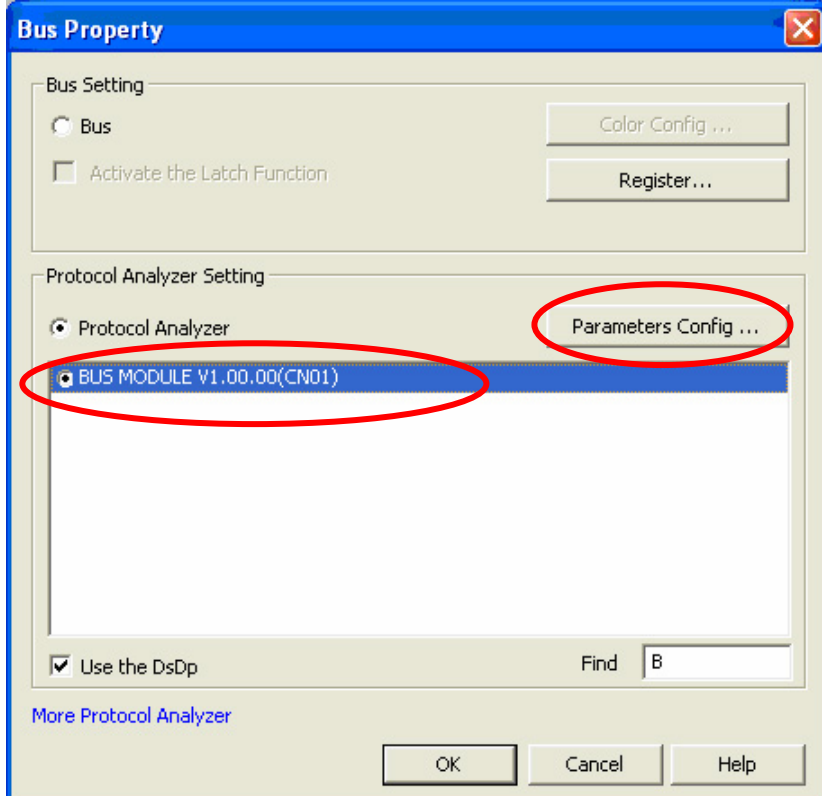
**STEP 1.** Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key**.



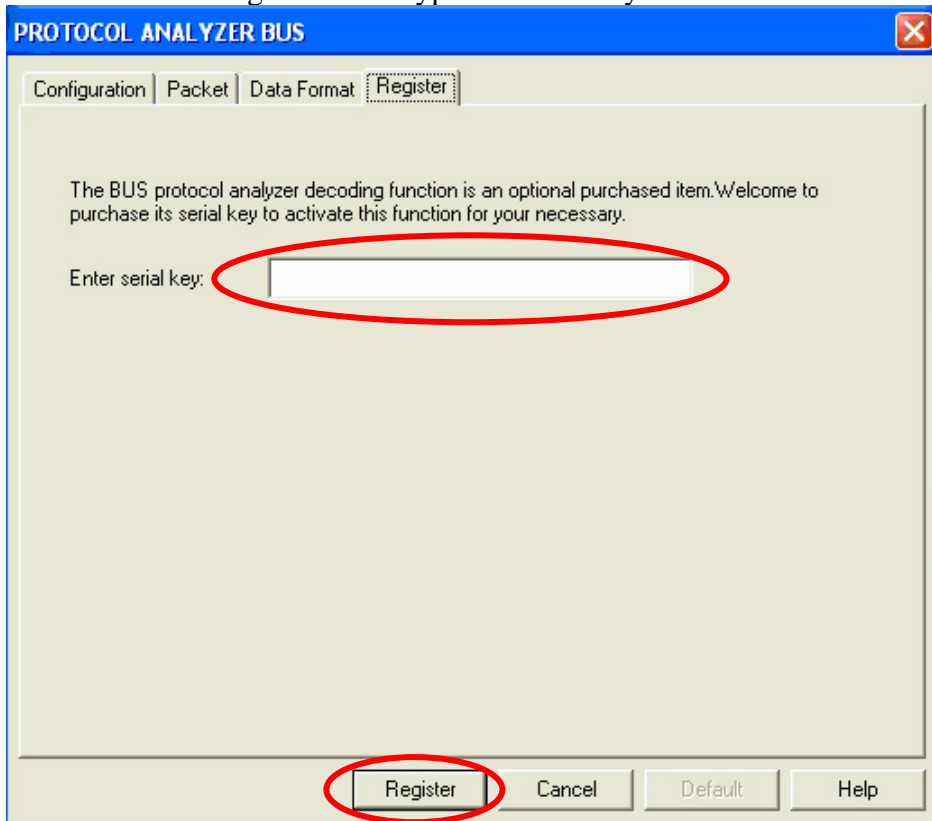
**STEP 2.** Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then click **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



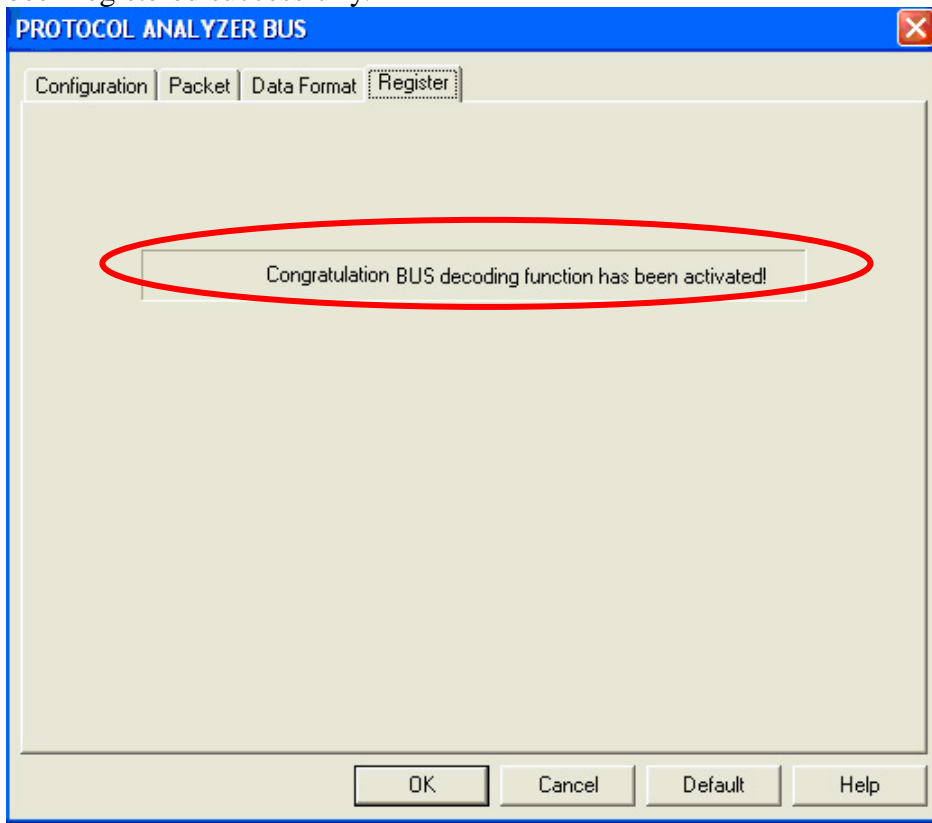
**STEP 3.** Select the Protocol Analyzer, and then choose **BUS MODULE V1.00.00 CN01**). Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



**STEP 4.** Click Register tab to type the serial key number of BUS. Then click Register.



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

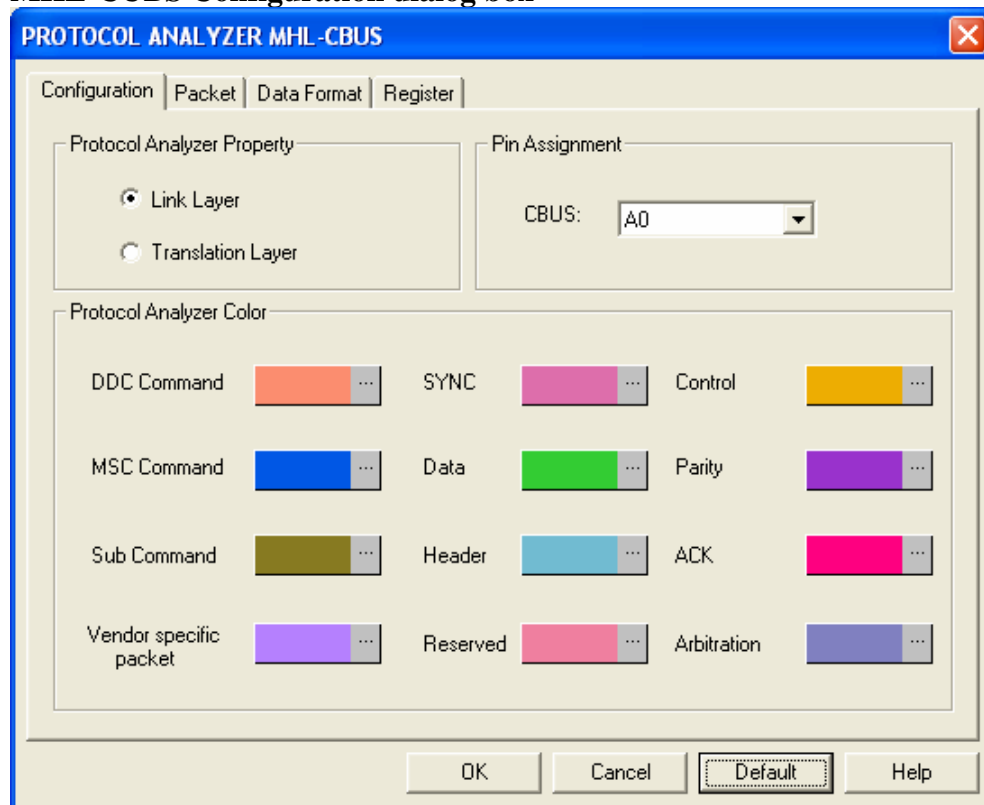


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## 2 User Interface

Please refer to the below images to do settings of MHL-CBUS module.

### MHL-CUBS Configuration dialog box



#### Protocol Analyzer Property

**Link Layer:** Select it to decode the Link Layer only without the Translation Layer.

**Translation Layer:** Select it to decode the Translation Layer; if there is any link package invalid, then that link package will be decoded according to the structure of the Link Layer.

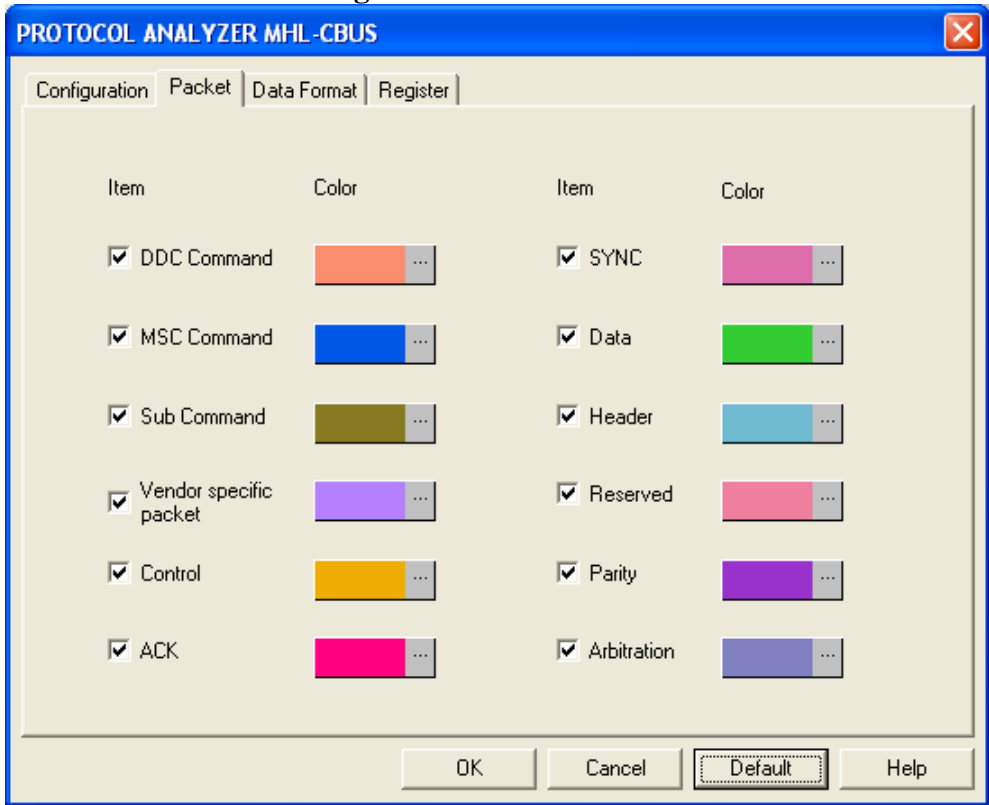
#### Pin Assignment

The MHL-CBUS only needs one channel to decode the signals, and it is A0 by default.

#### Protocol Analyzer Color

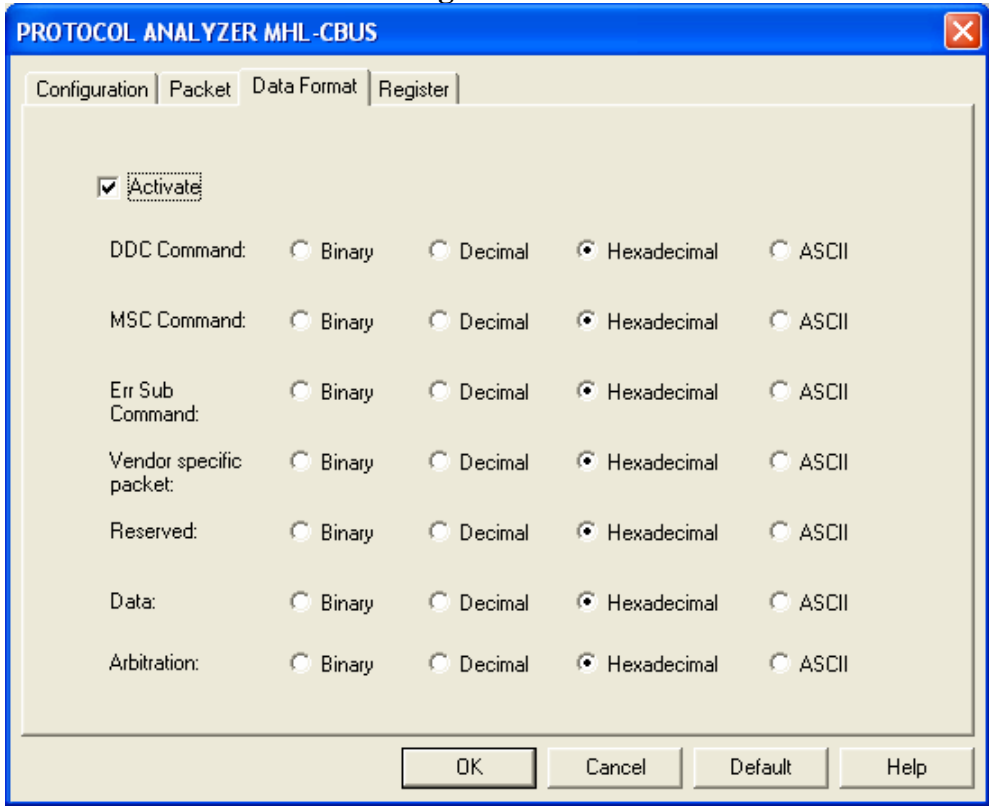
The colors can be varied by users.

**MHL-CUBS Packet dialog box**



In the Packet part, users can select the items to be displayed and vary their colors as their requirements.

**MHL-CUBS Data Format dialog box**



Users can set the data format of DDC Command, MSC Command, Sub Command, Vendor specific packet, Reserved, Data and Arbitration as their requirements. When selecting the option ‘Activate’, the data format is decided by the settings in the Protocol Analyzer; when not selecting this option, the data format is decided by the settings in the main program.

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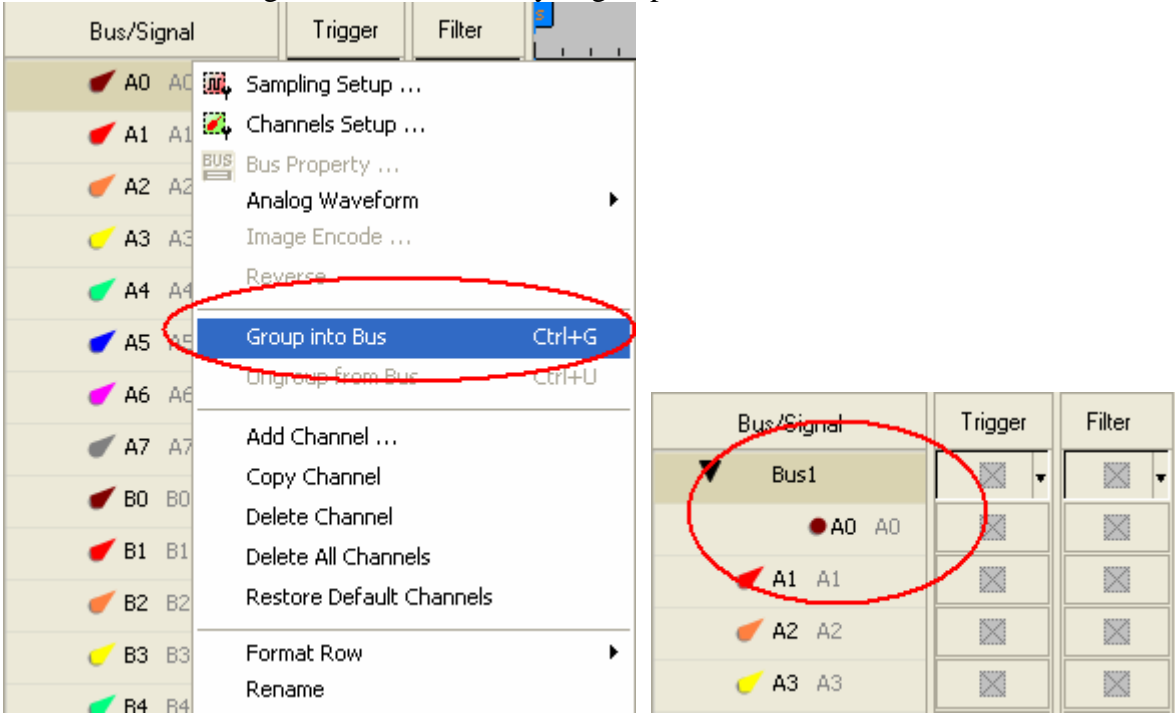
## MHL-CUBS Register dialog box



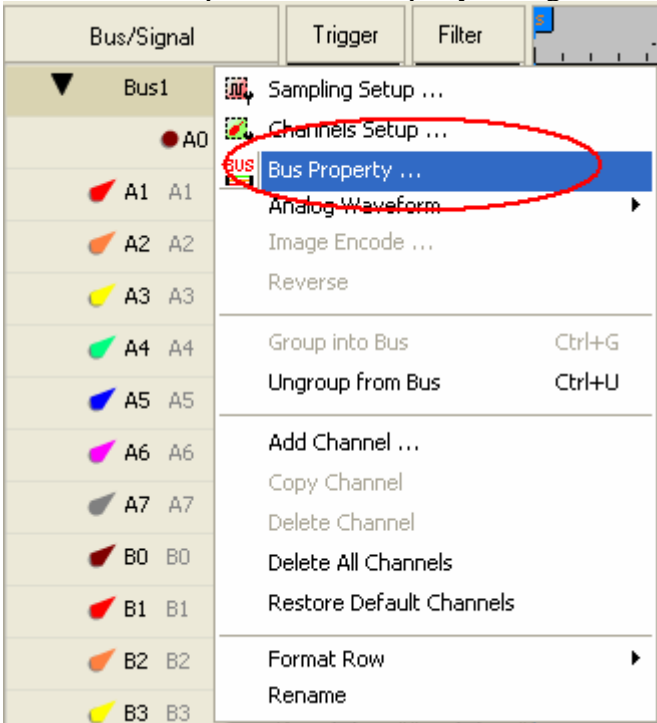


### 3 Operating Instructions

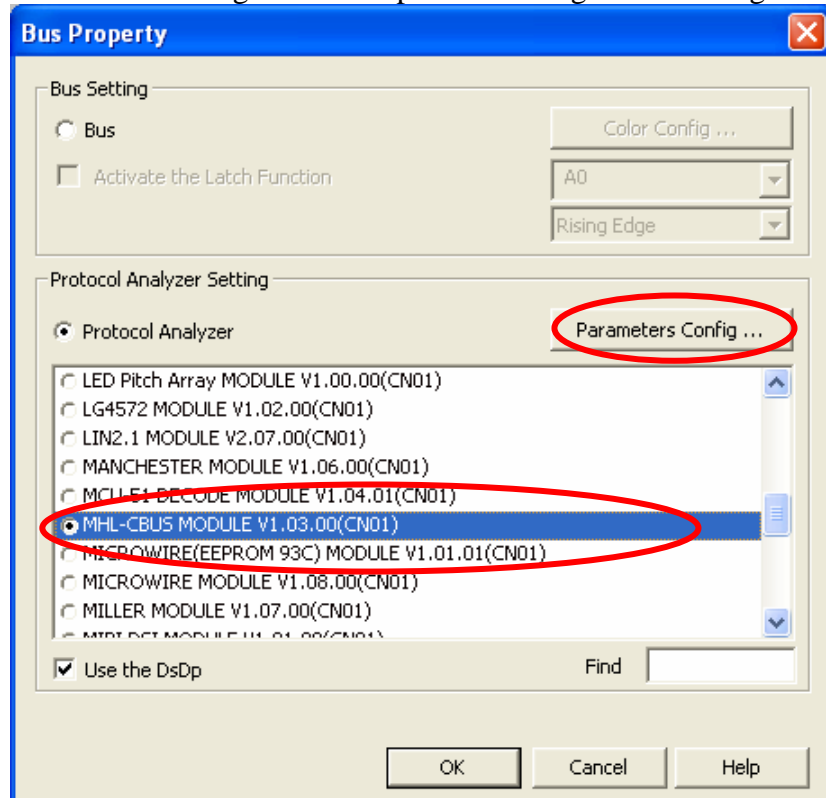
**STEP 1.** Group A0 into Bus1 by pressing the Right Key on the mouse. MHL-CBUS needs at least one channel to decode signal, so it is necessary to group one or more channels into the Bus.



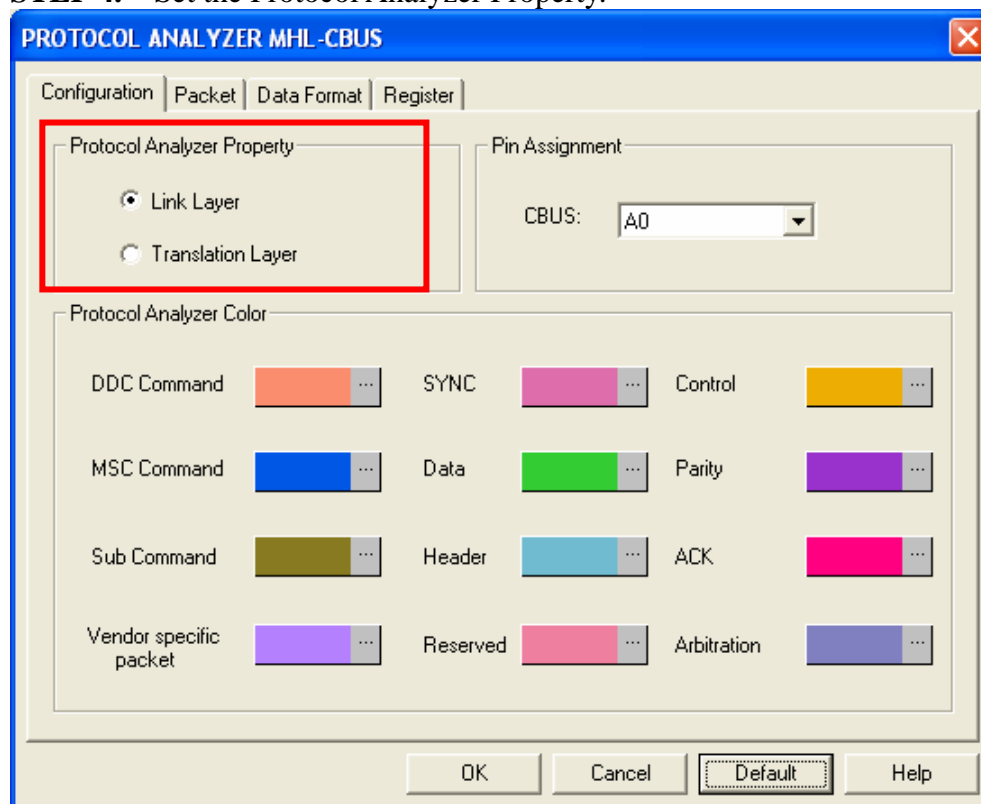
**STEP 2.** Select Bus1, press right key and select Bus Property from the popup menu, or click the Bus icon on the toolbar, to open the Bus Property dialog box.



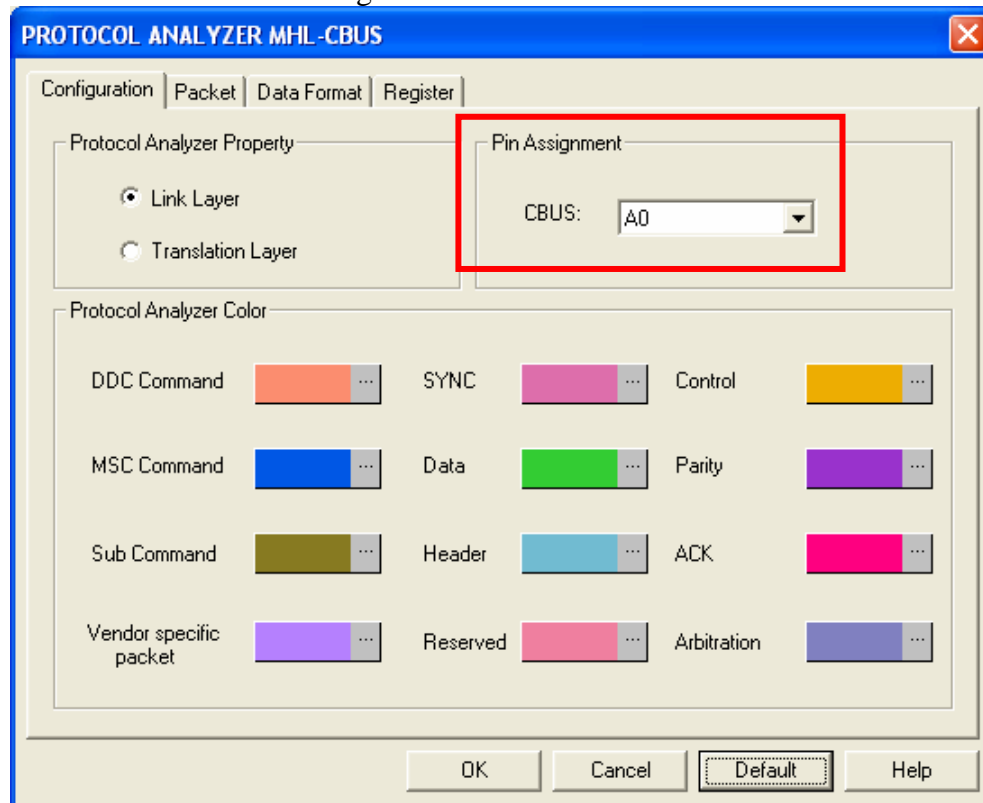
**STEP 3.** Select Protocol Analyzer, and select MHL-CBUS MODULE V1.03.00(CN01). Then click Parameters Configuration to open the Configuration dialog box.



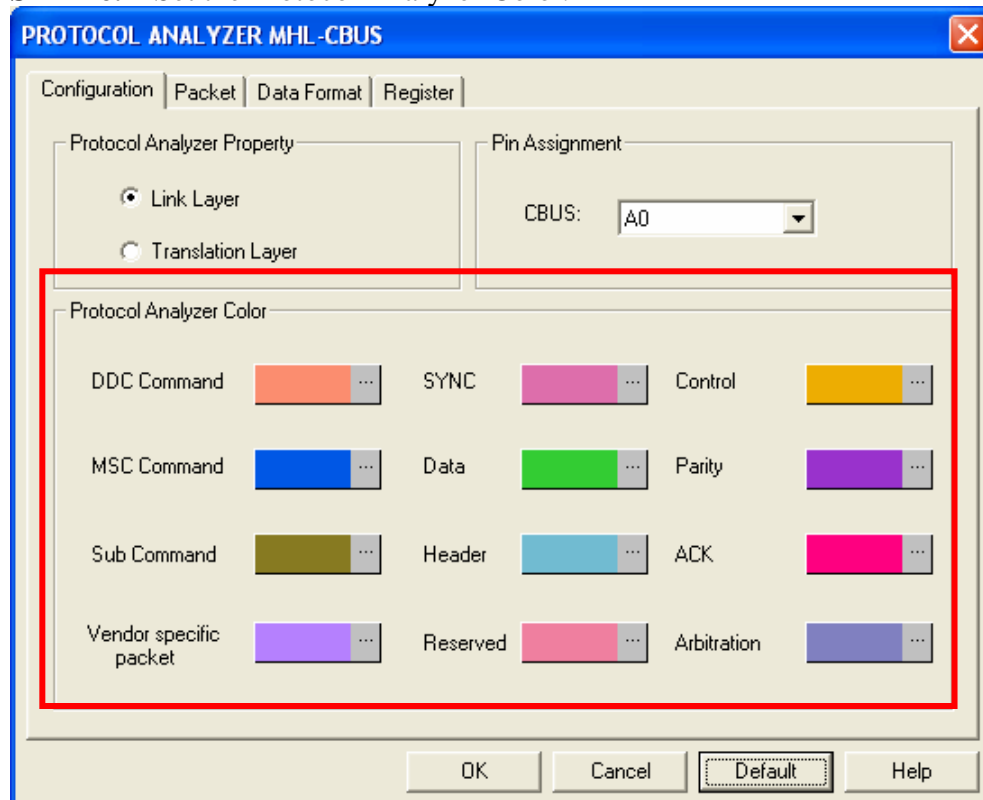
**STEP 4.** Set the Protocol Analyzer Property.



**STEP 5.** Set the Pin Assignment.

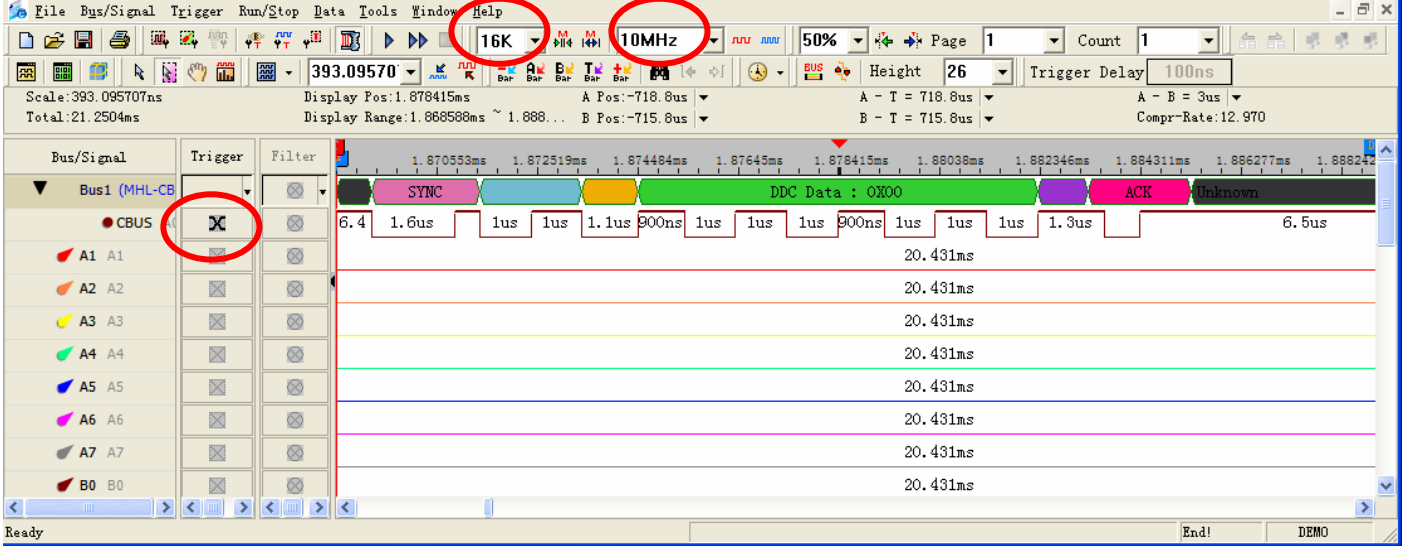


**STEP 6.** Set the Protocol Analyzer Color.



**STEP 7.** 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 16K and the sampling frequency is 10MHz (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

Packet #	Name	TimeStamp	SYNC	Header	Control	DDC Data	Parity	ACK
13	Bus1 (MHL-CBUS)	246.3us	00	00	0	11	0	ACK

Packet #	Name	TimeStamp	SYNC	Header	Control	DDC Command	Parity	ACK
14	Bus1 (MHL-CBUS)	260.3us	00	00	1	50	1	ACK