

SPECIFICATION

MODEL: B09017-LAP-DSI Bus-M

PART NO: _____

VERSION: V1.03

Approver		Check	Design
GM	PM		

Customer Confirm

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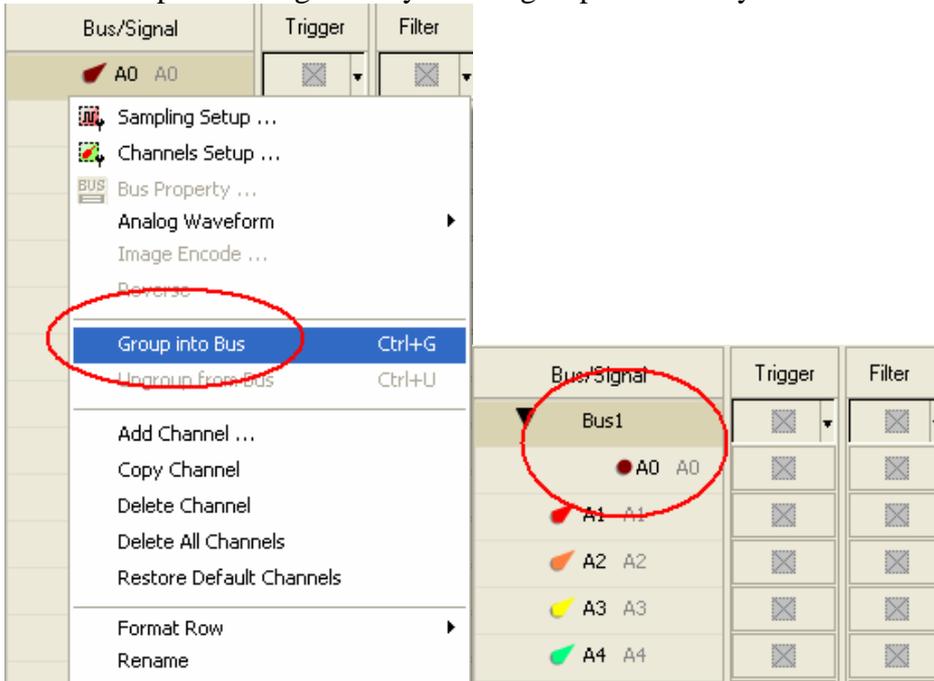
1 Software Register

Please register the software as the following steps:

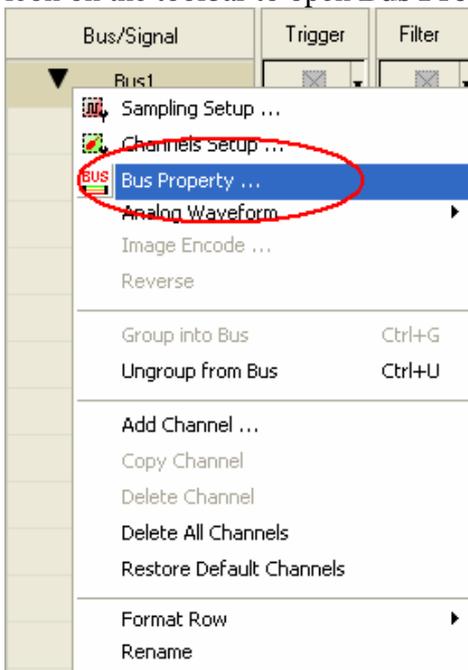
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

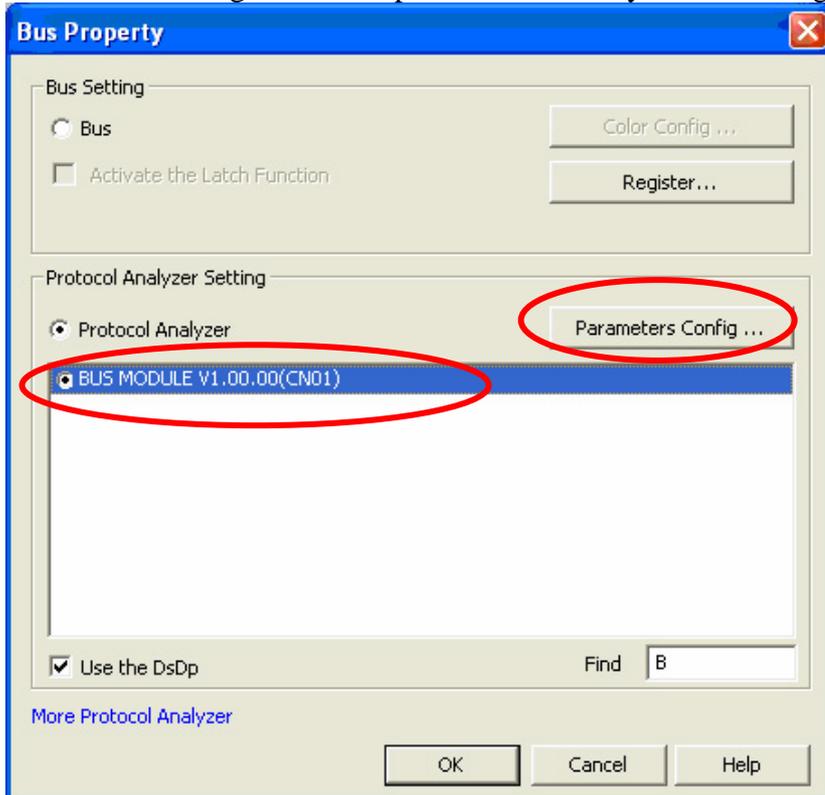
STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key**.



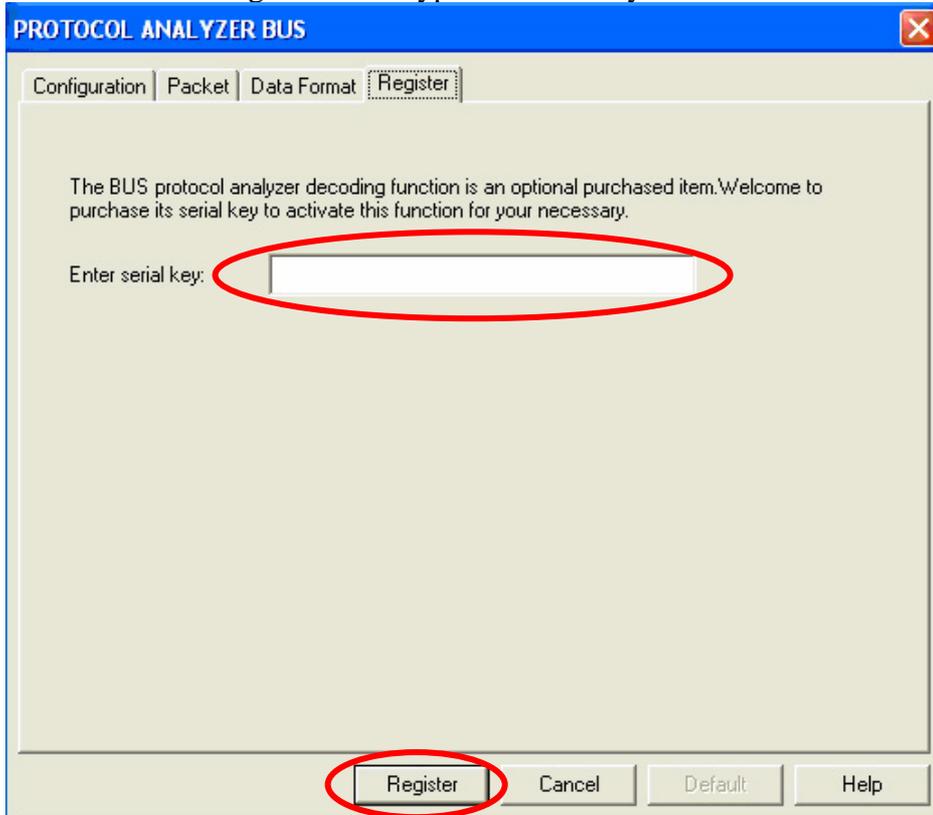
STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then click **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



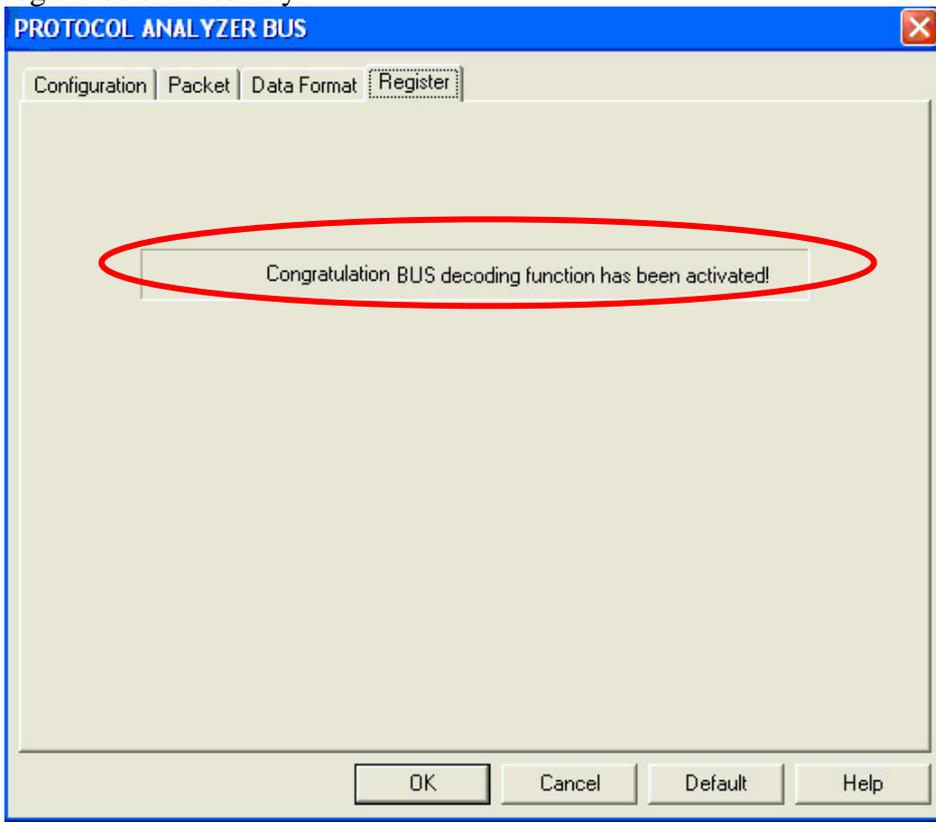
STEP 3. Select the Protocol Analyzer, and then choose **BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



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



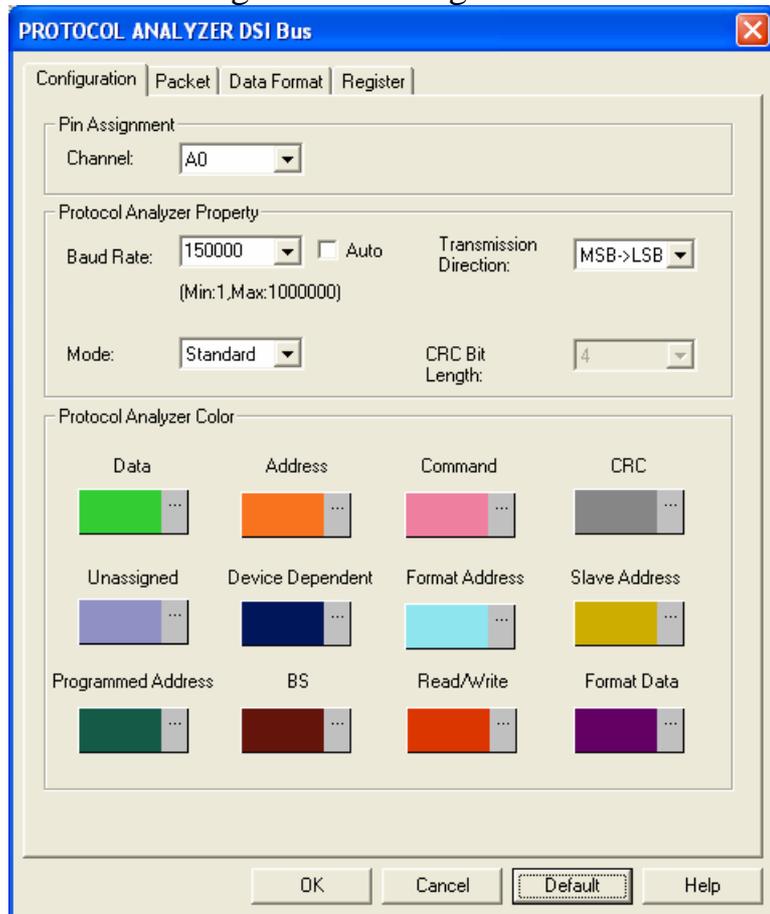
STEP 5. After clicking the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



2 User Interface

In the configuration, please refer to the below images to select options of setting DSI Bus module.

DSI Bus Configuration Dialog Box



Pin Assignment: The DSI Bus only needs one channel to decode signals.

Baud Rate: Users can enter a value in the range from 1 to 10000000 or select a value (1500, 5000, 15000, 50000, 150000, 500000, 1500000 or 5000000) from the pull-down menu, and the default is 150000. Meanwhile, users can enable the option, **Auto**, and then the value of the Baud Rate will be displayed automatically.

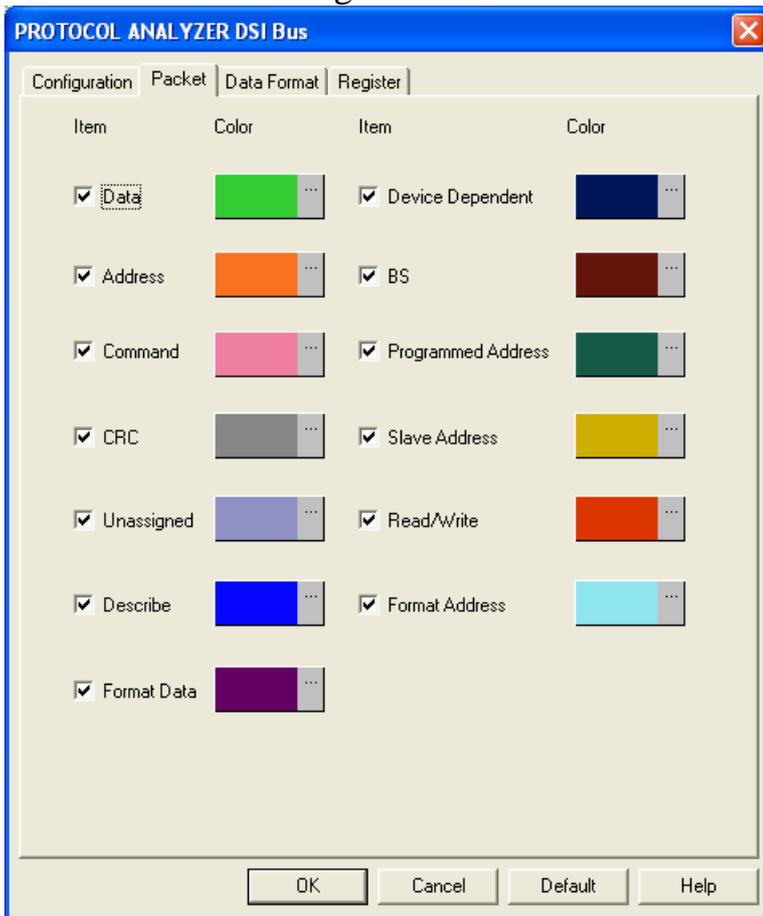
Transmission Direction: Set the Direction to **MSB->LSB** or **LSB->MSB**.

Mode: Set the Mode to **Standard** or **Enhanced**. In the Standard mode, the CRC Bit Length is 4, and the Column of the CRC Bit Length is disabled.

CRC Bit Length: Set the Length in the range from 0 to 8.

Protocol Analyzer Color: Set the displayed color for every packet in the Protocol Analyzer.

DSI Bus Packet Dialog Box



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

DSI Bus Data Format Dialog Box



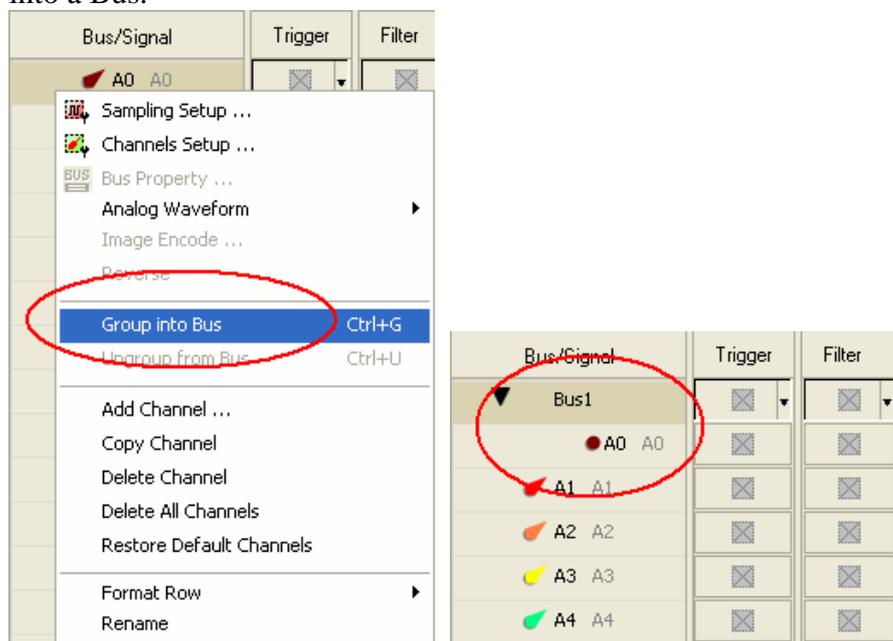
Users can set the data formats as their requirements. When selecting the option, **Activate**, the data formats are decided by the settings in the Protocol Analyzer; when not selecting the option, **Activate**, the data formats are decided by the settings in the main program.

DSI Bus Register Dialog Box

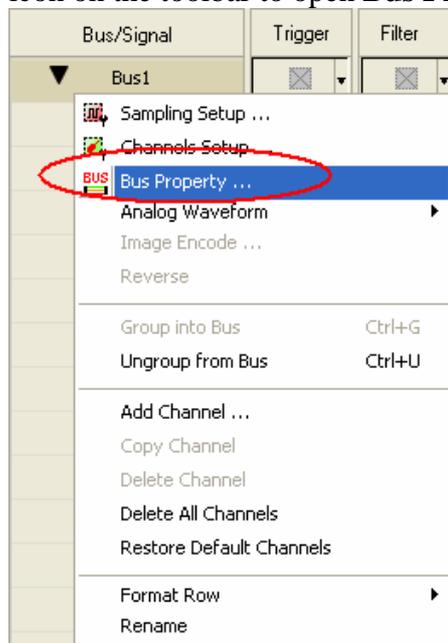


3 Operating Instructions

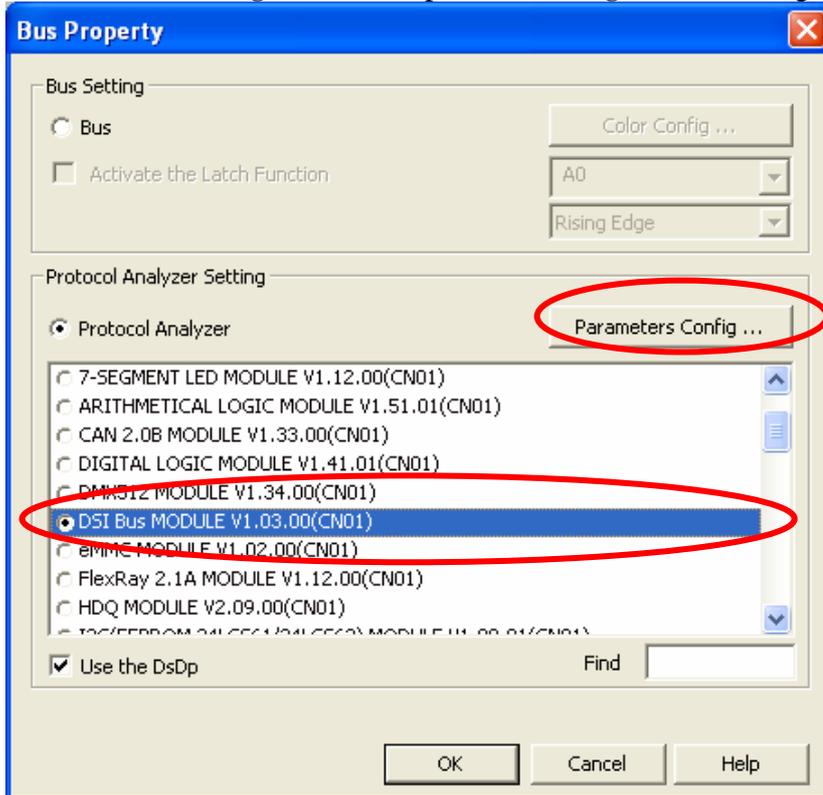
STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. DSI Bus needs only one channel to decode signals, so it is necessary to group one or more channels into a Bus.



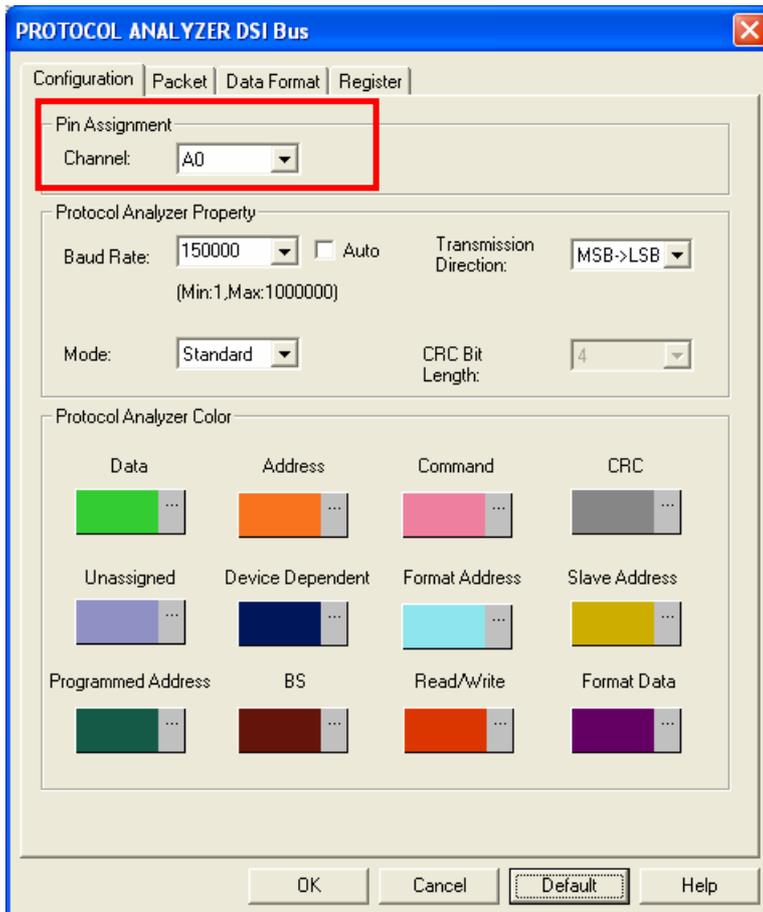
STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



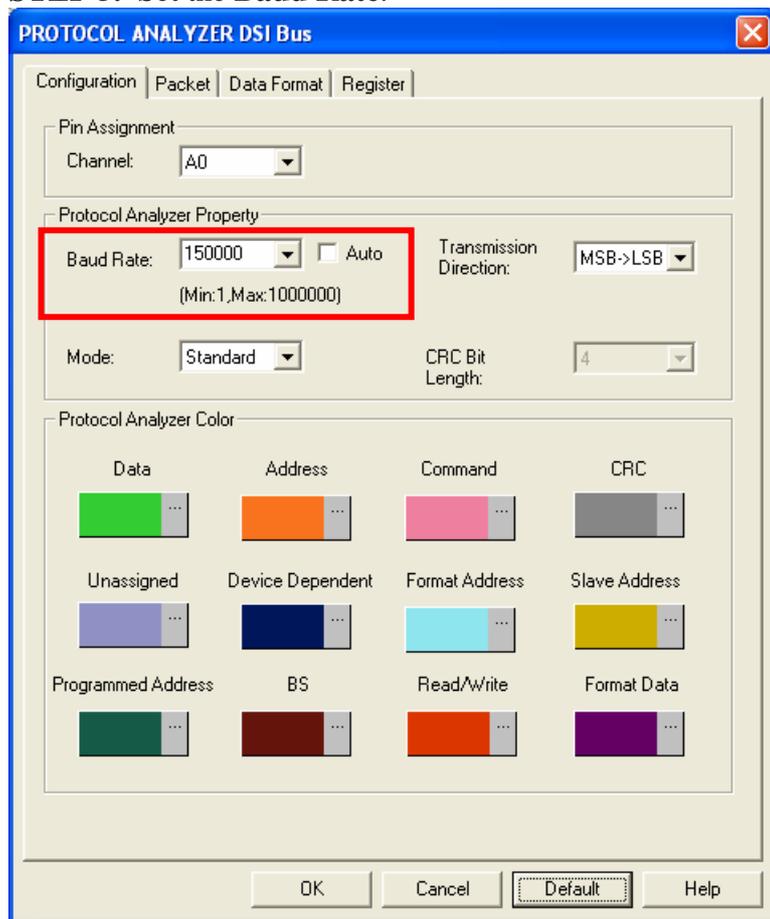
STEP 3. Select Protocol Analyzer, and then choose **DSI Bus MODULE V1.03.00(CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.



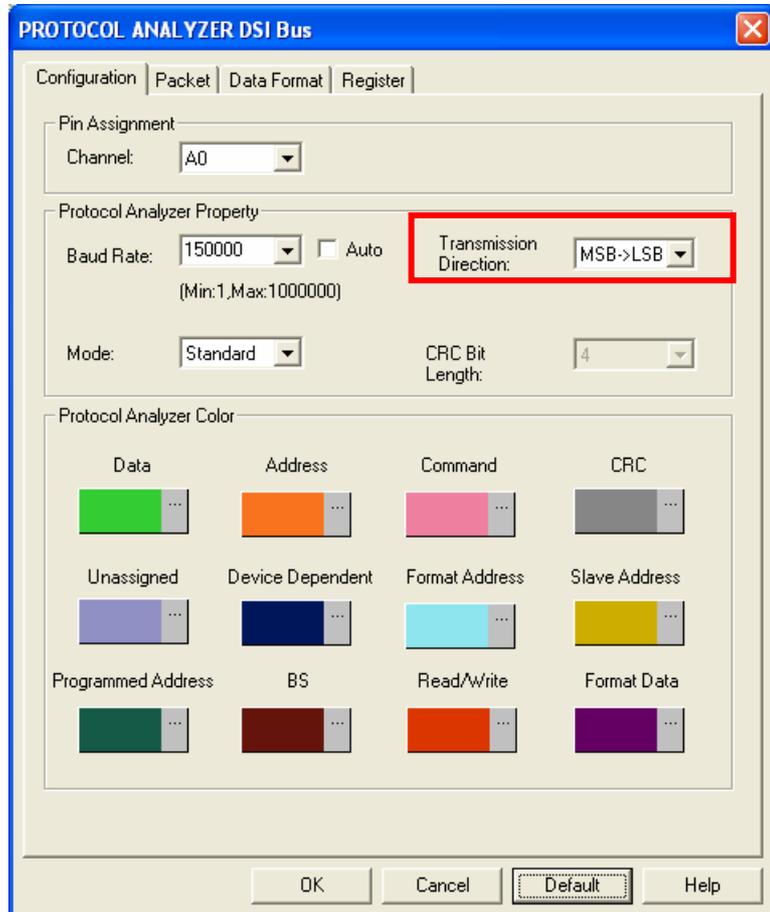
STEP 4. Set the **Channel**.



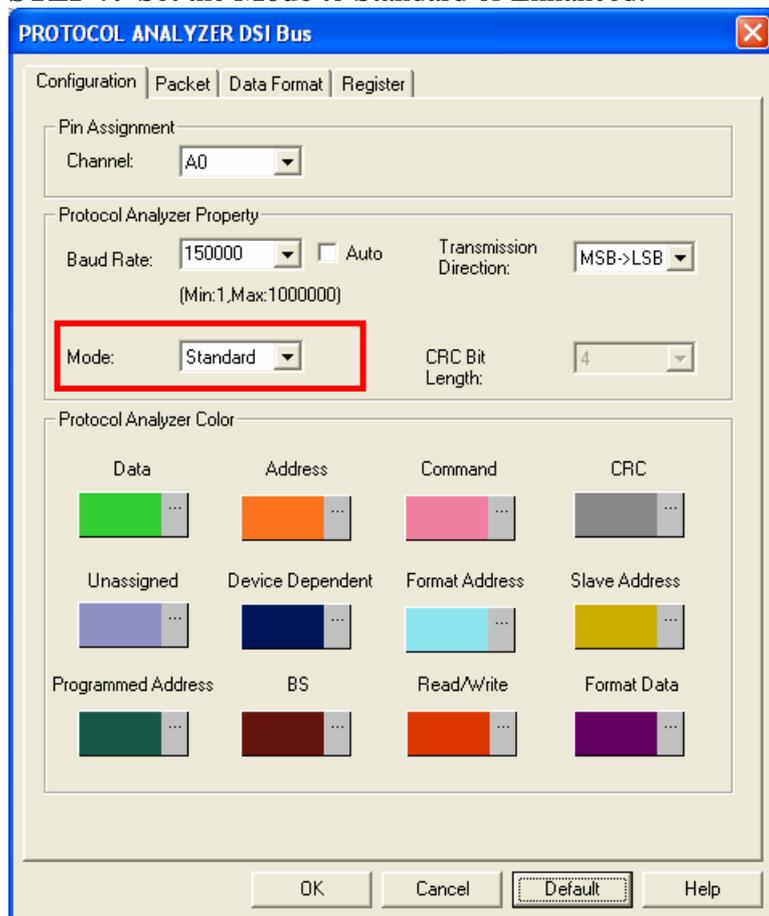
STEP 5. Set the Baud Rate.



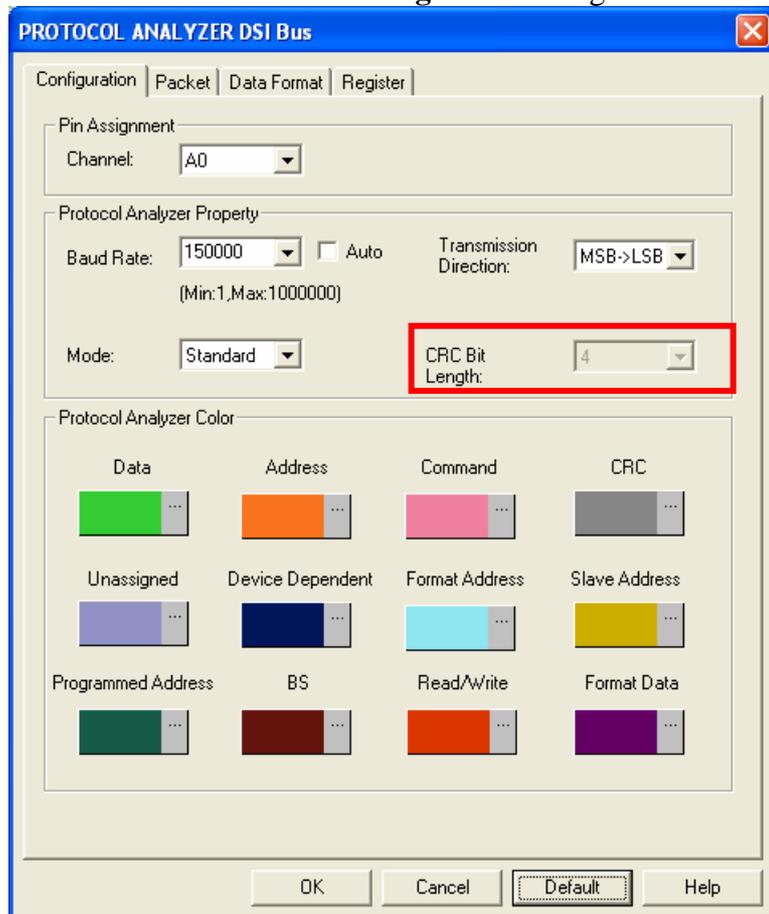
STEP 6. Set the Transmission Direction to MSB->LSB or LSB->MSB.



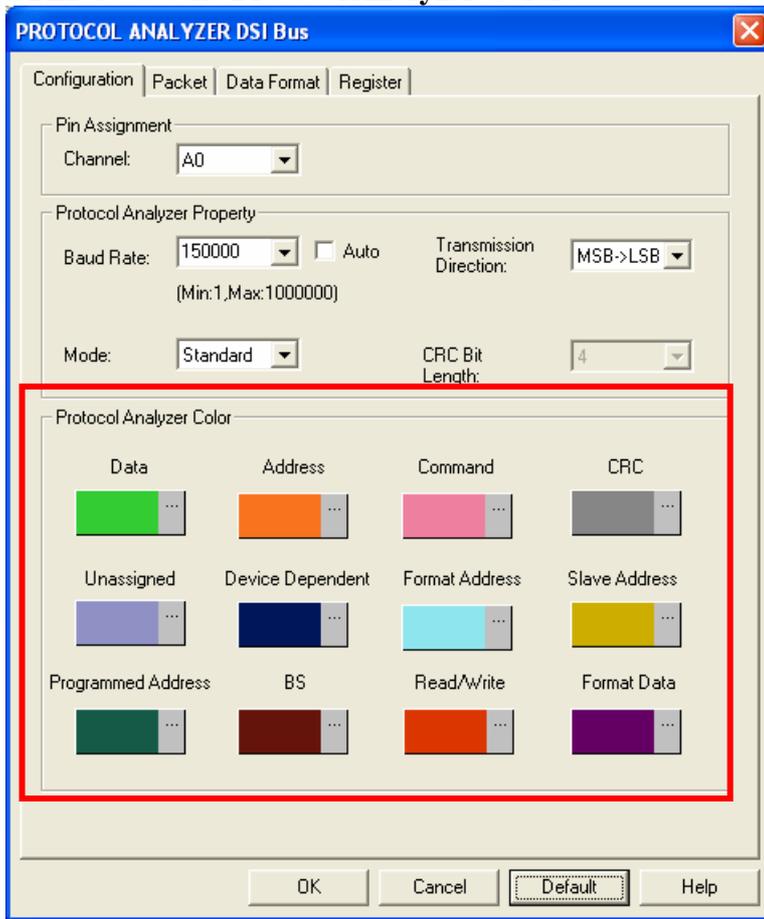
STEP 7. Set the Mode to Standard or Enhanced.



STEP 8. Set the CRC Bit Length in the range from 0 to 8.

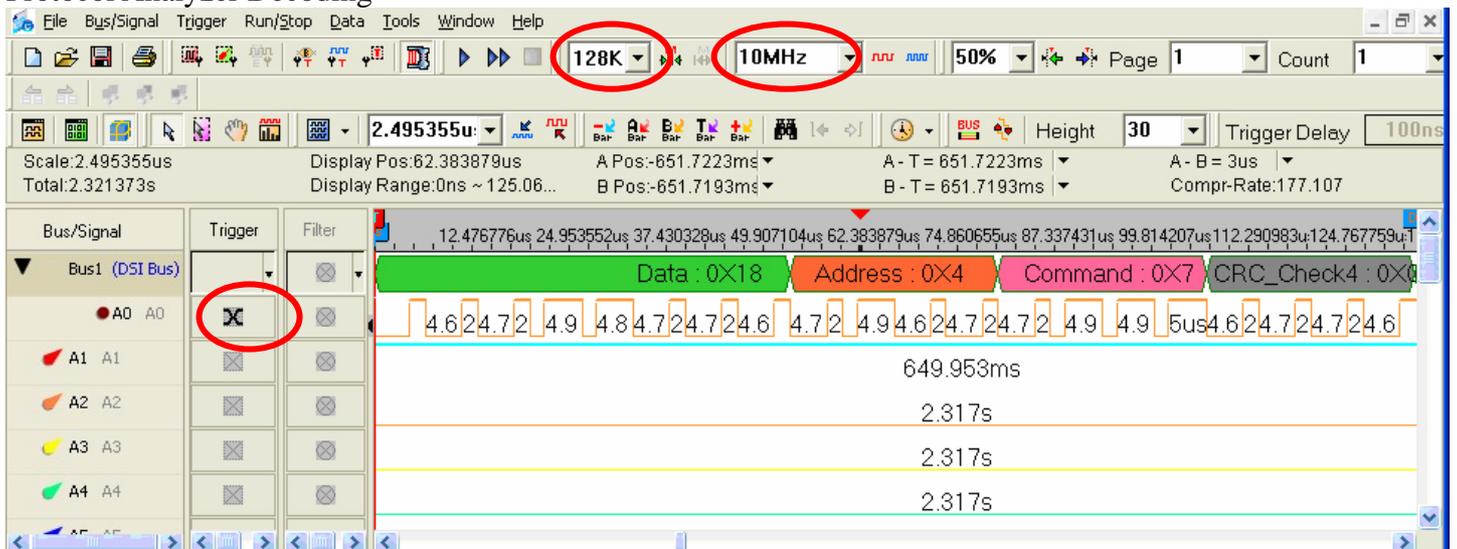


STEP 9. Set the Protocol Analyzer Color.



STEP 10. 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 10MHz (the sampling frequency should be more than ten times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

File Bus/Signal Trigger Run/Stop Data Tools Window Help

128K 10MHz 50% Page 1 Count 1

2.495355u: Height 30 Trigger Delay 100ns

Scale: 2.495355us Display Pos: 62.383879us A Pos: -651.7223ms A - T = 651.7223ms A - B = 3us
 Total: 2.321373s Display Range: 0ns ~ 125.06... B Pos: -651.7193ms B - T = 651.7193ms Compr-Rate: 177.107

Bus/Signal Trigger Filter

Bus1 (DSI Bus) A0 A0 A1 A1 A2 A2 A3 A3 A4 A4

12.476776us 24.953552us 37.430328us 49.907104us 62.383879us 74.860655us 87.337431us 99.814207us 112.290983us 124.767759us

Data: 0X18 Address: 0X4 Command: 0X7 CRC_Check4: 0X0

4.6 24.72 4.9 4.8 4.7 24.7 24.6 4.7 2 4.9 4.6 24.7 24.7 2 4.9 4.9 5us 4.6 24.7 24.7 24.6

649.953ms
2.317s
2.317s
2.317s

Setting... Refresh Export... Synch Parameter...

Packet #	Name	TimeStamp	Data	Address	Command	CRC_Check4	DESCRIBE
1	Bus1(DSI Bus)	0ns	18	4	7	0	Standard Long
2	Bus1(DSI Bus)	385.7us	AB	7	1	D	Standard Long
3	Bus1(DSI Bus)	771.4us	99	A	B	B	Standard Long
4	Bus1(DSI Bus)	1.157ms	7	4	9		Standard Short

Ready End! DEMO