



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

# SPECIFICATION

**MODEL: B12015-MIPI DSI**

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

**VERSION :** V1.02

Approver		Check	Design
GM	PM		

Customer Confirm

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## Revision History

Revision No.	History	Page No.	Date	Reviser
V1.00	First Version	2-14	2013-01-07	Nancy
V1.01	Available in ZPP store	2-14	2013-07-15	Anderson
V1.02	Abnormal decoding is solved.	11, 13-14	2013-07-15	Anderson



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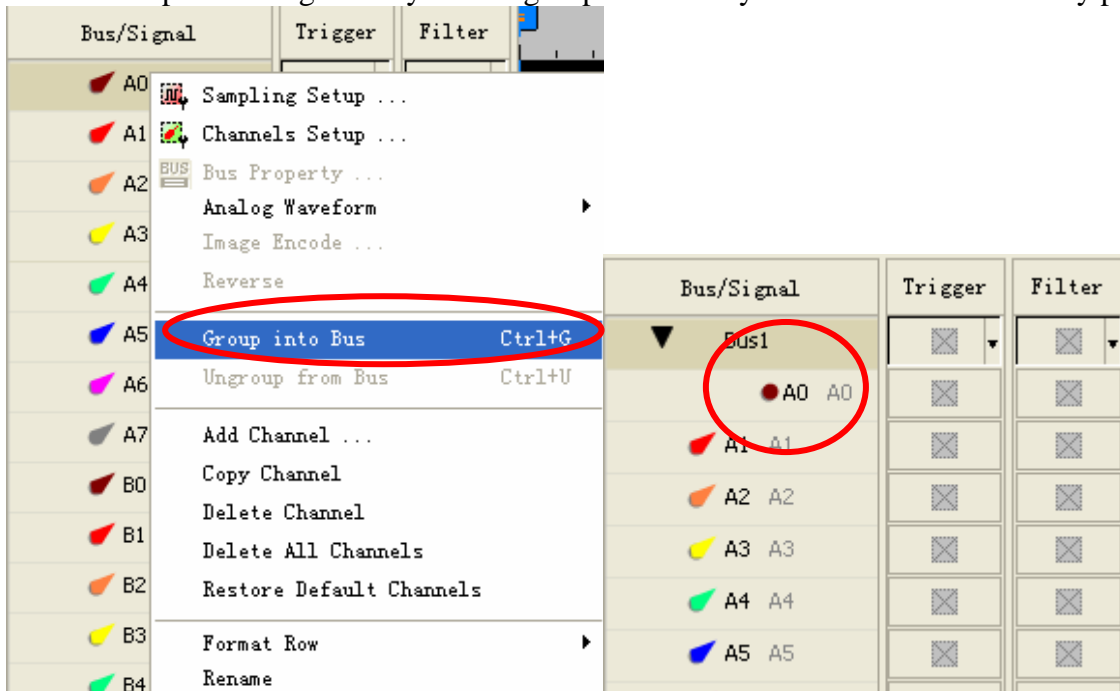
## 1 Software Register

Please register the software as the following steps:

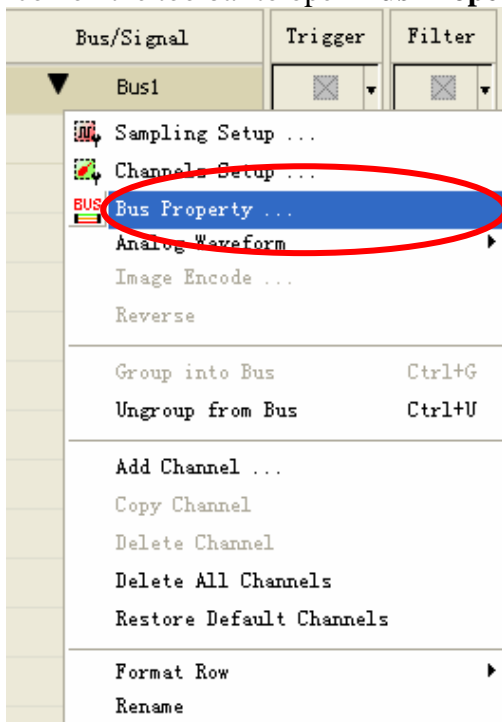
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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 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**.

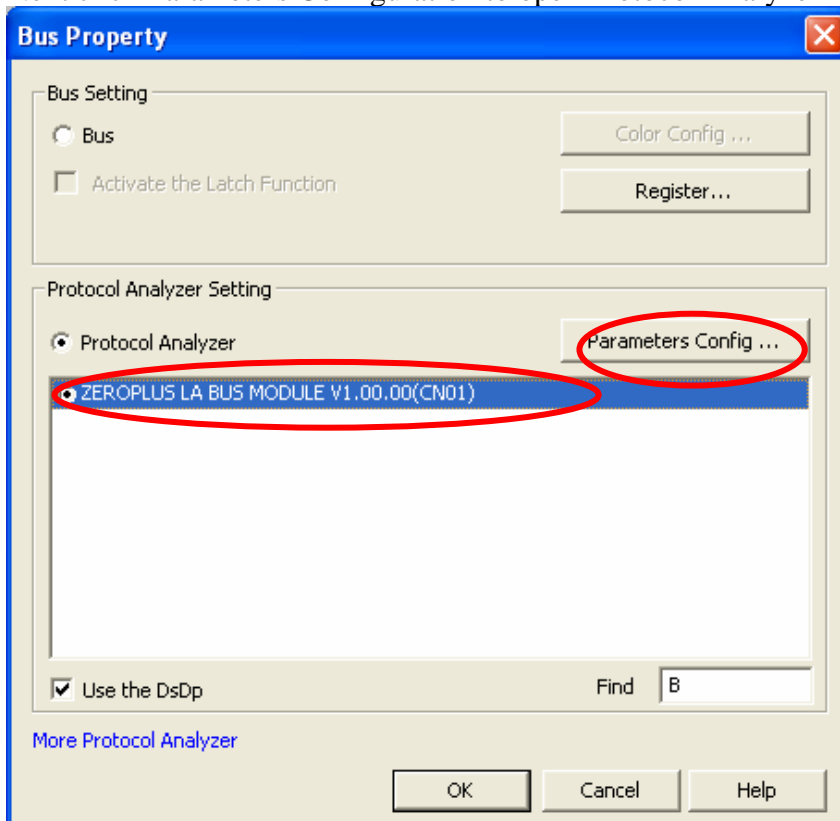


**STEP 2.** Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

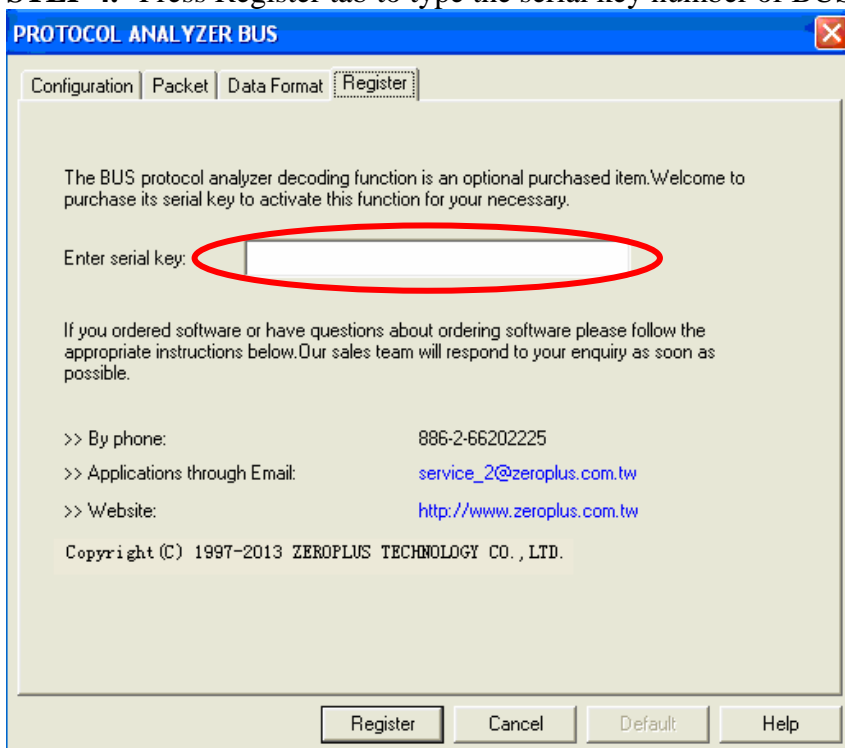




**STEP 3.** Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



**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.

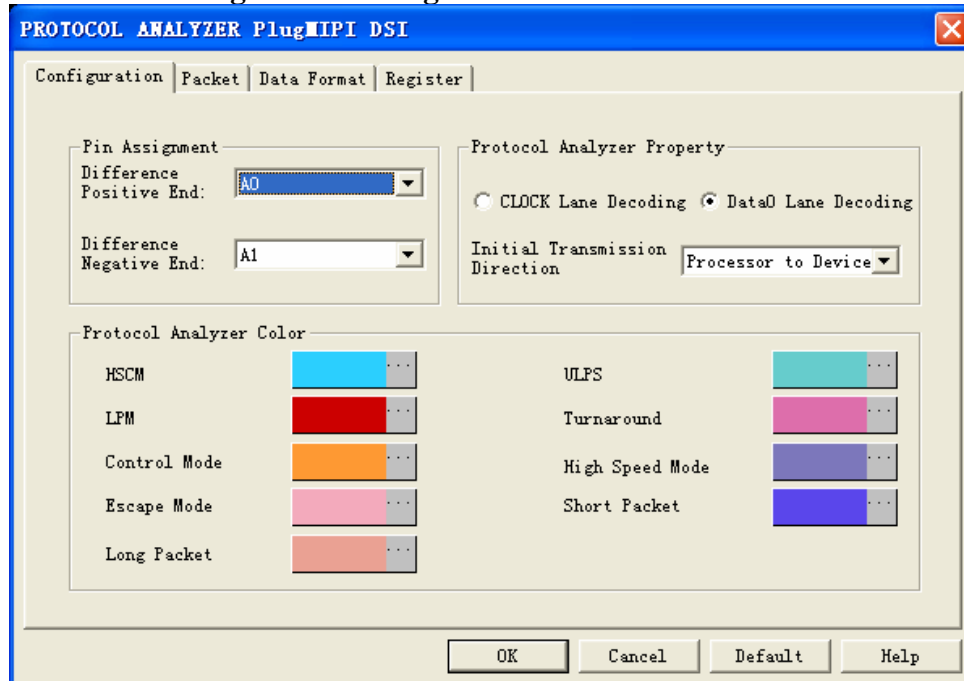




## 2 User Interface

Please refer to the below images to do settings of **MIPI DSI** module.

### MIPI DSI Configuration dialog box



#### Pin Assignment:

Difference Positive End: It is the CLK+ in the Clock Lane Decoding Mode and D+ in the Data0 Lane Decoding Mode.

Difference Negative End: It is the CLK- in the Clock Lane Decoding Mode and D- in the Data0 Lane Decoding Mode.

#### Protocol Analyzer Property:

The MIPI DSI provides two decoding modes: Clock Lane Decoding Mode and Data0 Lane Decoding Mode to be selected.

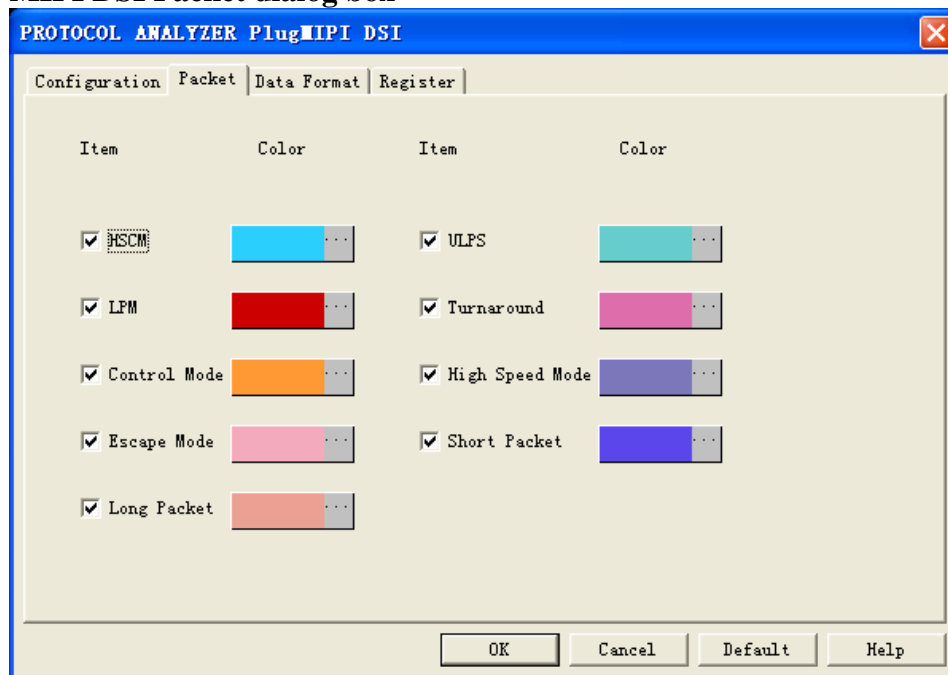
There are two direction options: “Processor to Device” and “Device to Processor” in the Initial Transmission Direction column. It is the “Processor to Device” by default and only can be available in the Data0 Lane Decoding Mode.

#### Protocol Analyzer Color:

The color can be varied by users.

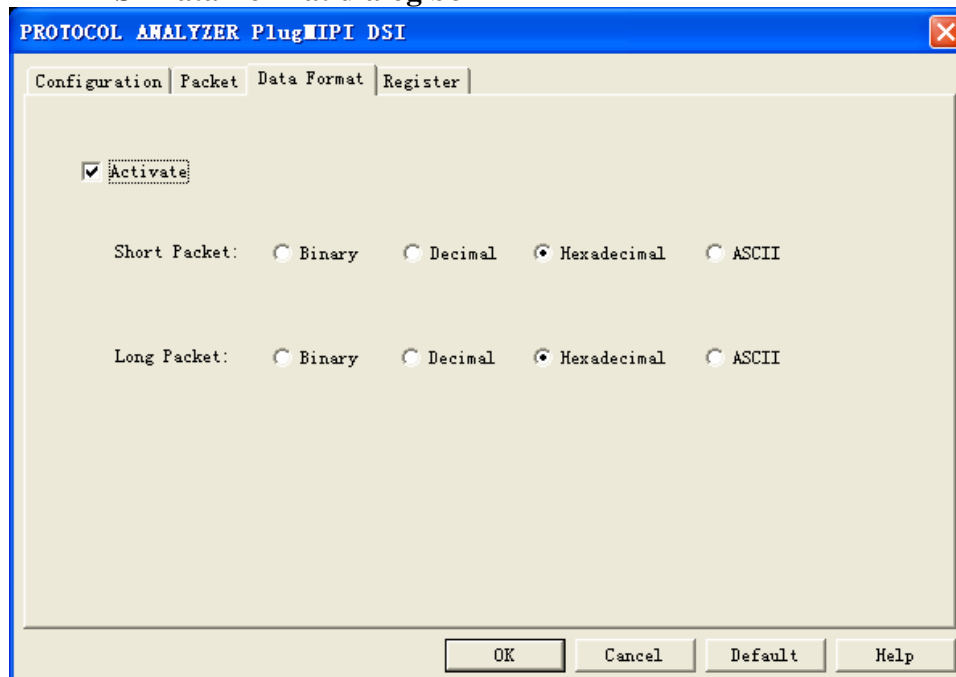


## MIPI DSI Packet dialog box



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

## MIPI DSI Data Format dialog box

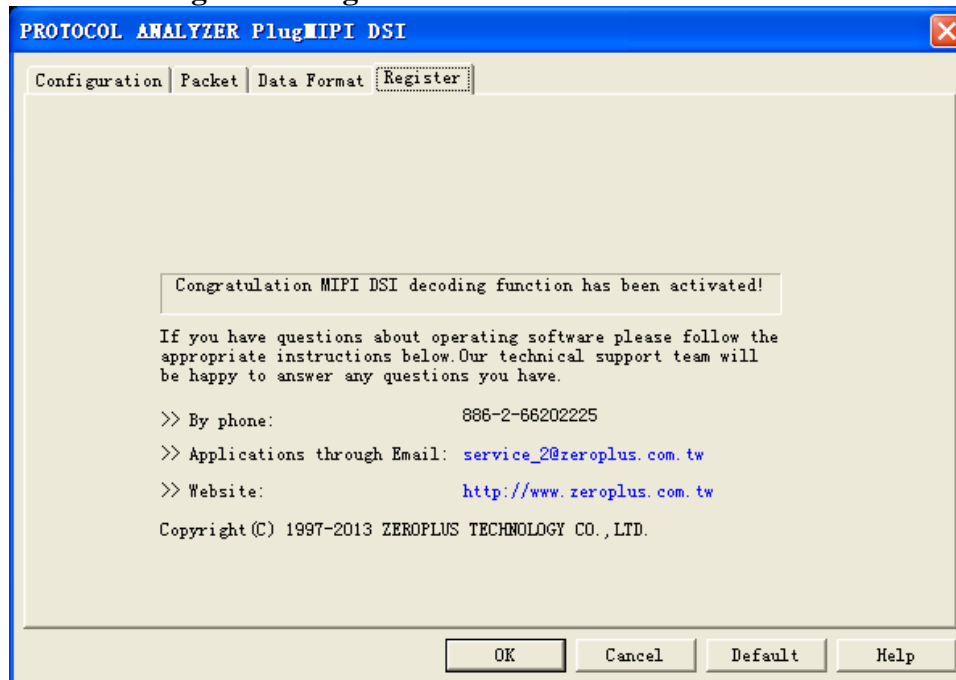


Users can set the Data Format as their requirements. The two items (Short Packet and Long Packet) can be set as Binary, Decimal, Hexadecimal or ASCII (Hexadecimal by default). When selecting the option “Activate”, the format is decided by the settings in the Protocol Analyzer; when not selecting the option “Activate”, the data format is decided by the settings in the main program.





## MIPI DSI Register dialog box

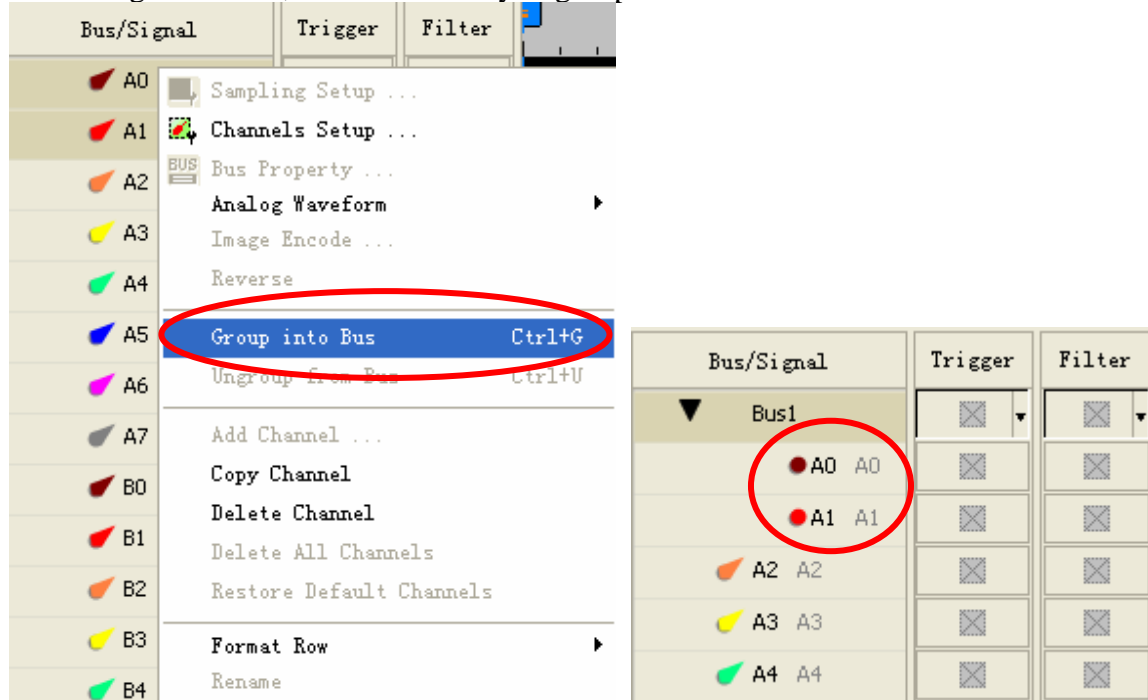


There is ZeroPlus company information. If you have questions about software operations, you can contact ZeroPlus by Telephone or Email.

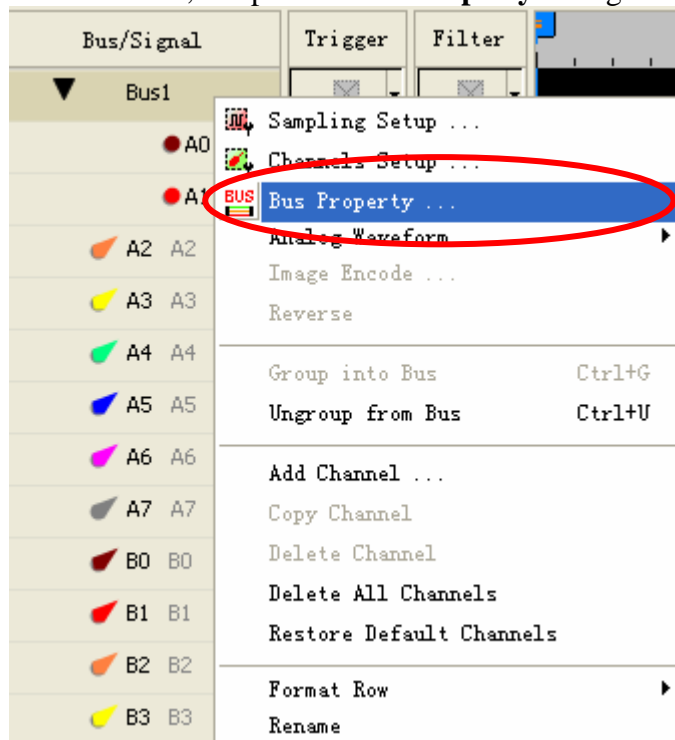


### 3 Operating Instructions

**STEP 1.** Group A0-A1 into **Bus1** by pressing the **Right Key** on the mouse. MIPI DSI needs two channels to decode signal at least, so it is necessary to group two or more channels into the Bus.

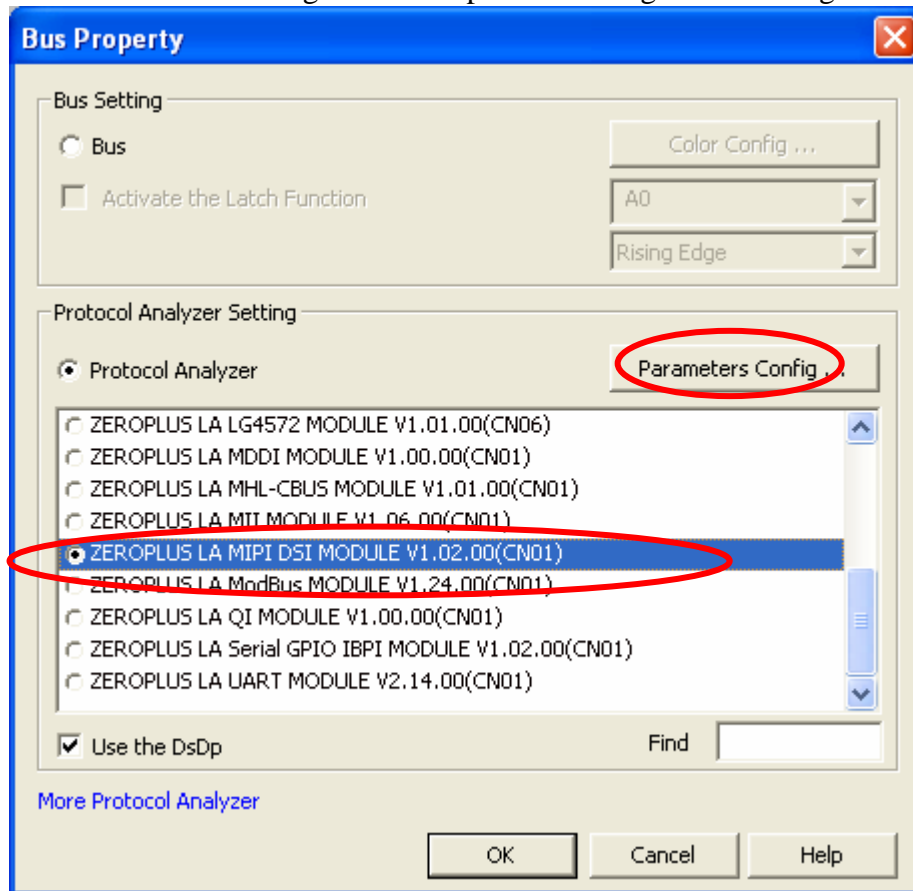


**STEP 2.** Select **Bus1**, press right key and select **Bus Property** from the popped menu, or click the **Bus** icon on the toolbar, to open the **Bus Property** dialog box.

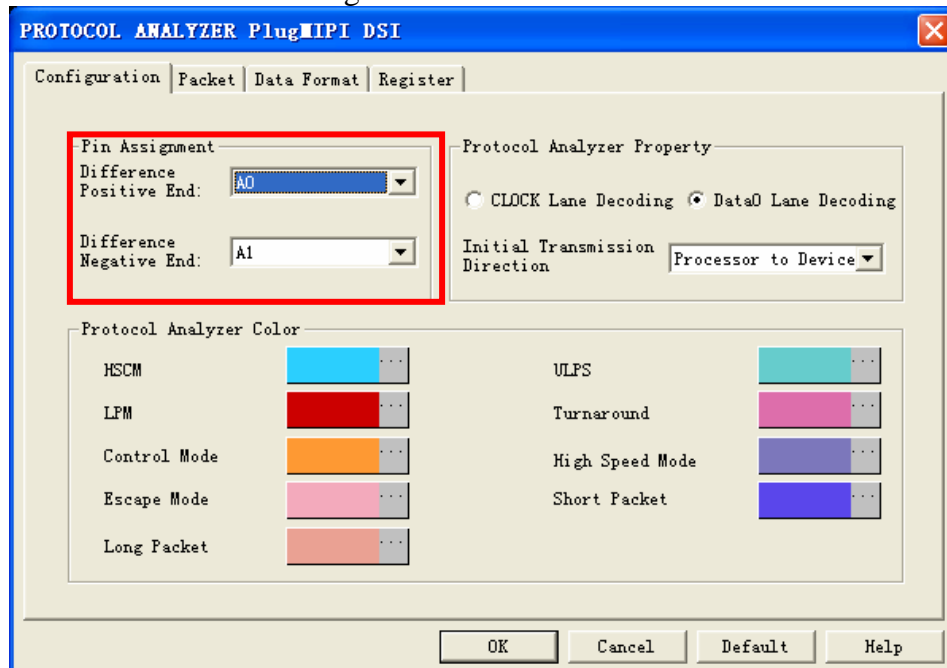




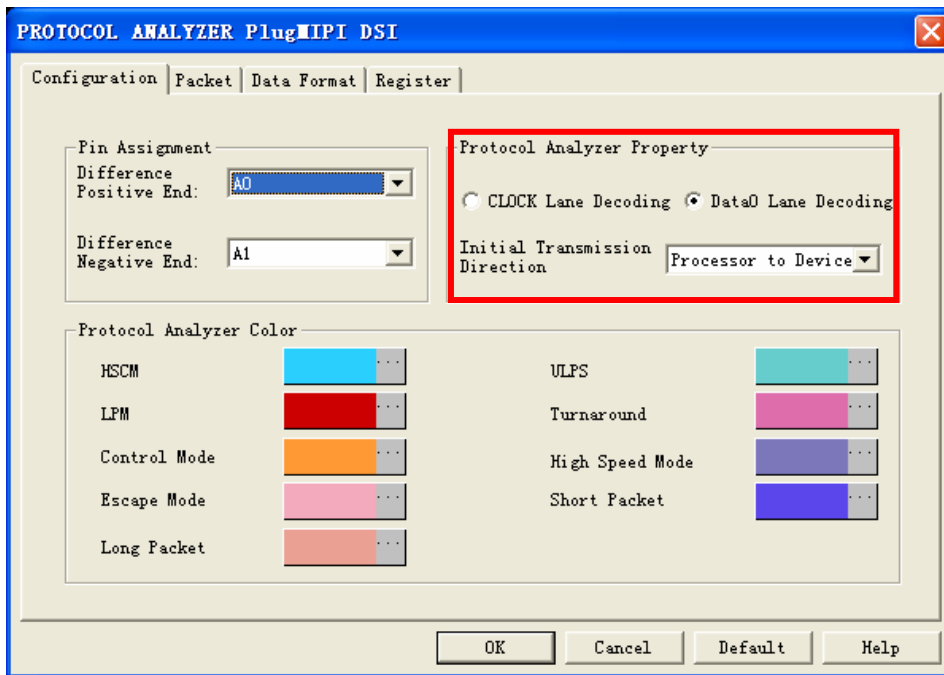
**STEP 3.** Select Protocol Analyzer, and select ZEROPLUS LA MIPI DSI MODULE V1.02.00 (CN01). Then click Parameters Configuration to open the Configuration dialog box.



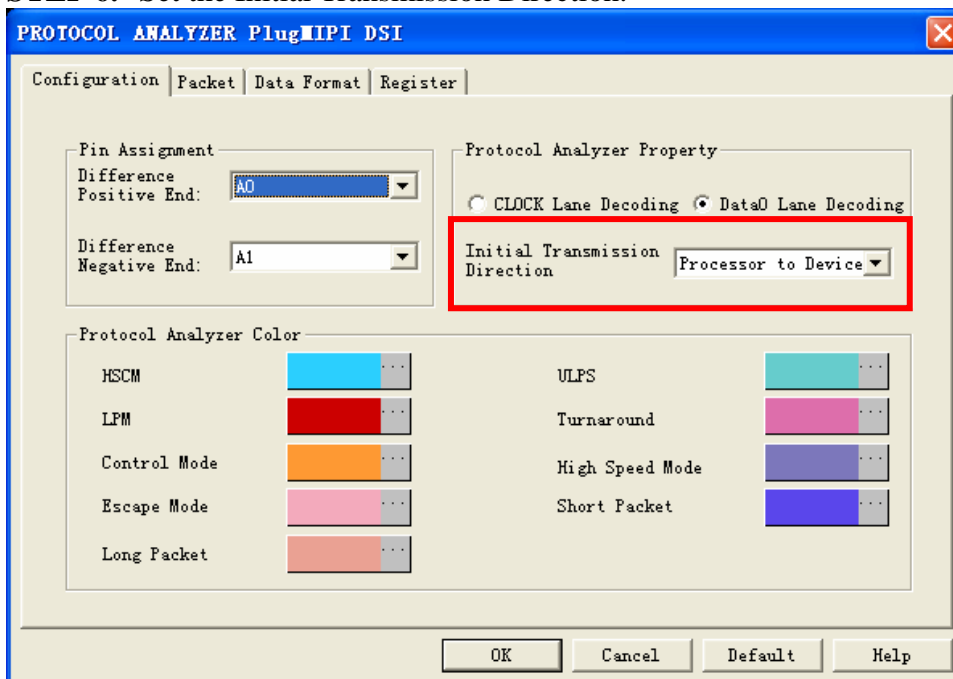
**STEP 4.** Set the Pin Assignment.



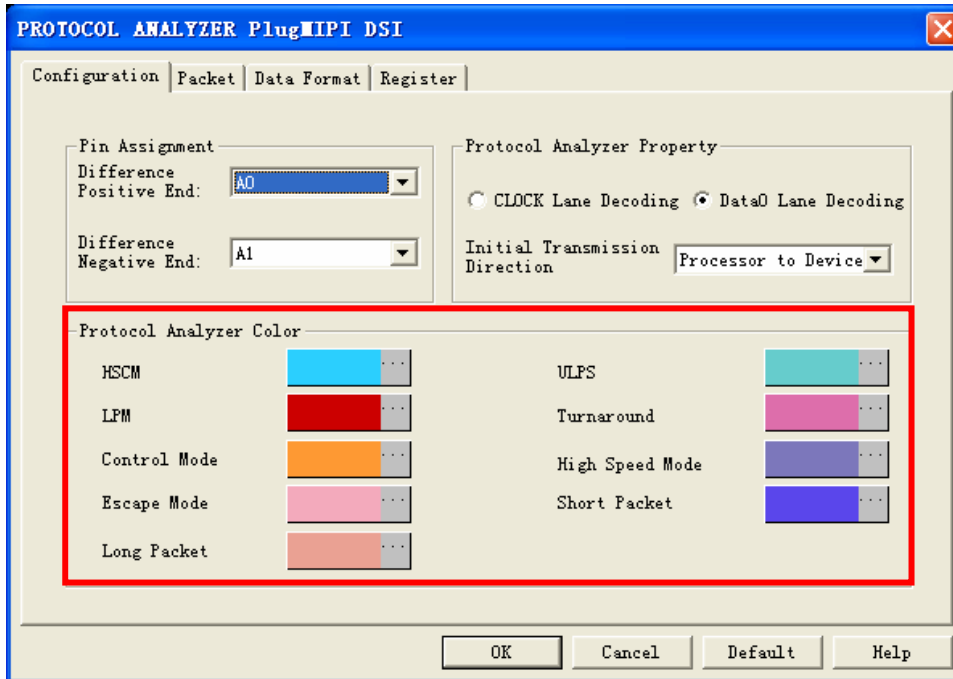
**STEP 5.** Set the Protocol Analyzer Property.



#### STEP 6. Set the Initial Transmission Direction.

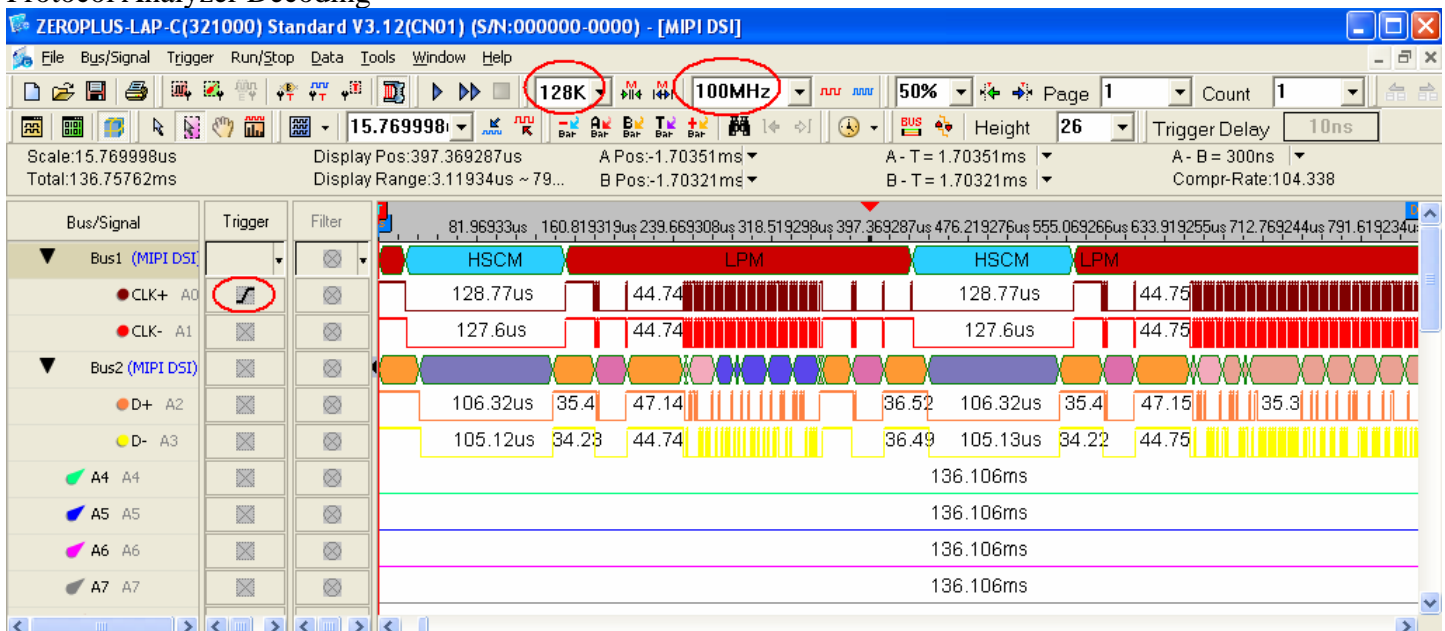


#### STEP 7. Set the Protocol Analyzer Color.



**STEP 8.** Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Rising Edge, the memory depth is 128K and the sampling frequency is 100MHz (the sampling frequency should be more than four times higher than the signal to be tested).

### Protocol Analyzer Decoding



### Packet List

