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

SPECIFICATION

MODEL: B12016-MDDI

PART NO： _____

VERSION： V1.00

Approver		Check	Design
GM	PM		

Customer Confirm

＊Please fax the file to Zeroplus Technology after signing.

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Content

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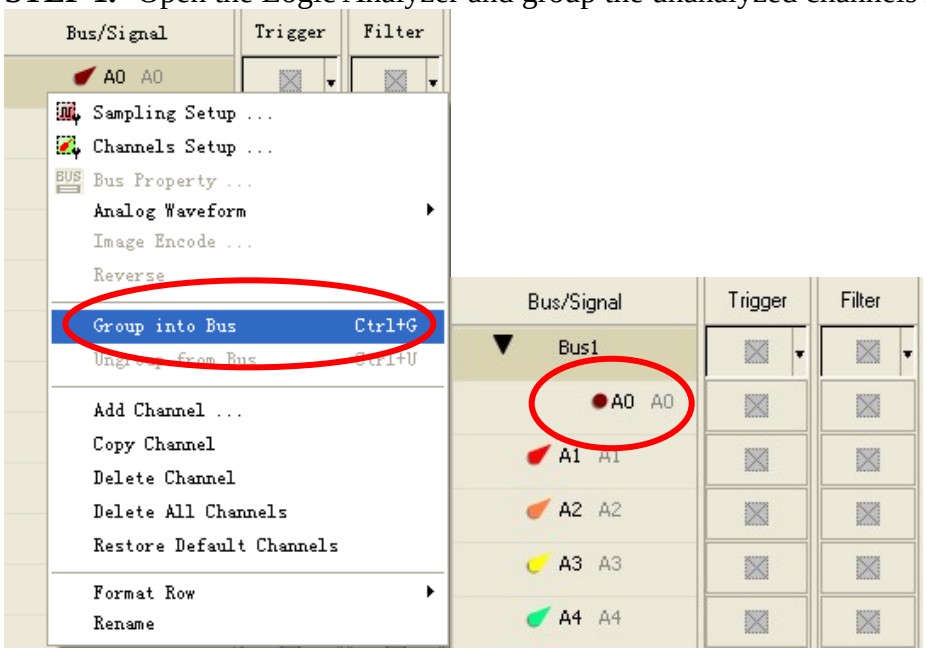
1 Software Register

Please register the software as the following steps:

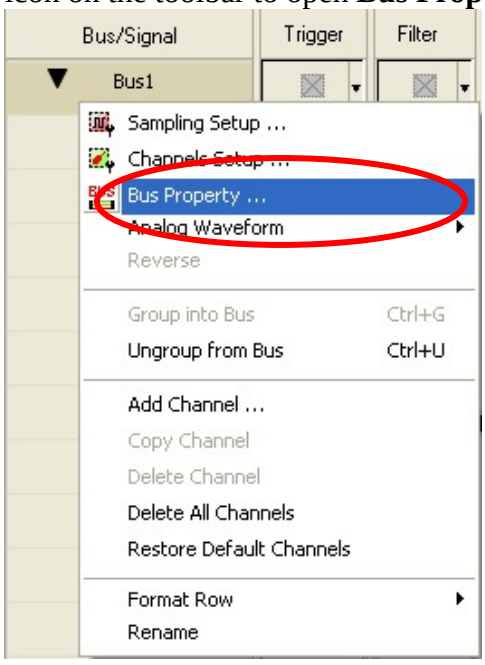
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ Remark2: We won't have additional notice for you, when there is any modification of the module specification. If there is any 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.



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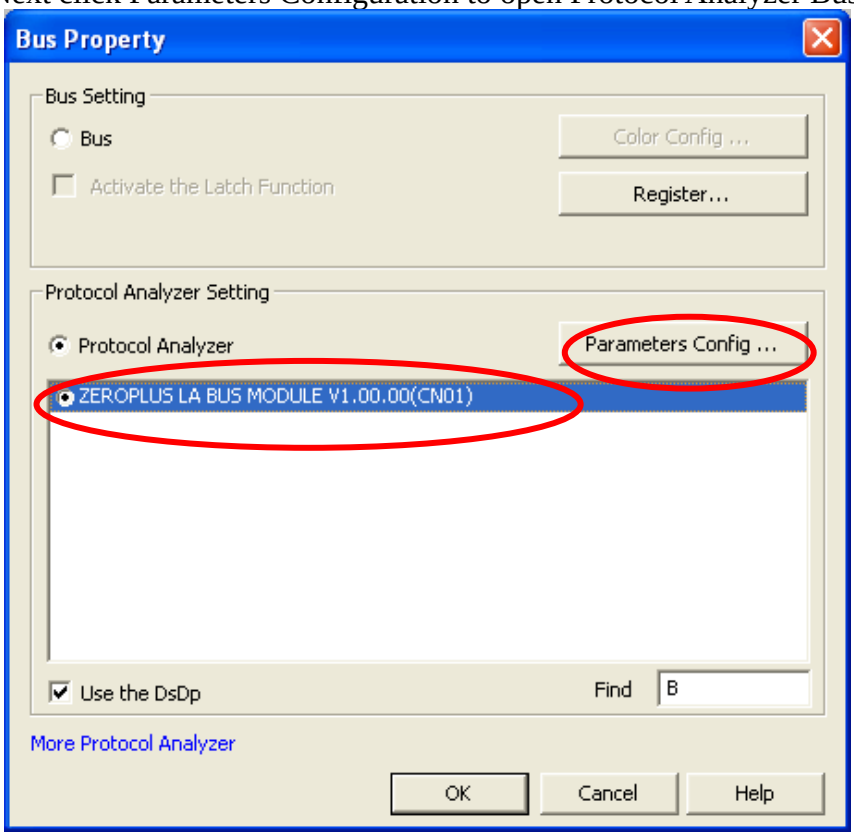
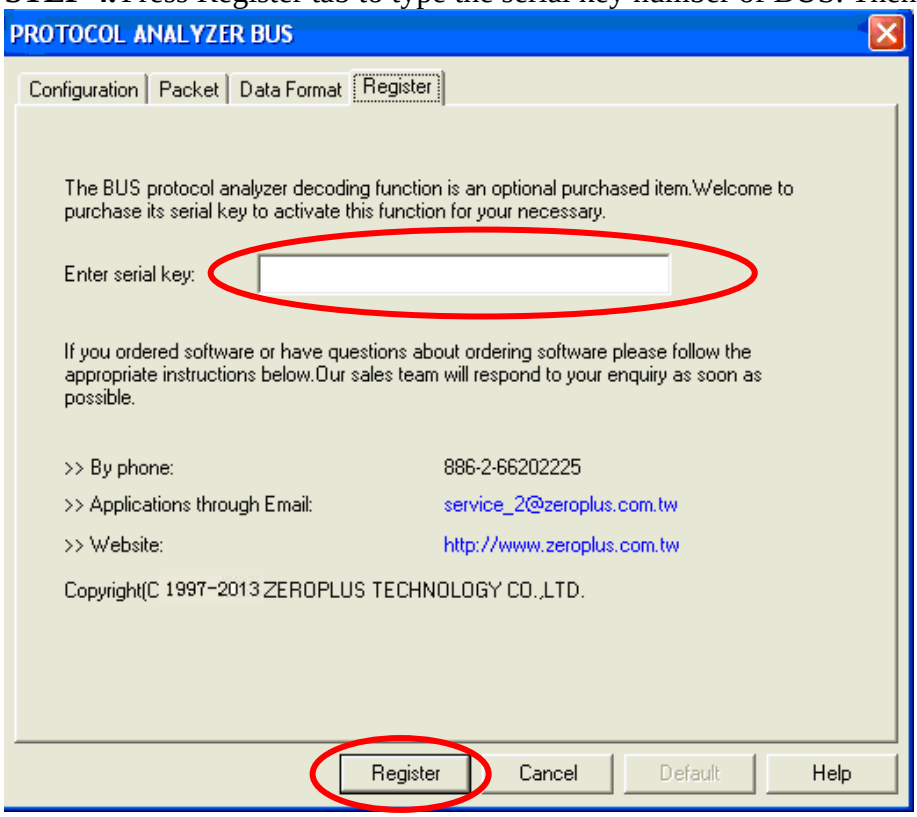
STEP 3. Select the Protocol Analyzer, and then choose **ZEROPLUS LA BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



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



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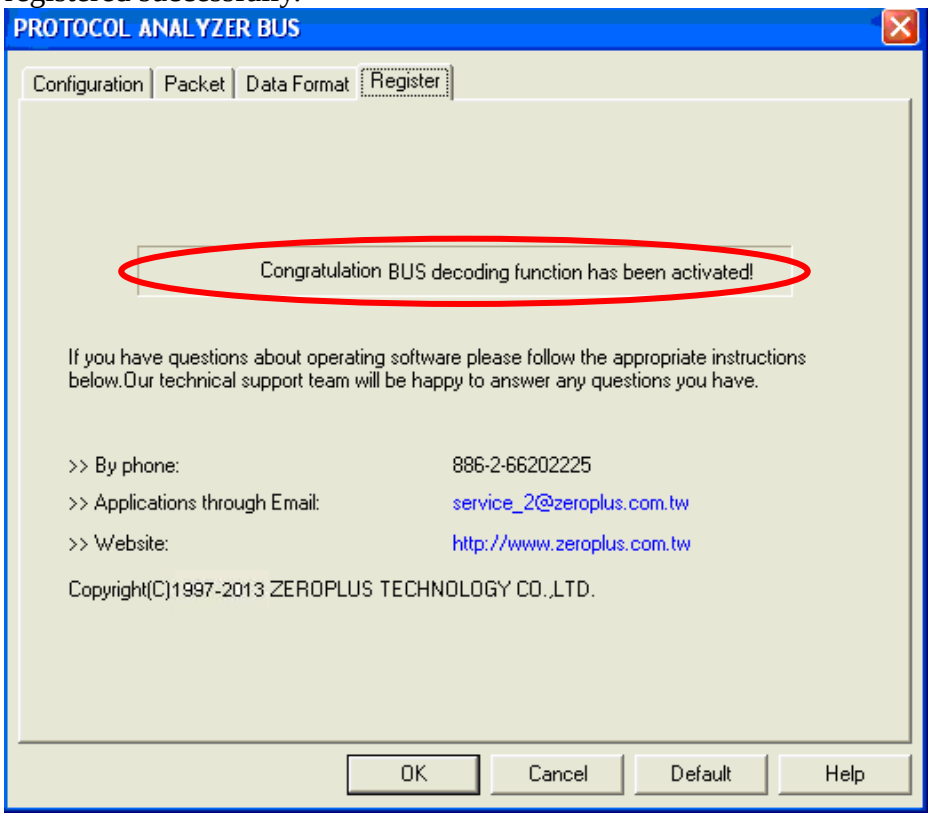
STEP 5. After pressing the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



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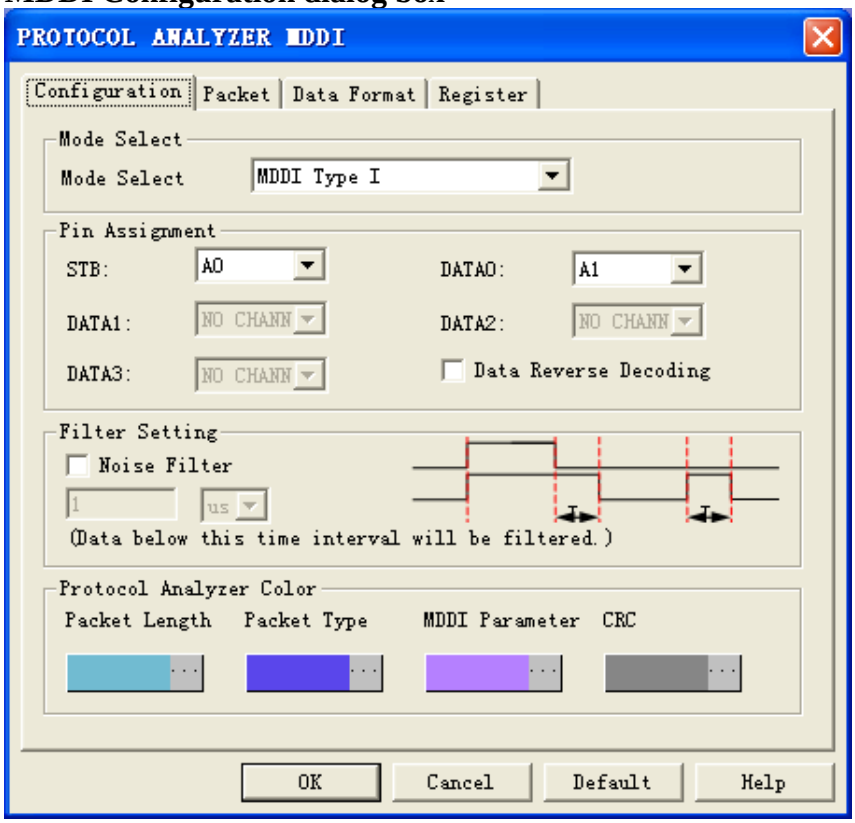
2 User Interface

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

MDDI Configuration dialog box



Mode Select:
Users can select MDDI Type I, MDDI Type II, MDDI Type III and MDDI Type IV, and it is the MDDI Type I by default. The data line is limited in the different mode.

Pin Assignment:
STB is the base line, all of DATA0, DATA1, DATA2 and DATA3 are data lines.
It is that the “Data Reverse Decoding” is not activated by default.

Filter Setting:
Start the noise filter function when the Noise Filter is activated. The value can be inputted from 1 to 1000, and it is 1 by default. The default unit is us, users cannot input value when the unit is ns, us or ms.

Protocol Analyzer Color:
The color can be varied by users.

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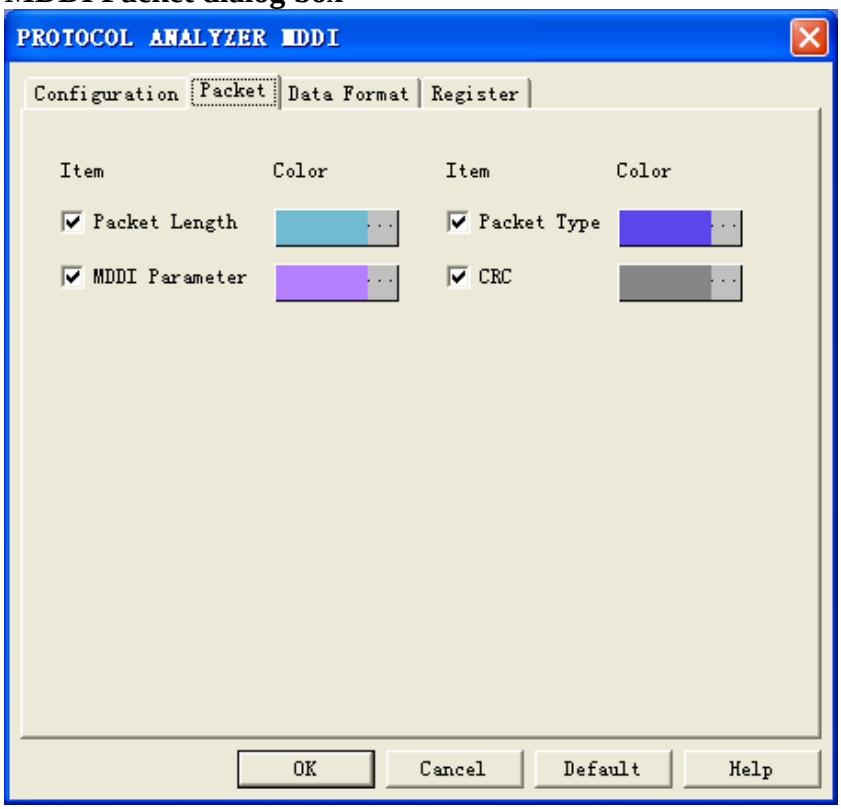
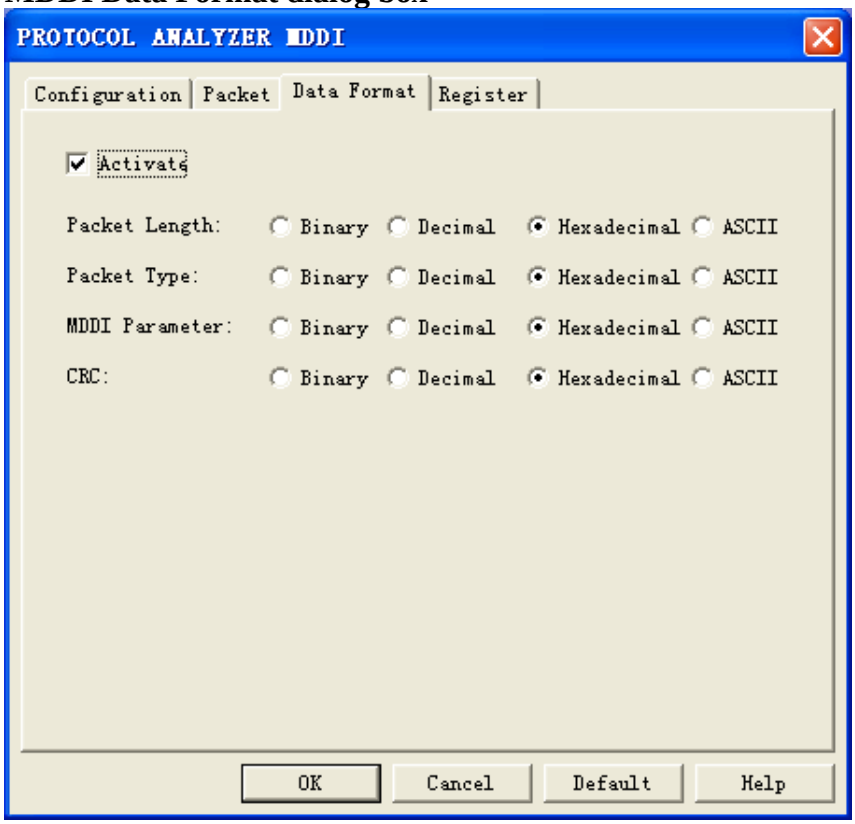
MDDI Packet dialog box



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

MDDI Data Format dialog box



Users can set the Data Format as their requirements. The four items (Packet Length, Packet Type, MDDI Parameter and CRC) can be set as Binary, Decimal, Hexadecimal or ASCII (Hexadecimal by default). When

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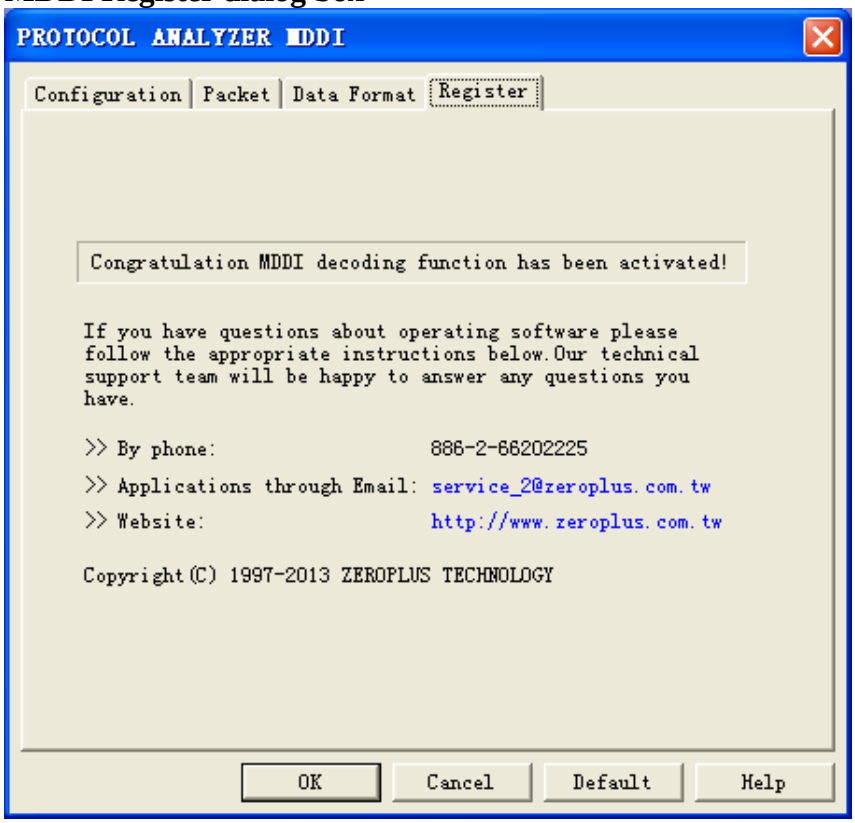
selecting the option Activate, the format is decided by the settings in the Protocol Analyzer; when not selecting the option Activate, the data format is decided by the settings in the main program.

MDDI Register dialog box



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

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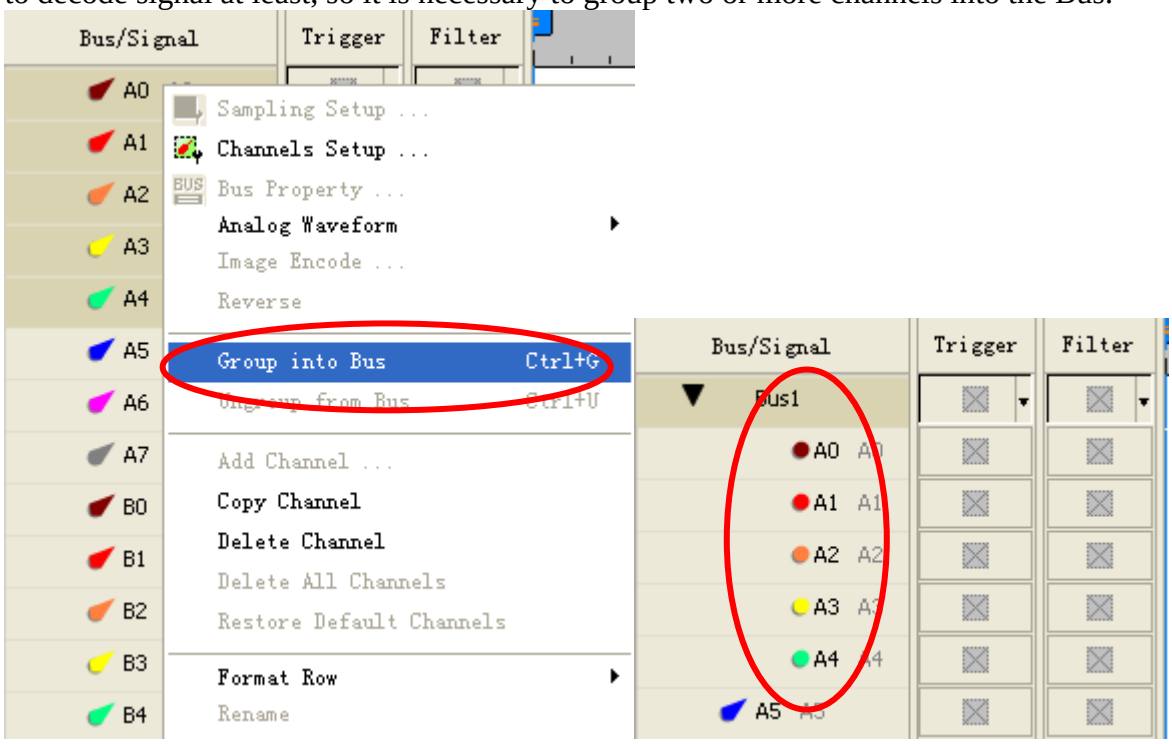
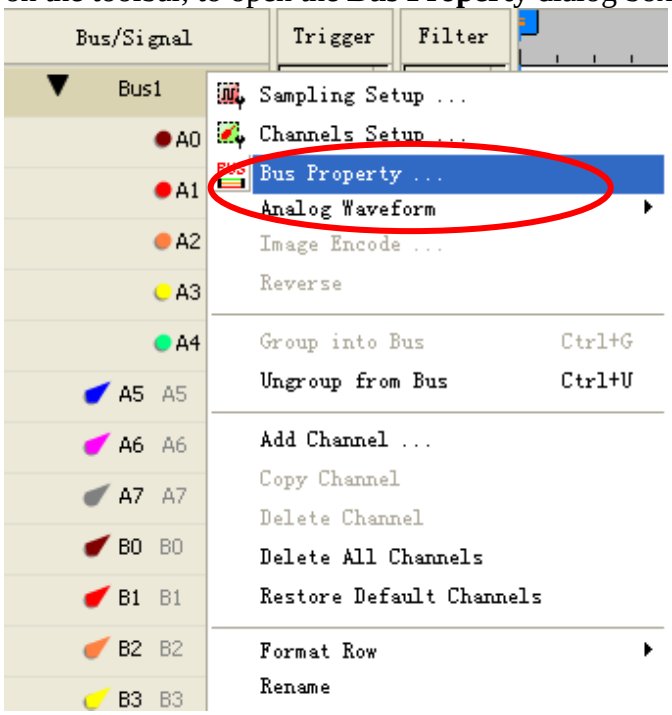
3 Operating Instructions

STEP 1. Group A0-A4 into **Bus1** by pressing the **Right Key** on the mouse. DDC EDID 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.



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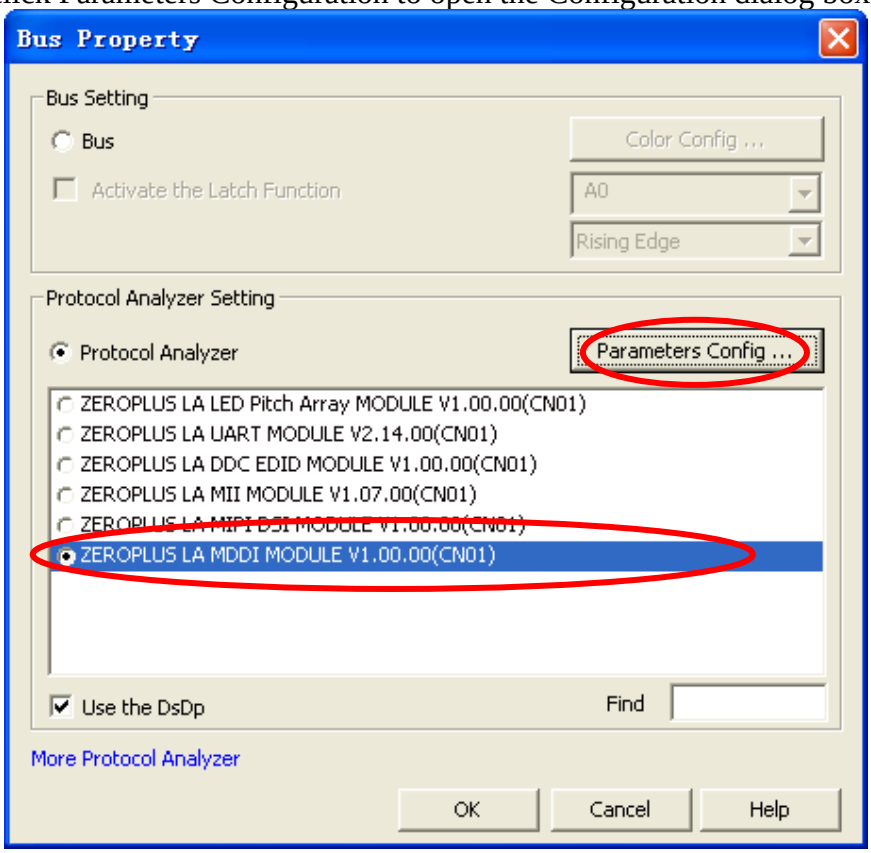
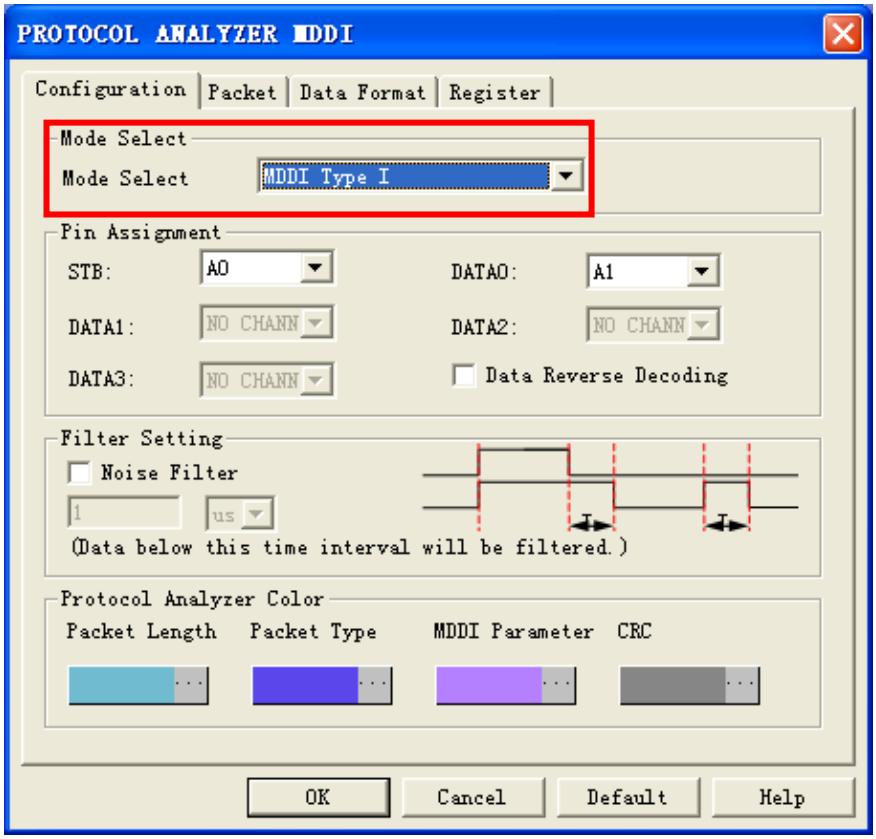
STEP 3. Select Protocol Analyzer, and select ZEROPLUS LA MDDI MODULE V1.00.00 (CN01). Then click Parameters Configuration to open the Configuration dialog box.



STEP 4. Set the Mode Select.



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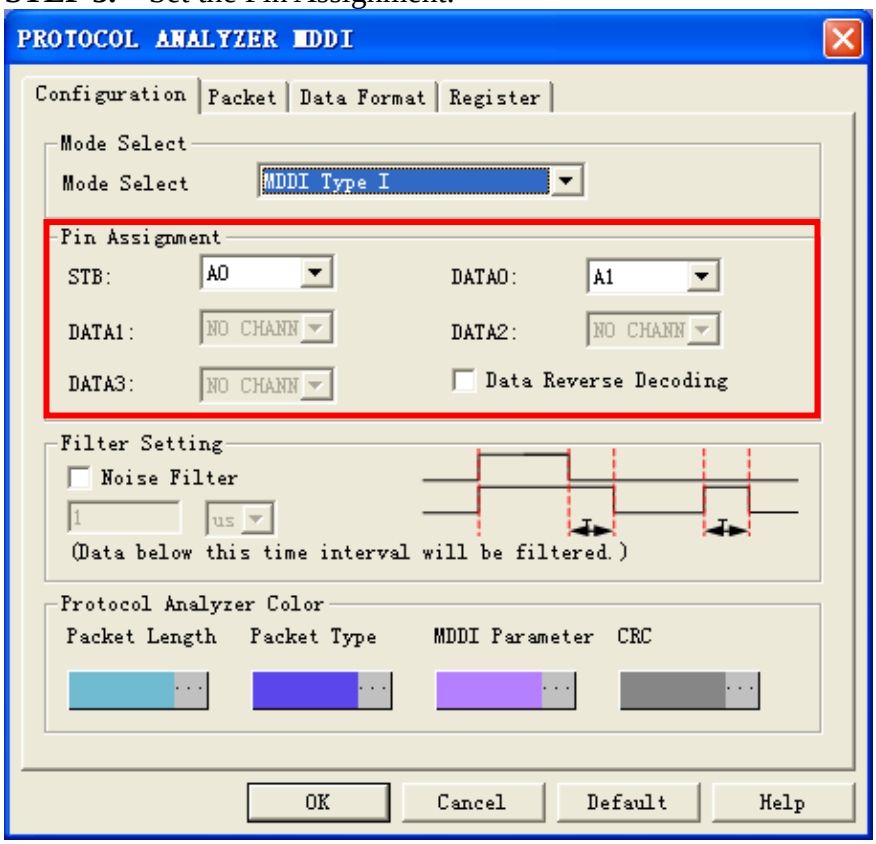
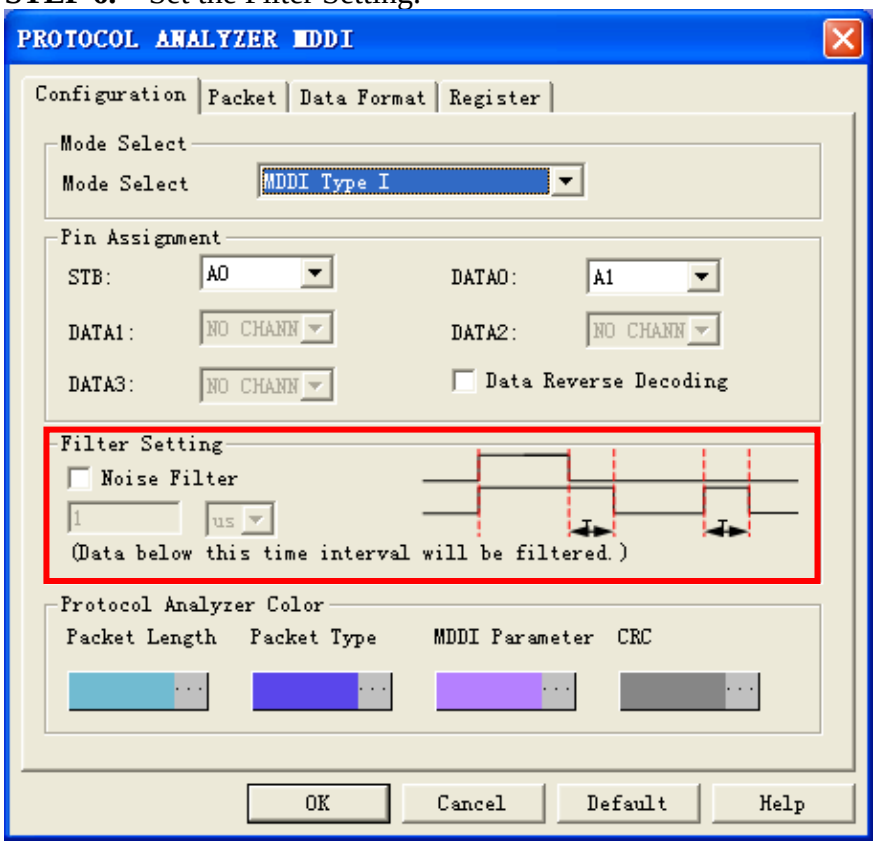
STEP 5. Set the Pin Assignment.



STEP 6. Set the Filter Setting.



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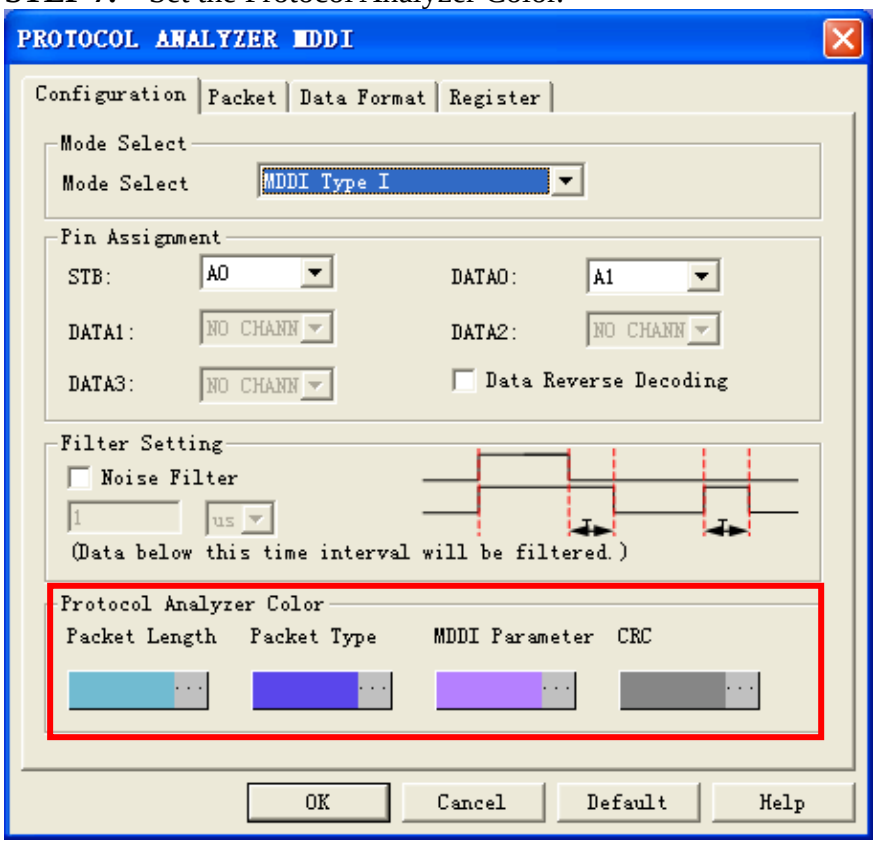
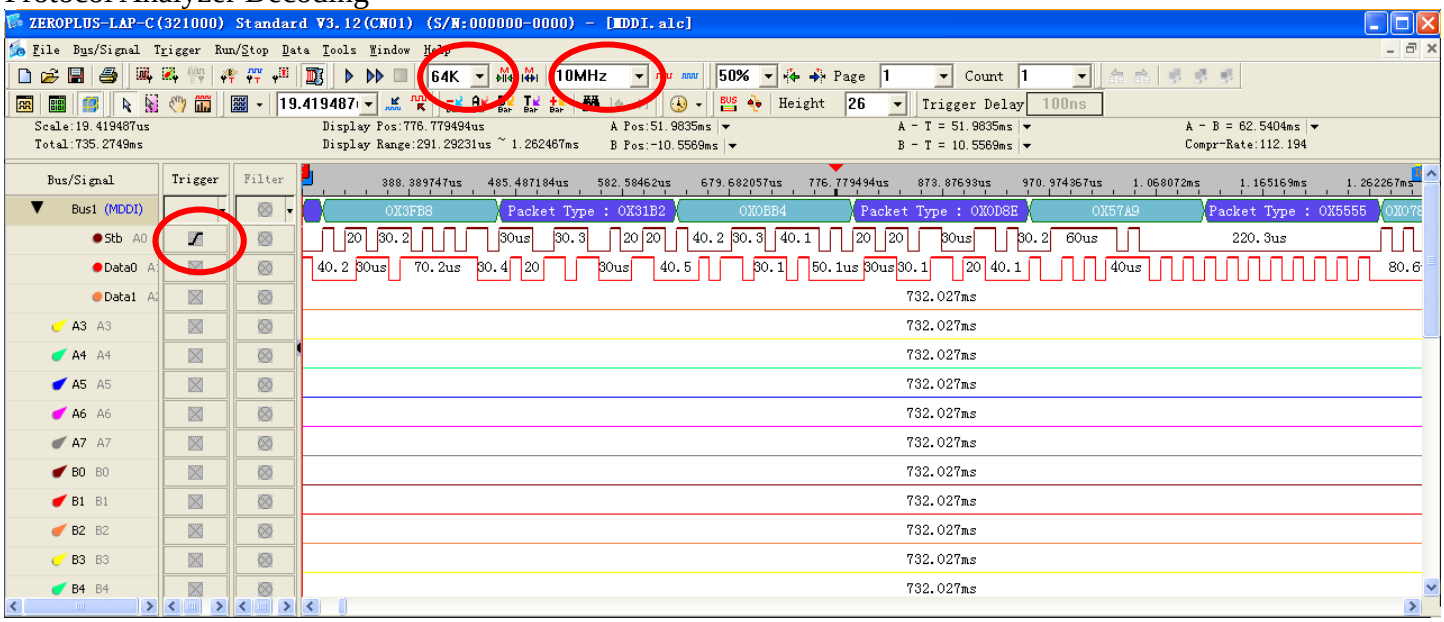
STEP 7. Set the Protocol Analyzer Color.



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 64K 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



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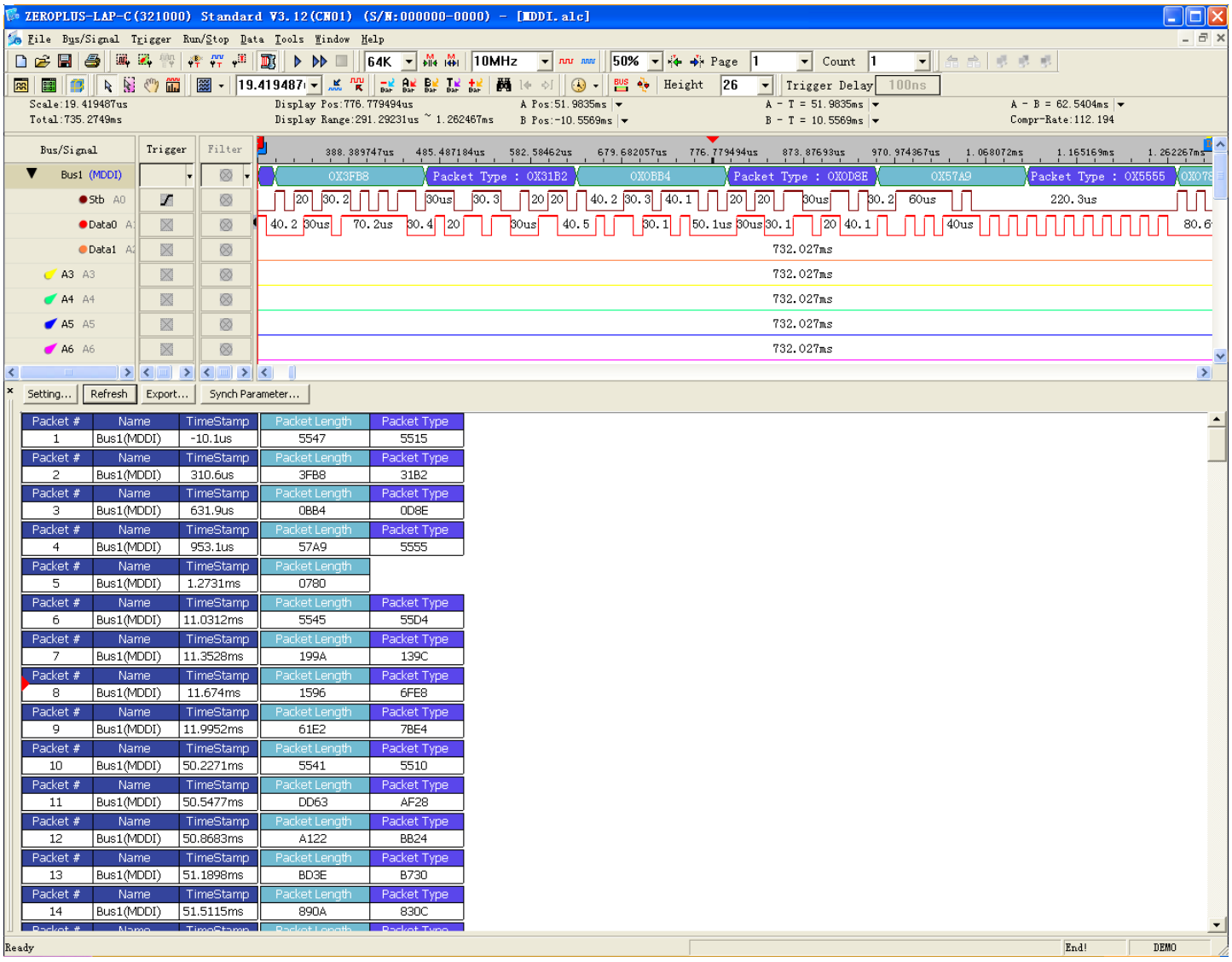
Packet List



Packet #	Name	TimeStamp	Packet Length	Packet Type
1	Bus1(MDDI)	-10.1us	5547	5515
2	Bus1(MDDI)	310.6us	3FB8	31B2
3	Bus1(MDDI)	631.9us	0BB4	0D8E
4	Bus1(MDDI)	953.1us	57A9	5555
5	Bus1(MDDI)	1.2731ms	0780	
6	Bus1(MDDI)	11.0312ms	5545	55D4
7	Bus1(MDDI)	11.3528ms	199A	139C
8	Bus1(MDDI)	11.674ms	1596	6FE8
9	Bus1(MDDI)	11.9952ms	61E2	7BE4
10	Bus1(MDDI)	50.2271ms	5541	5510
11	Bus1(MDDI)	50.5477ms	DD63	AF28
12	Bus1(MDDI)	50.8683ms	A122	BB24
13	Bus1(MDDI)	51.1898ms	BD3E	B730
14	Bus1(MDDI)	51.5115ms	890A	830C