



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

SPECIFICATION

MODEL: B12014-DDC EDID

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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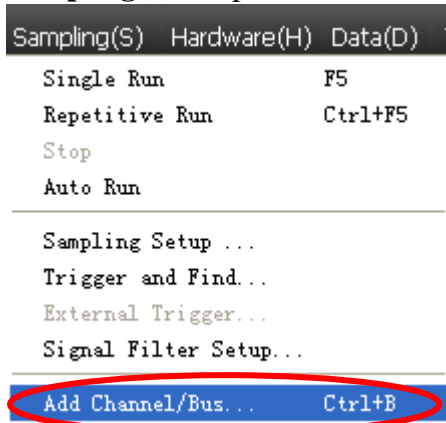
1 Software Register

Please register the software as the following steps:

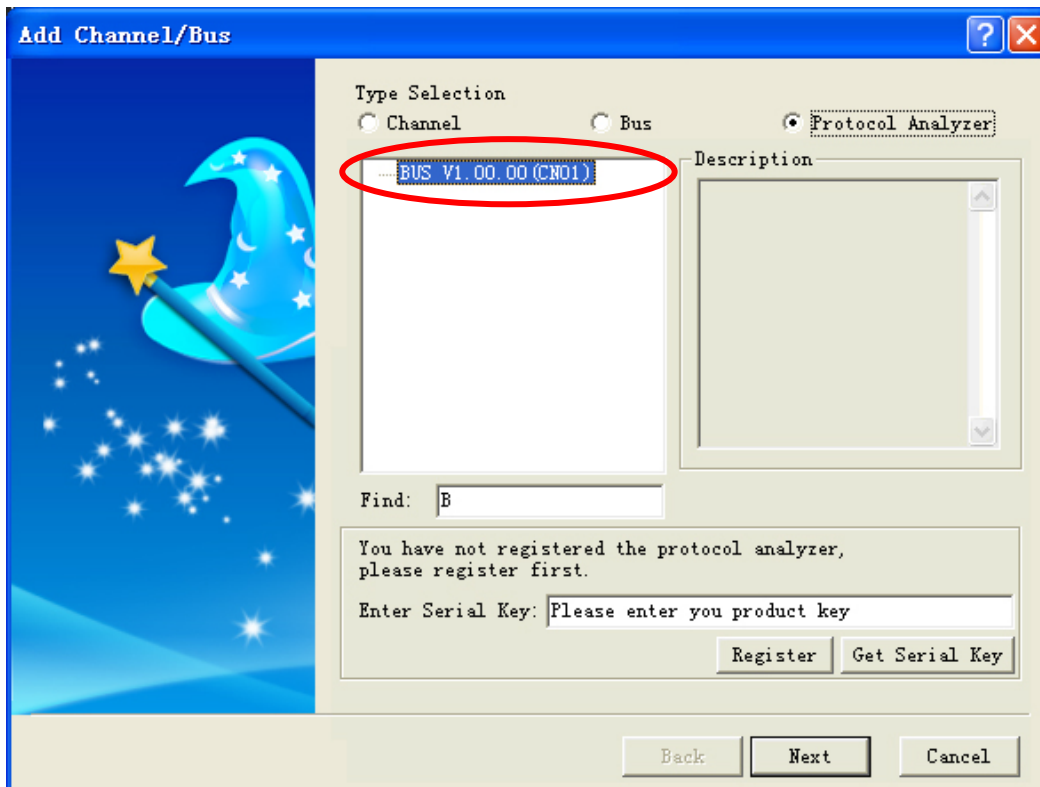
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

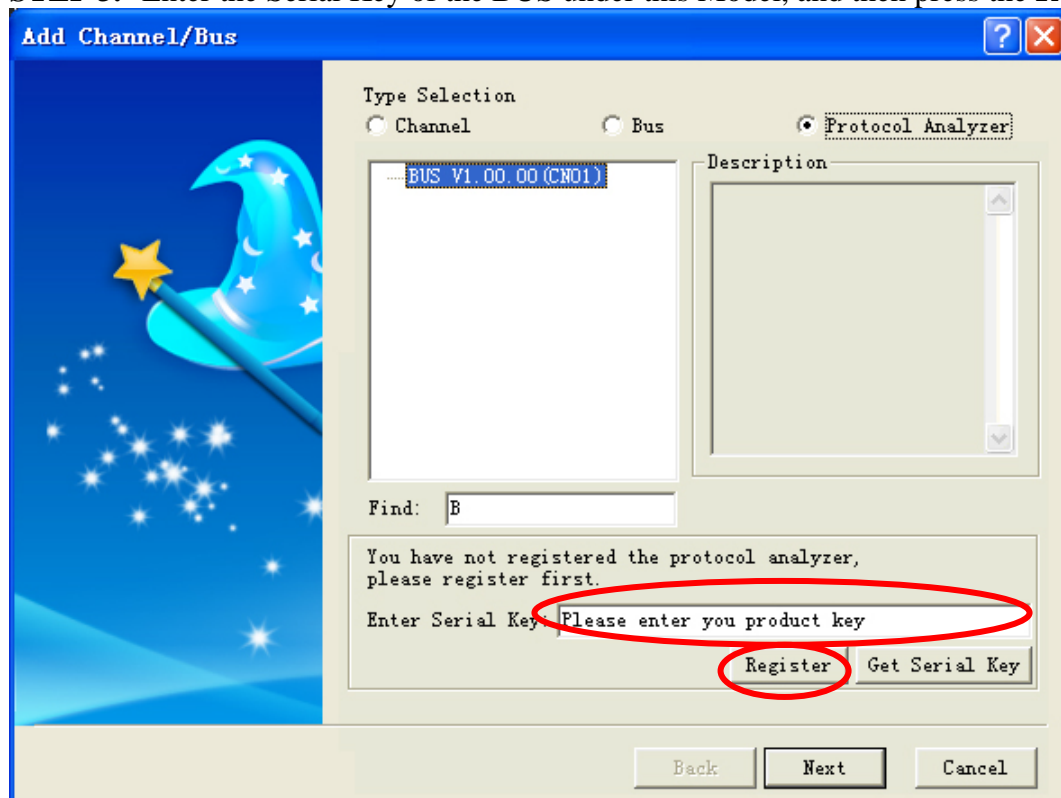
STEP 1. Open the Logic Analyzer and select the **Add Channel/Bus** item on the pull-down menu of the **Sampling(S)** to open the **Add Channel/Bus** dialog box.



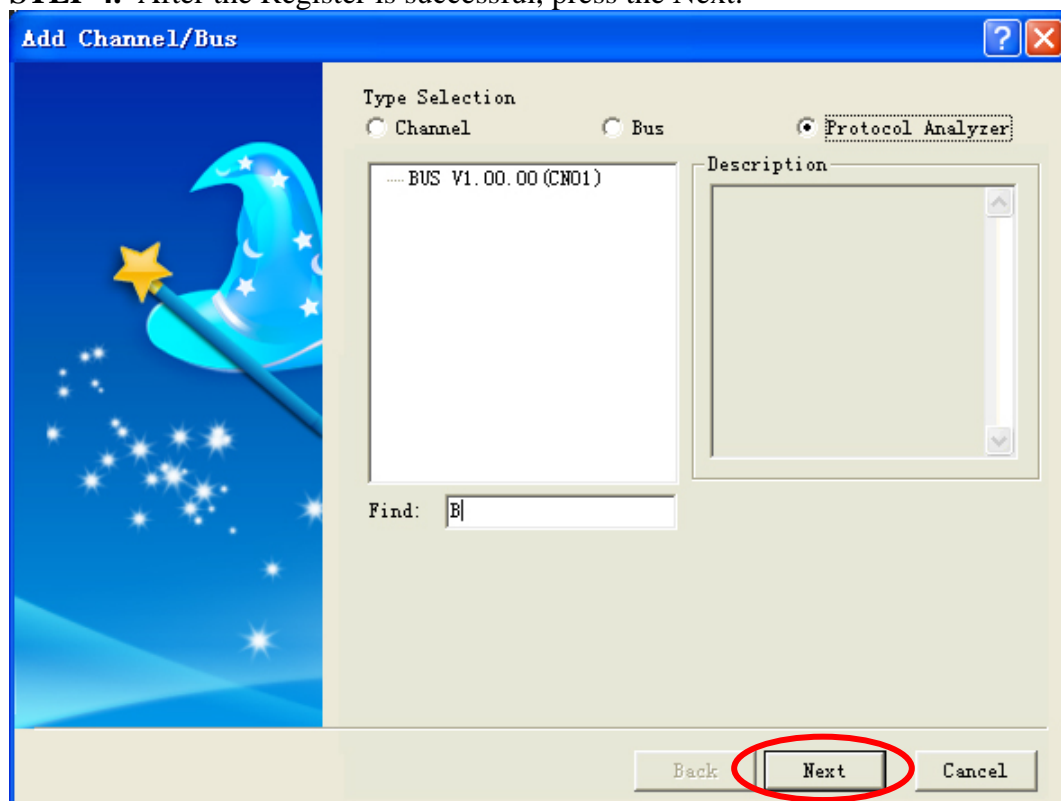
STEP 2. Select Protocol Analyzer item in the Add Channel/Bus dialog box, expand the Other Type, and select the BUS.



STEP 3. Enter the Serial Key of the BUS under this Model, and then press the **Register**.



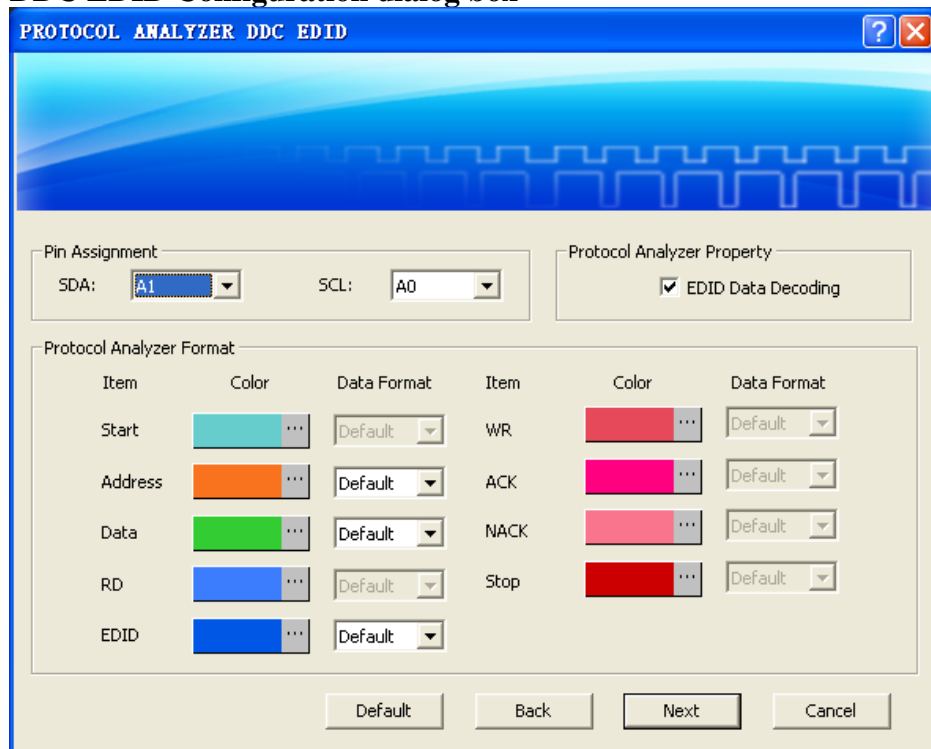
STEP 4. After the Register is successful, press the Next.



2. User Interface

Please refer to the below images to select options of **DDC EDID** module.

DDC EDID Configuration dialog box



Item	Color	Data Format	Item	Color	Data Format
Start		Default	WR		Default
Address		Default	ACK		Default
Data		Default	NACK		Default
RD		Default	Stop		Default
EDID		Default			

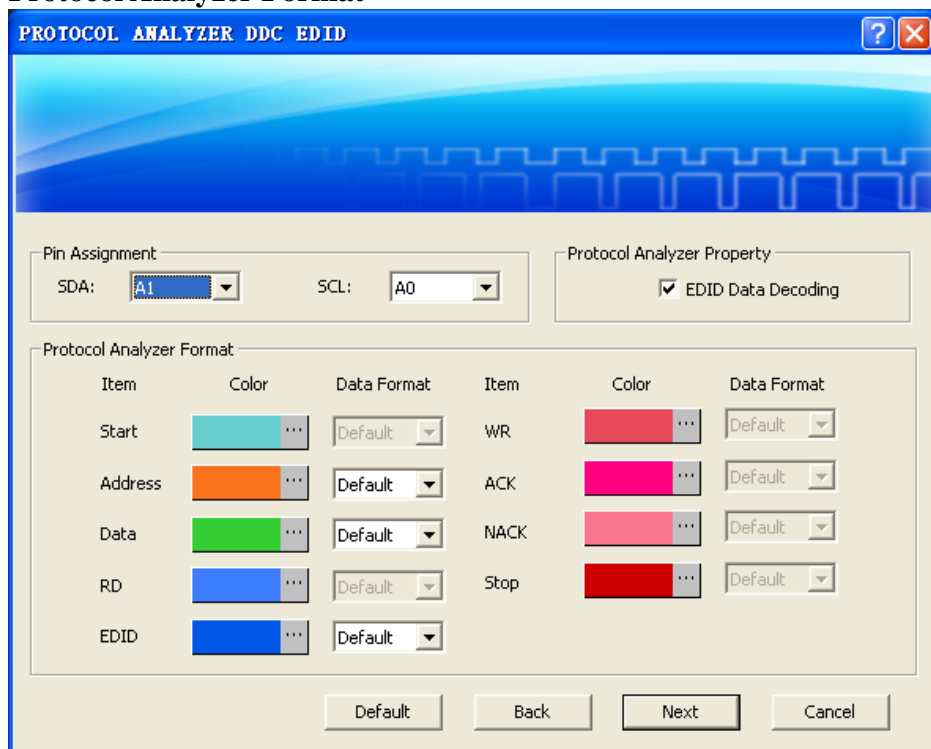
Pin Assignment:

DDC EDID needs at least 2 lines to decode. SDA (Data line) is A1 and SCL (Clock line) is A0 by default.

Protocol Analyzer Property:

EDID Data Decoding: if more data has been read and meets the EDID decoding requirements, it will decode that data, otherwise, it only decodes Data. It is activated by default.

Protocol Analyzer Format



PROTOCOL ANALYZER DDC EDID

Pin Assignment
SDA: A1 SCL: A0

Protocol Analyzer Property
☒ EDID Data Decoding

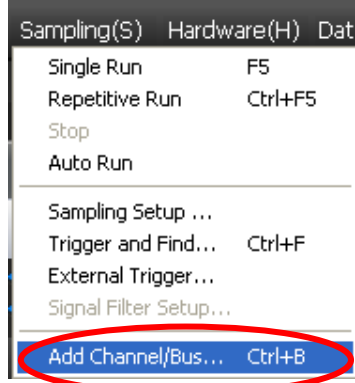
Item	Color	Data Format	Item	Color	Data Format
Start		Default	WR		Default
Address		Default	ACK		Default
Data		Default	NACK		Default
RD		Default	Stop		Default
EDID		Default			

Default Back Next Cancel

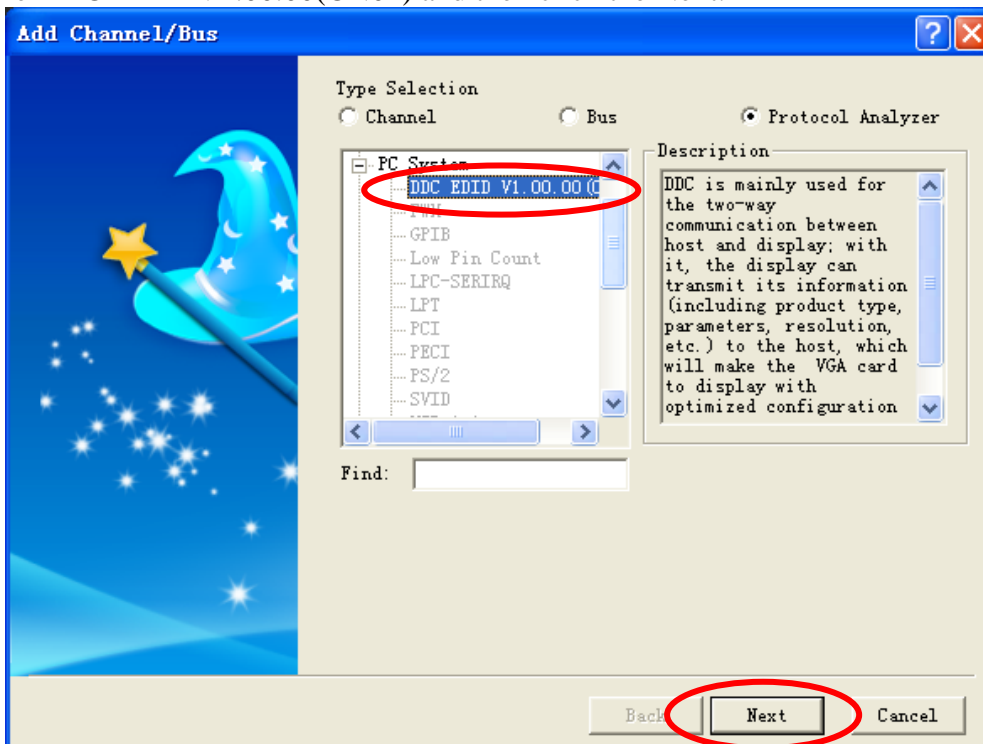
Users can set the color of the packet as their requirements. Three items (Address, Data and EDID) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the data format of these items in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default data format is controlled by the main program and the data format of these items is Default.

3. Operating Instructions

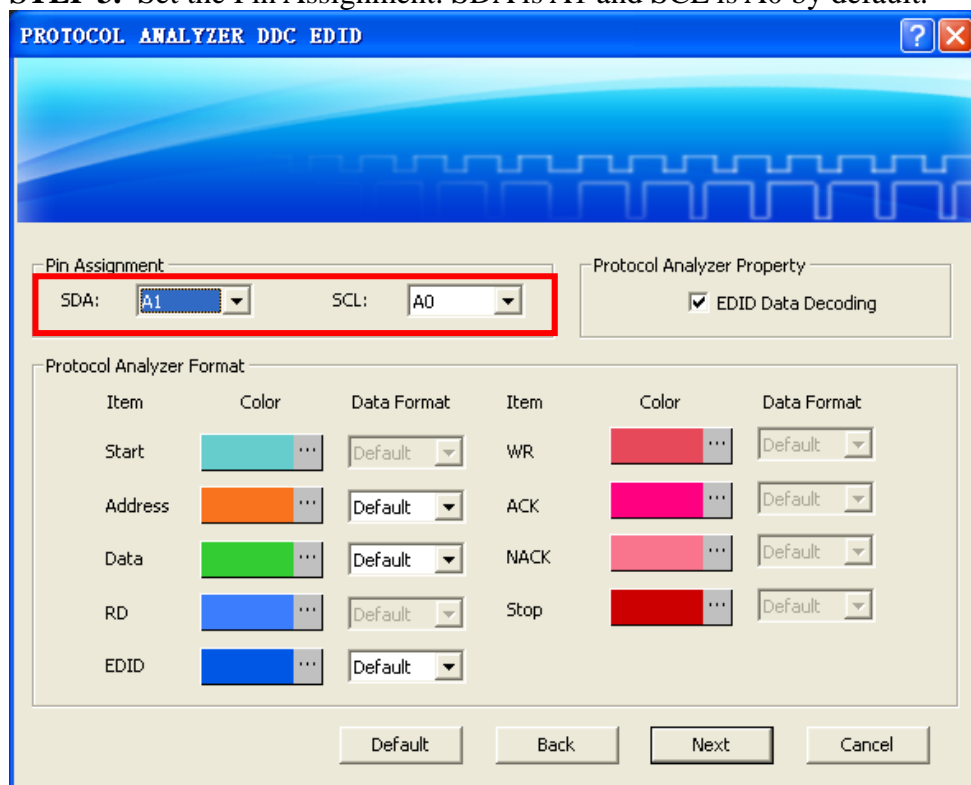
STEP 1. Select the Add Channel/Bus item on the pull-down menu of the Sampling(S) to open the Add Channel/Bus dialog box.



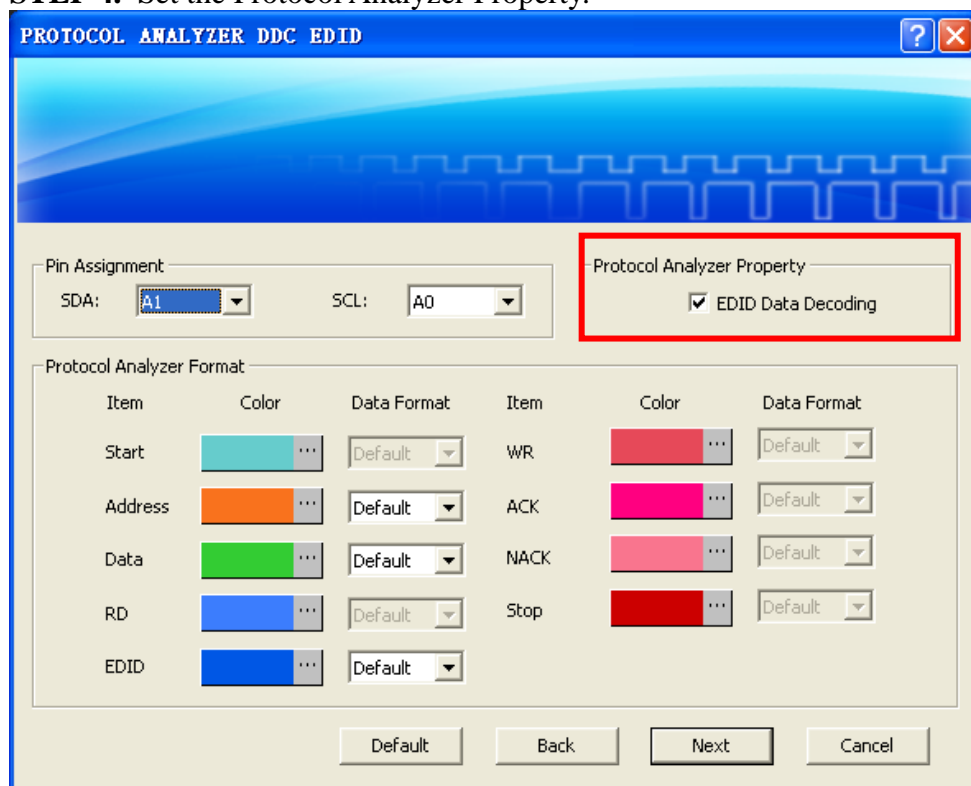
STEP 2. Select the Protocol Analyzer item in the Add Channel/Bus dialog box, expand the PC System, select the DDC EDID V1.00.00(CN01) and then click the Next.



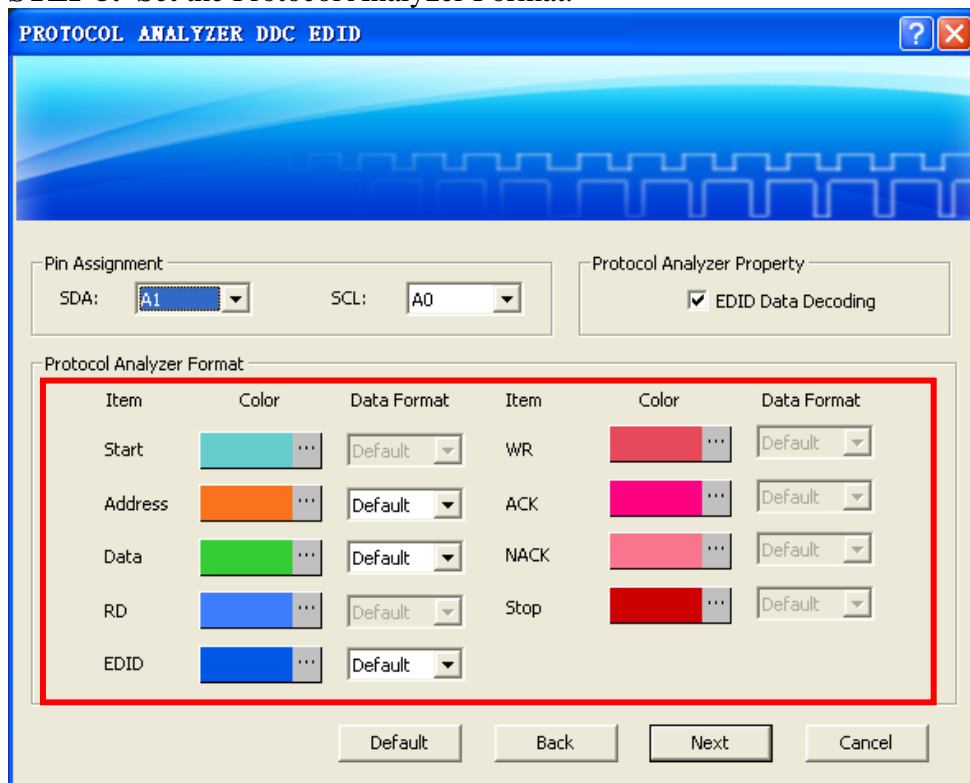
STEP 3. Set the Pin Assignment. SDA is A1 and SCL is A0 by default.



STEP 4. Set the Protocol Analyzer Property.



STEP 5. Set the Protocol Analyzer Format.

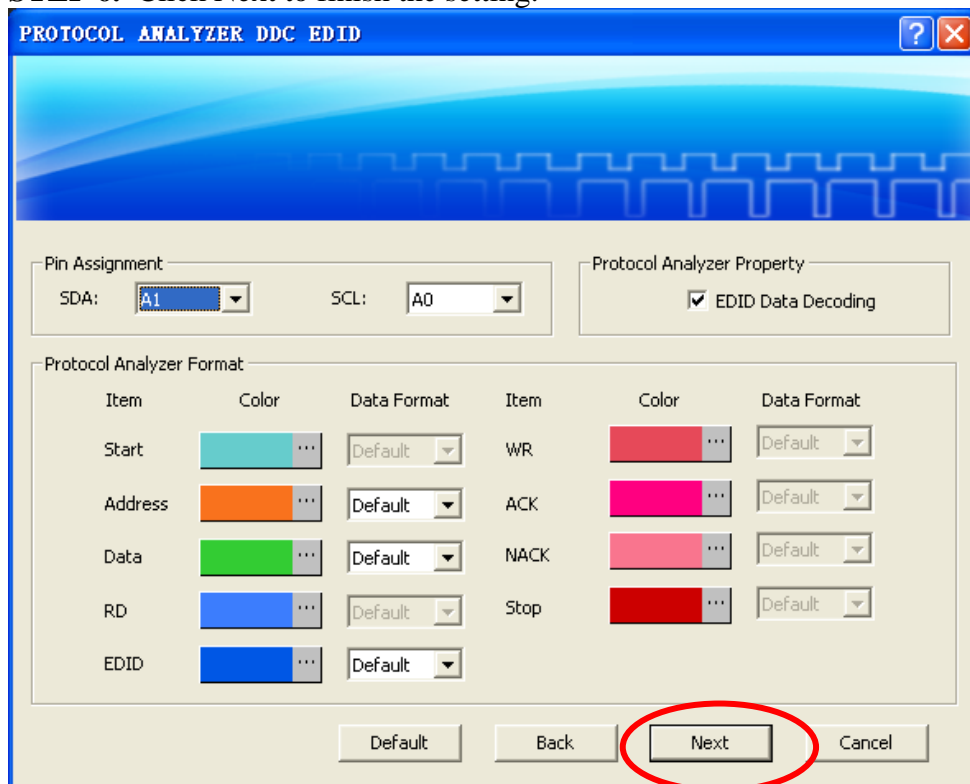


The screenshot shows the 'PROTOCOL ANALYZER DDC EDID' window. The 'Pin Assignment' section has SDA set to A1 and SCL to A0. The 'Protocol Analyzer Property' section has 'EDID Data Decoding' checked. The 'Protocol Analyzer Format' section is highlighted with a red box and contains the following table:

Item	Color	Data Format	Item	Color	Data Format
Start		Default	WR		Default
Address		Default	ACK		Default
Data		Default	NACK		Default
RD		Default	Stop		Default
EDID		Default			

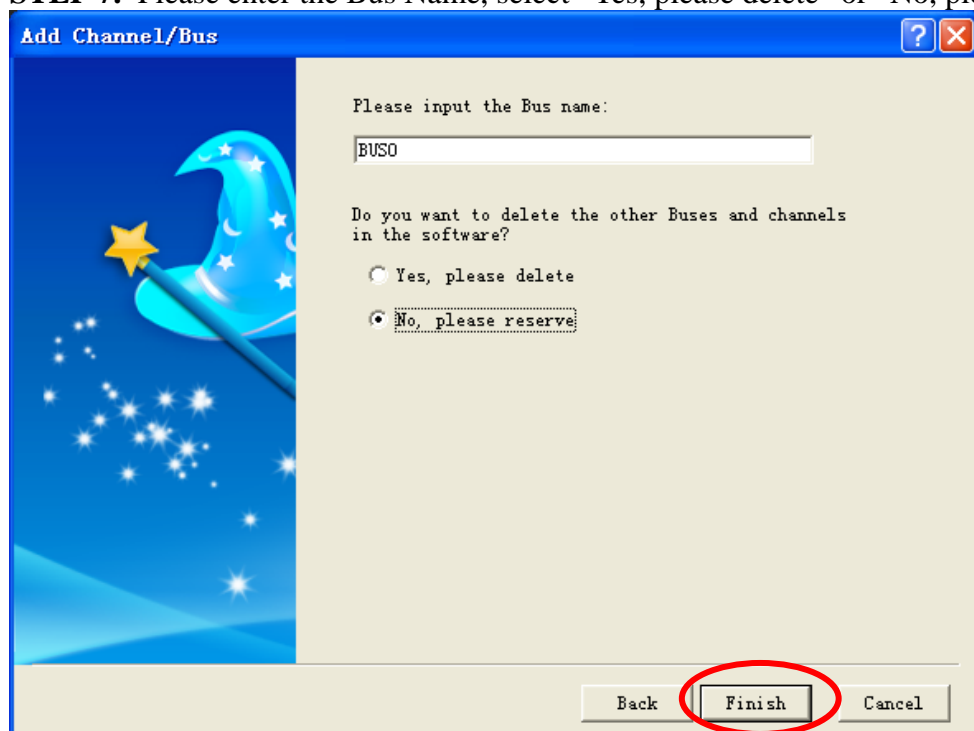
At the bottom of the window are buttons for 'Default', 'Back', 'Next', and 'Cancel'.

STEP 6. Click Next to finish the setting.



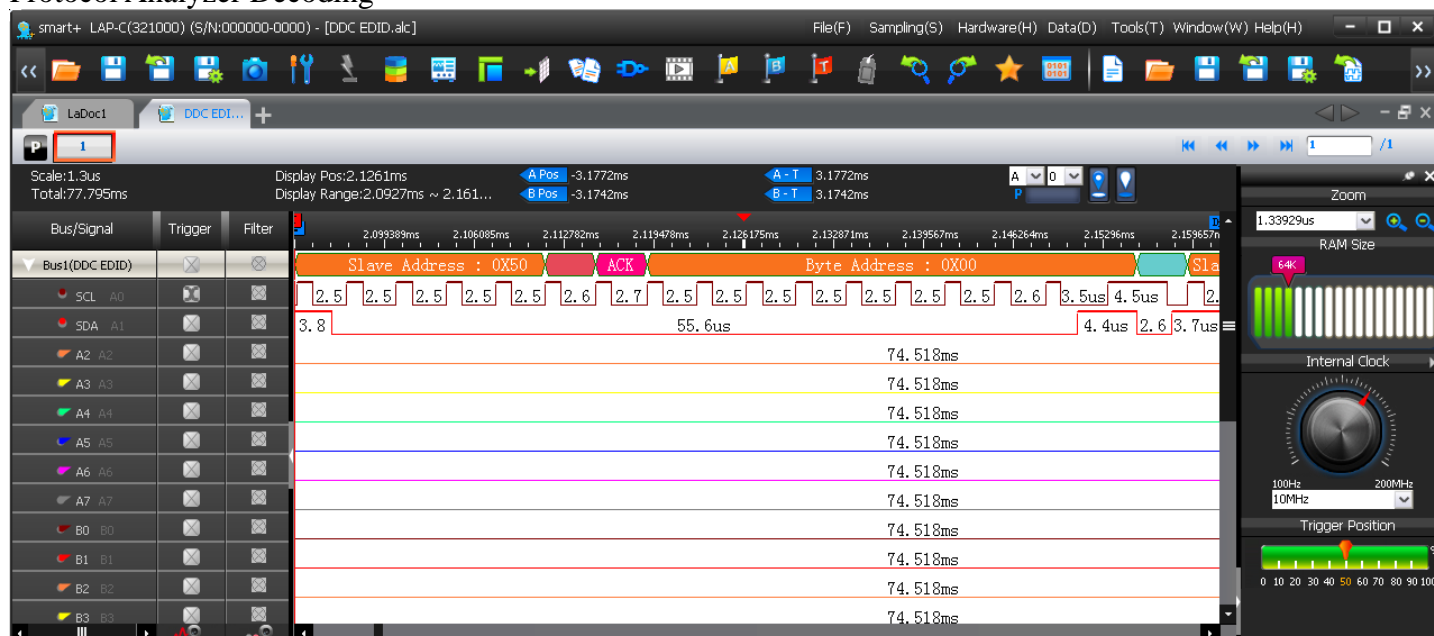
This screenshot is identical to the previous one, but the 'Next' button at the bottom of the 'Protocol Analyzer Format' section is circled in red to indicate it should be clicked to proceed.

STEP 7. Please enter the Bus Name, select “Yes, please delete” or “No, please reserve” and then click Finish.



STEP 8. 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 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 #	Name	TimeStamp	Start	Slave Address	Write	ACK	Byte Address										
1	Bus1(DDC EDID)	2.0818ms	Start	0X50	Write	ACK	0X00										
Packet #	Name	TimeStamp	Start	Slave Address	Read	ACK	Header	ID_MAFAC_NAME	ID_PRO_CODE	ID_PRO_SN	WEEK_OF_MAFAC						
2	Bus1(DDC EDID)	2.1555ms	Start	0X50	Read	ACK	Header	IBM	0X198E	0X00000000	0X0A						
YEAR_OF_MAFAC		Version	Reversion	Ana,Dig[7]	SIG_Lev_Std[6:5]			Setup[4]	Sync_In_Sup[3]	Sync_In_Sup[2]							
1995		0X01	0X01	0X0	0.700, 0.300, (1.000 V p-p)			0X0	0X1	0X0							
Sync_In_Sup[1]	Sync_In_Sup[0]	Max_H_ImageSize	Max_V_ImageSize	Disp_Tran_Chara	Standby[7]	Suspend[6]	Active_Off[5]										
0X0	0X0	40cm	30cm	2.8	0X1	0X1	0X0										
Disp_Type[4:3]	Std_Def[2]	Pref_Tim[1]	Def_GTF[0]	Rx[1:0]	Ry[1:0]	Gx[1:0]	Gy[1:0]	Bx[1:0]	By[1:0]	Wx[1:0]	Wy[1:0]	Red_x[9:0]					
RGB color	0X0	0X0	0X0	0X0	0X0	0X0	0X0	0X2	0X3	0X0	0X2	0.625					
Red_y[9:0]	Green_x[9:0]	Green_y[9:0]	Blue_x[9:0]	Blue_y[9:0]	White_x[9:0]	White_y[9:0]	720x400@70Hz[7]		720x400@88Hz[6]								
0.339	0.285	0.605	0.150	0.065	0.281	0.310	0X1		0X0								
640x480@60Hz[5]		640x480@72Hz[3]		640x480@75Hz[2]		800x600@56Hz[1]		800x600@60Hz[0]		800x600@72Hz[7]							
0X1		0X0		0X1		0X1		0X1		0X1							
800x600@75Hz[6]		832x624@75Hz[5]		1024x768@87Hz[4]		1024x768@60Hz[3]		1024x768@70Hz[2]		1280x1024@75Hz[0]							
0X1		0X0		0X0		0X1		0X1		0X1							
1152x870@75Hz[7]		Reserved[6:0]		Hor_Act_pixels		Image_Asp_rat[7:6]		Refresh_Rate[5:0]		Hor_Act_pixels		Image_Asp_rat[7:6]					
0X0		0X7C		640		4:3		70Hz		1600		4:3					
Refresh_Rate[5:0]		Hor_Act_pixels		Image_Asp_rat[7:6]		Refresh_Rate[5:0]		Hor_Act_pixels		Image_Asp_rat[7:6]		Refresh_Rate[5:0]					