



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

SPECIFICATION

MODEL: B12002-MIDI

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

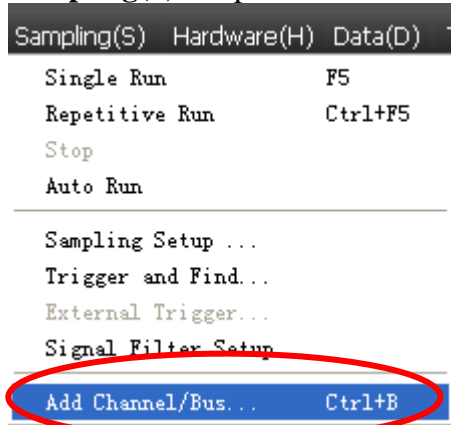
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1 Software Register

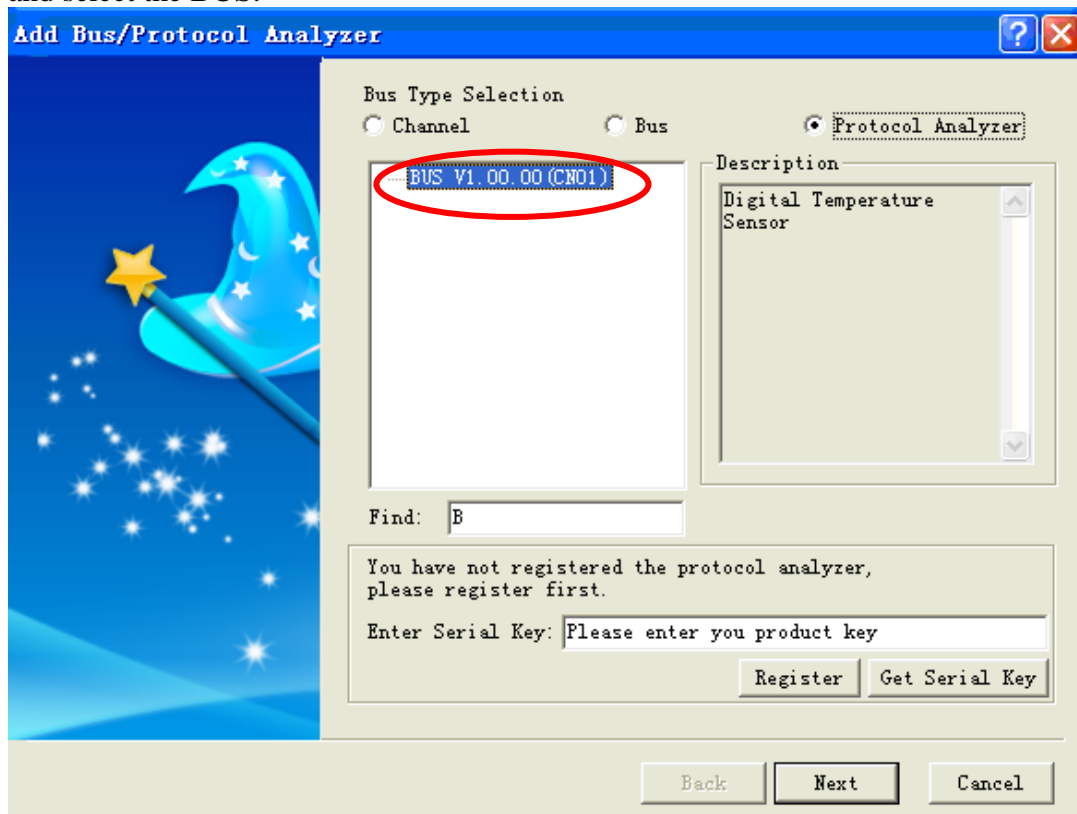
Please register the software as the following steps:

- ※ 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 some unconformity caused by the module version upgrade, users should take the module software as the standard.

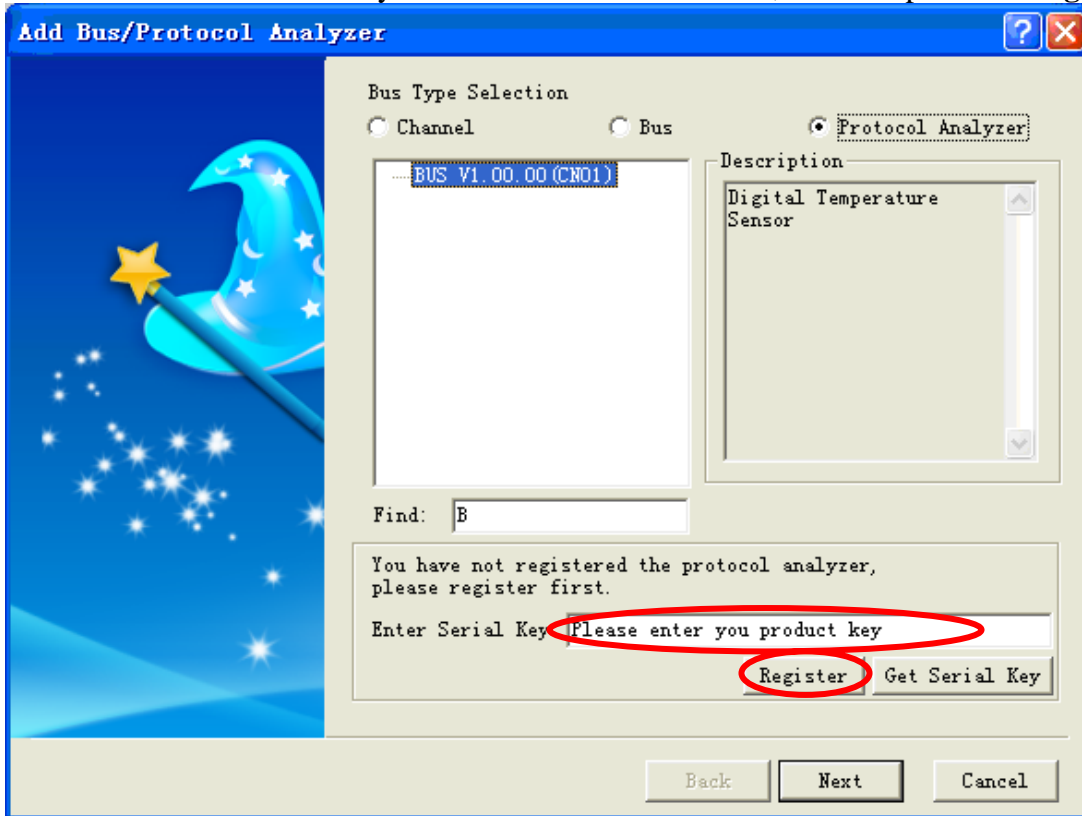
STEP 1. Open the Logic Analyzer and select the **Add Channel/Bus** item on the pull-down menu of the **Sampling(S)** to open the **Add Channel/Bus** dialog box.



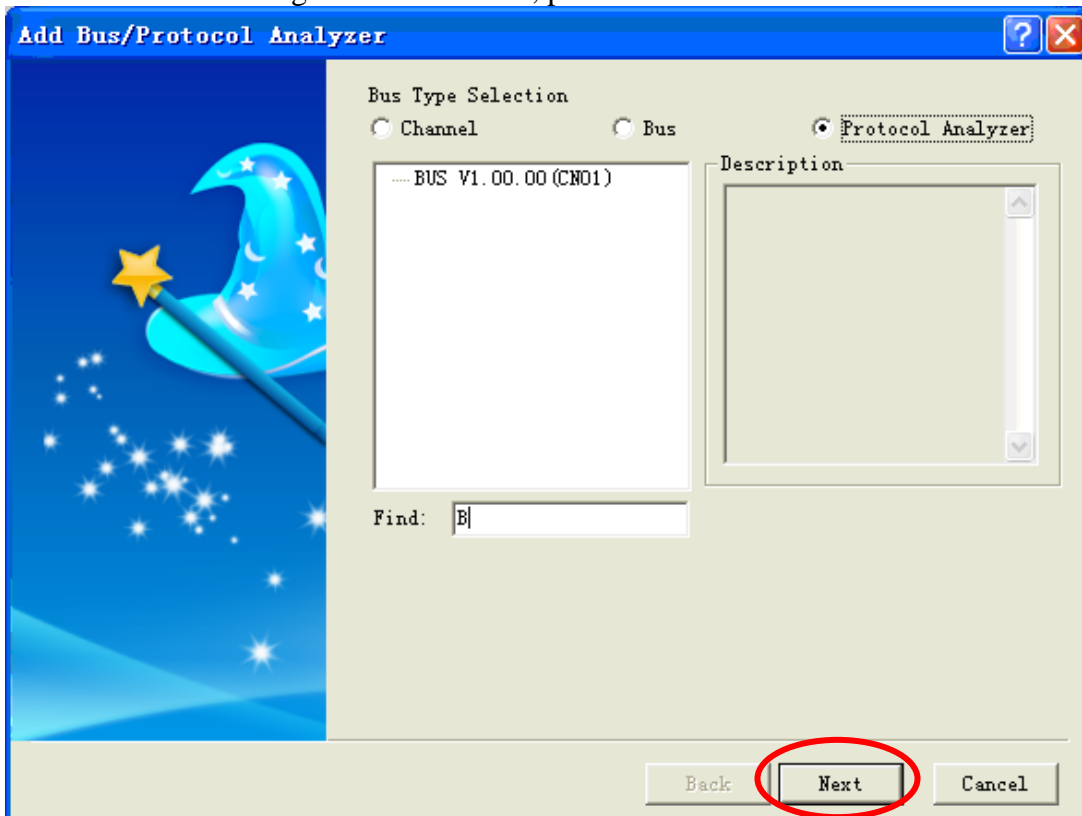
STEP 2. Select Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, and select the BUS.



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



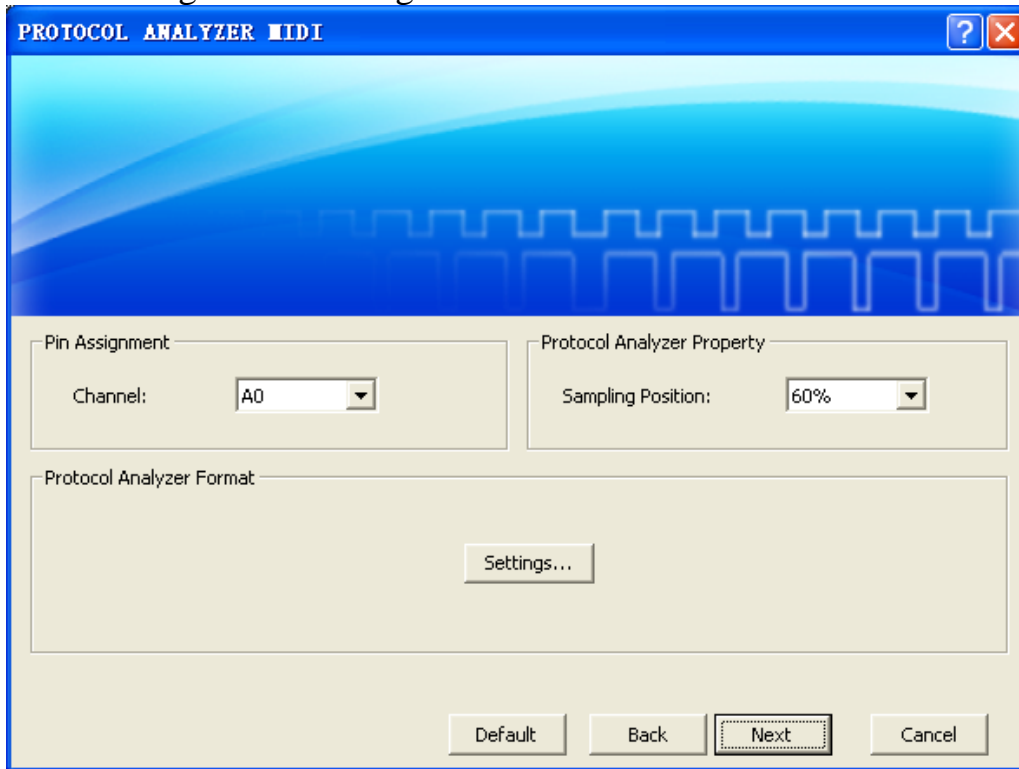
STEP 4. After the Register is successful, press the Next.



2 User Interface

Please refer to the below images to select options of setting **MIDI Module**.

MIDI Configuration Dialog Box



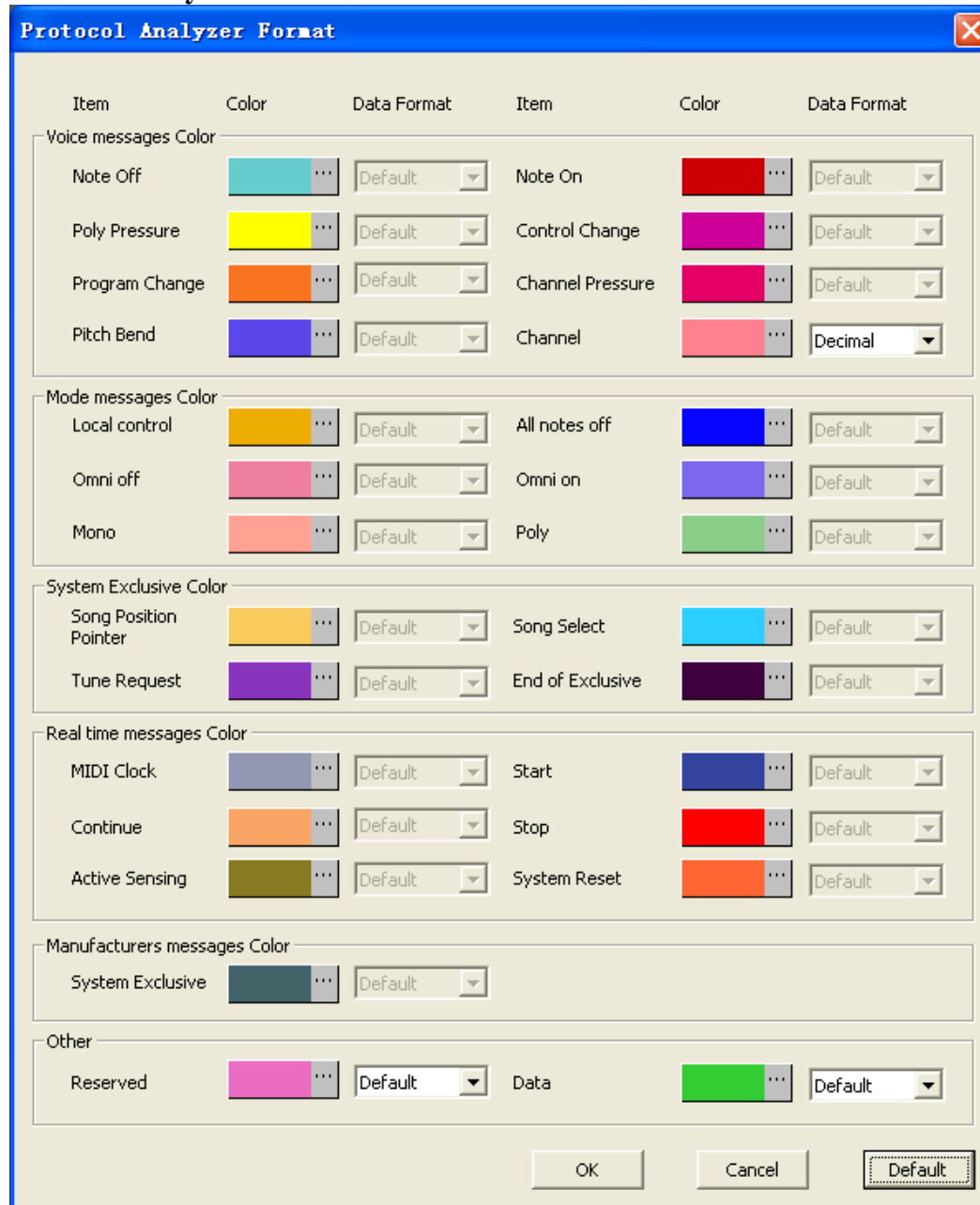
Pin Assignment:

Protocol Analyzer MIDI only needs one channel to decode, which is A0 by default.

Protocol Analyzer Property:

Sampling Position: There are 50%, 60%, 70%, 80%, 90% to choose, the default is 60%.

Protocol Analyzer Format



The dialog box titled "Protocol Analyzer Format" contains a table with two columns: "Item" and "Data Format". Each item has a corresponding color swatch and a dropdown menu for the data format. The items are grouped into sections: Voice messages Color, Mode messages Color, System Exclusive Color, Real time messages Color, Manufacturers messages Color, and Other.

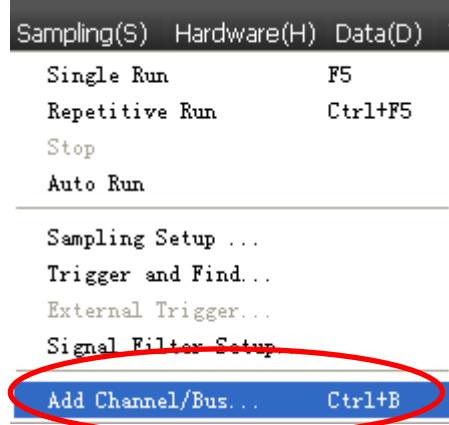
Item	Color	Data Format	Item	Color	Data Format
Voice messages Color					
Note Off		Default	Note On		Default
Poly Pressure		Default	Control Change		Default
Program Change		Default	Channel Pressure		Default
Pitch Bend		Default	Channel		Decimal
Mode messages Color					
Local control		Default	All notes off		Default
Omni off		Default	Omni on		Default
Mono		Default	Poly		Default
System Exclusive Color					
Song Position Pointer		Default	Song Select		Default
Tune Request		Default	End of Exclusive		Default
Real time messages Color					
MIDI Clock		Default	Start		Default
Continue		Default	Stop		Default
Active Sensing		Default	System Reset		Default
Manufacturers messages Color					
System Exclusive		Default			
Other					
Reserved		Default	Data		Default

Buttons: OK, Cancel, Default

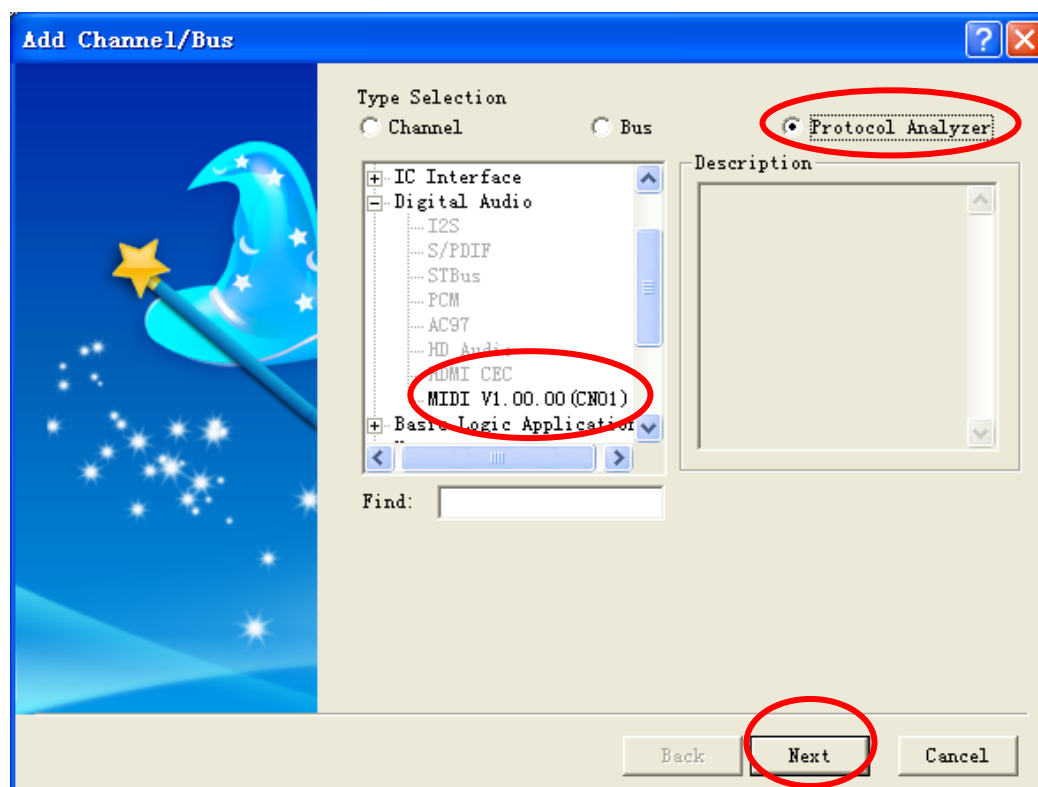
The Color of each Item can be varied as the users' requirements. The items (Channel, Reserved and Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of the item Channel in the Waveform Display Area and Packet List are controlled by the Protocol Analyzer. The default Data Formats are controlled by the main program and the Data Format of the items (Reserved and Data) is the Default.

3 Operating Instructions

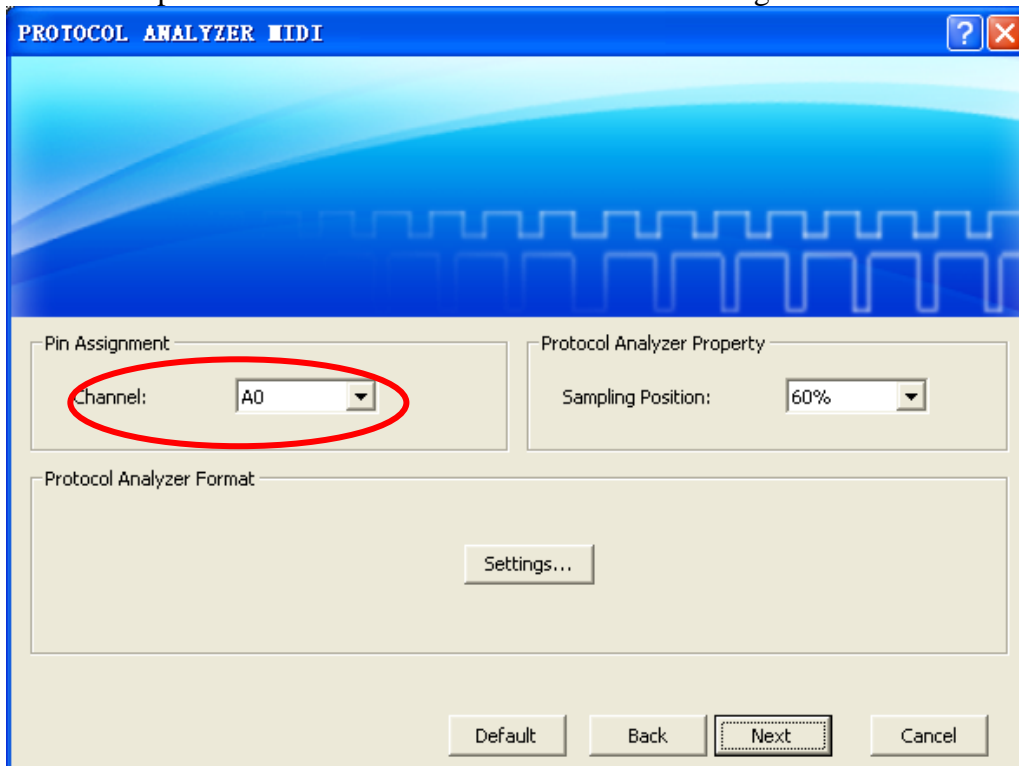
STEP 1. Select the Add Channel/Bus item on the pull-down menu of the Sampling(S) to open the Add Channel/Bus dialog box.



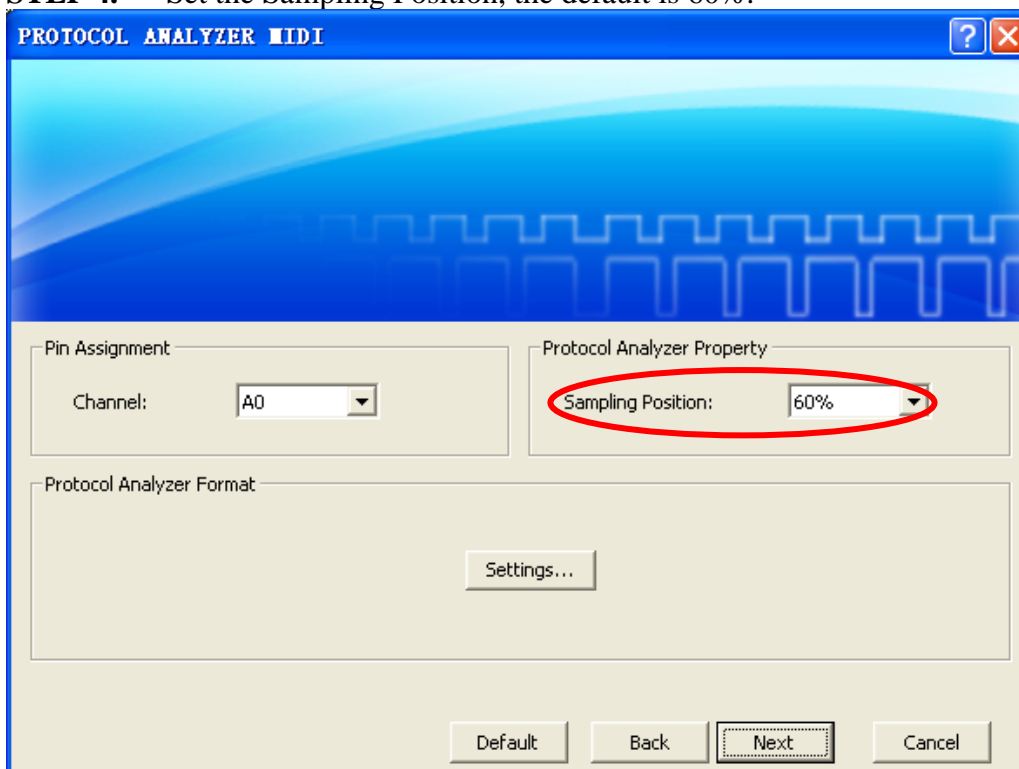
STEP 2. Select the Protocol Analyzer item in the Add Channel/Bus dialog box, expand the Digital Audio Type, select the MIDI and then press the **Next**.



STEP 3. Open the PROTOCOL ANALYZER MIDI dialog box and set the channel, the default is A0.



STEP 4. Set the Sampling Position, the default is 60%.





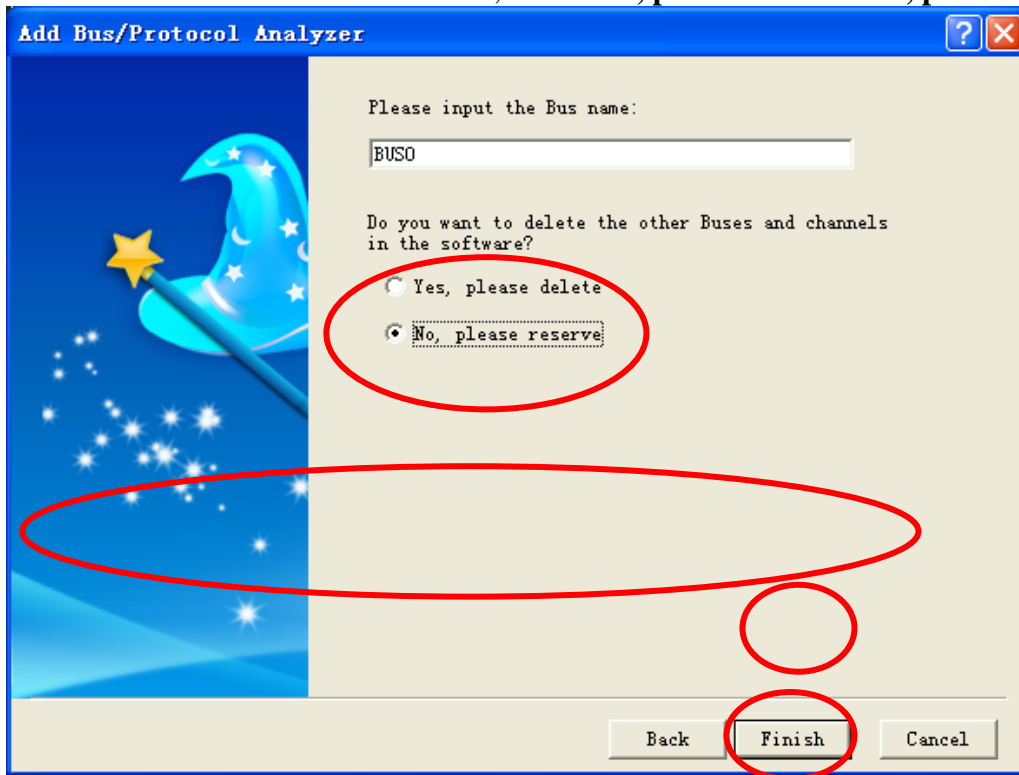
STEP 5. Set the Protocol Analyzer Color.

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Voice messages Color					
Note Off		Default	Note On		Default
Poly Pressure		Default	Control Change		Default
Program Change		Default	Channel Pressure		Default
Pitch Bend		Default	Channel		Decimal
Mode messages Color					
Local control		Default	All notes off		Default
Omni off		Default	Omni on		Default
Mono		Default	Poly		Default
System Exclusive Color					
Song Position Pointer		Default	Song Select		Default
Tune Request		Default	End of Exclusive		Default
Real time messages Color					
MIDI Clock		Default	Start		Default
Continue		Default	Stop		Default
Active Sensing		Default	System Reset		Default
Manufacturers messages Color					
System Exclusive		Default			
Other					
Reserved		Default	Data		Default

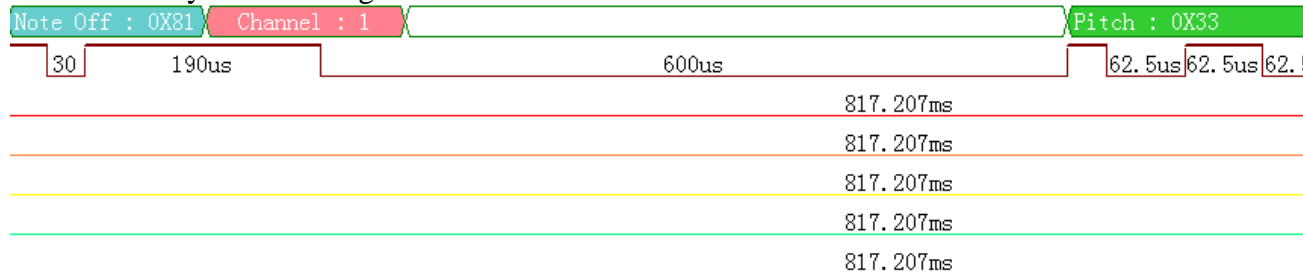
OK Cancel Default

STEP 6. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 7. Following pictures show the completion of the protocol analyzer decoding and the packet list. The memory depth is 2K; the sampling frequency is 400KHz (the sampling frequency should be more than ten times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

Navigator Packet List Statistics Memory Analyzer ? - X						
Packet #	Name	TimeStamp	Note Off	Channel	Pitch	Velocity
1	Bus1(MIDI)	0ms	0X81	1	0X33	0X20
Packet #	Name	TimeStamp	Note On	Channel	Pitch	Velocity
2	Bus1(MIDI)	2.5575ms	0X92	2	0X66	0X76