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

SPECIFICATION

MODEL: B11005-LAP-YK-5-M

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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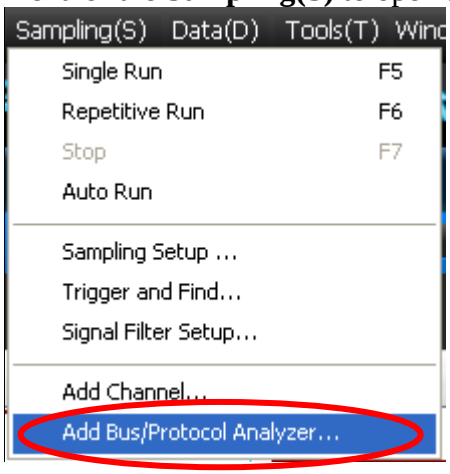
1 Software Register

Please register the software as the following steps:

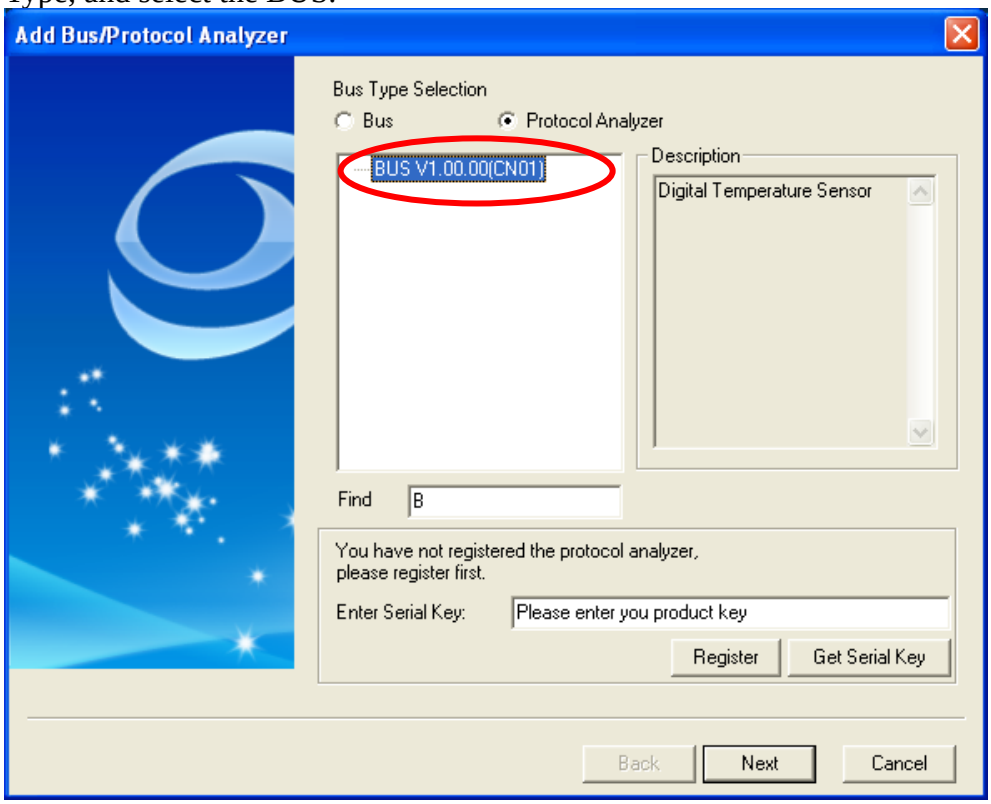
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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 Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



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



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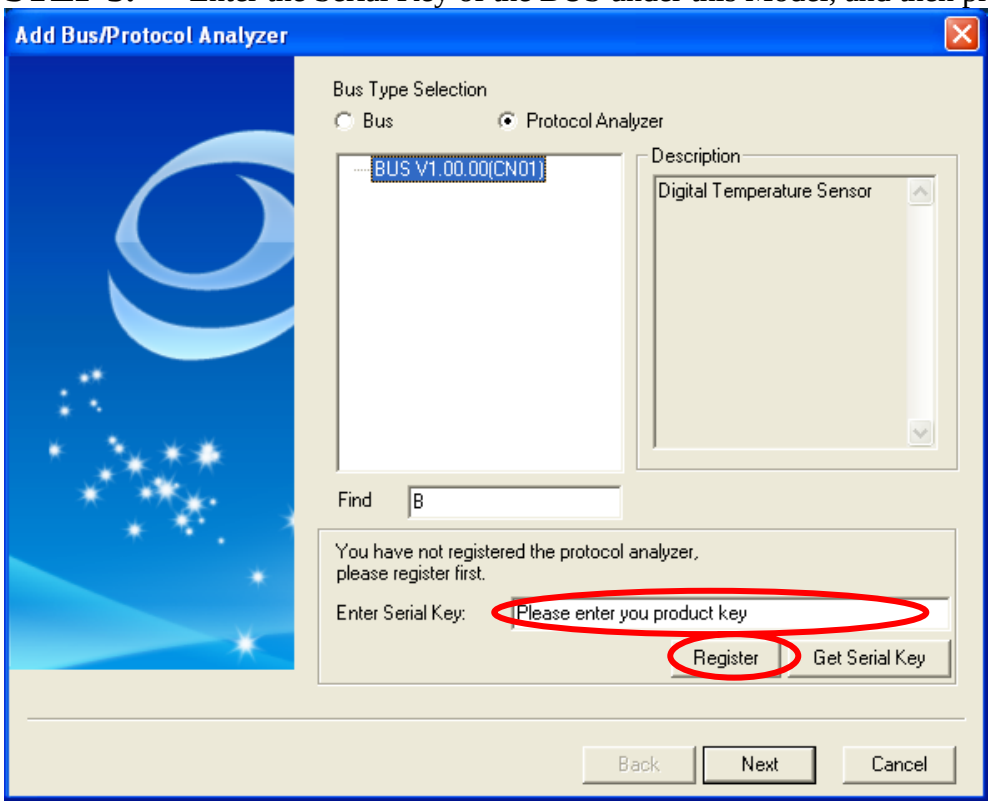
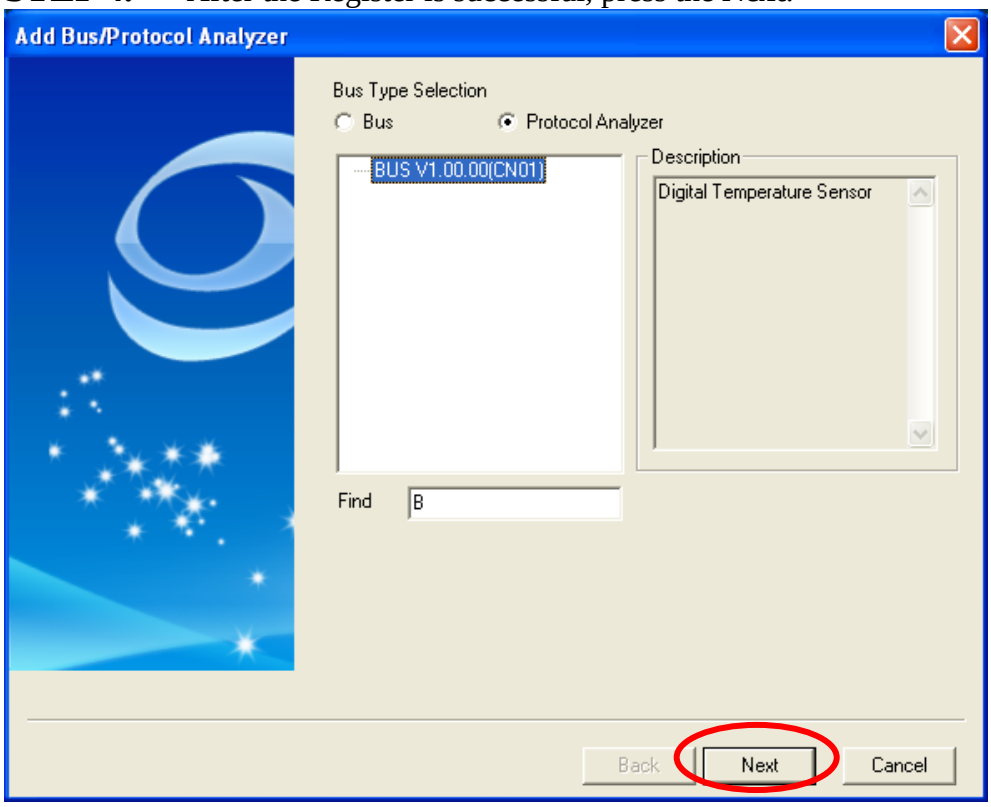
STEP 3. Enter the Serial Key of the BUS under this Model, and then press the **Register**.



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



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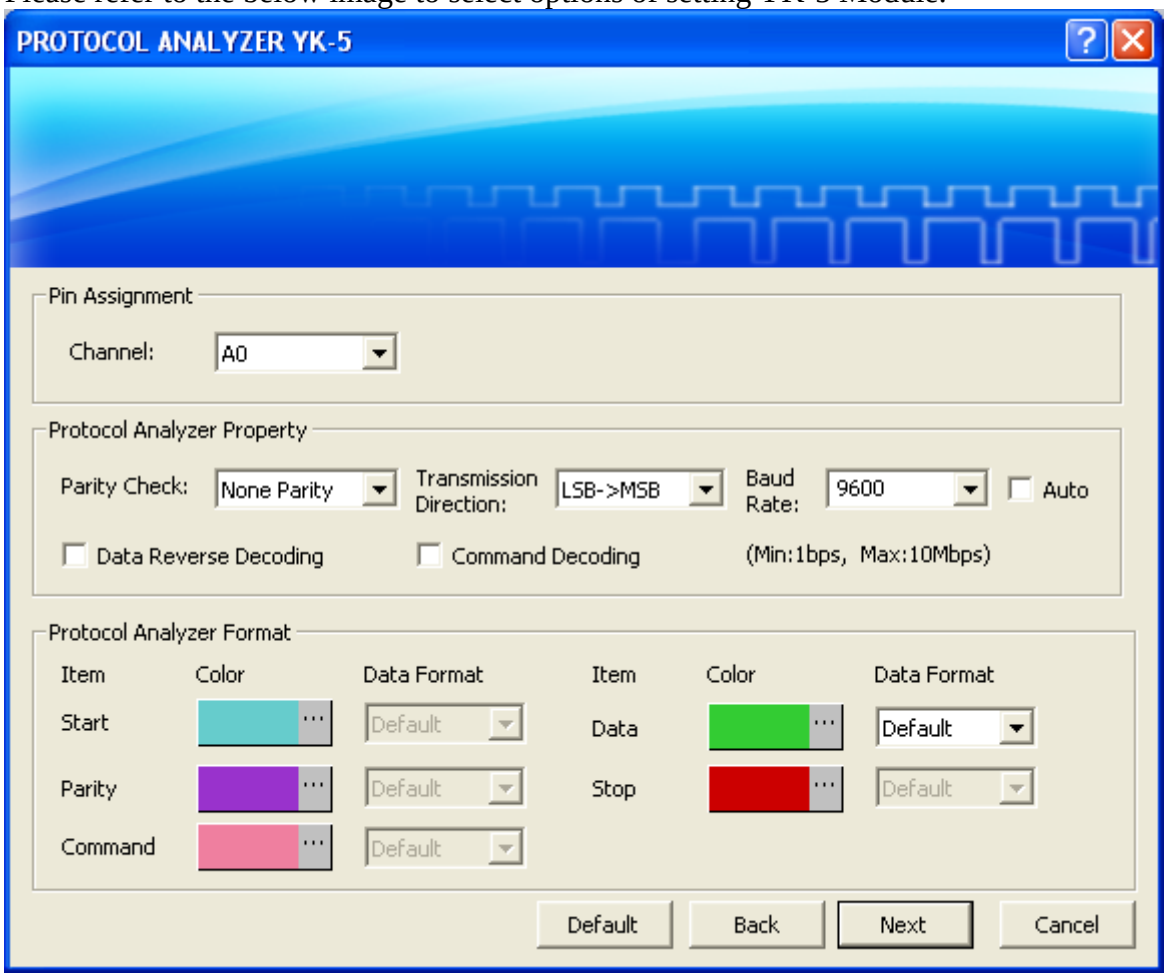
2 User Interface

Please refer to the below image to select options of setting YK-5 Module.



Pin Assignment:
Channel: It uses one channel RS232 decoding.

Protocol Analyzer Settings:
Parity Check: Users can select Odd Parity, Even Parity or None Parity.
Transmission Direction: The default direction is LSB→MSB.
Baud Rate: The input value can be 1bps→10Mbps. Also users can select 110, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 15200, 230400, 460800, 921600 bps from the pulldown menu.
Auto: Below are detailed operating steps.
1. First it will auto-judge the bitwise is reversed or not. If not, the signal is normal; if the first part is low, it will be ignored; and if the last part is also low, it will also be ignored and the main programme will do the following calculation.
2. It will find the longest Low Level part (Lmax), if there is any Low Level part that is lower than Lmax/10, it will ignore the value and do the following calculation.
3. It will find the shortest Low Level part (Lmin). It will find the Low Level of (1~1.15)*Lmin and mark the number with N1, then find the Low Level of (2~2.3)*Lmin and mark the number with N2; it totals 20 parts (N1+N2=20). The average value is (total value of Low Level parts)/(N1+2N2). If there is not such 20 parts in the whole signal, then it will recode the total parts that the signal has, and the average value still is (total value

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of Low Level parts)/(N1+2N2).
4. The average value is a time length value, it is no need to convert it to baud rate and can be decoded as bit length.
5. If the bitwise is reversed, the Low Level mentioned above should be High Level, because all should be reversed.

Data Reverse Decoding: All lines should be reversed, which means it will decode the Low as High and the High as Low in the decoding.

Command Decoding: It will decode according to the Hardware Command or Firmware Command.

Protocol Analyzer Format: Users can set the color of the packet as their requirements. The Item (Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of the Item (Data) 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 the Item is the Default.

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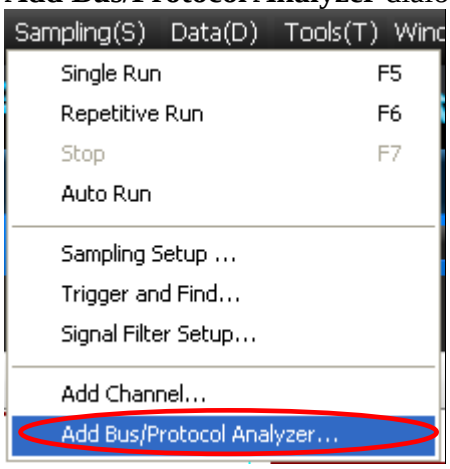
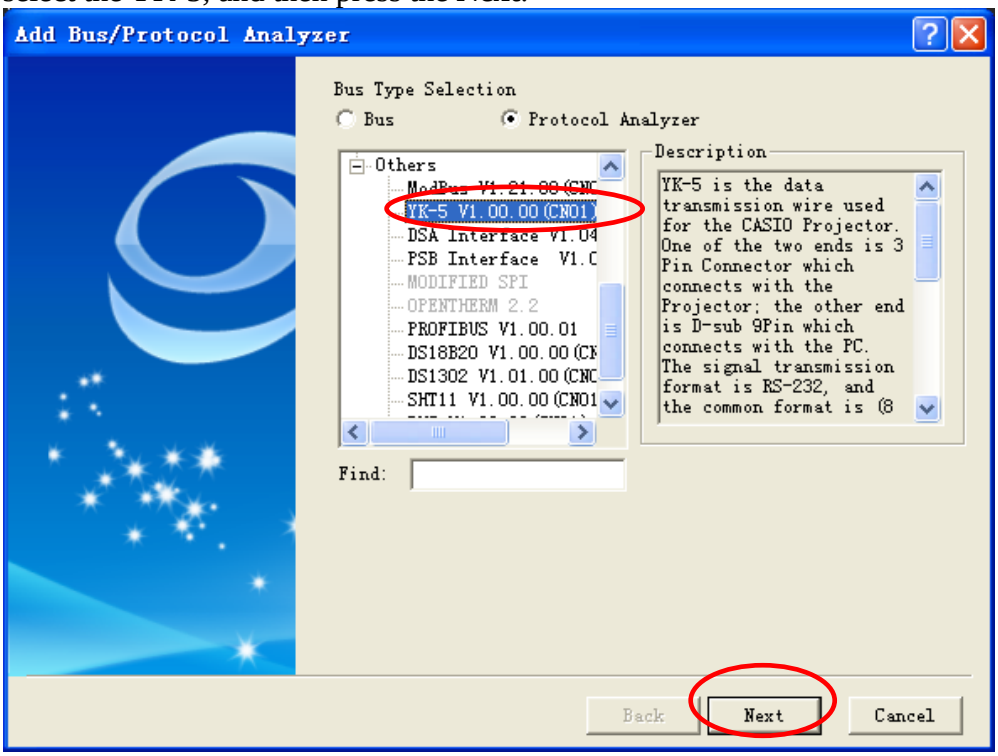
3. Operating Instructions

STEP 1. Select the **Add Bus/Protocol Analyzer** item on the pulldown menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Others, select the YK-5, and then press the **Next**.



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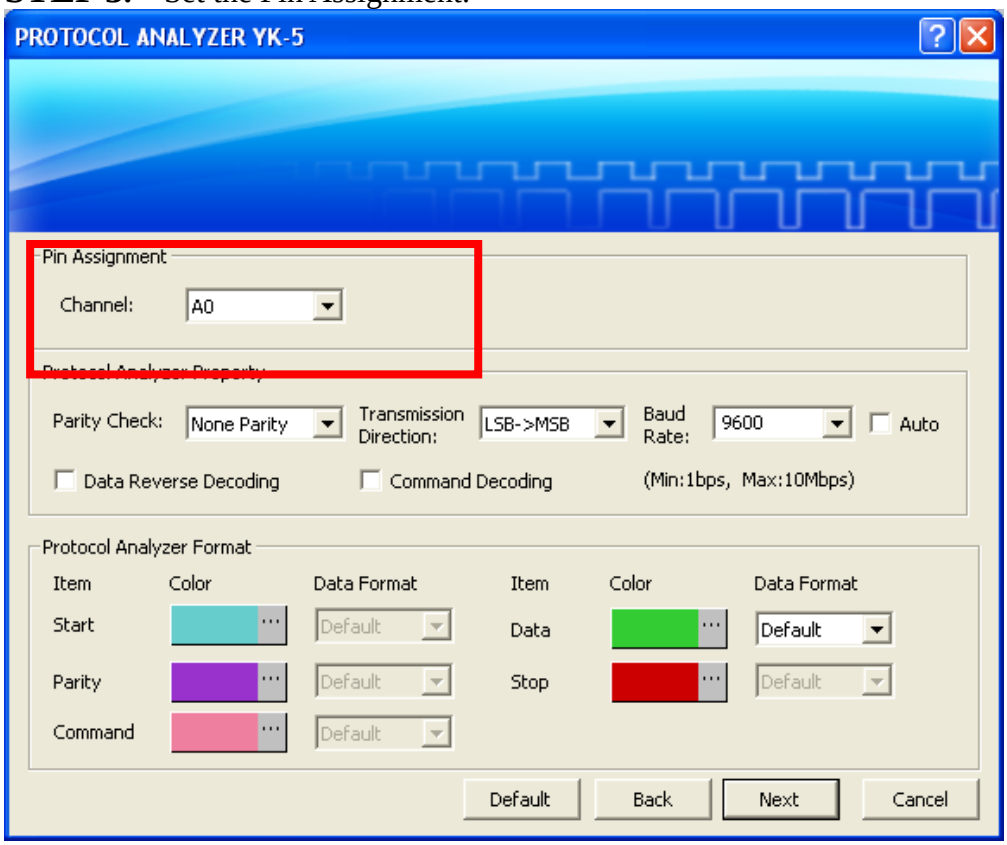
STEP 3. Set the Pin Assignment.



STEP 4. Set the Protocol Analyzer Property.

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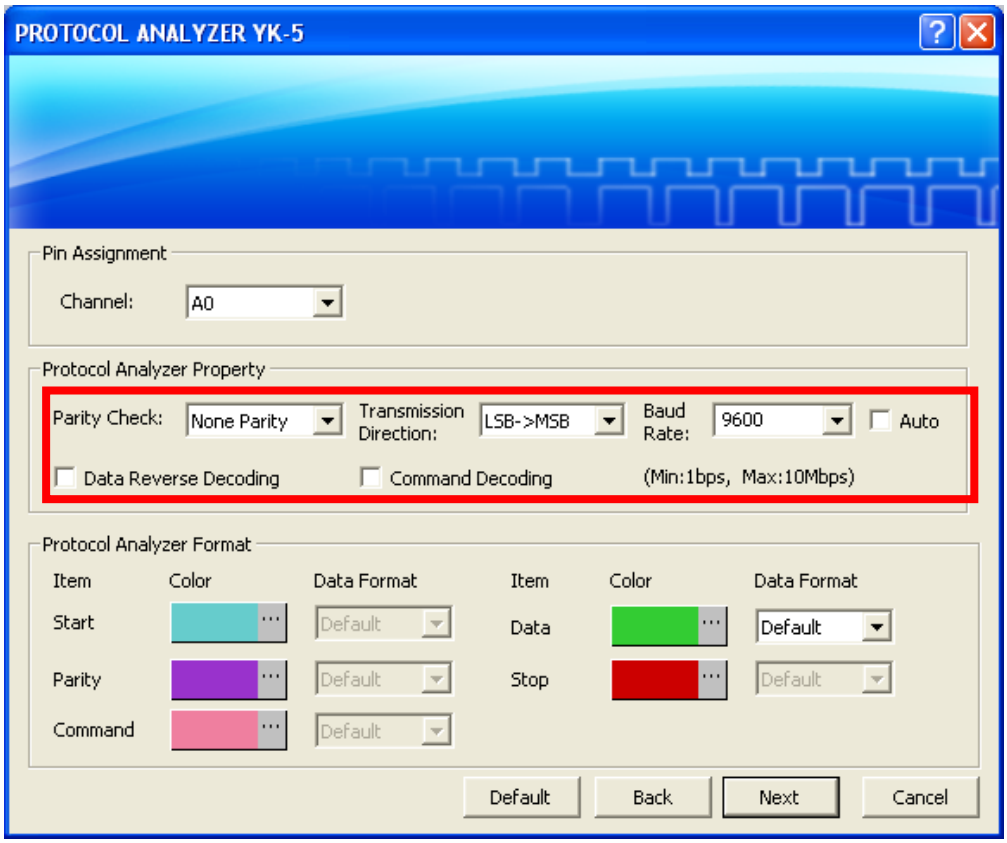
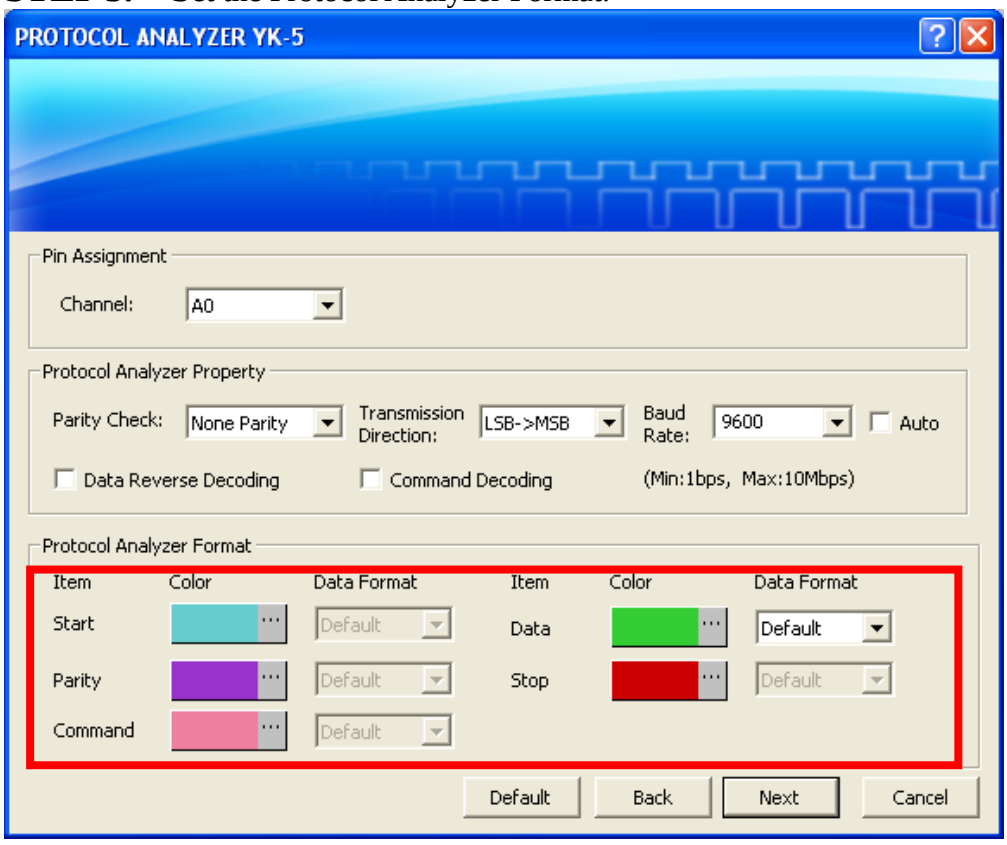


STEP 5. Set the Protocol Analyzer Format.



STEP 6. Press the **Next** to finish all settings.

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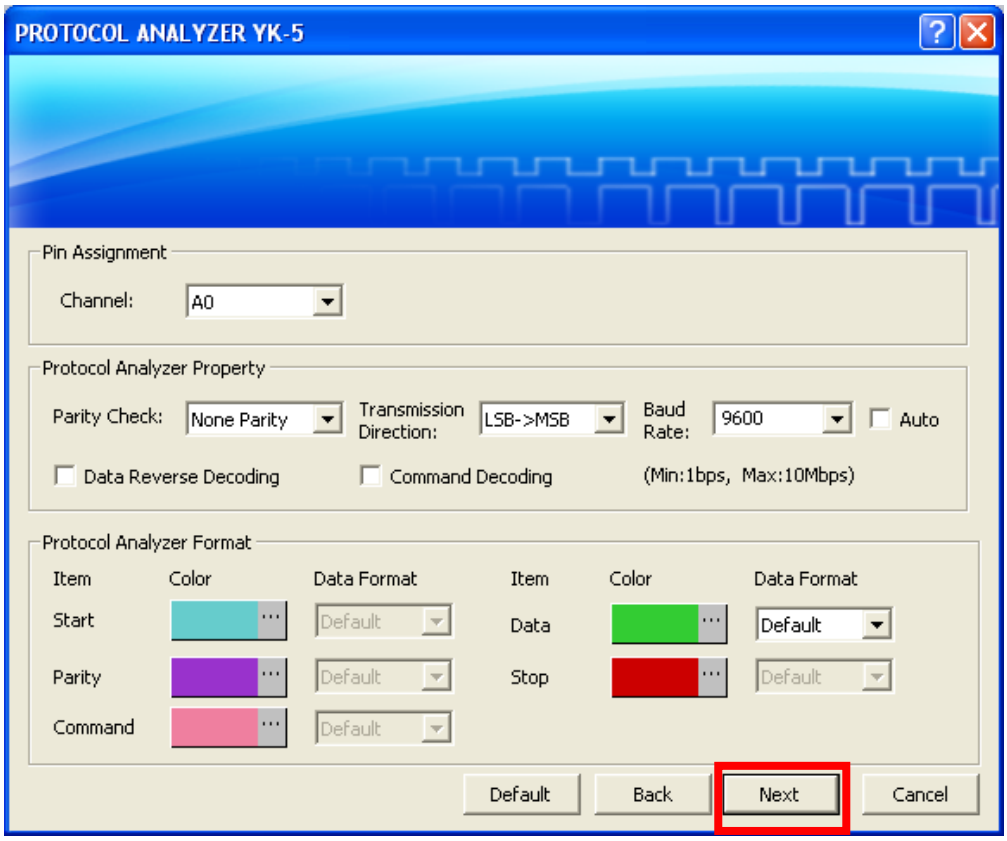
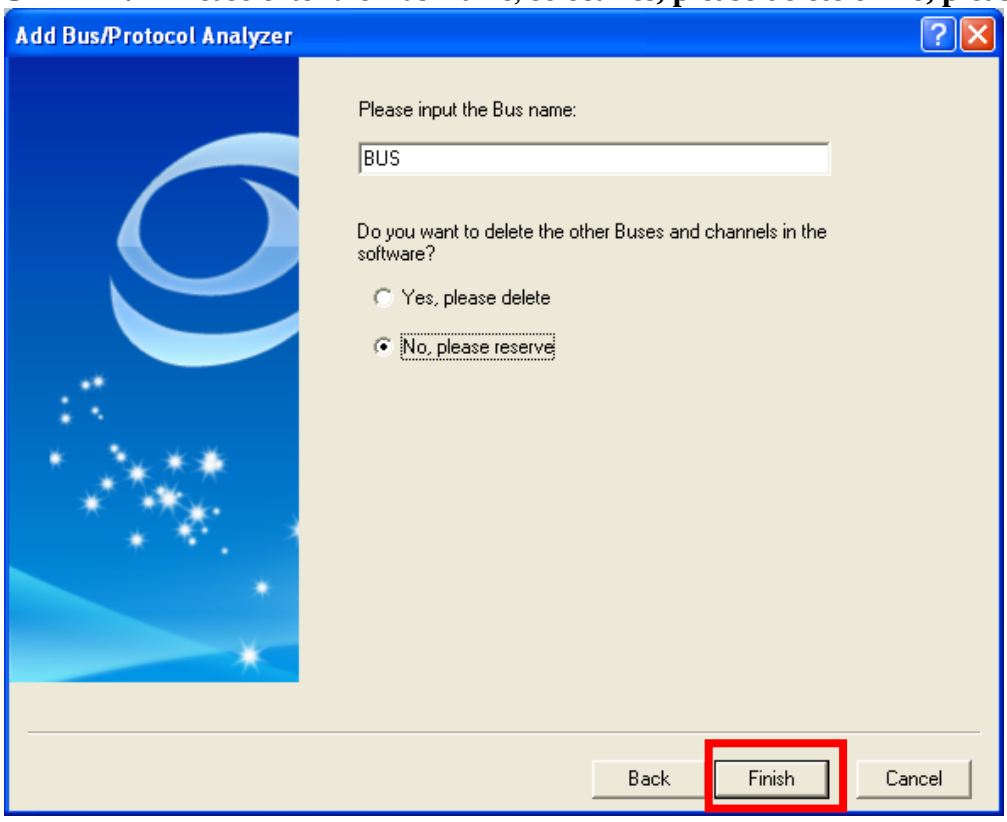


STEP 7. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 8. Following pictures show the completion of the protocol analyzer decoding and packet list. The

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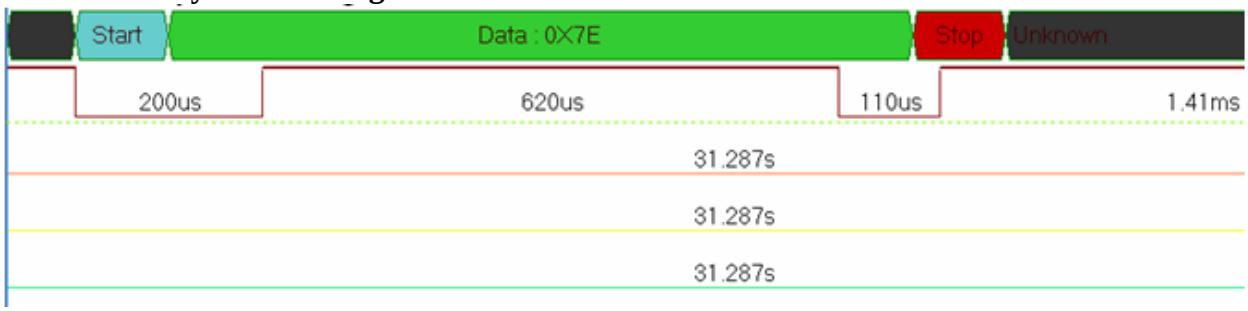
trigger condition is set as Either Edge; the memory depth is 32K; the sampling frequency is 100KHz. (the sampling frequency should be more than 10 times higher than the signal to be tested.)

Protocol Analyzer Decoding



Packet List