

SPECIFICATION

MODEL: 016-LAP-MILLER-M

PART NO: _____

VERSION: V1.07

Approver		Check	Design
GM	PM		

Customer Confirm

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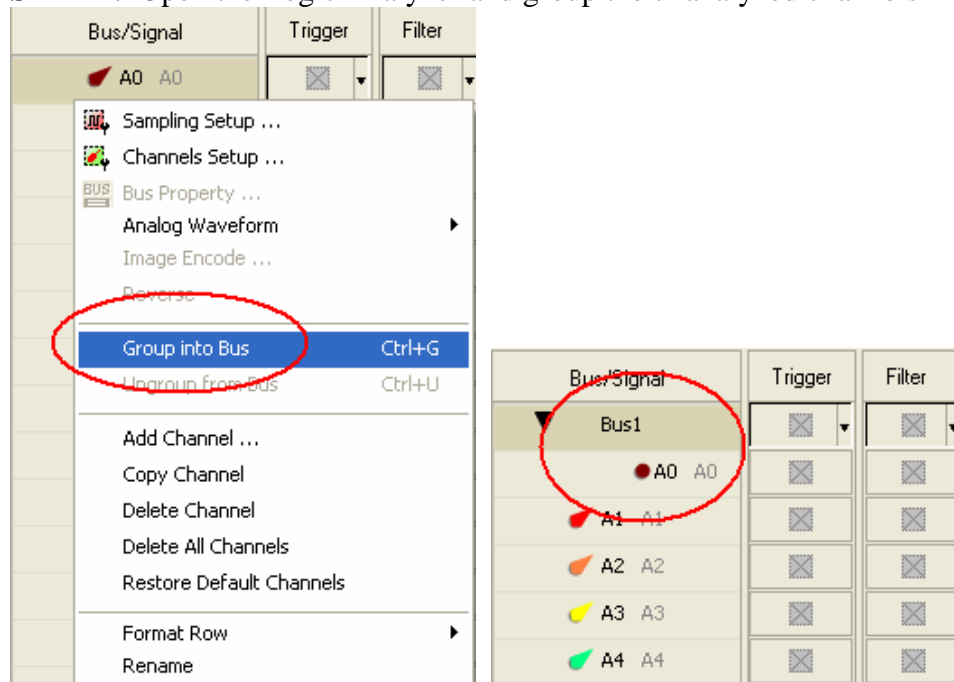
1 Software Register

Please register the software as the following steps:

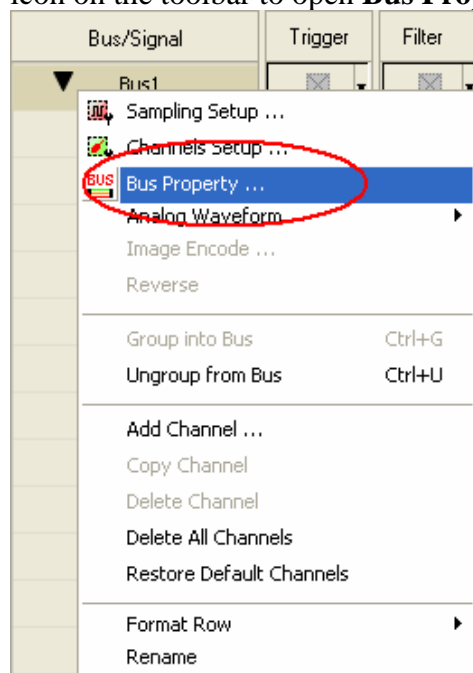
※ **Remark1:** The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ **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.

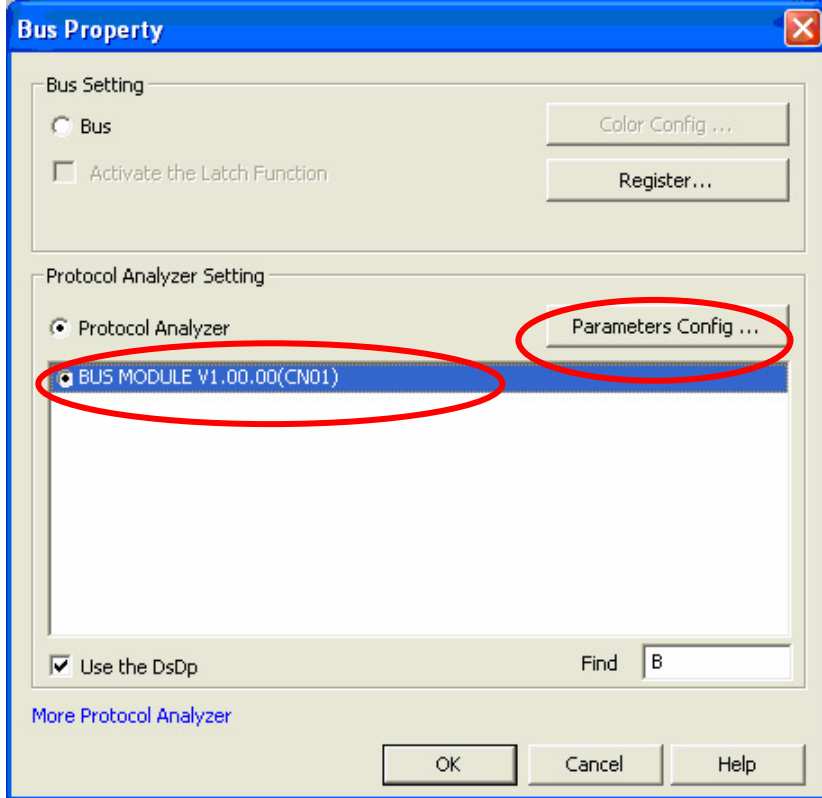
STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key**.



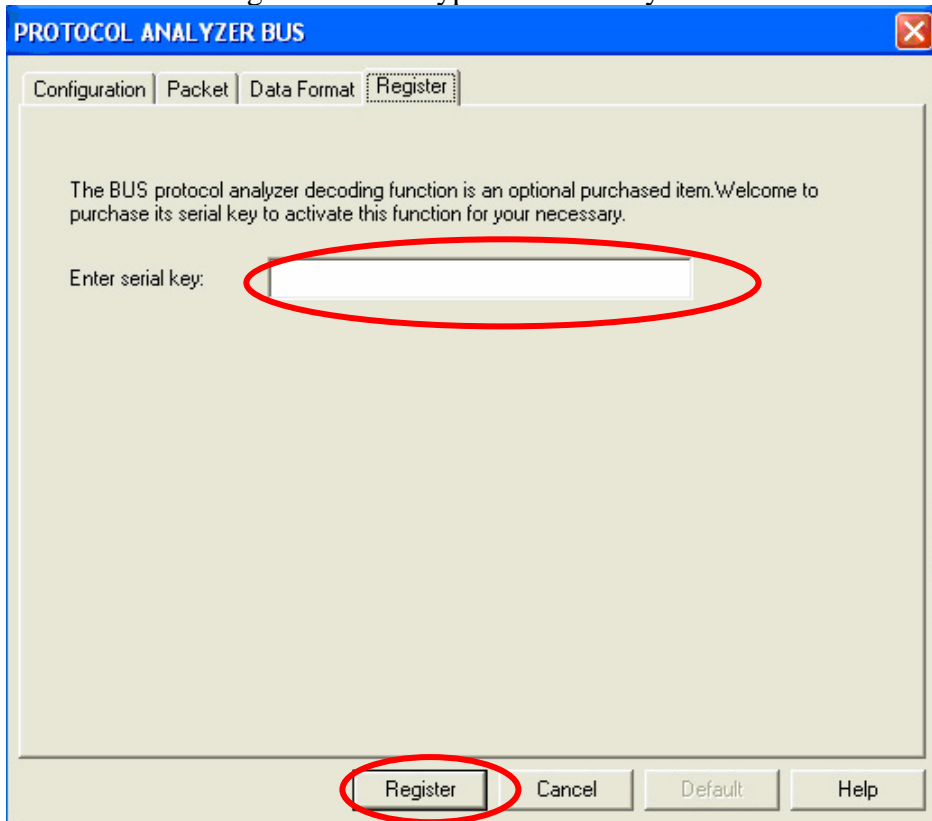
STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



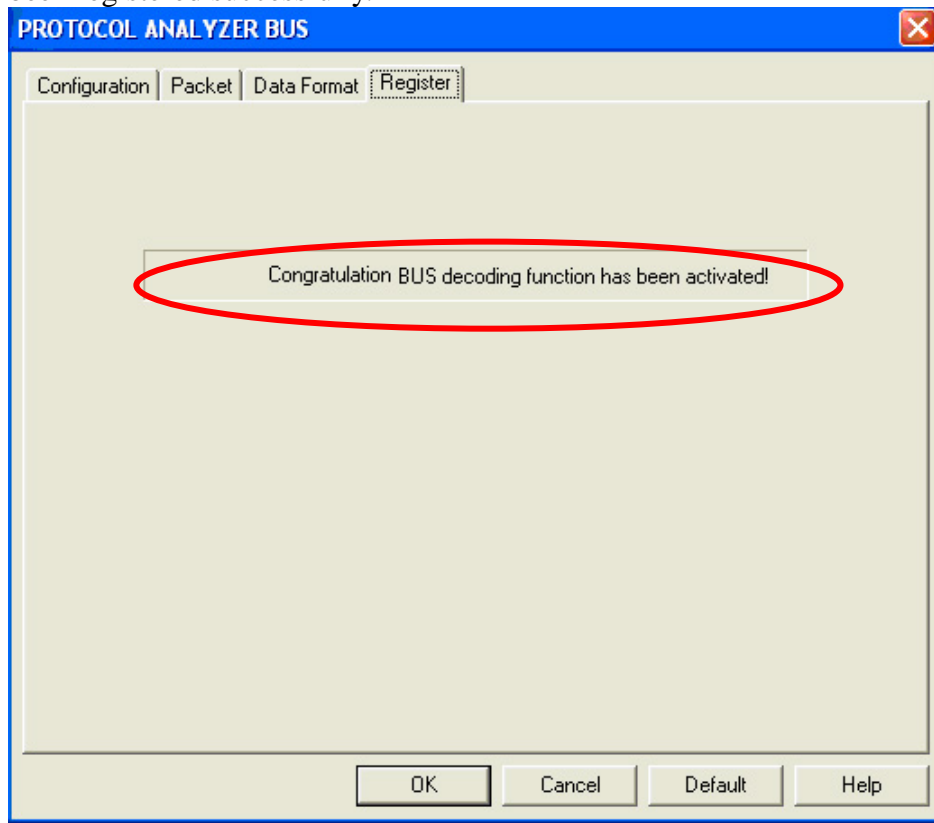
STEP 3. Select the Protocol Analyzer, and then choose **BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



STEP 4. Click Register tab and type the serial key number of BUS. Then click Register.



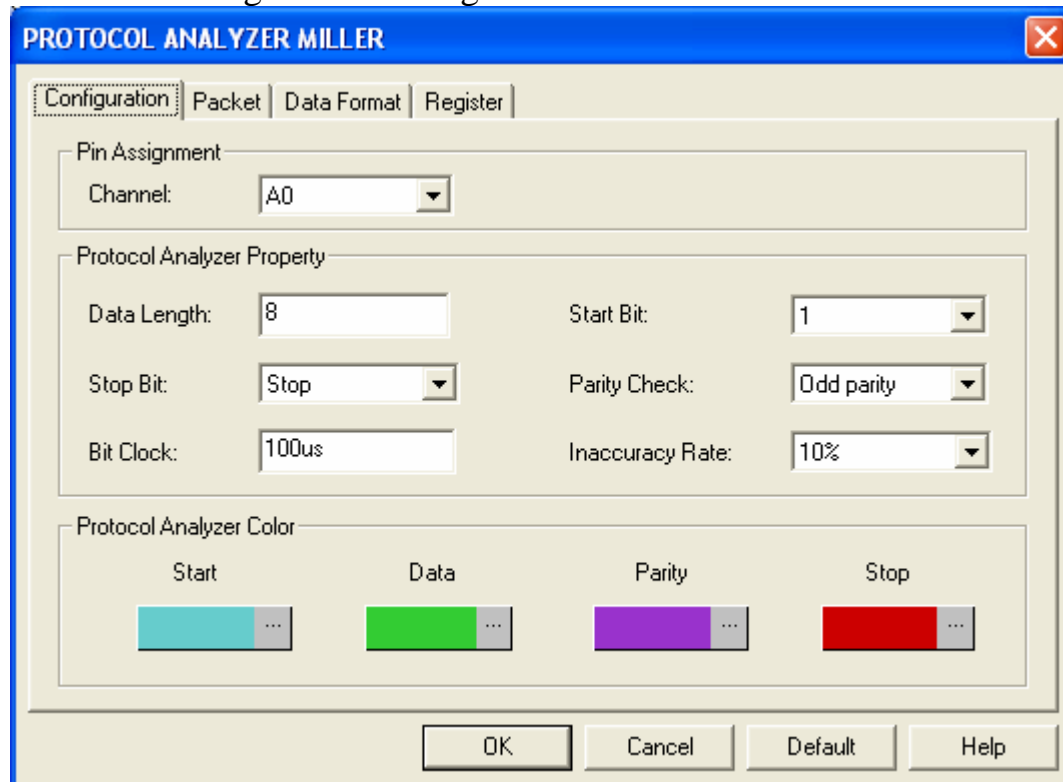
STEP 5. After clicking the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



2 User Interface

In the configuration, please refer to below images to select options of setting **MILLER**.

MILLER Configuration Dialog Box



Pin Assignment:

MILLER only needs one channel to decode the signals, and the default is A0.

Protocol Analyzer Property:

Data Length: Set the Data Length in the range from 1 to 65535bits, the default is 8 bits.

Stop Bit: Set the Stop Bit to Stop or None Stop, the default is Stop.

Bit Clock: Set the Bit Clock, the default is 100us.

Start Bit: Set the Start Bit to 0 or 1, the default is 1.

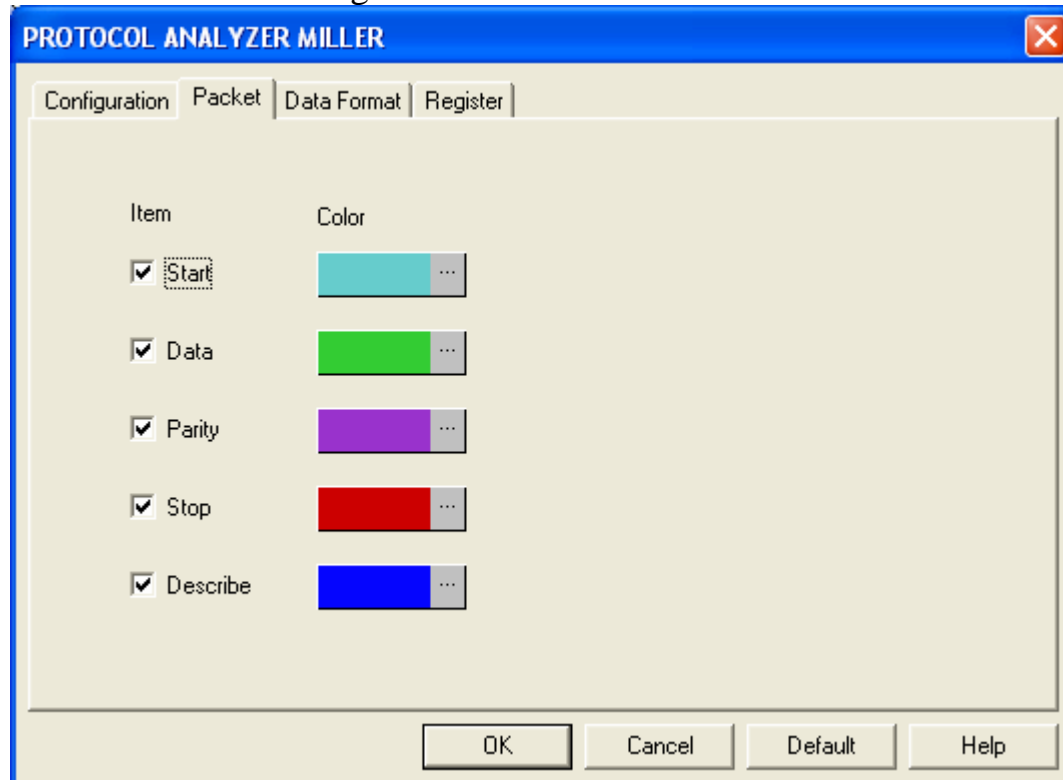
Parity Check: Set the Parity Check to None parity, Odd parity or Even parity, the default is Odd parity.

Inaccuracy Rate: Set the Inaccuracy Rate to 5%, 10% and 15%, the default is 10%.

Protocol Analyzer Color:

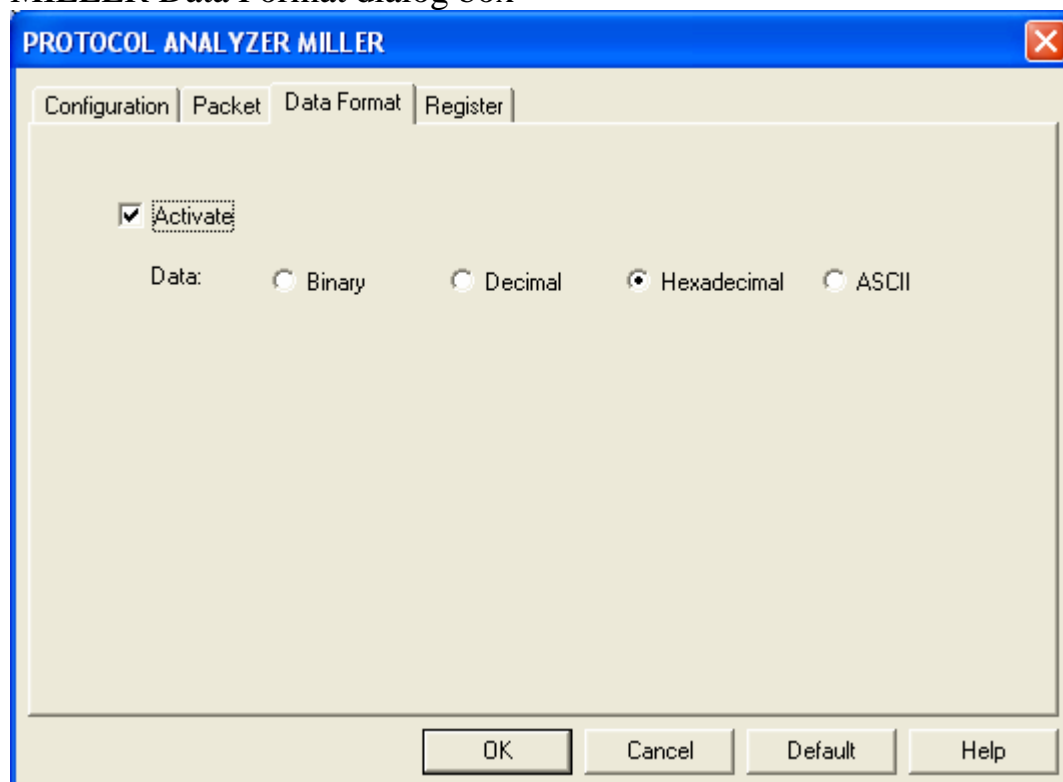
The color can be varied by users.

MILLER Packet Dialog Box



In the Packet dialog box, users can vary the color of items and set the item to be displayed.

MILLER Data Format dialog box



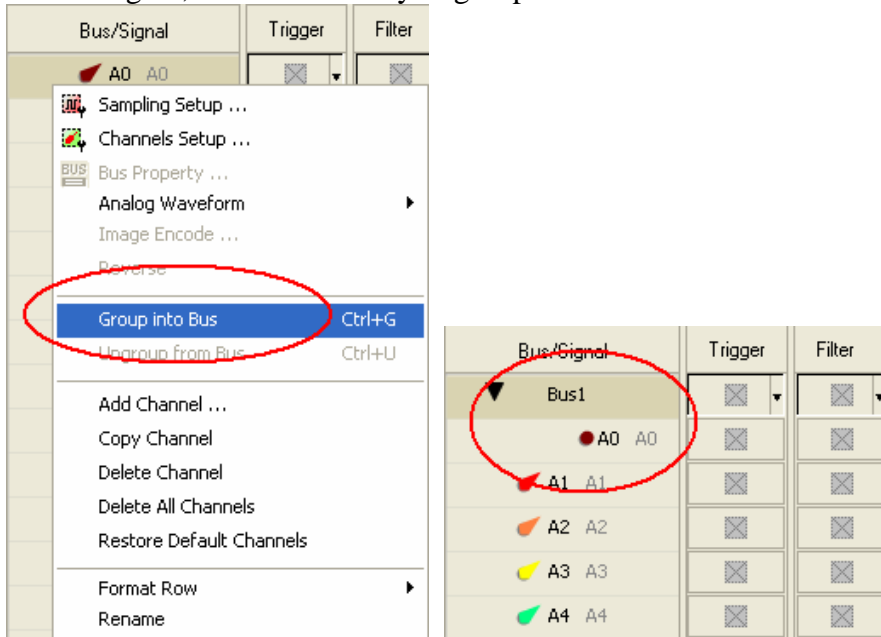
Users can set the Data Format of the item, Data, as their requirements. When selecting the option, Activate, the data format is decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data format is decided by the settings in the main program.

MILLER Register Dialog Box

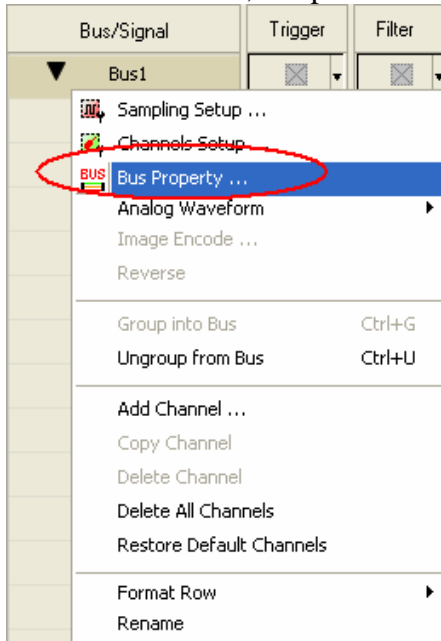


3 Operating Instructions

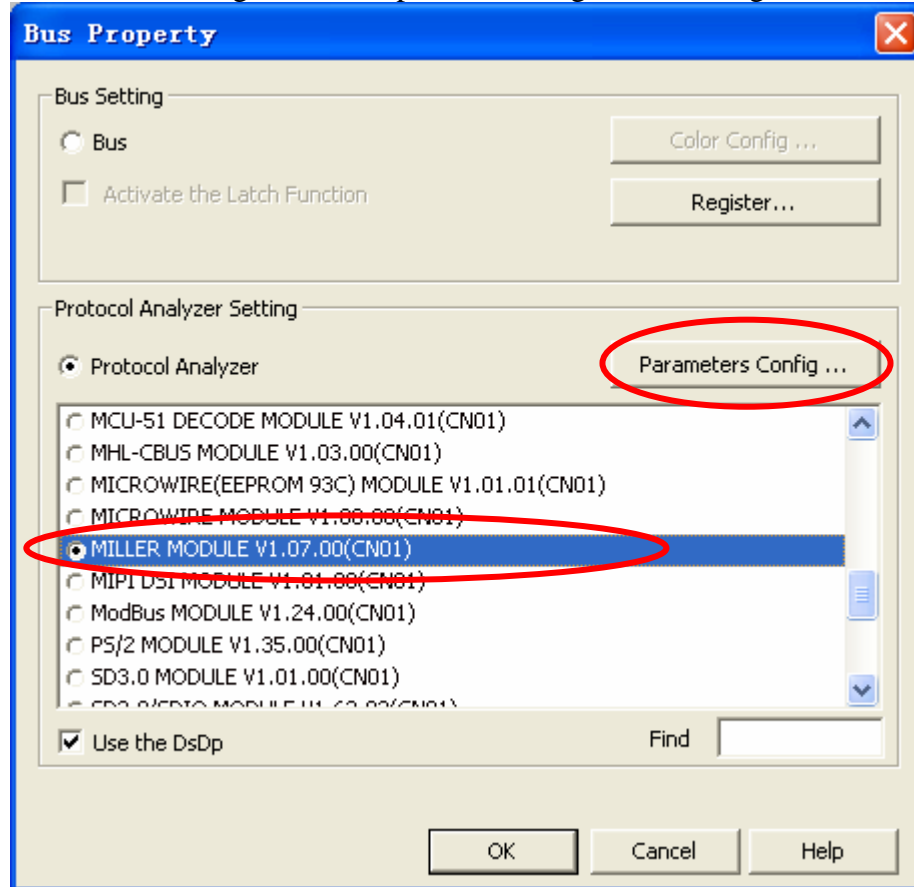
STEP 1. Group A0 into **Bus1** by pressing the **Right Key** on the mouse. MILLER only needs one channel to decode signal, so it is necessary to group one or more channels into a Bus.



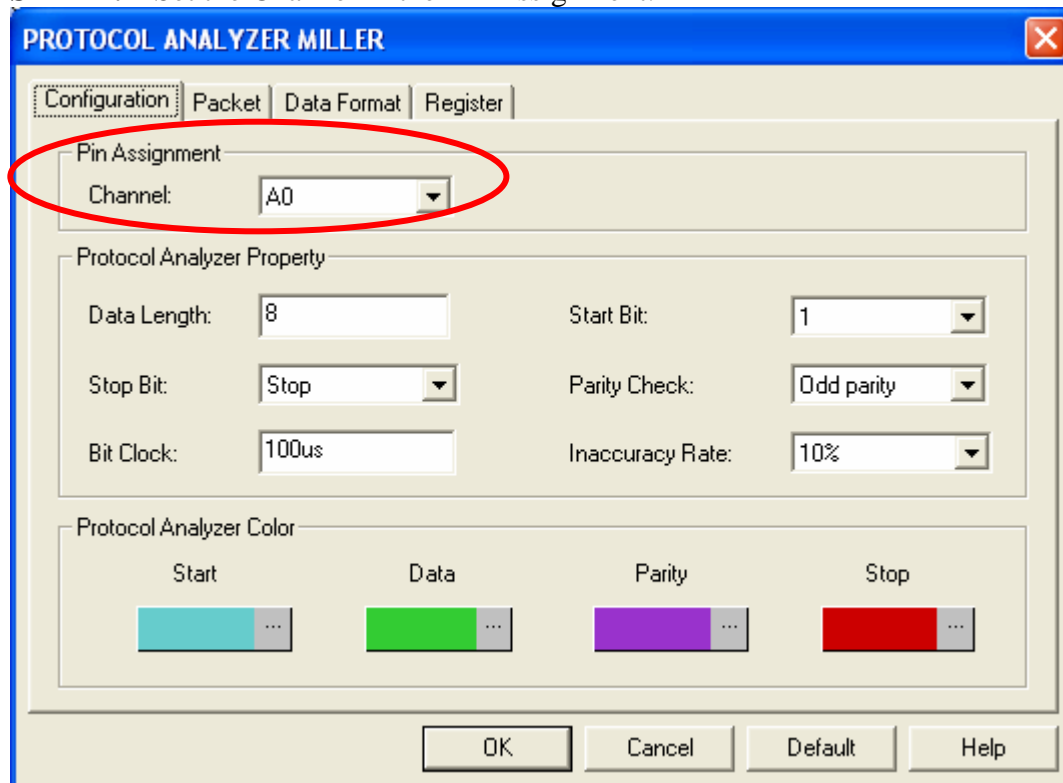
STEP 2. Select **Bus1**, press right key and select **Bus Property** from the popped menu, or click the **Bus** icon on the toolbar, to open the **Bus Property** dialog box.



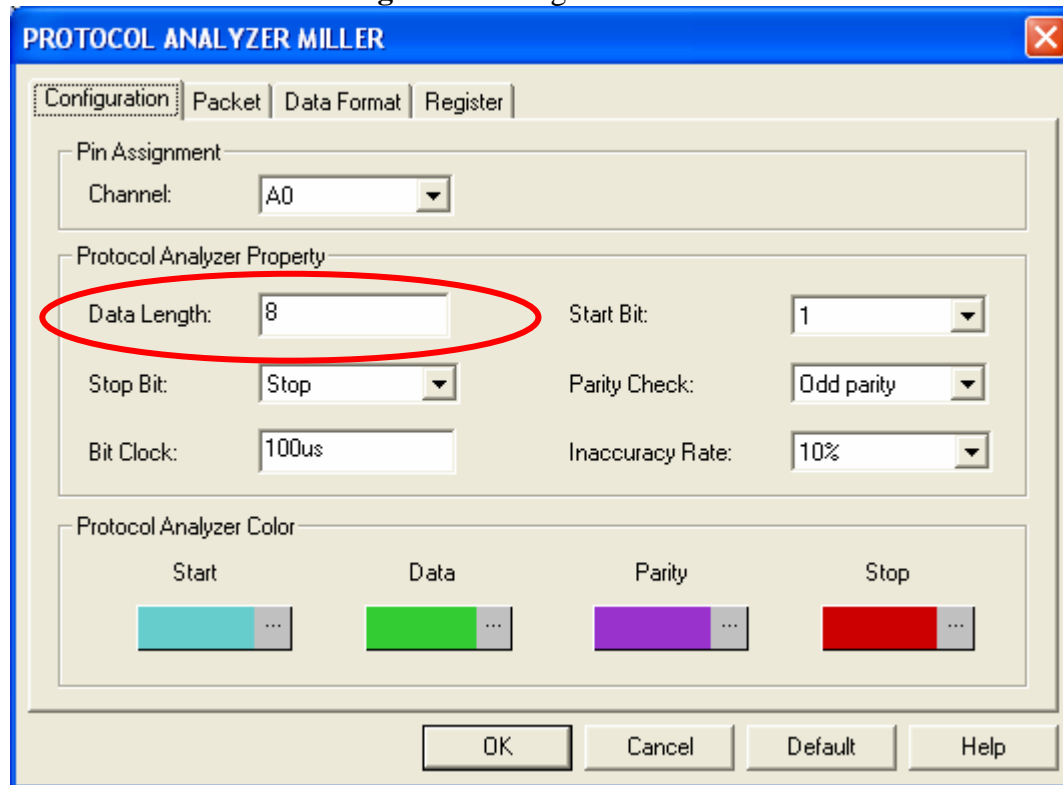
STEP 3. Select Protocol Analyzer, and select MILLER MODULE V1.07.00(CN01). Then click Parameters Configuration to open the Configuration dialog box.



STEP 4. Set the Channel in the Pin Assignment.



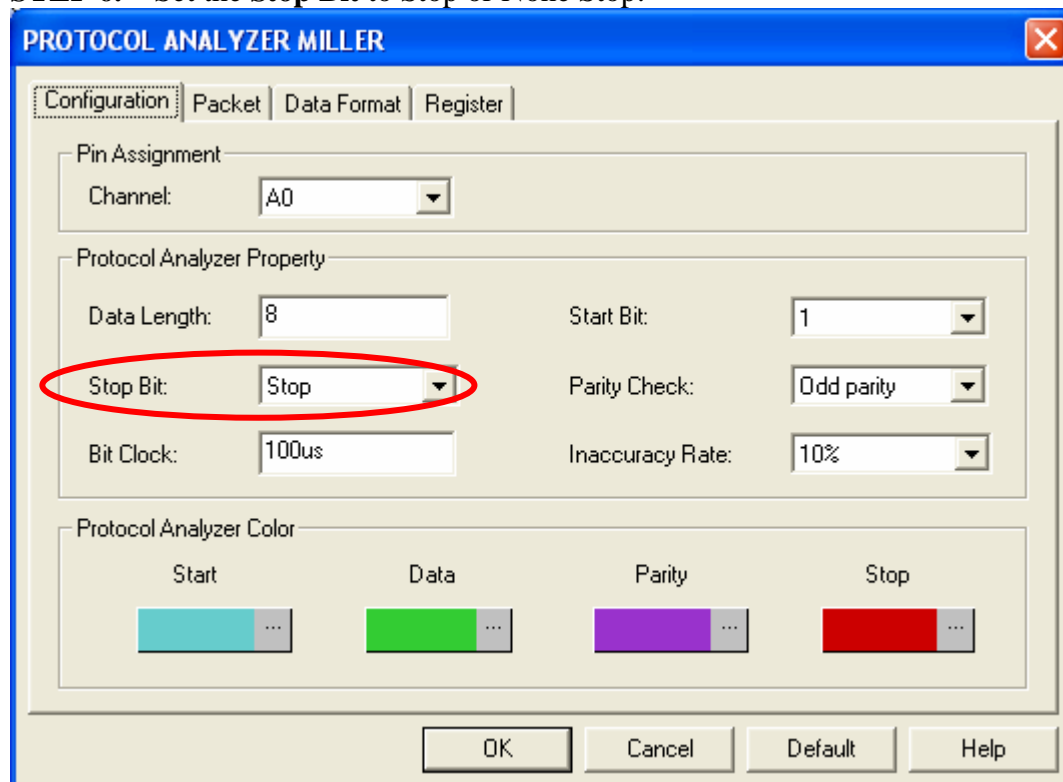
STEP 5. Set the **Data Length** in the range from 1 to 65535bits.



The screenshot shows the 'PROTOCOL ANALYZER MILLER' dialog box with the 'Configuration' tab selected. The 'Data Length' field is highlighted with a red oval and contains the value '8'. Other fields include 'Channel' (A0), 'Start Bit' (1), 'Stop Bit' (Stop), 'Parity Check' (Odd parity), 'Bit Clock' (100us), and 'Inaccuracy Rate' (10%). The 'Protocol Analyzer Color' section shows color swatches for Start (cyan), Data (green), Parity (purple), and Stop (red). Buttons at the bottom include OK, Cancel, Default, and Help.

Field	Value
Channel	A0
Data Length	8
Start Bit	1
Stop Bit	Stop
Parity Check	Odd parity
Bit Clock	100us
Inaccuracy Rate	10%

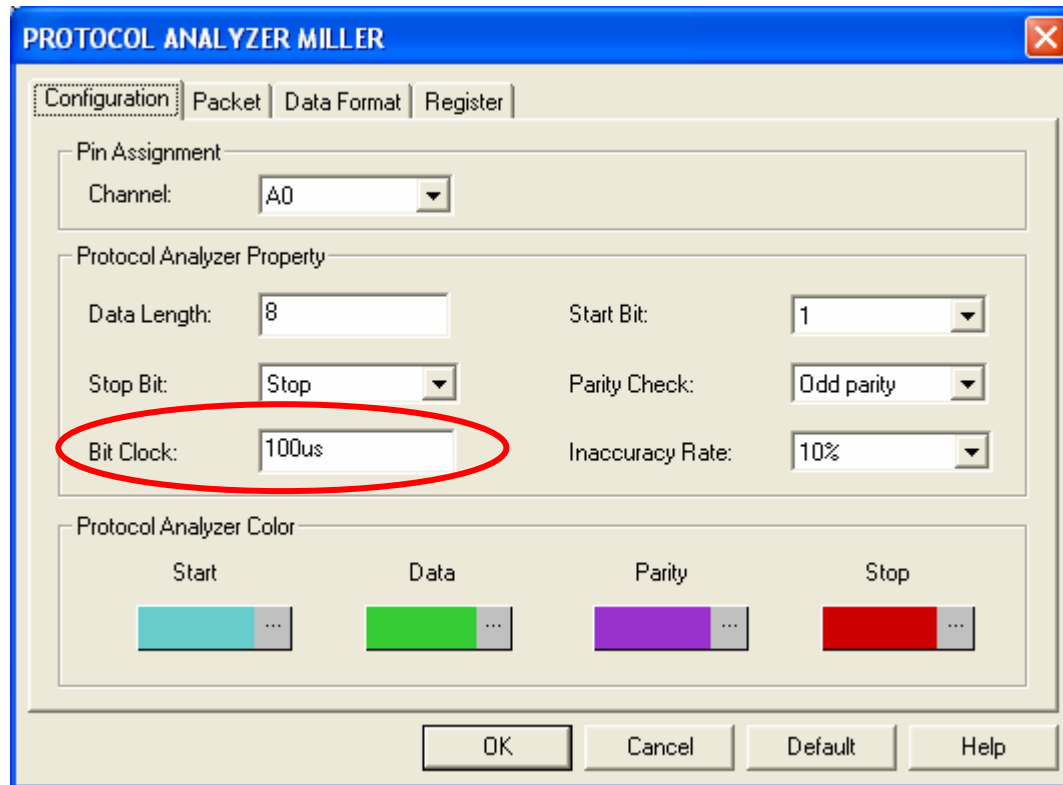
STEP 6. Set the **Stop Bit** to Stop or None Stop.



The screenshot shows the 'PROTOCOL ANALYZER MILLER' dialog box with the 'Configuration' tab selected. The 'Stop Bit' dropdown menu is highlighted with a red oval and shows 'Stop' selected. Other fields include 'Data Length' (8), 'Channel' (A0), 'Start Bit' (1), 'Parity Check' (Odd parity), 'Bit Clock' (100us), and 'Inaccuracy Rate' (10%). The 'Protocol Analyzer Color' section shows color swatches for Start (cyan), Data (green), Parity (purple), and Stop (red). Buttons at the bottom include OK, Cancel, Default, and Help.

Field	Value
Channel	A0
Data Length	8
Start Bit	1
Stop Bit	Stop
Parity Check	Odd parity
Bit Clock	100us
Inaccuracy Rate	10%

STEP 7. Set the **Bit Clock**.



The screenshot shows the 'PROTOCOL ANALYZER MILLER' dialog box with the 'Configuration' tab selected. The 'Pin Assignment' section has 'Channel' set to 'A0'. The 'Protocol Analyzer Property' section contains several settings: 'Data Length' is 8, 'Start Bit' is 1, 'Stop Bit' is Stop, 'Parity Check' is Odd parity, 'Bit Clock' is 100us (highlighted with a red circle), and 'Inaccuracy Rate' is 10%. The 'Protocol Analyzer Color' section shows color swatches for Start (cyan), Data (green), Parity (purple), and Stop (red). At the bottom are buttons for OK, Cancel, Default, and Help.

PROTOCOL ANALYZER MILLER

Configuration | Packet | Data Format | Register

Pin Assignment

Channel: A0

Protocol Analyzer Property

Data Length: 8 Start Bit: 1

Stop Bit: Stop Parity Check: Odd parity

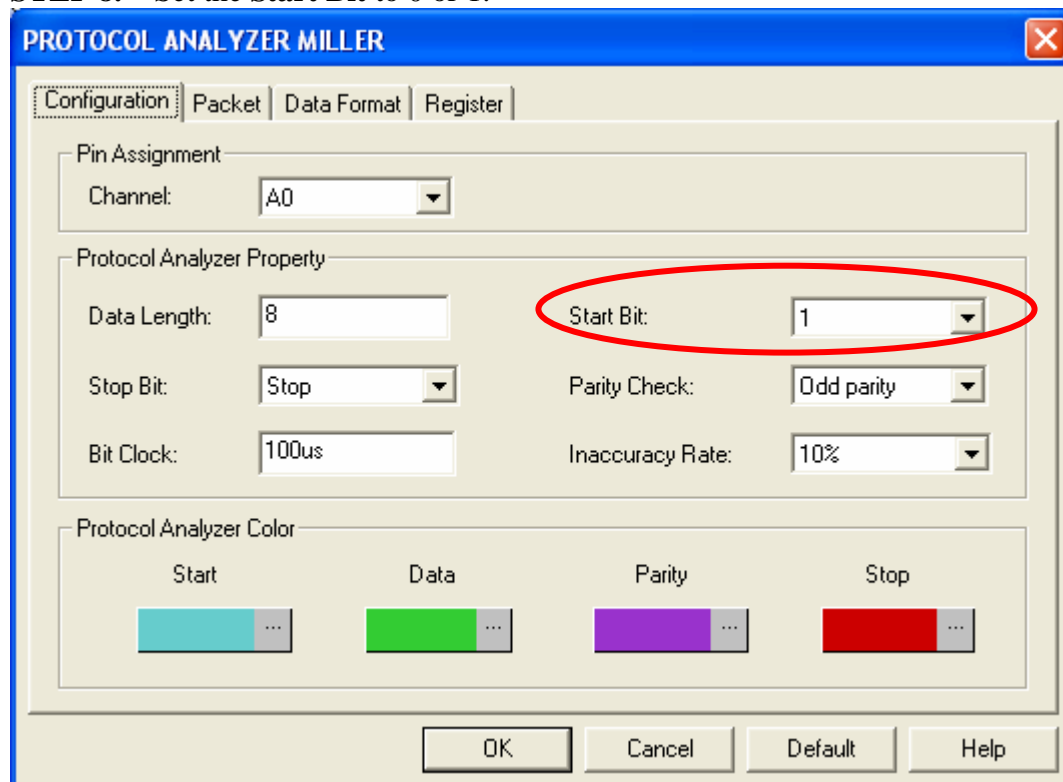
Bit Clock: 100us Inaccuracy Rate: 10%

Protocol Analyzer Color

Start Data Parity Stop

OK Cancel Default Help

STEP 8. Set the **Start Bit** to 0 or 1.



This screenshot is identical to the previous one, but the 'Start Bit' dropdown menu, which is currently set to '1', is highlighted with a red circle.

PROTOCOL ANALYZER MILLER

Configuration | Packet | Data Format | Register

Pin Assignment

Channel: A0

Protocol Analyzer Property

Data Length: 8 Start Bit: 1

Stop Bit: Stop Parity Check: Odd parity

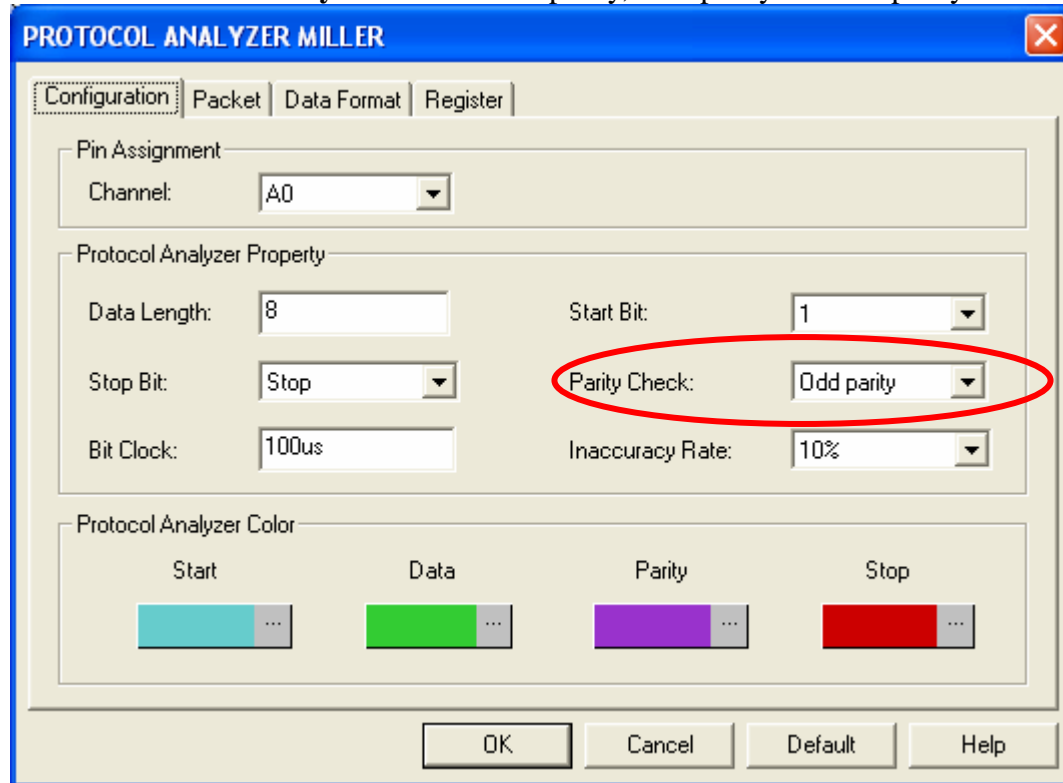
Bit Clock: 100us Inaccuracy Rate: 10%

Protocol Analyzer Color

Start Data Parity Stop

OK Cancel Default Help

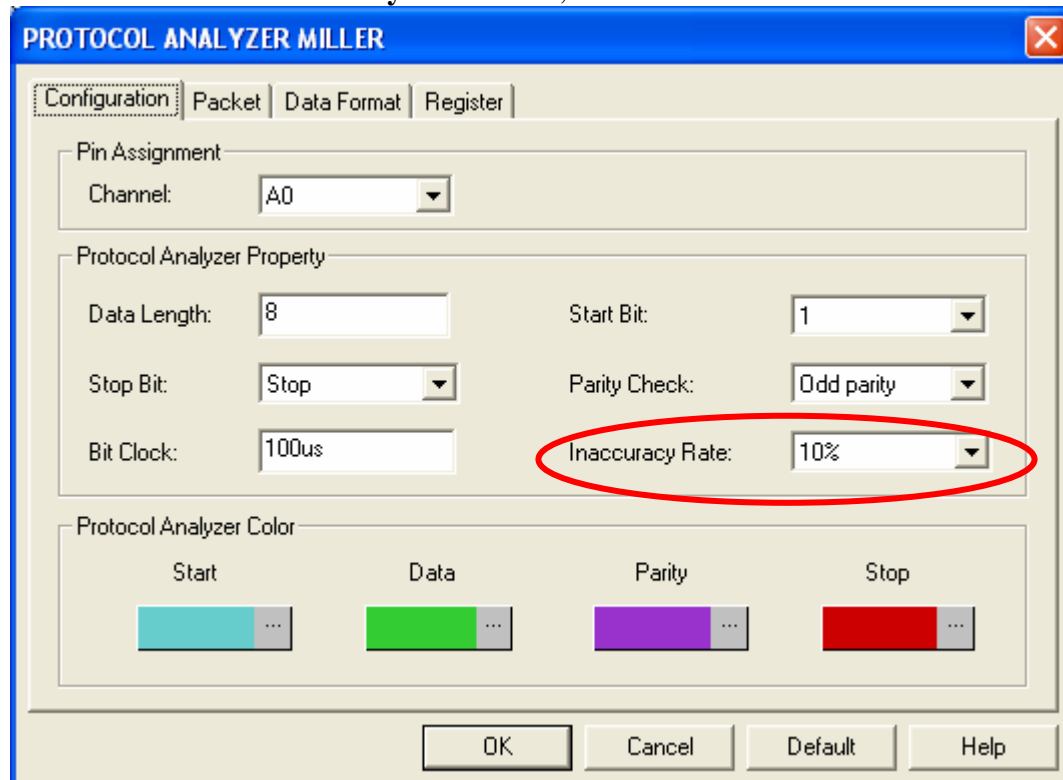
STEP 9. Set the **Parity Check** to None parity, Odd parity or Even parity.



The screenshot shows the 'PROTOCOL ANALYZER MILLER' dialog box with the 'Configuration' tab selected. The 'Parity Check' dropdown menu is circled in red and set to 'Odd parity'. Other settings include Channel: A0, Data Length: 8, Start Bit: 1, Stop Bit: Stop, Bit Clock: 100us, and Inaccuracy Rate: 10%.

Configuration	Packet	Data Format	Register
Pin Assignment			
Channel: A0			
Protocol Analyzer Property			
Data Length: 8	Start Bit: 1	Parity Check: Odd parity	
Stop Bit: Stop	Bit Clock: 100us	Inaccuracy Rate: 10%	
Protocol Analyzer Color			
Start	Data	Parity	Stop
OK Cancel Default Help			

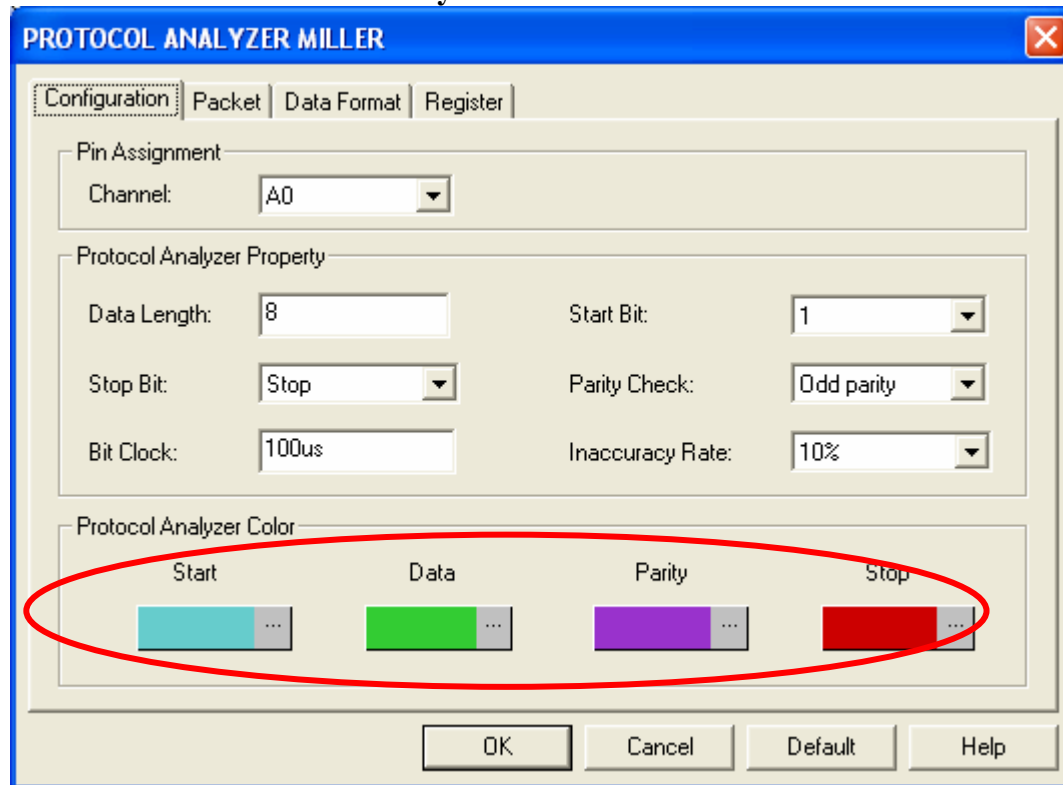
STEP 10. Set the **Inaccuracy Rate** to 5%, 10% and 15%.



The screenshot shows the 'PROTOCOL ANALYZER MILLER' dialog box with the 'Configuration' tab selected. The 'Inaccuracy Rate' dropdown menu is circled in red and set to '10%'. Other settings are the same as in Step 9.

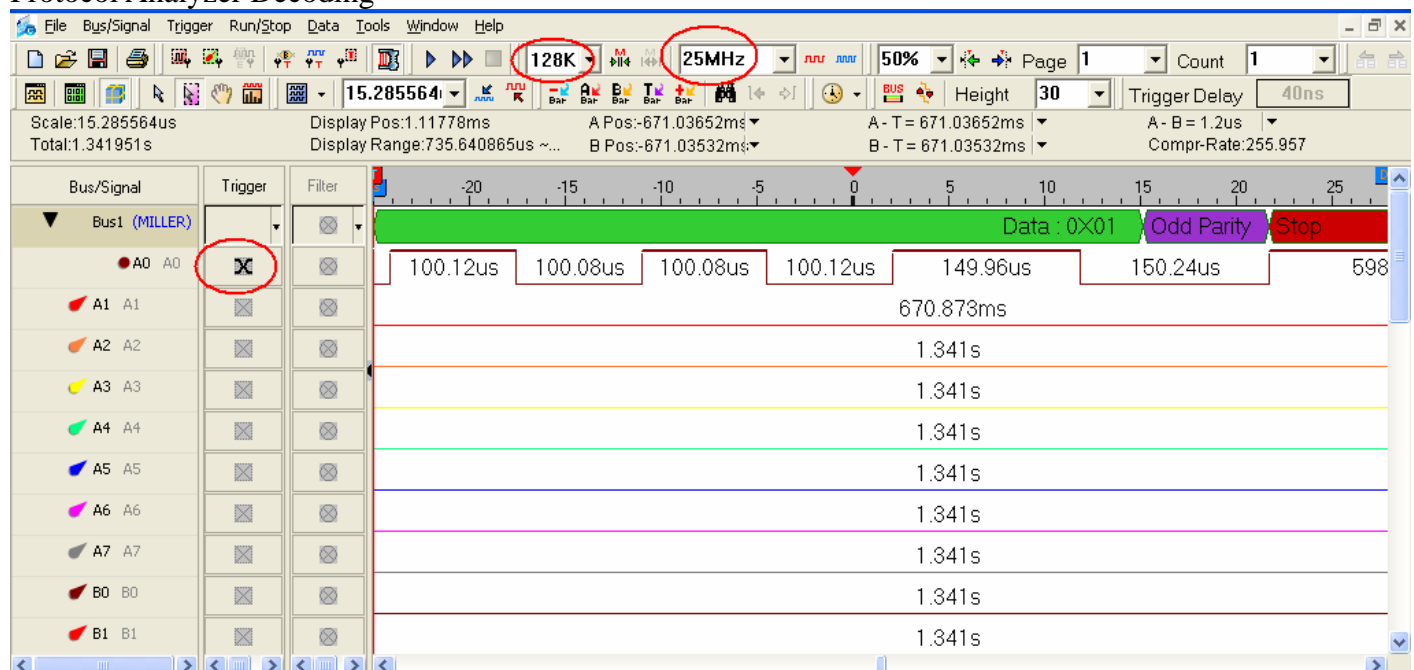
Configuration	Packet	Data Format	Register
Pin Assignment			
Channel: A0			
Protocol Analyzer Property			
Data Length: 8	Start Bit: 1	Parity Check: Odd parity	
Stop Bit: Stop	Bit Clock: 100us	Inaccuracy Rate: 10%	
Protocol Analyzer Color			
Start	Data	Parity	Stop
OK Cancel Default Help			

STEP 11. Set the Protocol Analyzer Color.



STEP 12. Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Either Edge; the memory depth is 128K; the sampling frequency is 25MHz (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

