

SPECIFICATION

MODEL: B12001-LAP-1-Wire(Advanced)

PART NO: _____

VERSION: V1.03

| Approver | | Check | Design |
|----------|----|-------|--------|
| GM | PM | | |
| | | | |

| Customer Confirm |
|------------------|
| |

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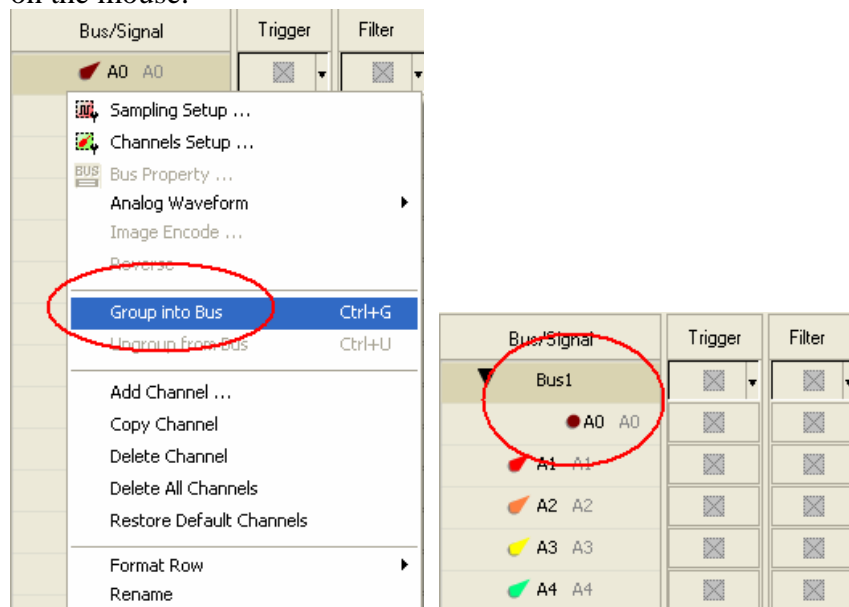
1 Software Register

Please register the software as the following steps:

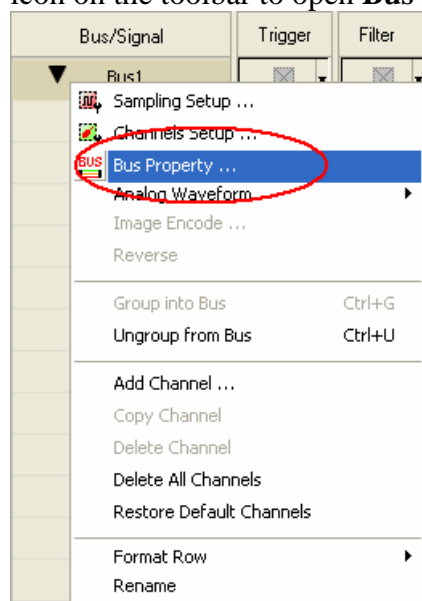
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

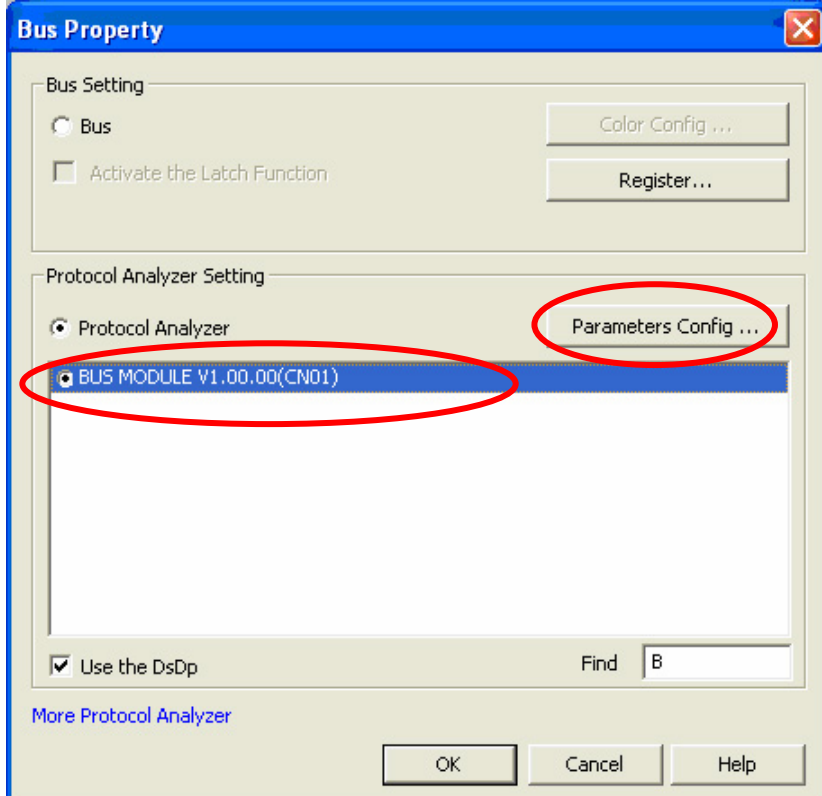
STEP 1. Open the Logic Analyzer and group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse.



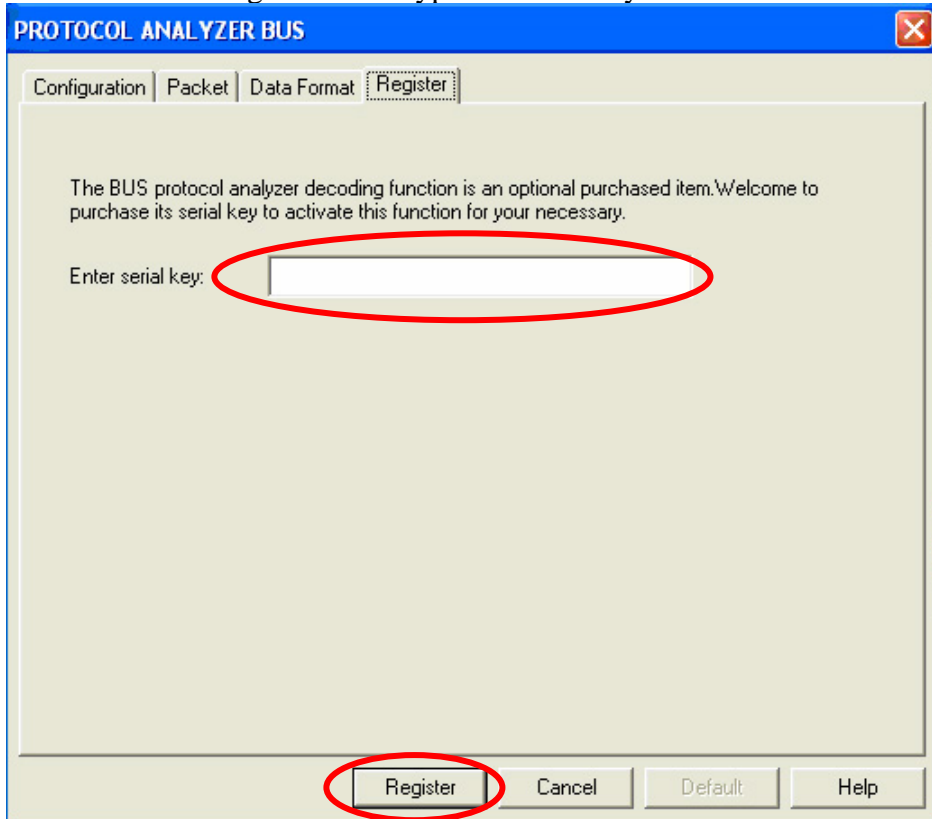
STEP 2. Select **Bus 1**, then press **Right Key** on the mouse to list the menu, then click **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.



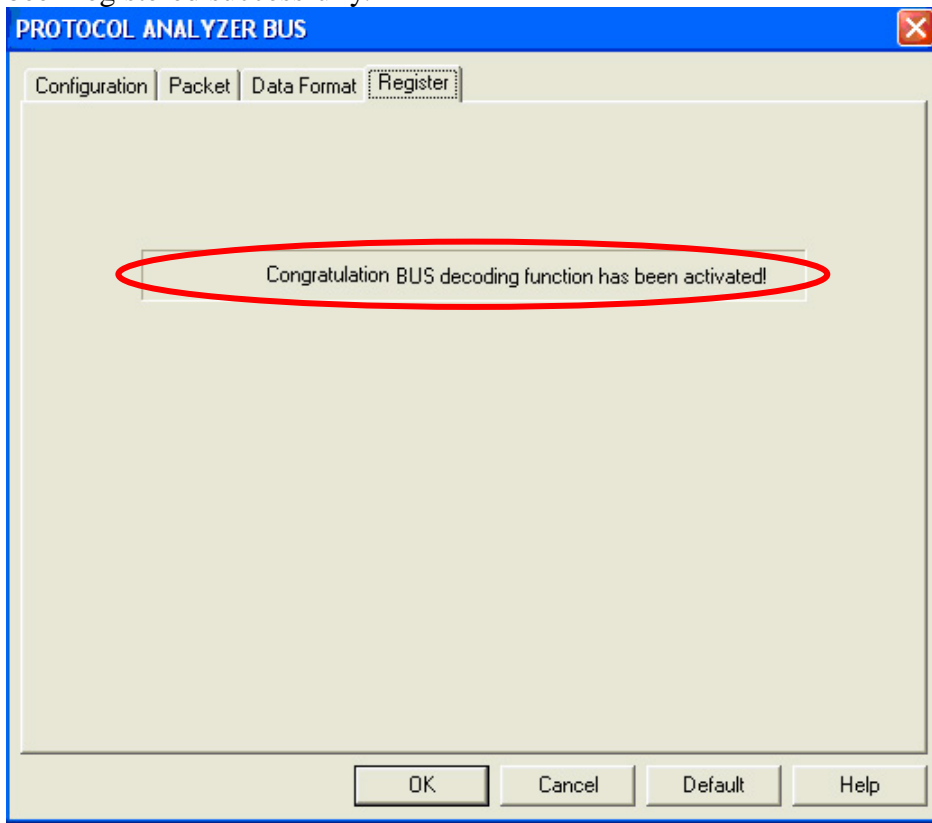
STEP 3. Select the Protocol Analyzer, and then choose **BUS MODULE V1.00.00 (CN01)**. Next click Parameters Configuration to open Protocol Analyzer Bus dialog box.



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



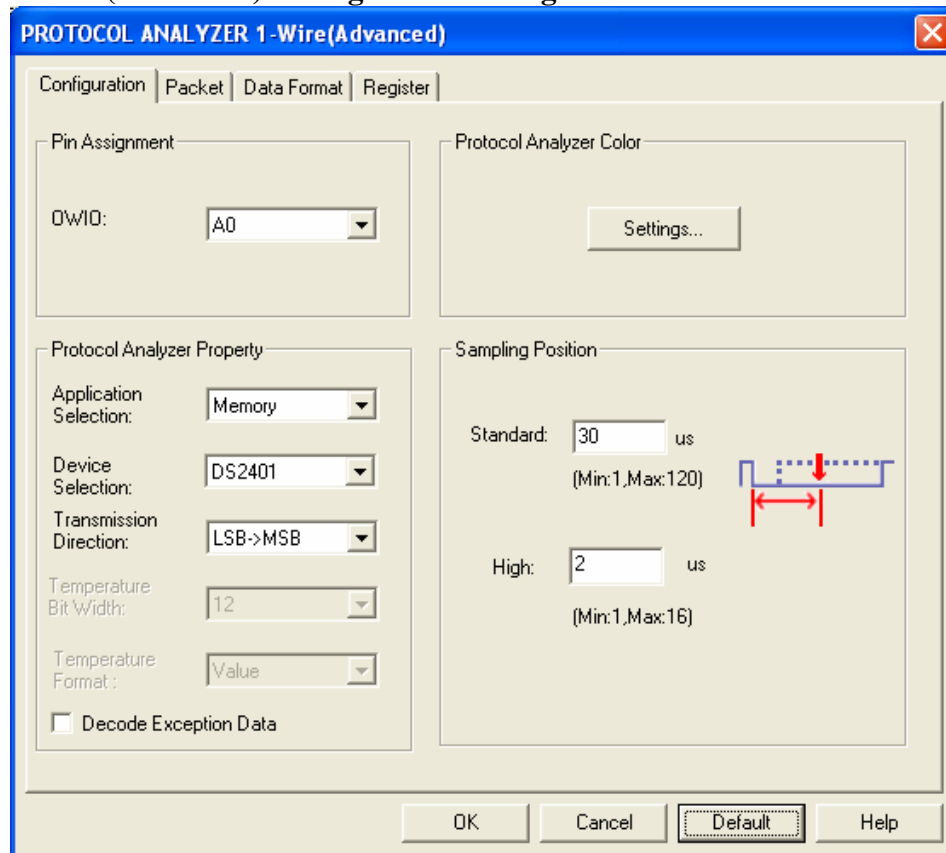
STEP 5. After clicking the Register button, following dialog box will appear, it denotes that the BUS has been registered successfully.



2 User Interface

Please refer to the below images to do settings of 1-Wire(Advanced) module.

1-Wire(Advanced) Configuration dialog box



Pin Assignment:

1-Wire(Advanced) only needs one channel to decode signal, and it is A0 by default.

Protocol Analyzer Property:

Application Selection: Memory and Temperature can be selected.

Device Selection: DS2401, DS2411, DS1982, DS2502, DS1985, DS2505, DS1986, DS2506, DS2406, DS2430A, DS28E04-100, DS1973, DS2433, DS2408, DS2431, DS2431-A1, DS1961S, DS2432, DS28EC20, DS2502-E48, DS2502-E64, DS18B20, DS18B20-PAR, DS18S20, DS18S20-PAR, DS1822, DS1822-PAR, DS1825 and DS28EA00 can be selected; it is DS2401 by default.

Transmission Direction: The Transmission Direction can be set as MSB->LSB or LSB->MSB.

MSB->LSB: From High Level to Low Level.

LSB->MSB: From Low Level to High Level.

Temperature Bit Width: 9, 10, 11 and 12 can be selected; it is 12 by default.

Temperature Format: Value, Celsius and Fahrenheit can be selected; it is Value by default.

Decode Exception Data: If it is selected, the unknown packet would be decoded by 1-wire with 8-bit as the unit, until the next Reset Pulse. It is not selected by default.

Sampling Position:

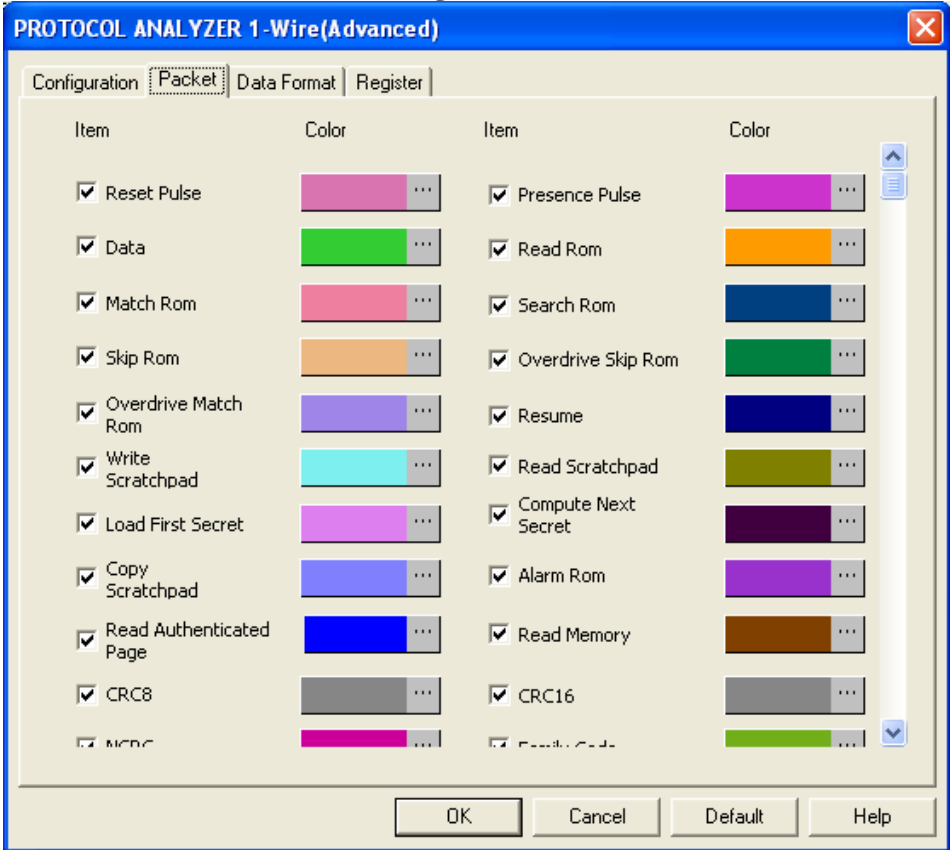
The Sampling Position can be set as Standard or High. In the Standard, the Sampling Position is between 1us and 120us, it is 30us by default. In the High, the Sampling Position is between 1us and 16us, it is 2us by default.

Protocol Analyzer Color:



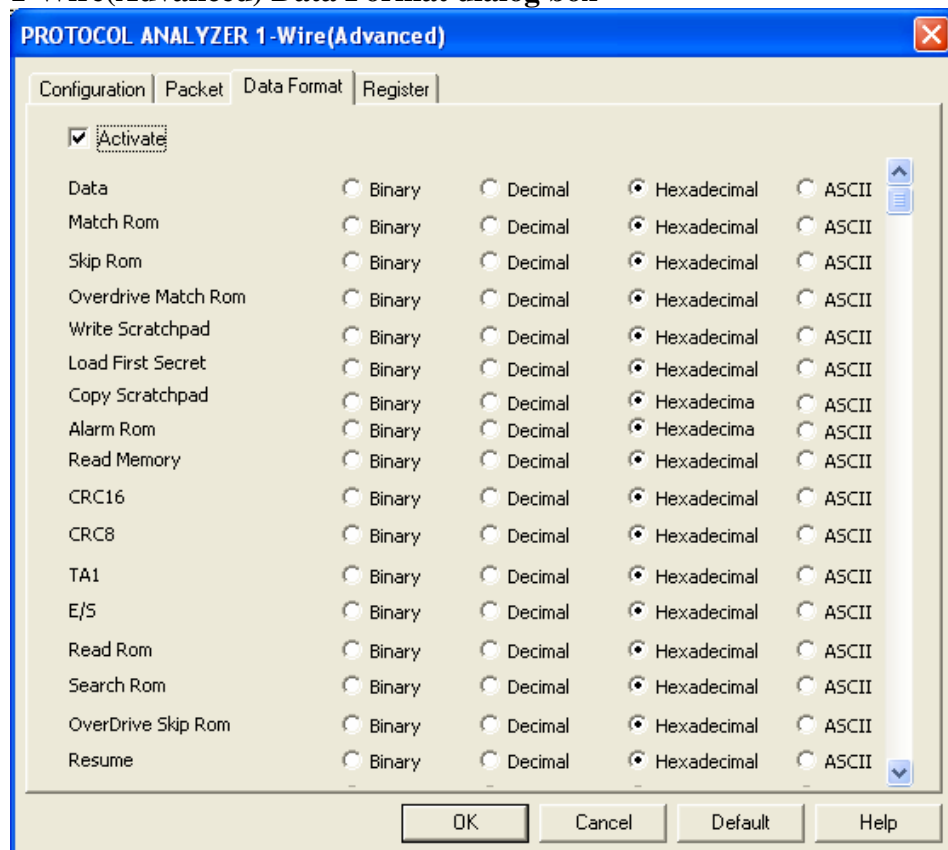
The color can be varied by users.

1-Wire(Advanced) Packet dialog box



In the Packet part, users can set the items and colors as users' requirements.

1-Wire(Advanced) Data Format dialog box



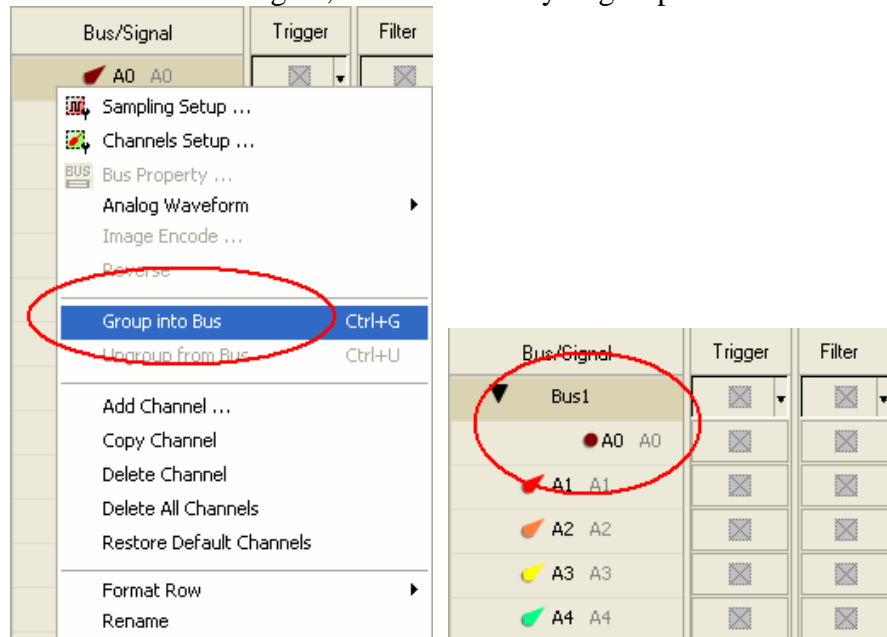
When the option 'Activate' is selected, users could self-define the data format of these items; when not selected, their data formats are decided by the settings of main program.

1-Wire(Advanced) Register dialog box

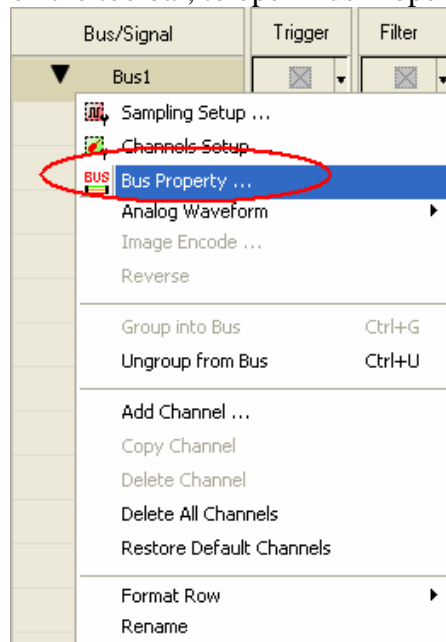


3 Operating Instructions

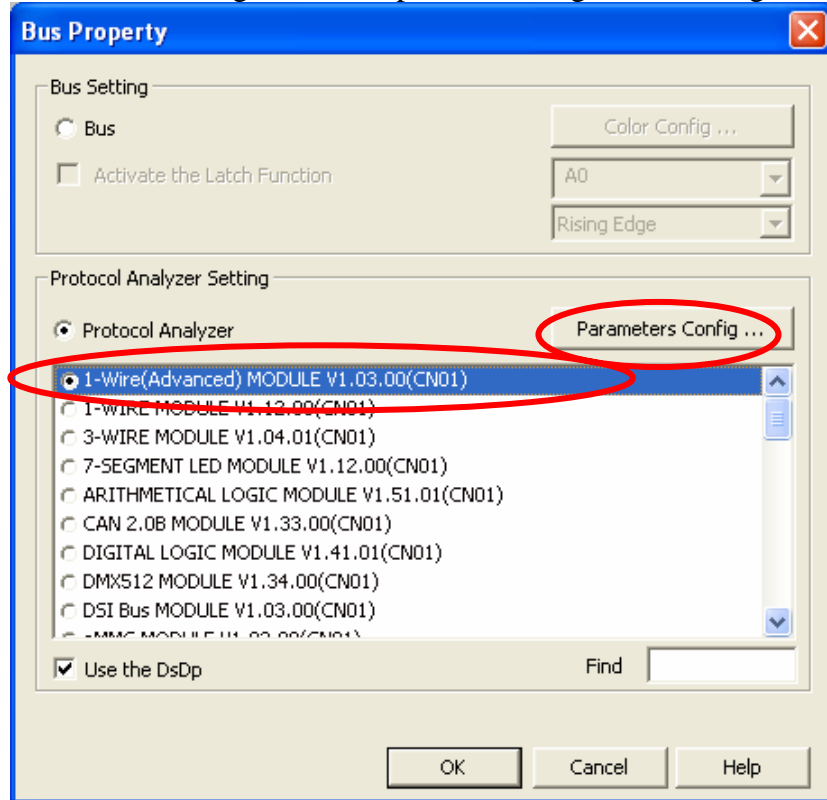
STEP 1. Group A0 into Bus1 by pressing the Right Key on the mouse. 1-Wire(Advanced) only needs one channel to decode signal, so it is necessary to group one or more channels into a Bus.



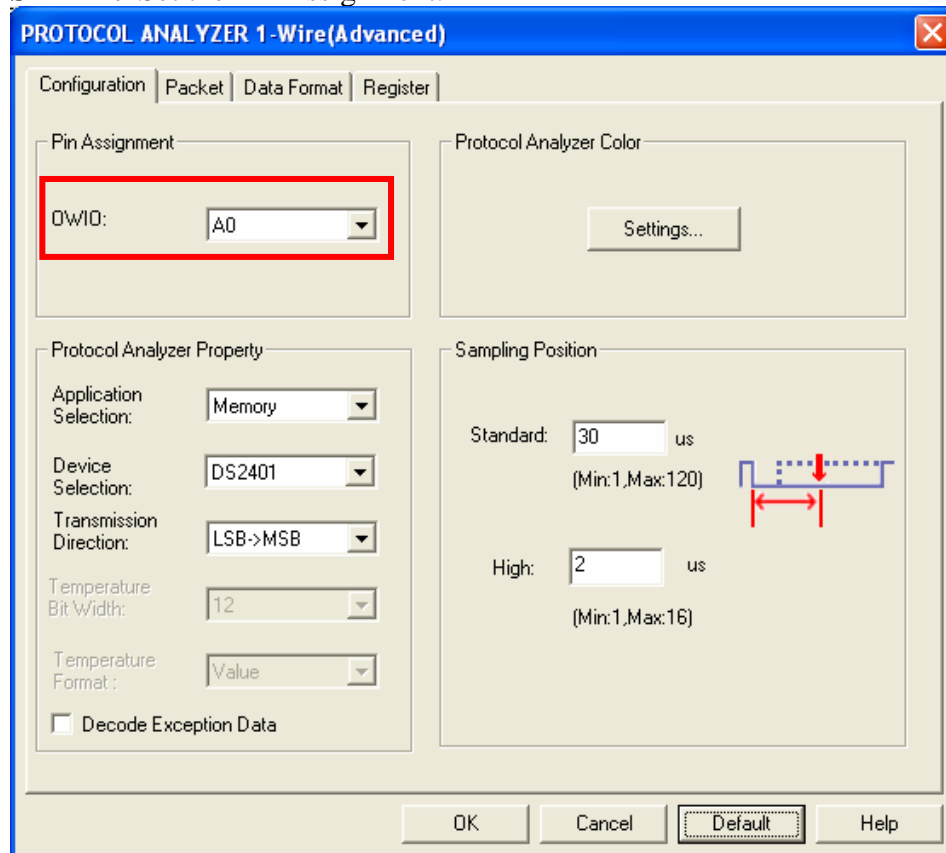
STEP 2. Select Bus1, press Right Key and select 'Bus Property' from the popup menu, or click Bus icon on the toolbar, to open Bus Property dialog box.



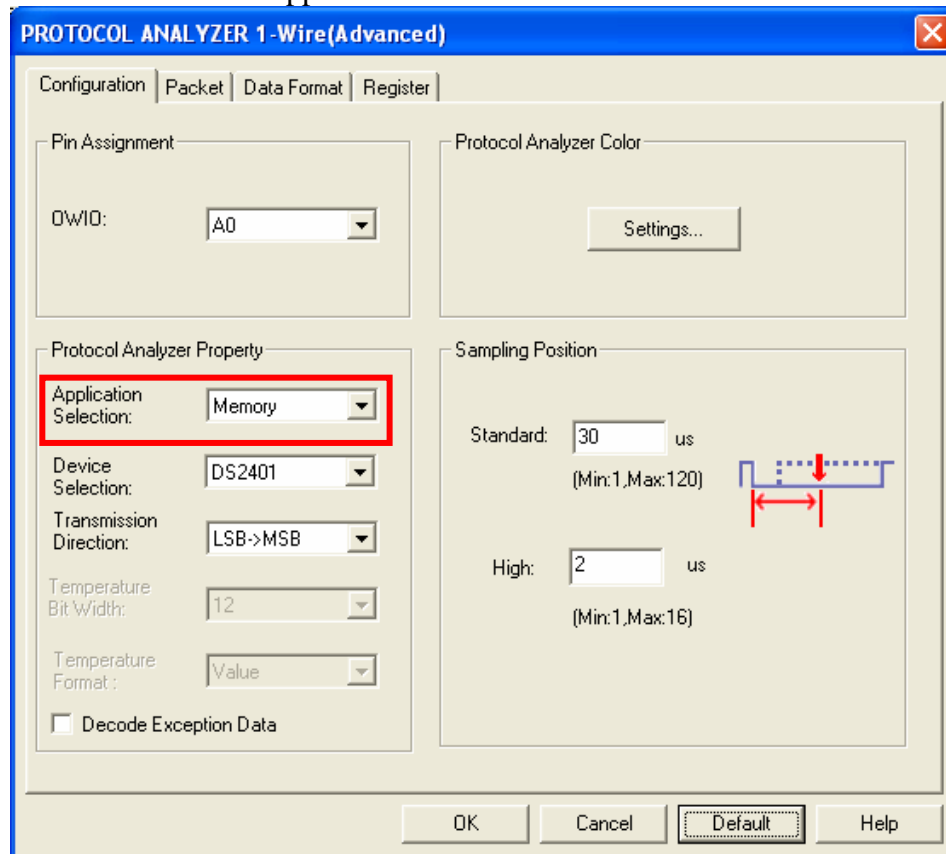
STEP 3. Select Protocol Analyzer, and select 1-Wire(Advanced) MODULE V1.03.00 (CN01). Then click Parameters Configuration to open the Configuration dialog box.



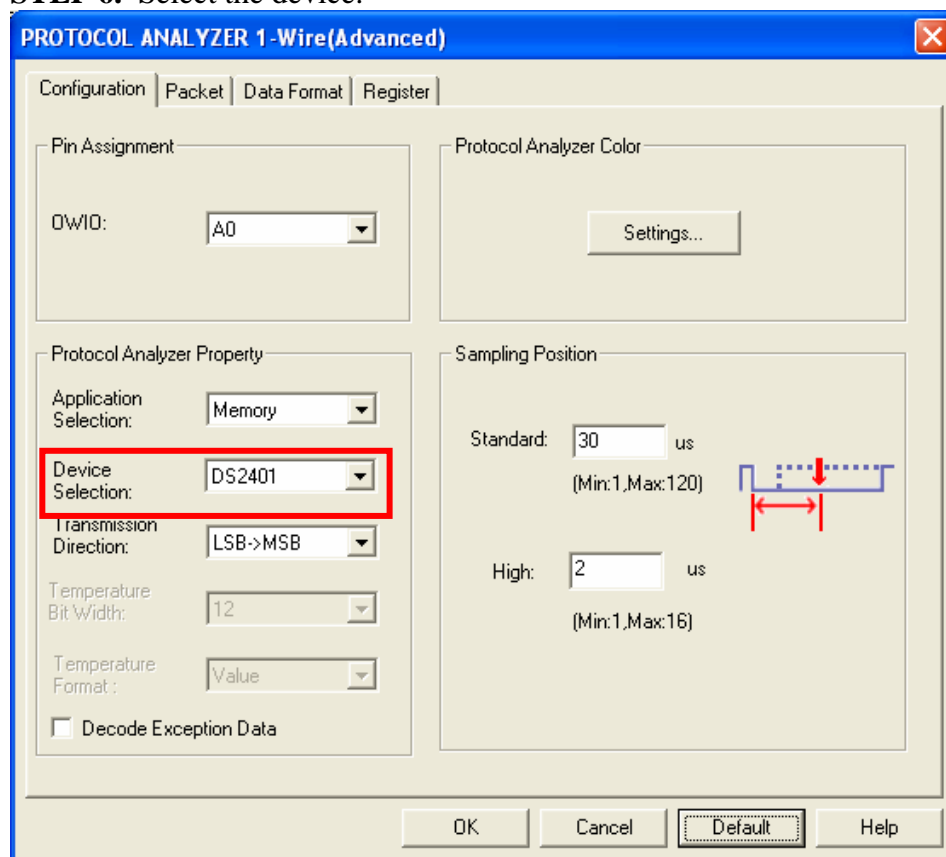
STEP 4. Set the Pin Assignment.



STEP 5. Select the application.



STEP 6. Select the device.



STEP 7. Set the Transmission Direction.

PROTOCOL ANALYZER 1-Wire(Advanced)

Configuration | Packet | Data Format | Register

Pin Assignment

OWID: A0

Protocol Analyzer Color

Settings...

Protocol Analyzer Property

Application Selection: Memory

Device Selection: DS2401

Transmission Direction: **LSB->MSB**

Temperature Bit Width: 12

Temperature Format: Value

☐ Decode Exception Data

Sampling Position

Standard: 30 us (Min:1,Max:120)

High: 2 us (Min:1,Max:16)

OK Cancel Default Help

STEP 8. Set the temperature bit width.

PROTOCOL ANALYZER 1-Wire(Advanced)

Configuration | Packet | Data Format | Register

Pin Assignment

OWID: A0

Protocol Analyzer Color

Settings...

Protocol Analyzer Property

Application Selection: Temperature

Device Selection: DS18B20

Transmission Direction: LSB->MSB

Temperature Bit Width: **12**

Temperature Format: Value

☐ Decode Exception Data

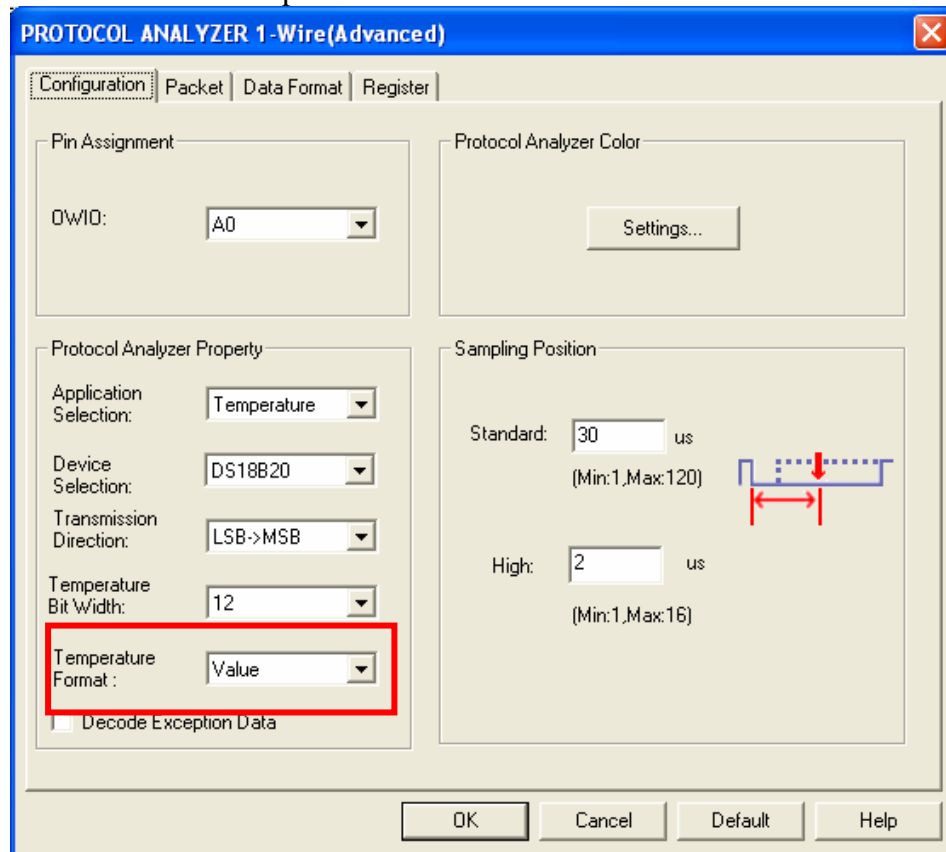
Sampling Position

Standard: 30 us (Min:1,Max:120)

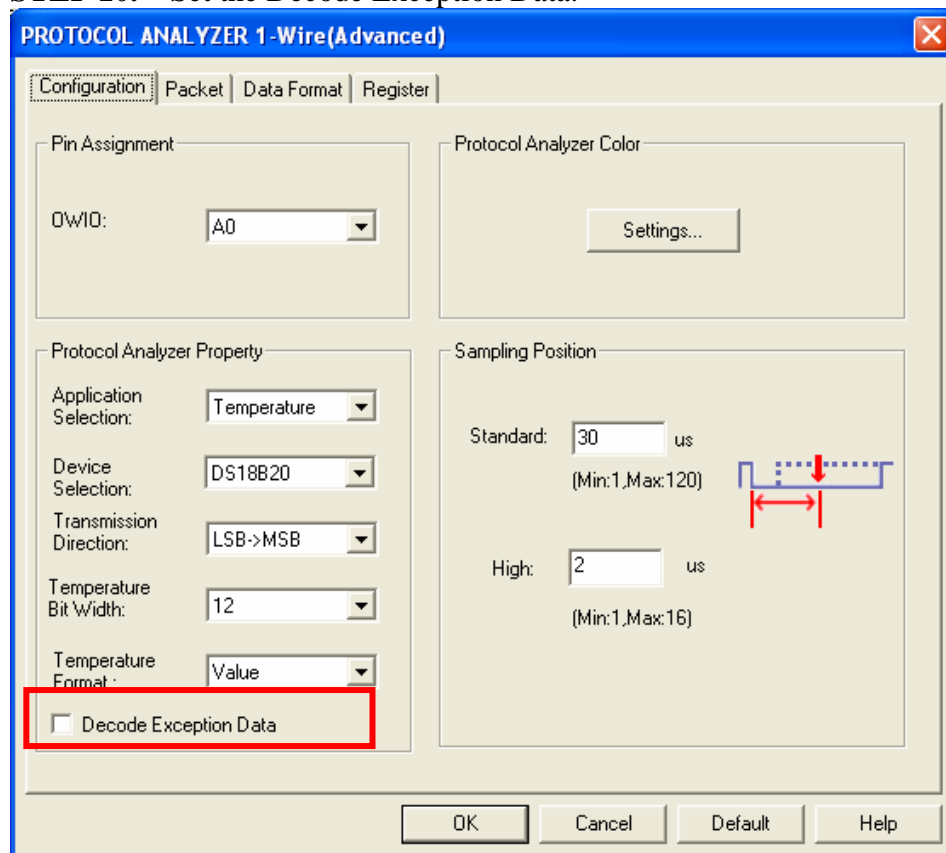
High: 2 us (Min:1,Max:16)

OK Cancel Default Help

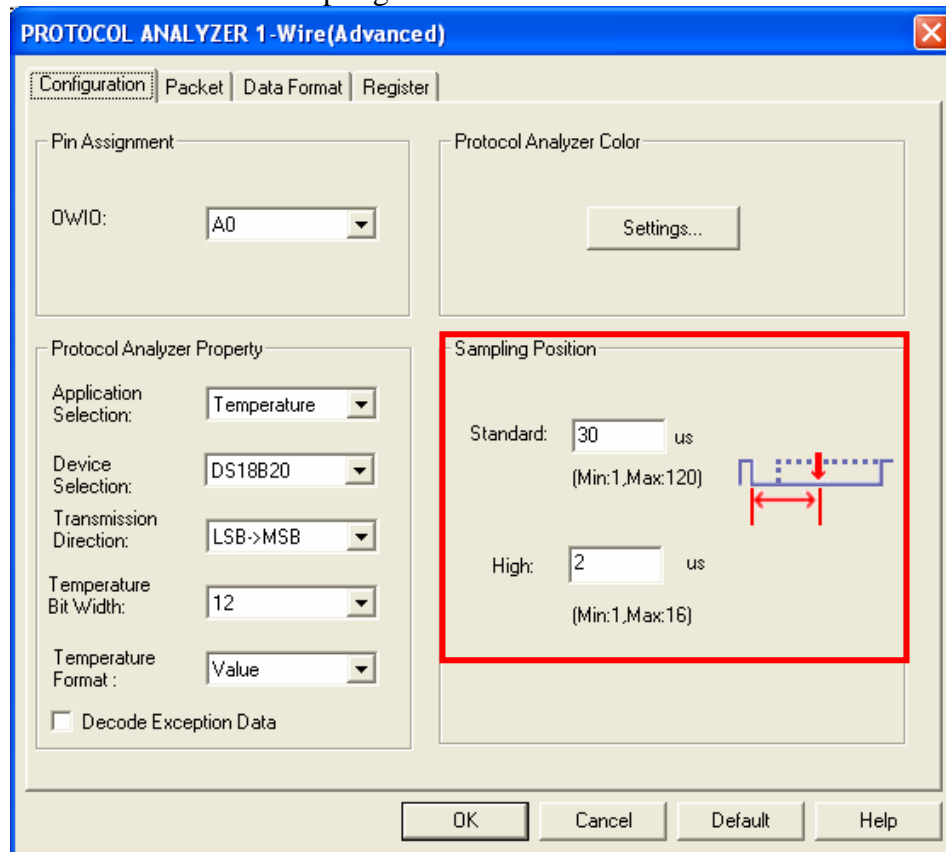
STEP 9. Set the temperature format.



STEP 10. Set the Decode Exception Data.



STEP 11. Set the Sampling Position.

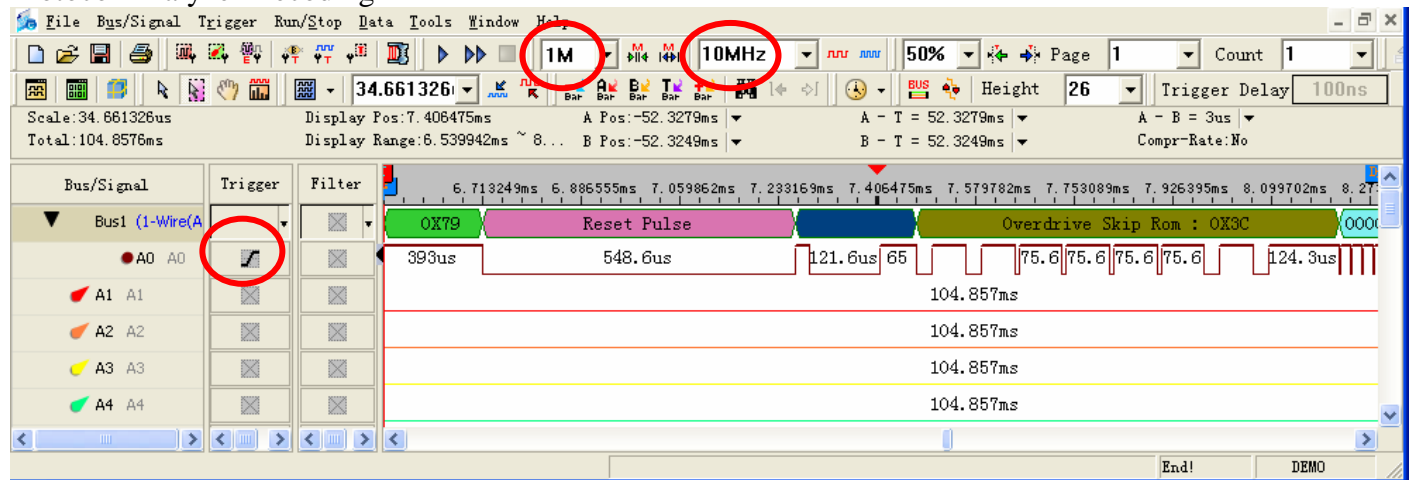


STEP 12. Click “Settings” to open the Protocol Analyzer Color dialog box.



STEP 13. 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 1M and the sampling frequency is 10MHz (the sampling frequency should be more than ten times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

