



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

# SPECIFICATION

**MODEL: B10003-LAP-DS1302-M**

**PART NO :** \_\_\_\_\_

**VERSION :** V1.01

Approver		Check	Design
GM	PM		

Customer Confirm

\* Please fax the file to  
Zeroplus Technology  
after signing .

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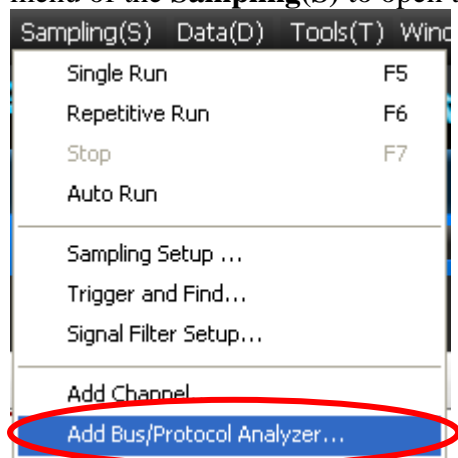


## 1 Software Register

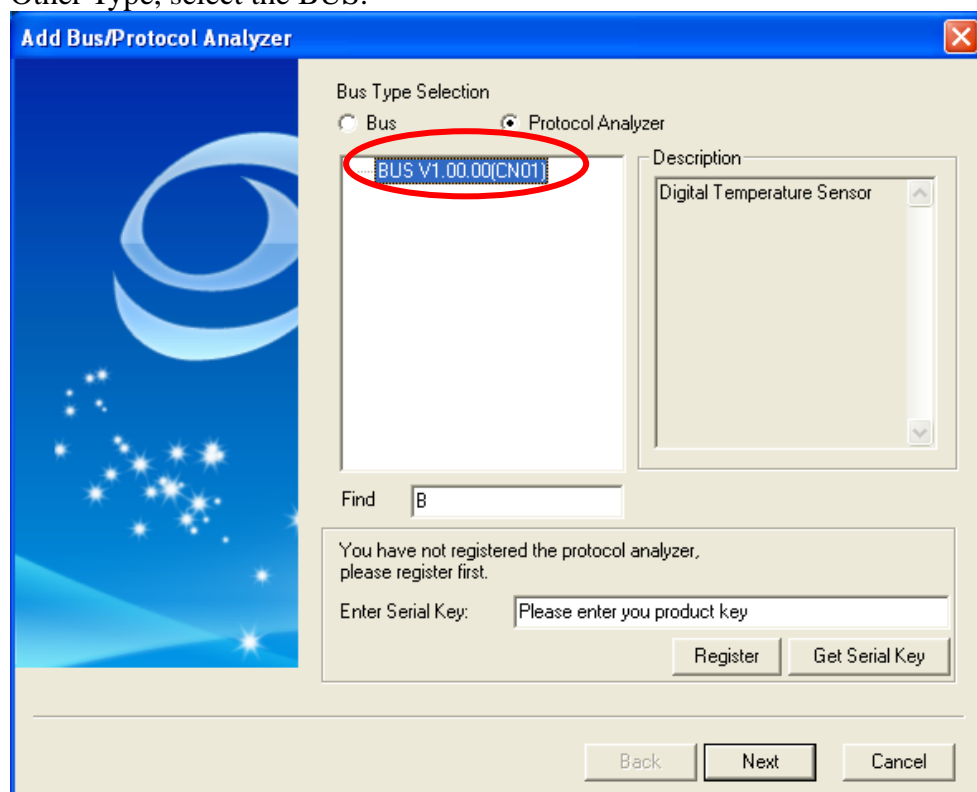
Please register the software as the following steps:

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

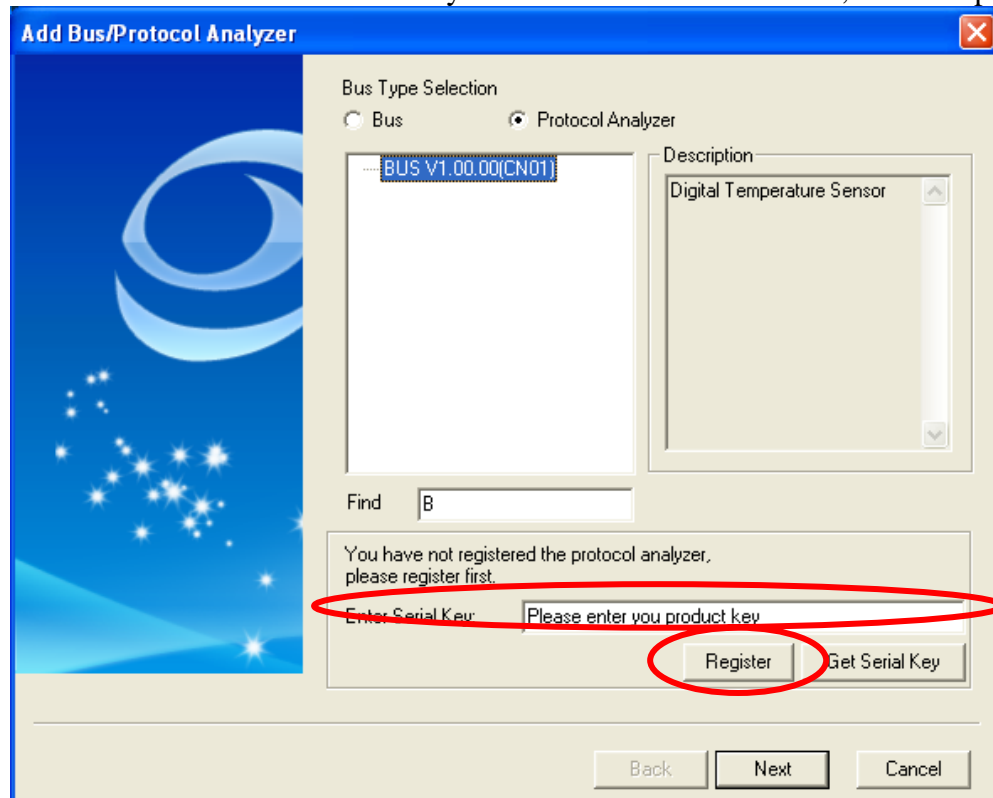


**STEP 2.** Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, select the BUS.

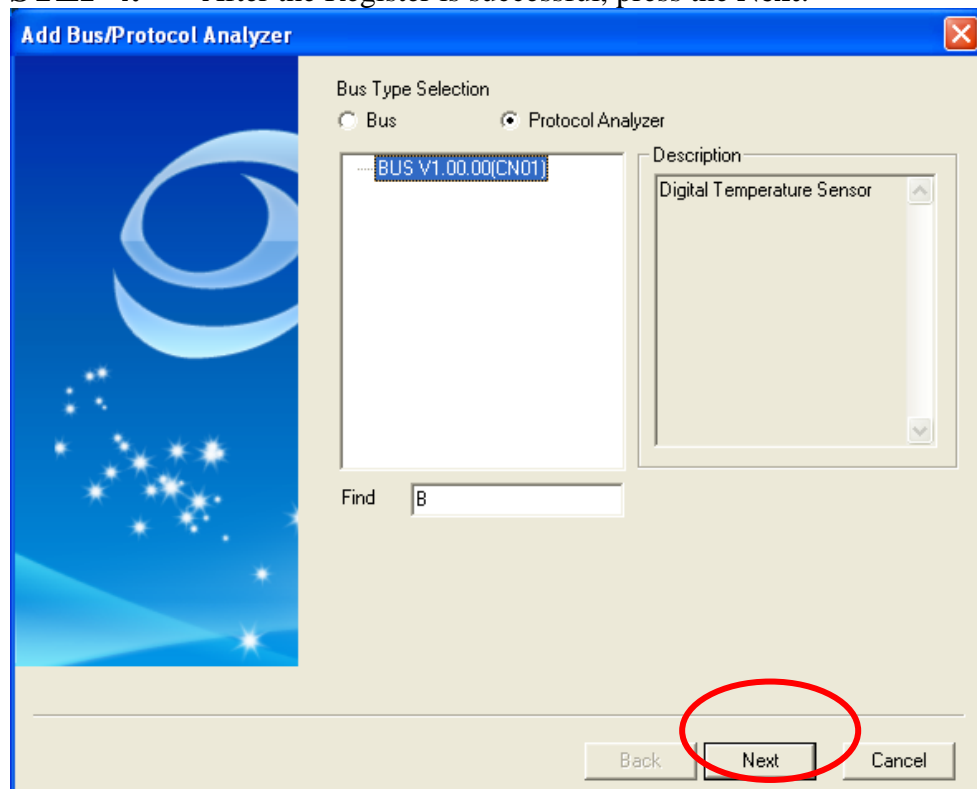




**STEP 3.** Enter the Serial Key of the BUS under this Model, and then press the **Register**.



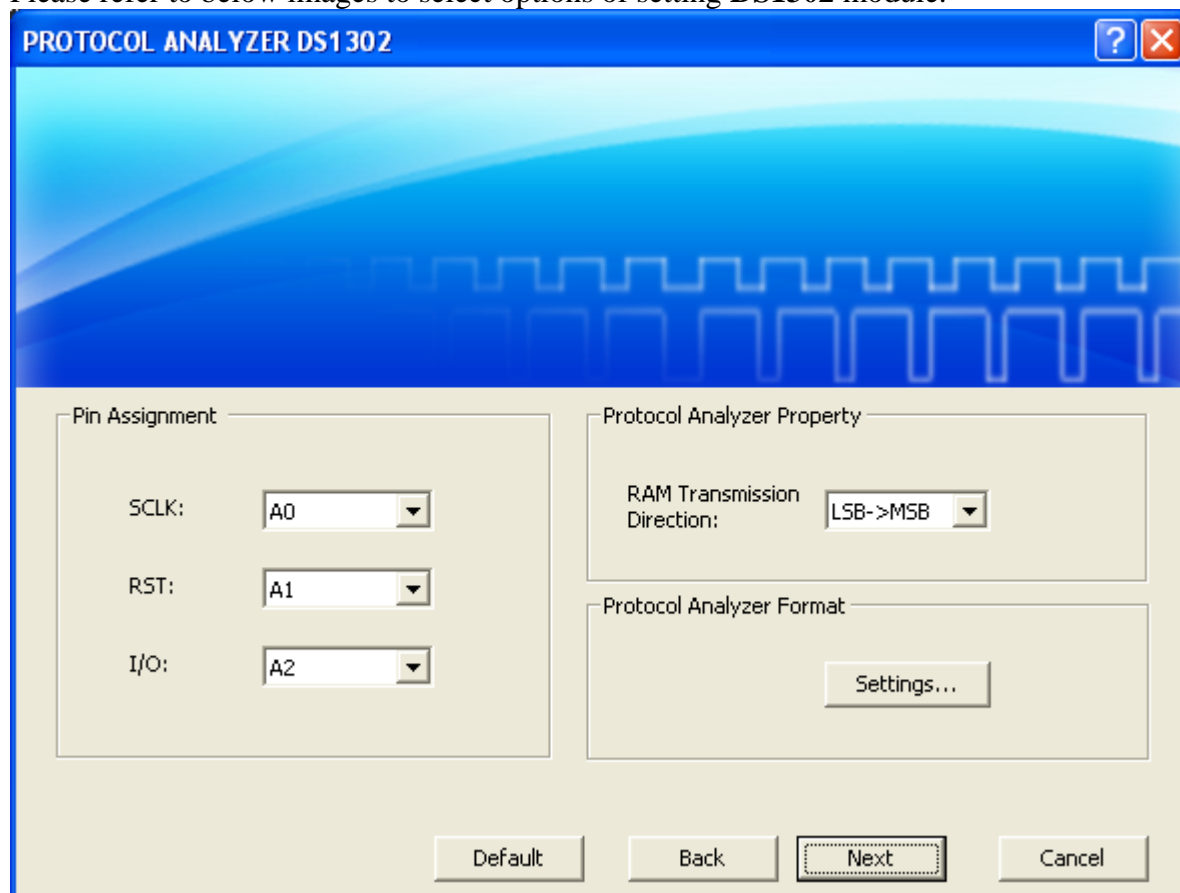
**STEP 4.** After the Register is successful, press the **Next**.





## 2 User Interface

Please refer to below images to select options of setting **DS1302** module.



### Pin Assignment:

Protocol Analyzer DS1302 needs three channels to do the relative decoding.

SCLK: It is the Signal Clock channel.

RST: It is the Reset channel.

I/O: It is the Data Input/Output channel.

### Protocol Analyzer Property:






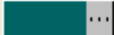


















RAM Transmission Direction: There are two options, LSB->MSB and MSB->LSB, for users to select, the default is LSB->MSB.

### Protocol Analyzer Format:

The protocol analyzer colors can be varied by users. The Items (Address, Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Item (Address, 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 these items (Address, Data) is the Default.



**Protocol Analyzer Format** ✖

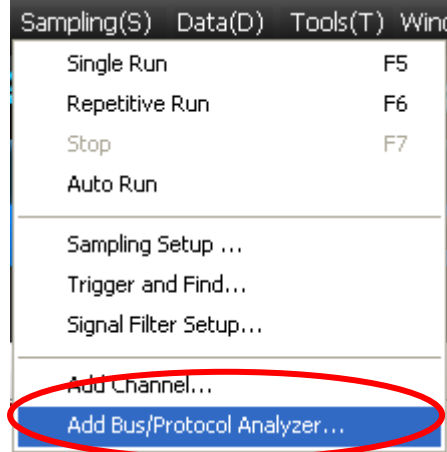
Item	Color	Data Format	Item	Color	Data Format
Read		Default ▾	12		Default ▾
Write		Default ▾	24		Default ▾
Address		Default ▾	Second		Default ▾
CK		Default ▾	Minute		Default ▾
RAM		Default ▾	Hour		Default ▾
CH		Default ▾	Day		Default ▾
WP		Default ▾	AM		Default ▾
Write Enable		Default ▾	PM		Default ▾
Write Disable		Default ▾	Date		Default ▾
DS		Default ▾	Month		Default ▾
RS		Default ▾	Year		Default ▾
TCS		Default ▾	Data		Default ▾

OK Cancel Default

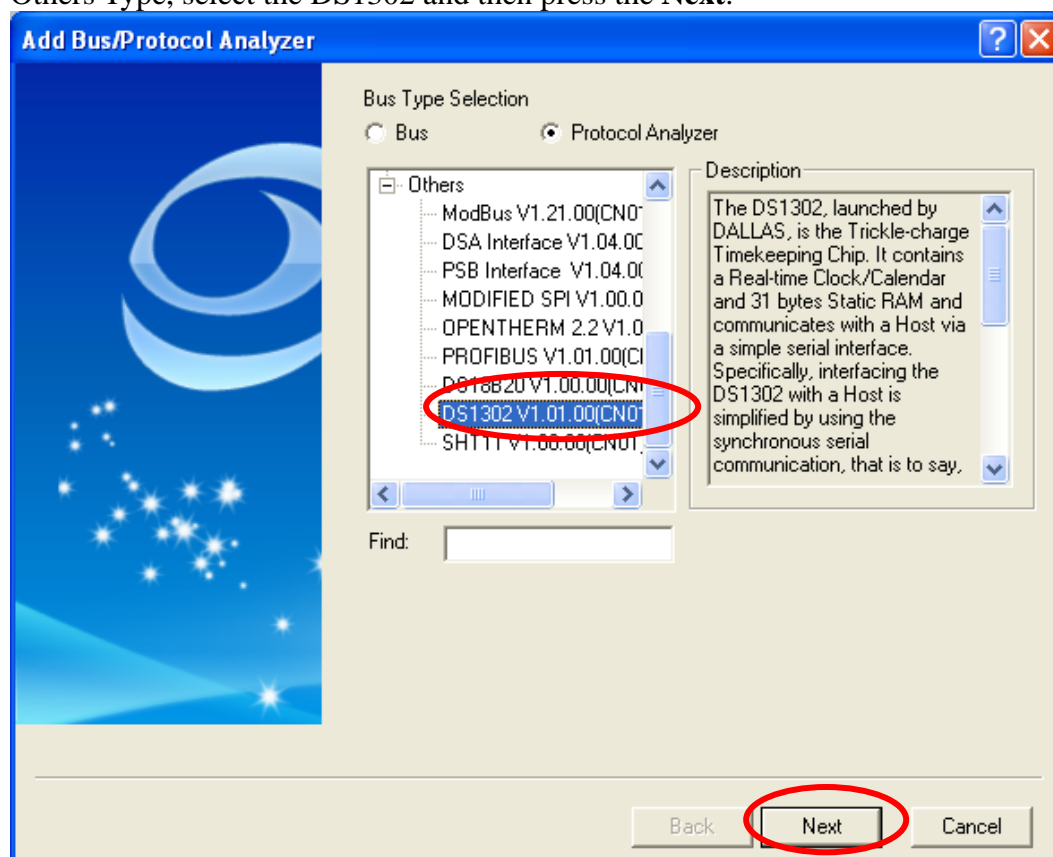


### 3 Operating Instructions

**STEP 1.** 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 the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Others Type, select the DS1302 and then press the **Next**.





**STEP 3.** Set the corresponding channels for SCLK, RST and I/O in the Pin Assignment.

PROTOCOL ANALYZER DS1302

Pin Assignment

SCLK: A0

RST: A1

I/O: A2

Protocol Analyzer Property

RAM Transmission Direction: LSB->MSB

Protocol Analyzer Format

Settings...

Default Back Next Cancel

**STEP 4.** Set the RAM Transmission Direction.

PROTOCOL ANALYZER DS1302

Pin Assignment

SCLK: A0

RST: A1

I/O: A2

Protocol Analyzer Property

RAM Transmission Direction: LSB->MSB

Protocol Analyzer Format

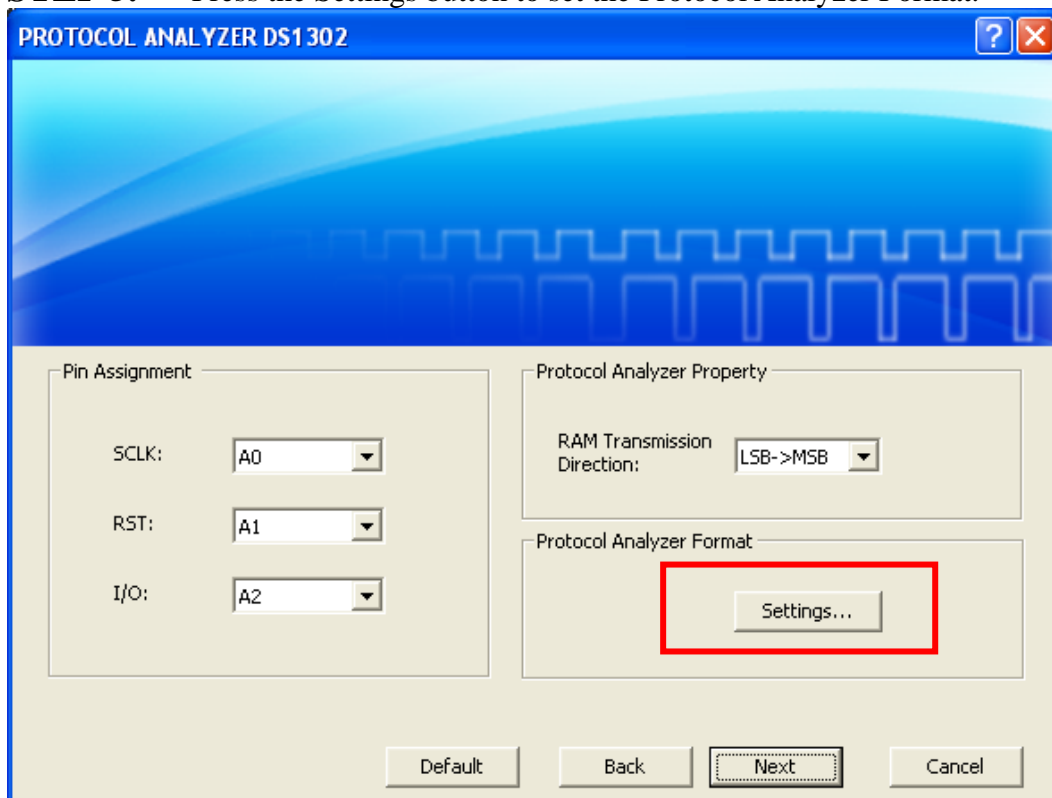
Settings...

Default Back Next Cancel

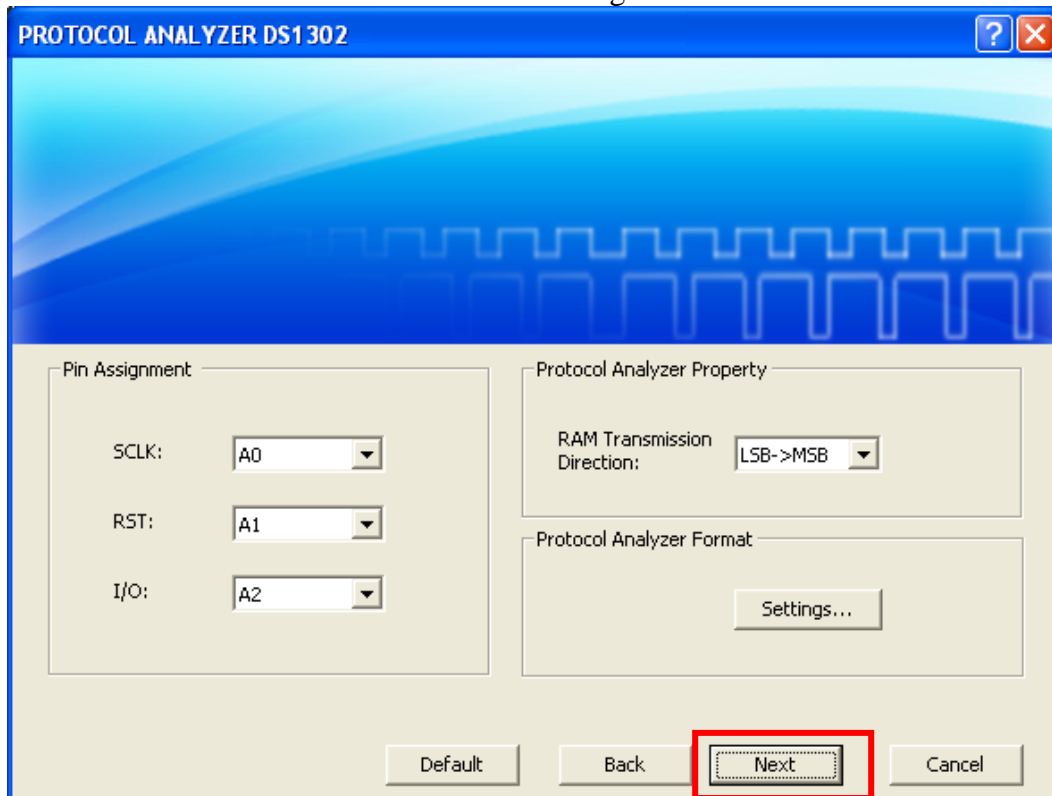




**STEP 5.** Press the Settings button to set the Protocol Analyzer Format.



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

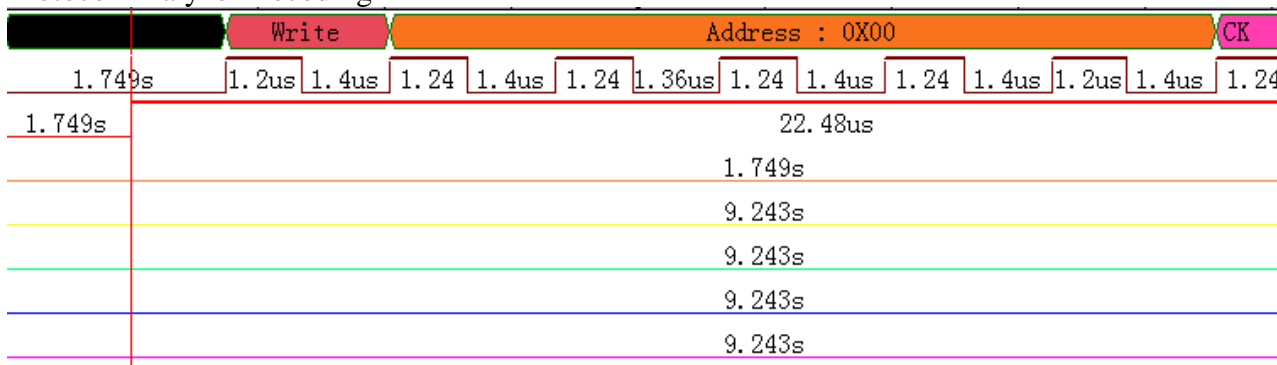




**STEP 7.** Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.

**STEP 8.** Following pictures show the completion of the protocol analyzer decoding and packet list, and the Compression Mode is activated. The memory depth is 128K; the sampling frequency is 25MHz (the sampling frequency should be more than eight times higher than the signal to be tested).

#### Protocol Analyzer Decoding





## Packet List

Navigator Packet List Statistics Memory Analyzer									
CX RAM RD WR									
Packet #	Name	TimeStamp	Write	Address	CK	Write Disable			
1	Bus1(DS1302)	0.00152ms	Write	00	CK	Write Disable			
Packet #	Name	TimeStamp	Write	Address	CK	Write Enable	Reserve	WP	
2	Bus1(DS1302)	0.0252ms	Write	07	CK	Write Enable	Reserve	0	
Packet #	Name	TimeStamp	Write	Address	CK	Write Enable	CS	DS	TCS
3	Bus1(DS1302)	0.07016ms	Write	08	CK	Write Enable	3	3	F
Packet #	Name	TimeStamp	Write	Address	CK	Write Enable	Hour	Reserve	
4	Bus1(DS1302)	0.11532ms	Write	02	CK	Write Enable	0	Reserve	24
Packet #	Name	TimeStamp	Write	Address	CK	Write Enable	Second	CH	
5	Bus1(DS1302)	0.16028ms	Write	00	CK	Write Enable	0	0	