



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

SPECIFICATION

MODEL: B11007-LAP-SWP-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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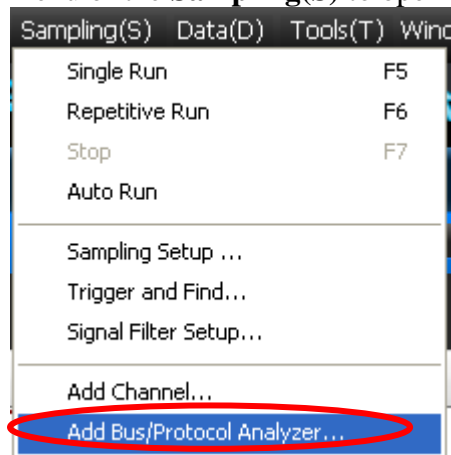
1 Software Register

Please register the software as the following steps:

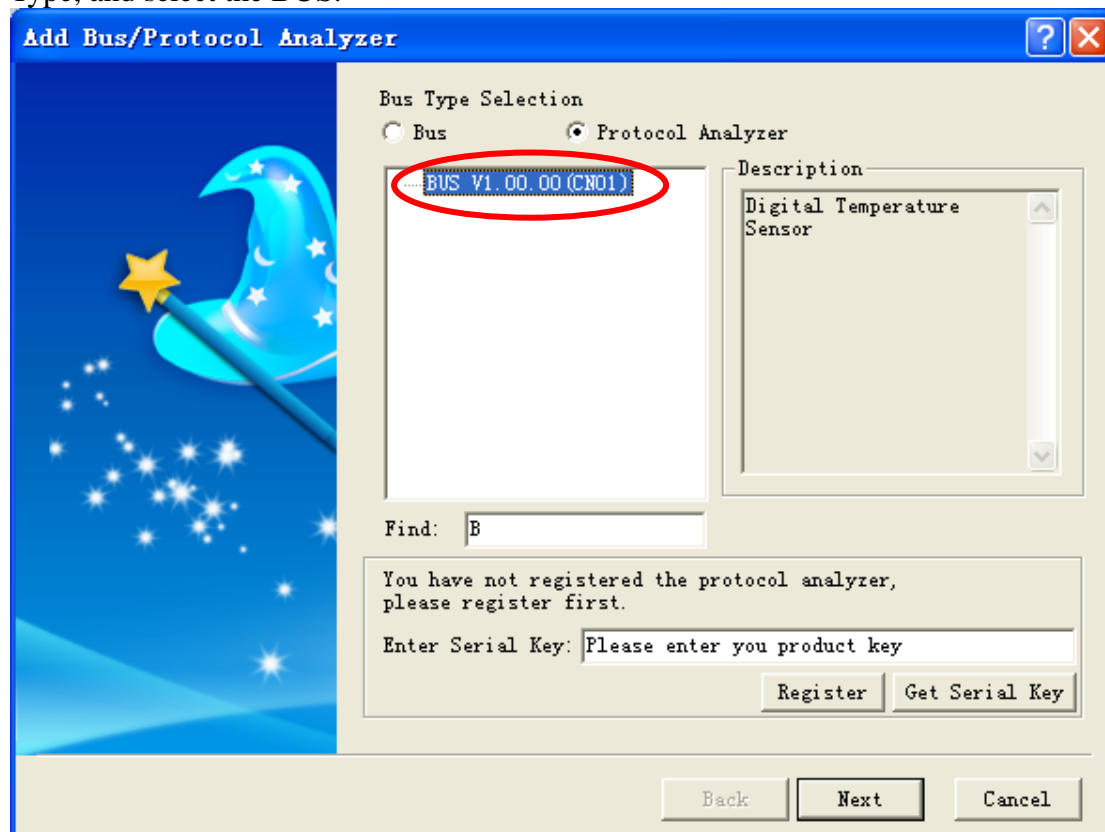
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

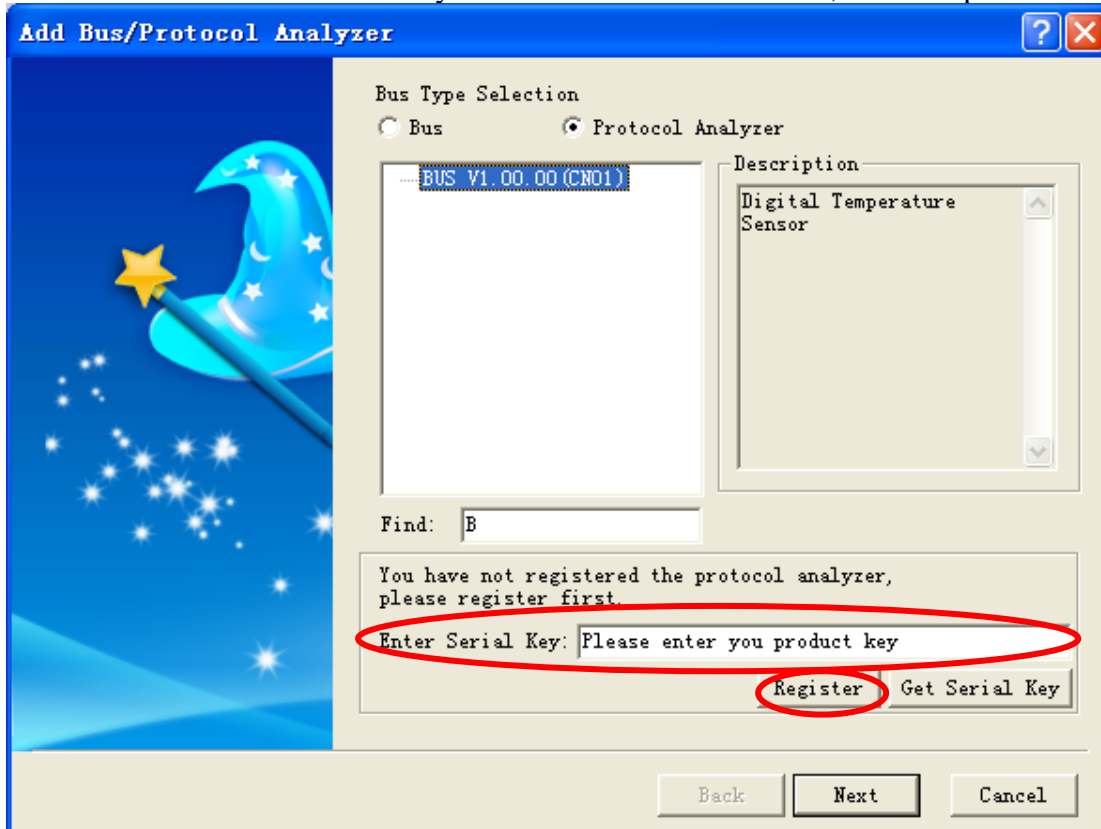
STEP 1. Open the Logic Analyzer and select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



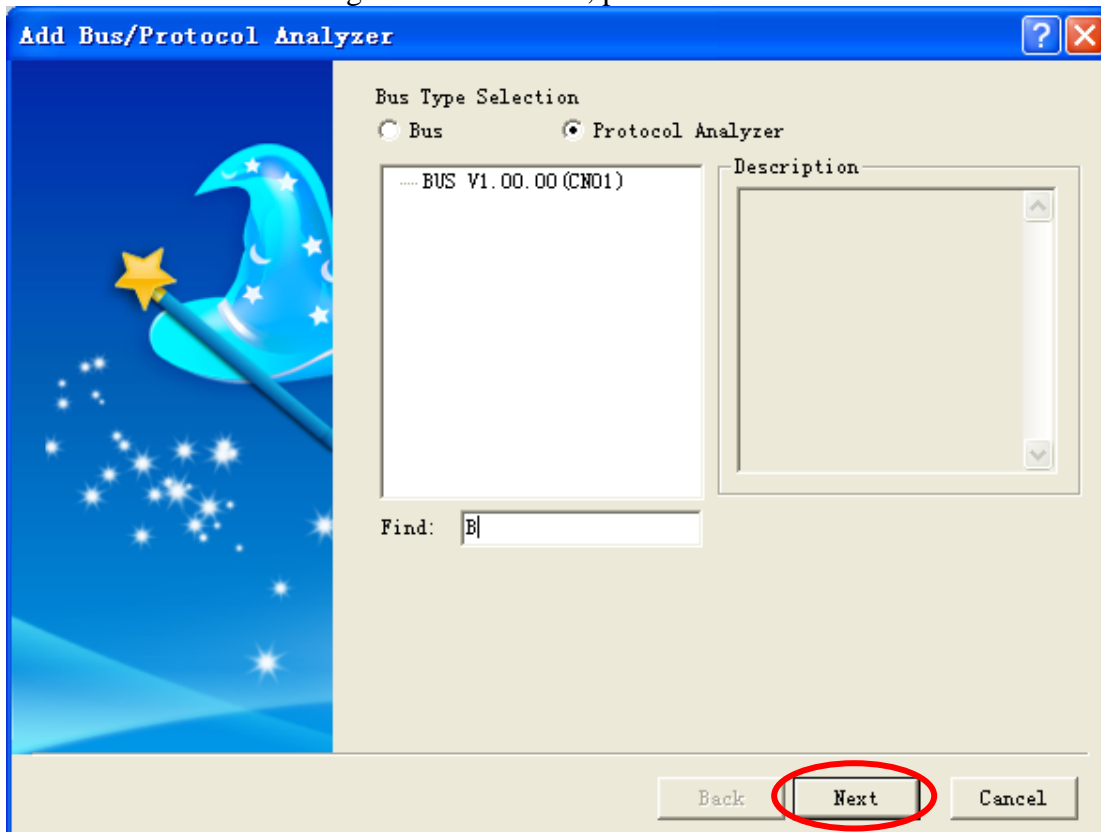
STEP 2. Select Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, and select the BUS.



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

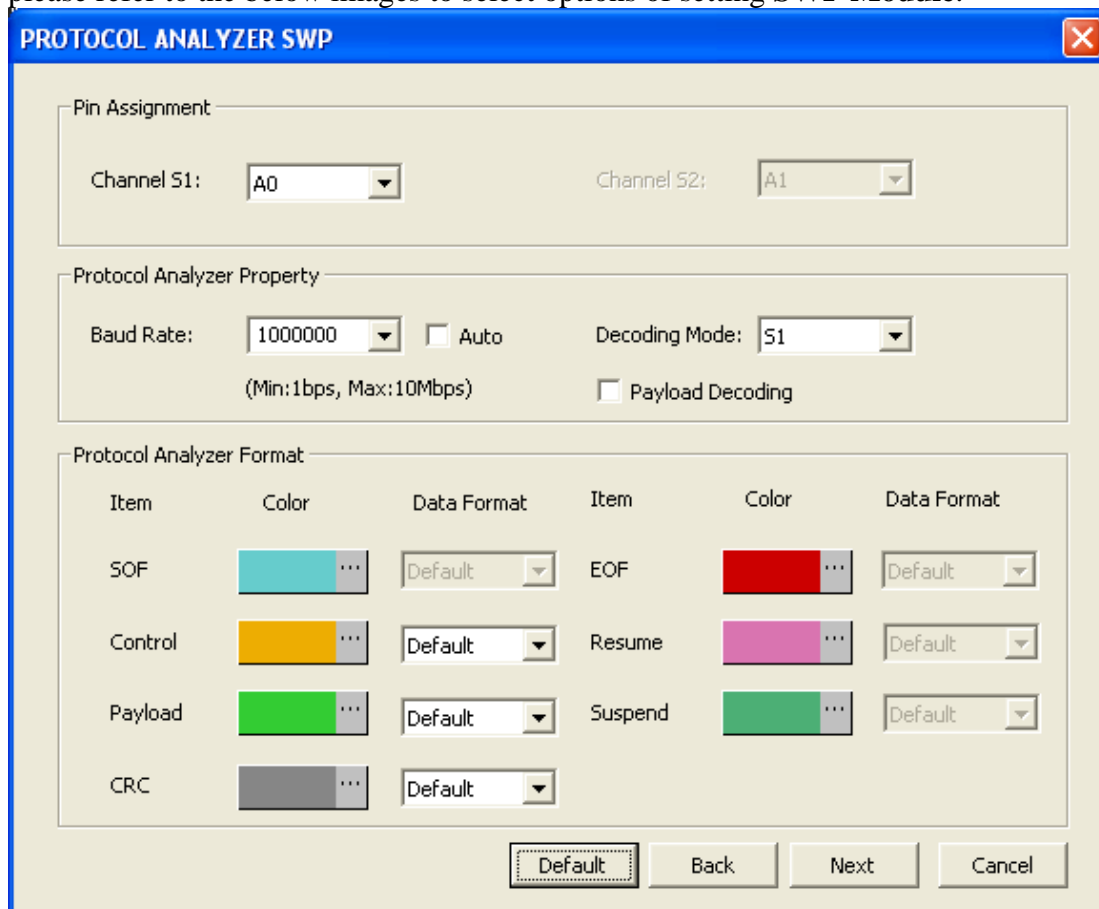


STEP 4. After the Register is successful, press the **Next**.



2 User Interface

please refer to the below images to select options of setting **SWP Module**.



PROTOCOL ANALYZER SWP

Pin Assignment

Channel S1: A0 Channel S2: A1

Protocol Analyzer Property

Baud Rate: 1000000 (Min:1bps, Max:10Mbps) ☐ Auto Decoding Mode: S1 ☐ Payload Decoding

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SOF		Default	EOF		Default
Control		Default	Resume		Default
Payload		Default	Suspend		Default
CRC		Default			

Default Back Next Cancel

Pin Assignment:

Signal channel in S1 decoding mode, double channels in S2 decoding mode.

Protocol Analyzer Property:

Baud Rate: Users can input the value from 1 bps to 10M bps, they also can select from the pull-down menu, which has 10000, 20000, 40000, 50000, 80000, 100000, 125000, 200000, 250000, 400000, 500000, 666000, 800000, 1000000bps.

Auto: The operating steps are below.

1. Delete the first part and the last part before calculating.
2. If only one part of level left, the baud rate is 1.
3. Or, it will begin from the front and take 25 intervals(or all intervals if less than 25) between Rising Edge and Falling Edge. Then delete 1/5 of the longer part, the remaining parts are marked by N. The whole time length of N parts of intervals is marked by SUM(switching time: S).
4. Average Value=SUM/N. The baud rate is N/SUM.

Decoding Mode: It includes S1 and S2. S2 decoding needs Channel S1 and Channel S2.

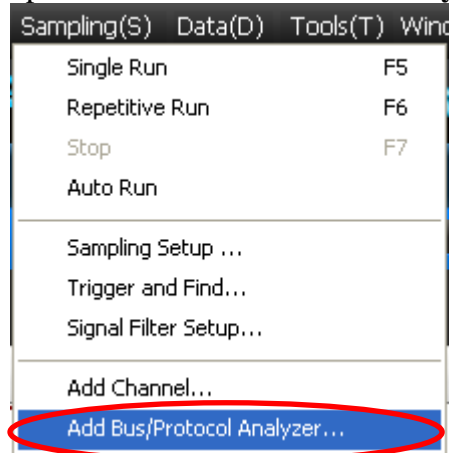
Payload Decoding: It controls the two-level decoding, and Payload can be decoded after activating the option.

Protocol Analyzer Format:

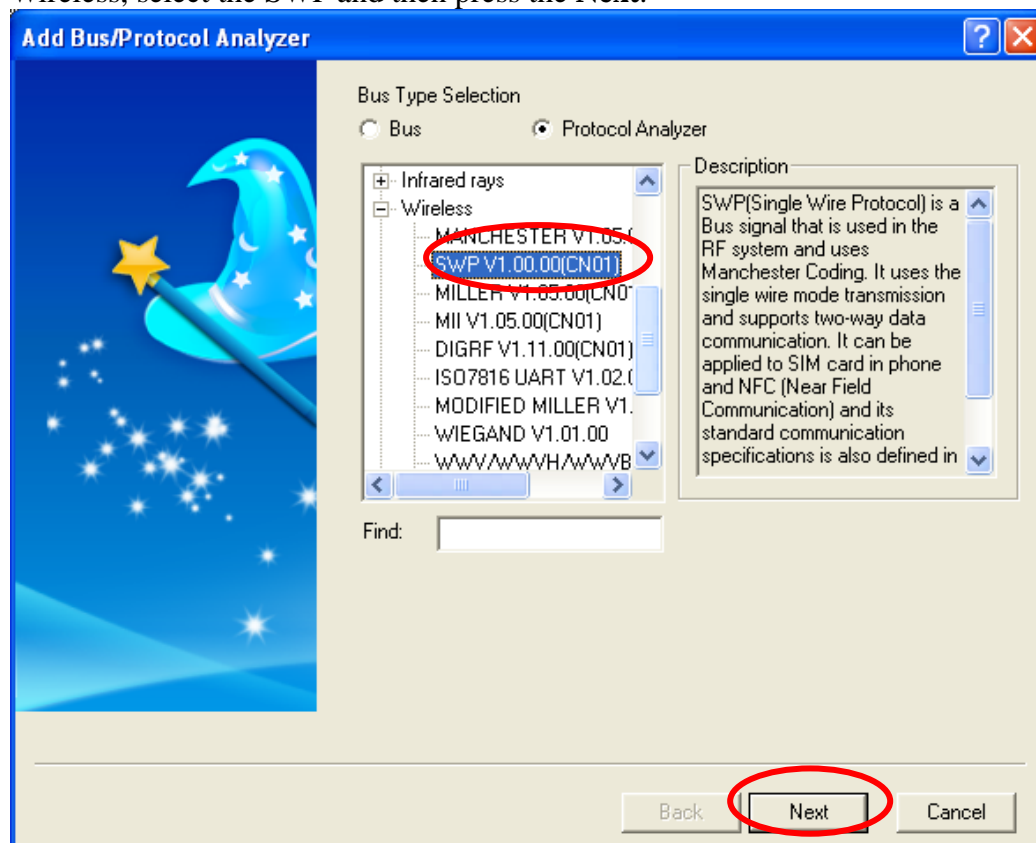
The Color of each Item can be varied as the users' requirements. The Items (Ctrl, Payload, CRC) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Items in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default Data Format is controlled by the main program and the Data Format of these items is the 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 Wireless, select the SWP and then press the **Next**.





STEP 3. Set the Pin Assignment.

PROTOCOL ANALYZER SWP

Pin Assignment

Channel S1: A0 Channel S2: A1

Protocol Analyzer Property

Baud Rate: 1000000 ☐ Auto Decoding Mode: S1
(Min:1bps, Max:10Mbps) ☐ Payload Decoding

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SOF		Default	EOF		Default
Control		Default	Resume		Default
Payload		Default	Suspend		Default
CRC		Default			

Default Back Next Cancel

STEP 4. Set the Protocol Analyzer Property.

PROTOCOL ANALYZER SWP

Pin Assignment

Channel S1: A0 Channel S2: A1

Protocol Analyzer Property

Baud Rate: 1000000 ☐ Auto Decoding Mode: S1
(Min:1bps, Max:10Mbps) ☐ Payload Decoding

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SOF		Default	EOF		Default
Control		Default	Resume		Default
Payload		Default	Suspend		Default
CRC		Default			

Default Back Next Cancel



STEP 5. Set the Protocol Analyzer Format.

PROTOCOL ANALYZER SWP

Pin Assignment

Channel S1: A0 Channel S2: A1

Protocol Analyzer Property

Baud Rate: 1000000 Auto Decoding Mode: S1
(Min:1bps, Max:10Mbps) Payload Decoding

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SOF		Default	EOF		Default
Control		Default	Resume		Default
Payload		Default	Suspend		Default
CRC		Default			

Default Back Next Cancel

STEP 6. Press the Next to finish all settings.

PROTOCOL ANALYZER SWP

Pin Assignment

Channel S1: A0 Channel S2: A1

Protocol Analyzer Property

Baud Rate: 1000000 Auto Decoding Mode: S1
(Min:1bps, Max:10Mbps) Payload Decoding

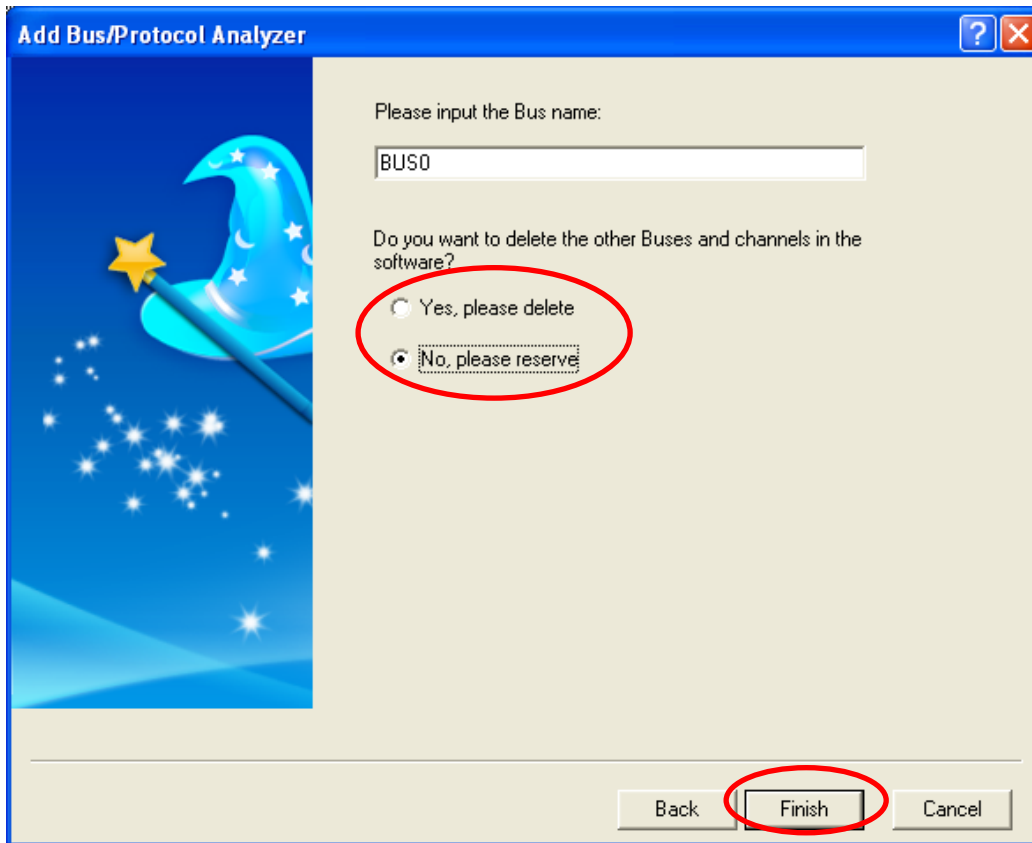
Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SOF		Default	EOF		Default
Control		Default	Resume		Default
Payload		Default	Suspend		Default
CRC		Default			

Default Back Next Cancel

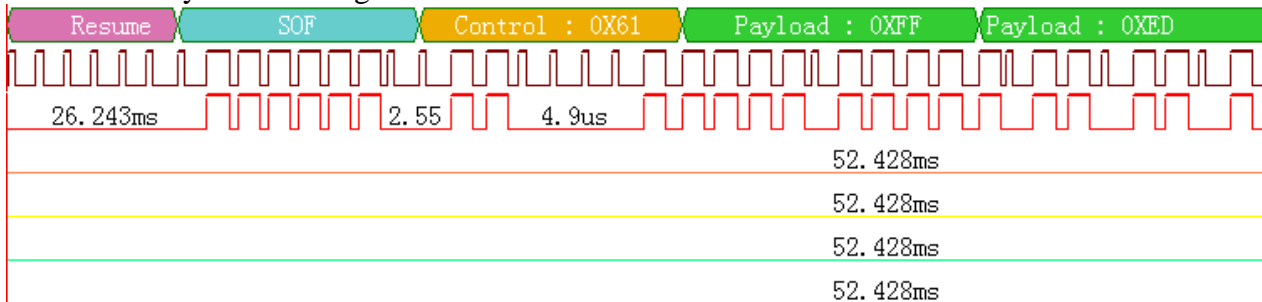


STEP 7. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 8. Following pictures show the completion of the protocol analyzer decoding and the packet list. The Trigger condition is set as Either Edge; the Memory depth is 1M; the sampling frequency is 20MHz. (the sampling frequency should be more than 10 times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

Navigator

Packet List

Statistics

Memory Analyzer

PL

Packet #	Name	TimeStamp	Resume	DESCRIBE			
1	Bus1(SWP)	0.01965ms	Resume	Resume			
Packet #	Name	TimeStamp	SOF	Control	Payload	CRC	EOF
2	Bus1(SWP)	0.0278ms	SOF	61	2BYTES	B044	EOF
3	Bus1(SWP)	0.11385ms	SOF	19	2BYTES	DABD	EOF
Packet #	Name	TimeStamp	SOF	Control	Payload	CRC	EOF
4	Bus1(SWP)	0.1985ms	SOF	F9	2BYTES	38E3	EOF
Packet #	Name	TimeStamp	Suspend	DESCRIBE			
5	Bus1(SWP)	0.26425ms	Suspend	Suspend			