



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

SPECIFICATION

MODEL: B08006-LAP-PSB Interface-M

PART NO : _____

VERSION : V1.04

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
Zeroplus Technology after
signing.

2F, NO.123, Jian Ba Rd,
Chung Ho City, Taipei Hsian, R.O.C.

Tel:+886-2-66202225
Fax:+886-2-22234362



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1 Software Register

Please register the software as the following steps:

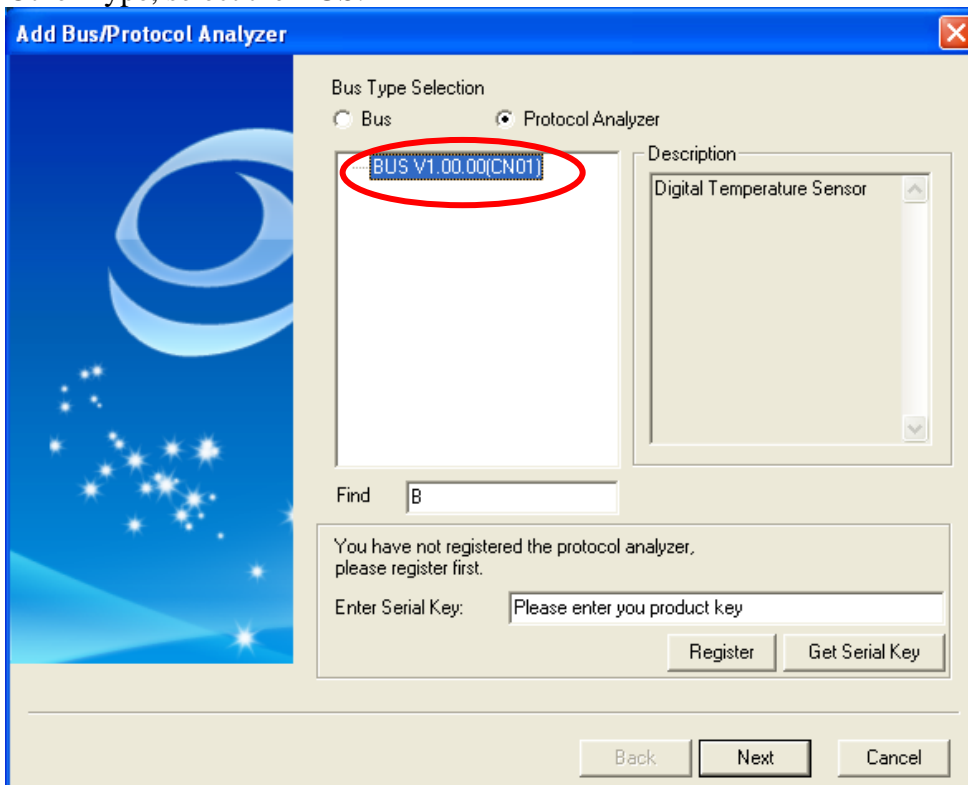
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ 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.

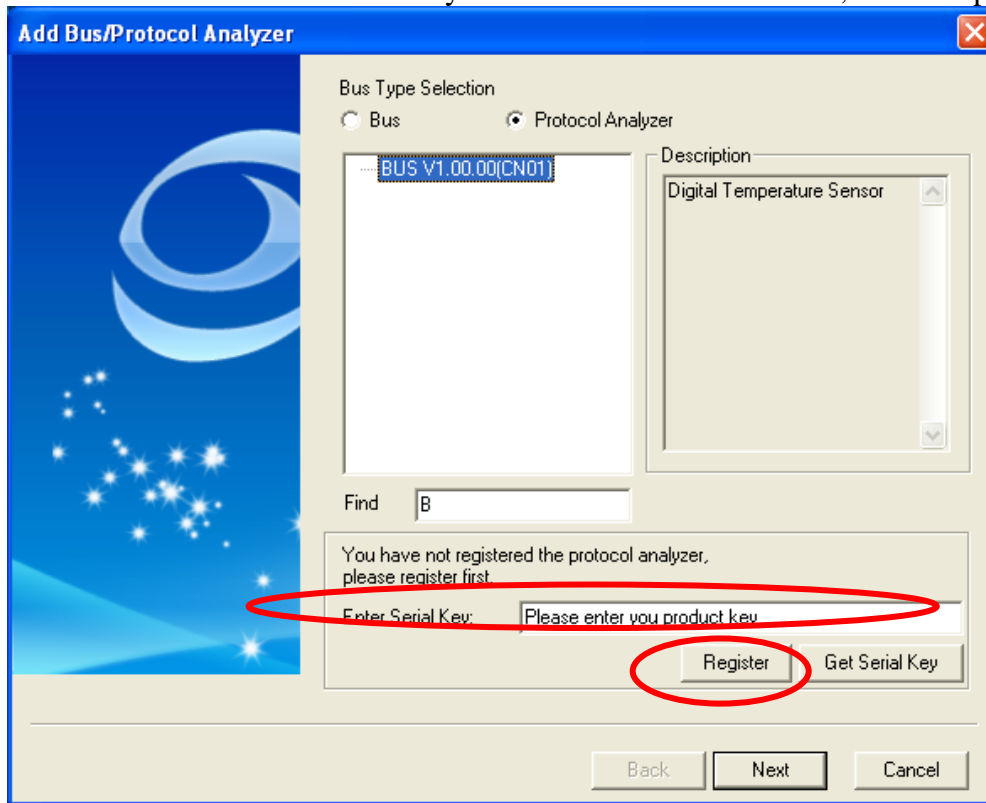
STEP 1. Open the Logic Analyzer and select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



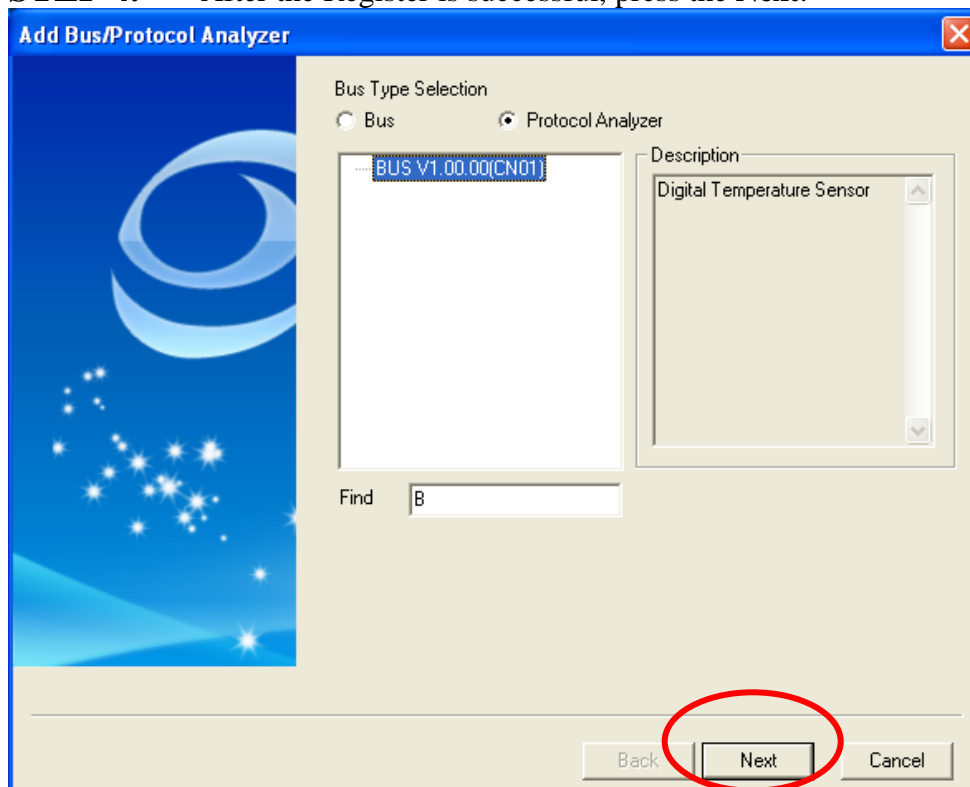
STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, select the BUS.



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 the below images to select options of setting **PSB Interface MODULE**.

PROTOCOL ANALYZER PSB Interface

Pin Assignment

Channel: A0

Protocol Analyzer Property

☒ Decoding Checksum Baud Rate: 4800 (Min:1,Max:10000000) ☐ Auto

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SYNC	[Pink]	Default	Start	[Light Blue]	Default
CMD/Data	[Orange]	Default	To Address	[Blue]	Default
WTR	[Red]	Default	From Address	[Purple]	Default
Data	[Green]	Default	Command	[Pink]	Default
Checksum	[Grey]	Default	Takn	[Blue]	Default

Default Back Next Cancel

Pin Assignment:

Set the needed channel from the dropdown menu.

Protocol Analyzer Property:

Decoding Checksum: Users can select whether the value of Checksum is decoded.

Baud Rate: The baud rate can be selected from the dropdown menu or entered within the range of 1bps~10Mbps as users' requirements. When **Auto** automatically is activated, the baud rate can be found automatically without users setting; and then the value of the baud rate will be displayed on the dialog box.

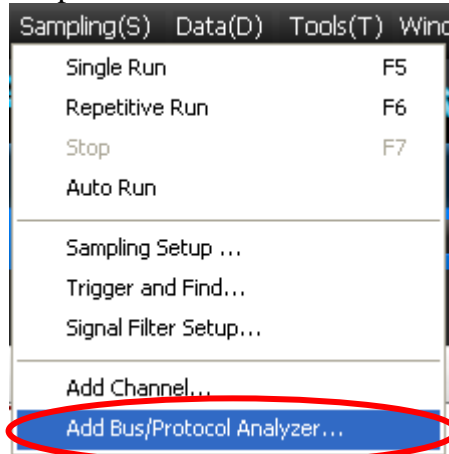
Protocol Analyzer Format:

Users can vary the color of the protocol analyzer as their requirements. The Items (To Address, From Address, Data, Command, Checksum) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Item (To Address, From Address, Data, Command, Checksum) 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 (To Address, From Address, Data, Command, Checksum) is the Default.

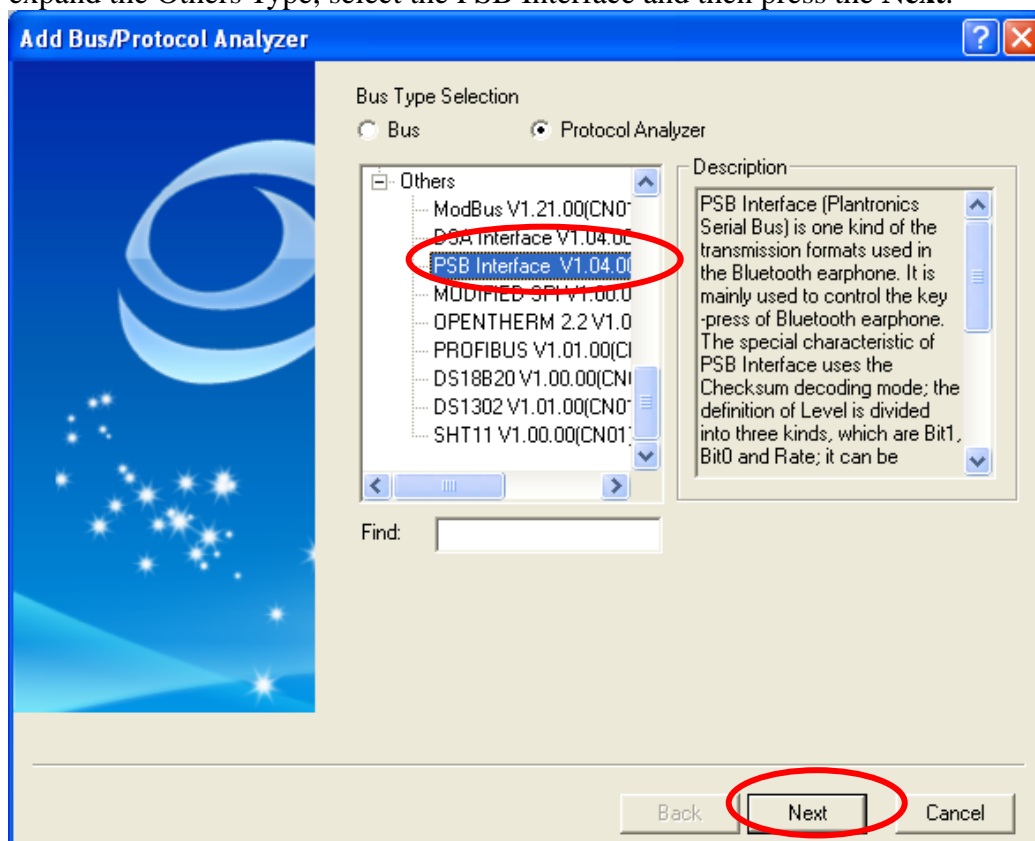


3 Operating Instructions

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 Others Type, select the PSB Interface and then press the **Next**.



STEP 3. Set the needed channel from the dropdown menu in the Pin Assignment.



The screenshot shows the 'PROTOCOL ANALYZER PSB Interface' window. The 'Pin Assignment' section has a 'Channel' dropdown menu with 'A0' selected, which is circled in red. Below it, the 'Protocol Analyzer Property' section has a checked 'Decoding Checksum' checkbox and a 'Baud Rate' dropdown set to '4800'. The 'Protocol Analyzer Format' section contains two columns of items with color swatches and 'Data Format' dropdowns, all set to 'Default'. At the bottom are 'Default', 'Back', 'Next', and 'Cancel' buttons.

STEP 4. Set the needed baud rate within the range of 1bps~10Mbps. The **Auto** option should be selected when users want to find the baud rate automatically.

This screenshot is similar to the previous one, but the 'Baud Rate' dropdown in the 'Protocol Analyzer Property' section is circled in red and set to '4800'. The 'Auto' checkbox is unchecked. All other settings remain the same.

STEP 5. When users need to use Checksum, they should select the Decoding Checksum option; otherwise the option is no need to be selected.



PROTOCOL ANALYZER PSB Interface

Pin Assignment
Channel: A0

Protocol Analyzer Property
☒ Decoding Checksum
Baud Rate: 4800 (Min:1,Max:10000000) ☐ Auto

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
SYNC		Default	Start		Default
CMD/Data		Default	To Address		Default
WTR		Default	From Address		Default
Data		Default	Command		Default
Checksum		Default	Takn		Default

Default Back Next Cancel

STEP 6. Set the Protocol Analyzer Format.

PROTOCOL ANALYZER PSB Interface

Pin Assignment
Channel: A0

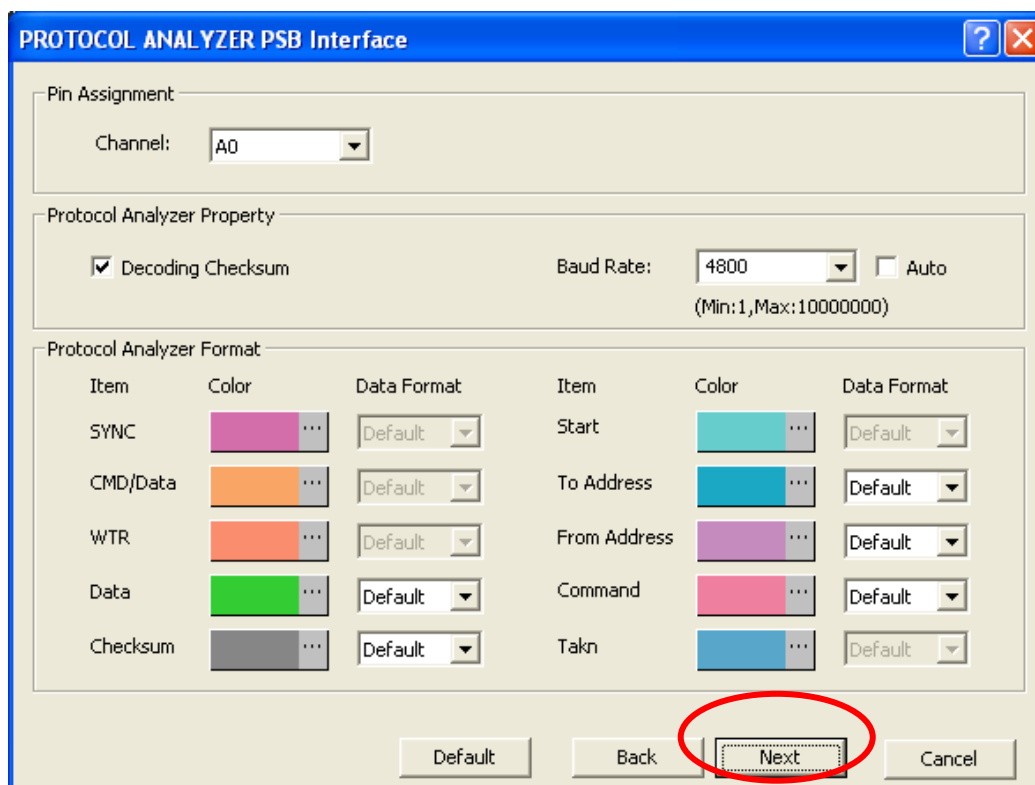
Protocol Analyzer Property
☒ Decoding Checksum
Baud Rate: 4800 (Min:1,Max:10000000) ☐ Auto

Protocol Analyzer Format

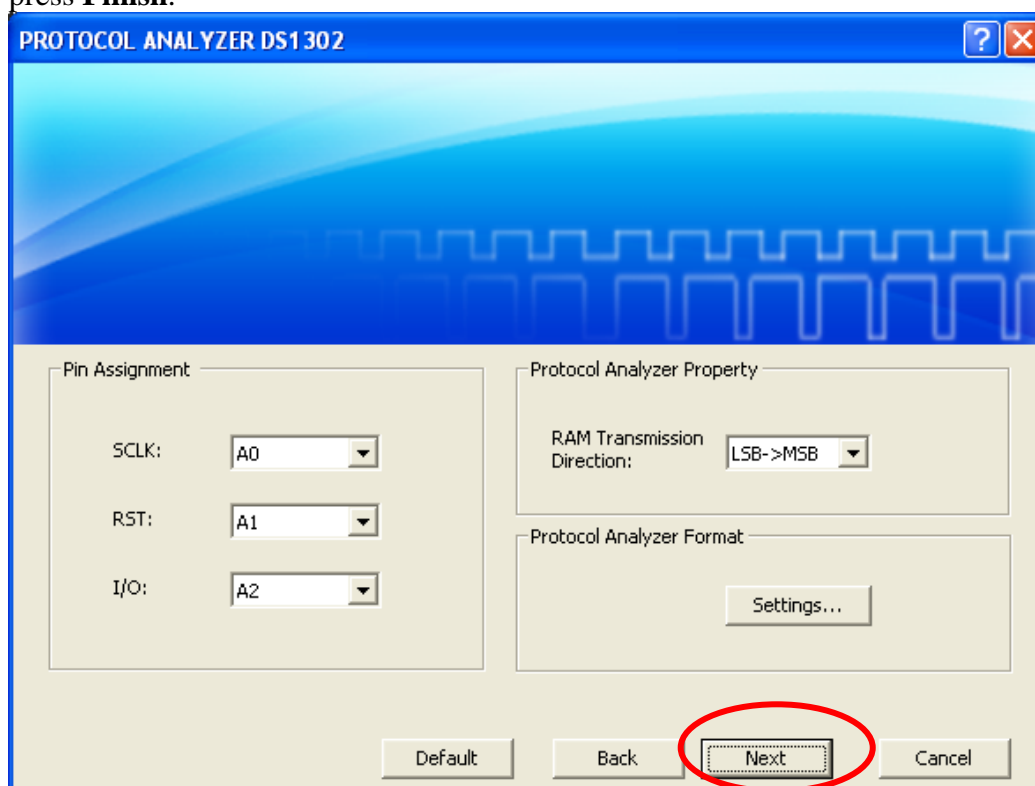
Item	Color	Data Format	Item	Color	Data Format
SYNC		Default	Start		Default
CMD/Data		Default	To Address		Default
WTR		Default	From Address		Default
Data		Default	Command		Default
Checksum		Default	Takn		Default

Default Back Next Cancel

STEP 7. Press the **Next** to finish all settings.



STEP 8. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 9. 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 200KHz (the sampling frequency should be more than eight times higher than the signal to be tested).

Protocol Analyzer Decoding

SYNC				Start		/Command		To Address :	
420us	105us	105us	40	170us	40	170us	40	170us	
16.756s									
16.756s									
16.756s									
16.756s									
16.756s									
16.756s									
16.756s									
16.756s									
16.756s									

Packet List

Navigator Packet List Statistics Memory Analyzer													
Packet #	Name	TimeStamp	SYNC	Start	/Command	To Address	Start	No Response	From Address	Start	Command		
1	Bus1(PSB Interface)	95.365ms	SYNC	Start	/Command	01	Start	No Response	23	Start	45		
			Start	Command	Start	Command	Start	Command	Start	Command	Start	Checksum	Takn
			Start	67	Start	89	Start	AB	Start	CD	Start	EF	Start
			Start	67	Start	89	Start	AB	Start	CD	Start	EF	Start
2	Bus1(PSB Interface)	117.655ms	SYNC	Start	/Data	00	Start	Response	22	Start	44	Start	
			Data	Start	Data	Start	Data	Start	Data	Start	Checksum		
			66	Start	88	Start	AA	Start	CC	Start	EE	Start	47
3	Bus1(PSB Interface)	139.255ms	SYNC	Start	/Data	7E	Start	Response	22	Start	10	Start	
			Start	Command	Start	Command	Start	Command	Start	Command	Start	Checksum	Takn