



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

SPECIFICATION

MODEL: 031-LAP-DSA Interface-M

PART NO: _____

VERSION: V1.04

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

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1 Software Download

Please install the software as the following steps:

Remark: 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. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

STEP 2. Click the **English** in the Instrument Division part on the Homepage.

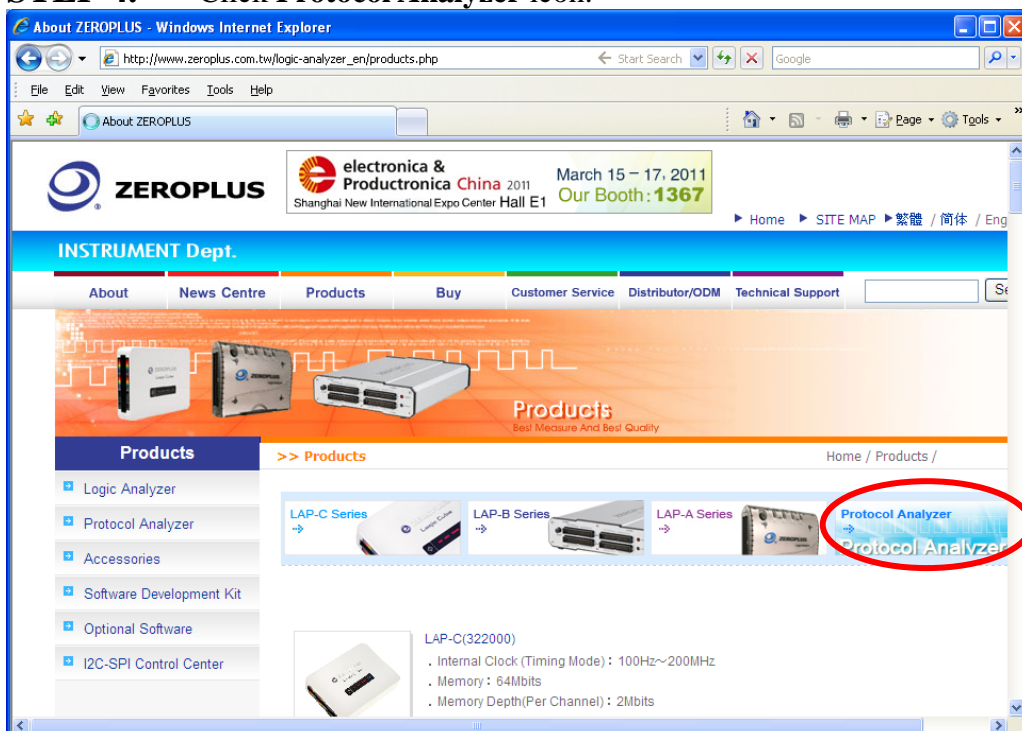




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

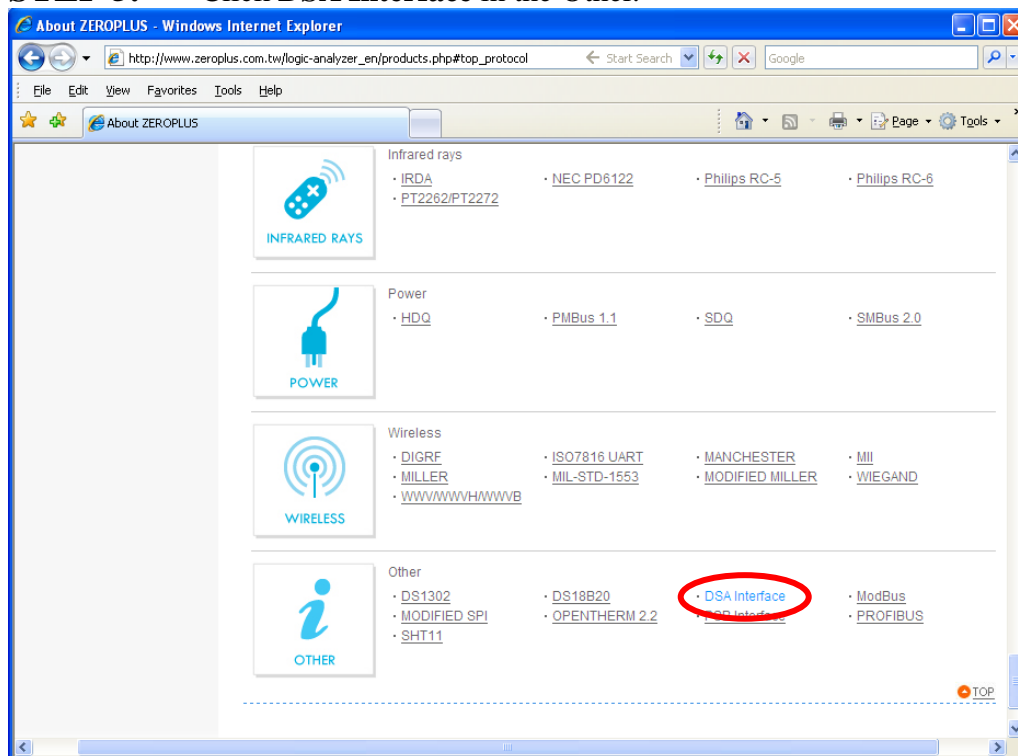


STEP 4. Click **Protocol Analyzer** icon.

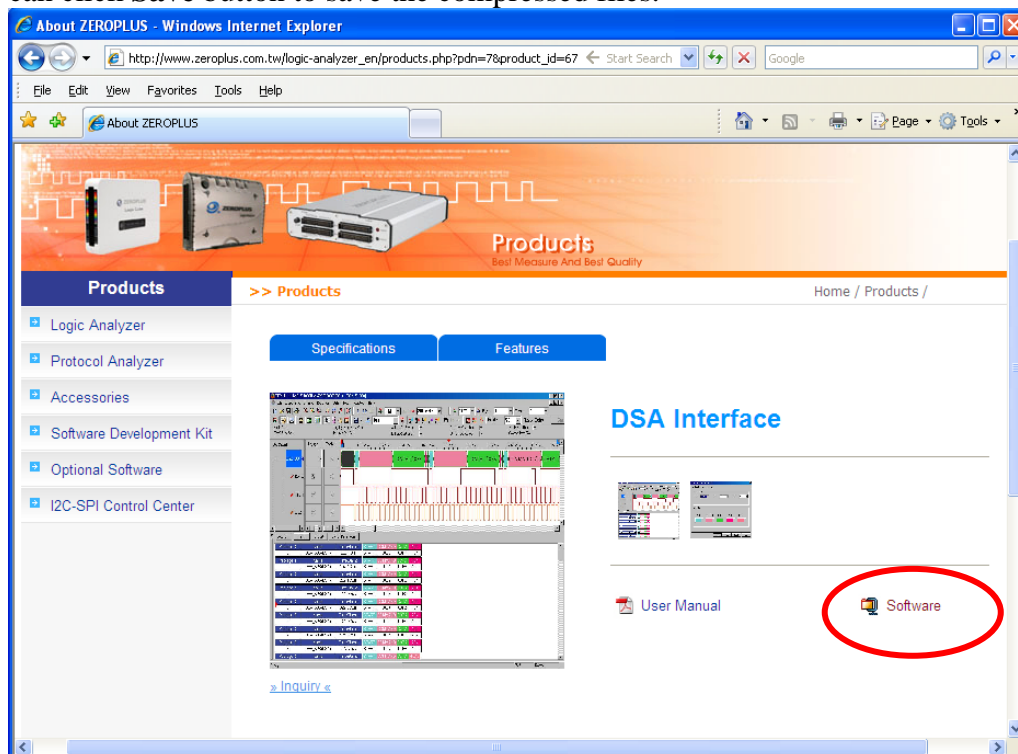




STEP 5. Click DSA Interface in the Other.

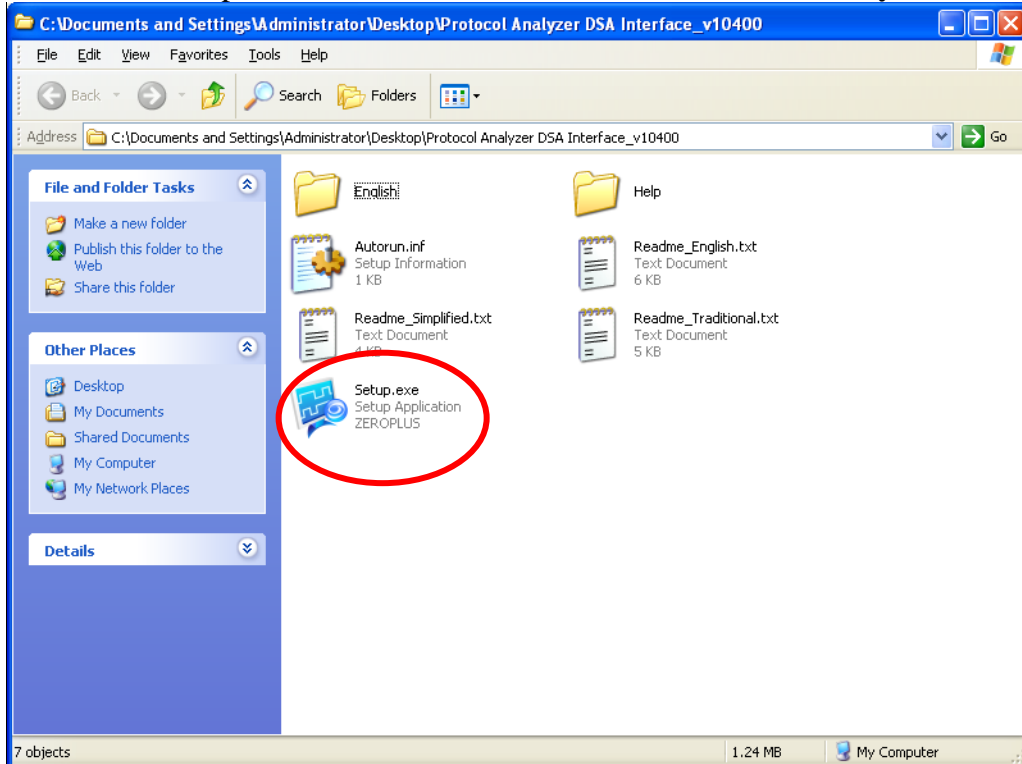


STEP 6. Click Software in the Products page. When the File Download dialog box appears, you can click Save button to save the compressed files.

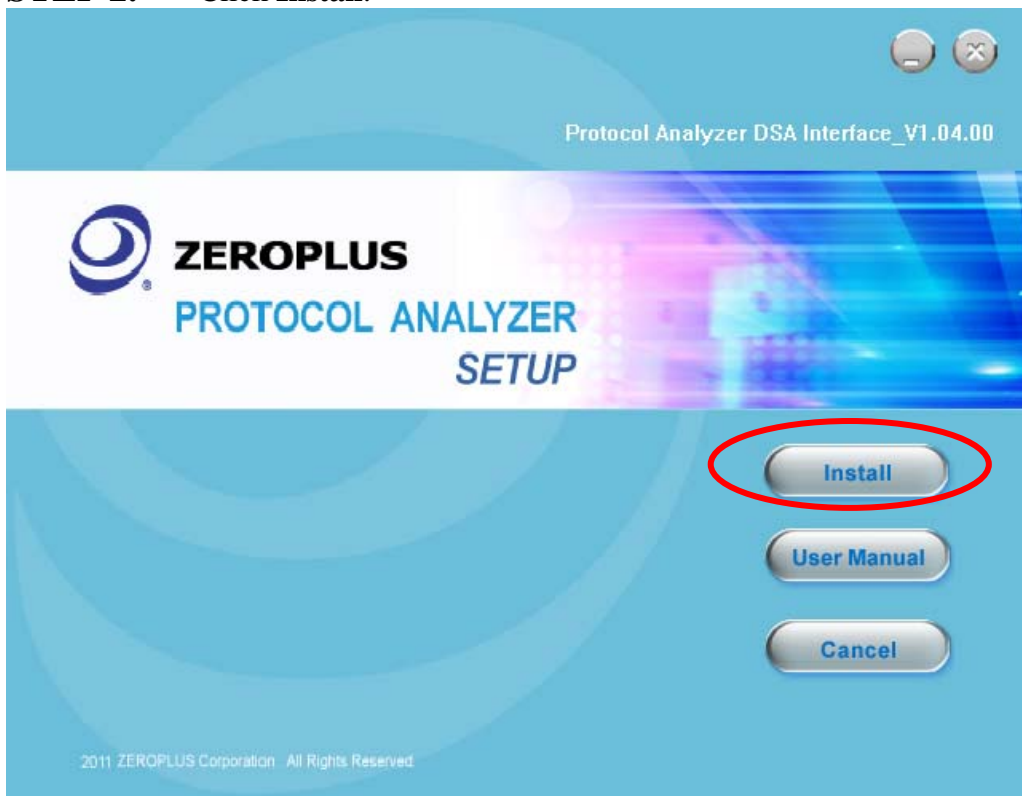


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer DSA Interface**.

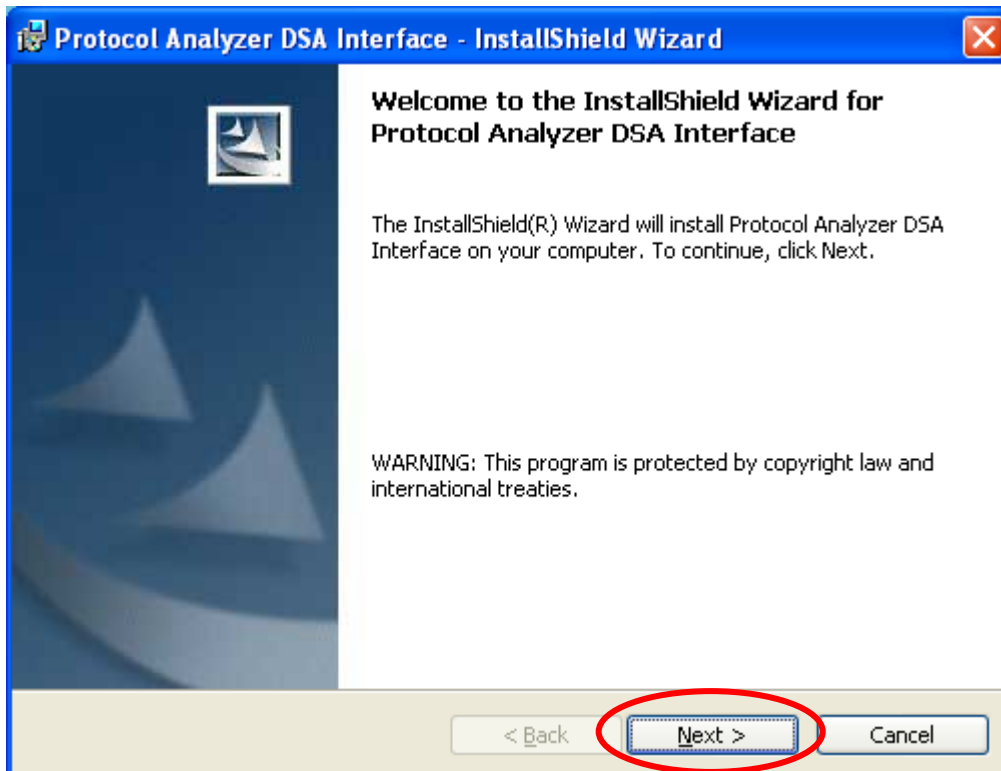


STEP 2. Click **Install**.

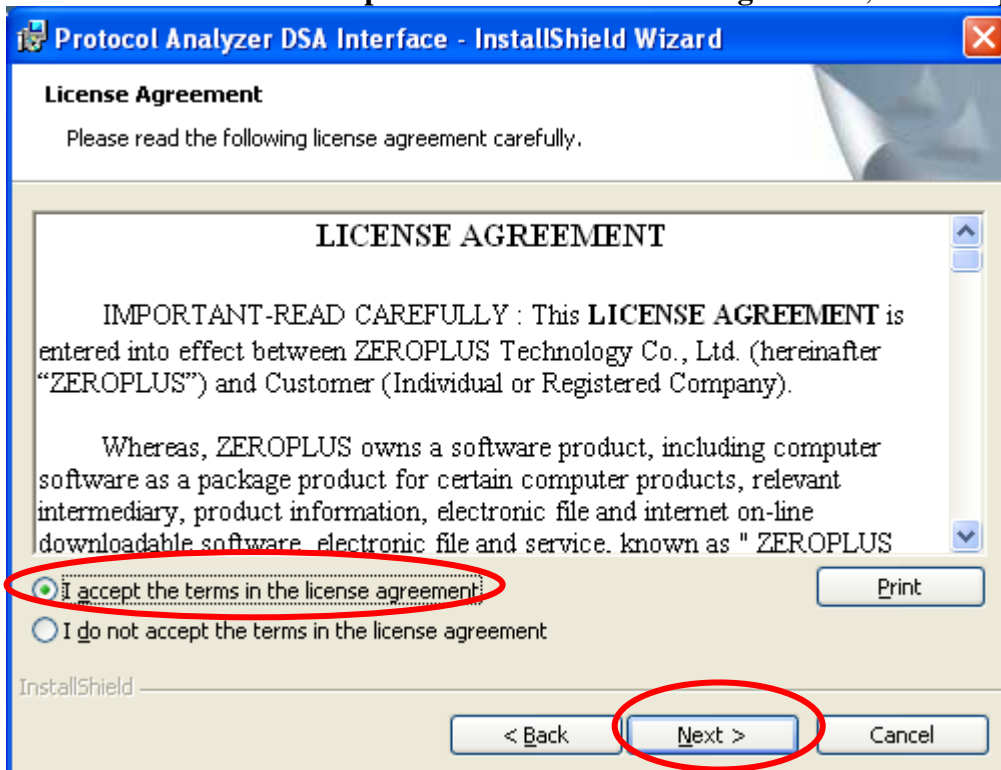




STEP 3. Click Next.



STEP 4. Select **I accept the terms in the license agreement**, and then press Next.





STEP 5. Fill in users' information in the below dialog box and click **Next**.

Protocol Analyzer DSA Interface - InstallShield Wizard

Customer Information

Please enter your information.

User Name:
Microsoft

Organization:
User

Install this application for:

☒ Anyone who uses this computer (all users)

☐ Only for me (Microsoft)

InstallShield

< Back Next > Cancel

STEP 6. Select **Complete** and then click **Next**.

Protocol Analyzer DSA Interface - InstallShield Wizard

Setup Type

Choose the setup type that best suits your needs.

Please select a setup type.

☒ **Complete**
All program features will be installed. (Requires the most disk space.)

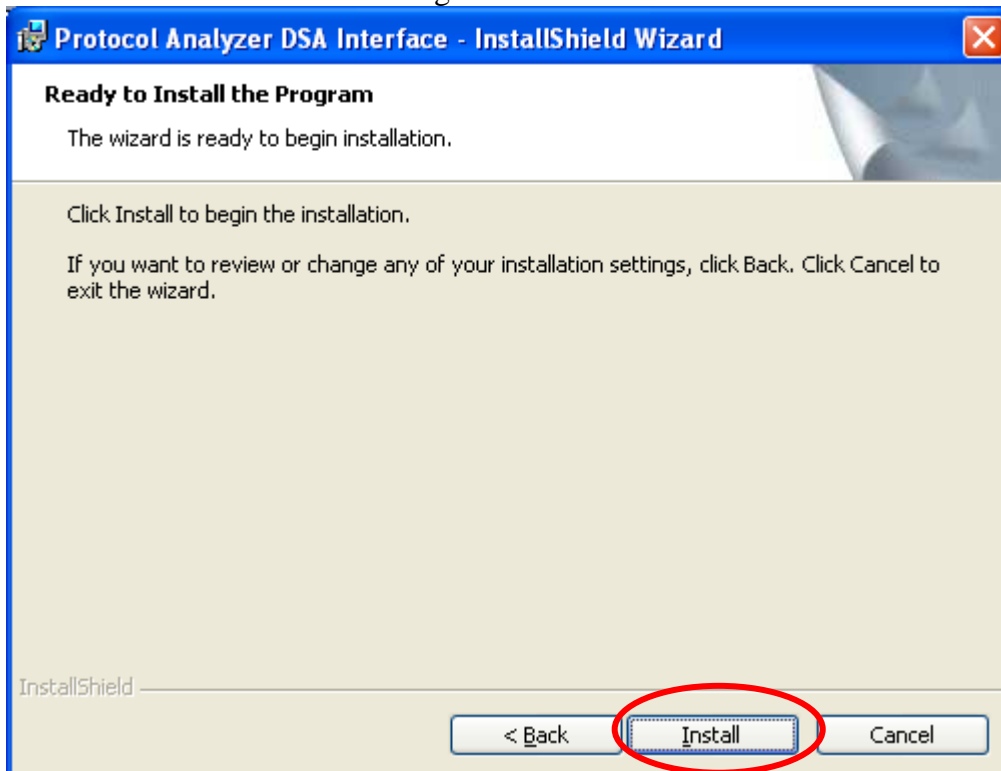
☐ **Custom**
Choose which program features you want installed and where they will be installed. Recommended for advanced users.

InstallShield

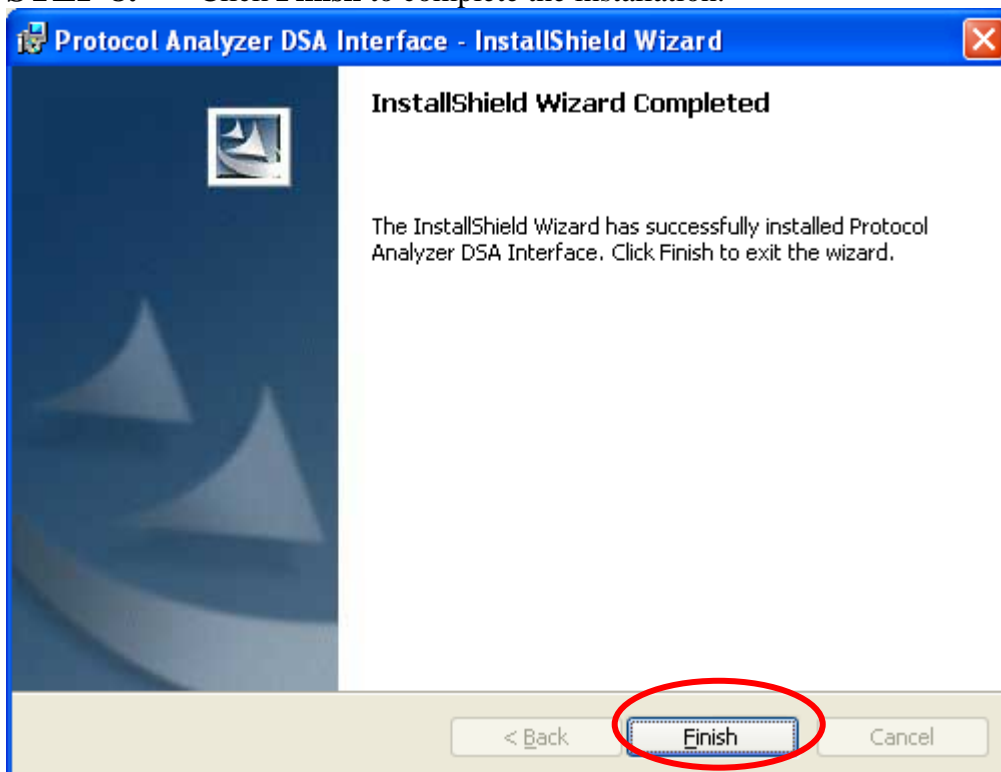
< Back Next > Cancel



STEP 7. Click **Install** to begin the installation.



STEP 8. Click **Finish** to complete the installation.

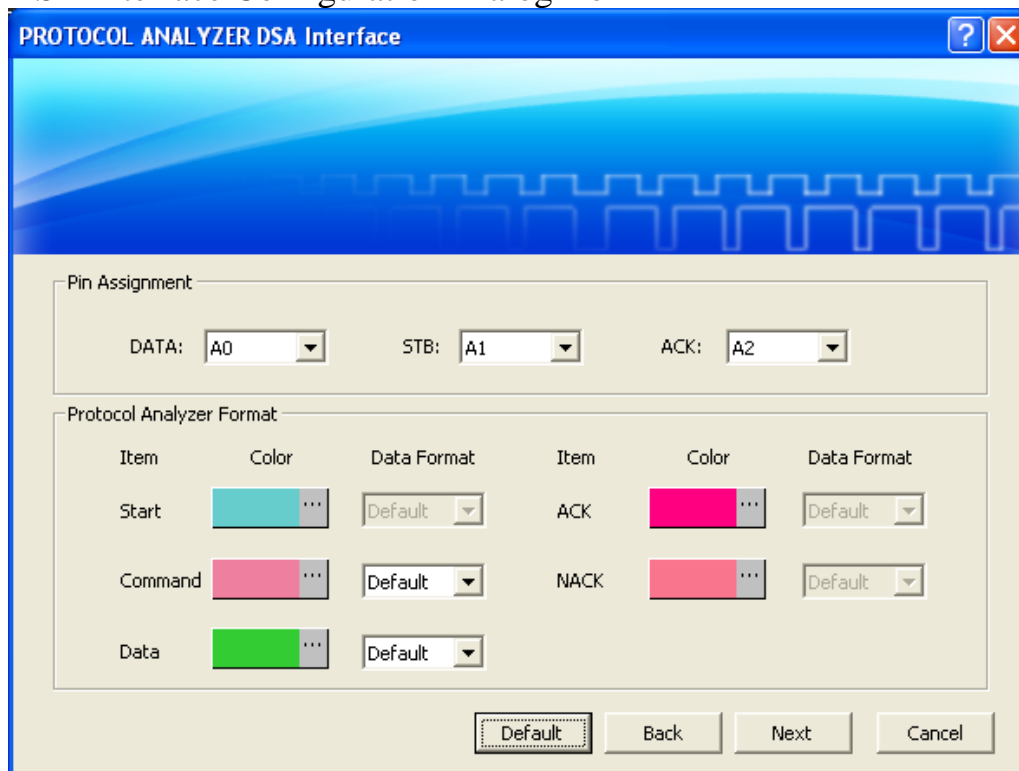




3 User Interface

Please refer to the below images to select options of setting **DSA Interface Module**.

DSA Interface Configuration Dialog Box



Pin Assignment:

DATA is the Data line, and its default is A0.

STB is the Synchronous line and its default is A1.

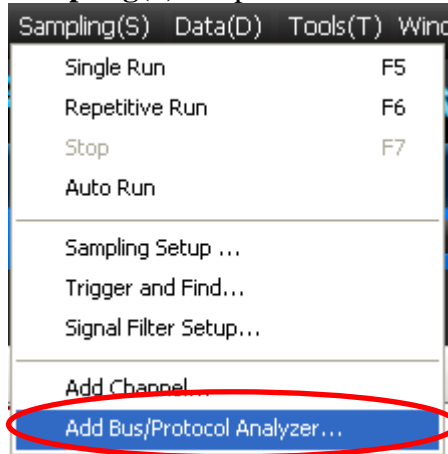
ACK is the Transmission Confirmation line and its default is A2.

Protocol Analyzer Format:

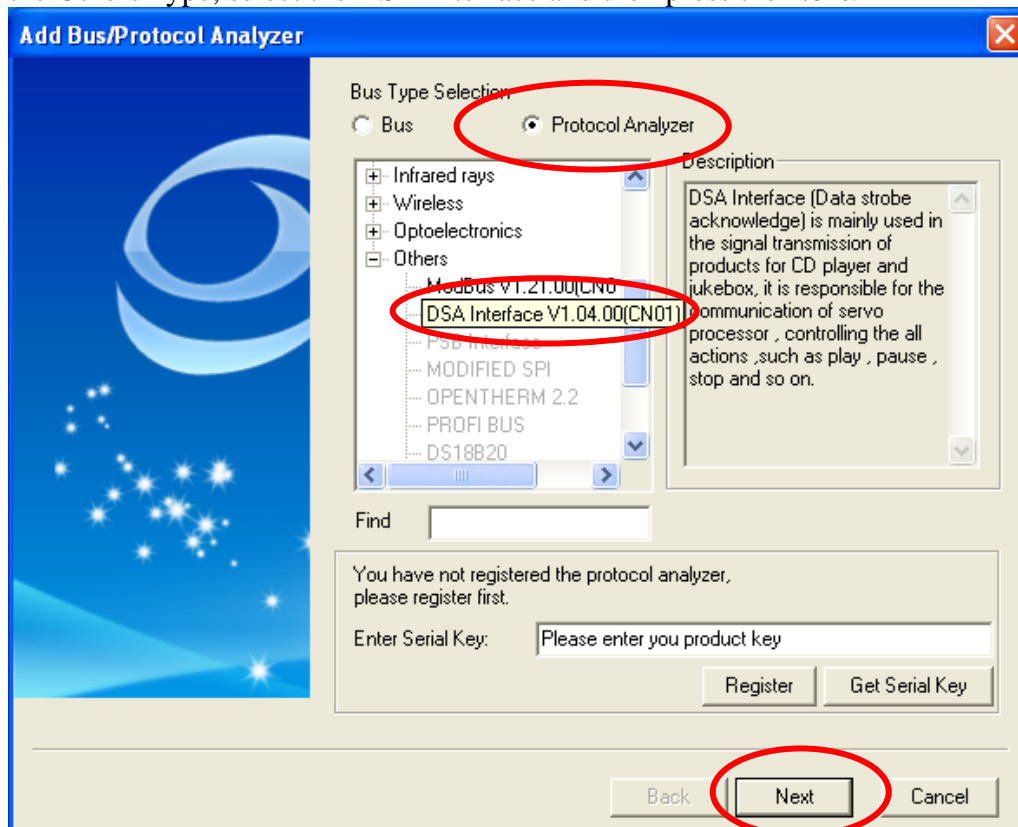
The Color of each Item can be varied as the users' requirements. The Items (Command and Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Items (Command and Data) in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default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

4 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.

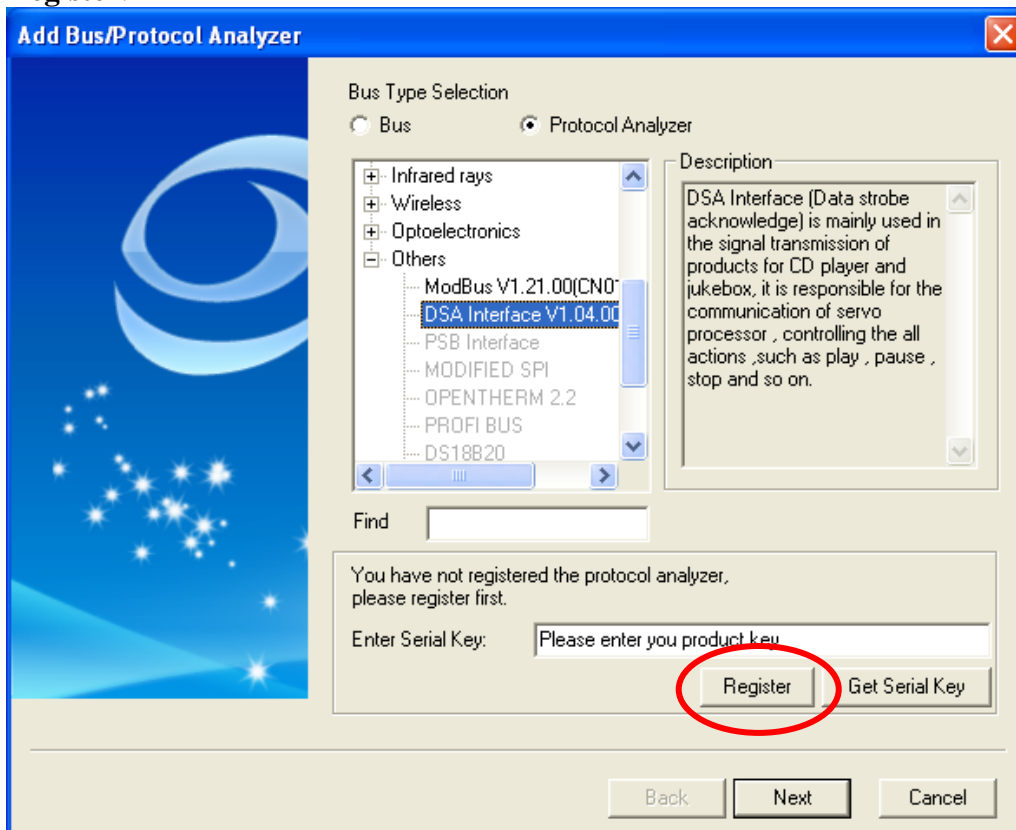


STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Others Type, select the DSA Interface and then press the **Next**.

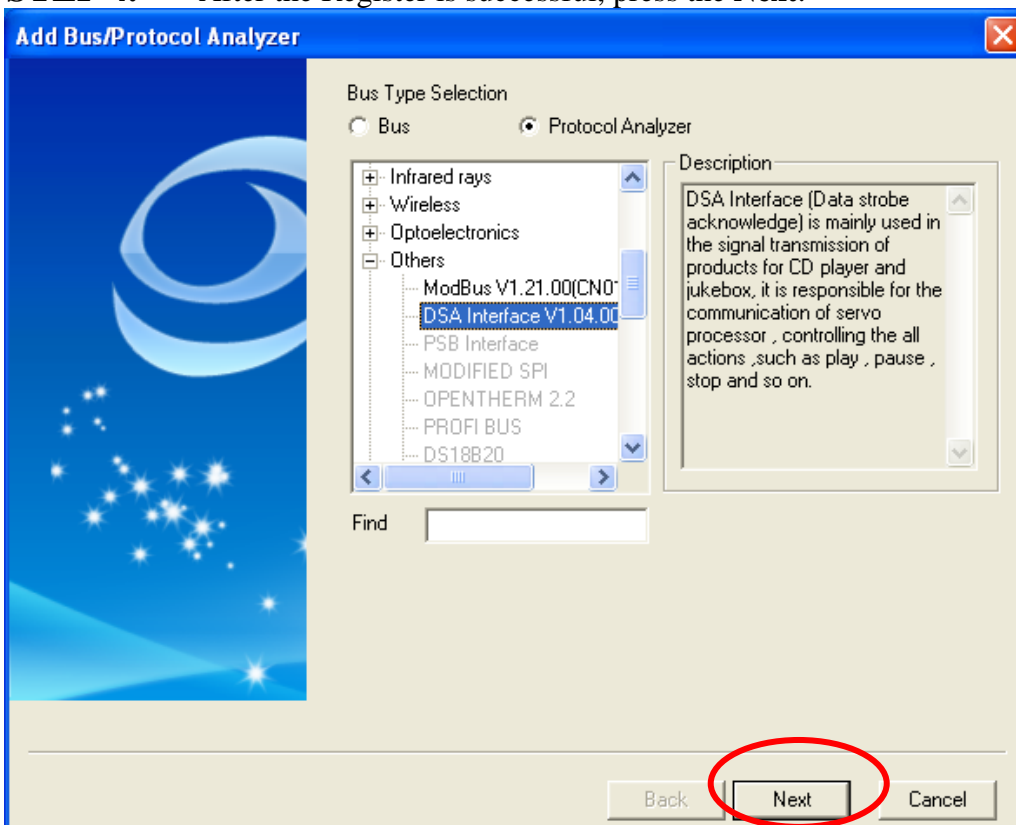




STEP 3. Enter the Serial Key of the DSA Interface under this Model, and then press the **Register**.



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

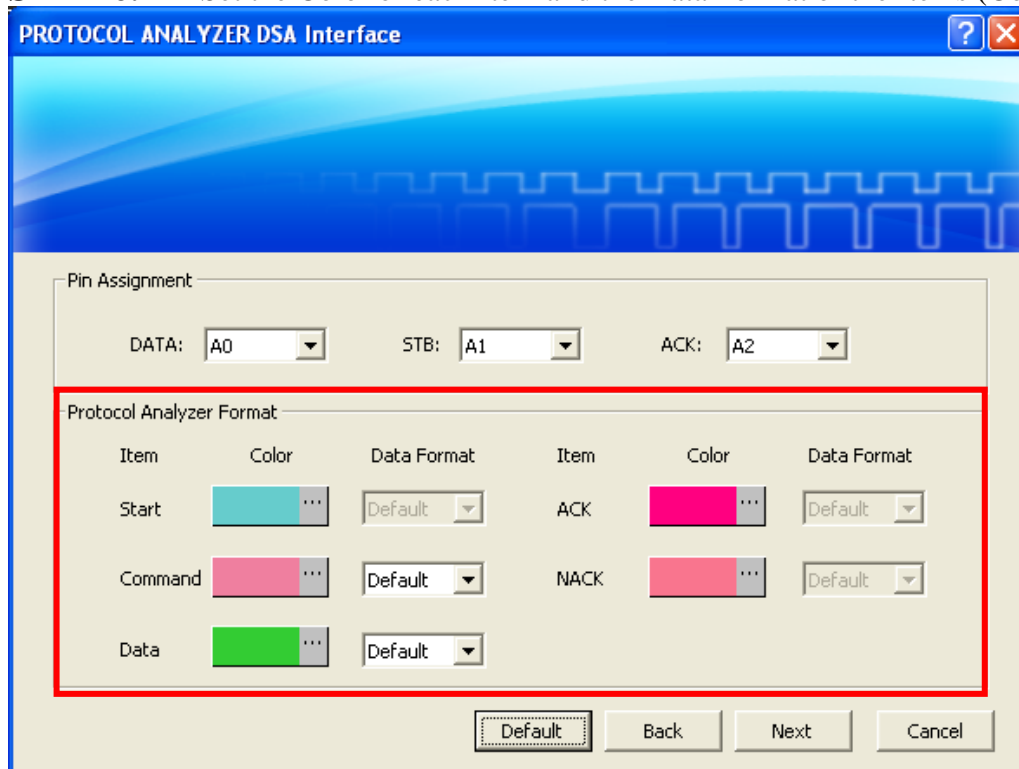




STEP 5. Open the PROTOCOL ANALYZER DSA Interface dialog box and set the channels for DATA, STB and ACK.



STEP 6. Set the Color of each Item and the Data Format of the Items (Command and Data).





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

PROTOCOL ANALYZER DSA Interface

Pin Assignment

DATA: A0 STB: A1 ACK: A2

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Start		Default	ACK		Default
Command		Default	NACK		Default
Data		Default			

Default Back **Next** Cancel

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

Add Bus/Protocol Analyzer

Please input the Bus name

BUS

Do you want to delete the other Buses and channels in the software?

☐ Yes, please delete

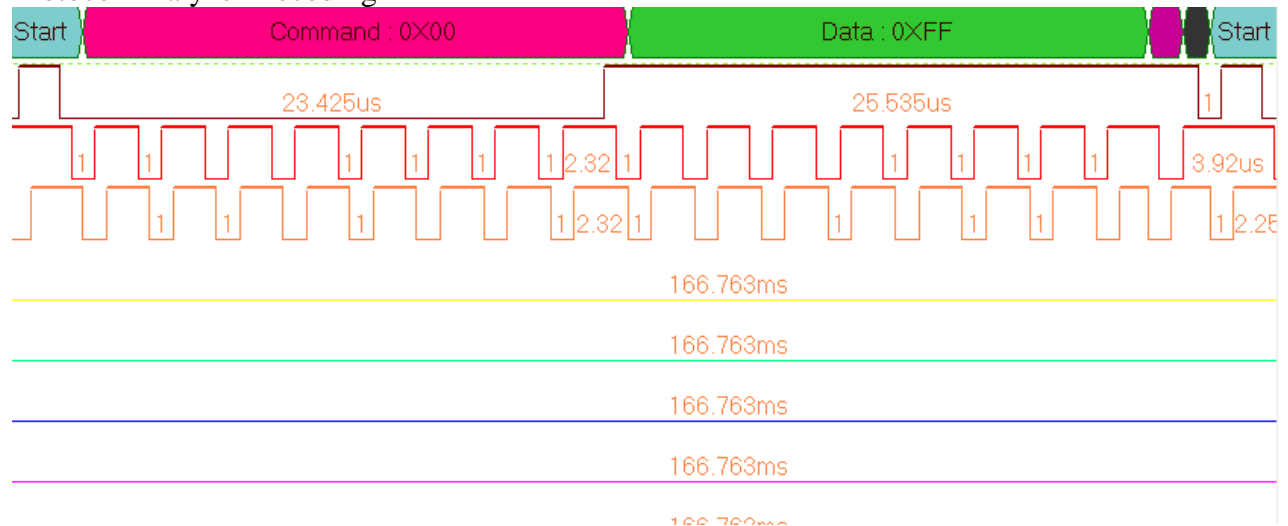
☒ **No, please reserve**

Back **Finish** Cancel



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 200MHz (the sampling frequency should be more than five times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

Navigator

Packet List

Statistics

Memory Analyzer

Setting...

Refresh

Export...

Synch. Parameter...

Packet #	Name	TimeStamp	Start	Command	Data	ACK
1	Bus1(DSA Interface)	0.0005ms	Start	00	FF	ACK
Packet #	Name	TimeStamp	Start	Command	Data	ACK
2	Bus1(DSA Interface)	0.05222ms	Start	01	FE	ACK
Packet #	Name	TimeStamp	Start	Command	Data	ACK
3	Bus1(DSA Interface)	0.10396ms	Start	02	FD	ACK
Packet #	Name	TimeStamp	Start	Command	Data	ACK
4	Bus1(DSA Interface)	0.15568ms	Start	03	FC	ACK
Packet #	Name	TimeStamp	Start	Command	Data	ACK
5	Bus1(DSA Interface)	0.20739ms	Start	04	FB	ACK
Packet #	Name	TimeStamp	Start	Command	Data	ACK
6	Bus1(DSA Interface)	0.25914ms	Start	05	FA	ACK