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

SPECIFICATION

MODEL: MODIFIED MILLER Specification

PART NO：B08041

VERSION：V1.01

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

中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw

2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

Content

中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

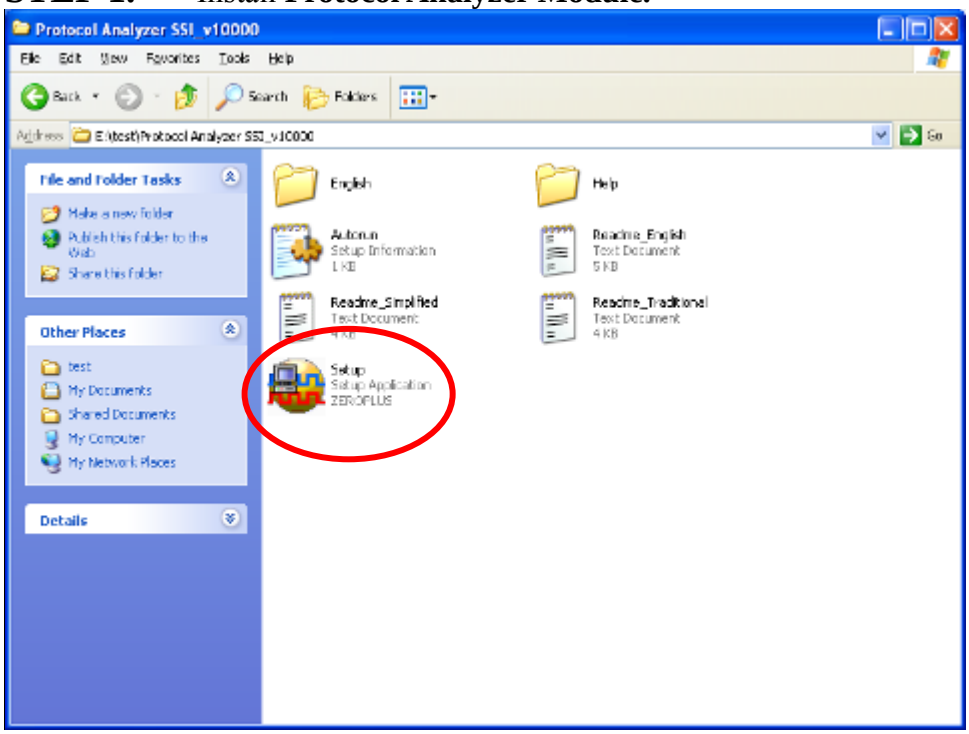
1 Software Installation

Please install the software as the following steps：

※ Remark: 1. The installation steps for all protocol analyzers are the same; you can complete the installation by following procedures. Following is an example on how to install protocol analyzer SSI.

※ Remark: 2. 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.

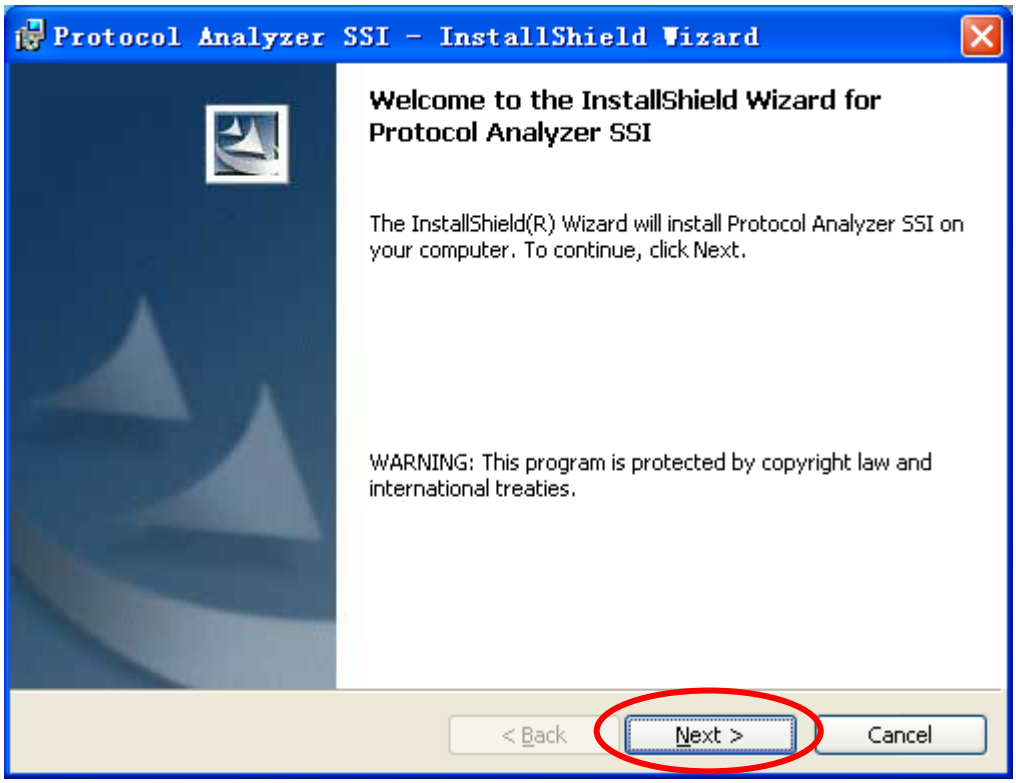
STEP 1. Install **Protocol Analyzer Module.**



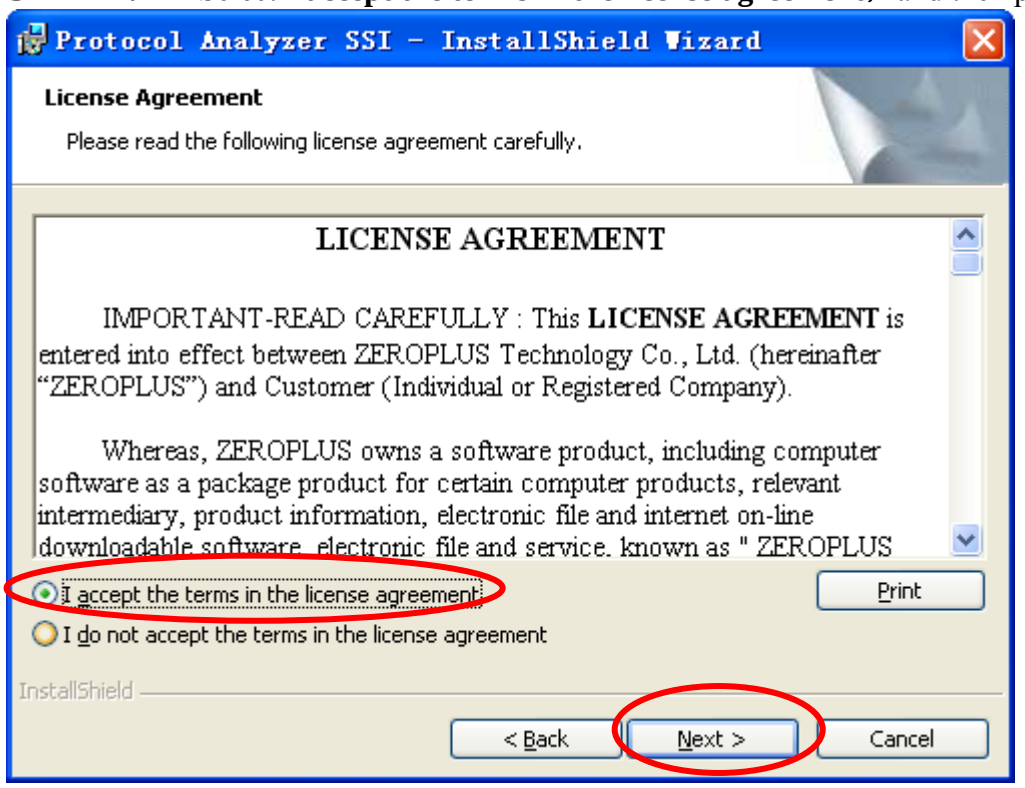
STEP 2. Click **Install.**

中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 3. Click **Next.**

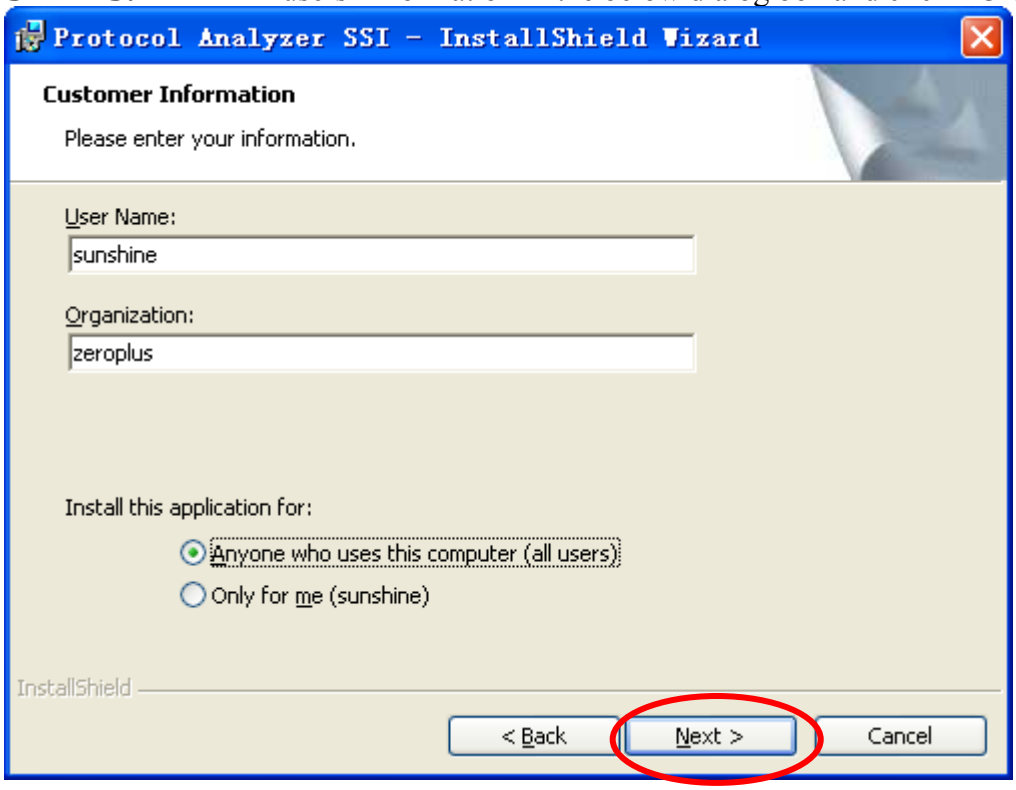


STEP 4. Select **I accept the terms in the license agreement**，and then press **Next**.

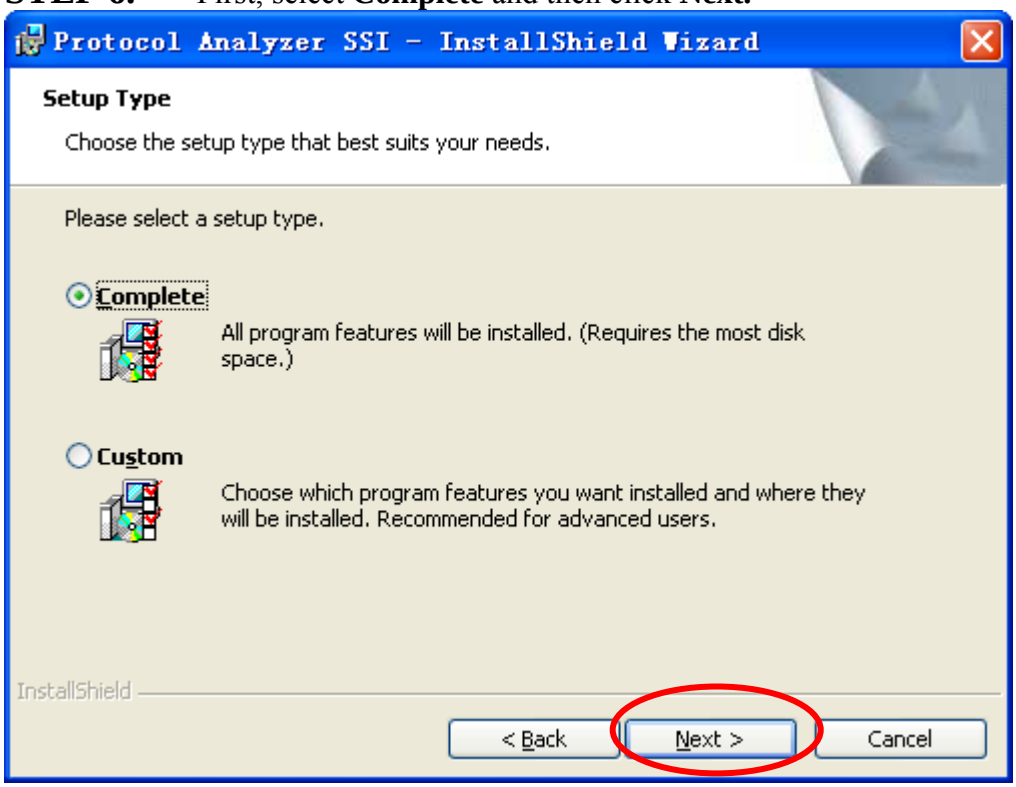


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

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

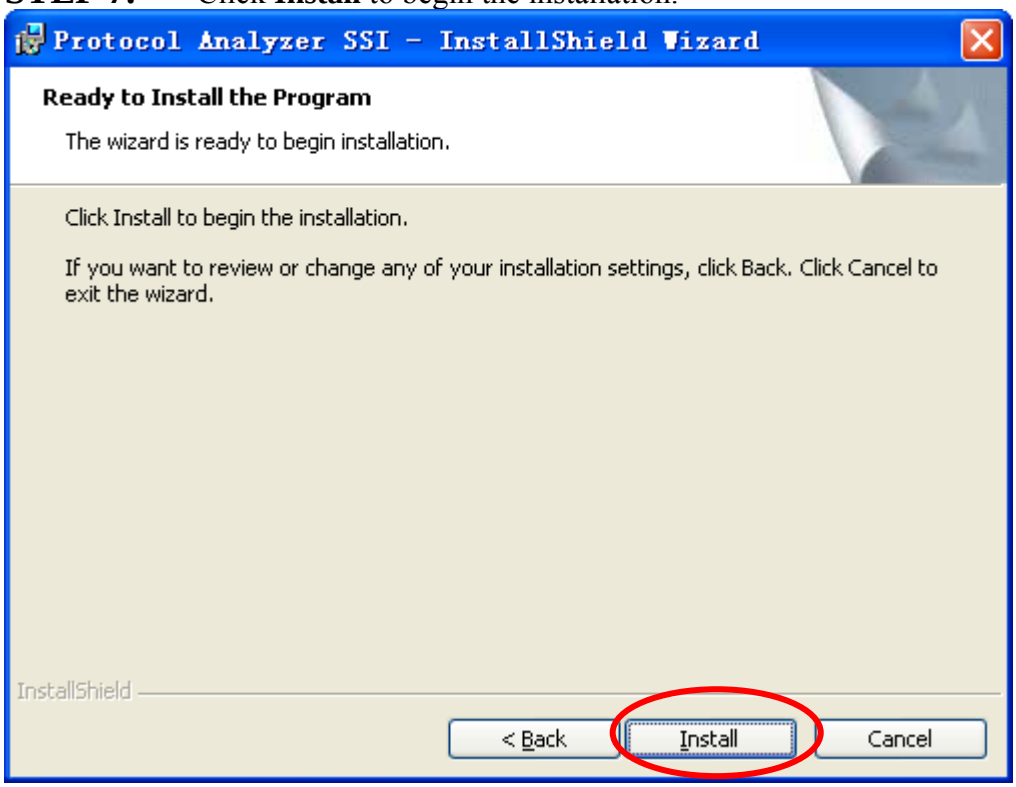


STEP 6. First, select **Complete** and then click **Next.**

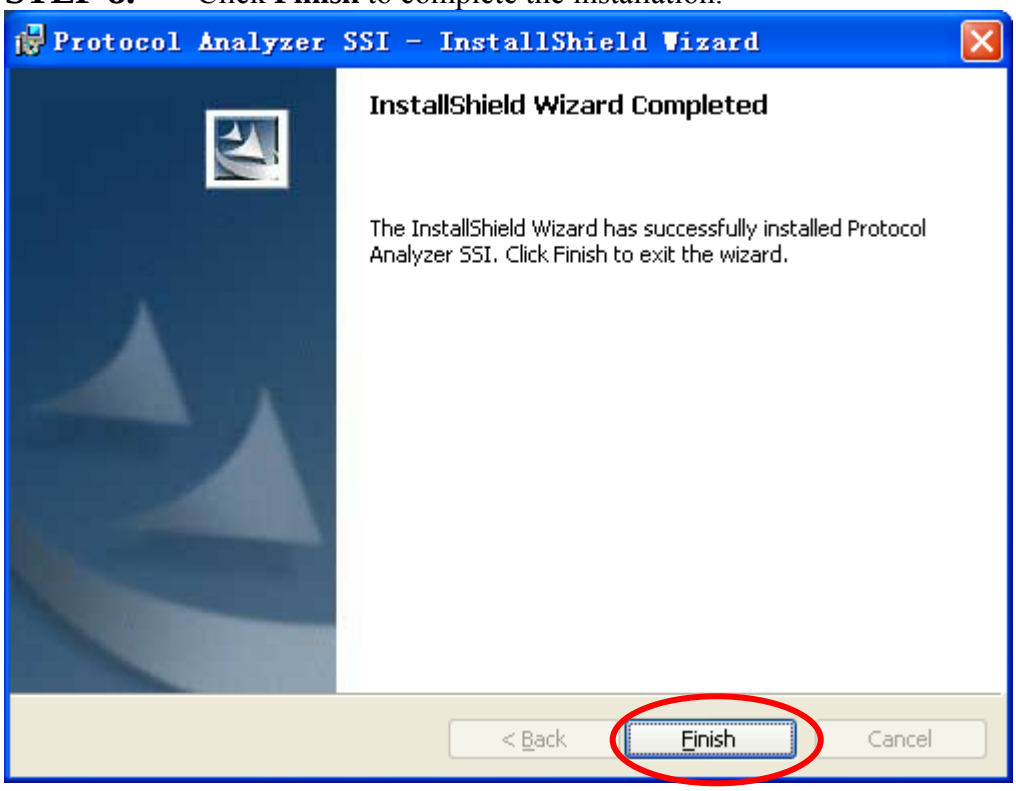


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

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



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

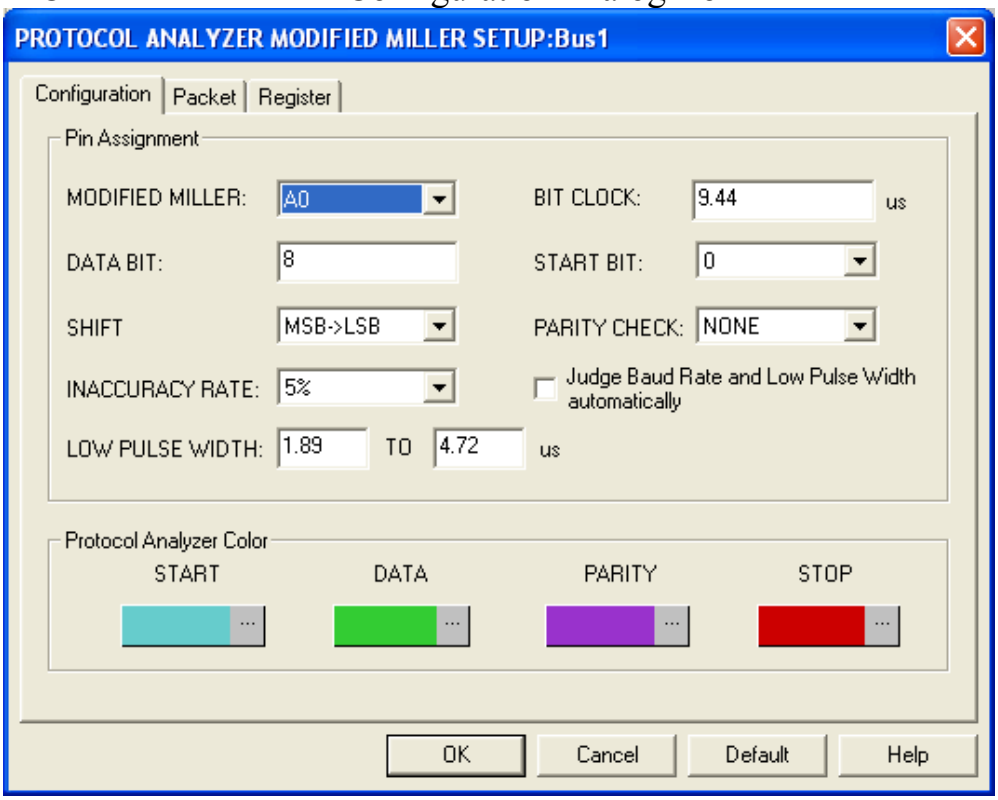


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

2 User Interface

In the configuration dialog box, please refer to the below images to select options of setting **MODIFIED MILLER MODULE**.

MODIFIED MILLER Configuration Dialog Box



Pin Assignment:

MODIFIED MILLER: Users can select the decoding channel by themselves.

BIT CLOCK: Users can input the value of the Bit Clock which is between 0.01 and 655.35us by themselves.

DATA BIT: Users can set the bit of the data which is between 4 and 28.

START BIT: Set the Start Bit of START as 0 or 1.

SHIFT: Users can set the direction of the Shift as MSB→LSB or LSB→MSB.

PARITY CHECK: Users can select NONE or ODD PARITY or EVEN PARITY to set PARITY CHECK.

INACCURACY RATE: There are four choices which are 5%, 10%, 15% and 20%.

Judge Baud Rate and Low Pulse Width automatically: When the option is selected, it can count the length of the Bit Clock and the Low Pulse Width automatically; and display the value of them on the dialog box.

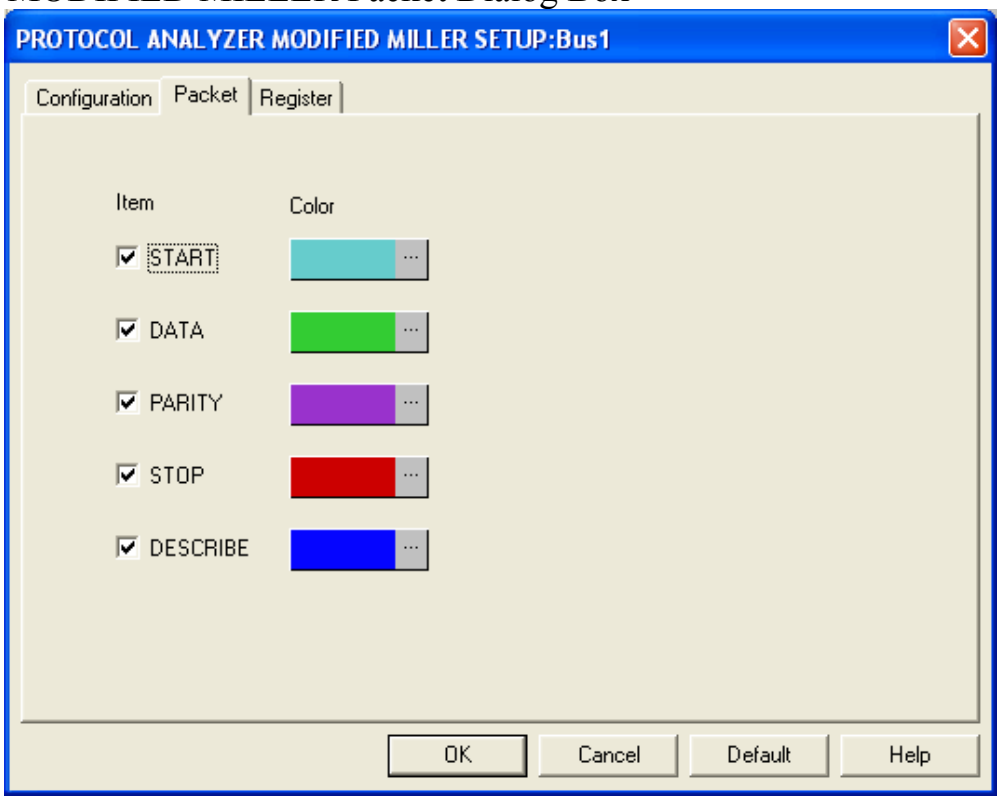
LOW PULSE WIDTH: It can be set between 0.00 and 65535.00us; it allows the decimal fraction. The left input must be less than the right input.

Protocol Analyzer Color:

Users can set the color of the packet as their requirements.

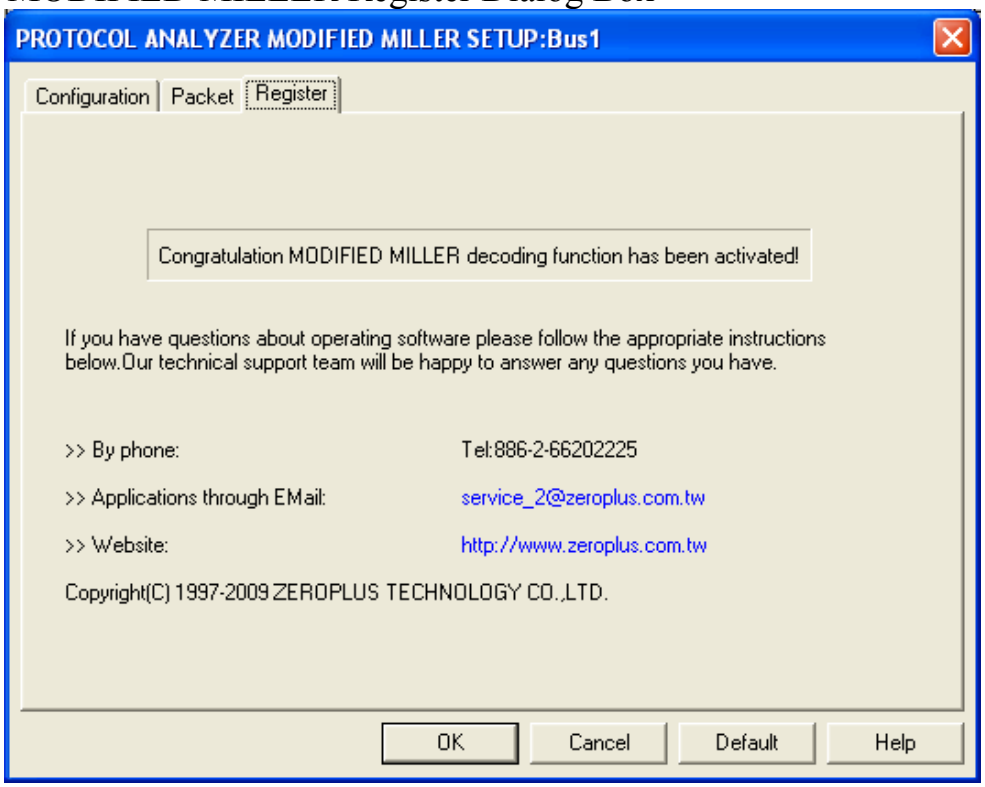
中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

MODIFIED MILLER Packet Dialog Box



Users can vary the color of the packet as their requirements.

MODIFIED MILLER Register Dialog Box

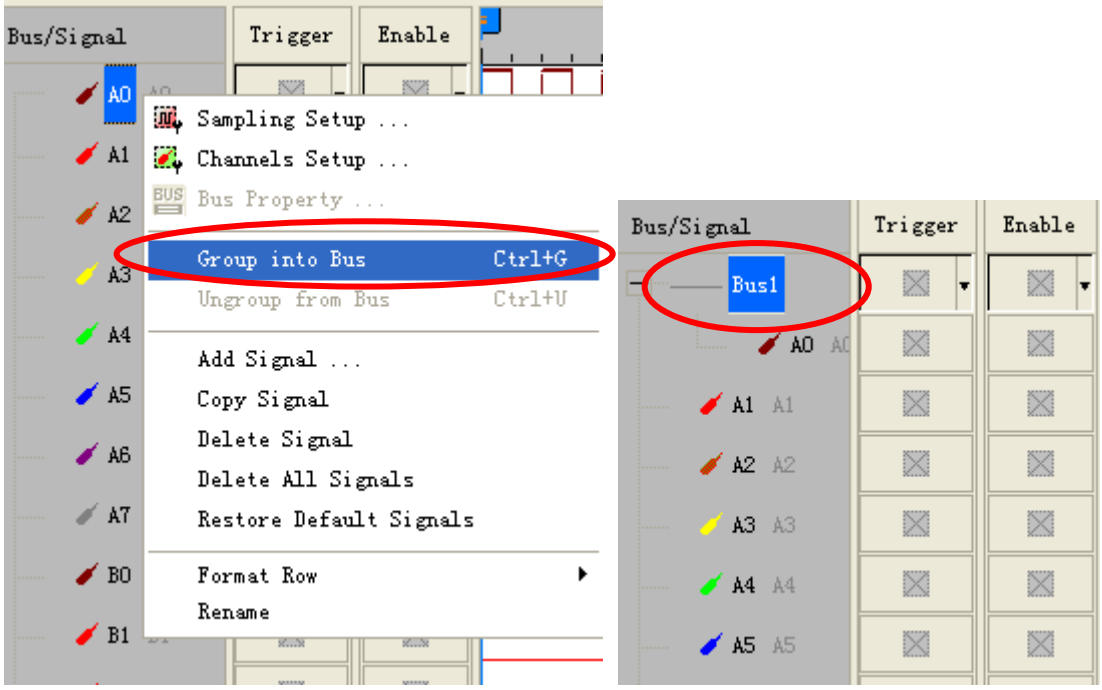


There is written Zeroplus company information. If you have any questions about software operations, you can contact Zeroplus by Telephone or Email.

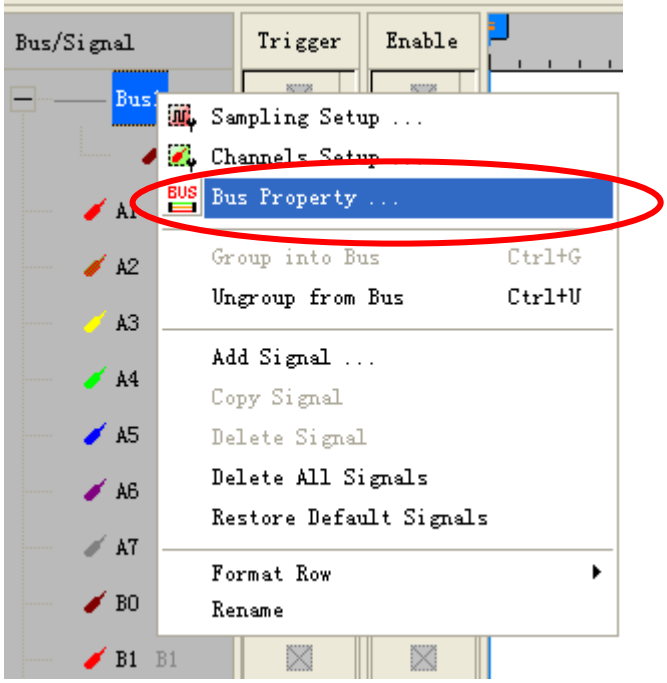
中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

3 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse.

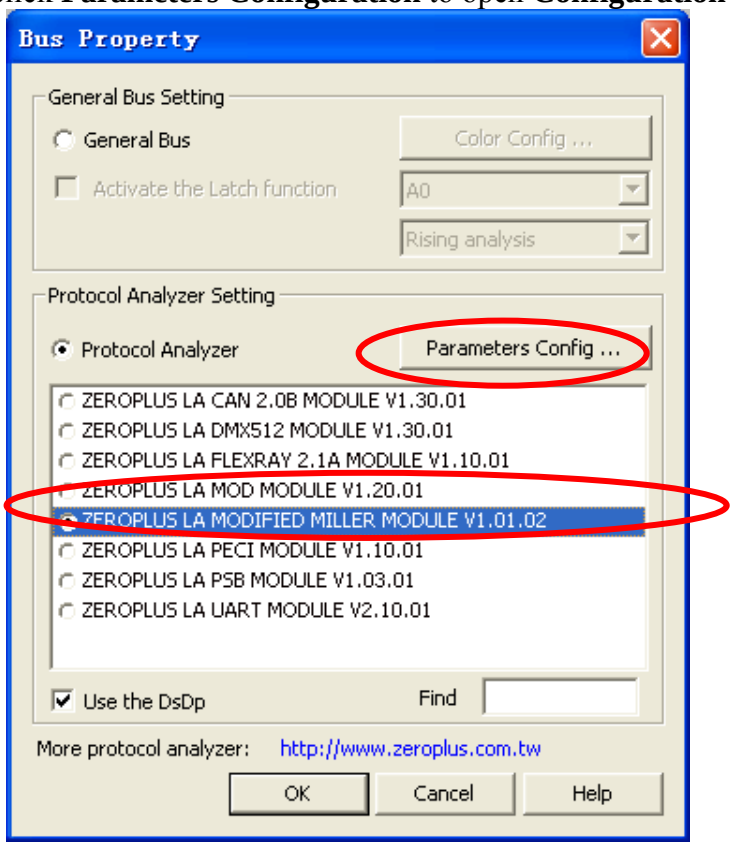


STEP 2. Select **Bus1**, then press **Right Key** on the mouse to list the menu, and then press **Bus Property** or **Bus** bar on the toolbar to open **Bus Property** dialog box.

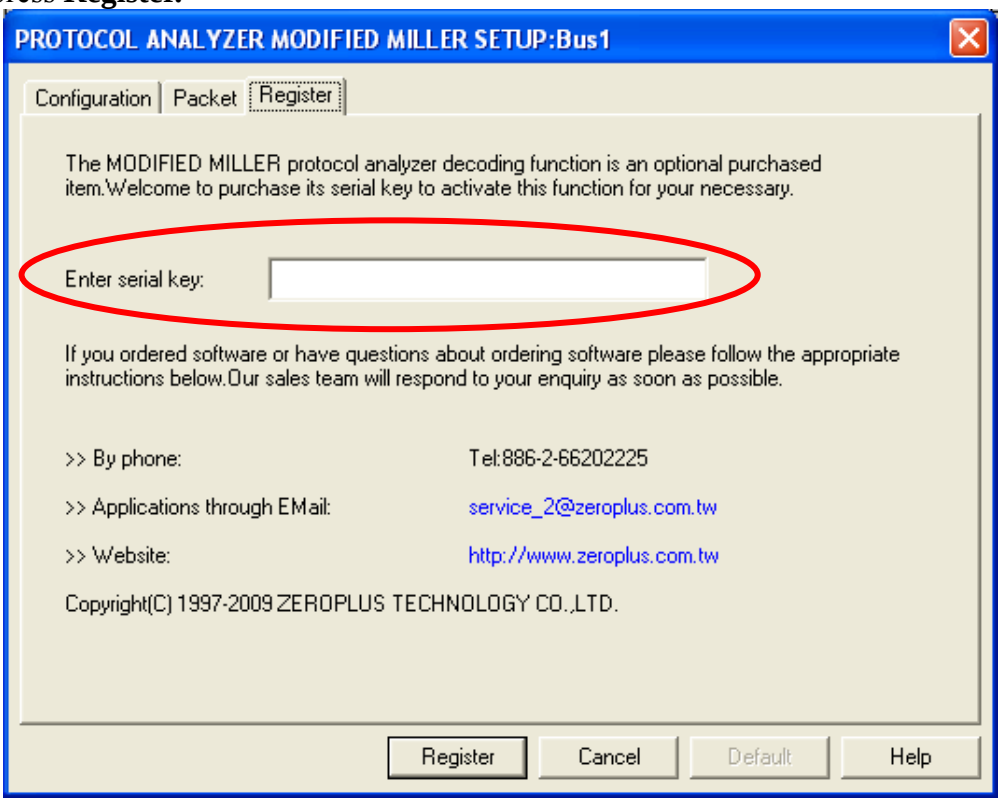


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 3. For Protocol Analyzer MODIFIED MILLER Parameters Configuration, select Protocol Analyzer, and then select **ZEROPLUS MODIFIED MILLER MODULE V1.01.02.** Next click **Parameters Configuration** to open **Configuration** dialog box.

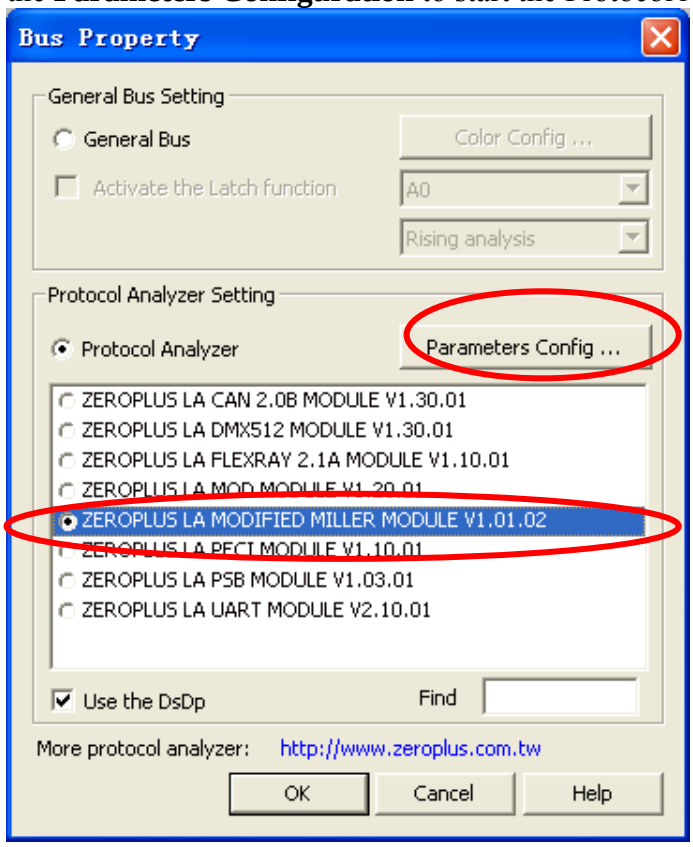


STEP 4. Click Register tab to type the serial key number of **MODIFIED MILLER**. Then, press **Register.**

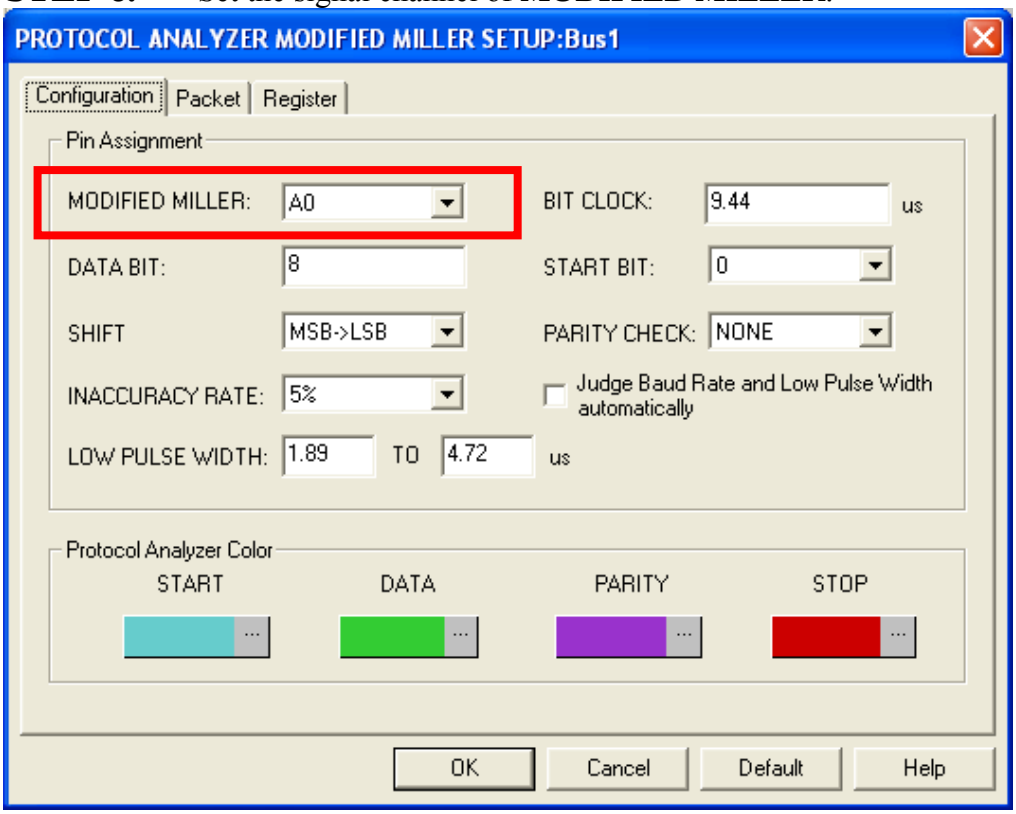


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 5. After completing **Register**, come back to the **Bus Property** dialog box, and then click the **Parameters Configuration** to start the Protocol Analyzer **MODIFIED MILLER** setup.

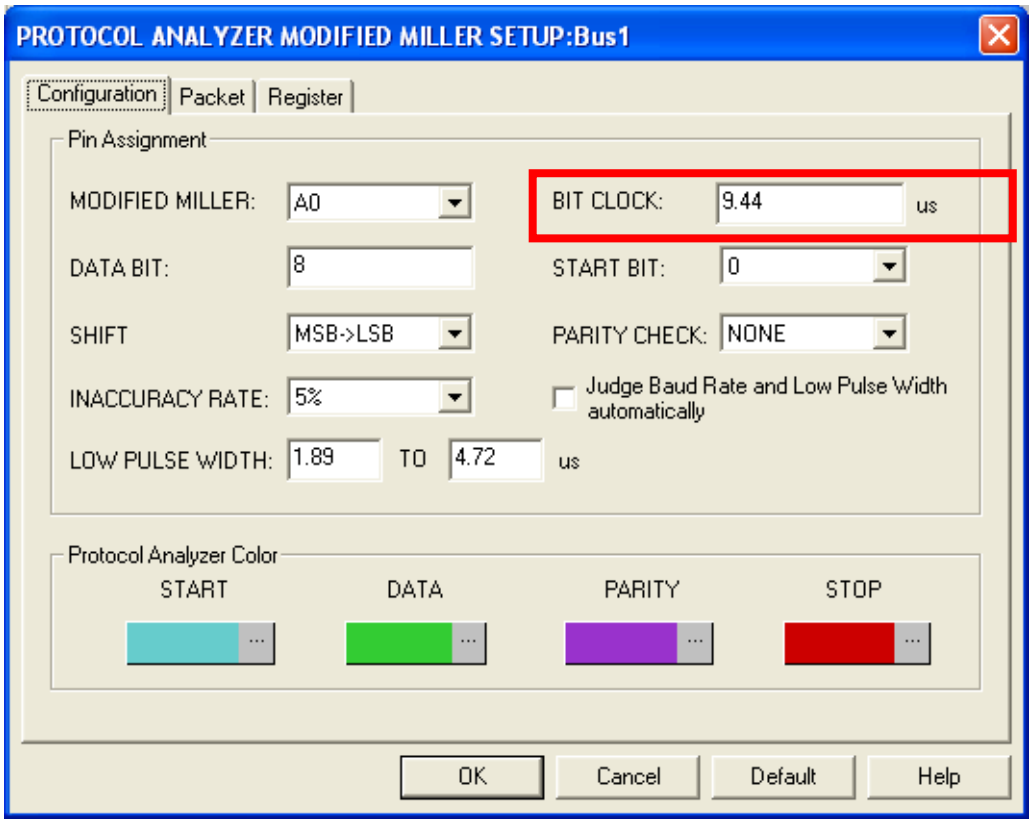


STEP 6. Set the signal channel of **MODIFIED MILLER**.

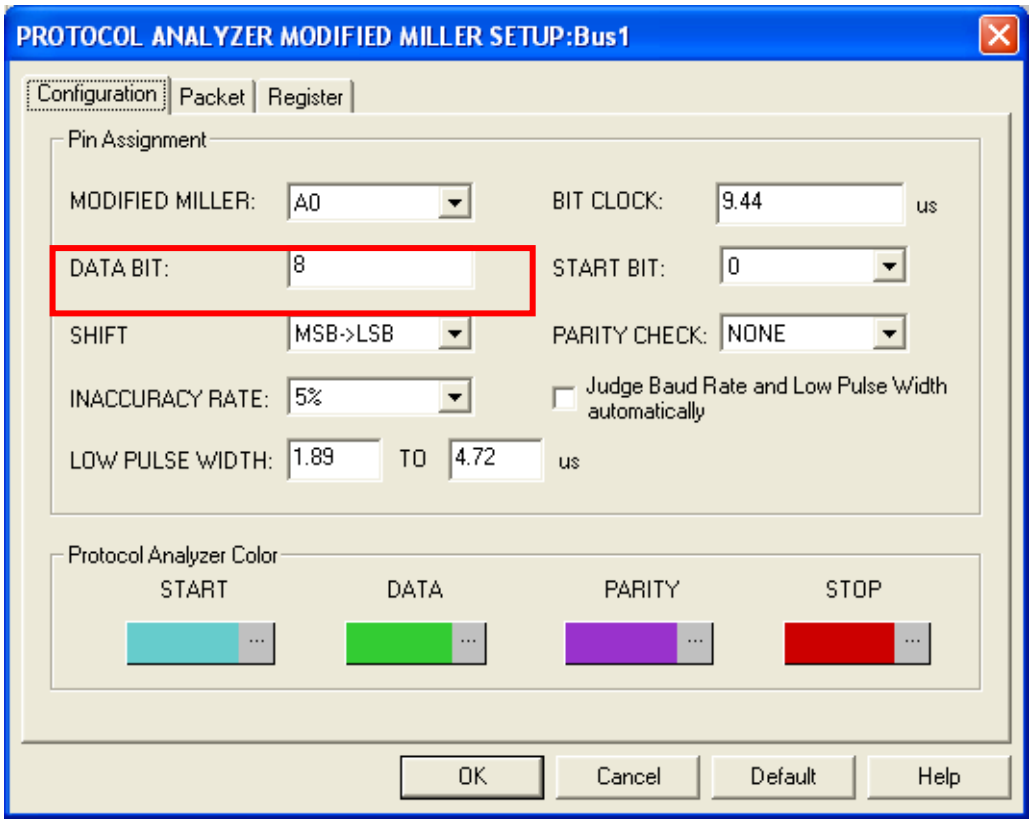


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 7. Set **BIT CLOCK.**

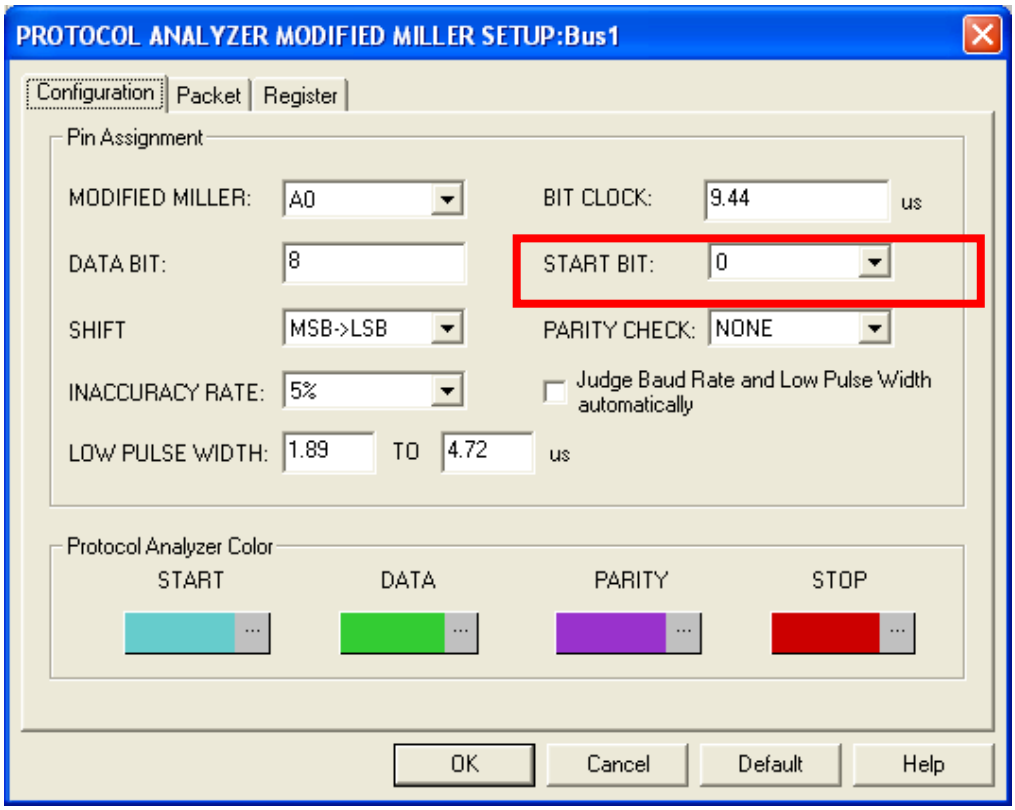


STEP 8. Set **DATA BIT.**

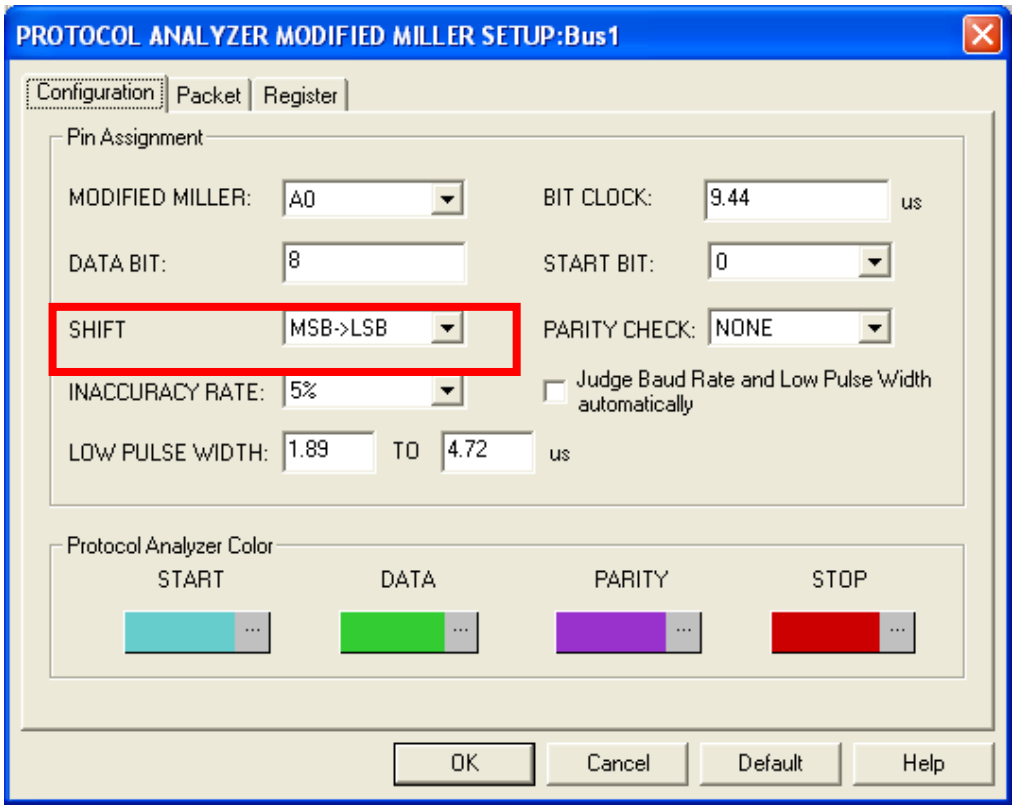


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 9. Select the value for **START BIT**.

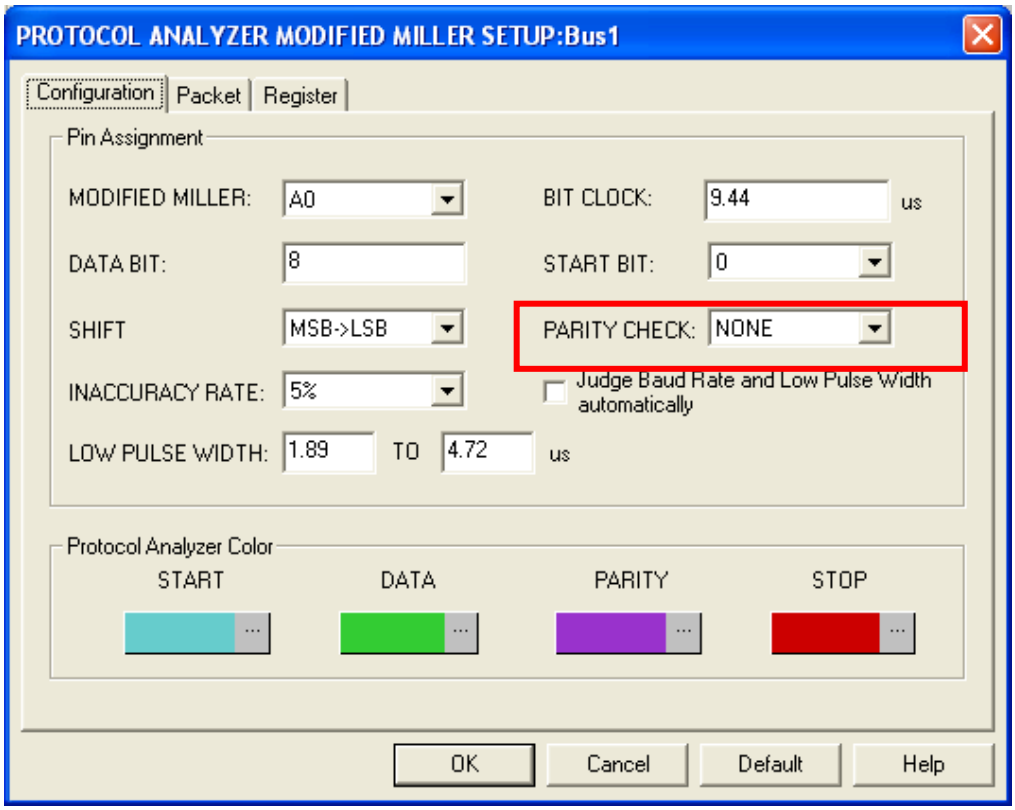


STEP 10. Select the direction for **SHIFT**.

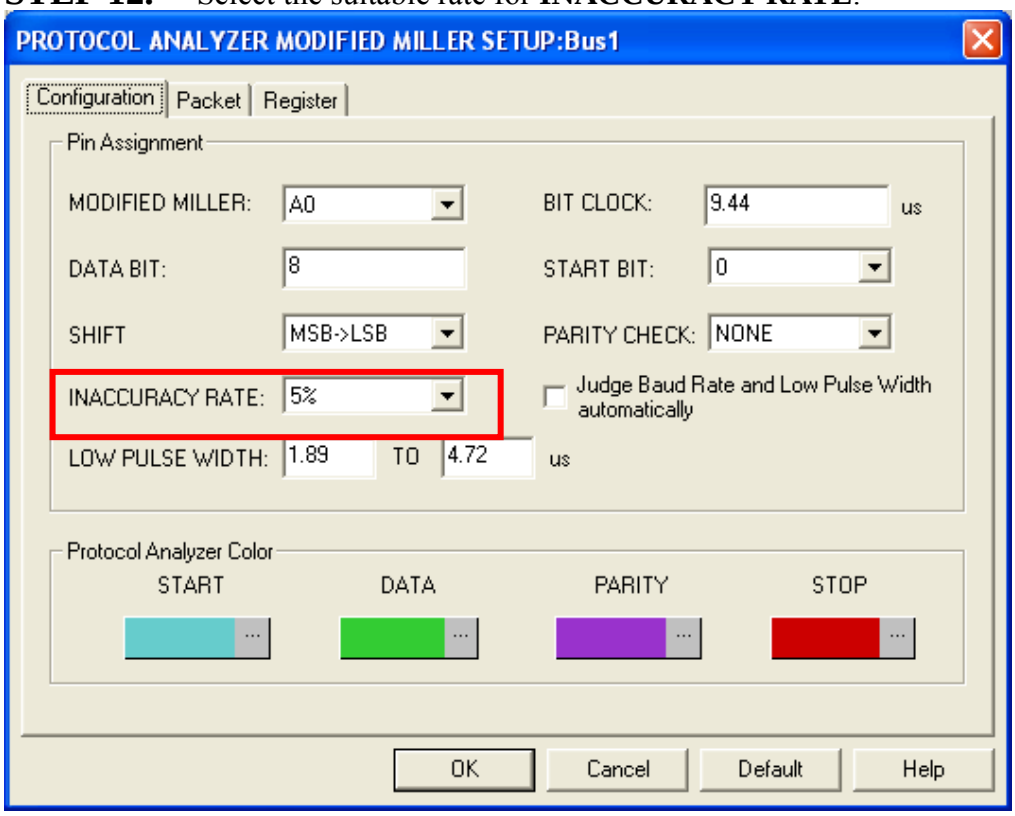


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 11. Set **PARITY CHECK**.

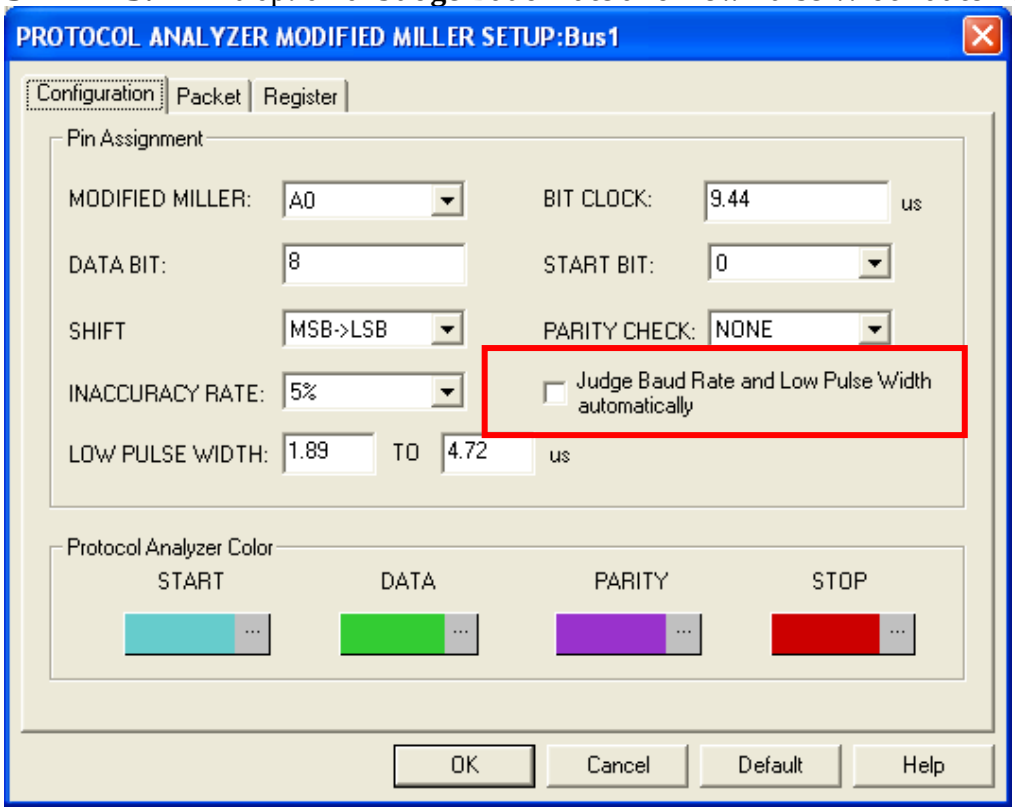


STEP 12. Select the suitable rate for **INACCURACY RATE**.

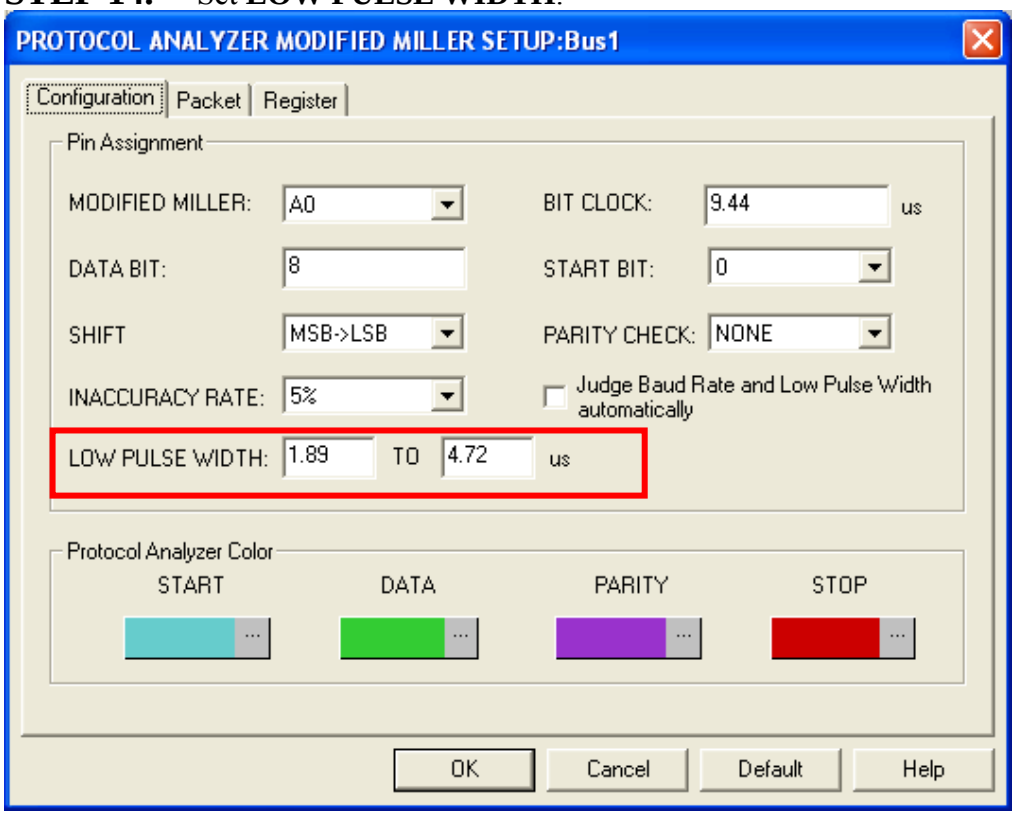


中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 13. The option of **Judge Baud Rate and Low Pulse Width automatically** can be selected.

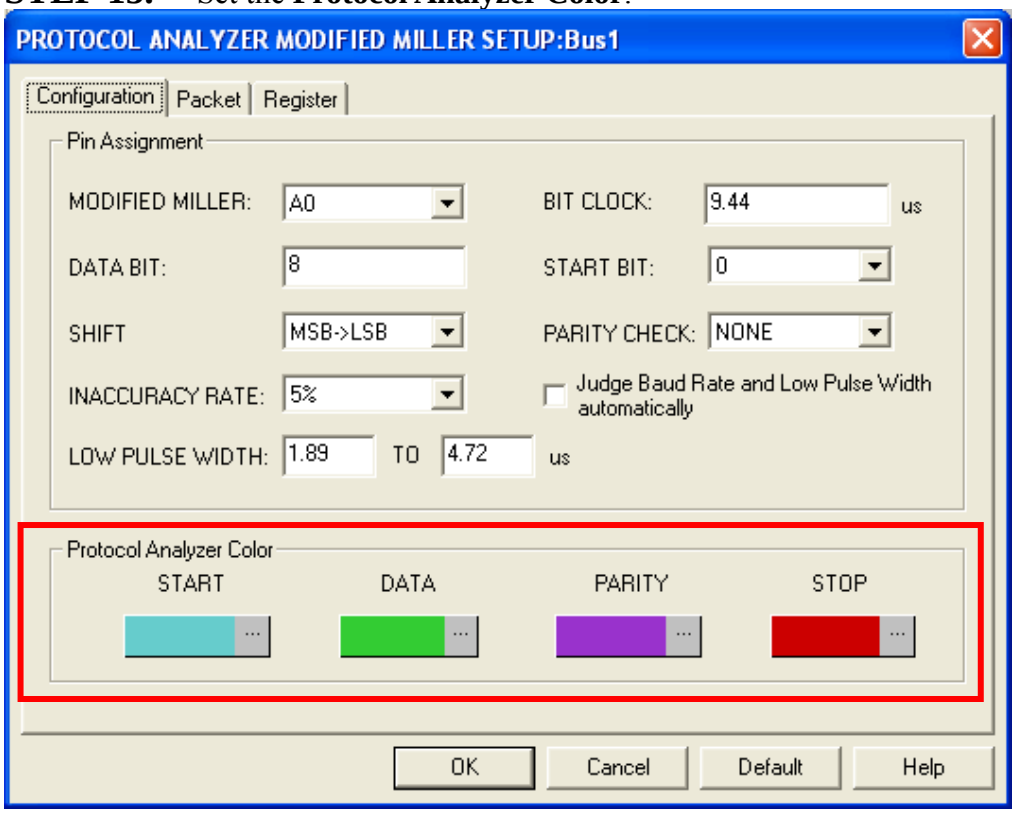


STEP 14. Set **LOW PULSE WIDTH**.



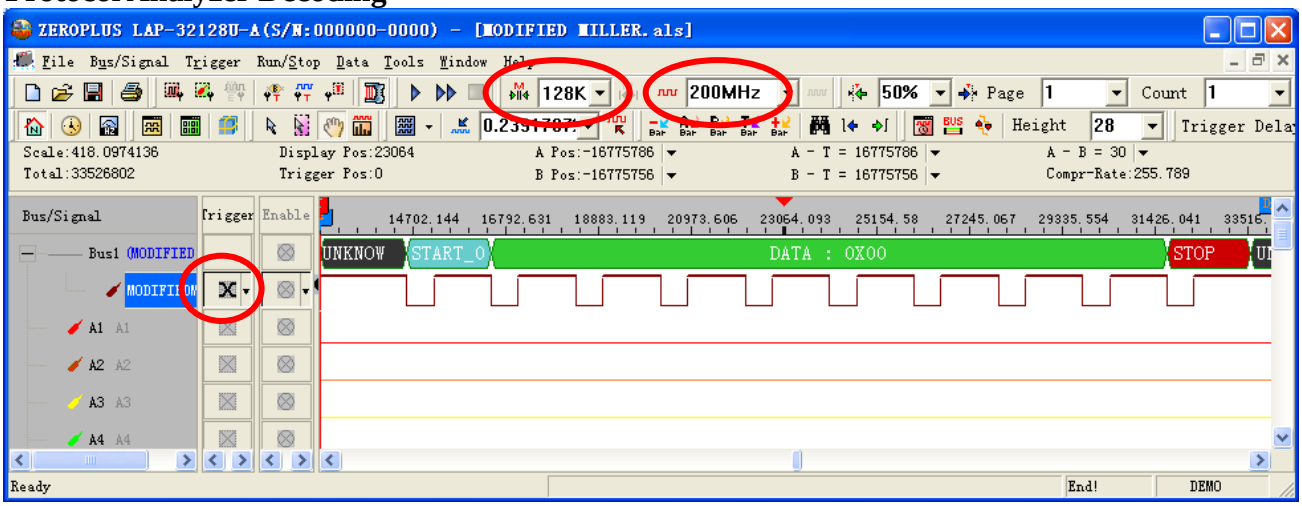
中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw
2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

STEP 15. Set the **Protocol Analyzer Color**.



STEP 16. 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.

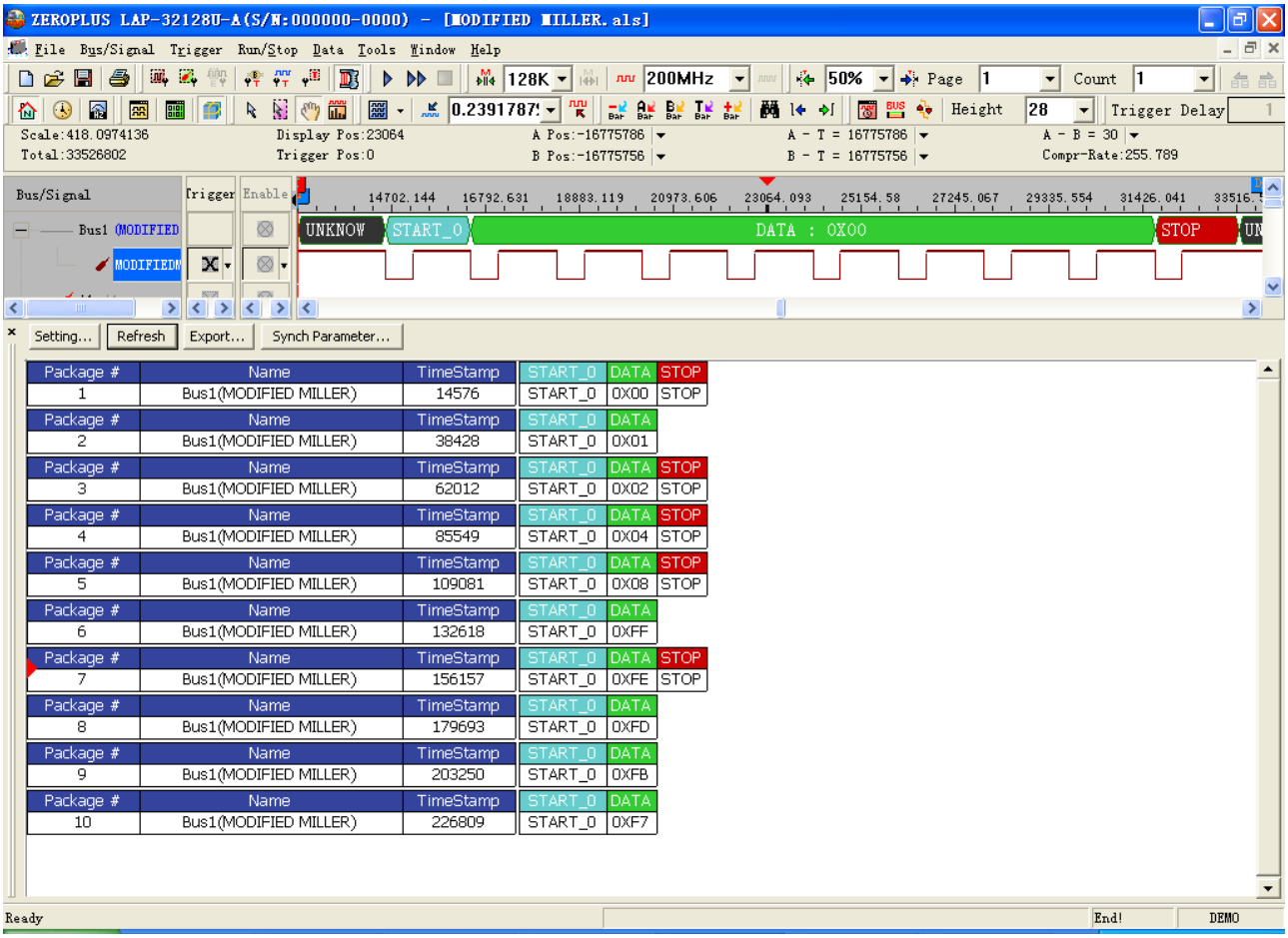
Protocol Analyzer Decoding



中和市建八路 123 號 2F
電話：886-2-66202225
傳真：886-2-22234362
www.zeroplus.com.tw

2F., No.123,Jian Ba Rd,
Chung Ho City, Taipei Hsien, R.O.C.
Tel: 886-2-66202225
Fax: 886-2-22234362

Packet List



Package #	Name	TimeStamp	START_0	DATA	STOP
1	Bus1(MODIFIED MILLER)	14576	START_0	0X00	STOP
2	Bus1(MODIFIED MILLER)	38428	START_0	0X01	
3	Bus1(MODIFIED MILLER)	62012	START_0	0X02	STOP
4	Bus1(MODIFIED MILLER)	85549	START_0	0X04	STOP
5	Bus1(MODIFIED MILLER)	109081	START_0	0X08	STOP
6	Bus1(MODIFIED MILLER)	132618	START_0	0XFF	
7	Bus1(MODIFIED MILLER)	156157	START_0	0XFE	STOP
8	Bus1(MODIFIED MILLER)	179693	START_0	0XFD	
9	Bus1(MODIFIED MILLER)	203250	START_0	0XFB	
10	Bus1(MODIFIED MILLER)	226809	START_0	0XF7	