

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

SPECIFICATION

MODEL: I2C (SERIAL EEPROM 24L SERIES) Specification

PART NO:

VERSION : V1.01

Approver		Check	Design
GM	PM	Спсск	Design

Customer Confirm

* After signature you fax to zeroplus company , please .

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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.

 \Re 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. Protocol Analyzer SSI_v10000 Ele Edit View Favorites Tools Help . 🌀 Back 🔹 💿 - 🏂 🔎 Search 📂 Folders 💷 * Address 🗀 Erijtest'/Protocol Analyzer SSI_v1000D 🖌 🔁 😡 File and Folder Tasks * English Help 💓 Make a new folder Sublish this folder to the Autorun Setup Information udi Betup 1 KD 📸 Share this folder Readme_Simplified Feat Document s_Traditional content * Other Places 4 KB 🛅 test 📇 My Documents etup. up Application ZEROPLUS 🛅 Shared Decuments 👰 My Computer Ny Network Places * Details









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

🙀 Protocol Analyzer SSI - InstallShield Vizard	×
License Agreement Please read the following license agreement carefully.	
LICENSE AGREEMENT	
IMPORTANT-READ CAREFULLY : This LICENSE AGREEMENT is entered into effect between ZEROPLUS Technology Co., Ltd. (hereinafter "ZEROPLUS") and Customer (Individual or Registered Company). Whereas, ZEROPLUS owns a software product, including computer software as a package product for certain computer products, relevant	
downloadable software_electronic file and service. known as " ZEROPLUS	~
I accept the terms in the license agreement Print I do not accept the terms in the license agreement Print	
InstallShield < <u>B</u> ack <u>N</u> ext > Cancel	



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

🙀 Protocol Analyzer SSI - InstallShield Vizar	d 🔀
Customer Information Please enter your information.	
User Name: sunshine	
Organization:	
Install this application for: Anyone who uses this computer (all users) Only for me (sunshine) 	
InstallShield	Cancel

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

🛃 Protocol /	analyzer SSI - InstallShield Vizard 🛛 🛛 🔀
Setup Type Choose the set	tup type that best suits your needs.
Please select a	setup type.
⊙ <u>C</u> omplete	All program features will be installed. (Requires the most disk space.)
Cu <u>s</u> tom	Choose which program features you want installed and where they will be installed. Recommended for advanced users.
InstallShield ———	< <u>B</u> ack <u>N</u> ext > Cancel



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

🔂 Protocol Analyzer SSI - InstallShield Vizard 🛛 🔀
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield

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





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2 User Interface

In the configuration dialog box, please refer to the below images to select options of setting I2C (SERIAL EEPROM 24L SERIES) MODULE.

I2C (SERIAL EEPROM 24L SERIES) Configuration Dialog Box

PROTOCOL ANALYZER I2C	SERIAL EEPROM 24	L SERIES) SETUP:Bus1	
Configuration Timing Packa	ge Register		
- Pin Assignment			
SDA: A0	•	SCL: A1	•
Address Setting			
Valid Bit of Address:	16 💌		
Protocol Analyzer Color			
START	DATA	ADDRESS	READ
WRITE	ACK	NACK	STOP
CHIP SELECT	CONTROL	DONOT CARE	
		•••	
	ОК	Cancel Def	ault Help

Pin Assignment: There are two channels, SDA and SCL; users can set the channels for them as their requirements, and the set result will affect the correctness of the decoding. **SDA:** Its default is A0; it is the data transmission channel when decoding. **SCL:** Its default is A1; it is the clock transmission channel when decoding.

Valid Bit of Address: It is used to set the length of ADDRESS; users can set the length within the range from 4 to 16; therein, the length must be an integer.

Protocol Analyzer Color: It is used to set the colors of the items; users can vary the color as their requirements.



I2C (SERIAL EEPROM 24L SERIES) Timing Dialog Box



Timing: It can make the analysis of the data within the flexible time according to the different Timing settings.

Waveform Image: Describe the position of the set time.

Time Format Settings:

It can set the time after activating time settings. The set time can be taken as the conditions of judging decoding. For example, decoding START, firstly judge whether the conditions of START is coincident or not, then judge whether the set time of tHD: Whether the set time of STA coincides with the factual waveform. It can start decoding START when both of the two conditions are coincident. The other package segments are the same with the above theory.



I2C (SERIAL EEPROM 24L SERIES) Package Dialog Box



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

I2C (SERIAL EEPROM 24L SERIES) 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.



3 Operating Instructions





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





STEP 3. For Protocol Analyzer I2C (SERIAL EEPROM 24L SERIES) Parameters Configuration, select Protocol Analyzer, and then select **ZEROPLUS LA I2C (SERIAL EEPROM 24L SERIES) MODULE V1.01.** Next click **Parameters Configuration** to open **Configuration** dialog box.

Bus Property	
General Bus Setting	
C General Bus	Color Config
Activate the Latch function	AO
	Rising analysis
Protocol Analyzer Setting	
Protocol Analyzer	Parameters Config
C ZEROPLUS LA ST MODULE V1.03	3 🔨
C ZEROPLUS LA UART MODULE V2	2.03
C ZEROPLUS LA OSD 111 MODULE	V1.03 V1.07
C ZEROPLUS LA J-K FLIP-FLOP MC	DULE V1.00
C ZEROPLUS LA UP DOWN COUNT	TER MODULE V1.01
C ZEROPLUS LA 3-K ELIP-ELOP MC	DULE V1.00
ZEROPLUS LA PECI MODULE VI.	OM 24L SERTES) MODULE
🔽 Use the DsDp	Find
More protocol analyzer: http://ww	w.zeroplus.com.tw
ок	Cancel Help

STEP 4. Click Register tab to type the serial key number of **I2C** (24L). Then, press **Register.**

ROTOCOL ANALYZER I2C(SERIAL	EEPROM 24L SERIES) SETUP:Bus1			
Configuration Timing Package Reg	jister			
The I2C(SERIAL EEPROM 24L SERIES) protocol analyzer decoding function is an optional purchased item.Welcome to purchase its serial key to activate this function for your necessary.				
Enter serial key:				
If you ordered software or have quest instructions below.Our sales team will	tions about ordering software please follow the appropriate respond to your enquiry as soon as possible.			
>> By phone: Tel:886-2-66202225				
>> Applications through EMail: service_2@zeroplus.com.tw				
>> Website: http://www.zeroplus.com.tw				
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STEP 5. After completing **Register**, come back to the **Bus Property** dialog box, and then click the **Parameters Configuration** to start the Protocol Analyzer **I2C** (**SERIAL EEPROM 24L SERIES**) setup.

Bus Property	
General Bus Setting	
C General Bus	Color Config
Activate the Latch function	A0 💌
	Rising analysis
Protocol Analyzer Setting	
Protocol Analyzer	Parameters Config .
C ZEROPLUS LA ST MODULE V1.03	
C ZEROPLUS LA UART MODULE V2.03	3 .05
C ZEROPLUS LA 1-WIRE MODULE VI.	.07
C ZEROPLUS LA J-K FLIP-FLOP MODU	JLE V1.00
C ZEROPLUS LA UP DOWN COUNTER	MODULE V1.01
C ZEROPLUS LA PECI MODULE V1.00	
ZEROPLUS LA I2C(SERIAL EEPROM	124L SERIES) MODULE
, ▼ Use the DsDp	Find
More protocol analyzer: http://www.	zeroplus.com.tw
ОК	Cancel Help

STEP 6. Set the two channels of **I2C** (24L).

SDA: JSDA	•	SUL: JSUL	
Address Setting			
Valid Bit of Address:	16 💌		
– Protocol Analyzer Color			
START	DATA	ADDRESS	READ
WRITE	ACK	NACK	STOP
CHIP SELECT	CONTROL	DONOT CARE	



STEP 7. Set the Valid Bit of Address.



STEP 8. Set the **Protocol Analyzer Color.**

PROTOCOL ANALYZER I2C(S	SERIAL EEPROM 2	4L SERIES) SETUP:Bus1	
Configuration Timing Packag	e Register		
Pin Assignment			
SDA: SDA	•	SCL: SCL	•
Address Setting			
Valid Bit of Address:	16 💌		
- Protocol Analuzer Color			
START	DATA	ADDRESS	READ
	•••		
WRITE	ACK	NACK	STOP
CHIP SELECT	CONTROL	DONOT CARE	
-			
L			
	ОК	Cancel De	efault Help



STEP 9. The setup of Time Format Settings.



STEP 10. Following pictures show the completion of the protocol analyzer decoding and the package list. The trigger condition is set as Either Edge; the memory depth is 128K; the sampling frequency is 50MHz.

Protocol Analyzer Decoding 🎒 ZEROPLUS LAP-32128U-A(S/N:00000-0000) - [DEMO.als] 🚛 File Bus/Signal Trigger Run/Stop Data Tools Window Help đΧ 🗋 😂 📕 🎒 💐 👯 👯 👯 📲 📲 🌉 🕨 🕪 💷 👫 128K 🔨 🚥 5000z 🗲 🛲 🦗 50% 🔻 🐝 Page 1 -Cour 🟠 🕟 📾 🗃 🥵 🔖 🖏 👘 🗰 🛛 🗛 🖓 HAN BAR BAR BAR BAR BAR 🙀 le 🏼 🖓 • - R 🐻 💾 🍖 Height 40 Font Size 9 Ŧ A Pos:1.591ms 🖛 Scale:1.093us Display Pos:61.968us A - T = 1.591ms 💌 A = B = 325.009ms 🖛 Total:644.321ms Compr-Rate: 245.789 Trigger Pos:Ons B Pos:-323.418ms 🖛 B - T = 323.418ms 🖛 Bus/Signal Trigger Enable 40.107us 45.572us 51.037us 56.503us 61.968us 67.434us 72.899us 78.365us 83.83us (120 (\otimes UNKNOW CHIP SELECT ACK \otimes \times 🥖 SDA х 🥖 SCL



Package List

ZEROPLUS LAP-32128U-A(S/N:000000-0000) - [DEMO. als]			
🚛 <u>F</u> ile B <u>u</u> s/Signal T <u>r</u> igger Run/ <u>S</u> top	<u>D</u> ata <u>T</u> ools <u>W</u> indow <u>H</u> elp		_ 8 ×
🗋 😂 🖪 🎒 🎮 縄 💱 🐢 😷 -	📲 🛐 🕨 🕪 🔳 👫 128K	🕶 🙀 📶 50MHz 💌 🛲 🦂	50% 🔻 🐝 Page 1 🔹 Cour
	") 🛗 📓 🔹 👗 1.093us 📼) 🐻 📴 🍖 Height 🛛 🖵
Font Size 9 🗸			
Scale:1.093us Display Po	s:61.968us A Pos:1.591ms	▼ A = T = 1.591ms ▼	A - B = 325.009ms →
Total:644.321ms Trigger Po	s:Uns B Pos:-323.418	ms ▼ B - T = 323.418ms ▼	Compr-Kate:245.789
Bus/Signal Trigger Enable	40.107us 45.572us 51.03	7us 56.503us 61.968us 67.434us 7	2.899us 78.365us 83.83us 89.2 3
🖃 — Busi (I2C () 🔹 🛛 🗸	UNKNOW START	CONTROL CODE : OXA CHIP	SELECT : OX1 WRITE ACK AD
SDA / 📉 🛛			
🖌 SCL / 🗶 🛞			
<	<	0	>
× Setting Refresh Export Synch Parameter			
Package #	Name	TimeStamp START CONTR	
1 Bus1(I2C(SE	RIAL EEPROM 24L SERIES))	45.24us START 0	XA 0X1
WRITE ACK ADDRESS_H	ACK ADDRESS_L ACK D	ATA ACK STOP	
Backage #	ACK UX47 ACK U	TimoStamp START CONTR	
2 Bus1(I2C(SE	RIAL EEPROM 24L SERIES))	254.68us START 0	XA OX1
WRITE ACK ADDRESS_H	ACK ADDRESS_L ACK D	ATA ACK DATA ACK DATA A	CK DATA ACK DATA ACK
WRITE ACK 0X47	ACK 0X75 ACK 0	XOO ACK OXOO ACK OXOO A	CK OXFF ACK OX23 ACK
DATA ACK DATA ACK	DATA ACK STOP		
Package #	Name	TimeStamp START CONTR	
Ready			End! DEMO