

# Instrument Business Department

CCIR656 Specification

Version : V1.0



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# **1** Software Installation

Please as the following steps to install the software:

**\*** Remark: The installation steps for all buses are the same; you can complete installation by following procedures. The below is an example to install SSI bus.

#### **STEP 1.** Install Bus Module



Cancel

# ○ 孕龍科技股份有限公司 ZEROPLUSITECHNOLOGY CO;LTD

## STEP 3. Click Next.



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

1	Special Bus SSI Todule - InstallShield Vizard	×
	License Agreement Please read the following license agreement carefully.	1
	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	
	intermediary, product information, electronic file and internet on-line	~
	downloadanie shriware electronic nie and service, known as "ZEROPLOS	-
	I accept the terms in the license agreement	
	I do not accept the terms in the license agreement	
Ir	nstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel	



# **STEP 5.** Fill in user information in the below dialog box and click **Next**.

🙀 Special Bus SSI Module - InstallShield M	/izard 🛛 🔀
Customer Information Please enter your information.	
User Name: sunshine	
Organization: zeroplus	
Install this application for:	
<ul> <li>Anyone who uses this computer (all users)</li> </ul>	
Only for <u>m</u> e (sunshine)	
InstallShield	ext > Cancel

## **STEP 6.** At first, select **Complete** and then click **Next**.

🛃 Special Bu	s SSI Module - InstallShield Wizard 🛛 🔀
Setup Type Choose the setu	up type that best suits your needs.
Please select a	setup type.
© <u>Complete</u>	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.



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





# 2 User Interface

Please refer to the below images to select options of setting CCIR656 MODULE.

## CCIR656 MODULE Configuration dialog box

SPECIAL BUS CCIR656 SETUP:Bus1									
Configuration Package Register									
Mode Select									
8 BITS	C 10 BITS	Samp	ling Mode:	RISING 💌					
-Bus Channel Setti	ng								
DBO: AO	▼ DB4:	A4 💌	CLK:	B0 💌					
DB1: A1	▼ DB5:	A5 💌	Decimal[1]:	B1 🔽					
DB2: A2	▼ DB6:	A6 💌	Decimal[0]:	B2 💌					
DB3: A3	▼ DB7 :	A7 💌							
-Bus Color									
SAV BLJ	ANKING EAV	СЪ	Ч	Cr					
	••	•••		•••					
		OK Cance	l Defaul	.t Help					

**CCIR656 Mode Select**: There are two mode options for CCIR656: 8 BITS and 10BITS ,you can select one as you requirements. The default is 8 BITS.

Sampling Mode: The sampling mode is set at CLOCK rising edge or falling edge

**CCIR656 Bus Channel Settings:**Because CCIR656 has two modes: 8BITS and 10BIT,when you select 8BITS Mode,there are 8 data lines from DB0 to DB7 and one CLK line,when you select 10BITS Mode,there adds additional two decimal lines.

**Bus Color Settings:**In order to recongize the package items,the items are displayed in different colors,thereinto,the error package is displayed red.



# CCIR656 MODULE Package dialog box

SPECIAL BUS CCIR65	5 SETUP:Bus1			×
Configuration Package	Register			
Item	Color			
🔽 SAV		🔽 Cr	and the second	
V BLANKING		🔽 Describe		
🔽 EAV				
🔽 Съ				
Y 🔽				
	OK	Cancel	Default Help	

In the package dialog, user can vary the color of items.

## CCIR656 MODULE Register dialog box

SPECIAL BUS CCIR656 SETUP:Bus1								
Configuration Package Register								
The CCIR656 bus decoding function is 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 que please follow the appropriate instru- respond to your enquiry as soon as y	stions about ordering software uctions below.Our sales team will possible.							
>> By phone:	Tel:886-2-66202225							
>> Applications through EMail:	service_2@zeroplus.com.tw							
>> Website:	http://www.zeroplus.com.tw							
Copyright (C) 1997-2008 ZEROPLUS TECHNOLOGY CO;LTD								
Regi	ster Cancel Default Help							

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



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# **3 Operating Intructions**

**STEP 1.** At first, group the unanalyzed channels into **bus1** by pressing the **Right Key** on mouse.



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



2F., No.123,Jian 8 Rd., Chung Ho City, Taipei TEL: 886-2-66202225 FAX: 886-2-66202226 http://www.zeroplus.com.tw



**STEP 3.** For Special Bus CCIR656 Parameters Configuration, select Special Bus, and then choose **ZEROPLUS LA CCIR656 MODULE V1.00.** Next click **Parameters Configuration** to open **Parameters Configuration** dialog box.

Bus Property								
General Bus Setting								
C GENERAL BUS	Color Config							
Special Bus Setting								
• SPECIAL BUS	Parameters Config							
C ZEROPLUS LA 1-WIRE MODULE V1.	04							
CI ZEROPLUS LA CCIR656 MODULE VI	00							
© ZEROPLUS LA LIN2.1 MODULE V2.6	<del>0</del>							
C ZEROPLUS LA ELEXBAX 2 1A MODILE VI.	.00 IEV1.00							
© ZEROPLUS LA CAN 2.08 MODULE V	1.05							
C ZEROPLUS LA JTAG 2.0 MODULE V	L.00(Internal V0.1)							
C ZEROPLUS LA ST7669 MODULE V1.	00 🗸							
✓ Use the DsDp								
Other More Module: http://www.zeroplus.com.tw								
ОК	Cancel Help							

**STEP 4.** Press Register tab to type the serial key number of logic analyzer. Then, press **Register.** 

SPECIAL BUS CCIR656 SETUP:Bus	ı 🔀								
Configuration Package Register									
· · · · · · · · · · · · · · · · · · ·									
The CCIR656 bus decoding function is	The CCIR656 bus decoding function is optional purchased item.Welcome								
to purchase its serial key to activa necessary	te this function for your								
Enter serial key:									
If you ordered software or have que please follow the appropriate instr	stions about ordering software uctions below.Our sales team will								
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								
Copyright (C) 1997-2008 ZEROPLUS TECHNOLOGY CO;LTD									
Regi	ster Cancel Default Help								
	ner her								



**STEP 5.** After completing **Register**, it turns to the **Bus Property** dialog box, then click the **parameters configuration** to start the Special Bus CCIR656 setup.

Bus Property	
General Bus Setting	
C GENERAL BUS	Color Config
	contracting th
Special Bus Setting	
SPECIAL BUS	Parameters Config
C ZEROPLUS LA 1-WIRE MODULE V1.0	04
C ZEROPLUS LA 7-SEGMENT LED MOD	ULE V1.01
ZEROPLUS LA CCIR656 MODULE V1	.00
C ZEROPLUS LA LINZ, 1 MODULE V2,0	0
O ZEROPLOS LA ELEXPAY 2 14 MODULE VI.	UU LE V1 00
C ZEROPLUS LA CAN 2.08 MODULE V	1.05
C ZEROPLUS LA JTAG 2.0 MODULE V1	.00(Internal V0.1)
C ZEROPLUS LA ST7669 MODULE V1.0	0 🔍 🗸
🔽 Use the DsDp	
Other More Module: http://www.zeroplu	us.com.tw
ОК	Cancel Help

**STEP 6.** Set up the Mode Select for CCIR656, there are two mode to be selected, and then set up Sampling Mode, the sampling mode is set at the rising or falling edge of CLOCK.

SP	SPECIAL BUS CCIR656 SETUP:Bus1									
С	Configuration Package Register									
	-Mode Select									
	Hode Select									
	(• o b.	115	0	IU BIIS		5 angs	ing mode.	JEI31		
	-Bus Chann	el Se	tting							
	DBO:	AO	•	DB4:	A4	•	CLK:	BO	-	
	DB1 :	A1	•	DB5:	<b>A</b> 5	•	Decimal[1]	B1	~	
	DB2:	A2	•	DB6:	A6	•	Decimal[0]	: B2	~	
	DB3:	A3	•	DB7 :	A7	•				
	-Bus Color									
	SAV		BLANKING	EAV		СЪ	Ч		Cr	
					• •				• •	
				0	K	Cancel	. Defa	ult	Help	



#### **STEP 7.** Set up the channels for **CCIR656** module by the following mode.

SPE	CIAL BU	is co	IR656 SET	ru <mark>P : Bu</mark>	s 1					
Configuration Package Register										
-Mode Select										
	G O P	 TTC	0	10 BITS		Sampl	ing Mode <sup>.</sup>	RISTNG		
	(* U D	115	· ·	IO DIIS		o ampi		JIIIJING		
Γ	Bus Chan	nel Se	tting —							
	DBO:	A0	•	DB4:	A4	-	CLK:	BO	•	
	DB1 :	A1	•	DB5:	A5	•	Decimal[1]	: B1	<u> </u>	
	DB2:	A2	•	DB6:	A6	•	Decimal[0]	: B2	<b>V</b>	
	DB3:	A3	•	DB7:	A7	•				
	Bus Color									
	SAV		BLANKING	EAV	r	СЪ	Y	C	ir 🛛	
			•••		• •	• •		••	• •	
					OK	Cancel	Defa	ult	Help	



**STEP 8.** Following pictures show that the completion of the Bus decoding and package list. The conditions are set as Memory depth is 128K, Sampling frequency is 200MHz.If the compression mode is activated, the logic analyzer can capture more data.

WILLIAM ZEROPLUS LAP-321280	-A(S/N:00000-0000) - [sk	y_DEMOals]	
🚛 File Bus/Signal Trigger	Run/ <u>S</u> top <u>D</u> at <u>a T</u> ools <u>W</u> indow	Help	_ @ ×
🗅 🕞 🖪 🚑 🔍 👯		128K W 128K	▼ 🔤 😽 <b>50%</b> 🔽 🐳 Page 1
	R R 🖑 🖬 🗃 - 🎿 2.1		😢 👪 le 🖓 🐻 🔡 🍖 Heigh
Trigger Delay 5ns	Font Size 28 -		
Scale:2.139us	Display Pos:235.251us	A Pos:-083.879ms  ▼	A - T = 83.879ms   ▼ 📉 📉
Total:166.214ms	Trigger Pos:Ons	B Pos:-083.879ms  ▼	B - T = 83.879ms   ▼ 💽 💽
Bus/Signal Trigger	Enable 192, 478u:203, 171,	1:213, 864u:224, 558u:235, 251u:245, 944u:2	56, 637u:267, 331u:278, 024u:288, 717
Bus1 (CCIR656			
- 🖌 DBO AO 🗙			
🖌 DB1 A1			
🖉 🖉 DB2 A2			
			-     "
<b>DB7</b> A7			
🥖 Decimal 🔣			
🖉 🥖 Decimal 🔣			
Package List			
SEROPLUS LAP-321280	-&(S/N:00000-0000) - [sk	y_DETOals]	
🕌 File Bus/Signal Trigger	Run/ <u>S</u> top <u>D</u> ata <u>T</u> ools <u>W</u> indow	Help	_ 8 ×
🗋 🖻 😹 🖪 🎒 🚳 🔍	🖗 👯 📲 🔟 🚺	₩ 128K - ₩ 200MHz	🕶 🛲 🧚 50% 💌 🐝 Page 1
1 🚯 🚯 📾 🎫 🍠	🔌 🕅 🖑 🎬 📓 - 🦽 2.1	I39us <mark>→</mark> 🙀 - 🖌 A¥ B¥ T¥ +	🛃 🎼 14 수) 😿 📴 🔖 Heigh
Trigger Delay 5ns	Font Size 28 -		
 Scale:2.139us	Display Pos:235.251us	å Pos:-083 879ms ₩	
Total:166.214ms		A TOS. 000.015ms +	A - T = 83.879ms ▼
	Trigger Pos:Ons	B Pos:=083.879ms ▼	A - T = 83.879ms   ▼ B - T = 83.879ms   ▼
Bus/Signal Trigger	Trigger Pos:Ons Enable 192,478u:203,171u	B Pos:=083.879ms ▼ 1:213,864u:224,558u:235,251u:245,944u:2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56,637u:267.331u:278.024u:288.7177
Bus/Signal Trigger	Trigger Pos:Ons	B Pos:-083.879ms ▼	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 55.637u;267.331u;278.024u;288.717
Bus/Signal Trigger	Trigger Pos:Ons Enable 192.478u:203.1711	B Pos:-083.879ms ▼ 1:213.864u:224.558u:235.251u:245.944u:2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171 56.037u:267.331u:278.024u:288.7171
Bus/Signal Trigger Bus1 (CCIR656 DBO AO DB1 A1	Trigger Pos:Ons	B Pos:-083.879ms -	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u;267.331u;278.024u;288.7176
Bus/Signal Trigger Bus1 (CCIR656 DB0 A0 DB1 A1 DB2 A2 DB2 A2	Trigger Pos:Ons	B Pos: −083. 879ms ▼	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7177
Bus/Signal Trigger Bus1 (CCIR656 Bus1 (CCIR6	Trigger Pos:Ons	B Pos:-083.879ms ▼ 1:213.864u:224.558u:235.251u:245.944u:2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171
Bus/Signal Trigger Bus1 (CCIR656 Bus1 (CCIR656 Bus1 (CCIR656 Bus1 A1 B	Trigger Pos:Ons	B Pos:-083.879ms ▼	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u.267.331u.278.024u.288.7171
Bus/Signal Trigger Bus1 (CCIR656 DB0 A0 DB1 A1 DB2 A2 DB3 A3 DB4 A4 DB5 A5 DB5 A5 DB6 A6	Trigger Pos:Ons	B Pos:-083.879ms ▼	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.717
Bus/Signal Trigger Bus1 (CCIR656 Bus1 (CCIR6	Trigger Pos:Ons	B Pos:-083.879ms ▼ 1213.864u:224.558u:235.251u:245.944u:2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171
Bus/Signal Trigger  Bus1 (CCIR656  Bus1 (CCIR656	Trigger Pos:Ons	B Pos:-083.879ms ▼ 1:213.864u:224.558u:235.251u:245.944u:2 	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 55.637u:267.331u:278.024u:288.7171
Bus/Signal Trigger Bus1 (CCIR656 DB0 A0 DB1 A1 DB2 A2 DB3 A3 DB3 A3 DB4 A4 DB5 A5 DB5 A5 DB5 A5 DB6 A6 DB7 A7 CLK B0 DC DCLK B0 DC DCCLK B0 DC	Trigger Pos:Ons	B Pos:-083.879ms ▼ 1:213.864u:224.558u:235.251u:245.944u:2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.717
Bus/Signal Trigger Bus1 (CCIR656 Bus1 (CCIR6	Trigger Pos:Ons	B Pos:-083.879ms ▼ 1213.864u;224.558u;235.251u;245.944u;2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171
Bus/Signal Trigger Bus/Signal (CCIR656 Bus1	Trigger Pos:Ons	B Pos:-083.879ms -	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7177
Bus/Signal Trigger Bus1 (CCIR656 DB0 A0 DB1 A1 DB2 A2 DB3 A3 DB4 A4 DB5 A5 DB5 A5 DB6 A6 DB7 A7 CLK B0 DB7 A7 E CLK B0 B Ba B3 C Decimal B B3 B3 C DB4 A4	Trigger Pos:Ons	B Pos:-083.879ms -	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7174
Bus/Signal Trigger  Bus1 (CCIR656  DB0 A0  DB1 A1  DB2 A2  DB3 A3  DB4 A4  DB5 A5  DB5 A5  DB6 A6  DB7 A7  CLK B0  Decimal  B3 B3  S  Setting Flash Expe	Trigger Pos:Ons  Enable 192,478u:203,1711  Enable	B Pos:-083.879ms -	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171
Bus/Signal Trigger Bus/Signal CCIR656 Bus1 (CCIR656 Bus1 A1 Bus1 (DB1 A1 Bus1	Trigger Pos:Ons         Enable       192,478m203,1711         Image: Second state	B Pos:-083.879ms         1213.864u.224.558u.235.251u.245.944u.2         1213.064u.224.558u.235.251u.245.944u.2         1213.064u.224.558u.235.251u.245.944u.245.944u.2         1213.064u.224.558u.235.251u.245.944u.245.944u.2         1213.074u.274.578u.2745.944u.245.	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u267.331u278.024u288.7171
Bus/Signal Trigger  Bus/Signal (CCIR656  DB0 A0  DB1 A1  DB2 A2  DB3 A3  DB4 A4  DB5 A5  DB5 A5  DB6 A6  DB7 A7  CLK B0  Decimal  Decimal  B3 B3  Setting Flash Expe  Package # Nat  Setting Flash Expe  Cb Y Cr	Trigger Pos:Ons         Enable       192,478u:203,1711         Image: Second state	B Pos:-083.879ms         1213.864u;224.558u;235.251u;245.944u;2         1213.864u;224.558u;235.251u;245.944u;24.558u;2450;240;240;240;240;240;240;240;240;240;24	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u:267.331u:278.024u:288.7171 56.637u:267.331u:278.024u:288.7171 56.637u:267.331u:278.024u:288.7171 57.64000000000000000000000000000000000000
Bus/Signal Trigger Bus/Signal (CCIR656 Bus1 (CCIR656 Bus1 (CCIR656 Bus1 A1 Bus1 (CC Cb Y Cr 0×88 (0×89 (0×88)	Trigger Pos:Ons         Enable       192,478m203,1711         Image: Second Stress St	B Pos:-083.879ms         n213.864u.224.558u.235.251u.245.944u.2         n213.864u.224.558u.2350u.2458u.2450u.2458u.2454u.2454u.2454u.2454	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u.267.331u.278.024u.288.7171
Bus/Signal Trigger Bus/Signal CCIR656 Bus1 (CCIR656 Bus1 at a a a a a a a a a a a a a a a a a a	Trigger Pos:Ons         Enable       192,478w203,1711         Image: Second State       Image: Second State         Image: Second State <th>B Pos:-083.879ms         u213.864u.224.558u.235.251u.245.944u.2         u213.864u.224.558u.2350u.2451u.245.944u.2</th> <th>A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u.267.331u.278.024u.288.7177 56.637u.267.331u.278.024u.288.7177 Cb Y Cr Y 0X84 0X85 0X86 0X87 Y Cr Y Cb 0X95 0X96 0X97 0X98 C Y Cr Y Cb 0X95 0X96 0X97 0X98 C Y Cr Y Cb 0X95 0X96 0X97 0X98</th>	B Pos:-083.879ms         u213.864u.224.558u.235.251u.245.944u.2         u213.864u.224.558u.2350u.2451u.245.944u.2	A - T = 83.879ms ▼ B - T = 83.879ms ▼ 56.637u.267.331u.278.024u.288.7177 56.637u.267.331u.278.024u.288.7177 Cb Y Cr Y 0X84 0X85 0X86 0X87 Y Cr Y Cb 0X95 0X96 0X97 0X98 C Y Cr Y Cb 0X95 0X96 0X97 0X98 C Y Cr Y Cb 0X95 0X96 0X97 0X98