I-2534 CAN bus Switch Module Quick Start User Guide

1. Introduction

This Quick Start User Guide introduces users how to use the I-2534 module to their application quickly. Therefore, it is only provided with the basic instructions. For more detailed information, please refer to the I-2534 manual in the ICPDAS CD-ROM. Also, users can download the manual from the ICPDAS web site:

<u>http://www.icpdas.com/root/product/solutions/industrial_communication/fieldbus/can_bus/r</u> epeater/i-2534_i-5534-m.html

This manual will help you quickly to familiarize yourself with the I-2534 module and its switching mechanism. Here, we use an example to show how to use the I-2534. For more the detail information, please refer to the user's manual of the I-2534.

2. CAN bus Pin Assignment

Name	Port	Description
CH1		CAN_High
CL1	1	CAN_Low
CG1		CAN_Ground
CH2		CAN_High
CL2	2	CAN_Low
CG2		CAN_Ground
CH3	3	CAN_High
CL3		CAN_Low
CG3		CAN_Ground
CH4	4	CAN_High
CL4		CAN_Low
CG4		CAN_Ground



3. Power & RS-232 Pin Assignment

Name	Description	
TxD	TXD pin of RS-232 port.	
RxD	RXD pin of RS-232 port.	
CG4(GND)	GND pin of RS-232 port. CAN4 GND and RS-232 GND use the same pin "CG4".	

Name	Description	
P\W/R	Voltage Source Input.	
	$+10V_{DC} \sim +30V V_{DC}$.	
GND	Power Ground.	



4. Indicator LED

LED Name	LED Color	Description
PWR LED	OFF	The I-2534 has no power
		source.
	Red	The I-2534 has power.

LED Name	LED Color	CAN Status Description
CAN1 CAN2 CAN3 CAN4	OFF	CAN port does not transmit or
		receive message now.
	Green	CAN port is transmitting or
		receiving message now.
	Red	CAN port have some errors
		when transmitting message.



5. CAN bus Terminal Resistor & DIP-Switch

DIP No.	Switch status	CAN bus resistor status
1	ON	CAN 1 with 120Ω resistor.
	OFF	CAN 1 without resister.
2	ON	CAN 2 with 120Ω resister.
2	OFF	CAN 2 without resister.
3	ON	CAN 3 with 120Ω resister.
	OFF	CAN 3 without resister.
4	ON	CAN 4 with 120Ω resister.
4	OFF	CAN 4 without resister.
5	N/A	Not Available
6	N/A	Not Available



6. Rotary Switch & CAN Baud Rate

Switch	CAN bus
Value	Baud Rate
0	5 kbps
1	10 kbps
2	20 kbps
3	33.3 kbps
4	50 kbps
5	62.5 kbps
6	83.3 kbps
7	100 kbps
8	125 kbps
9	250 kbps
А	500 kbps
В	800 kbps
С	1 Mbps
D	User-defined
U	baud rate.
E~F	Not-available



7. Normal / Initial Mode Switch

In general usage, the users should make switch at the "Normal" position.



Mode Name	The I-2534 Status Description
Normal	The I-2534 is in the normal mode.
Initial	The I-2534 is in the configurable mode. The users could use "I2534_Utility" to configure the route path, CAN filter or user-defined CAN baud rate. In initial mode, the CAN1 LED ~ CAN4 LED will be all twinkling every 1 second.

8. Configuring the Route Path, User-defined Baud Rate, CAN-ID Mapping

Users can configure the route path and user-defined baud rate of each CAN channel. We provide the "I2534_I5534M_Utility" to set these configurations into the I-2534 module. They can get the software utility from the shipping CD or web.

1-2534 / 1-5534-M Utility ¥1.2		I-2534 / I-5534-M Utility ¥I.2
COM Port in PC COM Port COM1 • 115200.n.8,1		COM Port in PC COM Port COM1 • 115208.n.8,1
CAN-ID Filter CAN Port 1 CAN Port 2 CAN Port 3 CANPort4		CAN-ID Filter CAN Port 1 CAN Port 2 CAN Port 3 CANPort4
Download CAN Filter	User Define CAN Baud Rate	CAN Port 1 Routing Table Input CAN Port Output CAN Port
Step 1. Create CAN Filter File	CAN 1 33.2 Kbps	$CAN 1 \longrightarrow \qquad \overrightarrow{\mathbf{v}} \ CAN 2 \qquad \overrightarrow{\mathbf{v}} \ CAN 3 \qquad \overrightarrow{\mathbf{v}} \ CAN 4 \qquad \longrightarrow \qquad \qquad$
Step 2. V Enable CAN Filter	CAN 2 56.9 Kbps	Finable CAN Port 1 Mapping CAN-ID Table T1-bit From 1122 (Hox) Mapping IDs
Step 3. Download CAN Filter File	CAN 3 22.4 Kbps	c 29-bit rts c (res) 1 11-bit to 29-bit 0x1239bx00000ABC 2 29-bit 0x00001122>0x00002211 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Read CAN Filter	Download User Baud Rate	Add
Read from Module	Read from Module	Clear Table Delete Row
Firmware Ve	er. Reset Module Exit Utility	Load CAN-ID File Save CAN-ID File Read from Module Write to Module Firmware Ver.

Mail to <u>service@icpdas.com</u> if you have any questions.