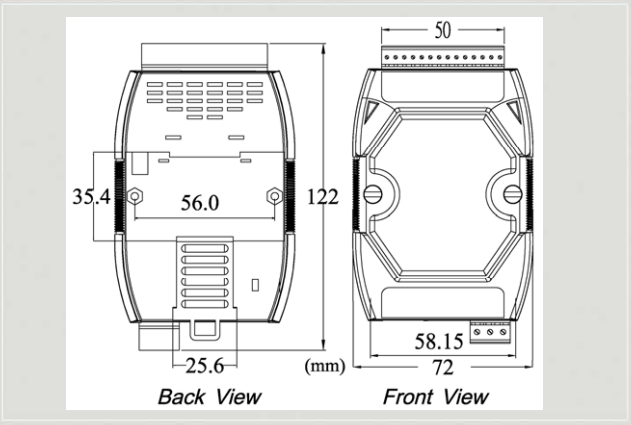
CAN Series Products

Two-channel CAN Bus Isolated Bridge

I-7532



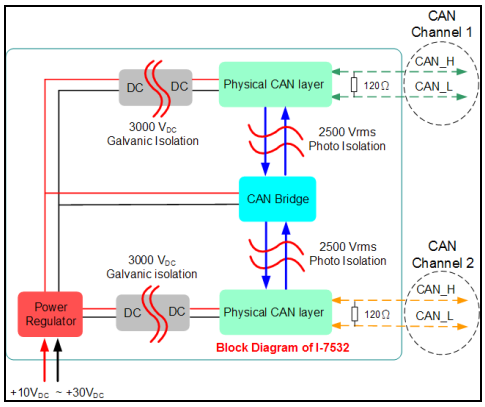
Dimensions

I-7532 is a CAN bridge used to establish a connection between two CAN bus systems in a CAN network and more functions are equipped than I-7531 (CAN Repeater). Three powerful features are provided by I-7532. First, the transmission distance limitation of the CAN bus system on each side of I-7532 are independent, which means the total CAN network distance can be extended. Second, when some errors (e.g. bit error) happened on one side of I-7532 of the CAN bus system; the other side can still work correctly. Last one, the baud rate and filter setting of these two CAN channels on I-7532 can be different for highly flexibility and efficiency.

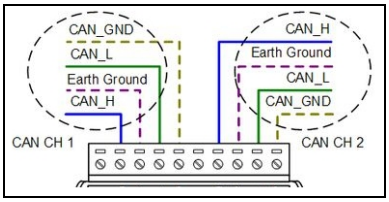
Features

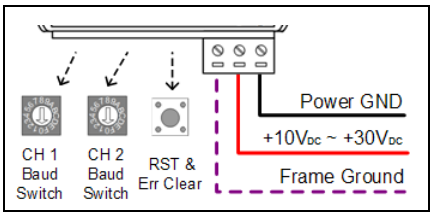
- 82C250 CAN transceiver
- 2500 Vrms photo coupler isolation on CAN side
- 3 kV galvanic isolation among the power supply and 2 CAN channels
- Support both CAN 2.0A and CAN 2.0B
- Fully compatible with the ISO 11898-2 standard
- Built-in jumper to select 120Ω terminal resister
- Watchdog inside
- Up to 100 CAN nodes on each channel
- 768-frame buffer for each CAN channel
- Adjustable CAN bus baud rate from 5K bps to 1M bps or programmable user-defined baud rate
- Support CAN bus acceptance filter configuration

Block Diagram



Pin Assignments





Baud Rate Selection

Switch Value	0	1	2	3
Baud [bps]	Config Mode	5k or User-defined CAN baud	10 k	20 k
Switch Value	4	5	6	7
Baud [bps]	40 k	50 k	80 k	100 k
Switch Value	8	9	A	B
Baud [bps]	125 k	200 k	250 k	400 k
Switch Value	C	D	E	F
Baud [bps]	500 k	600 k	800 k	1 M

Hardware Specifications

CAN Interface	
Controller	Microprocessor inside with 72MHz
Transceiver	NXP 82C250
Channel number	2
Connector	4-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H)
Baud Rate (bps)	Adjustable CAN bus baud rate from 5Kbps to 1Mbps or programmable user-defined baud rate
Isolation	3000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Jumper for 120 Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	2 W
Mechanism	
Installation	DIN-Rail
Dimensions	72mm x 122mm x 33mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing

LED Indication

PWR LED	
ON	Comm. Mode
FLASH	Config. Mode
OFF	Power off

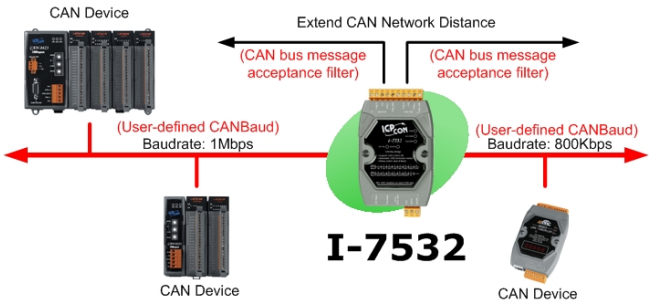
Rx LED	
Flashing	Transmission
ON (config. mode)	Configuration via this CAN Ch.
OFF	Bus idle

ERR LED	
Flashing (100ms)	Transmission Fail
Flashing (1sec)	Buffer Overflow
ON	Bus off
OFF	No error

RST & Err Clear Button

Reset & Error Clear button	
Click	Error clear
Push (3sec)	Module reset

Application



Ordering Information

I-7532 CR	Two-channel CAN Bus Isolated Bridge (RoHS)