



# CAN Series Products



## Industrial 4-port CAN bus Switch with Metal casing



I-5534-M



View

The I-5534-M is one kind of CAN bus switch. There are four independent CAN channels which offer a flexible design of the start or tree network topology. This new topology could resolve the complex CAN bus application, like industrial machinery, building automation, vehicle automation, and etc. Furthermore the I-5534-M integrates and exchanges data between different CAN network which has different baud rate. It helps users to extend the CAN network system. The I-5534-M could increase the maximum CAN node count in a CAN network by splitting the CAN network into several subnets. In additional, the user-defined CAN baud rate and CAN filter configuration are also supported.

### Features

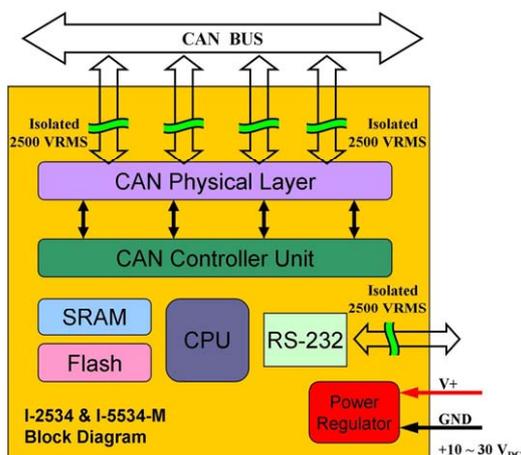
- 4 CAN communication ports
- Compatible with CAN specification 2.0A and 2.0B
- Fully compatible with the ISO 11898-2 standard
- Baud rate : 5 k, 10 k, 20 k, 33.3 k, 50 k, 62.5 k, 83.3 k, 125 k, 250 k, 500 k, 800 k, 1 M bps and customized.
- CAN bus filter is configurable
- 100 data frames buffer for each CAN channel
- Max data flow up to 2500 fps for all CAN channel
- Selectable baud rate by rotary switch
- Selectable 120Ω terminal resistor by Jumper
- LED for CAN status

### Utility Features

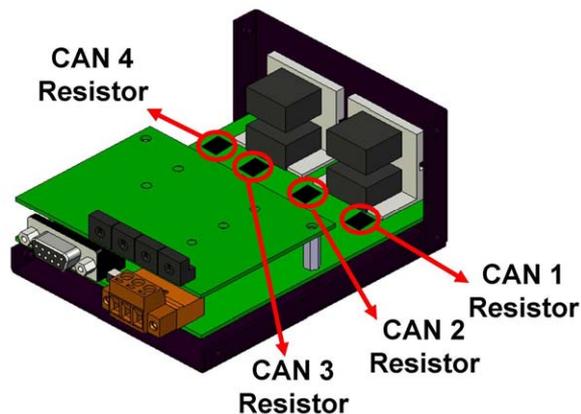


This utility configures the CAN filter and user-defined CAN baud rate. It can save the CAN filter configuration as file and would be import to another I-2534 or I-5534-M.

### Block Diagram



### CAN Terminal Resistor

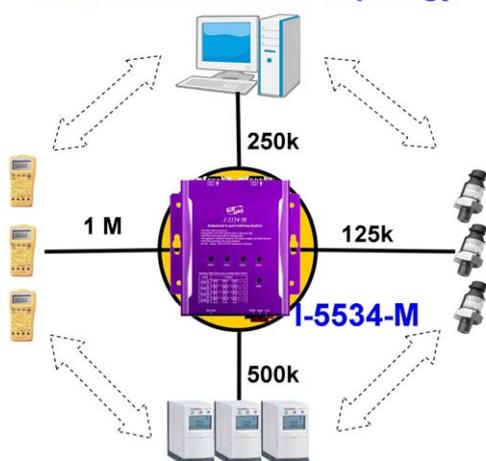


## Hardware Specifications

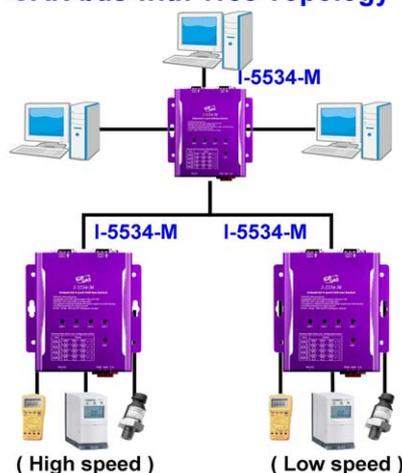
| Hardware                  |   |
|---------------------------|---|
| Controller                | High Performance Microcontroller  |
| RTC (Real Time Clock)     | No  |
| Watchdog                  | Watchdog IC   |
| ESD Protection            | 4 kV Contact for each channel   |
| CAN Interface             |   |
| Transceiver               | NXP TJA1042   |
| Channel number            | 4   |
| CAN Specification         | ISO-11898-2, CAN 2.0A and CAN 2.0B  |
| CAN Connector             | 9-pin male D-Sub with CAN_GND, CAN_SHLD, CAN_H, CAN_L   |
| Baud Rate (bps)           | 5k, 10 k, 20 k, 33.3 k, 50 k, 62.5 k, 83.3 k, 125 k, 250 k, 500 k, 800 k, 1 M bps and customized. |
| Baud Rate Selection       | Selectable by rotary switch   |
| Isolation                 | 3000 V <sub>DC</sub> for DC-to-DC, 2500 Vrms for photo-couple                                     |
| Terminal Resistor         | Selectable 120Ω terminal resistor by Jumper.  |
| Transmission Distance (m) | Depend on baud rate (for example, max. 1000 m at 50 kbps )  |
| CAN Filter                | Configurable by user  |
| UART Interface            |   |
| RS-232                    | 1 port (for configuration)  |
| RS-232 Connector          | 3-pin screwed terminal block (TxD, RxD, GND )   |
| LED                       |   |
| Round LED                 | CAN status LED x 4 , Power LED x 1  |
| Power                     |   |
| Input range               | Unregulated +10 ~ +30 V <sub>DC</sub>   |
| Power Consumption         | 1.5W  |
| Mechanism                 |   |
| Installation              | Wall-Mounting   |
| Casing                    | Aluminum metallic case  |
| Dimensions                | 116.5 x 127 x 61.3 mm (W x L x H)   |
| Environment               |   |
| Operating Temp.           | -25 ~ 75 °C   |
| Storage Temp.             | -30 ~ 80 °C   |
| Humidity                  | 10 ~ 90% RH, non-condensing   |

## Application

### CAN bus with Star Topology



### CAN bus with Tree Topology



## Ordering Information

|                 |  |
|-----------------|--|
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