ICP DAS

I-7188XBD-CAN

CAN bus series Programmable Automation Controller

Features

- Compatible with CAN specification 2.0 parts A and B
- Programmable transfer rate up to 1 Mbps
- Jumper for 120 Ω terminal resistor for CAN channel
- 64-bit hardware unique serial number inside
- COM driver support interrupt & 1 KB QUEUE input buffer
- COM port: COM1, COM2
- Built-in RTC, NVRAM, EEPROM
- One digital Input channel and one open collector output channel
- Built-in self-tuner ASIC controller on RS-485 port

Introduction

The I-7188XBD-CAN series PACs (Programmable Automation Controller) are powered by 80188-40 processor with 512 KB of static RAM, and 512 KB of Flash memory. All of them provide several communication interfaces to adapt to various applications, such as CAN port, RS-232 port and RS-485 port. Uses can program their application program flexibly with C/C++ language because of the built-in MiniOS7 operation system. Besides, the I-7188XBD-CAN series PACs have different I/O types for users to match their requirement.
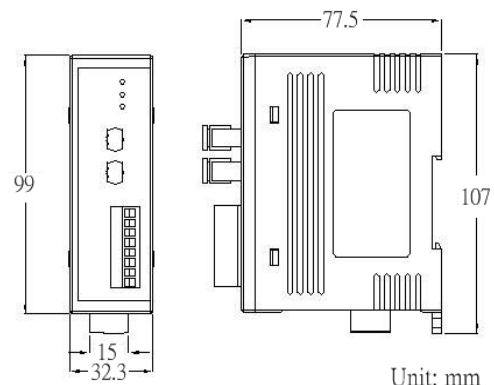
Wiring and Pin Assignments
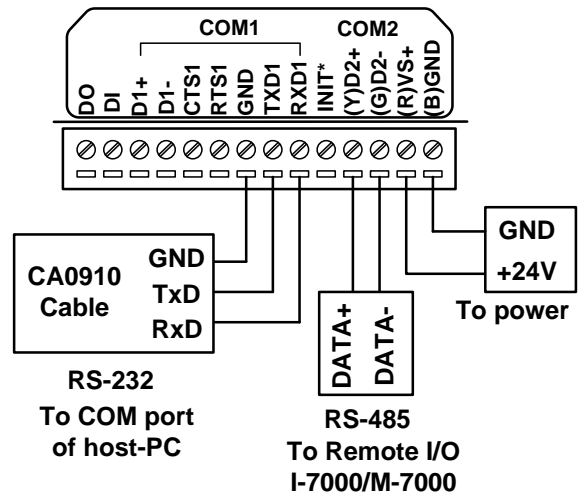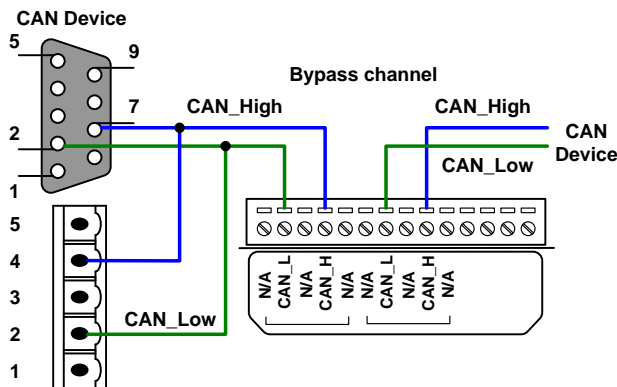
Application
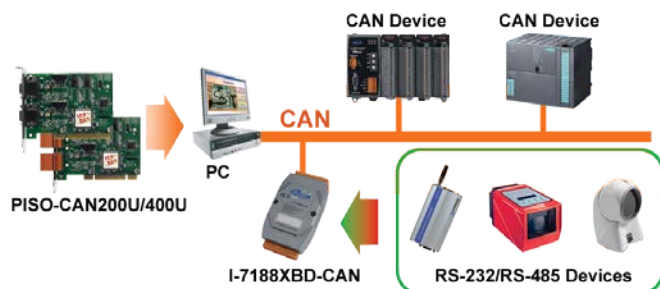
Dimensions (Units: mm)

▤ Hardware Specifications

Hardware	
CPU	80188, 40 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB
NVRAM	31 bytes (battery backup, data valid for up to 10 years)
RTC (Real Time Clock)	Yes
Watchdog	CPU built-in
Hardware Serial No.	64-bit hardware serial No.
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Channel number	1
Connector	5-pin screwed terminal block (CAN_L, CAN_H, N/A for others)
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate)
Transmission Distance (m)	Depend on baud rate (for example, max. 1000 m at 50 kbps)
Isolation	1000 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
UART Interface	
COM 1	RS-485/RS-232 (can't be used simultaneously)
COM 1 Connector	2-pin screwed terminal block (DATA+, DATA-) 5-pin screwed terminal block (TxD, RxD, RTS, CTS, GND)
COM 2	RS-485 (Self-turner inside)
COM 2 Connector	2-pin screwed terminal block (DATA+, DATA-)
Transmission Distance (m)	Depend on baud rate (for example, max. 1200 m at 9.6 kbps)
Baud Rate (bps)	110, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
LED	
Round LED	L1 LED, L2 LED, L3 LED
5-digit 7 Segment	Yes
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	3 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

▤ Ordering Information

I-7188XBD-CAN	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, seven segment Display, developing tool kit 512KB flash ,512KB SRAM, Minios7, 1 DI and 1 DO channels
I-7188XBD-CAN CR	Programmable automation controller with two series communication port (RS-232/RS-485), one CAN port, seven segment Display, developing tool kit 512KB flash ,512KB SRAM, Minios7, 1 DI and 1 DO channels (RoHS)