



**I-7188XB-CAN1**

**I-7188XBD-CAN**

## I-7188XBD-CAN/ I-7188XB-CAN1

**I-7188 CAN bus series Programmable  
Automation Controller**

### Introduction

The I-7188XBD-CAN/I-7188XB-CAN1 series PACs (Programmable Automation Controller) are powered by 80188-40 processor with 512K bytes of static RAM, and 512K bytes 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. Users can program their application program flexibly with C/C++ language because of the built-in MiniOS7 operation system. Besides, the I-7188XBD-CAN/I-7188XB-CAN series PACs have different I/O types for users to match their requirement. For I-7188XBD-CAN/I-7188XB-CAN, it provides 1 open collector digital output channel and 1 digital input channel. It is useful for transfer the command from differential communication interface. I-7188XB-CAN1 supports several I/O channels. The A/D converter has high performance, over voltage protection and high-resolution data acquisition, its 50 KHz gap-free data acquisition. Besides, it also provides 5 open collector digital output channels and 3 digital input channels. Therefore, it can satisfy the applications with I/O demand. Therefore, the I-7188XBD-CAN/I-7188XB-CAN1 series PACs are economic and convenient solution for diversification CAN application.

### Features

- 2500Vrms photo-isolation protection.
- Compatible with CAN specification 2.0 parts A and B.
- Programmable transfer rate up to 1 Mbps.
- Jumper select 120Ω terminator resistor for CAN channel
- 64-bit hardware unique serial number inside
- COM driver support interrupt & 1K 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
- 7-segment LED display
- Built-in ICP DAS's MiniOS7
- Program download port: COM1

### Applications

- CAN bus communication application
- Industry automation
- Auto defection CANopen slave devices
- IO monitor
- High speed data acquisition system
- Process monitor and control
- Factory automation
- Laboratory automation
- Communication switching

### Specifications

<b>CPU</b>	Am188™ES: 40M Hz or compatible
<b>Flash</b>	512K bytes, Erase unit is one sector (64K bytes); 100,000 erase/write cycles
<b>SRAM</b>	512K bytes
<b>EEPROM</b>	2048 bytes (8 blocks, each block has 256 bytes); Data retention > 100 years;

<b>NVSRAM</b>	1,000,000 erase/write cycles.
<b>Real Time Clock</b>	31 bytes, battery backup, data valid up to 10 years Year-2000 compliance; seconds, minutes, hours, date of the month, year, valid up from 1980 to 2079
<b>CAN Signal Support</b>	CAN_H, CAN_L
<b>Connecter</b>	5-pin screw terminal connector
<b>DI Level: Dry Contact</b>	Logical level 0: closed to GND / Logical level 1: open
<b>DI Level: Wet Contact</b>	Logical level 0: +1V / Logical level 1: +3.5V to +30V
<b>DO Level</b>	Open collector to 30V Max. / Output current: 100mA
<b>Power Consumption</b>	4W
<b>COM1</b>	RS-485: D1+, D1-, self-tuner ASIC inside
<b>COM2</b>	RS-485: D2+, D2-, Self-tuner inside
<b>Communication Speed</b>	RS-232: TXD, RXD, RTS, CTS, GND 115200 max
<b>CAN Controller</b>	Phillip SJA1000T CAN Controller
<b>CAN Transceiver</b>	Phillip 82C250 CAN Transceiver
<b>LED Directors</b>	NS, MS, IO
<b>Display</b>	7-segment LED: 5digit
<b>Clock Frequency</b>	16MHz
<b>Transmission Speed</b>	1MBPS Max.
<b>Isolated</b>	2500Vrms on CAN side
<b>Operating Temp</b>	-25C to 75C
<b>Storage Temp</b>	-30C to 85C
<b>Humidity</b>	5 ~ 95%

#### AD Specifications

- Analog input range :  $\pm 1.25V$
- Channels : Differential input
- Resolution : 12-bit
- Conversion rate: 50KS/s max.
- Input impedance : 2 M Ohm
- A/D trigger mode: pacer Trigger
- A/D data transfer mode: polling, interrupt
- Over voltage protection :  $\pm 220V$
- Linearity :  $\pm 2$ -bit

#### DI Specifications

- Logical level 1: +3.5V to +30V(only for DI0)
- Input high range: 5~30V(only for DI1~DI2)
- Input low range: 0~1V

#### DO Specifications

Open-collector Output: 100 mA / channel

- Load Voltage: 5Vdc to 30Vdc
- Load Current: 100mA (maximum)
- Isolation Voltage: 3750Vrms (only for DO1~DO4)

#### Dimensions

- 123 x mm x 72 mm x 33 mm

#### Ordering Information

<b>I-7188XBD-CAN</b>	Programmable automatic controller with two series communication port (RS-232/RS-485), one CAN port, seven segment Display, developing tool kit 512k flash ,256k SRAM, Minios7, 1 DI and 1 DO channels
<b>I-7188XB-CAN1</b>	I-7188XBD-CAN with additional 1 AI, 2 DI, and 4 DO channels