

# I-7188XB(D)-512

Standard Palm-sized Serial PAC with 80188-40 CPU, MiniOS7,
512 KB SRAM, 1 DI, 1 DO and 1 I/O Bus (7-Segment LED Display)

## Features

- Built-in High-Performance MiniOS7 from ICP DAS
- Easy-to-use SDKs (Using C language)
- Various Storage Media
  - 512 KB Flash
  - 2 KB EEPROM
- Various Communication Interfaces (RS-232/RS485)
- Built-in Digital Input/Output
  - 1-ch Digital Input
  - 1-ch Digital Output
- Build-in Watchdog Timer

## Introduction

The I-7188XB(D)-512 is for industry applications and can be used to replace PC or PLC devices in harsh environments. The I-7188XB(D)-512 controller is designed for palm-size embedded systems that require high reliability, PC-compatibility, and compactness at a reasonable price.

The controllers can be integrated into an OEM product as a processor core component. By building your product around I-7188XB(D)-512 controller, you reduce the time from design to market introduction, cut development costs, minimize technical risks, and deliver a more reliable product.

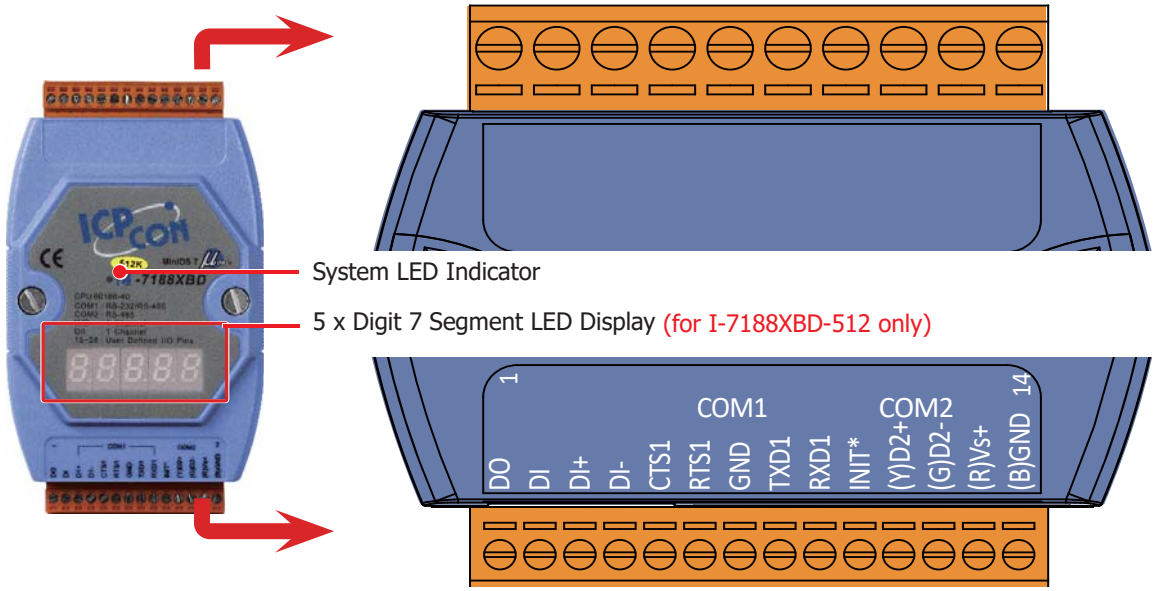
Depending on the type of embedded firmware programs that are being developed, and which I/O Expansion Board, the I-7188XB(D)-512 can be used as a single versatile controller.

## Powerful Embedded OS — MiniOS7

MiniOS7 is the most stable OS used in the last decade. Up to now, several hundred thousand copies with our PACs have been distributed worldwide.

- DOS-like embedded OS
- Antivirus ability
- Internet connectivity
- Short boot period (<1 Second)
- Less memory resource required
- Faster watchdog response time
- Libraries & demo programs for various peripherals, devices and remote I/O modules

## Appearances



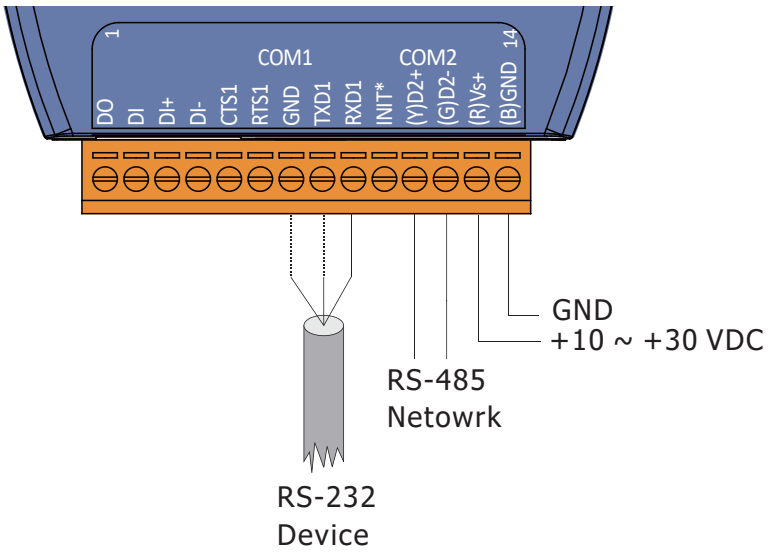

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## Specifications

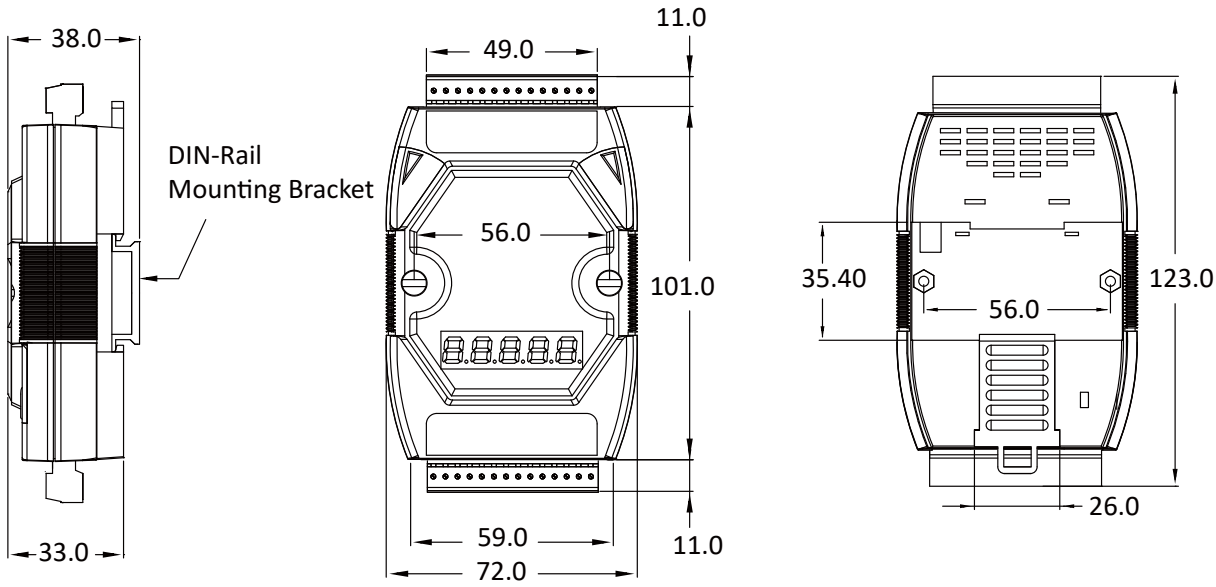
| Model | I-7188XB-512 | I-7188XBD-512 |
|---|---|---|
| **Software** | | |
| OS | MiniOS7 | |
| Development | C Language | |
| **CPU Module** | | |
| CPU | 80188, 40 MHz or compatible | |
| SRAM | 512 KB | |
| Flash | 512 KB | |
| EEPROM | 2 KB | |
| NVRAM | 31 Bytes | |
| RTC (Real Time Clock) | Provide seconds, minutes, hours, dates, day of week, month, year | |
| 64-bit Hardware Serial Number | Yes | |
| Watchdog Timer | Yes | |
| **Display** | | |
| Type | - | 5 x Digit 7 Segment LED Display |
| **LED Indicator** | | |
| Status | 1 x System | |
| **Communication Port** | | |
| Baud Rate | 115200 bps Max. | |
| COM1 | RS-232/RS-485 (RXD, TXD, RTS, CTS, GND for RS-232, Data+, Data- for RS-485 with self-tuner ASIC) | |
| COM2 | RS-485 (Data+, Data-) with internal self-tuner ASIC | |
| **I/O Expansion** | | |
| I/O Type | X-board | |
| **Digital Input** | | |
| Channels | 1 | |
| Dry Contact, ON Voltage Level | Close to GND | |
| Dry Contact, OFF Voltage Level | Open | |
| **Digital Output** | | |
| Channels | 1 | |
| Type | Open Collector | |
| Load Voltage | +30 VDC Max. | |
| Max. Load Current | 100 mA | |
| **Mechanical** | | |
| Dimension (W x H x D) | 72 mm x 119 mm x 33 mm | |
| Installation | DIN-Rail Mounting | |
| **Environmental** | | |
| Operating Temperature | -25 ~ +75 °C | |
| Storage Temperature | -40 ~ +80 °C | |
| Humidity | 5 ~ 90 % RH, Non-condensing | |
| **Power** | | |
| Input Range | +10 ~ +30 VDC | |
| Consumption | 2.0 W | 3.0 W |

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## Wiring Connections




## Dimensions (Units: mm)




Right Side View | Front View | Back View

## Ordering Information

| | |
|---|---|
| **I-7188XB-512 CR** | Standard Palm-sized Serial PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 2 Serial Ports, 1 DI, 1 DO and 1 I/O Bus (Blue Cover) (RoHS) |
| **I-7188XB-512-G CR** | Standard Palm-sized Serial PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 2 Serial Ports, 1 DI, 1 DO and 1 I/O Bus (Gary Cover) (RoHS) |
| **I-7188XBD-512 CR** | Standard Palm-sized Serial PAC with 80188-40 CPU, MiniOS7, 512 KB SRAM, 2 Serial Ports, 1 DI, 1 DO and 1 I/O Bus and 7-Segment LED Display (Blue Cover) (RoHS) |

## Accessories

| | |
|---|---|
| **X-Board** | Add-on I/O Expansion Board |

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