

# Embedded Controller

## Model I-7188

Model I-7188 provides high reliability and PC compatibility in a compact unit at a reasonable price. It may be integrated into an OEM product as a processor core component or used to control I-7000 modules for controlling the local I/O directly, without the host. The user can download an application program to the flash memory of the I-7188 from the host via the RS-232 port.

The module mounts easily on a DIN rail or panel.

### Applications

Embedded Controller  
Communication Controller  
Distributed Data Acquisition and Control System

### Features

Built-in RTC, NVRAM, EEPROM  
Built-in COM port: COM1, COM2, COM3, COM4  
COM driver support interrupt & 1K QUEUE input buffer for every COM port  
Built-in ICPDAS MiniOS7  
Built-in watchdog timer  
Program download port: COM4

### Specifications

CPU: Am188™ ES, 40 MHz  
SRAM: 256K bytes  
Flash Memory: 256K bytes; Erase unit is one sector (64K bytes); 100,000 erase/write cycles  
NVRAM: 31 bytes, battery backup, data valid up to 10 years  
EEPROM: 2048 bytes (8 blocks, each block has 256 bytes)  
Data Retention: Greater than 100 years; 1,000,000 erase/write cycles  
Real Time Clock: Seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079  
COM1: RS-232 or RS-485 jumper selectable, default is RS-232  
RS-232: TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND  
RS-485: D1+, D1-, Communication speed up to 115.2 kbps; 16 bytes FIFO  
COM2: RS-485 (D2+, D2-), Communication speed up to 115.2 kbps; 16 bytes FIFO  
COM3: RS-232 (TXD3, RXD3, GND), Communication speed up to 115.2 kbps  
COM4: RS-232 (TXD4, RXD4, GND), Communication speed up to 115.2 kbps  
Program download port (default)  
Can be used as general purpose RS-232 port  
Humidity: 0 to 90%  
Operating Temp: -4° to 167° F (-20° to 75° C)  
Storage Temp: -40° to 185° F (-40° to 85° C)  
Voltage Input: 10 - 30 VDC  
Power Consumption: 2.0W  
Dimensions: 4.8 x 2.8 x 1.3 in (12.3 x 7.2 x 3.3 cm)



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