



I-7188E4/I-7188E4D

Internet Embedded Controller



Certification

Model: I-7188E4

Model: I-7188E4D

Introduction

The I-7188EX, Embedded Internet/Ethernet Controller, focuses in Embedded Control applications while the I-7188EN, Internet Communication Controller, focuses in communication applications. According to different embedded firmware and application program, the Internet Communication Controller can be used as Device Server or Addressable Ethernet to RS-232/485/422 Converter or Embedded Internet/Ethernet Controller. The user should refer to comparison table to choose optimal product. Now we offer wide range Internet Communication Controllers, such as I-7188E1 / E2 /E3 /E4 / E5 / E8. Except the RTC circuitry, the basic hardware of I-7188EN is similar to I-7188EX. Since there are too many configurations for I-7188EN series product, OEM or ODM version is welcomed. Can be used as Addressable Ethernet to RS-232/485/422 Converter.

Most RS-232/485/422 devices don't support device address. The I-7188EN series can assign a unique address to any RS-232 device installed in the Ethernet network. Host-PC can send command with device address to Ethernet network, the destination I-7188EN will remove the address field & pass the other fields of command to its local RS-232 device. The response of this local RS-232 device will be passed to host-PC via this destination I-7188EN.

The i-7188EN series can be used as Ethernet to RS-232/485/422 Device Server. The Device Server is an appliance that network enables any device with a serial communication port. By virtue of its independent operating system, protocol independence, small size and flexibility, Device servers are able to meet the demand of virtually any network-enable application. Most devices don't have network ports. Our Internet Communication Controllers allow those devices to become connected to the network.

The hardware and software of i-7188EN is similar to i-7188EX, the i-7188EN also can be used as Embedded Internet/Ethernet Controller except the RTC (Real Time Clock). The user can use well-developed libraries and demo programs to implement an Embedded Internet/Ethernet Controller.

Features

- AMD 80188-40 Embedded CPU, or compatible
- Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
- 10BASE-T NE2000 compatible Ethernet Controller
- Reloadable Operating Software
- Remote Configuration
- Diagnostics
- COM driver support interrupt & 1K QUEUE Input & Output
- Support serial port
- Built-in EEPROM

- Built-in self-tuner ASIC controller on RS-485 port
- support three RS-232 ports and one RS-485 port
- 7-segment LED display for I-7188E4D
- Built-in MiniOS7
- Program download port: COM1 or Ethernet Port

Specifications

CPU

CPU 80188, 40MHz or compatible

SRAM 384K bytes

Flash Memory 512K bytes

EEPROM 2K Bytes

Built-in Watchdog Timer Yes

Communication Interface

COM1 RS-232 (TXD, RXD, RTS, CTS, GND)

COM2 RS-485 (D2+, D2-)

COM3 RS-232 (TXD, RXD, RTS, CTS, GND)

COM4 RS-232 (TXD, RXD, RTS, CTS, GND, DCD, DTR, DSR, RI)

Ethernet Port 10BASE-T NE2000 compatible Ethernet Controller

COM Port Formats

Data bit 7, 8

Parity Even, Odd, None

Stop bit 1

Baud Rate 115200 bps Max.

LED Display

5-Digit 7 Segment LED Display Yes (for I-7188E4D only)

System LED Indicator Yes

Dimensions

I-7188E4(D) 123mm x 72mm x 33mm

Operating Environment

Operating Temperature -25°C to +75°C

Storage Temperature -40°C to +80°C

Power

Protection Power reverse polarity protection

Required Supply Voltage +10 to +30V/DC (non-regulated)

Power consumption 2W for I-7188E4
3W for I-7188E4D

Ordering information

I-7188E4

I-7188E4D without LED display

I-7188E4D

Internet communication controller with three RS-232, one RS-485 and one Ethernet

I-7188E4 CR I-7188E4D without LED display (RoHS)
I-7188E4D CR Internet communication controller with three RS-232, one RS-485 and one Ethernet (RoHS)