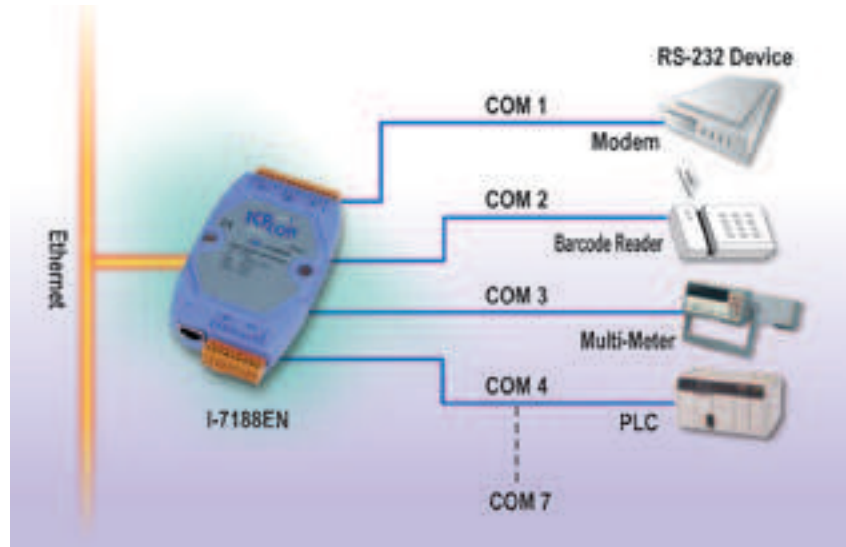# *i-*7188EN Internet Communication Controller SERIES

Introduction

The I-7188EX, Embedded Internet/Ethernet Controller, focuses on embedded control applications while the I-7188EN, Internet Communication Controller, focuses on communication applications. According to different embedded firmware 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 the optimal product. Now we offer a wide range of Internet Communication Controllers, such as I-7188E1/E2/E3/E4/E5/E8. Except for the RTC circuitry, the basic hardware of the I-7188EN is similar to the I-7188EX. Since there are too many configurations for the I-7188EN series product, an OEM or ODM version is welcomed.

Features

■ 80188-40 embedded CPU / 80186-80(New)
■ Supports a variety of TCP/IP features, including TCP, UDP, IP, ICMP, ARP
■ 10 BaseT NE2000 compatible Ethernet Controller
■ Remote Configuration; Diagnostics
■ COM driver support interrupt & 1K QUEUE input & output buffer
■ Support serial port
■ Built-in EEPROM

i-7188EN
Internet Communication Controller
SERIES

Features

- Built-in self-tuner ASIC chip for RS-485 port
- I-7188E1 support one RS-232 port
- I-7188E2 support one RS-232 port and one RS-485 port
- I-7188E3 support one RS-232 port, one RS-485 port one RS-422/485 port and several DI/O lines
- I-7188E3-232 support two RS-232 ports, one RS-485 port and serveral DI/O lines
- I-7188E4 support three RS-232 ports and one RS-485 port
- I-7188E5 support four RS-232 ports and one RS-485 port
- I-7188E5-485 support one RS-232 port and four RS-485 ports
- I-7188E8 support seven RS-232 ports and one RS-485 port
- 7-segment LED display for I-7188END
- Built-in MiniOS7
- Program download port: COM1
- **Support VxComm technique & Xserver**

Specifications

- CPU: 80188 40MHz
- SRAM: 384K bytes
- Flash Memory: 512K bytes
- EEPROM: 2048 bytes.
- Ethernet port: 10Base-T
- U.S patent NO.6,401,159 B1
- R.O.C. Invention Patent No. 086674, No. 103060, No. 132457
- D/I: 3.5V~30V
- D/O: 100mA/30V
- Operating temperature: -25˚C to +75˚C
- Storage temperature: -40˚C to +80˚C
- Dimensions: 123mm x 72mm x 33mm
- Power requirement: Unregulated 10~30 VDC power
- Power consumption: 2W (without display); 3W (with display)

Applications

- Factory Automation
- Building Automation
- Home Automation

i-7188EN SERIES

Internet Communication Controller

Internet Communication Controller   Selection Guide

Model Number	I-7188E1	I-7188E2	I-7188E3	I-7188E3-232	I-7188E4	I-7188E5	I-7188E5-485	I-7188E8
CPU (80188)	40M	40M	40M	40M	40M	40M	40M	40M
SRAM	384KB	384KB	384KB	384KB	384KB	384KB	384KB	384KB
Flash	512KB	512KB	512KB	512KB	512KB	512KB	512KB	512KB
Ethernet Port	10 BaseT	10 BaseT	10 BaseT	10 BaseT	10 BaseT	10 BaseT	10 BaseT	10 BaseT
COM1 Port	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)	RS-232/ (Note1)
COM2 Port	–	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)
COM3 Port	–	–	RS-422 (Note5)	RS-232 (Note1)	RS-232 (Note1)	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note2)
COM4 Port	–	–	–	–	RS-232 (Note4)	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note2)
COM5 Port	–	–	–	–	–	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note2)
COM6 Port	–	–	–	–	–	–	–	RS-232 (Note2)
COM7 Port	–	–	–	–	–	–	–	RS-232 (Note2)
COM8 Port	–	–	–	–	–	–	–	RS-232 (Note2)
DI	–	–	4	4	–	–	–	–
DO	–	–	4	4	–	–	–	–
RTC	N	N	N	N	N	N	N	N
Embedded O.S.	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7

Note1: RS-232, TXD, RXD, RTS, CTS, GND
Note2: RS-232, TXD, RXD, GND
Note3: RS-485, D2+, D2-; Self-tuner inside
Note4: RS-232, TXD, RXD, RTS, CTS, GND, DCD, DTR, DSR, RI
Note5: RS-422, TXD+, TXD-, RXD+, RXD-

Ordering Information

- **I-7188E1:** Internet Communication Controller
- **I-7188E1D:** I-7188E1 with seven-segment display
- **I-7188E2:** Internet Communication Controller
- **I-7188E2D:** I-7188E2 with seven-segment display
- **I-7188E3:** Internet Communication Controller
- **I-7188E3D:** I-7188E3 with seven-segment display
- **I-7188E3-232:** Internet Communication Controller
- **I-7188E3D-232:** I-7188E3-232 with display
- **I-7188E4:** Internet Communication Controller
- **I-7188E4D:** I-7188E4 with seven-segment display
- **I-7188E5:** Internet Communication Controller
- **I-7188E5D:** I-7188E5 with display
- **I-7188E5-485:** Internet Communication Controller
- **I-7188E5D-485:** I-7188E5-485 with display
- **I-7188E8:** Internet Communication Controller
- **I-7188E8D:** I-7188E8 with display

Options

- **PWR-24/110:**
  Wall-plug Power Adaptor/ 110VAC, 60Hz, 3.6W
- **PWR-24/220:**
  Wall-plug Power Adaptor/ 220VAC, 50Hz, 3.6W
- **PWR-24/230:**
  Wall-plug Power Adaptor/ 230VAC, 50Hz, 3.6W