

7188EN - 7188END

Internet Communication Controller

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.

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.

Can be used as Embedded Internet/Ethernet Controller Except the Real Time Clock, the hardware and software of I-7188EN is similar to I-7188EX. 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 buffer
- Support serial port
- Built-in EEPROM
- support one RS-232 port
- 7-segment LED display for I-7188E1D
- Built-in MiniOS7
- Program download port: COM1 or Ethernet Port
(Available soon)

Technical Specifications	
CPU	Am188™ES, 40M Hz or compatible
SRAM	384K bytes
Flash Memory	512K bytes; Erase unit is one sector (64K bytes); 100,000 erase/write cycles
EEPROM	2048 bytes (8 blocks, each block has 256 bytes); Data retention > 100 years; 1,000,000 erase/write cycles
Ethernet port	10Base-T
Watchdog timer provides fault tolerance and recovery	
Low power consumption	
D/I	3.5V~30V
D/O	100mA/30V
Accessories	1 download cable, 1 mini screw driver
Operating temperature	-25° to +75°
Storage temperature	-40° to +80°
Dimensions	123mm x 72mm x 33mm
Power requirement	Unregulated 10~30 VDC with protection from power reversals
Power consumption	2W (without display) 3W (with display)

Model	CPU	SRAM	Flash	D	I	D	O	Ethernet Port	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8 (Note2)
I-7188E1 I-7188E1D	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	-	-	-	-	-	-	-
I-7188E2 I-7188E2D	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	-	-	-	-	-	-
I-7188E3 I-7188E3D	40M Hz	384K	512K	4	4	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-422 (Note5)	-	-	-	-	-
I-7188E3-232 I-7188E3D-232	40M Hz	384K	512K	4	4	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note1)	-	-	-	-	-
I-7188E4 I-7188E4D	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note1)	RS-232 (Note4)	-	-	-	-
I-7188E5 I-7188E5D	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-232 (Note1)	RS-232 (Note1)	RS-232 (Note1)	-	-	-
I-7188E5-485 I-7188E5D-485	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	RS-485 (Note3)	-	-	-
I-7188E8 I-7188E8D	40M Hz	384K	512K	-	-	-	-	10 Base-T	RS-232 (Note1)	RS-485 (Note3)	RS-485 (Note3)	RS-232 (Note2)	RS-232 (Note2)	RS-232 (Note2)	RS-232 (Note2)	RS-232 (Note2)

Note1: RS-232, RXD, TXD, CTS, RTS, GND

Note2: RS-232, RXD, TXD, GND

Note3: RS-485: Data+, Data-;Self-tuner inside

Note4: RS-232, RXD, TXD, CTS, RTS, DSR, DTR, DCD, RI, GND

Note5: RS-422, TXD+, TXD-, RXD+, RXD-