Models: I-7188E1/E2/E3/E4/E5/E8

Internet Communication Controllers

The I-7188E1/2/3/4/5/8 Internet Communication Controllers focus on communication applications. Used with different embedded firmware programs, these Internet Communication Controllers can be used as Device Servers, Addressable Ethernet to RS-232/422/485 Converters, or an Embedded Internet/Ethernet Controllers.

Used as **Device Servers**, I-7188E1/2/3/4/5/8 can network enable 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 I-7188E1/2/3/4/5/8 can serve as **Addressable Ethernet to RS-232/422/485 Converters**: Most RS-232 devices don't support device addressing. The I-7188E1/2/3/4/5/8 series can assign a unique address to any RS-232 device installed in the Ethernet network. The host PC can send a command with device address to the Ethernet network and the destination I-7188E1/2/3/4/5/8 will remove the address field and pass the other fields of the command to its local RS-232/422/485 device. The response of this local RS-232/422/485 device will be passed to the host-PC via this destination I-7188E1/2/3/4/5/8.

I-7188E1/2/3/4/5/8 can be used as **Embedded Internet/Ethernet Controllers**: The user can use readily available and well-developed libraries and demo programs to implement an Embedded Internet/Ethernet Controller.

Applications

Factory Automation
Building Automation
Home Automation

Features

Supports TCP, UDP, IP, ICMP, ARP, RARP
10BASE-T NE2000 compatible Ethernet controller
Re-loadable operating software
Remote configuration
64-bit hardware unique serial number inside
COM driver support interrupt and 1K queue input buffer
Built-in NVRAM, EEPROM
Built-in MiniOS7
Program download port: COM1
Watchdog timer provides fault tolerance and recovery

Internet Communication Controllers						
	I-7188E1	I-7188E2	I-7188E3*	I-7188E4	I-7188E5	I-7188E8
Ethernet	10BaseT	10BaseT	10BaseT	10BaseT	10BaseT	10BaseT
COM1	RS-232	RS-232	RS-232	RS-232	RS-232	RS-232
COM2	- - -	RS-485	RS-485	RS-485	RS-485	RS-485
COM3	- - -	- - -	RS-422	RS-232	RS-232	RS-232
COM4	- - -	- - -	- - -	RS-232	RS-232	RS-232
COM5	- - -	- - -	- - -	- - -	RS-232	RS-232
COM6	- - -	- - -	- - -	- - -	- - -	RS-232
COM7	- - -	- - -	- - -	- - -	- - -	RS-232
COM8	- - -	- - -	- - -	- - -	- - -	RS-232

*I-7188E3 has 4 digital inputs and 4 digital outputs.

Specifications

CPU: Am188™ ES, 40 MHz or compatible
SRAM: 256K bytes
Flash Memory: 256K bytes; Erase unit is one sector (64K bytes); 100,000 erase/write cycles
NVSRAM: 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
Ethernet Port: 10Base-T
Operating Temperature: -13 to 167°F (-25 to 75°C)
Storage Temperature: -40 to 176°F (-40 to 80°C)
Voltage Input: 10 - 30 VDC
Power Consumption: 2W
Dimensions: 4.8 x 2.8 x 1.3 in (12.3 x 7.2 x 3.3 cm)

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