



I-7188XC/I-7188XCD Embedded Controller

I-7188XC

I-7188XCD

Features

- AMD's 80188-20 embedded CPU or compatible.
- Cost-effective version of I-7188 series
- User defined D/I/O
- COM driver support interrupt & 1K QUEUE
- input buffer
- COM port: COM1, COM2
- Built-in EEPROM
- Built-in I/O expansion bus
- Can add on one expansion board only
- Built-in self-tuner ASIC controller on RS-485 port
- Optional 7-segment LED display
- Built-in ICP DAS's MiniOS7
- Program download port: COM1

Specifications

CPU

CPU	Am188TM ES or compatible (20MHz)
SRAM	128K Bytes
Flash	256K Bytes (for I-7188XC) 512K Bytes (for I-7188XC/512); Erase unit is one sector (64K bytes); 100,000 erase/write cycles.
EEPROM	2048 Bytes (8 block, each block contains 256byte) Data retention > 100 years; 1,000,000 erase/write cycles
NVRAM	31 Bytes (battery backup, data valid up to 10 year) for I-7188XC/RTC
RTC (real time clock)	For I-7188XC/RTC Year-2000 compliance; seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079
64-bit Hardware Serial Number	-
Build-in Watchdog Timer	Yes

Communication Interface

COM1	RS-232 or RS-485 (Default is RS-232); Program download port RS-232 (TXD, RXD, RTS, CTS, GND) RS-485 (D1+, D1-, self-tuner ASIC inside) 16 bytes FIFO
COM2	RS-485 (D2+, D2-, self-tuner ASIC inside), 16 bytes FIFO, Isolation voltage: 3000V

Communication speed

All ports	115.2K bps max
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Digital Input/Output

Digital Input	Channels : 3 On voltage level : +1V/DC max. Input type : non-isolated On voltage level : +1V max (Connect to GND) Off voltage level : +3.5V~30V (Open)
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Digital Output	Channels : 3 Output type : Open-collector Output current : 100mA Max load voltage : +30V/DC
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LED Display

5-Digit LED Display	Yes (for 7188XCD)
Red LED	Yes

I/O expansion bus

I-7188XC	Yes
I-7188XCD	Yes

Operating Environment

Operating Temperature	-25°C to +75°C
Storage Temperature	-40°C to +80°C
Humidity	0 to 90%

Power

Protection	Power reverse polarity protection
Power requirement	10 to 30V/DC
Power consumption	I-7188XC : 2.0W I-7188XCD : 3.0W

Dimensions

- 123 x mm x 72 mm x 33 mm

Ordering Information

I-7188XC	Embedded controller with developing tool kit ,with 256k flash , 128K SRAM , Minios7
I-7188XCD	Embedded controller with seven segment display , developing tool kit ,with 256k flash , 128K SRAM , Minios7
I-7188XC CR	Embedded controller with developing tool kit ,with 256k flash , 128K SRAM , Minios7 (RoHS)
I-7188XCD CR	Embedded controller with seven segment display , developing tool kit , with 256k flash , 128K SRAM , Minios7 (RoHS)
OEM Version	
I-7188XC/RTC	Embedded controller with developing tool kit , with 256k flash , 128K SRAM , Minios7, with RTC
I-7188XCD/RTC	Embedded controller with seven segment display , developing tool kit , with 256k flash , 128K SRAM , Minios7, with RTC
I-7188XC/512	Embedded controller with developing tool kit , with 512k flash , 128K SRAM , Minios7
I-7188XCD/512	Embedded controller with seven segment display , developing tool kit , with 512k flash , 128K SRAM , Minios7
I-7188XC/512/RTC	Embedded controller with developing tool kit , with 512k flash , 128K SRAM , Minios7, with RTC
I-7188XCD/512/RTC	Embedded controller with seven segment display , developing tool kit , with 512k flash , 128K SRAM , Minios7 , with RTC
I-7188XC-512 CR	Embedded controller with developing tool kit , with 512k flash , 128K SRAM , Minios7 (RoHS)
I-7188XC/512/RTC CR	Embedded controller with developing tool kit , with 512k flash , 128K SRAM , Minios7, with RTC (RoHS)

Optional Accessories

DIN-540A	4 2Amp. Power supply
DIN-KA52F	1.05Amp. Power supply
X002	Prototype Board
X005	Prototype Board
X006	Prototype Board
X600	4 Mega Bytes NAND Flash memory expansion Board
X601	8 Mega Bytes NAND Flash memory expansion Board
X607	Wide 128k bytes battery backup SRAM
X608	512k bytes battery backup SRAM

Other add-on expansion boards refer to expansion board selection guide