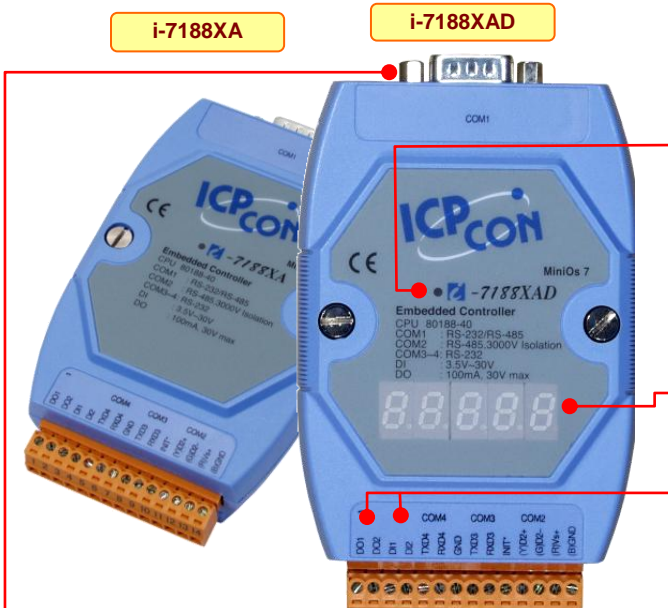


i-7188XA / i-7188XAD

Palm-size PAC – with 2 DI / 2 DO



Main Features

- 80188-40 embedded CPU
- OS: MiniOS7
- 512K SRAM, 512K Flash
- Built-in RTC, 31B NVRAM, 2048B EEPROM
- 4 COM ports : RS-232, RS-485
- 3000V isolated RS-485
- Power / Communication Indicator Red LED
- 5-digit 7-segment LED Display
- Built-in 2 DI & 2 DO channels

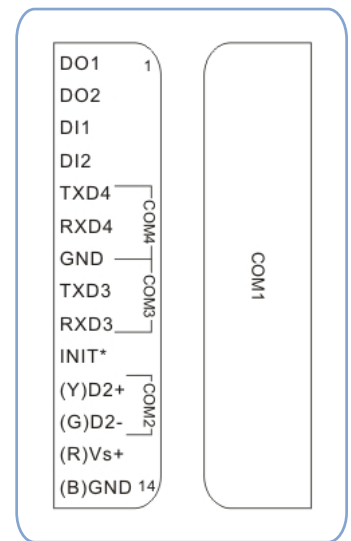
COM1 : RS-232 / RS-485
 RS-232: TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND
 RS-485: D1+, D1-
 Default is RS-232, jumper select.
 16 bytes FIFO

COM2 : RS-485
 RS-485: D2+, D2-
 Self-tuner ASIC
 Isolation voltage: 3000V
 16 bytes FIFO

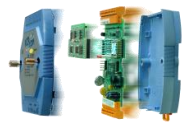
COM3 : RS-232
 RS-232: TXD3, RXD3, GND
 1 byte FIFO

COM4 : RS-232
 RS-232: TXD4, RXD4, GND
 Program download port
 1 byte FIFO

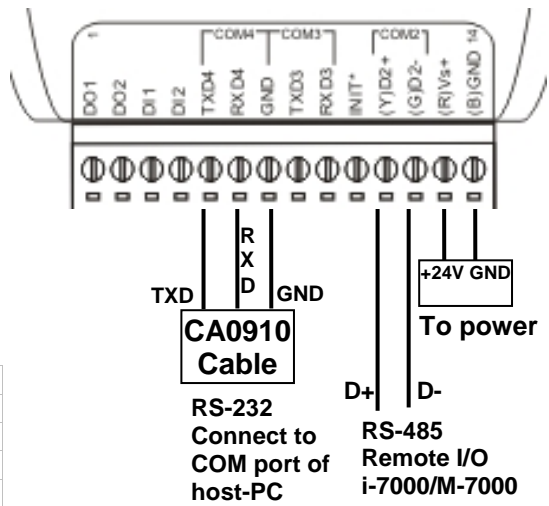
Pin Assignments



- ### Features
- Built-in Watch dog timer & 64-bit hardware unique serial number
 - Built-in power protection circuit & RS-485 network protection circuit
 - Can directly control 7000 series up to 256 modules (thousand of I/Os)
 - Easy use software development toolkits
 - COM driver support interrupt & 1K QUEUE Input / Output buffer
 - Built-in 2 digital input channels & 2 open-collector output channels
 - Built-in self-tuner ASIC controller on RS-485 port
 - Program language : TC/ TC++/BC/MSC/MSVC
 - Program download port: COM4
 - Modem control port:: COM1
 - Re-loadable OS, software & programs
 - built-in one expansion bus to add-on an expansion board



Wiring



Expansion Board Selection Guide

Category:	X-Boards:	
Prototype	X000	X001
Testing	X003	
RS-232/485	X500	
Flash ROM	X600	X601
Battery Backup SRAM	X607	X608

Specifications

Series : Palm-size PAC > 1st Generation > i-7188X > i-7188XA/XAD

PACs	i-7188XA	i-7188XAD
■ CPU		
CPU	80188, 40MHz or compatible	
SRAM	512K bytes	
Flash Memory	512K bytes; 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)	
RTC (Real Time Clock)	Yes; Seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079	
64-bit Hardware Serial Number	Yes	
Built-in Watchdog Timer	Yes	
■ Communication Interface		
COM1	RS-232 or RS-485 (jumper select(JP6), default is RS-232), 16 bytes FIFO RS-232 (TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND) RS-485 (D1+, D1-, self-tuner ASIC inside)	
COM2	RS-485 (D2+, D2-, self-tuner ASIC inside), 16 bytes FIFO, Isolation voltage : 3000V	
COM3	RS-232 (TXD3, RXD3, GND), 1 byte FIFO	
COM4	RS-232 (TXD4, RXD4, GND); Program download port; Can be used as general purpose RS-232 port, 1 byte FIFO	
■ COM Port Formats		
Communication Speed	115200 bps max. for all ports	
■ Digital Input/Output		
Digital Input	Channels : 2 Input type : non-isolated On voltage level : +1VDCmax (Connect to GND) Off voltage level : +3.5V~30VDC(Open)	
Digital Output	Channels : 2 Output type : Open-collector Output current : 100mA Max load voltage : +30VDC	
■ LED Display		
5-Digit 7 Segment LED Display	--	Yes
System LED Indicator	Yes, one red LED	
■ Hardware Expansion		
I/O expansion bus	Yes	
User defined I/O pins	No	
■ Dimensions		
L x H x D (mm)	119 x 72 x 33	
■ Operating Environment		
Operating Temperature	-25°C to +75°C (-13° F to +167° F)	
Storage Temperature	-40°C to +80°C (-40° F to +176° F)	
Humidity	5% ~ 90%, non-condensing	
■ Power		
Protection	Power reverse polarity protection	
Required Supply Voltage	+10 to +30VDC	
Power consumption	2.0 W	3.0 W

Ordering Information

Model Number	Description	
* All orders include download utility, download cable and manual.		
I-7188XA CR	Palm-size PAC, 80188-40 CPU, 512K Flash, 4 COM ports, 3000V isolated RS-485 (RoHS)	
I-7188XAD CR	Palm-size PAC, 80188-40 CPU, 512K Flash, 4 COM ports, 3000V isolated RS-485, LED display (RoHS)	
OEM Version		
I-7188XA-DW CR	OEM Palm-size PAC; same as i-7188XA CR, but the pin-header of local bus is in the up side down direction, and without plastic box (RoHS)	
I-7188XAD-DW CR	OEM Palm-size PAC; same as i-7188XA-DW CR with 5-digit 7-segment LED Display (RoHS)	
Options & Accessories		
GPSU06U-6	Wall-plug power Adapter / 100-240VAC, 50/60Hz, 6W	
DIN-540A/DIN-KA52F	Power supply; DIN-540A: 42Amp / DIN-KA52F: 1.05Amp	
X500	X-board for COM port, RS-232*1, without case	
X60x	X-board for memory expansion; Flash: X600(4M), X601(8M); battery backup SRAM:X607(Wide 128K), X608(512K)	
X-Board	Other add-on expansion boards refer to expansion board selection guide	