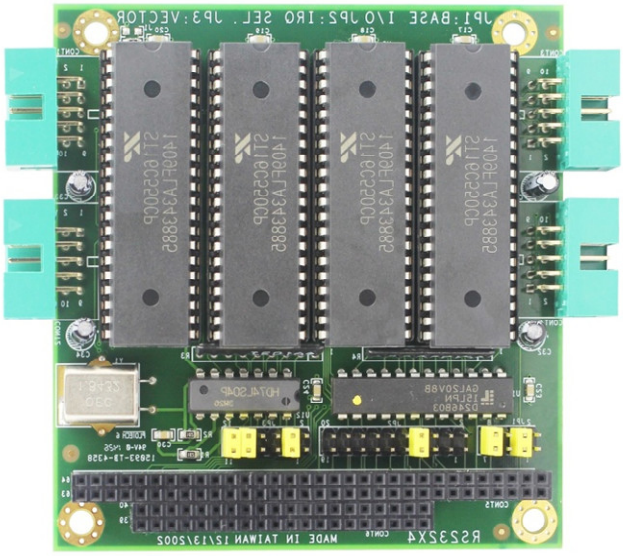
intelligent control on processor



ICOP-1800

Multi RS-232 Module

Version 1.0

Copyright

Trademarks Acknowledgement

Table of Contents

1 Packing List

Item	Description	Package
ICOP-1800	ICOP-1800 Multi RS-232 PC/104 Module	ICOP-1800 x1 Cable RS-232 x1 Screw kitx1

2 Specifications

Chipset	16550 UART
Serial Port	4 (10 pin box header)
Baud Rate	Up to 115.2Kbps
Bus Interface	PC/104 Standard compliant
Weight	100g
Dimension	90 x 96 mm (3.54 x 3.77 inches)
Power Requirement	Single +5V @ 200mA
Operating Temp.	0℃ ~ +55℃

Description

The ICOP-1800 provides four PC compatible asynchronous serial ports, each of which can be configured for RS232 operation. Addresses and interrupts are jumper selectable, and more than one ICOP-1800 can be sued in any PC/104 system.

The card is based on the 4 Goldstar chips. These chips each contain a UART (Universal Asynchronous Receiver/Transmitter).

- 4 x RS232C asynchronous ports
- 4 x 16550 UARTs
- Supports: TxD, RxD, RTX, CTS, DTR, DSR, DCD, and GND
- Interrupt: 2, 3, 4, 5, 7, 10, 11, 12, 14, 15
- RS232 modem control signals
- I/O address: 100h to 300h

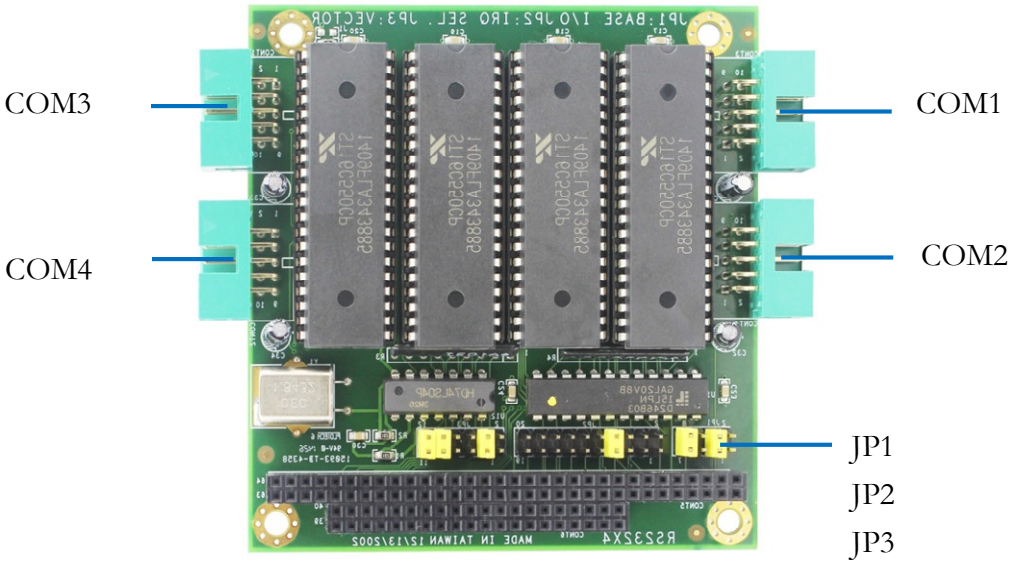
Power Requirement

- Single +5V

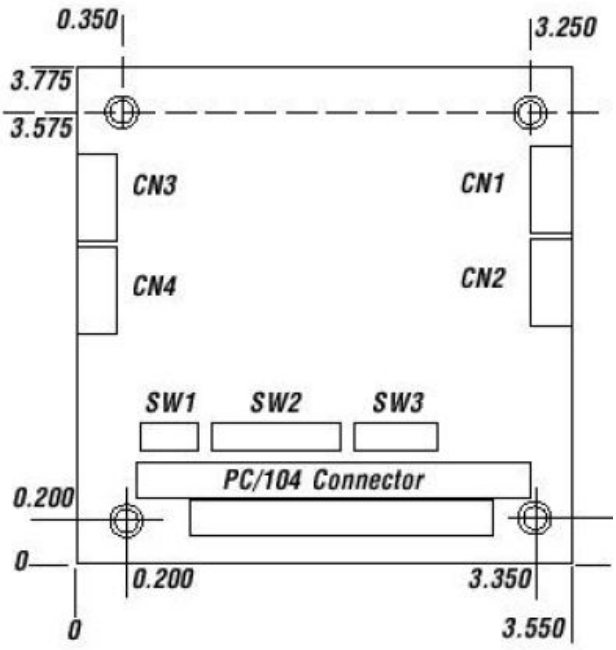
Physical and Environment

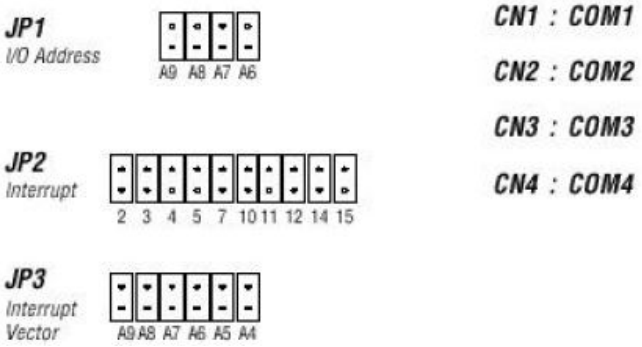
- Dimension: 90 x 96mm
- Weight: 100g
- Operating temperature: 0℃ ~ +55℃
- Storage temperature: -25℃ ~ +80℃
- Relative humidity: 0 ~ 90% non-condensing

Component Location



Board Layout





3 Jumper Setting

JP1 is used for setting the global base address for all four COM ports. The PIA assigns equal portions of the total I/O windows to each port separately.

Port 1: base address NNN + 00h, IRQ M
Port 2: base address NNN + 08h, IRQ M
Port 3: base address NNN + 10h, IRQ M
Port 4: base address NNN + 18h, IRQ M

Where NNN is the base I/O address set by **JP1**, and the M is the interrupt set by **JP2**.

Base I/O (JP1) – default (280h)

JP1	A6	A7	A8	A9
100h	Close	Close	Open	Close
140h	Open	Close	Open	Close
180h	Close	Open	Open	Close
1C0h	Open	Open	Open	Close
200h	Close	Close	Close	Open
240h	Open	Close	Close	Open
280h*	Close	Open	Close	Open
2C0h	Open	Open	Close	Open
300h	Close	Close	Open	Open
340h	Open	Close	Open	Open
380h	Close	Open	Open	Open
C0H	Open	Open	Open	open

IRQ Select (JP2) – default (IRQ 5)

JP2 is used to assign a single interrupt line that is shared by all four ports.

JP2										
IRQ	**2**	**3**	**4**	**5**	**7**	**10**	**11**	**12**	**14**	**15**
2	**Close**	Open	Open	Open	Open	Open	Open	Open	Open	Open
3	Open	**Close**	Open	Open	Open	Open	Open	Open	Open	Open
4	Open	Open	**Close**	Open	Open	Open	Open	Open	Open	Open
5*	Open	Open	Open	**Close**	Open	Open	Open	Open	Open	Open
7	Open	Open	Open	Open	**Close**	Open	Open	Open	Open	Open
10	Open	Open	Open	Open	Open	**Close**	Open	Open	Open	Open
11	Open	Open	Open	Open	Open	Open	**Close**	Open	Open	Open
12	Open	Open	Open	Open	Open	Open	Open	**Close**	Open	Open
14	Open	Open	Open	Open	Open	Open	Open	Open	**Close**	Open
15	Open	Open	Open	Open	Open	Open	Open	Open	Open	**Close**

Interrupt VECTOR (JP3) – default (2C0 h)

The interrupt vector is an I/O address range that indicates which serial port generated the interrupt.

JP3	A4	A5	A6	A7	A8	A9
000h	Close	Close	Close	Close	Close	Close
010h	Open	Close	Close	Close	Close	Close
020h	Close	Open	Close	Close	Close	Close
030h	Open	Open	Close	Close	Close	Close
040h	Close	Close	Open	Close	Close	Close
050h	Open	Close	Open	Close	Close	Close
060h	Close	Open	Open	Close	Close	Close
070h	Open	Open	Open	Close	Close	Close
080h	Close	Close	Close	Open	Close	Open
0A0h	Close	Open	Close	Open	Close	Close
0B0h	Open	Open	Close	Open	Close	Close
0C0h	Close	Close	Open	Open	Close	Close
0D0h	Open	Close	Open	Open	Close	Close
0E0h	Close	Open	Open	Open	Close	Close
0F0h	Open	Open	Open	Open	Close	Close
100h	Close	Close	Close	Close	Open	Close
110h	Open	Close	Close	Close	Open	Close
120h	Close	Open	Close	Close	Open	Open

130h	Open	Open	Close	Close	Open	Close
140h	Close	Close	Open	Close	Open	Close
150h	Open	Close	Open	Close	Open	Close
160h	Close	Open	Open	Close	Open	Close
170h	Open	Open	Open	Close	Open	Close
180h	Close	Close	Close	Open	Open	Close
190h	Open	Close	Close	Open	Open	Close
1A0h	Close	Open	Close	Open	Open	Close
1B0h	Open	Open	Close	Open	Open	Close
1C0h	Close	Close	Open	Open	Open	Close
1D0h	Open	Close	Open	Open	Open	Close
1E0h	Close	Open	Open	Open	Open	close
1F0h	Open	Open	Open	Open	Open	Close
200h	Close	Close	Close	Close	Close	Open
210h	Open	Close	Close	Close	Close	Open
220h	Close	Open	Close	Close	Close	Open
230h	Open	Open	Close	Close	Close	Open
240h	Close	Close	Open	Close	Close	Open
250h	Open	Close	Open	Close	Close	Open
260h	Close	Open	Open	Close	Close	Open
270h	Open	Open	Open	Close	Close	Open
280h	Close	Close	Close	Open	Close	Open
290h	Open	Close	Close	Open	Close	Open
2A0h	Close	Open	Close	Open	Close	Open
2B0h	Open	Open	Close	Open	Close	Open
2C0h*	Close	Close	Open	Open	Close	Open
2D0h	Open	Close	Open	Open	Open	Open
2E0h	Close	Open	Open	Open	Close	Open
2F0h	Open	Open	Open	Open	Close	Open
300h	Close	Close	Close	Close	Open	Open
310h	Open	Close	Close	Close	Open	Open
320h	Close	Open	Close	Close	Open	Open
330h	Open	Open	Close	Close	Open	Open
340h	Close	Close	Open	Close	Open	Open
350h	Open	Open	Open	Open	Open	Open
360h	Close	Open	Open	Close	Open	Open
370h	Open	Open	Open	Close	Open	Open

380h	Close	Close	Close	Open	Open	Open
390h	Open	Close	Close	Open	Open	Open
3A0h	Close	Open	Close	Open	Open	Open
3B0h	Open	Open	Close	Open	Open	Open
3C0h	Close	Close	Open	Open	Open	Open
3D0h	Open	Close	Open	Open	Open	Open
3E0h	Close	Open	Open	Open	Open	Open
3F0h	Open	Open	Open	Open	Open	Open

4 Connectors

COM1 COM1 RS232 port
COM2 COM2 RS232 port
COM3 COM3 RS232 port
COM4 COM4 RS232 port
CONT5 64-pin PC/104 bus
CONT6 40-pin PC/104 bus

Technical Support Directly from ICOP

To offer you more accurate and specific solutions for the technical situations you have, please prepare the information below before contacting ICOP:

—Product name and serial number

—Description of the H/W environment (i.e.: working temperature, I/O board information, information of connection between main board and IO boards, and/or other devices, etc)

—Description of the S/W environment (i.e: operating system, version, application software, and/or other related information, etc.)

—A detailed description and photos of the technical situation

—Any complement or technical situations you want ICOP more focusing on

User Manual Feedback

To make this user manual more complete, if you have any comments or feedbacks to this manual, please feel free to write to info@icop.com.tw or contact your ICOP sales representative.

Warranty

This product is warranted to be in good working order for a period of one year (12 months) from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it without additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, originality to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise is accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description. Should you have questions about warranty and RMA service, please contact us directly.

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