ICOP-1800

Multi RS-232 Module

User' s Manual

(Version 2.1)

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Table of Contents

Chapter 0
Packing List

Function	Function	Package
ICOP-1800	Multi RS-232 Module	● **ICOP-1800 Multi RS-232 PC/104 Module**

Chapter 1
Specifications

Features	ICOP-1800
Chipset	16550 UART
Serial Port	4 (10 pin box header)
Baudrate	Up to 115.2 Kbps
Bus Interface	PC/104 standard compliant
Board Weight	80g
Board Size	96mm X 90 mm
Power Requirements	+5V @ 250mA
Operating Temperature	-20 ~ +55°C

Description

The ICOP-1800 provides four PC compatible asynchronous serial ports, each of which can be configured for RS-232 operation. Addresses and interrupts are jumper selectable, and more than one ICOP-1800 can be used 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 RS-232C asynchronous ports
- 4 x 16550 UARTs
- Supports: TxD, RxD, RTS, CTS DTR, DSR, DCD, GND
- Interrupt select: 2, 3, 4, 5, 7, 10, 11, 12, 14, 15
- RS-232 modem control signals
- I/O address: 100h to 300h

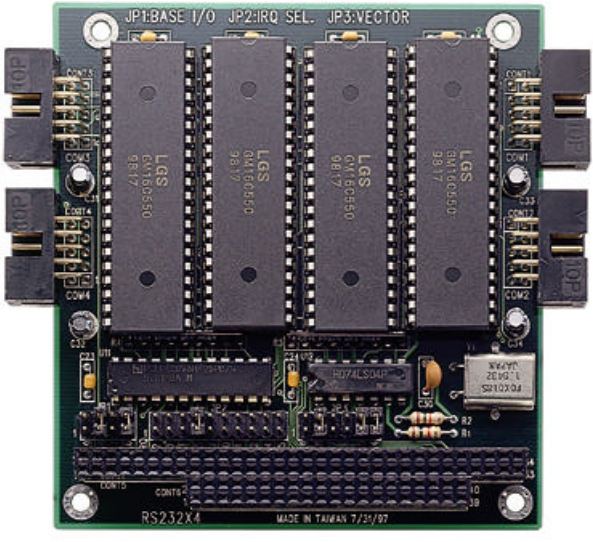
Power requirements:

- Single +5V

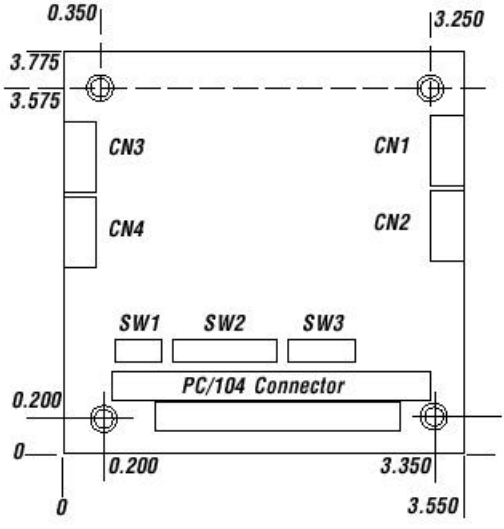
Physical and Environmental

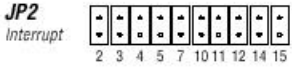
- Dimensions: 96 x 90 mm
- Weight: 80 g
- Operating temperature: -20 ~ +55°C
- Storage temperature: -25 ~ +80°C
- Relative humidity: 0 ~ 90% non-condensing

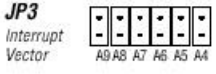
Product Photo



Board Layout







CN1 : COM1

CN2 : COM2

CN3 : COM3

CN4 : COM4

Chapter 2
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 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
3C0h	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 (2C0h)

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	close
090h	open	close	close	open	close	close
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	close
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	close	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	close	open	close	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

Chapter 3
Connectors

COM1 COM1 RS-232 port

COM2 COM2 RS-232 port

COM3 COM3 RS-232 port

COM4 COM4 RS-232 port

CONT5 64-pin PC/104 bus

CONT6 40-pin PC/104 bus

Warranty

This product is warranted to be in good working order for a period of one year 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 at no 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, or inability 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 will be 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.