

**ICOP-1500/1510**

**PC/104 Ethernet Module**

**PC/104 Dual Ethernet Module**

**User' s Manual**

**(Version 3.1)**

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# Chapter 0

## Packing List

Function	Function	Package
ICOP-1500	Ethernet Module	<ul style="list-style-type: none"><li>● ICOP-2800 PC/104 Ethernet Module</li><li>● Utility and Drivers Diskette x 1</li><li>● BNC T-type connector</li></ul>
ICOP-1510	Dual Ethernet Module	<ul style="list-style-type: none"><li>● ICOP-1510 PC/104 Dual Ethernet Module</li><li>● Utility and Drivers Diskette x 1</li></ul>

# Chapter 1

## Specifications

Features	ICOP-1500	ICOP-1510
Chipset	Realtek RTL8019AS	
Chipset Number	1	2
Bus Interface	PC/104 standard compliant	
Connector	BNC, RJ-45	RJ-45 X 2
BIOS Socket	1	0
Power Requirement	+5V @120mA	+5V @120mA
Board Weight	100g	80g
Board Size	96mm X 90 mm	
Operating Temperature	0 ~ +60°C	

## **Description**

The RTL8019AS integrates the RTL8019A and 16K-byte SRAM in a single chip. It is designed not only to provide more friendly functions but also to save the effort of SRAM source and inventory. Most of the design's specification inherit from RTL8019A.

Compliant to Ethernet II and IEEE802.3 10Base5, 10Base2, 10BaseT

Supports UTP, AUI & BNC auto-detect

Software compatible with NE2000

Supports PnP auto detect mode

Supports Full-Duplex Ethernet function to double channel bandwidth

Supports three level power down modes: sleep, power down with internal clock running clock, power down with internal halted.

Built-in data prefetch function to improve performance

Support 8 IRQ lines

Supports IO address fully decode mode

Supports 16K, 32K, 64K and 16K-page mode access to BROM (up to 256 pages with 16K bytes/page), and Flash memory read/write

Improves the blinking problem of CRS LED when the cable is not connedted

## **Software Support/Application Drivers:**

NDIS2 (DOS, OS/2,Lantastic, WFW3.1, etc.)

NDIS3, NDIS4, NDIS5 for WIN95, 98, NT3.51, 4.0, 5.0, WFW3.11

Netware 16-bit ODI driver for DOS, OS/2 and 32-bit ODI driver for Netware 3.x, 4.x, 5.0 Server

Packet driver for UNIX Client

SCO UNIX driver

Linux driver

**Interface:** PC/104 standard compliant

## **Connector:**

BNC connector for 10Base2

RJ-45 connector for 10BaseT

**Power Requirements:** single 5V @ 120 mA

**Dimensions:** 90 (L) x 96 (W) mm.

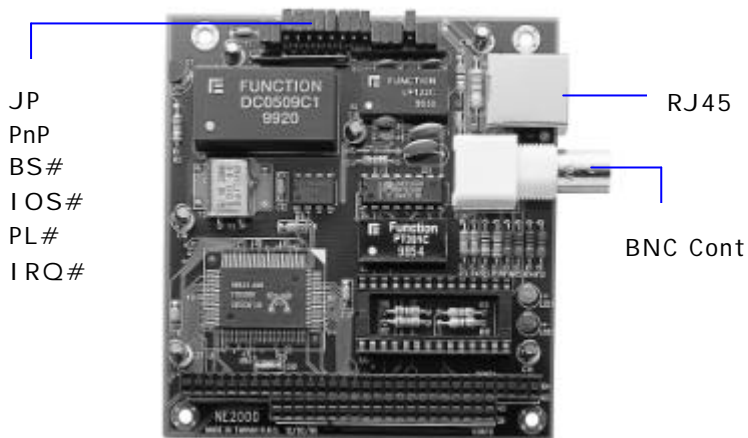
**Weight:** 100 g (ICOP-1500), 80 g (ICOP-1510)

**Operating Temperature:** 0 ~ +60 °C

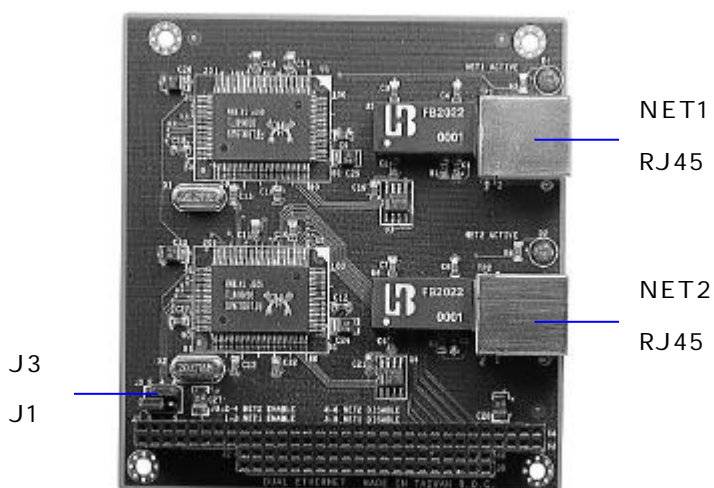


## Component Location

### ICOP-1500



### ICOP-1510



## Chapter 2

### Jumper Setting

#### ICOP-1500

**JP:** hardware/software mode selection

**close:** Jumper mode

**open:** software mode

**PnP:** plug and play mode

**close:** enable plug and play mode

**open:** disable plug and play mode

**BS#** BROM size and memory base address

BS4	BS3	BS2	BS1	BS0	BROM base and size
open	open	*	*	*	Disabled *
open	close	open	open	open	C000H, 32K
open	close	open	open	close	C800H, 32K
open	close	open	close	open	D000H, 32K
open	close	open	close	close	D800H, 32K
open	close	close	open	open	C000H, 64K
open	close	close	open	close	D000H, 64K
close	open	open	open	open	C000H, 16K
close	open	open	open	close	C400H, 16K
close	open	open	close	open	C800H, 16K
close	open	open	close	close	CC00H, 16K
close	open	close	open	open	D000H, 16K
close	open	close	open	close	D400H, 16K
close	open	close	close	open	D800H, 16K

close	open	close	close	close	DC00H, 16K
close	close	open	open	open	C000H, PAGE
close	close	open	open	close	C400H, PAGE
close	close	open	close	open	C800H, PAGE
close	close	open	close	close	CC00H, PAGE
close	close	close	open	open	D000H, PAGE
close	close	close	open	close	D400H, PAGE
close	close	close	close	open	D800H, PAGE
close	close	close	close	close	DC00H, PAGE

### **IOS#**    Select I/O base address

<b>IOS3</b>	<b>IOS2</b>	<b>IOS1</b>	<b>IOS0</b>	<b>I/O Base</b>
open	open	open	open	300H
open	open	open	close	320H *
open	open	close	open	340H
open	open	close	close	360H
close	open	open	open	380H
close	open	open	close	3A0H
close	open	close	open	3C0H
close	open	close	close	3E0H
open	close	open	open	200H
open	close	open	close	220H
open	close	close	open	240H
open	close	close	close	260H
close	close	open	open	280H
close	close	open	close	2A0H
close	close	close	open	2C0H
close	close	close	close	2E0H

**PL#**      Select network medium types

PL1	PL0	Medium Type
open	open	TP/CX auto-detect (10BaseT link test is enabled)
open	close	10BaseT with link test disabled
close	open	10BaseT (RJ-45)
close	close	10Base2 (BNC) *

**IRQ#**      IRQ Select

#2	#1	#0	Interrupt Line	Assigned ISA IRQ
open	open	open	INT0	IRQ2/9
open	open	close	INT1	IRQ3
open	close	open	INT2	IRQ4
open	close	close	INT3	IRQ5 *
close	open	open	INT4	IRQ10
close	open	close	INT5	IRQ11
close	close	open	INT6	IRQ12
close	close	close	INT7	IRQ15

**ICOP-1510 (J3): NET# Enable/Disable**

	NET1	NET2
Enable *	1-3 close	2-4 close
Disable	3-5 close	4-6 close

# Chapter 3

## Connectors

### ICOP-1500

**CONT1** 64-pin PC/104 bus

**CONT2** 40-pin PC/104 bus

**CONT3** BNC connector

**CONT6** RJ-45 connector

### ICOP-1510

**J1** 64-pin PC/104 bus

**J2** 40-pin PC/104 bus

**TP1** NET1 RJ-45 connector

**TP2** NET1 RJ-45 connector

## **C h a p t e r 4**

### **Network Interface**

The Realtek RTL-8019AS 10Mbps Ethernet controller board supports both 10BASE-T 'RJ-45' and Coax 10Base-2 ' BNC' connectors, and allows direct connection to your 10Mbps Ethernet based Local Area Network for full interaction with local servers, wide area networks such as the Internet.

I/O and IRQ settings can be done by software with the supplied utility software, or it can be set for Plug and Play compatibility. The controller supports: Full-Duplex Ethernet function to double channel bandwidth, auto media detection.

## 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.