

# ***MultiSpot***<sup>TM</sup> ***Network I/F Kit II***

# **SERVICE MANUAL**

**REVISION 0**

□ **MultiSpot Network I/F Kit II**      H11-5522 120V USA □

**Canon**

**MAR. 2000**

**HY8-19AS-000**

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**Office Imaging Consumer Products Quality Assurance Dept. 1**

**5-1 Hakusan 7-Chome, Toride-city, Ibaraki 302-8501, Japan**

## **DTP System**







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# I. MEANINGS OF MARKS

The marks used in this manual have the following meanings.

Mark	Meaning
	States a precaution to be taken to prevent danger to personnel, damage to the product, or damage to electronic components by discharge of static electricity. for example.
	States a precaution to be taken to prevent damage to electronic components by electrostatic discharge.
	Informs you of fire-related cautions.
	Informs you that the plug must be removed from the power outlet before starting an operation.
 NOTE	Gives useful information to understand descriptions.
 REFERENCE	Indicates sections to be read to obtain more detailed information.

## II. ABOUT THIS MANUAL

### **Chapter 1: General Description**

This chapter explains product specifications and the how to service the unit safely.

### **Chapter 2: Technical Reference**

This chapter explains the technical theory of the product.

### **Chapter 3: Maintenance and Service**

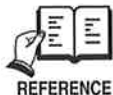
This chapter explains how to maintain the products for service operations, troubleshooting and service switches.

### **Chapter 4: Appendix**

This chapter explains the information of the installation, optional products and user data flow.

### **Chapter 5: Parts Catalog**

### **Chapter 6: Circuit Diagram**



- 
- For more details of user operations, *refer to the separate MultiSpot User's Guide and Administrator's Guide.*
  - For fax unit and printer service information, *refer to the separate LASER CLASS 3170/3175/3175MS Service Manual.*
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### III. REVISION HISTORY

<i>REVISION</i>	<i>CONTENT</i>
0	Original

## IV. TABLE OF CONTENTS

### ***Chapter 1: General Description***

Page	
1-1	1. FEATURES
1-2	2. SPECIFICATIONS
1-2	2.1 Supported Network Environments
1-2	2.2 Network Interface Device
1-3	3. OVERVIEW
1-3	3.1 Product Overview
1-4	4. SAFETY AND PRECAUTIONS
1-4	4.1 Damage due to ESD (ElectroStatic Discharge)
1-5	4.2 Other Options

### ***Chapter 2: Technical Reference***

2-1	1. SYSTEM OVERVIEW
2-1	1.1 Outline
2-2	1.2 Wiring Diagram
2-3	2. CIRCUIT OVERVIEW
2-3	2.1 NID (Network Interface Device) Board
2-5	2.2 NID Connector Board
2-6	3. FLOW OF IMAGE DATA
2-6	3.1 Network printer
2-7	3.2 Network Scanner
2-8	3.3 Network FAX

### ***Chapter 3: Maintenance and Service***

3-1	1. TROUBLESHOOTING
3-1	1.1 Servicing Notes
3-2	1.2 NID Board LED
3-3	1.3 Errors Not Shown on the Display
3-4	2. SERVICE DATA
3-5	3. UPDATE THE NID BOARD FIRMWARE
3-7	4. TEST PRINT

**Chapter 4: Appendix**

- 4-1 1. INSTALLATION
- 4-1 1.1 Installation Precautions
- 4-1 1.2 Installation
- 4-1 1.2.1 Unpacking
- 4-2 1.2.2 Preparation
- 4-5 1.2.3 Attaching the kit
- 4-8 1.2.4 Installing the Firmware ROM DIMM
- 4-11 1.2.5 Replacing the ROM
- 4-12 1.2.6 Installing NetSpot
- 4-12 1.2.7 Check after Kit Installation
- 4-12 1.2.8 Removing the kit
- 4-12 1.2.9 Performing a Cold Reset
- 4-13 2. USER DATA

**Chapter 5: Parts Catalog**

- 5-1 1. ABOUT THIS PARTS CATALOG
- 5-2 2. PARTS LAYOUT & PARTS LIST
- 5-8 3. TOOL

**Chapter 6: Circuit Diagram**

- 6-1 1. ABOUT THIS CIRCUIT DIAGRAM
- 6-2 2. PRODUCT NO. LIST
- 6-3 3. HOW TO USE THE CIRCUIT DIAGRAM
- 6-3 3.1 SYMBOL
- 6-4 3.2 INDEX
- 6-5 3.3 SIGNAL ADDRESS LIST
- 6-7 4. CIRCUIT DIAGRAM
- 6-7 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A501
- 6-8 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A502
- 6-9 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A503
- 6-10 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A504
- 6-11 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A505
- 6-12 NETWORK INTERFACE BOARD ASS'Y HG1-4344-A506
- 6-13 NETWORK I/F RELAY BOARD ASS'Y HG5-1955-A501
- 6-14 NETWORK I/F RELAY BOARD ASS'Y HG5-1955-A502
- 6-15 5. SIGNAL ADDRESS LIST
- 6-15 SIGNAL ADDRESS LIST
- (NETWORK INTERFACE BOARD ASS'Y) HG1-4344
- 6-22 SIGNAL ADDRESS LIST
- (NETWORK I/F RELAY BOARD ASS'Y) HG5-1955

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# ***Chapter 1***

## ***General Description***

General  
Description

## 1. FEATURES

The MultiSpot Network I/F Kit II is composed of a Network Interface Device (NID), MultiSpot software, NetSpot utilities, etc. Devices can be used as network printers, network scanners, network faxes, etc. by using them with this kit.

The server MultiSpot software is installed on the network server, and the client MultiSpot software is installed on the client computer. The NID is attached to the device and the device is connected to the network. The server can manage a maximum of 5 devices.

The MultiSpot Network I/F Kit II is composed of the following parts.

- **Network Interface Device (NID)**

This is a board which is for connecting the device and the network, and relays the printer, etc. signal sent from the network to the device.

- **MultiSpot Software**

This is software used to operate a device as a network-compatible device. There are two types, the client type and the server type.

- **NetSpot Utility**

This is utility software used to perform device network settings, firmware writing, etc. from the network computer.

An example network configuration is shown below

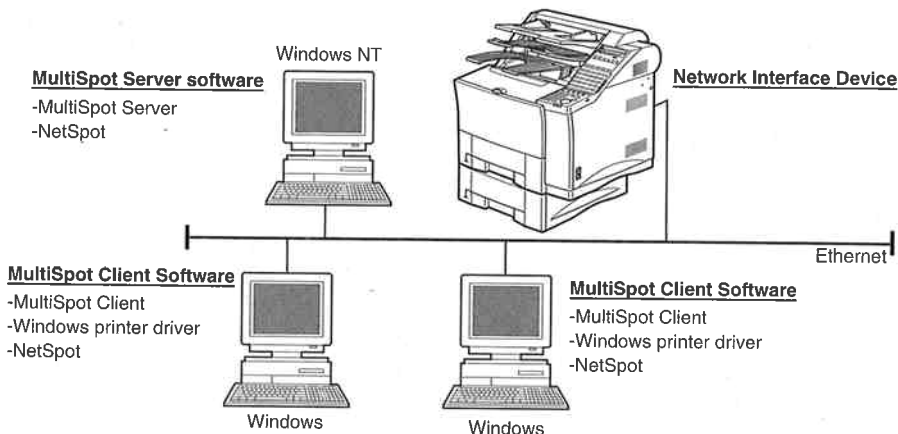


Figure 1-1 MultiSpot Network System

## **2. SPECIFICATIONS**

### **2.1 Supported Network Environments**

Type	Ethernet (CSMA/CD method)
NOS	Windows NT Server 4.0 (SP5)
Client OS	Windows95/98, Windows NT Server/Workstation 4.0
Protocol	TCP/IP

### **2.2 Network Interface Device**

CPU	AMD SB80C188-20
Flash ROM	512kbit × 8
DRAM	4Mbit × 2
SRAM	256kbit
Ethernet controller	NS DP83902A
Interface	10BASE-T (Twisted pair via RJ-45 connector)
Operation temperature	Same as main body

### 3. OVERVIEW

#### 3.1 Product Overview

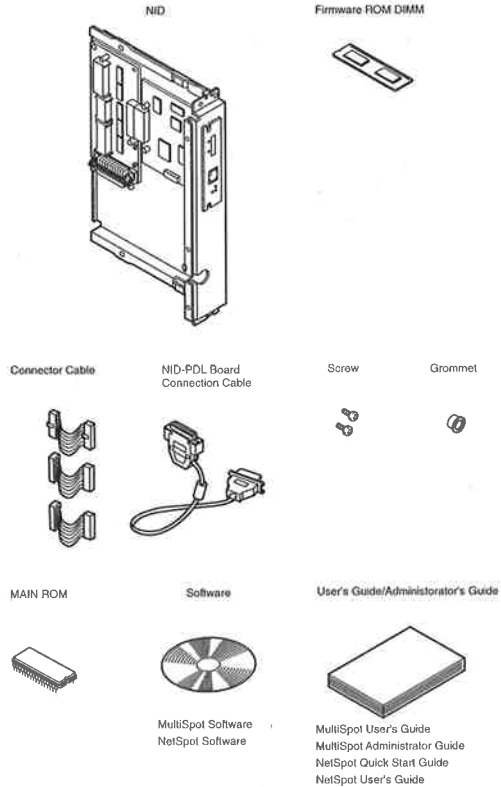


Figure 1-2 Product Overview

## 4. SAFETY AND PRECAUTIONS

### 4.1 Damage due to ESD (ElectroStatic Discharge)

This option contains printed circuit boards that use many electrical components such as ROM, RAM and custom ICs. A static charge can damage these components, so, care must be taken to prevent damage caused by electrostatic discharge.



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#### Static electricity

Electrostatic discharge damages electronic components and alters their electrical characteristics. Even plastic tools and hands without grounding wrist straps will generate enough static electricity to damage electronic components.

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The following equipment is needed to prevent electrostatic discharge damage:

- An earthed conductive mat
- Grounding wrist straps
- Crocodile clip cable for earthing metal parts on the fax

Carry out the following countermeasures if the above equipment is not available, for example, when travelling to a remote site to service a fax:

- Use an grounding bag for storing or carrying printed circuit boards or electronic devices.
- Avoid wearing silk or polyester clothing, or leather-soled shoes. Wear cotton clothing and rubber-soled shoes.
- Avoid servicing the fax in carpeted rooms.
- Before starting servicing, touch grounded earth terminals to discharge any static electricity charges.
- Wear grounding wrist straps, and earth metal parts on the machine.
- Handle printed circuit boards and electronic devices by their edges and packages. Do not directly touch electronic devices with your fingers.



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#### Electric shock when carrying out work with the fax turned on

When you must service the fax with the power cord plugged in, you must not ground your body with grounding wrist straps. This is to prevent electricity passing to your body and causing electric shock.

---

## **4.2 Other Options**

This kit and the following options are cannot be used at the same time.

- PS Module I
- Ethernet Board EB-52 FX
- Dual-line Upgrade Kit II

In order to use the kit, the following option is require.

- Printer Board I

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# ***Chapter 2***

## ***Technical Reference***



## 1. SYSTEM OVERVIEW

### 1.1 Outline

The MCH(MultiPASS Common Header) is included as a supplement in the MultiSpot system data. Data sent from the network is passed to the SCNT board via the NID and has its header removed by the CPU.

If the data with the header removed is PDL data, it is forwarded to the PDL board and handled as it would be by a printer. If it is fax data, it is processed for fax transmission as-is by the SCNT board.

Also, MCH is appended to scanner data by the SCNT board CPU, passed through the NID, and send to the MultiSpot server.

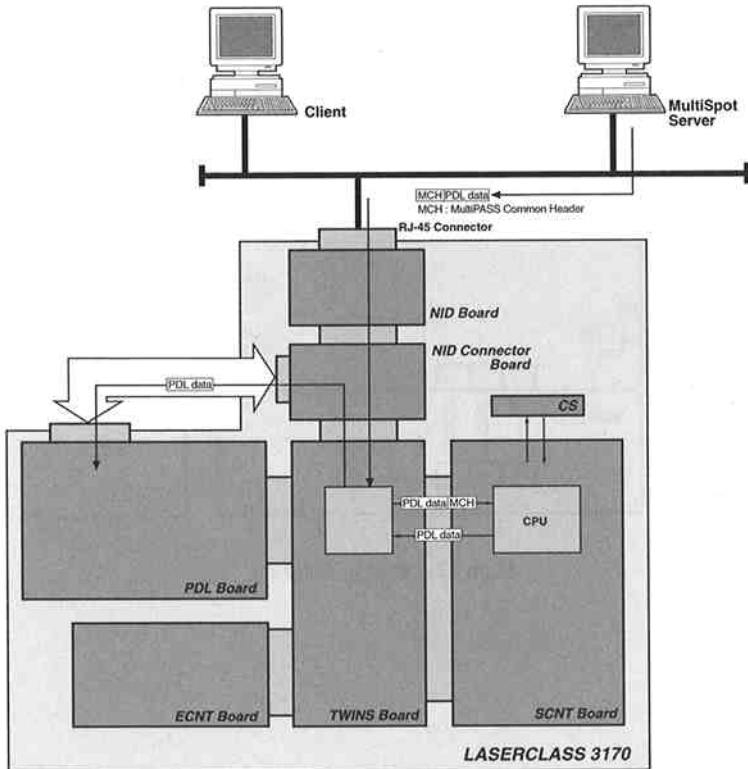


Figure 2-1 System Overview

## 1.2 Wiring Diagram

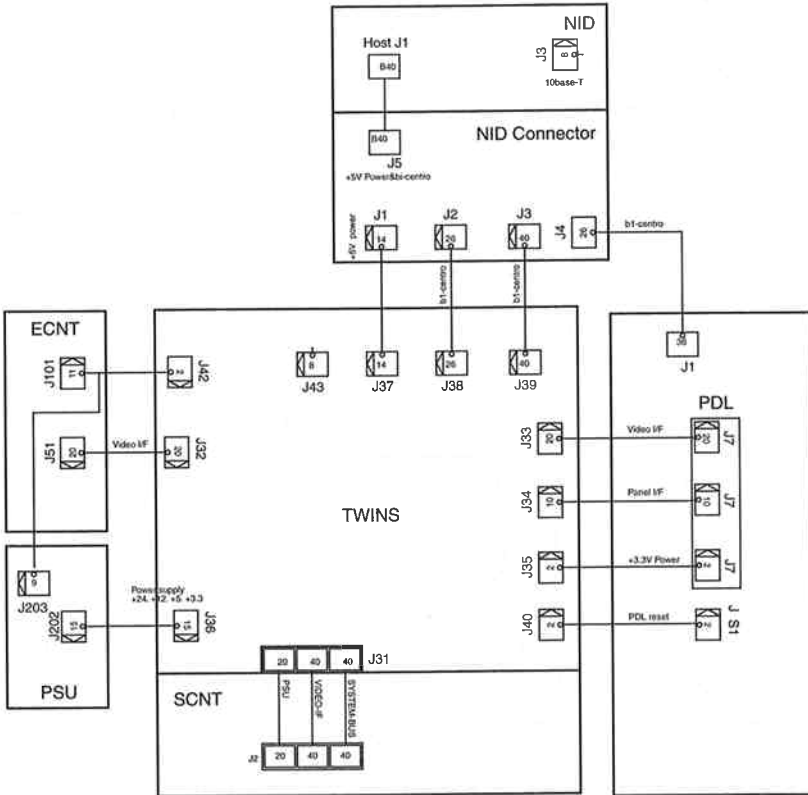


Figure 2-2 Wiring Diagram

## 2. CIRCUIT OVERVIEW

### 2.1 NID (Network Interface Device) Board

The NID board plays the role of connecting the network and the device. It performs protocol processing of data send from the network, etc.

The IEEE1284 is used as an interface inside the device.

Also, it is possible to write out firmware from NetSpot.

#### a) CPU

- AMD SB80C188-20 processor operating at 40 MHz
- 16-bit data bus
- 20-bit address bus
- 2ch DMA controller
- 3ch programmable 16-bits timers
- Interrupt controller

#### b) System controller

- Interface the Ethernet controller, communication controller, CPU, SRAM, DRAM, Flash EPROM

#### c) Ethernet controller

- CSMA/CD local area network control
- Integrated 10 Base-T transceiver

#### d) Communication controller

- IEEE1284 controller

#### e) DRAM

- 4-Mbit  $\times$  2
- Code execution and data buffering

#### f) SRAM

- 256-kbit
- Buffering of transmit and receiving ethernet packet

#### g) Flash EPROM

- Board firmware code
- Power on self test
- NVRAM function for storage configuration data

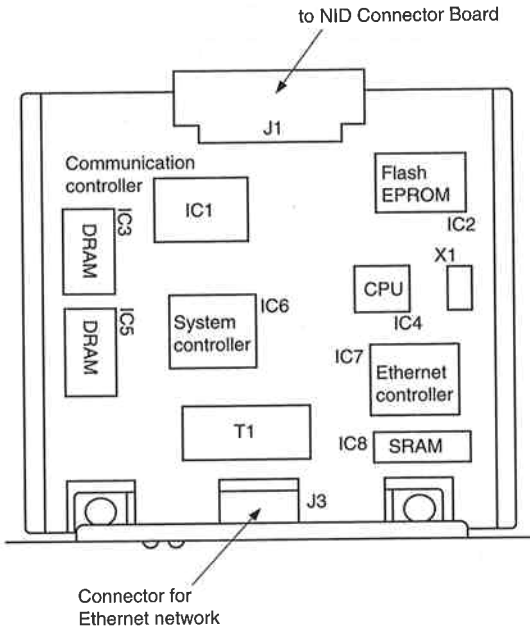


Figure 2-3 NID Block Diagram

## 2.2 NID Connector Board

The NID connector board relays between the NID board and TWINS board with the IEEE1284 interface. Also, relaying between the TWINS board and the PDL board is done by the IEEE1284 interface.

### a) Driver IC

- IEEE1284 Interface drive

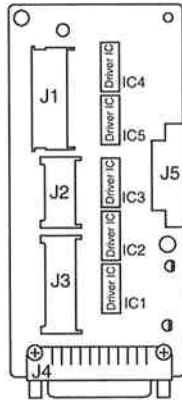


Figure 2-4 NID Connector Block Diagram

### 3. FLOW OF IMAGE DATA

#### 3.1 Network printer

- (1) MultiSpot print data from the network is sent to the NID board.
- (2) MultiSpot print data which has been sent to the NID board is protocol processed, and sent to the TWINS board after being passing through the NID connector by the IEEE1284 interface.
- (3) The MultiSpot print data is forwarded to the SCNT board and the MCH is removed by the CPU.
- (4) The PDL data which has had its header removed is sent to the TWINS board.
- (5) This PDL data is forwarded to the PDL board via the NID connector board.
- (6) The PDL data is turned into a video signal by the PDL board, and sent to the ECNT board by the video interface via the TWINS board.

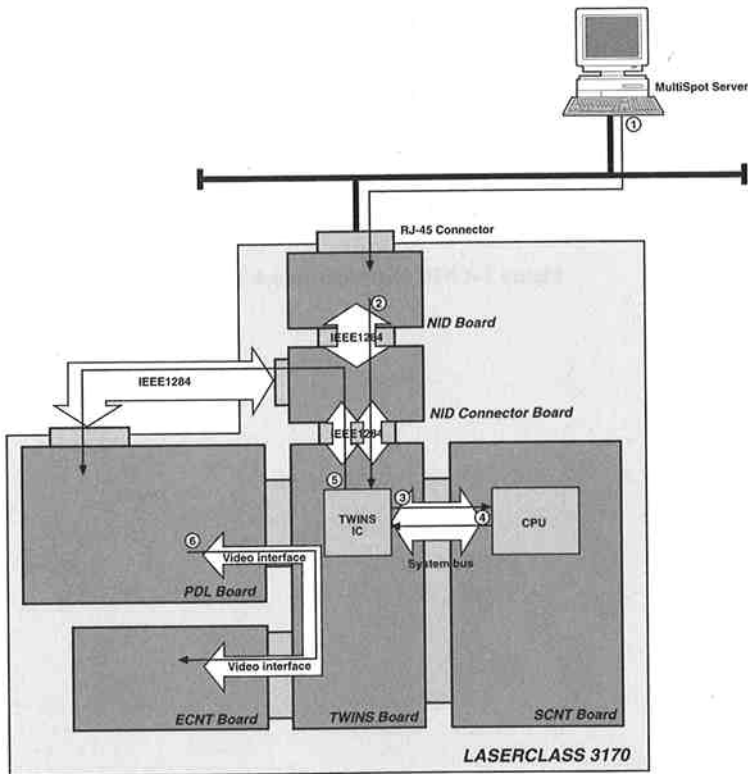


Figure 2-5 Flow Of Print Data



### 3.2 Network Scanner

- (1) Scanner data read by the contact sensor (CS) is stored in DRAM after image processing.
- (2) The scanner data stored in DRAM has an MCH appended by the CPU and is then sent to the NID board, passing through the TWINS board and NID connector board.
- (3) Protocol processing is done by the NID board, and it is then forwarded as MultiSpot scanner data to the MultiSpot server on the network.

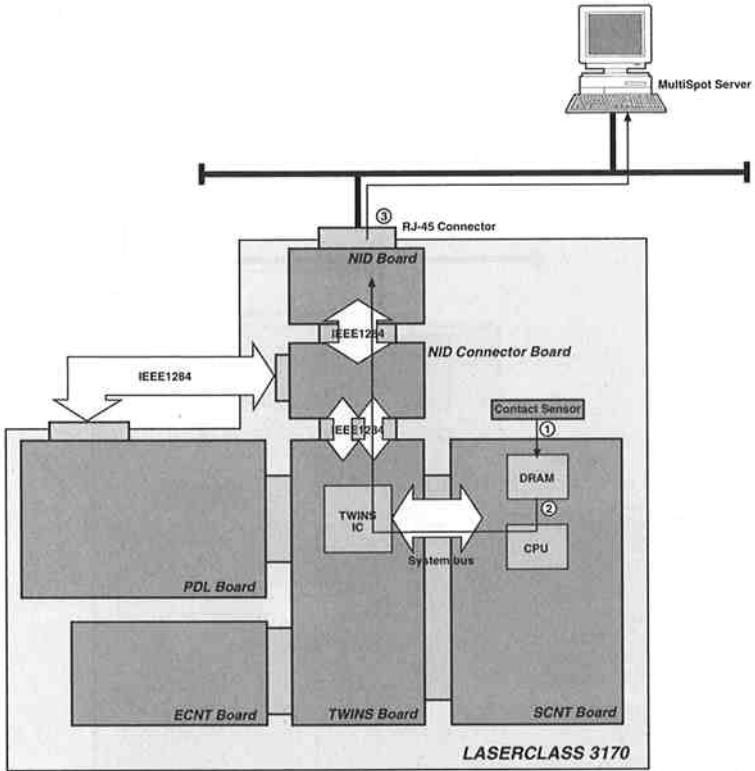


Figure 2-6 Flow Of Scanner Data

### 3.3 Network FAX

- TX

- (1) MultiSpot fax data is sent to the NID from the MultiSpot server.
- (2) It then passes from the NID board through the NID connector board and the TWINS board and is stored in SCNT DRAM.
- (3) The MultiSpot fax data stored in DRAM has an MCH appended by the CPU, then undergoes encoding for fax transmission or is returned to DRAM.
- (4) The encoded fax data is sent to the NCU board through the modem for transmission, and is sent to the other party through a telephone line.

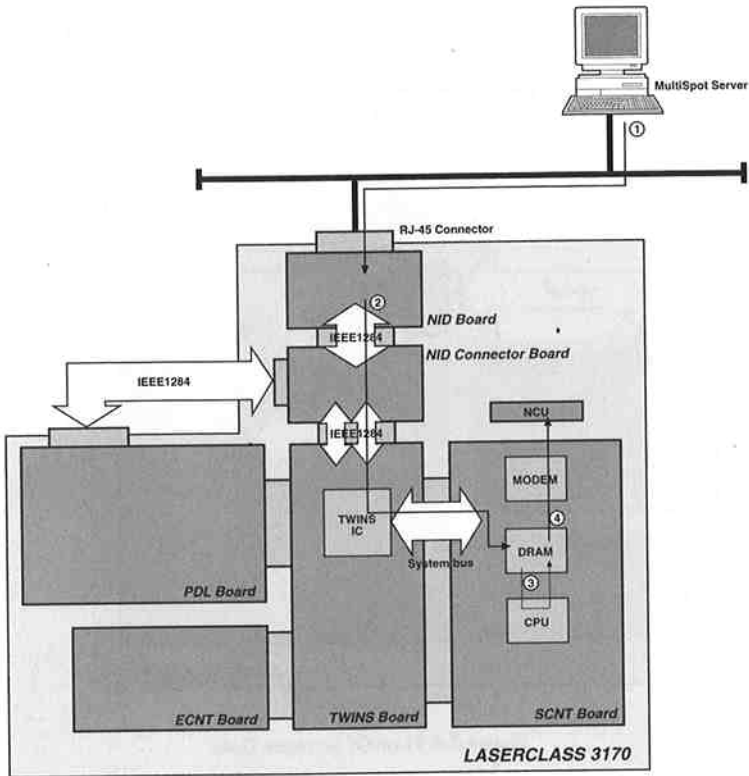


Figure 2-7 Flow Of FAX Data (Tx)

- RX

- (1) The fax data passed through the NCU board from the telephone line, enters the SCNT board, and then passes through the modem to be stored in DRAM.
- (2) The fax data stored in DRAM is decoded by the CPU, an MCH is appended, and then it is stored again in DRAM.
- (3) The MultiSpot data stored in DRAM passes through the TWINS board and NID connector board, is sent to the NID board, and is sent to the MultiSpot server after undergoing protocol processing.

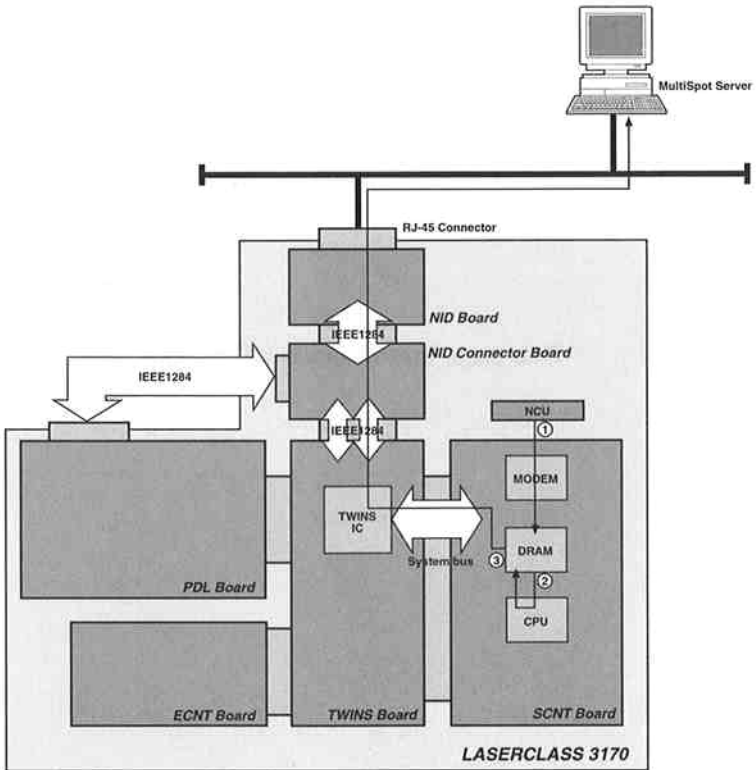


Figure 2-8 Flow Of FAX Data (Rx)

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# ***Chapter 3***

## ***Maintenance and Service***



## **1. TROUBLESHOOTING**

### **1.1 Servicing Notes**

- Notes of performing the all clear

When performing an all clear for some reason, be sure to switch the power off and on.

When an all clear is performed, settings information downloaded from the MultiSpot server is also cleared. On the NID architecture, it cannot be detected that an all clear has been performed, so it is necessary to switch the power off and on in order to download settings information from the MultiSpot server.

It is not necessary to switch the power off and on when performing a Cold Reset.

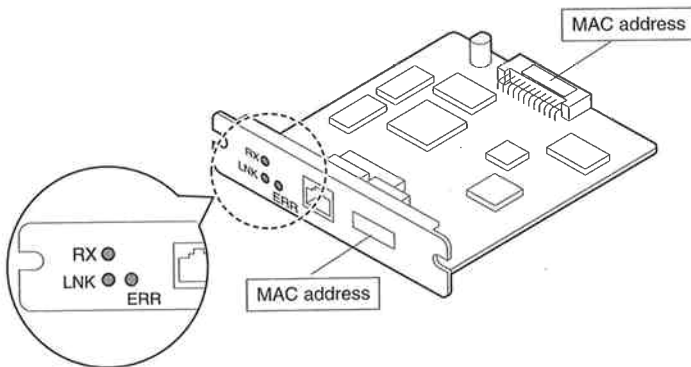
## 1.2 NID Board LED

The LED which displays the status of the NID board is located to the right of the RJ-45 connector. The LED is explained below.

**RX:** Lights up green. Lights up when the NID board detects a packet. It normally flashes on and off rapidly when packets pass through. If the flashing condition continues for a prolonged period of time, an abnormal operation has occurred.

**LNK:** Lights up green. Normally flashes green when the NID is connected to a network. If it remains unlit even though connected to a network, abnormal operation of the HUB or the NID board can be assumed.

**ERR:** Lights up red. Lights up for a few seconds for a self test when powered on, but after that only flashes when an error occurs.



**Figure 3-1 NID Board LED**



### 1.3 Errors Not Shown on the Display

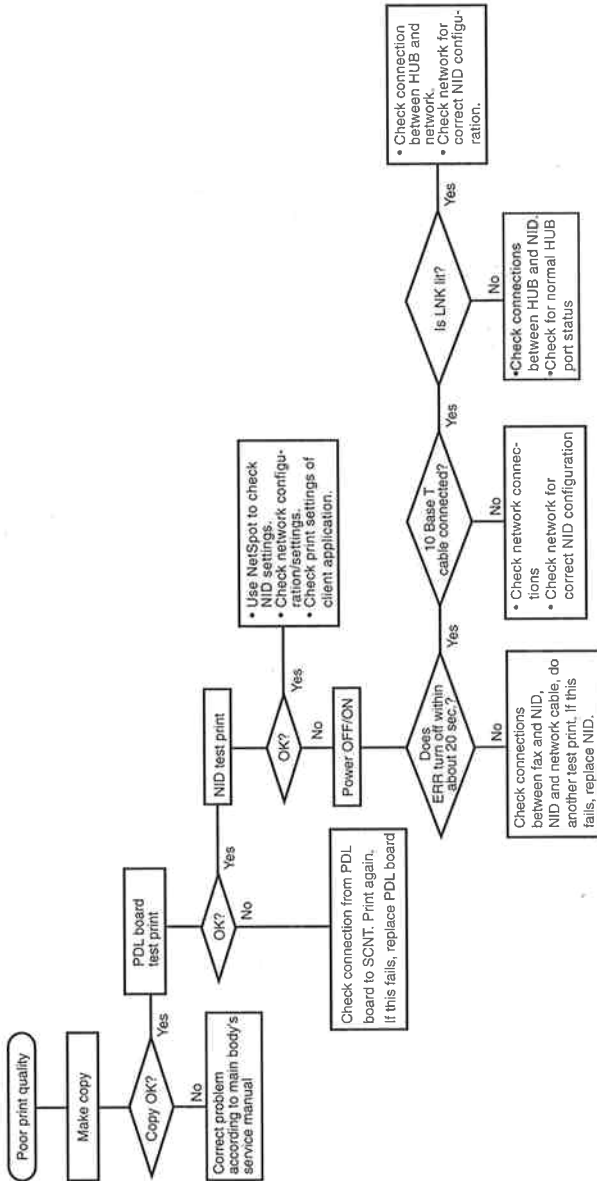


Figure 3-2 Troubleshooting Flow

## 2. SERVICE DATA

- New SSSWs/Parameters Added to this Option

### #7 PRINTER

#### SW08 (switch 08 :Option print settings)

Bit	Function	1	0
0	Prohibit forced PDL/MultiPASS print processing for FAX RX recording	Yes	No
1	Not used		
2	Not used		
3	Not used		
4	Not used		
5	Not used		
6	Not used		
7	Not used		

#### [Bit 0]

When this switch is "0," forced printing of PDL or MutiPASS print to FAX RX recording is permitted.

When it is "1," forced printing of PDL or MutiPASS print to FAX RX recording is prohibited.

### 3. UPDATE THE NID BOARD FIRMWARE

Use the Flash ROM update program of the NetSpot (Administrator version) to replace the ROM on the NID. To update NID board firmware:

- (1) Before performing the firmware update, the NID network settings information is output by a test print. Please refer to the next item for the how to perform the test print.
- (2) Select the appropriate device from the device list.
- (3) From the “Device” menu, choose “Flash Network Board...”.

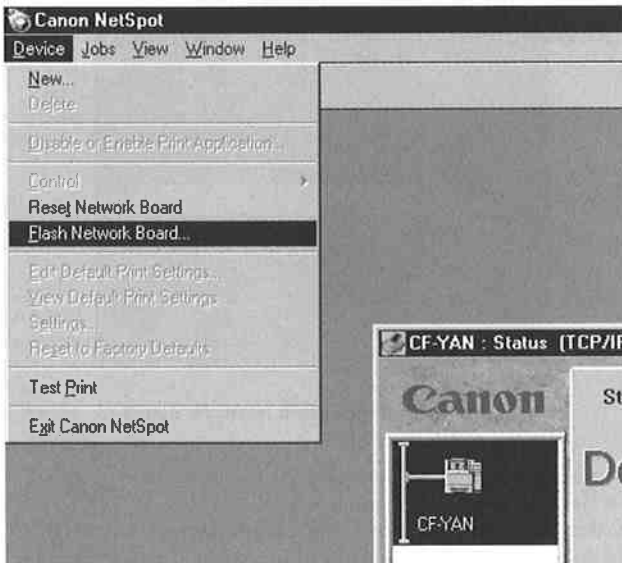


Figure 3-3 NetSpot Device Menu

- (4) The window below is displayed. Do one of the following:  
under New Firmware Data, input the file name containing the desired firmware image.  
choose "Browse...", and locate and select the name of the file containing the new firmware image.



**Figure 3-4 NetSpot Flash Network Board**

- (5) Choose Flash.  
Initiate the flash operation during a period of low network activity. If NetSpot indicates that the flash operation did not complete successfully, power cycle the printer before restarting the flash operation.
- (6) Perform Network Settings  
Set the settings values to the same as those on the test print which was output in item (1). Please refer to the NetSpot Online help for the setting method.
- (7) Print out a Test Print  
When the update and settings are completed, print out a test print and make sure that the setting details and firmware version are correct.

## 4. TEST PRINT

The NetSpot test print is used to confirm the NID board settings. The NID firmware version, MAC address, protocol settings status, etc. can be checked with the test print.

- (1) Select the appropriate device from the device list.
- (2) From the "Device" menu, choose "Test Print"

<b>Canon Network Interface Device</b>			
Name:	LASERCLASS_3170		
Firmware Version:	31.11		
Node Address:	0000850FD02F		
<b>IPX/SPX Information</b>			
Protocol Status:	802.2		
Application Mode:	UNCONFIGURED		
<b>TCP/IP Information</b>			
Protocol Status:	ETHERNET II		
Application Mode:	UNCONFIGURED		
IP Address Mode:	Manual Addressing		
IP Address:	192.68.0.2		
Subnet Mask:	255.255.255.0		
Default Gateway:	0.0.0.0		
Broadcast Address:	255.255.255.255		
<b>Document Distribution System Information</b>			
Status:	Enabled		
Mode:	TCP/IP		
TCP/IP Server IP Address:	192.68.0.1		
TCP/IP Server State:	Connected		
<b>Network Statistics</b>			
CRC Errors:	0	Collisions:	0
Missed Frames:	0	Heartbeat:	0
Align Errors:	0	Out of Window:	0
Recvr Disabled:	0	Underruns:	0
Deferring:	0	Overruns:	0
Overflow:	0		
Total Rx Frames:	24952	Total Tx Frames:	28502
Abort Rx Frames:	0	Abort Tx Frames:	0
Rx Too Big:	0	Rx Too Small:	0

Figure 3-5 NetSpot Test Print Sample

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# ***Chapter 4***

# ***Appendix***





# 1. INSTALLATION

## 1.1 Installation Precautions

### Damage due to electrostatic discharge

Electrostatic charge in the human body is the cause of damage to electronic parts as well as changes in their characteristics. When attaching / removing the kit, be sure to take measures against electrostatic discharge by using a wrist strap, etc. If the kit is handled when an electrostatic charge is present, the electronic parts may be damaged.



REFERENCE

Countermeasures for Electrostatic Discharge

For details regarding countermeasures for electrostatic discharge, please refer to *Chapter 1, 4. SAFETY AND PRECAUTIONS.*

### Combination with other options

The kit can not be used with the following options.

Therefore, remove them when installing the kit.

- DUAL-LINE UPGRADE KIT II
- ETHERNET BOARD EB-52 FX
- PS MODULE I

## 1.2 Installation

### 1.2.1 Unpacking

Check that the box contains the MultiSpot Network I/F Kit II, cables, Main ROM, Firmware ROM DIMM and two screws.

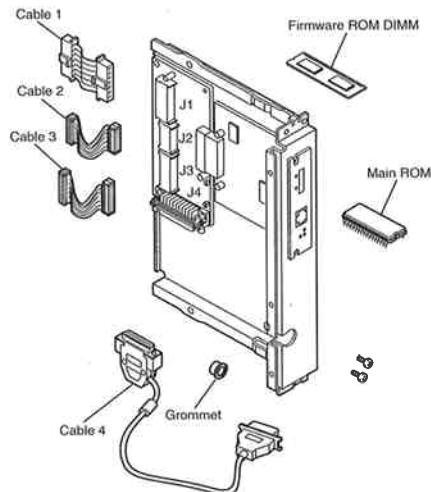


Figure 4-1 External View

### 1.2.2 Preparation

Perform the operations below before attaching the kit.

- (1) If there is image data in image memory, output the image data from the memory.
- (2) Output the one-touch dial list, coded speed dial list, group dial list, sender name list and user data list.



**NOTE**

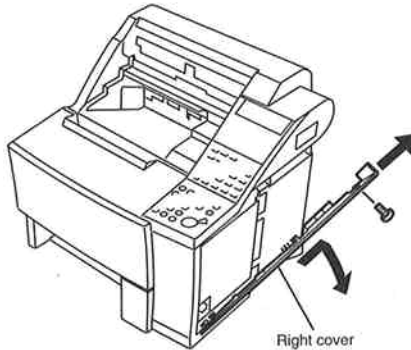
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When performing device (FAX) settings from MultiSpot system, the user settings data recorded by device (FAX) will be overwritten.

If the MultiSpot server has been installed before the kit, when performing power ON after installing the kit, the user settings data recorded by device (FAX) will be overwritten.

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- (3) Disconnect the modular jack cord (telephone line) from the fax.
- (4) Disconnect the power cord of the fax unit at the power source. Wait at least 10 minutes for the power supply unit to cool before continuing to work.
- (5) Remove the one screw.
- (6) Slide the right cover to the right, open the top side, and pull up to remove.



**Figure 4-2 Preparation for Installation 1**

- (7) Refer to Figure 4-1 and bend cables 1, 2 and 3 as shown in order to make insertion of the kit easier.
- (8) Insert cables Cable 1, 2 and 3 into J1, J2 and J3 on the kit.
- (9) Attach the Grommet to Cable 4. Then attach the cable to connector J4 on the kit with the screws.
- (10) Insert the Grommet into the hole of the kit.

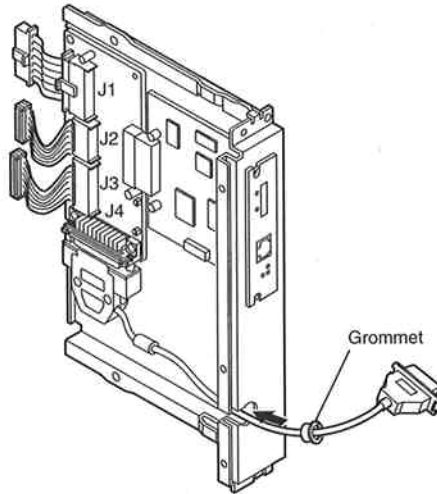


Figure 4-3 Preparation for Installation 2

If a Printer Board I (Option) is not installed proceed to step (13).

- (11) Remove the seven screws.
- (12) Disconnect the connectors of the option from J33, J34, J35 and J40 on the TWINS board. Then, remove the option.

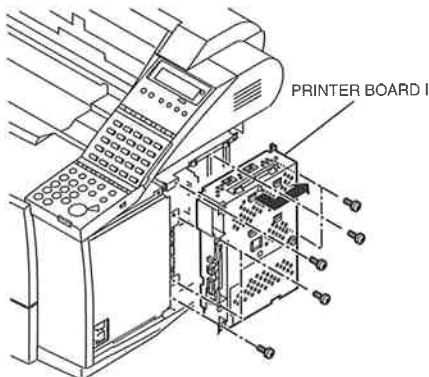
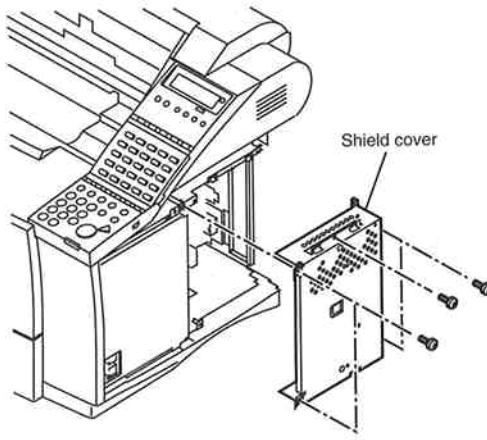


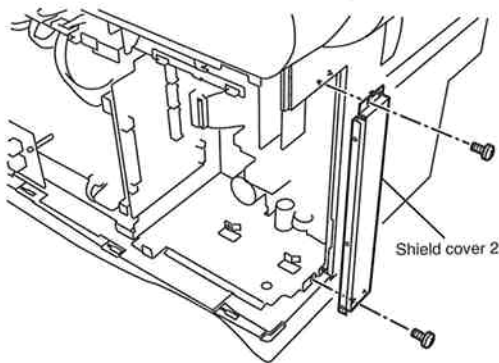
Figure 4-4 Preparation for Installation 3A

(13) Remove the five screws and remove the shield cover.



**Figure 4-5 Preparation for Installation 3B**

(14) Remove the two screws and remove the shield cover 2.



**Figure 4-6 Preparation for Installation 4**

### 1.2.3 Attaching the kit

- (1) Make a note of the kit's MAC address because it is necessary for MAC address registration after the NetSpot installation.
- (2) Insert the kit, aligning the tabs with the slots on the main unit.
- (3) After inserting the kit, insert connectors J1, J2 and J3 into J37, J38 and J39 on the TWINS board.
- (4) Fasten the kit in place with the 2 screws (A-screws) which were used for the shield cover 2, then secure the 2 included screws (B-screws).

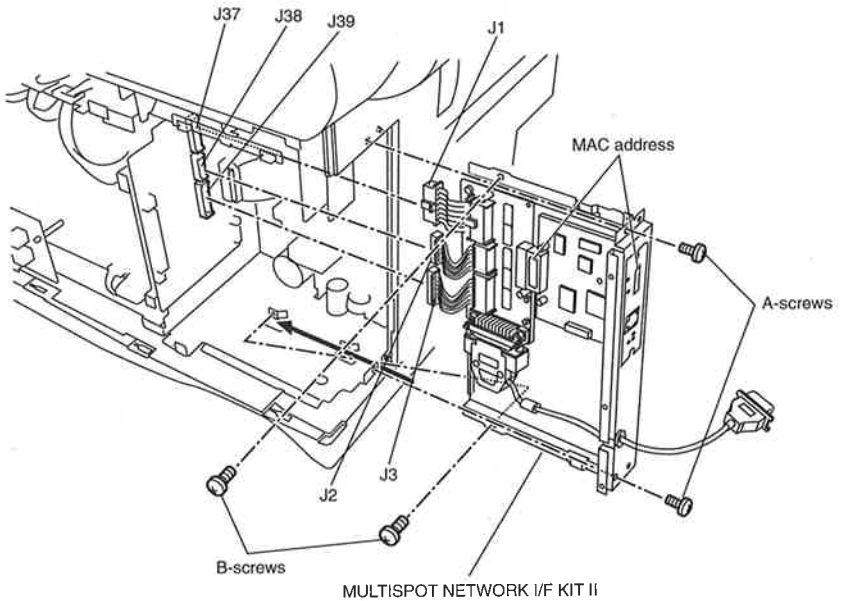
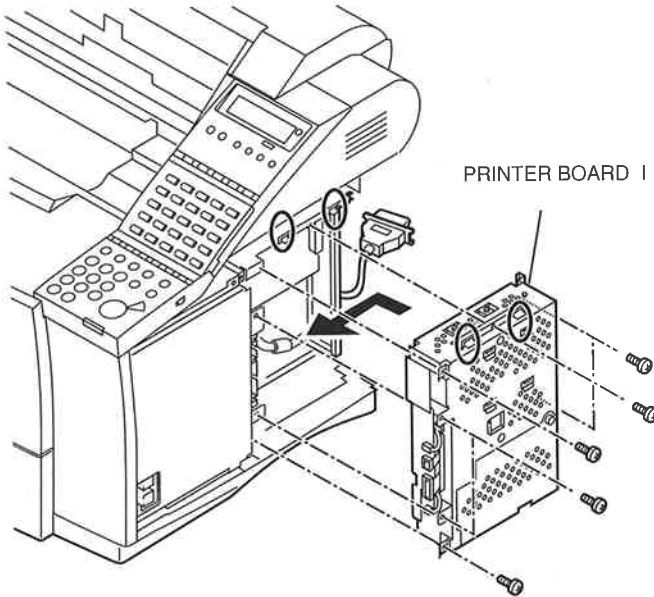


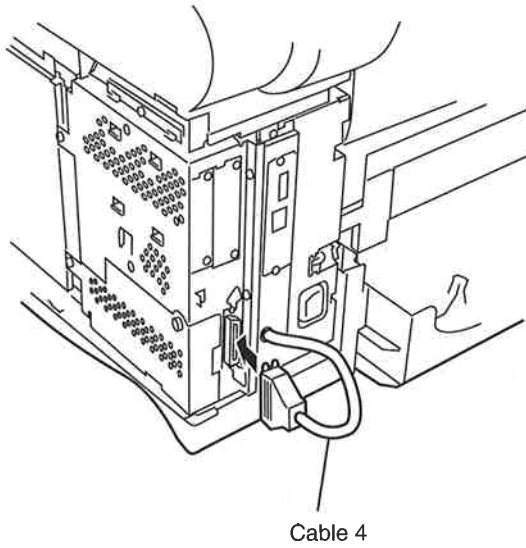
Figure 4-7 MultiSpot Network I/F Kit II Installation

- (5) Insert Printer Board I (Option) into the main unit. Attach the option by aligning it with the hooks in the circles in the figure and sliding it in the direction indicated by the black arrow.
- (6) After inserting the option, insert connectors of the option into J33, J34, J35 and J40 on the TWINS board.
- (7) Fasten the option in place with the seven screws.



**Figure 4-8 Printer Board I (Option) Installation**

- (8) Attach Cable 4 (Centronics cable) to connector J1 (Centronics connector) on Printer Board I.



**Figure 4-9 Centronics Cable Attachment**

### 1.2.4 Installing the Firmware ROM DIMM

- (1) Loosen the screw at the top of the memory slot cover.

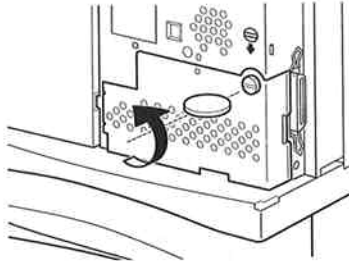


Figure 4-10 Firmware ROM DIMM Installing 1



**NOTE**

---

Loosen the screw with a large coin, or similar object, then use your fingers to rotate the screw until the cover opens. You do not need to remove the screw completely.

---

- (2) Swing open the cover and lift it off the Printer Board I.

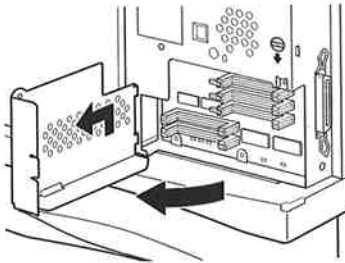


Figure 4-11 Firmware ROM DIMM Installing 2



---

To avoid electric shock, do not open the covers.

---



- (3) Insert the ROM DIMM into the socket by pushing it into the top of the three slots at the top right of the motherboard until it snaps into place. If a ROM DIMM is already installed, replace it.

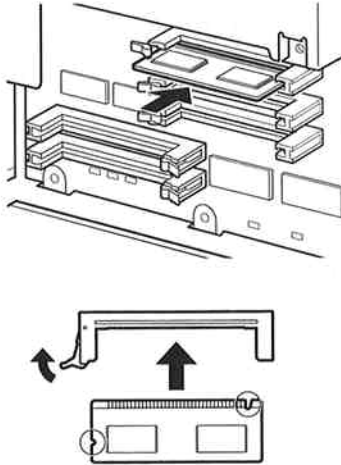
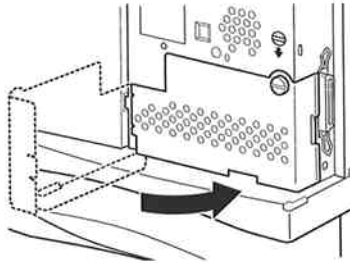


Figure 4-12 Firmware ROM DIMM Installing 3



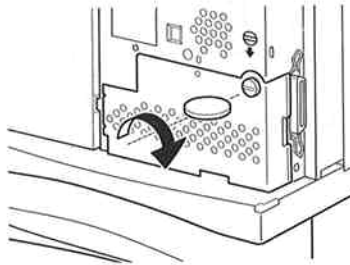
- Be sure to open the entrance to the top socket by pushing back on the left tab for that slot.
- Make sure the indent on the ROM DIMM is on the right side of the ROM DIMM as you press it into the board.
- If the ROM DIMM is inserted into a different slot, it will not operate correctly. Therefore, be sure to insert the ROM DIMM into the correct (top) slot.

- (4) Place the memory slot cover back on the Printer Board I and close it.



**Figure 4-13 Firmware ROM DIMM Installing 4**

- (5) Tighten the screw at the top of the memory slot cover to secure it in position.



**Figure 4-14 Firmware ROM DIMM Installing 5**

## 1.2.5 Replacing the ROM

- (1) Remove the six screws and remove the shield cover.

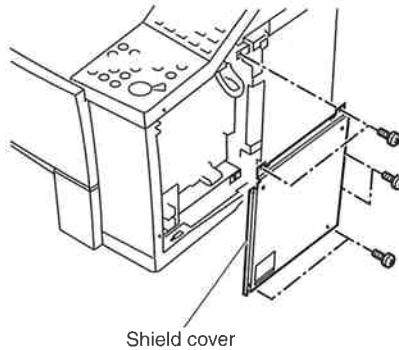


Figure 4-15 ROM Replacement 1

- (2) Remove the ROM on the SCNT board using the IC-Removing Tool (HY9-0022).
- (3) Replace the ROM.

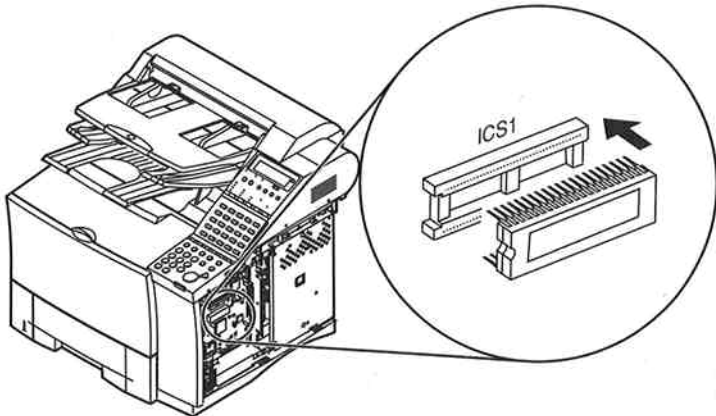


Figure 4-16 ROM Replacement 2

- (4) Fasten the shield cover of the SCNT board in place with the six screws.
- (5) Fasten the right cover in place with the one screw.
- (6) Connect the LAN cable to the kit.
- (7) Connect the modular jack cord (telephone line) to the fax.
- (8) Plug in the fax.
- (9) If a Printer Board I is not installed before installing the kit, perform a Cold Reset to reset the function as a printer referring to *1.2.9 Performing a Cold Reset*.

### **1.2.6 Installing NetSpot**

After installing the kit, carry out the installation of NetSpot referring to the *NetSpot quick start guide*.

### **1.2.7 Check after Kit Installation**

After installing NetSpot, carry out the test print from NetSpot referring to the *NetSpot user's guide* to make sure there are no problems with the installation of the kit.

If the test print is not carried out, return to *1.2.3 Attaching the kit*, *1.2.4 Installing the Firmware ROM DIMM* and *1.2.5 Replacing the ROM*, re-attach the kit, and then perform the test print again.

### **1.2.8 Removing the kit**

When removing the kit, perform the steps in *1.2.3 Attaching the kit*, *1.2.4 Installing the Firmware ROM DIMM* and *1.2.5 Replacing the ROM*, in reverse order. Be sure to remove them only after turning the power off.

### **1.2.9 Performing a Cold Reset**

After installing the option, carry out the following procedure to reset the functions as a printer. Cold Reset may be any of several types, each differing in how it is executed to suit individual needs as shown below; see the Service Manual for details on Cold Reset.

If you want LTR as the default recording paper size, under TEST PRINT of TEST MENU:

- (1) Press and hold down the **Item**, **Value** and **Enter/Cancel** buttons at the same time. Then plug the main unit in while still pressing the **Item**, **Value** and **Enter/Cancel** buttons.
- (2) When you see the "COLD RESET LTR" message, release all the buttons.

If you want A4 as the default recording paper size, under TEST PRINT of TEST MENU:

- (1) Press and hold down the **Menu**, **Item** and **Value** buttons at the same time. Then plug the main unit in while still pressing the **Menu**, **Item** and **Value** buttons.
- (2) When you see the "COLD RESET A4" message, release all the buttons.



- 
- After the factory defaults have been reset, the printer enters the standby mode.
  - The fax automatically checks which options are installed after a cold reset is performed. When the fax has finished warming up, the On Line LED comes on and "READY" appears in the display.
- 

- (3) If the message is not displayed, return to *1.2.3 Attaching the kit*, re-attach the option, and then re-perform the cold reset operation.

## 2. USER DATA

When the kit is installed in the device, the following switch will be added to the user data.

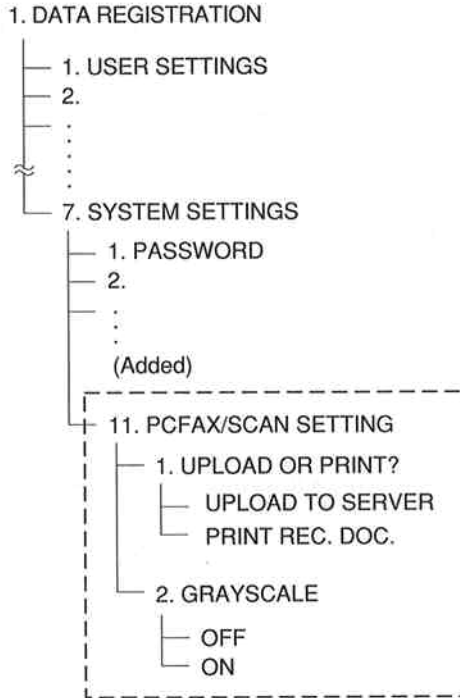


Figure 4-17 Added User Data

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# ***Chapter 5***

## ***Parts Catalog***





## 1. ABOUT THIS PARTS CATALOG

### 2. PARTS LAYOUT & PARTS LIST

#### Parts layout illustration

##### a) Parts search

Find a part from the parts layout illustration and find its key number from the parts list to identify the part number and name.

Further, screws, nuts, washers, grip rings, pins and spacers are mentioned in the parts list.

**Note:** If parts have the same or similar shape but different specifications, their key number is assigned to several part numbers and names in the parts list.

##### b) Parts replacement procedure

The parts layout illustrations are arranged according to the disassembly procedure of the product.

#### Parts list

##### a) FIGURE & KEY No.

The FIGURE & KEY No. column corresponds to the key numbers assigned to the parts in the parts layout illustration.

It also corresponds to the part locations printed on the PC board.

##### b) PART NUMBER

The PART NUMBER column gives the part numbers corresponding to the key numbers. To order a part, indicate the part number clearly.

**Note:** Parts marked NPN are not service parts.

##### c) RANK

The service parts with N in the RANK column are order parts.

##### d) QTY

The QTY column gives the number of parts in the corresponding components layout illustration.

##### e) DESCRIPTION

The DESCRIPTION column gives the part names in English.

To order a part, indicate the part name, too.

### 3. TOOL

This is a list of tools used for servicing products.

## 2. PARTS LAYOUT & PARTS LIST

FIGURE 1 MULTISPOT NETWORK I/F KIT II  
PACKAGE CONTENTS

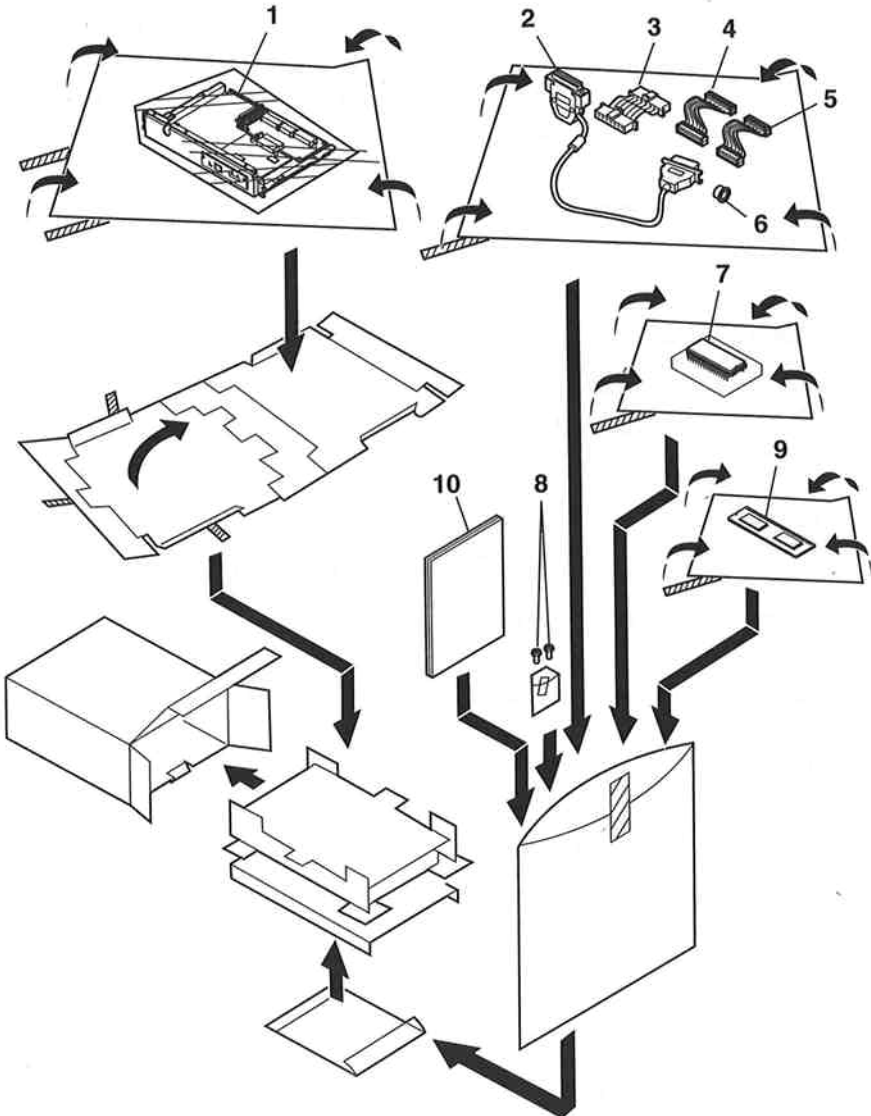
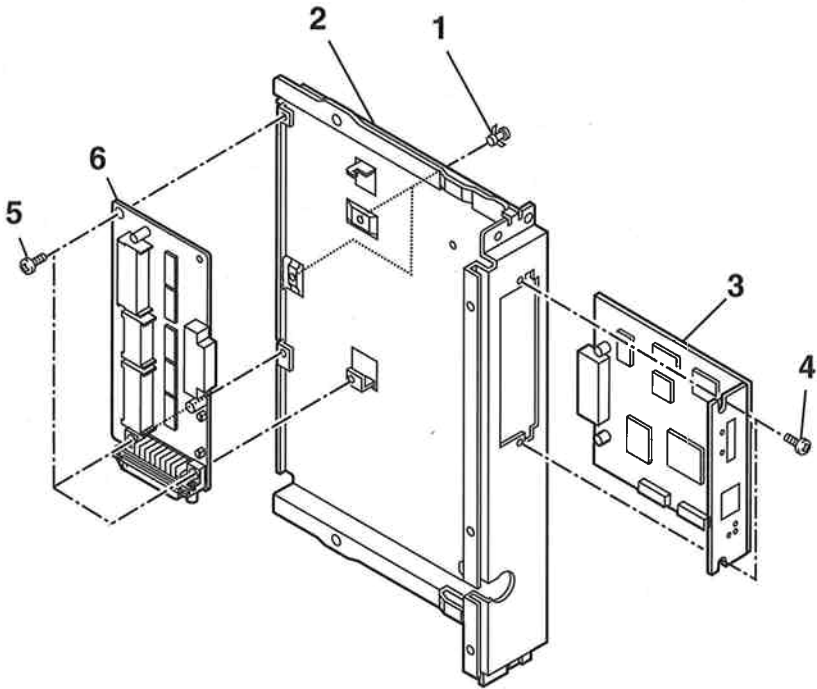


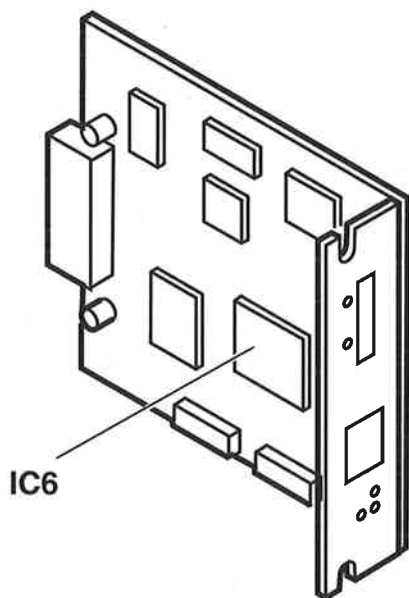
FIGURE & KEY No.	PART No.	RANK	QTY	DESCRIPTION	REMARKS
1 - 1	NPN			1 MULTISPOT NETWORK BOARD ASSY	
2	HH2-2900-000			1 CABLE, CENTRONICS 25-36P	
3	HH2-2897-000			1 CABLE WITH CONNECTOR, 14P	
4	HH2-2898-000			1 CABLE WITH CONNECTOR, 40P	
5	HH2-2899-000			1 CABLE WITH CONNECTOR, 26P	
6	WT2-0212-000			1 GROMMET	
7	HH4-3276-000			1 IC, M27C160-100F1, EP-ROM	
8	XB1-2300-607			2 SCREW, BH3X6(S)	
9	HH4-3385-000			1 DIMM ASS'Y	
10	HT1-2153-000	N		1 USER'S GUIDE (ENGLISH)	

FIGURE 2 MULTISPOT NETWORK BOARD ASS'Y





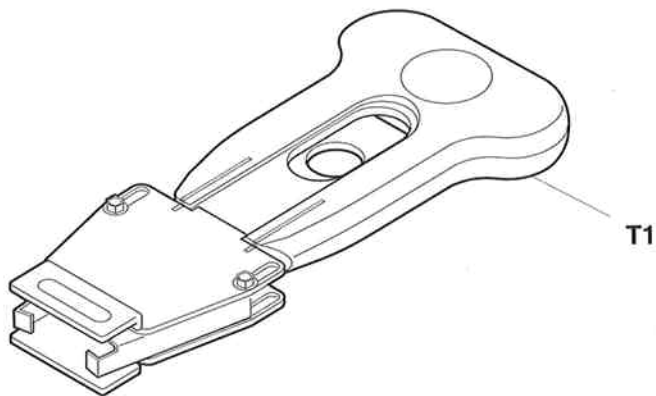
**FIGURE 3 NETWORK INTERFACE BOARD ASS'Y**





**3. TOOL**

**FIGURE 4 TOOLS**







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# ***Chapter 6***

## ***Circuit Diagram***



## **1. ABOUT THIS CIRCUIT DIAGRAM**

This circuit diagram is divided into the following three sections and contains information necessary for servicing the products.

### **HOW TO USE THE CIRCUIT DIAGRAM (Section 4)**

This section describes how to read and use this circuit diagram correctly.

### **CIRCUIT DIAGRAM (Section 5)**

This section contains information necessary for servicing the products, and includes the circuit diagrams of the products.

### **SIGNAL ADDRESS LIST (Section 6)**

For circuit diagrams consisting of multiple pages, the address on the other page for each signal connecting is not included in the diagram. Therefore, refer to the signal address list for circuit diagrams consisting of multiple pages.

## 2. PRODUCT NO. LIST

This circuit diagram describes the component units of the following products.

UNIT NAME	DRAWING No.	PRODUCT No.
NETWORK INTERFACE BOARD ASS'Y	HG1-4344	HG1-4344
NETWORK I/F RELAY BOARD ASS'Y	HG5-1955	HG5-1955

**CAUTION:** The numbers attachment to the technical drawings in this manual are Design drawing numbers. In some cases the service part numbers and Design drawing numbers do not match.

### 3. HOW TO USE THE CIRCUIT DIAGRAM

#### 3.1 SYMBOL

The symbols used in this circuit diagram conform to Canon standards. However, the circuit diagram of the power supply unit, etc. which are manufactured by other companies, use the standard symbols of those other manufacturers.

The main differences between Canon standards and those of other manufacturers are given below.

#### a) ARRAY SYMBOL

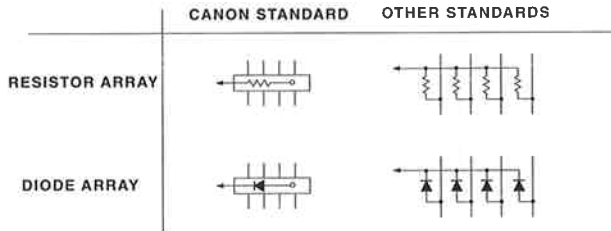


Figure 6-1 Array Symbol

#### b) GROUND SYMBOL

Ground symbols are as shown below, unless specified otherwise in the diagram.

NAME	SYMBOL
DIGITAL GROUND	
ANALOG GROUND	
RELAY GROUND	
FRAME GROUND	

Figure 6-2 Ground Symbol

**c) JUMPER TERMINAL SYMBOL**

Jumper terminal symbols are as shown below.

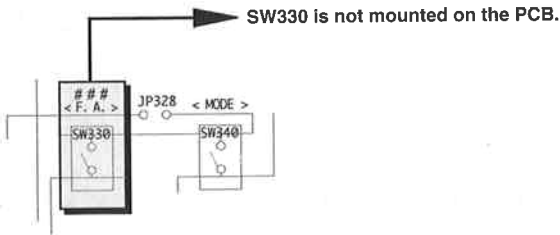
—○ ○— Connected Jumper Terminal

—○<sup>###</sup> ○— Disconnected Jumper Terminal

**Figure 6-3 Jumper Terminal Symbol**

**d) UNMOUNTED PART SYMBOL**

Parts marked with ### are not mounted on the PCB.



**Figure 6-4 Unmounted Part Symbol**

**3.2 INDEX**

Each circuit diagram has an index, like the one shown here, on the lower right hand side.

No.	REMARKS	DRAWING NAME		
		DRAWING No.		
		MODEL NAME	PART No.	REV.

**Figure 6-5 Index**

- No. : Number of modification to this manual
- REMARKS : Modification content
- DRAWING NAME : Name of circuit diagram
- DRAWING No. : Drawing number of this diagram
- MODEL NAME : Name of model corresponding to Part No.
- PART No. : Service part number of relevant board in this circuit diagram
- REV. : Version number indicating revision of this diagram



### 3.3 SIGNAL ADDRESS LIST

The following is an example of how to read the signal address list.

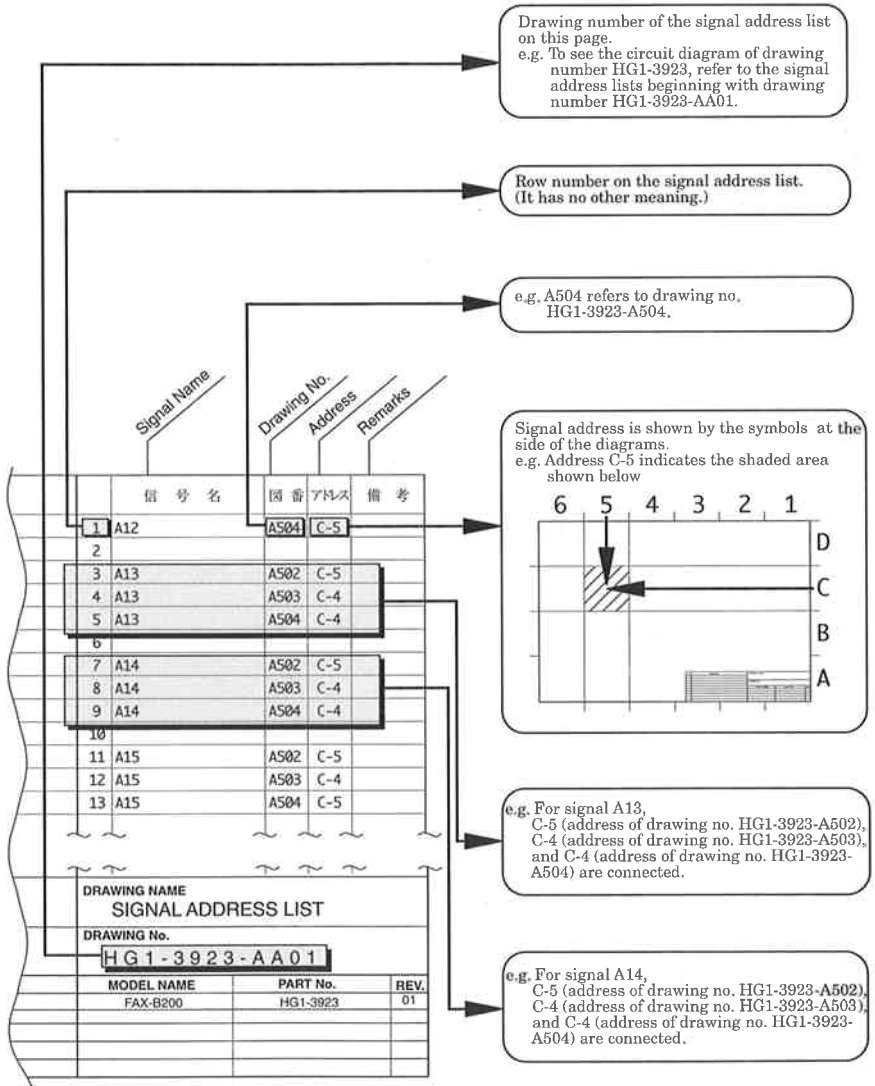
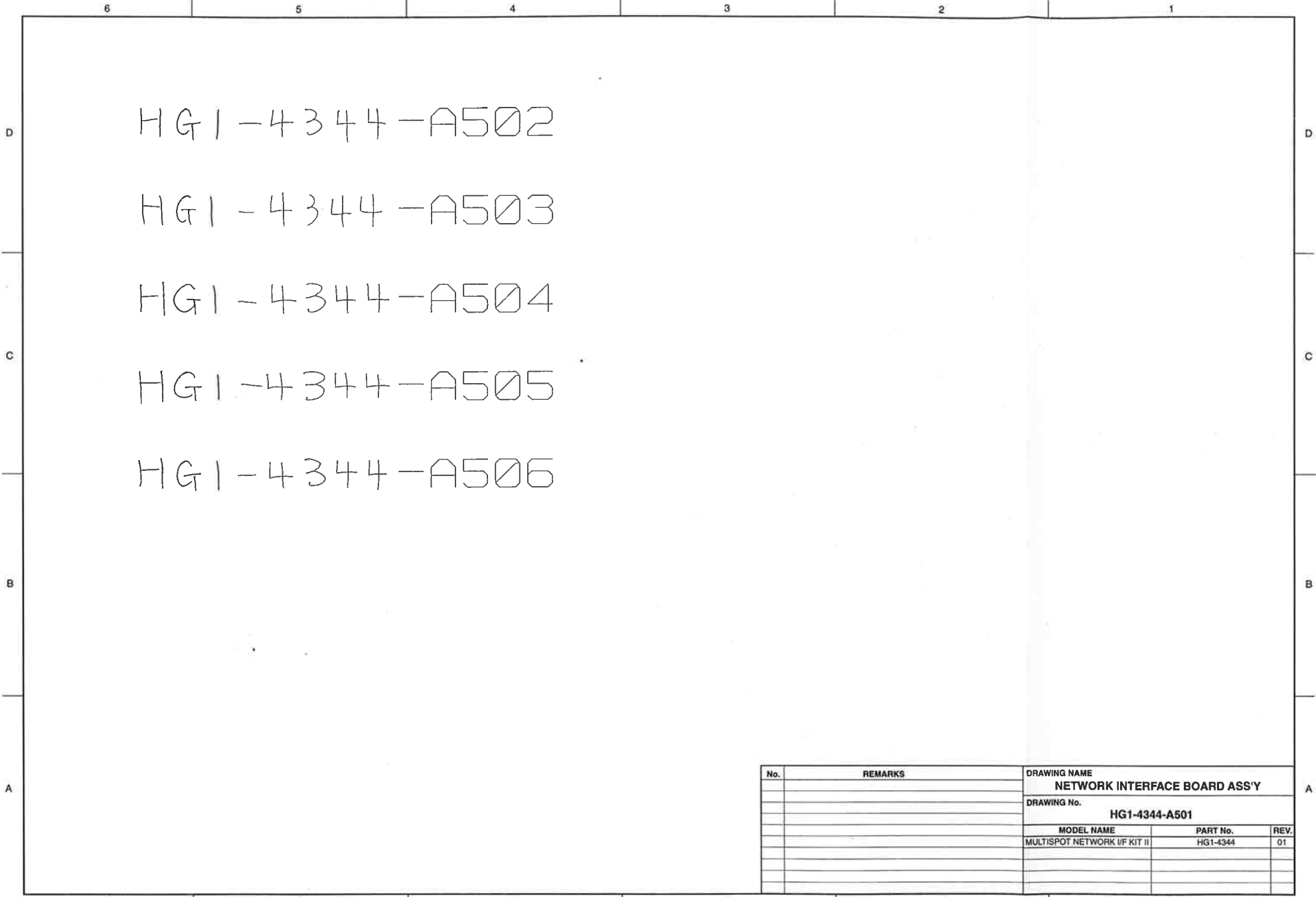


Figure 6-6 Signal Address List

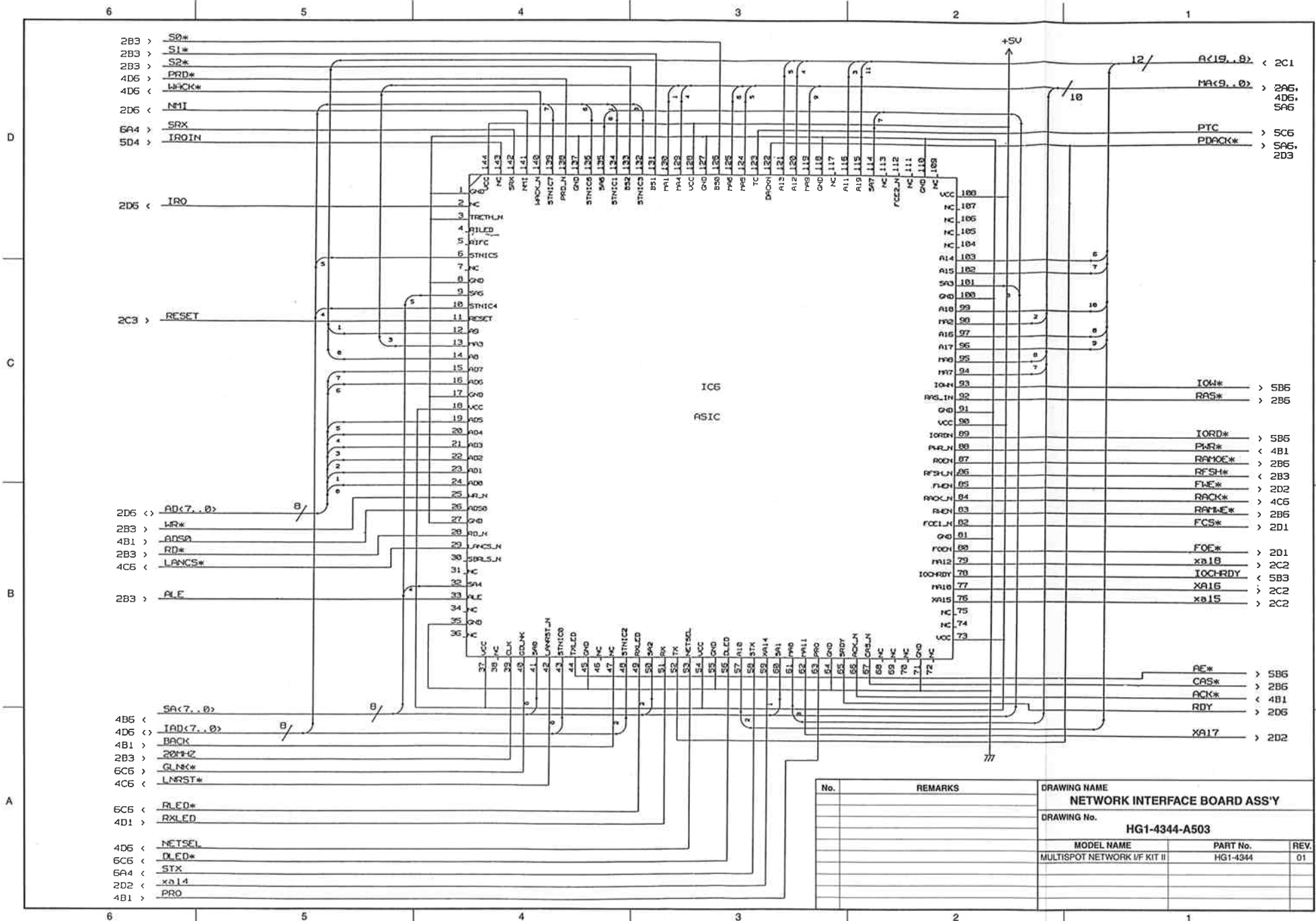
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# 4. CIRCUIT DIAGRAM

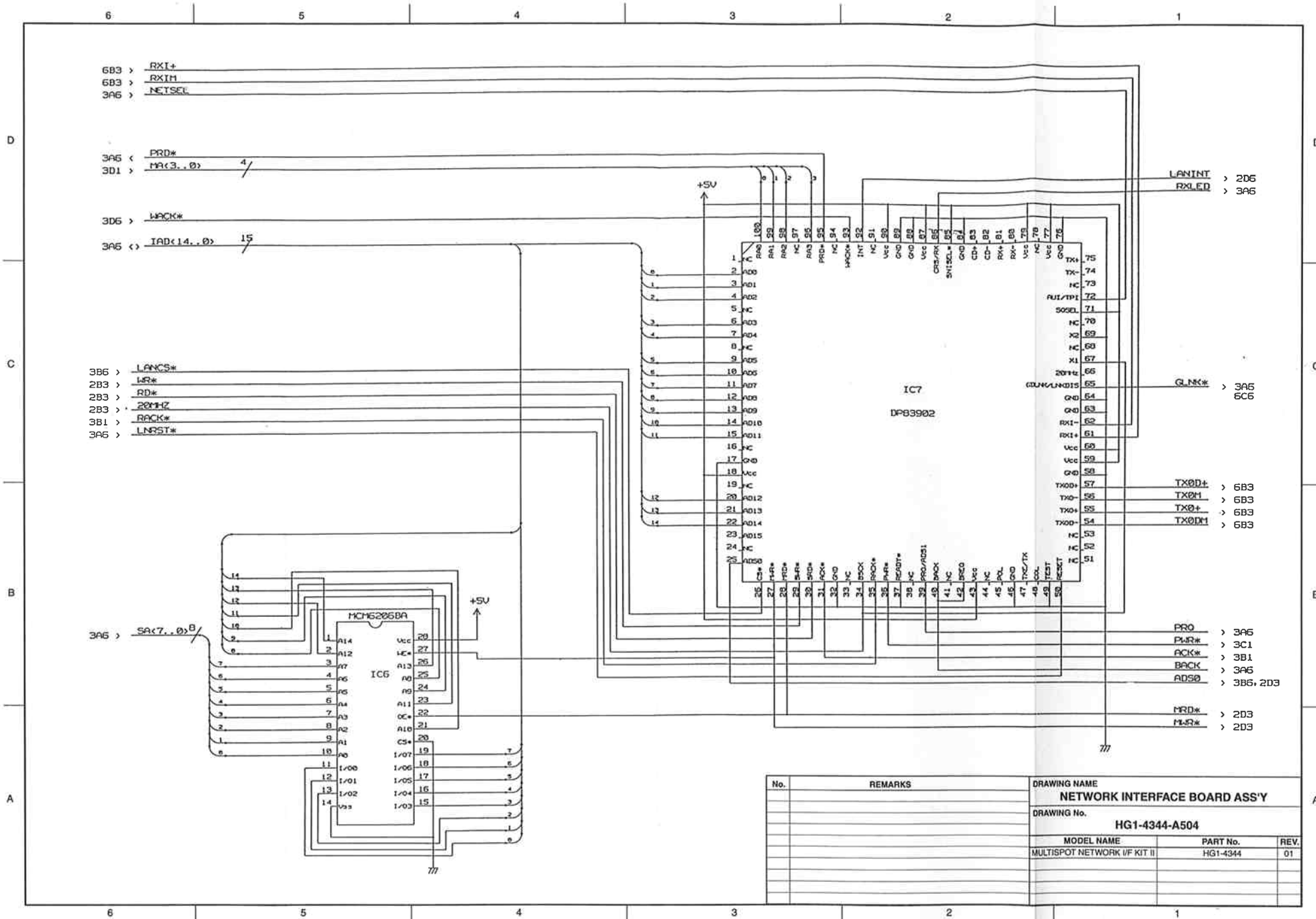


No.	REMARKS	DRAWING NAME		
		NETWORK INTERFACE BOARD ASS'Y		
		DRAWING No.		
		HG1-4344-A501		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

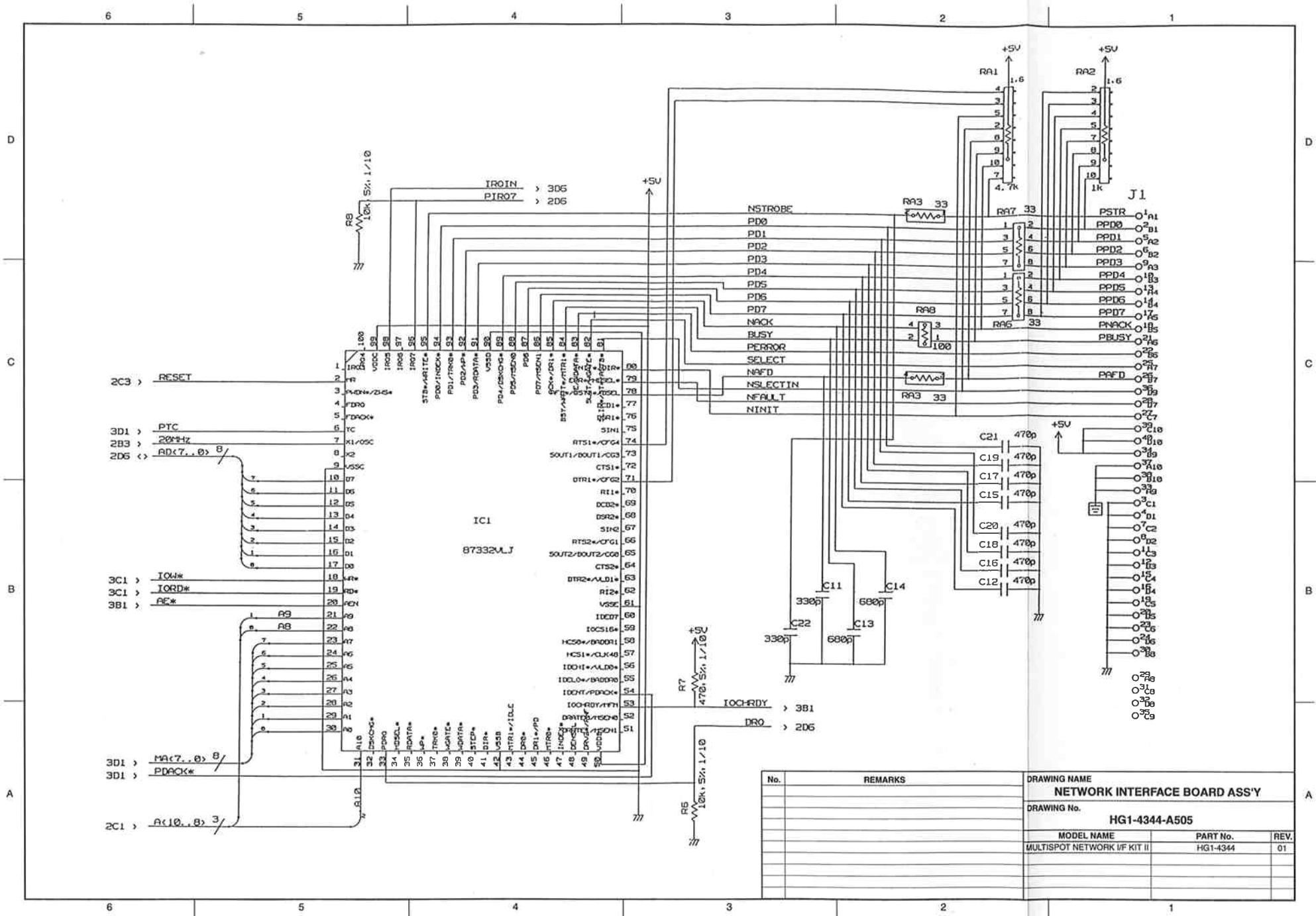




No.	REMARKS	DRAWING NAME		
		NETWORK INTERFACE BOARD ASS'Y		
		DRAWING No. HG1-4344-A503		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01



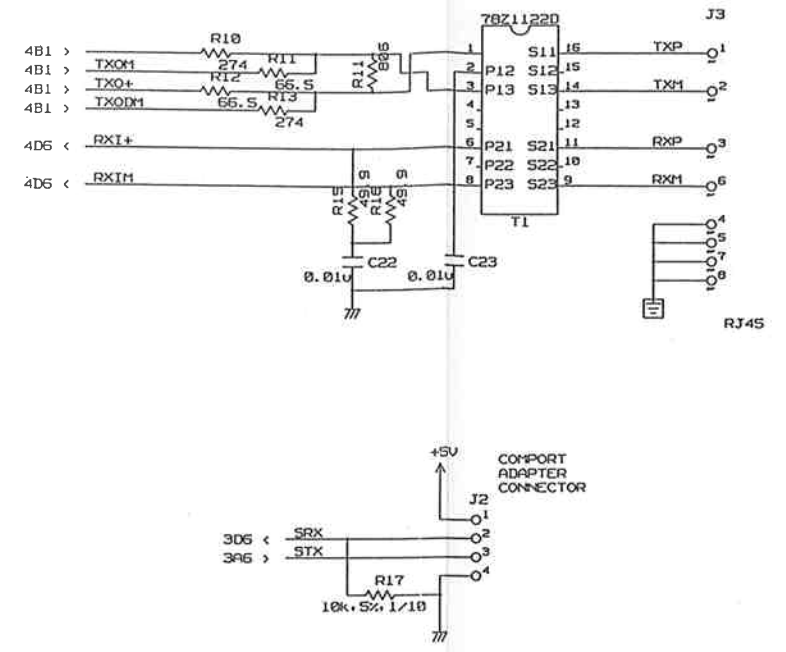
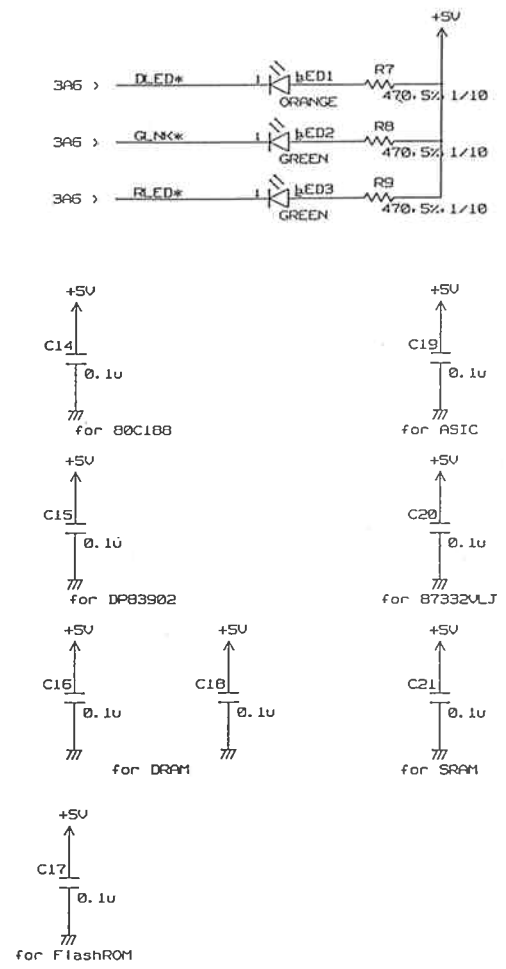
No.	REMARKS	DRAWING NAME		
		NETWORK INTERFACE BOARD ASS'Y		
		DRAWING No. HG1-4344-A504		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01



No.	REMARKS	DRAWING NAME		
		NETWORK INTERFACE BOARD ASS'Y		
		DRAWING No. HG1-4344-A505		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

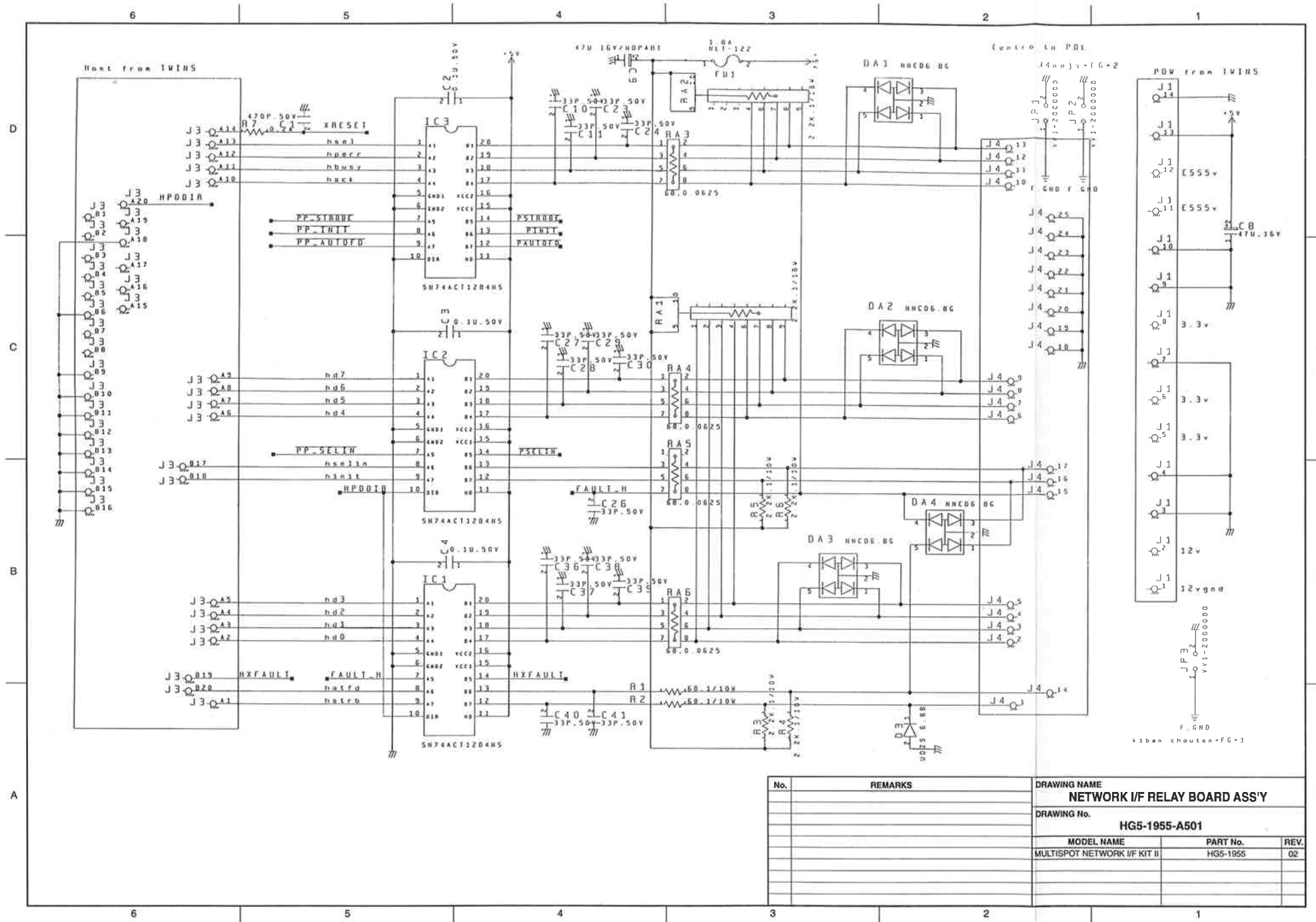
6 5 4 3 2 1

D  
C  
B  
A

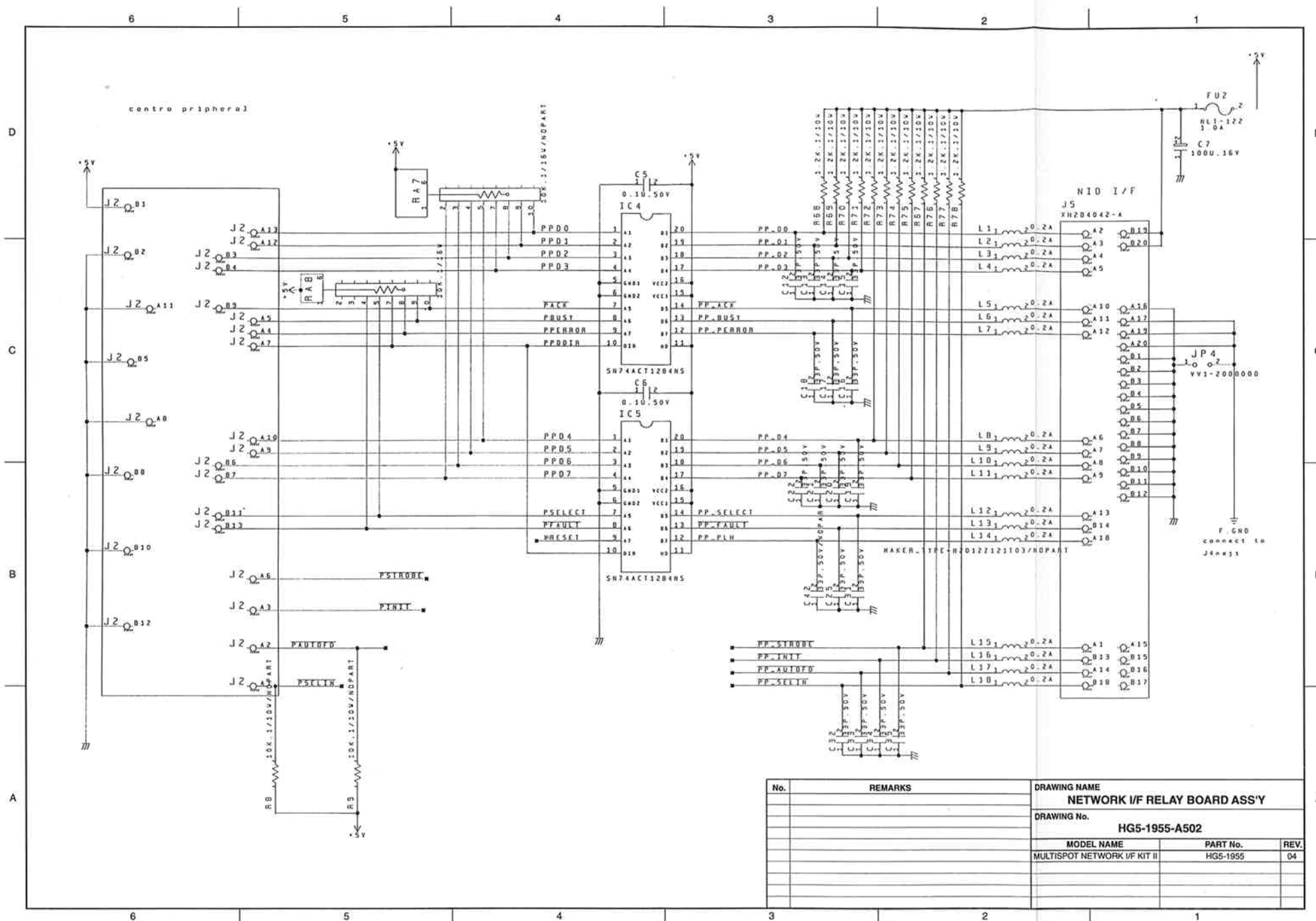


No.	REMARKS	DRAWING NAME		
		NETWORK INTERFACE BOARD ASS'Y		
		DRAWING No.		
		HG1-4344-A506		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01





No.	REMARKS	DRAWING NAME		
		NETWORK I/F RELAY BOARD ASS'Y		
		DRAWING No. HG5-1955-A501		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG5-1955	02



No.	REMARKS	DRAWING NAME		
		NETWORK I/F RELAY BOARD ASS'Y		
		DRAWING No. HG5-1955-A502		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG5-1955	04

## 5. SIGNAL ADDRESS LIST

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	20MHZ	A501	B-3		39	A16	A502	D-3	
2	20MHZ	A502	B-8		40				
3	20MHZ	A503	C-6		41	A17	A501	B-5	
4	20MHZ	A504	B-6		42	A17	A502	D-3	
5					43				
6	AB	A501	D-2		44	A18	A501	B-5	
7	AB	A501	D-5		45	A18	A502	E-3	
8	AB	A502	D-6		46				
9	AB	A504	B-6		47	A19	A501	B-5	
10					48	A19	A502	F-4	
11	A9	A501	D-2		49				
12	A9	A501	D-5		50	ACK	A502	C-1	
13	A9	A504	B-6		51	ACK	A503	B-1	
14					52				
15	A10	A501	D-2		53	ADD	A501	B-2	
16	A10	A501	D-5		54	ADD	A501	B-2	
17	A10	A502	B-4		55	ADD	A501	B-5	
18	A10	A504	A-5		56	ADD	A501	C-1	
19					57	ADD	A501	D-5	
20	A11	A501	C-5		58	ADD	A502	D-6	
21	A11	A501	D-2		59	ADD	A504	B-6	
22	A11	A502	F-4		60				
23					61	AD1	A501	B-2	
24	A12	A501	C-5		62	AD1	A501	B-2	
25	A12	A501	D-2		63	AD1	A501	B-5	
26	A12	A502	F-4		64	AD1	A501	C-1	
27					65	AD1	A501	D-5	
28	A13	A501	C-5		66	AD1	A502	D-6	
29	A13	A501	D-2		67	AD1	A504	B-6	
30	A13	A502	F-4		68				
31					69	AD2	A501	A-5	
32	A14	A501	C-5		70	AD2	A501	B-2	
33	A14	A502	E-3		71	AD2	A501	B-2	
34					72	AD2	A501	C-1	
35	A15	A501	C-5		73	AD2	A501	D-5	
36	A15	A502	E-3		74	AD2	A502	D-6	
37					75	AD2	A504	B-6	
38	A16	A501	B-5		76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. HG1-4344-AA01		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

# MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	AD3	A501	B-2		39	AD7	A504	B-6	
2	AD3	A501	B-2		40				
3	AD3	A501	B-5		41	A0S0	A501	D-3	
4	AD3	A501	C-5		42	AD50	A502	C-8	
5	AD3	A501	D-1		43	AD50	A503	B-1	
6	AD3	A502	D-6		44				
7	AD3	A504	B-6		45	$\overline{AE}$	A502	C-1	
8					46	$\overline{AE}$	A504	B-6	
9	AD4	A501	B-2		47				
10	AD4	A501	B-2		48	ALE	A501	B-3	
11	AD4	A501	B-4		49	ALE	A502	C-8	
12	AD4	A501	C-5		50				
13	AD4	A501	D-1		51	BACK	A502	B-8	
14	AD4	A502	D-6		52	BACK	A503	B-1	
15	AD4	A504	B-6		53				
16					54	BUSY	A504	C-3	
17	AD5	A501	B-2		55				
18	AD5	A501	B-2		56	$\overline{CAS}$	A501	B-6	
19	AD5	A501	B-4		57	$\overline{CAS}$	A502	C-1	
20	AD5	A501	C-5		58				
21	AD5	A501	D-1		59	$\overline{DLED}$	A502	A-8	
22	AD5	A502	D-6		60	$\overline{DLED}$	A505	D-6	
23	AD5	A504	B-6		61				
24					62	DR0	A501	D-6	
25	AD6	A501	A-3		63	DR0	A504	A-3	
26	AD6	A501	B-2		64				
27	AD6	A501	B-2		65	FCS	A501	D-1	
28	AD6	A501	C-5		66	FCS	A502	C-1	
29	AD6	A501	D-1		67				
30	AD6	A502	D-6		68	FOE	A501	D-1	
31	AD6	A504	B-6		69	FOE	A502	C-1	
32					70				
33	AD7	A501	B-2		71	FWE	A501	D-2	
34	AD7	A501	B-2		72	FWE	A502	D-1	
35	AD7	A501	B-3		73				
36	AD7	A501	C-5		74	$\overline{GLNK}$	A502	B-8	
37	AD7	A501	D-1		75	$\overline{GLNK}$	A503	C-1	
38	AD7	A502	D-6		76	$\overline{GLNK}$	A505	D-6	

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. HG1-4344-AA02		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

## MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	IAD0	A502	B-5		39	IAD10	A503	B-6	
2	IAD0	A503	A-5		40	IAD10	A503	C-4	
3	IAD0	A503	C-4		41				
4					42	IAD11	A503	B-6	
5	IAD1	A502	E-5		43	IAD11	A503	C-4	
6	IAD1	A503	A-5		44				
7	IAD1	A503	C-4		45	IAD12	A503	B-4	
8					46	IAD12	A503	B-6	
9	IAD2	A502	B-5		47				
10	IAD2	A503	A-5		48	IAD13	A503	B-4	
11	IAD2	A503	C-4		49	IAD13	A503	B-6	
12					50				
13	IAD3	A502	E-5		51	IAD14	A503	B-4	
14	IAD3	A503	A-5		52	IAD14	A503	B-6	
15	IAD3	A503	C-4		53				
16					54	IOCHRDY	A502	C-1	
17	IAD4	A502	E-6		55	IOCHRDY	A504	A-3	
18	IAD4	A503	A-5		56				
19	IAD4	A503	C-4		57	IORD	A502	D-1	
20					58	IORD	A504	B-6	
21	IAD5	A502	E-6		59				
22	IAD5	A503	A-5		60	IOW	A502	D-1	
23	IAD5	A503	C-4		61	IOW	A504	B-6	
24					62				
25	IAD6	A502	E-5		63	IRO	A501	D-6	
26	IAD6	A503	A-5		64	IRO	A502	E-8	
27	IAD6	A503	C-4		65				
28					66	IROIN	A502	E-8	
29	IAD7	A502	E-5		67	IROIN	A504	D-4	
30	IAD7	A503	A-5		68				
31	IAD7	A503	C-4		69	LANCS	A502	C-8	
32					70	LANCS	A503	C-6	
33	IAD8	A503	B-6		71				
34	IAD8	A503	C-4		72	LANINT	A501	D-6	
35					73	LANINT	A503	D-1	
36	IAD9	A503	B-6		74				
37	IAD9	A503	C-4		75				
38					76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. <b>HG1-4344-AA03</b>		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

# MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	LNRSY	A502	B-6		39	MA5	A501	A-6	
2	LNRSY	A503	C-6		40	MA5	A501	C-2	
3					41	MA5	A502	F-4	
4	MA0	A501	A-4		42	MA5	A504	A-6	
5	MA0	A501	A-6		43				
6	MA0	A501	C-2		44	MA6	A501	A-4	
7	MA0	A502	B-4		45	MA6	A501	A-6	
8	MA0	A503	D-3		46	MA6	A501	C-2	
9	MA0	A504	A-6		47	MA6	A502	F-4	
10					48	MA6	A504	A-6	
11	MA1	A501	A-4		49				
12	MA1	A501	A-6		50	MA7	A501	A-4	
13	MA1	A501	C-2		51	MA7	A501	A-6	
14	MA1	A502	F-5		52	MA7	A501	C-2	
15	MA1	A503	D-3		53	MA7	A502	D-3	
16	MA1	A504	A-6		54	MA7	A504	B-6	
17					55				
18	MA2	A501	A-4		56	MA8	A501	A-4	
19	MA2	A501	A-6		57	MA8	A501	A-6	
20	MA2	A501	C-2		58	MA8	A502	D-3	
21	MA2	A502	D-3		59				
22	MA2	A503	D-3		60	MA9	A501	A-4	
23	MA2	A504	A-6		61	MA9	A501	A-6	
24					62	MA9	A502	F-4	
25	MA3	A501	A-4		63				
26	MA3	A501	A-6		64	MRD	A501	D-3	
27	MA3	A501	C-2		65	MRD	A503	A-1	
28	MA3	A502	D-6		66				
29	MA3	A503	D-3		67	MWR	A501	D-3	
30	MA3	A504	A-6		68	MWR	A503	A-1	
31					69				
32	MA4	A501	A-4		70	NACK	A504	C-3	
33	MA4	A501	A-6		71				
34	MA4	A501	C-2		72	NAFD	A504	C-3	
35	MA4	A502	F-5		73				
36	MA4	A504	A-6		74	NETSEL	A502	A-8	
37					75	NETSEL	A503	D-6	
38	MA5	A501	A-4		76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. HG1-4344-AA04		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

## MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	NFAULT	A504	C-3		39	PNACK	A504	C-1	
2					40				
3	NINIT	A504	C-3		41	PPD0	A504	D-1	
4					42				
5	NMI	A501	D-6		43	PPD1	A504	D-1	
6	NMI	A502	E-8		44				
7					45	PPD2	A504	D-1	
8	NSLECTIM	A504	C-3		46				
9					47	PPD3	A504	D-1	
10	NSTROBE	A504	D-3		48				
11					49	PPD4	A504	D-1	
12	PAFD	A504	C-1		50				
13					51	PPD5	A504	C-1	
14	PDO	A504	D-3		52				
15					53	PPD6	A504	C-1	
16	PD1	A504	D-3		54				
17					55	PPD7	A504	C-1	
18	PD2	A504	D-3		56				
19					57	PRD	A502	F-B	
20	PD3	A504	D-3		58	PRD	A503	D-6	
21					59				
22	PD4	A504	D-3		60	PRD	A502	A-B	
23					61	PRQ	A503	B-1	
24	PD5	A504	C-3		62				
25					63	PSTR	A504	D-1	
26	PD6	A504	C-3		64				
27					65	PTC	A502	E-1	
28	PD7	A504	C-3		66	PTC	A504	C-6	
29					67				
30	PBACK	A501	D-3		68	PWR	A502	D-1	
31	PBACK	A502	E-1		69	PWR	A503	B-1	
32	PBACK	A504	A-6		70				
33					71	PXP	A505	C-1	
34	PERROR	A504	C-3		72				
35					73	RACK	A502	D-1	
36	PIR07	A501	D-6		74	RACK	A503	C-6	
37	PIR07	A504	D-4		75				
38					76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. <b>HG1-4344-AA05</b>		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

## MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram

NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK
1	RAMOE	A501	B-6		39	S0	A502	F-8	
2	RAMOE	A502	D-1		40				
3					41	SI	A501	B-3	
4	RAMWE	A501	B-6		42	SI	A502	F-8	
5	RAMWE	A502	D-1		43				
6					44	S2	A501	B-3	
7	RAS	A501	B-6		45	S2	A502	F-8	
8	RAS	A502	D-1		46				
9					47	SA0	A502	B-5	
10	RD	A501	B-3		48	SA0	A503	A-6	
11	RD	A502	C-8		49				
12	RD	A503	C-6		50	SA1	A502	B-4	
13					51	SA1	A503	A-6	
14	RDY	A501	D-6		52				
15	RDY	A502	B-1		53	SA2	A502	B-5	
16					54	SA2	A503	A-6	
17	RESET	A501	C-3		55				
18	RESET	A502	D-8		56	SA3	A502	E-3	
19	RESET	A504	C-6		57	SA3	A503	A-6	
20					58				
21	RFSH	A501	B-3		59	SA4	A502	C-6	
22	RFSH	A502	D-1		60	SA4	A503	A-6	
23					61				
24	RLED	A502	B-8		62	SA5	A502	E-6	
25	RLED	A505	C-6		63	SA5	A503	A-6	
26					64				
27	RXI*	A503	D-6		65	SA6	A502	E-5	
28	RXI*	A505	C-4		66	SA6	A503	B-6	
29					67				
30	RXIM	A503	D-6		68	SA7	A502	E-4	
31	RXIM	A505	C-4		69	SA7	A503	B-6	
32					70				
33	RXLED	A502	A-8		71	SELECT	A504	C-3	
34	RXLED	A503	D-1		72				
35					73	SRX	A502	E-8	
36	RXM	A505	C-1		74	SRX	A505	B-3	
37					75				
38	S0	A501	B-3		76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. HG1-4344-AA06		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01



**MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram**

NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS	REMARK
1	STX	A502	A-8		39	XA18	A501	C-2	
2	STX	A505	B-3		40	XA18	A502	C-1	
3					41				
4	TX0+	A503	B-1		42				
5	TX0+	A505	D-4		43				
6					44				
7	TX0D+	A503	C-1		45				
8	TX0D+	A505	D-4		46				
9					47				
10	TX0DM	A503	B-1		48				
11	TX0DM	A505	D-4		49				
12					50				
13	TX0M	A503	B-1		51				
14	TX0M	A505	D-4		52				
15					53				
16	TXM	A505	D-1		54				
17					55				
18	TXP	A505	D-1		56				
19					57				
20	WACK	A502	F-8		58				
21	WACK	A503	D-6		59				
22					60				
23	WR	A501	B-3		61				
24	WR	A502	C-8		62				
25	WR	A503	C-6		63				
26					64				
27	XA14	A501	D-2		65				
28	XA14	A502	A-8		66				
29					67				
30	XA15	A501	C-2		68				
31	XA15	A502	C-1		69				
32					70				
33	XA16	A501	C-2		71				
34	XA16	A502	C-1		72				
35					73				
36	XA17	A501	D-2		74				
37	XA17	A502	B-1		75				
38					76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK INTERFACE BOARD ASS'Y)		
		DRAWING No. HG1-4344-AA07		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG1-4344	01

**MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram**

NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK
1	FAULT_H	A501	B-4		39				
2	FAULT_H	A501	B-5		40	PPERROR	A502	C-4	
3					41				
4	HPDDIR	A501	B-5		42	PF_ACK	A502	C-3	
5	HPDDIR	A501	D-6		43				
6					44	PF_AUTOFD	A501	D-5	
7	HXFAULT	A501	B-4		45	PF_AUTOFD	A502	B-3	
8	HXFAULT	A501	B-6		46				
9					47	PF_BUSY	A502	C-3	
10	PACK	A502	C-4		48				
11					49	PP_D0	A502	D-3	
12	FAUTOFD	A501	D-4		50				
13	FAUTOFD	A502	B-5		51	PP_D1	A502	D-3	
14					52				
15	PBUSY	A502	C-4		53	PP_D2	A502	C-3	
16					54				
17	FFAULT	A502	B-4		55	PP_D3	A502	C-3	
18					56				
19	FINIT	A501	D-4		57	PP_D4	A502	C-3	
20	FINIT	A502	B-5		58				
21					59	PP_D5	A502	C-3	
22	PPD0	A502	D-4		60				
23					61	PP_D6	A502	C-3	
24	PPD1	A502	D-4		62				
25					63	PP_D7	A502	B-3	
26	PPD2	A502	C-4		64				
27					65	PF_FAULT	A502	B-3	
28	PPD3	A502	C-4		66				
29					67	PF_INIT	A501	D-5	
30	PPD4	A502	C-4		68	PF_INIT	A502	B-3	
31					69				
32	PPD5	A502	C-4		70	PP_PERROR	A502	C-3	
33					71				
34	PPD6	A502	C-4		72	PP_PLH	A502	B-3	
35					73				
36	PPD7	A502	B-4		74	PP_SELECT	A502	B-3	
37					75				
38	PPDDIR	A502	C-4		76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK I/F RELAY BOARD ASS'Y)		
		DRAWING No.		
		HG5-1955-AA01		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG5-1955	01

**MultiSpot Network I/F Kit II Chapter 6: Circuit Diagram**

NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK	NO.	SIGNAL NAME	DRWG NO.	ADDS.	REMARK
1	FP_SELIN	A501	C-5		39				
2	FP_SELIN	A502	B-3		40				
3					41				
4	FP_STROBE	A501	D-5		42				
5	FP_STROBE	A502	B-3		43				
6					44				
7	PSELECT	A502	B-4		45				
8					46				
9	PSELIN	A501	C-4		47				
10	FSELIN	A502	B-5		48				
11					49				
12	FSTROBE	A501	D-4		50				
13	FSTROBE	A502	B-5		51				
14					52				
15	XRESET	A501	D-5		53				
16	XRESET	A502	B-4		54				
17					55				
18					56				
19					57				
20					58				
21					59				
22					60				
23					61				
24					62				
25					63				
26					64				
27					65				
28					66				
29					67				
30					68				
31					69				
32					70				
33					71				
34					72				
35					73				
36					74				
37					75				
38					76				

No.	REMARKS	DRAWING NAME		
		SIGNAL ADDRESS LIST (NETWORK I/F RELAY BOARD ASS'Y)		
		DRAWING No.		
		HG5-1955-AA02		
		MODEL NAME	PART No.	REV.
		MULTISPOT NETWORK I/F KIT II	HG5-1955	01

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