

T M 32-5865-069-24 & P

---

TECHNICAL MANUAL

ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE MANUAL

INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

PROCESSOR, SIGNAL DATA MX-10214/MLQ-34

PART NUMBER 5051650-1

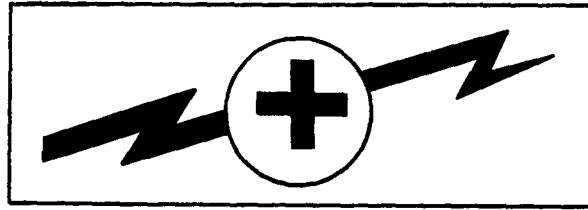
NSN 5865-01-109-1689

This publication is not available through AG Publications Center. Requisition through Commander, US Army Electronics Materiel Readiness Activity, Vint Hill Farms Station, Warrenton, VA 22186-5141.

---

HEADQUARTERS, DEPARTMENT OF THE ARMY  
FEBRUARY 1985

# WARNING



WARNING

## HIGH VOLTAGE

is used in the operation of this equipment

## DEATH ON CONTACT

may result if personnel fail to observe safety precautions

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections of 115 volt ac input connection when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

WARNING: Do not be misled by the term "low voltage." Potentials as low as 50 volts may cause death under adverse conditions.

For Artificial Respiration, refer to FM 21-11, First Aid for Soldiers.

CHANGE  
NO. 2

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, D. C., 6 September 1990

ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS  
AND SPECIAL TOOLS LIST  
FOR  
PROCESSOR, SIGNAL DATA MX-10214/MLQ-34  
PART NUMBER 5051650-1  
NSN 5865-01-109-1689

TM 32-5865-069-24&P, 15 February 1985, is changed as follows:

1. Remove old pages and insert new pages as indicated below.
2. New or changed material is indicated by a vertical line in the margin of the new page.
3. Changes to illustrations are indicated by a hand pointing to the affected areas and schematic diagrams have shaded lines in the affected areas.

Remove Pages

1-3 and 1-4  
5-31 and 5-32  
C-4.1 and C-4.2  
C-5 and C-6  
C-9 through C-16  
C-27 through C-30  
C-37 and C-38  
C-41 through C-44  
C-51/(C-52 Blank)  
C-79 and C-80  
C-89 through C-106  
F0-7 (Sheet 2 of 5)  
F0-7 (Sheet 3 of 5)  
F0-7 (Sheet 4 of 5)  
F0-7 (Sheet 5 of 5)  
F0-9 (Sheet 1 of 7)

Insert Pages

1-3 and 1-4  
5-31 and 5-32  
C-4.1 and C-4.2  
C-5 and C-6  
C-9 through C-16  
C-27 through C-30  
C-37 and C-38  
C-41 through C-44  
C-51/(C-52 Blank)  
C-79 and C-80  
C-89 through C-106  
F0-7 (Sheet 2 of 5)  
F0-7 (Sheet 3 of 5)  
F0-7 (Sheet 4 of 5)  
F0-7 (Sheet 5 of 5)  
F0-9 (Sheet 1 of 7)

4. File this change sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

Official:

**THOMAS F. SIKORA**  
*Brigadier General United States Army*  
*The Adjutant General*

**CARL E VUONO**  
*General, United States Army*  
*Chief of Staff*

CHANGE. }  
NO. 1 }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, D.C., 11 April 1988

ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS  
AND SPECIAL TOOLS LIST  
FOR  
PROCESSOR, SIGNAL DATA MX-10214/MLQ-34  
PART NUMBER 5051650-1  
NSN 5865-01-109-1689

TM 32-5865-069-24&P, 15 February 1985, is changed as follows:

1. Remove old pages and insert new pages as indicated below.
2. New or changed material is indicated by a vertical line in the margin of the new page.
3. Changes to illustrations are indicated by a hand pointing to the affected areas and schematic diagrams having shaded lines in the affected areas.

Remove pages

Cover and Warning  
Title and A  
B /(C blank)  
1-3 through 1-5/( 1-6 blank)  
3-9 through 3-16  
5-53 and 5-54  
5-77 and 5-78  
5-101 and 5-102  
5-155 through 5-158  
C-3 through C-10  
C-13 through C-16  
C-19 through C-22  
C-25 through C-30  
C-37 through C-46  
C-67/(C-68 blank)  
C-77/(C-78 blank)  
C-83 through C-106  
FO-6 (Sheet 4 of 10)  
FO-6 (Sheet 5 of 10)  
FO-7 (Sheet 2 of 5)  
FO-7 (Sheet 3 of 5)  
FO-8 (Sheet 1 of 5)  
FO-9 (Sheet 1 of 7)  
FO-9 (Sheet 2 of 7)

Insert pages

Cover and Warning  
Title and A  
B and C  
1-3 through 1- 5/( 1-6 blank)  
3-9 through 3-16  
5-53 and 5-54  
5-77 and 5-78  
5-101 and 5-102  
5-155 through 5-158  
C-3 through C-10  
C-13 through C-16  
C-19 through C-22  
C-25 through C-30  
C-37 through C-46  
C-67/(C-68 blank)  
C-77/(C-78 blank)  
C-83 through C-106  
FO-6 (Sheet 4 of 10)  
FO-6 (Sheet 5 of 10)  
FO-7 (Sheet 2 of 5)  
FO-7 (Sheet 3 of 5)  
FO-8 (Sheet 1 of 5)  
FO-9 (Sheet 1 of 7)  
FO-9 (Sheet 2 of 7)

Remove pages

F0-9 (Sheet 4 of 7)  
F0-11 (Sheet 3 of 6)  
F0-12 (Sheet 1 of 6)  
F0-12 (Sheet 2 of 6)  
F0-12 (Sheet 4 of 6)  
F0-12 (Sheet 6 of 6)  
F0-13 (Sheet 1 of 6)  
F0-13 (Sheet 5 of 6)  
F0-14 (Sheet 1 of 3)  
F0-14 ( Sheet 2 of 3)  
F0-15 (Sheet 2 of 6)  
F0-15 (Sheet 5 of 6)  
F0-16 (Sheet 2 of 3)  
F0-16 (Sheet 3 of 3)  
F0-17

Insert pages

F0-9 (Sheet 4 of 7)  
F0-11 (Sheet 3 of 6)  
F0-12 (Sheet 1 of 6)  
F0-12 ( Sheet 2 of 6)  
F0-12 (Sheet 4 of 6)  
F0-12 (Sheet 6 of 6)  
F0-13 (Sheet 1 of 6)  
F0-13 (Sheet 5 of 6)  
F0-14 (Sheet 1 of 3)  
F0-14 (Sheet 2 of 3)  
F0-16 (Sheet 2 of 6)  
F0-15 (Sheet 5 of 6)  
F0-16 (Sheet 2 of 3)  
F0-16 (Sheet 3 of 3)  
F0-17

4, File these change sheets in front of the publication for reference purposes.

**By Order of the Secretary of the Army:**

**CARL E. VUONO**  
*General, United States Army*  
*Chief of Staff*

**Official:**

**R. L. DILWORTH**  
*Brigadier General, United States Army*  
*The Adjutant General*

**RECORD OF CHANGES**

<b>CHANGE NO.</b>	<b>DATE</b>	<b>TITLE OR BRIEF DESCRIPTION</b>	<b>ENTERED BY</b>





TECHNICAL MANUAL

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington, DC, 15 February 1985

NO. 32-5865-069-24&P

ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST  
FOR

PROCESSOR, SIGNAL DATA MX-10214/MLQ-34  
PART NUMBER 505 1650-1  
NSN 5865-01-109-1689

			Paragraph	Page
CHAPTER	1.	INTRODUCTION		
Section	I.	General Information	1-1	1-1
	II.	Description and Data	1-8	1-2
CHAPTER	2.	ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section	I.	Tools and Equipment	2-2	2-1
	II.	Repairing and Refinishing Instructions	2-3	2-1
	III.	Lubrication Instructions		2-1
	IV.	Preventive Maintenance Checks and Services	2-4	2-1
	V.	Troubleshooting	2-5	2-1
	VI.	Maintenance of RSPU	2-6	2-3
CHAPTER	3.	FUNCTIONING OF EQUIPMENT		3-1
	4.	DIRECT SUPPORT MAINTENANCE INSTRUCTIONS		4-1
	5.	GENERAL SUPPORT MAINTENANCE INSTRUCTIONS		5-1
APPENDIX	A.	REFERENCES		A-1
	B.	MAINTENANCE ALLOCATION CHART		B-1
	C.	REPAIR PARTS AND SPECIAL TOOLS LIST		C-1
Section	I.	Introduction		C-1
	II.	Repair Parts List		C-5
	III.	Special Tools List		C-91
	IV.	National Stock Number and Part Number Index		C-92
	D.	EXPENDABLE SUPPLIES AND MATERIALS LIST		D-1
GLOSSARY		Glossary 1		
INDEX		<b>Index-1</b>		

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Processor, Signal Data MX-10214/MLQ-34 . . . . .	1-0
3-1	RC Bus (A, B), Timing . . . . .	3-2
3-2	RCBus A Data Format (Receiver Control) . . . . .	3-3
3-3	RC Bus A Data Format (Status Word) . . . . .	3-4
3-4	RCBUS B Data Format (From PAN Processor) . . . . .	3-6
3-5	RCBUS B Data Format (To PAN Processor) . . . . .	3-7
3-6	Converter, IF (A20), Functional Block Diagram . . . . .	3-9

**LIST OF ILLUSTRATIONS - Continued**

Figure	Title	Page
3-7	IF Down Converter (A14), Functional Block Diagram . . . . .	3-10
3-8	Control Sequencer CCA (A9), Functional Block Diagram . . . . .	3-13
3-9	Micromemory CCA (A8), Functional Block Diagram . . . . .	3-15
3-10	Address Generator CCA (A10), Functional Block Diagram . . . . .	3-17
3-11	4K RAM CCA (A11), Functional Block Diagram . . . . .	3-18
3-12	150 Hz Tone Detector CCA (A5), Functional Block Diagram . . . . .	3-22
3-13	Power Monitor CCA (A17), Functional Block Diagram . . . . .	3-25
5-1	RSPU, Test Set-up Diagram . . . . .	5-10
5-2	Carrier Presence Detector CCA (A1-A4), Test Set-up Diagram . . . . .	5-11
5-3	150 Hz Tone Detector CCA (A5), Test Set-up Diagram . . . . .	5-12
5-4	RC Bus Status Interface CCA (A6), Test Set-up Diagram . . . . .	5-12
5-5	RC Bus Interface/8085 CPU CCA (A7), Test Set-up Diagram . . . . .	5-12
5-6	Micro-memory CCA (A8), Test Set-up Diagram . . . . .	5-13
5-7	Control Sequencer CCA (A9), Test Set-up Diagram . . . . .	5-13
5-8	Address Generator CCA (A10), Test Set-up Diagram . . . . .	5-14
5-9	4K RAM CCA (A11), Test Set-up Diagram . . . . .	5-14
5-10	I/O Register Set CCA (A12), Test Set-up Diagram . . . . .	5-15
5-11	IF Down Converter CCA (A14), Test Set-up Diagram . . . . .	5-16
5-12	Converter IF Assembly (A20), Test Set-up Diagram . . . . .	5-17
5-13	Key Flat Positioning I . . . . .	5-26
5-14	Power Monitor CCA (A17), Test Set-up Diagram . . . . .	5-45
5-1.5	-6V Regulator CCA (A21), Test Set-up Diagram . . . . .	5-53
5-16	Filter Assembly-Jack (A22), Parts Identification . . . . .	5-54
C-1	Processor, Signal Data 5051650-1 . . . . .	C-4.2
C-2	Wiring Harness 5051657-1 . . . . .	C-20

## LIST OF ILLUSTRATIONS - Continued

<b>Figure</b>	<b>Title</b>	<b>Page</b>
C-3	Wiring Harness C5077144-1 .....	C-22
C-4	Contact Assembly 5051658-1 .....	C-25
C-5	IF Down Converter Assembly 5051653-1 .....	C-28
C-6	CCA, -6 Volt Regulator 5055292-1 .....	C-30
C-7	CCA, Power Monitor 5051928-1 .....	C-32
C-8	CCA, RC BUS Interface Status 5052009-1 .....	C-35
C-9	CCA, Carrier Presence Detector 5052001-3 .....	C-38
C-10	CCA, Carrier Presence Detector 5052001-2 .....	C-45
C-11	CCA, 150 Hz, NATO Tone Detecto 5052013-1 .....	C-53
C-12	CCA, I/O Register Set 5052025-1 .. . . . .	C-57
C-13	CCA, Micro Memory 5052057-1 . . . . .	C-61
C-14	CCA, Control Sequencer 5052045-1 . . . . .	C-65
C-15	CCA, Address Generator 5052037-1 . . , . . , . . . . .	C-69
C-16	CCA, 4K Ram 5052033-1 . . . . .	C-72
C-17	CCA , RC Bus Interface/8085 CPU 5052049-3 .....	C-75
C-18	CCA, IF Down Converter 5052017-1 .....	C-79
C-19	Filter Assembly, EMI 5051780-2 .....	C-82
C-20	Filter Assembly, Jack 5051805-1 .....	C-84
C-21	Light Indicator Assembly 5053136-1 .....	C-86
C-22	Special Tools List . . . . .	C-92
F0-1	RSPU, Functional Block Diagram	
F0-2	RC Bus Interface/8085 CPU CCA (A7), Functional Block Diagram	

LIST OF ILLUSTRATIONS - Continued

Figure	Title	Page
F0-3	1/0 Register Set CCA (A12), Functional Block Diagram	
F0-4	RC Bus Status Interface CCA (A6), Functional Block Diagram	
F0-5	Carrier Presence Detector CCA (A1-A4), Functional Block Diagram	
F0-6	RSPU, Schematic Diagram	
F0-7	Carrier Presence Detector CCA, (A1-A4), Schematic Diagram	
F0-8	150 Hz Tone Detector CCA (A5), Schematic Diagram	
F0-9	RC Bus Status Interface CCA (A6), Schematic Diagram	
F0-10	RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram	
F0-11	Micromemory CCA (A8), Schematic Diagram	
F0-12	Control Sequencer CCA (A9), Schematic Diagram	
F0-13	Address Generator CCA (A10), Schematic Diagram	
F0-14	4K RAM CCA (A11), Schematic Diagram	
F0-15	1/0 Register Set CCA (A12), Schematic Diagram	
F0-16	IF Down Converter CCA (A14), Schematic Diagram	
F0-17	Power Monitor CCA (A17), Schematic Diagram	
F0-18	Converter IF Assembly (A20), Schematic Diagram	
F0-19	RSPU CPD Alignment, Test Set-up Diagram	

LIST OF TABLES

Number	Title	Page
1-1	Tabulated Data . . . . .	1-2
2-1	Organizational Preventive Maintenance Checks and Services Monthly Schedule . . . . .	2-2
5-1	Test Information . . . . .	5-2
5-2	Pre-Test Inspection . . . . .	5-18

## LIST OF TABLES - Continued

Number	Title	Page
5-3	RSPU CCA/Module Identification . . . . .	5-20
5-4	Contact Assembly, Key Positions . . . . .	5-26
5-5	RF Cable Routing . . . . .	5-27
5-6	Filter Assembly EMI (A16), Test Procedure . . . . .	5-40
5-7	Filter Assembly EMI (A16), Wire Chart . . . . .	5-41
5-8	Power Monitor CCA (A17), Test Procedure . . . . .	5-42
5-9	Indicator Lamp Assembly (A18, A19), Inspection . . . . .	5-47
5-10	Converter, IF (A20), Cabling Routing . . . . .	5-47
5-11	Converter, IF (A20), Wire List . . . . .	5-48
5-12	-6V Regulator CCA (A21), Test Procedure . . . . .	5-51
5-13	Filter Assembly-Jack (A22), Internal Wiring . . . . .	5-55
5-14	Maintenance of Wire Harness . . . . .	5-56
5-15	RSPU, Wire List . . . . .	5-58

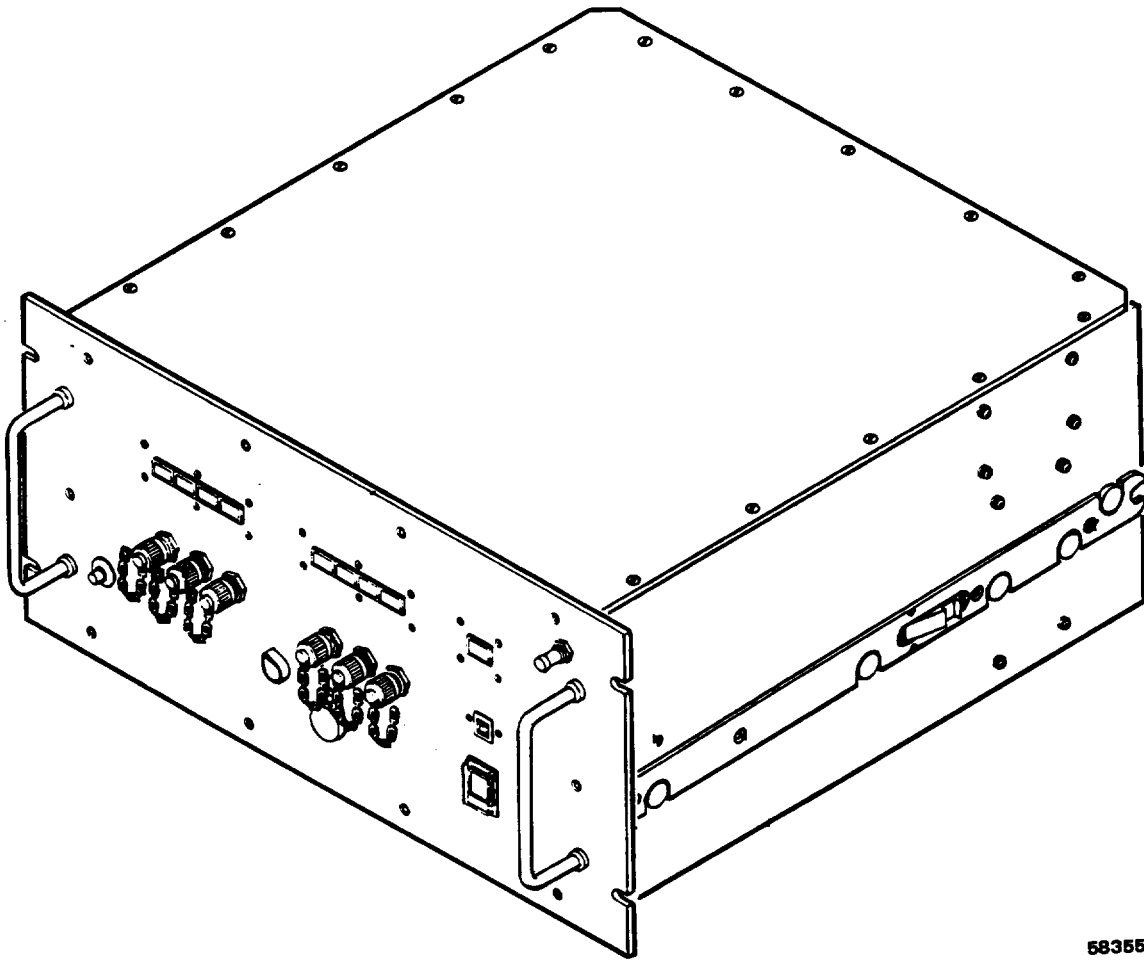


Figure 1-1. Processor Signal, Data MX-10214/MLQ-34

## CHAPTER 1

### INTRODUCTION

#### Section I. GENERAL INFORMATION

**1-1. SCOPE.** This technical manual provides organizational, direct support and general support maintenance information for the Processor, Signal Data MX-10214/MLQ-34 (shown in figure 1-1), referred to herein as the RSPU. A functional description of the RSPU and its circuit card assemblies/modules is provided. Referenced publications are listed in Appendix A. Appendix B contains the Maintenance Allocation Chart (MAC). The Repair Parts and Special Tools List (RPSTL) is provided in Appendix C. Appendix D is a list of expendable supplies and materials. Non-standard terms and abbreviations are defined in the Glossary. An Index is provided. Operating instructions for the RSPU are provided in TM 32-5865-060-10, Countermeasures Set, Special Purpose AN/MLQ-34 (System Operator's Manual).

**1-2. MAINTENANCE FORMS AND RECORDS.** Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

**1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.** Procedures for destroying Army materiel are described in TM 750-244-2, Procedures for Destruction of Army Materiel to Prevent Enemy Use (Electronics Command).

**1-4. ADMINISTRATIVE STORAGE.** The administrative storage requirements are described in TM 740-90-1, Administration Storage.

**1-5. CALIBRATION.** Not applicable.

**1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).** EIR's will be prepared using SF 368, Quality Deficiency Report (QDR). Instructions for preparing EIR's are provided in TM 38-750, TAMMS. EIR's should be mailed directly to Commander, U.S. Army Electronic Materiel Readiness Activity, ATTN: SELEM-ME-F, Vint Hill Farms Station, Warrenton, Va. 22186. A reply will be furnished directly to you.

**1-7. REPORTING OF ERRORS.** The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to; Commander, U.S. Army Electronics Materiel Readiness Activity, ATTN: SELEM-ME-E, Vint Hill Farms Station, Warrenton, VA 22186.

Section II. DESCRIPTION AND DATA

1-8. DESCRIPTION. A single RSPU is used in each AN/ML()-34 system. The RSPU interfaces the four system receivers to other units in the system. It also provides received signal processing functions. Received signals are processed as follows:

- a. Carrier presence detectors monitor the narrowband IF output of the receivers to provide activity indicators.
- b. NATO tone detectors monitor the audio output of the receivers providing an indication when the tone is detected.
- c. A signal data processor provides data for a panoramic (PAN) display of the received signal.

For a further description of the RSPU, refer to TM 32-5865-060-10, System Operator's Manual.

1-9. TABULATED DATA. Table 1-1 lists the technical characteristics of the RSPU.

Table 1-1. Tabulated Data

Characteristics	Specifications
RC Bus A (serial data, clock and strobe)	Data format and timing described in figures 3-1, 3-2 and 3-3.
RC Bus B (serial data, clock and strobe)	Data format and timing described in figures 3-1, 3-4, and 3-5.
5 MHz reference (clock input)	
Frequency	5 MHz ± 50 Hz.
Signal Type	Balanced analog
Impedance	170 ohms, line-to-line
Amplitude	2.5 volts peak-to-peak (minimum)
5 MHz reference (clock output)	
Frequency	Derived from 5 MHz reference input.
Signal Type	Differential Voltage Logic (Note)
Receiver Blanking	
External Blanking Signals (4)	
Level	TTL compatible



Table 1-1. Tabulated Data - Continued

Characteristics	Specifications
Impedance	50 ohms
Receiver Delay Gate (4)	Differential Voltage Logic (Note). Logic 1 indicates valid signal data.
Receiver Set Fault Status	Power supply and temperature status signals
IF Signal Inputs	4 Wideband IF (WBIF) and 4 Narrowband IF (NBIF) signals from the Receiver Set.
NBIF Signal Outputs (8)	
Level	-1 dBm <b>±3 dB</b> with signal input level -32dBm.
Impedance	50 ohms
Carrier Presence Detector (CPD) Status Output (4)	
Detector Sensitivity	
High Range	Adjust to ensure a sensitivity capable of responding to NBIF input signals of 3 to 9 dB above average noise level.
Low Range	Adjust to ensure a sensitivity capable of responding to NBIF input signals of 6 to 13 dB above average noise level.
Response time	Signal-to-noise ratio of 7 dB maximum and a bandwidth of 25 kHz as follows: a. Response time 2 milliseconds max. b. False alarm rate less than $4 \times 10^{-4}$ . c. Probability of detection 92% min.
Input Signal Level	-32 dBm <b>±2dB</b> (0 dBm REF) at a center frequency of 24 MHz with receiver set for automatic gain control (AGC).
VSWR	Noise only input noise level -42 dBm <b>±4</b> dBm.
Input impedance	2.1 Max
Input impedance	50 ohms.
Integrator Done Signal (4)	Differential Voltage Logic (Note). Logic "0" indicates the CPD has completed a 2 millisecond integration and that the CPD status signal is valid.

Table 1-1. Tabulated Data - Continued

Characteristics	Specifications
150 Hz (NATO) Tone Detector (4)	
Frequency Detected	150 Hz $\pm 3$ Hz
Response Time	140 milliseconds
Interference	<p>Detect presence of tone signal (S) at an amplitude of 12 to 865 millivolts in the presence of interfering signals as follows:</p> <p>a. Audio signal (M) with spectral distribution from 400 to 10,000 Hz of level such that (signal S)/(signal M) is <math>\geq -9</math> dB.</p> <p>b. Gaussian noise (N), 0 to 10 KHz at a level such that (signal S)/(signal N) is <math>&gt; -5</math> dB.</p>
Detector Output	<p>Differential Voltage Logic (Note)                      Logic "1" indicates the presence of 150 Hz tone.</p>
Receiver Set Audio/AGC	<p>Three types of audio signal (standard, auxiliary, and independent sideband) and an automatic gain control signal from each of four receivers in the Receiver Set are buffered and repeated.</p>
Power Requirements:	
Voltage:	120 Vac, $\pm 5\%$
Frequency	400 Hz $\pm 20$ Hz
Power	200 Watts maximum
Altitude:	
Operational	10,000 ft. above sea level.
Non-Operational	50,000 ft. above sea level.

Table 1-1. Tabulated Data - Continued

Characteristics	Specifications
Temperature:	
Operational	-25 degrees F to +120 degrees F (-32 degrees C to +49 degrees C)
Transportation	-65 degrees F to +160 degrees F (-54 degrees C to +71 degrees C)
Humidity:	Maximum 95% with ambient temperature 120° F.
Physical Characteristics:	
Weight	Approximately 45 pounds
Dimensions	8.75 inches H x 17 inches W x 17 inches D
<b>Note</b>	
Differential Voltage Logic (balanced line) with respect to the minus input:	
Logic 1	Plus input is 2.0 to 5.5 Vdc  Simultaneously the minus input is 0 to 0.4 Vdc (Common mode input voltage may be plus or minus 15 Vdc)
Logic 0	Plus input is 0 to 0.4 Vdc  Simultaneously the minus input is 2.0 to 5.5 Vdc (Common mode input voltage may be plus or minus 15 Vdc)



## CHAPTER 2

## ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

2-1. SCOPE. This chapter provides the information for the performance of organizational maintenance personnel by the Maintenance Allocation Chart (MAC).

## Section I. TOOLS AND EQUIPMENT

2-2. TOOLS AND EQUIPMENT. Refer to the MAC in Appendix B and the Repair Parts and Special Tools List (RPSTL) in Appendix C.

## Section II. REPAINTING AND REFINISHING INSTRUCTIONS

2-3. REPAINTING AND REFINISHING INSTRUCTIONS. For touch up painting instructions, refer to the applicable cleaning and refinishing practices specified in TB 43-0118, Field Instructions for Painting and Preserving Electronics Command Equipment, including Camouflage Pattern Painting of Electrical Equipment Shelters. Surfaces which are exposed when the RSPU is mounted in the system will be painted color No. 24410. Refer to Appendix D for details of the materials to be used.

## Section III. LUBRICATION INSTRUCTIONS

## NOTE

Lubrication is not required.

## Section IV. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

2-4. GENERAL. Preventive Maintenance Checks and Services (PMCS) are essential for the efficient operation of the RSPU. PMCS will aid in discovering and correcting defects before they result in serious malfunctions. The checks and services are listed in table 2-1. PMCS shall be accomplished in accordance with the following:

- a. if the equipment fails to operate, refer to para 2-5.
- b. Report any defects using proper forms. Refer to TM 38-750, (TAMMS).

## Section V. TROUBLESHOOTING

2-5. TROUBLESHOOTING. Troubleshooting consists of performing the system BITE test. When the symptom is identified as a faulty RSPU inform Direct Support (DS). Refer to TM 32-5865-060-10 for the BITE procedure. Troubleshooting allocated to General Support (GS) shall be in accordance with the MAC.

Table 2-1. Organizational Preventive Maintenance Checks and Services Monthly Schedule.

**NOTE**

If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation. Make the complete checks and services when the equipment can be shut down.

Item no.	Item to be checked	Procedure	Equipment will be reported not ready (Red) if:
----------	--------------------	-----------	--

**WARNING**

Ensure power source is disconnected before withdrawing the unit from the rack. Refer to TM 32-5865-060-10 for system shutdown procedure. HIGH VOLTAGE may be present at the power connector connected to J1. This HIGH VOLTAGE could cause death.

1	Lamp test	Depress lamp test button on front panel. All lamps should be lit. Replace lamps as necessary. Refer to para. 2-7.4.	Lamp test does not function or serviceable lamps do not light.
2	Front panel hardware	Check all hardware for tightness. All hardware should be securely mounted.	Hardware cannot be secured.
3	Rear panel connectors	Check connectors for proper connection.	Connections cannot be secured.
4	Fan, B1	Check fan for proper operation. Clean filter. Refer to para. 2-7.2.	No air flow or excessively noisy operation.

## Section VI. MAINTENANCE OF RSPU

2-6. SCOPE. This section describes the tasks allocated to organizational maintenance by the MAC. These tasks are accomplished without dismantling the unit.

2-7. MAINTENANCE OF RSPU. The maintenance of the RSPU is limited to the tasks detailed in this paragraph. If the RSPU is found to be faulty, inform DS.

2-7.1 Inspection. Inspect the RSPU as follows:

- a. Inspect for accumulations of dust, grease and for damage.
- b. Check that external components are undamaged. For damaged components, report to DS for disposition.

**WARNING**

Adequate ventilation should be provided while using TRICHLOROTRI-FLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame: the products of decomposition are toxic and irritating. Since TRICHLOROFLURO-ETHANE dissolves natural oils, prolonged contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, consult a physician immediately.

2-7.2 Cleaning. The exterior of the unit should be free of dirt, dust, grease, moisture, fungus, rust and corrosion. Clean as follows:

- a. Remove dust, dirt, and moisture with a clean soft cloth.
- b. Remove grease, fungus and ground-in dirt from RSPU using a cloth dampened (but not wet) with trichlorotri fluoroethane, available as freon type TF, NSN 6850-00-105-3084.
- c. Remove dust and dirt from plugs and jacks with a brush.
- d. Remove dirt/dust from air filters using a stiff brush.

2-7.3 Test. Test using the system BITE. Refer to TM 32-5865-060-10 for the BITE procedure.

2-7.4 Lamp Replacement. When necessary, replace lamps in panel indicators as follows:

- a. Using a small flat tip screwdriver in the groove at the top of the indicator, gently remove the indicator.

- b. Holding the indicator, insert the tip of the screwdriver under the lip of the defective lamp.
- c. Lift the lamp from its holder.
- d. Insert a serviceable lamp into the holder and press down until seated.
- e. Re-insert the lamp holder into the body of the indicator and press down. The assembly will lock into place.

2-7.5 Filter Removal. To remove the filter located on the rear of the chassis, perform the following:

CAUTION

An RFI gasket is fitted to the filter. Ensure the gasket is undamaged and sets properly when the filter is replaced.

- a. Loosen eight thumb screws.
- b. Remove filter from rear of chassis.
- c. To install a replacement filter, reverse steps a. and b. above.



## CHAPTER 3

### FUNCTIONING OF EQUIPMENT

3-1. **SCOPE.** This chapter provides a functional description of the RSPU and its modules and circuit card assemblies. It is to the level required for support of units tested by the AN/USM-410. The descriptions are keyed to functional block diagrams. Refer to TM 32-5865-060-24&P, System Maintenance Manual, for a detailed system interface description.

3-2. **RSPU FUNCTIONAL DESCRIPTION.** Refer to F0-1, a functional block diagram of the unit. The RSPU provides the following functions:

a. An interface between the four digitally tuned and controlled VHF receivers housed in the Receiver Set (RS) and other units of the AN/MLQ-34 system.

b. Four Carrier Presence Detectors (CPD), each monitors the Narrow-Band IF (NBIF) input from a dedicated receiver. When a signal is present in the receiver, CPD outputs are used to provide activity indications (computer interrupts, front panel lamp, and status data transmitted on RC Bus A).

c. Four NATO tone detectors monitor the auxiliary audio signal inputs from the receivers. These detectors determine the presence of the NATO tone in the received signal. Indications that the tone has been detected are provided to the system (computer interrupts, front panel lamps, and status data transmitted on RC Bus A).

d. A signal data processor converts either the Wide-Band IF (WBIF), or video, from the RS into digital representation of the frequency spectrum. The digital data output is transferred on RC Bus B to provide 128 data points for a remote panoramic (PAN) display. Control of PAN display data processor is also transferred on RC Bus B.

These functions are described in the following subparagraphs.

3-2.1 **RC Bus A Interface.** Receiver control and tuning are determined by data transferred on the serial data bus RC Bus A. When the system is in the PRIMARY mode, the bus is controlled by the system CPU. When the system is in the BACKUP mode, the bus is controlled by the RCDU. The bus is routed to the RSPU and buffered on RC Bus Status Interface CCA A6. The buffered output is used to drive the four receivers in the Receiver Set. In addition, the control interface (P/OA6) monitors the bus. When the receivers are being addressed, the control interface collects data from the bus. Receiver address bit 3 and bit 4), IF bandwidth control (bit 6, bit 7 and bit 8) and carrier presence manual threshold (bit 55) are decoded and used to control CPD A1-A4. When the RSPU is addressed (polled for data), the status interface (P/O A6) drives status data onto the bus. Status inputs to A6 are: TONE STATUS from each tone detector, CPD LOCAL from each detector, RS PWR and RS TEMP STATUS, RSPU PWR and RSPU TEMP STATUS. The 5 MHz reference input from the RS is buffered by A6. RC Bus timing is described in

figure 3-1. The data format for RC Bus A is described in figure 3-2 and figure 3-3. RC Bus A DATA, CLOCK and STROBE outputs from A6 are provided at the front panel for monitoring.

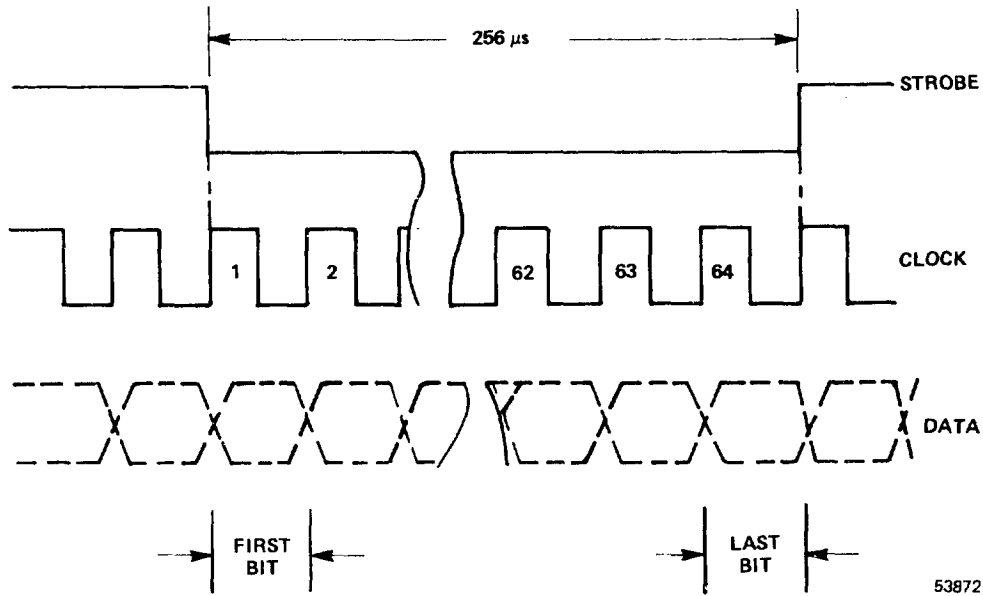


Figure 3-1. RC Bus (A, B), Timing

3-2.2 Signal Interface. Signals routed to the RSPU are interfaced to the system as follows:

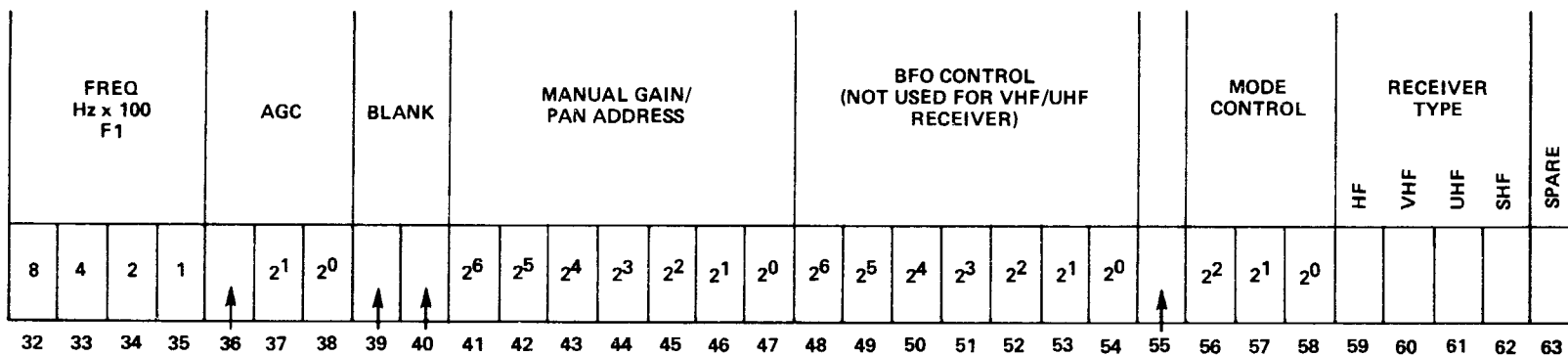
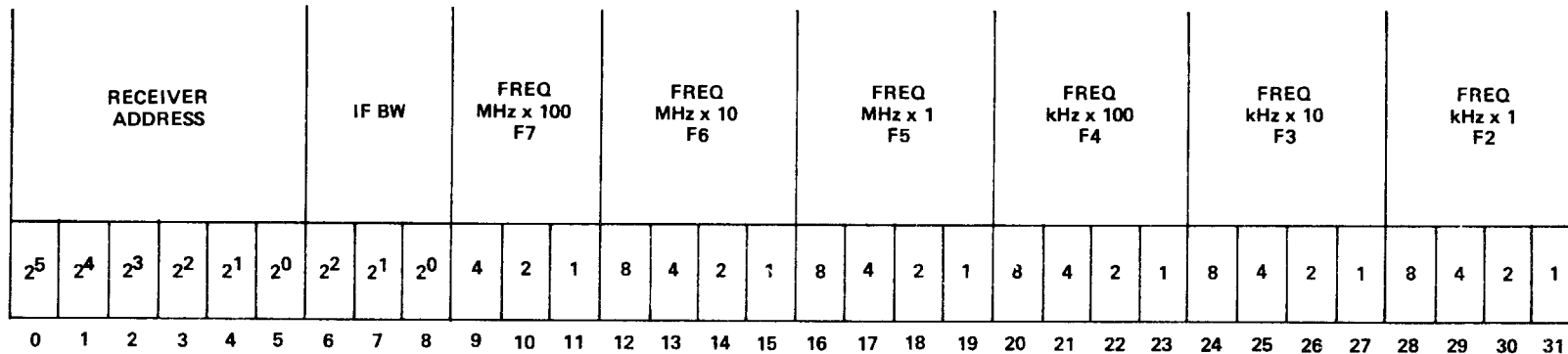
NBIF signals from each of the four receivers are fed to a dedicated CPD, (NBIF IN-RCVR 1 to CPD AI, etc.). The NBIF input is amplified, buffered and provided as two independent outputs. NBIF OUT signals are fed to the Exciters, AUX NBIF OUT to the Control, Signal Interface (SICU).

b. Receiver Set audio and AGC signals from each receiver are routed out to the SICU. These signals are STD AUDIO (standard), AUX AUDIO (auxiliary), ISB AUDIO (independent sideband) and receiver AGC. AUX AUDIO RCVR 1-4 are buffered by tone detector A5.

RCVR BLANKING is fed to the I/O Register A12 and output as four EXT BLANKING signals, one for each receiver.

d. RC Bus A and RC Bus B are routed to the front panel for monitoring.

3-2.3 RC Bus B (PAN Display Data). The data bus RC Bus B is controlled by the Control, Display Receiver (RCDU). The bus is used to transmit display data to the PAN display section of the RCDU and to transfer control information to the PAN display data processor. PAN display data is a group of 128 cells. The cells are transmitted six per data word, each word identified with a first cell address to indicate the position of the data within the display. Twenty-two (22) RC Bus B data words are required for a complete PAN display. PAN processor control data is



DUMP

EXTERNAL BLANK ENABLE

BLANK WHILE TUNE

CARRIER PRESENCE  
MANUAL THRESHOLD

53873

Figure 3-2. RC Bus A Data Format (Receiver Control)

FUNCTION	ADDRESS						CARRIER PRESENCE RCVR NO.				150 Hz TONE RCVR NO.				RS POWER	RS TEMP	RSPU POWER	RSPU TEMP	SPARE																						
WEIGHT	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>																																			
BIT	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31									
FUNCTION	SPARE																																								
WEIGHT																																									
BIT	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63									

53874

Figure 3-3. RC Bus A Data Format (Status Word)

received from the bus. The data is decoded to control: attenuation with a 60 dB range, bandwidth in eight steps and the video/WBIF selection used to determine which input signal is processed. RC Bus timing is described in figure 3-1. Data format for RC Bus B is shown in figure 3-4 and figure 3-5.

3-2.4 PAN Processor. The PAN processor is comprised of: an analog front end (A14 and A20), a microprogram sequencer (A9) with microprogram memory (A8), a high speed data memory (A11) and an address generator (A10). A12 provides the processor interface functions and a high speed A/D converter which allows continuous sampling of the signal input. These items form a digital data processor which converts the received signal, WBIF or video as required, into a digital representation of its frequency spectrum using a Fast Fourier Transform (FFT) algorithm. The following paragraphs briefly describe the operation of the processor.

3-2.4.1 Analog Front End. Received signal selection, display bandwidth, and attenuation are controlled by the operator at the RCDU. Data, transmitted from the RCDU to the RSPU on RC Bus B, is collected and formatted by RC Bus Interface/8085 CPU, A7. A7 transfers PAN processor control data to I/O Register, A12, using the DATA BUS. A12 decodes the data received from A7 to provide control signals for down converters A14 and A20. IF SEL RCVR 1-4 are used to select from one of the four WBIF signals applied to A20 (RCVR 1 WBIF thru RCVR 4 WBIF). VIDEO CONT RCVR 1-4 select from one of the four video inputs applied to A14 from A5. The signals 10 DB, and 20 DB1 thru 20 DB3 control attenuation of the selected signal in A14 and A20. The selected WBIF signal input is down converted in A20 and appears at the output as the SELECTED IF signal. SELECTED IF has a center frequency of 2 MHz and is processed in A14 to provide two versions of the IF signal (one wideband signal with center frequency 2 MHz and one narrowband signal with center frequency 200 kHz). These two signals are fed to a selector circuit together with the selected video signal. The output signal from A14, ANALOG IN, is selected from the three signals by control inputs NBIF\*, WBIF\*, and VIDEO\*. ANALOG IN is fed to A12 for conversion into digital data.

3-2.4.2 Signal Data Processing. Analog-to-digital conversion of the ANALOG IN signal is performed on A12. Conversion is controlled by the clock signal PICCLK from Control Sequencer, A9. When the ANALOG IN signal is either too small or too large to provide valid data for processing A12 outputs the signal PDSIV to A7. This signal is transferred to the RCDU where it is used to warn the operator that the displayed data may be invalid. Control signals are derived from data fed to A12 from A7 on the DATA BUS. These signals, which determine FFT size and sampling rate, are held in storage registers to await transfer to A9 on the C-Data bus (CDAT). The transfer of CDAT to A9 followed by the 'valid data' flag CIVLD, start the data processing cycle. Seven BUS CONTROL signals organize the transfer of data between the processor circuit cards. The A-data bus (ADAT), and the B-data bus (BDAT) are used for the transfer of signal data. The Immediate-data bus (IDDAT) is used to transfer general housekeeping data. Control signals (SEQUENCER CONTROL) instruct A9 to ensure the proper address word is provided for conditional branches in the program. Status flag signals are provided from A12 and address generator A10. A10 is used to perform the processing operations on the signal data and to organize data in 4K RAM (A11). Address bus MADDR is used for this task. The signal MWRCYC\* controls the data memory. All data processor clocks are provided by A9. Four signals, RCVR 1 DELAY GATE thru RCVR 4 DELAY GATE, are fed into A12. The leading edge of the gate signal is coincident with the presence of valid data in the receiver output signals (WBIF/VIDEO). The appropriate gate signal, selected from the four inputs, is stretched in A12 and

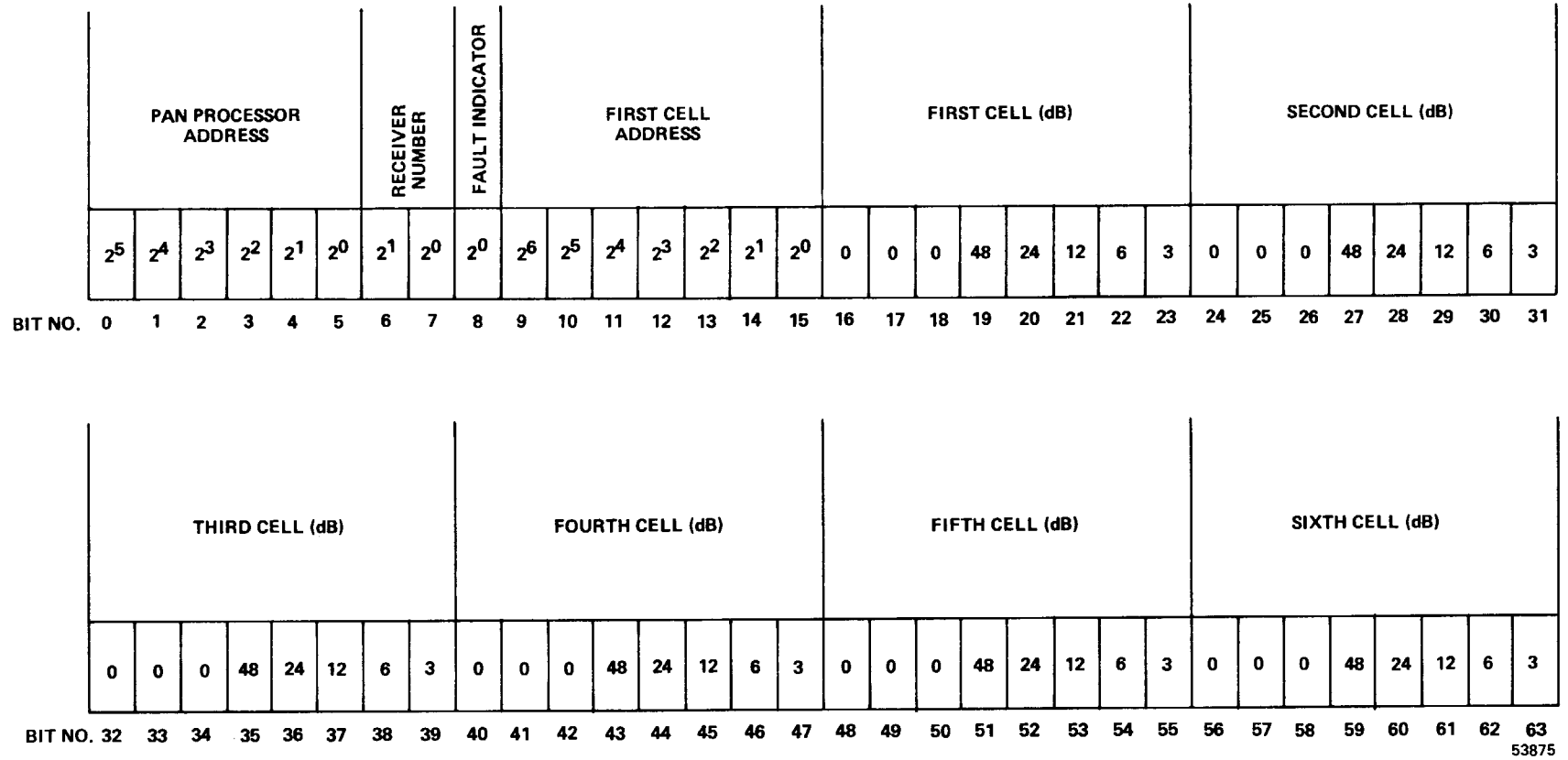


Figure 3-4. RC Bus B Data Format (From PAN Processor)

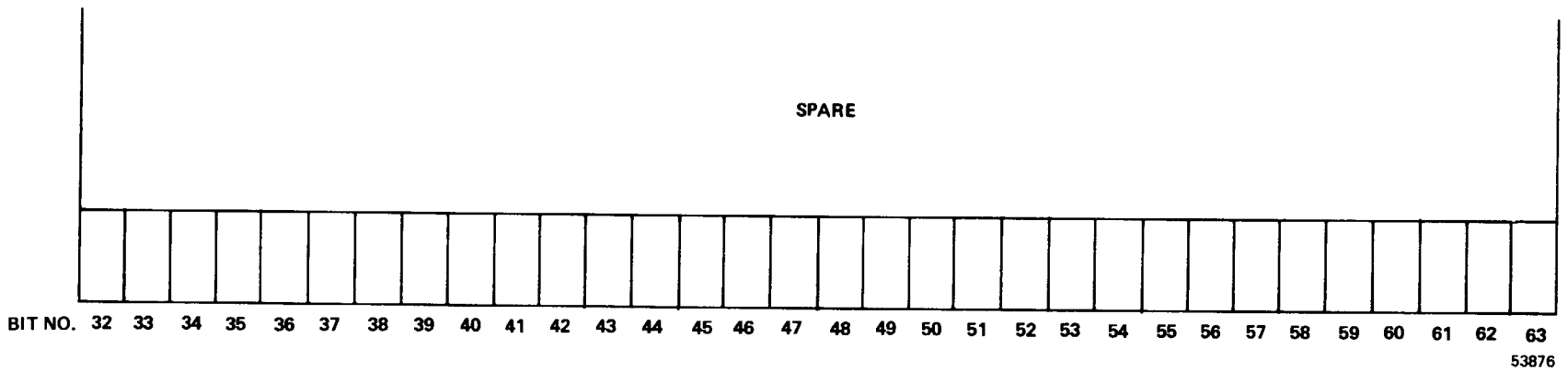
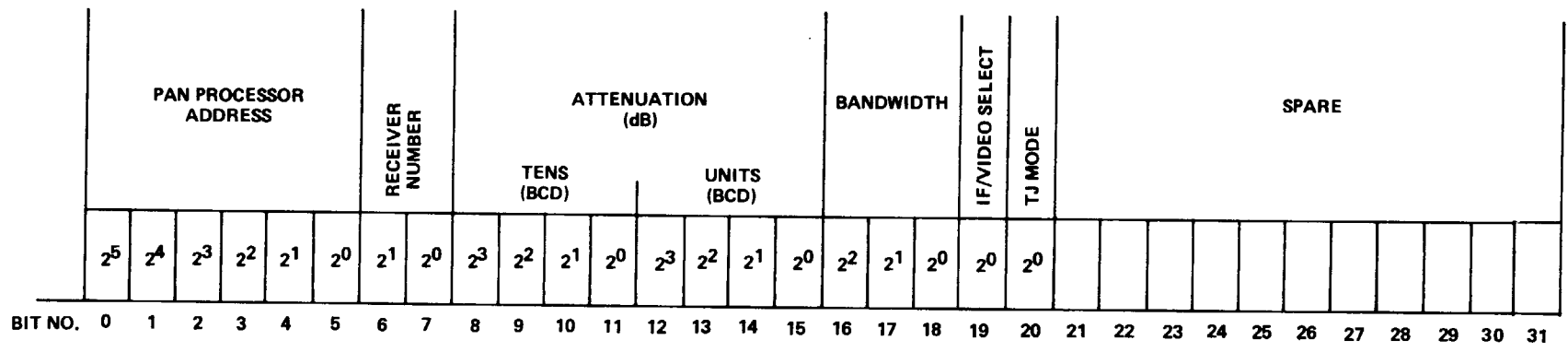


Figure 3-5. RC Bus B Data Format (To PAN Processor)

fed to the CPD as the LOOK-THRU MODE CONTROL signal, A12 also uses this signal to enable the control data word onto the CDAT bus and to provide the CIVLD flag. When CIVLD is received by A9, the control word is decoded to determine a start point for the sequence of addresses provided to microprogram memory A8. The instruction sets, used to control the execution of the FFT programs, are stored in read-only memory on A8. A9 addresses the memory using the UADDR bus. Various signals, fed to the processor circuit cards from A8, control the data flow and data processing operations. The processor starts by fetching data from A12 (ADISEL\* enabling samples of the received signal onto the ADAT bus). Data is stored in memory at addresses determined by the address output, MADDR, from A10 to A11. When WBIF signal processing is required, the RCVR BLANKING signal input to A12 may occur before sampling is complete. A12 indicates invalid data by sending PDBWTN to A7. This signal is transferred to the RCDU on RC Bus B. When sampling is complete, A10 performs the required arithmetic operations on the stored data according to instructions received from A8. A10 sends PROCESSOR STATUS flag signals to A9. These are used to provide branch addresses to A8. A8 changes the instruction set to meet the new requirement. The processor transforms the sampled data into 128 spectral points. When the transform is complete, the data is stored in memory, A11. A8 then sends PIDLOAD\* to A12 signaling A12 to collect the transformed data from the BDAT bus. BDAT is collected and transferred to A7 under the control of PICCLK and handshake signals from A7. When all the data has been transferred, A12 outputs status flag DODONE to A9. CRSEL\* resets this flag to end the sequence.

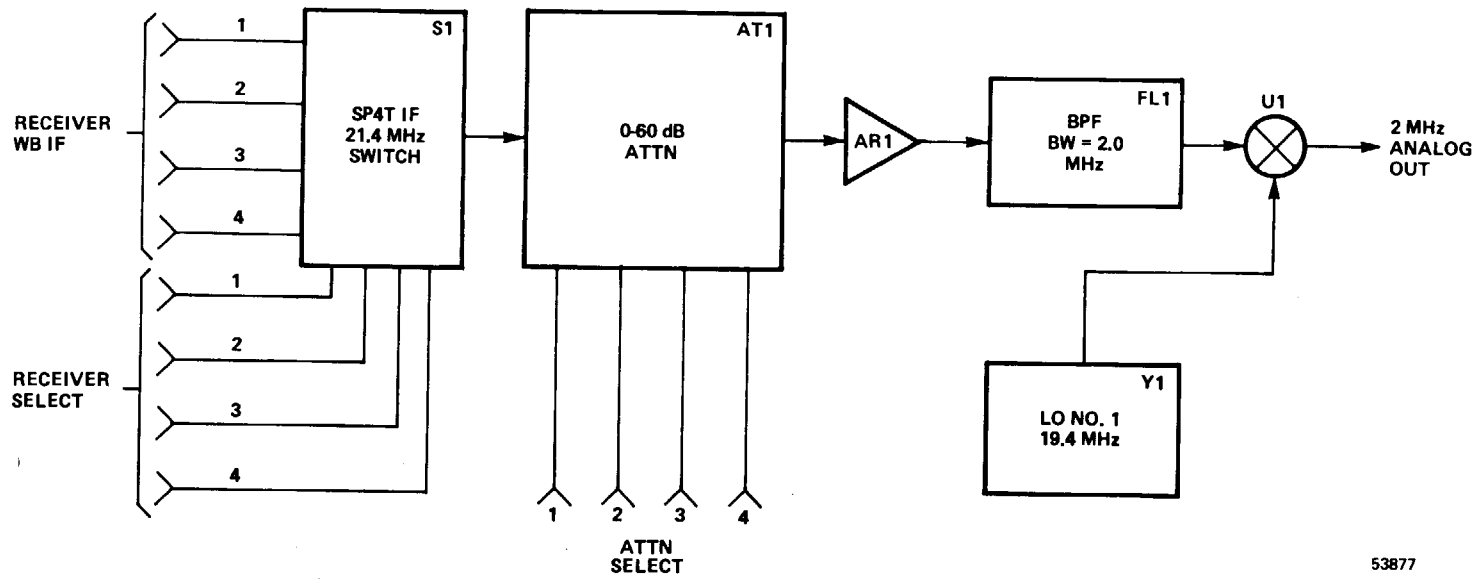
3-2.5 Power Distribution. The ac power to the RSPU is applied to the three power supply modules thru Electromagnetic Interference (EMI) filter A16, power on/off switch S3 and three circuit breakers. Power supply modules are the encapsulated non-repairable type with built-in regulation and over-current protection circuits. The dc power supplies, +5V from PS1, +/-15V from PS2, and +28V from PS3 are fed to power monitor A17. A17 monitors the voltages from the power supply modules and provides an indication (lamp in power ON/OFF switch) when all three are present in the RSPU. The signal RSPU PWR STATUS is also provided to A6. In addition to the main dc power supplies, -6 VDC is produced by the -6V regulator A21 for use on A12. Over voltage protection for circuits using +5V is provided by VR1.

3-3. CIRCUIT CARD/MODULE FUNCTIONAL DESCRIPTION. The following subparagraphs provide a functional description of the RSPU CCA/Modules.

3-3.1 Converter IF (A20). Refer to figure 3-6, a functional block diagram of converter assembly A20. The inputs to A20 are the four WBIF (21.4 MHz) outputs from RCVR 1-4 together with RCVR SELECT and ATTN SELECT control signals. The WBIF signals are applied to a SP4T switch, S1. The selected signal is routed thru S1 by the control signal RCVR SELECT and fed to a switched 0-60 dB attenuator AT1. The amount of attenuation is determined by the control signals ATTN SELECT. The output from at1 is amplified by AR1 and filtered, to reject images and out of band signals, by FL1. The IF signal is then down converted in mixer U1 using the 19.4 MHz local oscillator signal from Y1. The output of U1, SELECTED IF, has a center frequency of 2 MHz.

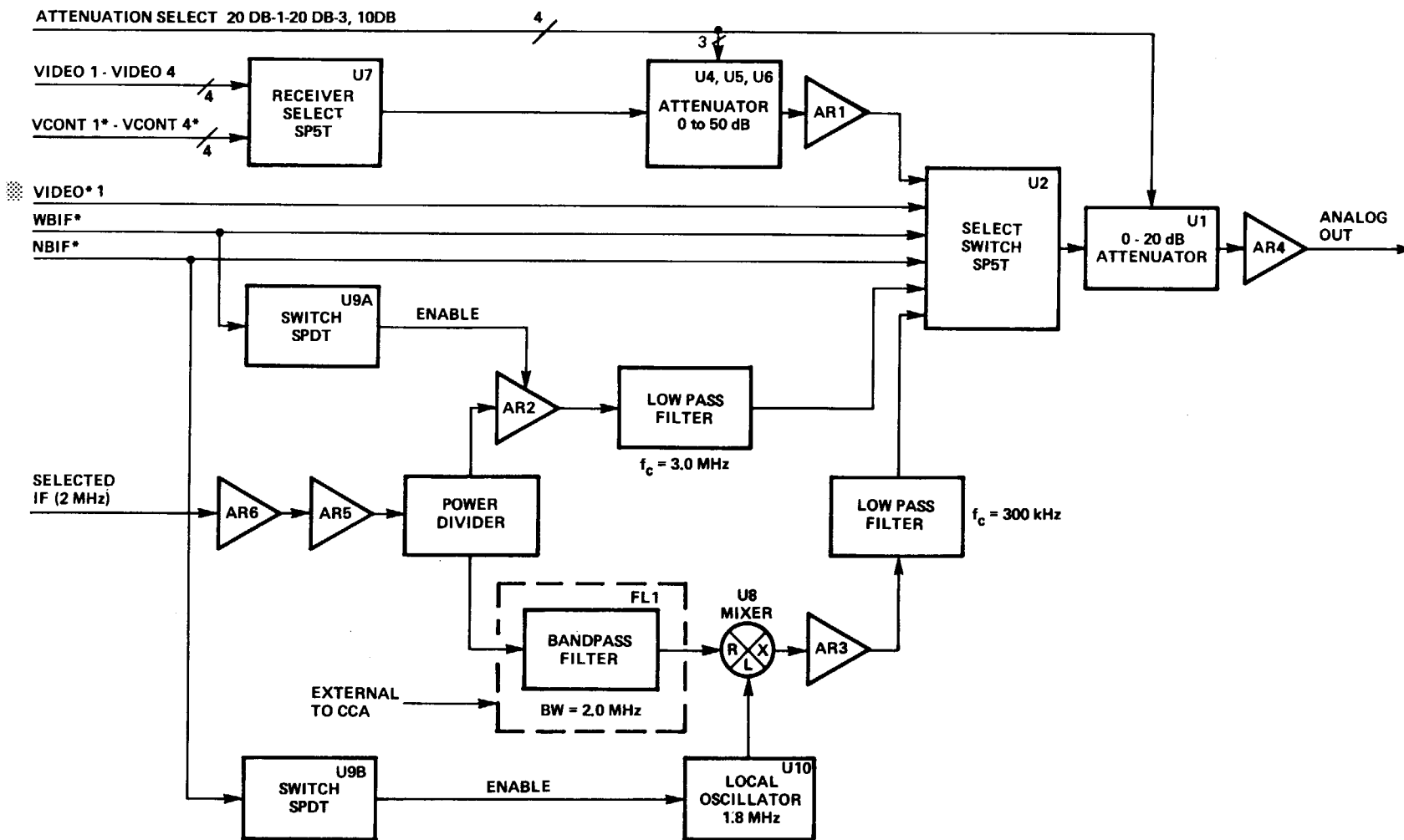
3-3.2 IF Down Converter (A14). Refer to figure 3-7, a functional block diagram of IF down converter A14. The SELECTED IF signal input from A20 is fed via amplifiers AR6 and AR5 to a power divider circuit. When a wideband signal is required, the control signal WBIF\* is active and enables amplifier AR2 in the upper leg of the divider. The output of AR2 is fed thru a low-pass filter which has a cut-off





53877

Figure 3-6. Converter, IF (A20), Functional Block Diagram



53878

Figure 3-7. IF Down Converter (A14), Functional Block Diagram

frequency of 3.0 MHz. The output of the filter is applied to switch U2. WBIF\* routes the signal thru U2 to the output via switched attenuator U1 and amplifier AR4. When a narrowband signal is required, NBIF\* is active and enables local oscillator U10. The signal from the "lower" leg of the divider is fed via an external bandpass filter to mixer U8. The 1.8 MHz signal from U10 is input to U8 and down converts the signal. The mixer output is amplified by AR3 and fed thru a low-pass filter, cut-off frequency 300 kHz, to the input of switch U2. NBIF\* routes the signal thru U2 to the output via U1 and AR4. Video signals, one from each of the four receivers, are fed to U7. The required signal is routed thru U7 by one of the control signals, VCONT 1\* - 4\*. The output of U7 is fed thru a switched 0-50 dB attenuator to AR1. The T-pad attenuators use FET switches U4, U5, and U6 to obtain a 10 dB per step attenuation. The switches are controlled by attenuation select signals from A12 (20 DB1-3 and 10 DB). The output of AR1 is routed thru switch U2 by the VIDEO\* 1 signal and output via attenuator U1 and AR4. The output from the SP5T switch is routed thru a 20 dB T-pad attenuator. The output from the attenuator is amplified and buffered in AR4.

3-3.3 RC Bus Interface/8085 CPU CCA, A7. F0-2 is a functional block diagram of A7. There are two sections of A7 described in the following paragraphs.

3-3.3.1 Microcomputer (CPU) Section. Refer to F0-2, Sheet 1. The microcomputer is based on 8085 MPU, U28. U21 and U22 provide four kilobytes of EPROM memory. One kilobyte of RAM storage is also provided (U1E, U2A, U2B, U12 and U13). The MPU uses a multiplexed data/address bus. When enabled by ALE, U20 latches the eight least significant bits of the address from the data/address bus. The more significant address-bits are buffered by U38. Together, the outputs from U20 and U38 provide a complete 16-bit address bus. Address bits from U38 are also decoded by the address decoder circuit (U19, U27). This circuit provides 15 memory address/select signals. All I/O devices, used to interface the MPU with external data sources, are accessed using memory mapped I/O techniques. The devices are enabled by signals from two decoders. When enabled by SEL 3000\*, U40 decodes address-bits from the address bus. U40 provides eight device select signals. These are used to select the required Programmable Peripheral Interface (PPI) device. Decoder U42 provides eight enable signals, I/O SEL 0\* thru I/O SEL 7\*. These are used to enable single I/O devices. The read/write logic is controlled by the signals RD\* and WR\*. These signals are used to enable data to/from the data bus. The data bus is buffered to provide a high drive capability. The data bus buffer circuit (U2C, U3C, U4, U10, and U11) is bidirectional and controlled by the RD/WR\* and ALE\* signals from U18 and U1D. Program instructions for data collection and distribution routines are stored in the EPROM memory. The power on reset circuit (CR1, R8, C16) ensures the routines are started correctly at power on. Interrupt signals TRANSMIT INTR, TIMER INTR and RECEIVE INTR are used to control program execution. The MPU internal clock is inverted by U9F to provide the 3.072 MHz CLK\* signal. This signal is used to time external circuits providing data for the CPU.

3-3.3.2 RC Bus Interface Section. The RC bus interface section provides the functions necessary to interface the RSPU with the RC bus. Refer to F0-2, sheet 2. This section functions under the control of the CPU. Control, address, and data busses together with I/O enable signals interface this section with the CPU. In turn, the section provides two CPU interrupts for program control. The RC Bus Interface performs three tasks. These are described in the following subparagraphs.

3-3.3.2.1 RC Bus Monitor. The RC bus interface circuit monitors the RC Bus waiting for a data word addressed to the RSPU. Line receiver U31A buffers the RC BUS STROBE. U31B buffers the RC BUS CLOCK signal. The signals are inverted by U8D and U8E to provide the STROBE and CLOCK\* signals. When the strobe sync logic circuit (U1C, U23B, U23C, U24A, U17A and U25A) detects STROBE\*, it provides the RESET COUNTERS\* signal. This signal resets the frame counter (U32, U37) which then begins to count CLOCK\* signals. The frame counter feeds a seven-bit address to the control signal generator (PROM U41). An eighth bit is provided by ADDRESS EN\* from U5B. U41 provides four control signals. These establish the timing for both RC bus monitor and RC bus driver tasks. RC BUS DATA, buffered by U5A, is clocked into serial-to-parallel converter circuit (U24B, U35). The address field in the data word is compared with the unit address in U15. The unit address, COMPARE ADDR A1-A5, is fed to U15 from PPI 0 (U29). When the address in the data word matches the unit address, U15 produces an enable signal (A=B) which is fed to the receive/transmit decoder circuit (U3D, U14A, U14B, U14C, U18D, and U6). STATUS ENABLE\* from U41 allows the decoder to check the logic of the sixth bit in the data word. This bit determines if the RSPU is to transmit data onto the bus or to receive data from the bus. The decoder provides either the RCV signal or the XMIT ENABLE\* signal. XMIT ENABLE\* is used for the RC bus driver task, described in para 3-3.3.2.2. The RCV signal enables data to be loaded into a First-In First-Out (FIFO) shift register (U1B, U3A, U16A, U16B, U34, U36). The load function is performed by control signal LOAD REG\* from U41. The FIFO holds eight bits of the data word at a time. The data is collected by the CPU using the CPU DATA BUS via PPI 1 in 8-bit bytes. This action is controlled by the RD\* and WR\* signals fed to the circuit. As each byte is loaded, the FIFO provides a RECEIVE INTR signal for the CPU.

3-3.3.2.2 RC Bus Driver. When the RC bus interface section is required to transmit data onto the RC bus, the XMIT ENABLE\* signal is active. This signal enables the XMIT control logic circuit (U3B, U7A, U7B, U7C, U16D, U33B). This circuit decodes control and enable signals. The circuit provides TRANSMIT INTR and two control signals fed to parallel-to-serial converter U39. TRANSMIT INTR is fed to the CPU to clock inhibit signal start the transmit routine. The two control signals (BUS DRIVER DATA ACK\*, and a signal) allow data to be parallel loaded into U39 and then clocked out serially to the line driver (P/O U26). Data for this transfer onto the RC bus is fed onto the CPU DATA BUS in eight-bit bytes. This data is then fed to U39 via PPI 1 as BUS DRIVER DATA D0 - D7. Control signal BUS DRIVER DATA ACK\* is used to load U39. BUS DRIVER DATA ACK\* is also fed to the CPU, via PPI 1. The signal informs the CPU that data is loaded. When the clock inhibit is released, U39 clocks serial data out to the line driver (P/O U26). The line driver drives the serial data onto the RC bus.

3-3.3.2.3 Control Interface. The CPU is interfaced with five control signal inputs to PPI 0 and PPI 1. The signals, MONITOR ENABLE, ADDRESS GENERATOR ENABLE\*, and ADDRESS GENERATOR SELECT are used to allow the CPU to determine the RSPU operating mode. The RCDU ADDRESS A0-A7 is bidirectional and used to collect address bits for the data word, UNIT ADDRESS A0-A7 is hardwired to carry the RSPU address. COMPARE ADDR A1 - A5 for the RC bus monitor circuit are provided from this input.

3-3.4 Control Sequencer CCA, (A9). Refer to figure 3-8, a functional block diagram of A9. A9 provides the following functions: an address sequence for micromemory A8; control of the IDDAT bus; the FFT processor clocks; A and B data bus source decoding.

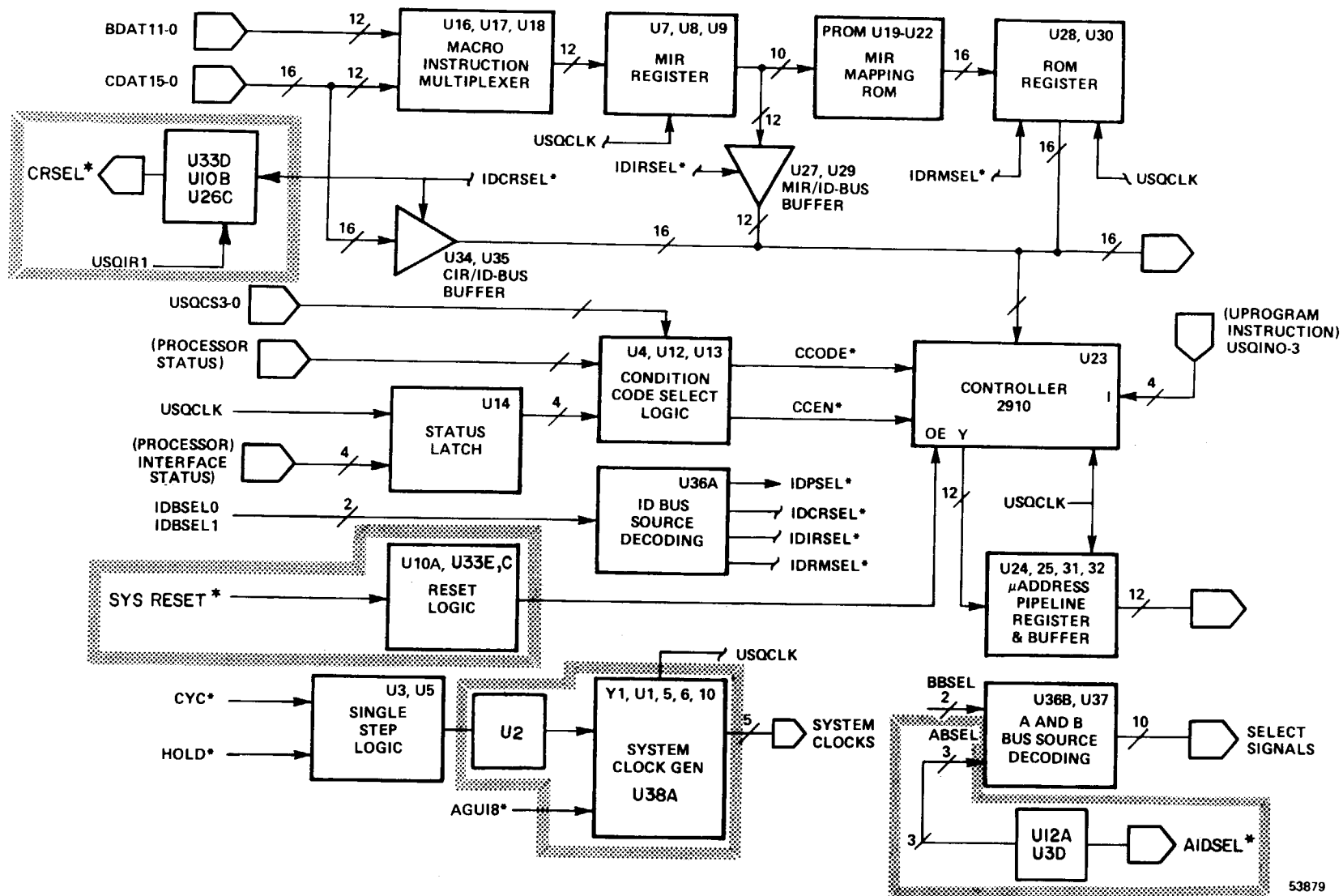


Figure 3-8. Control Sequencer CCA (A9), Functional Block Diagram

Change 1

3-13

TM 32-5865-069-24&P

53879

3-3.4.1 IDDAT Bus Control. Two control signals IDBSEL0 and IDBSEL1 are used to control the bus. These signals are decoded in U36A. The outputs of U36A control the source of the data enabled onto the bus. When IDCRSEL\* is low, buffer U34 and U35 is enabled. CDAT 15-0 is fed out as IDDAT 15-0. When IDIRSEL\* is low, buffer U27, U29 is enabled. The output of the Macro Instruction Register (MIR) circuit (U7, U8, U9) is fed onto the bus. When IDRMSEL\* is low, the ROM Register Circuit (U28, U30) is enabled providing data for the bus. The signal IDPLSEL\* is fed to A8. When IDPLSEL\* is low, A8 provides data for the bus.

3-3.4.2 Condition Code Select Logic. The condition code select logic circuit (U4, U12, and U13) is fed with status signal inputs. These are from the processor interface A12 via latch U14 and from address generator A10. USOCS 3-0 are control signals used to select the required status signal. The status signal selected generates CCODE\*. CCODE\* is applied to controller U23. U23 examines CCODE\* before executing a conditional instruction. CCEN\* is normally low. When USQCS 3-0 are all high, CCEN\* is forced high. This overrides CCODE\* for a specific instruction.

3-3.4.3 Address Control. Data from the FFT data buses is applied to the macro instruction multiplexer U16, U17, and U18. When control signal USQIR1 is low, CDAT 11-0 is loaded into the Macro Instruction Register (MIR) formed by U7, U8, and U9. When USQIR1 is high, BDAT 11-0 is loaded into the MIR. Data is clocked into the MIR by USQCLK. The MIR output is used to address MIR mapping ROM (PROM U19-U22). This circuit provides 16-bits of data latched into ROM registers U28 and U30 by USQCLK. The data is enabled onto the IDDAT bus by IDRMSEL\*. Twelve bits of the data word on the IDDAT bus are applied to controller U23. U23 receives a four-bit instruction USQINO-3 from A8. USQINO-3, CCODE\*, and CCEN\* are used to process the input data. The twelve-bit address is fed to the micro address pipeline register and buffer circuit (U24, U25, U31, and U32). This circuit provides uaddr signals used to address micromemory A8.

3-3.4.4 System Clocks. The clocks used by the FFT processor are generated by the system clock generator (Y1, U1, U5, U6 and U10). The clock frequency (6 or 8 MHz) is controlled by AGUI8. When AGUI8 is low, the clock frequency is 8 MHz. When AGUI8 is high, the frequency is 6 MHz. CYC\* and HOLD\* are pulled up on the card. These functions can also be used to control the clock. CYC\* allows single step during test.

3-3.4.5 A and B Bus Source Decoding. ABSEL 0-3 and BBSEL 0-1 are decoded by U36B and U37 to provide control signals. These signals are used to select the devices using the A and B data busses.

3-3.4.6 Reset Logic. The reset logic circuit (U10A, U33) generates an initial power on reset for the sequencer.

3-3.5 Micromemory CCA, (A8). Refer to figure 3-9, a functional block diagram of A8. A8 provides a 2KX80 bit control memory which contains the instructions required by the data processor. The address (UADDR0-11) from A9 addresses the memory. Ten bits are used as address inputs to the PROM (U1-U10). The remaining two bits are inputs to the board and PROM select logic (U12, U22, U24) in addition to five bits of BDARD SELECT data. The chip select inputs to the PROM are BRDENA 2\* and BRDENA 3\* generated by the board select logic. Address bit 11 to the PROM is BRDENA 1\* from the select logic. The 80 bits of instruction from PROM are latched into the microinstruction registers (U11, U16-U21, U25-U27) by uIRCLK.

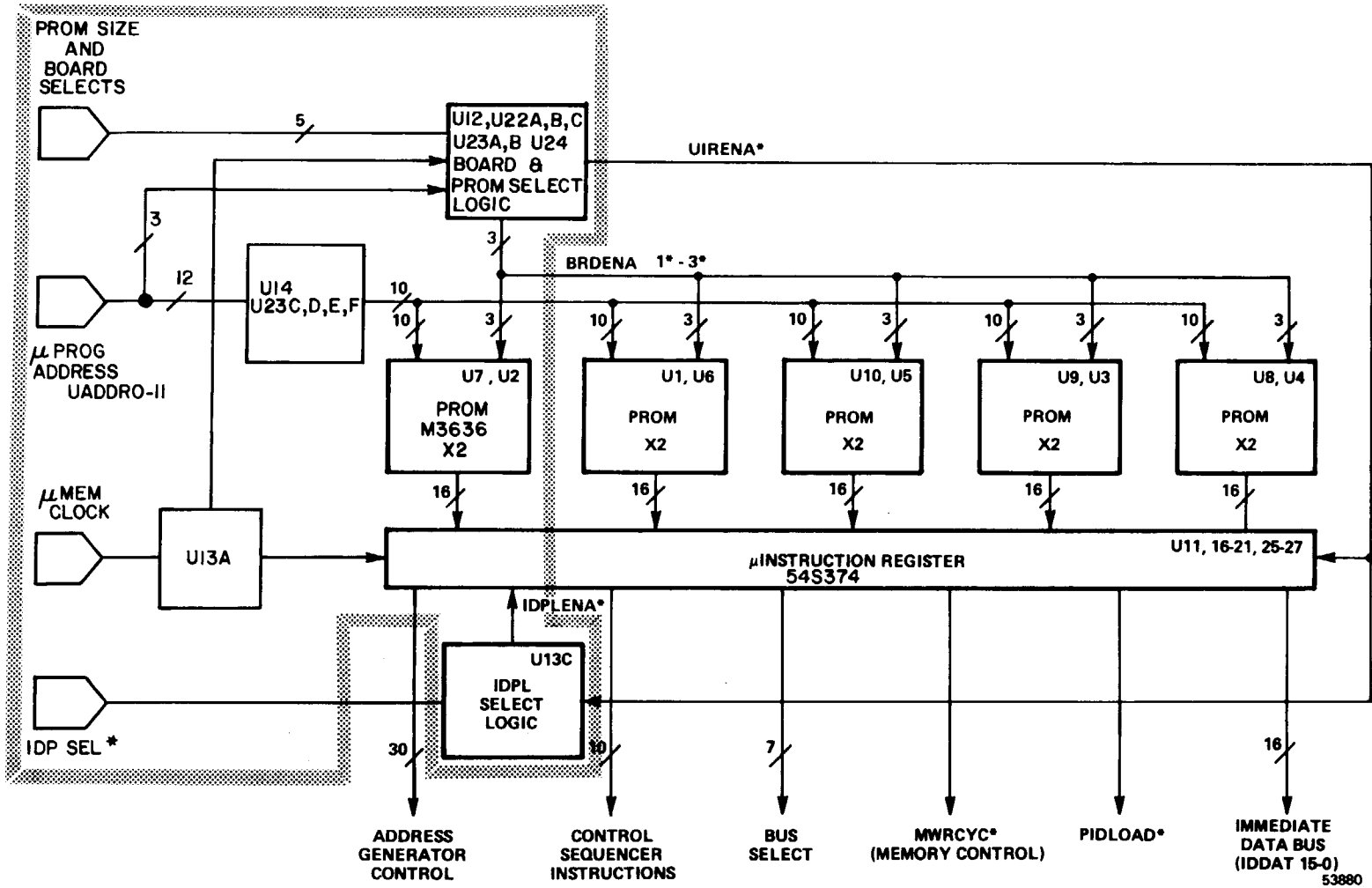


Figure 3-9. Micromemory CCA (A8), Functional Block Diagram

IDPSEL\* and UIRENA\* are gated out of the IDPL select logic circuit (U13C) as IDPLENA\*. This signal is used as the output control for registers U16 and U25. The output from these two registers is IMMEDIATE DATA (IDDAT15-0). The outputs from the remaining registers are: ADDRESS GENERATOR CONTROL, CONTROL SEQUENCER INSTRUCTIONS, BUS SELECT, MWRCYC\* (MEMORY CONTROL), and PIDLOAD\*. These outputs are controlled by UIRENA\*.

3-3.6 Address Generator CCA, (A10). Refer to figure 3-10, a functional block diagram of A10. A10 receives data from the FFT data busses and generates address information for A11. Thirty-two bits of IDDAT-BUS and BDAT BUS data are received by memory data multiplexers (U19A, U25, U26, U37, U38). Sixteen bits of immediate data are buffered in U35 & U36. When AIDSEL\* occurs, the buffers are enabled allowing ADAT to be transferred onto the ADAT-BUS. BDAT BUS data is also routed to multiplier logic circuit (U29, U30, U39, and U40). The data outputs from the memory data mux are latched into the Memory Data Registers (MDR, U27 and U28) by AGUCLKB and AGUIR1. The MDR outputs are sent to the Registered Arithmetic Logic Unit (RALU, U4 thru U7) in 4-bit slices. The RALU receives nine bits (AGU18-0) of instruction data from A8, four bits (RFA3-0) of read address from the multiplier registers (used to select one of four registers in the RALU), and four bits of read/write address from A8. The carry/shift logic circuits (U2, U8, U9, U10) receive five bits of shift/carry select (AGUSS2-0) and (AGUCS1-0) inputs from A8. The outputs from the shift selection logic determine whether the registers in the RALU shift up or down. A carry signal is generated by the carry select logic. This is sent to the RALU for arithmetic operations. The data output from the RALU consists of sixteen bits fed to the permute mux (U14, U15, U23, U24). These bits are restructured in the permute mux and routed to the memory address register (U21, U22 and U31, U32). In addition to the data output, four flag outputs are sent to the processor flag register (U12 and U13). The outputs from the register are PCARRY, PZERO, POFLW, and PSIGN. Sixteen bits of data are fed out as MADDR15-0. The output from the permute mux is also fed to the return data register (U16D, U33, and U34). Sixteen bits of data are enabled onto the ADAT BUS on the next ARDRSEL\*.

3-3.7 4K RAM CCA, (A11). Refer to figure 3-11, a functional block diagram of the A11. Sixteen bits of data from the ADAT BUS are fed to the memory. Eight bits are loaded into the upper byte memory and eight bits are loaded into the lower byte memory when the memory write logic circuit (U22) generates WRITE ENABLE. Twelve bits of memory address are applied to the 4K x 16 memory from A10. The remaining 4 bits of MADDR are compared by U17 with 4 bits of BOARD ADDRESS. When there is comparison, CHIP ENABLE is applied to both memory sections. Data from memory is put on the BDAT Bus via buffers U20 and U21.

3-3.8 I/O Register Set CCA, (A12). Refer to F0-3, a functional block diagram of A12. A12 provides the I/O functions associated with FFT data processing as follows:

- a. Collects and decodes data from the CPU (P/O A7) used to control the operation of the IF down converter A14.
- b. Converts ANALOG IN signals from A14 into the digital data required for signal processing.



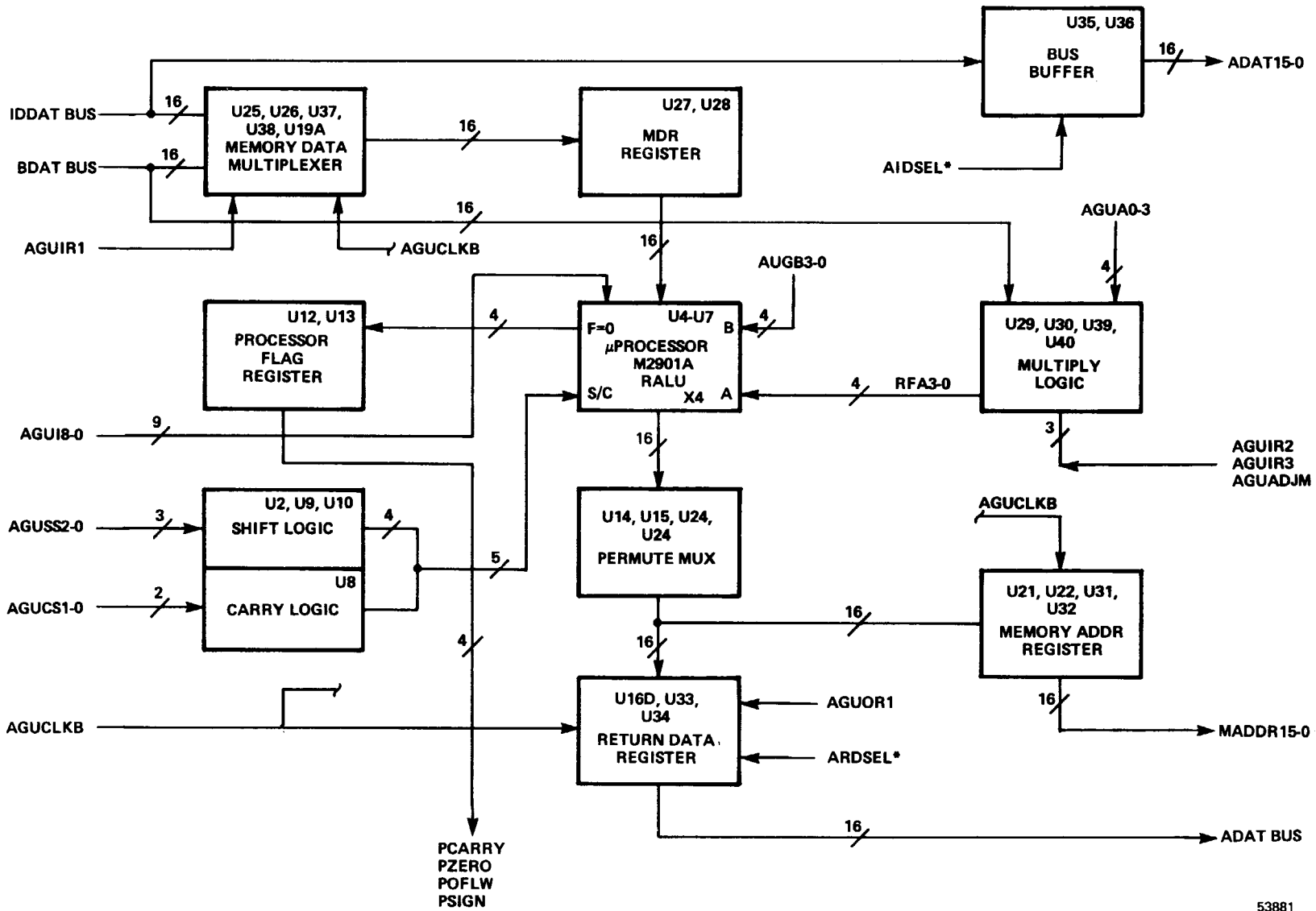
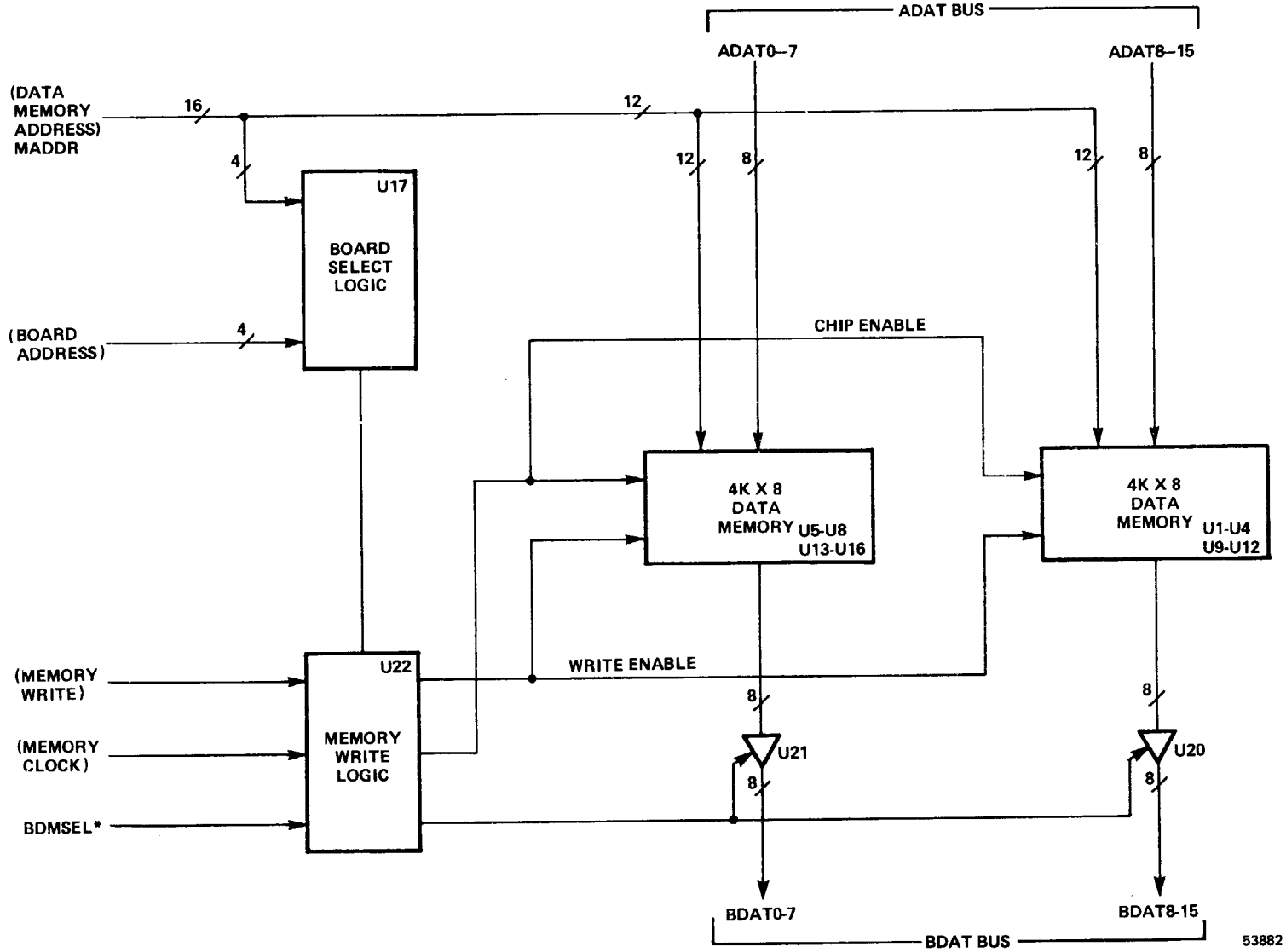


Figure 3-10. Address Generator CCA (A10), Functional Block Diagram



53882

Figure 3-11. 4K RAM CCA (A11), Functional Block Diagram

- c. Collects control data for the PAN data processor from the CPU.
- d. Transfers processed data to the CPU.

3-3.8.1 CPU Interface. PPI device, U25, provides the interface between the CPU (P/O A7) and the PAN processor. The interface allows the CPU to control the operation of the processor and to collect processed data. The transfer of data via U25 is controlled by the signals WR\* and PPISEL2\*. When these signals are active, DATA BUS D0-D7 is transferred to the selected output port of U25. The output port of U25 used for the transfer is determined by ADDR BUS A0-A1. Processed data, D0-D7, is transferred via U25 to the CPU as DATA BUS D0-D7. This occurs when the signals RD\* and PPISEL2\* are active. The transfer of data is accompanied by handshake signals. U25 is reset by the CPU using SYSTEM RESET\*, inverted by U23B.

3-3.8.2 Control Signals. The FFT control register circuit is formed by U22A, U22B, and U29. This circuit provides an eight-bit control word CDAT 0-7. This is used to control the PAN processor sequence. Four-bits of data from the PPI device U25 provide the four MSB. The four LSB are zeros. C0\*-C3\* are used as test inputs and normally pulled up high. Data is latched by FFT CONTROL REG CLK. Decoder 1 (U34A) decodes two data-bits from U25 to provide three control signals: WBIF\*, NBIF\*, and VIDEO\*. Decoder 2 (U34B) decodes the two data-bits from U25 which represent the selected receiver number. VIDEO CONTL RCVR 1\*-4\* signals are used to select one of four video signal inputs for processing. Decoder 2 outputs are inverted to provide IF SEL RCVR 1-4. These signals are used to select the appropriate IF signal for processing. Decoder 3 (U6C, U6D, U24A, U24B, U24C, U28A) and inverter U24F provide the attenuation control signals 20DB1-3 and 10DB. The mode signal TJ MODE is controlled by the CPU. OBFA\* is a handshake from the CPU to the PAN processor. This signal indicates that output buffer (port A) is full. OBFA\* is used to generate OBFA1 and OBFA2 in inverter circuit U23E, U23F, and U24D. IBFB is also a handshake from the CPU to the PAN processor. This signal indicates the input buffer (port B) is full. IBFB is inverted by U23A and used to generate the DODONE flag signal. ACKA\* and ACKB\* are handshake signals from the PAN processor to the CPU. ACKA\* informs the CPU that control data has been received. ACKB\* informs the CPU that processed signal data is ready for collection.

3-3.8.3 Analog Data. The analog signal RCVR IF/VIDEO is fed to the input of impedance matching amplifier AR1. The amplifier output RCVR ANALOG is fed to A/D converter U19 and to the input over range detector circuit (U4, U18B). The reference amplifier circuit (U3A, Q1) provides the reference voltage for both U19 and the detector circuit. When the amplitude of RCVR ANALOG exceeds preset limits, the detector provides the flag signal PDSFIV. OBFA\* is used to reset the circuit. U19 converts RCVR ANALOG into an eight-bit digital word. Conversion is controlled by PICCLK (the PAN processor clock signal). The data word is stored in the A data register (U30, U31). Control signal AIDSEL\* enables the register allowing the PAN processor to fetch the data (ADAT) from the A data bus.

3-3.8.4 FFT Control Register Clock. The signal FFT CNTRL REG CLK/DELAY is used to enable control data onto the CDAT bus and to set the CIVLD flag. When this occurs, the data processing cycle begins. When the AN/MLQ-34 system is in the TJ and look-thru modes, FFT CNTRL REG CLK/DELAY is synchronized with the system receive/transmit cycle. This is to ensure that there is valid data in the signal

being processed. The signals RCVR BLANKING and DELAY GATE 1-4 provide this information. In the look-thru mode, the timing of FFT CNTRL REG CLK/DELAY also depends upon the type of signal being processed. When not operating in the look-thru mode, the timing of the signal is controlled by OBFA1 from the CPU.

3-3.8.4.1 Wideband IF Signal Processing. When a wideband IF signal is being processed, the trailing edge of RCVR BLANKING from line-receiver U5B triggers the wideband IF delay circuit (U14, U12A, U28B). This circuit provides a delay of approximately 5 microseconds, compensating for the delay in the 200 kHz filter used in the down converter. The output of the delay circuit is routed thru the gating logic (U6A, U6B, U13A, U26B, U28C) to clock enable flip-flop U18A. U18A transfers the state of OBFA1 to enable the FFT clock control logic circuit (U13C, U13D, U21A, U21C, U24E). The output of the gating circuit also triggers pulse stretcher circuit (U1B, U7A). This circuit provides a pulse approximately 1 second long. The leading edge is coincident with the delayed trailing edge of RCVR BLANKING. At this time there is valid data in the signal input to AR1. The pulse is output as the LOOK THRU MODE CONTROL signal and fed to the FFT clock control logic. This signal, gated by TJ MODE, provides the FFT CNTRL REG CLK/DELAY signal. FFT CNTRL REG CLK clocks control data onto the CDAT bus. DELAY clocks status flag generator U15A to provide the CIVLD flag signal. CIVLD starts the data processing cycle.

3-3.8.4.2 Video Signal Processing. Four signals, DELAY GATE 1-4, are buffered by line receivers U8 and U9. These signals are fed to 4 to 1 multiplexer U10. U10 selects the appropriate receiver delay gate using control signals RCVR NO MSB, RCVR NO LSB. The output of U10 is routed thru the gating logic circuit to clock enable flip-flop U18A. U18A transfers the state of OBFA1 to enable the FFT clock control logic circuit. The gate output also triggers pulse stretcher circuit. This circuit provides a 1 second long pulse. The leading edge is coincident with the leading edge of the selected receiver DELAY GATE. At this time there should be valid data in the RCVR VIDEO signal input to AR1. LOOK THRU MODE CNTRL is gated with TJ MODE in the FFT clock control circuit to provide the FFT CNTRL REC CLK/DELAY signal. This signal is used to enable control data onto the CDAT bus and set the CIVLD flag.

3-3.8.4.3 Bandwidth Check. The gating circuit also provides the signal RCVR BW CHK. All the time there is valid data in the signal input to AR1, RCVR BW CHK remains low. The function AIDSEL\*, from the PAN processor, is used together with PICCLK to fetch data samples from the ADAT register. These two signals and RCVR BW CHK are fed into U14. When the PAN processor has collected the required number of samples to provide a valid display, AIDSEL\* is set high. When AIDSEL\* goes high, RCVR BW CHK is transferred to the output of U14 as the flag signal PDBWTN. If RCVR BW CHK is high at this time, PDBWTN is set high. This indicates that there is insufficient time to collect the required number of data samples to provide a valid display. OBFA\* resets the flag.

3-3.9 Carrier Presence Detector (CPD) CCA, (A1 - A4). Refer to F0-5, a functional block diagram of a typical CPD. The RSPU contains four CPD. The CPD is an integrating, peak responding, threshold detector. It is capable of detecting energy levels at low signal to noise ratios with a typical response time of 2 milliseconds. An integrator disable circuit prevents the integrator bias from changing in the presence of noise only. This allows the circuit to respond to low duty cycle samples of CW, AM, FM, or SSB modulated signals. There are two versions of the CPD. The differences are shown on F0-5.

3-3.9.1 Operation. The 21.4 MHz Narrowband IF (NBIF) signal from the receiver is fed to the CPD. In the -2 version, NBIF is fed directly to the IF Amplifier (Q14, Q15). In the -3 version, NBIF is first fed to S1. S1 is controlled by the logic of 250 kHz SEL and 500 kHz SEL. When both signals are high, NBIF is fed thru FL1 to the IF Amplifier. FL1 rejects out of band noise. When either the 250 kHz or 500 kHz IF bandwidth is selected, S1 switches FL1 out. The output from the amplifier is divided. One output is amplified by Q19 and fed out as NBIF 1 and 2. The other output from the divider is amplified in two AGC controlled IF stages U2, Q1. AGC is provided by peak detector (Q3, Q17, Q18) and filter circuit U3. This maintains a constant peak level into the envelope detector Q2. LOOK THRU is used for AGC optimization. The noise output from Q2 triggers first comparator U10 each time it crosses the threshold offset level selected for a given IF bandwidth. Offset levels are varied as a function of receiver IF bandwidth. This is controlled thru FET switches U9, U21 to compensate for differences in noise characteristics with different bandwidths. The output of the comparator is converted to  $\pm 5$  Vdc level by quantizer CR5 and CR6. When the output of U10 goes high, a positive reference voltage is applied to the input of the integrator (Q9, Q10, U11, U12) thru FET switch Q4. Simultaneously, the delay generator (Q12, U8, Q5) is triggered. This closes Q4 allowing the integrator to charge toward the positive reference voltage. When the noise signal voltage drops below the threshold offset level at the U10 input, the output of U10 switches the negative reference voltage to the integrator thru Q4. This causes the integrator to discharge toward the negative voltage reference until Q4 opens. The delay time constant is chosen such that the integrator discharges after each threshold crossing for a length of time equal to the average noise pulse width characteristic of the selected IF bandwidth. The delay time constant is varied as a function of receiver IF bandwidth. This is controlled thru FET switches U7 and U20. The output of the integrator is constantly compared against a DC voltage from the Signal Noise Ratio (SNR) set control Q7 and Q8, by a second comparator U13. The output of the comparator is fed to a latch U14B (a one bit shift register). The clock for the shift register comes from the counter circuit (U6, U7, U18A). The dump control circuit (U14A, U18B) generates the DUMP command. Dump is used to discharge the integrator. The timing of DUMP is controlled by the external 250 kHz clock applied to the counters. INTEGRATOR DUMP resets the counters resulting in an internal sample pulse at the appropriate sample time. When SAMPLE GATE occurs, a zero voltage is applied to the integrator and the counters are halted. The outputs from U14B are transferred to the output via a differential line driver as CPD, and from the buffer circuit as CPD LOCAL. The INT DONE is provided as an output to external units.

3-3.10 150 Hz Tone Detector CCA, (A5). There are four identical channels of tone detection on A5. Refer to figure 3-12, a functional block diagram of a typical channel (RCVR No. 1 is shown and discussed). The purpose of the tone detector is to detect a 150 Hz signal in the presence of noise and other modulation. This must be done with a low probability of false alarm and a high probability of detection. The main device for this operation is a 150 Hz detector micro-circuit U9). In addition to the detector, there are three operational amplifiers (AR1-AR3) and line driver (U2, U1). The input to the detector is AUDIO with bandwidth of 30 Hz to 250 kHz. It is amplified in AR1 and routed to U9 thru a 2:1 attenuator. The output from U9 is driven out as TONE DET RCVR 1 and TONE STAT RCVR 1. The audio from AR1 is attenuated and buffered by AR2 and AR3. AR2 provides AUX AUDIO OUT RCVR #1 and AR3 VIDEO RCVR #1.

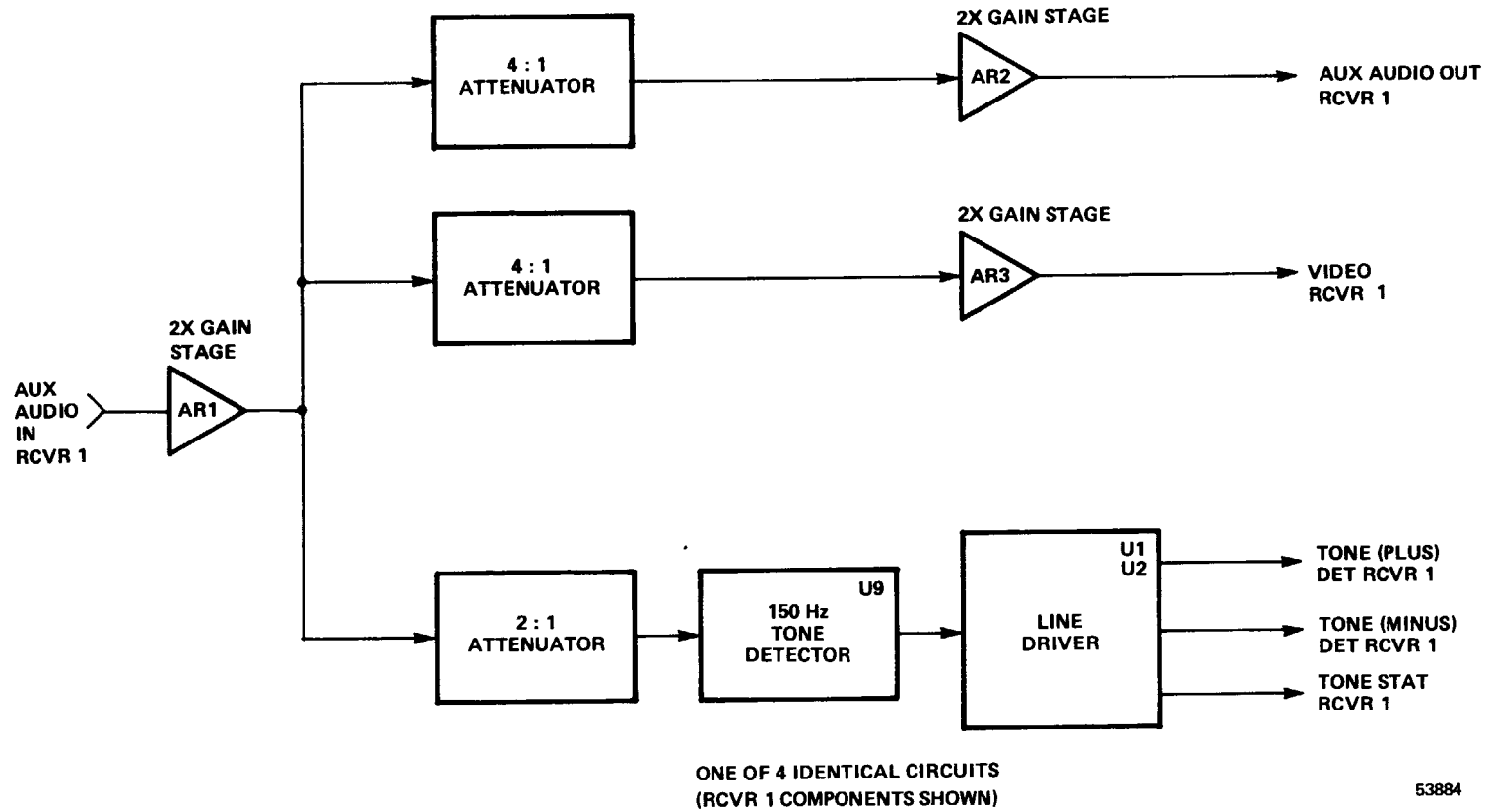


Figure 3-12. 150 Hz Tone Detector CCA (A5), Functional Block Diagram

3-3.11 RC Bus Status Interface CCA (A6). Refer to F0-4 a functional block diagram of A6. A6 provides a control interface with RC Bus A. This allows the AN/MLQ-34 computer to control the operation of the four CPD. In addition, A6 is used to provide the computer with status data. A6 also buffers and repeats RC Bus A. This allows the bus to be used to tune and control four receivers.

3-3.11.1 RC Bus Buffer. RC Bus A signals data, clock, and strobe are fed to line-receivers U33A, U43A, and U43B respectively. The line-receivers are enabled by POR\* from the power-on-reset logic circuit (U26B, U26C). The CLOCK signal is inverted by U4E to provide a CLOCK\* signal. CLOCK\* is buffered and inverted by U27B and fed to the front panel of the RSPU as RC BUS A CLK MON. A line-driver (P/O U32) drives the CLOCK OUT. Inverters U26A and U26F invert STROBE to provide two signals STROBE\* (1) and STROBE\* (2). These signals are used to synchronize the logic circuits on A6 with the RC Bus. STROBE\* (1) is buffered and inverted by U27A to provide RC BUS A STROBE MON at the front panel of the RSPU. STROBE is driven out by the line-driver (P/O U32) as the STROBE OUT. DATA is buffered and inverted by U23E and U27C to provide RC BUS A DATA MON at the RSPU front panel. A line-driver (P/O U44) drives DATA out as RC BUS OUT. The 5 MHz reference is fed to line-receiver U33B. This signal is buffered for use on A6 and also driven out by the line-driver (P/O U52) as 5 MHz OUT. The logic circuits on A6 examine the address-bits (bit 0-5) in each data word. The logic of the address bits determines the mode of operation. When data-bits 3, 4, and 5 are all high (logic '1'), A6 transmits STATUS DATA onto the bus. When data-bit 5 is low (logic '0'), A6 listens to the bus. In the listen mode, data-bits 6, 7, 8, and 55 are latched from the bus. These data-bits are used to provide control signals for the CPD.

3-3.11.2 Address Storage. DATA from U33A is applied to the data/clock gate circuit (U22C, U23A, U23B, U23D, U25). This circuit is enabled when the status flip-flop (U1B) is reset by STROBE\* (1) forcing STATUS\* high. SERIAL DATA, from the data gate circuit, is shifted into the data shift register (U11, U21, U41) by XMT CLK. XMT CLK is the CLOCK\* signal gated out by STATUS\*. The address frame shift-register (U34) counts the CLOCK\* signals. After six CLOCK\* periods the event flip-flop (U15A) is set enabling event shift-register (U24). U24 shifts the 5 MHz (CLK) signal from line receiver (U33B). Four sequential control signals are generated by U24. The first is STORE ADDR. This signal is fed to address store U31. U31 latches the first six bits (address) in the data word held as parallel data in the data shift register. The address-bits from the data word are fed to status decoder, address comparator, and CPD address decoder circuits.

3-3.11.3 Status Decoding. The second control signal provided by U24 is STATUS DECODE. This signal enables status decoder U13B. U13B examines address bits 3, 4, and 5. When all the bits are high, U13B sets U1B. STATUS\* disables the data gate circuit. The SERIAL DATA input to the data shift-register is inhibited. The data shift register is reset preparing the circuit to transfer data out. If the address bits are not all high, U1B remains in the reset condition (STATUS\* high, STATUS low).

3-3.11.4 Status Transmission. LOAD STATUS, the third control signal from U24 is applied to the data shift register. CPD LOCAL 1-4, 150 Hz TONE RCVR 1-4, RS POWER, RS TEMP, RSPU POWER (inverted by U53B), and RSPU TEMP (inverted by U53A) are loaded into the shift register. These signals are shifted out as serial STATUS DATA by RCV CLK. RCV CLK is the CLOCK signal gated in the data/clock gate

circuit by STATUS from U1B. STATUS DATA is fed to the line driver, P/O U44. The line driver is gated by the output of the XMT flip-flop U2A. U2A provides the XMT\* signal. When XMT\* is low, the line driver is enabled and drives STATUS DATA onto RC Bus A.

3-3.11.5 Address Comparator. ADDR SEL 23-2<sup>5</sup> (BIT 0-2) are hardwired to provide the unit address. These signals are fed to the (A) input of address comparator (U42) with STATUS from U1B (BIT 5). BIT 0, 1, 2, and 5 latched by U31 from the data word provide the (B) input to U42. U42 is enabled by the fourth control signal from U24, ADDR COMPARE. When the two inputs to U42 are the same, the signal (A) = (B) goes high. This signal is used to clock XMT and CPD address detector flip-flops (U2A, U1A). U1A and U2A outputs are determined by the logic of U1B. When U1B is set, U2A output XMT\* enables STATUS DATA to be driven onto RC BUS A and U1A is held reset by the STATUS\* input to the CPD logic circuit. When U1B is reset, XMT\* is high preventing data from being driven onto RC Bus A. U1B provides ENABLE CPD and enables the CPD address decoder U12.

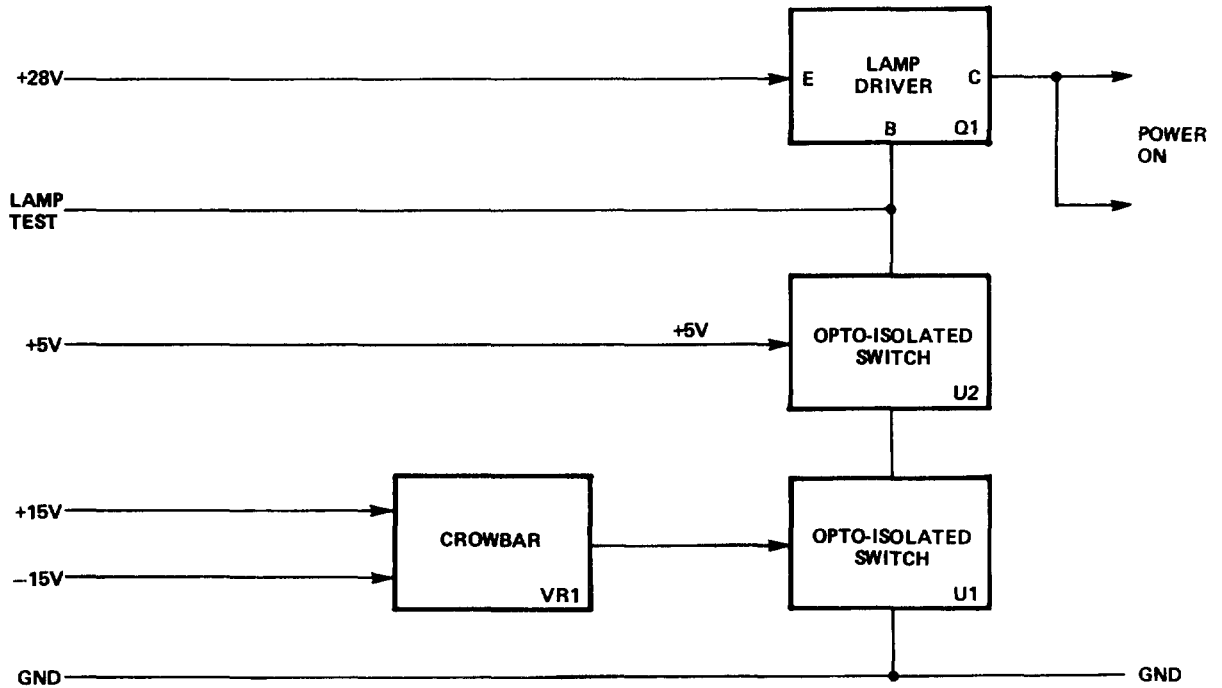
3-3.11.6 CPD Control. ENABLE CPD from U1A sets the data 6-8 enable flip-flop. (U3A, U22A, U26E). The flip-flop provides the signal ENABLE CPD DATA 6-8 fed to the CPD shift register circuit (U4D, U7, U22B, U22D). This signal allows bits 6-8 of the data word to be clocked into the CPD shift register. ENABLE CPD is also used to enable a counter circuit (U4A, U5, U14A, U14B, U14C, U16). This circuit counts CLOCK signals. When the count reaches three, the circuit provides the DIS CPD DATA 6-8\* signal. This signal resets the data 6-8 enable flip-flop and inhibits data input to the shift register. When the counter circuit reaches a count of 50, the CPD event pulse flip-flop (U4B, U14C, U14D, U15B) is clocked and the CPD event shift register (U4C, U6, U23F) is reset. The output from the CPD event pulse flip-flop is fed to the CPD event shift register. The 5 MHz (CLK) is applied to the register which provides three sequential control signals. The first signal is ENABLE CPD DATA 55. This allows the CPD shift register to store data-bit 55. The second signal is STORE CPD DATA. This is decoded with the two CPD address-bits in CPD address decoder U12. U12 output enables one of the four CPD address lines CPDADDR (0, 2, 4, 6). Each address line controls one of the four CPD control registers (U35-U38) and one of the four CPD reset generators (U18, U28). Data from the CPD shift register is loaded into the addressed CPD control register. Decoders U45-U48, one dedicated to each CPD control register, decode the latched data (BIT 6-8). The decoder provides the appropriate bandwidth information for the addressed CPD, as CPD 1 BW SEL - CPD 4 BW SEL. Latched data-bit 55 provides the sensitivity control information for the addressed CPD, SENS CONT 1-4. The appropriate CPD reset generator provides a reset signal. This signal CPD RESET 1-4 is used to dump the integrator charge in the selected CPD. The third control signal DISABLE CPD\*, resets the counter and CPD address detector circuits.

3-3.11.7 Indicator Lamps. The outputs from the four CPD, CPD 1 LOCAL \* thru CPD 4 LOCAL\* are used to drive front panel lamps. Each signal is fed to a pulse stretcher circuit (U9, U19). The outputs of the pulse stretcher are fed to AND/OR INVERT gates (U29, U39). The input signal is also fed via an inverter (U53C, U53D, U53E, U53F) into the gate. The gate output is the longer of the two input signals. This arrangement allows the lamps to be lit for transient as well as continuous activity in the CPD. The operation of the lamp circuit for the 150 Hz detectors is similar. A LAMP TEST\* input to the lamp drivers causes all lamps to light.



3-3.12 Power Monitor CCA (A17), Functional Description. Refer to figure 3-13, a functional block diagram of A17. A17 provides overvoltage protection for the CCAs in the RSPU. Crow-bar device VR1 monitors the power supply voltages. When there is an overvoltage condition, the device short-circuits the power supply. The short circuit causes the overcurrent protection circuit, part of each power supply module, to operate.

switches U1 and U2. The absence of either +/-15V at the input to U1, or +5V at the input of U2 cause lamp driver Q1 to switch off.



53885

Figure 3-13. Power Monitor CCA (A17), Functional Block Diagram



CHAPTER 4  
DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

NOTE

This Chapter is not applicable since there are no Direct Support (DS) maintenance functions allocated on the RSPU. However, DS maintenance provides forward maintenance support and technical assistance to the organizational level through the use of mobile Maintenance Support Teams on a periodic or as required basis.



## CHAPTER 5

### GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

5-1. **SCOPE.** This chapter provides the information required for general support maintenance personnel to perform the maintenance tasks authorized in the Maintenance Allocation Chart (MAC). Maintenance is performed using Electronic Equipment Test Station AN/USM-410 for those items listed in table 5-1. Manual testing procedures are provided for those modules not tested on the AN/USM-410. These modules will be evacuated to SIG/INT EW section for diagnostic testing and repair.

5-2. **TEST LEVEL DESCRIPTIONS.** Four levels of test can be performed using the AN/USM-410. The levels are defined as follows:

a. Level 1. Go-chain (performance) test at unit level. No disassembly is required.

b. Level 2. Unit level diagnostic tests necessary to isolate faults to a printed circuit assembly/module; or a function group of printed circuit assemblies/modules. Minimal disassembly is required for testing.

c. Level 3. Go-chain (performance) tests at printed circuit assembly/module level.

d. Level 4. Printed circuit assembly/module level diagnostic tests necessary to fault isolate to the active piece part/functional group.

5-3. **TEST PROCEDURES.** Tests for each Unit Under Test (UUT) specified in table 5-1 require Interface Devices (ID) and cables to connect the UUT to the AN/USM-410. The required items of test equipment for each UUT are identified in table 5-1. Interconnection data is shown in the referenced figure. Automatic Test Equipment Software Programs (ATESP) written for the UUTS specified are stored on Test Program Tape (TPT) and are identified by a specific TPT number. TPT number, program entry points and file names are listed in table 5-1. Operation of the AN/USM-410 is described in technical manual PDEP 11-6625-2773-12-3. The test procedure for each UUT is as follows:

a. Pre-test inspection:

- (1) Inspect the UUT as described in table 5-2.
- (2) Correct any defects found before beginning testing.

b. Preprogram start procedure:

- (1) Perform the turn-on procedure for the AN/USM-410 as described in PDEP 11-6625-2773-12-3.
- (2) Mount the ATESP magnetic tape in accordance with the instructions detailed in PDEP 11-6625-2773-12-3.

Table 5-1. Test Information

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
RSPU (5051650-1)	1 & 2	PIU-B ID	5053510-1	000500	Verification Test	5051650SRV.IC	Fig 5-1 FO-19
		PIU-B Plug-in Adapter #11	5053521-1	000550	Entry to Adapter Self-test	5051650ADP.IC 5051650PV1.IC	
	RF ID #1	5053526-1	001000	ATE/UUT Hookup	5051650PV1.IC 5051650PV2.IC		
	400 Hz Switching ID	5053501-2	010000	Signature Resistor Tests	5051650PV3.IC 5051650PV4.IC		
	RF Milli-volt Meter	Boonton Model 92BD	010900	RC Bus A Data Monitor Test	5051650PV5.IC 5051650PV6.IC		
	RCVR Set	5051640-1	012000	Carrier Presence Detector 1 NBIF Output #1 Test	5051650PV7.IC 5051650PV8.IC 5051650PV9.IC		
	Receiver R-2144A/URR	ESR 801-B					
	Directional Coupler	5054986-1					
	Extender Card	C5077448-1					
	Wide Band Noise Generator	Micronetics Model PNG 5110	013400	Carrier Presence Detector 2 NBIF Output #1 Test			
	Accessories (p/o ID Accessory Kit):						
50 Ohm TNC Termination (Qty 7)	C5076294-1						

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
RSPU (5051650-1) (Continued)		BNC to BNC feedthru	C5076232-1				Fig 5-1 F0-19
		Cables:					
		W1	5053528-1	014800	Carrier Presence Detector 3 NBIF		
		W5	5053529-1		Output #1 Test		
		W10 (Qty 2)	5053530-1				
		W14	C5075936-1	016200	Carrier Presence Detector 4 NBIF		
		W16	C5075905-1		Output #1 Test		
		W25	C5075902-1				
		W26	C5075907-1	017600	Tone Detector 1 Aux Audio		
		W30	C5075975-1		Out RCVR Test		
		W38	C5076102-1				
		W46	C5076174-1	018900	Tone Detector 2 Aux Audio		
		W48	C5076178-1		Out RCVR Test		
		W53	C5076188-1				
		W68	C5076211-1	020200	Tone Detector 3 Aux Audio		
		W70	C5076215-1		Out RCVR Test		
		W71	C5076217-1				
		W81	C5076271-1	021500	Tone Detector 4 Aux Audio		
		W89	C5076292-1		Out RCVR Test		
		W90	C5076293-1				
	W222	C5110273-3					
	W140	C5075955-1					
	W416	C5114425-1					
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5051650-1	022800	RC Bus B Clock Monitor Test		

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
Carrier Presence Detector CCA (5052001-2 or -3)	3 & 4	PIU-B ID	5053510-1	000500	Verification Test	5052001SRV.IC	Fig 5-2
		PIU-B Plug-in Adapter #4	5053514-1	000550	Entry for Adapter Self-Test	5052001ADP.IC 5052001PV1.IC	
	RF ID #2	5053527-1					
	Cables:		001000	ATE/UTT Hookup			
	W16	C5075902-1					
	W46	C5076174-1					
	W223 (Qty 5)	C5110273-2					
W225	C5110275-1						
W226	C5110276-1						
W227	C5110277-1						
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052001-1				
150 Hz Tone Detector CCA (5052013-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052013SRV.IC	Fig 5-3
		PIU-A Plug-in Adapter #1	C5076124-1	001000	ATE/UTT Hookup	5052013ADP.IC 5052013PV1.IC	
	Software: Automatic Test Equipment Software Program (ATESP)	TPT5052013-1					



Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
RC Bus Status Interface CCA (5052009-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052009SRV.IC	Fig 5-4
		PIU-A Plug-in Adapter #10	C5076133-1	001000	ATE/UTT Hookup	5052009ADP.IC 5052009PV1.IC	
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052009-1	010000	Start of Performance Verification	5052009LF1.DL 5052009LF2.DL	
		<b>NOTE</b>				This test program, due to its large size, requires a formatted disk DPØ with no other stored program.	
RC Bus Interface 8085 CPU-A CCA (5052049-3)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052049SRV.IC 5052049ADP.IC	Fig 5-5
		PIU-A Plug-in Adapter #9	C5076132-1				
		Cables: W91 W92	C5076260-1 C5075948-1	001000	ATE/UUT Hookup	5052049PV1.IC	
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052049-3	010000	Start of Performance Verification	5052049LF1.DL	

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
Micro-Memory CCA (5052057-1) or (5052057-2)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052057SRV.IC	Fig 5-6
		PIU-A Plug-in Adapter #6	C5076129-1	001000	ATE/UTT Hookup	5052057ADP.IC	
		Test Cable W233	C5110283-1	010000	Start of Performance Verification	5052057PV1.IC	
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052057-1				
Control Sequencer CCA (5052045-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052045SRV.IC	Fig 5-7
		PIU-A Plug-in Adapter #7	C5076130-1	001000	ATE/UTT Hookup	5052045ADP.IC	
		Test Cable W235	C5110285-1	010000	Start of Performance Verification	5052045PV1.IC	
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052045-1			5052045LF1.DL	

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
Address Generator CCA (5052037-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052037SRV.IC	Fig 5-8
		PIU-A Plug-in Adapter #7	C5076130-1	001000	ATE/UTT Hookup	5052037ADP.IC	
	Test Cable W236	C5110432-1	010000	Start of Performance Verification	5052037PV1.IC		
	Software: Automatic Test Equipment Software Program (ATESP)	TPT5052037-1			5052037LF1.DL		
4K RAM CCA (5052033-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052033SRV.IC	Fig 5-9
		PIU-A Plug-in Adapter #3	C5076126-1	001000	ATE/UTT Hookup	5052033ADP.IC	
	Software: Automatic Test Equipment Software Program (ATESP)	TPT5052033-1	010000	Start of Performance Verification	5052033PV1.IC		
			5052033LF1.DL				
			5052033P0.DT				
			5052033P1.DT				
			5052033P2.DT				
		5052033P3.DT					
		5052033P4.DT					
		5052033P5.DT					

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
I/O Register Set CCA (5052025-1)	3 & 4	PIU-A ID	5053507-1	000500	Verification Test	5052025SRV.IC	Fig 5-10
		PIU-A Plug-in Adapter #6	C5076129-1	001000	ATE/UTT Hookup	5052025ADP.IC 5052025PV1.IC	
		Cable W233	C5110283-1	010000	Start of Performance Verification	5052025LF1.DL	
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5052025-1				
IF Down Converter CCA (5052017-1)	3 & 4	PIU-B ID	5053510-1	000500	Verification Test	5052017SRV.IC	Fig 5-11
		PIU-B Plug-in Adapter #4	5053514-1	001000	ATE/UTT Hookup	5052017ADP.IC 5052017PV1.IC	
		RF ID #2	5053527-1				
		RF Millivolt Meter	Boonton 928D				
		Cables: W16	C5075902-1				
		W46	C5076174-1				
		W223 (Qty 4)	C5110273-2				
W226	C5110276-1						
W227	C5110277-1						
Adapter TNC Jack to BNC Plug (p/o ID Accessory Kit)	5053527-1						

Table 5-1. Test Information - Continued

Unit under test (UUT)	Test level	Test equipment		Program entry points		File names	Test set-up diagram
		Item	Part no.	Entry point	Test		
Converter IF Assembly (5051653-1)	3 & 4	Software: Automatic Test Equipment Software Program (ATESP)	TPT5052017-1				Fig 5-12
		PIU-B ID	5053510-1	000500	Verification Test	5051653SRV.IC	
		PIU-B Plug-in Adapter #4	5053514-1	001000	ATE/UTT Hookup	5051653ADP.IC	
		RF ID #2	5053527-1			5051653PV1.IC	
		Filter Assembly	C5114334-1				
		Cables:					
		W14	C5075936-1				
		W16	C5075902-1				
		W38	C5076101-1				
		W222 (Qty 4)	C5110273-3				
W223 (Qty 5)	C5110273-2						
W226	C5110276-1						
W250	C5110444-1						
		Software: Automatic Test Equipment Software Program (ATESP)	TPT5051653-1				

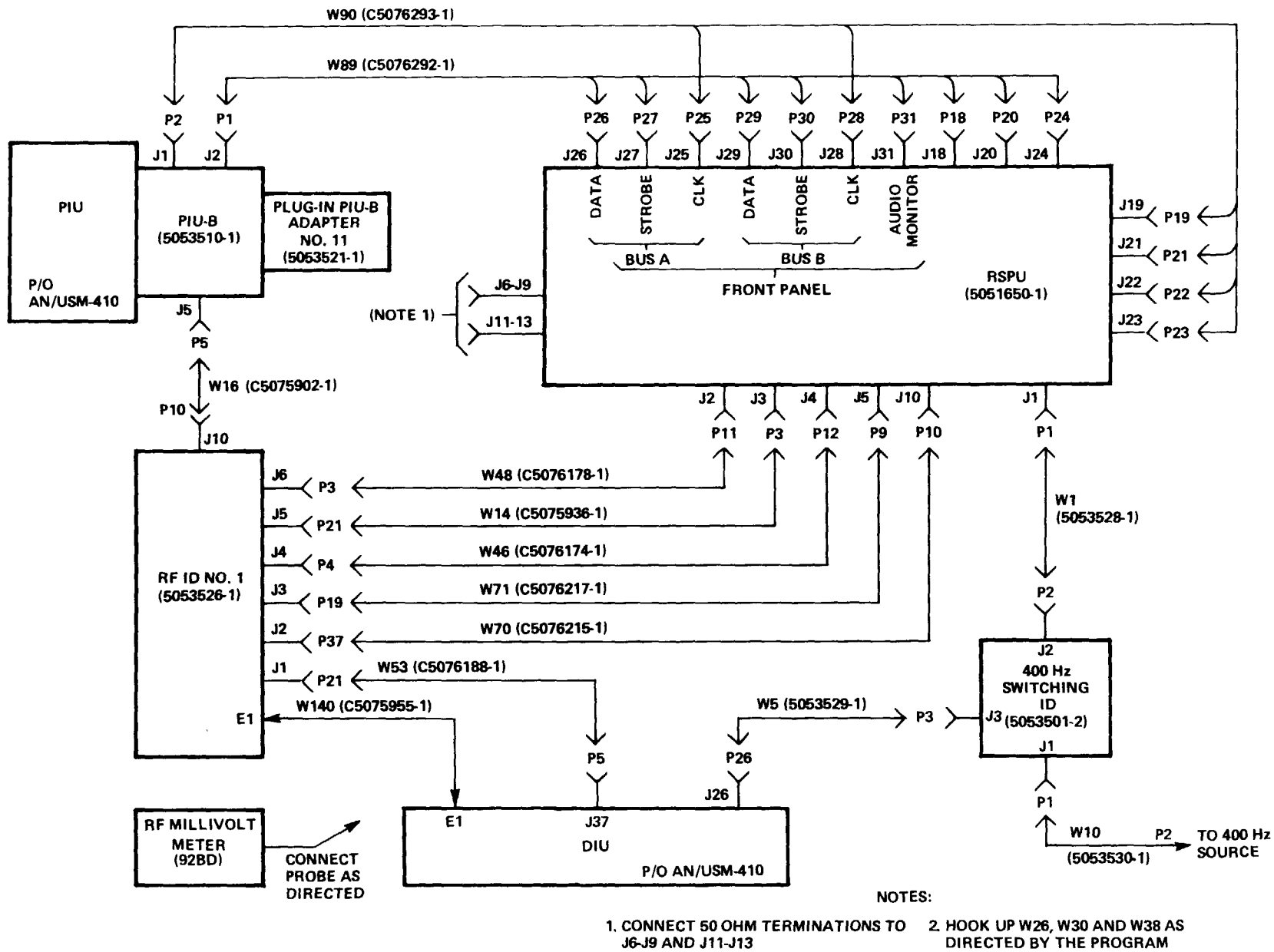


Figure 5-1. RSPU, Test Set-up Diagram

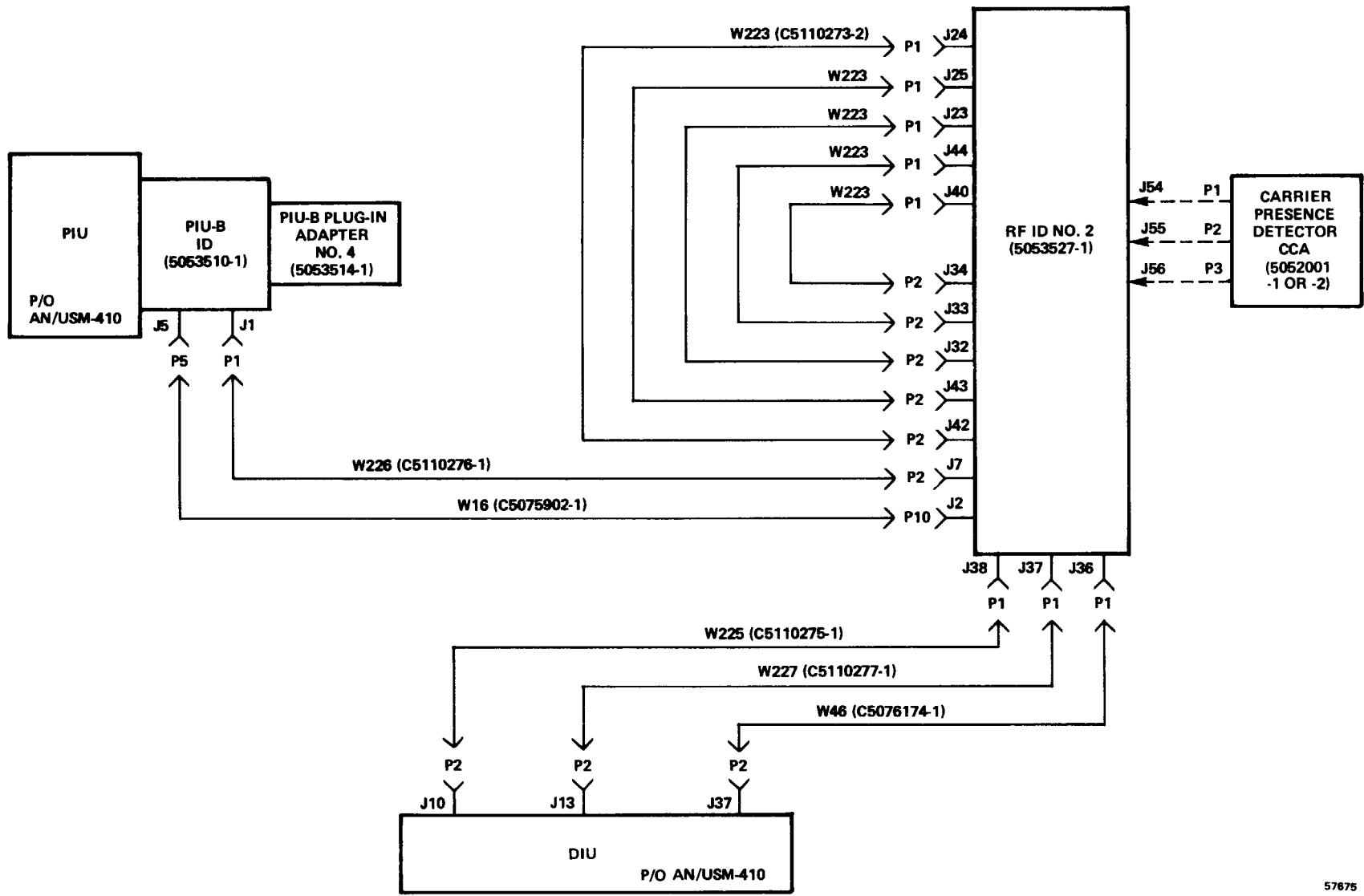


Figure 5-2. Carrier Presence Detector CCA (A1-A4), Test Set-up Diagram

- (3) Load the ATESP from magnetic tape to the removable disk by entering the following commands at the keyboard:

DIR DPO ret

INIT MTO ret

LOAD/A/V MTO: 0 (file names from table 5-1, one space between each name) ret

example: LOAD/A/V MTO: @ 05051630PV1.IC 5051630ADP.IC 5051630SRV.IC ret

#### NOTE

When more than three file names are used, enter three file names followed by the ^ character and a carriage return, then the remaining file names.

- (4) Verify that all the file names required are displayed on the Video Display Terminal (VDT).

- (5) Enter the following command at the keyboard:

RELEASE MTO ret

- (6) Remove the ATESP magnetic tape in accordance with the instructions detailed in PDEP 11-6625-2773-12-3.

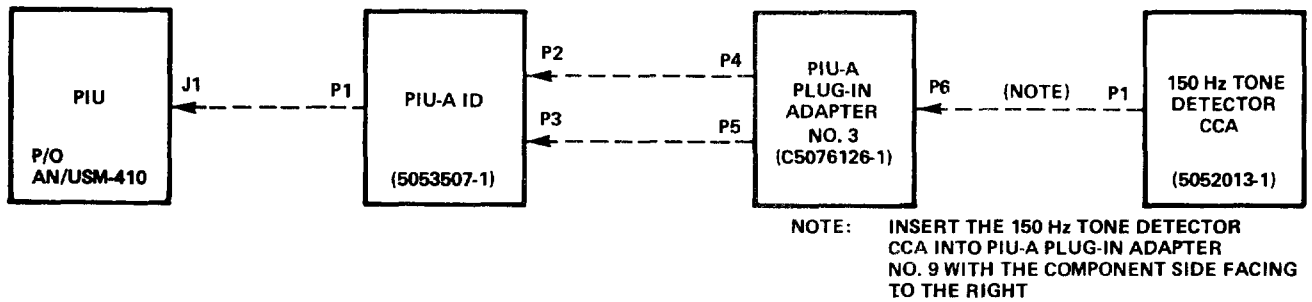
#### c. UUT testing:

- (1) At the Test Operator's Panel Select; the desired interface(s) (printer, disk, etc.); the desired test result output (ALL TESTS or FAILURES ONLY) .

#### NOTE

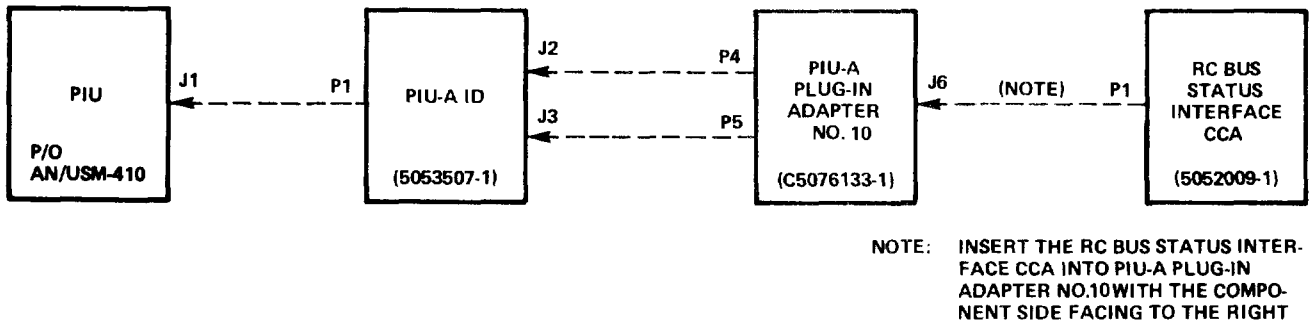
If no selection is made, no test results will be saved.





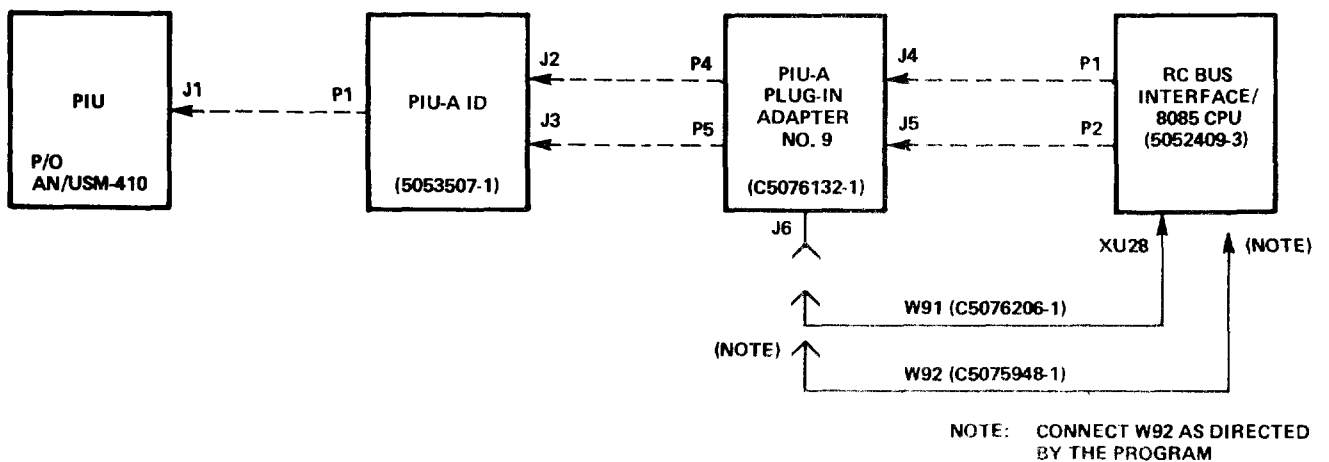
57685

Figure 5-3. 150 Hz Tone Detector CCA (A5), Test Set-up Diagram



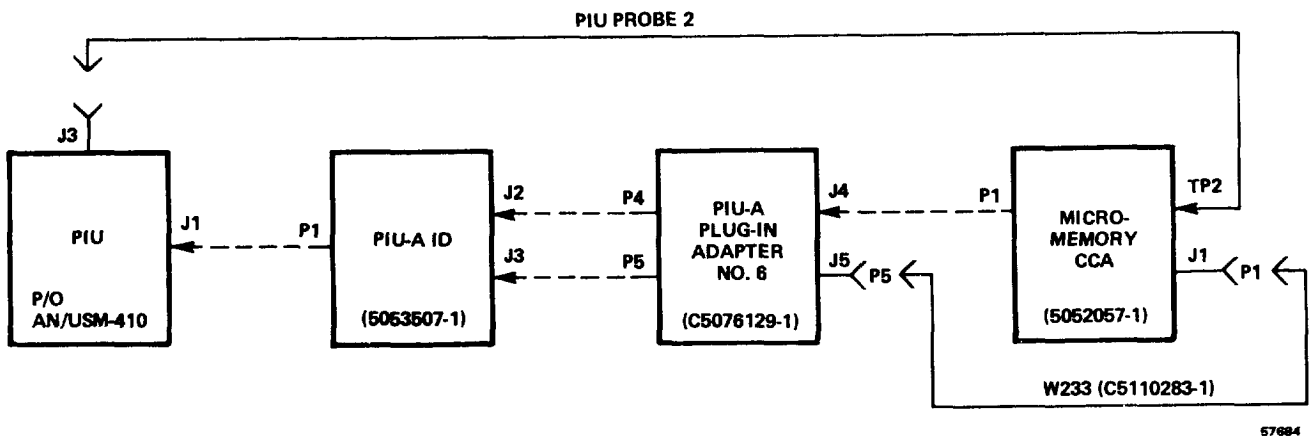
57676

Figure 5-4. RC Bus Status Interface CCA (A6), Test Set-up Diagram



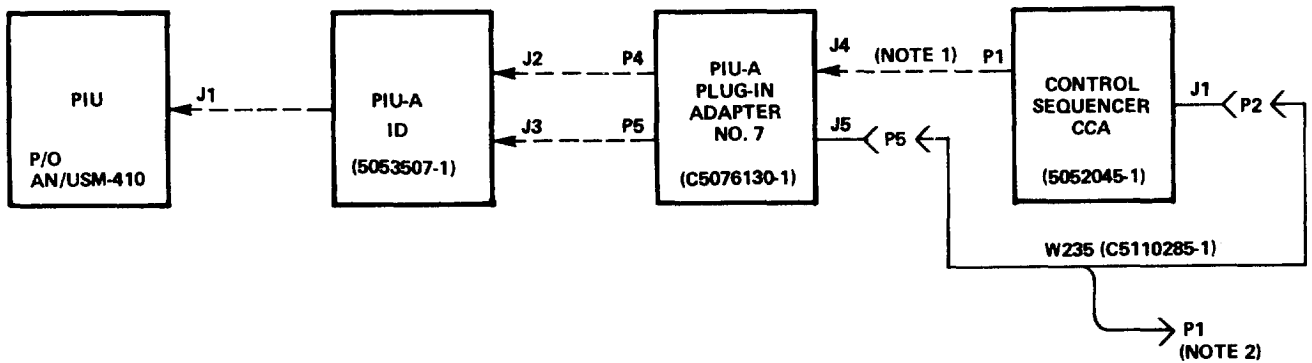
57683

Figure 5-5. RC Bus Interface/8085 CPU CCA (A7), Test Set-up Diagram



57684

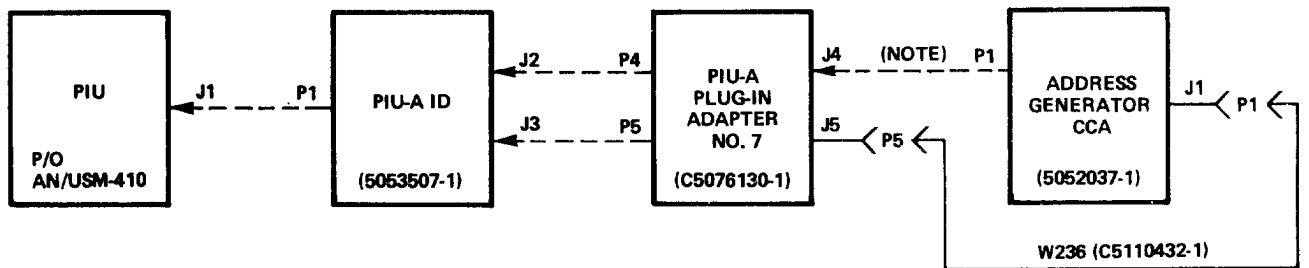
Figure 5-6. Micro-memory CCA (A8), Test Set-up Diagram



NOTE: 1. INSERT THE CONTROL SEQUENCER CCA INTO PIU-A PLUG-IN ADAPTER NO. 7 WITH THE COMPONENT SIDE FACING TO THE RIGHT  
 2. DO NOT CONNECT W235-P1

57680

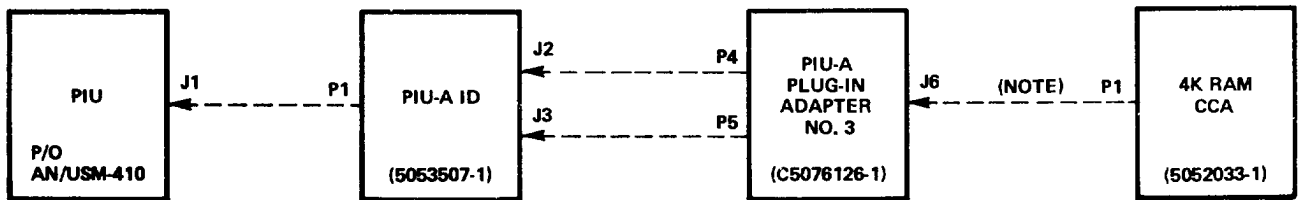
Figure 5-7. Control Sequencer CCA (A9), Test Set-up Diagram



NOTE: INSERT THE ADDRESS GENERATOR CCA INTO PIU-A PLUG-IN ADAPTER NO. 7 WITH THE COMPONENT SIDE FACING TO THE RIGHT

57681

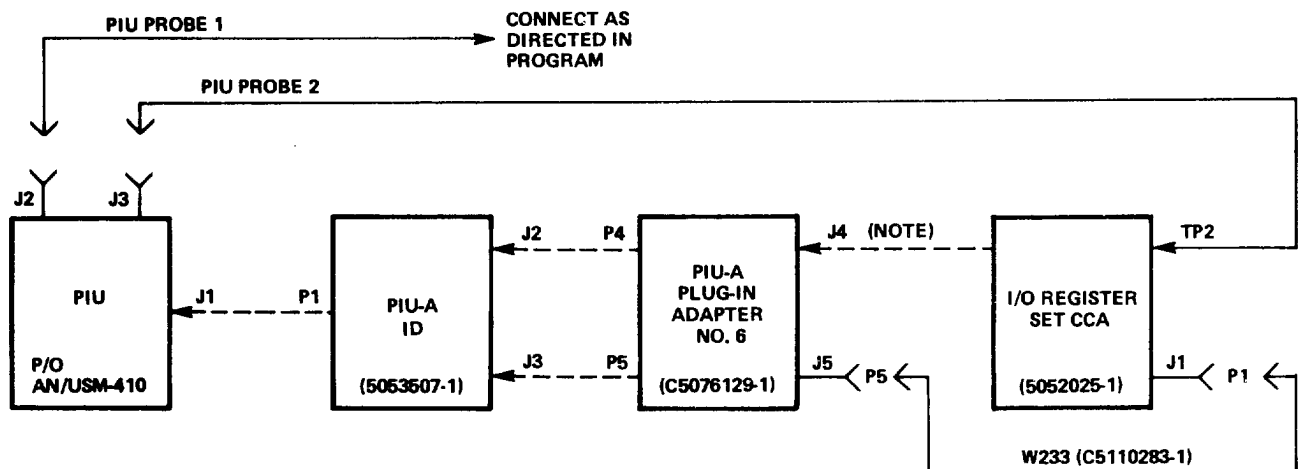
Figure 5-8. Address Generator CCA (A10), Test Set-up Diagram



NOTE: INSERT THE 4K RAM CCA INTO THE PIU-A PLUG-IN ADAPTER NO. 3 WITH THE COMPONENT SIDE FACING TO THE RIGHT

57682

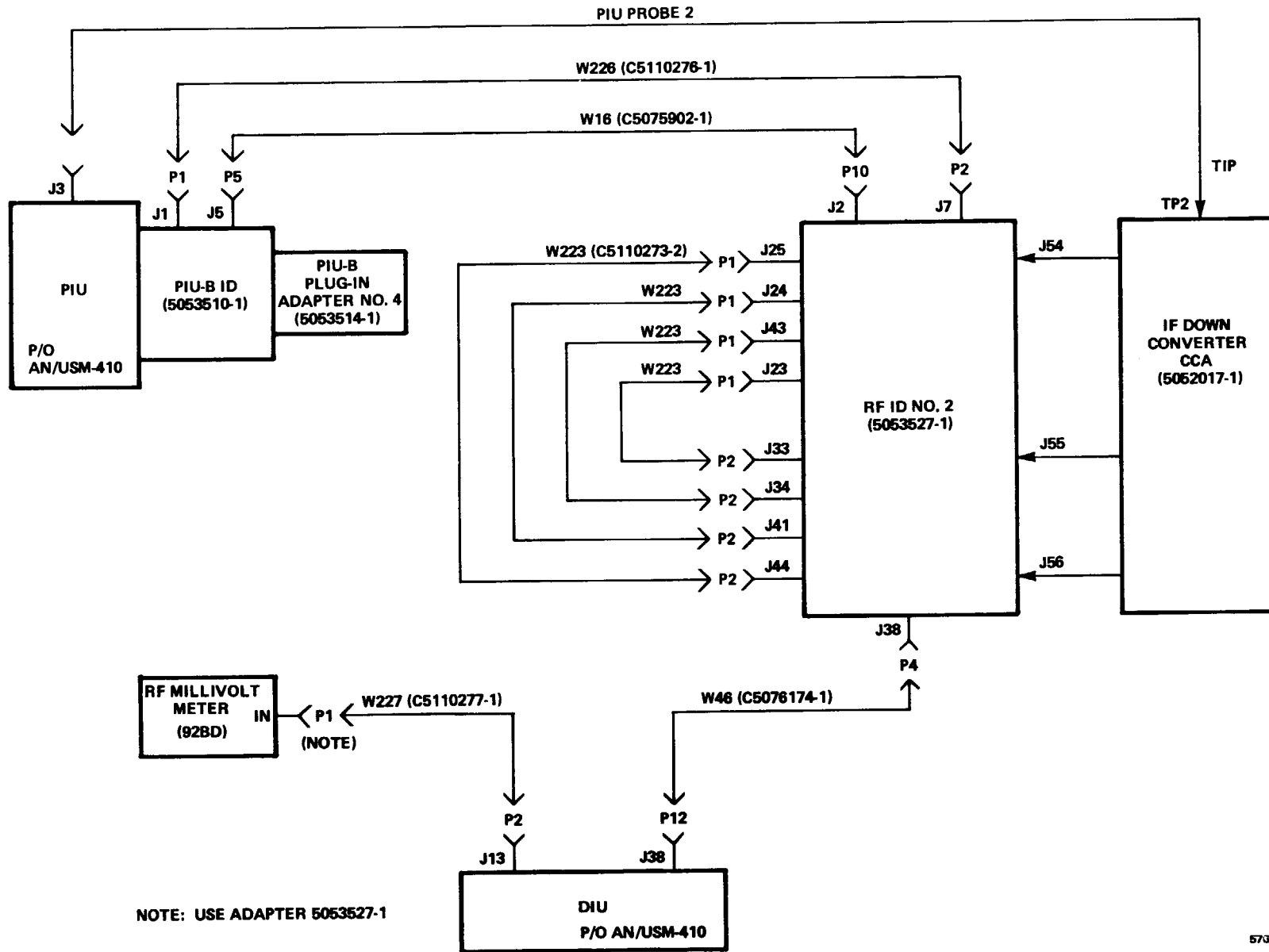
Figure 5-9. 4K RAM CCA (A11), Test Set-up Diagram



NOTE: INSERT THE I/O REGISTER SET CCA INTO PIU-A PLUG-IN ADAPTER NO. 6 WITH THE COMPONENT SIDE FACING TO THE RIGHT

57679

Figure 5-10. I/O Register Set CCA (A12), Test Set-up Diagram



57377

Figure 5-11. IF Down Converter CCA (A14), Test Set-up Diagram

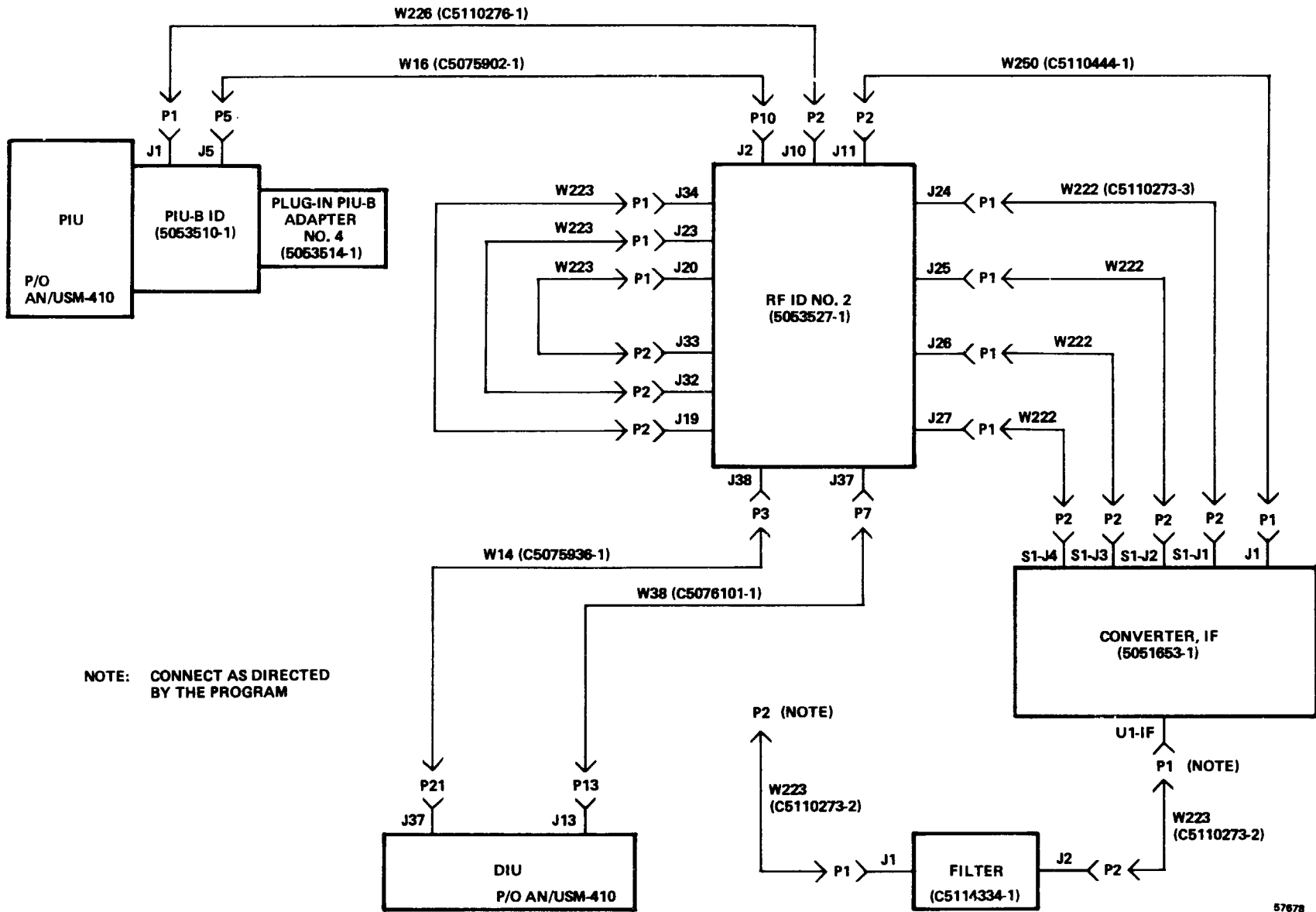


Figure 5-12. Converter IF Assembly (A20), Test Set-up Diagram

Table 5-2. Pre-Test Inspection

Assembly/ component	Inspection method	Normal indication	Procedure
RSPU	Visual	a thru c must be free of defects.	<ul style="list-style-type: none"> <li>a. Inspect exterior for dents, scratches, corrosion, damaged or missing hardware.</li> <li>b. Inspect all controls, indicators, and connections for broken, loose or damaged parts.</li> <li>c. With top and bottom covers removed, inspect all cables, wiring, and switches for burned contacts and insulation, broken or loose connections and other signs of damage.</li> </ul>

**CAUTION**

A1 thru A10 and A12 contain parts sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing or inserting these assemblies.

CCA A1 - A10 CCA A12	Visual	a thru c must be free of defects.	<ul style="list-style-type: none"> <li>a. Inspect for discolored, loose, broken or burned components and connections.</li> <li>b. Inspect for cold solder joints, and excessive solder.</li> <li>c. Inspect board for cracks, chips and breaks.</li> </ul>
IF Down Converter (A14)	Visual	a and b must be free of defects.	<ul style="list-style-type: none"> <li>a. Inspect for dents, scratches, corrosion, damaged, loose or missing hardware.</li> </ul>
Converter IF (A20)			<ul style="list-style-type: none"> <li>b. Inspect all cables and connectors for broken or loose connections and other signs of damage.</li> </ul>

Table 5-2. Pre-Test Inspection - Continued

Assembly/ component	Inspection method	Normal indication	Procedure
CCA A11	Visual	a thru c must be free of defects.	a. Inspect for discolored, loose, broken or burned components and connections.  b. Inspect for cold solder joints, and excessive solder.  c. Inspect board for cracks, chips and breaks.

- (2) Start ATESP/UUT testing by entering the following command at the keyboard:

```

TEST (the TPT number from table 5-1)PV1 ret
examples - { TEST 5051600PV1 ret
              TEST 5052332PV1 ret
              etc.

```

- (3) Based on the program entry points, described in table 5-1, select and execute one of the following options:

**NOTE**

The first entry point must be used for the first test of the UUT.

- (a) If the first entry point is to be used, press PROCEED.
- (b) Enter the appropriate entry point; press RETURN.

**WARNING**

HIGH VOLTAGES are used during test. Extreme caution should be exercised. These HIGH VOLTAGES could cause death.

- (4) Follow the instructions as they appear on the VDT until the program is complete.

NOTE

The system interconnection instructions displayed on the VDT are also provided in the figures referenced in table 5-1.

d. Program completion instructions:

(1) Disconnect the UUT from the AN/USM-410

(2) Store all interface adapters and interconnecting cables.

5-4. COMPONENT REMOVAL AND INSTALLATION. The procedure for removing components from the RSPU is described below. For part and hardware location and visual identification, refer to the Repair Parts and Special Tools List (RPSTL), Appendix C. table 5-3 lists the components.

**WARNING**

The following removal/installation procedures must be carried out with the unit disconnected from the AWUSM-410. When connected to the power source, HIGH VOLTAGE is present in the unit. This HIGH VOLTAGE could cause death.

Table 5-3. RSPU CCA/Module Identification

Component	Reference designation	Part number	Schematic diagram
Carrier Presence Detector	A1-A4	5052001-2/3	F0-7
150 Hz Tone Detector	A5	5052013-1	F0-8
RC Bus Status Interface	A6	5052009-1	F0-9
RC Bus Interface/8085 CPU	A7	5052049-3	F0-10
Micro-Memory	A8	5052057-1	F0-11
Control Sequencer	A9	5052045-1	F0-12
Address Generator	A10	5052037-1	F0-13
4K RAM	A11	5052033-1	F0-14
I/O Register Set	A12	5052025-1	F0-15
IF Down Converter	A14	5052017-1	F0-16
Contact Assy	A15	5051658-1	---
EMI Filter Assy	A16	5051780-2	---
Power Monitor	A17	5051928-1	F0-17
Indicator Light Assy	A18, A19	5053136-1	---
Converter IF	A20	5051653-1	F0-18
-6 Volt Regulator	A21	5055292-1	F0-6



CAUTION

A1 thru A10 and A12 contain parts sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing or installing these assemblies.

CAUTION

When reconnecting coaxial cables, torque SMA connectors to 8 inch pounds. Use the torque wrench supplied. Failure to tighten the connectors properly will cause excessive VSUR which will adversely affect the operation of the unit.

CAUTION

An RFI gasket is fitted to each of the covers. Ensure the gasket is undamaged and seats properly when the covers are replaced.

5-4.1 Cover Removal. The procedure for removing top and bottom covers is as follows:

- a. Release all the captive turnlock fasteners by turning 1/4 turn counter-clockwise.
- b. Lift off the covers.

5-4.2 Circuit Card Assembly (A1 thru A12, A14), Removal/Installation. A1 thru A12 and A14 are mounted in the card file assembly. The A13 slot is not used. To remove a CCA from the card file proceed as follows:

- a. Remove the top cover. Refer to para 5-4.1.
- b. Release the securing catches at each side of the CCA.

CAUTION

A1 thru A10 and A12 contain parts sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing or installing these assemblies.

- c. Extract the CCA using circuit card extractor tool 5054268. Lift straight up and remove the CCA from the unit.
- d. To replace a CCA, insert the card into the guides in the card file assembly. Push down until firmly seated.
- e. Secure the catches at each side of the CCA.
- f. Replace the top cover.

5-4.3 Power Monitor CCA (A17), Removal/Installation. CCA A17 is removed/replaced as follows:

- a. Remove the top and bottom covers. Refer to para 5-4.1.
- b. Remove and retain the hardware securing A17 to the chassis.
- c. Label and unsolder all connections to A17.
- d. Remove A17 from the unit.
- e. To install a replacement, reverse the procedure detailed in steps a. thru d.

5-4.4 Converter IF (A20), Removal/Installation. Module A20 is removed/replaced as follows:

- a. Remove top and bottom covers. Refer to para 5-4.1.
- b. Disconnect the four coaxial cables from connectors J1 thru J4 on A20S1.
- c. Disconnect the coaxial cable connected to A20U1 - IF.
- d. Release the two captive screws and remove the multi-pin connector from J1 on the module.
- e. Supporting the module, remove the four screws securing the module to the left-hand side of the chassis. Retain the screws and washers for reassembly.
- f. Lift the module from the chassis and remove through the top of the unit.
- g. To install a replacement, reverse the procedure detailed in steps a. thru e. Torque SMA connectors to 8 inch-pounds.

5-4.5 -6 Volt Regulator (A21), Removal/Installation. A21 is removed/replaced as follows:

- a. Remove bottom cover. Refer to para 5-4.1.
- b. Remove and retain the four screws and washers securing A21 to the rear of the chassis.
- c. Label and unsolder all connections.
- d. Remove the A21 from the unit.
- e. To install a replacement, remove the stand-off hardware from the faulty assembly and mount on the replacement part. Reverse the procedure detailed in steps a. thru d.

5-4.6 Power Supply Module (PS1), Removal/Installation. PS1 is mounted on the left-hand side of the chassis. To remove/replace PS1, carry out the following steps:

- a. Remove top and bottom covers. Refer to para 5-4.1.
- b. Remove and retain the six screws and washers securing the module to the chassis.
- c. Label and unsolder all connections to PS1.
- d. Remove PS1 and the thermal gasket from the unit.

CAUTION

Do not bend or flex the thermal gasket. The heat conducting properties are affected when the gasket is cracked or delaminated. An unserviceable gasket could cause damage to the power supply module.

- e. Inspect the gasket and replace as necessary.

NOTE

Use insulated sleeving (heat-shrink) of the appropriate inside diameter on all soldered connections.

- f. To install a replacement assembly, reverse the procedure detailed in steps a. thru e.

5-4.7 Power Supply Modules (PS2, PS3), Removal/Installation. PS2 and PS3 are mounted on the right-hand side of the chassis towards the rear. The power supply modules are removed from the unit as follows:

- a. Remove the top and bottom covers. Refer to para 5-4.1.
- b. Label and unsolder all connections to the power supply being removed.
- c. Supporting the module, remove the four screws securing the power supply to the chassis. Retain the screws and washers for reassembly.

CAUTION

Do not bend or flex the thermal gasket. The heat conducting properties are affected when the gasket is cracked or delaminated. An unserviceable gasket could cause damage to the power supply module.

- d. Remove the module and thermal gasket from the unit.
- e. Inspect the gasket and replace as necessary.

NOTE

Use insulated sleeving (heat-shrink) of the appropriate inside diameter on all soldered connections.

- f. To install a replacement, reverse the procedure detailed in steps a. thru e.

5-4.8 EMI Filter Assembly (A16), Removal/Installation. A16 is removed as follows:

- a. Remove PS2. Refer to para 5-4.7 for procedure.
- b. Remove and retain the four screws securing the module to the rear panel.
- c. Label and unsolder the connection to ground terminal E1.
- d. Remove and retain the six screws securing the module cover. Lift off the cover.
- e. Label and unsolder the output connections to FL-1, FL-2, and E2.
- f. Slip the wires through the grommet and remove the module from the unit.
- g. To install a replacement, reverse the procedure detailed in steps a. thru f.

5-4.9 Filter Assembly (FL1), Removal/Installation. FL1 is removed/replaced as follows:

- a. Remove top and bottom covers. Refer to para 5-4.1.
- b. Remove the two coaxial cables connected at J1 and J2 (access from the underside of the unit).
- c. Supporting FL1, remove and retain the four screws and washers securing the assembly to the chassis.
- d. Remove FL1 through the bottom of the unit.
- e. To install a replacement, reverse the procedure detailed in steps a. thru d. Torque SMA connectors to 8 inch-pounds.

5-4.10 Contact Assembly (A15), Removal/Installation. To remove/replace A15 carry out the following steps:

- a. Remove top and bottom covers. Refer to para 5-4.1.

CAUTION

A1 thru A10 and A12 contain parts sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing or installing these assemblies.

- b. Remove A1 thru A14 from the card file. Store the CCA safely.

- co Label and carefully remove all back-plane connectors.
- d. Using extractor tool CET-C6B, remove the coaxial contacts from connectors XA1P2 thru XA4P2 and XA14P2.
- e. Remove and retain the self-locking nuts securing each of the two cable-clamps at the rear of the assembly.

CAUTION

When unfastening cable-ties, take care not to cut or damage the wire harness.

- f. Unfasten all cable-ties securing wiring to the assembly.
- g. Remove and retain the hardware securing ground terminal E1 to the assembly.
- h. Unsolder the wires connected to W1, W2 and W3.
- i. Remove the four screws, nuts and washers securing the assembly to the front chassis cross member. Retain all hardware for reassembly.
- j. Remove the four screws, nuts, and washers securing the assembly to the rear chassis cross member. Retain all hardware for reassembly.
- k. The assembly can now be removed from the unit.
- l. Before installing the replacement assembly, check the following:
  - (1) All wire wrap pins are undamaged.
  - (2) All key positions are as described in table 5-4. Figure 5-13 shows key positioning.
  - (3) Wire wrap connections on the back-plane are as described in table 5-i5.

NOTE

Use insulated sleeving (heat-shrink) of the appropriate inside diameter on the soldered connections to W1, W2, and W3.

- m. To install the replacement assembly, reverse the procedure detailed in steps a. thru k.

5-4.11 RF Cable Assemblies (W2 - W20), Removal/Installation. Cable routing is described in table 5-5. To replace a damaged cable carry out the following steps:

NOTE

Torque all SMA connectors to 8 inch-pounds.

- a. Remove top and bottom covers. Refer to para 5-4.1.
- b. Identify the cable assembly to be removed.

Table 5-4. Contact Assembly, Key Positions

Reference designation	Key 'A' position	Key 'B' position
XA1P1	5	5
XA1P3	5	5
XA2P1	5	5
XA2P3	5	5
XA3P1	5	5
XA3P3	5	5
XA4P1	5	5
XA4P3	5	5
XA5	4	8
XA6	5	2
XA7	5	8
XA8	4	7
XA9	5	3
XA10	4	6
XA11	2	6
XA12	2	3
XA13	(Vacant slot)	-
XA14P1	4	4
XA14P3	4	4

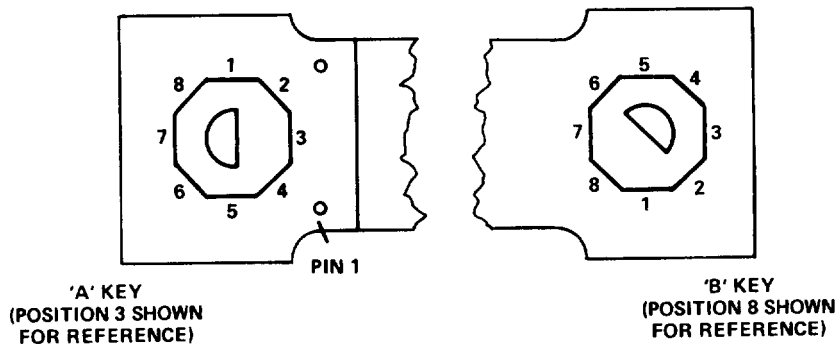


Figure 5-13. Key Flat Positioning

Table 5-5. RF Cable Routing

Reference designation	From	To	Part number
W2	W2J1 W2E1	J2 XA1P2-4	5053250-26
W3	W3J1 W3E1	J3 XA2P2-4	5053250-25
W4	W4J1 W4E1	J4 XA3P2-4	5053250-22
W5	W5J1 W5E1	J5 XA4P2-4	5053250-20
W6	W6J1 W6E1	J6 XA1P2-5	5053250-27
W7	W7J1 W7E1	J7 XA2P2-5	5053250-24
W8	W8J1 W8E1	J8 XA3P2-5	5053250-22
W9	W9J1 W9E1	J9 XA4P2-5	5053250-20
W10	W10J1 W10E1	J10 XA1P2-3	5053250-23
W11	W11J1 W11E1	J11 XA2P2-3	5053250-24
W12	W12J1 W12E1	J12 XA3P2-3	5053250-26
W13	W13J1 W13E1	J13 XA4P2-3	5053250-27
W14	W14J1 W14P1	J14 A20S1-J1	C5077154-8
W15	W15J1 W15P1	J15 A20S1-J2	C5077154-7
W16	W16J1 W16P1	J16 A20S1-J3	C5077154-7
W17	W17J1 W17P1	J17 A20S1-J4	C5077154-7

Table 5-5. RF Cable Routing - Continued

Reference designation	From	To	Part number
W18	W18P1 W18E1	FL1-J1 XA14P2-4	5053245-15
W19	W19P1 W19E1	FL1-J2 XA14P2-2	5053245-7
W20	W20P1 W20E1	A20U1-J1 XA14P2-5	C5077155-32

c. Remove cable assemblies W2 thru W13 as follows:

- (1) Remove the A1 thru A4, refer to para 5-4.2 for procedure. Store the CCA safely.
- (2) Remove the jam-nut securing the connector, (J2 thru J13) at the J1 end of the cable, to the rear of the chassis.

CAUTION

When unfastening cable-ties, take care not to cut or damage wiring in the wire harness.

- (3) Unfasten the cable-ties securing the cable to the wiring harness.
- (4) Loosen cable clamps as necessary to release the cable from the harness.
- (5) Using extraction tool CET-C6B, remove the coaxial contact from the connector at the E1 end of the cable. Refer to table 5-5.
- (6) Remove the cable from the unit.
- (7) To install a replacement cable, reverse the procedure detailed in steps c. (1) thru c. (7).
- (8) Replace top and bottom covers. Refer to para 5-4.1.

d. Remove cable assemblies W14 thru W17 as follows:

- (1) Remove the jam-nut securing the connector at the J1 end of the cable (J14 thru J17) to the rear-of the chassis.

CAUTION

When unfastening cable-ties, take care not to cut or damage the wiring in the wiring harness.

- (2) Unfasten the cable-ties securing the cable in the bundle.



- (3) Disconnect the coaxial connector at the E1 end of the cable.
  - (4) Remove the cable from the unit.
  - (5) To install a replacement cable, reverse the procedure detailed in steps d.(1) thru d.(4). Torque the SMA connector to 8 inch-pounds.
  - (6) Replace top and bottom covers, refer to para 5-4.1.
- e. Remove cable assemblies W18 thru W20 as follows:
- (1) Remove A14, refer to para 5-4.2 for procedure. Store A14 safely.
  - (2) Disconnect the connector at the J1 end of the cable. Refer to

CAUTION

When unfastening cable-ties, take care not to cut or damage the wiring in the wiring harness.

- (3) Unfasten the cable ties securing the cable to the wire harness.
- (4) Using extraction tool CET-C6B, remove the coaxial contact from XA14P2 at the E1 end of the cable. Refer to table 5-5.
- (5) Remove the cable from the unit.
- (6) To install a replacement cable, reverse the procedure detailed in steps e.(1) thru e.(5). Torque SMA connectors to 8 inch-pounds.
- (7) Replace top and bottom covers. Refer to para 5-4.1.

5-4.12 Indicator Light Assembly (A18, A19), Replacement. A18 and A19 are mounted on the front panel. Replace a faulty assembly as described in the following subparagraphs.

NOTE

Individual indicator lights can be replaced without removing the assembly from the unit. Refer to para 5-9.

5-4.12.1 Removal. To remove a defective assembly from the unit carry out the following steps:

- a. Lower the front panel as follows:

CAUTION

An RFI gasket is fitted to the panel. Ensure the gasket is undamaged and seats properly when the panel is replaced.

- (1) Unscrew the rubber boot on the POWER RESET actuator. The boot should be finger-tight.

- (2) Remove and retain the ten screws securing the panel to the chassis.
- (3) Gently pull the panel forward to the extent of the service loop in the wiring harness.
- (4) Lower and support the panel.
- (5) Remove the threaded bushing from the circuit breaker actuator shaft. Retain the bushing for reassembly.

- b. Label and unsolder all wires connected to the defective assembly.
- c. Remove and retain the four countersunk screws securing the assembly to the front panel.
- d. Remove and retain the nuts and washers from the two remaining screws securing the assembly to the panel. Remove and retain the screws.
- e. The assembly may now be removed from the panel.

5-4.12.2 Installation. Install a replacement assembly as follows:

- a. Remove and retain the four pan-head screws from the front of the replacement assembly.
- b. Position the assembly on the front panel and secure using the hardware retained in steps c. and d.
- c. Solder the connecting wire to the terminals of the assembly.
- d. Raise and secure the front panel. Refer to para 5-4.12.1.a.
- e. Ensure the assembly is fitted with serviceable lamps. Refer to para 5-9.
- f. Install the four pan-head screws retained in step a. in the defective assembly. Repair as described in para 5-9.

5-4.13 Filter-Jack Assembly (A22), Removal/Installation. To remove A22 from the unit carry out the following steps:

- a. Remove top and bottom covers. Refer to para 5-4.1.
- b. Label and unsolder the connections to the assembly.
- c. Remove and retain the jam-nut securing the assembly to the front panel.
- d. Remove and retain the cover and spring washer.
- e. Remove the assembly from the panel.

**NOTE**

Use insulated sleeving (heat-shrink) of the appropriate inside diameter on soldered connections.

- f. To install a replacement assembly, reverse the procedure detailed in steps a. thru e. above.

5-4.14 Fan Assembly (B1), Removal/Installation. To remove/replace B1 carry out the following steps:

- a. Remove top and bottom covers. Refer to para 5-4.1,
- b. Label and remove the three wires connected to the terminal block on B1.
- c. Remove and retain the hardware securing the two cable clamps supporting the wire harness on B1.
- d. Remove and retain the four screws, lock washers, and flat washers securing B1 to the mounting plate.
- e. Carefully remove B1 from the unit.
- f. To install a replacement, reverse the procedure detailed in steps a. thru e.

5-4.15 Capacitor (C1), Removal/Installation. To remove/replace C1 carry out the following steps:

- a. Remove the top cover. Refer to para 5-4.1.
- b. Label and disconnect the three wires connected to the terminals of B1.
- c. Remove and retain the two screws and washers securing C1 mounting bracket to the rear of the chassis.
- d. Unsolder the leads of the capacitor from terminals E3 and E4.
- e. Remove the faulty capacitor from the spring clip. ■
- f. To install a replacement, reverse the procedure detailed in steps a. thru e. ■

5-4.16 Circuit Breaker Assemblies (CB1 - CB4), Removal/Installation. To remove/replace a circuit breaker carry out the following steps:

- a. Remove the top cover. Refer to para 5-4.1.
- b. Lower the front panel as follows:

CAUTION

An RFI gasket is fitted to the front panel. Ensure the gasket is undamaged and seats properly when the panel is replaced.

- (1) Unscrew the rubber boot on the POWER RESET actuator. The boot should be finger-tight.

(2) Remove and retain the ten screws securing the panel to the chassis.

(3) Gently pull the panel forward to the extent of the service loop in the wiring harness.

(4) Lower and support the panel.

(5) Remove the threaded bushing from the power reset switch assembly precision shaft. Retain the bushing for reassembly.

c. Remove and retain the two screws securing the power reset switch assembly and spacer bar to the right side of the chassis.

d. Remove spacer bar.

e. Label and remove the connections to the faulty circuit breaker.

f. Remove the jam-nut and lock washer securing the circuit breaker to the mounting bracket and remove the circuit breaker.

g. Remove and retain the jam-nut and lock washer from the replacement circuit breaker.

h. Remove and retain the two screws and washers from the terminals of the replacement circuit breaker.

i. Set the circuit breaker to the closed position (white-band not visible).

j. To install the replacement, reverse the procedure detailed in steps a. through i. Use the hardware retained in steps g. and h.

5-4.17 Wire Harness (WI), Removal/Installation. Generally the wire harness can be repaired satisfactorily by following the Procedures described in para 5-13. When it becomes necessary to replace the entire harness, carry out the following steps:

a. Remove top and bottom covers. Refer to para 5-4.1 for procedure.

b. Remove all CCA from the card file. refer to para 5-4.2 for procedure. Store the CCA safely.

#### CAUTION

An RFI gasket is fitted to the front panel assembly. Ensure the gasket is undamaged and seats properly when the assembly is replaced.

c. Lower the front panel as follows:

(1) Unscrew the rubber boot covering the POWER RESET actuator. The boot should be finger-tight.

(2) Remove and retain the ten screws securing the panel to the chassis.

(3) Carefully pull the panel forward to the extent of the service loop in the wiring harness.

- (4) Lower and support the panel .
- (5) Remove and retain the threaded bushing from the circuit breaker actuator shaft.
- d. Carefully unsolder the connections to the front mounted components served by W1 (i.e., all except M1 and S3).
- e. Unsolder wires numbered 323 and 397 from S3.

CAUTION

When unfastening cable-ties, take care not to cut or damage the wiring in harness W21.

- f. Remove the tie securing the wiring around S3.
- g. Unfasten the cable-ties securing the harness to the front panel and to harness W21.
- h. Unsolder the wires connected to S4.
- i. Unsolder all wires connected to A17 (9 connections).
- j. Remove and retain the hardware securing ground-tree E5 to the chassis.
- k. Raise the front panel and temporarily secure using two of the screws retained in step c.
- l. Carefully remove all the back-plane connectors from A15.

CAUTION

When unfastening cable-ties, take care not to damage the wiring in harness W21.

- m. Unfasten the two cable-ties securing harness W21 to the bottom right side of the chassis.
- n. Unfasten the cable-ties securing harness W1 to harness W21.
- o. Unsolder the connection to A15W1-2.
- p. Unsolder the connections to A15W1-1, A15W2 and A15W3.
- q. Remove and retain the hardware securing A15E1.
- r. Remove and retain the hardware securing the two cable clamps supporting the harness on A15. Remove the clamps and retain for reassembly. Remove PS1, refer to para 5-4.6.
- s. Unsolder wires numbered 352, 400, 309, 311, 401 and 405.
- t. Loosen the screw in the retainer block for TB1 and remove TB1-3 thru TB1-8.

- u. Using connector pin insertion/removal tool MS27534-20, remove all connections from the terminal blocks. Retain the blocks for reassembly.
- v. Unsolder the connections to VR1.
- w. Remove A20, refer to para 5-4.4. Store the assembly safely.
- x. Remove PS2 and PS3, refer to para 5-4.7. Store the modules safely.
- y. Remove the jam-nut securing J20 thru J23 to the rear of the chassis.
- z. Remove and retain the hardware securing ground-trees E1/E7 to the chassis.
- aa. Remove A21, refer to para 5-4.5. Store the CCA safely.
- ab. Remove and retain the hardware securing ground-tree E6 to the chassis.
- ac. Unsolder wires numbered 249, 351A, 1579, 186, 187, 191 and 197A from E6.
- ad. Remove and retain the hardware securing the remaining cable-clamps supporting the harness. Remove the clamps from the harness and retain for reassembly.
- ae. Remove the jam-nuts securing J18, J19 and J24 to the rear of the chassis.

**CAUTION**

When unfastening cable-ties, take care not to cut or damage the wiring in harness W21 or miniature coaxial cables.

- af. Unfasten all remaining cable-ties securing the harness to harness W21 and the coaxial cables.
- ag. Remove the harness from the unit.

**NOTE**

Use insulated sleeving (heat-shrink) on soldered connections where appropriate.

- ah. To install a replacement harness, reverse the procedure detailed in steps a. thru ag. Refer to the wire list, table 5-15 for complete wiring details.

5-4.18 Wire Harness (W21), Removal/Installation. Generally the wire harness can be repaired satisfactorily by following the procedures described in para 5-13. When it becomes necessary to replace the entire harness, carry out the following steps:

- a. Remove A16, refer to para 5-4.8 for procedure. Store A16 and PS2 safely.
- b. Remove PS3, refer to para 5-4.7 for procedure. Store PS3 safely.
- c. Remove and retain the hardware securing ground-tree E6 to the chassis.

- d. Unsolder wires numbered 249, 351A, and 1581 connected to E6.
- e. Remove and retain the two screws and washers securing C1 mounting bracket to the rear of the chassis.
- f. Unsolder the wires connected to terminals E2, E3 and E4. Retain C1, mounted on its bracket for reassembly.
- g. Remove and retain the three screws and washers securing the wiring to the terminals of 61.
- h. Loosen the screw in the retainer for TB1. Label and remove terminal blocks TB1-1 and TB1-2.
- i. Using connector pin insertion/removal tool MS27354-16, remove all connections to the terminal blocks. Retain the blocks for reassembly.
- j. At PS1, unsolder wires numbered 292 and 308. (Terminals 1 and 2.)
- k. Lower the front panel as follows:

CAUTION

An RFI gasket is fitted to the front panel, ensure the gasket is undamaged and seats properly when the panel is replaced.

- (1) Unscrew the rubber boot on the POWER RESET actuator. The boot should be finger-tight.
- (2) Remove and retain the ten screws securing the panel to the chassis.
- (3) Gently pull the panel forward to the extent of the service loop in the wiring harness.
- (4) Lower and support the panel.
- (5) Remove the threaded bushing from the circuit breaker actuator shaft. Retain the bushing for reassembly.
- l. Remove and retain the two screws securing the circuit breaker mounting bracket to the right side of the chassis.
- m. Disconnect all wires connected to the terminals of CB1 - CB4. Retain the securing screws and washers for reassembly. Store the circuit breaker assembly safely.
- n. Remove and retain the hardware securing ground-tree E8 to the chassis.
- o. Unsolder the two wires connected to M1.
- p. Unsolder wires numbered 248 and 330 and the respective shield wires from the terminals of S3.

CAUTION

When unfastening cable-ties, take care not to cut or damage the wiring in harness W1.

Unfasten cable-ties as necessary to release harness W21 from harness W1 and the chassis.

- r. Remove W21 from the unit.

CAUTION

Wire harness W21 distributes ac power within the unit. Ensure that all connections are properly made and sleeved where applicable.

- s. To install a replacement harness, reverse the procedure detailed in steps a. thru r.

5-4.19 Wire Harness (W22), Removal/Installation. Generally the wire harness can be repaired satisfactorily by following the procedures detailed in para 5-13. When it becomes necessary to replace the entire harness, carry out the following steps:

- a. Remove top and bottom covers. Refer to para 5-4.1 for procedure.
- b. Remove J24 from the rear panel by removing the jam nut.
- c. Remove backplane connector XA9 from A15.
- d. Remove the hardware securing E6 to the rear panel.
- e. Unsolder wires 186, 187, 191 and 197A from E6.
- f. Using the extraction tool MS27543-20, remove wires 192, 193 and 202 from pin positions 87, 88 and 27 of backplane connector XA7.

CAUTION

When unfastening cable-ties, take care not to cut or damage the wiring in the harness.

- g. Unfasten cable ties and clamps as necessary to release W22.
- h. Remove W22 from the unit.
- i. To install a replacement W22, reverse the procedure described in steps a. thru h. above.

5-4.20 Panel Mounted Switches (S1-S3), Removal/Installation. To remove/install a panel mounted switch, carry out the following steps:

- a. Remove bottom cover. Refer to para 5-4.1.



- b. S1 is removed/installed as follows:
  - (1) Tag and unsolder the wires connected to the switch.
  - (2) Remove jam nut and lockwasher securing S1 to the front panel.
  - (3) Remove S1.
  - (4) To install a replacement S1, reverse the procedure described in steps (1) thru (3) above.
  - (5) Install bottom cover.
- c. S2 is removed/installed as follows:
  - (1) Tag and unsolder the wires connected to S2.
  - (2) Remove and retain the knob.
  - (3) Remove the nut securing S2 to the front panel.
  - (4) Remove S2.
  - (5) To install a replacement S2, reverse the procedure described in steps (1) thru (4) above.
  - (6) Install bottom cover.
- d. S3 is removed/installed as follows:
  - (1) Tag and unsolder the wires connected to S3.
  - (2) Remove indicator from the switch housing.
  - (3) Loosen the screw inside the housing to free the cam securing the sleeve against the front panel.
  - (4) Remove sleeve and switch housing.
  - (5) To install a replacement S3, reverse the procedure described in steps (1) thru (4) above.
  - (6) Install bottom cover.

5-4.21 Overvoltage Protector (VR1), Removal/Installation. To remove/install VR1, carry out the following steps:

- a. Remove the top cover. Refer to para 5-4.1.
- b. Tag and unsolder the wires connected to VR1.
- c. Remove and retain the screws securing PS1 to the side panel. Move PS1 to access the screws securing VR1 to the chassis. Refer to para 5-4.6.

- d. Remove and retain the hardware securing VR1 to the chassis.
- e. Remove VR1.
- f. To install a replacement VR1, reverse the procedure described in steps a. thru e. above.

5-4.22 Elapsed Time Indicator (M1), Removal/Installation. To remove/install M1, carry out the following steps:

- a. Remove top cover. Refer to para 5-4.1.
- b. Tag and unsolder the wires connected to M1.
- c. Remove and retain the two screws securing M1 to the front panel.
- d. Remove M1.
- e. To install a replacement M1, reverse the procedure described in steps a. thru d. above.

5-4.23 Light Indicator (A23), Removal/Installation. To remove/install A23, carry out the following steps:

- a. Remove top cover. Refer to para 5-4.1.
- b. Tag and unsolder the wires connected to A23.
- c. Remove and retain the hardware securing A23 to the front panel.
- d. Remove A23.
- e. To install a replacement A23, reverse the procedure described in steps a. thru d. above.

5-5. MAINTENANCE OF CIRCUIT CARDS (A1 - A12, A14) .

CAUTION

A1 thru A10 and A12 contain parts sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing or installing these assemblies.

A1 thru A12 and A14 are tested using AN/USM-410, refer to para 5-2. The assemblies are repaired by replacing faulty component(s), determined during test. Refer to NAVTORPSTA REPORT 1347, Guide Manual for Repair of Electronic Modules, for component replacement procedures. After installing replacement parts, test the CCA using AN/USM-410 to verify repair.

5-6. REPAIRS TO CONTACT ASSEMBLY (A15). Minor damage to the assembly can be repaired by replacing damaged contacts. When damage to the assembly is extensive, refer to para 5-4.10. Repair the assembly as follows:

- a. Remove top and bottom covers. Refer to para 5-4.1 for procedure.

- b. Remove all CCA from the card file, refer to para 5-4.2 for procedure. Store the CCA safely.
- c. To repair damaged edge connector, proceed as follows:
  - (1) Remove back plane connector(s).
  - (2) Using wire wrap gun (EW-8), unwrap wire connection(s) to the damaged edge connector contact(s).
  - (3) Using contact extraction tool number 600-0002-000, remove the damaged contact(s).
  - (4) Using contact insertion tool number 600-0004-000, insert replacement contact(s).
  - (5) Using wire wrap gun (Ew-8), wrap new wires to restore connections removed in step c(2) above.
  - (6) Check connections against the wire list, table 5-15.
  - (7) Replace back plane connector(s).
- d. Install all CCA in the card file, refer to para 5-4.2 for procedure.
- e. Replace top and bottom covers. Refer to para 5-4.1.

5-7. REPAIR OF EMI FILTER ASSEMBLY (A16) . A16 may be repaired by replacing faulty or damaged components. Bench test the assembly as described in table 5-6. Replace faulty components as follows:

- a. To replace connector J1:
  - (1) Remove and retain the six screws, flat washers and lock washers securing the assembly cover.
  - (2) Unsolder the three wires connecting FL1, FL2 and EI to J1.
  - (3) Remove nuts and washers securing FL1 and FL2. Retain for reassembly.
  - (4) Remove FL1 and FL2 from the housing.
  - (5) Remove the jam nut securing J1 to the housing.

NOTE

Use wires from damaged connector if possible.

- (6) Solder a 4-inch piece of wire (AWG16, 600V, WMT, TFE) to each of the pins of the replacement connector.
- (7) Install a replacement connector and secure using the jam nut.
- (8) Reinstall FL1 and FL2 and secure using the self-locking nuts.

Table 5-6. Filter Assembly EMI (A16), Test Procedure

Step	Test condition	Meter connection	Normal reading	Additional checks and remarks
1	Bench test - cover removed.	J1-A to FL1 J1-C to FL2	Continuity	If no continuity, find and repair open connection
2		J1-A to Ground	No continuity	If there is continuity, replace FL1.
3		J1-C to Ground	No continuity	If there is continuity, replace FL2.
4		J1-A to FL1 output	Continuity	If there is no continuity, replace FL1.
5		J1-C to FL2 output	Continuity	If there is no continuity, replace FL2.

- (9) Solder the wires to FL1, FL2 and E1. Refer to table 5-7, a wire chart for the assembly.
- b. To replace filter FL1, FL2:
- (1) Remove and retain the six screws, flat washers and lock washers securing the cover.
  - (2) Unsolder the wire connecting the filter to J21.
  - (3) Remove and retain the nuts and washers securing the filter to the housing.
  - (4) Position the replacement filter in the housing and secure with the hardware retained in step b.(3).
  - (5) Solder on the wire removed in step b.(2) above.
  - (6) Test the assembly using the procedure detailed in table 5-6.
  - (7) Secure the cover using screws and washers retained in step b.(1) above.

Table 5-7. Filter Assembly EMI (A16), Wire Chart

Wire No.	From	To
1	J1-A	FL1-2
2	J1-B	E1
3	J1-C	FL2-2

5-8. MAINTENANCE OF POWER MONITOR CCA (A17). A17 may be repaired by replacing faulty components. Refer to table 5-8 for test procedure and troubleshooting information. Refer to NAVTORPSTA REPORT 1347, Guide Manual for Repair of Electronic Modules, for component replacement procedures.

5-9. REPAIR OF INDICATOR LIGHT ASSEMBLY (A18, A19). A18 and A19 may be repaired by replacing faulty or damaged components. Inspect the assembly as described in table 5-9. Replace faulty components as follows:

- a. Replace faulty indicator lens(es) as follows:

NOTE

Lens(es) may be replaced without removing the assemblies from the unit.

- (1) Using a small flat point screwdriver in the groove at the top of the indicator light assembly, gently lift out the lens.
- (2) Pull the lens out to the extent of the retaining spring.

Table 5-8. Power Monitor CCA (A17), Test Procedure

Step	Test condition	Procedure	Normal indication	Remarks/Further checks
1.	Pre-test inspection.	Visually inspect CCA: a. Check jumper connections. b. Check general condition of CCA.	On card, jumpers connected as shown in figure F0-17.	No burnt or damaged components.  Repair parts installed correctly.
2.	Set power supply mode and current limit.	a. Set all power supply units used in test to constant voltage mode. b. Set current limit to 100 mA.		
3.	Set power supply output voltage to initial value.	a. Switch on all power supplies. b. Measure output voltage of each power supply in turn. c. Adjust as necessary.	PS1: $30 \pm 0.4$ Vdc  PS2: $5 \pm 0.1$ Vdc  PS3: $28 \pm 0.3$ Vdc	
4.	Connect test equipment to Power Monitor CCA.	a. Switch off all power supplies. b. Connect equipment as shown in figure 5-14. c. Connect multimeter between pin 25 (+) and pin 1 (-).		

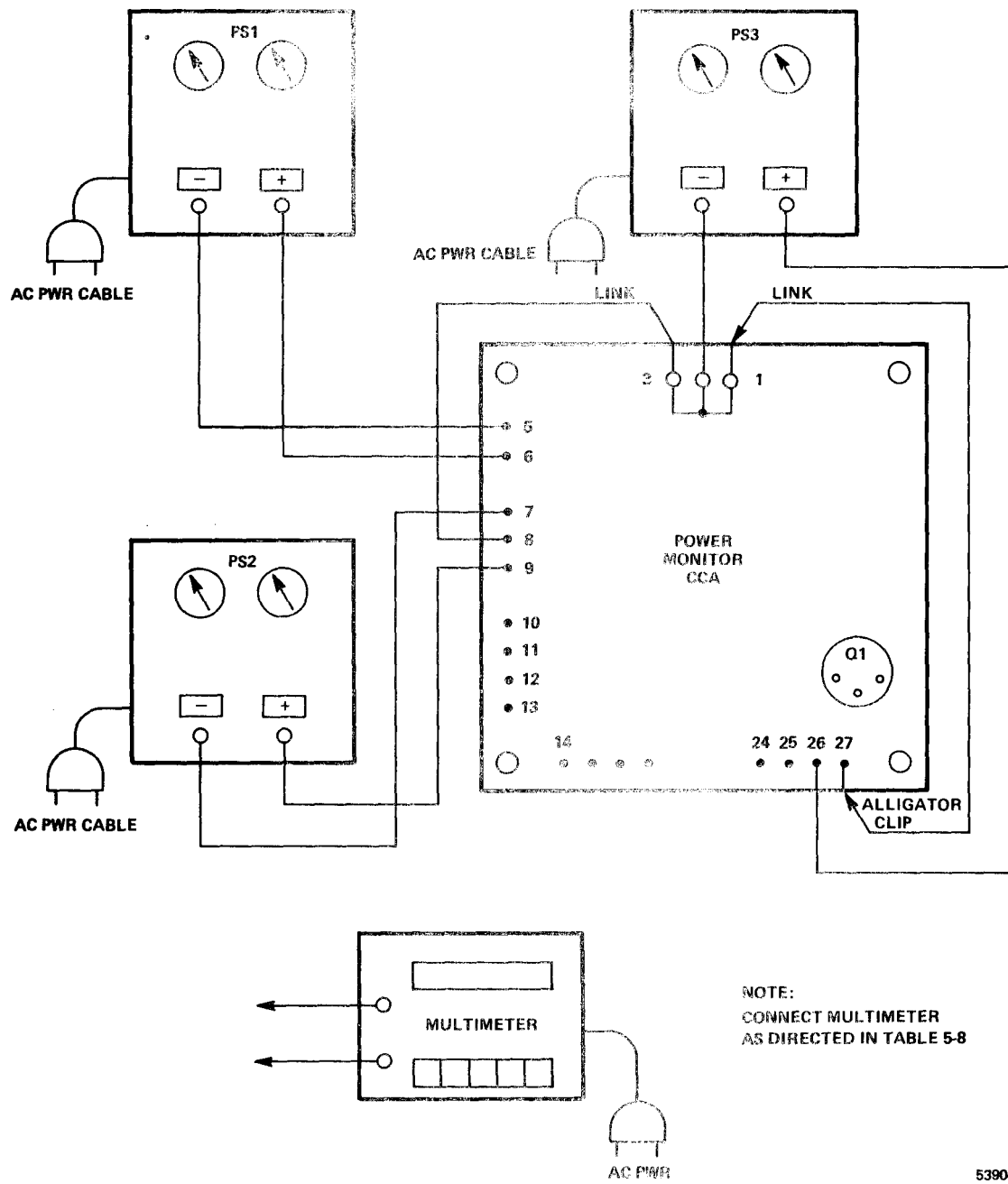
Table 5-8. Power Monitor CCA (A17), Test Procedure - Continued

Step	Test condition	Procedure	Normal indication	Remarks/Further checks
5.	Apply +28V to pin 26.	a. Switch on PS3. b. Link pin 27 to pin 1. c. Check reading on multimeter.	Reading > 26 Vdc	a. No reading on meter - possible fault Q1, R15. b. Low reading on meter - possible faults Q1, R13, CR1.
6.	Same as 5.	a. Disconnect link. b. Check reading on multimeter.	Reading < 1 Vdc	High reading on meter - possible faults U1, U2.
7.	Apply +15V to pin 6 -15V to pin 5 +28V to pin 26.	a. Switch on PS1, PS3. b. Check reading on multimeter.	Reading < 2 Vdc	a. Overcurrent trips PS1 - possible faults VR1, C1, R1. b. Reading same as step 6 - possible faults U1, R1, VR4.
8.	Apply +15V to pin 6 -15V to pin 5 +5V to pin 9 +28V to pin 26.	a. Switch on PS1, PS2 and PS3. b. Check reading on multimeter.	Reading > 26 Vdc	Reading same as step 7 - possible faults U2, R3, VR5.

Table 5-8. Power Monitor CCA (A17), Test Procedure - Continued

Step	Test condition	Procedure	Normal indication	Remarks/Further checks
9.	Test (crowbar) action of VR1.	a. Switch off all power supplies. b. Connect multimeter across output terminals of PS1. c. Switch on PS1. Adjust output voltage. d. Increase voltage output of PS1 in 0.1V steps. e. Note the voltage at which the overcurrent circuit trips PS1.	30 ± 0.4 Vdc  Current trip at 33 ± 1.7 Vdc.	No trip below 34.7 Vdc - VR1 faulty.
10.	Test reset action of VR1.	a. Disconnect PS1 from pin 6. b. Switch on PS1. c. Adjust output voltage for 30 ± 0.4 Vdc. d. Switch off PS1. e. Reconnect PS1 to pin 6. f. Switch on PS1. g. Check reading on multimeter.	Reading should be 30 ± 0.4 Vdc.	Overcurrent trip PS1 - VR1 faulty.





53904

Figure 5-14. Power Monitor CCA (A17), Test Set-up Diagram

Table 5-9. Indicator Lamp Assembly (A18, A19), Inspection

Component	Inspection method	Normal condition	Procedure
Indicator Light Assy	Visual	a thru d must be free of defects.	a. Check the assembly for loose, missing or damaged hardware. b. Check lamp contacts for dirt, corrosion and damage. c. Check for continuity between lamp contacts and printed wiring board connections using a multimeter. d. Examine the printed wiring board, check-for broken or cracked board, dry joints or excessive solder, lifted or broken tracks.

(3) Insert the blade of the screwdriver between the retaining spring and the top of the sleeve. Gently depress the spring to release the assembly from the sleeve.

(4) Ensure the replacement lens is fitted with serviceable lamps.

(5) Insert the lens into the sleeve and push gently until the retaining spring snaps into place.

b. Replace Indicator Assembly/Printed Wiring Board as follows:

**CAUTION**

Use a low temperature soldering iron tip or appropriate heat-sink to avoid damage to printed wiring board. Refer to NAVTORPSTA REPORT 1347

(1) Use solder wick or suction to remove solder from all connections to the printed wiring board.

(2) Remove and retain the four screws securing the printed wiring board to the assembly.

(3) Remove the board from the assembly.

(4) Discard the faulty component.

(5) Assemble the replacement part to the component retained in step b.(4).

- (6) Use the four screws retained in step b.(2) to secure the printed wiring board to the assembly.
- (7) Solder the printed wiring board to the assembly.
- (8) Ensure the repaired assembly meets all the requirements of table 5-9.

5-10. MAINTENANCE OF CONVERTER, IF (A20). A20 is tested using AN/USM-410, refer to para 5-2. The assembly is repaired by replacing faulty or damaged components and cables. RF cable routing is described in table 5-10. Table 5-11 is a wire list for the assembly. The following subparagraphs provide general instructions for the replacement of components:

CAUTION

When disconnecting or reconnecting miniature coaxial cables, take care not to twist or strain the cable.

NOTE

Before replacing a suspected defective component, ensure the associated wiring is not defective. Use the wire list, table 5-11, and schematic diagram F0-18.

- a. Replace top plate mounted components (S1, AR1) as follows:
  - (1) Disconnect coaxial cable connection(s) to the defective component.
  - (2) Label and unsolder all connecting wires at the terminals of the defective component.
  - (3) Remove and retain the three screws and washers securing the top-plate to the threaded posts.
  - (4) Carefully separate the plates to allow access to the mounting hardware.

Table 5-10. Converter, IF (A20), Cable Routing

Reference designation	P1	P2	Part Number
W1	S1-J5	AT1-J1	5053047-7
W3	FL1-A	AR1-OUT	6053048-11
W4	FL1-B	U1-RF	5053048-6
W5	U1-L0	Y1-J1	5053047-8
W2	AT1-J2	AR1-IN	5053239-7

Table 5-11. Converter, IF (A20), Wire List

Wire no.	From	To
1	J1-1	S1 GND
2	S1 GND	AR1 GND
3	AR1 GND	G1-3
4	G1 GND	AT1 GND
5	J1-2	S1 +5V
6	S1 +5V	E4
7	AT1 +5V	E4
8	J1-3	AR1 +15V
9	J1-4	Y1-1
10	J1-5	S1-1
11	J1-6	S 1 - 2
12	J1-7	S1-3
13	J1-8	S1-4
14	J1-9	AT1-1
15	J1-10	AT1-2
16	J1-11	Not Connected
17	J1-12	AT1-4
18	AT1-3	E3

- (5) Remove and retain the hardware securing the defective component to the plate.
- (6) Position the replacement component on the plate and secure using the hardware retained in step a. (5).
- (7) Secure the top-plate to the threaded spacers.

NOTE

insulated sleeving (0.125 ID HTSK CLR) on all wires connected to S1.

- (8) Solder the wires removed in step a. (2) to the terminals of the replacement component.
- (9) Reconnect to coaxial cable(s). Torque the connectors to 8 inch-pounds.
- (10) Test the assembly using AN/USM-410 to verify repair.

## b. Replace Y1 as follows:

- (1) Remove and retain the three screws and washers securing the top-plate to the threaded spacers.
- (2) Carefully separate the plates to access the underside of Y1.
- (3) Disconnect the coaxial cable.
- (4) Label and unsolder the wires connector to the terminals of Y1.
- (5) Remove and retain the hardware securing Y1 to the top plate.
- (6) Position the replacement on the plate and secure using the hardware retained in step b. (5).

## NOTE

Use insulated sleeving (0.125 ID HTSK CLR) on these connections.

- (7) Solder the connecting wires to the terminals of the replacement.
- (8) Connect the coaxial cable and torque connector to 8 inch-pounds.
- (9) Secure the top-plate to the threaded spacers using the hardware retained in step b. (1).
- (10) Test the assembly using AN/USM-410 to verify repair.

## c. Replace bottom plate mounted components (AT1, U1, FL1) as follows:

- (1) Remove and retain the three screws and washers securing the top plate to the threaded spacers.
- (2) Carefully separate the plates to the extent of the service loop in the wiring.
- (3) Disconnect the two coaxial cables connected to the faulty component.

## NOTE

Steps (4) and (7) apply to AT1 only. Omit these steps when replacing U1 or FL1.

- (4) Label and unsolder the wires connected to the terminals of AT1.
- (5) Remove and retain the hardware securing the faulty component to the bottom plate.
- (6) Position the replacement on the plate and secure using the hardware retained in step c. (5).

NOTE

Use insulated sleeving (0.125 ID HTSK CLR) on these connections.

- (7) Solder the connections removed in step c. (4) to the replacement component.
- (8) Connect the coaxial cables and torque the connector to 8 inch-pounds.
- (9) Secure the top plate to the threaded spacers using the hardware retained in step c. (1).
- (10) Test the assembly using AN/USM-410 to verify repair.

5-11. MAINTENANCE OF -6V REGULATOR CCA (A21). A21 may be repaired by replacement of faulty or damaged components. Refer to NAVTORPSTA REPORT 1347, Guide Manual for Repair of Electronic Modules, for component replacement procedures. Table 5-12 provides test and troubleshooting information.

5-12. MAINTENANCE FILTER-JACK ASSEMBLY (A22). A22 is a repairable assembly. Repairs may be accomplished by replacing defective filters FL1, FL2. Installation procedures for the component parts are described in para 5-12.1. Refer to figure 5-16 for parts identification.

5-12.1 Component Installation. To install a replacement component carry out the following steps:

- a. Access components as follows:
  - (1) Use solder wick or suction to remove the solder fillet.
  - (2) Separate the cap from the case to the extent of the service loop.
  - (3) Unsolder the wire connecting the telephone jack to the ground terminal.
  - (4) Unsolder the two wires which connect the tip and ring of the jack to FL1 and FL2 respectively.
- b. To install a replacement filter, FL1 or FL2, proceed as follows:
  - (1) Remove the jam nut securing the filter to the case.
  - (2) Remove the filter from the case.
  - (3) Position a serviceable filter in the case and secure with the jam nut.
- c. Reassemble as follows:
  - (1) Rewire the assembly as described in table 5-13. Allow a minimum service loop.

Table 5-12. -6V Regulator CCA (A21), Test Procedure

Step	Test condition	Procedure	Normal indication	Remarks/Further checks
1.	Pre-test inspection	Visually inspect the CCA: a. Check for burnt or damaged components. b. Check printed wiring board for lifted or broken traces. c. Check that all parts are installed correctly.	a. thru c. must be free of defects.	Correct any defects before proceeding with the test.
2.	Set power supply mode and current limit.	a. Set the power supply used in the test to the constant voltage mode. b. Set the current limit to 250 mA.		
3.	Set power supply output voltage to initial value.	a. Switch on power supply. b. Measure output voltage. c. Adjust as necessary.	15 ± 1 Vdc	
4.	Connect test equipment to CCA.	a. Switch off power supply. b. Make connections as shown in figure 5-15. c. Connect multimeter between pin 3 (+) and pin 2 (-).		

Table 5-12. -6V Regulator CCA (A21), Test Procedure - Continued

Step	Test condition	Procedure	Normal indication	Remarks/Further checks
5.	Apply -15V to pin 1.	a. Switch on power supply.  b. Check reading on multimeter.  c. If the indication is normal, note the reading on the multimeter.	6 $\pm$ 0.1 Vdc	a. Overcurrent trip on power supply - possible faults C1, VR1.  b. Low reading on meter - possible faults C2, VR1, R1, R2.  c. High reading on meter - possible faults VR1, VR2, R1, R2.
6.	Same as step 5.	a. Increase the power supply output voltage to 18 $\pm$ 1 Vdc.  b. Check the reading on the multimeter.  c. Decrease the power supply output voltage to 10 $\pm$ 1 Vdc.  d. Check the reading on the multimeter		Same as noted in Step 5. $\pm$ 25 mV   Same as noted in Step 5. $\pm$ 25 mV



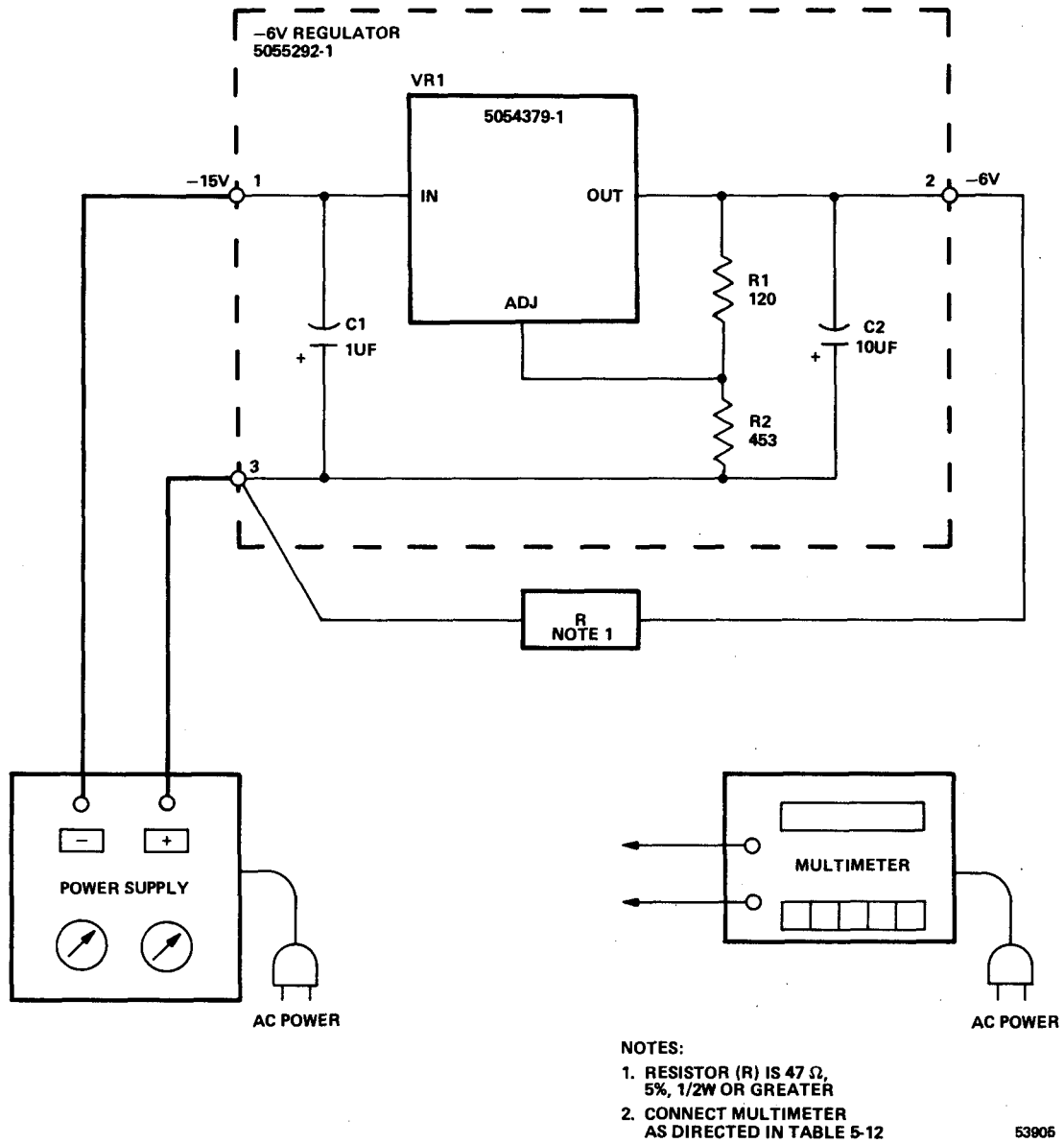


Figure 5-15. -6V Regulator CCA (A21), Test Set-up Diagram

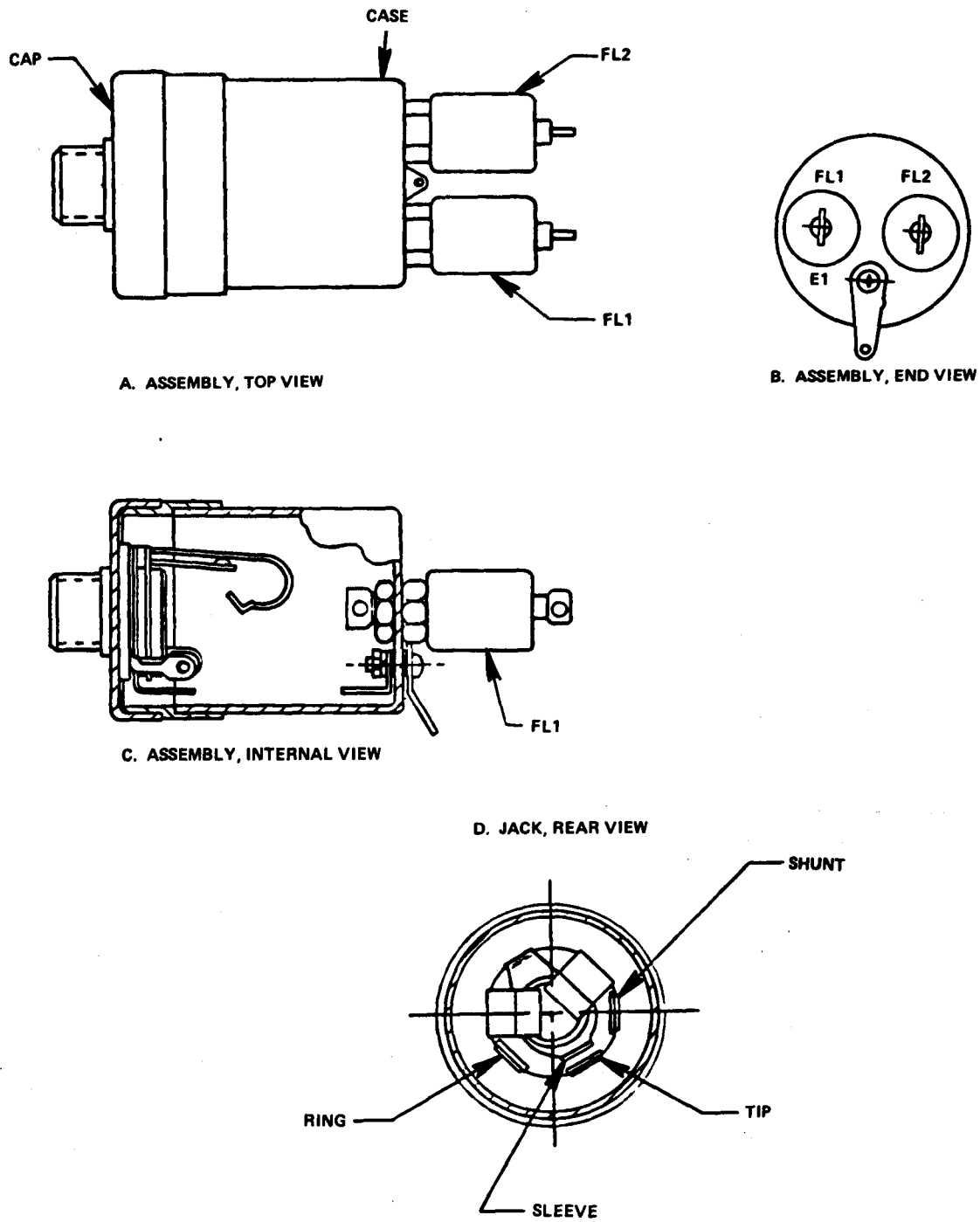


Figure 5-16. Filter Assembly-Jack (A2), Parts Identification

Table 5-13. Filter Assembly-Jack (A22), Internal Wiring

Wire no.	From	To
1	TIP	FL1 (INSIDE CAN)
2	RING	FL2 (INSIDE CAN)
3	SLEEVE	E1 (INSIDE CAN)

- (2) Use a multimeter to check continuity of wiring.
- (3) Solder the case to the cap. Use the minimum amount of heat to run a small solder fillet all around the assembly.

5-13. MAINTENANCE OF WIRE HARNESS (M1, w21, AND w22). Check suspected areas of the harnesses as described in table 5-14. The following subparagraphs provide a general guide to the repair of the harness.

- a. To repair damaged multipin connectors:
  - (1) Push out the damaged pin using the contact removal tool.
  - (2) Remove damaged pins by cutting wire(s) as close to the pin(s) as possible.
  - (3) Check that the shortened wire(s) can be reconnected without straining.
  - (4) Strip insulation and crimp on new pin(s).
  - (5) Insert new pin(s) into connector using contact insertion tool.
- b. If the wire is strained by shortening, proceed as follows:
  - (1) Make up a new wire of the required length.
  - (2) Using cable markers, identify the wire at both ends with its wire number.
  - (3) Crimp on a new pin and insert in the connector.
  - (4) Route the wire along the harness, secure under the existing cable clamps.
  - (5) Disconnect old wire at destination.
  - (6) Use the correct termination for the new wire and connect at destination.
  - (7) Cut back the old wire to the first tie point at each end.

Table 5-14. Maintenance of Wire Harness

Step	Test condition	Procedure	Normal indication	Remarks and further checks
1	Harness in the Unit.	Visually inspect harness for frayed, burnt or discolored insulation, broken wires or loose connections.		Wire should be dressed to disclose no frayed insulation. All connections should be tight. All broken and/or loose connections should be repaired. Wire with burnt or discolored insulation should be inspected further.
2	Harness in the Unit.	Use multimeter, wire list, and schematic to check for continuity of suspected areas of the wire harness.	All point-to-point connections should have continuity.	All wire connections should have continuity. All open circuits must be repaired.

Table 5-15. RSPU, Wire List

## NOTES - UNLESS OTHERWISE SPECIFIED:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION, PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATION
2. REFER TO RPSTL, APPENDIX C FOR WIRE TYPE INFORMATION. ITEM NUMBERS ON THIS WIRE LIST ARE NOT APPLICABLE
3. REF SCHEMATIC DIAGRAM 5051651, FO-6
4. LENGTH OF WIRE TO BE DETERMINED AT ASSEMBLY
5. WIRING PROCEDURE PER MIL-STD-454, REQT 9, SOLDER PER MIL-STD-454, REQT 5
6. IDENTIFICATION OF WIRE PER MIL-STD-681, SYSTEM IV
7. PRECEDING CONNECTOR INDICATES "SHIELD OF WIRE AT" - EG "\*CB1-1"  
INDICATES "SHIELD OF WIRE AT CB1-1"  
\*FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION  
\*PRECEDING PIN LETTER INDICATES LOWER CASE
8. UNLISTED PINS ARE NOT CONNECTED
9. FOR WIRE HARNESS SUMMARY SEE SHEETS 103-104 OF THIS WIRELIST
10. MACHINE WIRE WRAP USING ITEM 15 NOTED ON PL 5051658
11. WIREWRAP WIRELIST FOR BACKPLANE (5051658-1) LISTED ON SHEETS 105-109
12. EACH WIREWRAP STRING IS LISTED IN EXACT WIRING SEQUENCE
13. CONNECTOR LISTED AS A14 SHOULD BE READAS XA14
14. PART OF 5051657 HARNESS (W1)
15. PART OF C5077144-1 HARNESS (W21)
16. PART OF C5077580-1 HARNESS (W22)



COMPONENT J18

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND			J18 - A	2	E6	000	207		STR	14		22ANG BLACK
SHLD GND			J18 - B	3	E6	000	207		STR	14		22ANG BLACK
			J18 - C	4								NC
GND			J18 - C	5	E6	000	207		STR	14		22ANG BLACK
STD AUC HI RCVR1			J18 - E	6	J20 - P	999	205		STR	14		22ANG WHITE
STD AUC LG RCVR1			J18 - F	7	J20 - R	999	205		STR	14		22ANG WHITE
AUX AUC RCVR 1			J18 - G	8	XA05 - 71	999	209		STR	14		24ANG WHITE
AUX AUC RCVR 1			J18 - G	317	S02 - 1	999	209		STR	14		24ANG WHITE
AUX AUC RTN 1			J18 - H	9	XA05 - 70	999	205		STR	14		22ANG WHITE
STD AUC HI RCVR2			J18 - J	10	J20 - U	999	205		STR	14		22ANG WHITE
STD AUC LG RCVR2			J18 - K	11	J20 - V	999	205		STR	14		22ANG WHITE
AUX AUC RCVR 2			J18 - L	12	XA05 - 27	999	209		STR	14		24ANG WHITE
AUX AUC RCVR 2			J18 - L	318	S02 - 2	999	205		STR	14		24ANG WHITE
AUX AUC RTN 2			J18 - M	13	XA05 - 26	999	205		STR	14		22ANG WHITE
STD AUC HI RCVR3			J18 - N	14	J20 - Y	999	205		STR	14		22ANG WHITE
STD AUC LG RCVR3			J18 - P	15	J20 - Z	999	205		STR	14		22ANG WHITE
AUX AUC RCVR 3			J18 - R	16	XA05 - 44	999	209		STR	14		24ANG WHITE
AUX AUC RCVR 3			J18 - R	319	S02 - 3	999	209		STR	14		24ANG WHITE
AUX AUC RTN 3			J18 - S	17	XA05 - 43	999	205		STR	14		22ANG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST  
 5051652  
 CODE IDENT 57958 SHEET 3 REV F

5-59

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
STD AUD HI RCVR4			J18 - T	18	J20 - *C	999	205		STR	14		22ANG WHITE		
STD AUD LO RCVR4			J18 - U	19	J20 - *D	999	205		STR	14		22ANG WHITE		
AUX AUD RCVR 4			J18 - V	20	XA05 - 56	999	209		STR	14		24ANG WHITE		
AUX AUD RCVR 4			J18 - Y	328	S02 - 4	999	209		STR	14		24ANG WHITE		
AUX AUD BTN 4			J18 - W	21	XA05 - 116	999	205		STR	14		22ANG WHITE		
AGC RCVR 1			J18 - X	22	J20 - *G	999	205		STR	14		22ANG WHITE		
AGC BTN 1			J18 - Y	23	J20 - *H	999	205		STR	14		22ANG WHITE		
AGC RCVR 2			J18 - Z	24	J20 - *I	999	205		STR	14		22ANG WHITE		
AGC BTN 2			J18 - *A	25	J20 - *J	999	205		STR	14		22ANG WHITE		
AGC RCVR 3			J18 - *B	26	J20 - *K	999	205		STR	14		22ANG WHITE		
AGC BTN 3			J18 - *C	27	J20 - *M	999	205		STR	14		22ANG WHITE		
AGC RCVR 4			J18 - *D	28	J20 - *N	999	205		STR	14		22ANG WHITE		
AGC BTN 4			J18 - *E	29	J20 - *P	999	205		STR	14		22ANG WHITE		
ISR AUDIO RCVR 1			J18 - *F	30	J20 - *Q	999	205		STR	14		22ANG WHITE		
ISR AUDIO RCVR 2			J18 - *G	31	J20 - *R	999	205		STR	14		22ANG WHITE		
ISR AUDIO RCVR 3			J18 - *H	32	J20 - *S	999	205		STR	14		22ANG WHITE		
ISR AUDIO RCVR 4			J18 - *J	33	J20 - *T	999	205		STR	14		22ANG WHITE		
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						WIRE LIST 5051652 CODE IDENT 57958							SHEET 4	REV F
CONTRACT NO.:														



COMPONENT J19

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND			J19 - A	35	E6	000	207		STR	14		22ANG BLACK
SHLD GND			J19 - B	36	E6	000	207		STR	14		22ANG BLACK
			J19 - C	37								NC
			J19 - D	38								NC
			J19 - E	39								NC
			J19 - F	40								NC
GND			J19 - G	41	E6	000	207		STR	14		22ANG BLACK
CPD RCVR 1 +			J19 - H	42	XA1P3- 13	999	205		STR	14		22ANG WHITE
CPD RCVR 1 -			J19 - J	43	XA1P3- 12	999	205		STR	14		22ANG WHITE
CPD RCVR 2 +			J19 - K	44	XA2P3- 13	999	205		STR	14		22ANG WHITE
CPD RCVR 2 -			J19 - L	45	XA2P3- 12	999	205		STR	14		22ANG WHITE
CPD RCVR 3 +			J19 - M	46	XA3P3- 13	999	205		STR	14		22ANG WHITE
CPD RCVR 3 -			J19 - N	47	XA3P3- 12	999	205		STR	14		22ANG WHITE
CPD RCVR 4 +			J19 - P	48	XA4P3- 13	999	205		STR	14		22ANG WHITE
CPD RCVR 4 -			J19 - R	49	XA4P3- 12	999	205		STR	14		22ANG WHITE
TONE DET RCVR1+			J19 - S	50	XA05 - 13	999	205		STR	14		22ANG WHITE
TONE DET RCVR1-			J19 - T	51	XA05 - 73	999	205		STR	14		22ANG WHITE
TONE DET RCVR2+			J19 - U	52	XA05 - 31	999	205		STR	14		22ANG WHITE
TONE DET RCVR2-			J19 - V	53	XA05 - 91	999	205		STR	14		22ANG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>		<b>5051652</b>	
CODE IDENT	57958	SHEET	5
CONTRACT NO.:		REV	F

501

TM 32-5865-069-248P

5-62

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
TONE DET RCVR 3+			J19 - W	54	XA05 - 92	999	205		STR	14		22ANG WHITE
TONE DET RCVR 3-			J19 - X	55	XA05 - 33	999	205		STR	14		22ANG WHITE
TONE DET RCVR 4+			J19 - Y	56	XA05 - 47	999	205		STR	14		22ANG WHITE
TONE DET RCVR 4-			J19 - Z	57	XA05 - 107	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR1+			J19 - *A	58	XA12 - 109	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR1-			J19 - *B	59	XA12 - 51	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR2+			J19 - *C	60	XA12 - 110	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR2-			J19 - *D	61	XA12 - 112	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR3+			J19 - *E	62	XA12 - 111	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR3-			J19 - *F	63	XA12 - 53	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR4+			J19 - *G	64	XA12 - 52	999	205		STR	14		22ANG WHITE
DELAYGATE RCVR4-			J19 - *H	65	XA12 - 113	999	205		STR	14		22ANG WHITE
RCVR BLANKING +			J19 - *I	66	XA12 - 65	999	205		STR	14		22ANG WHITE
RCVR BLANKING -			J19 - *J	67	XA12 - 66	999	205		STR	14		22ANG WHITE
CPD INTEG DONE1+			J19 - *K	68	XA1P3- 10	999	205		STR	14		22ANG WHITE
CPD INTEG DONE1-			J19 - *M	69	XA1P3- 11	999	205		STR	14		22ANG WHITE
CPD INTEG DONE2+			J19 - *N	70	XA2P3- 10	999	205		STR	14		22ANG WHITE
CPD INTEG DONE2-			J19 - *P	71	XA2P3- 11	999	205		STR	14		22ANG WHITE
CPD INTEG DONE3+			J19 - *Q	72	XA3P3- 10	999	205		STR	14		22ANG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST** 5051652

CODE IDENT	57958	SHEET	6	REV	F
------------	-------	-------	---	-----	---

CONTRACT NO.:

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
<del>CPD INTEG D0A3</del>			J19 - #R	73	XA3P3- 11	999	205		STR	14		22ANG WHITE
<del>CPD INTEG D0A4</del>			J19 - #S	74	XA4P3- 10	999	205		STR	14		22ANG WHITE
<del>CPD INTEG D0A4</del>			J19 - #T	75	XA4P3- 11	999	205		STR	14		22ANG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>	<b>5051652</b>	
CODE IDENT	57958	SHEET
CONTRACT NO.:	7	REV <b>F</b>

5-63

TM 32-5865-069-248P

5-64

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
GND			J20 - A	77	E7	000	207		STR	14		22AWG BLACK					
GND			J20 - B	78	E7	000	207		STR	14		22AWG BLACK					
			J20 - C	79								NC					
			J20 - D	80								NC					
			J20 - E	81								NC					
			J20 - F	82								NC					
			J20 - G	83								NC					
			J20 - H	84								NC					
			J20 - J	85								NC					
			J20 - K	86								NC					
			J20 - L	87								NC					
			J20 - M	88								NC					
GND			J20 - N	89	E7	000	207		STR	14		22AWG BLACK					
STD AUD HI RCV1	6	J18 - E	J20 - P														
STD AUD LG RCV1	7	J18 - F	J20 - R														
AUX AUD RCV1			J20 - S	90	XA05 - 03	999	205		STR	14		22AWG WHITE					
AUX AUD RTN RCV1			J20 - T	91	XA05 - 63	999	205		STR	14		22AWG WHITE					
STD AUD HI RCV2	10	J18 - J	J20 - U														
STD AUD LG RCV2	11	J18 - K	J20 - V														
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>											
CONTRACT NO.:						CODE IDENT		57958		SHEET		8		REV		F	

5051652

57958

8

F

COMPONENT **J20**

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AUX AUC RCVR2			J20 - W	92	XA05 - 19	999	205		STR	14		22ANG WHITE
AUX AUC RTN RCVR2			J20 - X	93	XA05 - 79	999	205		STR	14		22ANG WHITE
STD AUC HI RCVR3	14	J18 - N	J20 - Y									
STD AUC LG RCVR3	15	J18 - P	J20 - Z									
AUX AUC RCVR3			J20 - *A	94	XA05 - 37	999	205		STR	14		22ANG WHITE
AUX AUC RTN RCVR3			J20 - *B	95	XA05 - 97	999	205		STR	14		22ANG WHITE
STD AUC HI RCVR4	18	J18 - Y	J20 - *C									
STD AUC LG RCVR4	19	J18 - U	J20 - *D									
AUX AUC RCVR4			J20 - *E	96	XA05 - 52	999	205		STR	14		22ANG WHITE
AUX AUC RTN RCVR4			J20 - *F	97	XA05 - 112	999	205		STR	14		22ANG WHITE
AGC RCVR 1	22	J18 - X	J20 - *G									
AGC RTN 1	23	J18 - Y	J20 - *H									
AGC RCVR 2	24	J18 - Z	J20 - *I									
AGC RTN 2	25	J18 - *A	J20 - *J									
AGC RCVR 3	26	J18 - *B	J20 - *K									
AGC RTN 3	27	J18 - *C	J20 - *M									
AGC RCVR 4	28	J18 - *D	J20 - *N									
AGC RTN 4	29	J18 - *E	J20 - *P									
ISB AUDIO RCVR 1	30	J18 - *F	J20 - *C									

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

CONTRACT NO.:

<b>WIRE LIST</b>			
<b>5051652</b>			
CODE IDENT	57958	SHEET	9
		REV	F

5-65

TM 32-5865-069-24P

5-66

COMPONENT **J20**

TM 32-5865-069-24&amp;P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
ISB AUDIO RCVR 2	31	J18 - *G	J20 - *R									
ISB AUDIO RCVR 3	32	J18 - *H	J20 - *S									
ISB AUDIO RCVR 4	33	J18 - *J	J20 - *T									
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> <b>5051652</b>						
CONTRACT NO.:						CODE IDENT	57950	SHEET	10	REV	F	

COMPONENT J2

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLO	ITEM NO.	LEVE	KEY	NOTI	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND						000	207					22AWG BLACK
SHLD GND			J21 - B	100	F7	000	207		STR	14		22AWG BLACK
												NC
			J21 - C	102								N
			J21 - E	103								NC
			J21 - F	104								NC
			J21 - G	105								NC
			J21 - H	106								NC
GND			J21 - I	107	F7	000	207		STR	14		22AWG BLACK
			J21 - K	108	XA06 - 12	999	205		STR	14		22AWG WHITE
			J21 - L	109	XA06 - 21	000	205		STR	14		22AWG WHITE
RCBUSACLOCK CLT+			J21 - M	110	XA06 - 68	999	205		STR	14		22AWG WHITE
RCBUSACLOCK OUT-			J21 - N	111	XA06 - 88	999	205		STR	14		22AWG WHITE
RCBUSACATA OUT+			J21 - P	112	XA06 - 22	999	205		STR	14		22AWG WHITE
RCBUSACATA OUT-			J21 - Q	113	XA06 - 22	000	205		STR	14		22AWG WHITE
5MHZ REF CSC+			J21 - S	114	XA06 - 77	999	217		TSP	14		24AWG WHITE
5MHZ REF CSC-			J21 - T	114	XA06 - 37	000						24AWG BLACK
SHLD GND			J21 - S	114A	F1	000	211		STR	14		24AWG BLACK
ADDR SEL 2(5)			J21 - U	116	XA06 - 71	999	205		STR	14		24AWG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5051652

CODE IDENT

5795E

SHEET

11

REV

F

5-68

COMPONENT J21

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
ADDR SEL 2(5)			J21 - U	119	J22 - P	999	209		STR	14		24ANG WHITE											
ADDR SEL 2(4)			J21 - V	120	XA06 - 10	999	209		STR	14		24ANG WHITE											
ADDR SEL 2(4)			J21 - V	121	J22 - R	999	209		STR	14		24ANG WHITE											
ADDR SEL 2(3)			J21 - W	122	XA06 - 70	999	209		STR	14		24ANG WHITE											
ADDR SEL 2(3)			J21 - W	123	J22 - S	999	209		STR	14		24ANG WHITE											
			J21 - X	124								NC											
RS PCMR +			J21 - Y	125	XA06 - 63	999	205		STR	14		22ANG WHITE											
RS PCMR -			J21 - Z	126	XA06 - 03	999	205		STR	14		22ANG WHITE											
GND			J21 - *A	127	E7	000	207		STR	14		22ANG BLACK											
			J21 - *B	128								NC											
EXT BLANK RCVR 1			J21 - *C	129	XA12 - 03	999	205		STR	14		22ANG WHITE											
EXT BLANK RCVR 2			J21 - *D	130	XA12 - 64	999	205		STR	14		22ANG WHITE											
EXT BLANK RCVR 3			J21 - *E	131	XA12 - 63	999	205		STR	14		22ANG WHITE											
EXT BLANK RCVR 4			J21 - *F	132	XA12 - 04	999	205		STR	14		22ANG WHITE											
GND			J21 - *G	133	E7	000	207		STR	14		22ANG BLACK											
RS TEMP +			J21 - *H	134	XA06 - 06	999	205		STR	14		22ANG WHITE											
RS TEMP -			J21 - *J	135	XA06 - 11	999	205		STR	14		22ANG WHITE											
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:						WIRE LIST						505 1652											
						CODE IDENT						57958											
												SHEET 12 REV F											



COMPONENT J22

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND			J22 - A	137	E7	000	207		STR	14		22ANG BLACK
SHLC GND			J22 - B	138	E7	000	207		STR	14		22ANG BLACK
			J22 - C	139								NC
			J22 - D	140								NC
GND			J22 - E	141	E7	000	207		STR	14		22ANG BLACK
RCBUSASTROBE IN+			J22 - F	142	XA06 - 16	999	205		STR	14		22ANG WHITE
RCBUSASTROBE IN-			J22 - G	143	XA06 - 76	999	205		STR	14		22ANG WHITE
RCBUSACLOCK IN +			J22 - H	144	XA06 - 14	999	205		STR	14		22ANG WHITE
RCBUSACLOCK IN -			J22 - J	145	XA06 - 75	999	205		STR	14		22ANG WHITE
RCBUSACATA IN +			J22 - K	146	XA06 - 19	999	205		STR	14		22ANG WHITE
RCBUSACATA IN -			J22 - L	147	XA06 - 80	999	205		STR	14		22ANG WHITE
5MHZ REF +	148	J23 - M	J22 - M	115	XA06 - 28	999	217		TSP	14		24ANG WHITE
5MHZ REF -	148	J23 - N	J22 - N	115	XA06 - 29	000						24ANG BLACK
SHLD GND	148A	J23 - M	J22 - M	115A	E1	000	211		STR	14		24ANG BLACK
ADDR SEL 2(5)	119	J21 - U	J22 - P									
ADDR SEL 2(4)	121	J21 - V	J22 - R									
ADDR SEL 2(3)	123	J21 - W	J22 - S									
			J22 - T	150								NC
			J22 - U	151								NC

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>		<b>5051652</b>	
CONTRACT NO.:	CODE IDENT	SHEET	REV
	5795e	13	F

5-69

TM 32-5865-069-2&P

5-70

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			J22 - V	152								NC
GND			J22 - W	153	E7	000	207		STR	14		22AWG BLACK
			J22 - X	154								NC
			J22 - Y	155								NC
			J22 - Z	156								NC
			J22 - #A	157								NC
			J22 - #B	158								NC
			J22 - #C	159								NC
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						CODE IDENT		5795e		SHEET 14		REV F
						5051652						

COMPONENT J23

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
SHLD GND			J23 - A	161	E1	000	207		STR	14		22AWG BLACK	
SHLD GND			J23 - B	162	E1	000	207		STR	14		22AWG BLACK	
			J23 - C	163								NC	
			J23 - D	164								NC	
GND			J23 - E	165	E1	000	207		STR	14		22AWG BLACK	
RCBUSB STROBE +			J23 - F	166	XA07 - 108	999	205		STR	14		22AWG WHITE	
RCBUSB STROBE -			J23 - G	167	XA07 - 48	999	205		STR	14		22AWG WHITE	
RCBUSB CLCCK +			J23 - H	168	XA07 - 107	999	205		STR	14		22AWG WHITE	
RCBUSB CLCCK -			J23 - J	169	XA07 - 109	999	205		STR	14		22AWG WHITE	
RCBUSB DATA +			J23 - K	170	XA07 - 116	999	205		STR	14		22AWG WHITE	
RCBUSB DATA -			J23 - L	171	XA07 - 56	999	205		STR	14		22AWG WHITE	
5MHZ REF +			J23 - M	148	J22 - M	999	217		TSP	14		24AWG WHITE	
5MHZ REF -			J23 - N	148	J22 - N	000						24AWG BLACK	
SHLD GND			*J23 - M	148A	*J22 - M	000	211		STR	14		24AWG BLACK	
UNIT ACRS A5			J23 - P	172	XA07 - 84	999	205		STR	14		22AWG WHITE	
UNIT ACRS A4			J23 - R	173	XA07 - 23	999	205		STR	14		22AWG WHITE	
UNIT ACRS A3			J23 - S	174	XA07 - 21	999	205		STR	14		22AWG WHITE	
UNIT ACRS A2			J23 - T	175	XA07 - 82	999	205		STR	14		22AWG WHITE	
UNIT ACRS A1			J23 - U	176	XA07 - 22	999	205		STR	14		22AWG WHITE	
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP			
CONTRACT NO.:						WIRE LIST						5051652	
						CODE IDENT		57958		SHEET 15		REV F	

5-71

TM 32-5865-069-248P

5-72

COMPONENT J23

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
UNIT ADDR A0			J23 - V	177	XA07 - 83	999	205		STR	14		22ANG WHITE					
ADD RTA			J23 - M	178	XA07 - 42	999	205		STR	14		22ANG WHITE					
ADD GEN ENABLE *			J23 - X	179	XA07 - 51	999	205		STR	14		22ANG WHITE					
			J23 - Y	180								NC					
			J23 - Z	181								NC					
			J23 - *A	182								NC					
			J23 - *B	183								NC					
			J23 - *C	184								NC					
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID						WIRE LIST											
TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED																	
CONTRACT NO.:						5051652											
						CODE IDENT		57958		SHEET		16		REV		F	

COMPONENT J24

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND			J24 - A	186	E6	000	207		STR	16		22AWG BLACK
SHLD GND			J24 - B	187	E6	000	207		STR	16		22AWG BLACK
			J24 - C	188								NC
			J24 - D	189								NC
			J24 - E	190								NC
GND			J24 - F	191	E6	000	207		STR	16		22AWG BLACK
DATA0 FLAG			J24 - G	192	XA07 - 87	999	205		STR	16		22AWG WHITE
FFT TRANS FLAG			J24 - H	193	XA07 - 27	999	205		STR	16		22AWG WHITE
DC DCNE			J24 - J	194	XA09 - 06	999	188		SHLD	16		22AWG WHITE
SHLD GND			*J24 - J	194A	*J24 - K	000	211		STR	16		24AWG BLACK
CIVLC			J24 - K	195	XA09 - 05	999	188		SHLD	16		22AWG WHITE
SHLD GND	194A	*J24 - J	*J24 - K	195A	*J24 - L	000	211		STR	16		24AWG BLACK
PIC CLK			J24 - L	196	XA09 - 10	999	188		SHLD	16		22AWG WHITE
SHLD GND	195A	*J24 - K	*J24 - L	196A	*J24 - M	000	211		STR	16		24AWG BLACK
AOI SEL *			J24 - M	197	XA09 - 54	999	188		SHLD	16		22AWG WHITE
SHLD GND	196A	*J24 - L	*J24 - M	197A	E6	000	211		STR	16		24AWG BLACK
C DAT 7			J24 - N	198	XA09 - 16	999	205		STR	16		22AWG WHITE
C DAT 6			J24 - P	199	XA09 - 76	999	205		STR	16		22AWG WHITE
C DAT 5			J24 - R	200	XA09 - 17	999	205		STR	16		22AWG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>		<b>5051652</b>	
CODE IDENT	57958	SHEET	17
		REV	F

CONTRACT NO.:

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
C DAT 4			J24 - S	201	XA09 - 77	999	205		STR	16		22ANG WHITE
EFT CBLF NEMPT			J24 - T	202	XA07 - 88	999	205		STR	16		22ANG WHITE
			J24 - U	203								NC
			J24 - V	204								NC

<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP	<b>WIRE LIST</b> CODE IDENT	<b>5051652</b>		SHEET	REV
		<b>57958</b>	18	F	

CONTRACT NO.:

COMPONENT J

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
RC BUS A CLK			J25	206	XA06 - 81	999	219		SHLD	14		24AWG WHITE
SHLD GND	212A	*J28	*J25	206A	E5	000	211		STR	14		24AWG BLACK
RC BUS A DATA			J26	208	XA06 - 21	999	209		STR	14		24AWG WHITE
RC BUS A STROBE			J27	210	XA06 - 20	999	209		STR	14		24AWG WHITE
RC BUS B CLOCK			J28	212	XA12 - 11	999	219		SHLD	14		24AWG WHITE
SHLD GND			*J28	212A	*J25	000	211		STR	14		24AWG BLACK
RC BUS B DATA			J29	214	XA12 - 67	999	209		STR	14		24AWG WHITE
RC BUS B STROBE			J30	216	XA12 - 12	999	209		STR	14		24AWG WHITE
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT    57958    SHEET    19    REV    F						
CONTRACT NO.:												

5-75

TM 32-5865-069-248P

5-76

COMPONENT P01

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
GND			P01 - 01	220	E1	000	207		STR	14		22AWG BLACK					
+5V			P01 - 02	221	T01 - 3G	999	205		STR	14		22AWG WHITE					
+15V	223	P01 - 04	P01 - 03	222	T01 - 4K	999	205		STR	14		22AWG WHITE					
+15V			P01 - 04	223	P01 - 03	999	209		STR	14		24AWG WHITE					
IF SEL RCVR 1			P01 - 05	224	XA12 - 105	999	209		STR	14		24AWG WHITE					
IF SEL RCVR 2			P01 - 06	225	XA12 - 45	999	209		STR	14		24AWG WHITE					
IF SEL RCVR 3			P01 - 07	226	XA12 - 104	999	209		STR	14		24AWG WHITE					
IF SEL RCVR 4			P01 - 08	227	XA12 - 44	999	209		STR	14		24AWG WHITE					
20 DB 3			P01 - 09	228	A14P1- 13	999	209		STR	14		24AWG WHITE					
20 DB 2			P01 - 10	229	A14P1- 30	999	209		STR	14		24AWG WHITE					
			P01 - 11	230								NC					
10 DB 4			P01 - 12	231	A14P1- 15	999	209		STR	14		24AWG WHITE					
			P01 - 13	232								NC					
			P01 - 14	233								NC					
			P01 - 15	234								NC					
			P01 - 16	235								NC					
			P01 - 17	236								NC					
			P01 - 18	237								NC					
			P01 - 19	238								NC					
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP			WIRE LIST				
CONTRACT NO.:						5051652			CODE IDENT			57958		SHEET 20		REV F	



SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
			P01 - 20	239								NC	
			P01 - 21	240								NC	
			P01 - 22	241								NC	
			P01 - 23	242								NC	
			P01 - 24	243								NC	
			P01 - 25	244								NC	
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							
CONTRACT NO.:						CODE IDENT		57958		SHEET 21		REV F	

5-77

TM 32-5865-069-248P

5-78

COMPONENT **A15**

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
+5V	358	T81 - 3H	A15 -W1-1										
+5V	359	T81 - 3J	A15 -W1-2										
GND	402	T81 - 8G	A15 - W2										
GND	403	T81 - 8H	A15 - W3										
GND			A15 - E1	246	E8	000	203		STR	14		20AWG BLACK	
250KHZ CLK CCND			A15J1-	1	435	XA1P2-	1	999	219		SHLD	14	24AWG WHITE
250KHZ CLK SHLD			*15J1-	1	435A	A15J1-	2	000	211		STR	14	24AWG BLACK
			A15J1-	1									WIREWAPPED PIN
250KHZ CLK SHLD	435A	*15J1-	1	A15J1-	2								WIREWAPPED PIN
250KHZ CLK CCND			A15J1-	3	436	XA2P2-	1	999	219		SHLD	14	24AWG WHITE
250KHZ CLK SHLD			*15J1-	3	436A	A15J1-	4	000	211		STR	14	24AWG BLACK
			A15J1-	3									WIREWAPPED PIN
250KHZ CLK SHLD	436A	*15J1-	3	A15J1-	4								WIREWAPPED PIN
250KHZ CLK CCND			A15J1-	5	501	XA3P2-	1	999	219		SHLD	14	24AWG WHITE
250KHZ CLK SHLD			*15J1-	5	501A	A15J1-	6	000	211		STR	14	24AWG BLACK
			A15J1-	5									WIREWAPPED PIN
250KHZ CLK SHLD	501A	*15J1-	5	A15J1-	6								WIREWAPPED PIN
250KHZ CLK CCND			A15J1-	7	565	XA4P2-	1	999	219		SHLD	14	24AWG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>		<b>5051652</b>	
CODE IDENT	57958	SHEET	22
		REV	F

CONTRACT NO.:

COMPONENT A15

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
250KHZ CLK SHLD			*15J1- 7	565A	A15J1- 8	000	211		STR	14		24AWG BLACK											
			A15J1- 7									WIREWRAPPED PIN											
250KHZ CLK SHLD	565A	*15J1- 7	A15J1- 8									WIREWRAPPED PIN											
250KHZ CLK CCND			A15J1- 9	630	XA06 - 74	999	219		SHLD	14		24AWG WHITE											
250KHZ CLK SHLD			*15J1- 9	630A	A15J1- 10	000	211		STR	14		24AWG BLACK											
250KHZ CLK SHLD			*XA06- 74	630B	XA06 - 02	000	211		STR	14		24AWG BLACK											
			A15J1- 9									WIREWRAPPED PIN											
250KHZ CLK SHLD	630A	*15J1- 9	A15J1- 10									WIREWRAPPED PIN											
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:												WIRE LIST											
												5051652											
CODE IDENT								57958		SHEET		23		REV		F							

5-79

TM 32-5865-069-24&P

5-80

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HGT IN			A16 - FL1	248	S03 - ANG	999	213		TSP	15		20AWG WHITE
AC HEUT IN			A16 - FL2	248	S03 - CNO	000						20AWG BLACK
SHLD GAD			*A16 - FL1	248A	A16 - E2	000	211		STR	15		24AWG BLACK
SHLD GAD			*S03 - ANG	248B	E8	000	211		STR	15		24AWG BLACK
GND			A16 - E1	249	E6	000	203		STR	15		20AWG BLACK
SHLD GAD	248A	*A16 - FL1	A16 - E2									
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						WIRE LIST						
CONTRACT NO.:						5051652						
						CODE IDENT		57958		SHEET 24		REV F

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
GND			A17 - 01	251	E5	000	211		STR	14		24AWG BLACK
			A17 - 02	252								NC
			A17 - 03	253								NC
			A17 - 04	254								NC
-15V	371	T81 - 58	A17 - 05									
+15V	362	T81 - 48	A17 - 06									
GND			A17 - 07	255	E5	000	211		STR	14		24AWG BLACK
			A17 - 08	256								NC
+5V	355	T81 - 30	A17 - 09									
			A17 - 10	257								NC
			A17 - 11	258								NC
			A17 - 12	259								NC
			A17 - 13	260								NC
			A17 - 14	261								NC
			A17 - 15	262								NC
			A17 - 16	263								NC
			A17 - 17	264								NC
			A17 - 18	265								NC
			A17 - 19	266								NC
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT    57958    SHEET    25    REV    F						
CONTRACT NO.:												

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			A17 - 20	267								NC
			A17 - 21	268								NC
			A17 - 22	269								NC
			A17 - 23	270								NC
RSPU PWR CN			A17 - 24	271	XA06 - 64	999	209		STR	14		24AWG WHITE
POWER CN	323	S03 - 0	A17 - 25									
+28V	302	T01 - 6C	A17 - 26									
LAMP TEST	315	S01 - 02	A17 - 27									
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> <span style="float: right;">5051652</span> CODE IDENT <span style="float: right;">57950</span> SHEET <span style="float: right;">26</span> REV <span style="float: right;">F</span>						
CONTRACT NO.:												



5-84

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
+28V			A19 - 01	279	T01 - 6G	999	205		STR	14		22ANG WHITE					
CPD CBT 1			A19 - 02	283	XA06 - 110	999	209		STR	14		24ANG WHITE					
CPD CBT 2			A19 - 03	282	XA06 - 54	999	209		STR	14		24ANG WHITE					
CPD CBT 3			A19 - 04	281	XA06 - 51	999	209		STR	14		24ANG WHITE					
CPD CBT 4			A19 - 05	280	XA06 - 114	999	209		STR	14		24ANG WHITE					
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP			WIRE LIST				
CONTRACT NO.:						CODE IDENT			57958			SHEET		28		REV F	

5051652

57958

SHEET

28

REV F



COMPONENT A

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
-15V	379	TB1 - 5K	A21 - 01									
-6V			A21 - 02	285	XA12 - 56	999	205		STR	14		22AWG WHITE
ANALOG GNC	396	TB1 - 7K	A21 - 03									
AUDIC MONITOR			A22 - FL2	286	S02 - C	999	209		STR	14		24AWG WHITE
GND			A22 - E1	290	E5	000	211		STR	14		24AWG BLACK
+28V			A23 - 01	305	TB1 - 6H	999	209		STR	14		24AWG WHITE
OVERTEMP DET	771	XA06 - 34	A23 - 02									
			A23 - 03	303								NC
			A23 - 04									NC
			A23 - 05									NC
			A23 - 06									NC

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST 5051652  
 CODE IDENT 57958 SHEET 29 REV F

CONTRACT NO.:

5-85

TM 32-5865-069-24&P



COMPONENT CB1

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HCT			CB1 - 01	291	T01 - 1C	999	100		SHLD	15		22AWG WHITE
SHLD GAD			*CB1 - 01	291A	*CB2 - 01	000	211		STR	15		24AWG BLACK
AC HCT CB			CB1 - 02	292	PS1 - 02	999	100		SHLD	15		22AWG WHITE
SHLD GAD			*CB1 - 02	292A	*CB2 - 02	000	211		STR	15		24AWG BLACK
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						5051652 CODE IDENT    57958    SHEET    31    REV    F						

TM 32-5865-069-24&P

5-87

88-9

COMPONENT **CB2**

TM 32-5865-069-2&amp;P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HET			CB2 - 01	294	T81 - 18	999	188		SHLD	15		22AWG WHITE
SHLD GAD	291A	*CB1 - 01	*CB2 - 01	294A	*CB3 - 01	000	211		STR	15		24AWG BLACK
AC HET CB			CB2 - 02	295	PS2 - 02	999	188		SHLD	15		22AWG WHITE
SHLD GAD	292A	*CB1 - 02	*CB2 - 02	295A	*CB3 - 02	000	211		STR	15		24AWG BLACK
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE		COAX - COAXIAL		SOL - SOLID		
CONTRACT NO.:						TP - TWISTED PAIR		SHLD - SHIELDED		STR - STRANDED		
						WW - WIRE WRAP						
						<b>WIRE LIST</b>						
						CODE IDENT					5051652	
						5795E					SHEET 32	
											REV F	

COMPONENT CB3

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HCT			CB3 - 01	297	TB1 - 1A	999	188		SHLD	15		22AWG WHITE
SHLD GAD	294A	*CB2 - 01	*CB3 - 01	297A	*CB4 - 01	000	211		STR	15		24AWG BLACK
AC HCT CB			CB3 - 02	298	PS3 - 02	999	188		SHLD	15		22AWG WHITE
SHLD GAD	295A	*CB2 - 02	*CB3 - 02	298A	*CB4 - 02	000	211		STR	15		24AWG BLACK

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST**  
**5051652**  
 CODE IDENT    **5795E**    SHEET    **33**    REV    **F**

CONTRACT NO.:

5-90

COMPONENT **C84**

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HCT			C84 - 01	300	TB1 - 1G	999	188		SHLD	15		22AWG WHITE
SHLD GND	297A	*CB3 - 01	*CB4 - 01	300A	E8	000	211		STR	15		24AWG BLACK
AC HCT CB			C84 - 02	301	M01 - 01	999	188		SHLD	15		22AWG WHITE
SHLD GND	298A	*CB3 - 02	*CB4 - 02	301A	*CB4 - 02	000	211		STR	15		24AWG BLACK
AC HCT CB			C84 - 02	302	E3	999	188		SHLD	15		22AWG WHITE
SHLD GND	301A	*CB4 - 02	*CB4 - 02	302A	E8	000	211		STR	15		24AWG BLACK

KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP	<b>WIRE LIST</b>		<b>5051652</b>	
	CONTRACT NO.:	CODE IDENT	57958	SHEET 34 REV F

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC HCT CB	301	CB4 - 02	M01 - 01									
AC NEUT	351	TB1 - 2K	M01 - 02									

KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP	<b>WIRE LIST</b>		5051652	
CONTRACT NO.:	CODE IDENT	57958	SHEET	35
			REV	F

591

TM 32-5865-069-248P

B-92

COMPONENT **PS1**

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
AC NEUT			PS1 - 01	308	T01 - 2C	999	188		SHLD	15		22AWG WHITE					
SHLC GND			*T01 - 2C	3088	*T01 - 2B	800	211		STR	15		24AWG BLACK					
AC HCT CB	292	C01 - 02	PS1 - 02														
+5V	352	T01 - 3A	PS1 - 03		V01 - (+)	999	224		STR	14		16AWG WHITE					
GND	400	T01 - 8E	PS1 - 04		V01 - (-)	000	225		STR	14		16AWG BLACK					
GND	401	T01 - 8F	PS1 - 04														
GND	405	T01 - 8K	PS1 - 04														
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>											
CONTRACT NO.:						CODE IDENT		57958		SHEET		36		REV		F	

5051652

57958

36

REV F



COMPONENT PS2

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC NEUT			PS2 - 01	310	TB1 - 2B	999	100		SHLD	15		22AWG WHITE
SHLD GND	3000	*TB1 - 2C	*TB1 - 2B	3100	*TB1 - 2A	000	211		STR	15		24AWG BLACK
AC HET CR	295	CR2 - 02	PS2 - 02									
+15V	361	TB1 - 4A	PS2 - 03									
ANALOG GND	395	TB1 - 7J	PS2 - 04									
-15V	370	TB1 - 5A	PS2 - 05									
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						5051652						
						CODE IDENT	5795e	SHEET	37	REV	F	

5-93

TM 32-5865-069-248P

5-94

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AC NEUT			PS3 - 01	312	TB1 - 2A	999	188		SHLD	15		22AWG WHITE
SHLD GND	310B	*TB1 - 2B	*TB1 - 2A	312B	*TB1 - 2A	999	211		STR	15		24AWG BLACK
AC HET CB	298	CB3 - 02	PS3 - 02									
+28V	380	TB1 - 6A	PS3 - 03									
GND	399	TB1 - 8D	PS3 - 04									
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT    57958    SHEET    38    REV    F						
CONTRACT NO.:												

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS			
	WIRE NO.	LOCATION													
LAMP TEST *			501 - 01	314	XA06 - 50	999	209		STR	14		24AWG WHITE			
LAMP TEST			501 - 02	315	A17 - 27	999	209		STR	14		24AWG WHITE			
GND	398	TB1 - 8C	501 - 03												
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>									
CONTRACT NO.:						5051652		CODE IDENT		57958		SHEET	39	REV	F



COMPONENT S03

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
POWER CN			S03 - C	322	S03 - D		220		SOL			24AWG SOLID
POWER CN	322	S03 - C	S03 - D	323	A17 - 25	999	209		STR	14		24AWG WHITE
GND	397	T81 - 8B	S03 - 01	324	S03 - 03		220		SOL			24AWG SOLID
			S03 - 02	325								NC
GND	324	S03 - 01	S03 - 03									
			S03 - 04	326								NC
			S03 - ANC	327								NC
AC HCT IN	248	A16 - FL1	S03 - ANC	328	S03 - BND		221		SOL			22AWG SOLID
AC HCT SW			S03 - AC	329	S03 - BC		221		SOL			22AWG SOLID
AC HCT SW			S03 - AC	330	T81 - 1E	999	213		TSP	15		20AWG WHITE
AC NEUT SW			S03 - CC	330	T81 - 2F	000						20AWG BLACK
SHLD GND			*S03 - AC	330A	E8	000	211		STR	15		24AWG BLACK
			S03 - BNC	331								NC
AC HCT IN	328	S03 - ANO	S03 - ENC									
AC HCT SW	329	S03 - AC	S03 - BC									
			S03 - CNC	332								NC
AC NEUT IN	248	A16 - FL2	S03 - CND	333	S03 - DND		221		SOL			22AWG SOLID
AC NEUT SW			S03 - CC	334	S03 - DC		221		SOL			22AWG SOLID
			S03 - DNC	335								NC
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT    57952    SHEET    41    REV    F						
CONTRACT NO.:												

5-97

TM 32-5865-069-24&P

5-98

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
AC NEUT IN	333	S03 - CNO	S03 - DNG														
AC NEUT S4	334	S03 - CC	S03 - DC														
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP																	
WIRE LIST						5795E			5051652			SHEET 42 REV F					
CONTRACT NO.:																	



5-100

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
AC HGT	297	CB3 - 01	T81 - 1A											
AC HGT	294	CB2 - 01	T81 - 1B											
AC HGT	291	CB1 - 01	T81 - 1C											
			T81 - 1D	341								NC		
			T81 - 1E	342								NC		
AC HGT SM	330	S03 - AC	T81 - 1F											
AC HGT	300	CB4 - 01	T81 - 1G											
			T81 - 1H	343								NC		
			T81 - 1J	344								NC		
			T81 - 1K	345								NC		
AC NEUT	312	PS3 - 01	T81 - 2A											
AC NEUT	310	PS2 - 01	T81 - 2B											
AC NEUT	308	PS1 - 01	T81 - 2C											
			T81 - 2D	346								NC		
			T81 - 2E	347								NC		
AC NEUT SM	330	S03 - CC	T81 - 2F											
			T81 - 2G	348								NC		
			T81 - 2H	349								NC		
AC NEUT			T81 - 2J	350	E2	999	188		SHLD	15		22AWG WHITE		
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT 57958							SHEET 44	REV F
CONTRACT NO.:														



COMPONENT T81

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND	312B	*T81 - 2A	*T81 - 2J	350A	*T81 - 2K	000	211		STR	15		24ANG BLACK
AC NEUT			T81 - 2K	351	M01 - 02	999	100		SHLD	15		22ANG WHITE
SHLD GND	350A	*T81 - 2J	*T81 - 2K	351A	E8	000	211		STR	15		24ANG BLACK
+5V			T81 - 3A	352	PS1 - 03	999	201		STR	14		20ANG WHITE
+5V			T81 - 3B	353	VR1 - (+)	999	201		STR	14		20ANG WHITE
+5V			T81 - 3C	354	VR1 - (+)	999	201		STR	14		20ANG WHITE
+5V			T81 - 3D	355	A17 - 09	999	209		STR	14		24ANG WHITE
			T81 - 3E	356								NC
+5V			T81 - 3F	357	XA1P1- 29	999	205		STR	14		22ANG WHITE
+5V	221	P01 - 02	T81 - 3G									
+5V			T81 - 3H	358	A15 -W1-1	999	201		STR	14		20ANG WHITE
+5V			T81 - 3J	359	A15 -W1-2	999	201		STR	14		20ANG WHITE
+5V			T81 - 3K	360	XA3P1- 29	999	205		STR	14		22ANG WHITE
+15V			T81 - 4A	361	PS2 - 03	999	205		STR	14		22ANG WHITE
+15V			T81 - 4B	362	A17 - 06	999	209		STR	14		24ANG WHITE
+15V			T81 - 4C	363	A14P3- 16	999	205		STR	14		22ANG WHITE
+15V			T81 - 4D	364	XA05 - 60	999	205		STR	14		22ANG WHITE
+15V			T81 - 4E	365	XA12 - 60	999	205		STR	14		22ANG WHITE
+15V			T81 - 4F	366	XA1P1- 28	999	205		STR	14		22ANG WHITE
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT 57958 SHEET 45 REV F						
CONTRACT NO.:												

5-101

TM 32-5865-069-248P

5-102

COMPONENT T81

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
+15V			T81 - 4G	367	XA2P1- 28	999	205		STR	14		22ANG WHITE	
+15V			T81 - 4H	368	XA3P1- 28	999	205		STR	14		22ANG WHITE	
+15V			T81 - 4J	369	XA4P1- 28	999	205		STR	14		22ANG WHITE	
+15V	222	P01 - 03	T81 - 4K										
-15V			T81 - 5A	370	PS2 - 05	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5B	371	A17 - 05	999	205		STR	14		24ANG WHITE	
-15V			T81 - 5C	372	A14P3- 14	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5D	373	XA05 - 58	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5E	374	XA12 - 58	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5F	375	XA1P1- 10	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5G	376	XA2P1- 10	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5H	377	XA3P1- 10	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5J	378	XA4P1- 10	999	205		STR	14		22ANG WHITE	
-15V			T81 - 5K	379	A21 - 01	999	205		STR	14		22ANG WHITE	
+28V			T81 - 6A	380	PS3 - 03	999	205		STR	14		22ANG WHITE	
			T81 - 6B	381								NC	
+28V			T81 - 6C	382	A17 - 26	999	205		STR	14		24ANG WHITE	
			T81 - 6D	383								NC	
			T81 - 6E	384								NC	
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP		WIRE LIST 5051652	
CONTRACT NO.:						CODE IDENT		57958		SHEET 46		REV F	

TM 32-5865-069-24&amp;P

COMPONENT T81

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
+28V	273	A18 - 01	T81 - 6F									
+28V	279	A19 - 01	T81 - 6G									
+28V	305	A23 - 01	T81 - 6H									
			T81 - 6J	385								NC
			T81 - 6K	386								NC
ANALCG GND			T81 - 7A	387	E1	000	203		STR	14		20AWG BLACK
ANALCG GND			T81 - 7B	388	XA05 - 57	000	207		STR	14		22AWG BLACK
ANALCG GND			T81 - 7C	389	A14P1- 02	000	203		STR	14		20AWG BLACK
ANALCG GND			T81 - 7D	390	XA1P1- 16	000	207		STR	14		22AWG BLACK
ANALCG GND			T81 - 7E	391	XA2P1- 16	000	203		STR	14		20AWG BLACK
ANALCG GND			T81 - 7F	392	XA3P1- 16	000	211		STR	14		24AWG BLACK
ANALCG GND			T81 - 7G	393	XA4P1- 16	000	207		STR	14		22AWG BLACK
ANALCG GND			T81 - 7H	394	XA12 - 57	000	207		STR	14		22AWG BLACK
ANALCG GND			T81 - 7J	395	PS2 - 04	000	207		STR	14		22AWG BLACK
ANALCG GND			T81 - 7K	396	A21 - 03	000	203		STR	14		20AWG BLACK
GND			T81 - 8A	404	E1	000	203		STR	14		20AWG BLACK
GND			T81 - 8B	397	S03 - 01	000	207		STR	14		22AWG BLACK
GND			T81 - 8C	398	S01 - 03	000	207		STR	14		22AWG BLACK
GND			T81 - 8C	399	PS3 - 04	000	207		STR	14		22AWG BLACK

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5051652

CODE IDENT

5755E

SHEET

47

REV

F

CONTRACT NO.:

5-104

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
GND			T81 - 8E	400	PS1 - 04	000	207		STR	14		22AWG BLACK
GND			T81 - 8F	401	PS1 - 04	000	203		STR	14		20AWG BLACK
GND			T81 - 8G	402	A15 - K2	000	203		STR	14		20AWG BLACK
GND			T81 - 8H	403	A15 - K3	000	203		STR	14		20AWG BLACK
			T81 - 8J									NC
GND			T81 - 8K	405	PS1 - 04	000	203		STR	14		20AWG BLACK
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						5051652 CODE IDENT    57958    SHEET    48    REV    F						

COMPONENT VR1

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
+5V	309	PS1 - 03	VR1 - (+)									
+5V	353	TR1 - 3B	VR1 - (+)									
+5V	354	TR1 - 3C	VR1 - (+)									
GND	311	PS1 - 04	VR1 - (-)									
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						57952		5051652		SHEET 49		REV F

5-105

TM 32-5865-069-248P

5-106

COMPONENT XA01

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
			XA1P1- 03	409								WIREDAPPED PIN											
			XA1P1- 08	414								WIREDAPPED PIN											
-15V	375	T81 - 5F	XA1P1- 10																				
			XA1P1- 15	420								WIREDAPPED PIN											
ANALCG GNC	390	T81 - 7D	XA1P1- 16									WIREDAPPED PIN											
			XA1P1- 21	425								WIREDAPPED PIN											
+15V	366	T81 - 4F	XA1P1- 28																				
+5V	357	T81 - 3F	XA1P1- 29									WIREDAPPED PIN											
			XA1P1- 32	434								WIREDAPPED PIN											
250KHZ CLK COND	435	A15J1- 1	XA1P2- 1																				
			XA1P2- 2	437								NC											
			XA1P2- 3	438								NC											
			XA1P2- 4	439								NC											
			XA1P2- 5	440								NC											
			XA1P3- 02	443								WIREDAPPED PIN											
			XA1P3- 04	445								WIREDAPPED PIN											
			XA1P3- 05	446								WIREDAPPED PIN											
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:						WIRE LIST						5051652											
						CODE IDENT						57958 SHEET 50 REV F											

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
			XA1P3- 09	450								WIREWAPPED PIN	
CPD INTEG DQNE1+	68	J19 - *K	XA1P3- 10										
CPD INTEG DQNE1-	69	J19 - *M	XA1P3- 11										
CPD RCVR 1 -	43	J19 - J	XA1P3- 12										
CPD RCVR 1 +	42	J19 - H	XA1P3- 13										
			XA1P3- 17	454								WIREWAPPED PIN	
			XA1P3- 18	455								WIREWAPPED PIN	
<p>KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID            TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED            WW - WIRE WRAP</p>						<p><b>WIRE LIST</b></p>							
<p>CONTRACT NO.:</p>						<p>57958</p>		<p>5051652</p>		<p>SHEET 51</p>		<p>REV F</p>	

5-107

5-108

COMPONENT XA02

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA2P1- 03	473								WIREDWRAPPED PIN		
			XA2P1- 08	478								WIREDWRAPPED PIN		
-15V	376	TB1 - 5G	XA2P1- 10											
			XA2P1- 15	484								WIREDWRAPPED PIN		
ANALCG GND	391	TB1 - 7E	XA2P1- 16									WIREDWRAPPED PIN		
			XA2P1- 21	489								WIREDWRAPPED PIN		
+15V	367	TB1 - 4G	XA2P1- 28											
			XA2P1- 29	496								WIREDWRAPPED PIN		
			XA2P1- 32	499								WIREDWRAPPED PIN		
250KHZ CLK CCND	436	A15J1- 3	XA2P2- 1											
			XA2P2- 2	502								NC		
			XA2P2- 3	503								NC		
			XA2P2- 4	504								NC		
			XA2P2- 5	505								NC		
			XA2P3- 02	508								WIREDWRAPPED PIN		
			XA2P3- 04	510								WIREDWRAPPED PIN		
			XA2P3- 05	511								WIREDWRAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP			WIRE LIST	
CONTRACT NO.:						5051652		CODE IDENT		57958		SHEET 52		REV F

TM 32-5865-069-248P



SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA2P3- 09	515								WIREWAPPED PIN
CPD INTEG DONE2+	70	J19 - *N	XA2P3- 10									
CPD INTEG DONE2-	71	J19 - *P	XA2P3- 11									
CPD RCVR 2 -	45	J19 - L	XA2P3- 12									
CPD RCVR 2 +	44	J19 - K	XA2P3- 13									
			XA2P3- 17	519								WIREWAPPED PIN
			XA2P3- 18	520								WIREWAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>			
CODE IDENT		5755e	5051652
CONTRACT NO.:	SHEET	53	REV F

5-109

TM 32-5865-069-24&P

5-110

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA3P1- 03	538								WIREDRAPPED PIN		
			XA3P1- 08	543								WIREDRAPPED PIN		
-15V	377	T81 - 5H	XA3P1- 10											
			XA3P1- 15	549								WIREDRAPPED PIN		
ANALOG GND	392	T81 - 7F	XA3P1- 16									WIREDRAPPED PIN		
			XA3P1- 21	554								WIREDRAPPED PIN		
+15V	368	T81 - 4H	XA3P1- 28											
+5V	360	T81 - 3K	XA3P1- 29									WIREDRAPPED PIN		
			XA3P1- 32	563								WIREDRAPPED PIN		
250KHZ CLK CCND	501	A15J1- 5	XA3P2- 1											
			XA3P2- 2	566								NC		
			XA3P2- 3	567								NC		
			XA3P2- 4	568								NC		
			XA3P2- 5	569								NC		
			XA3P3- 02	572								WIREDRAPPED PIN		
			XA3P3- 04	574								WIREDRAPPED PIN		
			XA3P3- 05	575								WIREDRAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							<b>5051652</b>	
CONTRACT NO.:						CODE IDENT		57952		SHEET 54		REV F		

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
			XA3P3- 09	579								WIREWAPPED PIN											
CPD INTEG DONE3+	72	J19 - *G	XA3P3- 10																				
CPD INTEG DONE3-	73	J19 - *R	XA3P3- 11																				
CPD RCVR 3 -	47	J19 - N	XA3P3- 12																				
CPD RCVR 3 +	46	J19 - M	XA3P3- 13																				
			XA3P3- 17	583								WIREWAPPED PIN											
			XA3P3- 18	584								WIREWAPPED PIN											
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:						WIRE LIST						5051652											
						CODE IDENT						57958 SHEET 55 REV F											

5-111

TM 32-5865-069-24P

5-112

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA4P1- 03	602								WIREDAPPED PIN		
			XA4P1- 08	608								WIREDAPPED PIN		
-15V	378	TB1 - 5J	XA4P1- 10											
			XA4P1- 15	613								WIREDAPPED PIN		
ANALOG GND	393	TB1 - 7G	XA4P1- 16									WIREDAPPED PIN		
			XA4P1- 21	618								WIREDAPPED PIN		
+15V	369	TB1 - 4J	XA4P1- 28											
			XA4P1- 29	625								WIREDAPPED PIN		
			XA4P1- 32	628								WIREDAPPED PIN		
250KHZ CLK COND	565	A15J1- 7	XA4P2- 1											
			XA4P2- 2	631								NC		
			XA4P2- 3	632								NC		
			XA4P2- 4	633								NC		
			XA4P2- 5	634								NC		
			XA4P3- 02	637								WIREDAPPED PIN		
			XA4P3- 04	639								WIREDAPPED PIN		
			XA4P3- 05	640								WIREDAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							<b>5051652</b>	
CONTRACT NO.:						CODE IDENT		57958		SHEET 56		REV F		

COMPONENT XA04

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
			XA4P3- 09	644								WIRED RAPPED PIN	
CPD INTEG DONE4+	74	J19 - *S	XA4P3- 10										
CPD INTEG DONE4-	75	J19 - *T	XA4P3- 11										
CPD RCVR 4 -	49	J19 - R	XA4P3- 12										
CPD RCVR 4 +	48	J19 - P	XA4P3- 13										
			XA4P3- 17	648								WIRED RAPPED PIN	
			XA4P3- 18	649								WIRED RAPPED PIN	
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						WIRE LIST							
CONTRACT NO.:						CODE IDENT		57958		SHEET		57    REV F	
						5051652							

5-113

TM 32-5866-069-248P

5-114

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
AUX AUC RCVR1	90	J20 - S	XA05 - 03									
VIDEC RCVR 1			XA05 - 09	671	A14P1- 07	999	219		SHLD	14		24AWG WHITE
SHLD GND			*XA05- 09	671A	XA05 - 10	000	211		STR	14		24AWG BLACK
SHLD GND			*14P1- 07	671B	A14P1- 08	000	211		STR	14		24AWG BLACK
SHLD GND	671A	*XA05- 09	XA05 - 10									
TCNE DET RCVR1+	50	J19 - S	XA05 - 13									
			XA05 - 14	674								WIREWAPPED PIN
AUX AUC RCVR2	92	J20 - W	XA05 - 19									
VIDEC RCVR 2			XA05 - 23	682	A14P1- 09	999	219		SHLD	14		24AWG WHITE
SHLD GND			*XA05- 23	682A	XA05 - 24	000	211		STR	14		24AWG BLACK
SHLD GND			*14P1- 09	682B	A14P1- 10	000	211		STR	14		24AWG BLACK
SHLD GND	682A	*XA05- 23	XA05 - 24									
AUX AUC RTN 2	13	J18 - M	XA05 - 26									
AUX AUC RCVR 2	12	J18 - L	XA05 - 27									
TCNE DET RCVR 2+	52	J19 - U	XA05 - 31									
			XA05 - 32	687								WIREWAPPED PIN
TCNE DET RCVR 3-	55	J19 - X	XA05 - 33									
AUX AUC RCVR3	94	J20 - *A	XA05 - 37									
VIDEC RCVR 3			XA05 - 40	693	A14P1- 03	999	219		SHLD	14		24AWG WHITE

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>			<b>5051652</b>		
CODE IDENT	57952	SHEET	50	REV	F

CONTRACT NO.:

COMPONENT XA05

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
SHLD GND			*XA05- 40	693A	XA05 - 41	000	211		STR	14		24AWG BLACK
SHLD GND			*14P1- 03	693B	A14P1- 04	000	211		STR	14		24AWG BLACK
SHLD GND	693A	*XA05- 40	XA05 - 41									
AUX AUC RTN 3	17	J18 - S	XA05 - 43									
AUX AUC RCVR 3	16	J18 - R	XA05 - 44									
TONE DET RCVR 4+	56	J19 - Y	XA05 - 47									
			XA05 - 49	698								WIREWAPPED PIN
AUX AUC RCVR4	96	J20 - *E	XA05 - 52									
VIDEG RCVR 4			XA05 - 55	703	A14P1- 05	999	219		SHLD	14		24AWG WHITE
SHLD GND			*XA05- 55	703A	XA05 - 115	000	211		STR	14		24AWG BLACK
SHLD GND			*14P1- 05	703B	A14P1- 06	000	211		STR	14		24AWG BLACK
AUX AUC RCVR 4	20	J18 - V	XA05 - 56									
ANALCG GND	388	T81 - 78	XA05 - 57									WIREWAPPED PIN
-15VCC	373	T81 - 50	XA05 - 58									WIREWAPPED PIN
+15VDC	364	T81 - 40	XA05 - 60									WIREWAPPED PIN
AUX AUC RTN RCVL	91	J20 - T	XA05 - 63									
AUX AUC RTN 1	9	J18 - H	XA05 - 70									
AUX AUC RCVR 1	8	J18 - G	XA05 - 71									
TONE DET RCVR 1-	51	J19 - T	XA05 - 73									

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>			
CODE IDENT		57958	5051652
SHEET		59	REV F

CONTRACT NO.:

5-115

TM 32-5865-069-24&P

TM 32-5665-069-248P

**COMPONENT XA05**

5-116

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
AUX AUD RTN RCV2	93	J20 - X	XA05 - 79										
TONE DET RCVR 2-	53	J19 - Y	XA05 - 91										
TONE DET RCVR3+	54	J19 - W	XA05 - 92										
			XA05 - 94	731								WIREDWRAPPED PIN	
AUX AUD RTN RCV3	95	J20 - *B	XA05 - 97										
TONE DET RCVR 4-	57	J19 - Z	XA05 - 107										
AUX AUD RTN RCV4	97	J20 - *F	XA05 - 112										
SHLD GND	703A	*XA05-	55	XA05 - 115									
AUX AUD RTN 4	21	J10 - M	XA05 - 116										
			XA05 - 117	749								WIREDWRAPPED PIN	
			XA05 - 118	750								WIREDWRAPPED PIN	
+15VCC			XA05 - 120									WIREDWRAPPED PIN	
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							
CONTRACT NO.:						CODE IDENT		57958		<b>5051652</b> SHEET		60    REV F	



COMPONENT **XA06**

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
250KHZ CLK SHLD	6300	*XA06- 74	XA06 - 02									
RS POWER -	126	J21 - Z	XA06 - 03									
RSPU TEMP	337	S04 - 01	XA06 - 04									
RS TEMP +	134	J21 - *H	XA06 - 06									
RCBUSACLOCK OUT-	111	J21 - N	XA06 - 08									
ADDR SEL 2(4)	120	J21 - V	XA06 - 10									
RS TEMP -	135	J21 - *J	XA06 - 11									
RCBUSASTRCBEQUT+	108	J21 - K	XA06 - 12									
RCBUSACLOCK IN +	144	J22 - H	XA06 - 14									
RCBUSASTRCBE IN+	142	J22 - F	XA06 - 16									
5MHZ REF OSC -	114	J21 - T	XA06 - 17									
RCBUSACATA IN +	146	J22 - K	XA06 - 19									
RC BLS A STRCBE	210	J27	XA06 - 20									
RC BLS A DATA	208	J26	XA06 - 21									
RCBUSACATA OUT +	112	J21 - P	XA06 - 22									
			XA06 - 25	762								WIREWAPPED PIN
5MHZ REF +	115	J22 - H	XA06 - 28									
5MHZ REF -	115	J22 - N	XA06 - 29									
			XA06 - 31	768								WIREWAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT    57958    SHEET    61    REV    F						
CONTRACT NO.:												

5-117

TM. 32-5865-069-248P

5-118

COMPONENT XA06

TM 32-5865-069-24&amp;P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
CVERTEMP DET			XA06 - 34	771	A23 - 02	999	209		STR	14		24ANG WHITE	
			XA06 - 37	774								WIREDRAPPED PIN	
			XA06 - 42	779								WIREDRAPPED PIN	
			XA06 - 43	780								WIREDRAPPED PIN	
			XA06 - 45	782								WIREDRAPPED PIN	
LAMP TEST +	314	S01 - 01	XA06 - 50										
CPD DET 3	281	A19 - 04	XA06 - 51										
			XA06 - 52	787								WIREDRAPPED PIN	
			XA06 - 53	788								WIREDRAPPED PIN	
CPD DET 2	282	A19 - 03	XA06 - 54										
150HZ TONE DET 1	277	A18 - 02	XA06 - 55										
			XA06 - 56	789								WIREDRAPPED PIN	
			XA06 - 57	790								WIREDRAPPED PIN	
150HZ TONE DET 2	276	A18 - 03	XA06 - 58										
RS PCHER +	125	J21 - Y	XA06 - 63										
RSPU PWR CN	271	A17 - 24	XA06 - 64										
RCRUSACLOCK OUT+	110	J21 - H	XA06 - 68										
ADDR SEL 2(3)	122	J21 - W	XA06 - 70										
ADDR SEL 2(5)	118	J21 - U	XA06 - 71										
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP		WIRE LIST 5051652	
CONTRACT NO.:						CODE IDENT		57958		SHEET 62		REV F	

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
RCBUSASTRCBEOUT-	109	J21 - L	XA06 - 72										
250KHZ CLK CGND	630	A15J1-	9 XA06 - 74										
RCBUSACLOCK IN-	145	J22 - J	XA06 - 75										
RCBUSASTRCBE IN-	143	J22 - G	XA06 - 76										
5MHZ REF CSC+	114	J21 - S	XA06 - 77										
RCBUSACATA IN -	147	J22 - L	XA06 - 80										
RC BUS A CLK	206	J25	XA06 - 81										
RCBUSACATA OUT-	113	J21 - R	XA06 - 82										
			XA06 - 84	803								WIREWAPPED PIN	
			XA06 - 85	804								WIREWAPPED PIN	
			XA06 - 87	806								WIREWAPPED PIN	
			XA06 - 88	807								WIREWAPPED PIN	
			XA06 - 89	808								WIREWAPPED PIN	
			XA06 - 90	809								WIREWAPPED PIN	
			XA06 - 91	810								WIREWAPPED PIN	
			XA06 - 93	812								WIREWAPPED PIN	
			XA06 - 94	813								WIREWAPPED PIN	
			XA06 - 95	814								WIREWAPPED PIN	
			XA06 - 96	815								WIREWAPPED PIN	
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							
CONTRACT NO.:						CODE IDENT		5051652		SHEET		REV	
						57952		63		F			

5-120

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA06 - 97	816								WIREWAPPED PIN
			XA06 - 99	818								WIREWAPPED PIN
			XA06 - 100	819								WIREWAPPED PIN
			XA06 - 101	820								WIREWAPPED PIN
			XA06 - 102	821								WIREWAPPED PIN
			XA06 - 103	822								WIREWAPPED PIN
			XA06 - 104	823								WIREWAPPED PIN
			XA06 - 105	824								WIREWAPPED PIN
			XA06 - 107	826								WIREWAPPED PIN
			XA06 - 108	827								WIREWAPPED PIN
			XA06 - 109	828								WIREWAPPED PIN
CPD DET 1	283	A19 - 02	XA06 - 110									
GND			XA06 - 111	829	E1	000	207		STR	14		22AWG BLACK
			XA06 - 112	830								WIREWAPPED PIN
			XA06 - 113	831								WIREWAPPED PIN
CPD DET 4	280	A19 - 05	XA06 - 114									
150HZ TONE DET 3	275	A18 - 04	XA06 - 115									
			XA06 - 116	832								WIREWAPPED PIN
			XA06 - 117	833								WIREWAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST			5051652		
CODE IDENT	57958	SHEET	64	REV	F

CONTRACT NO.:

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
150HZ TONE DET 4	274	A18 - 05	X406 - 118									

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST** **5051652**  
 CODE IDENT **57958** SHEET **65** REV **F**

5-121

TM 32-5865-069-24&P

5-122

COMPONENT XA07

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
			XA07 - 17	853								WIREWRAPPED PIN											
			XA07 - 19	855								WIREWRAPPED PIN											
UNIT ACRS A3	174	J23 - S	XA07 - 21																				
UNIT ACRS A1	176	J23 - U	XA07 - 22																				
UNIT ACRS A4	173	J23 - R	XA07 - 23																				
			XA07 - 24	860								WIREWRAPPED PIN											
FFT TRANS FLAG	193	J24 - H	XA07 - 27																				
			XA07 - 30	863								WIREWRAPPED PIN											
			XA07 - 31	864								WIREWRAPPED PIN											
			XA07 - 32	865								WIREWRAPPED PIN											
			XA07 - 33	866								WIREWRAPPED PIN											
			XA07 - 34	867								WIREWRAPPED PIN											
			XA07 - 39	872								WIREWRAPPED PIN											
			XA07 - 41	874								WIREWRAPPED PIN											
ADD RTN	178	J23 - M	XA07 - 42																				
			XA07 - 44	876								WIREWRAPPED PIN											
RCBUSB STROBE-	167	J23 - G	XA07 - 48																				
			XA07 - 49	880								WIREWRAPPED PIN											
ADD GEN ENABLE *	179	J23 - X	XA07 - 51																				
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:						WIRE LIST						5051652											
						CODE IDENT						57958											
												SHEET 66											
												REV F											

COMPONENT XA07

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA07 - 52	882								WIREDAPPED PIN
RCBUS0 DATA -	171	J23 - L	XA07 - 56									
			XA07 - 77	906								WIREDAPPED PIN
			XA07 - 78	913								WIREDAPPED PIN
UNIT ACBS A2	175	J23 - T	XA07 - 82									
UNIT ACBS A0	177	J23 - V	XA07 - 83									
UNIT ACBS A5	172	J23 - P	XA07 - 84									
DATA0 FLAG	192	J24 - G	XA07 - 87									
FET C0LE NEMPT	202	J24 - T	XA07 - 88									
			XA07 - 92	918								WIREDAPPED PIN
			XA07 - 93	919								WIREDAPPED PIN
			XA07 - 94	920								WIREDAPPED PIN
			XA07 - 95	921								WIREDAPPED PIN
			XA07 - 98	924								WIREDAPPED PIN
			XA07 - 102	928								WIREDAPPED PIN
			XA07 - 104	930								WIREDAPPED PIN
RCBUS0 CLCCK+	168	J23 - H	XA07 - 107									
RCBUS0 STR0BE+	166	J23 - F	XA07 - 108									
RCBUS0 CLCCK-	169	J23 - J	XA07 - 109									

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5051652

CODE IDENT

57958

SHEET

67

REV F

CONTRACT NO.:

5-123

TM 32-5865-069-24&P

5-124

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
RCBUSR DATA +	178	J23 - K	XA07 - 116										
<p>KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID</p> <p>TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED</p> <p>WW - WIRE WRAP</p>						<p><b>WIRE LIST</b></p>							
<p>CONTRACT NO.:</p>						<p>5051652</p>		<p>CODE IDENT</p>		<p>57558 SHEET</p>		<p>68 REV F</p>	



COMPONENT XA08

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA08 - 02	945								WIREWRAPPED PIN		
			XA08 - 03	946								WIREWRAPPED PIN		
			XA08 - 04	947								WIREWRAPPED PIN		
			XA08 - 05	948								WIREWRAPPED PIN		
			XA08 - 06	949								WIREWRAPPED PIN		
			XA08 - 07	950								WIREWRAPPED PIN		
			XA08 - 08	951								WIREWRAPPED PIN		
			XA08 - 09	952								WIREWRAPPED PIN		
			XA08 - 10	953								WIREWRAPPED PIN		
			XA08 - 11	954								WIREWRAPPED PIN		
			XA08 - 12	955								WIREWRAPPED PIN		
			XA08 - 13	956								WIREWRAPPED PIN		
			XA08 - 14	957								WIREWRAPPED PIN		
			XA08 - 15	958								WIREWRAPPED PIN		
			XA08 - 16	959								WIREWRAPPED PIN		
			XA08 - 17	960								WIREWRAPPED PIN		
			XA08 - 18	961								WIREWRAPPED PIN		
			XA08 - 19	962								WIREWRAPPED PIN		
			XA08 - 20	963								WIREWRAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID						<b>WIRE LIST</b>								
TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED														
CONTRACT NO.:						CODE IDENT			57958	SHEET		69	REV	F

5851652

57958

69

F

5-125

TM 32-5865-069-24&P

5-126

COMPONENT XA08

TM 32-5866-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS																	
	WIRE NO.	LOCATION																											
			XA08 - 26	969								WIREWAPPED PIN																	
			XA08 - 28	971								WIREWAPPED PIN																	
			XA08 - 29	972								WIREWAPPED PIN																	
			XA08 - 30	973								WIREWAPPED PIN																	
			XA08 - 31	974								WIREWAPPED PIN																	
			XA08 - 32	975								WIREWAPPED PIN																	
			XA08 - 33	976								WIREWAPPED PIN																	
			XA08 - 34	977								WIREWAPPED PIN																	
			XA08 - 35	978								WIREWAPPED PIN																	
			XA08 - 36	979								WIREWAPPED PIN																	
			XA08 - 37	980								WIREWAPPED PIN																	
			XA08 - 38	981								WIREWAPPED PIN																	
			XA08 - 39	982								WIREWAPPED PIN																	
			XA08 - 40	983								WIREWAPPED PIN																	
			XA08 - 41	984								WIREWAPPED PIN																	
			XA08 - 42	985								WIREWAPPED PIN																	
			XA08 - 43	986								WIREWAPPED PIN																	
			XA08 - 44	987								WIREWAPPED PIN																	
			XA08 - 45	988								WIREWAPPED PIN																	
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP						WIRE LIST 5051652					
CONTRACT NO.:						CODE IDENT						57958						SHEET 70						REV F					

COMPONENT XA08

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA08 - 46	989								WIRESAPPED PIN
			XA08 - 47	990								WIRESAPPED PIN
			XA08 - 48	991								WIRESAPPED PIN
			XA08 - 49	992								WIRESAPPED PIN
			XA08 - 50	993								WIRESAPPED PIN
			XA08 - 58	1001								WIRESAPPED PIN
			XA08 - 60	1003								WIRESAPPED PIN
			XA08 - 61	1004								WIRESAPPED PIN
			XA08 - 62	1005								WIRESAPPED PIN
			XA08 - 66	1009								WIRESAPPED PIN
			XA08 - 67	1010								WIRESAPPED PIN
			XA08 - 68	1011								WIRESAPPED PIN
			XA08 - 69	1012								WIRESAPPED PIN
			XA08 - 70	1013								WIRESAPPED PIN
			XA08 - 71	1014								WIRESAPPED PIN
			XA08 - 72	1015								WIRESAPPED PIN
			XA08 - 73	1016								WIRESAPPED PIN
			XA08 - 74	1017								WIRESAPPED PIN
			XA08 - 75	1018								WIRESAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5851652

CONTRACT NO.:

CODE IDENT

57958

SHEET

71

REV

F

5-127

TM 32-5865-069-248P

5-128

COMPONENT XA08

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA08 - 76	1019								WIREWAPPED PIN
			XA08 - 77	1020								WIREWAPPED PIN
			XA08 - 78	1021								WIREWAPPED PIN
			XA08 - 79	1022								WIREWAPPED PIN
			XA08 - 80	1023								WIREWAPPED PIN
			XA08 - 86	1029								WIREWAPPED PIN
			XA08 - 88	1031								WIREWAPPED PIN
			XA08 - 89	1032								WIREWAPPED PIN
			XA08 - 90	1033								WIREWAPPED PIN
			XA08 - 91	1034								WIREWAPPED PIN
			XA08 - 92	1035								WIREWAPPED PIN
			XA08 - 93	1036								WIREWAPPED PIN
			XA08 - 94	1037								WIREWAPPED PIN
			XA08 - 95	1038								WIREWAPPED PIN
			XA08 - 96	1039								WIREWAPPED PIN
			XA08 - 97	1040								WIREWAPPED PIN
			XA08 - 98	1041								WIREWAPPED PIN
			XA08 - 99	1042								WIREWAPPED PIN
			XA08 - 100	1043								WIREWAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						CODE IDENT		57958		SHEET 72		REV F

TM 32-5865-069-248P

COMPONENT XA08

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA08 - 101	1044								WIRED RAPPED PIN
			XA08 - 102	1045								WIRED RAPPED PIN
			XA08 - 103	1046								WIRED RAPPED PIN
			XA08 - 104	1047								WIRED RAPPED PIN
			XA08 - 105	1048								WIRED RAPPED PIN
			XA08 - 106	1049								WIRED RAPPED PIN
			XA08 - 107	1050								WIRED RAPPED PIN
			XA08 - 108	1051								WIRED RAPPED PIN
			XA08 - 109	1052								WIRED RAPPED PIN
			XA08 - 110	1053								WIRED RAPPED PIN
			XA08 - 120	1063								WIRED RAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE TT - TWISTED TRIPLE COAX - COAXIAL SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR TP - TWISTED PAIR SHLD - SHIELDED STR - STRANDED  
 WW - WIRE WRAP

CONTRACT NO.:

WIRE LIST 5051652

CODE IDENT 57958 SHEET 73 REV F

5-129

TM 32-5865-069-248P

5-130

COMPONENT XA09

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS					
	WIRE NO.	LOCATION															
GND			XA09 - 02	1066	XA09 - 12	999	209		STR	16		24AWG WHITE					
			XA09 - 02	1066								WIREWRAPPED PIN					
			XA09 - 03	1067								WIREWRAPPED PIN					
			XA09 - 04	1068								WIREWRAPPED PIN					
CIVLD	195	J24 - K	XA09 - 05	1069								WIREWRAPPED PIN					
DO OCNE	194	J24 - J	XA09 - 06	1070								WIREWRAPPED PIN					
			XA09 - 08	1072								WIREWRAPPED PIN					
PIC CLK	196	J24 - L	XA09 - 10	1074								WIREWRAPPED PIN					
GND	1066	XA09 - 02	XA09 - 12	1076								WIREWRAPPED PIN					
			XA09 - 13	1077								WIREWRAPPED PIN					
			XA09 - 14	1078								WIREWRAPPED PIN					
			XA09 - 15	1079								WIREWRAPPED PIN					
C DAT 7	198	J24 - N	XA09 - 16	1080								WIREWRAPPED PIN					
C DAT 5	200	J24 - R	XA09 - 17	1081								WIREWRAPPED PIN					
			XA09 - 18	1082								WIREWRAPPED PIN					
			XA09 - 19	1083								WIREWRAPPED PIN					
			XA09 - 20	1084								WIREWRAPPED PIN					
			XA09 - 21	1085								WIREWRAPPED PIN					
			XA09 - 23	1087								WIREWRAPPED PIN					
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652											
CONTRACT NO.:						CODE IDENT		57958		SHEET		74		REV		F	

COMPONENT XA09

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA09 - 24	1088								WIREWAPPED PIN
			XA09 - 25	1089								WIREWAPPED PIN
			XA09 - 26	1090								WIREWAPPED PIN
			XA09 - 27	1091								WIREWAPPED PIN
			XA09 - 30	1094								WIREWAPPED PIN
			XA09 - 31	1095								WIREWAPPED PIN
			XA09 - 32	1096								WIREWAPPED PIN
			XA09 - 33	1097								WIREWAPPED PIN
			XA09 - 34	1098								WIREWAPPED PIN
			XA09 - 35	1099								WIREWAPPED PIN
			XA09 - 36	1100								WIREWAPPED PIN
			XA09 - 37	1101								WIREWAPPED PIN
			XA09 - 38	1102								WIREWAPPED PIN
			XA09 - 39	1103								WIREWAPPED PIN
			XA09 - 40	1104								WIREWAPPED PIN
			XA09 - 41	1105								WIREWAPPED PIN
			XA09 - 42	1106								WIREWAPPED PIN
			XA09 - 43	1107								WIREWAPPED PIN
			XA09 - 45	1109								WIREWAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5051652

CODE IDENT

57958

SHEET

75

REV

F

CONTRACT NO.:

5-131

TM 32-5865-069-248P

5-132

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA09 - 46	1110								WIREWRAPPED PIN		
			XA09 - 47	1111								WIREWRAPPED PIN		
			XA09 - 49	1113								WIREWRAPPED PIN		
			XA09 - 50	1114								WIREWRAPPED PIN		
			XA09 - 51	1115								WIREWRAPPED PIN		
			XA09 - 52	1116								WIREWRAPPED PIN		
			XA09 - 53	1117								WIREWRAPPED PIN		
AD1 SEL *	197	J24 - M	XA09 - 54	1118								WIREWRAPPED PIN		
			XA09 - 54	1118								WIREWRAPPED PIN		
			XA09 - 56	1120								WIREWRAPPED PIN		
			XA09 - 60	1124								WIREWRAPPED PIN		
+5V			XA09 - 61	1125	XA09 - 120	999	209		STR	16		24AWG WHITE		
			XA09 - 63	1127								WIREWRAPPED PIN		
			XA09 - 64	1128								WIREWRAPPED PIN		
			XA09 - 67	1131								WIREWRAPPED PIN		
			XA09 - 68	1132								WIREWRAPPED PIN		
			XA09 - 69	1133								WIREWRAPPED PIN		
			XA09 - 72	1136								WIREWRAPPED PIN		
			XA09 - 73	1137								WIREWRAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>								
CONTRACT NO.:						5051652								
						CODE IDENT		5795E		SHEET		76	REV	F



COMPONENT XA09

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA09 - 74	1138								WIREDRAPPED PIN
			XA09 - 75	1139								WIREDRAPPED PIN
C DAT 6	199	J24 - P	XA09 - 76	1140								WIREDRAPPED PIN
C DAT 4	201	J24 - S	XA09 - 77	1141								WIREDRAPPED PIN
			XA09 - 78	1142								WIREDRAPPED PIN
			XA09 - 79	1143								WIREDRAPPED PIN
			XA09 - 80	1144								WIREDRAPPED PIN
			XA09 - 81	1145								WIREDRAPPED PIN
			XA09 - 82	1146								WIREDRAPPED PIN
			XA09 - 83	1147								WIREDRAPPED PIN
			XA09 - 84	1148								WIREDRAPPED PIN
			XA09 - 85	1149								WIREDRAPPED PIN
			XA09 - 86	1150								WIREDRAPPED PIN
			XA09 - 87	1151								WIREDRAPPED PIN
			XA09 - 90	1154								WIREDRAPPED PIN
			XA09 - 91	1155								WIREDRAPPED PIN
			XA09 - 92	1156								WIREDRAPPED PIN
			XA09 - 93	1157								WIREDRAPPED PIN
			XA09 - 94	1158								WIREDRAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST**

5051652

CODE IDENT

SHEET

REV

57958

77

F

CONTRACT NO.:

5-134

COMPONENT **XA09**

TM 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA09 - 95	1159								WIREWRAPPED PIN
			XA09 - 96	1160								WIREWRAPPED PIN
			XA09 - 97	1161								WIREWRAPPED PIN
			XA09 - 98	1162								WIREWRAPPED PIN
			XA09 - 99	1163								WIREWRAPPED PIN
			XA09 - 100	1164								WIREWRAPPED PIN
			XA09 - 101	1165								WIREWRAPPED PIN
			XA09 - 102	1166								WIREWRAPPED PIN
			XA09 - 103	1167								WIREWRAPPED PIN
			XA09 - 104	1168								WIREWRAPPED PIN
			XA09 - 105	1169								WIREWRAPPED PIN
			XA09 - 106	1170								WIREWRAPPED PIN
			XA09 - 109	1173								WIREWRAPPED PIN
			XA09 - 110	1174								WIREWRAPPED PIN
			XA09 - 111	1175								WIREWRAPPED PIN
			XA09 - 112	1176								WIREWRAPPED PIN
			XA09 - 113	1177								WIREWRAPPED PIN
			XA09 - 115	1179								WIREWRAPPED PIN
			XA09 - 117	1181								WIREWRAPPED PIN
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						CODE IDENT		57958		SHEET 78		REV F
						5051652						

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
+5V	1125	XA09 - 61	XA09 - 120	1184								WIREWAPPED PIN
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> <span style="float: right;"><b>5051652</b></span>						
CONTRACT NO.:						CODE IDENT		57958		SHEET 79		REV F

5-135

TM 32-5865-069-24&P

5-136

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS																													
	WIRE NO.	LOCATION																																							
			XA10 - 03	1188								WIREDRAPPED PIN																													
			XA10 - 04	1189								WIREDRAPPED PIN																													
			XA10 - 05	1190								WIREDRAPPED PIN																													
			XA10 - 06	1191								WIREDRAPPED PIN																													
			XA10 - 07	1192								WIREDRAPPED PIN																													
			XA10 - 08	1193								WIREDRAPPED PIN																													
			XA10 - 09	1194								WIREDRAPPED PIN																													
			XA10 - 10	1195								WIREDRAPPED PIN																													
			XA10 - 11	1196								WIREDRAPPED PIN																													
			XA10 - 12	1197								WIREDRAPPED PIN																													
			XA10 - 13	1198								WIREDRAPPED PIN																													
			XA10 - 14	1199								WIREDRAPPED PIN																													
			XA10 - 15	1200								WIREDRAPPED PIN																													
			XA10 - 16	1201								WIREDRAPPED PIN																													
			XA10 - 17	1202								WIREDRAPPED PIN																													
			XA10 - 18	1203								WIREDRAPPED PIN																													
			XA10 - 19	1204								WIREDRAPPED PIN																													
			XA10 - 20	1205								WIREDRAPPED PIN																													
			XA10 - 21	1206								WIREDRAPPED PIN																													
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652																	
CONTRACT NO.:						CODE IDENT						57958						SHEET						80						REV						F					

COMPONENT XA10

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA10 - 22	1207								WIRES WRAPPED PIN
			XA10 - 23	1208								WIRES WRAPPED PIN
			XA10 - 24	1209								WIRES WRAPPED PIN
			XA10 - 25	1210								WIRES WRAPPED PIN
			XA10 - 26	1211								WIRES WRAPPED PIN
			XA10 - 27	1212								WIRES WRAPPED PIN
			XA10 - 28	1213								WIRES WRAPPED PIN
			XA10 - 29	1214								WIRES WRAPPED PIN
			XA10 - 30	1215								WIRES WRAPPED PIN
			XA10 - 31	1216								WIRES WRAPPED PIN
			XA10 - 32	1217								WIRES WRAPPED PIN
			XA10 - 33	1218								WIRES WRAPPED PIN
			XA10 - 34	1219								WIRES WRAPPED PIN
			XA10 - 35	1220								WIRES WRAPPED PIN
			XA10 - 36	1221								WIRES WRAPPED PIN
			XA10 - 37	1222								WIRES WRAPPED PIN
			XA10 - 38	1223								WIRES WRAPPED PIN
			XA10 - 39	1224								WIRES WRAPPED PIN
			XA10 - 40	1225								WIRES WRAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

WIRE LIST

5051652

CODE IDENT

57950

SHEET

81

REV F

CONTRACT NO.:

5-137

T.M. 32-5865-069-248P

COMPONENT XA10

5-138

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA10 - 41	1226								WIREDRAPPED PIN
			XA10 - 42	1227								WIREDRAPPED PIN
			XA10 - 43	1228								WIREDRAPPED PIN
			XA10 - 44	1229								WIREDRAPPED PIN
			XA10 - 45	1230								WIREDRAPPED PIN
			XA10 - 46	1231								WIREDRAPPED PIN
			XA10 - 47	1232								WIREDRAPPED PIN
			XA10 - 49	1234								WIREDRAPPED PIN
			XA10 - 50	1235								WIREDRAPPED PIN
			XA10 - 52	1237								WIREDRAPPED PIN
			XA10 - 53	1238								WIREDRAPPED PIN
			XA10 - 54	1239								WIREDRAPPED PIN
			XA10 - 55	1240								WIREDRAPPED PIN
			XA10 - 60	1245								WIREDRAPPED PIN
			XA10 - 61	1246								WIREDRAPPED PIN
			XA10 - 63	1248								WIREDRAPPED PIN
			XA10 - 64	1249								WIREDRAPPED PIN
			XA10 - 65	1250								WIREDRAPPED PIN
			XA10 - 66	1251								WIREDRAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						WIRE LIST 5051652						
CONTRACT NO.:						CODE IDENT		57958		SHEET 82		REV F

COMPONENT **XA10**

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA10 - 67	1252								WIREDWRAPPED PIN
			XA10 - 68	1253								WIREDWRAPPED PIN
			XA10 - 69	1254								WIREDWRAPPED PIN
			XA10 - 70	1255								WIREDWRAPPED PIN
			XA10 - 71	1256								WIREDWRAPPED PIN
			XA10 - 72	1257								WIREDWRAPPED PIN
			XA10 - 73	1258								WIREDWRAPPED PIN
			XA10 - 74	1259								WIREDWRAPPED PIN
			XA10 - 75	1260								WIREDWRAPPED PIN
			XA10 - 76	1261								WIREDWRAPPED PIN
			XA10 - 77	1262								WIREDWRAPPED PIN
			XA10 - 78	1263								WIREDWRAPPED PIN
			XA10 - 79	1264								WIREDWRAPPED PIN
			XA10 - 80	1265								WIREDWRAPPED PIN
			XA10 - 81	1266								WIREDWRAPPED PIN
			XA10 - 82	1267								WIREDWRAPPED PIN
			XA10 - 83	1268								WIREDWRAPPED PIN
			XA10 - 84	1269								WIREDWRAPPED PIN
			XA10 - 85	1270								WIREDWRAPPED PIN
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652						
CONTRACT NO.:						CODE IDENT	57950	SHEET	83	REV	F	

5-139

TM 32-5865-069-2WP

5-140

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
			XA10 - 86	1271								WIREDRAPPED PIN	
			XA10 - 87	1272								WIREDRAPPED PIN	
			XA10 - 88	1273								WIREDRAPPED PIN	
			XA10 - 89	1274								WIREDRAPPED PIN	
			XA10 - 90	1275								WIREDRAPPED PIN	
			XA10 - 91	1276								WIREDRAPPED PIN	
			XA10 - 92	1277								WIREDRAPPED PIN	
			XA10 - 93	1278								WIREDRAPPED PIN	
			XA10 - 94	1279								WIREDRAPPED PIN	
			XA10 - 95	1280								WIREDRAPPED PIN	
			XA10 - 96	1281								WIREDRAPPED PIN	
			XA10 - 97	1282								WIREDRAPPED PIN	
			XA10 - 98	1283								WIREDRAPPED PIN	
			XA10 - 99	1284								WIREDRAPPED PIN	
			XA10 - 100	1285								WIREDRAPPED PIN	
			XA10 - 101	1286								WIREDRAPPED PIN	
			XA10 - 102	1287								WIREDRAPPED PIN	
			XA10 - 103	1288								WIREDRAPPED PIN	
			XA10 - 104	1289								WIREDRAPPED PIN	
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP		WIRE LIST	
CONTRACT NO.:						5051652		CODE IDENT		57958		SHEET 84	REV F



SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
			XA10 - 105	1290								WIRESAPPED PIN	
			XA10 - 106	1291								WIRESAPPED PIN	
			XA10 - 107	1292								WIRESAPPED PIN	
			XA10 - 108	1293								WIRESAPPED PIN	
			XA10 - 109	1294								WIRESAPPED PIN	
			XA10 - 110	1295								WIRESAPPED PIN	
			XA10 - 111	1296								WIRESAPPED PIN	
			XA10 - 112	1297								WIRESAPPED PIN	
			XA10 - 115	1300								WIRESAPPED PIN	
			XA10 - 120	1305								WIRESAPPED PIN	
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP		WIRE LIST 5051652	
CONTRACT NO.:						CODE IDENT		57950		SHEET		85	
												REV F	

5-141

TM 32-5865-069-24&P

5-142

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA11 - 02	1308								WIREWAPPED PIN
			XA11 - 03	1309								WIREWAPPED PIN
			XA11 - 04	1310								WIREWAPPED PIN
			XA11 - 05	1311								WIREWAPPED PIN
			XA11 - 06	1312								WIREWAPPED PIN
			XA11 - 07	1313								WIREWAPPED PIN
			XA11 - 08	1314								WIREWAPPED PIN
			XA11 - 09	1315								WIREWAPPED PIN
			XA11 - 10	1316								WIREWAPPED PIN
			XA11 - 11	1317								WIREWAPPED PIN
			XA11 - 12	1318								WIREWAPPED PIN
			XA11 - 20	1326								WIREWAPPED PIN
			XA11 - 21	1327								WIREWAPPED PIN
			XA11 - 22	1328								WIREWAPPED PIN
			XA11 - 23	1329								WIREWAPPED PIN
			XA11 - 24	1330								WIREWAPPED PIN
			XA11 - 25	1331								WIREWAPPED PIN
			XA11 - 26	1332								WIREWAPPED PIN
			XA11 - 27	1333								WIREWAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST**  
 5051652  
 CODE IDENT    5795E    SHEET    86    REV    F

CONTRACT NO.:

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA11 - 28	1334								WIRESAPPED PIN		
			XA11 - 29	1335								WIRESAPPED PIN		
			XA11 - 30	1336								WIRESAPPED PIN		
			XA11 - 31	1337								WIRESAPPED PIN		
			XA11 - 32	1338								WIRESAPPED PIN		
			XA11 - 33	1339								WIRESAPPED PIN		
			XA11 - 34	1340								WIRESAPPED PIN		
			XA11 - 35	1341								WIRESAPPED PIN		
			XA11 - 53	1359								WIRESAPPED PIN		
			XA11 - 54	1360								WIRESAPPED PIN		
			XA11 - 56	1362								WIRESAPPED PIN		
			XA11 - 60	1366								WIRESAPPED PIN		
			XA11 - 61	1367								WIRESAPPED PIN		
			XA11 - 63	1369								WIRESAPPED PIN		
			XA11 - 64	1370								WIRESAPPED PIN		
			XA11 - 65	1371								WIRESAPPED PIN		
			XA11 - 66	1372								WIRESAPPED PIN		
			XA11 - 67	1373								WIRESAPPED PIN		
			XA11 - 68	1374								WIRESAPPED PIN		
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						WIRE LIST							5051652	
CONTRACT NO.:						CODE IDENT		5795E		SHEET 87		REV F		

**COMPONENT XA11**

5-144

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA11 - 69	1375								WIRED RAPPED PIN
			XA11 - 70	1376								WIRED RAPPED PIN
			XA11 - 71	1377								WIRED RAPPED PIN
			XA11 - 72	1378								WIRED RAPPED PIN
			XA11 - 80	1386								WIRED RAPPED PIN
			XA11 - 81	1387								WIRED RAPPED PIN
			XA11 - 82	1388								WIRED RAPPED PIN
			XA11 - 83	1389								WIRED RAPPED PIN
			XA11 - 84	1390								WIRED RAPPED PIN
			XA11 - 85	1391								WIRED RAPPED PIN
			XA11 - 86	1392								WIRED RAPPED PIN
			XA11 - 87	1393								WIRED RAPPED PIN
			XA11 - 88	1394								WIRED RAPPED PIN
			XA11 - 89	1395								WIRED RAPPED PIN
			XA11 - 90	1396								WIRED RAPPED PIN
			XA11 - 91	1397								WIRED RAPPED PIN
			XA11 - 92	1398								WIRED RAPPED PIN
			XA11 - 93	1399								WIRED RAPPED PIN
			XA11 - 94	1400								WIRED RAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

<b>WIRE LIST</b>		<b>5851652</b>	
CODE IDENT	<b>57958</b>	SHEET	<b>88</b>
		REV	<b>F</b>

CONTRACT NO.:

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			X111 - 95	1401								WIREWAPPED PIN
			X111 - 120	1426								WIREWAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						CODE IDENT		57958		SHEET 89		REV F

5-145

TM 32-5865-069-24&P

5-146

COMPONENT XA12

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
EXT BLANK RCVR 1	129	J21 - *C	XA12 - 03									
EXT BLANK RCVR 4	132	J21 - *F	XA12 - 04									
			XA12 - 05	1430								WIREDRAPPED PIN
			XA12 - 06	1431								WIREDRAPPED PIN
			XA12 - 07	1432								WIREDRAPPED PIN
			XA12 - 08	1433								WIREDRAPPED PIN
			XA12 - 09	1434								WIREDRAPPED PIN
			XA12 - 10	1435								WIREDRAPPED PIN
RC BUS B CLOCK	212	J28	XA12 - 11									
RC BUS B STROBE	216	J30	XA12 - 12									
			XA12 - 13	1436								WIREDRAPPED PIN
			XA12 - 14	1437								WIREDRAPPED PIN
			XA12 - 15	1438								WIREDRAPPED PIN
			XA12 - 16	1439								WIREDRAPPED PIN
			XA12 - 17	1440								WIREDRAPPED PIN
			XA12 - 18	1441								WIREDRAPPED PIN
			XA12 - 19	1442								WIREDRAPPED PIN
			XA12 - 20	1443								WIREDRAPPED PIN
			XA12 - 21	1444								WIREDRAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT 5795E SHEET 90 REV F						
CONTRACT NO.:												

COMPONENT XA12

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS		
	WIRE NO.	LOCATION												
			XA12 - 22	1445								WIREDAPPED PIN		
			XA12 - 23	1446								WIREDAPPED PIN		
			XA12 - 24	1447								WIREDAPPED PIN		
			XA12 - 25	1448								WIREDAPPED PIN		
			XA12 - 26	1449								WIREDAPPED PIN		
			XA12 - 27	1450								WIREDAPPED PIN		
			XA12 - 28	1451								WIREDAPPED PIN		
			XA12 - 29	1452								WIREDAPPED PIN		
			XA12 - 30	1453								WIREDAPPED PIN		
			XA12 - 31	1454								WIREDAPPED PIN		
			XA12 - 32	1455								WIREDAPPED PIN		
			XA12 - 33	1456								WIREDAPPED PIN		
			XA12 - 34	1457								WIREDAPPED PIN		
			XA12 - 35	1458								WIREDAPPED PIN		
			XA12 - 36	1459								WIREDAPPED PIN		
			XA12 - 37	1460								WIREDAPPED PIN		
			XA12 - 38	1461								WIREDAPPED PIN		
			XA12 - 39	1462								WIREDAPPED PIN		
			XA12 - 40	1463								WIREDAPPED PIN		
<b>KEY:</b> TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							<b>5051652</b>	
CONTRACT NO.:						CODE IDENT		<b>57958</b>		SHEET		<b>91</b>	REV	<b>F</b>

5-147

TM 32-5865-069-248P

5-148

COMPONENT XA12

TM. 32-5865-069-24&P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS			
	WIRE NO.	LOCATION													
			XA12 - 41	1464								WIREWAPPED PIN			
			XA12 - 42	1465								WIREWAPPED PIN			
			XA12 - 43	1466								WIREWAPPED PIN			
IF SEL RCVR 4	227	P01 - 08	XA12 - 44												
IF SEL RCVR 2	225	P01 - 06	XA12 - 45												
			XA12 - 46	1467								WIREWAPPED PIN			
			XA12 - 47	1468								WIREWAPPED PIN			
			XA12 - 48	1469								WIREWAPPED PIN			
			XA12 - 49	1470								WIREWAPPED PIN			
			XA12 - 50	1471								WIREWAPPED PIN			
DELAYGATE RCVR1-	59	J19 - *B	XA12 - 51												
DELAYGATE RCVR4+	64	J19 - *G	XA12 - 52												
DELAYGATE RCVR3-	63	J19 - *F	XA12 - 53												
			XA12 - 54	1472								WIREWAPPED PIN			
RCVR IF VIDEO			XA12 - 55	1473	A14P2-	1	999	219	SHLD	14		24AWG WHITE			
SHLD GND			*XA12-	55	1473A	XA12 - 114	000	211	STR	14		24AWG BLACK			
-6V	205	A21 - 02	XA12 - 56												
ANALGG GND	394	T01 - 7H	XA12 - 57									WIREWAPPED PIN			
-15V	374	T01 - 5E	XA12 - 58									WIREWAPPED PIN			
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP			<b>WIRE LIST</b> <b>5051652</b> CODE IDENT      57958      SHEET      92      REV      F		
CONTRACT NO.:															



SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS											
	WIRE NO.	LOCATION																					
+15V	365	T81 - 4E	XA12 - 60									WIREWAPPED PIN											
EXT BLANK RCVR 3	131	J21 - *E	XA12 - 63																				
EXT BLANK RCVR 2	130	J21 - *D	XA12 - 64																				
RCVR BLANKING +	66	J19 - *I	XA12 - 65																				
RCVR BLANKING -	67	J19 - *J	XA12 - 66																				
RC BUS B CATA	214	J29	XA12 - 67																				
			XA12 - 68	1477								WIREWAPPED PIN											
			XA12 - 69	1478								WIREWAPPED PIN											
			XA12 - 70	1479								WIREWAPPED PIN											
			XA12 - 71	1480								WIREWAPPED PIN											
			XA12 - 72	1481								WIREWAPPED PIN											
			XA12 - 73	1482								WIREWAPPED PIN											
			XA12 - 74	1483								WIREWAPPED PIN											
			XA12 - 75	1484								WIREWAPPED PIN											
			XA12 - 76	1485								WIREWAPPED PIN											
			XA12 - 77	1486								WIREWAPPED PIN											
			XA12 - 78	1487								WIREWAPPED PIN											
			XA12 - 79	1488								WIREWAPPED PIN											
			XA12 - 80	1489								WIREWAPPED PIN											
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR						COAX - COAXIAL SHLD - SHIELDED						SOL - SOLID STR - STRANDED WW - WIRE WRAP					
CONTRACT NO.:						WIRE LIST						5051652											
						CODE IDENT						57958 SHEET 93 REV F											

5-149

TM 32-5865-069-24&P

5-150

COMPONENT XA12

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA12 - 81	1490								WIREWAPPED PIN
			XA12 - 82	1491								WIREWAPPED PIN
			XA12 - 83	1492								WIREWAPPED PIN
			XA12 - 84	1493								WIREWAPPED PIN
			XA12 - 85	1494								WIREWAPPED PIN
			XA12 - 86	1495								WIREWAPPED PIN
			XA12 - 87	1496								WIREWAPPED PIN
			XA12 - 88	1497								WIREWAPPED PIN
			XA12 - 89	1498								WIREWAPPED PIN
			XA12 - 90	1499								WIREWAPPED PIN
			XA12 - 91	1500								WIREWAPPED PIN
			XA12 - 92	1501								WIREWAPPED PIN
			XA12 - 93	1502								WIREWAPPED PIN
			XA12 - 94	1503								WIREWAPPED PIN
			XA12 - 95	1504								WIREWAPPED PIN
			XA12 - 96	1505								WIREWAPPED PIN
			XA12 - 97	1506								WIREWAPPED PIN
			XA12 - 98	1507								WIREWAPPED PIN
			XA12 - 99	1508								WIREWAPPED PIN

KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID  
 TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED  
 WW - WIRE WRAP

**WIRE LIST**  
**5051652**  
 CODE IDENT    57958    SHEET    94    REV    F

CONTRACT NO.:

COMPONENT XA12

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
			XA12 - 100	1509								WIREDWRAPPED PIN
			XA12 - 101	1510								WIREDWRAPPED PIN
			XA12 - 102	1511								WIREDWRAPPED PIN
			XA12 - 103	1512								WIREDWRAPPED PIN
IF SEL RCVR 3	226	P01 - 07	XA12 - 104									
IF SEL RCVR 1	224	P01 - 05	XA12 - 105									
			XA12 - 106	1513								WIREDWRAPPED PIN
			XA12 - 107	1514								WIREDWRAPPED PIN
			XA12 - 108	1515								WIREDWRAPPED PIN
DELAYGATE RCVR1+	58	J19 - *A	XA12 - 109									
DELAYGATE RCVR2+	60	J19 - *C	XA12 - 110									
DELAYGATE RCVR3+	62	J19 - *E	XA12 - 111									
DELAYGATE RCVR2-	61	J19 - *D	XA12 - 112									
DELAYGATE RCVR4-	65	J19 - *H	XA12 - 113									
SHLD GND	1473A	*XA12-	55	XA12 - 114								WIREDWRAPPED PIN
				XA12 - 115	1517							WIREDWRAPPED PIN
				XA12 - 117	1518							WIREDWRAPPED PIN
				XA12 - 118	1519							WIREDWRAPPED PIN
				XA12 - 120	1521							WIREDWRAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>						
CONTRACT NO.:						5051652 CODE IDENT    5795E    SHEET    95    REV    F						

5-151

TM 32-5865-069-24&P

B-162

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
ANALCG GND	389	T81 - 7C	A14P1-	02								WIREWAPPED PIN
VIDEC RCVR 3	693	XA05 - 40	A14P1-	03								
SHLD GND	6938	*14P1-	03	A14P1-	04							
VIDEC RCVR 4	703	XA05 - 55	A14P1-	05								
SHLD GND	7038	*14P1-	05	A14P1-	06							
VIDEC RCVR 1	671	XA05 - 09	A14P1-	07								
SHLD GND	6718	*14P1-	07	A14P1-	08							
VIDEC RCVR 2	682	XA05 - 23	A14P1-	09								
SHLD GND	6828	*14P1-	09	A14P1-	10							
			A14P1-	11	1525							WIREWAPPED PIN
			A14P1-	12	1526							WIREWAPPED PIN
20 DB 3	228	P01 - 09	A14P1-	13								WIREWAPPED PIN
			A14P1-	14								WIREWAPPED PIN
10 DB 4	231	P01 - 12	A14P1-	15								WIREWAPPED PIN
			A14P1-	16	1527							WIREWAPPED PIN
ANALCG GND			A14P1-	18	1529	A14P3-	31	000	207	STR	14	22AWG BLACK
			A14P1-	18								WIREWAPPED PIN
			A14P1-	27	1538							WIREWAPPED PIN
			A14P1-	28	1539							WIREWAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR TT - TWISTED TRIPLE TP - TWISTED PAIR COAX - COAXIAL SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b> 5051652 CODE IDENT 57958 SHEET 96 REV F						
CONTRACT NO.:												

COMPONENT XA14

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
20 DB 2	229	P01 - 10	A14P1- 30									WIREDAPPED PIN
			A14P1- 31	1541								WIREDAPPED PIN
			A14P1- 32	1542								WIREDAPPED PIN
RCVR IF VIDEO	1473	XA12 - 55	A14P2- 1									
			A14P2- 2	1544								NC
			A14P2- 3	1545								NC
			A14P2- 4	1546								NC
			A14P2- 5	1547								NC
-15V	372	TB1 - 5C	A14P3- 14									WIREDAPPED PIN
			A14P3- 15	1557								WIREDAPPED PIN
+15V	363	TB1 - 4C	A14P3- 16									WIREDAPPED PIN
			A14P3- 30	1575								WIREDAPPED PIN
ANALCG GND	1529	A14P1- 18	A14P3- 31									WIREDAPPED PIN
			A14P3- 32	1577								WIREDAPPED PIN
KEY: TST - TWISTED SHIELDED TRIPLE TP - TWISTED SHIELDED PAIR SHLD - SHIELDED SOL - SOLID STR - STRANDED WW - WIRE WRAP												
CONTRACT NO.:												
WIRE LIST												
5051652												
CODE IDENT												
57958												
SHEET												
97												
REV												
F												

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
GND	161	J23 - A	E1	1578	E5	000	203		STR	14		20AWG BLACK	
GND	162	J23 - B	E1	1579	E6	000	203		STR	14		20AWG BLACK	
GND	165	J23 - E	E1	1580	E7	000	203		STR	14		20AWG BLACK	
SHLD GND	114A	*J21 - S	E1										
SHLD GND	115A	*J22 - M	E1										
GND	220	P01 - 01	E1										
GND	387	T81 - 7A	E1										
GND	404	T81 - 8A	E1										
GND	829	XA06 - 111	E1										
AC NEUT	287	801 - 01	E2										
AC NEUT	350	T81 - 2J	E2										
AC HCT CB	288	801 - 02	E3										
AC HCT CB	302	CB4 - 02	E3										
FAN CAP	289	801 - 03	E4										
KEY: TST - TWISTED SHIELDED TRIPLE TSP - TWISTED SHIELDED PAIR						TT - TWISTED TRIPLE TP - TWISTED PAIR		COAX - COAXIAL SHLD - SHIELDED		SOL - SOLID STR - STRANDED WW - WIRE WRAP		<b>WIRE LIST</b> 5051652	
CONTRACT NO.:						CODE IDENT		57958		SHEET		98 REV F	

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
SHLD GND	206A	*J25	E5										
GND	251	A17 - 01	E5										
GND	255	A17 - 07	E5										
GND	290	A22 - E1	E5										
GND	339	S04 - 02	E5										
GND	1578	E1	E5										
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							
CONTRACT NO.:						CODE IDENT		5795E		SHEET		5051652	
								99		REV		F	

5-155

TM 32-5865-069-24&P

5-156

COMPONENT E6

TM 32-5865-069-248P

SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS
	WIRE NO.	LOCATION										
GND	2	J18 - A	E6	1501	E8	000	203		STR	15		20AWG BLACK
GND	3	J18 - B	E6									
GND	5	J18 - D	E6									
GND	35	J19 - A	E6									
GND	36	J19 - S	E6									
GND	41	J19 - G	E6									
SHLD GND	186	J24 - A	E6									
SHLD GND	187	J24 - B	E6									
GND	191	J24 - F	E6									
SHLD GND	197A	*J24 - H	E6									
GND	249	A16 - E1	E6									
GND	1579	E1	E6									
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID						WIRE LIST						
TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED												
CONTRACT NO.:						5051652						
						CODE IDENT		57958		SHEET 180		REV F

Change 1



SIGNAL NAME	CALL BACKS		FROM	WIRE NO.	TO	COLOR	ITEM NO.	LEVEL	KEY	NOTE	GROUP	REMARKS	
	WIRE NO.	LOCATION											
GND	77	J20 - A	E7										
GND	78	J20 - B	E7										
GND	89	J20 - N	E7										
GND	99	J21 - A	E7										
GND	100	J21 - B	E7										
GND	107	J21 - J	E7										
GND	127	J21 - *A	E7										
GND	133	J21 - *G	E7										
GND	137	J22 - A	E7										
GND	138	J22 - B	E7										
GND	141	J22 - E	E7										
GND	153	J22 - W	E7										
GND	1500	E1	E7										
KEY: TST - TWISTED SHIELDED TRIPLE    TT - TWISTED TRIPLE    COAX - COAXIAL    SOL - SOLID TSP - TWISTED SHIELDED PAIR    TP - TWISTED PAIR    SHLD - SHIELDED    STR - STRANDED WW - WIRE WRAP						<b>WIRE LIST</b>							
CONTRACT NO.:						57958		5051652		SHEET 101		REV F	

5-157

TM 32-5865-069-248P



ITEM#	KEY	CTY	WIRE NUMBERS													
188	SHLD	18	194 310	195 312	196 350	197 351	291	292	294	295	297	298	300	301	302	308
201	STR	5	352	353	354	358	359									
203	STR	15	246 1561	249	387	389	391	396	401	402	403	404	405	1578	1579	1580
205	STR	135	6	7	9	10	11	13	14	15	17	18	19	21	22	23
			24	25	26	27	28	29	30	31	32	33	42	43	44	45
			46	47	48	49	50	51	52	53	54	55	56	57	58	59
			60	61	62	63	64	65	66	67	68	69	70	71	72	73
			74	75	90	91	92	93	94	95	96	97	108	109	110	111
			112	113	125	126	129	130	131	132	134	135	142	143	144	145
			146	147	166	167	168	169	170	171	172	173	174	175	176	177
			178	179	192	193	198	199	200	201	202	221	222	273	279	285
			287	288	289	357	360	361	363	364	365	366	367	368	369	370
			372	373	374	375	376	377	378	379	380					
207	STR	36	2	3	5	35	36	41	77	78	89	99	100	107	127	133
			137	138	141	153	161	162	165	186	187	191	220	368	390	393
			354	355	397	398	359	400	1529	829						
209	STR	48	8	12	16	20	1066	118	119	120	121	122	123	1125	208	210
			214	216	223	224	225	226	227	228	229	231	271	274	275	276
			277	280	281	282	283	286	305	314	315	317	318	319	320	323
			337	355	362	371	382	771								
211	STR	46	114A	115A	148A	194A	195A	196A	197A	206A	212A	248A	248B	251	255	290

TJ 5051652 REV-F RSPL

WIRE HARNESS SUMMARY  
 DATA 10/07/83  
 PAGE 2

ITEM#	KEY	QTY	WIRE NUMBERS													
			291A	292A	254A	295A	297A	298A	300A	301A	302A	308B	310B	312B	330A	339
			350A	351A	392	435A	436A	1473A	501A	565A	630A	630B	671A	671B	682A	682B
			653A	693B	703A	703B										
213	TSP	2	248	330												
217	TSP	3	114	115	148											
219	SHLD	12	206	212	435	436	1473	501	565	630	671	682	693	703		
220	SGL	2	322	324												
221	SGL	4	328	329	333	334										
224	STR	1	309													
225	STR	1	311													

RPT NO. CAB0015P-6 PRGG REV-A8 TJ 5051652 REV-F DT=8 RSPU GO XOY0=XA1P1-01  
 OUTPLT NETWORK CARDS

11 +15V 05	XA05	60	XA05	120		
11 +15V 12	XA12	60	XA12	120		
11 +15V 14	A14P3	16	A14P3	32		
11 +5V 01	XA1P1	29	XA2P1	29		
11 +5V 03	XA3P1	29	XA4P1	29		
1 +5V 08	XA08	60	XA08	120	XA08	61
1 +5V 09	XA09	60	XA09	120		
1 +5V 10	XA10	60	XA10	120	XA10	61
1 +5V 11	XA11	60	XA11	120	XA11	61
11 -15V 05	XA05	58	XA05	118		
11 -15V 12	XA12	58	XA12	118		
11 -15V 14	A14P3	14	A14P3	30		
11 ABSEL 0	XA08	105	XA09	105		
11 ABSEL 1	XA08	45	XA09	45		
11 ABSEL 2	XA08	104	XA09	104		
1 ACAT 00	XA10	87	XA11	87	XA12	87
1 ACAT 01	XA10	27	XA11	27	XA12	27
1 ACAT 02	XA10	86	XA11	86	XA12	86
1 ACAT 03	XA10	26	XA11	26	XA12	26
1 ACAT 04	XA10	85	XA11	85	XA12	85
1 ACAT 05	XA10	25	XA11	25	XA12	25
1 ACAT 06	XA10	84	XA11	84	XA12	84
1 ACAT 07	XA10	24	XA11	24	XA12	24
1 ACAT 08	XA10	83	XA11	83	XA12	83
1 ACAT 09	XA10	23	XA11	23	XA12	23
1 ACAT 10	XA10	82	XA11	82	XA12	82
1 ACAT 11	XA10	22	XA11	22	XA12	22
1 ACAT 12	XA10	81	XA11	81	XA12	81
1 ACAT 13	XA10	21	XA11	21	XA12	21
1 ACAT 14	XA10	80	XA11	80	XA12	80
1 ACAT 15	XA10	20	XA11	20	XA12	20
11 ADCR BUS A0	XA07	17	XA12	36		
11 ADCR BUS A1	XA07	77	XA12	96		
11 ADCSEL *	XA09	54	XA12	54		
11 AGLA 0	XA08	74	XA10	105		
11 AGLA 1	XA08	14	XA10	45		
11 AGLA 2	XA08	73	XA10	104		
11 AGLA 3	XA08	13	XA10	44		
11 AGLADJM	XA08	08	XA10	13		
11 AGLB 0	XA08	76	XA10	107		
11 AGLB 1	XA08	16	XA10	47		
11 AGLB 2	XA08	75	XA10	106		
11 AGLB 3	XA08	15	XA10	46		
11 AGLCLK	XA09	69	XA10	115		
11 AGLCS 0	XA08	77	XA10	110		
11 AGLCS 1	XA08	17	XA10	50		
11 AGLI 0	XA08	72	XA10	77		
11 AGLI 1	XA08	12	XA10	17		
11 AGLI 2	XA08	71	XA10	76		
11 AGLI 3	XA08	11	XA10	16		

RPT AC. CAB0015P-6 PRCG REV-A8 T J 5 0 5 1 6 5 2 REV-F DT=8 RSPU GDXOYO=XAIPI-01  
 CUTPLT NETWORK CARDS

11 AGLI 4	XA08	70	XA10	75				
11 AGLI 5	XA08	10	XA10	15				
11 AGLI 6	XA08	69	XA10	74				
11 AGLI 7	XA08	09	XA10	14				
1 AGLI E	XA08	68	XA09	67	XA10	73		
11 AGLIR 0	XA08	67	XA10	79				
77 AGLIR 1	XA08	07	XA10	19				
11 AGLIR 2	XA08	66	XA10	78				
11 AGLIR 3	XA08	06	XA10	18				
11 AGLOR 0	XA08	80	XA10	109				
11 AGLOR 1	XA08	20	XA10	49				
11 AGLOR 2	XA08	79	XA10	108				
11 AGLSS 0	XA08	19	XA10	112				
11 AGLSS 1	XA08	78	XA10	52				
11 AGLSS 2	XA08	18	XA10	111				
11 AICSEL *	XA09	56	XA10	55				
11 ARSEL *	XA09	115	XA10	54				
11 EBSEL 0	XA08	89	XA09	106				
11 EBSEL 1	XA08	29	XA09	46				
1 ECAT 00	XA09	95	XA10	95	XA11	95	XA12	95
1 ECAT 01	XA09	35	XA10	35	XA11	35	XA12	35
1 ECAT 02	XA09	94	XA10	94	XA11	94	XA12	94
1 ECAT 03	XA09	34	XA10	34	XA11	34	XA12	34
1 ECAT 04	XA09	93	XA10	93	XA11	93	XA12	93
1 ECAT 05	XA09	33	XA10	33	XA11	33	XA12	33
1 ECAT 06	XA09	92	XA10	92	XA11	92	XA12	92
1 ECAT 07	XA09	32	XA10	32	XA11	32	XA12	32
1 ECAT 08	XA09	91	XA10	91	XA11	91	XA12	91
1 ECAT 09	XA09	31	XA10	31	XA11	31	XA12	31
1 ECAT 10	XA09	90	XA10	90	XA11	90	XA12	90
1 ECAT 11	XA09	30	XA10	30	XA11	30	XA12	30
1 ECAT 12	XA10	89	XA11	89	XA12	89		
1 ECAT 13	XA10	29	XA11	29	XA12	29		
1 ECAT 14	XA10	88	XA11	88	XA12	88		
1 ECAT 15	XA10	28	XA11	28	XA12	28		
11 EPCSEL *	XA09	47	XA11	54				
11 EPCSEL 2 *	XA08	04	XA08	30				
11 CCAT 00	XA09	79	XA12	79				
11 CCAT 01	XA09	19	XA12	19				
11 CCAT 02	XA09	78	XA12	78				
11 CCAT 03	XA09	18	XA12	18				
11 CCAT 04	XA09	77	XA12	77				
11 CCAT 05	XA09	17	XA12	17				
11 CCAT 06	XA09	76	XA12	16				
11 CCAT 07	XA09	16	XA12	16				
11 CIVLD	XA09	05	XA12	05				
11 CLCCK	XA07	98	XA12	71				
11 CPC RESET NO 2	XA06	102	XA2P3	05				
11 CPC RESET NO 1	XA06	42	XA1P3	05				
11 CPC RESET 3	XA06	43	XA3P3	05				

RPT RC. CAB0015P-6 PRG REV-A8 TJ 5051652 REV-F DT=8 RSPU GDXY0=XAIPI-01  
 OUTPUT NETWORK CARCS

11	CPC RESET 4	XA06	103	XA4P3	05				
11	CPC1 LOCAL	XA06	52	XA1P3	18				
11	CPC1-25 KHZ SEL	XA06	25	XA1P3	17				
11	CPC1-500KHZ SEL	XA06	87	XA1P1	15				
11	CPC1-8KHZ SEL	XA06	64	XA1P1	03				
11	CPC2 LOCAL	XA06	113	XA2P3	18				
11	CPC2-25 KHZ SEL	XA06	31	XA2P3	17				
11	CPC2-250 KHZ SEL	XA06	91	XA2P3	02				
11	CPC2-50 KHZ SEL	XA06	94	XA2P3	04				
11	CPC2-500 KHZ SEL	XA06	93	XA2P1	15				
11	CPC2-8 KHZ SEL	XA06	90	XA2P1	03				
11	CPC3 LOCAL	XA06	112	XA3P3	18				
11	CPC3-25 KHZ SEL	XA06	37	XA3P3	17				
11	CPC3-250 KHZ SEL	XA06	97	XA3P3	02				
11	CPC3-50 KHZ SEL	XA06	100	XA3P3	04				
11	CPC3-500 KHZ SEL	XA06	99	XA3P1	15				
11	CPC3-8 KHZ SEL	XA06	96	XA3P1	03				
11	CPC4 LOCAL	XA06	53	XA4P3	18				
11	CPC4-25 KHZ SEL	XA06	45	XA4P3	17				
11	CPC4-250 KHZ SEL	XA06	105	XA4P3	02				
11	CPC4-50 KHZ SEL	XA06	108	XA4P3	04				
11	CPC4-500 KHZ SEL	XA06	107	XA4P1	15				
11	CPC4-8 KHZ SEL	XA06	104	XA4P1	03				
11	CP1-250 KHZ SEL	XA06	85	XA1P3	02				
11	CP1-50 KHZ SEL	XA06	88	XA1P3	04				
11	CR SEL *	XA09	117	XA12	73				
11	DATA BUS C0	XA07	31	XA12	98				
11	DATA BUS C1	XA07	92	XA12	39				
11	DATA BUS C2	XA07	32	XA12	99				
11	DATA BUS C3	XA07	93	XA12	40				
11	DATA BUS C4	XA07	33	XA12	100				
11	DATA BUS C5	XA07	94	XA12	41				
11	DATA BUS C6	XA07	34	XA12	101				
11	DATA BUS C7	XA07	95	XA12	42				
11	CCCONE	XA09	06	XA12	06				
11	CNC 01	XA1P1	16	XA1P1	32				
11	CNC 02	XA2P1	16	XA2P1	32				
11	CNC 03	XA3P1	16	XA3P1	32				
11	CNC 04	XA4P1	16	XA4P1	32				
11	CNC 05	XA05	57	XA05	117				
1	CNC 08	XA08	05	XA08	03	XA08	02	XA08	62
1	CNC 09	XA09	80	XA09	72	XA09	12	XA09	73
1	CNC 09	XA09	74	XA09	14	XA09	75	XA09	15
1	CNC 11	XA11	02	XA11	03	XA11	04	XA11	64
11	CNC 12	XA12	57	XA12	117				
11	CNC 14P1	A14P1	02	A14P1	18				
11	CNC 14P3	A14P3	15	A14P3	31				
11	ICSESEL I	XA08	28	XA09	21				
11	ICSESEL O	XA08	88	XA09	81				

RPT NO. CAB0015P-6 PRCG REV-A8 TJ 5051652 REV-F DT=8 RSPU GOXOYO=XA1P1-01  
 OUTPUT NETWORK CARDS

1	IDCAT 00	XA08	103	XA09	103	XA10	103				
1	IDCAT 01	XA08	43	XA09	43	XA10	43				
1	IDCAT 02	XA08	102	XA09	102	XA10	102				
1	IDCAT 03	XA08	42	XA09	42	XA10	42				
1	IDCAT 04	XA08	101	XA09	101	XA10	101				
1	IDCAT 05	XA08	41	XA09	41	XA10	41				
1	IDCAT 06	XA08	100	XA09	100	XA10	100				
1	IDCAT 07	XA08	40	XA09	40	XA10	40				
1	IDCAT 08	XA08	99	XA09	99	XA10	99				
1	IDCAT 09	XA08	39	XA09	39	XA10	39				
1	IDCAT 10	XA08	98	XA09	98	XA10	98				
1	IDCAT 11	XA08	38	XA09	38	XA10	38				
1	IDCAT 12	XA08	97	XA09	97	XA10	97				
1	IDCAT 13	XA08	37	XA09	37	XA10	37				
1	IDCAT 14	XA08	96	XA09	96	XA10	96				
1	IDCAT 15	XA08	36	XA09	36	XA10	36				
11	IDFLSEL *	XA08	26	XA09	20						
1	LOCK-THRU MODE	XA1P1	21	XA2P1	21	XA3P1	21	XA4P1	21	XA12	09
11	MACDR 00	XA10	72	XA11	72						
11	MACDR 01	XA10	12	XA11	12						
11	MACDR 02	XA10	71	XA11	71						
11	MACDR 03	XA10	11	XA11	11						
11	MACDR 04	XA10	70	XA11	70						
11	MACDR 05	XA10	10	XA11	10						
11	MACDR 06	XA10	69	XA11	69						
11	MACDR 07	XA10	09	XA11	09						
11	MACDR 08	XA10	68	XA11	68						
11	MACDR 09	XA10	08	XA11	08						
11	MACDR 10	XA10	67	XA11	67						
11	MACDR 11	XA10	07	XA11	07						
11	MACDR 12	XA10	66	XA11	66						
11	MACDR 13	XA10	06	XA11	06						
11	MACDR 14	XA10	65	XA11	65						
11	MACDR 15	XA10	05	XA11	05						
11	MEMCLK	XA09	08	XA11	56						
11	MCMNTR ENABLE	XA07	41	XA07	102						
11	MWRCYC *	XA08	44	XA11	53						
11	NB IF *	XA1P1	32	XA12	103						
11	CPCRY	XA09	03	XA10	03						
11	CPCFLW	XA09	63	XA10	04						
11	CPPLUSS	XA09	04	XA10	64						
11	CPZERC	XA09	64	XA10	63						
11	PDEWTA	XA07	78	XA12	13						
11	PDIVOP	XA07	24	XA12	115						
11	PICCLK	XA09	10	XA12	10						
11	PICLOAD *	XA08	58	XA12	14						
11	PPI SEL 2 *	XA07	44	XA12	37						
11	RC DATA IN	XA07	39	XA12	70						
11	RD *	XA07	49	XA12	97						



RPT NO. DAB0015P-6 PRG REV-A8 TJ 5051652 REV-F DT=B RSPU GDXYO=XA1P1-01  
 OUTPUT NETWORK CARDS

XA1P1	08	XA12	48						
XA12	108	XA2P1	08						
XA12	49	XA3P1	08						
XA12	50	XA4P1	08						
XA06	89	XA1P3	09						
XA06	95	XA2P3	09						
XA06	101	XA3P3	09						
XA06	109	XA4P3	09						
XA07	104	XA12	72						
XA07	52	XA12	74	XA09	71				
1XA05	14	XA06	56						
2XA05	32	XA06	117						
3XA05	94	XA06	116						
4XA05	49	XA06	57						
XA08	95	XA09	87						
XA08	35	XA09	27						
XA08	94	XA09	86						
XA08	34	XA09	26						
XA08	93	XA09	85						
XA08	33	XA09	25						
XA08	92	XA09	84						
XA08	32	XA09	24						
XA08	91	XA09	83						
XA08	31	XA09	23						
XA08	90	XA09	82						
XA08	86	XA09	68						
XA08	110	XA09	111						
XA08	50	XA09	51						
XA08	109	XA09	110						
XA08	49	XA09	50						
XA08	108	XA09	113						
XA08	48	XA09							
XA08			53						
XA08	107								
XA08	47	XA09	52						
XA08	106	XA09	109						
XA08	46	XA09	49						
A14P1	16	XA12	102						
A14P1	27	XA12	46						
A14P1	11	XA12	106						
A14P1	28	XA12	47						
A14P1	12	XA12	107						
A14P1	31	XA12	43						
XA07	30	XA12	38						
A14P1	15	XA12	15						
A14P1	14	XA12	08						
A14P1	30	XA12	75						
A14P1	13	XA12	69						
J01	01	J01	03	J01	05	J01	07	J01	09
J01	02	J01	04	J01	06	J01	08	J01	10
XA07	19	XA12	07						



## APPENDIX A

## REFERENCES

<u>Reference</u>	<u>Title</u>
FM 21-11	First Aid for Soldiers
MIL-STD-454	Standard General Requirements for Electronic Equipment
MIL-STD-681	Identification Coding and Application of Hookup and Lead Wire
NAVORPSTA REPORT 1347	Guide Manual for Repair of Electronic Modules
PDEP 11-6625-2773-12-3	Electronic Equipment Test Station AN/USM-410
TB 43-0118	Field Instructions for Painting and Preserving Electronics Command Equipment including Camouflage Pattern Painting of Electronic Equipment Shelters
TM 32-5865-060-10	Operator's Manual for Counter measures Set AN/MLQ-34
TM 32-5865-060-24&P	Organizational, Direct Support and General Support Maintenance Manual including Repair Parts and Special Tools List for Countermeasures Set AN/MLQ-34
TM 38-750	The Army Maintenance Management System (TAMMS)
TM 740-90-1	Administration Storage
TM 750-244-2	Procedures for Destruction of Army Materiel to Prevent Enemy Use (Electronics Command)



## APPENDIX B

## MAINTENANCE ALLOCATION CHART

PROCESSOR, SIGNAL DATA  
MX-10214/MLQ-34  
(5051650-1)

## Section I. INTRODUCTION

## B-1. GENERAL

This section provides a general explanation of all maintenance and repair functions authorized at various maintenance categories.

b. The Maintenance Allocation Chart (MAC) in section II designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component will be consistent with the capacities and capabilities of the designated maintenance categories.

c. Section III lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from section II.

d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

B-2. MAINTENANCE FUNCTIONS. Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel).

b. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.

d. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.

e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install, may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

h. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. Replace is authorized by the MAC and is shown as the third position code of the SM&R code.

**i. Repair. The application of maintenance services<sup>1</sup>, including fault location/troubleshooting<sup>2</sup>, removal/installation, and disassembly/assembly<sup>3</sup>, procedures, and maintenance actions<sup>4</sup>, to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction or failure in a part, subassembly, module (component or assembly), end item, or system.**

j. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications (i.e., DMWR). Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc) considered in classifying Army equipments/components.

---

<sup>1</sup>Services - inspect, test, service, adjust, align, calibrate, and/or replace.

<sup>2</sup>Fault locate/troubleshoot - The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or unit under test (UUT).

<sup>3</sup>Disassemble/assemble - encompasses the step-by-step taking apart (or breakdown) of a spare/functional group coded item to the level of its least component identified as maintenance significant (i.e., assigned an SMR code) for the category of maintenance under consideration.

<sup>4</sup>Actions - welding, grinding, riveting, straightening, facing, remachining, and/or resurfacing.

B-3. EXPLANATION OF COLUMNS IN THE MAC, SECTION II.

a. Column 1, Group Number. Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly. End item group number shall be "00".

b. Column 2, Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Function. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see paragraph B-2.)

d. Column 4, Maintenance Level. Column 4 specifies, by the listing of a work time figure in the appropriate sub-column(s), the category of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate work time figures will be shown for each category. The work time figure represents the average time required to restore an item (assembly, subassembly component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

<b>C</b>	.....	Operator or crew
<b>O</b>	.....	Organizational maintenance
<b>F</b>	.....	Direct support maintenance
<b>H</b>	.....	General support maintenance
<b>D</b>	.....	Depot maintenance

e. Column 5, Tools and Equipment. Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. Column 6, Remarks. This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in Section IV.

B-4. EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

a. Column 1, Reference Code. The tool and test equipment reference code correlates with a code used in the MAC, Section II, Column 5.

b. Column 2, Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

c. Column 3. Nomenclature. Name or identification of the tool or test equipment.

d. Column 4. National Stock Number. The National stock number of the tool or TMDE .

e. Column 5. Tool Part Number. The manufacturer's part number.

B-5 . EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

a. Reference Code. The code recorded in column 6, section II.

b. Remarks. This column lists information pertinent to the maintenance function performed as indicated in the MAC, section II.



SECTION II. MAINTENANCE ALLOCATION CHART  
 Processor, Signal Data  
 MX-10214/MLQ-34  
 (5051650-1)

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOOLS AND EQUIP.	REMARKS
			C	O	F	H	O		
00	Processor, Signal Data 5051650-1	Inspect				0.2		1	A
		Test				1.0		1, 3-5, 17, 23, 26, 27, 32, 33	
		Align						1, 4, 5, 27, 33-43	
		Repair				0.8		1, 3-5, 17-24, 28-33	
		Overhaul					x		
01	Wiring Harness W1 5051657-1	Inspect				0.5		1	
		Replace				8.0		1-3, 17-22, 24, 28-31	
		Repair				3.0		1-3, 17-22, 24, 28-31	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS AND EQUIP.	REMARKS
			c	o	F	H	o		
02	Wiring Harness W21 C5077144-1	Inspect				0.5		1	
		Replace				3.0		1-3, 17-22, 24, 28-31	
		Repair				1.5		1-3, 17-22, 24, 28-31	
03	Contact Assy. A15 5051658-1	Inspect				0.1		1	
		Replace				0.5		1-3, 17-22, 24, 29-31	
		Repair				0.5		1-3, 17-22, 24, 29-31	
04	IF Down Converter Assembly A20 5051653-1	Inspect				0.1		1	
		Test				0.8		1-4,6, 32	
		Remove/ Install				1.0		1,2,17; 26,27	
		Repair				0.6		1-4,6, 32	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS AND EQUIP.	REMARK
			C	O	F	H	D		
05	CCA, -6 Volt Regulator A21 5055292-1	Inspect				0.1		1	
		Test				0.5		1-3, 23	
		Replace				0.3		1	
		Repair				0.6		1-3, 23	
06	CCA, Power Monitor A17 5051928-1	Inspect				0.2		1	
		Test				0.5		1-3, 23	
		Replace				0.5		1	
		Repair				0.4		1-3, 23	
07	CCA, RC Bus Interface Status A6 5052009-1	Inspect				0.1		1	
		Test				0.8		1-4,7, 32	
		Remove/ Install				0.3		1,2,17 26,27	
		Repair				0.6		1-4,7, 32	
08	CCA, Carrier Presence Detector A1,2,3,4 5052001-2	Inspect				0.1		1	
		Test				0.8		1-4,8, 32	
		Remove/ Install				0.3		1,2,17 26,27	
		Repair				0.6		1-4,8, 24,32	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS AND EQUIP.	REMARKS
			c	o	F	H	D		
09	CCA, 150 Hz, NATO Tone Detector A5 5052013-1	Inspect				0.1		1	
		Test				0.8		1-4,9, 32	
		Remove/ Install Repair				0.3		1,2,17, 26,27	
10	CCA, 1/0 Register Set A12 5052025-1	Inspect				0.1		1	
		Test				0.8		1-4,10, 32	
		Remove/ Install Repair				0.3		1,2,17, 26,27	
11	CCA, Micro Memory A8 5052057-1	Inspect				0.1		1	
		Test				0.8		1-4,11, 32	
		Remove/ Install Repair				0.3		1,2,17, 26,27	
						0.6		1-4,11, 32	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS ANO EQUIP.	REMARKS
			c	o	F	H	o		
12	CCA, Control Sequencer 5052045-1	Inspect				0.1		1	
		Test				0.8		1-4,12,32	
		Remove/ Install Repair				0.3		1,2,17,26,27	
						0.6		1-4,12,32	
13	CCA, Address Generator A10 5052037-1	Inspect				0.1		1	
		Test				0.8		1-4,13,32	
		Remove/ Install Repair				0.3		1,2,17,26,27	
						0.5		1-4,13,32	
14	CCA, 4K Ram All 5052033-1	Inspect				0.1		1	
		Test				0.8		1-4,14,32	
		Remove/ Install Repair				0.3		1,2,17,26,27	
						0.1		26,27	
						0.8		1-4,14,32	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS AND EQUIP.	REMARK!
			c	o	F	H	D		
15	CCA, RC Bus Interface/8085 CPU A7 5052049-3	Inspect				0.1		1	
		Test				0.8		1-4,15,32	
		Remove/Install				0.3		1,2,17,26,27	
		Repair				0.6		1-4,15,32	
16	CCA, IF Down Converter A14 5052017-1	Inspect				0.1		1	
		Test				0.8		1-4,16,32	
		Remove/Install				0.3		1,2,17,26,27	
		Repair				0.8		1-4,16,24,32	
17	Filter Assy., EMI A16 5051780-2	Inspect				0.2		1	
		Test				0.3		1-3	
		Replace				0.4		1-3	
		Repair				0.5		1-3	
18	Filter Assy., Jack A22 5051805-1	Inspect				0.1		1	
		Test				0.3		1-3	
		Replace				0.2		1-3	
		Repair				0.2		1-3	
19	Power Supply PS1 5054935-2	Inspect				0.1		1	
		Replace				0.4		1-3,28	
		Repair					x		B

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOOLS AND EQUIP.	REMARK:
			c	o	F	H	D		
20	Power Supply PS2 0213-2-1196-8	Inspect				0.1		1	B
		Replace				0.4		1,3,28	
		Repair					x		
21	Power Supply PS3 0213-2-1196-9	Inspect				0.1		1	B
		Replace				0.4		1-3,28	
		Repair					x		
22	Filter, Bandpass FL1 5054980-2	Inspect				0.2		1	
		Test				0.2		1,3	
		Replace				0.3		1	
23	Light Indicator Assy 5053136-1	Inspect				0.2		1	
		Replace				0.3		1-3	
		Repair				0.4		1,3	
24	Cable Assy, RF W2, W12 5053250-26	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
25	Cable Assy, RF W3 5053250-25	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
26	Cable Assy, RF W4, W8 5053250-22	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	

GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOO LS AND EQUIP.	REMARKS
			c	o	F	H	D		
27	Cable Assy, RF W5, W9 5053250-20	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
28	Cable Assy, RF W6, W13 5053250-27	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
29	Cable Assy, RF W7, W11 5053250-24	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
30	Cable Assy, RF W10 5053250-23	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
31	Cable Assy, RF W14 C5077154-8	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,31	
32	Cable Assy, RF W15, W16, W17 C5077154-7	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,31	



GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE CATEGORY					TOOLS AND EQUIP.	EMAR K
			c	o	F	i	D		
33	Cable Assy, RF W18 5053245-15	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24	
34	Cable Assy, RF W19 5053245-7	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24,31	
35	Cable Assy, RF W20 C5077155-32	Inspect				0.1		1	
		Test				0.1		1,3	
		Replace				0.1		1,17, 24,31	
36	Wiring Harness BR. W22 C5077580-1	Inspect				0.5		1	
		Replace				8.0		1-3, 17-22, 24,31	
		Repair				3.0		1-3 , 17-22, 24,31	

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

Processor, Signal Data

MX-10214/MLO-34  
(5051650-1)

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOO L NUMBER
1	HD	Tool Kit, Electronic Equip.	5180-00-605-0079	TK-100/G
2	HD	Took Kit, Electronic Equip.	5180-00-610-8177	TK-105/G
3	HD	Multimeter Set	6625-00-969-4105	ME-303A/U
4	HD	Test Station	6625-01-069-4223	AN/USM-410 (V2)
5	HD	ATE Software Test Program Set for Signal Data Processor		TPT5051650 GTE FSCM 57958
6	HD	ATE Software Test Program Set for IF Down Converter Assy., A20		TPT5051653 GTE FSCM 57958
7	HD	ATE Software Test Program Set for CCA, RC Bus Status Interface, A6		TPT5052009 GTE FSCM 57958
8	HD	ATE Software Test Program Set for CCA, Carrier Presence Detector, A1,2,3,4		TPT5052001 GTE FSCM 57958
9	HD	ATE Software Test Program Set for CCA, NATO Tone Detector, A5		TPT5052013 GTE FSCM 57958
10	HD	ATE Software Test Program Set for CCA, I/O Register Set, A12		TPT5052025 GTE FSCM 57958
11	HD	ATE Software Test Program Set for CCA, Micro Memory A8		TPT5052057 GTE FSCM 57958

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOO L NUMBER
12	HD	ATE Software Test Program Set for CCA, Micro Control Sequence, A9		TPT5052045 GTE FSCM 57958
13	HD	ATE Software Test Program Set for CCA, Address Generator, A10		TPT5052037 GTE FSCM 57958
14	HD	ATE Software Test Program Set for CCA, 4K RAM, A11		TPT5052033 GTE FSCM 57958
15	HD	ATE Software Test Program Set for CCA, Bus Interface/ 8085 CPU, A7		TPT5052049 GTE FSCM 57958
16	HD	ATE Software Test Program Set for CCA IF Down Converter, A14		TPT5052017 GTE FSCM 57958
17	HD	Circuit Card Extractor		5054268 GTE FSCM 57958
18	HD	Connector Pin Insertion/ Removal Tool Contact Size 20	5120-00-915-4587	MS27534-20
19	HD	Connector Pin Insertion/ Removal Tool Contact Size 16	5120-01-075-3111	MS27534-16
20	HD	Gun, Wire Wrap		OK Wire Wrap Tool Co . EW-8 FSCM 0866

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
21	HD	Bit Wire Wrap Size 30	5130-01-044-0152	OK Wire Wrap Tool Co. SB30MSH-B FSCM 08666
22	HD	Sleeve Wire Wrap Size 30	5120-01-036-4959	OK Wire Wrap Tool Co. P3032 FSCM 08666
23	HD	Power Supply 0-40V .6A (3 each)	6625-00-437-4861	HP6205B
24	HD	Tool Coaxial Contact Extraction	5120-00-693-2661	Cannon CET-C6B
25	HD	Wrench Torque 5-50 in. lbs.	5120-00-902-9436	
26	HD	Extender Card, CCA		0108-1-4063-1 GTE FSCM 57958
27	HD	Extender Card, CCA		C5077448-1 GTE FSCM 57958
28	HD	Heat Gun	4940-00-364-2828	Masters HG-501 FSCM83284
29	HD	Contact Extraction Tool		Teradyne 600-0002-000 FSCM 31413

TOOL OR TEST EQUIPMENT REF COOE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
30	HD	Contact Insertion Tool		Teradyne 600-0004-000
31	FHD	Wrench, Torque 7-10 in. lbs. Preset	5120-00-169-5776	FSCM 31413 Omni Spectra Model T8438 FSCM16179
32	HD	PIU-A Interface Device (Adapter, Test)		5053507 MX-10426/U GTE FSCM 57958
33	HD	400 Hz Switching Interface Device (Adapter, Test)		5053501 MX-10429/U GTE FSCM 57958
34	HD	Termination 50 Ohm (2 each)	5905-00-581-4285	HP908A
35	HD	Receiver (ESR801B)		Magnavox 706692-801
36	HD	Receiver Set	5865-01-109-1679	5051640-1 R2197/ MLQ-34
37	HD	Adjustable Amplitude Noise Generator		Micronetics PNG 5110
38	HD	Oscilloscope	6625-00-106-9622	AN/USM 281C
39	HD	Procesor Signal Data	5865-01-109-1689	5051650-1 MX-10214/ MLQ-34

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOO L NUMBER
40	HD	Power Meter	6625-01-075-0261	TS-3793(U) HP436A
41	HD	Adapter, Test PIU-B	5865-01-147-1044	5053510-1 MX-10425/U
42	HD	Plug-in Adapter RSPU		5053521-1
43	HD	Coupler, Directional		5054986-1

SECTION IV. REMARKS  
 Processor, Signal Data  
 MX-10214/MLO-34  
 (5051650-1)

REFERENCE CODE	REMARKS
<p>A</p> <p>B</p>	<p>Refer to DMWR 32-5865-069 for depot level functions.</p> <p>Return to vendor for repair per USAEMRA Supply Bulletin.</p> <p>Subject: Electronic Items Depot/Contract Repair Support.</p>





## APPENDIX C

ORGANIZATIONAL, DIRECT SUPPORT, AND  
GENERAL SUPPORT MAINTENANCE  
REPAIR PARTS AND SPECIAL TOOLS LIST

---

## Section I. INTRODUCTION

C-1. **SCOPE.** This manual lists spares and repair parts, special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational, direct support, and general support maintenance of the Processor, Signal Data MX-10214/MLQ-34. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

C-2. **GENERAL.** This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence. Bulk materials are listed in NSN sequence.

b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized for the performance of maintenance.

Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list in alphameric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. This index is followed by a cross-reference list of reference designators to figure and item numbers.

C-3. **EXPLANATION OF COLUMNS.**

a. Illustration. This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify item called out in the illustration.

b. Source, Maintenance, and Recoverability (SMR) Codes.

(1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

<u>Code</u>	<u>Defini ti on</u>
PA -	Item procured and stocked for anticipated or known usage.
PE -	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
XA -	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.
XB -	Item is not procured or stocked. If not available through salvage, requisition.

**NOTE**

Cannibalization or salvage may be used as a source of supply for any items coded above except those coded XA and aircraft support items as restricted by AR 700-42.

(2) Maintenance Code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered on the third position will indicate the lowest maintenance level authorized to remove, replace and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

<u>Code</u>	<u>Appli cati on/Expl anati on</u>
O -	Support item is removed, replaced, used at the organizational level.
F -	Support item is removed, replaced, used at the direct support level.
H -	Support item is removed, replaced, used at the general support level.
D -	Support items that are removed, replaced, used at depot, mobile depot, or specialized repair activity only.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes.

<u>Code</u>	<u>Application/Explanation</u>
<b>O</b> -	The lowest maintenance level capable of complete repair of the support item is the organizational level.
<b>F</b> -	The lowest maintenance level capable of complete repair of the support item is the direct support level.
<b>H</b> -	The lowest maintenance level capable of complete repair of the support item is the general support level.
<b>D</b> -	The lowest maintenance level capable of complete repair of the support item is the depot level.
<b>Z</b> -	Nonreparable. No repair is authorized.

(3) Recoverability Code. Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

<u>Recoverability Codes</u>	<u>Definition</u>
Z -	Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
O -	Reparable item. When uneconomically repairable, condemn and dispose at organizational level.
F -	Reparable item. When uneconomically repairable, condemn and dispose at the direct support level.
H -	Reparable item. When uneconomically repairable, condemn and dispose at the general support level.
D -	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.

c. National Stock Number. Indicates the national stock number assigned to the item and which will be used for requisitioning,

Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When a stock numbered item is requisitioned, the item received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in \_\_\_\_\_ which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. The physical security classification of the item is indicated by the parenthetical entry. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. When the part to be used differs between serial numbers of the same model, the effective serial numbers are shown as the last line of the description. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased accordingly.

Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc).

C-4. SPECIAL INFORMATION.

a. A square symbol on the components of a CCA denotes the positive end.

b. Action change codes indicates in the left-hand margin of the listing page denote the following:

N-Indicates an added item.

C-Indicates a change in data.

R-Indicates a change in NSN only.

C-5. HOW TO LOCATE REPAIR PARTS.

a. When National Stock Number or Part Number is Unknown:

(1) First. Using the table of contents, determine the functional group or subgroup within the item belongs. This is necessary since illustrations are prepared for functional groups or subgroups, and listings are divided into the same groups.

(2) Second. Find the illustration covering functional group or subgroup to which the item belongs.

(3) Third. Identify the items on the illustration and note the illustration figure and item number of the item.

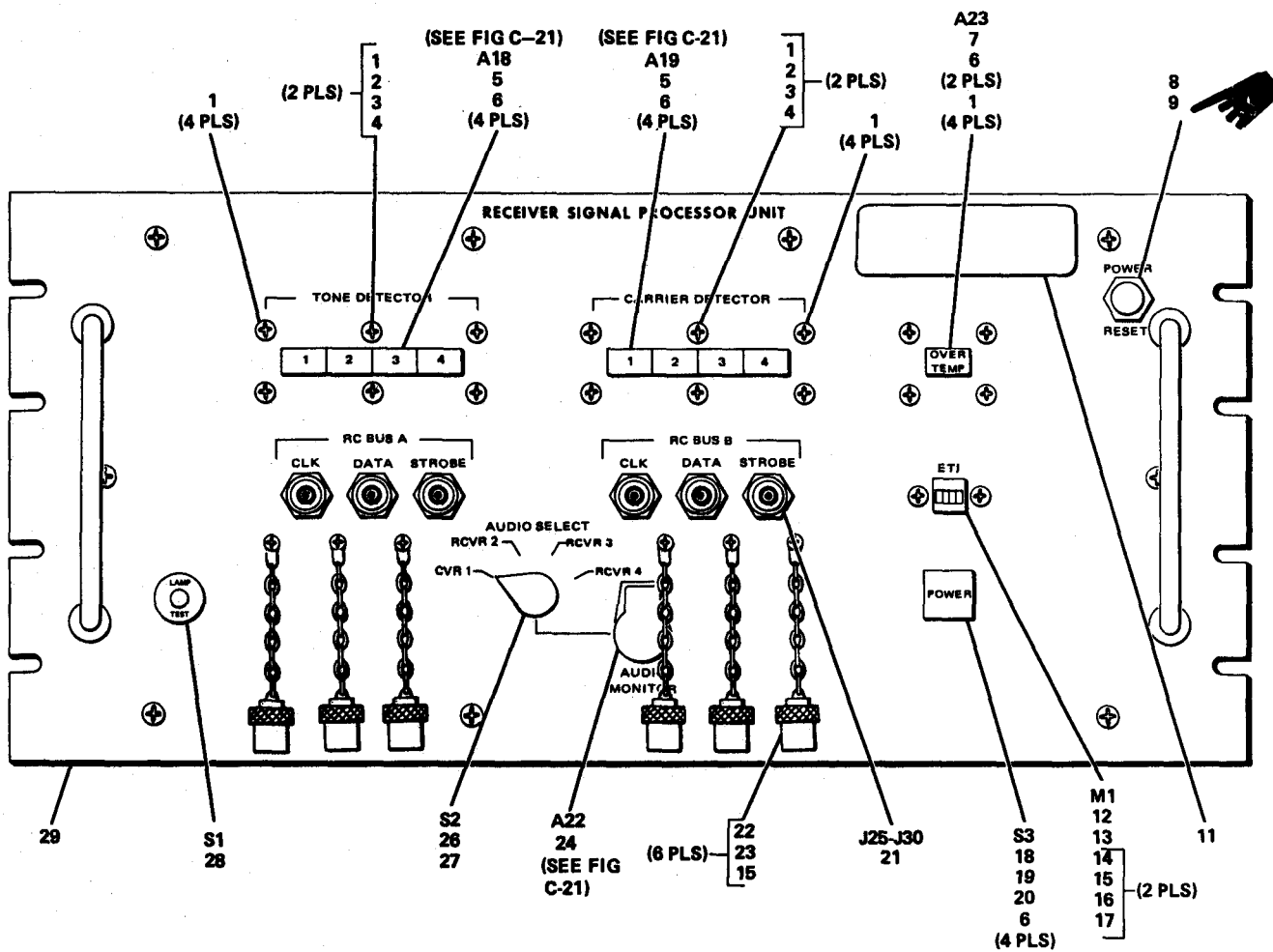
(4) Fourth. Using the Repair Parts Listing, find the figure and item numbers noted on the illustration.

b. When National Stock Number or Part Number is Known:

(1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) Second. After finding the figure and item number, locate the figure and item number in the repair parts list.

C-6. ABBREVIATIONS. Not applicable.

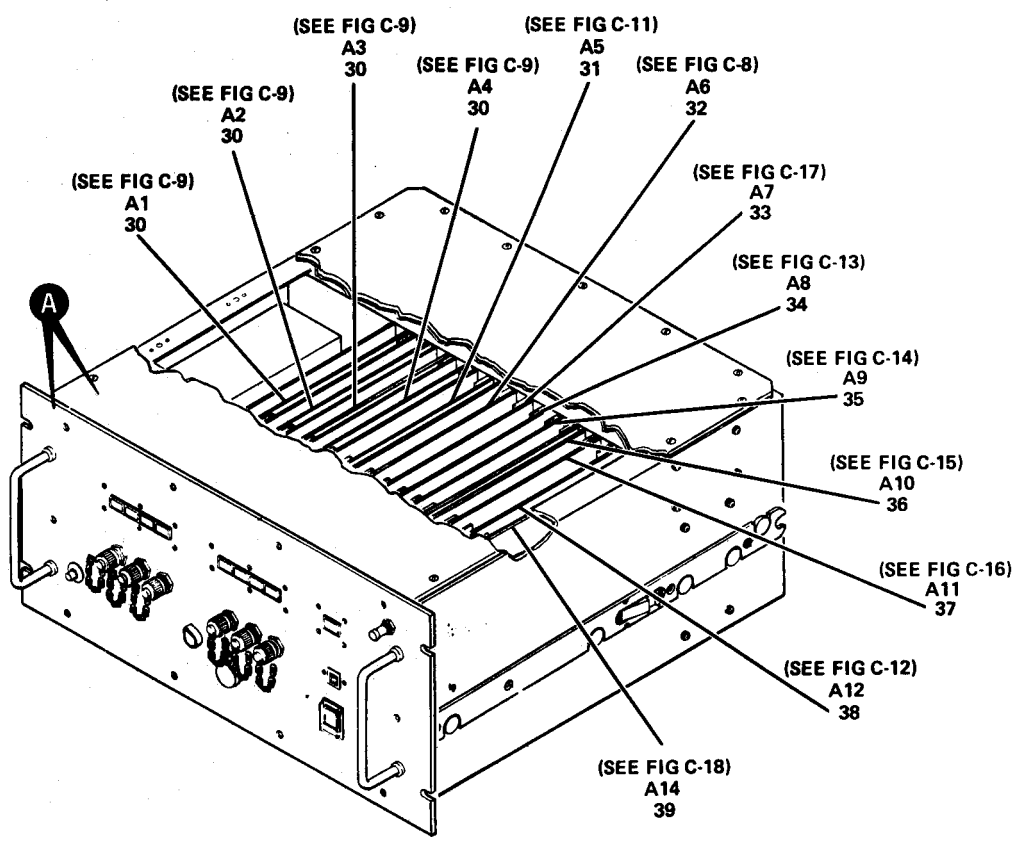


PREFIX ALL REFERENCE DESIGNATIONS WITH: A23  
 Figure C-1. Processor, Signal Data 5051650-1 (Sheet 1 of 8)

58211

SECTION 1. REPAIR PARTS LIST

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 00 PROCESSOR, SIGNAL DATA (57958) 5051650-1		
C-1	1	PAHZZ	5305-00-066-7328	MS24693C27	96906	SCR, MACH, FL HD	EA	20
C-1	2	PAHZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT	EA	16
C-1	3	PAHZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK	EA	18
C-1	4	PAHZZ	5310-00-934-9761	MS35649-264	96906	NUT, PLAIN, HEX	EA	10
C-1	5	PAHHH		5053136-1	57958	IND LIGHT ASSY	EA	2
C-1	6	PAOZZ	6240-01-147-4339	MS3338-6839	96906	LAMP, INCAND	EA	22
C-1	7	PAHHH		5053215-1	57958	IND LIGHT ASSY	EA	1
C-1	8	PAHZZ	5930-00-220-5705	5054832-1	57958	BOOT, DUMR SEAL	EA	1
C-1	9	PAHZZ		0213-1-1068-1	57958	ADAPTER, BUSHING	EA	1
C-1	11	XBHZZ		5051425-28	57958	PLATE, IDENT	EA	1
C-1	12	PAHZZ	6645-00-255-1371	M7793/6-002	96906	MTR, TIME TOTLZG	EA	1
C-1	13	PAHZZ	6645-00-258-8547	MS3345-2	96906	FLANGE, MTG, MTR	EA	1
C-1	14	PAHZZ	5305-00-066-7325	MS24693C5	96906	SCR, MACH, FL HD	EA	2
C-1	15	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT	EA	35
C-1	16	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK	EA	27
C-1	17	PAHZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEX	EA	4
C-1	18	PAHZZ	5930-01-132-8670	5054830-6	57958	SWITCH, PUSH	EA	1
C-1	19	PAHZZ		M22885-83-200	81349	GUARD, SWITCH	EA	1
C-1	20	PAHZZ	6210-01-140-5660	5054892-1	57958	LIGHT, INDICATOR	EA	1
C-1	21	PAHZZ	5935-01-013-7179	M39012-34-0001	81349	CONN, RCPT, ELEC	EA	6
C-1	22	PAHZZ	5935-01-124-9677	M39012-25-0020	81349	COVER, ELEC CONN	EA	6
C-1	23	PAHZZ	5305-00-054-5647	MS51957-13	96906	SCR, MACH, PAN HD	EA	25
C-1	24	PAHHH		5051805-1	57958	FLTR ASSY-JACK	EA	1
C-1	25	PAHZZ	5935-00-026-9824	5054927-1	57958	COVER, TEL JACK	EA	1
C-1	26	PAHZZ		5054513-12	57958	SWITCH, ROTARY	EA	1
C-1	27	PAOZZ	5355-00-552-1810	MS91528-1K1B	96906	KNOB	EA	1
C-1	28	PAHZZ	5930-01-132-4476	5051824-1	57958	SWITCH, PUSH	EA	1
C-1	29	XBHZZ		5051655-1	57958	PANEL, BLANK	EA	1



**NOTE: 5052001-3 FIGURE C-9 A1 THROUGH A4 IS THE PREFERRED PART AND IS INTERCHANGEABLE WITH 5052001-2 FIGURE C-10 A1 THROUGH A4.**

56212

Figure C-1. Processor, Signal Data 5051650-1 (Sheet 2 of 8)



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SHR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	30	PAHHD		5052001-3	57958	CKT CARD ASSY	EA	1
C-1	31	PAHHD	5865-01-152-0470	5052013-1	57958	CKT CARD ASSY	EA	1
C-1	32	PAHHD	5865-01-151-7571	5052009-1	57958	CKT CARD ASSY	EA	1
C-1	33	PAHHD	5865-01-150-2894	5052049-3	57958	CKT CARD ASSY	EA	1
C-1	34	PAHHD		5052057-2	57958	CKT CARD ASSY	EA	1
C-1	35	PAHHD	5865-01-151-7574	5052045-1	57958	CKT CARD ASSY	EA	1
C-1	36	PAHHD	5865-01-150-2901	5052037-1	57958	CKT CARD ASSY	EA	1
C-1	37	PAHHD	5865-01-151-7575	5052033-1	57958	CKT CARD ASSY	EA	1
C-1	38	PAHHD	5865-01-151-7572	5052025-1	57958	CKT CARD ASSY	EA	1
C-1	39	PAHHD	5865-01-150-2900	5052017-1	57958	CKT CARD ASSY	EA	1

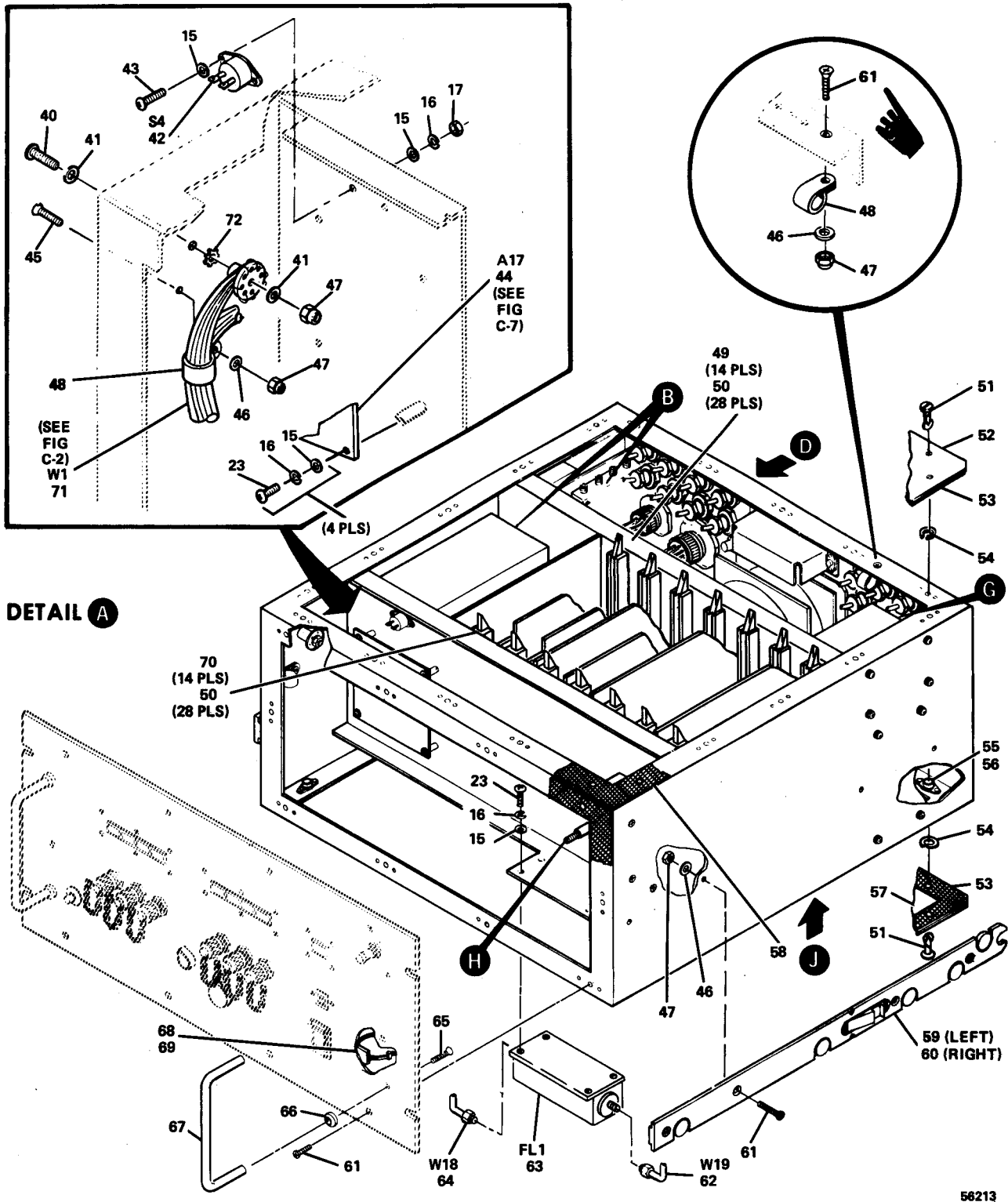


Figure C-1. Processor, Signal Data 5051650-1 (Sheet 3 of 8)

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NG	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	40	PAHZZ	5305-00-054-6672	MS51957-47	96906	SCR, MACH, PAN HD	EA	6
C-1	41	PAHZZ	5310-00-069-5291	NAS620C8	80205	WASHER, FLAT	EA	7
C-1	42	PAHZZ	5930-01-040-7541	M24236-1-0480	81349	SWITCH, THRMSTC	EA	1
C-1	43	PAHZZ	5305-00-054-5648	MS51957-14	96906	SCR, MACH, PAN HD	EA	6
C-1	44	PAHHH	5865-01-150-2902	5051928-1	57958	CKT CARD ASSY	EA	1
C-1	45	PAHZZ	5305-00-088-9671	MS24693C52	96906	SCR, MACH, FL HD	EA	3
C-1	46	PAHZZ	5310-00-595-6772	MS15795-808	96906	WASHER, FLAT	EA	50
C-1	47	PAHZZ	5310-00-982-6814	MS21044C08	96906	NUT, SL FLKG, HEX	EA	30
C-1	48	PAHZZ	5340-00-543-3931	MS25281R3	96906	CLAMP, LOOP	EA	2
C-1	49	XBHZZ		5054821-3	57958	HLDR, ELEC CARD	EA	14
C-1	50	XBHZZ	5320-00-119-6754	MS20470AD2-3	96906	RIVET, SOLID	EA	56
C-1	51	PAHZZ	5325-01-076-6452	5054837-4	57958	STUD, TNLK FSTNR	EA	44
C-1	52	XBHHH		5051656-2	57958	COVER, ELEK EQPT	EA	1
C-1	53	PAHZZ		5051656-105	57958	GASKET	EA	2
C-1	54	PAHZZ	5310-00-949-6139	5054837-2	57958	RING, RETAINING	EA	44
C-1	55	PAHZZ	5325-00-788-5635	5054837-1	57958	RCPT, TNLK FSTNR	EA	44
C-1	56	XBHZZ	5320-00-117-6939	MS20426AD3-5	96906	RIVET, SOLID	EA	88
C-1	57	XBHHH		5051656-1	57958	COVER, ELEK EQPT	EA	1
C-1	58	PAHZZ		5051654-111	57958	GASKET	EA	1
C-1	59	XBHZZ		5054833-1	57958	SLIDE SECT, DWR	EA	1
C-1	60	XBHZZ		5054833-2	57958	SLIDE SECT, DWR	EA	1
C-1	61	PAHZZ	5305-00-086-9666	MS24693C51	96906	SCR, MACH, FL HD	EA	22
C-1	62	PAHZZ		5053245-7	57958	CABLE ASSY, RF	EA	1
C-1	63	PAHHH		5054980-2	57958	FILTER, BANDPASS	EA	1
C-1	64	PAHZZ		5053245-15	57958	CABLE ASSY, RF	EA	1
C-1	65	PAHZZ	5305-00-959-4158	MS24693C273	96906	SCR, MACH, FL HD	EA	4
C-1	66	XBHZZ	5340-00-870-5350	0213-1-1074-1	57958	FERRULE, HANDLE	EA	4
C-1	67	XBHZZ	5340-00-060-5386	MS39087-3	96906	HANDLE, BOW	EA	2
C-1	68	PAHZZ	4920-00-110-5317	5035870-1	57958	BASE, TDN STRAP	EA	14
C-1	69	PAHZZ	5975-00-727-5153	MS3367-4-9	96906	STRAP, TIEDOWN	EA	15
C-1	70	PAHZZ	5999-01-133-3337	5054835-1	57958	SHLD GSKT, ELEK	EA	14
C-1	71	XBHHH		5051657-1	57958	MRG HARNESS, BR	EA	1
C-1	72	PAHZZ	5310-00-614-3552	MS35335-59	96906	WASHER, LOCK	EA	4
C-1	72.1	PAHZZ	5340-00-989-9224	MS25281R6	96906	CLAMP, LOOP	EA	2

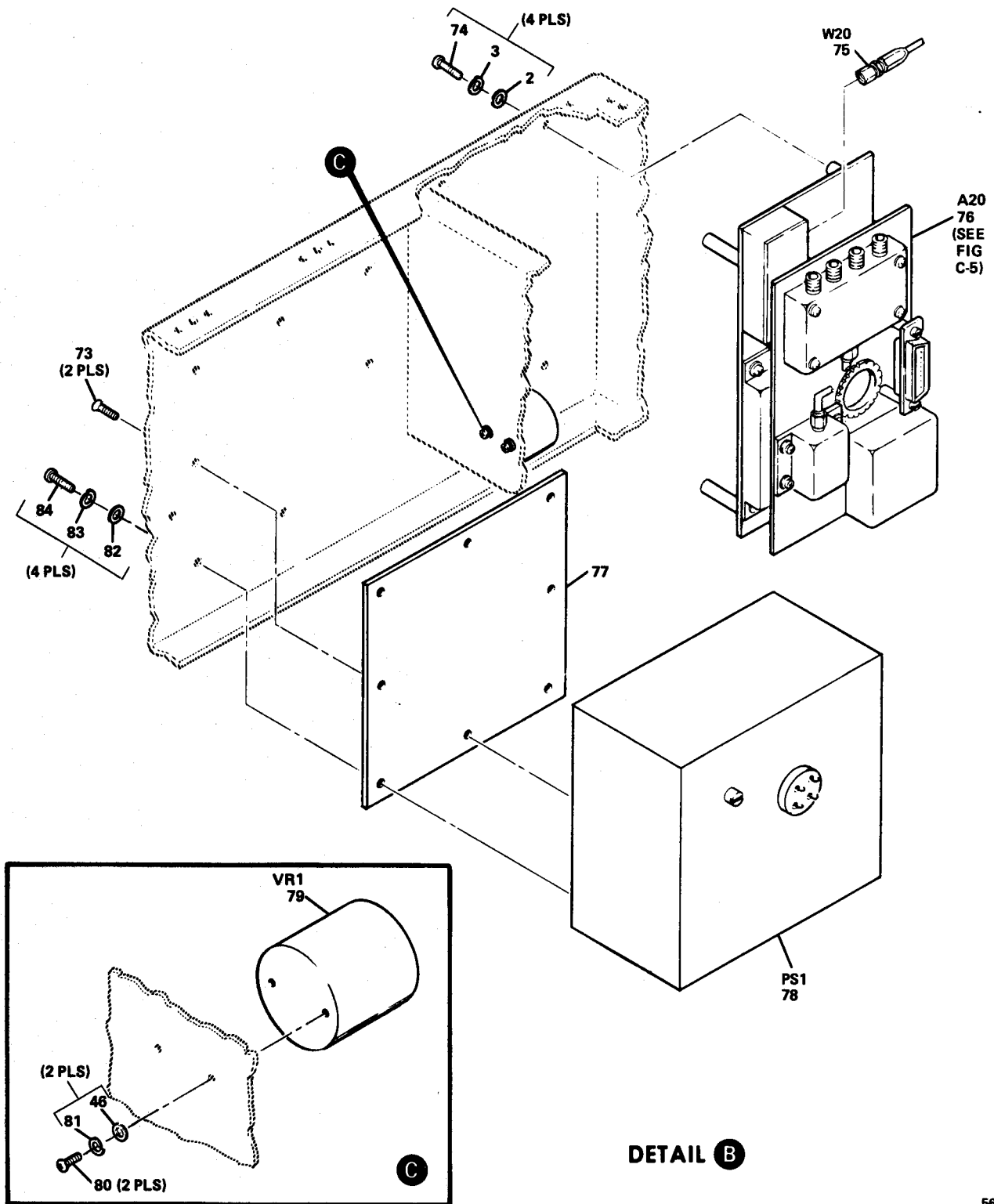


Figure C-1. Processor, Signal Data 5051650-1 (Sheet 4 of 8)

(1) ILLUS		(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION  USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
(A) FIG NO	(B) ITEM NO							
C-1	73	PAHZZ	5305-00-900-0593	MS24693C268	96906	SCR, MACH, FL HD	EA	4
C-1	74	PAHZZ	5305-00-054-6651	MS51957-27	96906	SCR, MACH, PAN HD	EA	4
C-1	75	PAHZZ		C5077155-32	57958	CABLE ASSY, RF	EA	1
C-1	76	PAHZZ	5865-01-152-0465	5051653-1	57958	CONVERTER, IF	EA	1
C-1	77	PAHZZ	5970-01-133-1578	5054919-4	57958	INSUL, THRM CNDT	EA	1
C-1	78	PAHDD	4920-01-074-9387	0213-2-1196-19	57958	POWER SUPPLY	EA	1
C-1	79	PAHZZ	5920-01-137-5132	5054296-3	57958	PROTECTOR, OVV	EA	1
C-1	80	PAHZZ	5305-00-054-6668	MS51957-43	96906	SCR, MACH, PAN HD	EA	2
C-1	81	PAHZZ	5310-01-067-9589	MS35338-137	96906	WASHER, LOCK	EA	4
C-1	82	PAHZZ	5310-00-595-6772	MS15795-808	96906	WASHER, FLAT	EA	14
C-1	83	PAHZZ	5310-00-933-8120	MS35338-138	96906	WASHER, LOCK	EA	13
C-1	84	PAHZZ	5305-00-059-3657	MS51958-61	96906	SCR, MACH, PAN HD	EA	12

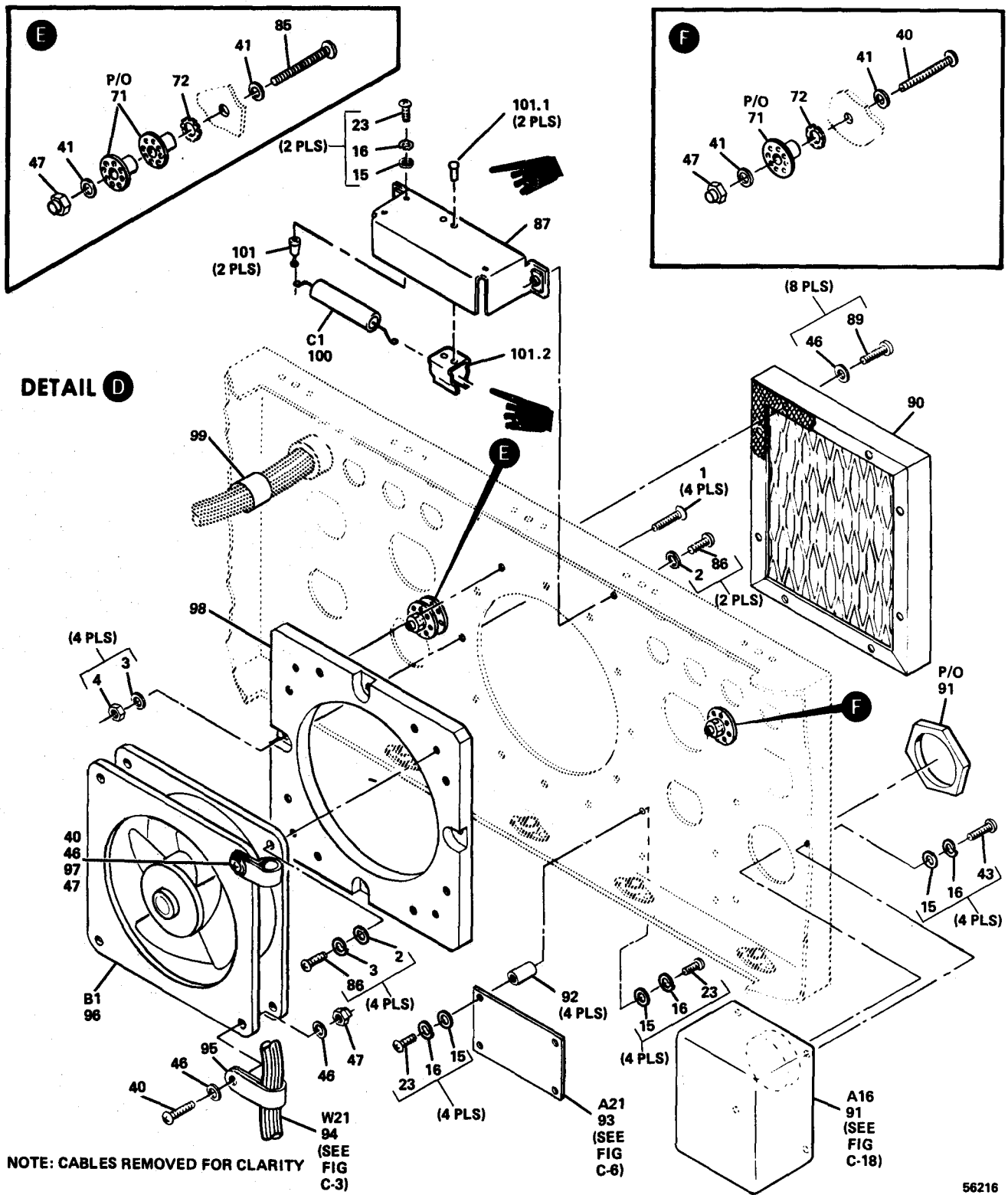
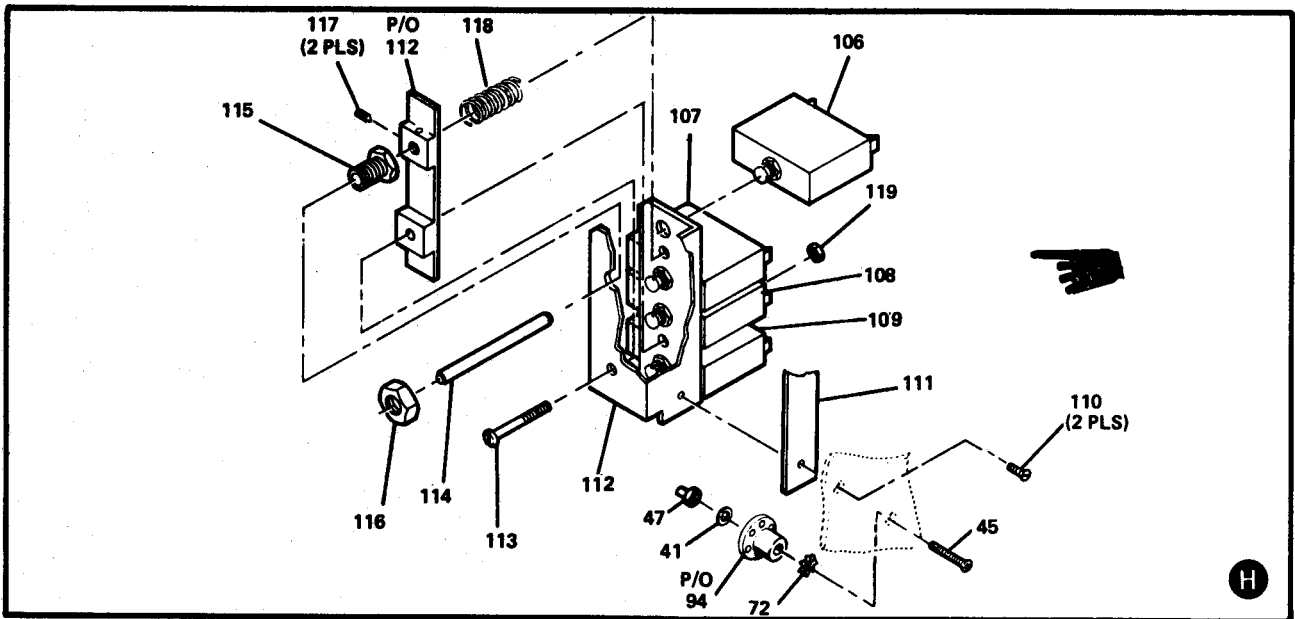
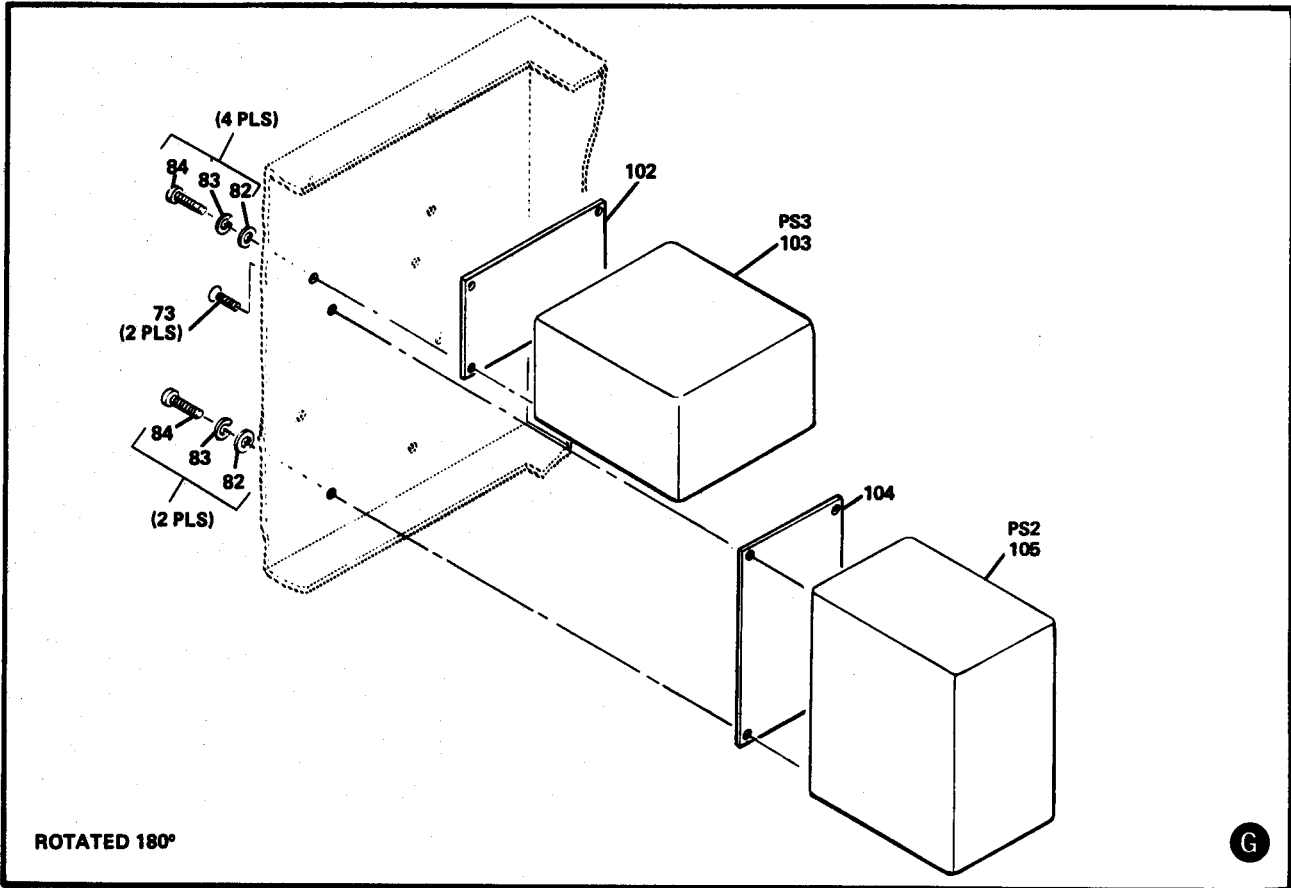


Figure C-1. Processor, Signal Data 5051650-1 (Sheet 5 of 8)

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	85	PAHZZ	5305-00-054-6674	MS51957-49	96906	SCR, MACH, PAN HD	EA	1
C-1	86	PAHZZ	5305-00-054-6654	MS51957-30	96906	SCR, MACH, PAN HD	EA	6
C-1	87	XBHZZ		0108-1-4116-1	57958	BRACKET.CAP	EA	1
C-1	89	PAHZZ	5305-00-054-6674	MS51957-49	96906	SCR, MACH, PAN HD	EA	8
C-1	90	PAHZZ	4130-01-134-6963	0213-1-1000-2	57958	FILTER ELEMENT	EA	1
C-1	91	PAHHH	5915-01-131-0627	5051780-2	57958	FILTER ASSY, EMI	EA	1
C-1	92	PAHZZ	5340-01-065-2783	5054884-22	57958	SPACER, THD, RND	EA	4
C-1	93	PAHHH	5865-01-151-7570	5055292-1	57958	CKT CARD ASSY	EA	1
C-1	94	XBHHH		C5077144-1	57958	WRG HARNESS, BR	EA	1
C-1	95	PAHZZ	5340-01-014-0696	MS25281R8	96906	CLAMP, LOOP	EA	3
C-1	96	PAHZZ	4140-01-071-0697	5054774-1	57958	FAN, TUBE AXIAL	EA	1
C-1	97	PAHZZ	5340-00-721-5315	MS25281R5	96906	CLAMP, LOOP	EA	1
C-1	98	XBHHH		5053042-1	57958	PLATE, MTG, FAN	EA	1
C-1	99	XBHZZ		5054784-1	57958	BAND, MARKER	EA	1
C-1	100	PAHZZ		M83421-01-5210M	81349	CAP, FXD, PLSTC	EA	1
C-1	101	PAHZZ	5940-00-905-4516	SE209D01	81349	TERMINAL, STUD	EA	3
C-1	101.1	PAHZZ	5320-00-721-5329	MS16535-153	96906	RIVET TUBULAR OVH	EA	2
C-1	101.2	PAHZZ	5340-01-014-0080	M24066/2-124	81349	CLIP, SOLID, SPR TNSN	EA	1



56215

Figure C-1. Processor, Signal Data 5051650-1 (Sheet 6 of 8)



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	102	PAHZZ	5970-01-132-5616	5054919-1	57958	INSUL, THRCNDT	EA	1
C-1	103	PAHDD	5820-01-017-8585	0213-2-1196-9	57958	POWER SUPPLY	EA	1
C-1	104	PAHZZ	5970-01-133-8971	5054919-7	57958	INSUL, THRM CNDT	EA	1
C-1	105	PAHDD	5841-01-018-8756	0213-2-1196-8	57958	POWER SUPPLY	EA	1
C-1	106	PAHZZ	5925-00-444-0595	5054860-7	57958	CIRCUIT BREAKER	EA	1
C-1	107	PAHZZ	5925-01-131-7584	5054860-6	57958	CIRCUIT BREAKER	EA	1
C-1	108	PAHZZ	5925-00-444-0585	5054860-5	57958	CIRCUIT BREAKER	EA	1
C-1	109	PAHZZ	5925-01-137-5239	5054860-1	57958	CIRCUIT BREAKER	EA	1
C-1	110	PAHZZ	5305-00-088-9965	MS24693C29	96906	SCR, MACH, FL HD	EA	2
C-1	111	XBHZZ		C5140781	57958	SPACER BAR	EA	1
C-1	112	XBHZZ		C5147089	57958	SUPPORT, CKT BRKR ASSY	EA	1
C-1	113	PAHZZ		5054883-2	57958	SCR, SHOULDER	EA	1
C-1	114	PAHZZ		C5147088-2	57958	SHAFT, PRECISION	EA	1
C-1	115	PAHZZ		5054831-2	57958	BSHG, MACH THD	EA	1
C-1	116	XBHZZ		C5147092-2	57958	SPACER, THD	EA	1
C-1	117	PAHZZ	5305-01-011-2188	MS51029-101	96906	SET SCREW	EA	2
C-1	118	PAHZZ	5360-00-124-2095	MS24585C143	96906	SPR, HLCL, CPRSN	EA	1
C-1	119	PAHZZ	5310-00-224-0494	MS25082-C12	96906	NUT, PL, HEX	EA	1

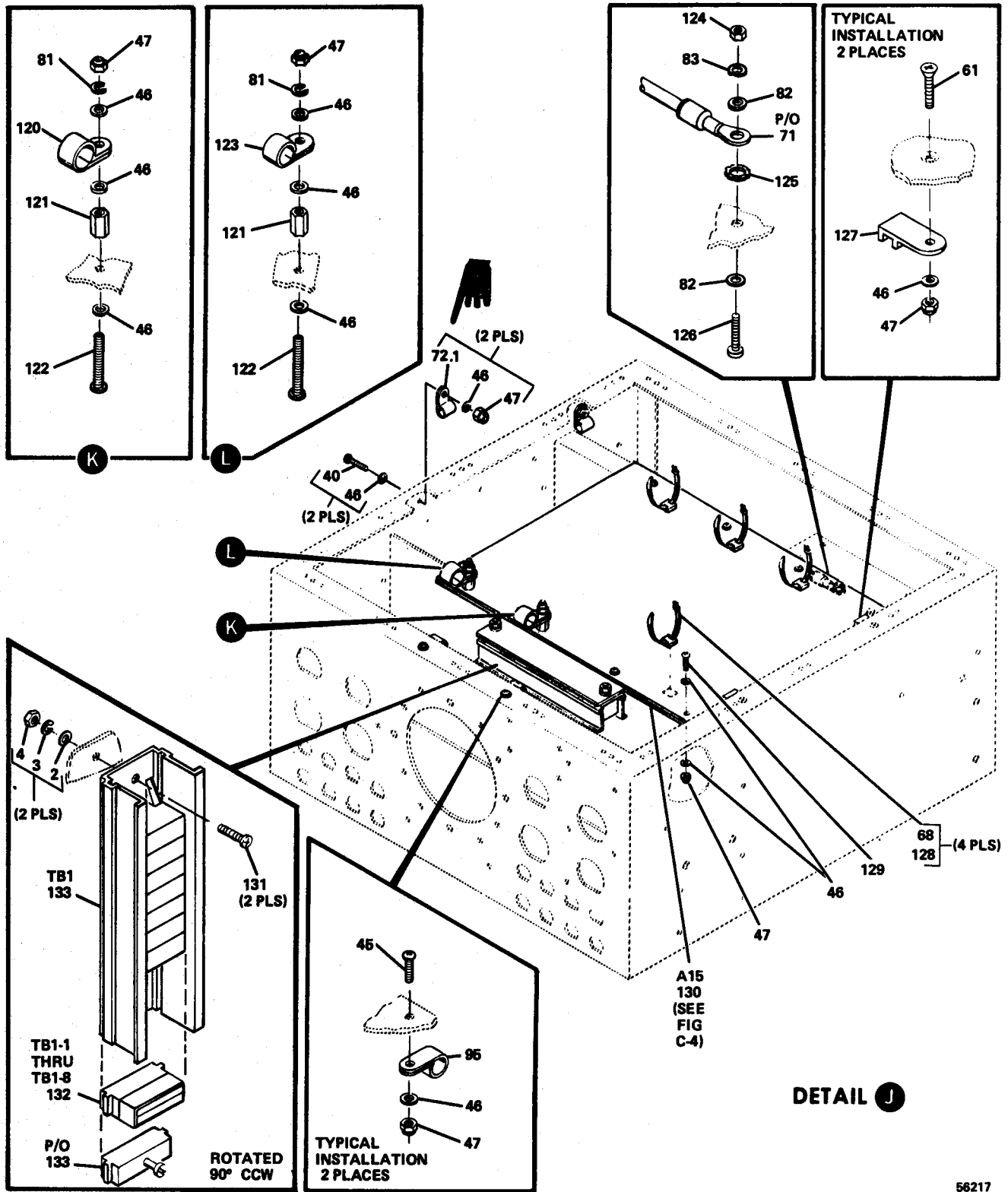
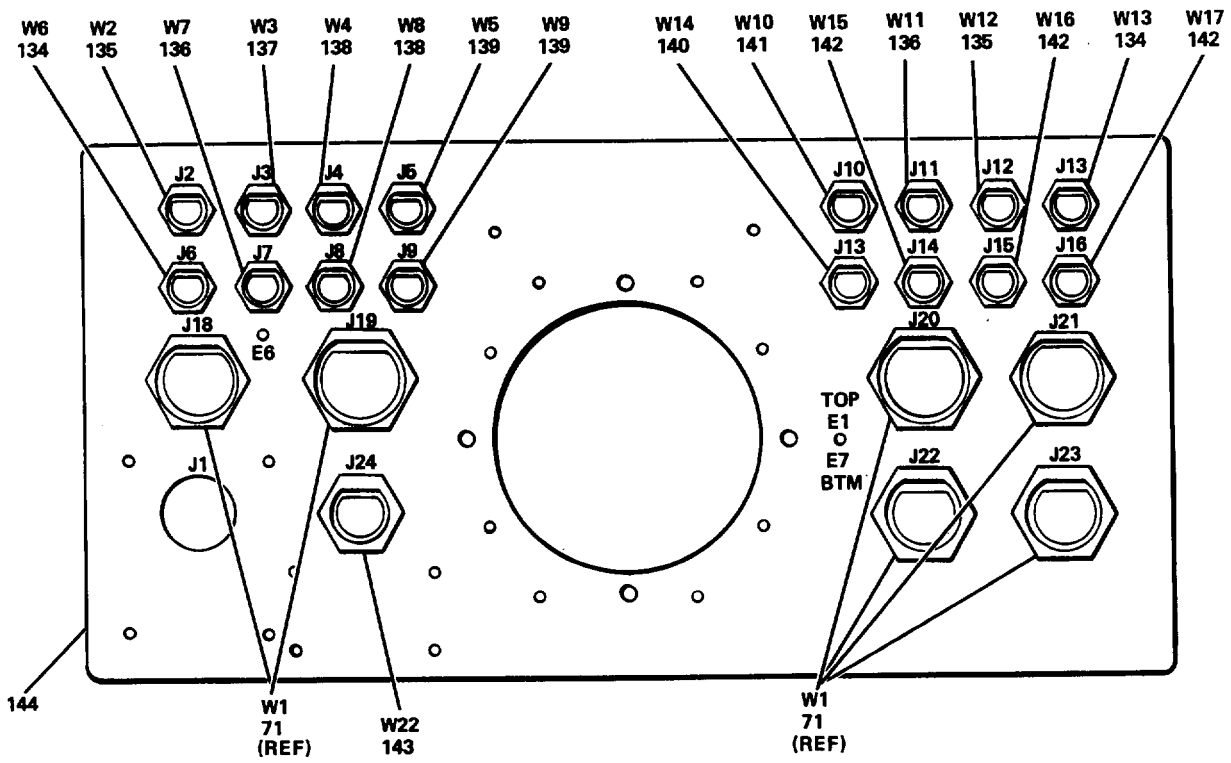


Figure C-1. Processor, Signal Data 5051650-1 (Sheet 7 of 8)

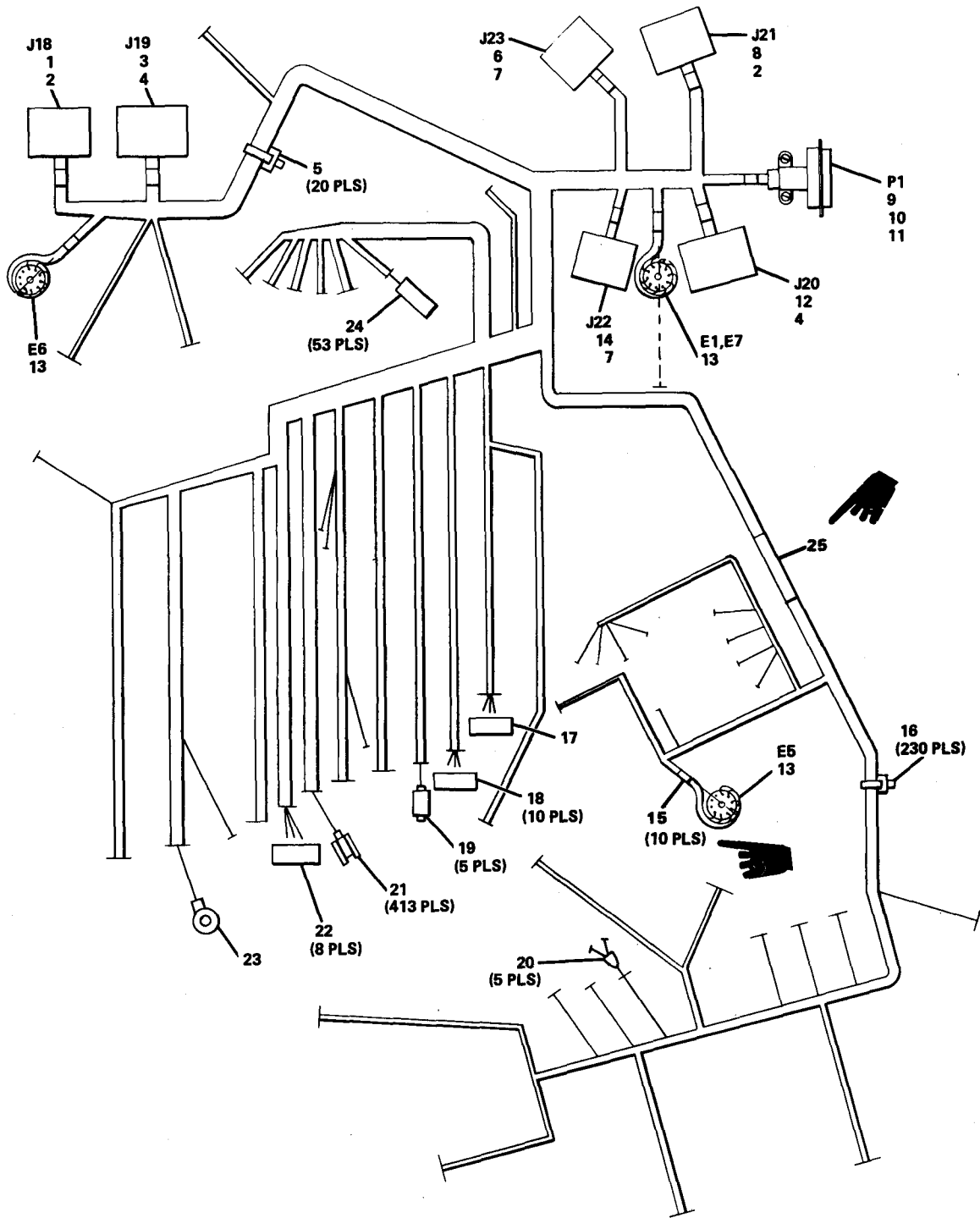
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	120	PAHZZ	5340-00-964-3664	MS25281R11	96906	CLAMP, LOOP	EA	1
C-1	121	PAHZZ	5310-01-134-5759	5054671-1	57958	SPACER, THD, HEX	EA	2
C-1	122	PAHZZ	5305-00-054-6675	MS51957-50	96906	SCR, MACH, PAN HD	EA	2
C-1	123	PAHZZ	5340-00-088-7768	MS25281R12	96906	CLAMP, LOOP	EA	1
C-1	124	PAHZZ	5310-00-934-9765	MS35650-304	96906	NUT, PLAIN, HEX	EA	1
C-1	125	PAHZZ	5310-00-209-1239	MS35335-60	96906	WASHER, LOCK	EA	1
C-1	126	PAHZZ	5305-00-059-3658	MS51958-62	96906	SCR, MACH, PAN HD	EA	1
C-1	127	PAHZZ	5340-00-421-5080	5054294-1	57958	BASE, TDN STRAP	EA	2
C-1	128	PAHZZ	5975-00-111-3208	MS3367-5-9	96906	STRAP, TIEDOWN	EA	25
C-1	129	PAHZZ	5305-00-054-6670	MS51957-45	96906	SCR, MACH, PAN HD	EA	6
C-1	130	XBHHH		5051658-1	57958	CONTACT ASSY	EA	1
C-1	131	PAHZZ	5305-00-727-8832	MS51959-29	96906	SCR, MACH, FL HD	EA	2
C-1	132	PAHZZ	5940-00-161-0449	M81714-2AA1	81349	TERM JCT BLOCK	EA	8
C-1	133	PAHZZ	5975-00-009-0173	M81714-5-1	81349	TRACK, TJB	EA	1



56218

Figure C-1. Processor, Signal Data 5051650-1 (Sheet 8 of 8)

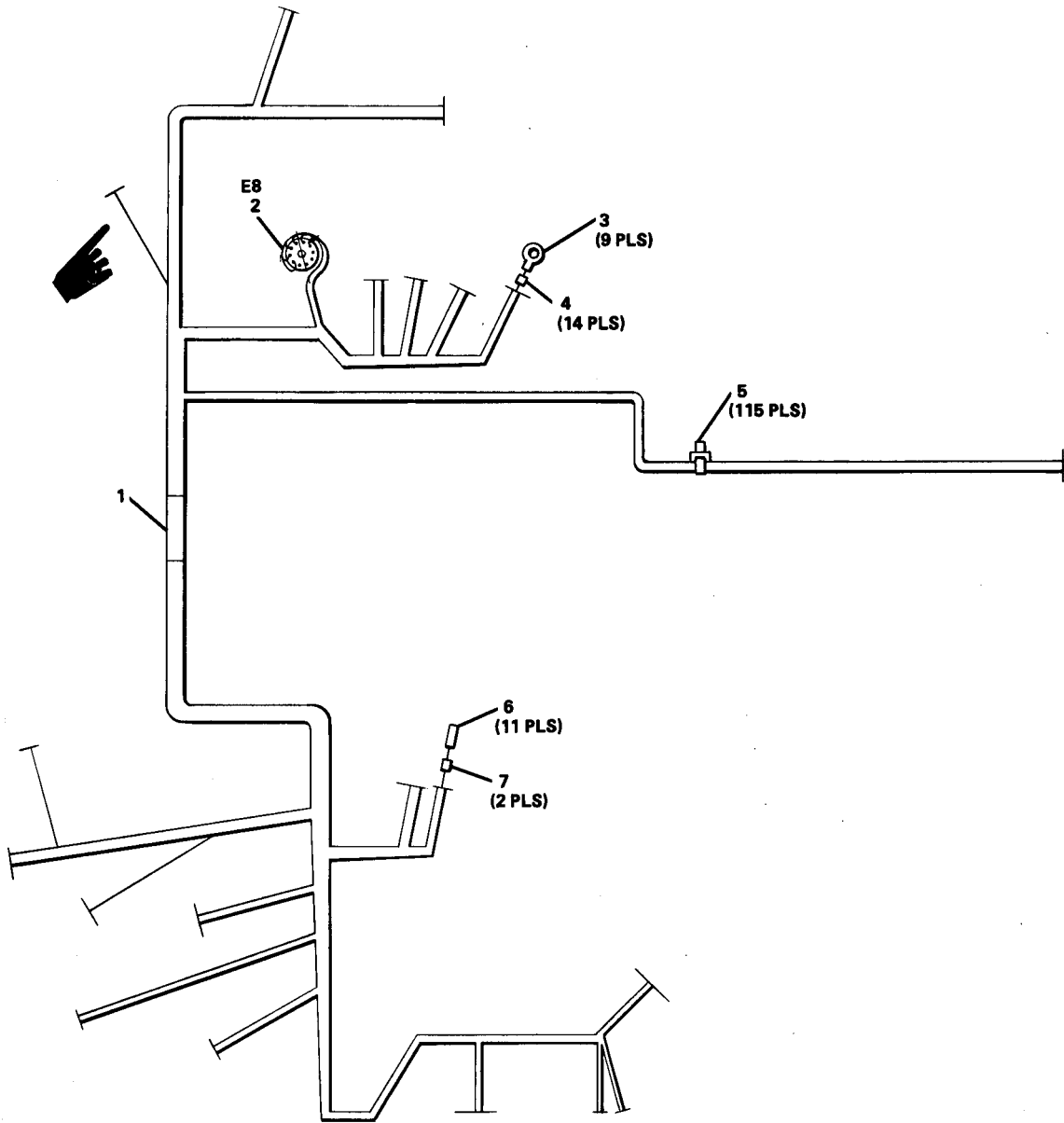
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-1	134	PAHZZ		5053250-27	57958	CABLE ASSY, RF	EA	2
C-1	135	PAHZZ		5053250-26	57958	CABLE ASSY, RF	EA	2
C-1	136	PAHZZ		5053250-24	57958	CABLE ASSY, RF	EA	2
C-1	137	PAHZZ		5053250-25	57958	CABLE ASSY, RF	EA	1
C-1	138	PAHZZ		5053250-22	57958	CABLE ASSY, RF	EA	2
C-1	139	PAHZZ		5053250-20	57958	CABLE ASSY, RF	EA	2
C-1	140	PAHZZ		C5077154-8	57958	CABLE ASSY, RF	EA	1
C-1	141	PAHZZ		5053250-23	57958	CABLE ASSY, RF	EA	1
C-1	142	PAHZZ		C5077154-7	57958	CABLE ASSY, RF	EA	3
C-1	143	XBHHH		C5077580-1	57958	MRG HARNESS, BR	EA	1
C-1	144	XBDDD		5051654-1	57958	CHAS, ELEC EQPT	EA	1



56219

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23W1  
Figure C-2. Wiring Harness 5051657-1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCN	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 01 HIRING HARNESS (57958) 5051657-1		
C-2	1	PAHZZ	5935-00-448-9223	MS3474L18-32S	96906	CONN,RCPT,ELEC	EA	1
C-2	2	PAHZZ	5935-00-189-2521	MS3416-18EN	96906	BKSHL, ELEC CONN	EA	2
C-2	3	PAHZZ	5935-01-092-3459	MS3474L20-41S	96906	CONN,RCPT,ELEC	EA	1
C-2	4	PAHZZ	5935-00-503-9112	MS3416-20EN	96906	BKSHL, ELEC CONN	EA	2
C-2	5	PAHZZ	5975-00-111-3208	MS3367-5-9	96906	STRAP,TIEDOWN	EA	20
C-2	6	PAHZZ	5935-00-873-0954	MS3474L16-26P	96906	CONN,RCPT,ELEC	EA	1
C-2	7	PAHZZ	5935-00-189-2520	MS3416-16EN	96906	BKSHL, ELEC CONN	EA	2
C-2	8	PAHZZ	5935-00-448-5654	MS3474L18-32P	96906	CONN,RCPT,ELEC	EA	1
C-2	9	PAHZZ	5935-00-410-9250	M24308-2-3	81349	CONN,RCPT,ELEC	EA	1
C-2	10	PAHZZ	5935-00-603-6717	M24308-21-3	81349	CLAMP,CBL,CONN	EA	1
C-2	11	PAHZZ	5935-01-069-6794	M24308-25-1	81349	RTNR, ELEC CONN	EA	2
C-2	12	PAHZZ	5935-00-763-8247	MS3474L20-41P	96906	CONN,RCPT,ELEC	EA	1
C-2	13	PAHZZ	5940-00-918-8068	SE26XF02	81349	TERMINAL,STUD	EA	4
C-2	14	PAHZZ	5935-00-782-8160	MS3474L16-26S	96906	CONN,RCPT,ELEC	EA	1
C-2	15	XBHZZ		5054784-2	57958	BAND,MARKER	EA	10
C-2	16	PAHZZ	5975-00-727-5153	MS3367-4-9	96906	STRAP,TIEDOWN	EA	230
C-2	17	PAHZZ	5935-01-034-6671	0213-1-1042-1	57958	RETAINER,TERM	EA	1
C-2	18	PAHZZ	5935-01-012-7962	0213-1-1042-12	57958	RETAINER,TERM	EA	10
C-2	19	PAHZZ	5999-00-459-5733	5054568-1	57958	CONTACT,ELEC	EA	5
C-2	20	PAHZZ	5940-00-857-3414	NAS1746-2	80205	SPLICE,CNDCT	EA	15
C-2	21	PAHZZ	5940-00-168-8161	0213-1-1007-1	57958	TERMINAL,QDISC	EA	413
C-2	22	PAHZZ	5940-00-535-2620	0213-1-1042-11	57958	RETAINER,TERM	EA	8
C-2	23	PAHZZ	5940-00-143-4771	MS25036-103	96906	TERMINAL,LUG	EA	1
C-2	24	PAHZZ	5999-00-137-5066	M39029-1-16-20	81349	CONTACT,ELEC	EA	53
C-2	25	PAHZZ		5054784-6	57958	BAND,MARKER	EA	1



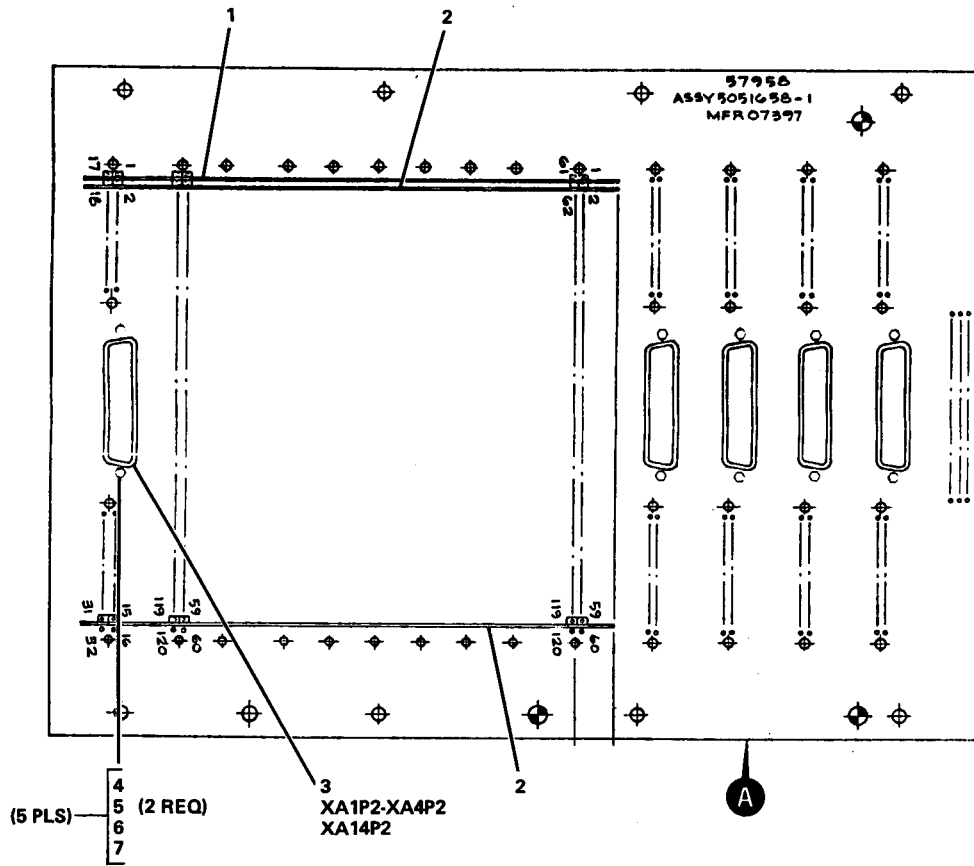
56220

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23W21  
Figure C-3. Wiring Harness C5077144-1



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR COOE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNI
						GROUP 02 WIRING HARNESS (57958) C5077144-1		
C-3	1	XBHZZ		5054784-2	57958	BAND , MARKER	EA	
C-3	2	PAHZZ	5940-00-910-8068	SE26XF02	81349	TERMINAL, STUD	EA	
C-3	3	PAHZZ	5940-00-813-0698	MS25036-101	96906	TERMINAL, ,LUG	EA	
C-3	4	PAHZZ	5940-00-857-3414	NAS1746-2	80205	SPLICE, CNDCT	EA	1
C-3	5	PAHZZ	5975-00-727-5153	MS3367-4-9	96906	STRAP , TX EDOWN	EA	11
C-3	6	PAHZZ	5999-00-137-5066	M39029-1-16-20	81349	CONTACT , ELEC	EA	1
C-3	7	PAHZZ	5940-00-056-8696	NAS1746-3	80205	SPLICE , CNDCT	EA	

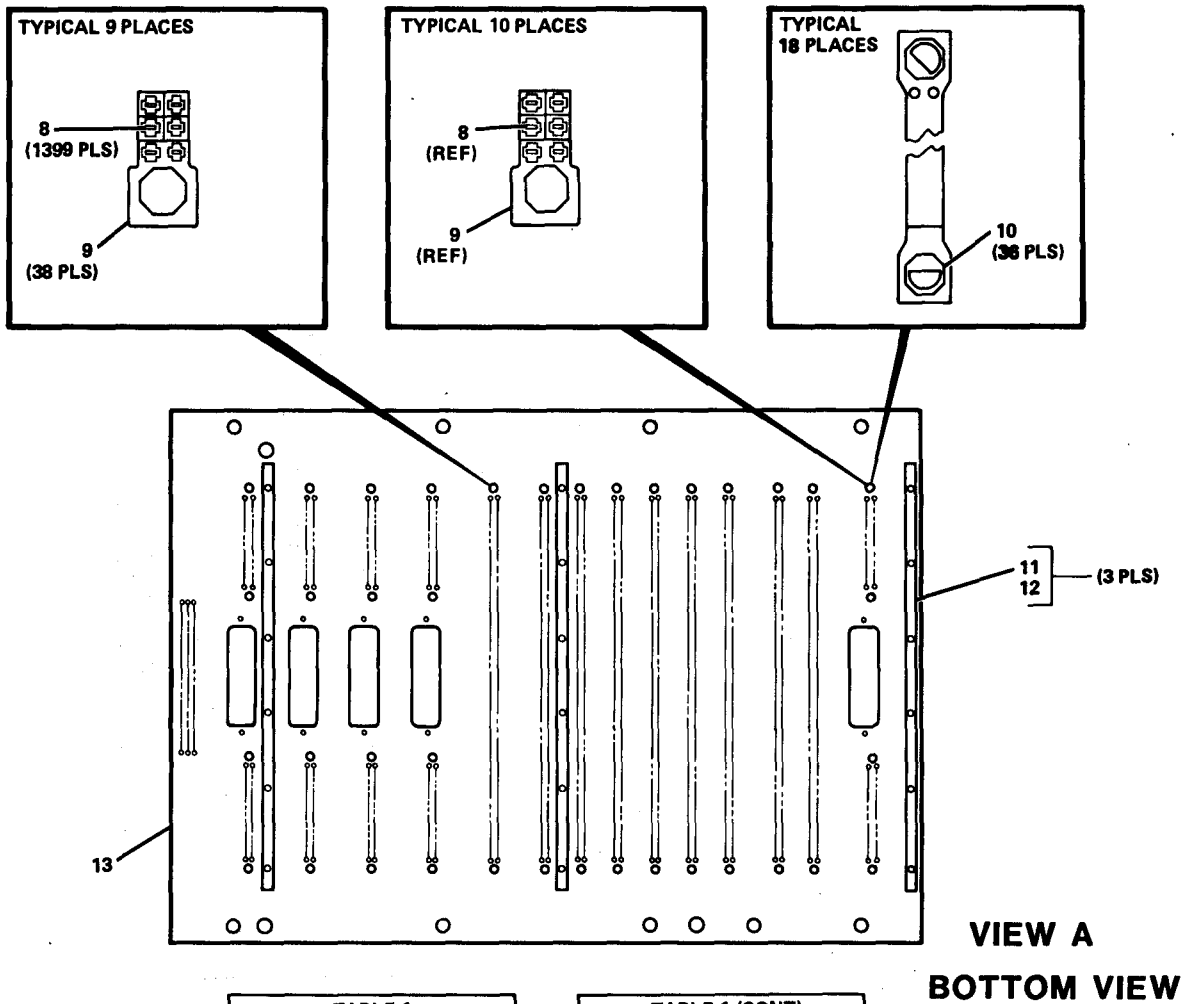




TOP VIEW

56221

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A15  
Figure C-4. Contact Assy. 5051658-1 (Sheet 1 of 2)



**TABLE 1**

6 7 8  
5 1  
4 3 2

KEY FLAT POSITIONING  
TOP VIEW SHOWN

REF DES	KEY "A" POSITION	KEY "B" POSITION
XA1P1	5	5
XA1P3	5	5
XA2P1	5	5
XA2P3	5	5
XA3P1	5	5
XA3P3	5	5
XA4P1	5	5
XA4P3	5	5
XA5	4	8
XA6	5	2

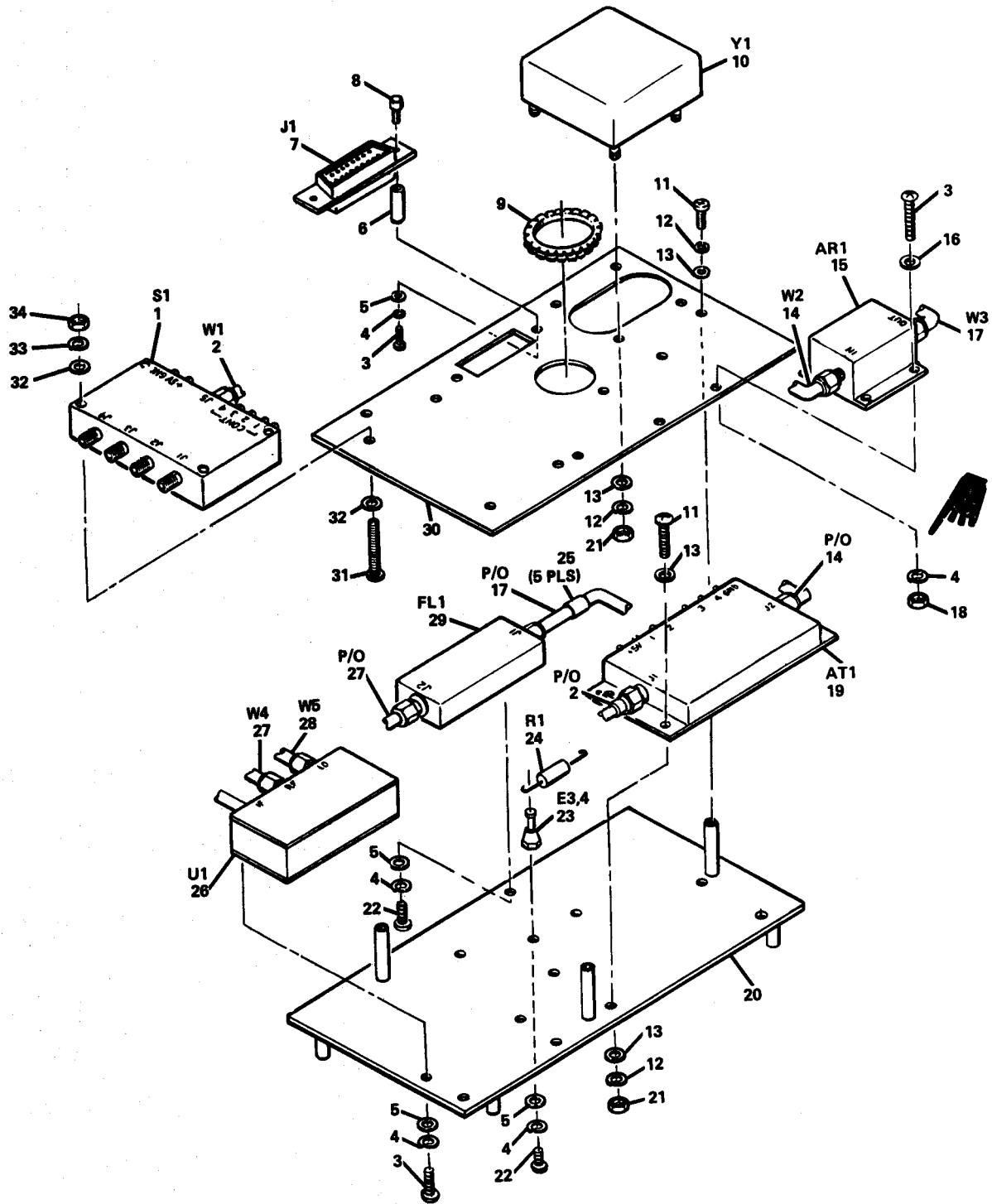
**TABLE 1 (CONT)**

REF DES	KEY "A" POSITION	KEY "B" POSITION
XA7	5	8
XA8	4	7
XA9	5	3
XA10	4	6
XA11	2	6
XA12	2	3
XA13	4	4
XA14P1	—	—
XA14P3	4	4

58222

Figure C-4. Contact Assy. 5051658-1 (Sheet 2 of 2)

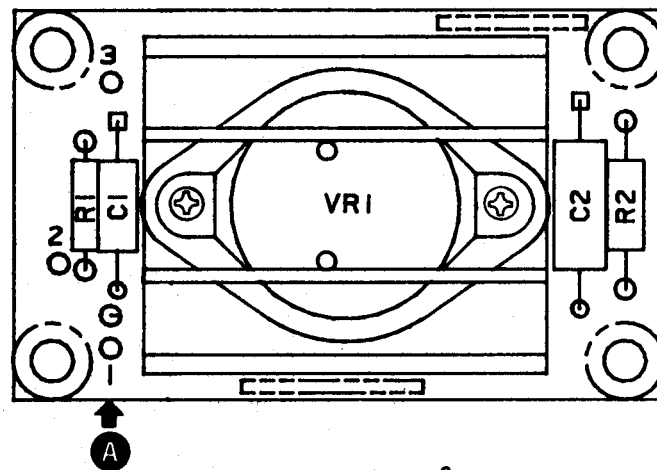
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 03 CONTACT ASSY. (57958) 5051658-1		
C-4	1	PAHZZ	6150-01-135-6295	5054937-5	57958	BUS BAR	EA	1
C-4	2	PAHZZ		5054937-6	57958	BUS BAR	EA	2
C-4	3	PAHZZ	5935-01-133-7288	5054822-1	57958	CONN, RCPT, ELEC	EA	5
C-4	4	PAHZZ	5305-00-054-5639	MS51957-5	96906	SCR, MACH, PAN HD	EA	10
C-4	5	PAHZZ	5310-00-043-4708	NAS620C2	80205	WASHER, FLAT	EA	20
C-4	6	PAHZZ	5310-01-023-6132	MS51848-43	96906	WASHER, LOCK	EA	10
C-4	7	PAHZZ	5310-00-812-4294	NAS671C2	80205	NUT, PLAIN, HEX	EA	10
C-4	8	PAHZZ	5999-01-028-2598	MS6157-44018	10001	CONTACT, ELEC	EA	38
C-4	9	PAHZZ	5935	MS6157-14000	10001	CONTACT, ELEC	EA	1399
C-4	10	PAHZZ	5865-01-037-1887	2648706P2	10001	BUSHING, KEY	EA	36
C-4	11	XA		5053112-103	57958	STIFFENER	EA	3
C-4	12	XBHZZ	5320-00-205-7282	MS20470AD2-8	96906	RIVET, SOLID	EA	18



56223

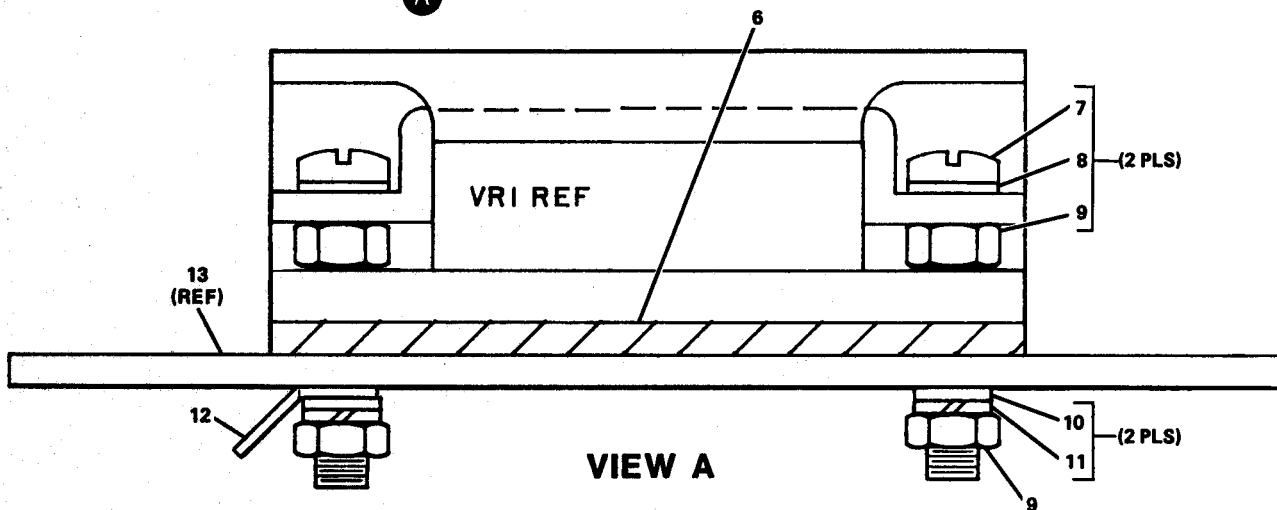
PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A20  
Figure C-5. IF Down Converter 5051653-1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 04 IF DOWN CONVERTER (57958) 5051653-1		
-5	1	PAHZZ	5985-01-138-1963	5054965-1	57958	SW, RF XMSN LINE	EA	1
-5	2	PAHZZ		5053047-7	57958	CABLE ASSY, RF	EA	1
-5	3	PAHZZ	5305-00-054-5649	MS51957-15	96906	SCR, MACH, PAN HD	EA	10
-5	4	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK	EA	14
-5	5	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT	EA	10
-5	6	PAHZZ	5340-00-105-4079	5054758-2	57958	SPACER, THD, HEX	EA	2
-5	7	PAHZZ	5935-00-489-9999	M24308-4-3	81349	CONN, RCPT, ELEC	EA	1
-5	8	PAHZZ	5935-01-052-9436	M24308-26-1	81349	RTNR, ELEC CONN	EA	2
-5	9	PAHZZ	5325-01-024-4930	MS21266-2N	96906	GROMMET, NH	EA	4
-5	10	PAHZZ	5955-01-141-8669	5054964-2	57958	OSCILLATOR, RF	EA	1
-5	11	PAHZZ	5305-00-054-6652	MS51957-28	96906	SCR, MACH, PAN HD	EA	7
-5	12	PAHZZ	5310-00-929-6395	MS35338-136	96906	WASHER, LOCK	EA	11
-5	13	PAHZZ	5310-00-722-5998	MS15795-805	96906	WASHER, FLAT	EA	15
-5	14	PAHZZ		5053239-7	57958	CABLE ASSY, RF	EA	1
-5	15	PAHZZ	5895-01-137-5415	5054641-1	57958	AMPLIFIER, RF	EA	1
-5	16	PAHZZ	5310-00-057-0573	NAS620C4	80205	WASHER, FLAT	EA	4
-5	17	PAHZZ		5053048-11	57958	CABLE ASSY, RF	EA	1
-5	18	PAHZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEX	EA	4
-5	19	PAHZZ	5995-01-137-6113	5054966-1	57958	ATTENUATOR, VAR	EA	1
-5	20	XBHZZ		5053041-1	57958	PLATE, MTG, CMPNT	EA	1
-5	21	PAHZZ	5310-00-934-9761	MS35649-264	96906	NUT, PLAIN, HEX	EA	8
-5	22	PAHZZ	5305-00-054-5647	MS51957-13	96906	SCR, MACH, PAN HD	EA	4
-5	23	PAHZZ	5940-00-905-4516	SE209D01	81349	TERMINAL, STUD	EA	2
-5	24	PAHZZ	5905-01-047-1530	RLR07C2201GR	81349	RES, FXD, FILM	EA	1
-5	25	XBHZZ		5054784-1	57958	BAND, MARKER	EA	5
-5	26	PAHZZ	5985-01-138-0736	5054981-1	57958	MIXER, DBL BAL	EA	1
-5	27	PAHZZ		5053048-6	57958	CABLE ASSY, RF	EA	1
-5	28	PAHZZ		5053047-8	57958	CABLE ASSY, RF	EA	1
-5	29	PAHZZ	5915-01-139-0943	5054980-1	57958	FILTER, BANDPASS	EA	1
-5	30	XBHZZ		5053040-1	57958	PLATE, MTG, CMPNT	EA	1
-5	31	PAHZZ	5305-00-054-5645	MS51957-10	96906	SCR, MACH, PAN HD	EA	4
-5	32	PAHZZ	5310-00-595-6761	MS15795-802	96906	WASHER, FLAT	EA	8
-5	33	PAHZZ	5310-00-928-2690	MS35338-134	96906	WASHER, LOCK	EA	4
-5	34	PAHZZ	5310-00-938-2013	MS35649-224	96906	NUT, PLAIN, HEX	EA	4



**LEGEND**

REF DES	INDEX NO.
C1	1
C2	2
R1	3
R2	4
VR1	5
Z1	13

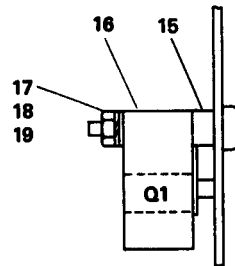
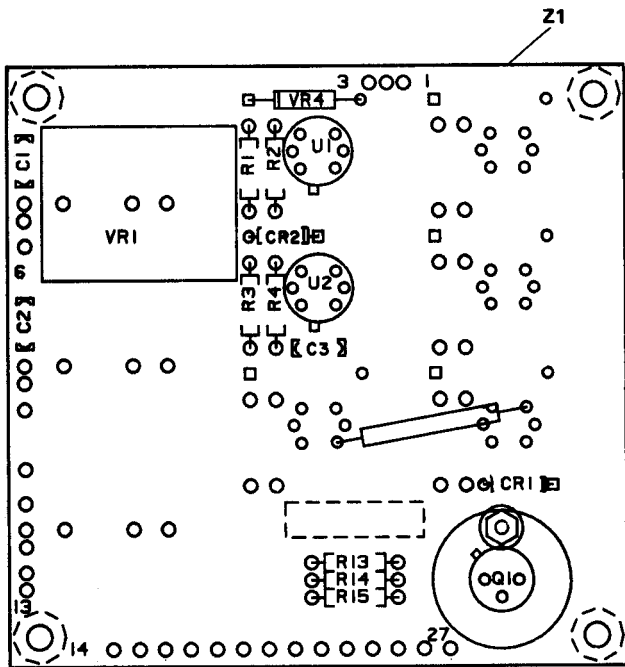


56224

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A21  
 Figure C-6. CCA, -6 Volt Regulator 5055292-1



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 05 CCA, -6 VOLT REGULATOR (57958) 5055292-1		
C-6	1	PAHZZ	5910-00-068-4298	M39003-01-2356	81349	CAP,FXD,ELCTLT	EA	1
C-6	2	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA	1
C-6	3	PAHZZ	5905-00-240-7947	RLR07C1200GR	81349	RES,FXD,FILM	EA	1
C-6	4	PAHZZ	5905-00-112-2465	RNC55H4530FS	81349	RES,FXD,FILM	EA	1
C-6	5	PAHZZ		5054379-1	57958	MICROCKT,LIN	EA	1
C-6	6	PAHZZ	5999-01-137-5400	M87111/5-1H12	81349	HEAT SINK, CMPNT	EA	1
C-6	7	PAHZZ	5305-00-054-6655	MS51957-31	96906	SCR, MACH, PAN HD	EA	2
C-6	8	PAHZZ	5310-00-773-7624	NAS620C6	80205	WASHER,FLAT	EA	2
C-6	9	PAHZZ	5310-00-616-8660	NAS671C6	80205	NUT,PLAIN,HEX	EA	4
C-6	10	PAHZZ	5310-00-722-5998	MS15795-805	96906	WASHER,FLAT	EA	2
C-6	11	PAHZZ	5310-00-929-6395	MS35338-136	96906	WASHER,LOCK	EA	2
C-6	12	PAHZZ	5940-00-156-7196	MS77072-2	96906	TERMINAL,LUG	EA	1
C-6	13	XA		5055293-1	57958	PRINTED WRG BD	EA	1



LEGEND

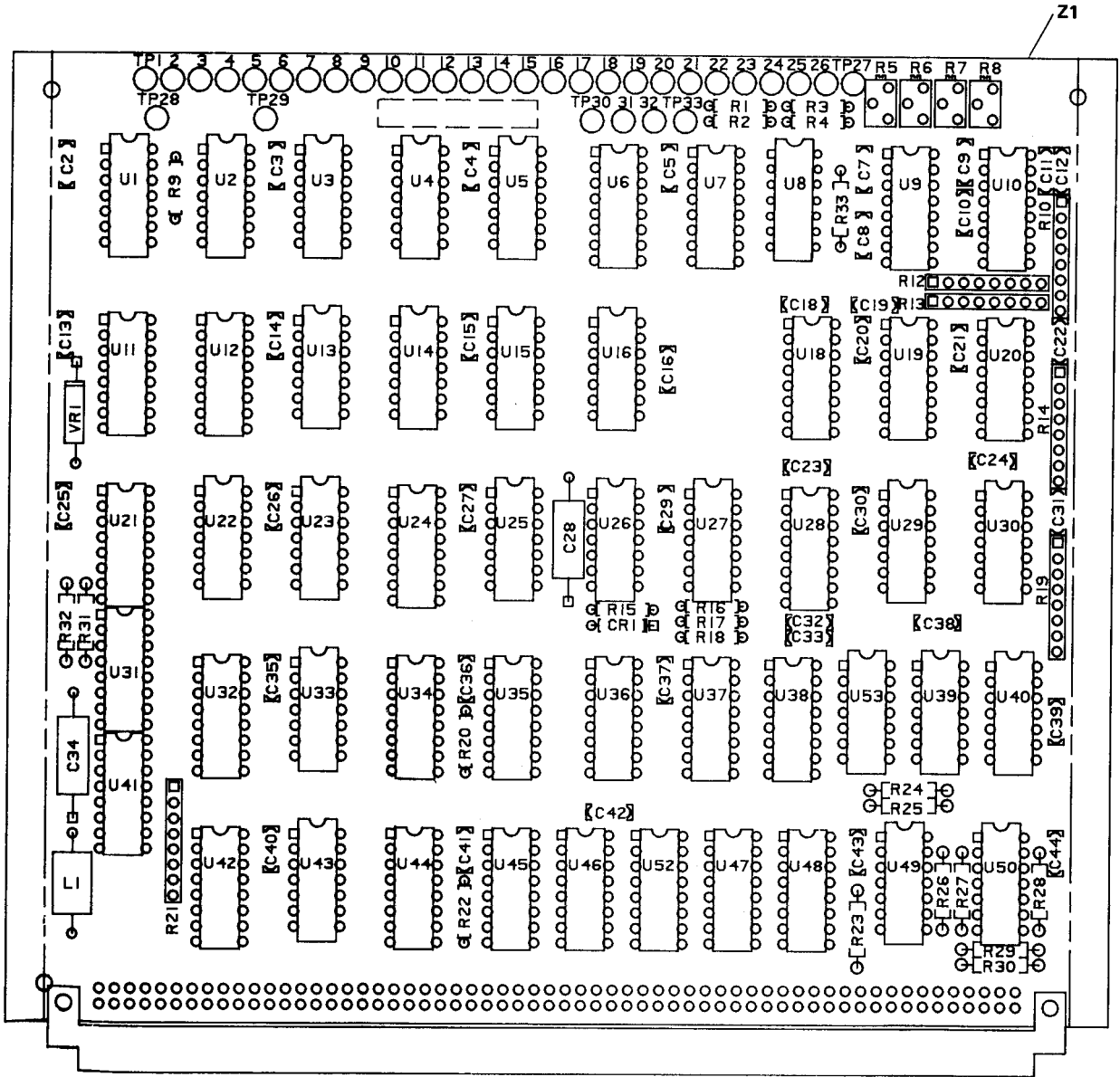
REF DES	INDEX NO.
C1	1
C3	2
CR1	3
CR2	3
Q1	4
R1	5
R2	6
R3	7
R4	8
R13	9
R14	10
R15	11
U1	12
U2	12
VR1	13
VR4	14
Z1	21

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A17  
 Figure C-7. CCA, Power Monitor 5051928-1

58225

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 06 CCA, POWER MONITER (57958) 5051928-1		
C-7	1	PAHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP,FXD,CER	EA	1
C-7	2	PAHZZ	5910-01-042-3759	M39014-02-1407	81349	CAP,FXD,CER	EA	1
C-7	3	PAHZZ	5961-01-038-6918	JAN1N4148-1	81349	SCND DVC, DIODE	EA	1
C-7	4	PAHZZ	5961-00-949-1440	JAN2N2905A	81349	TRANSISTOR	EA	1
C-7	5	PAHZZ	5905-01-047-1530	RLR07C2201GR	81349	RES,FXD,FILM	EA	1
C-7	6	PAHZZ	5905-00-758-2917	RLR07C5100GR	81349	RES,FXD,FILM	EA	1
C-7	7	PAHZZ	5905-00-721-0010	RLR07C2400GR	81349	RES,FXD,FILM	EA	1
C-7	8	PAHZZ	5905-00-240-7979	RLR07C4700GR	81349	RES,FXD,FILM	EA	1
C-7	9	PAHZZ	5905-00-419-2823	RLR07C7501GR	81349	RES,FXD,FILM	EA	1
C-7	10	PAHZZ	5905-00-150-5256	RLR07C3902GR	81349	RES,FXD,FILM	EA	1
C-7	11	PAHZZ	5905-00-223-2610	RLR07C51R0GR	81349	RES,FXD,FILM	EA	1
C-7	12	PAHZZ	5961-01-069-9665	JAN4N22A	81349	CPLR,OPTOELEK	EA	1
C-7	13	PAHZZ	5920-01-135-7677	5054818-8	57958	PROTECTOR,OYV	EA	1
C-7	14	PAHZZ	5961-00-008-8361	JAN1N4104	81349	SCND DVC, DIODE	EA	1
C-7	15	PAHZZ	5365-00-823-4868	NAS1056C3-012	80205	SPACER,SLEEVE	EA	1
C-7	16	PAHZZ	5999-00-116-8983	5054895-1	57958	HEAT SINK, ELEC	EA	1
C-7	17	PAHZZ	5305-00-054-5642	MS51957-8	96906	SCR, MACH, PAN HD	EA	1
C-7	18	PAHZZ	5310-00-938-2013	MS35649-224	96906	NUT,PLAIN,HEX	EA	1
C-7	19	PAHZZ	5310-00-595-6761	MS15795-802	96906	WASHER, FLAT	EA	1
C-7	20	PAHZZ	5310-00-928-2690	MS35338-134	96906	WASHER, LOCK	EA	1
C-7	21	XA		5051930-1	57958	PRINTED WRG BD	EA	1





Z1

56226

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A6  
 Figure C-8. CCA, RC Bus Interface Status 5052009-1 (Sheet 1 of 2)

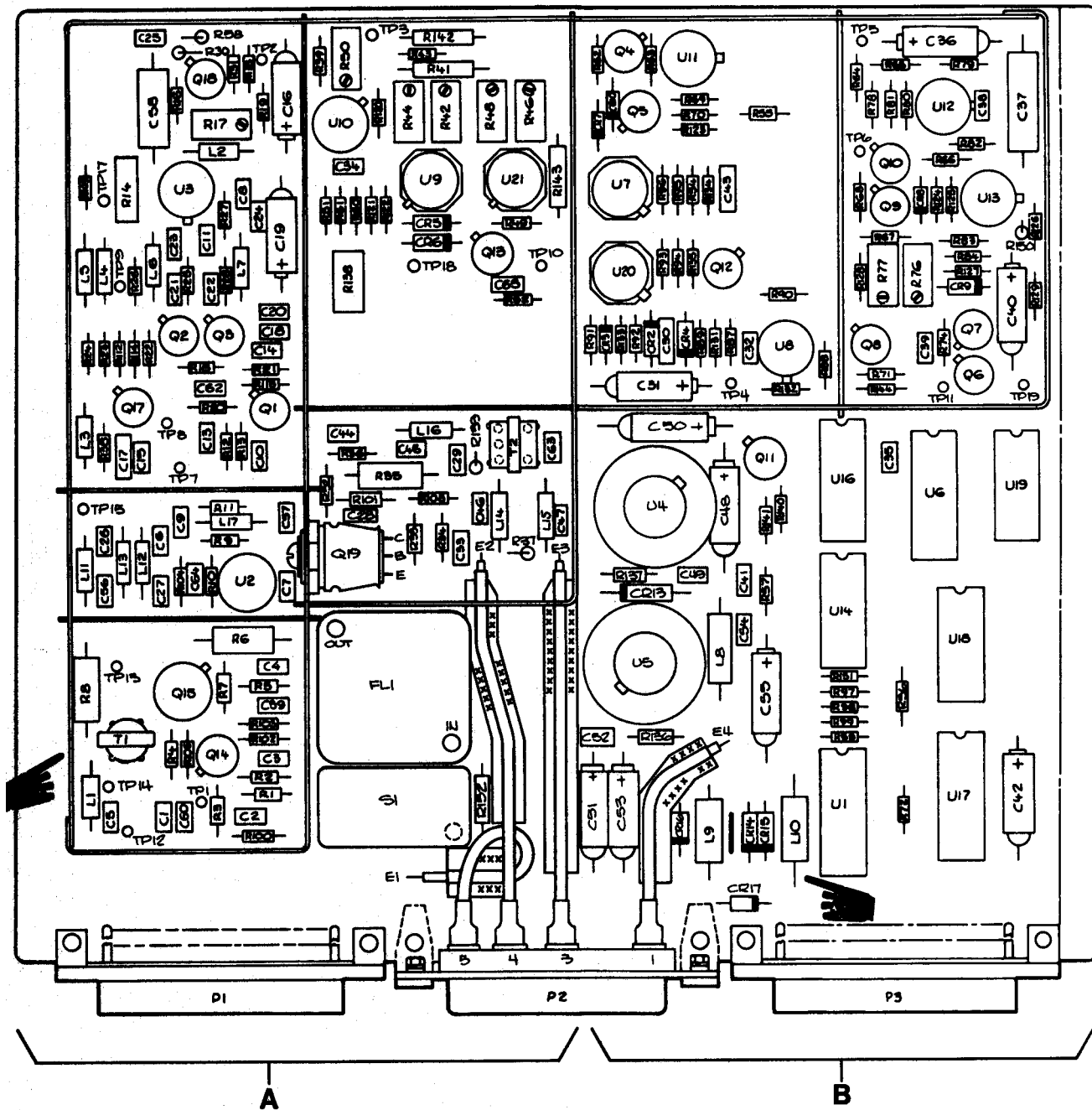
LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.
C2	1	R25	12
C3	1	R26	12
C4	1	R27	12
C5	1	R28	12
C7	1	R29	12
C8	2	R30	12
C9	2	R31	13
C10	2	R32	14
C11	2	R33	12
C12	1	U1	15
C13	1	U2	15
C14	1	U3	15
C15	1	U4	16
C16	1	U5	17
C18	3	U6	18
C19	1	U7	18
C20	1	U8	19
C21	1	U9	20
C22	1	U10	20
C23	3	U11	18
C24	1	U12	21
C25	1	U13	22
C26	1	U14	23
C27	1	U15	15
C28	4	U16	17
C29	1	U18	20
C30	3	U19	20
C31	1	U20	20
C32	3	U21	18
C33	1	U22	23
C34	4	U23	24
C35	1	U24	18
C36	1	U25	23
C37	1	U26	24
C38	1	U27	25
C39	1	U28	20
C40	1	U29	26
C41	1	U30	26
C42	1	U31	27
C43	1	U32	28
C44	1	U33	29
CR1	5	U34	18
L1	6	U35	30
R1	7	U36	30
R2	7	U37	30
R3	7	U38	30
R4	7	U39	26
R5	8	U40	26
R6	8	U41	18
R7	8	U42	31
R8	8	U43	29
R9	9	U44	28
R10	10	U45	21
R12	11	U46	21
R13	11	U47	21
R14	10	U48	21
R15	7	U49	19
R16	9	U50	19
R17	9	U52	28
R18	9	U53	24
R19	10	VR1	32
R20	9	Z1	33
R21	10		
R22	9		
R23	12		
R24	12		

56227

Figure C-8. CCA, RC Bus Interface Status 5052009-1 (Sheet 2 of 2)

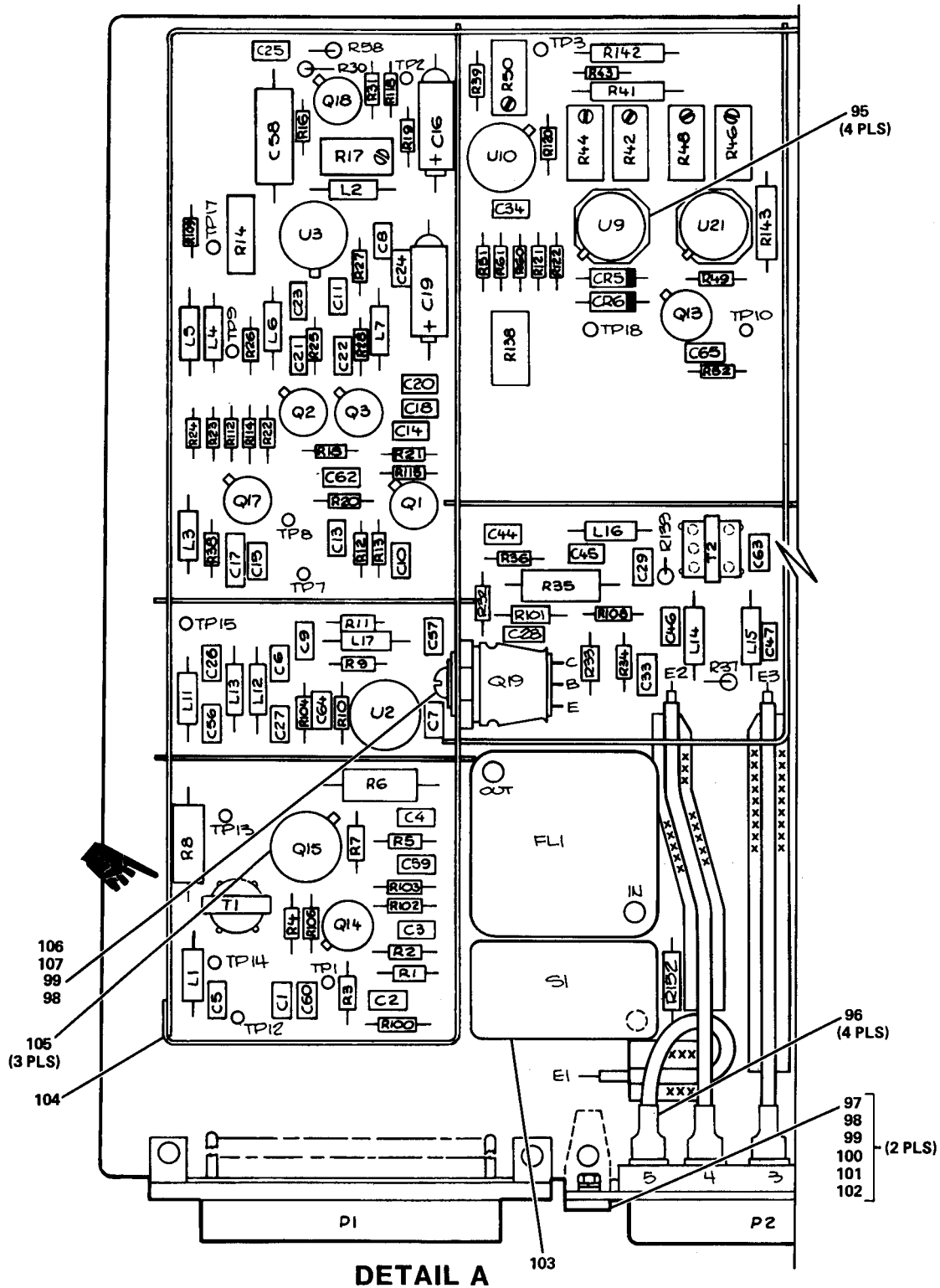
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 07 CCA, RC BUS INTERFACE STATUS (57958) 5052009-1		
C-8	1	PAHZZ	5910-00-434-4177	M39014-02-1310	81349	CAP,FXD,CER	EA	27
C-8	2	PAHZZ	5910-01-041-9162	M39014-02-1405	81349	CAP,FXD,CER	EA	8
C-8	3	PAHZZ	5910-01-033-5234	M39014-02-1236	81349	CAP,FXD,CER	EA	4
C-8	4	PAHZZ	5910-00-997-4079	M39003-01-2271	81349	CAP,FXD,ELCTLT	EA	2
C-8	5	PAHZZ	5961-00-232-3279	JAN1N5711	81349	SCND DVC, DIODE	EA	1
C-8	6	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA	1
C-8	7	PAHZZ	5905-00-165-3144	RLR05C1002GR	81349	RES,FXD,FILM	EA	5
C-8	8	PAHZZ	5905-01-044-8473	RJR26FX503M	81349	RES,YAR,NMW	EA	4
C-8	9	PAHZZ	5905-00-012-2824	RLR05C1001GR	81349	RES,FXD,FILM	EA	6
C-8	10	PAHZZ	5905-01-116-8932	M8340105M1001GC	81349	RES NTWK, FILM	EA	4
C-8	11	PAHZZ	5905-01-141-2632	M8340105M1603GC	81349	RES NTWK, FILM	EA	2
C-8	12	PAHZZ	5905-00-436-8560	RLR07C91R0GR	81349	RES,FXD,FILM	EA	9
C-8	13	PAHZZ	5905-00-458-9267	RLR07C2200GR	81349	RES,FXD,FILM	EA	1
C-8	14	PAHZZ	5905-00-448-9355	RLR07C3000GR	81349	RES,FXD,FILM	EA	1
C-8	15	PAHZZ	5962-00-348-2541	M38510-00205BCX	81349	MICROCKT, DGTL	EA	4
C-8	16	PAHZZ	5962-01-040-0008	M38510-15102BCX	81349	MICROCKT, DGTL	EA	1
C-8	17	PAHZZ		C5140512	57958	MICROCKT, DGTL	EA	2
C-8	18	PAHZZ	5962-00-386-8211	M38510-00902BEX	81349	MICROCKT, DGTL	EA	7
C-8	19	PAHZZ	5962-01-133-9699	5054327-1	57958	MICROCKT, DGTL	EA	3
C-8	20	PAHZZ	5962-01-068-1039	M38510-31401BEX	81349	MICROCKT, DGTL	EA	6
C-8	21	PAHZZ		C5140309	81349	MICROCKT, DGTL	EA	5
C-8	22	PAHZZ	5962-01-138-1659	M38510-00102BCX	81349	MICROCKT, DGTL	EA	1
C-8	23	PAHZZ	5962-01-093-0110	M38510-300018CX	81349	MICROCKT, DGTL	EA	3
C-8	24	PAHZZ	5962-01-091-8195	M38510-30003BCX	81349	MICROCKT, DGTL	EA	3
C-8	25	PAHZZ	5962-00-361-8732	M38510-008018CX	81349	MICROCKT, DGTL	EA	1
C-8	26	PAHZZ	5962-00-369-7831	M38510-00502BCX	81349	MICROCKT, DGTL	EA	4
C-8	27	PAHZZ	5962-01-096-4171	M38510-30106BEX	81349	MICROCKT, DGTL	EA	1
C-8	28	PAHZZ	5962-01-019-6176	0213-1-1295-2	57958	MICROCKT, DGTL	EA	3
C-8	29	PAHZZ	5962-00-264-3566	0213-1-1001-2	57958	MICROCKT, DGTL	EA	2
C-8	30	PAHZZ	5962-01-057-3455	M38510-30107BEX	81349	MI CROCKT, DGTL	EA	4
C-8	31	PAHZZ	5962-01-016-8738	M38510-15001BEX	81349	MICROCKT, DGTL	EA	1
C-8	32	PAHZZ	5961-01-059-4038	JAN1N4112	81349	SCND DVC, DIODE	EA	1
C-8	33	XA		5052011-1	57958	PRINTED WRG BD	EA	1



56228

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A1, A23A2, A23A3, A23A4  
 Figure C-9. CCA, Carrier Presence Detector 5052001-3 (Sheet 1 of 5)





56229

Figure C-9. CCA, Carrier Presence Detector 5052001-3 (Sheet 2 of 5)

LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.	REF DES	INDEX NO.
C1	1	Q13	38	R114	58
C2	2	Q14	39	R115	58
C3	1	Q15	40	R118	58
C4	3	Q17	35	R120	58
C5	1	Q18	38	R121	75
C6	4	Q19	40	R122	51
C7	3	R1	41	R138	64
C8	3	R2	42	R139	50
C9	3	R3	42	R142	63
C10	4	R4	43	R143	76
C11	5	R5	44	R152	77
C13	3	R6	45	S1	78
C14	6	R7	46	T1	79
C15	3	R8	47	T2	79
C16	7	R9	48	U2	81
C17	8	R10	49	U3	82
C18	3	R11	50	U8	87
C19	7	R12	51	U9	86
C20	3	R13	51	U10	87
C21	4	R14	52	U21	86
C22	9	R16	51		
C23	10	R17	53		
C24	10	R18	49		
C25	3	R19	54		
C26	11	R20	55		
C27	4	R21	44		
C28	2	R22	50		
C29	12	R23	56		
C33	4	R24	57		
C34	3	R25	58		
C44	1	R26	58		
C45	1	R27	58		
C46	10	R28	58		
C47	4	R30	58		
C56	2	R31	59		
C57	16	R32	56		
C58	17	R33	51		
C59	1	R34	42		
C60	1	R35	60		
C62	1	R36	42		
C63	2	R37	61		
C64	2	R38	44		
C65	3	R39	62		
CR5	18	R41	63		
CR6	18	R42	634		
FL1	24	R43	49		
L1	25	R44	64		
L2	26	R46	65		
L3	25	R48	65		
L4	25	R49	66		
L5	27	R50	67		
L6	28	R51	49		
L7	27	R52	58		
L11	25	R58	51		
L12	30	R60	69		
L13	30	R61	62		
L14	30	R100	61		
L15	30	R101	74		
L16	26	R102	58		
L17	31	R103	58		
P1	32	R104	61		
P2	22	R106	58		
Q1	34	R108	58		
Q2	35	R109	58		
Q3	35	R112	58		

56230

Figure C-9. CCA, Carrier Presence Detector 5052001-3 (Sheet 3 of 5)

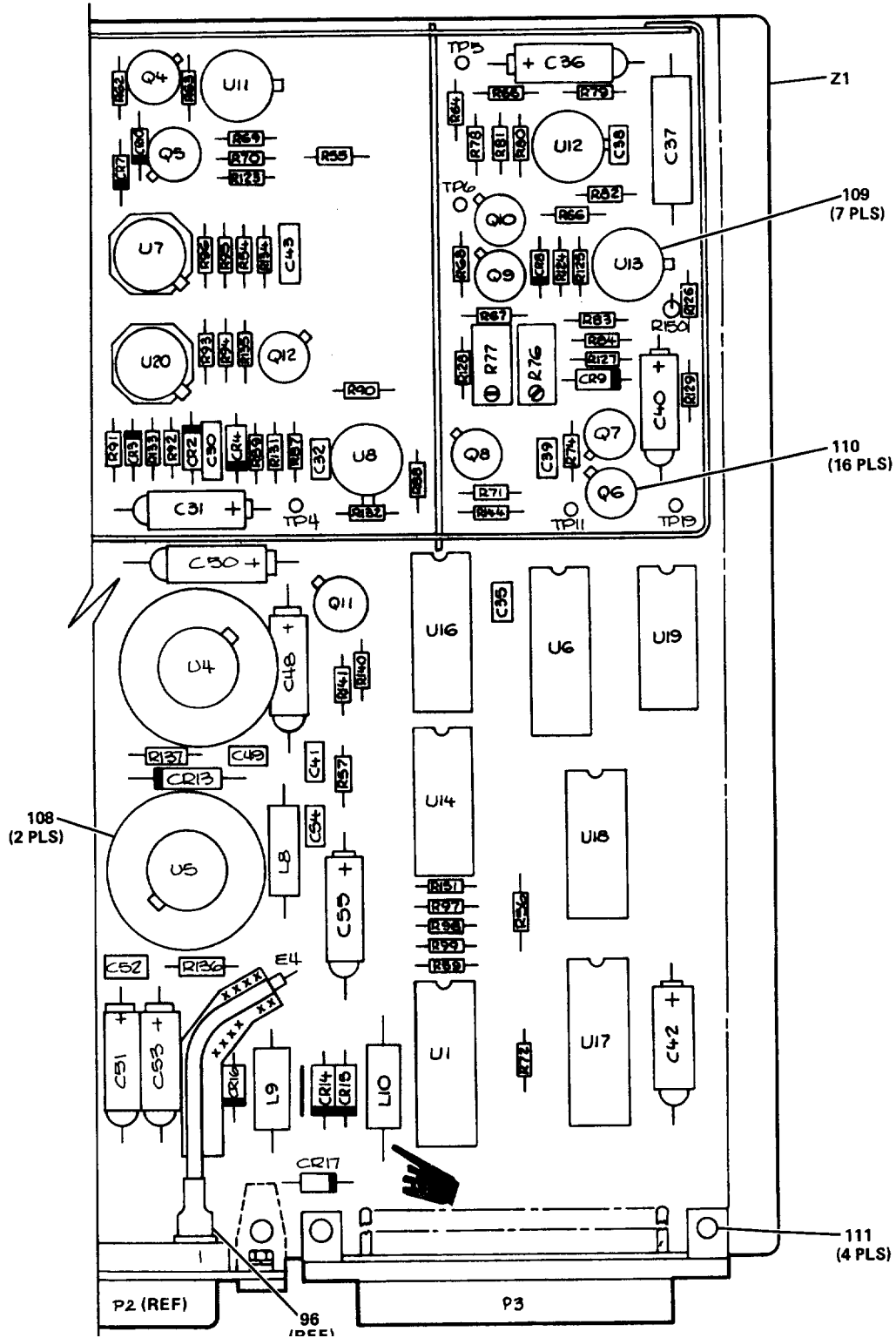


Figure C-9. CCA, Carrier Presence Detector 5052001-3 (Sheet 4 of 5)

56373

**LEGEND**

REF DES	INDEX No.	REF DES	INDEX NO.
C30	8	R81	56
C31	7	R82	70
C32	3	R83	71
C35	3	R84	69
C36	13	R87	51
C37	14	R88	51
C38	5	R89	69
C39	3	R90	51
C40	7	R91	72
C41	3	R92	69
C42	7	R93	78
C43	15	R94	68
C48	7	R95	73
C49	3	R96	73
C50	7	R97	51
C51	7	R98	51
C52	3	R99	51
C53	7	R123	56
C54	3	R124	59
C55	7	R125	51
CR2	18	R126	56
CR3	19	R127	56
CR4	20	R128	58
CR7	19	R129	68
CR8	19	R131	56
CR9	21	R132	56
CR10	19	R133	56
CR13	22	R134	56
CR14	22	R135	56
CR15	22	R136	51
CR16 <sup>y</sup>	23	R137	51
CR17 <sup>y</sup>	23	R140	56
L8	28	R141	58
L9	29	R144	56
L10	29	R150	51
P3	32	R151	51
0 4 *	36	J1 *	80
05	37	J4	83
06	36	J5	84
Q7	38	J6 *	65
Q8	36	J7	86
Q9	37	J11	88
Q10 *	36	J12	82
Q11	36	J13	89
Q12	36	J14 *	90
R54	66	J16 *	91
R55	51	J17 *	85
R56	51	J18 *	92
R57	51	J19	93
R59	51	J20	86
R62	59	Z1	84
R63	58		
R64	59		
R65	66		
R66	59		
R67	58		
R68	58		
R69	56		
R70	56		
R71	58		
R72	51		
R74	58		
R76	67		
R77	67		
R78	56		
R79	68		
R80	66		

\*SEE CAUTION



**CAUTION**

THIS DEVICE REQUIRES SPECIAL HANDLING AND PROCESSING TO PREVENT DAMAGE FROM ELECTROSTATIC DISCHARGE TRANSIENTS.

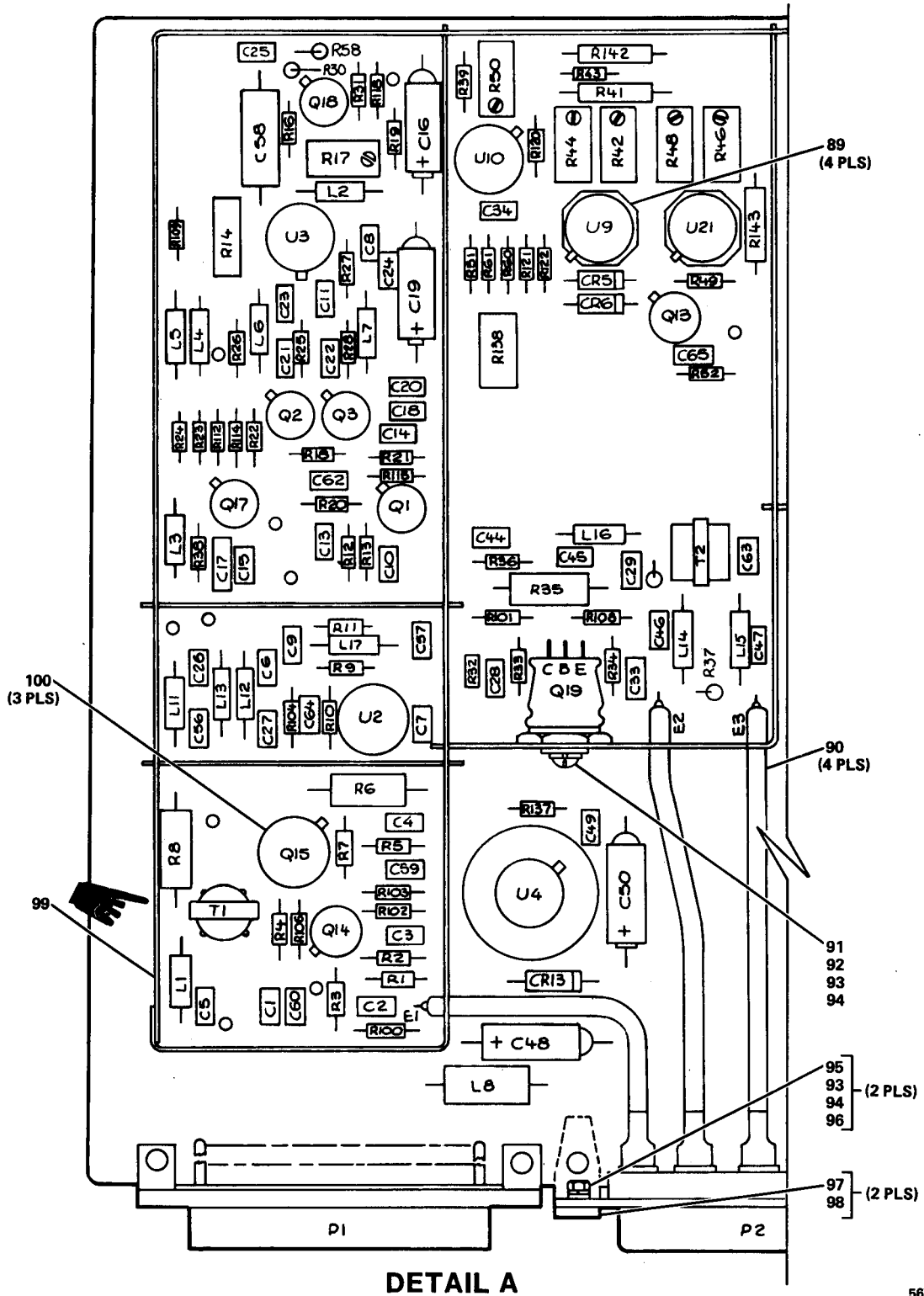
@

56374

Figure C-9. CCA, Carrier Presence Detector 5052001-3 (Sheet 5 of 5)

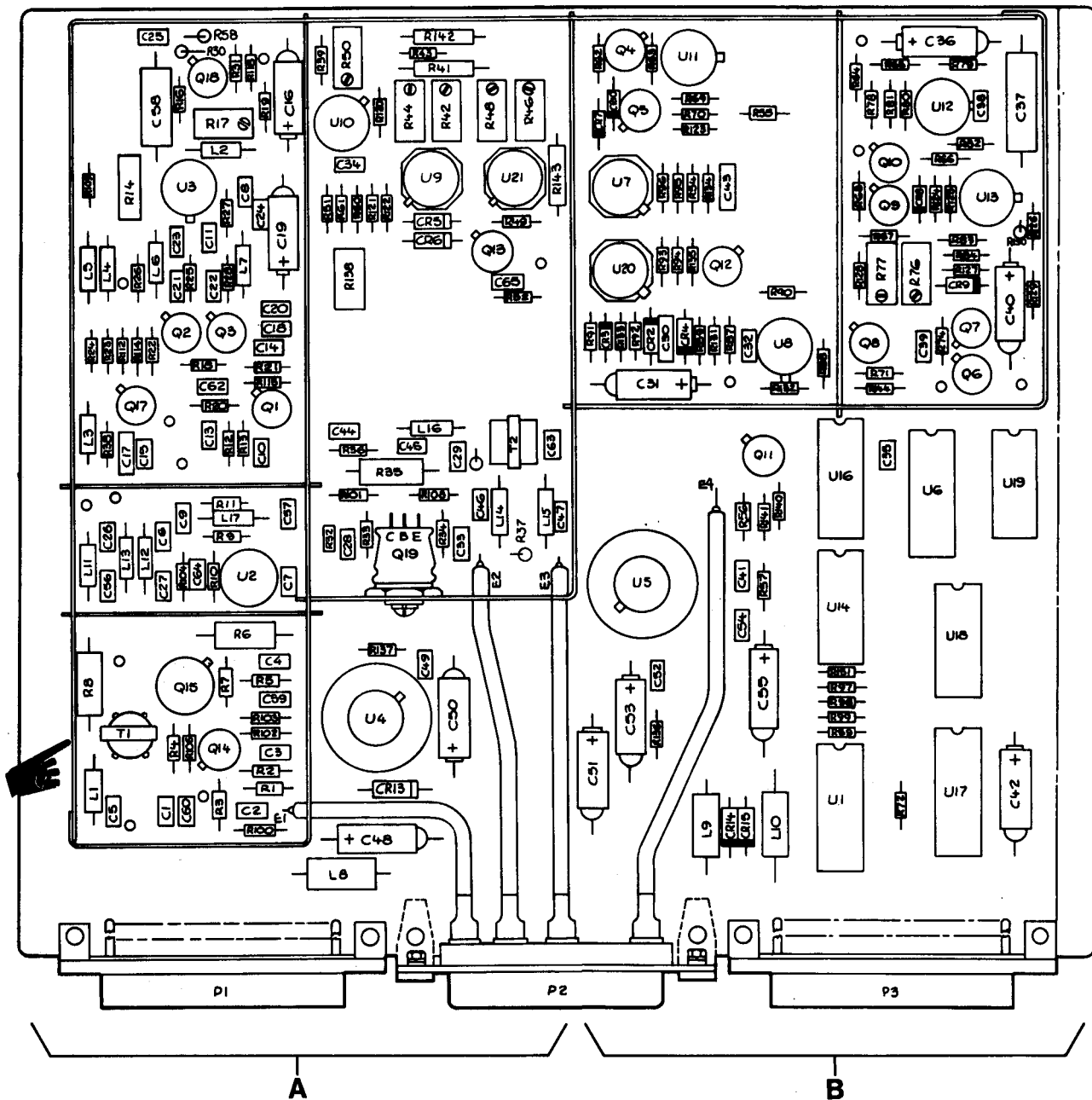
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	TY VC NY
						GROUP 08 CCA, CARRIER PRESENCE DETECTOR (57958)R 5052001-3		
C-9	1	PAHZZ	5910-00-124-0659	M39014-01-1456	81349	CAP,FXD,CER	EA	8
C-9	2	PAHZZ	5910-00-010-8666	M39014-01-1238	81349	CAP,FXD,CER	EA	5
C-9	3	PAHZZ	5910-01-007-5962	M39014-01-1474	81349	CAP,FXD,CER	EA	18
C-9	4	PAHZZ	5910-01-052-7651	CCR05CG101JM	81349	CAP,FXD,CER	EA	6
C-9	5	PAHZZ	5910-01-035-0022	M39014-01-1204	81349	CAP,FXD,CER	EA	2
C-9	6	PAHZZ	5910-01-107-8000	CCR05CG271JM	81349	CAP,FXD,CER	EA	1
C-9	7	PAHZZ	5910-00-283-3092	M39003-01-2290	81349	CAP,FXD,ELCTLT	EA	10
C-9	8	PAHZZ	5910-01-042-3759	M39014-02-1407	81349	CAP,FXD,CER	EA	2
C-9	9	PAHZZ	5910-01-027-1258	M39014-01-1473	81349	CAP,FXD,CER	EA	1
C-9	10	PAHZZ	5910-01-065-6790	CCR05CG151JM	81349	CAP,FXD,CER	EA	3
C-9	11	PAHZZ	5910-01-107-7999	CCR05CG221JM	81349	CAP,FXD,CER	EA	1
C-9	12	PAHZZ	5910-00-010-8715	M39014-01-1450	81349	CAP,FXD,CER	EA	1
C-9	13	PAHZZ	5910-00-550-1901	M39003-01-2262	81349	CAP,FXD,ELCTLT	EA	1
C-9	14	PAHZZ	5910-01-020-2466	M39022-10A104JM	81349	CAP,FXD,PLSTC	EA	1
C-9	15	PAHZZ		CCR06CG822KM	81349	CAP,FXD,CER	EA	1
C-9	16	PAHZZ	5910-01-107-7998	CCR05CG820JM	81349	CAP,FXD,CER	EA	1
C-9	17	PAHZZ		M39022-10A473JM	81349	CAP,FXD,PLSTC	EA	1
C-9	18	PAHZZ	5961-00-104-1398	JANTX1N751A	81349	SCND DVC, DIODE	EA	3
C-9	19	PAHZZ	5961-00-494-4915	JANTX1N4148	81349	SCND DVC, DIODE	EA	4
C-9	20	PAHZZ	5961-00-104-1397	JANTX1N749A	81349	SCND DVC, DIODE	EA	1
C-9	21	PAHZZ	5961-00-350-8249	JANTX1N825	81349	SCND DVC, DIODE	EA	1
C-9	22	PAHZZ	5961-00-156-0618	JANTX1N5614	81349	SCND DVC, DIODE	EA	3
C-9	23	PAHZZ	5961-00-335-8934	JANTX1N5712	81349	SCND DVC, DIODE	EA	2
C-9	24	PAHZZ		C5114404-1	57958	FILTER,BANDPASS	EA	1
C-9	25	PAHZZ	5950-00-035-4425	MS75085-07	96906	COIL,RF	EA	5
C-9	26	PAHZZ	5950-00-325-6462	MS75085-11	96906	COIL,RF	EA	1
C-9	27	PAHZZ	5950-00-279-6539	MS75085-03	96906	COIL,RF	EA	2
C-9	28	PAHZZ	5950-01-004-7258	MS75085-13	96906	COIL,RF	EA	1
C-9	29	PAHZZ	5950-01-081-0458	MS21390-20	96906	COIL,RF	EA	3
C-9	30	PAHZZ	5950-00-299-4467	MS75083-10	96906	COIL,RF	EA	4
:9	31	PAHZZ	5950-00-211-3995	MS75083-11	96906	COIL,RF	EA	1
:9	32	PAHZZ	5935-01-138-4962	5054801-1	57958	CONN,RCPT,ELEC	EA	2
:9	33	PAHZZ	5935-00-958-2108	5054822-2	57958	CONN,RCPT,ELEC	EA	1
:9	34	PAHZZ	5961-00-836-6663	JANTX2N918	81349	TRANSISTOR	EA	1
:9	35	PAHZZ	5961-00-420-3668	JANTX2N2369A	81349	TRANSISTOR	EA	3
:9	36	PAHZZ	5961-00-493-5250	JANTX2N4858	81349	TRANSISTOR	EA	2
:9	37	PAHZZ	5961-00-022-5666	JANTX2N2907A	81349	TRANSISTOR	EA	2
:9	38	PAHZZ	5961-00-858-3826	JANTX2N2222A	81349	TRANSISTOR	EA	7
:9	39	PAHZZ	5961-00-133-2983	JANTX2N2857	81349	TRANSISTOR	EA	1
:9	40	PAHZZ	5961-00-603-8935	JANTX2N5109	81349	TRANSISTOR	EA	2
:9	41	PAHZZ	5905-00-146-4593	RLR05C2200GR	81349	RES,FXD,FILM	EA	2
:9	42	PAHZZ	5905-00-165-3166	RLR05C10R0GR	81349	RES,FXD,FILM	EA	3
:9	43	PAHZZ	5905-00-007-3837	RLR05C5100GR	81349	RES,FXD,FILM	EA	1
:9	44	PAHZZ	5905-00-006-6978	RLR05C3300GR	81349	RES,FXD,FILM	EA	3
:9	45	PAHZZ	5905-00-943-3755	RLR20C1200GR	81349	RES,FXD,FILM	EA	1
:9	46	PAHZZ		RLR05C27R0GR	81349	RES,FXF,FILM	EA	1
:9	47	PAHZZ	5905-00-926-8706	RLR20C1000GR	81349	RES,FXD,FILM	EA	1
:9	48	PAHZZ	5905-00-006-5562	RLR05C51R0GR	81349	RES,FXD,FILM	EA	1
:9	49	PAHZZ	5905-00-405-0714	RLR05C4701GR	81349	RES,FXD,FILM	EA	4
:9	50	PAHZZ	5905-00-165-3134	RLR05C4700GR	81349	RES,FXD,FILM	EA	3
:9	51	PAHZZ	5905-00-012-2824	RLR05C1001GR	81349	RES,FXD,FILM	EA	22
:9	52	PAHZZ	5905-00-351-6101	RLR20C1004GR	81349	RES,FXD,FILM	EA	1
:9	53	PAHZZ	5905-01-018-5556	RJR24FW102M	81349	RES,VAR,NHM	EA	1
:9	54	PAHZZ	5905-00-006-1225	RLR05C2002GR	81349	RES,FXD,FILM	EA	1
:9	55	PAHZZ	5905-00-172-4624	RLR05C33R0GR	81349	RES,FXD,FILM	EA	1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-9	56	PAHZZ	5905-00-142-0593	RLR05C56ROGR	81349	RES,FXD,FILM	EA	2
C-9	57	PAHZZ	5905-00-146-4592	RLR05C1800GR	81349	RES,FXD,FILM	EA	1
C-9	58	PAHZZ	5905-00-165-3144	RLR05C1002GR	81349	RES,FXD,FILM	EA	36
C-9	59	PAHZZ	5905-00-170-9750	RLR05C1003GR	81349	RES,FXD,FILM	EA	6
C-9	60	PAHZZ	5905-00-974-6043	RLR20C2000GR	81349	RES,FXD,FILM	EA	1
C-9	61	PAHZZ	5905-00-403-3044	RLR05C1000GR	81349	RES,FXD,FILM	EA	3
C-9	62	PAHZZ	5905-00-165-3181	RLR05C2201GR	81349	RES,FXD,FILM	EA	2
C-9	63	PAHZZ	5905-00-096-3223	RTH42ES152J	81349	RES,THERMAL	EA	2
C-9	64	PAHZZ	5905-00-594-2644	RJR24FM253M	81349	RES,VAR,NMW	EA	3
C-9	65	PAHZZ	5905-01-043-0522	RJR24FM103M	81349	RES,VAR,NMW	EA	2
C-9	66	PAHZZ	5905-00-421-2922	RNC50H1212FS	81349	RES,FXD,FILM	EA	1
C-9	67	PAHZZ	5905-01-012-9761	RJR24FMS02M	81349	RES,VAR,NMW	EA	3
C-9	68	PAHZZ	5905-00-005-8930	RNC50H1003FS	81349	RES,FXD,FILM	EA	7
C-9	69	PAHZZ	5905-00-378-0271	RLR05C6800GR	81349	RES,FXD,FILM	EA	4
C-9	70	PAHZZ	5905-00-163-2591	RLR05C1801GR	81349	RES,FXD,FILM	EA	1
C-9	71	PAHZZ	5905-00-189-2266	RLR05C1601GR	81349	RES,FXD,FILM	EA	1
C-9	72	PAHZZ	5905-00-006-5561	RLR05C2702GR	81349	RES,FXD,FILM	EA	1
C-9	73	PAHZZ	5905-00-194-0376	RNC50H3011FS	81349	RES,FXD,FILM	EA	2
C-9	74	PAHZZ	5905-00-163-2587	RLR05C1201GR	81349	RES,FXD,FILM	EA	1
C-9	75	PAHZZ	5905-00-007-7187	RLR05C2202GR	81349	RES,FXD,FILM	EA	1
C-9	76	PAHZZ	5905-01-138-0473	RTH42ES822J	81349	RES,THERMAL	EA	1
C-9	77	PAHZZ	5905-00-240-7948	RLR07C1201GR	81349	RES,FXD,FILM	EA	1
C-9	78	PAHZZ		C5114403-1	57958	ELECTRONIC SW	EA	1
C-9	79	PAHZZ		5055209-1	57958	TRANSFORMER,RF	EA	2
C-9	80	PAHZZ	5962-01-015-8539	M38510-05504BEX	81349	MICROCKT,DGTL	EA	1
C-9	81	PAHZZ	5962-01-029-5481	5055205-1	57958	MICROCKT,LIN	EA	1
C-9	82	PAHZZ	5962-01-014-0499	M38510-10104BGX	81349	MICROCKT,LIN	EA	2
C-9	83	PAHZZ		M38510-11502BXX	81349	MICROCKT,LIN	EA	1
C-9	84	PAHZZ		M38510-10703BXX	81349	MICROCKT,LIN	EA	1
C-9	85	PAHZZ	5962-01-095-5514	5055206-1	57958	MICROCKT,DGTL	EA	2
C-9	86	PAHZZ		M38510-11102BIX	81349	MICROCKT,LIN	EA	4
C-9	87	PAHZZ	5962-01-016-5296	5068030-1	57958	MICROCKT,LIN	EA	2
C-9	88	PAHZZ		M38510-10602BGX	81349	MICROCKT,LIN	EA	1
C-9	89	PAHZZ	5962-01-048-7767	M38510-10304BGX	81349	MICROCKT,LIN	EA	1
C-9	90	PAHZZ	5962-01-067-4985	M38510-05101BCX	81349	MICROCKT,DGTL	EA	1
C-9	91	PAHZZ	5962-01-022-6717	M38510-05503BEX	81349	MICROCKT,DGTL	EA	1
C-9	92	PAHZZ		M38510-05203BCX	81349	MICROCKT,DGTL	EA	1
C-9	93	PAHZZ	5962-00-064-1798	5055211-1	57958	MICROCKT,DGTL	EA	1
C-9	94	XA		5052003-2	57958	PRINTED WRG BD	EA	1
C-9	95	PAHZZ	5999-01-084-0860	M38527-5-01D	81349	MTG PAD,CMPNT	EA	4
C-9	96	PAHZZ	5999-01-029-0591	5054823-2	57958	CONTACT,ELEC	EA	4
C-9	97	PAHZZ	5305-00-225-6400	MS24693C3	96906	SCR,MACH,FL HD	EA	2
C-9	98	PAHZZ	5310-00-057-0573	NAS620C4	80205	WASHER,FLAT	EA	3
C-9	99	PAHZZ	5310-00-442-6913	NAS1640-4	80205	WASHER,LOCK	EA	3
C-9	100	PAHZZ	5310-00-208-3786	NAS671C4	80205	NUT,PLAIN,HEX	EA	2
C-9	101	PAHZZ	5935-01-128-5971	5054822-3	57958	BRKT,ELEC CONN	EA	2
C-9	102	XBHZZ	5320-00-117-6815	MS20470AD3-4	96906	RIVET,SOLID	EA	2
C-9	103	PAHZZ		C5114402-1	57958	MTG PAD,CMPNT	EA	1
C-9	104	XBHZZ		5053298-2	57958	SHI ELD ASSEMBLY	EA	1
C-9	105	PAHZZ	5999-01-054-6450	M38527-8-41P	81349	MTG PAD,CMPNT	EA	3
C-9	106	PAHZZ	5999-00-417-4115	5055208-1	57958	HEAT SINK,ELEC	EA	1
C-9	107	PAHZZ	5305-01-049-9121	MS1957-12	96906	SCR,MACH,PAN HD	EA	1
C-9	108	PAHZZ	5999-00-116-8983	5054895-1	57958	HEAT SINK,ELEC	EA	2
C-9	109	PAHZZ	5999-01-086-6659	M38527-5-02D	81349	MTG PAD,CMPNT	EA	7
C-9	110	PAHZZ	5999-01-054-6449	M38527-3-01D	81349	MTG PAD,CMPNT	EA	16
C-9	111	XBHZZ	5320-00-879-6607	MS16535-82	96906	RIVET,TUBULAR	EA	4



56727

Figure C-10. CCA, Carrier Presence Detector 5052001-2 (Sheet 2 of 5)



56375

PREFIX ALL REFERENCE DESIGNATIONS WITH ONE OF THE FOLLOWING: A23A1, A23A2, A23A3, A23A4

Figure C-10. CCA, Carrier Presence Detector 5052001-2 (Sheet 1 of 5)



## LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.	REF DES	INDEX NO.
C1	1	Q1	32	R109	55
C2	2	Q2	33	R112	55
C3	1	Q3	33	R114	55
C4	3	Q13	36	R115	55
C5	1	Q14	37	R118	56
C6	4	Q15	38	R120	55
C7	3	Q17	33	R121	72
C8	3	Q18	36	R122	49
C9	3	Q19	38	R137	49
C10	4	R1	39	R138	61
C11	5	R2	39	R139	48
C13	3	R3	40	R142	60
C14	6	R4	41	R143	73
C15	3	R5	42	T1	74
C16	7	R6	43	T2	74
C17	8	R7	44	U2	76
C18	3	R8	45	U3	77
C19	7	R9	46	U4	78
C20	3	R10	47	U9	81
C21	4	R11	48	U10	82
C22	9	R12	49	U21	81
C23	10	R13	49		
C24	10	R14	50		
C25	3	R16	49		
C26	11	R17	51		
C27	4	R18	47		
C28	2	R19	52		
C29	12	R20	44		
C33	4	R21	42		
C34	3	R22	48		
C44	1	R23	53		
C45	1	R24	54		
C46	10	R25	55		
C47	4	R26	55		
C48	7	R27	55		
C49	3	R28	55		
C50	7	R30	55		
C56	2	R31	56		
C57	16	R32	53		
C58	17	R33	49		
C59	1	R34	40		
C60	1	R35	57		
C62	1	R36	40		
C63	2	R37	58		
C64	2	R38	42		
C65	3	R39	59		
CR5	18	R41	60		
CR6	18	R42	61		
CR13	22	R43	47		
L1	23	R44	61		
L2	24	R46	62		
L3	23	R48	62		
L4	23	R49	63		
L5	25	R50	64		
L6	26	R51	47		
L7	25	R52	55		
L8	27	R58	49		
L11	23	R60	66		
L12	28	R61	59		
L13	28	R100	58		
L14	28	R101	71		
L15	28	R102	55		
L16	23	R103	56		
L17	29	R104	58		
P1	30	R106	55		
P2	31	R108	55		

58728

Figure C-10. CCA, Carrier Presence Detector 5052001-2 (Sheet 3 of 5)

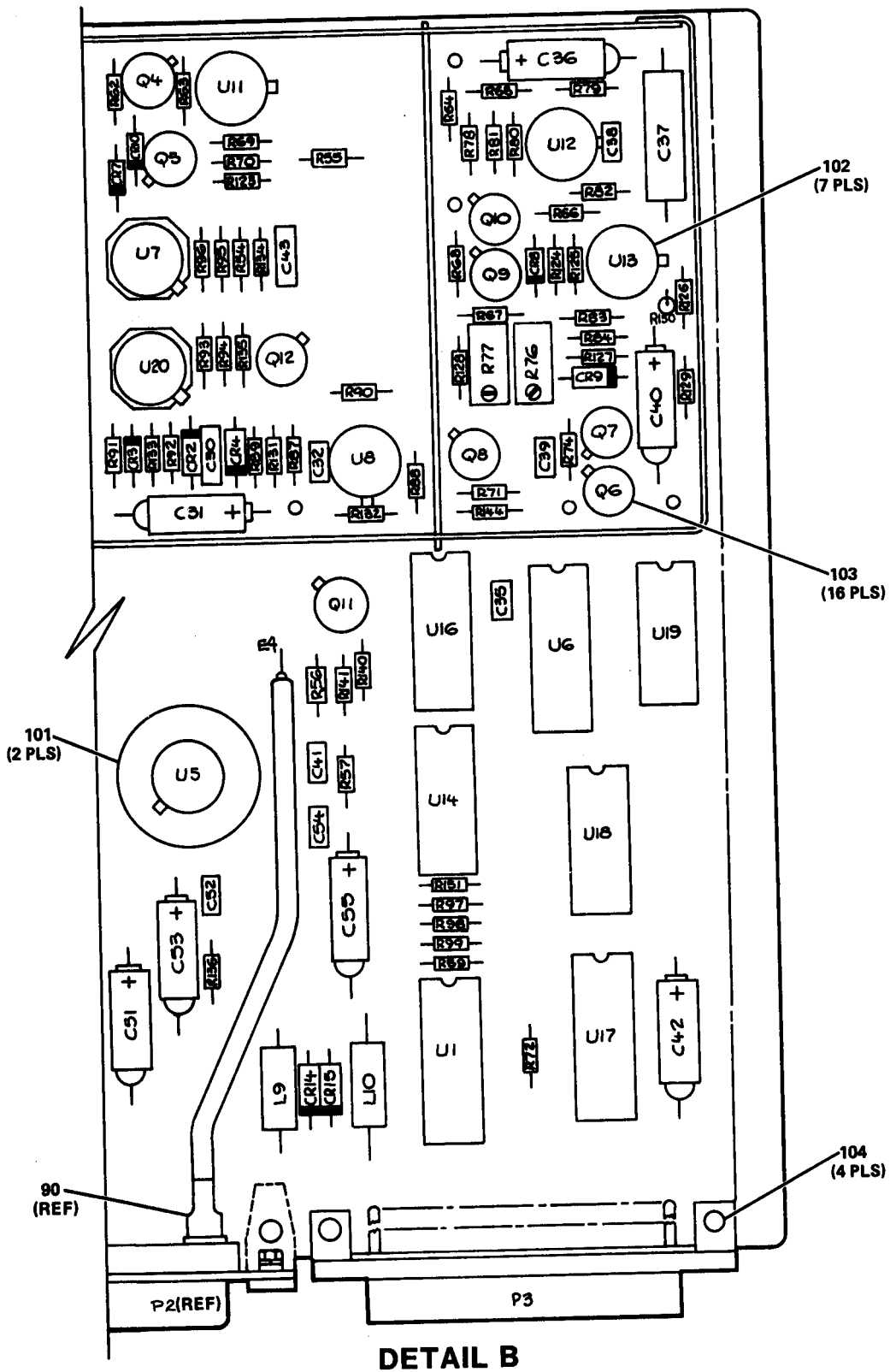


Figure C-10. CCA, Carrier Presence Detector 5052001-2 (Sheet 4 of 5)

LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.
C30	8	R89	66
C31	7	R90	49
C32	3	R91	69
C35	3	R92	66
C36	13	R93	65
C37	14	R94	65
C38	5	R95	70
C39	3	R96	70
C40	7	R97	49
C41	3	R98	49
C42	7	R99	49
C43	15	R123	55
C51	7	R124	56
C52	3	R125	49
C53	7	R126	55
C54	3	R127	55
C55	7	R128	55
CR2	18	R129	55
CR3	19	R131	55
CR4	20	R132	55
CR7	19	R133	55
CR8	19	R134	55
CR9	21	R135	55
CR10	19	R136	49
CR14	22	R140	55
CR15	22	R140	55
L9	27	R144	55
L10	27	R151	49
P3	30	R150	49
Q4	34	U1	75
Q5	35	U5	79
Q6	36	U6	80
Q7	36	U7	81
Q8	36	U8	82
Q9	35	U11	83
Q10	24	U12	77
Q11	237	U13	84
Q12	36	U14	85
R54	65	U16	86
R55	49	U17	80
R56	49	U18	87
R57	49	U19	88
R59	49	U20	81
R62	56	Z1	105
R63	55		
R64	56		
R65	65		
R66	56		
R67	55		
R68	55		
R69	55		
R70	55		
R71	55		
R72	49		
R74	55		
R76	61		
R77	64		
R78	65		
R79	65		
R80	65		
R81	55		
R82	67		
R83	68		
R84	66		
R87	49		
R88	49		

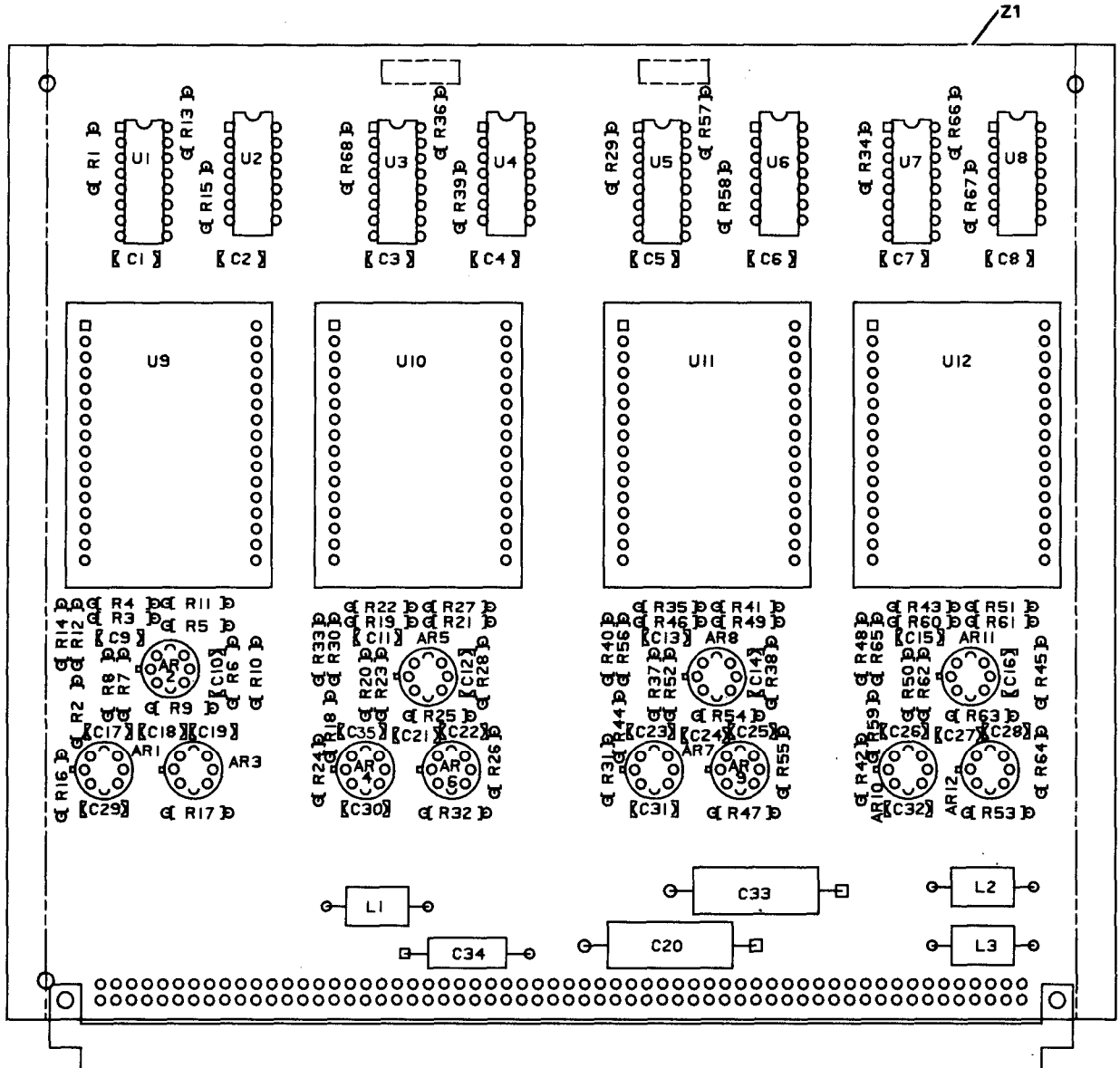
56730

Figure C-10. CCA, Carrier Presence Detector 5052001-2 (Sheet 5 of 5)

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 08 CCA, CARRIER PRESENCE DETECTOR (57958) 5052001-2		
C-10	1	PAHZZ	5910-00-124-0659	M39014-01-1456	81349	CAP,FXD,CER	EA	8
C-10	2	PAHZZ	5910-00-010-8666	M39014-01-1238	81349	CAP,FXD,CER	EA	5
C-10	3	PAHZZ	5910-01-007-5962	M39014-01-1474	81349	CAP,FXD,CER	EA	18
C-10	4	PAHZZ	5910-01-052-7651	CCR05CG101JM	81349	CAP,FXD,CER	EA	6
C-10	5	PAHZZ	5910-01-035-0022	M39014-01-1204	81349	CAP,FXD,CER	EA	2
C-10	6	PAHZZ	5910-01-107-8000	CCR05CG271JM	81349	CAP,FXD,CER	EA	1
C-10	7	PAHZZ	5910-00-283-3092	M39003-01-2290	81349	CAP,FXD,ELCTLT	EA	10
C-10	8	PAHZZ	5910-01-042-3759	M39014-02-1407	81349	CAP,FXD,CER	EA	2
C-10	9	PAHZZ	5910-01-042-8386	M39014-01-1449	81349	CAP,FXD,CER	EA	1
C-10	10	PAHZZ	5910-01-065-6790	CCR05CG151JM	81349	CAP,FXD,CER	EA	3
C-10	11	PAHZZ	5910-01-107-7999	CCR05CG221JM	81349	CAP,FXD,CER	EA	1
C-10	12	PAHZZ	5910-00-010-8715	M39014-01-1450	81349	CAP,FXD,CER	EA	1
C-10	13	PAHZZ	5910-00-550-1901	M39003-01-2262	81349	CAP,FXD,ELCTLT	EA	1
C-10	14	PAHZZ	5910-01-020-2466	M39022-10A104JM	81349	CAP,FXD,PLSTC	EA	1
C-10	15	PAHZZ		CCR06CG822KM	81349	CAP,FXD,CER	EA	1
C-10	16	PAHZZ	5910-01-107-7998	CCR05CG820JM	81349	CAP,FXD,CER	EA	1
C-10	17	PAHZZ		M39022-10A473JM	81349	CAP,FXD,PLSTC	EA	1
C-10	18	PAHZZ	5961-00-104-1398	JANTX1N751A	81349	SCND DVC ,DIODE RGLTR	EA	3
C-10	19	PAHZZ	5961-00-494-4915	JANTX1N4148	81349	SCND DVC, DIODE	EA	4
C-10	20	PAHZZ	5961-00-104-1397	JANTX1N749A	81349	SCND DVC, DIODE RGLTR	EA	1
C-10	21	PAHZZ	5961-00-350-8249	JANTX1N825	81349	SCND DVC, DIODE	EA	1
C-10	22	PAHZZ	5961-00-156-0618	JANTX1N5614	81349	SCND DVC, DIODE	EA	3
C-10	23	PAHZZ	5950-00-035-4425	MS75085-07	96906	COIL,RF	EA	5
C-10	24	PAHZZ	5950-00-325-6462	MS75085-11	96906	COIL,RF	EA	1
C-10	25	PAHZZ	5950-00-279-6539	MS75085-03	96906	COIL,RF	EA	2
C-10	26	PAHZZ	5950-01-004-7258	MS75085-13	96906	COIL,RF	EA	1
C-10	27	PAHZZ	5950-01-081-0458	MS21390-20	96906	COIL,RF	EA	3
C-10	28	PAHZZ	5950-00-299-4467	MS75083-10	96906	COIL,RF	EA	4
C-10	29	PAHZZ	5950-00-211-3995	MS75083-11	96906	COIL,RF	EA	1
C-10	30	PAHZZ	5935-01-138-4962	5054801-1	57958	CONN,RCPT,ELEC	EA	2
C-10	31	PAHZZ	5935-00-958-2108	5054822-2	57958	CONN,RECPT,ELEC	EA	1
C-10	32	PAHZZ	5961-00-836-6663	JANTX2N918	81349	TRANSISTOR	EA	1
C-10	33	PAHZZ	5961-00-420-3668	JANTX2N2369A	81349	TRANSISTOR	EA	3
C-10	34	PAHZZ	5961-00-493-5250	JANTX2N4858	81349	TRANSISTOR	EA	2
C-10	35	PAHZZ	5961-00-022-5666	JANTX2N2907A	81349	TRANSISTOR	EA	2
C-10	36	PAHZZ	5961-00-858-3826	JANTX2N2222A	81349	TRANSISTOR	EA	7
C-10	37	PAHZZ	5961-00-133-2983	JANTX2N2857	81349	TRANSISTOR	EA	1
C-10	38	PAHZZ	5961-00-603-8935	JANTX2N5109	81349	TRANSISTOR	EA	2
C-10	39	PAHZZ	5905-00-246-4593	RLR05C2200GR	83149	RES,FXD,FILM	EA	2
C-10	40	PAHZZ	5905-00-165-3166	RLR05C10R0GR	81349	RES,FXD,FILM	EA	3
C-10	41	PAHZZ	5905-00-007-3837	RLR05C5100GR	81349	RES,FXD,FILM	EA	1
C-10	42	PAHZZ	5905-00-006-6978	RLR05C3300GR	81349	RES,FXD,FILM	EA	3
C-10	43	PAHZZ	5905-00-943-3755	RLR20C1200GR	81349	RES,FXD,FILM	EA	1
C-10	44	PAHZZ	5905-00-172-4624	RLR05C33R0GR	81349	RES,FXD,FILM	EA	2
C-10	45	PAHZZ	5905-00-926-8706	RLR20C1000GR	81349	RES,FXD,FILM	EA	1
C-10	46	PAHZZ	5905-00-006-5562	RLR05C51R0GR	81349	RES,FXD,FILM	EA	1
C-10	47	PAHZZ	5905-00-405-0714	RLR05C4701GR	81349	RES,FXD,FILM	EA	4
C-10	48	PAHZZ	5905-00-165-3134	RLR05C4700GR	81349	RES,FXD,FILM	EA	3
C-10	49	PAHZZ	5905-00-012-2824	RLR05C1001GR	81349	RES,FXD,FILM	EA	22
C-10	50	PAHZZ	5905-00-351-6101	RLR20C1004GR	81349	RES,FXD,FILM	EA	1
C-10	51	PAHZZ	5905-01-018-5556	RJR24FW102M	81349	RES,VAR,MMW	EA	1
C-10	52	PAHZZ	5905-00-006-1225	RLR05C2002GR	81349	RES,FXD,FILM	EA	1
C-10	53	PAHZZ	5905-00-142-0593	RLR05C56R0GR	81349	RES,FXD,FILM	EA	2
C-10	54	PAHZZ	5905-00-146-4592	RLR05C1800GR	81349	RES,FXD,FILM	EA	1
C-10	55	PAHZZ	5905-00-165-3144	RLR05C1002GR	81349	RES,FXD,FILM	EA	36

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCN	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-10	56	PAHZZ	5905-00-170-9750	RLR05C1003GR	81349	RES,FXD,FILM	EA	6
C-10	57	PAHZZ	5905-00-974-6043	RLR20C2000GR	81349	RES,FXD,FILM	EA	1
C-10	58	PAHZZ	5905-00-403-3044	RLR05C1000GR	81349	RES,FXD,FILM	EA	3
C-10	59	PAHZZ	5905-00-165-3181	RLR05C2201GR	81349	RES,FXD,FILM	EA	2
C-10	60	PAHZZ	5905-00-096-3223	RTH42ES152J	81349	RES,THERMAL	EA	2
C-10	61	PAHZZ	5905-00-594-2644	RJR24FW253M	81349	RES,VAR,NHW	EA	4
C-10	62	PAHZZ	5905-01-043-0522	RJR24FW103M	81349	RES,VAR,NHW	EA	2
C-10	63	PAHZZ	5905-00-421-2922	RNC50H1212FS	81349	RES,FXD,FILM	EA	1
C-10	64	PAHZZ	5905-01-012-9761	RJR24FW502M	81349	RES,VAR,NHW	EA	2
C-10	65	PAHZZ	5905-00-005-8930	RNC50H1003FS	81349	RES,FXD,FILM	EA	7
C-10	66	PAHZZ	5905-00-378-0271	RLR05C6800GR	81349	RES,FXD,FILM	EA	4
C-10	67	PAHZZ	5905-00-163-2591	RLR05C1801GR	81349	RES,FXD,FILM	EA	1
C-10	68	PAHZZ	5905-00-189-2266	RLR05C1601GR	81349	RES,FXD,FILM	EA	1
C-10	69	PAHZZ	5905-00-006-5561	RLR05C2702GR	81349	RES,FXD,FILM	EA	1
C-10	70	PAHZZ	5905-00-194-0376	RNC50H3011FS	81349	RES,FXD,FILM	EA	2
C-10	71	PAHZZ	5905-00-163-2587	RLR05C1201GR	81349	RES,FXD,FILM	EA	1
C-10	72	PAHZZ	5905-00-007-7187	RLR05C2202GR	81349	RES,FXD,FILM	EA	1
C-10	73	PAHZZ	5905-01-138-0473	RTH42ES822J	81349	RES,THERMAL	EA	1
C-10	74	PAHZZ		5055209-1	57958	TRANSFORMER,RF	EA	1
C-10	75	PAHZZ	5962-01-015-8539	M38510-055048EX	81349	MICROCKT,DGTL	EA	1
C-10	76	PAHZZ	5962-01-029-5481	5055205-1	57958	MICROCKT,LIN	EA	1
C-10	77	PAHZZ	5962-01-014-0499	M38510-101048GX	81349	MICROCKT,LIN	EA	2
C-10	78	PAHZZ		M38510-115028XX	81349	MICROCKT,LIN	EA	1
C-10	79	PAHZZ		M38510-107038XX	81349	MICROCKT,LIN	EA	1
C-10	80	PAHZZ	5962-01-095-5514	5055206-1	57958	MICROCKT,DGTL	EA	2
C-10	81	PAHZZ		M38510-111028IX	81349	MICROCKT,LIN	EA	4
C-10	82	PAHZZ	5962-01-016-5296	5068030-1	57958	MICROCKT,LIN	EA	2
C-10	83	PAHZZ		M38510-106028GX	81349	MICROCKT,LIN	EA	1
C-10	84	PAHZZ	5962-01-048-7767	M38510-103048GX	81349	MICROCKT,LIN	EA	1
C-10	85	PAHZZ	5962-01-067-4985	M38510-051018CX	81349	MICROCKT,DGTL	EA	1
C-10	86	PAHZZ	5962-01-022-6717	M38510-055038EX	81349	MICROCKT,DGTL	EA	1
C-10	87	PAHZZ		M38510-052038CX	81349	MICROCKT,DGTL	EA	1
C-10	88	PAHZZ	5962-00-064-1798	5055211-1	57958	MICROCKT,DGTL	EA	1
C-10	89	PAHZZ	5999-01-084-0860	M38527-5-01D	81349	MTG PAD, CMPNT	EA	4
C-10	90	PAHZZ	5999-01-029-0591	5054823-2	57958	CONTACT,ELEC	EA	4
C-10	91	PAHZZ	5999-00-417-4115	5055208-1	57958	SCR, MACH, PAN HD	EA	1
C-10	92	PAHZZ	5305-01-049-9121	MS51957-12	96906	WASHER,LOCK	EA	3
C-10	93	PAHZZ	5310-00-442-6913	NAS1640-4	80205	WASHER,FLAT	EA	3
C-10	94	XA	5310-00-057-0573	NAS620C4	80205	SCR, MACH, FL HD	EA	2
C-10	95	PAHZZ	5305-00-225-6400	MS24693C3	96906	NUT,PLAIN,HEX	EA	2
C-10	96	PAHZZ	5310-00-208-3786	NAS671C4	80205	BRKT, ELEC CONN	EA	2
C-10	97	PAHZZ	5935-01-128-5971	5054822-3	57958	RIVET,TUBULAR	EA	2
C-10	98	PAHZZ	5320-00-894-2052	MS16535-45	96906	SHIELD ASSEMBLY	EA	1
C-10	99	PAHZZ		5053298-1	57958	INSULATOR,DISK	EA	3
C-10	100	PAHZZ	5999-01-054-6450	M38527-8-41P	81349	HEAT SINK, ELEC	EA	2
C-10	101	PAHZZ		M87111/3-1A44	81349	HEAT SINK, ELEC	EA	4
C-10	102	XBHZZ	5999-01-086-6659	M38527-5-02D	81349	MTG PAD, CMPNT	EA	7
C-10	103	PAHZZ	5999-01-054-6449	M38527-3-01D	81349	MTG PAD, CMPNT	EA	16
C-10	104	XBHZZ	5320-00-080-0494	MS16535-81	96906	RIVET,TUBULAR	EA	4
C-10	105	PAHZZ		5052003-1	57958	PRINTED WRG BD	EA	1





56731

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A5  
 Figure C-11. CCA, 150 Hz Nato Tone Detector 5052013-1 (Sheet 1 of 2)

LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.
AR1	1	R17	9
AR2	1	R18	7
AR3	1	R19	7
AR4	1	R20	9
AR5	1	R21	7
AR6	1	R22	8
AR7	1	R23	7
AR8	1	R24	10
AR9	1	R25	7
AR10	1	R26	7
AR11	1	R27	9
AR12	1	R28	8
C1	2	R29	6
C2	2	R30	7
C3	2	R31	10
C4	2	R32	9
C5	2	R33	8
C6	2	R34	6
C7	2	R35	8
C8	2	R36	7
C9	2	R37	9
C10	2	R38	8
C11	2	R39	7
C12	2	R40	8
C13	2	R41	9
C14	2	R42	10
C15	2	R43	8
C16	2	R44	7
C17	2	R45	8
C18	2	R46	7
C19	2	R47	9
C20	3	R48	8
C21	2	R49	7
C22	2	R50	9
C23	2	R51	9
C24	2	R52	7
C25	2	R53	9
C26	2	R54	7
C27	2	R55	7
C28	2	R56	7
C29	2	R57	7
C30	2	R58	7
C31	2	R59	7
C32	2	R60	7
C33	3	R61	7
C34	4	R62	7
C35	2	R63	7
L1	5	R64	7
L2	5	R65	7
L3	5	R66	7
R1	6	R67	7
R2	7	R68	6
R3	7	U1	11
R4	8	U2	12
R5	7	U3	11
R6	8	U4	12
R7	7	U5	11
R8	9	U6	12
R9	7	U7	11
R10	7	U8	12
R11	9	U9	13
R12	7	U10	13
R13	7	U11	13
R14	8	U12	13
R15	7	Z1	14
R16	10		

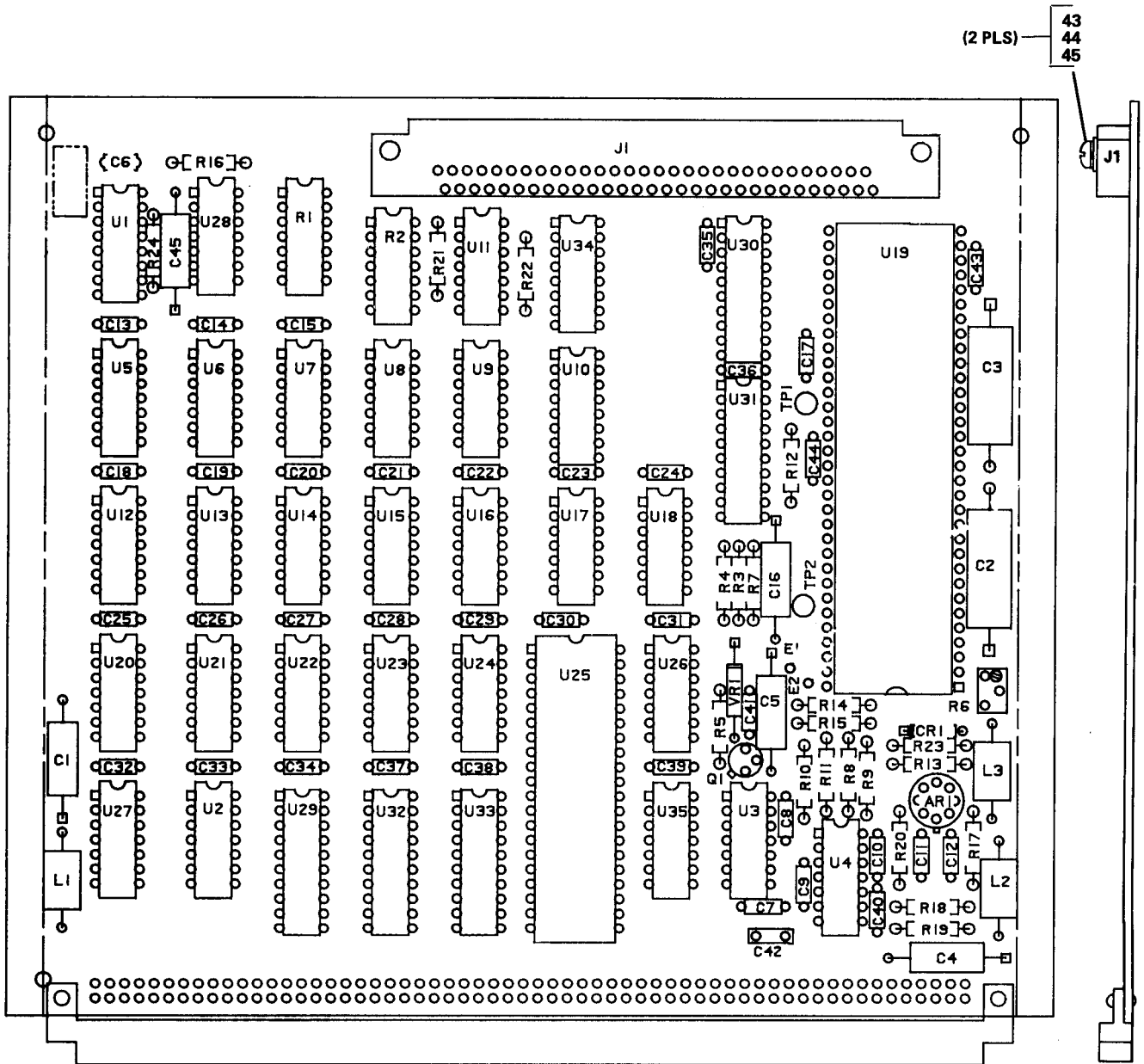
56732

Figure C-11. CCA, 150 Hz Nato Tone Detector 5052013-1 (Sheet 2 of 2)



(1) ILLUS		(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION  USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
(A) FIG NO	(B) ITEM NO							
						GROUP 09 CCA, 150 MZ NATO TONE DETECTOR (57958) 5052013-1		
C-11	1	PAHZZ	5962-00-365-9523	5054328-1	57958	MICROCKT,LIN	EA	12
C-11	2	PAHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP,FXD,CER	EA	32
C-11	3	PAHZZ	5910-00-998-6949	M39003-01-2306	81349	CAP,FXD,ELCTLT	EA	2
C-11	4	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA	1
C-11	5	PAHZZ	5950-00-832-4881	0213-1 -1060-1	57958	COIL,RF	EA	3
C-11	6	PAHZZ	5905-00-012-2824	RLR05C1001GR	81349	RES,FXD,FILM	EA	4
C-11	7	PAHZZ	5905-00-165-3144	RLR05C1002GR	81349	RES,FXD,FILM	EA	36
C-11	8	PAHZZ	5905-00-006-6980	RLR05C5101GR	81349	RES,FXD,FILM	EA	12
C-11	9	PAHZZ	5905-00-006-1225	RLR05C2002GR	81349	RES,FXD,FILM	EA	12
C-11	10	PAHZZ	5905-00-165-3135	RLR05C6200GR	81349	RES,FXD,FILM	EA	4
C-11	11	PAHZZ	5962-01-019-6176	0213-1 -1295-2	57958	MICROCKT,DGTL	EA	4
C-11	12	PAHZZ	5962-01-091-8195	M38510-30003BCX	81349	MICROCKT,DGTL	EA	4
C-11	13	PAHZZ	5962-01-138-0745	5054325-1	57958	DETECTOR,RF	EA	4
C-11	14	XA		5052015-1	57958	PRINTED WRG BD	EA	1





(2 PLS) 43  
44  
45

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A12  
Figure C-12. CCA, I/O Register Set 5052025-1 (Sheet 1 of 2)

56733

LEGEND

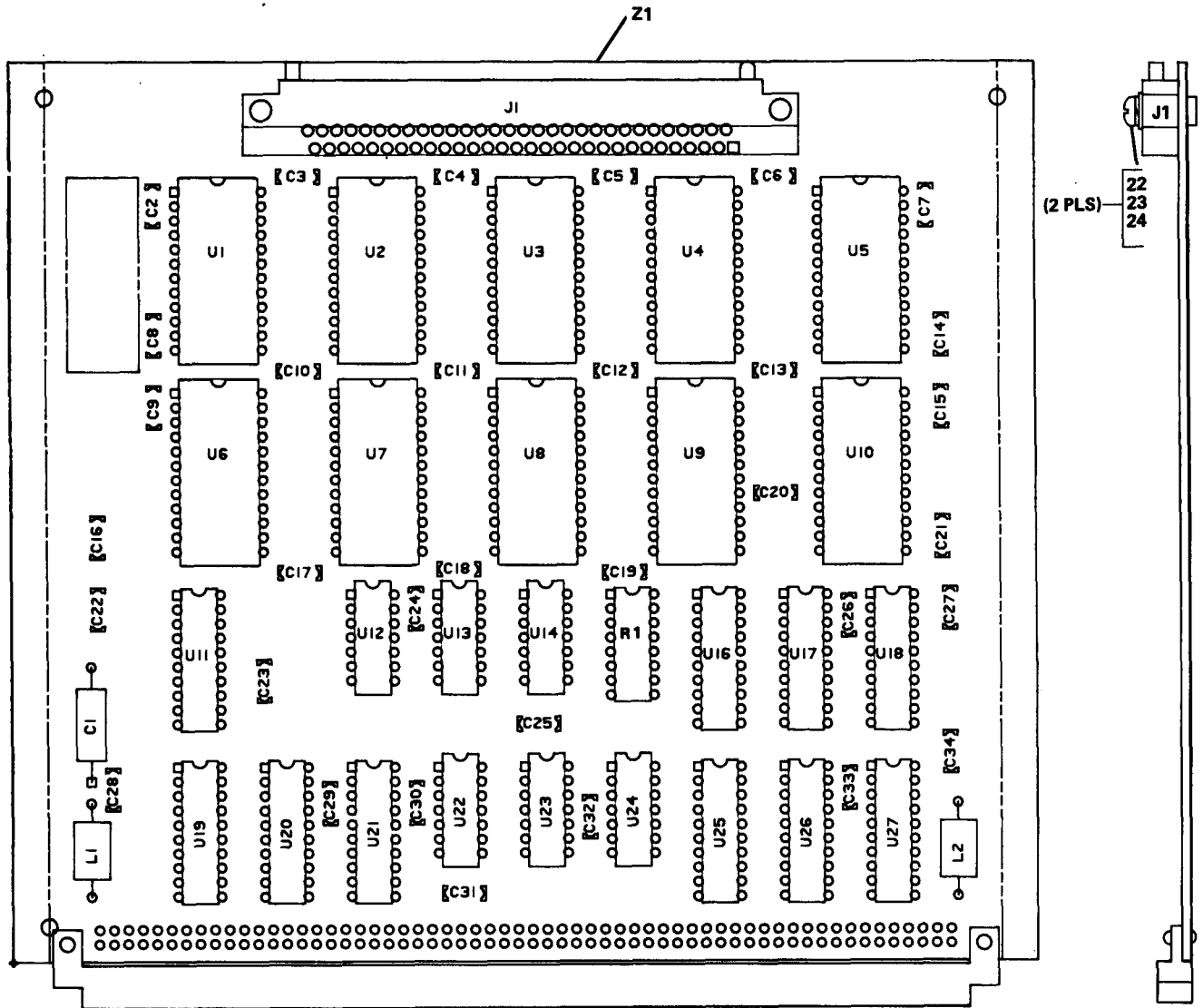
REF DES	INDEX NO.	REF DES	INDEX NO.
AR1	1	R15	18
C1	2	R16	19
C2	3	R17	18
C3	3	R18	20
C4	2	R19	21
C5	2	R20	18
C6	4	R21	13
C7	5	R22	13
C8	5	R23	22
C9	5	R24	23
C10	5	U1	24
C11	5	U2	25
C12	5	U3	26
C13	5	U4	27
C14	5	U5	28
C15	5	U6	29
C16	2	U7	30
C17	5	U8	28
C18	5	U9	28
C19	5	U10	31
C20	5	U11	32
C21	5	U12	32
C22	5	U13	29
C23	5	U14	32
C24	5	U15	32
C25	5	U16	33
C26	5	U17	30
C27	5	U18	32
C28	5	U19	34
C29	5	U20	35
C30	5	U21	36
C31	5	U22	37
C32	5	U23	37
C33	5	U24	37
C34	5	U25	38
C35	5	U26	37
C36	5	U27	35
C37	5	U28	37
C38	5	U29	39
C39	5	U30	40
C40	5	U31	40
C41	5	U32	39
C42	6	U33	39
C43	5	U34	41
C44	5	U35	37
C45	7	VR1	42
CR1	8	Z1	46
J1	9		
L1	10		
L2	10		
L3	10		
Q1	11		
R1	12		
R2	12		
R3	13		
R4	14		
R5	15		
R6	16		
R7	15		
R8	13		
R9	17		
R10	13		
R11	17		
R12	13		
R13	13		
R14	18		

58734

Figure C-12. CCA, I/O Register Set 5052025-1 (Sheet 2 of 2)

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 10 CCA, I/O REGISTER SET (57958) 5052025-1		
C-12	1	PAHZZ	5962-01-073-9544	7801301GX	14933	MICROCKT,LIN	EA	1
C-12	2	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA	4
C-12	3	PAHZZ	5910-00-998-6949	M39003-01-2306	81349	CAP,FXD,ELCTLT	EA	2
C-12	4	PAHZZ	5910-01-035-5517	M39014-01-1212	81349	CAP,FXD,CER	EA	1
C-12	5	PAHZZ	5910-01-099-6524	M39014-22-0194	81349	CAP,FXD,CER	EA	36
C-12	6	PAHZZ	5910-00-137-4806	M23269-10-3218	81349	CAP,FXD,GLASS	EA	1
C-12	7	PAHZZ	5910-00-111-4993	M39003-01-2270	81349	CAP,FXD,ELCTLT	EA	1
C-12	8	PAHZZ	5961-01-038-6918	JAN1N4148-1	81349	SCND DVC, DIODE	EA	1
C-12	9	PAHZZ	5935-01-098-0711	5068183-1	57958	CONN,RCPT,ELEC	EA	1
C-12	10	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA	3
C-12	11	PAHZZ	5961-00-925-3777	JAN2N2907A	81349	TRANSISTOR	EA	1
C-12	12	PAHZZ	5905-01-032-6806	M8340101M1001GB	81349	RES NTWK, FILM	EA	2
C-12	13	PAHZZ	5905-01-047-1529	RLR07C1001GR	81349	RES,FXD,FILM	EA	7
C-12	14	PAHZZ	5905-01-064-6736	RLR07C1202GR	81349	RES,FXD,FILM	EA	1
C-12	15	PAHZZ	5905-01-042-3729	RLR07C3301GR	81349	RES,FXD,FILM	EA	2
C-12	16	PAHZZ	5905-01-011-9501	RJR26FW102M	81349	RES,VAR,MNW	EA	1
C-12	17	PAHZZ	5905-00-458-9263	RLR07C1000GR	81349	RES,FXD,FILM	EA	2
C-12	18	PAHZZ	5905-00-482-0505	RLR07C10R0GR	81349	RES,FXD,FILM	EA	4
C-12	19	PAHZZ	5905-00-433-6207	RLR07C1603GR	81349	RES,FXD,FILM	EA	1
C-12	20	PAHZZ	5905-00-223-2610	RLR07C51R0GR	81349	RES,FXD,FILM	EA	1
C-12	21	PAHZZ	5905-00-450-8530	RLR07C1500GR	81349	RES,FXD,FILM	EA	1
C-12	22	PAHZZ	5905-00-438-0506	RLR07C5101GR	81349	RES,FXD,FILM	EA	1
C-12	23	PAHZZ	5905-01-064-8329	RLR07C1503GR	81349	RES,FXD,FILM	EA	1
C-12	24	PAHZZ	5962-01-068-1039	M38510-31401BEX	81349	MICROCKT,DGTL	EA	1
C-12	25	PAHZZ	5962-00-361-8732	M38510-00801BCX	81349	MICROCKT,DGTL	EA	1
C-12	26	PAHZZ	5962-00-007-4079	M38510-10102BCX	81349	MICROCKT,LIN	EA	1
C-12	27	PAHZZ	5962-01-009-5492	5068042-1	57958	MICROCKT,LIN	EA	1
C-12	28	PAHZZ	5962-00-264-3566	0213-1-1001-2	57958	MICROCKT,DGTL	EA	1
C-12	29	PAHZZ	5962-01-093-0110	M38510-30001BCX	81349	MICROCKT,DGTL	EA	2
C-12	30	PAHZZ	5962-01-017-5985	5068021-1	57958	MICROCKT,DGTL	EA	2
C-12	31	PAHZZ	5962-01-050-0919	M38510-30902BEX	81349	MICROCKT,DGTL	EA	1
C-12	32	PAHZZ	5962-00-348-2541	M38510-00205BCX	81349	MICROCKT,DGTL	EA	5
C-12	33	PAHZZ	5962-01-096-5757	M38510-07101BCX	81349	MICROCKT,DGTL	EA	1
C-12	34	PAHZZ		5054342-1	57958	CONVERTER,A/D	EA	1
C-12	35	PAHZZ	5962-01-034-2146	M38510-08101BCX	81349	MICROCKT,DGTL	EA	2
C-12	36	PAHZZ	5962-01-074-4122	M38510-30005BCX	81349	MICROCKT,DGTL	EA	1
C-12	37	PAHZZ	5962-01-091-8195	M38510-30003BCX	81349	MICROCKT,DGTL	EA	6
C-12	38	PAHZZ	5962-01-072-4143	5054337-1	57958	MICROCKT,DGTL	EA	1
C-12	39	PAHZZ	5962-01-102-3114	7801101RX	14933	MICROCKT,DGTL	EA	3
C-12	40	PAHZZ	5962-01-078-8678	5068027-1	57958	MICROCKT,DGTL	EA	3
C-12	41	PAHZZ	5962-01-138-1661	M38510-30702BEX	81349	MICROCKT,DGTL	EA	2
C-12	42	PAHZZ	5961-00-950-9887	JAN1N827	81349	SCND DVC,DIODE	EA	1
C-12	43	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER,FLAT	EA	2
C-12	44	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER,LOCK	EA	2
C-12	45	PAHZZ	5305-00-054-5650	MS51957-16	96906	SCR, MACH, PAN MD	EA	2
C-12	46	XA		5052027-1	57958	PRINTED WRG BD	EA	1





PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A8  
 Figure C-13. CCA, Micro Memory 5052057-1 (Sheet 1 of 2)

56376

LEGEND

REF DES	INDEX NO.
C1	1
C2	2
C3	2
C4	2
C5	2
C6	2
C7	2
C8	2
C9	2
C10	2
C11	2
C12	2
C13	2
C14	2
C15	2
C16	2
C17	2
C18	2
C19	2
C20	2
C21	2
C22	2
C23	2
C24	2
C25	2
C26	2
C27	2
C28	2
C29	2
C30	2
C31	2
C32	2
C33	2
C34	2
J1	3
L1	4
L2	4
R1	5
U1	6
U2	7
U3	8
U4	9
U5	10
U6	11
U7	12
U8	13
U9	14
U10	15
U11	16
U12	17
U13	18
U14	19
U16	16
U17	16
U18	16
U19	16
U20	16
U21	16
U22	20
U23	19
U24	21
U25	16
U26	16
U27	16
Z1	25

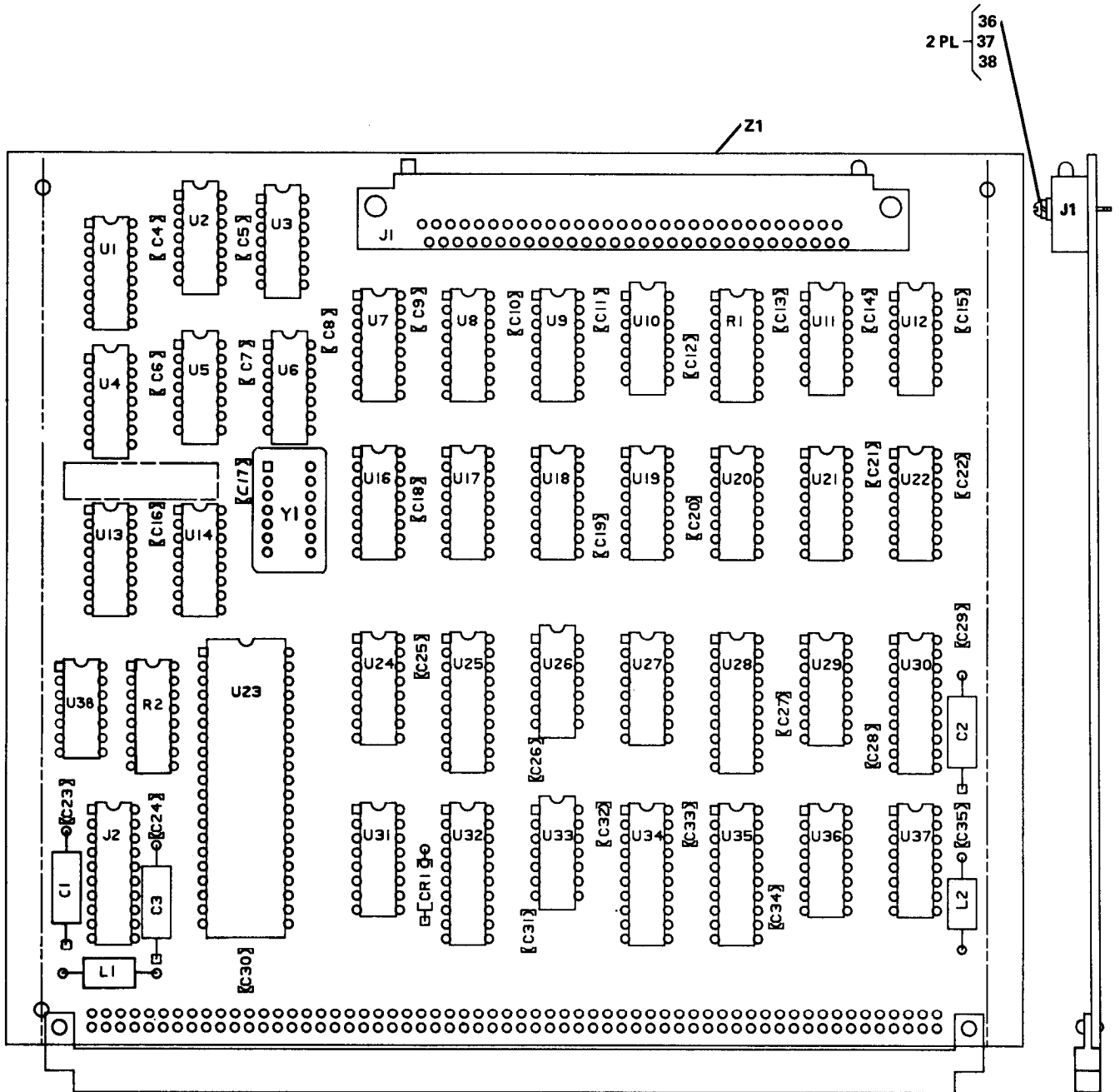
56377

Figure C-13. CCA, Micro Memory 5052057-1 (Sheet 2 of 2)



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 11 CCA, MICRO MEMORY ( 57958 ) 5052057-1		
C-13	1	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA	1
C-13	2	PAHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP,FXD,CER	EA	33
C-13	3	PAHZZ	5935-01-098-0711	5068183-1	57958	CONN,RCPT,ELEC	EA	1
C-13	4	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA	2
C-13	5	PAHZZ	5905-01-039-9710	M8340102M1001GB	81349	RES NTWK, FILM	EA	1
C-13	6	PAHZZ		5053286-1	57958	MICROCKT,DGTL	EA	1
C-13	7	PAHZZ		5053286-2	57958	MICROCKT,DGTL	EA	1
C-13	8	PAHZZ		5053286-3	57958	MICROCKT,DGTL	EA	1
C-13	9	PAHZZ		5053286-4	57958	MICROCKT,DGTL	EA	1
C-13	10	PAHZZ		5053286-5	57958	MICROCKT,DGTL	EA	1
C-13	11	PAHZZ		5053286-6	57958	MICROCKT,DGTL	EA	1
C-13	12	PAHZZ		5053286-7	57958	MICROCKT,DGTL	EA	1
C-13	13	PAHZZ		5053286-8	57958	MICROCKT,DGTL	EA	1
C-13	14	PAHZZ		5053286-9	57958	MICROCKT,DGTL	EA	1
C-13	15	PAHZZ		5053286-10	57958	MICROCKT,DGTL	EA	1
C-13	16	PAHZZ	5962-01-078-8678	5068027-1	57958	MICROCKT,DGTL	EA	10
C-13	17	PAHZZ	5962-01-026-6052	M38510-07005BCX	81349	MICROCKT,DGTL	EA	1
C-13	18	PAHZZ	5962-01-017-5985	5068021-1	57958	MICROCKT,DGTL	EA	1
C-13	19	PAHZZ	5962-01-026-2489	M38510-07003BCX	81349	MICROCKT,DGTL	EA	2
C-13	20	PAHZZ	5962-01-043-3941	M38510-07501BCX	81349	MICROCKT,DGTL	EA	1
C-13	21	PAHZZ	5962-01-096-5757	M38510-07101BCX	81349	MICROCKT,DGTL	EA	1
C-13	22	PAHZZ	5305-00-054-5650	MS51957-16	96906	SCR,MACH,PAN HD	EA	2
C-13	23	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER,LOCK	EA	2
C-13	24	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER,FLAT	EA	2
C-13	25	XA		5052059-1	57958	PRINTED NRG BD	EA	1





PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A9  
 Figure C-14. CCA, Control Sequencer 5052045-1 (Sheet 1 of 2)

56378

LEGEND

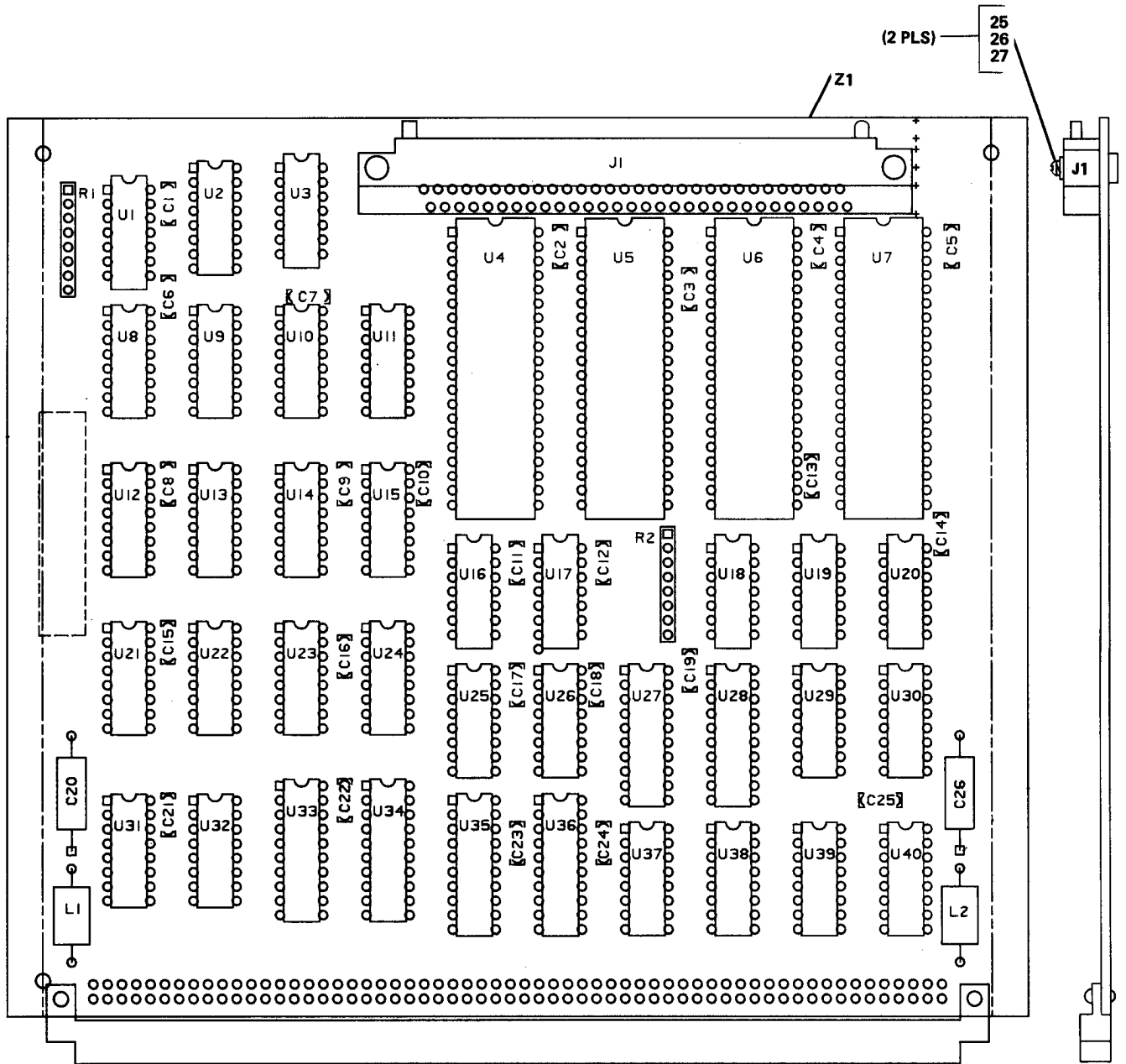
REF DES	INDEX NO.	REF DES	INDEX NO.
C1	1	U26	27
C2	1	U27	28
C3	1	U28	29
C4	2	U29	28
C5	2	U30	29
C6	2	U31	19
C7	2	U32	26
C8	2	U33	30
C9	2	U34	31
C10	2	U35	31
C11	2	U36	32
C12	2	U37	33
C13	2	U38	34
C14	2	Y1	35
C15	2	Z1	39
C16	2		
C17	2		
C18	2		
C19	2		
C20	2		
C21	2		
C22	2		
C23	2		
C24	2		
C25	2		
C26	2		
C27	2		
C28	2		
C29	2		
C30	2		
C31	2		
C32	2		
C33	2		
C34	2		
C35	2		
CR1	3		
J1	4		
J2	5		
L1	6		
L2	6		
R1	7		
R2	8		
U1	9		
U2	10		
U3	11		
U4	12		
U5	13		
U6	14		
U7	15		
U8	15		
U9	15		
U10	16		
U11	13		
U12	17		
U13	18		
U14	19		
U16	20		
U17	20		
U18	20		
U19	21		
U20	22		
U21	23		
U22	24		
U23	25		
U24	19		
U25	26		

56378

Figure C-14. CCA, Control Sequencer 5052045-1 (Sheet 2 of 2)

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 12 CCA, CONTROL SEQUENCER (57958) 5052045-1		
C-14	1	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA	3
C-14	2	PAHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP,FXD,CER	EA	32
C-14	3	PAHZZ	5961-01-038-6918	JAN1N4148-1	81349	SCND DVC, DIODE	EA	1
C-14	4	PAHZZ	5935-01-098-0711	5068183-1	57958	CONN,RCPT,ELEC	EA	1
C-14	5	PAHZZ	5935-01-094-8050	M83734-13-014	81349	SKT, ELEC CMPNT	EA	1
C-14	6	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA	2
C-14	7	PAHZZ	5905-01-039-9710	M8340102M1001GB	81349	RES NTHK, FILM	EA	1
C-14	8	PAHZZ	5905-01-071-1740	M8340102M2001GB	81349	RES NTHK, FILM	EA	1
C-14	9	PAHZZ	5962-01-050-5248	M38510-071068BEX	81349	MICROCKT,DGTL	EA	1
C-14	10	PAHZZ	5962-01-039-4752	M38510-07401BCX	81349	MICROCKT,DGTL	EA	1
C-14	11	PAHZZ	5962-01-021-5875	M38510-07001BCX	81349	MICROCKT,DGTL	EA	1
C-14	12	PAHZZ	5962-01-026-2490	M38510-070068CX	81349	MICROCKT,DGTL	EA	1
C-14	13	PAHZZ	5962-01-026-2489	M38510-07003BCX	81349	MICROCKT,DGTL	EA	2
C-14	14	PAHZZ	5962-01-096-5757	M38510-07101BCX	81349	MICROCKT,DGTL	EA	1
C-14	15	PAHZZ	5962-01-069-2637	M38510-31512BEX	81349	MICROCKT,DGTL	EA	3
C-14	16	PAHZZ	5962-01-017-5985	5068021-1	57958	MICROCKT,DGTL	EA	1
C-14	17	PAHZZ	5962-01-043-3941	M38510-07501BCX	81349	MICROCKT,DGTL	EA	1
C-14	18	PAHZZ	5962-01-042-8074	M38510-07901BEX	81349	MICROCKT,DGTL	EA	1
C-14	19	PAHZZ	5962-01-058-9435	M38510-07105BEX	81349	MICROCKT,DGTL	EA	3
C-14	20	PAHZZ	5962-01-050-0921	M38510-30903BEX	81349	MICROCKT,DGTL	EA	3
C-14	21	PAHZZ	5962-01-151-7555	5053287-1	57958	MICROCKT,DGTL	EA	1
C-14	22	PAHZZ		5053287-2	57958	MICROCKT,DGTL	EA	1
C-14	23	PAHZZ		5053287-3	57958	MICROCKT,DGTL	EA	1
C-14	24	PAHZZ		5053287-4	57958	MICROCKT,DGTL	EA	1
C-14	25	PAHZZ		78017020X	14933	MICROCKT,DGTL	EA	1
C-14	26	PAHZZ	5962-01-085-2943	5054354-1	57958	MICROCKT,DGTL	EA	2
C-14	27	PAHZZ	5962-01-034-9832	M38510-31004BCX	81349	MICROCKT,DGTL	EA	1
C-14	28	PAHZZ	5962-01-027-1743	5068035-1	57958	MICROCKT,DGTL	EA	2
C-14	29	PAHZZ	5962-01-078-8678	5068027-1	57958	MICROCKT,DGTL	EA	2
C-14	30	PAHZZ	5962-01-061-6583	M38510-31302BCX	81349	MICROCKT,DGTL	EA	1
C-14	31	PAHZZ	5962-01-148-6135	5068028-1	57958	MICROCKT,DGTL	EA	2
C-14	32	PAHZZ	5962-01-102-4229	M38510-07702BEX	81349	MICROCKT,DGTL	EA	1
C-14	33	PAHZZ		M38510/07701BEX	81349	MICROCKT,DGTL	EA	1
C-14	34	PAHZZ	5962-01-034-2146	M38510-08101BCX	81349	MICROCKT,DGTL	EA	1
C-14	35	PAHZZ		5054906-5	57958	OSCILLATOR,RF	EA	1
C-14	36	PAHZZ	5305-00-054-5650	MS51957-16	96906	SCR, MACH, PAN HD	EA	2
C-14	37	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER,FLAT	EA	2
C-14	38	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER,LOCK	EA	2
C-14	39	XA		5052047-1	57958	PRINTED WRG BD	EA	1





PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A10  
Figure C-15. CCA, Address Generator 5052037-1 (Sheet 1 of 2)

56380

LEGEND

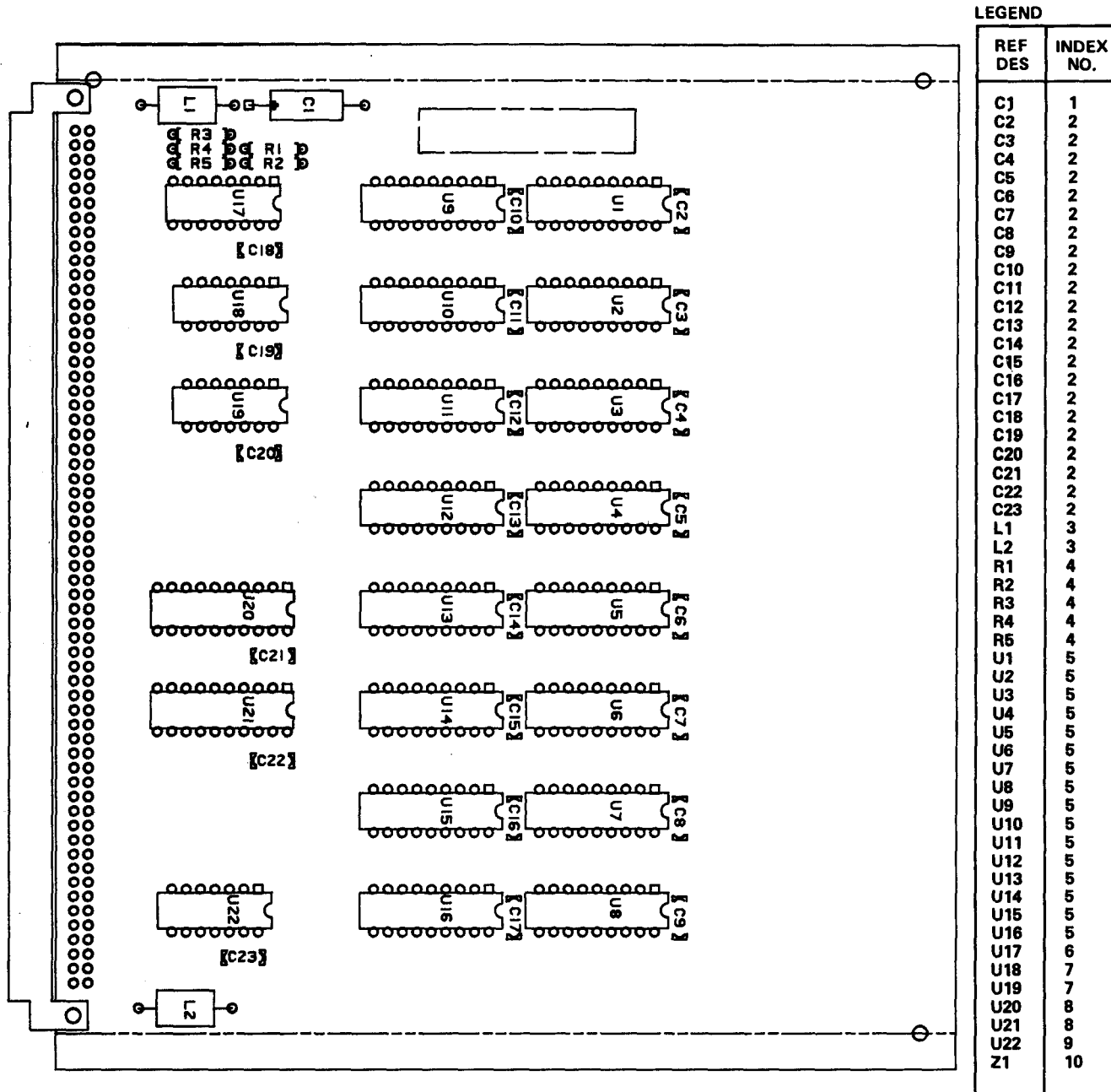
REF DES	INDEX NO.
C1	1
C2	1
C3	1
C4	1
C5	1
C6	1
C7	1
C8	1
C9	1
C10	1
C11	1
C12	1
C13	1
C14	1
C15	1
C16	1
C17	1
C18	1
C19	1
C20	2
C21	1
C22	1
C23	1
C24	1
C25	1
C26	2
J1	3
L1	4
L2	4
R1	5
R2	5
U1	6
U2	7
U3	8
U4	9
U5	9
U6	9
U7	9
U8	10
U9	11
U10	11
U11	12
U12	13
U13	14
U14	14
U15	14
U16	15
U17	16
U18	17
U19	15
U20	18
U21	19
U22	19
U23	14
U24	14
U25	20
U27	21
U28	21
U29	22
U30	22
U31	19
U32	19
U33	23
U34	23
U35	24
U36	24
Z1	28

56381

Figure C-15. CCA, Address Generator 5052037-1 (Sheet 2 of 2)



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M
						GROUP 13 CCA, ADDRESS GENERATOR (57958) 5052037-1	
C-15	1	PAHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP, FXD, CER	EA
C-15	2	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP, FXD, ELCTLT	EA
C-15	3	PAHZZ	5935-01-098-0711	5068183-1	57958	CONN, RCPT, ELEC	EA
C-15	4	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL, RF	EA
C-15	5	PAHZZ	5905-01-116-8932	M8340105M1001GC	81349	RES NTWK, FILM	EA
C-15	6	PAHZZ	5962-01-043-3941	M38510-07501BCX	81349	MICROCKT, DGTL	EA
C-15	7	PAHZZ	5962-01-124-9724	5054363-1	57958	MICROCKT, DGTL	EA
C-15	8	PAHZZ	5962-01-021-5875	M38510-07001BCX	81349	MICROCKT, DGTL	EA
C-15	9	PAHZZ	5962-01-086-7636	5068119-1	57958	MICROCKT, DGTL	EA
C-15	10	PAHZZ	5962-00-329-8166	M38510-01403BEX	81349	MICROCKT, DGTL	EA
C-15	11	PAHZZ	5962-01-026-0494	5054364-1	57958	MICROCKT, DGTL	EA
C-15	12	PAHZZ	5962-01-128-9755	5068052-1	57958	MICROCKT, DGTL	EA
C-15	13	PAHZZ	5962-01-058-9435	M38510-07105BEX	81349	MICROCKT, DGTL	EA
C-15	14	PAHZZ	5962-01-043-3942	M38510-07903BEX	81349	MICROCKT, DGTL	EA
C-15	15	PAHZZ	5962-01-017-5985	5068021-1	57958	MICROCKT, DGTL	EA
C-15	16	PAHZZ	5962-01-066-8393	M38510-08003BCX	81349	MICROCKT, DGTL	EA
C-15	17	PAHZZ	5962-01-091-8195	M38510-30003BCX	81349	MICROCKT, DGTL	EA
C-15	18	PAHZZ	5962-01-096-5757	M38510-07101BCX	81349	MICROCKT, DGTL	EA
C-15	19	PAHZZ	5962-01-027-5649	5068070-1	57958	MICROCKT, DGTL	EA
C-15	20	PAHZZ	5962-01-050-0921	M38510-30903BEX	81349	MICROCKT, DGTL	EA
C-15	21	PAHZZ	5962-01-102-3114	7801101RX	14933	MICROCKT, DGTL	EA
C-15	22	PAHZZ	5962-01-135-8471	5068024-1	57958	MICROCKT, DGTL	EA
C-15	23	PAHZZ	5962-01-078-8678	5068027-1	57958	MICROCKT, DGTL	EA
C-15	24	PAHZZ	5962-01-148-6135	5068028-1	57958	MICROCKT, DGTL	EA
C-15	25	PAHZZ	5305-00-054-5650	MS51957-16	96906	SCR, MACH, PAN HD	EA
C-15	26	PAHZZ	5310-00-595-6211	MS15795-803	96906	WASHER, FLAT	EA
C-15	27	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK	EA
C-15	28	XA		5052039-1	57958	PRINTED WRG BD	EA

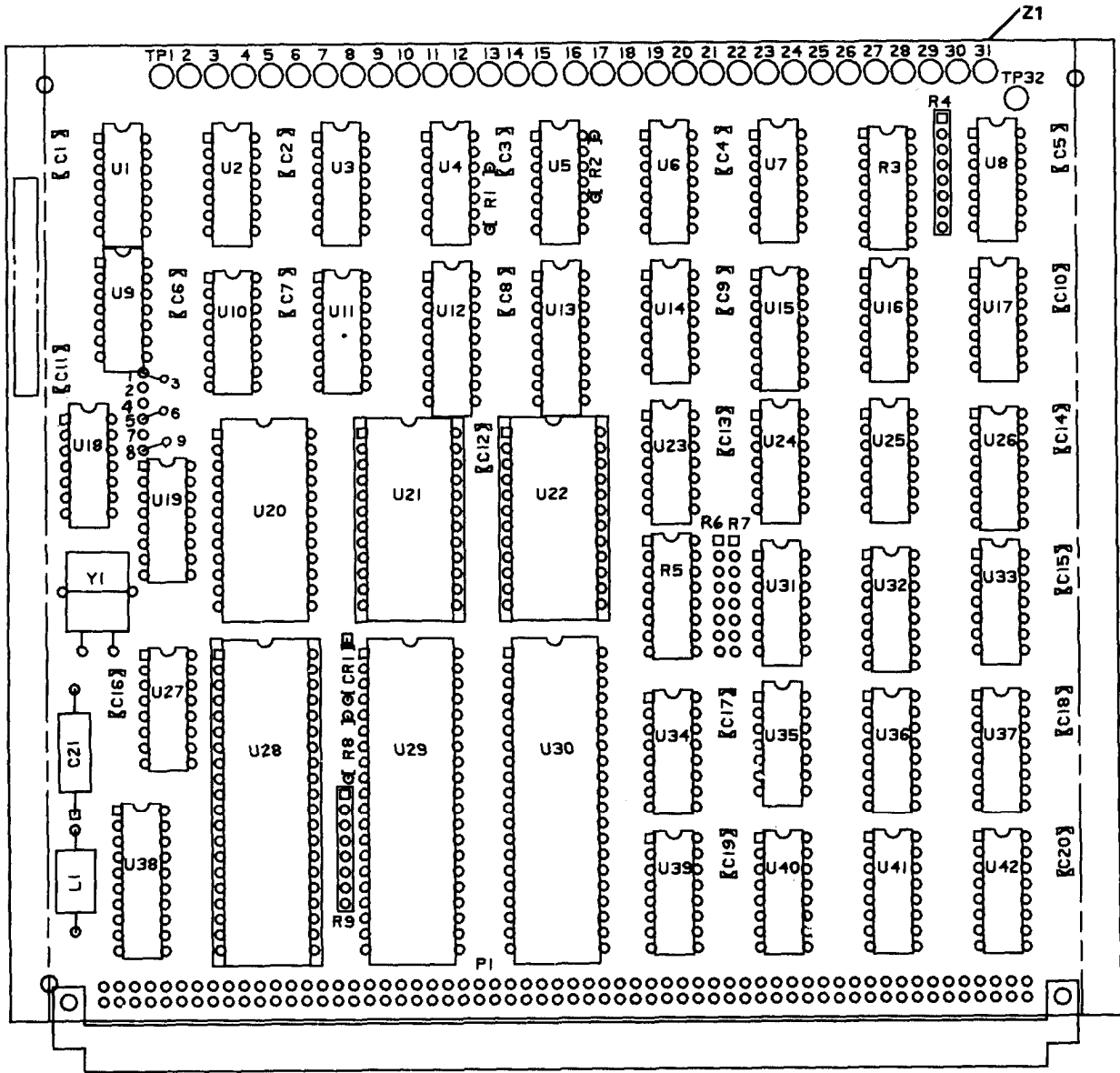


56382

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A11  
 Figure C-16. CCA, 4K Ram 5052033-1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	J/M
						GROUP 14 CCA, 4K RAM (57958) 5052033-1	
C-16	1	AHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELCTLT	EA 1
C-16	2	AHZZ	5910-00-600-6889	M39014-02-1230	81349	CAP,FXD,CER	EA 22
C-16	3	AHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA 2
C-16	4	AHZZ	5905-00-458-9500	RCRO5G102JS	81349	RES,FXD,CMPSN	EA 5
C-16	5	AHZZ	5999-01-143-1733	5054365-1	57958	MICROCKT,DGTL	EA 16
C-16	6	AHZZ	5962-01-007-5813	5068020-1	57958	MICROCKT,DGTL	EA 1
C-16	7	AHZZ	5962-01-026-2489	M38510-07003BCX	81349	MICROCKT,DGTL	EA 2
C-16	8	AHZZ	5962-01-148-6135	5068028-1	57958	MICROCKT,DGTL	EA 2
C-16	9	AHZZ	5962-01-017-5985	5068021-1	57958	MICROCKT,DGTL	EA 1
C-16	10	A		5052035-1	57958	PRINTED WRG BD	EA 1





56383

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A7  
 Figure C-17. CCA, RC Bus Interface/8085 CPU 5052049-3 (Sheet 1 of 2)

LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.
C1	1	U37	31
C2	1	U38	34
C3	1	U39	35
C4	1	U40	28
C5	1	U41	36
C6	1	U42	28
C7	1	XU21	37
C8	1	XU22	37
C9	1	XU28	38
C10	1	Y1	39
C11	1	Z1	40
C12	1		
C13	1		
C14	1		
C15	1		
C16	2		
C17	1		
C18	1		
C19	1		
C20	1		
C21	3		
CR1	4		
L1	5		
R1	6		
R2	6		
R3	7		
R4	8		
R5	9		
R8	10		
R9	11		
U1	12		
U2	13		
U3	14		
U4	15		
U5	16		
U6	15		
U7	17		
U8	18		
U9	18		
U10	19		
U11	19		
U12	20		
U13	20		
U14	13		
U15	21		
U16	17		
U17	15		
U18	22		
U19	23		
U20	24		
U21	25		
U22	26		
U23	13		
U24	17		
U25	15		
U26	27		
U27	28		
U28	29		
U29	30		
U30	30		
U31	16		
U32	31		
U33	15		
U34	32		
U35	33		
U36	32		

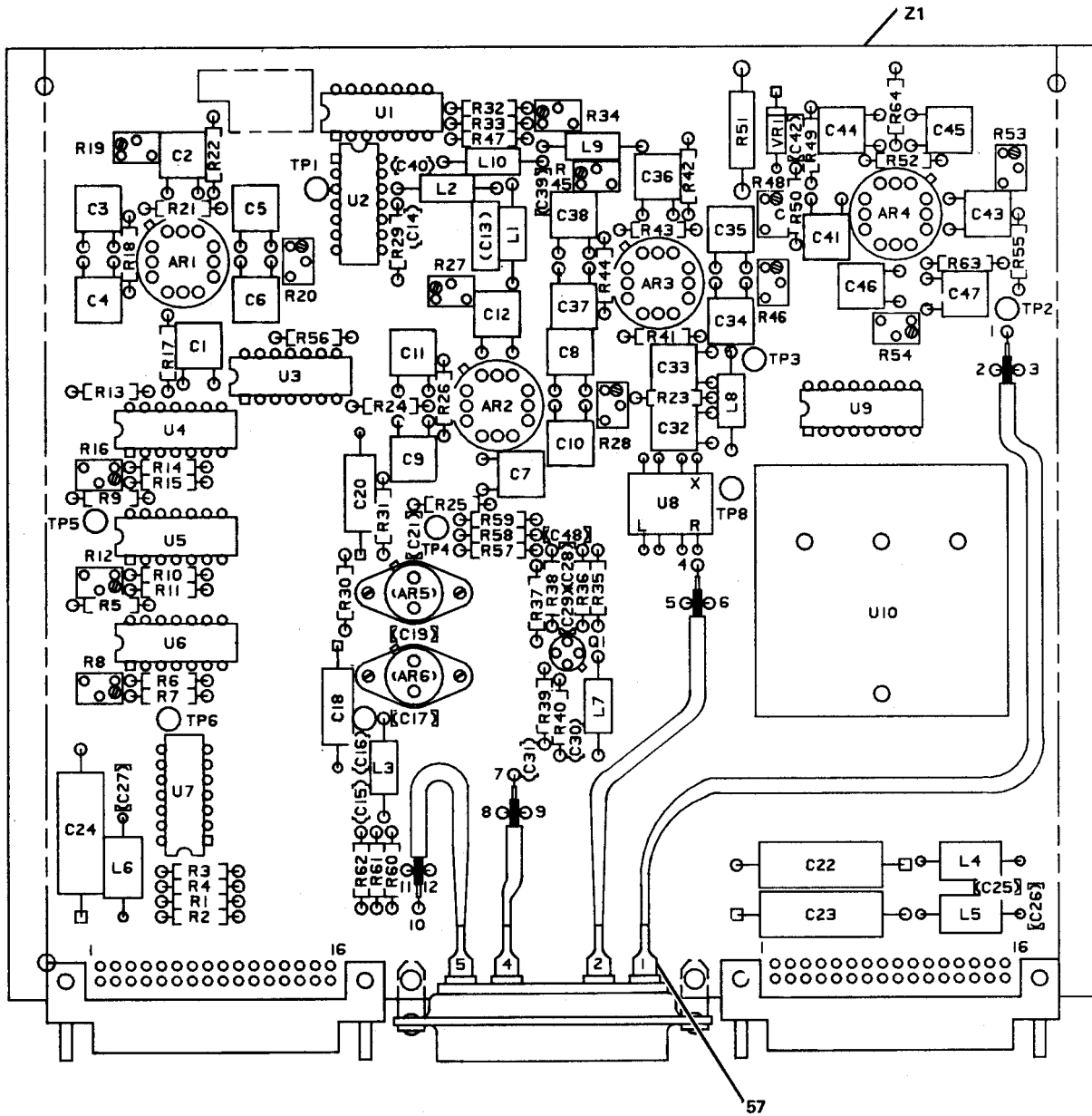
56384

Figure C-17. CCA, RC Bus Interface/8085 CPU 5052049-3 (Sheet 2 of 2)

(A) FIG NO	(B) ITEM NO	SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION  USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 15 CCA, RC BUS INTERFACE/ 8085 CPU (57958) 5052049-3		
C-17	1	PAHZZ	5910-00-513-5385	M39014-02-1218	81349	CAP,FXD,CER	EA	19
C-17	2	PAHZZ	5910-01-042-3759	M39014-02-1407	81349	CAP,FXD,CER	EA	1
C-17	3	PAHZZ	5910-00-935-3511	M39003-01-2286	81349	CAP,FXD,ELECTLT	EA	1
C-17	4	PAHZZ	5961-01-038-6918	JAN1N4148-1	81349	SCND DVC, DIODE	EA	1
C-17	5	PAHZZ	5950-00-832-4881	0213-1-1060-1	57958	COIL,RF	EA	1
C-17	6	PAHZZ	5905-00-012-2824	RLR05C1001GR	81349	RES,FXD,FILM	EA	2
C-17	7	PAHZZ	5905-01-039-9710	M8340102M1001GB	81349	RES NTMK, FILM	EA	1
C-17	8	PAHZZ	5905-01-116-8932	M8340105M1001GC	81349	RES NTMK, FILM	EA	1
C-17	9	PAHZZ	5905-01-040-0392	M8340102M1002GB	81349	RES NTMK, FILM	EA	1
C-17	10	PAHZZ	5905-00-412-4047	RCR05G564JS	81349	RES,FXD,CMPSN	EA	1
C-17	11	PAHZZ	5905-01-119-6151	M8340105M1002GC	81349	RES NTMK, FILM	EA	1
C-17	12	PAHZZ	5962-01-091-8195	M38510-30003BCX	81349	MICROCKT,DGTL	EA	1
C-17	13	PAHZZ	5962-01-093-0110	M38510-30001BCX	81349	MICROCKT,DGTL	EA	3
C-17	14	PAHZZ	5962-01-034-9832	M38510-31004BCX	81349	MICROCKT,DGTL	EA	1
C-17	15	PAHZZ	5962-01-096-4169	M38510-30102BCX	81349	MICROCKT,DGTL	EA	5
C-17	16	PAHZZ	5962-00-264-3566	0213-1-1001-2	57958	MICROCKT,DGTL	EA	2
C-17	17	PAHZZ	5962-01-039-6395	M38510-30301BCX	81349	MICROCKT,DGTL	EA	3
C-17	18	PAHZZ	5962-00-341-0544	M38510-00105BCX	81349	MICROCKT,DGTL	EA	2
C-17	19	PAHZZ	5962-01-067-7728	5054345-1	57958	MICROCKT,DGTL	EA	2
C-17	20	PAHZZ	5962-01-139-0704	5054344-1	57958	MICROCKT,DGTL	EA	2
C-17	21	PAHZZ		M38510-15002BEX	81349	MICROCKT,DGTL	EA	1
C-17	22	PAHZZ	5962-00-361-8648	M38510-00701BCX	81349	MICROCKT,DGTL	EA	1
C-17	23	PAHZZ	5962-01-027-1748	5054321-1	57958	MICROCKT,DGTL	EA	1
C-17	24	PAHZZ	5962-01-074-8172	5054346-1	57958	MICROCKT,DGTL	EA	1
C-17	25	PAHZZ		5053288-5	57958	MICROCKT,DGTL	EA	1
C-17	26	PAHZZ		5053288-6	57958	MICROCKT,DGTL	EA	1
C-17	27	PAHZZ	5962-01-019-6176	0213-1-1295-2	57958	MICROCKT,DGTL	EA	1
C-17	28	PAHZZ	5962-01-096-4172	M38510-30701BEX	81349	MICROCKT,DGTL	EA	3
C-17	29	PAHZZ		7901001QX	14933	MICROCKT,DGTL	EA	1
C-17	30	PAHZZ	5962-01-072-4143	5054337-1	57958	MICROCKT,DGTL	EA	2
C-17	31	PAHZZ	5962-01-065-7026	M38510-31504BEX	81349	MICROCKT,DGTL	EA	2
C-17	32	PAHZZ	5962-01-113-7057	5068082-1	57958	MICROCKT,DGTL	EA	2
C-17	33	PAHZZ	5962-01-096-5756	M38510-00903BCX	81349	MICROCKT,DGTL	EA	1
C-17	34	PAHZZ	5962-01-086-7634	M38510-32403BRX	81349	MICROCKT,DGTL	EA	1
C-17	35	PAHZZ	5962-01-106-7727	M38510-30608BEX	14933	MICROCKT,DGTL	EA	1
C-17	36	PAHZZ		5055509-1	57958	MICROCKT,DGTL	EA	1
C-17	37	PAHZZ	5935-01-084-6481	M83734-8-014	81349	SKT, ELEK CMPNT	EA	2
C-17	38	PAHZZ	5935-01-093-0731	M83734-10-014	81349	SKT, ELEK CMPNT	EA	1
C-17	39	PAHZZ		CR69AU6-144MHZ	81349	XTAL UNIT, QTZ	EA	1
C-17	40	XA		5052051-3	57958	PRINTED WRG BD	EA	1







PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A14  
 Figure C-18. CCA, IF Down Converter 5052017-1 (Sheet 1 of 2)

56722

LEGEND

REF DES	INDEX NO.	REF DES	INDEX NO.	REF DES	INDEX NO.
AR1	1	R2	25	U4	50
AR2	1	R3	25	U5	50
AR3	1	R4	25	U6	50
AR4	1	R5	26	U7*	51
AR5	2	R6	27	U8	53
AR6	2	R7	27	U9*	54
C1	3	R8	28	U10	55
C2	4	R9	26	VR1	56
C3	4	R10	29	Z1	58
C4	5	R11	29		
C5	4	R12	28		
C6	5	R13	26		
C7	4	R14	29		
C8	4	R15	29		
C9	5	R16	28		
C10	5	R17	30		
C11	4	R18	31		
C12	4	R19	32		
C13	6	R20	33		
C14	7	R21	25		
C15	8	R22	25		
C16	8	R23	25		
C17	4	R24	25		
C18	9	R25	34		
C19	4	R26	27		
C20	9	R27	32		
C21	4	R28	33		
C22	10	R29	35		
C23	10	R30	36		
C24	10	R31	36		
C25	4	R32	29		
C26	4	R33	29		
C27	4	R34	28		
C28	4	R35	37		
C29	4	R36	38		
C30	11	R37	39		
C31	12	R38	39		
C32	5	R39	38		
C33	5	R40	40		
C34	5	R41	41		
C35	4	R42	25		
C36	4	R43	25		
C37	5	R44	27		
C38	4	R45	32		
C39	13	R46	33		
C40	14	R47	35		
C41	4	R48	32		
C42	15	R49	42		
C43	4	R50	43		
C44	4	R51	44		
C45	5	R52	45		
C46	4	R53	46		
C47	5	R54	33		
C48	4	R55	36		
L1	16	R56	26		
L2	17	R57	27		
L3	18	R58	47		
L4	19	R59	27		
L5	19	R60	48		
L6	19	R61	49		
L7	20	R62	48		
L8	21	R63	25		
L9	22	R64	25		
L10	23	U1	50		
Q1	24	U2*	51		
R1	25	U3	52		

\*SEE CAUTION



CAUTION

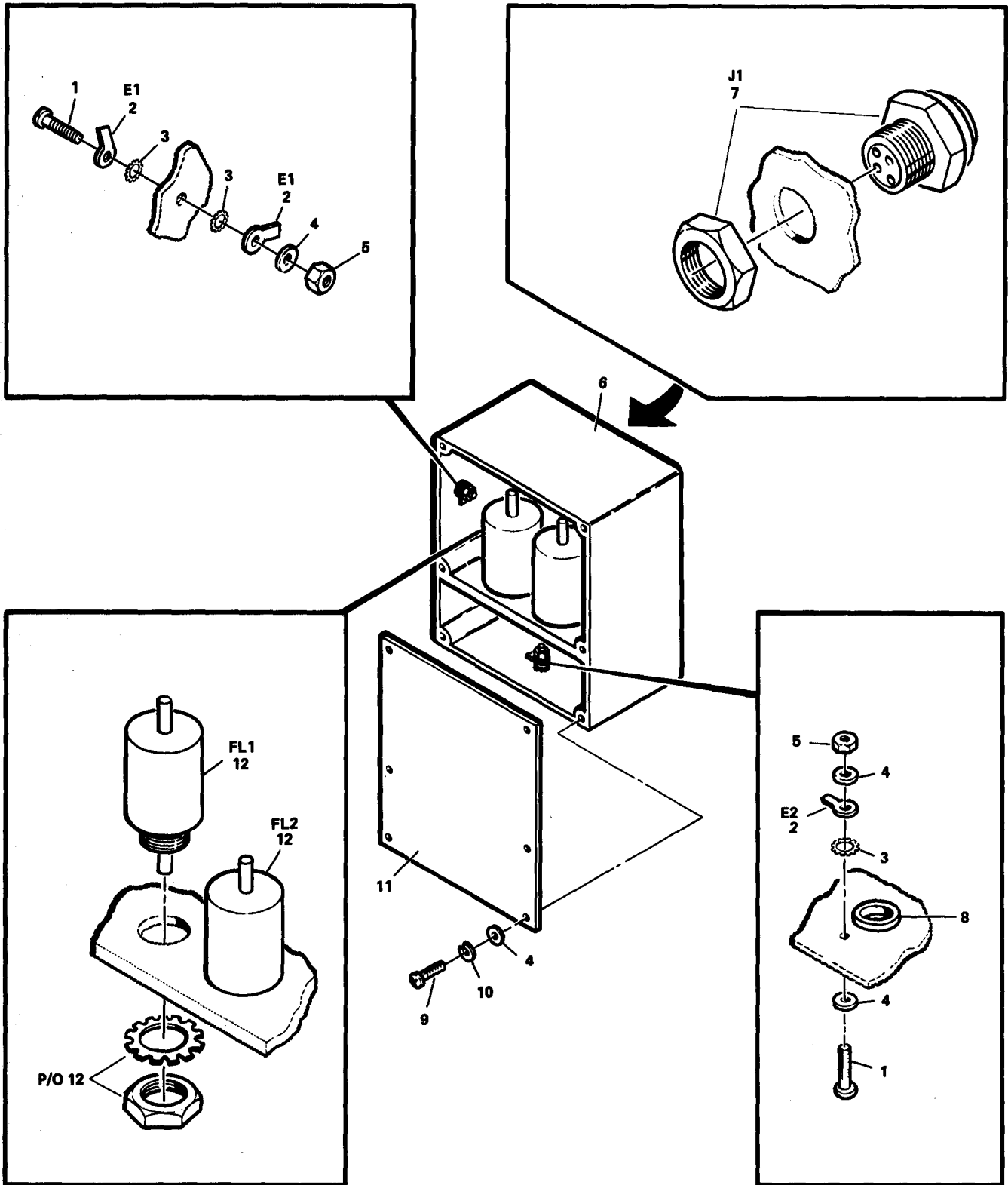


THIS DEVICE REQUIRES SPECIAL HANDLING AND PROCESSING TO PREVENT DAMAGE FROM ELECTROSTATIC DISCHARGE TRANSIENTS.

56723

Figure C-18. CCA, IF Down Converter 5052017-1 (Sheet 2 of 2)

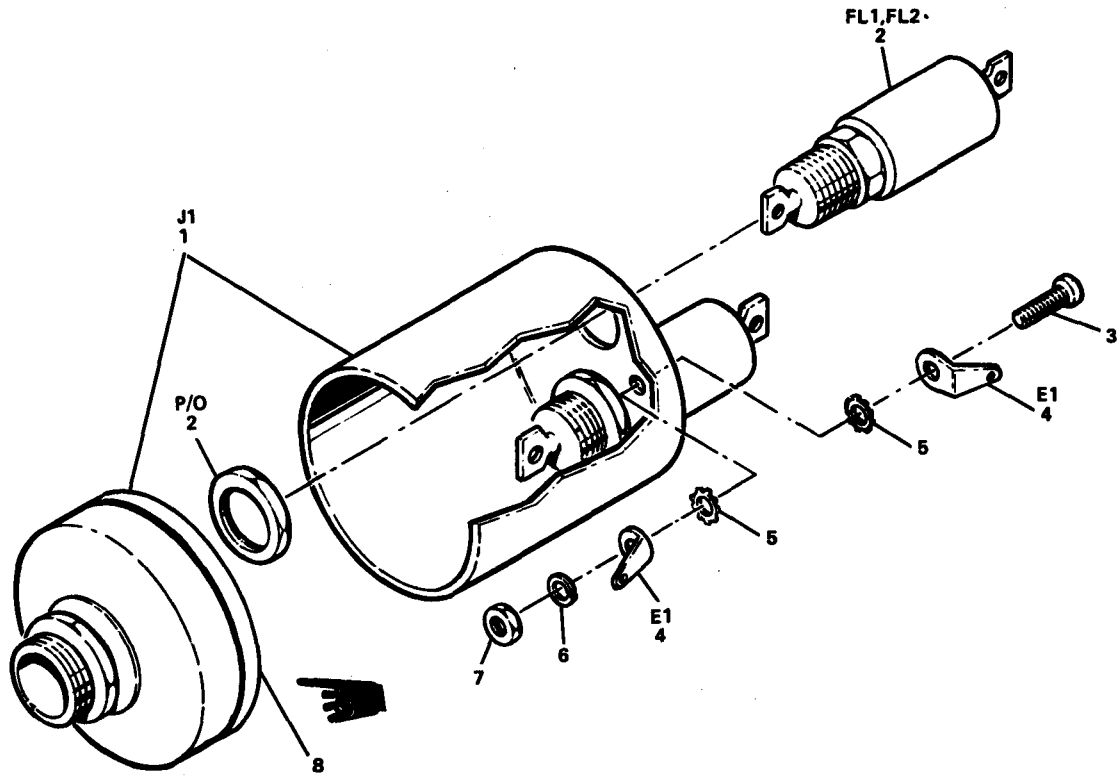
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	JTY INC IN NIT
						GROUP 16 CCA , IF DOWN CONVERTER (57958) 5052017-1		
C-18	1	'AHZZ	5962-01-139-0695	5054339-1	57958	MICROCKT,LIN	EA	4
C-18	2	'AHZZ	5962-01-138-0739	5054640-2	57958	AMPLIFIER,RF	EA	2
C-18	3	'AHZZ	5910-00-101-2381	M39014-02-1206	11349	CAP,FXD,CER	EA	1
C-18	4	'AHZZ	5910-01-042-3759	M39014-02-1407	11349	CAP,FXD,CER	EA	23
C-18	5	'AHZZ	5910-00-513-5385	M39014-02-1218	11349	CAP,FXD,CER	EA	10
C-18	6	'AHZZ	5910-01-093-4719	CMR05F111JPD	11349	CAP,FXD,MICA	EA	1
C-18	7	'AHZZ	5910-00-114-0755	M39014-01-1209	11349	CAP,FXD,CER	EA	1
C-18	8	'AHZZ	5910-01-036-7696	M39014-01-1233	11349	CAP,FXD,CER	EA	2
C-18	9	'AHZZ	5910-00-935-3511	M39003-01-2286	11349	CAP,FXD,ELCTLT	EA	2
C-18	10	'AHZZ	5910-00-998-6949	M39003-01-2306	11349	CAP,FXD,ELCTLT	EA	3
C-18	11	PAH	5910-01-025-5001	M39014-01-1221	11349	CAP,FXD,CER	EA	1
C-18	12	'AHZZ	5910-01-042-4449	M39014-01-1231	11349	CAP,FXD,CER	EA	1
C-18	13	'AHZZ	5910-00-113-5312	M39014-02-1202	11349	CAP,FXD,CER	EA	1
C-18	14	'AHZZ	5910-00-106-3852	M39014-01-1228	11349	CAP,FXD,CER	EA	1
C-18	15	AHZ	5910-00-600-6889	M39014-02-1230	11349	CAP,FXD,CER	EA	1
C-18	16	'AHZZ	5950-00-496-1518	MS75089-6	16906	COIL,RF	EA	1
C-18	17	'AHZZ	5950-00-553-9439	MS75089-4	16906	COIL,RF	EA	1
C-18	18	'AHZZ	5950-00-932-6920	MS75088-3	16906	COIL,RF	EA	1
C-18	19	'AHZZ	5950-00-832-4881	0213-1-1060-1	77958	COIL,RF	EA	3
C-18	20	'AHZZ	5950-00-329-6763	MS75088-13	16906	COIL,RF	EA	1
C-18	21	'AHZZ	5950-01-008-8645	MS75089-3	16906	COIL,RF	EA	1
C-18	22	'AHZZ	5950-01-013-0788	MS75089-19	16906	COIL,RF	EA	1
C-18	23	'AHZZ	5950-00-496-1509	MS75089-17	16906	COIL,RF	EA	1
C-18	24	'AHZZ	5961-00-905-4815	JAN2M918	11349	TRANSISTOR	EA	1
C-18	25	'AHZZ	5905-00-458-9263	RLR07C1000GR	11349	RES,FXD,FILM	EA	12
C-18	26	'AHZZ	5905-00-419-2822	RLR07C2001GR	11349	RES,FXD,FILM	EA	4
C-18	27	'AHZZ	5905-00-458-9267	RLR07C2200GR	11349	RES,FXD,FILM	EA	6
C-18	28	'AHZZ	5905-01-036-9409	RJR26FM501M	11349	RES,VAR,MNM	EA	4
C-18	29	'AHZZ	5905-00-402-1396	RLR07C3600GR	11349	RES,FXD,FILM	EA	6
C-18	30	'AHZZ	5905-00-240-7950	RLR07C1501GR	11349	RES,FXD,FILM	EA	1
C-18	31	'AHZZ	5905-00-419-0189	RLR07C1801GR	11349	RES,FXD,FILM	EA	1
C-18	32	'AHZZ	5905-01-011-9501	RJR26FM102M	11349	RES,VAR,MNM	EA	4
C-18	33	'AHZZ	5905-01-044-9116	RJR26FM502M	11349	RES,VAR,MNM	EA	4
C-18	34	'AHZZ	5905-00-721-0010	RLR07C2400GR	11349	RES,FXD,FILM	EA	1
C-18	35	'AHZZ	5905-01-047-1531	RLR07C1002GR	11349	RES,FXD,FILM	EA	2
C-18	36	'AHZZ	5905-00-482-0505	RLR07C10R0GR	11349	RES,FXD,FILM	EA	3
C-18	37	'AHZZ	5905-00-240-7948	RLR07C1201GR	11349	RES,FXD,FILM	EA	1
C-18	38	'AHZZ	5905-00-197-4197	RLR07C39R0GR	11349	RES,FXD,FILM	EA	2
C-18	39	'AHZZ	5905-00-419-3949	RLR07C8201GR	11349	RES,FXD,FILM	EA	2
C-18	40	'AHZZ	5905-00-240-7979	RLR07C4700GR	11349	RES,FXD,FILM	EA	1
C-18	41	'AHZZ	5905-00-223-2610	RLR07C51R0GR	11349	RES,FXD,FILM	EA	1
C-18	42	'AHZZ	5905-00-758-2917	RLR07C5100GR	11349	RES,FXD,FILM	EA	1
C-18	43	'AHZZ	5905-01-047-1529	RLR07C1001GR	11349	RES,FXD,FILM	EA	1
C-18	44	'AHZZ	5905-00-480-5087	RLR20C4300GR	11349	RES,FXD,FILM	EA	1
C-18	45	'AHZZ	5905-01-042-3729	RLR07C3301GR	11349	RES,FXD,FILM	EA	1
C-18	46	'AHZZ	5905-01-012-3770	RJR26FM103M	11349	RES,VAR,MNM	EA	1
C-18	47	'AHZZ	5905-00-483-0457	RLR07C24R0GR	11349	RES,FXD,FILM	EA	1
C-18	48	'AHZZ	5905-00-450-8530	RLR07C1500GR	11349	RES,FXD,FILM	EA	2
C-18	49	'AHZZ	5905-00-471-1947	RLR07C36R0GR	11349	RES,FXD,FILM	EA	1
C-18	50	'AHZZ		7801401CX	14933	MICROCKT,DGTL	EA	4
C-18	51	'AHZZ	5962-00-318-2401	5054347-1	57958	MICROCKT,LIN	EA	2
C-18	52	'AHZZ	5962-00-341-0544	M38510-00105BCX	11349	MICROCKT,DGTL	EA	1
C-18	53	'AHZZ	5895-01-151-6009	5054285-1	57958	MIXER,DBL BAL	EA	1
C-18	54	'AHZZ		M38510-11103BEX	11349	MICROCKT,LIN	EA	1
C-18	55	'AHZZ	5955-01-141-8670	5054964-3	57958	OSCILLATOR,RF	EA	1
C-18	56	'AHZZ	5961-00-950-9887	JAN1N627	11349	SCND DVC,DIODE	EA	1
C-18	57	'AHZZ	5999-01-029-0591	5054823-2	57958	CONTACT,ELEC	EA	4
C-18	58	LA		5052019-1	57958	PRINTED WRG BD	EA	1



56724

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A16  
Figure C-19. Filter Assy., EMI 5051780-2

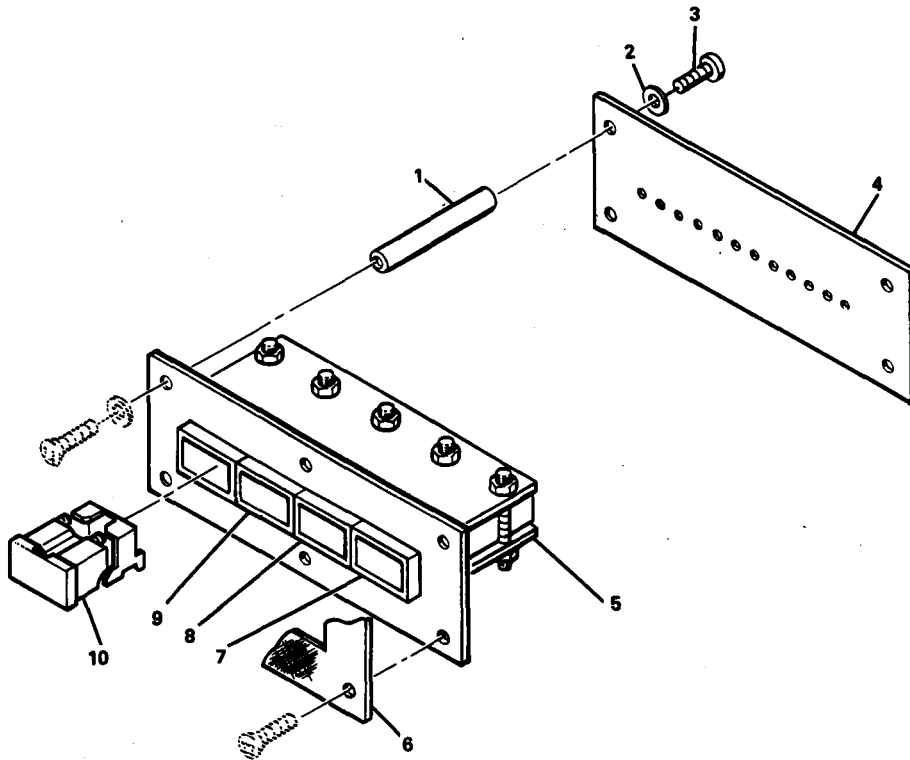
(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) [TEP NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	/M	TY NC IN NIT
						GROUP 17 FILTER ASSY. , EMI (57958) 5051780-2		
C-19	1	'AHZZ	5305-00-054-5651	MS51957-17	16906	SCR, MACH, PAN HD	EA	2
C-19	2	'AHZZ	5940-00-740-7933	0213-1-1167-1	17958	TERMINAL, LUG	EA	3
C-19	3	'AHZZ	5310-00-058-3599	MS35335-57	16906	WASHER, LOCK	EA	3
C-19	4	'AHZZ	5310-00-595-6211	MS15795-803	16906	WASHER, FLAT	EA	9
C-19	5	'AHZZ	5310-00-982-4999	MS21044C04	16906	NUT, SLFLKG, HEX	EA	2
C-19	6	'BHZZ		5051781-1	17958	HOUSING, FILTER	EA	1
C-19	7	'AHZZ	5935-00-481-4095	MS3474L12-3P	16906	CONN, RCPT, ELEC	EA	1
C-19	8	'AHZZ	5325-01-078-5181	MS35489-35	16906	GROMMET, NM	EA	1
C-19	9	'AHZZ	5305-00-054-5647	MS51957-13	16906	SCR, MACH, PAN HD	EA	6
C-19	10	'AHZZ	5310-00-933-8118	MS35338-135	16906	WASHER, LOCK	EA	6
C-19	11	'BHZZ		5051782-1	17958	COVER, FILTER	EA	1
C-19	12	'AHZZ	5915-01-138-0653	5054802-2	17958	FILTER, RFI	EA	2



56725

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A22  
Figure C-20. Filter Assy., Jack 5051805-1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 18 FILTER ASSY., JACK (57958) 5051805-1		
C-20	1	PAHZZ	5935-01-132-8592	5051823-1	57958	JACK, TELEPHONE	EA	1
C-20	2	PAHZZ	5915-01-131-7657	5054928-1	57958	FILTER, RFI	EA	2
C-20	3	PAHZZ	5305-00-054-5647	MS51957-13	96906	SCR, MACH, PAN HD	EA	1
C-20	4	PAHZZ	5940-00-050-2308	MS35431-3	96906	TERMINAL, LUG	EA	2
C-20	5	PAHZZ	5310-00-058-3599	MS35335-57	96906	WASHER, LOCK	EA	2
C-20	6	PAHZZ	5310-00-933-8118	MS35338-135	96906	WASHER, LOCK	EA	1
C-20	7	PAHZZ	5310-00-934-9748	MS35649-244	96906	NUT, PLAIN, HEX	EA	1
C-20	8	PAHZZ		C5121141	57958	SLEEVE	EA	1

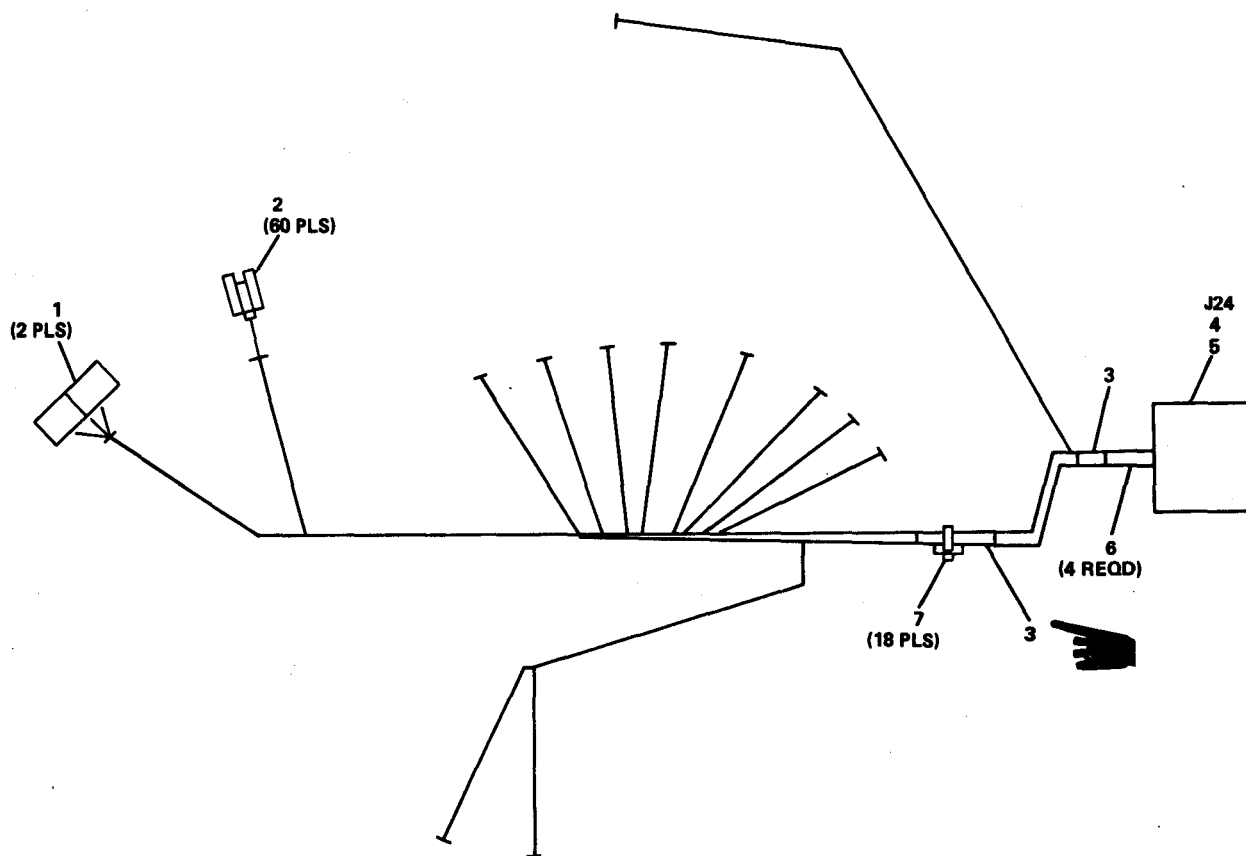


58726

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23A18 OR A23A19  
Figure C-21. Light Indicator Assy. 5053136-1



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 23 LIGHT INDICATOR ASSEMBLY (57958) 5053136-1		
C-21	1	PAHZZ	5845-00-409-6706	5054884-3	57958	SPACER,THD,RND	EA	4
C-21	2	PAHZZ	5310-00-773-7624	NAS620C6	80205	WASHER,FLAT	EA	4
C-21	3	PAHZZ	5305-00-054-6650	MS51957-26	96906	SCR,MACH,PAN HD	EA	8
C-21	4	PAHZZ		5052303-1	57958	PRINTED WRG BD	EA	1
C-21	5	XBHHH		5054721-1	57958	IND LIGHT ASSY	EA	1
C-21	6	PAHZZ		5053038-7	57958	SHLD GSKT, ELEK	EA	1
C-21	7	PAHZZ	6210-01-136-9091	5054907-105	57958	LIGHT,INDICATOR	EA	1
C-21	8	PAHZZ	6210-01-136-9090	5054907-104	57958	LIGHT,INDICATOR	EA	1
C-21	9	PAHZZ	6210-01-136-9089	5054907-103	57958	LIGHT,INDICATOR	EA	1
C-21	10	PAHZZ	6210-01-137-1808	5054907-102	57958	LIGHT,INDICATOR	EA	1



58442

PREFIX ALL REFERENCE DESIGNATIONS WITH: A23W22  
Figure C-22 Wiring Harness, Branched C5077580-1

(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCN	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 36 WIRING HARNESS, BRANCHED (57958) C5077580-1		
C-22	1	PAHZZ	5940-00-535-2620	0213-1-1042-11	57958	RETAINER, TERM	EA	2
C-22	2	PAHZZ	5940-00-168-8161	0213-1-1007-1	57958	TERMINAL, QDISC	EA	60
C-22	3	PAHZZ		5054784-1	57958	BAND, MARKER	EA	2
C-22	4	PAHZZ	5935-00-893-6809	MS3474L14-19S	96906	CONN, RCPT, ELEC	EA	1
C-22	5	PAHZZ	5935-00-205-8969	MS3416-14EN	96906	BKSHL, ELEC CONN	EA	1
C-22	6	PAHZZ	5940-00-857-3414	NA51746-2	80205	SPLICE, CNDCT	EA	4
C-22	7	PAHZZ	5975-00-727-5153	MS3367-4-9	96906	STRAP, TIEDOWN	EA	18

ILLUS		SMR CODE	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITE NO		NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION USABLE ON CODE	//	QTY INC IN INT
						GROUP 37 BULK MATERIAL		
BULK	1	AHZZ	5970-00-812-2967	M23053-5-108-0	81349	INSUL SLVG, ELEC	FT	V
BULK	2	AHZZ	5970-00-812-2969	M23053-5-104-0	81349	INSUL SLVG, ELEC	FT	V
BULK	3	AHZZ	5970-00-954-1622	M23053-5-105-0	81349	INSUL SLVG, ELEC	FT	V
BULK	4	AHZZ	5970-00-954-1624	M23053-5-107-0	81349	INSUL SLVG, ELEC	FT	V
BULK	5	AHZZ	5999-01-133-3337	5054835-1	57958	SHLD GSKT, ELEC	FT	V
BULK	6	AHZZ	6145-00-013-8651	M22759-11-16-9	81349	WIRE, ELECTRICAL	FT	V
BULK	7	AHZZ	6145-00-160-4775	03203	53909	WIRE, ELECTRICAL	FT	V
BULK	8	AHZZ	6145-00-577-3420	03224	53909	WIRE, ELECTRICAL	FT	V
BULK	9	AHZZ	6145-00-600-6052	M22759-11-16-0	81349	WIRE, ELECTRICAL	FT	V
BULK	10	AHZZ	6145-00-890-5437	5054775-3	57958	CABLE, SP, ELEC	FT	V
BULK	11	AFZZ	6145-00-939-4955	M22759-11-20-0	81349	WIRE, ELECTRICAL	FT	V
BULK	12	AHZZ	6145-00-939-4964	M22759-11-20-9	81349	WIRE, ELECTRICAL	FT	V
BULK	13	AHZZ	6145-00-945-7467	M22759-11-22-0	81349	WIRE, ELECTRICAL	FT	V
BULK	14	AHZZ	6145-00-948-9469	M22759-11-24-0	81349	WIRE, ELECTRICAL	FT	V
BULK	15	AHZZ	6145-00-948-9479	M22759-11-24-9	81349	WIRE, ELECTRICAL	FT	V
BULK	16	AHZZ	6145-01-080-9298	M22759-11-22-9	81349	WIRE, ELECTRICAL	FT	V
BULK	17	AHZZ	6145-01-139-2156	EC24U0-9STX	81349	CABLE, SP, ELEC	FT	V
BULK	18	AHZZ		MILI22129-22AWG	81349	INSUL SLVG, ELEC	FT	V
BULK	19	AHZZ		5054630-1	57958	INSUL SLVG, ELEC	FT	V
BULK	20	AHZZ		MILI22129-24AWG	81349	INSUL SLVG, ELEC	FT	V
BULK	21	AHZZ		5054630-3	57958	INSUL SLVG, ELEC	FT	V
BULK	22	AHZZ		Q0343TYPE24AWG	81348	WIRE, ELECTRICAL	FT	V
BULK	23	AHZZ		MILI22129-26AWG	81349	WIRE, ELECTRICAL	FT	V
BULK	24	AHZZ		5055207-1	57958	CABLE, RF	FT	V
BULK	25	AHZZ		5035850-1	57958	ADHESIVE	AR	V
BULK	26	AHZZ		5054875	57958	SHLD GSKT, ELEC	FT	V

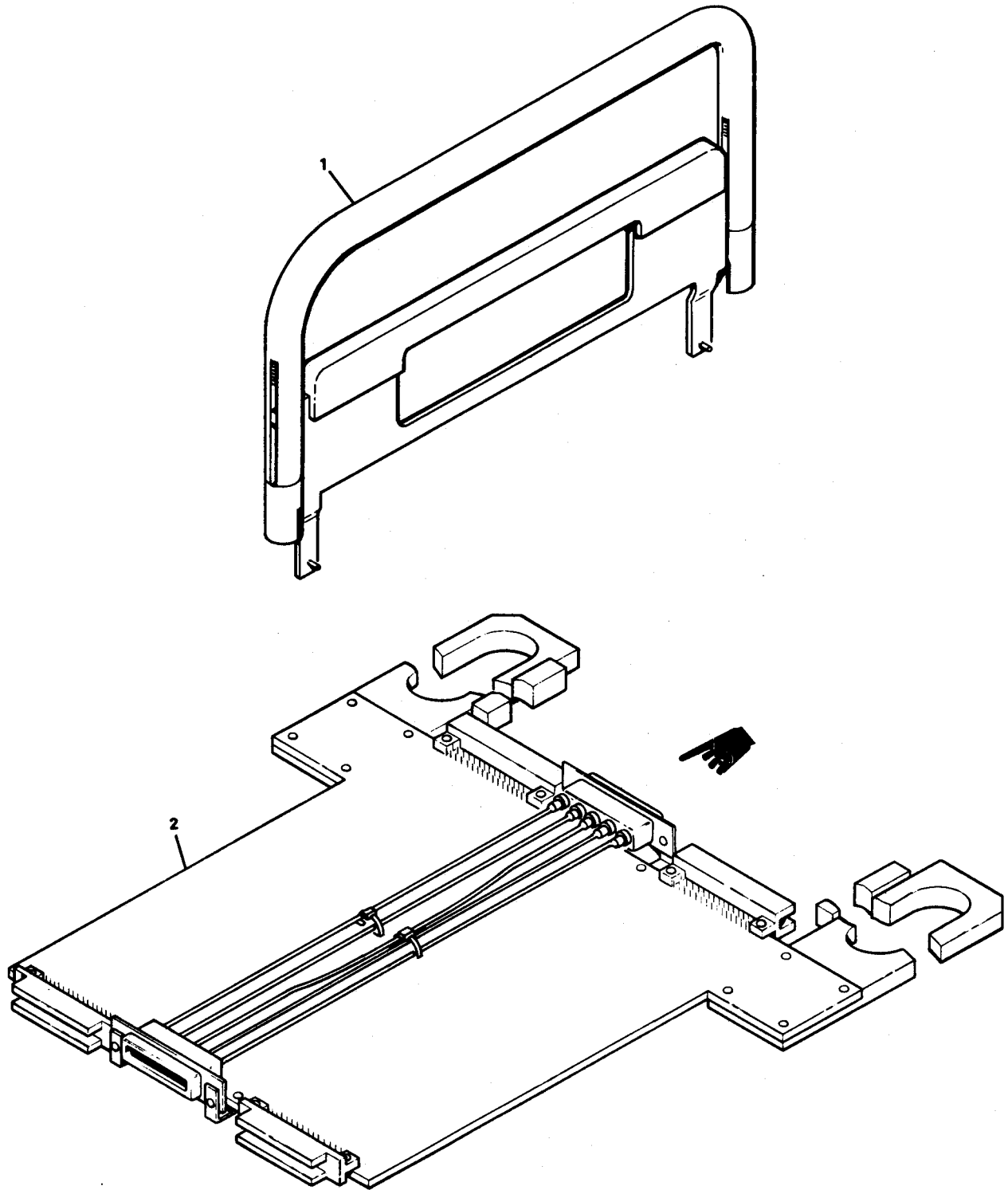


Figure C-23. Special Tools



(1) ILLUS		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCN	DESCRIPTION  USABLE ON CODE	U/M	QT IN UN1
C-23	1	PEHZZ		5054268-1	57958	GROUP 38 SPECIAL TOOLS		
C-23	2	PEHZZ		C5077448-1	57958	CCA EXTRACTOR CCA EXTENDER CARD	EA EA	

SECTION IV

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5905-00-005-8930	C-9	68	5340-00-060-5386	C-1	67
5905-00-005-8930			5962-00-064-1798	C-9	93
5905-00-006-1225	C-11	9	5962-00-064-1798	C-10	88
5905-00-006-1225	C-9	54	5305-00-066-7325	C-1	14
5905-00-006-1225	C-10	52	5305-00-066-7328	C-1	1
5905-00-006-5561	C-9	72	5910-00-068-4295	C-6	1
5905-00-006-5561	C-10	69	5310-00-069-5291	C-1	41
5905-00-006-5562	C-9	48	5320-00-080-0494	C-10	104
5905-00-006-5562	C-10	46	5340-00-088-7768	C-1	123
5905-00-006-6978	C-9	44	5305-00-088-9666	C-1	61
5905-00-006-6978	C-10	42	5305-00-088-9671	C-1	45
5905-00-006-6980	C-12	8	5305-00-088-9965	C-1	110
5905-00-007-3837	C-9	43	5905-00-096-3223	C-9	63
5905-00-007-3837	C-10	41	5905-00-096-3223	C-10	60
5962-00-007-4079	C-12	26	5910-00-101-2381	C-18	3
5905-00-007-7187	C-9	75	5961-00-104-1397	C-9	20
5905-00-007-7187	C-10	72	5961-00-104-1397	C-10	20
5961-00-008-8361	C-7	14	5961-00-104-1398	C-9	18
5975-00-009-0173	C-1	133	5961-00-104-1398	C-10	18
5910-00-010-8666	C-9	2	5340-00-105-4079	C-5	6
5910-00-010-8666	C-10	2	5910-00-106-3852	C-18	14
5910-00-010-8715	C-9	12			
5910-00-010-8715	C-10	12	4920-00-110-5317	C-1	68
5905-00-012-2824	C-10	49	5975-00-111-3208	C-1	128
5905-00-012-2824	C-12	6	5975-00-111-3208	C-2	5
5905-00-012-2824	C-17	6	5910-00-111-4933	C-12	7
5905-00-012-2824	C-8	9	5905-00-112-2465	C-6	4
5905-00-012-2824	C-9	51	5910-00-113-5312	C-18	13
6145-00-013-8651	BULK	7	5910-00-114-0755	C-18	7
5961-00-022-5666	C-9	37	5999-00-116-8983	C-7	16
5961-00-022-5666	C-10	35	5999-00-116-8983	C-9	108
5935-00-026-9824	C-1	25	5999-00-116-8983	C-10	101
5950-00-035-4425	C-9	25	5320-00-117-6815	C-9	102
5950-00-035-4425	C-10	23	5320-00-117-6939	C-1	56
5310-00-043-4708	C-4	5	5320-00-119-6754	C-1	50
5940-00-050-2308	C-20	4	5910-00-124-0659	C-9	1
5305-00-054-5639	C-4	4	5910-00-124-0659	C-10	1
5305-00-054-5642	C-7	17	5360-00-124-2095	C-1	118
5305-00-054-5645	C-5	31	5961-00-133-2983	C-9	39
5305-00-054-5647	C-1	23	5961-00-133-2983	C-10	37
5305-00-054-5647	C-19	9	5910-00-137-4806	C-12	6
5305-00-054-5647	C-20	3	5999-00-137-5066	C-2	24
5305-00-054-5647	C-5	22	5999-00-137-5066	C-3	6
5305-00-054-5648	C-1	43	5905-00-142-0593	C-9	56
5305-00-054-5649	C-5	3	5905-00-142-0593	C-10	53
5305-00-054-5650	C-12	45	5940-00-143-4771	C-2	23
5305-00-054-5650	C-13	22	5905-00-146-4592	C-9	57
5305-00-054-5650	C-14	36	5905-00-146-4593	C-9	41
5305-00-054-5650	C-15	25	5905-00-150-5256	C-7	10
5305-00-054-5651	C-19	1	5961-00-156-0618	C-9	22
5305-00-054-6650	C-21	3	5961-00-156-0618	C-10	22
5305-00-054-6651	C-1	74	5940-00-156-7196	C-6	12
5305-00-054-6652	C-5	11	6145-00-160-4775	BULK	8
5305-00-054-6654	C-1	86	5940-00-161-0449	C-1	132
5305-00-054-6655	C-6	7	5905-00-163-2587	C-9	74
5305-00-054-6668	C-1	80	5905-00-163-2587	C-10	71
5305-00-054-6670	C-1	129	5905-00-163-2591	C-9	70
5305-00-054-6672	C-1	40	5905-00-163-2591	C-10	67
5305-00-054-6674	C-1	85	5905-00-165-3134	C-9	50
5305-00-054-6674	C-1	89	5905-00-165-3134	C-10	48
5305-00-054-6675	C-1	122	5905-00-165-3135	C-11	10
5940-00-056-8696	C-3	7	5905-00-165-3144	C-11	7
5310-00-057-0573	C-5	16	5905-00-165-3144	C-8	7
5310-00-057-0573	C-9	98	5905-00-165-3144	C-9	58
5310-00-057-0573	C-10	94	5905-00-165-3144	C-10	55
5310-00-058-3599	C-19	3	5905-00-165-3166	C-9	42
5310-00-058-3599	C-20	5	5905-00-165-3166	C-10	40
5305-00-059-3657	C-1	34	5905-00-165-3181	C-9	62
5305-00-059-3658	C-1	126	5905-00-165-3181	C-10	59
			5940-00-168-8161	C-2	21



STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5905-00-170-9750	C-9	59	5905-00-412-4047	C-17	10
5905-00-170-9750	C-10	56	5999-00-417-4115	C-9	106
5905-00-172-4624	C-9	55	5999-00-417-4115	C-10	91
5905-00-172-4624	C-10	44	5905-00-419-0189	C-18	31
5905-00-189-2266	C-9	71	5905-00-419-2822	C-18	26
5905-00-189-2266	C-10	68	5905-00-419-2823	C-7	9
5935-00-189-2520	C-2	7	5905-00-419-3949	C-18	39
5935-00-189-2521	C-2	2	5961-00-420-3668	C-9	35
5905-00-194-0376	C-9	73	5961-00-420-3668	C-10	33
5905-00-194-0376	C-10	70	5905-00-421-2922	C-9	66
5905-00-197-4197	C-18	38	5905-00-421-2922	C-10	63
5320-00-205-7282	C-4	12	5340-00-421-5080	C-1	127
5310-00-208-3786	C-9	100	5905-00-433-6207	C-12	19
5310-00-208-3786	C-10	96	5910-00-434-4177	C-8	1
5310-00-209-1239	C-1	125	5905-00-436-8560	C-8	12
5950-00-211-3995	C-9	31	5905-00-438-0506	C-12	22
5950-00-211-3995	C-10	29	5310-00-442-6913	C-9	99
5930-00-220-5705	C-1	8	5310-00-442-6913	C-10	93
5905-00-223-2610	C-12	20	5925-00-444-0585	C-1	108
5905-00-223-2610	C-18	41	5925-00-444-0595	C-1	106
5905-00-223-2610	C-7	11	5935-00-448-5654	C-2	8
5310-00-224-0494	C-1	119	5935-00-448-9223	C-2	1
5305-00-225-6400	C-9	97	5905-00-448-9355	C-8	14
5305-00-225-6400	C-10	95	5905-00-450-8530	C-12	21
5961-00-232-3279	C-8	5	5905-00-450-8530	C-18	48
5905-00-240-7947	C-6	3	5905-00-458-9263	C-12	17
5905-00-240-7948	C-18	37	5905-00-458-9263	C-18	25
5905-00-240-7948	C-9	77	5905-00-458-9267	C-18	27
5905-00-240-7950	C-18	30	5905-00-458-9267	C-8	13
5905-00-240-7979	C-18	40	5905-00-458-9500	C-16	4
5905-00-240-7979	C-7	8	5999-00-459-5733	C-2	19
5905-00-246-4593	C-10	39	5905-00-471-1947	C-18	49
6645-00-255-1371	C-1	12	5905-00-480-5087	C-18	44
6645-00-258-8547	C-1	13	5935-00-481-4095	C-19	7
5962-00-264-3566	C-12	28	5905-00-482-0505	C-12	18
5962-00-264-3566	C-17	16	5905-00-482-0505	C-18	36
5962-00-264-3566	C-8	29	5905-00-483-0457	C-18	47
5950-00-279-6539	C-9	27	5935-00-489-9999	C-5	7
5950-00-279-6539	C-10	24	5961-00-493-5250	C-9	36
5910-00-283-3092	C-9	7	5961-00-493-5250	C-10	34
5910-00-283-3092	C-10	7	5961-00-494-4915	C-9	19
5950-00-299-4467	C-9	30	5961-00-494-4915	C-10	19
5950-00-299-4467	C-10	28	5950-00-496-1509	C-18	23
5962-00-318-2401	C-18	51	5950-00-496-1518	C-18	16
5950-00-325-6462	C-9	26	5935-00-503-9112	C-2	4
5950-00-325-6462	C-10	24	5910-00-513-5385	C-17	1
5950-00-329-6763	C-18	20	5910-00-513-5385	C-18	5
5962-00-329-8166	C-15	10			
5961-00-335-8934	C-9	23	5940-00-535-2620	C-2	22
5962-00-341-0544	C-17	18	5340-00-543-3931	C-1	48
5962-00-341-0544	C-18	52	5910-00-550-1901	C-9	13
5962-00-348-2541	C-12	32	5910-00-550-1901	C-10	13
5962-00-348-2541	C-8	15	5355-00-552-1810	C-1	27
5961-00-350-8249	C-9	21	5950-00-553-9439	C-18	17
5961-00-350-8249	C-10	21			
5905-00-351-6101	C-9	52	6145-00-577-3420	BULK	17
5905-00-351-6101	C-10	52			
5962-00-361-8648	C-17	22	5905-00-594-2644	C-9	64
5962-00-361-8732	C-12	25	5905-00-594-2644	C-10	61
5962-00-361-8732	C-8	25	5310-00-595-6211	C-1	15
5962-00-365-9523	C-11	1	5310-00-595-6211	C-12	43
5962-00-369-7831	C-8	26	5310-00-595-6211	C-13	24
5905-00-378-0271	C-9	69			
5905-00-378-0271	C-10	66			
5962-00-386-8211	C-8	18			
5905-00-402-1396	C-18	29			
5905-00-403-3044	C-9	61			
5905-00-403-3044	C-10	58			
5905-00-405-0714	C-9	49			
5905-00-405-0714	C-10	47			
5845-00-409-6706	C-21	1			
5935-00-410-9250	C-2	9			

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5310-00-595-6211	C-14	37	5940-00-857-3414	C-2	20
5310-00-595-6211	C-15	26	5940-00-857-3414	C-3	4
5310-00-595-6211	C-19	4	5961-00-858-3826	C-9	38
5310-00-595-6211	C-5	5	5961-00-858-3826	C-10	36
5310-00-595-6761	C-5	32	5340-00-870-5350	C-1	66
5310-00-595-6761	C-7	19	5935-00-873-0954	C-2	6
5310-00-595-6772	C-1	46	5320-00-879-6607	C-9	111
5310-00-595-6772	C-1	82	6145-00-890-5437	BULK	10
6145-00-600-6052	BULK	9			
5910-00-600-6889	C-11	2	5320-00-894-2052	C-10	98
5910-00-600-6889	C-13	2	5305-00-900-0593	C-1	73
5910-00-600-6889	C-14	2	5940-00-905-4516	C-1	101
5910-00-600-6889	C-15	1	5940-00-905-4516	C-5	23
5910-00-600-6889	C-16	2	5961-00-905-4815	C-18	24
5910-00-600-6889	C-18	15	5940-00-918-8068	C-2	13
5910-00-600-6889	C-7	1	5940-00-918-8068	C-3	2
5935-00-603-6717	C-2	10	5961-00-925-3777	C-12	11
5961-00-603-8935	C-9	40	5905-00-926-8706	C-9	47
5961-00-603-8935	C-10	38	5905-00-926-8706	C-10	45
5310-00-614-3552	C-1	72	5310-00-928-2690	C-5	33
5310-00-616-8660	C-6	9	5310-00-928-2690	C-7	20
5905-00-721-0010	C-18	34	5310-00-929-6395	C-1	3
5905-00-721-0010	C-7	7	5310-00-929-6395	C-5	12
5320-00-721-5239	C-1	101.1	5310-00-929-6395	C-6	11
5340-00-721-5315	C-1	97	5950-00-932-6920	C-18	18
5310-00-722-5998	C-1	2	5310-00-933-8118	C-1	16
5310-00-722-5998	C-5	13	5310-00-933-8118	C-12	44
5310-00-722-5998	C-6	10	5310-00-933-8118	C-13	23
5975-00-727-5153	C-1	69	5310-00-933-8118	C-14	38
5975-00-727-5153	C-2	16	5310-00-933-8118	C-15	27
5975-00-727-5153	C-3	5	5310-00-933-8118	C-19	10
5305-00-727-8832	C-1	131	5310-00-933-8118	C-20	6
5940-00-740-7933	C-19	2	5310-00-933-8118	C-5	4
5905-00-758-2917	C-18	42	5310-00-933-8120	C-1	83
5905-00-758-2917	C-7	6	5310-00-934-9748	C-1	17
5935-00-763-8247	C-2	12	5310-00-934-9748	C-20	7
			5310-00-934-9748	C-5	18
5310-00-773-7624	C-21	2	5310-00-934-9761	C-1	4
5310-00-773-7624	C-6	8	5310-00-934-9761	C-5	21
5935-00-782-8160	C-2	14	5310-00-934-9765	C-1	124
5325-00-788-5635	C-1	55	5910-00-935-3511	C-11	4
5970-00-812-2967	BULK	2	5910-00-935-3511	C-12	2
5970-00-812-2969	BULK	3	5910-00-935-3511	C-13	1
5310-00-812-4294	C-4	7	5910-00-935-3511	C-14	1
5940-00-813-0698	C-3	3	5910-00-935-3511	C-15	2
5365-00-823-4868	C-7	15	5910-00-935-3511	C-16	1
5950-00-832-4881	C-11	5	5910-00-935-3511	C-17	3
5950-00-832-4881	C-12	10	5910-00-935-3511	C-18	9
5950-00-832-4881	C-14	4	5910-00-935-3511	C-6	2
5950-00-832-4881	C-14	6	5310-00-938-2013	C-5	34
5950-00-832-4881	C-15	4	5310-00-938-2013	C-7	18
5950-00-832-4881	C-16	3	6145-00-939-4955	BULK	11
5950-00-832-4881	C-17	5	6145-00-939-4964	BULK	12
5950-00-832-4881	C-18	19	5905-00-943-3755	C-9	45
5950-00-832-4881	C-8	6	5905-00-943-3755	C-10	43
5961-00-836-6663	C-9	34	6145-00-945-7467	BULK	13
5961-00-836-6663	C-10	32	6145-00-948-9469	BULK	15
			6145-00-948-9479	BULK	16

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5961-00-949-1440	C-7	4	5961-01-026-2489	C-13	19
5310-00-949-6139	C-1	54	5962-01-026-2489	C-14	13
5961-00-950-9887	C-12	42	5962-01-026-2489	C-16	7
5961-00-950-9887	C-18	56	5962-01-026-2490	C-14	12
5970-00-954-1622	BULK	4	5962-01-026-6052	C-13	17
5970-00-954-1624	BULK	5	5910-01-027-1258	C-9	9
			5962-01-027-1743	C-14	28
			5962-01-027-1748	C-17	23
5935-00-958-2108	C-9	33	5962-01-027-5649	C-15	19
5935-00-958-2108	C-10	31	5999-01-028-2598	C-4	8
5305-00-959-4158	C-1	65	5999-01-029-0591	C-18	57
5340-00-964-3664	C-1	120	5999-01-029-0591	C-9	96
5905-00-974-6043	C-9	60	5999-01-029-0591	C-10	90
5905-00-974-6043	C-10	57	5962-01-029-5481	C-9	81
5310-00-982-4999	C-19	5	5962-01-029-5481	C-10	76
5310-00-982-6814	C-1	47	5905-01-032-6806	C-12	12
5340-00-989-9224	C-1	72.1	5910-01-033-5234	C-8	3
			5962-01-034-2146	C-12	35
5910-00-997-4079	C-8	4	5962-01-034-2146	C-14	34
5910-00-998-6949	C-11	3	5935-01-034-6671	C-2	17
5910-00-998-6949	C-12	3	5962-01-034-9832	C-14	27
5910-00-998-6949	C-18	10	5962-01-034-9832	C-17	14
5950-01-004-7258	C-9	28	5910-01-035-0022	C-9	5
5950-01-004-7258	C-10	26	5910-01-035-0022	C-10	5
5962-01-007-5813	C-16	6	5910-01-035-5517	C-12	4
5910-01-007-5962	C-9	3	5910-01-036-7696	C-18	8
5910-01-007-5962	C-10	3	5905-01-036-9409	C-18	28
5950-01-008-8645	C-18	21	5865-01-037-1887	C-4	10
5962-01-009-5492	C-12	27	5961-01-038-6918	C-12	8
5305-01-011-2188	C-1	117	5961-01-038-6918	C-14	3
5905-01-011-9501	C-12	16	5961-01-038-6918	C-17	4
5905-01-011-9501	C-18	32	5961-01-038-6918	C-7	3
5904-01-012-3770	C-18	46	5962-01-039-4752	C-14	10
5935-01-012-7962	C-2	18	5962-01-039-6395	C-17	17
5905-01-012-9761	C-9	67	5905-01-039-9710	C-13	5
5905-01-012-9761	C-10	64	5905-01-039-9710	C-14	7
5950-01-013-0788	C-18	22	5905-01-039-9710	C-17	7
5935-01-013-7179	C-1	21	5962-01-040-0008	C-8	16
5340-01-014-0080	C-1	101.2	5905-01-040-0392	C-17	9
5962-01-014-0499	C-9	82	5930-01-040-7541	C-1	42
5962-01-014-0499	C-10	77	5910-01-041-9162	C-8	2
5340-01-014-0696	C-1	95	5905-01-042-3729	C-12	15
5962-01-015-8539	C-9	80	5905-01-042-3729	C-18	45
5962-01-015-8539	C-10	75	5910-01-042-3759	C-17	2
5962-01-016-5296	C-9	87	5910-01-042-3759	C-18	4
5962-01-016-5296	C-10	82	5910-01-042-3759	C-7	2
5962-01-016-8738	C-8	31	5910-01-042-3759	C-9	8
5962-01-017-5985	C-12	30	5910-01-042-3759	C-10	8
5962-01-017-5985	C-13	18	5910-01-042-4449	C-18	12
5962-01-017-5985	C-14	16	5962-01-042-8074	C-14	18
5962-01-017-5985	C-15	15			
5965-01-017-5985	C-16	9			
5820-01-017-8585	C-1	103			
5905-01-018-5556	C-9	53			
5905-01-018-5556	C-10	51			
5841-01-018-8756	C-1	105	5910-01-042-8386	C-10	9
5962-01-019-6176	C-11	11	5905-01-043-0522	C-9	65
5962-01-019-6176	C-17	27	5905-01-043-0522	C-10	62
5962-01-019-6176	C-8	28	5962-01-043-3941	C-13	20
5910-01-020-2466	C-9	14	5962-01-043-3941	C-14	17
4910-01-020-2466	C-10	15	5962-01-043-3941	C-15	6
5962-01-021-5875	C-14	11	5962-01-043-3942	C-15	14
5962-01-021-5875	C-15	8	5905-01-044-8473	C-8	8
5962-01-022-6717	C-9	91	5905-01-044-9116	C-18	33
5962-01-022-6717	C-10	86	5905-01-047-1529	C-12	13
5310-01-023-6132	C-4	6			
5325-01-024-4930	C-5	9			
5910-01-025-5001	C-18	11			
5962-01-026-0494	C-15	11			

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5905-01-047-1529	C-18	43	5962-01-086-7634	C-17	34
5905-01-047-1530	C-5	24	5962-01-086-7636	C-15	9
5905-01-047-1530	C-7	5	5962-01-091-8195	C-12	12
5905-01-047-1531	C-18	35	5962-01-091-8195	C-12	37
5962-01-048-7767	C-9	89	5962-01-091-8195	C-15	17
5962-01-048-7767	C-10	84	5962-01-091-8195	C-17	12
5305-01-049-9121	C-9	107	5962-01-091-8195	C-8	24
5305-01-049-9121	C-10	92	5935-01-092-3459	C-2	3
5962-01-050-0919	C-12	31	5962-01-093-0110	C-12	29
5962-01-050-0921	C-14	20	5962-01-093-0110	C-17	13
5962-01-050-0921	C-15	20	5962-01-093-0110	C-8	23
5962-01-050-5248	C-14	9	5935-01-093-0731	C-17	38
5910-01-052-7651	C-9	4	5910-01-093-4719	C-18	6
5910-01-052-7651	C-10	4	5935-01-094-8050	C-14	5
5935-01-052-9436	C-5	8	5962-01-095-5514	C-9	85
5999-01-054-6449	C-9	110	5962-01-095-5514	C-10	80
5999-01-054-6449	C-10	103	5962-01-096-4169	C-17	15
5999-01-054-6450	C-9	105	5962-01-096-4171	C-8	27
5999-01-054-6450	C-10	100	5962-01-096-4172	C-17	28
5962-01-057-3455	C-8	30	5962-01-096-5756	C-17	33
5962-01-058-9435	C-14	19	5962-01-096-5757	C-12	33
5962-01-058-9435	C-15	13	5962-01-096-5757	C-13	21
5961-01-059-4038	C-8	32	5962-01-096-5757	C-14	14
5962-01-061-6583	C-14	30	5962-01-096-5757	C-15	18
5905-01-064-6736	C-12	14	5935-01-098-0711	C-12	9
5905-01-064-8329	C-12	23	5935-01-098-0711	C-13	3
5340-01-065-2783	C-1	92	5935-01-098-0711	C-14	4
5910-01-065-6790	C-9	10	5935-01-098-0711	C-15	3
5910-01-065-6790	C-10	10	5910-01-099-6524	C-13	5
5962-01-065-7026	C-18	31	5962-01-102-3114	C-12	39
5962-01-066-8393	C-16	16	5962-01-102-3114	C-15	21
5962-01-067-4985	C-9	90	5962-01-102-4229	C-14	32
5962-01-067-4985	C-10	85	5962-01-106-7727	C-17	35
5962-01-067-7728	C-18	19	5910-01-107-7998	C-10	17
5310-01-067-9589	C-1	81			
5962-01-068-1039	C-12	24	5910-01-107-7998	C-9	16
5962-01-068-1039	C-8	20	5910-01-107-7999	C-9	11
5962-01-069-2637	C-14	15	5910-01-107-7999	C-10	10
5935-01-069-6794	C-2	11	5910-01-107-8000	C-9	6
5961-01-069-9665	C-7	12	5910-01-107-8000	C-10	6
4140-01-071-0697	C-1	96	5962-01-113-7057	C-17	32
5905-01-071-1740	C-14	8	5905-01-116-8932	C-15	5
5962-01-072-4143	C-12	38	5905-01-116-8932	C-17	8
5962-01-072-4143	C-17	30	5905-01-116-8932	C-8	10
5962-01-073-9544	C-12	1	5905-01-119-6151	C-17	11
5962-01-074-4122	C-12	36	5935-01-124-9677	C-1	22
5962-01-074-8172	C-17	24	5962-01-124-9724	C-15	7
4920-01-074-9387	C-1	78	5935-01-128-5971	C-9	101
5325-01-076-6452	C-1	51	5935-01-128-5971	C-10	97
5325-01-078-5181	C-19	8	5962-01-128-9755	C-15	12
5962-01-078-8678	C-12	40	5915-01-131-0627	C-1	91
5962-01-078-8678	C-13	16	5925-01-131-7584	C-1	107
5962-01-078-8678	C-14	29	5915-01-131-7657	C-20	2
5962-01-078-8678	C-15	23	5930-01-132-4476	C-1	28
			5970-01-132-5616	C-1	102
6145-01-080-9298	BULK	14	5935-01-132-8592	C-20	1
5950-01-081-0458	C-9	29	5930-01-132-8670	C-1	18
5950-01-081-0458	C-10	27	5970-01-133-1578	C-1	77
5999-01-084-0860	C-9	95	5999-01-133-3337	BULK	6
5999-01-084-0860	C-10	89	5999-01-133-3337	C-1	70
5935-01-084-6481	C-17	37			
5962-01-085-2943	C-14	26			
5999-01-086-6659	C-9	109			
5999-01-086-6659	C-10	102			

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
5935-01-133-7286	C-4	3			
5970-01-133-8971	C-1	104			
5962-01-133-9699	C-8	19			
5310-01-134-5759	C-1	121			
4130-01-134-6963	C-1	90			
6150-01-135-6295	C-4	1			
5920-01-135-7677	C-7	13			
5962-01-135-8471	C-15	22			
6210-01-136-9089	C-21	9			
6210-01-136-9090	C-21	8			
6210-01-136-9091	C-21	7			
6210-01-137-1808	C-21	10			
5920-01-137-5132	C-1	79			
5925-01-137-5239	C-1	109			
5999-01-137-5400	C-6	6			
5895-01-137-5415	C-5	15			
5985-01-137-6113	C-5	19			
5905-01-138-0473	C-9	76			
5905-01-138-0473	C-10	73			
5915-01-138-0653	C-19	12			
5985-01-138-0736	C-5	26			
5962-01-138-0739	C-18	2			
5962-01-138-0745	C-11	13			
5962-01-138-1659	C-8	22			
5962-01-138-1661	C-12	41			
5985-01-138-1963	C-5	1			
5935-01-138-4962	C-9	32			
5935-01-138-4962	C-10	30			
5962-01-139-0695	C-18	1			
5962-01-139-0704	C-17	20			
5915-01-139-0943	C-5	29			
6145-01-139-2156	BULK	18			
6210-01-140-5660	C-1	20			
5905-01-141-2632	C-8	11			
5955-01-141-8669	C-5	10			
5955-01-141-8670	C-18	55			
5999-01-143-1733	C-16	5			
6240-01-147-4339	C-1	6			
5962-01-148-6135	C-14	31			
5962-01-148-6135	C-13	24			
5962-01-148-6135	C-16	8			
5865-01-150-2894	C-1	33			
5865-01-150-2900	C-1	39			
5865-01-150-2901	C-1	36			
5865-01-150-2902	C-1	44			
5895-01-151-6009	C-18	53			
5962-01-151-7555	C-14	21			
5865-01-151-7570	C-1	93			
5865-01-151-7571	C-1	32			
5865-01-151-7572	C-1	38			
5865-01-151-7574	C-1	35			
5865-01-151-7575	C-1	37			
5865-01-152-0465	C-1	76			
5865-01-152-0470	C-1	31			

PART UMB	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
CCRO5CG101JM	81349	C-9	4	MS15795-805	96906	C-1	2
CCRO5CG151JM	81349	C-9	10	MS15795-805	96906	C-5	13
CCRO5CG221JM	81349	C-9	11	MS15795-805	96906	C-6	10
CCRO5CG271JM	81349	C-9	6	MS15795-808	96906	C-1	46
CCRO5CG820JM	81349	C-9	16	MS15795-808	96906	C-1	82
CCRO6CG822KM	81349	C-9	15	MS16535-82	96906	C-9	111
CMRO5F111JPD	81349	C-18	6	MS16535-153	96906	C-1	
CR69AU6-144MHZ	81349	C-17	39	MS20470AD3-4	96906	C-9	102
C5077448-1	57958	C-23	2	MS20426AD3-5	96906	C-1	56
C5077144-1	57	C-1	94				
C5077154-7	57958	C-1	142	MS20470AD2-3	96906	C-1	50
C5077154-8	57958	C-1	140	MS20470AD2-8	96906	C-4	12
C5077155-32	57958	C-1	75	MS21044C04	96906	C-18	5
C5077580-1	57958	C-1	143	MS21044C08	96906	C-1	47
C5114402-1	57958	C-9	103				
C5114403-1	57958	C-9	78	MS21266-2N	96906	C-5	
C5114404-1	57958	C-9	24	MS21390-20	96906	C-9	29
C5121141	57958	C-20	8	MS24585C143	96906	C-1	118
C5140309	81349	C-8	21	MS24693C268	96906	C-1	73
C5140512	57958	C-8	17	MS24693C27	96906	C-1	1
C5140781	57958	C-1	111	MS24693C273	96906	C-1	65
C5147088-2	57958	C-1	114	MS24693C29	96906	C-1	110
C5147089	57958	C-1	112	MS24693C3	96906	C-9	
C5147092-2	57958	C-1	116	MS24693C5	96906	C-1	14
EC24UO-9STX	81349	BULK	18	MS24693C51	96906	C-1	61
JANTX1N4148	81349	C-9	19	MS24693C52	96906	C-1	45
JANTX1N5614	81349	C-9	22	MS25036-101	96906	C-3	3
JANTX1N5712	81349	C-9	23	MS25036-103	96906	C-2	
JANTX1N749A	81349	C-9	20	MS25082-C12	96906	C-1	
JANTX1N751A	81349	C-9	18	MS25281R11	96906	C-1	120
JANTX1N825	81349	C-9	21	MS25281R12	96906	C-1	123
JANTX2N2222A	81349	C-9	38	MS25281R3	96906	C-1	48
JANTX2N2369A	81349	C-9	35	MS25281R5		C-1	97
JANTX2N2857	81349	C-9	39	MS25281R6	96906	C-1	72.1
JANTX2N2907A	81349	C-9	37	MS25281R8	96906	C-1	95
JANTX2N4858	81349	C-9	36				
JANTX2N5109	81349	C-9	40	MS3338-6839	96906	C-1	6
JANTX2N918	81349	C-9	34	MS3345-2	96906	C-1	13
JAN1N4104	81349	C-7	14	MS3367-4-9	96906	C-1	69
JAN1N4112	81349	C-8	32	MS3367-4-9	96906	C-2	16
JAN1N4148-1	81349	C-12	8	MS3367-4-9	96906	C-3	5
JAN1N4148-1	81349	C-14	3	MS3367-5-9	96906	C-1	128
JAN1N4148-1	81349	C-17	4	MS3367-5-9	96906	C-2	5
JAN1N4148-1	81349	C-7	3	MS3416-16EN	96906	C-2	7
JAN1N5711	81349	C-8	5	MS3416-18EN	96906	C-2	2
JAN1N827	81349	C-12	42	MS3416-20EN	96906	C-2	4
JAN1N827	81349	C-18	56	MS3474L12-3P	96906	C-18	7
JAN2N2905A	81349	C-7	4	MS3474L16-26P	96906	C-2	6
JAN2N2907A	81349	C-12	11	MS3474L16-26S	96906	C-2	14
JAN2N918	81349	C-18	24	MS3474L18-32P	96906	C-2	8
JAN4N22A	81349	C-7	12	MS3474L18-32S	96906	C-2	1
MILI22129-22AWG	81349	BULK	18	MS3474L20-41P	96906	C-2	12
MILI22129-24AWG	81349	BULK	20	MS3474L20-41S	96906	C-2	3
MILI22129-26AWG	81349	BULK	23	MS35335-57	96906	C-18	3
MS15795-802	96906	C-5	32	MS35335-57	96906	C-19	5
MS15795-802	96906	C-7	19	MS35335-59	96906	C-1	72
MS15795-803	96906	C-1	15				
MS15795-803	96906	C-12	43				
MS15795-803	96906	C-13	24				
MS15795-803	96906	C-14	37				
MS15795-803	96906	C-15	26				
MS15795-803	96906	C-19	4				
MS15795-803	96906	C-5	5				

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
MS35335-60	96906	C-1	125	MS51958-61	96906	C-1	84
MS35338-134	96906	C-5	33	MS51958-62	96906	C-1	126
MS35338-134	96906	C-7	20	MS51959-29	96906	C-1	131
MS35338-135	96906	C-1	16	MS75083-10	96906	C-9	30
MS35338-135	96906	C-12	44	MS75083-11	96906	C-9	31
MS35338-135	96906	C-13	23	MS75085-03	96906	C-9	27
MS35338-135	96906	C-14	38	MS75085-07	96906	C-9	25
MS35338-135	96906	C-15	27	MS75085-11	96906	C-9	26
MS35338-135	96906	C-19	10	MS75085-13	96906	C-9	28
MS35338-135	96906	C-20	6	MS75088-13	96906	C-17	20
MS35338-135	96906	C-5	4	MS75088-3	96906	C-17	18
MS35338-136	96906	C-1	3	MS75089-17	96906	C-17	23
MS35338-136	96906	C-5	12	MS75089-19	96906	C-17	22
MS35338-136	96906	C-6	11	MS75089-3	96906	C-17	21
MS35338-137	96906	C-1	81	MS75089-4	96906	C-17	17
MS35338-138	96906	C-1	83	MS75089-6	96906	C-17	16
MS35431-3	96906	C-20	4	MS77072-2	96906	C-6	12
MS35489-35	96906	C-19	8	MS91528-1K1B	96906	C-1	27
MS35649-224	96906	C-5	34	M22759-11-16-0	81349	BULK	9
MS35649-224	96906	C-7	18	M22759-11-16-9	81349	BULK	7
MS35649-244	96906	C-1	17	M22759-11-20-0	81349	BULK	11
MS35649-244	96906	C-20	7	M22759-11-20-9	81349	BULK	12
MS35649-244	96906	C-5	18	M22759-11-22-0	81349	BULK	13
MS35649-264	96906	C-1	4	M22759-11-22-9	81349	BULK	14
MS35649-264	96906	C-5	21	M22759-11-24-0	81349	BULK	15
MS35650-304	96906	C-1	124	M22759-11-24-9	81349	BULK	16
MS39087-3	96906	C-1	67	M22885-83-200	81349	C-1	19
MS51029-101	96906	C-1	117	M23053-5-104-0	81349	BULK	3
MS51848-43	96906	C-4	6	M23053-5-105-0	81349	BULK	4
MS51957-10	96906	C-5	31	M23053-5-107-0	81349	BULK	5
MS51957-12	96906	C-9	107	M23053-5-108-0	81349	BULK	2
MS51957-13	96906	C-1	23	M23269-10-3218	81349	C-11	6
MS51957-13	96906	C-19	9	M24066/2-124	81349	C-1	101.2
MS51957-13	96906	C-20	3	M24236-1-0480	81349	C-1	42
MS51957-13	96906	C-5	22	M24308-2-3	81349	C-2	9
MS51957-14	96906	C-1	43	M24308-21-3	81349	C-2	10
MS51957-15	96906	C-5	3	M24308-25-1	81349	C-2	11
MS51957-16	96906	C-12	45	M24308-26-1	81349	C-5	8
MS51957-16	96906	C-13	22	M24308-4-3	81349	C-5	7
MS51957-16	96906	C-14	36	M38510-00102BCX	81349	C-8	22
MS51957-16	96906	C-15	25	M38510-00105BCX	81349	C-16	18
MS51957-17	96906	C-19	1	M38510-00105BCX	81349	C-17	52
MS51957-26	96906	C-21	3	M38510-00205BCX	81349	C-11	32
MS51957-27	96906	C-1	74	M38510-00205BCX	81349	C-8	15
MS51957-28	96906	C-5	11	M38510-00502BCX	81349	C-8	26
MS51957-30	96906	C-1	86	M38510-00701BCX	81349	C-16	22
MS51957-31	96906	C-6	7	M38510-00801BCX	81349	C-11	25
MS51957-43	96906	C-1	80	M38510-00801BCX	81349	C-8	25
MS51957-45	96906	C-1	129	M38510-00902BCX	81349	C-8	18
MS51957-47	96906	C-1	40	M38510-00903BCX	81349	C-16	33
MS51957-49	96906	C-1	85				
MS51957-49	96906	C-1	89	M38510-01403BEX	81349	C-14	10
MS51957-5	96906	C-4	4	M38510-05101BCX	81349	C-9	90
MS51957-50	96906	C-1	122	M38510-05203BCX	81349	C-9	92
MS51957-8	96906	C-7	17	M38510-05503BEX	81349	C-9	91

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
M38510-05504BEX	81349	C-9	80	M38510-30903BEX	81349	C-14	20
M38510-070018CX	81349	C-14	11	M38510-310048CX	81349	C-13	27
M38510-070018CX	81349	C-15	8	M38510-310048CX	81349	C-16	14
M38510-070038CX	81349	C-13	19	M38510-313028CX	81349	C-13	30
M38510-070038CX	81349	C-14	13	M38510-314018EX	81349	C-11	24
M38510-070038CX	81349	C-16	7	M38510-314018EX	81349	C-8	20
M38510-070058CX	81349	C-13	17	M38510-315048EX	81349	C-16	31
M38510-070068CX	81349	C-14	12	M38510-315128EX	81349	C-13	15
M38510-071018CX	81349	C-12	33	M38510-324038RX	81349	C-16	34
M38510-071018CX	81349	C-13	21	M38527-3-01D	81349	C-9	110
M38510-071018CX	81349	C-14	14	M38527-5-01D	81349	C-9	95
M38510-071018CX	81349	C-15	18	M38527-5-02D	81349	C-9	109
M38510-071058EX	81349	C-14	19	M38527-8-41P	81349	C-9	105
M38510-071058EX	81349	C-15	13	M39003-01-2262	81349	C-9	13
M38510-071068EX	81349	C-14	9	M39003-01-2270	81349	C-11	7
M38510-074018CX	81349	C-14	10	M39003-01-2271	81349	C-8	4
M38510-075018CX	81349	C-13	20	M39003-01-2286	81349	C-10	4
M38510-075018CX	81349	C-14	17	M39003-01-2286	81349	C-11	2
M38510-075018CX	81349	C-15	6	M39003-01-2286	81349	C-12	1
M38510/077018EX	81349	C-14	33	M39003-01-2286	81349	C-13	1
M38510-077028EX	81349	C-14	32	M39003-01-2286	81349	C-14	2
M38510-079018EX	81349	C-14	18	M39003-01-2286	81349	C-15	1
M38510-079038EX	81349	C-15	14	M39003-01-2286	81349	C-16	3
M38510-080038CX	81349	C-15	16	M39003-01-2286	81349	C-17	9
M38510-081018CX	81349	C-12	35	M39003-01-2286	81349	C-6	2
M38510-081018CX	81349	C-14	34	M39003-01-2290	81349	C-9	7
M38510-101028CX	81349	C-12	26	M39003-01-2306	81349	C-10	3
M38510-101048GX	81349	C-9	82	M39003-01-2306	81349	C-11	3
M38510-103048GX	81349	C-9	89	M39003-01-2306	81349	C-17	10
M38510-106028GX	81349	C-9	88	M39003-01-2356	81349	C-6	1
M38510-107038XX	81349	C-9	84	M39012-25-0020	81349	C-1	22
M38510-111028IX	81349	C-9	86	M39012-34-0001	81349	C-1	21
M38510-111038EX	81349	C-18	54	M39014-01-1204	81349	C-9	5
M38510-115028XX	81349	C-9	83	M39014-01-1209	81349	C-17	7
M38510-150018EX	81349	C-8	31	M39014-01-1212	81349	C-11	4
M38510-150028EX	81349	C-17	21	M39014-01-1221	81349	C-17	11
M38510-151028CX	81349	C-8	16	M39014-01-1228	81349	C-17	14
				M39014-01-1231	81349	C-17	12
M38510-300018CX	81349	C-12	29	M39014-01-1233	81349	C-17	8
M38510-300018CX	81349	C-17	13	M39014-01-1238	81349	C-9	2
M38510-300018CX	81349	C-8	23	M39014-01-1473	81349	C-9	
M38510-300038CX	81349	C-11	12	M39014-01-1450	81349	C-9	12
M38510-300038CX	81349	C-12	37	M39014-01-1456	81349	C-9	1
M38510-300038CX	81349	C-15	17	M39014-01-1474	81349	C-9	3
M38510-300038CX	81349	C-17	12	M39014-02-1202	81349	C-17	13
M38510-300038CX	81349	C-8	24	M39014-02-1206	81349	C-17	3
M38510-300058CX	81349	C-12	36	M39014-02-1218	81349	C-16	1
M38510-301028CX	81349	C-17	15	M39014-02-1218	81349	C-17	5
M38510-301068EX	81349	C-8	27	M39014-02-1230	81349	C-10	2
M38510-301078EX	81349	C-8	30	M39014-02-1230	81349	C-12	2
M38510-303018CX	81349	C-17	17	M39014-02-1230	81349	C-13	2
M38510-306088EX	81349	C-17	35	M39014-02-1230	81349	C-14	1
M38510-307018EX	81349	C-17	28	M39014-02-1230	81349	C-15	2
M38510-307028EX	81349	C-12	41				
M38510-309028EX	81349	C-12	31				
M38510-309038EX	81349	C-14	20				



PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
M39014-02-1230	81349	C-7	1	RJR26FW501M	81349	C-17	28
M39014-02-1236	81349	C-8	3	RJR26FW502M	81349	C-17	33
M39014-02-1310	81349	C-8	1	RJR26FX503M	81349	C-8	8
M39014-02-1405	81349	C-8	2	RLR05C10R0GR	81349	C-9	42
M39014-02-1407	81349	C-17	2	RLR05C1000GR	81349	C-9	61
M39014-02-1407	81349	C-18	4	RLR05C1001GR	81349	C-10	6
M39014-02-1407	81349	C-7	2	RLR05C1001GR	81349	C-16	6
M39014-02-1407	81349	C-9	8	RLR05C1001GR	81349	C-8	9
M39014-22-0194	81349	C-12	5	RLR05C1001GR	81349	C-9	51
M39022-10A104JM	81349	C-9	14	RLR05C1002GR	81349	C-10	7
M39022-10A473JM	81349	C-9	17	RLR05C1002GR	81349	C-8	7
M39029-1-16-20	81349	C-2	24	RLR05C1002GR	81349	C-9	58
M39029-1-16-20	81349	C-3	6	RLR05C1002GR	81349	C-9	59
M7793/6-102	96906	C-1	12	RLR05C1003GR	81349	C-9	74
M81714-2AA1	81349	C-1	132	RLR05C1201GR	81349	C-9	71
M81714-5-1	81349	C-1	133	RLR05C1601GR	81349	C-9	57
M8340101M1001GB	81349	C-12	12	RLR05C1800GR	81349	C-9	70
H8340102M1001GB	81349	C-13	5	RLR05C1801GR	81349	C-10	9
M8340102M1001GB	81349	C-14	7	RLR05C2002GR	81349	C-9	54
M8340102M1001GB	81349	C-17	7	RLR05C2002GR	81349	C-9	41
M8340102M1002GB	81349	C-17	9	RLR05C2200GR	81349	C-9	62
M8340102M2001GB	81349	C-14	8	RLR05C2201GR	81349	C-9	75
M8340105M1001GC	81349	C-15	5	RLR05C2202GR	81349	C-9	46
M8340105M1001GC	83149	C-17	8	RLR05C27R0GR	81349	C-9	72
M8340105M1001GC	81349	C-8	10	PLR05C27G2GR	81349	C-9	55
M8340105M1002GC	81349	C-17	11	RLR05C33R0GR	81349	C-9	44
M8340105M1603GC	81349	C-8	11	RLR05C3300GR	81349	C-9	50
M83421-01-5210M	81349	C-1	100	RLR05C4700GR	81349	C-9	49
M83734-10-014	81349	C-17	38	RLR05C4701GR	81349	C-9	48
M83734-13-014	81349	C-14	5	RLR05C51R0GR	81349	C-9	43
M83734-8-014	81349	C-17	37	RLR05C5100GR	81349	C-10	8
M87111/3-1A44	81349	C-10	101	RLR05C56R0GR	81349	C-9	56
M87111/5-1H12	81349	C-6	6	RLR05C6200GR	81349	C-10	10
NAS1056C3-012	80205	C-7	15	RLR05C6800GR	81349	C-9	69
NAS1640-4	80205	C-9	99	RLR07C10R0GR	81349	C-11	18
NAS1756-2	80205	C-2	20	RLR07C10R0GR	81349	C-17	36
NAS1756-2	80205	C-3	4	RLR07C1000GR	81349	C-11	17
NAS1746-3	80205	C-3	7	RLR07C1000GR	81349	C-17	25
NAS620C2	80205	C-4	5	RLR07C1001GR	81349	C-11	13
NAS620C4	80205	C-5	16	RLR07C1001GR	81349	C-17	43
NAS620C4	80205	C-9	98	RLR07C1002GR	81349	C-17	35
NAS620C6	80205	C-21	2	RLR07C1200GR	81349	C-6	3
NAS620C6	80205	C-6	8	RLR07C1201GR	81349	C-17	37
NAS620C8	80205	C-1	41	RLR07C1202GR	81349	C-9	77
NAS671C2	80205	C-4	7	RLR07C1500GR	81349	C-11	14
NAS671C4	80205	C-9	100	RLR07C1500GR	81349	C-11	21
NAS671C6	80205	C-6	9	RLR07C1500GR	81349	C-17	48
QQ343TYPE24AWG	81348	BULK	22	RLR07C1501GR	81349	C-17	30
RCR05G102JS	81349	C-16	4	RLR07C1503GR	81349	C-11	23
RCR05G564JS	81349	C-17	10	RLR07C1603GR	81349	C-11	19
RJR24FW102M	81349	C-9	53	RLR07C1801GR	81349	C-17	31
RJR24FW103M	81349	C-9	65	RLR07C2001GR	81349	C-17	26
RJR24FW253M	81349	C-9	64	RLR07C2200GR	81349	C-17	27
RJR24FW502M	81349	C-9	67	RLR07C2200GR	81349	C-8	13
RJR26FW102M	81349	C-12	16				
RJR26FW102M	81349	C-18	32				
RJR26FW103M	81349	C-18	46				

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
RLR07C2201GR	81349	C-5	24	0213-1-1060-1	57958	C-15	3
RLR07C2201GR	81349	C-7	5	0213-1-1060-1	57958	C-16	5
RLR07C240RGR	81349	C-18	47	0213-1-1060-1	57958	C-17	19
RLR07C2400GR	81349	C-18	34	0213-1-1060-1	57958	C-8	6
RLR07C2400GR	81349	C-7	7	0213-1-1068-1	57958	C-1	9
RLR07C3000GR	81349	C-8	14	0213-1-1074-1	57958	C-1	66
RLR07C3301GR	81349	C-12	15	0213-1-1167-1	57958	C-18	2
RLR07C3301GR	81349	C-18	45	0213-1-1295-2	57958	C-10	11
RLR07C36R0GR	81349	C-18	49	0213-1-1295-2	57958	C-16	27
RLR07C3600GR	81349	C-18	29	0213-1-1295-2	57958	C-8	28
RLR07C39R0GR	81349	C-18	38	0213-2-1196-19	57958	C-1	78
RLR07C3902GR	81349	C-7	10	0213-2-1196-8	57958	C-1	105
RLR07C4700GR	81349	C-18	40	0213-2-1196-9	57958	C-1	103
RLR07C4700GR	81349	C-7	8	03203	53909	BULK	8
RLR07C51R0GR	81349	C-12	20	03224	53909	BULK	17
RLR07C51R0GR	81349	C-18	41	2648706P2	10001	C-4	10
RLR07C51R0GR	81349	C-7	11	5035850-1	57958	BULK	25
RLR07C5100GR	81349	C-18	42	5035870-1	57958	C-1	68
RLR07C5100GR	81349	C-7	6	5051425-28	57958	C-1	11
RLR07C5101GR	81349	C-12	22	5051653-1	57958	C-1	76
RLR07C7501GR	81349	C-7	9	5051654-1	57958	C-1	144
RLR07C8201GR	81349	C-18	39	5051654-111	57958	C-1	58
RLR07C91R0GR	81349	C-8	12	5051655-1	57958	C-1	29
RLR20C1000GR	81349	C-9	47	5051656-1	57958	C-1	57
RLR20C1004GR	81349	C-9	52	5051656-105	57958	C-1	53
RLR20C1200GR	81349	C-9	45	5051656-2	57958	C-1	52
RLR20C2000GR	81349	C-9	60	5051657-1	57958	C-1	71
RLR20C4300GR	81349	C-18	44	5051658-1	57958	C-1	130
RNC50H1003FS	81349	C-9	68	5051780-2	57958	C-1	91
RNC50H1212FS	81349	C-9	66	5051781-1	57958	C-18	6
RNC50H3011FS	81349	C-9	73	5051782-1	57958	C-18	11
RNC55H4530FS	81349	C-6	4	5051805-1	57958	C-1	24
RTH42ES152J	81349	C-9	63	5051823-1	57958	C-19	1
RTH42ES822J	81349	C-9	76	5051824-1	57958	C-1	28
SE209D01	81349	C-1	101	5051824-1	57958	C-1	44
SE209D01	81349	C-5	23	5051928-1	57958	C-7	21
SE26XF02	81349	C-2	13	5051930-1	57958	C-7	21
SE26XF02	81349	C-3	2	5052001-3	57958	C-1	30
WS6157-14000	10001	C-4	9	5052003-2	57958	C-9	94
WS6157-44018	10001	C-4	8	5052009-1	57958	C-1	32
0108-1-4116-1	57958	C-1	87	5052011-1	57958	C-8	33
0213-1-1000-2	57958	C-1	90	5052013-1	57958	C-1	31
0213-1-1001-2	57958	C-12	28	5052015-1	57958	C-10	14
0213-1-1001-2	57958	C-17	16	5052017-1	57958	C-1	39
0213-1-1001-2	57958	C-8	29	5052019-1	57958	C-17	58
0213-1-1007-1	57958	C-2	21	5052025-1	57958	C-1	38
0213-1-1042-1	57958	C-2	17	5052027-1	57958	C-11	46
0213-1-1042-11	57958	C-2	22	5052033-1	57958	C-1	37
0213-1-1042-12	57958	C-2	18	5052035-1	57958	C-15	10
0213-1-1060-1	57958	C-11	5	5052037-1	57958	C-1	36
0213-1-1060-1	57958	C-12	10	5052039-1	57958	C-14	28
0213-1-1060-1	57958	C-13	4	5052045-1	57958	C-1	35
0213-1-1060-1	57958	C-14	6	5052047-1	57958	C-13	39
0213-1-1060-1	57958	C-15	4	5052049-3	57958	C-1	33
				5052051-3	57958	C-17	40
				5052057-2	57958	C-1	34

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
5052059-1	57958	C-13	25	5054344-1	57958	C-16	20
5052303-1	57958	C-21	4	5054345-1	57958	C-16	19
				5054346-1	57958	C-16	24
				5054347-1	57958	C-17	51
5053038-7	57958	C-21	6	5054354-1	57958	C-13	26
5053040-1	57958	C-5	30	5054363-1	57958	C-14	7
5053041-1	57958	C-5	20	5054364-1	57958	C-14	11
5053042-1	57958	C-1	98	5054365-1	57958	C-15	5
5053047-7	57958	C-5	2	5054379-1	57958	C-6	5
5053047-8	57958	C-5	28	5054513-12	57958	C-1	26
5053048-11	57958	C-5	17	5054568-1	57958	C-2	19
5053048-6	57958	C-5	27	5054630-1	57958	BULK	1
5053112-101	57958	C-4	13	5054630-3	57958	BULK	21
5053112-103	57958	C-4	11	5054640-2	57958	C-17	2
5053136-1	57958	C-1	5	5054641-1	57958	C-5	15
5053215-1	57958	C-1	7	5054671-1	57958	C-1	121
5053239-7	57958	C-5	14	5054721-1	57958	C-20	5
5053245-15	57958	C-1	64	5054758-2	57958	C-5	6
5053245-7	57958	C-1	62	5054774-1	57958	C-1	96
5053250-20	57958	C-1	139	5054775-3	57958	BULK	10
5053250-22	57958	C-1	138	5054784-1	57958	C-1	99
5053250-23	57958	C-1	141	5054784-1	57958	C-5	25
5053250-24	57958	C-1	136	5054784-2	57958	C-2	15
5053250-25	57958	C-1	137	5054784-2	57958	C-3	1
5053250-26	57958	C-1	135	5054784-6	57958	C-2	25
5053250-27	57958	C-1	134	5054801-1	57958	C-9	32
5053286-1	57958	C-13	6	5054802-2	57958	C-18	12
5053286-10	57958	C-13	15	5054818-8	57958	C-7	13
5053286-2	57958	C-13	7	5054821-3	57958	C-1	49
5053286-3	57958	C-13	8	5054822-1	57958	C-4	3
5053286-4	57958	C-13	9	5054822-2	57958	C-9	33
5053286-5	57958	C-13	10	5054822-3	57958	C-9	101
5053286-6	57958	C-13	11	5054823-2	57958	C-17	57
5053286-7	57958	C-13	12	5054823-2	57958	C-9	96
5053286-8	57958	C-13	13	5054830-6	57958	C-1	18
5053286-9	57958	C-13	14	5054831-2	57958	C-1	115
5053287-1	57958	C-14	21	5054832-1	57958	C-1	8
5053287-2	57958	C-14	22	5054833-1	57958	C-1	59
5053287-3	57958	C-14	23	5054833-2	57958	C-1	60
5053287-4	57958	C-14	24	5054835-1	57958	BULK	6
5053288-5	57958	C-17	25	5054835-1	57958	C-1	70
5053288-6	57958	C-17	26	5054837-1	57958	C-1	55
5053298-2	57958	C-9	104	5054837-2	57958	C-1	54
5054268-1	57958	C-23	1	5054837-4	57958	C-1	51
5054285-1	57958	C-18	53	5054860-1	57958	C-1	109
5054294-1	57958	C-1	127	5054860-5	57958	C-1	108
5054296-3	57958	C-1	79	5054860-6	57958	C-1	107
5054321-1	57958	C-17	23	5054860-7	57958	C-1	106
5054325-1	57958	C-11	13	5054875	57958	BULK	26
5054327-1	57958	C-8	19	5054883-2	57958	C-1	113
5054328-1	57958	C-11	1				
5054337-1	57958	C-12	38	5054884-22	57958	C-1	92
5054337-1	57958	C-17	30	5054884-3	57958	C-20	1
5054339-1	57958	C-17	1				
5054342-1	57958	C-12	34	5054892-1	57958	C-1	20

PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
5054895-1	57958	C-7	16				
5054895-1	57958	C-9	108				
5054906-5	57958	C-14	35	7801101RX			
5054907-102	57958	C-21	10	7801101RX	14933	C-11	39
5054907-103	57958	C-21	9	7801301GX	14933	C-14	21
5054907-104	57958	C-21	8	7801401CX	14933	C-11	1
5054907-105	57958	C-21	7	7801702QX	14933	C-17	50
5054919-1	57958	C-1	102	7901001QX	14933	C-14	
5054919-4	57958	C-1	77				
5054919-7	57958	C-1	104				
5054927-1	57958	C-1	25				
5054928-1	57958	C-20	2				
5054937-5	57958	C-4	1				
5054937-6	57958	C-4	2				
5054964-2	57958	C-5	10				
5054964-3	57958	C-18	55				
5054965-1	57958	C-5	1				
5054966-1	57958	C-5	19				
5054980-1	57958	C-5	29				
5054980-2	57958	C-1	63				
5054981-1	57958	C-5	26				
5055205-1	57958	C-9	81				
5055206-1	57958	C-9	85				
5055207-1	57958	BULK	24				
5055208-1	57958	C-9	106				
5055209-1	57958	C-9	79				
5055211-1	57958	C-9	93				
5055292-1	57958	C-1	93				
5055293-1	57958	C-6	13				
5055509-1	57958	C-17	36				
5068020-1	57958	C-16	6				
5068021-1	57958	C-12	30				
5068021-1	57958	C-13	18				
5068021-1	57958	C-14	16				
5068021-1	57958	C-15	19				
5068021-1	57958	C-16	9				
5068024-1	57958	C-15	22				
5068027-1	57958	C-12	40				
5068027-1	57958	C-13	16				
5068027-1	57958	C-14	29				
5068027-1	57958	C-15	23				
5068028-1	57958	C-14	31				
5068028-1	57958	C-15	24				
5068028-1	57958	C-16	8				
5068030-1	57958	C-9	87				
5068035-1	57958	C-14	28				
5068042-1	57958	C-12	27				
5068052-1	57958	C-15	12				
5068070-1	57958	C-15	19				
5068082-1	57958	C-17	32				
5068119-1	57958	C-15	9				
5068183-1	57958	C-12	9				
5068183-1	57958	C-13	3				
5068183-1	57958	C-14	4				
5068183-1	57958	C-15	3				

## APPENDIX D

## EXPENDABLE SUPPLIES AND MATERIALS LIST

## Section I. INTRODUCTION

D-1. SCOPE. This appendix lists expendable supplies and materials you will need to operate and maintain the RSPU. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

## D-2. EXPLANATION OF COULMNS.

a. Column (1)-Item number. This column is a numerical listing of the items contained in this appendix.

b. Column (2)-Level. This column identifies the lowest level of maintenance that requires the listed item.

C - Operator/Crew  
O - Organizational Maintenance  
F - Direct Support Maintenance  
H - General Support Maintenance

c. Column (3)-National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

d. Column (4)-Description Indicates the Federal item name and, if required, a description to identify the item.

e. Column (5)-Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS

(1) ITEM NUMBER	(3) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1	0	8020-00-257-0382	Brush	EA
2	0	8305-00-222-2423	Lint-Free Cloth	EA
3	0	6850-00-105-3084	Cleaning Compound, Freon-TF	OZ
4	0	8010-00-087-0103	Paint Finishing (Color 24410)	QT
5	H	3439-00-194-9727	Sol der	LB
7	0		Rag	EA
8	H		Heat Shrink Tubing	

## GLOSSARY

## SECTION I. ABBREVIATIONS

ABSEL	A Bus Select
ADI SEL	Analog Data Input Select
ALE	Address Latch Enable
AUX	Auxiliary
A/D	Analog to Digital
BBSSEL	B Bus Select
CIVL	Control Input Valid
CONT	Control
CPU	Central Processor Unit
CRSEL	Control Register Select
CYC	Cycle
dB	Decibel
dBm	Decibels Referred to 1 Milliwatt
DODONE	Device Output Done
EPROM	Erasable Programmable Read Only Memory
IDBSEL	Immediate Data Bus Select
IDDAT	Immediate Data
MADDR	Memory Address
MI R	Macro Instruction Register
MPU	Microprocessor Unit
MWRCYC	Memory Write Cycle
PAN	Panoramic
PI DLOAD	Peripheral Interface Service Load
PPI	Programmable Peripheral Interface
PROM	Programmable Lead Only Memory
RS	Receiver Set
SP4T	Single Pole Four Throw
TEMP	Temperature
USQCLK	Microsequencer Clock
USQCS	Microsequencer Control Signal

SECTION II. DEFINITIONS

<b>Algorithm</b>	A step-by-step procedure for solving a problem.
<b>Attenuation</b>	The amount by which a signal or other quantity is reduced.
<b>A/D Converter</b>	A device or circuit which provides a digit output from an analog input.
<b>Bidirectional</b>	Able to transfer data in two directions.
<b>Buffer</b>	A device capable of driving several gates without overloading the preceding stage.
<b>Comparator</b>	A device whose output signal depends on the result of comparing two or more input signals.
<b>Conditional Instruction</b>	An instruction in a computer program which is executed only when a specified condition is met.
<b>Decoder</b>	A device which provides specific outputs from coded inputs.
<b>FFT Processor</b>	A circuit used to transform signal data from the time domain to the frequency domain.
<b>Indicator</b>	A lamp or other device used to convey information.
<b>Integrator</b>	A device or circuit whose output signal is proportional to the integral of the input signal with respect to time.
<b>Interface</b>	A device or circuit that links one part of a system to another.
<b>Interrupt</b>	A signal which causes a break in a computer program.
<b>Macroinstruction</b>	A source program instruction which becomes several machine code-instructions for a microprocessor.
<b>Microinstruction</b>	A machine code instruction which controls the operation of a microprocessor directly.
<b>Microprogram</b>	A routine of microinstruction.
<b>Optimization</b>	The adjustment of the elements of a process for the best end result.



Parallel-to-Serial Converter	A device or circuit which provides a parallel output from a serial input.
Programmable Peripheral Interface	A multifunction I/O device whose mode can be changed using control signals.
Pulse Stretcher	A shaping circuit that widens a pulse.
Routine	A sequence of instructions for performing an operation.
Sensitivity	The ability of a circuit or device to respond to a low level applied stimulus.
Sequencer	A device that initiates or terminates events in a desired sequence.



INDEX

Subject	Paragraph, Figure, Table Number
<b>A</b>	
Address Generator CCA (A10)	
Functional Block Diagram . . . . .	F 3-10
Functional Description . . . . .	3-3.6
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	FO-13
Administrative Storage . . . . .	1-4
<b>C</b>	
Calibration . . . . .	1-5
Carrier Presence Detector CCA (A1-A4)	
Functional Block Diagram . . . . .	FO-5
Functional Description . . . . .	3-3.9
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	FO-7
Circuit Card/Module Functional Description	
Address Generator CCA (A10) . . . . .	3-3.6
Carrier Presence Detector CCA (A1-A4) . . . . .	3-3.9
Control Sequencer CCA (A9) . . . . .	3-3.4
Converter IF (A20) . . . . .	3-3.1
IF Down Converter (A14) . . . . .	3-3.2
I/O Register Set CCA (A12) . . . . .	3-3.8
Micromemory CCA (A8) . . . . .	3-3.5
Power Monitor CCA (A17) . . . . .	3-3.12
RC Bus Interface/8085 CPU CCA (A7) . . . . .	3-3.3
RC Bus Status Interface CCA (A6) . . . . .	3-3.11
4K RAM CCA (A11) . . . . .	3-3.7
150 Hz Tone Detector CCA (A5) . . . . .	3-3.10
Component Removal and Installation . . . . .	5-4
Capacitor (C1) . . . . .	5-4.15
Cover Remova. . . . .	5-4.1
CCA A1 - A12, A14 . . . . .	5-4.2
Circuit Breaker Assemblies (CB1-CB4) . . . . .	5-4.16
Contact Assembly (A15) . . . . .	5-4.10
Converter IF (A20) . . . . .	5-4.4
Elapsed Time Indicator (M1) . . . . .	5-4.2.2
EMI Filter Assembly (A16) . . . . .	5-4.8
Fan Assembly (B1) . . . . .	5-4.14
Filter Assembly (FL1) . . . . .	5-4.9
Filter-Jack Assembly (A22) . . . . .	5-4.13
Indicator Light Assembly (A18, A19) . . . . .	5-4.12
Light Indicator (A23) . . . . .	5-4.23
Overvoltage Protector (VR1) . . . . .	5-4.21
Panel Mounted Switches (S1-S3) . . . . .	5-4.20
Power Monitor CCA (A17) . . . . .	5-4.3

Subject	Paragraph, Figure, Table Number
C (Cont)	
Power Supply Module (PS1) . . . . .	5-4. 6
Power Supply Modules (PS2, PS3) . . . . .	5-4. 7
RF Cable Assemblies (W2-W20) . . . . .	5-4. 11
Wire Harness (W1) . . . . .	5-4. 17
Wire Harness (W21) . . . . .	5-4. 18
Wire Harness (W22) . . . . .	5-4. 19
-6 Volt Regulator (A21) . . . . .	5-4. 5
Converter Assembly Key Positions . . . . .	F 5-26
Control Sequencer CCA (A9)	
Functional Block Diagram . . . . .	F 3-8
Functional Description . . . . .	3-3. 4
Removal /Installation . . . . .	5-4. 2
Schematic Diagram . . . . .	FO-12
Converter IF (A20)	
Cable Routing . . . . .	T 5-10
Functional Block Diagram . . . . .	F 3-6
Functional Description . . . . .	3-3. 1
Maintenance . . . . .	5-10
Removal /Installation . . . . .	5-4. 4
Schematic Diagram . . . . .	FO-18
Wire List . . . . .	T 5-11
D	
Destruction of Army Materiel to <b>Prevent</b> Enemy Use . . . . .	1-3
E	
Expendable Supplies and Materials List . . . . .	Appendix D
F	
Filter Assembly EMI (A16)	
<b>Removal</b> . . . . .	2-7. 5
Repair . . . . .	
Test Procedure . . . . .	T 5-6
Wire Chart . . . . .	T 5-7
Filter-Jack Assembly (A22)	
Internal Wiring . . . . .	T 5-13
Maintenance . . . . .	5-12
Parts Identification . . . . .	F 5-16
Functional Description, RSPU	
PAN Processor . . . . .	3-2. 4
Power Distribution . . . . .	3-2. 5
RCBus A Interface . . . . .	3-2. 1
RC Bus B (PAN Display Data) . . . . .	3-2. 3
Signal Interface . . . . .	3-2. 2

Subject	Paragraph, Figure, Table Number
I (Cont)	
I	
IF Down Converter (A14)	
Functional Block Diagram . . . . .	F 3-7
Functional Description . . . . .	3-3.2
Removal /Installation . . . . .	5-4.2
Schematic Diagram . . . . .	F0-16
Indicator Light Assembly (A18, A19)	
Inspection . . . . .	T 5-9
Repair . . . . .	5-9
I/O Register Set CCA (A12)	
Functional Block Diagram . . . . .	F0-3
Functional Description . . . . .	3-3.8
Removal /Installation . . . . .	5-4.2
Schematic Diagram . . . . .	F0-15
M	
Maintenance Allocation Chart . . . . .	Appendix B
Maintenance Forms and Records . . . . .	
Maintenance of Circuit Card (A1-A12, A14) . . . . .	
Micromemory CCA (A8)	
Functional Block Diagram . . . . .	F 3-9
Functional Description . . . . .	3-3.5
Rmoval /Installation . . . . .	5-4.2
Schematic Diagram . . . . .	F0-11
O	
Organizational Preventive Maintenance Checks and Services	
Monthly Schedule . . . . .	T 2-1
P	
<b>Power Monitor CCA (A17)</b>	
<b>Functional Block Diagram</b> . . . . .	F 3-13
<b>Functional Description</b> . . . . .	3-3.12
<b>Maintenance</b> . . . . .	
<b>Removal/Installation</b> . . . . .	
<b>Schematic Diagram</b> . . . . .	F0-17
<b>Test Procedure</b> . . . . .	T 5-8
<b>Test Set-Up Diagram</b> . . . . .	F 5-14
<b>Pre-Test Inspection</b> . . . . .	T 5-2
<b>Preventive Maintenance Checks and Services</b> . . . . .	2-4
<b>Processor, Signal Data MX-10214/MLQ-34</b> . . . . .	F 1-1
<b>CCA/Module Identification</b> . . . . .	T 5-3
<b>Description</b> . . . . .	1-8

Paragraph,  
Figure, Table  
Number

Subject

P (Cont)

Functional Block Diagram . . . . .	F0-1
Functional Description . . . . .	3-2
Maintenance . . . . .	2-7
Cleaning . . . . .	2-7.2
Inspection . . . . .	2-7.1
Lamp Replacement . . . . .	2-7.4
Test . . . . .	2-7.3
Schematic Diagram . . . . .	F0-6
Tabulated Data . . . . .	<b>1-9</b>
Technical Characteristics . . . . .	T 1-1
Test Set-up Diagram . . . . .	F 5-1
Wire List . . . . .	T 5-15

R

RC Bus A Interface	
RC Bus (A, B), Timing . . . . .	F 3-1
RC Bus A Data Format (Receiver Control) . . . . .	F 3-2
RC Bus A Data Format (Status Word) . . . . .	F 3-3
RC Bus Interface/8.85 CPU CCA (A7)	
Functional Block Diagram . . . . .	F0-2
Functional Description . . . . .	3-3.3
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	F0-10
RC Bus B (PAN Display Data)	
RC Bus (A, B), Timing . . . . .	F 3-1
RC Bus B Data Format (From PAN Processor) . . . . .	F 3-4
RC Bus B Data Format (To PAN Processor) . . . . .	F 3-5
RC Bus Status Interface CCA (A6)	
Functional Block Diagram . . . . .	F0-4
Functional Description . . . . .	3-3.11
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	F0-9
References . . . . .	Appendix A
Repairing and Refinishing Instructions . . . . .	2-3
Repair Parts and Special Tools List . . . . .	Appendix C
Repairs to Contact Assembly (A15) . . . . .	5-6
Reporting Equipment Improvement Recommendations (EIR) . . . . .	1-6
Reporting of Errors . . . . .	1-7
<b>RF Cable Routing.</b> . . . . .	5-5

T

Test Information . . . . .	T 5-1
Test Level Descriptions . . . . .	<b>5-2</b>
Test Procedures . . . . .	5-3

Subject	Paragraph, Figure, Table Number
<b>T (Cont)</b>	
Test Setup	
Address Generator CCA (A10) . . . . .	F 5-14
Carrier Presence Detector CCA (A1-A4) . . . . .	F 5-2
RC Bus Status Interface CCA (A6) . . . . .	F 5-4
RC BUS Status Interface 8085 CPU CCA (A7) . . . . .	F 5-5
RSPU CPD Alignment . . . . .	FO-19
150 Hz Tone Detector CCA (A5) . . . . .	5-3
Tools and Equipment . . . . .	<b>2-2</b>
Troubleshooting . . . . .	2-5

**W**

Wire Harness (W1, W21, W22)	
Maintenance . . . . .	5-13,
. . . . .	T 5-14

**#**

-6V Regulator CCA (A21)	
Maintenance . . . . .	5-11
Test Procedure . . . . .	T 5-12
Test Set-up Diagram . . . . .	F 5-15
4K RAM CCA (A11)	
Functional Block Diagram . . . . .	F 3-11
Functional Description . . . . .	3-3.7
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	FO-14
150 Hz Tone Detector CCA (A5)	
Functional Block Diagram . . . . .	F 3-12
Functional Description . . . . .	3-3.10
Removal/Installation . . . . .	5-4.2
Schematic Diagram . . . . .	FO-8





By Order of the Secretary of the Army:

Official:

**JOHN A. WICKHAM, JR.**  
*General, United States Army*  
*Chief of Staff*

**DONALD J. DELANDRO**  
*Brigadier General, United States Army*  
*The Adjutant General*



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT. FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

Your mailing address.

DATE SENT

Date you filled out this form.

PUBLICATION NUMBER

TM 32-5865-069-24&P

PUBLICATION DATE

15 February 1985

PUBLICATION TITLE

Processor, Signal  
Data MX-10214/MLQ-34

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
C-84		C-20	

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Two different parts are labeled as callout 2. One is the Filter, but the other is not identified. I think it would be helpful to identify the other item as well.

**SAMPLE**

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

Jack Warren, SSG, 514-0157

SIGN HERE

*Jack Warren*

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314




OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

**SAMPLE**

Commander  
US Army Electronics Materiel Readiness Activity  
ATTN: SELEM-ME-E  
Vint Hill Farms Station  
Warrenton, VA 22186-5141

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

---

DATE SENT

**PUBLICATION NUMBER**  
TM 32-5865-069-24&P

**PUBLICATION DATE**  
15 February 1985

**PUBLICATION TITLE**  
Processor, Signal  
Data MX-10214/MLQ-34

**BE EXACT... PIN-POINT WHERE IT IS**

PAGE NO	PARA-GRAPH	FIGURE NO.	TABLE NO.

**IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:**

**PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER**

**SIGN HERE:**

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY


POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Electronics Materiel Readiness Activity  
ATTN: SELEM-ME-E  
Vint Hill Farms Station  
Warrenton, VA 22186-5141

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

<h2 style="margin: 0;">SOMETHING WRONG WITH THIS PUBLICATION?</h2>			
 <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT. FOLD IT AND DROP IT IN THE MAIL!</p> </div>			
FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)		DATE SENT	
PUBLICATION NUMBER <b>TM 32-5865-069-24&amp;P</b>		PUBLICATION DATE <b>15 February 1985</b>	PUBLICATION TITLE <b>Processor, Signal Data MX-10214/MLQ-34</b>
<b>BE EXACT... PIN-POINT WHERE IT IS</b>			
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
<b>IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:</b>			
PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER			SIGN HERE:

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314




OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Electronics Materiel Readiness Activity  
ATTN: SELEM-ME-E  
Vint Hill Farms Station  
Warrenton, VA 22186-5141



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

 <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;"> <p>THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!</p> </div>		<h2 style="margin: 0;">SOMETHING WRONG WITH THIS PUBLICATION?</h2>	
FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)		DATE SENT	
PUBLICATION NUMBER <b>TM 32-5865-069-24&amp;P</b>		PUBLICATION DATE <b>15 February 1985</b>	PUBLICATION TITLE Processor, Signal Data MX-10214/MLQ-34
BE EXACT... PIN-POINT WHERE IT IS			
PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:			
PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER		SIGN HERE:	

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

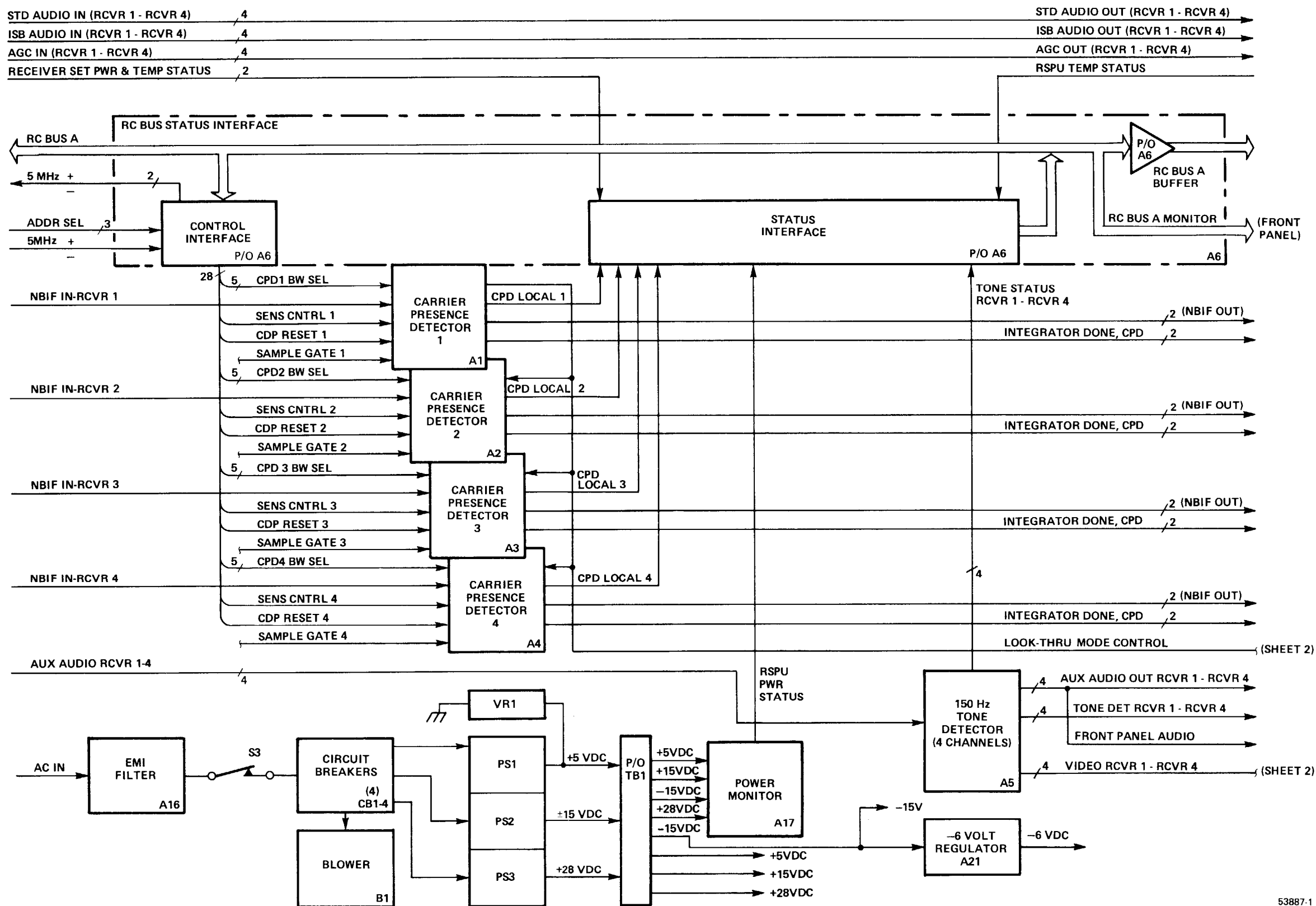
DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



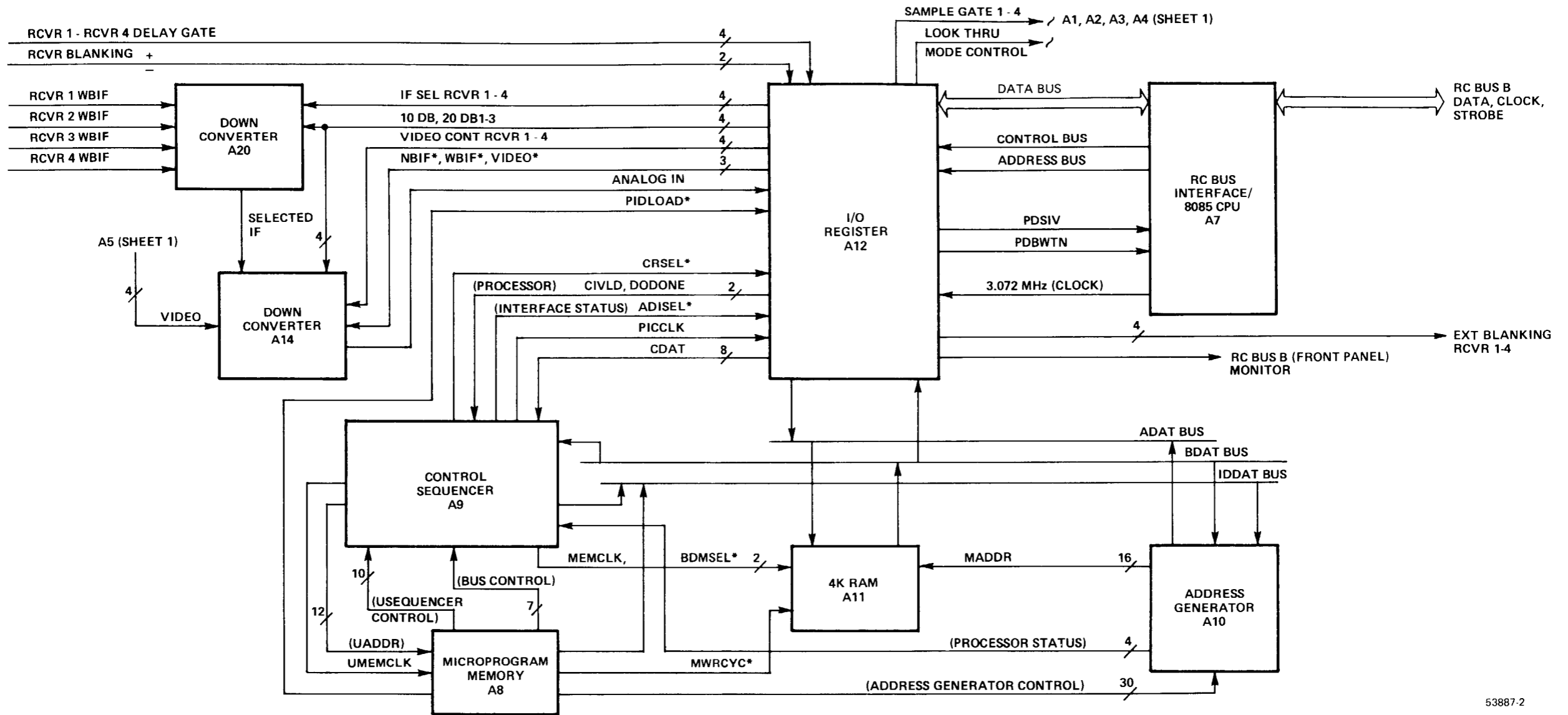
OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Electronics Materiel Readiness Activity  
ATTN: SELEM-ME-E  
Vint Hill Farms Station  
Warrenton, VA 22186-5141



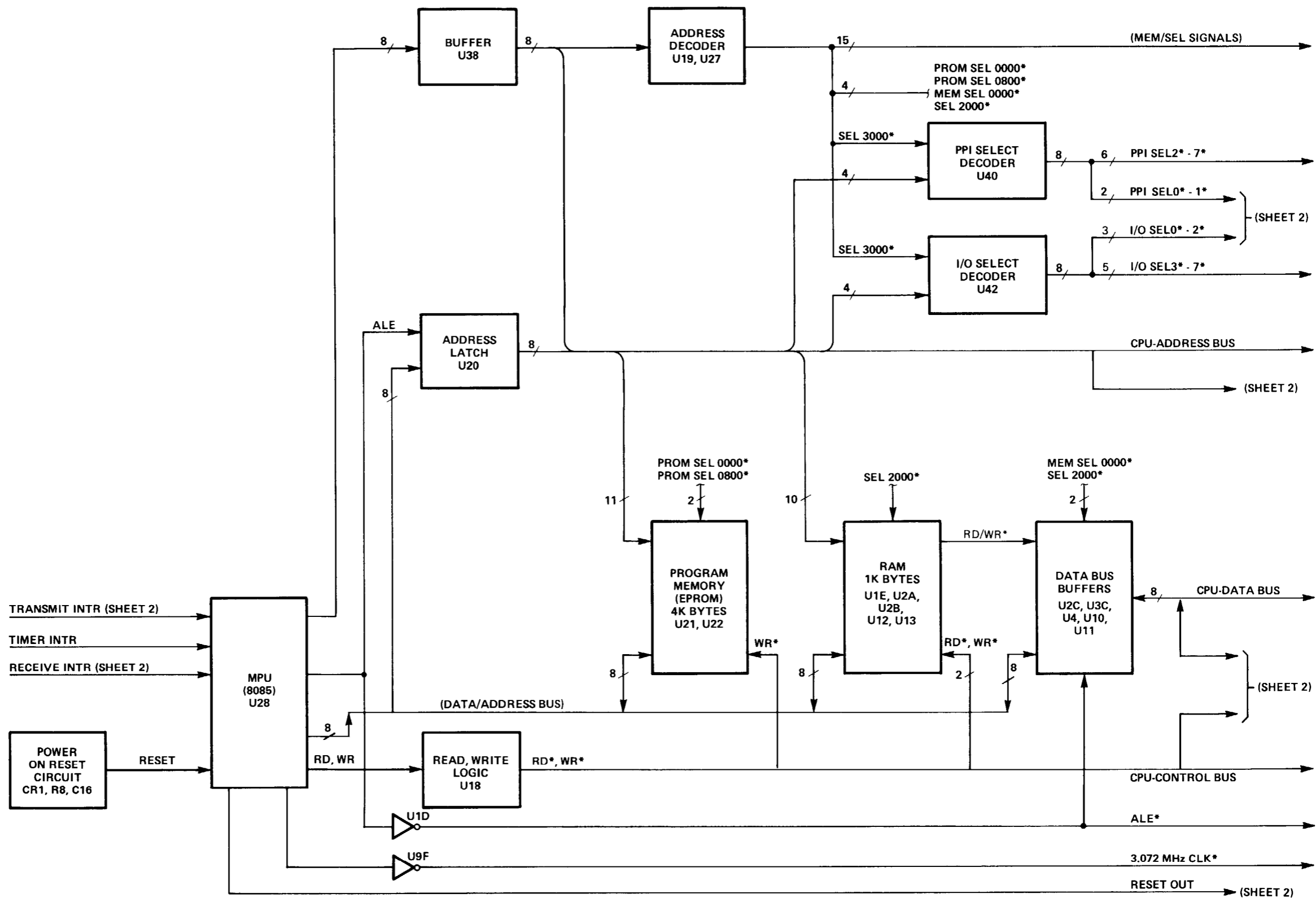
53887-1

F0-1. RSPU, Functional Block Diagram (Sheet 1 of 2)

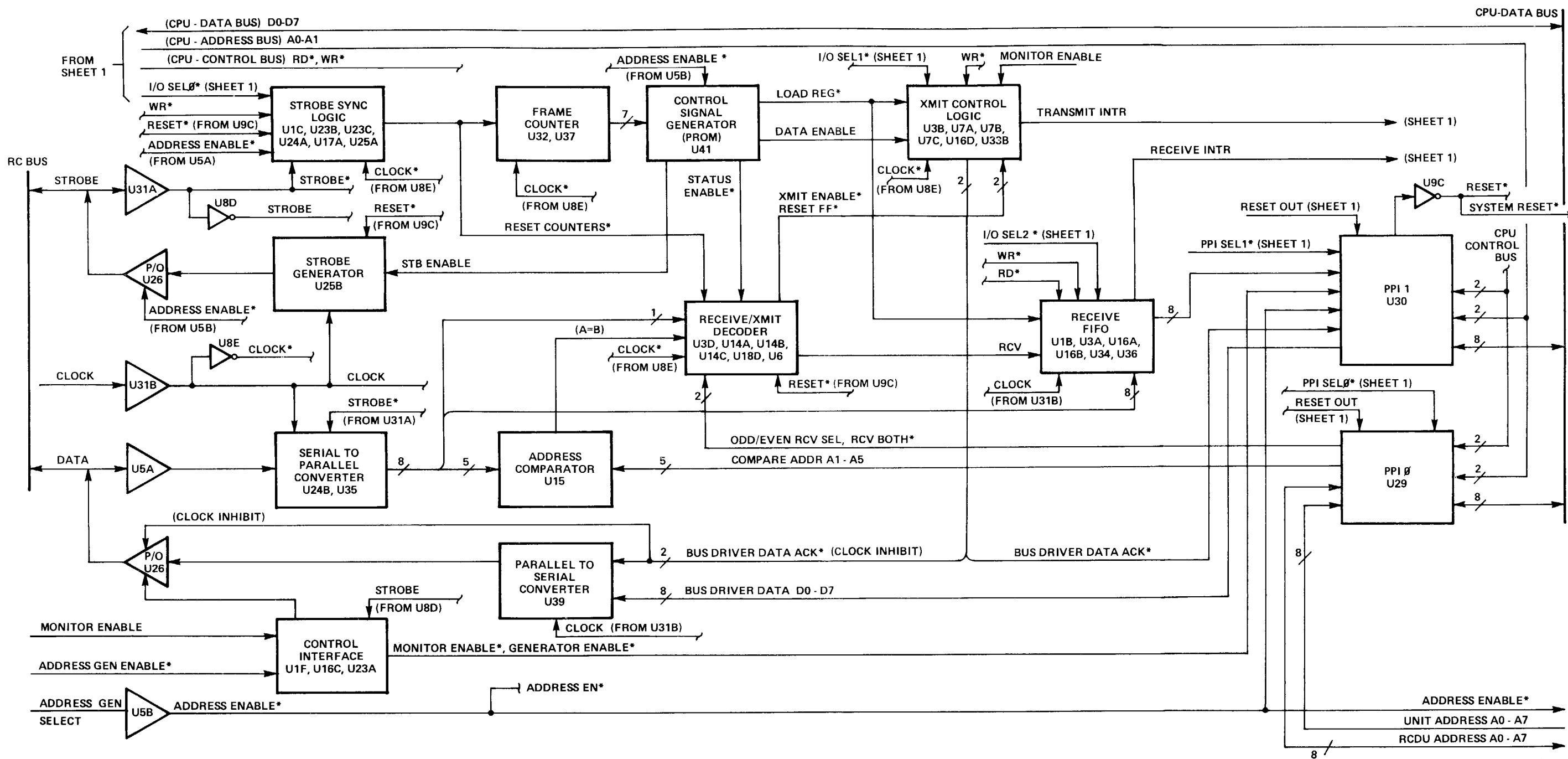


53887-2

F0-1. RSPU, Functional Block Diagram (Sheet 2 of 2)

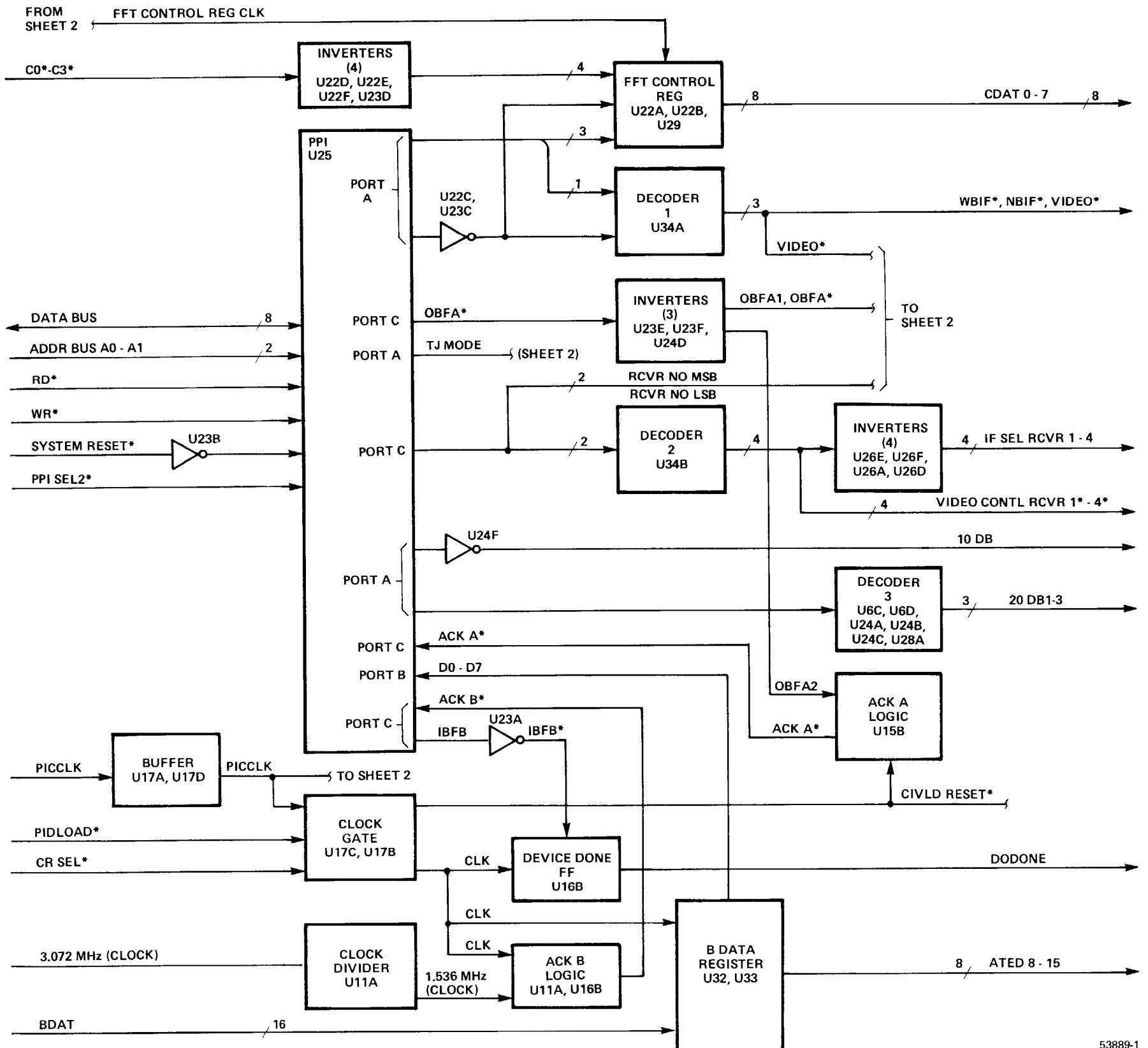


F0-2. RC Bus Interface/8085 CPU CCA (A7), Functional Block Diagram (Sheet 1 of 2)



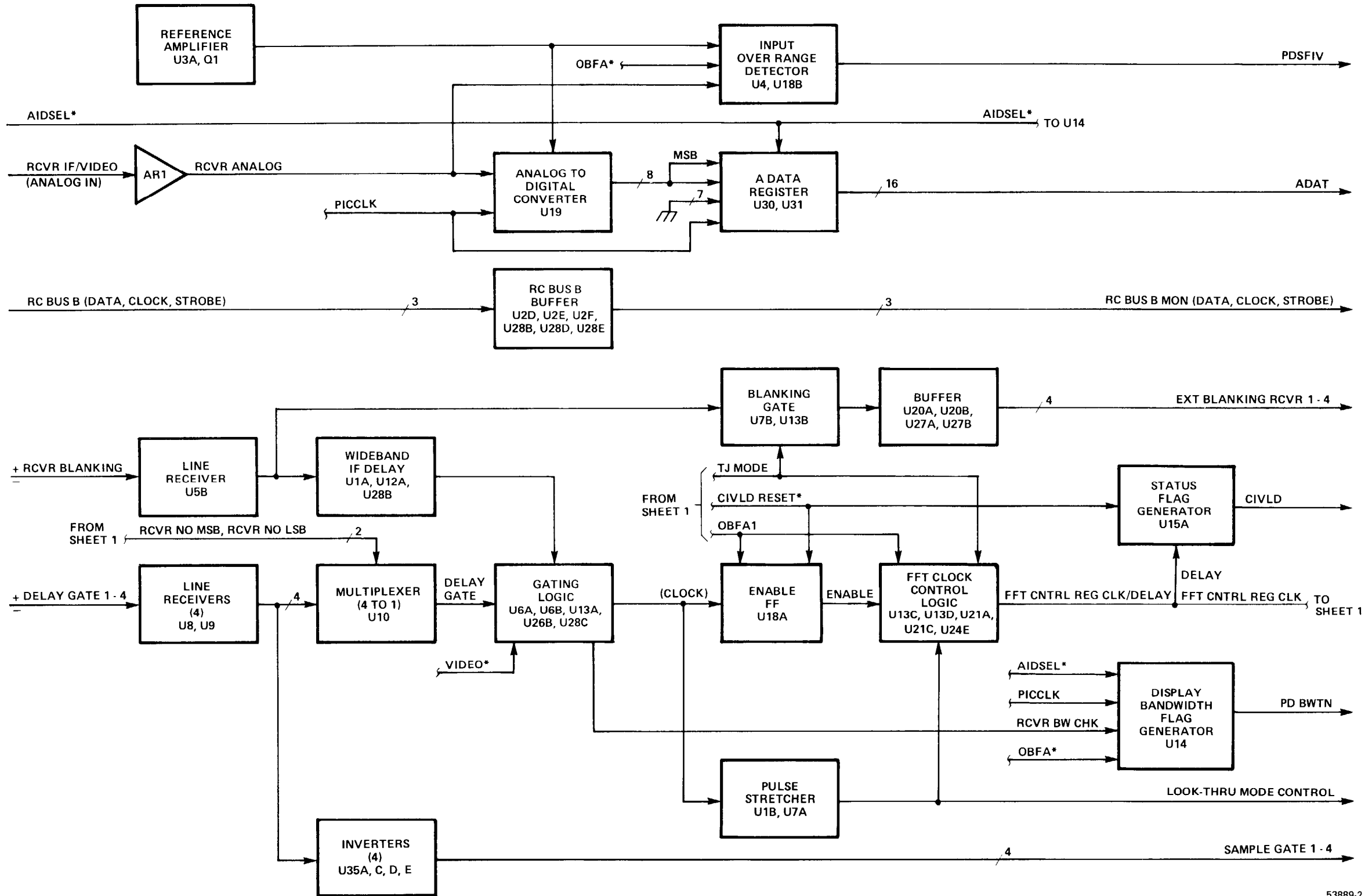
53888-2

F0-2. RC Bus Interface/8085 CPU CCA (A7), Functional Block Diagram (Sheet 2 of 2)



53889-1

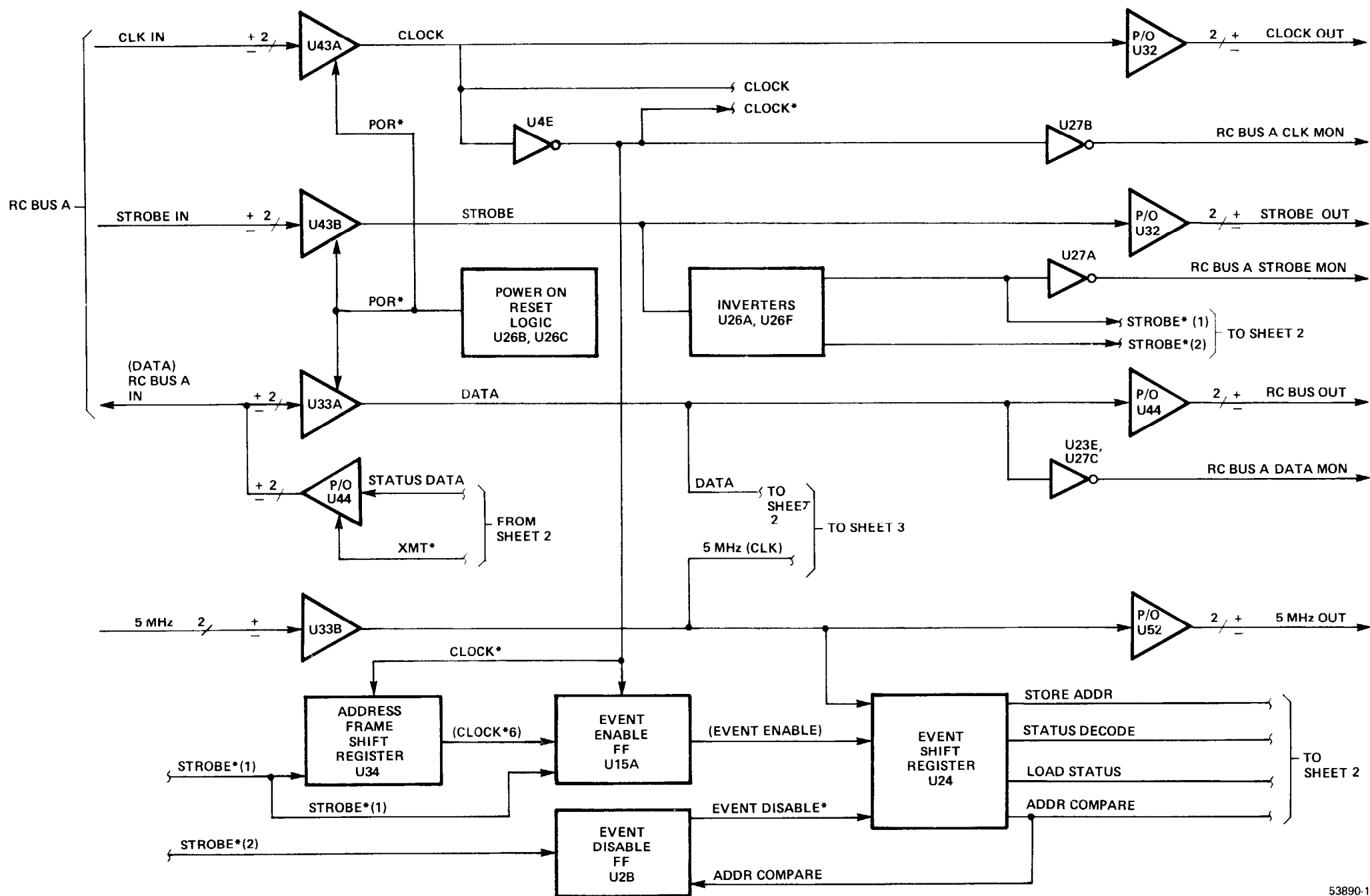
F0-3. 1/0 Register Set CCA (A12),  
 Functional Block Diagram  
 (Sheet 1 of 2)



53889-2

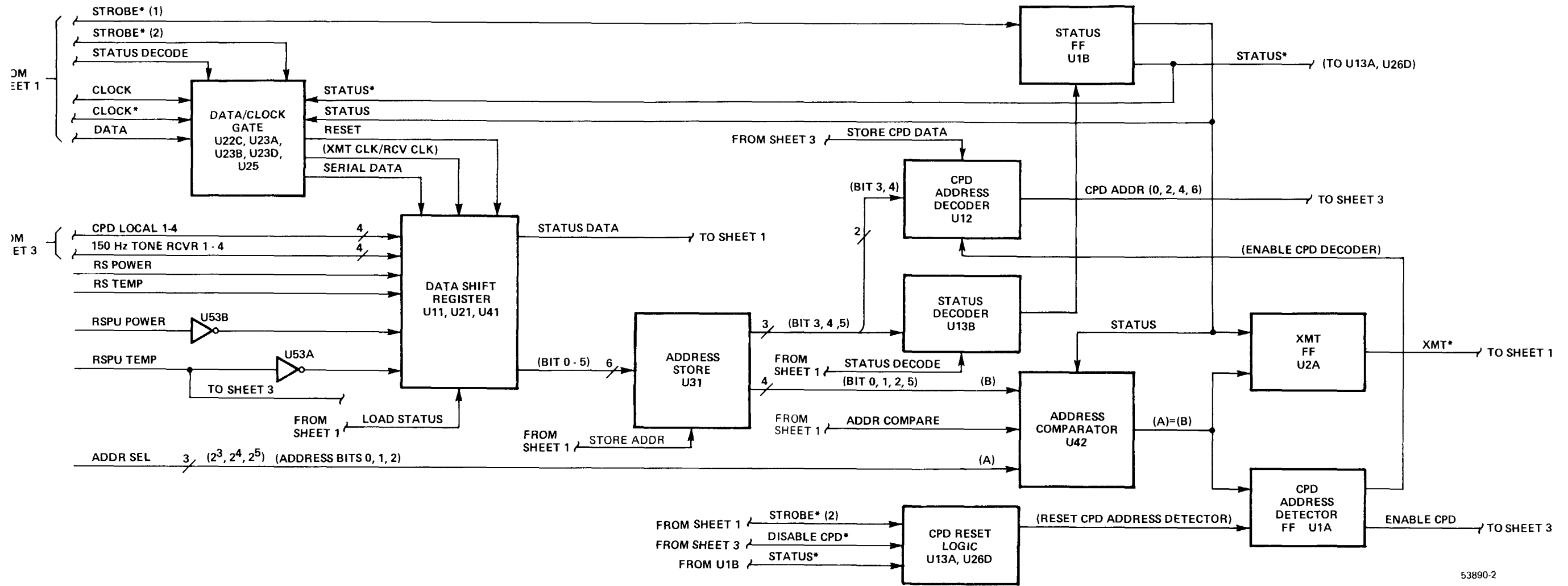
F0-3. I/O Register Set CCA (A12),  
Functional Block Diagram  
(Sheet 2 of 2)





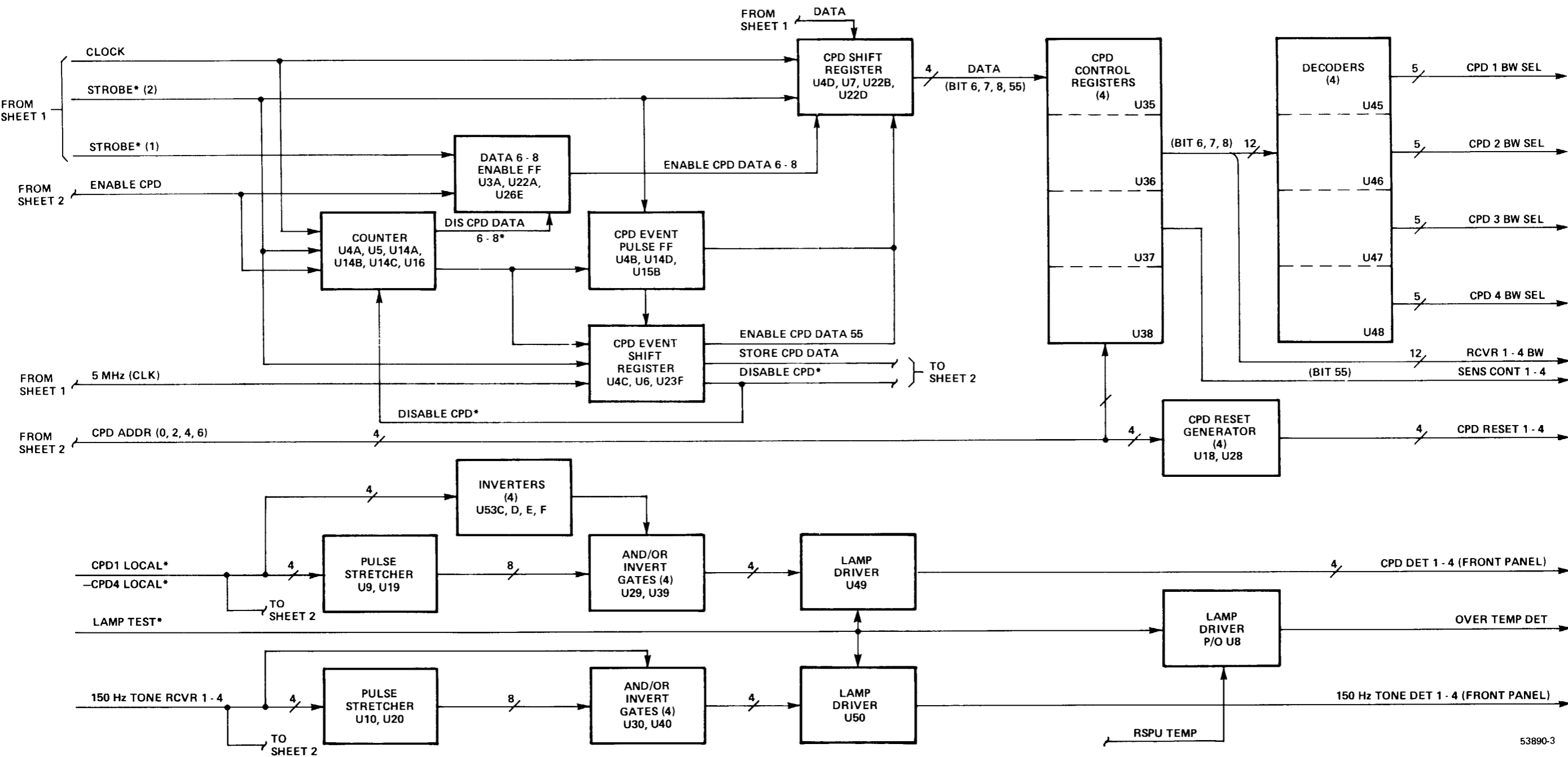
53890-1

F0-4. RC Bus Status Interface CCA (A6), Functional Block Diagram (Sheet 1 of 3)



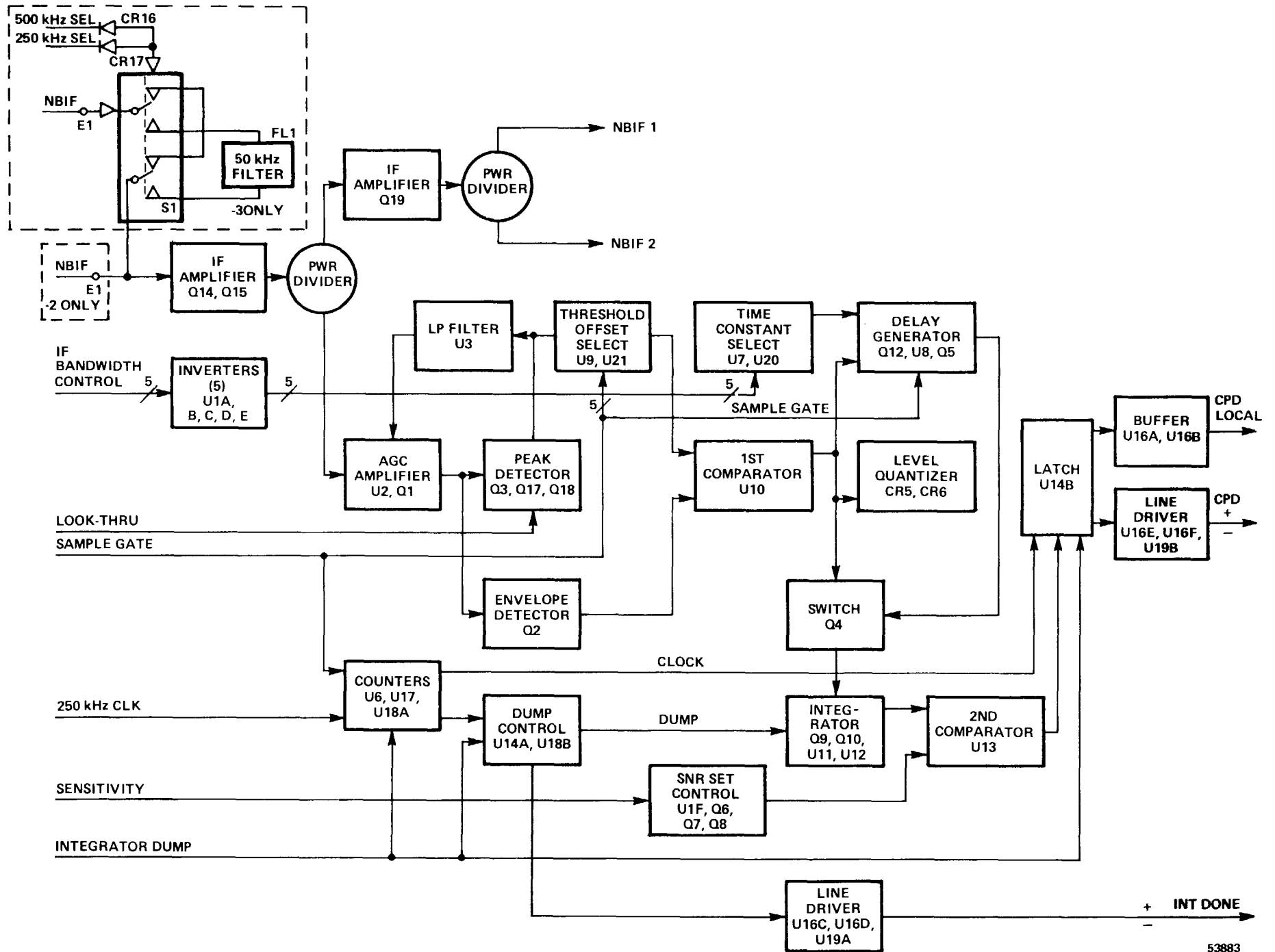
53890-2

F0-4. RC Bus Status Interface CCA (A6), Functional Block Diagram (Sheet 2 of 3)



53890-3

F0-4. RC Bus Status Interface CCA (A6), Functional Block Diagram (Sheet 3 of 3)



53883

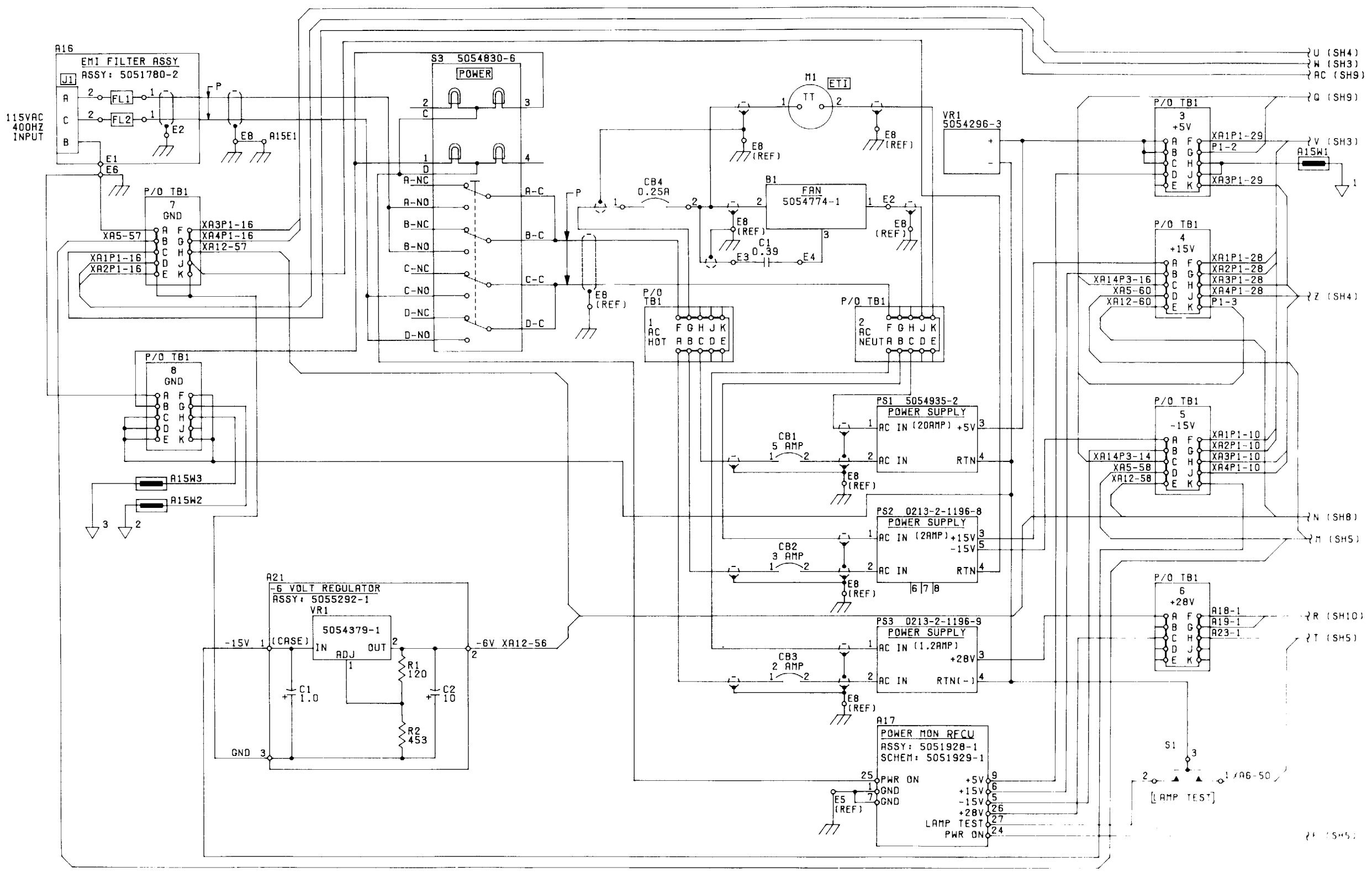
F0-5. Carrier Presence Detector CCA (A1-A4), Functional Block Diagram

NOTES: UNLESS OTHERWISE SPECIFIED:

1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS
2. RESISTANCE VALUES IN OHMS
3. CAPACITANCE VALUES IN UF
4. P/O INDICATES PART OF
5. UNUSED CONNECTOR PINS NOT SHOWN
6.  INDICATES EQUIPMENT MARKING
7. \* FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION
8.  INDICATES BUSS BAR
9. \* PRECEDING CONNECTOR PIN LETTER INDICATES LOWER CASE CHARACTER
10.  $\nabla$  INDICATES BUS BAR CONNECTION
11. SIGNAL NAMES ON THE FOUR CARRIER PRESENCE DETECTORS (A1 THRU A4) WILL VARY DUE TO THEIR RELATIONSHIP WITH THE FOUR RECEIVERS. SIGNAL NAMES MAY NOT MATCH SCHEMATIC 5052002-1 BECAUSE IT IS A VENDOR SUPPLIED ITEM. SINCE RC BUS INTERFACE /BOB5 CPU (A7) IS A MULTI-USE CARD, A FEW NAMES MAY NOT MATCH

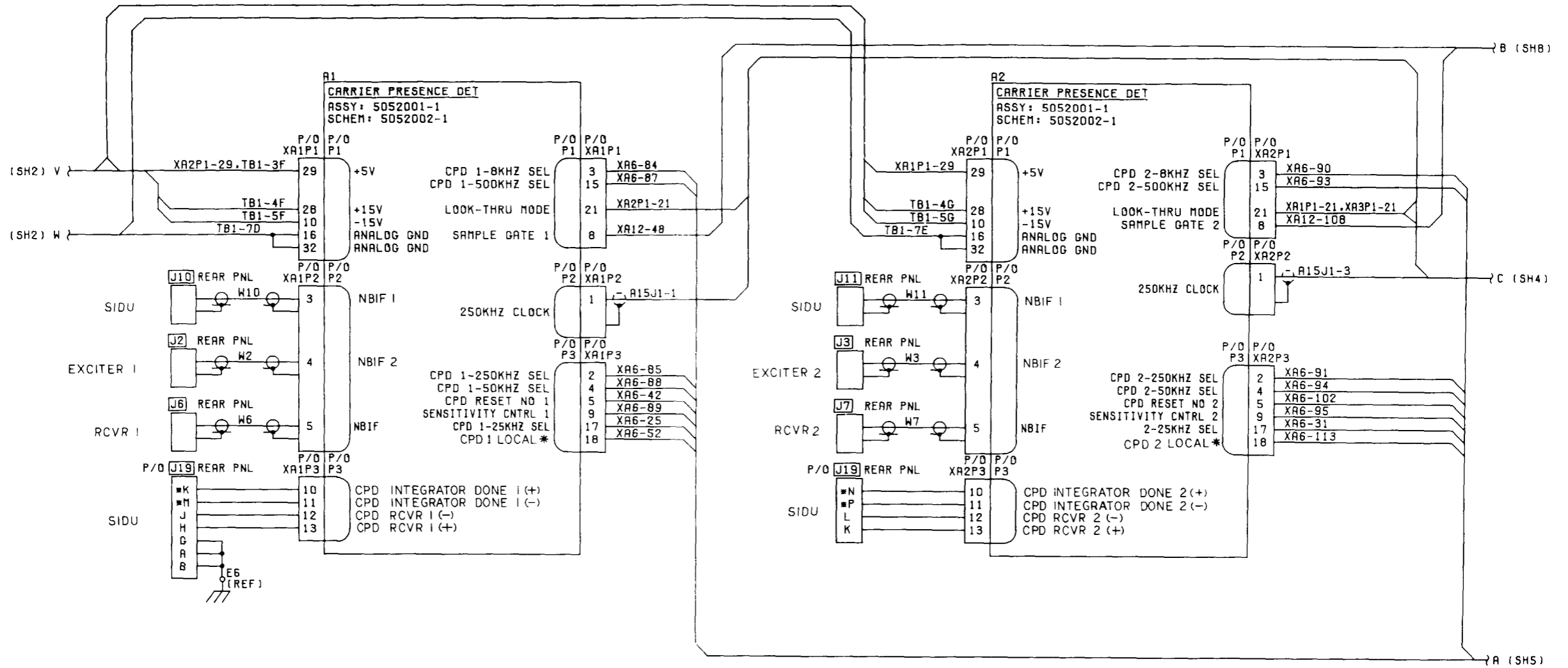
HIGHEST REFERENCE DESIGNATIONS			
A23	B1	C1	CB4
VR1	EB	FL1	J3D
M1	P1	PS3	S4
TB1	W20		
REFERENCE DESIGNATIONS NOT USED			
A13	J1	W1	

5051651-1

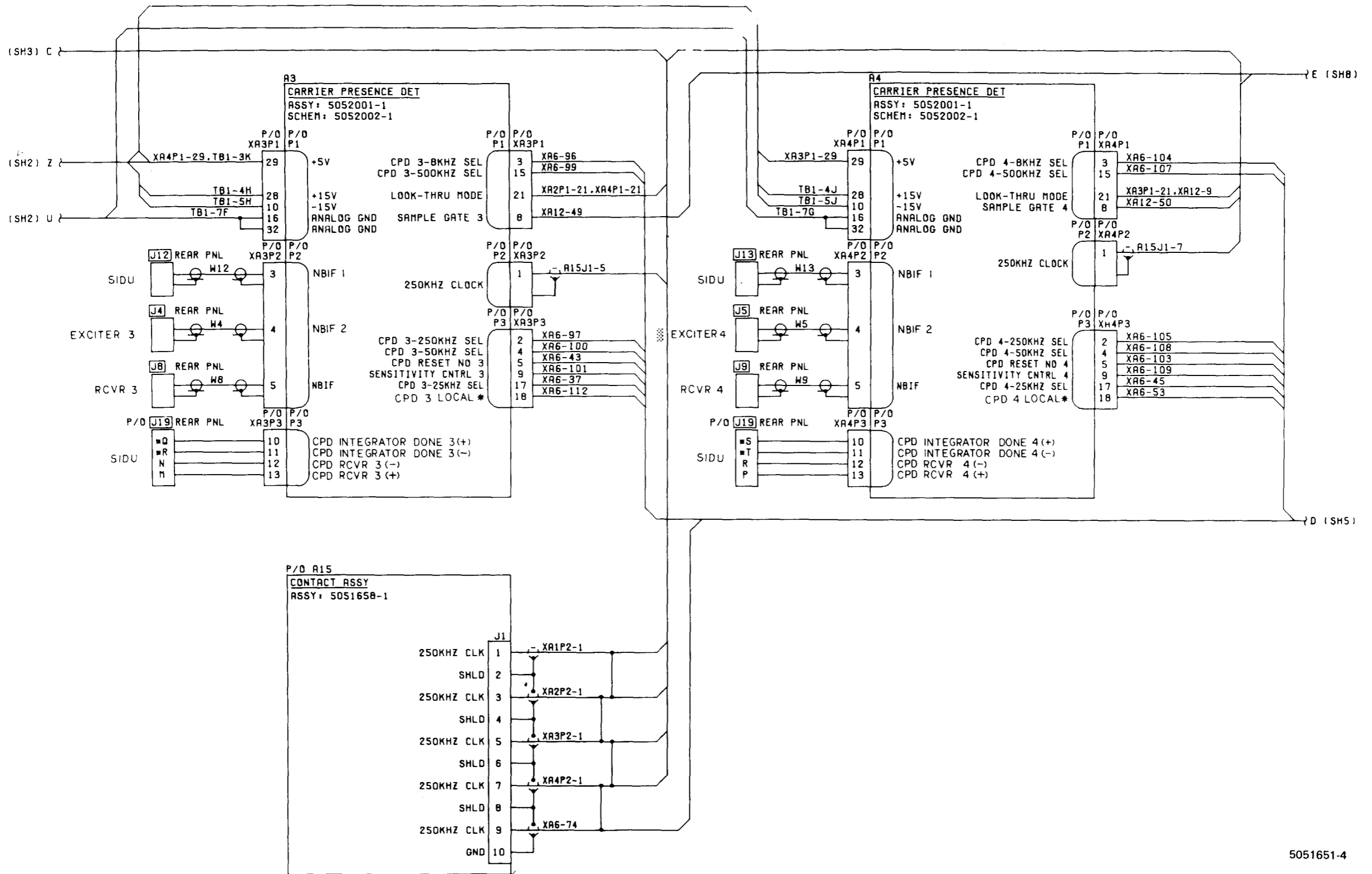


5051651-2

F0-6. RSPU, Schematic Diagram (Sheet 2 of 10)



F0-6. RSPU, Schematic Diagram (Sheet 3 of 10)

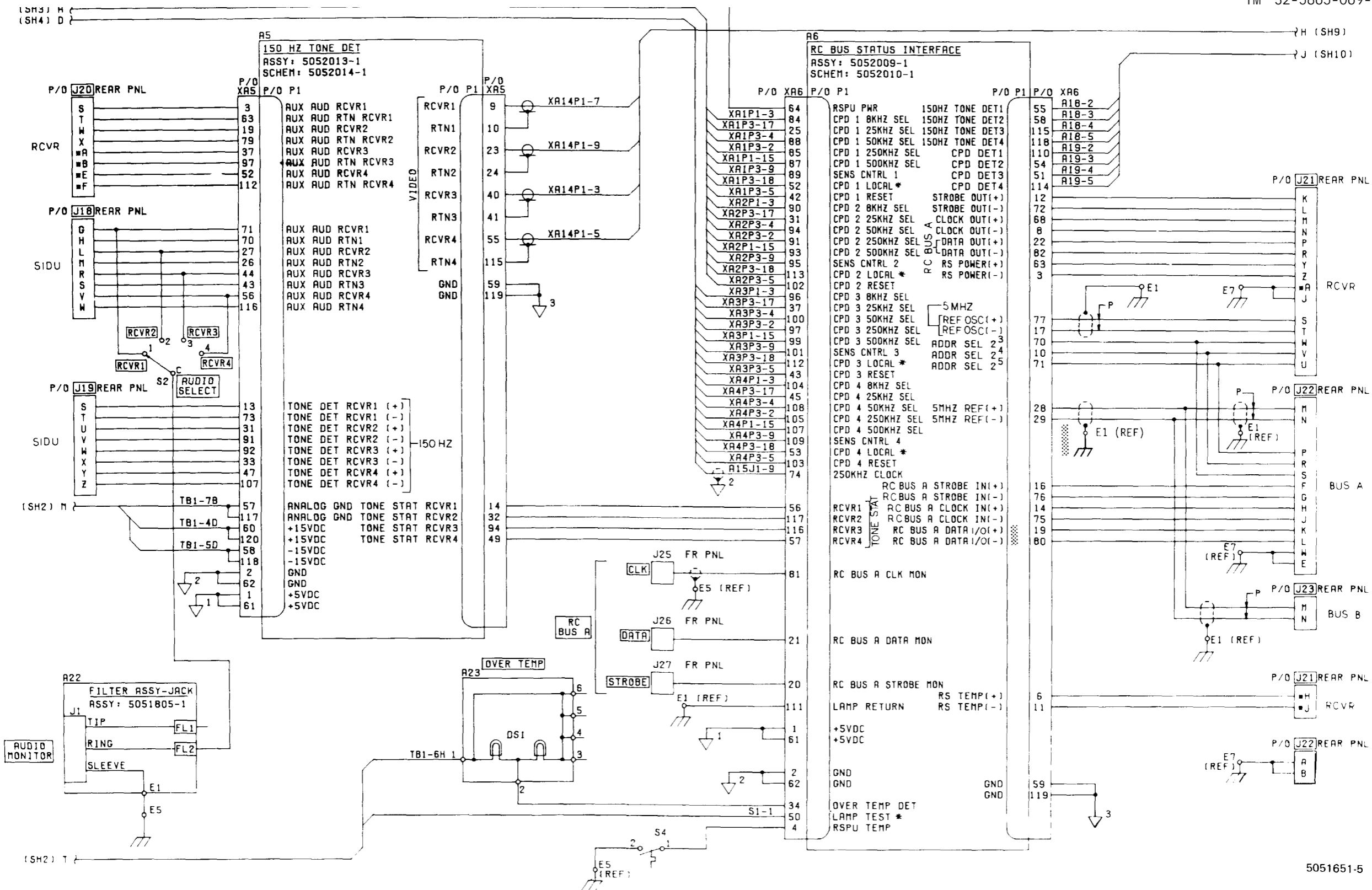


5051651-4

F0-6. RSPU, Schematic Diagram (Sheet 4 of 10)

Change 1

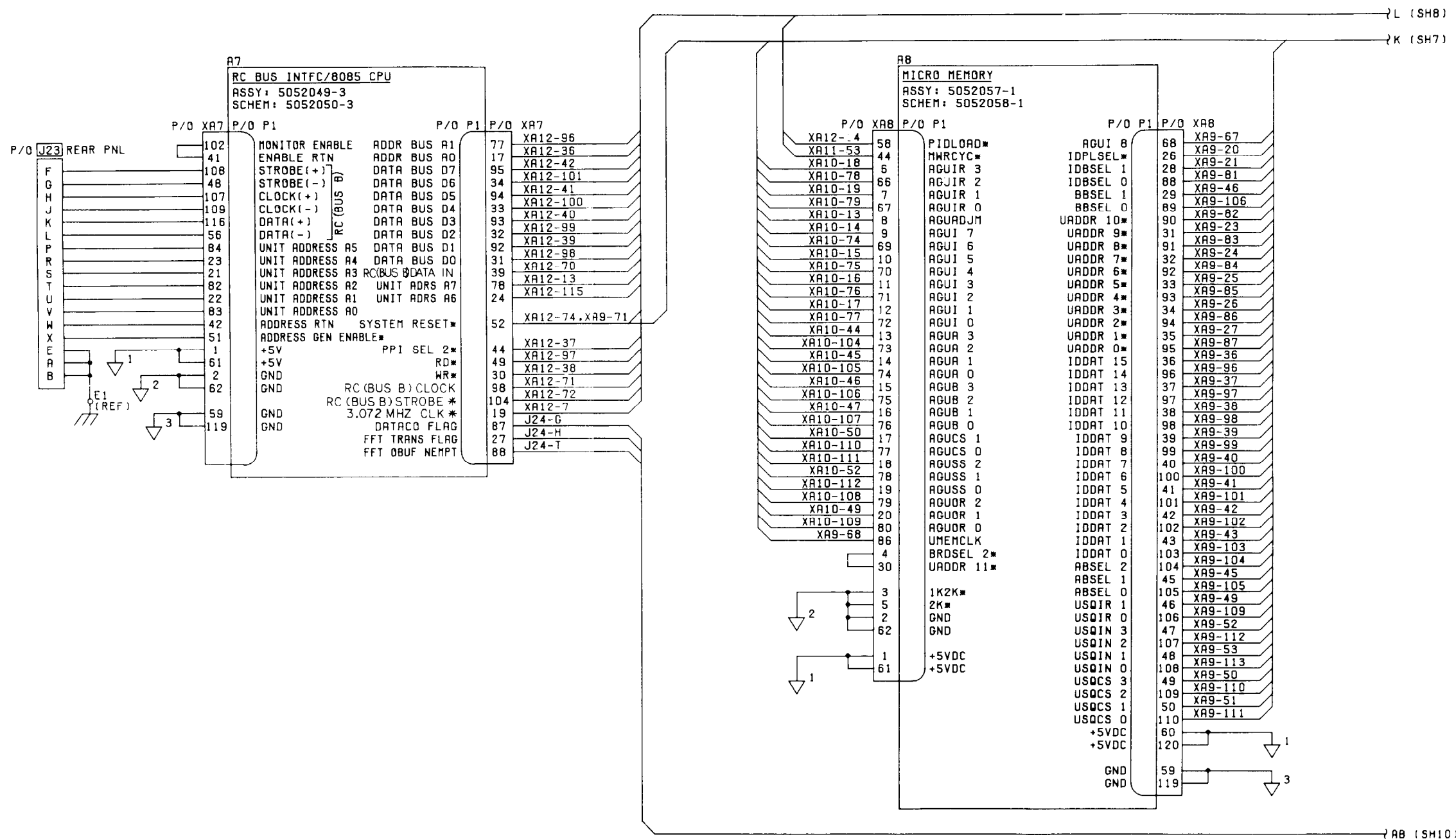




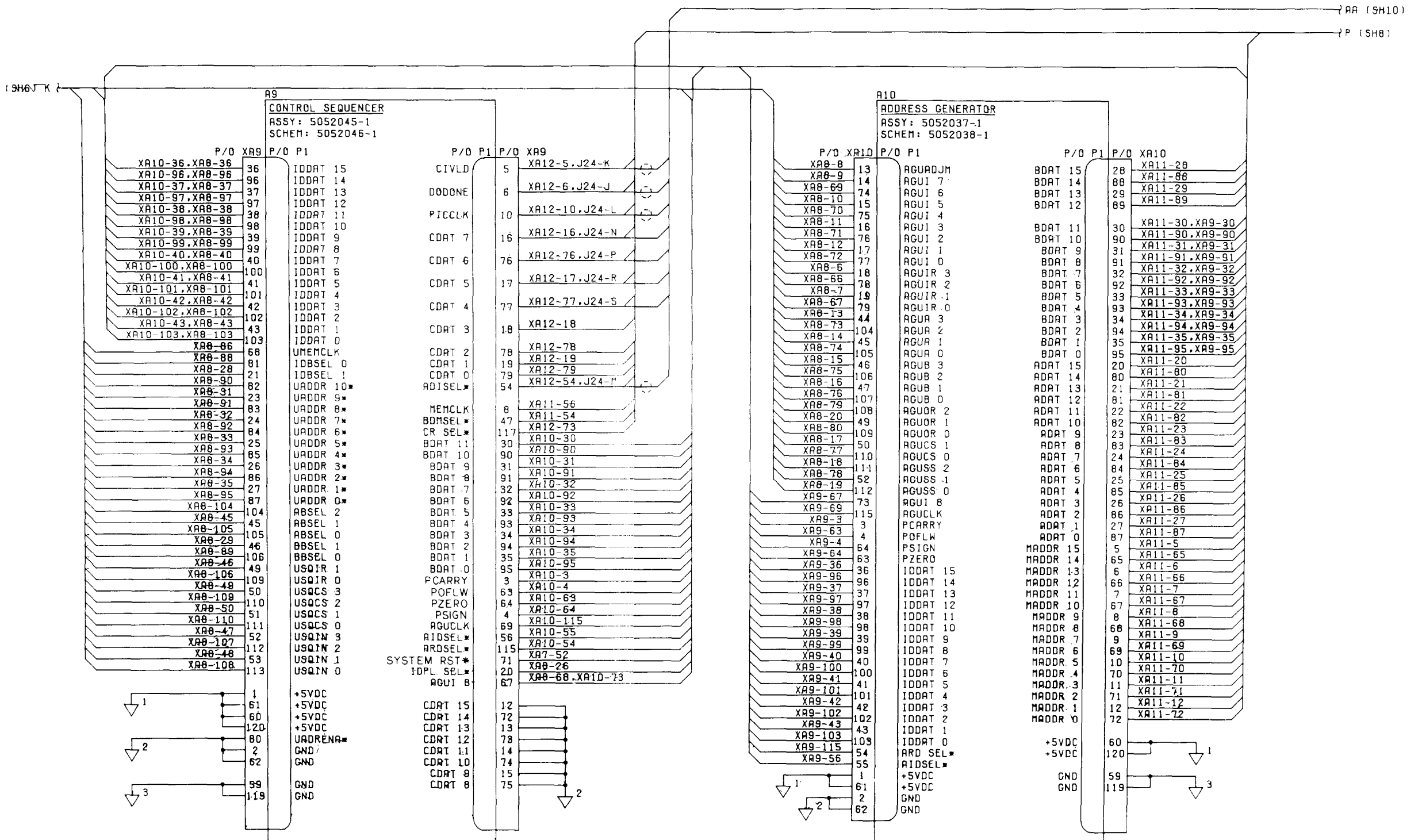
5051651-5

F0-6. RSPU, Schematic Diagram (Sheet 5 of 10)

Change 1

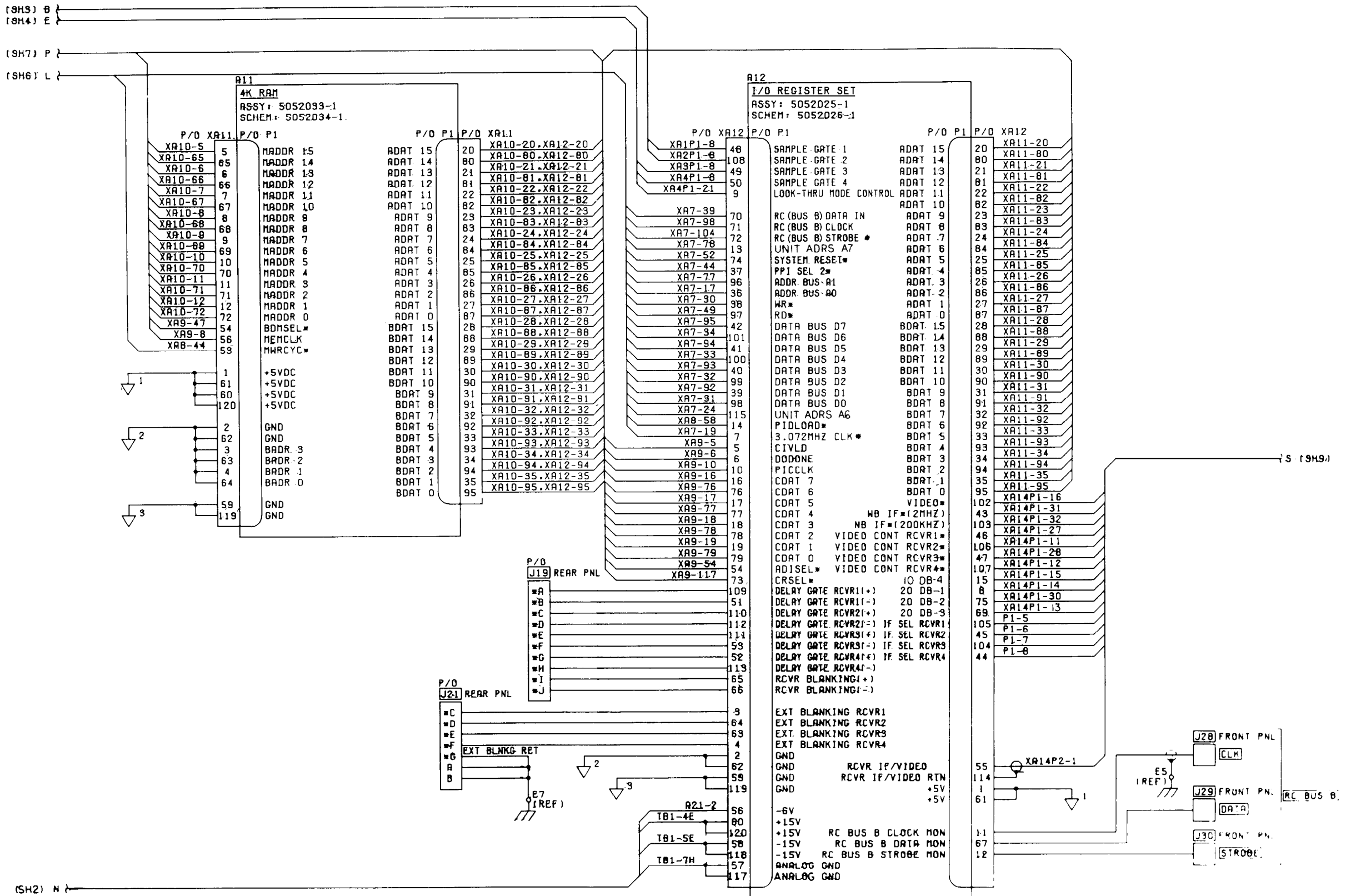


F0-6. RSPU, Schematic Diagram (Sheet 6 of 10)

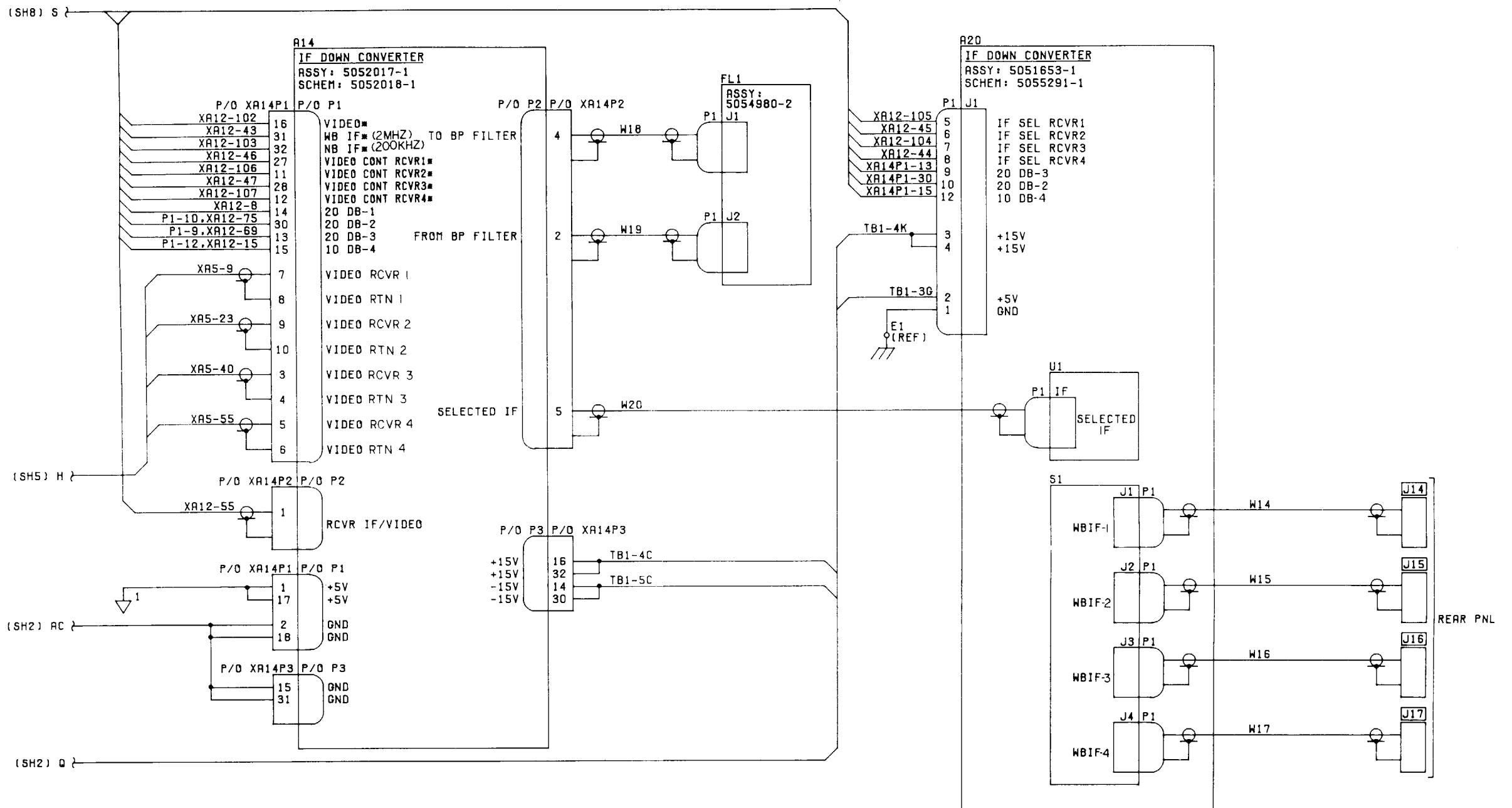


5051651-7

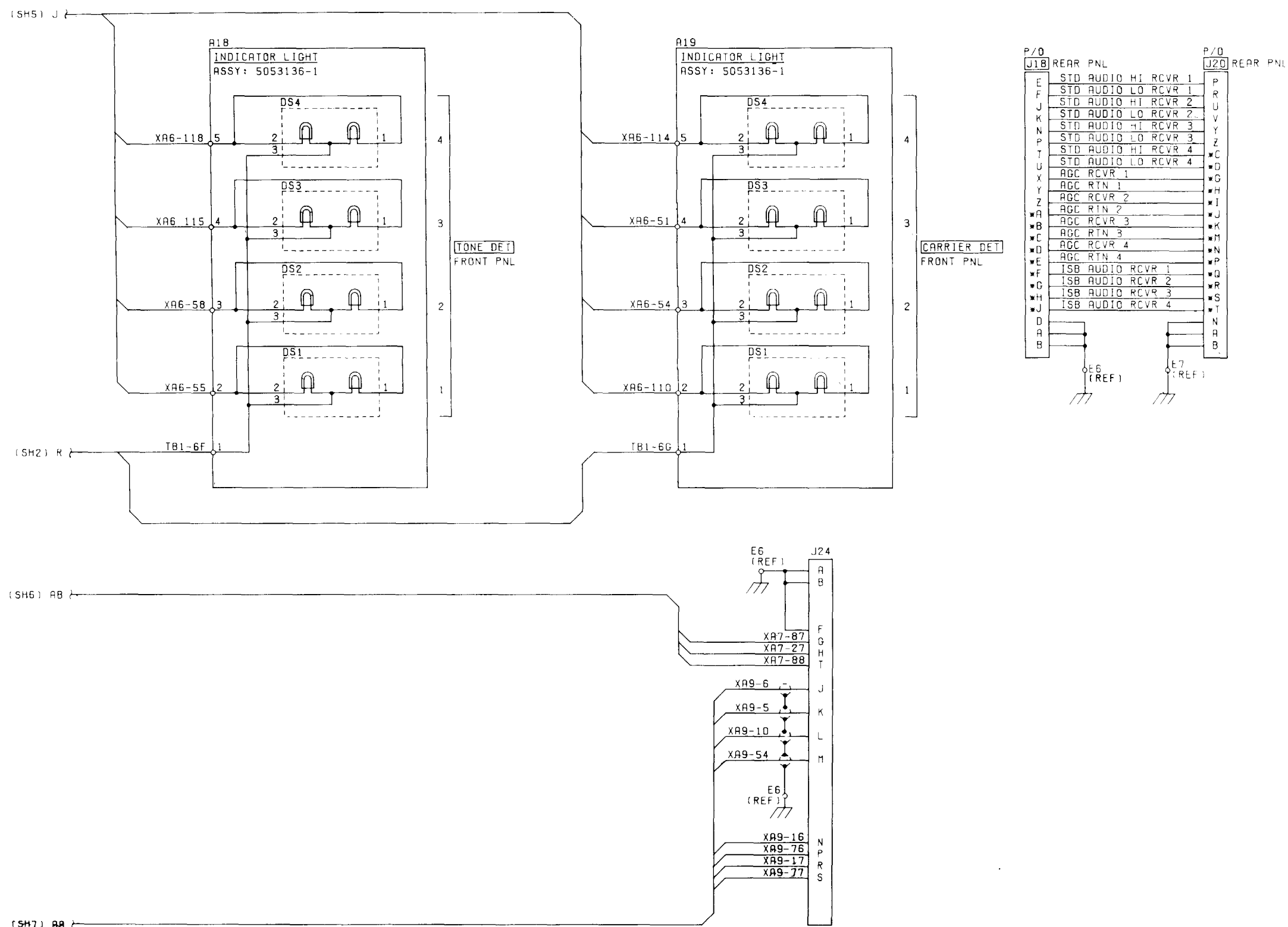
F0-6. RSPU, Schematic Diagram (Sheet 7 of 10)



F0-6. RSPU, Schematic Diagram (Sheet 8 of 10)



5051651-9




F0-6. RSPU, Schematic Diagram (Sheet 10 of 10)

NOTES:

1.0 GENERAL:

- 1.1 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY DOD-STD-100.
- 1.2 DATA INCLUDED IN PARENTHESIS ( ), IS FOR REFERENCE ONLY.
- 1.3 A NUMBER SIGN (#) FOLLOWING A SIGNAL NAME MEANS THE INVERTED (NOT) FORM OF THE SIGNAL.

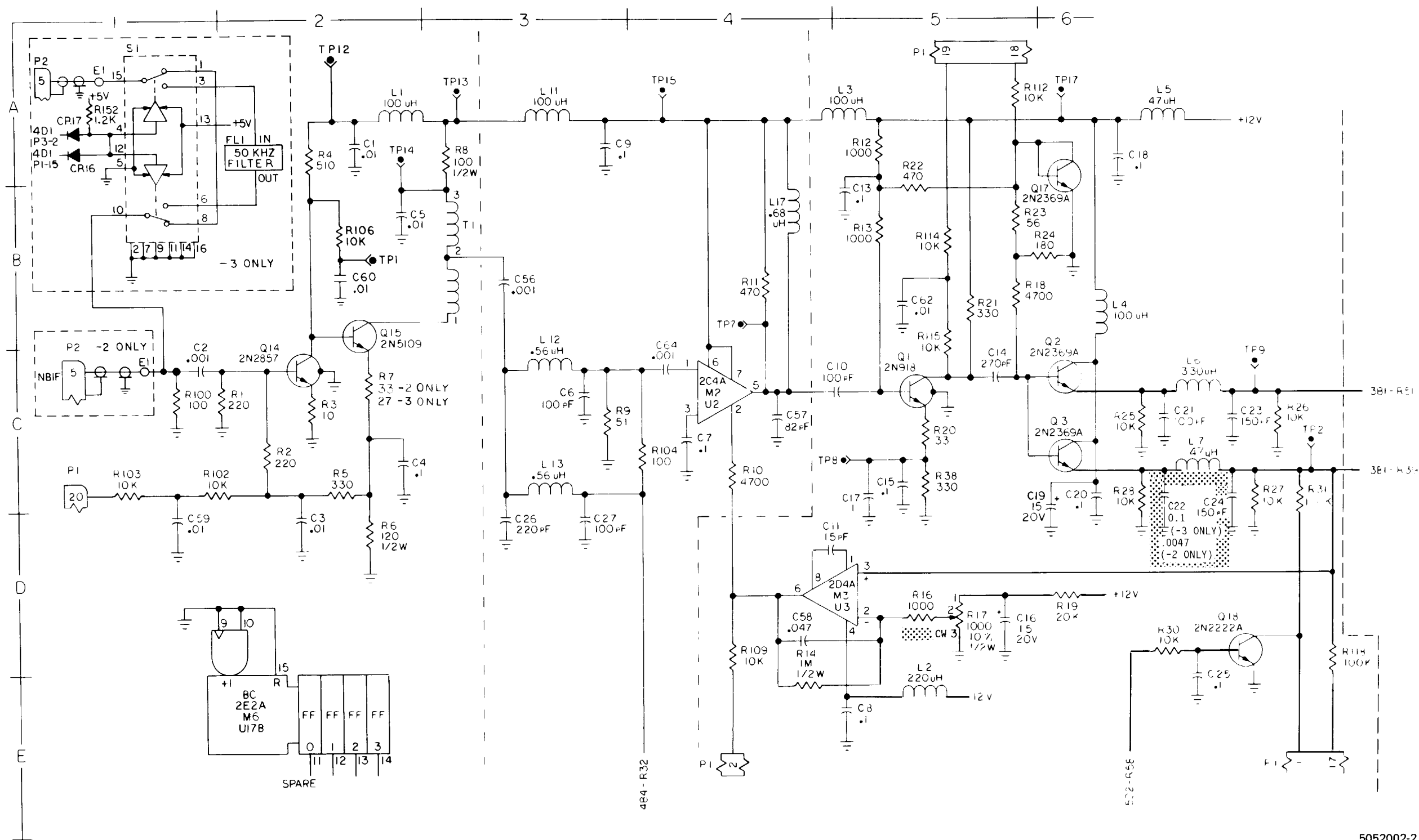
2.0 SPECIFIC:

- 2.1 UNLESS OTHERWISE SPECIFIED:  
RESISTANCE VALUES ARE IN OHMS.  
RESISTORS ARE 2% .1/8W.  
CAPACITANCE VALUES ARE IN MICROFARADS.  
VOLTAGES ARE DC.  
DIODES AND/OR TRANSISTORS ARE JANTX TYPE.
- 2.2  THIS DEVICE REQUIRES SPECIAL HANDLING AND PROCESSING TO PREVENT DAMAGE FROM ELECTROSTATIC DISCHARGE TRANSIENTS.

INTEGRATED CIRCUIT TABLE							
REFERENCE DESIGNATION	SECOND TAGGING LINE SYM	PART NUMBER	POWER INPUT PINS				
			GND	+5V	-12V	+12V	
SEE NOTE 2.2 U1	M1	JM38510/05504BEX	8	1	NA	NA	
U2	M2	5055205-1	4, 8	NA	NA	7	
U3, U12	M3	JM38510/10104BGX	NA	NA	4	7	
U4	M4	JM38510/11502BXX	NA	NA	NA	NA	
U5	M5	JM38510/10703BXX	NA	NA	NA	NA	
SEE NOTE 2.2 U6, U17	M6	5055206-1	8	16	NA	NA	
U7, U9, U20, U21	M7	JM38510/11102B1X	NA	5	7	4	
U8, U10	M8	5068030-1	NA	NA	4	7	
U11	M9	JM38510/10602BGX	NA	NA	4	7	
U13	M10	JM38510/10304BGX	1	NA	4	8	
SEE NOTE 2.2 U14	M11	JM38510/05101BCX	7	14	NA	NA	
SEE NOTE 2.2 U16	M12	JM38510/05503BCX	8	1	NA	NA	
SEE NOTE 2.2 U18	M13	JM38510/05203BCX	7	14	NA	NA	
U19	M14	5055211-1	7	14	NA	NA	

REFERENCE DESIGNATION		
HIGHEST USED -3	HIGHEST USED -2	NOT USED -2 & -3
C64	C64	C12, C61
CR17	CR15	CR1, CR11, CR12
E4	E4	
L17	L17	
P3	P3	
P2-5	P2-5	P2-2
Q19	Q19	Q16
R152	R151	R15, R29, R40, R45, R47, R53, R73, R75, R85, R86, R105, R107, R110, R111, R113, R116, R117, R119, R130, R145-R149
S1		
FL1		
T2	T2	
TP18	TP18	TP16
U21	U21	U15

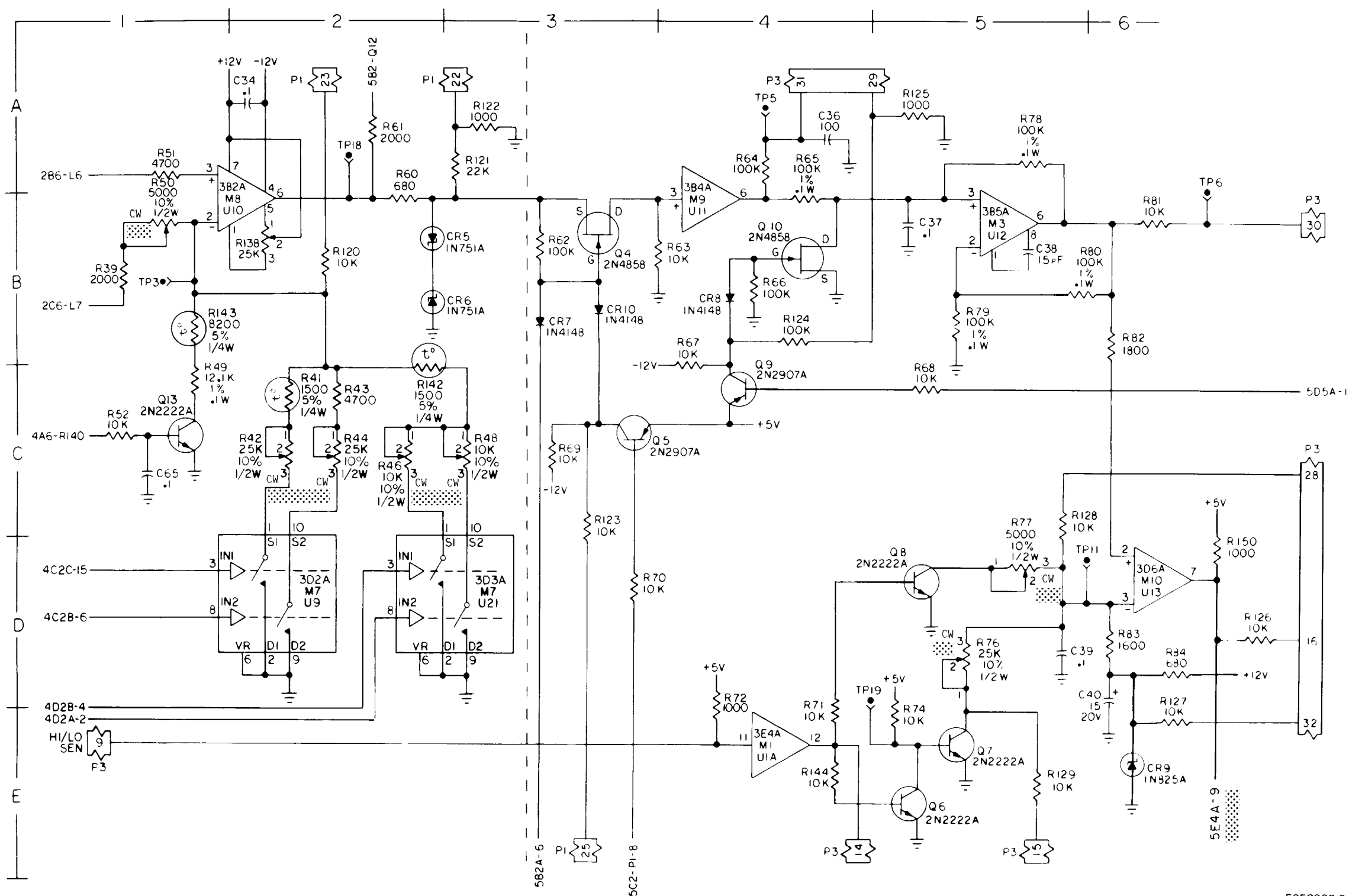
5052002-1



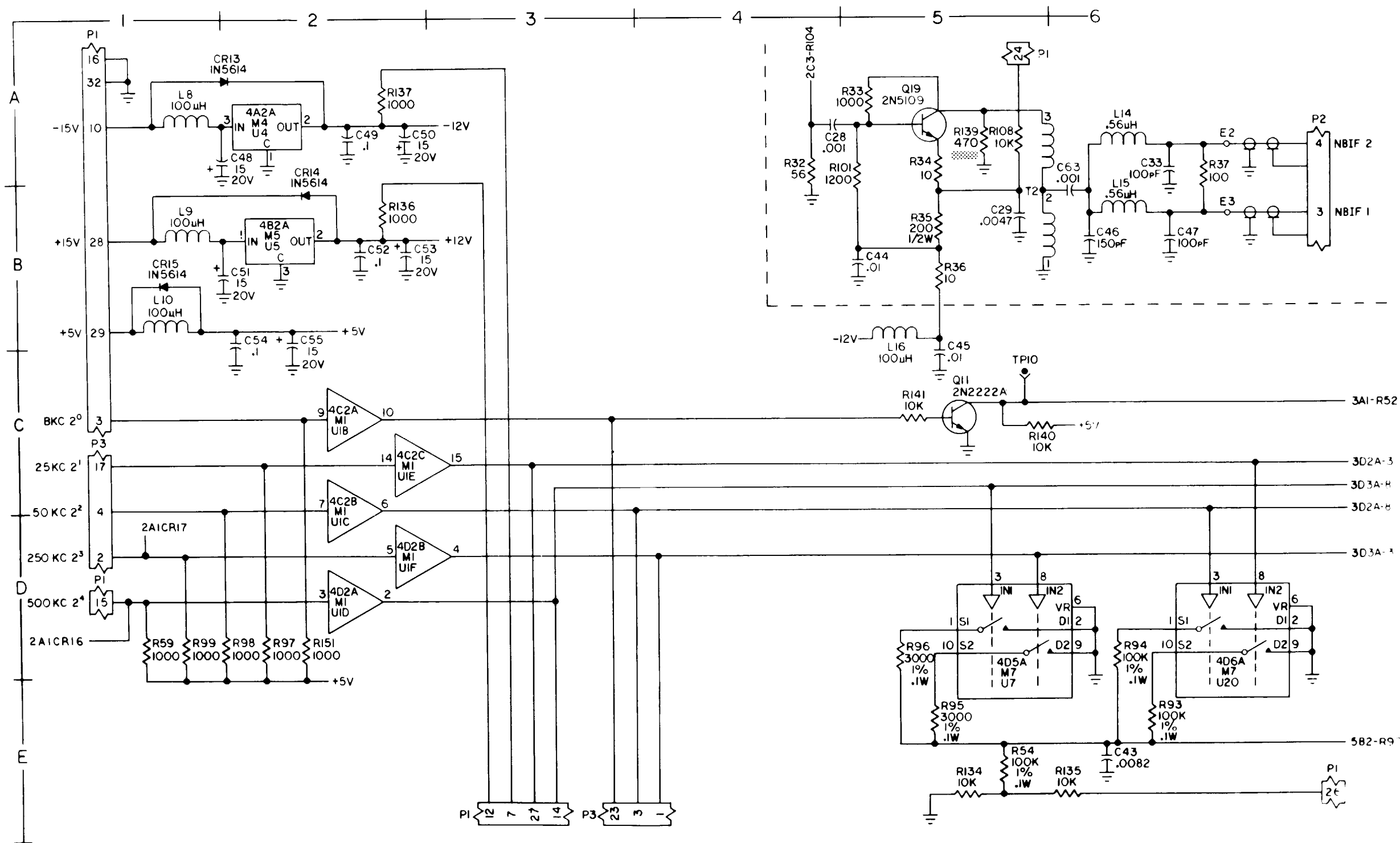
Carrier Presence Detector CCA,  
(A1-A4), Schematic Diagram  
(Sheet 2 of 5)

Change 2



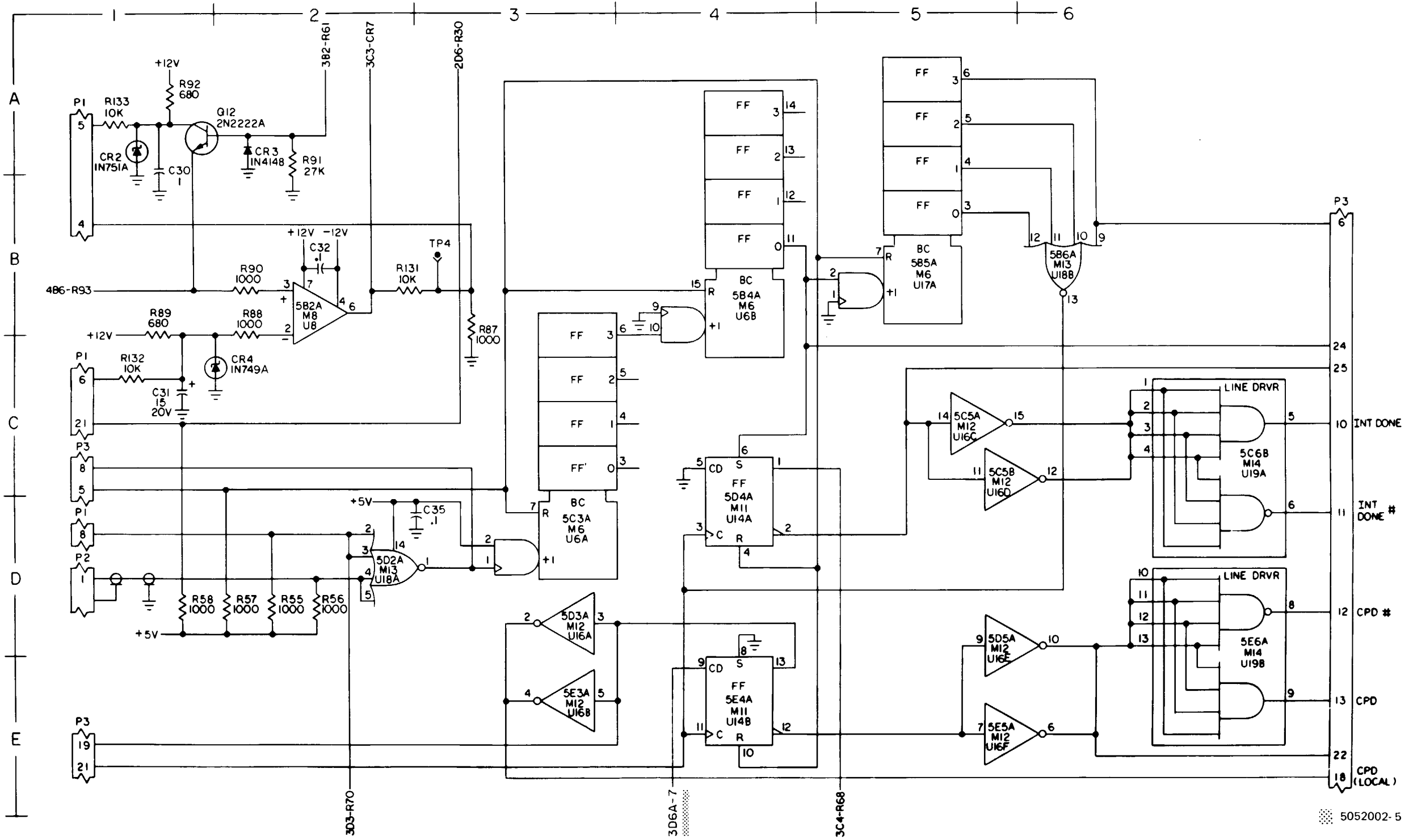


F0-7. Carrier Presence Detector CCA, (A1-A4), Schematic Diagram (Sheet 3 of 5)  
Change 2



F0-7. Carrier Presence Detector CCA, (A1-A4), Schematic Diagram (Sheet 4 of 5)  
 Change 2

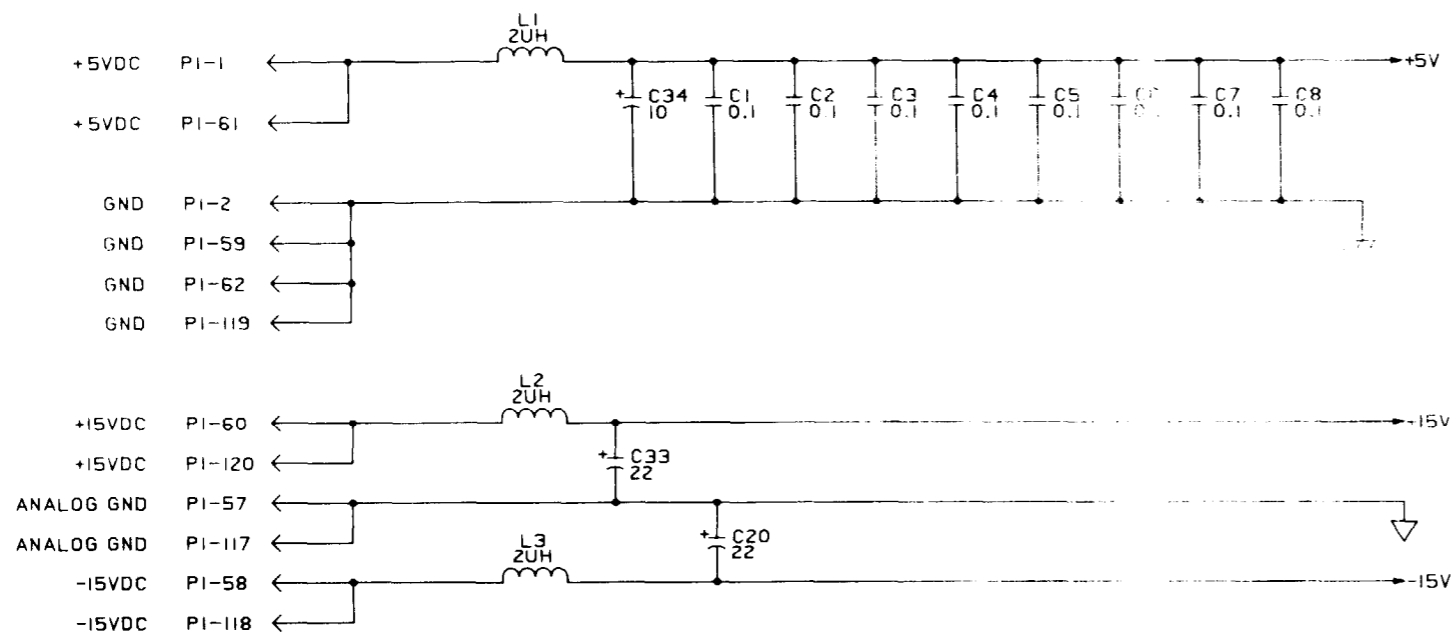
5052002-4



5052002-5

F0-7. Carrier Presence Detector CCA, (A1-A4), Schematic Diagram (Sheet 5 of 5)

Change 2



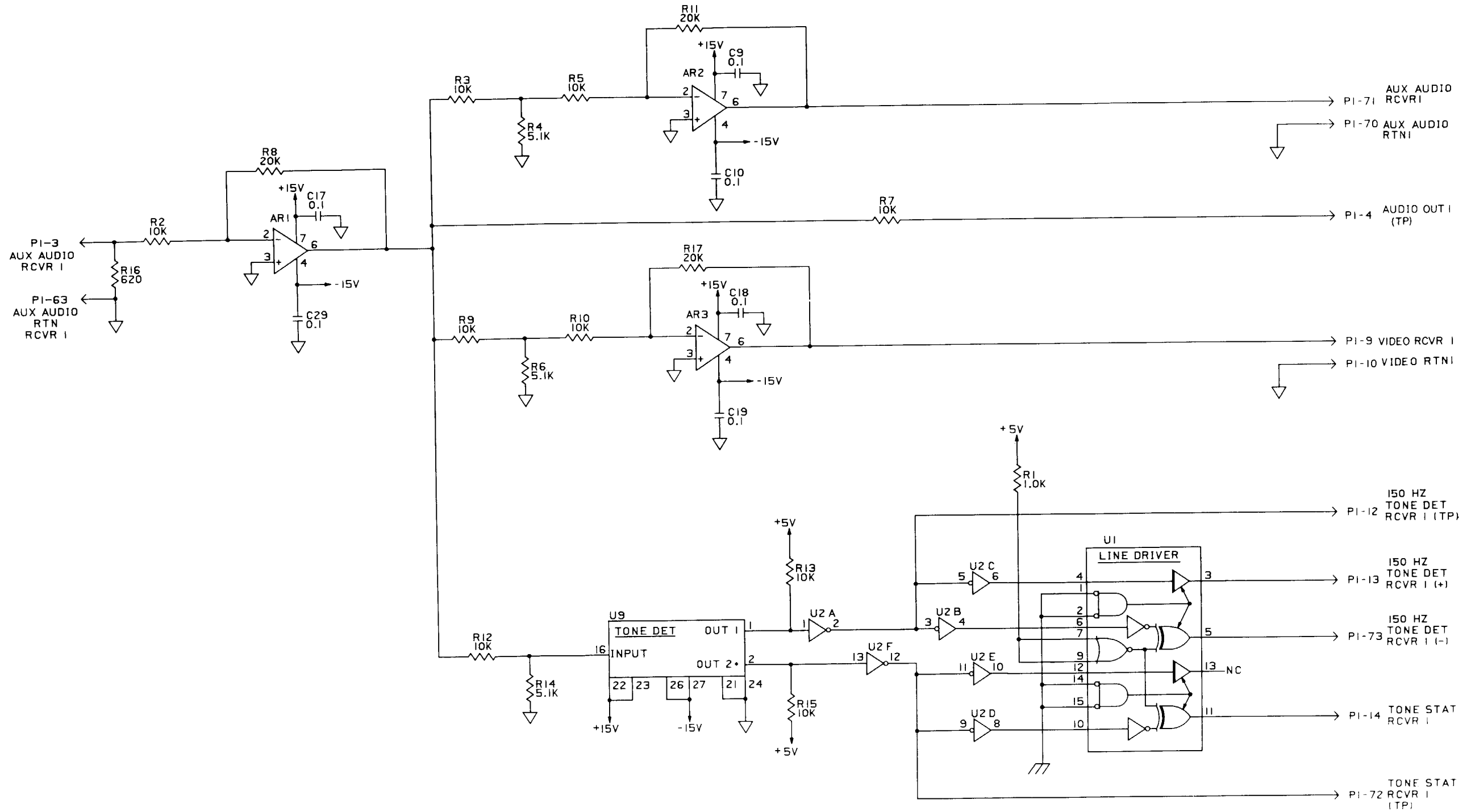
NOTES: UNLESS OTHERWISE SPECIFIED:  
 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS  
 2. RESISTANCE VALUES IN OHMS  
 3. CAPACITANCE VALUES IN UF  
 4. INDUCTANCE VALUES IN UH.  
 5. NC INDICATES NO CONNECTION.

HIGHEST REFERENCE DESIGNATIONS			
AR12	C35	L3	R68
PI	UI2		
REFERENCE DESIGNATIONS NOT USED			

SUPPLEMENTARY DATA TABLE						
REF DES	PART NUMBER	TYPE	+ 5V	GND	+ 15V	- 15V
U1,3,5,7	0213-1-1295-2	7832	16	8	—	—
U2,4,6,8	M38510-30003BCX	54LS04	14	7	—	—
U9-12	5054325-1		—	SHOWN	SHOWN	SHOWN
AR1-12	5054328-1	2600	—	—	7	4

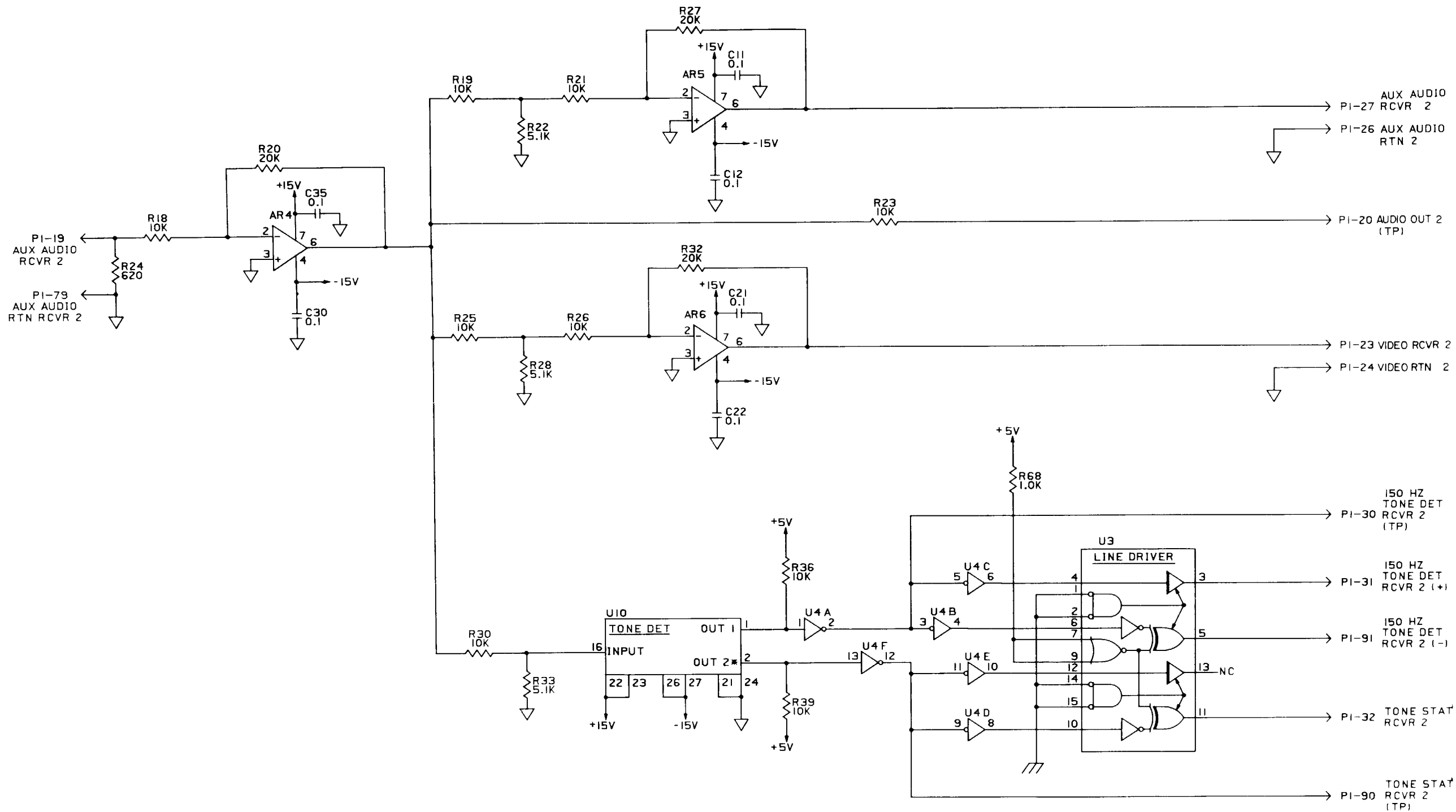
5052014-1

F0-8. 150 Hz Tone Detector CCA (A5), Schematic Diagram ( Sheet 1 of 5)



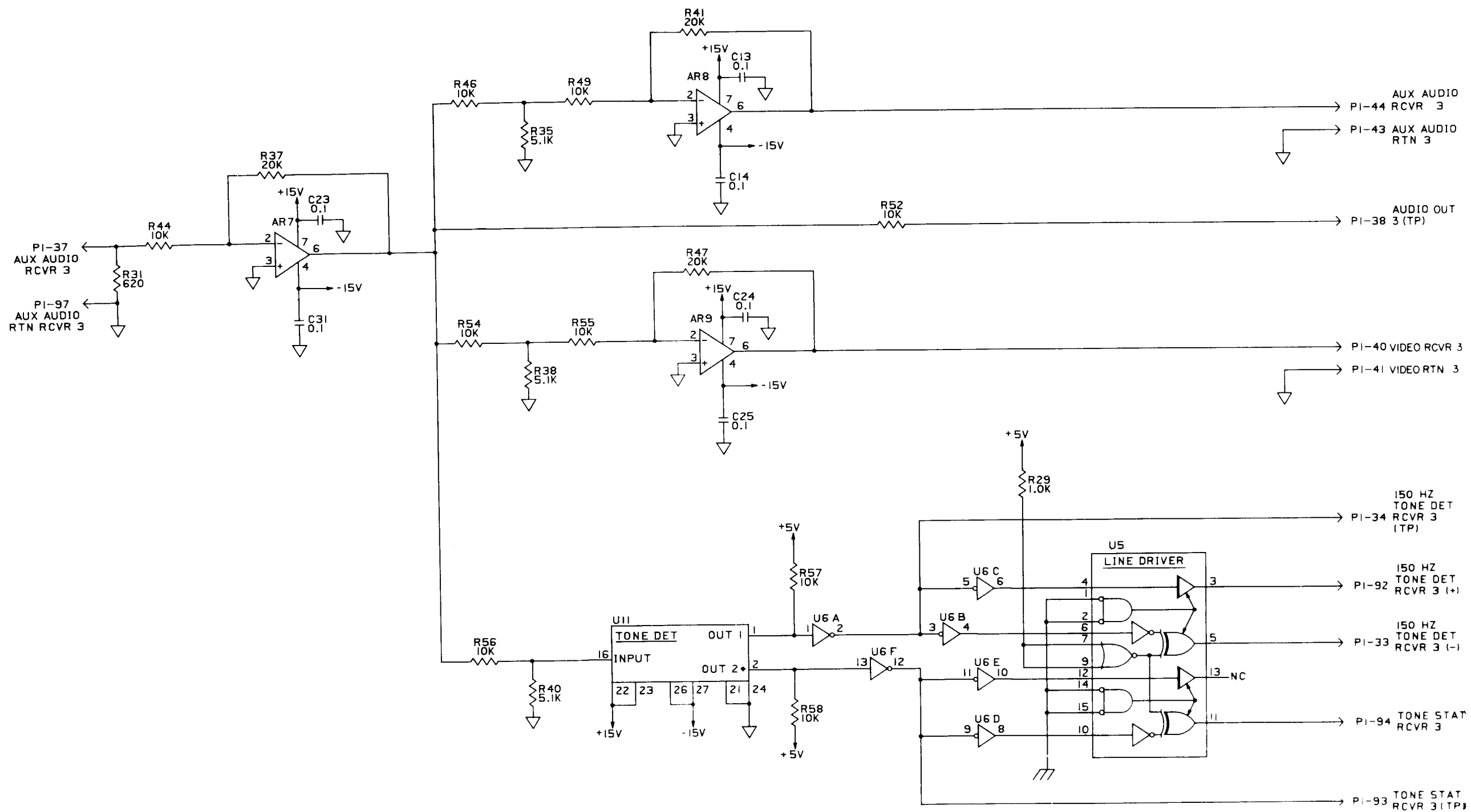
5052014-2

F0-8. 150 Hz Tone Detector Schematic Diagram (Sheet 2 of 5)



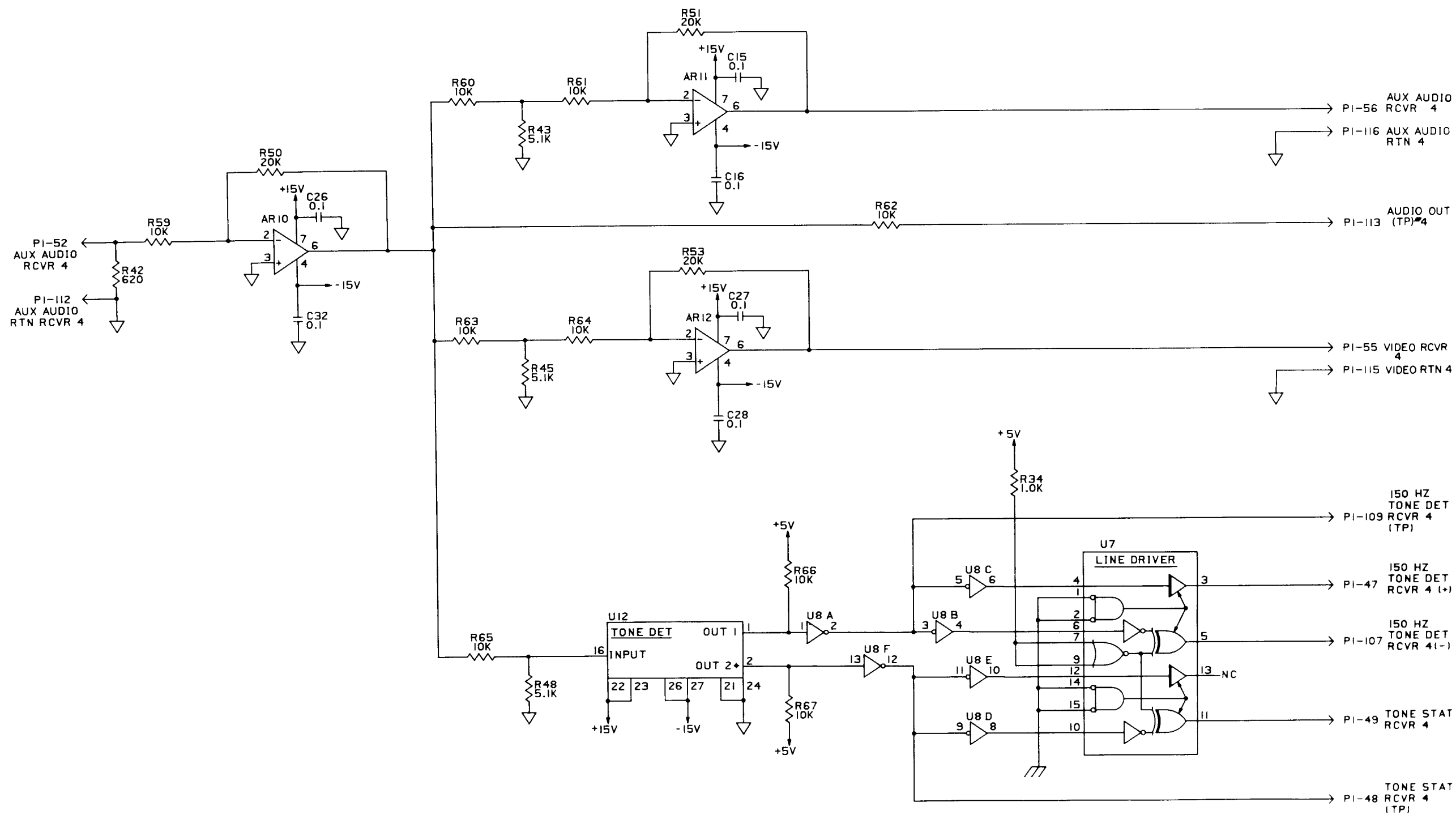
5052014-3

F0-8. 150 Hz Tone Detector CCA (A5),  
Schematic Diagram  
( Sheet 3 of 5)



5052014-4

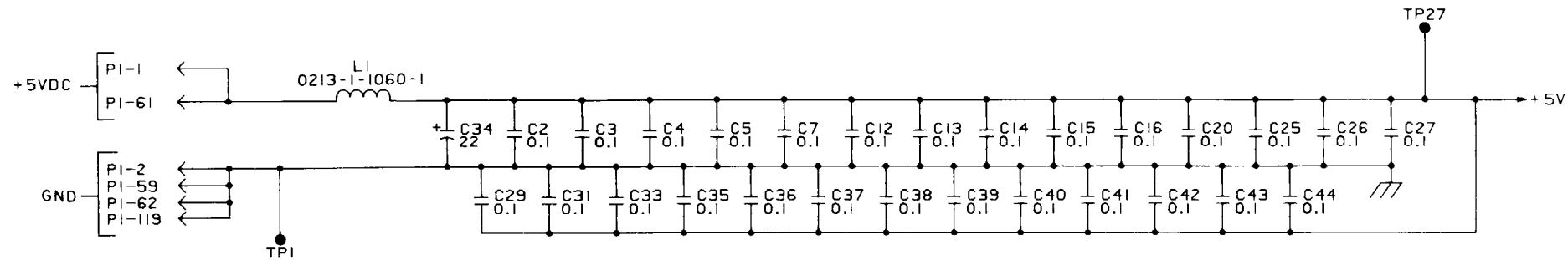
F0-8 . 150 Hz Tone Detector Schematic Diagram (Sheet 4 of 5)



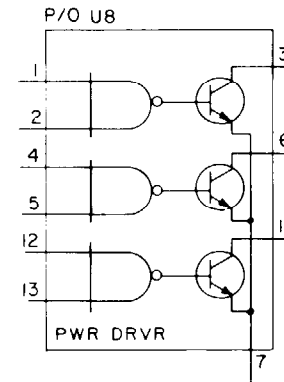
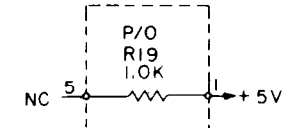
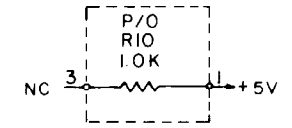
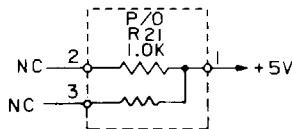
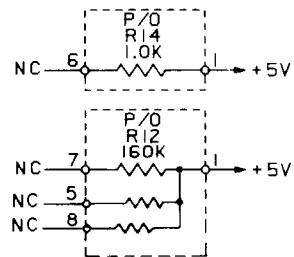
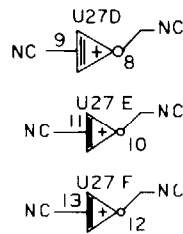
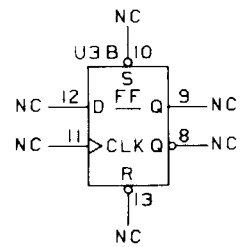
5052014-5

F0-8 . 150 Hz Tone Detector CCA (A5),  
Schematic Diagram  
( Sheet 5 of 5)





SPARES



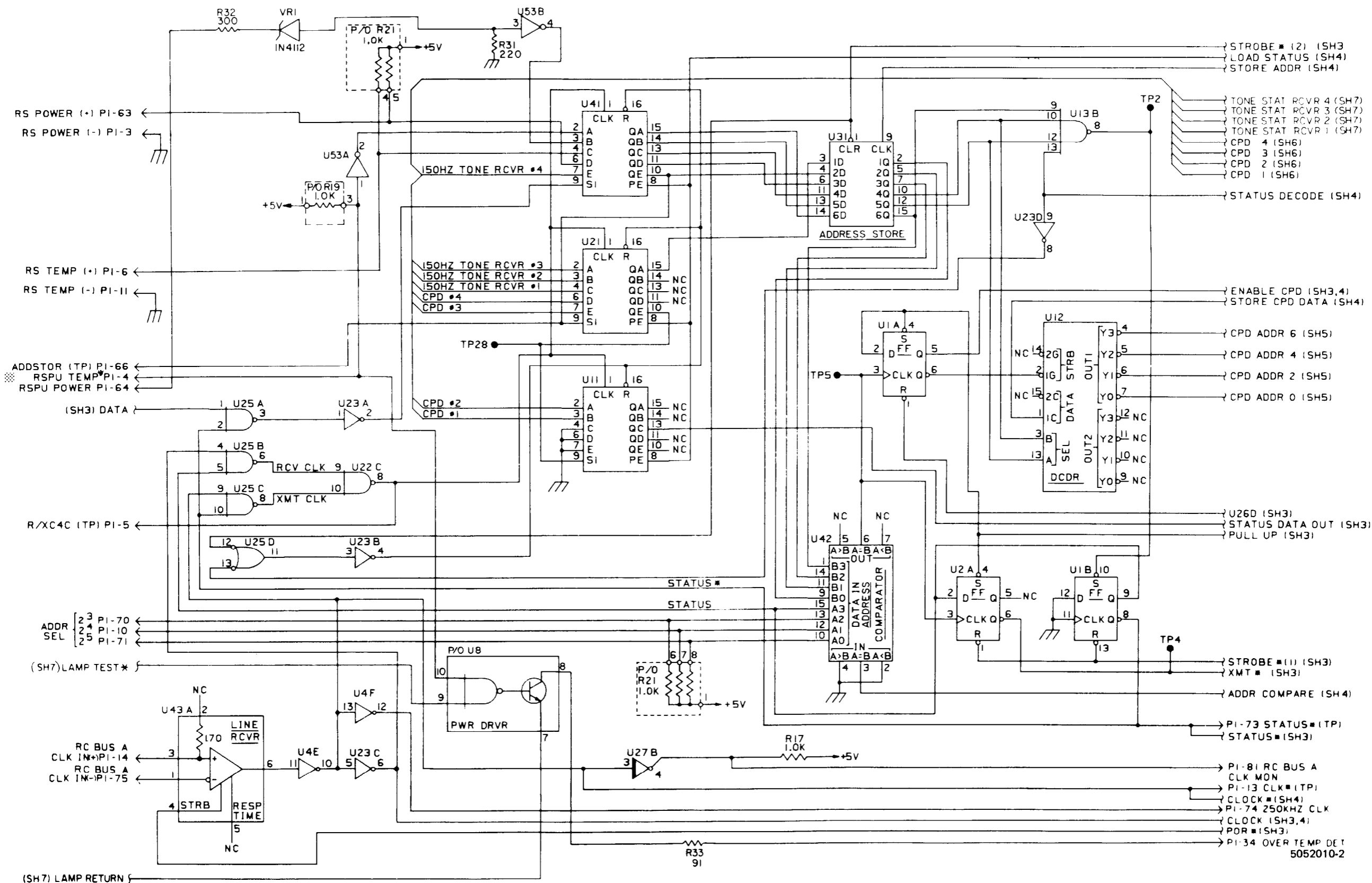
- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS.
  2. RESISTANCE VALUES IN OHMS.
  3. CAPACITANCE VALUES IN UF.
  4. P/O INDICATES PART OF.
  5. UNUSED CONNECTOR PINS NOT SHOWN.
  6. NC INDICATES NO CONNECTION.
  7. \* FOLLOWING SIGNAL INDICATES LOW OR NOT FUNCTION.
  8. INDUCTANCE VALUES IN UH.
  9. C5140512 (TYPE 5490A) IS THE PREFERRED PART AND WILL REPLACE M38510-01307BCX (TYPE 5490) SHOULD IT FAIL.

HIGHEST REFERENCE DESIGNATIONS			
U53	C44	P33	L1
CR1	PI	VRI	TP33
REFERENCE DESIGNATIONS NOT USED			
CL6,17 R11 U17,51			

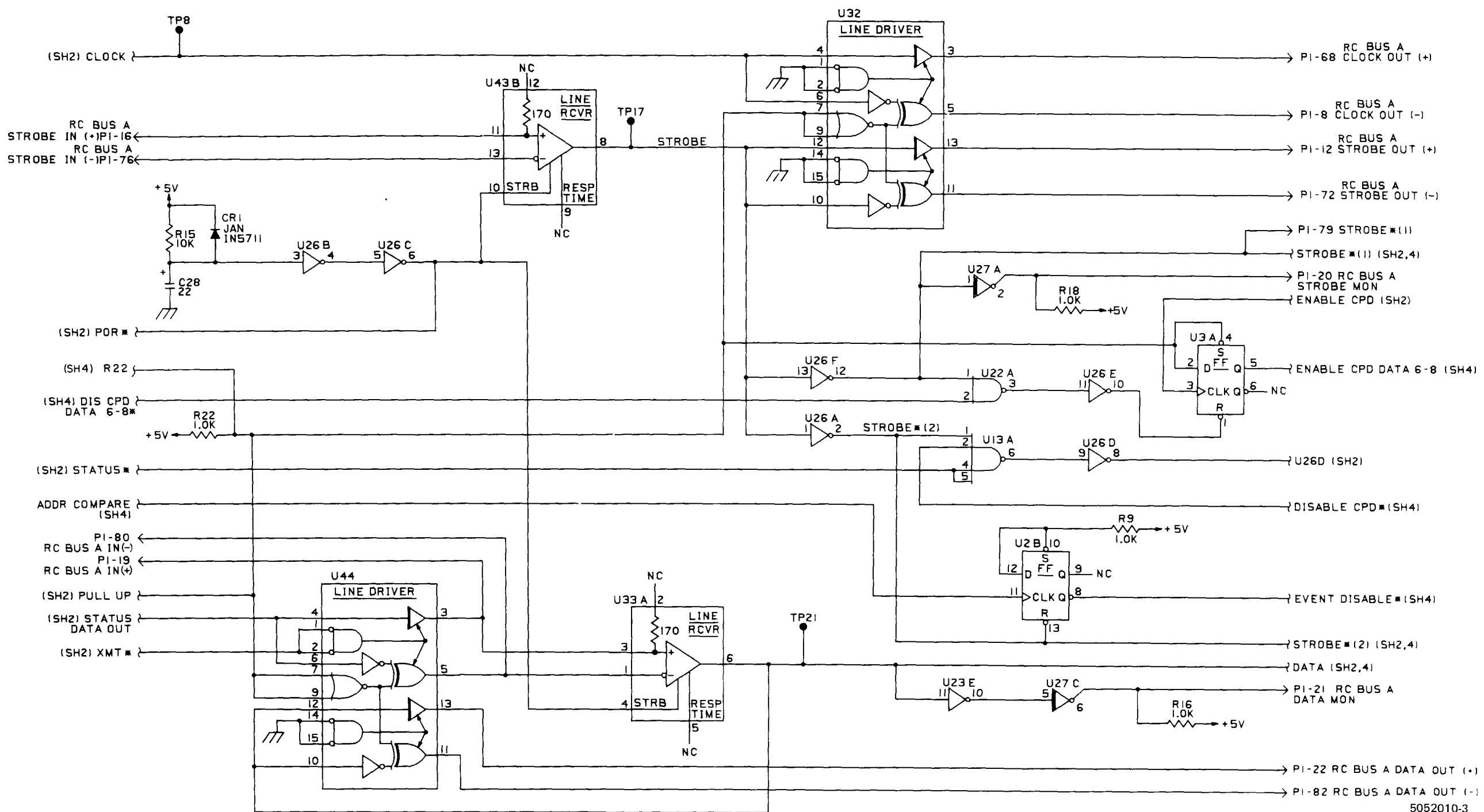
5052010-1

SUPPLEMENTARY DATA TABLE				
REF DES	PART NUMBER	TYPE	+ 5V	GND
U1-3,15	M38510-00205BCX	5474	14	7
U23,26,53	M38510-30003BCX	54LS04	14	7
U5,16	SEE NOTE 9	SEE NOTE 9	5	10
U6,7,11,21,24,34,41	M38510-00902BEX	5496	5	12
U9-10,18-20,28	M38510-31401BEX	54LS123	16	8
U12,45-48	C6140309	54155	16	8
U13	M38510-00102BCX	5420	14	7
U14,22,25	M38510-30001BCX	54LS00	14	7
U27	M38510-00801BCX	5406	14	7
U29,30,39,40	M38510-005J2BCX	5451	14	7
U31	M38510-30106BEX	54LS174	16	8
U32,44,52	0213-1-1295-2	7832	16	8
U33,43	0213-1-1001-2	7820A	14	7
U35-38	M38510-30107BEX	54LS175	16	8
U42	M38510-15001BEX	5485	16	8
U49,50,8	5054327-1	UHD400-1	14	SHOWN
U4	M38510-15102BCX	5414	4	7

F0-9. RC Bus Status Interface CCA (A6),  
Schematic Diagram  
(Sheet 1 of 7)  
Change 2

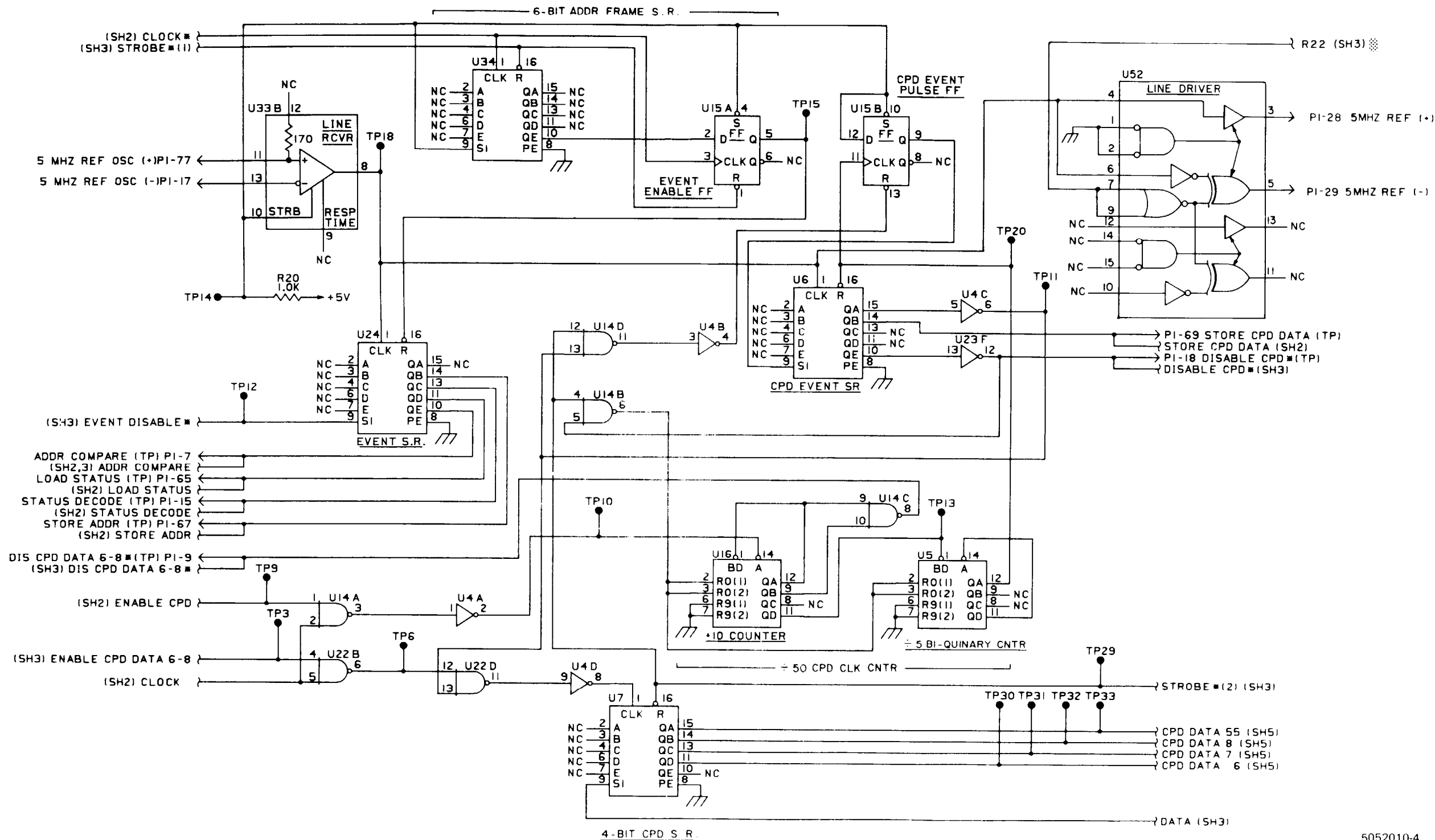


F0-9. RC Bus Status Interface CCA (A6),  
Schematic Diagram  
(Sheet 2 of 7)  
Change 1



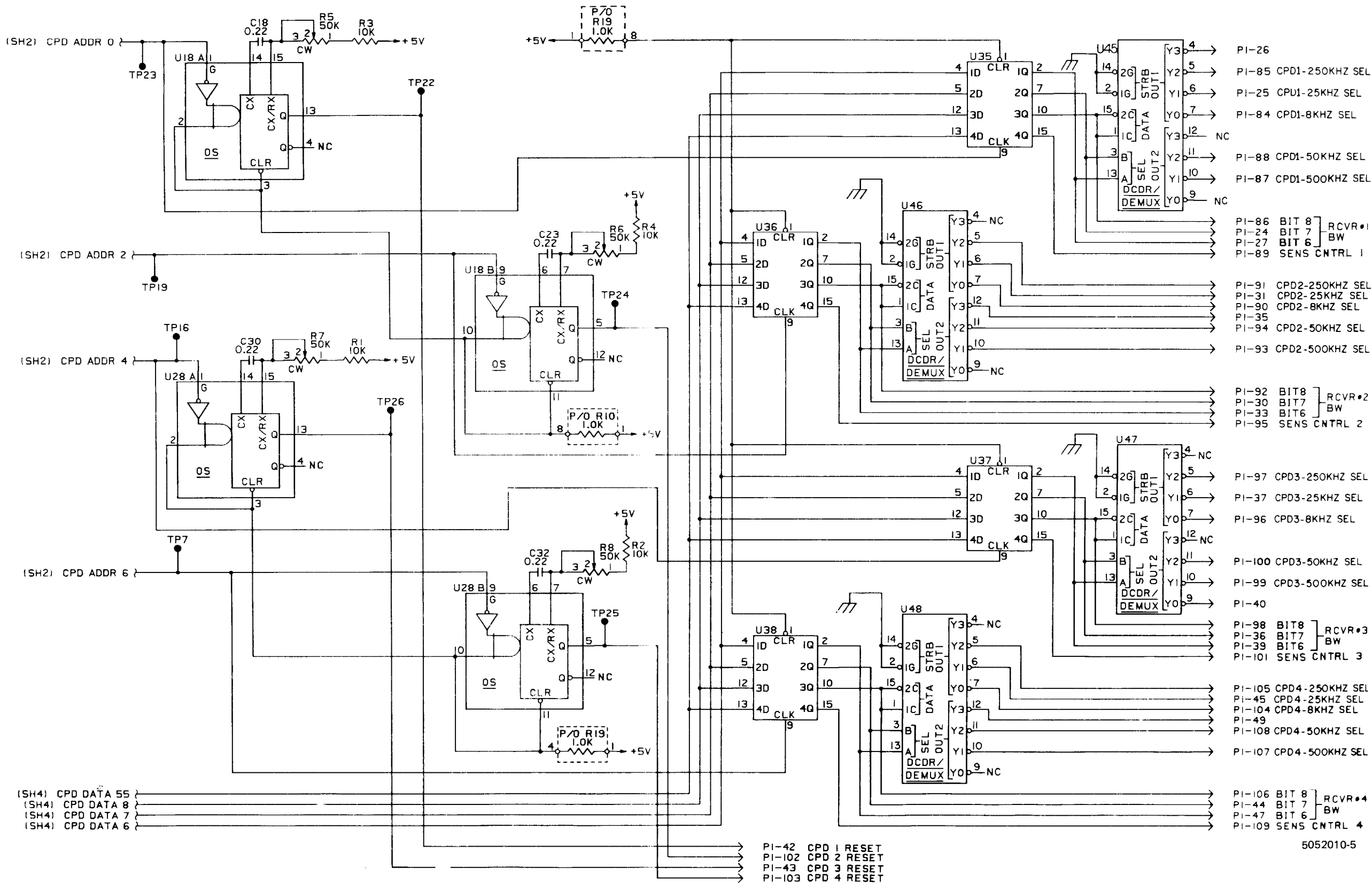
5052010-3

F0-9. RC Bus Status Interface CCA (A6), Schematic Diagram (Sheet 3 of 7)

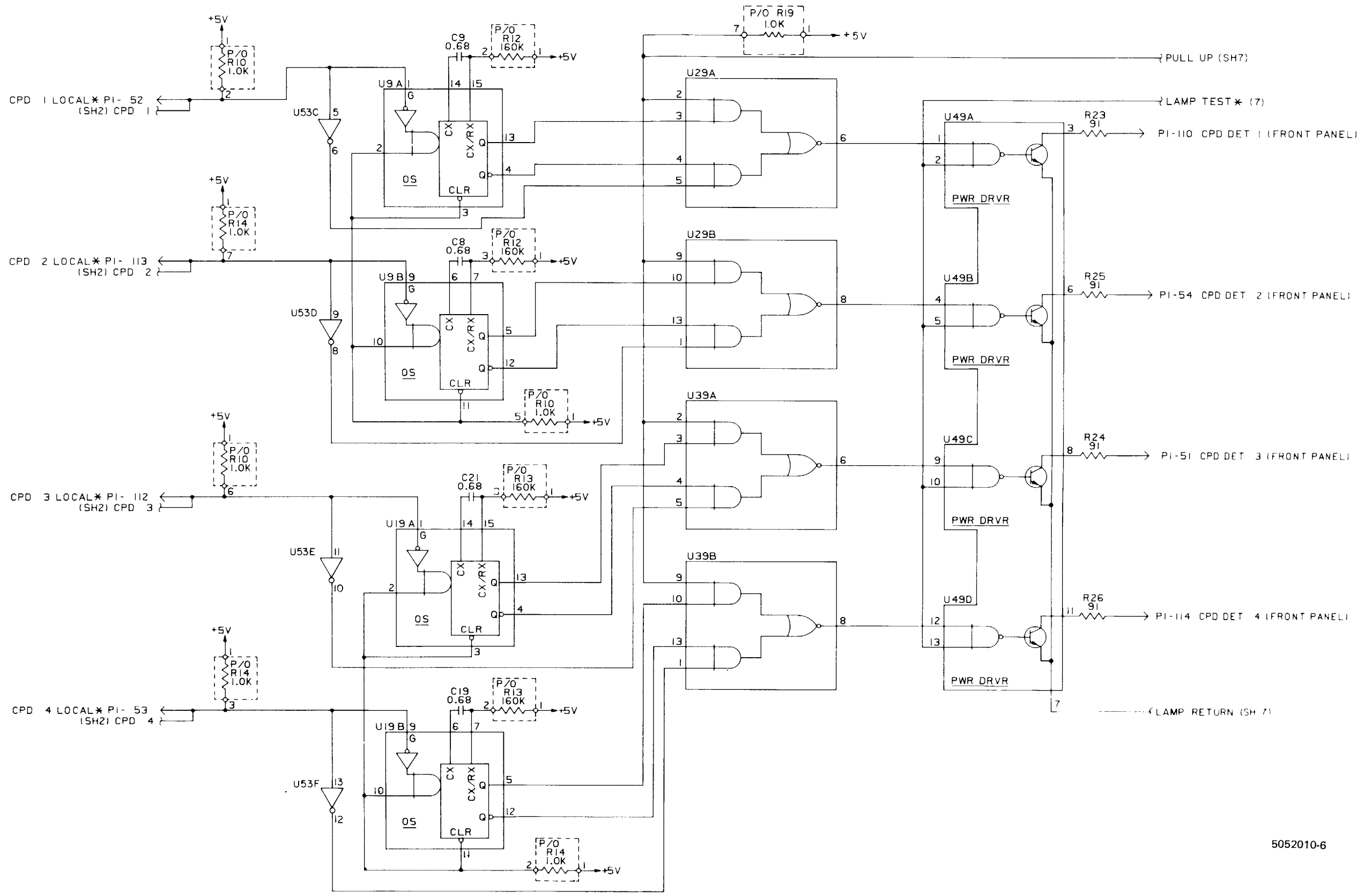


5052010-4

F0-9. RC Bus Status Interface CCA (A6), Schematic Diagram (Sheet 4 of 7) Change 1

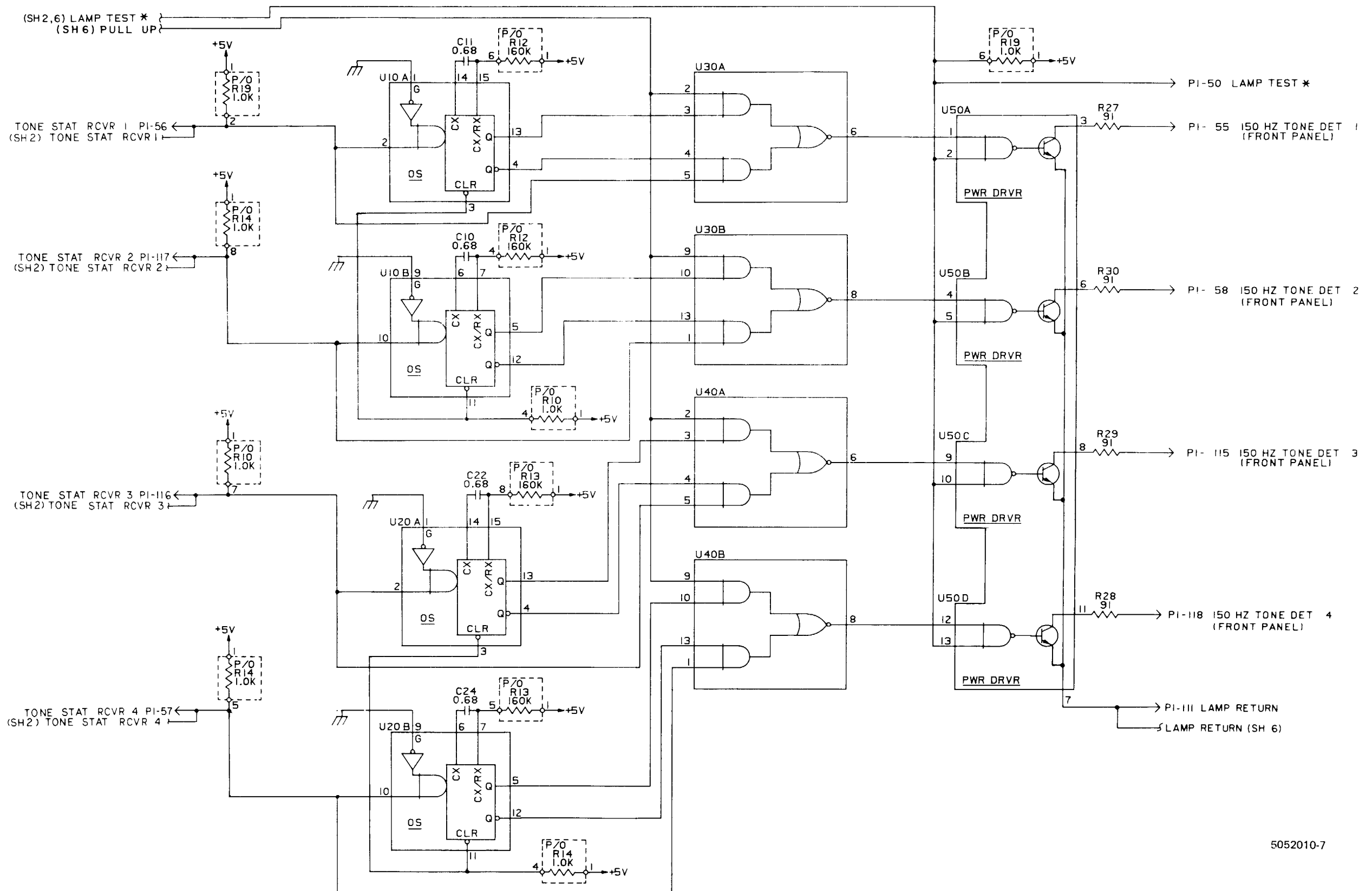


F0-9. RC Bus Status Interface CCA (A6), Schematic Diagram (Sheet 5 of 7)



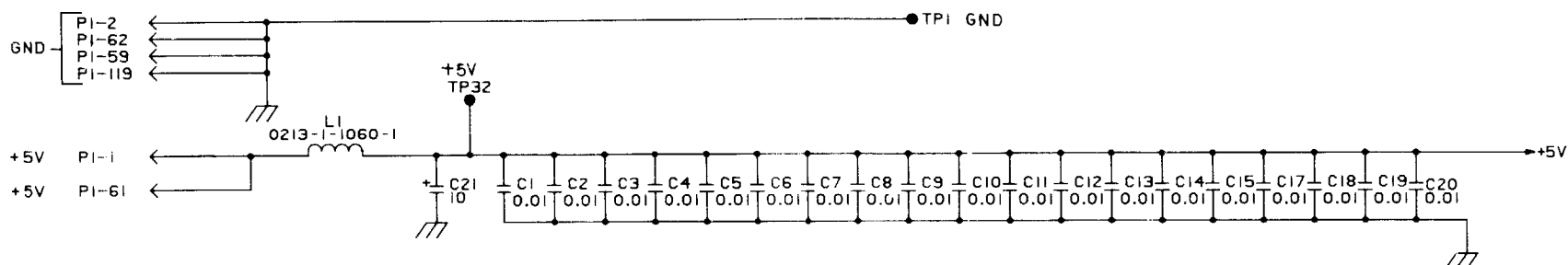
5052010-6

F0-9. RC Bus Status Interface CCA (A6), Schematic Diagram (Sheet 6 of 7)

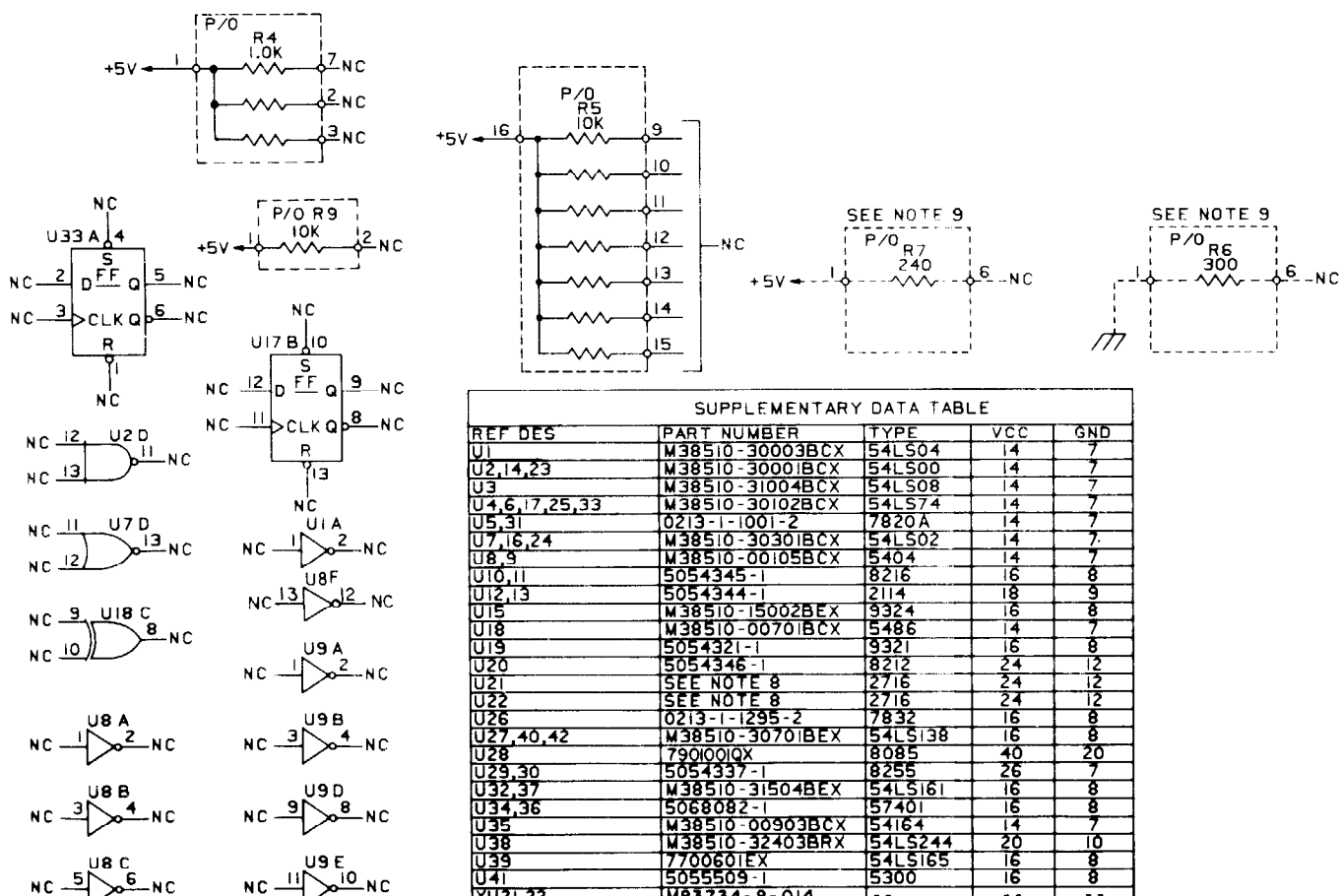


5052010-7

F0-9. RC Bus Status Interface CCA (A6),  
Schematic Diagram  
(Sheet 7 of 7)



SPARES



- NOTES: UNLESS OTHERWISE SPECIFIED:  
 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS  
 2. RESISTANCE VALUES IN OHMS  
 3. CAPACITANCE VALUES IN UF  
 4. NC INDICATES NO CONNECTION  
 5. UNUSED CONNECTOR PINS NOT SHOWN.  
 6. P/O INDICATES PART OF.  
 7. # FOLLOWING SIGNAL NAMES INDICATES LOW OR NOT FUNCTION.  
 8. DASH VARIATION CHART FOR PART NO. OF U21 AND U22.

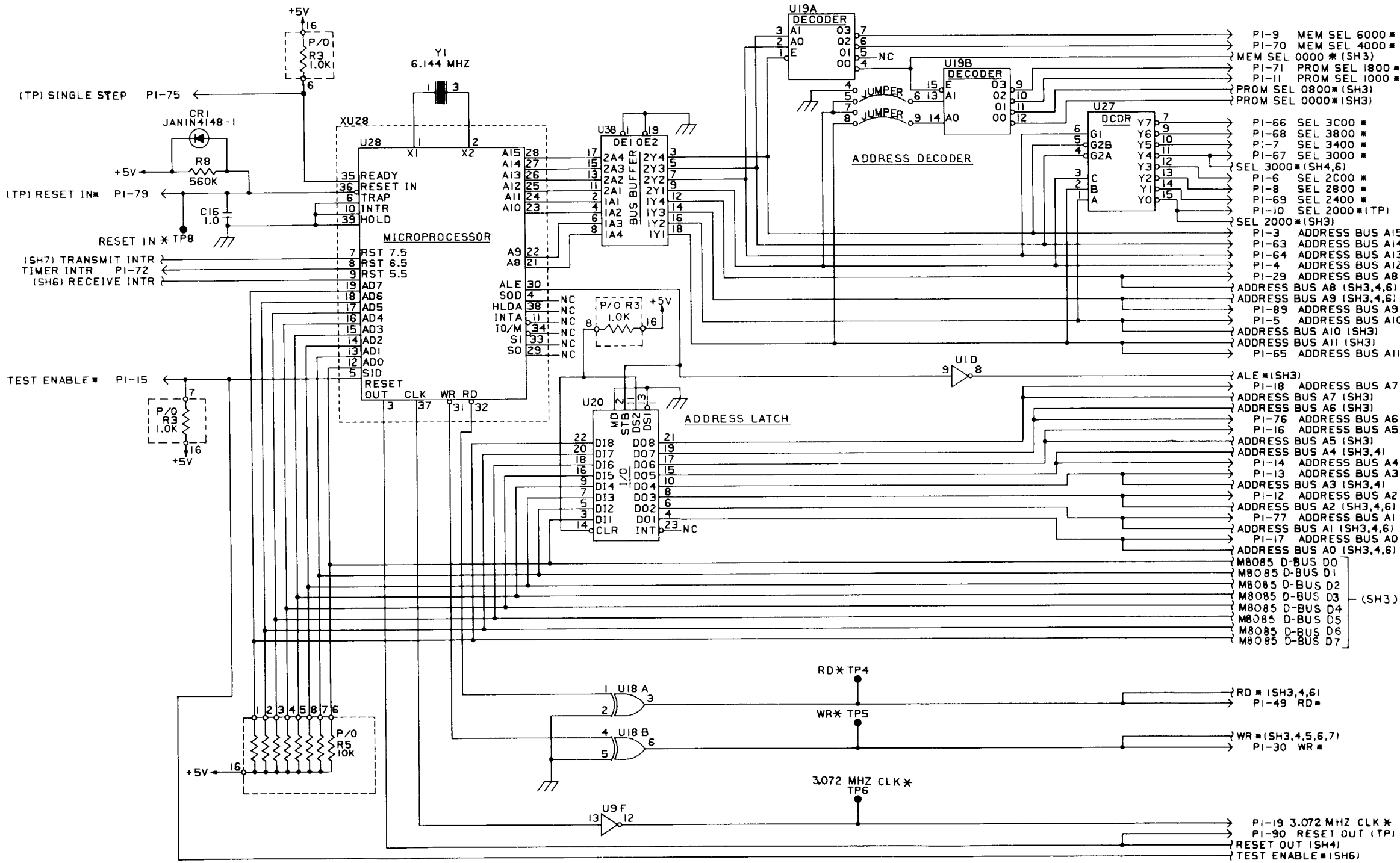
REF DES	VARIATION		
	-1	-2	-3
U21	5053288-1	5053288-3	5053288-5
U22	5053288-2	5053288-4	5053288-6

9. R6 AND R7 NOT INSTALLED, MOUNTING POSITION PROVIDED FOR POSSIBLE FUTURE USE.

-1,-2,-3

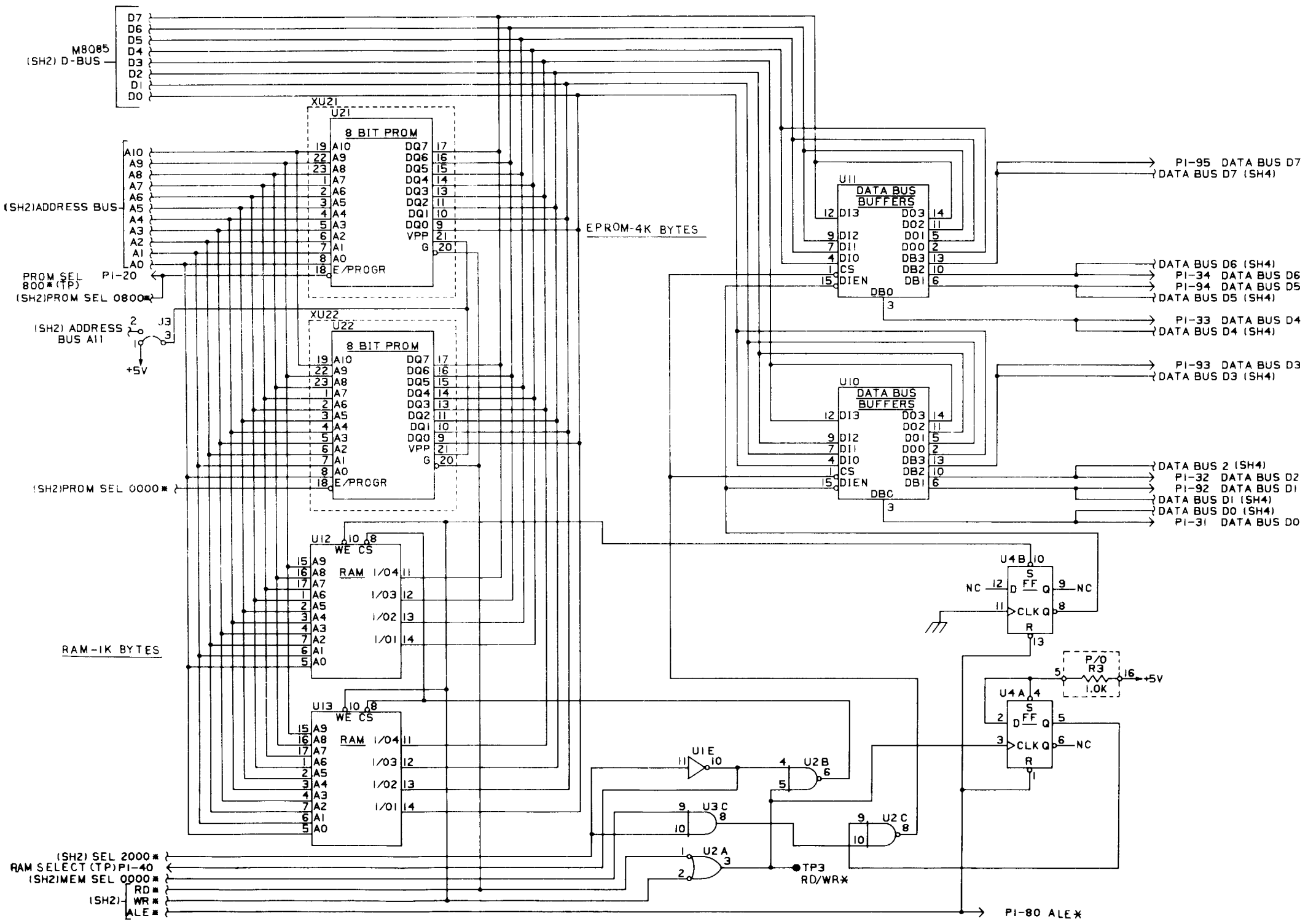
HIGHEST REFERENCE DESIGNATIONS			
C21	CRI	R9	U42
Y1	PI	XU28	
REFERENCE DESIGNATIONS NOT USED			
XU1-20,23-27			
R6,7 SEE NOTE 9			



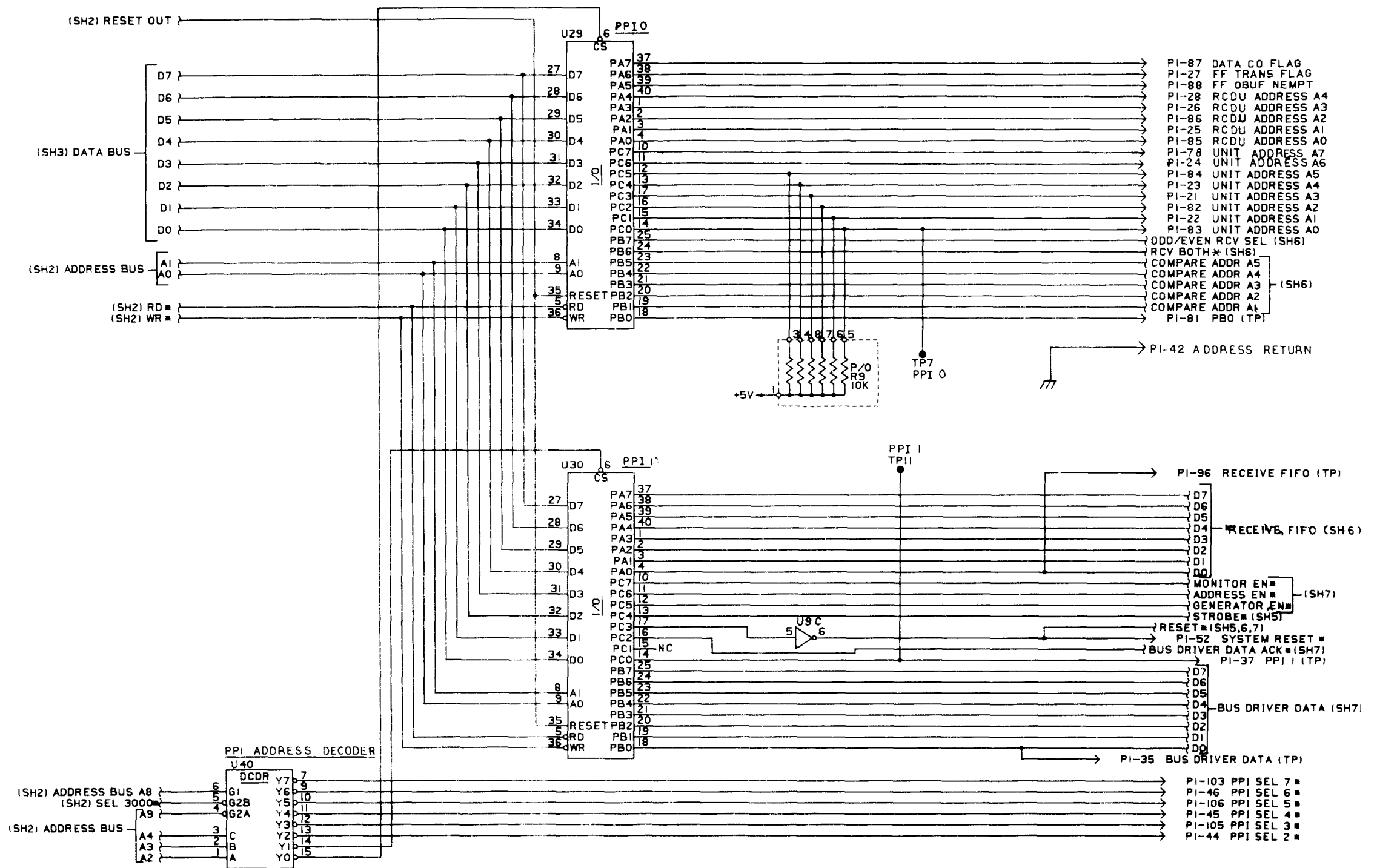


5052050-2

F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram (Sheet 2 of 7)

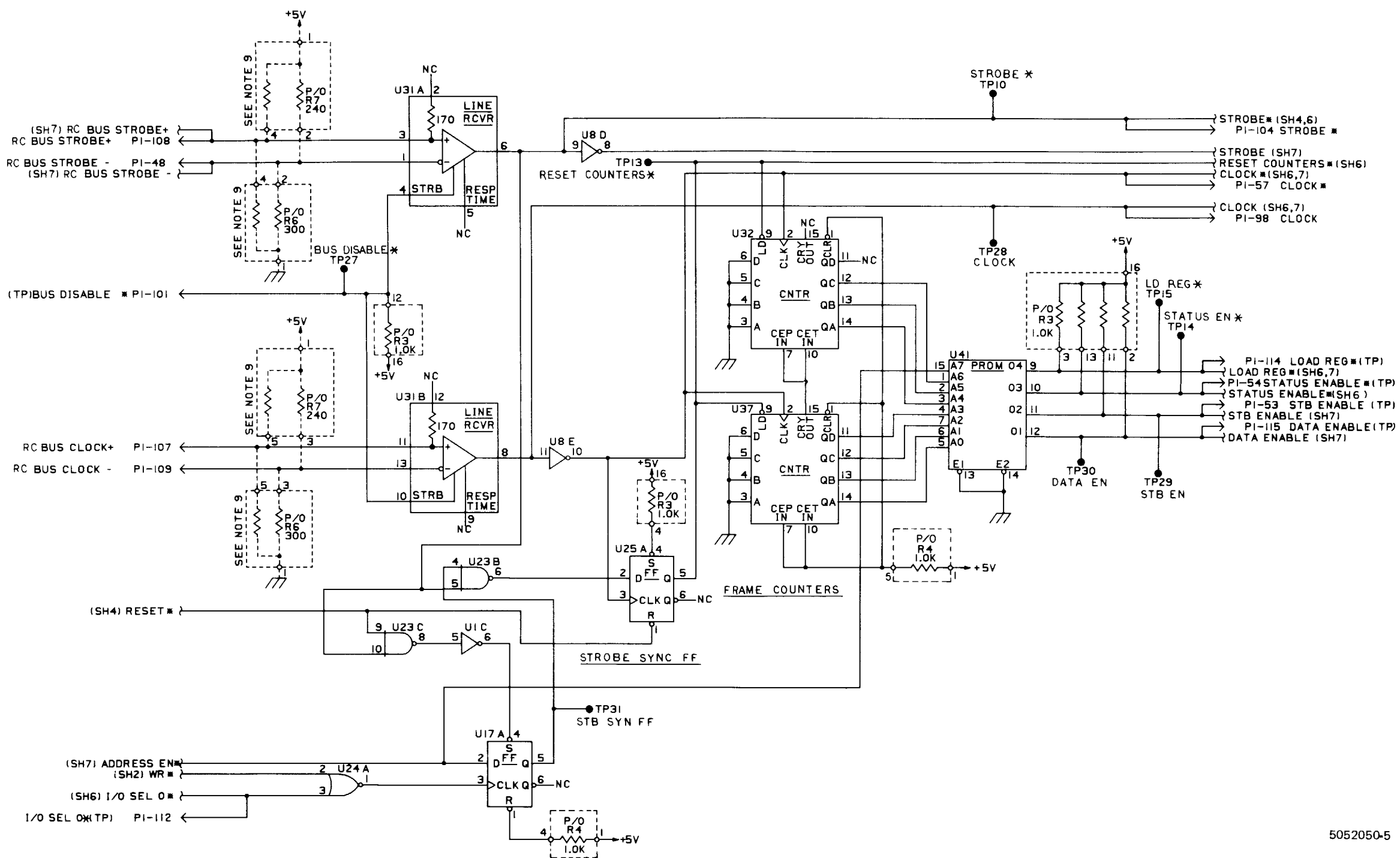


F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram (Sheet 3 of 7)



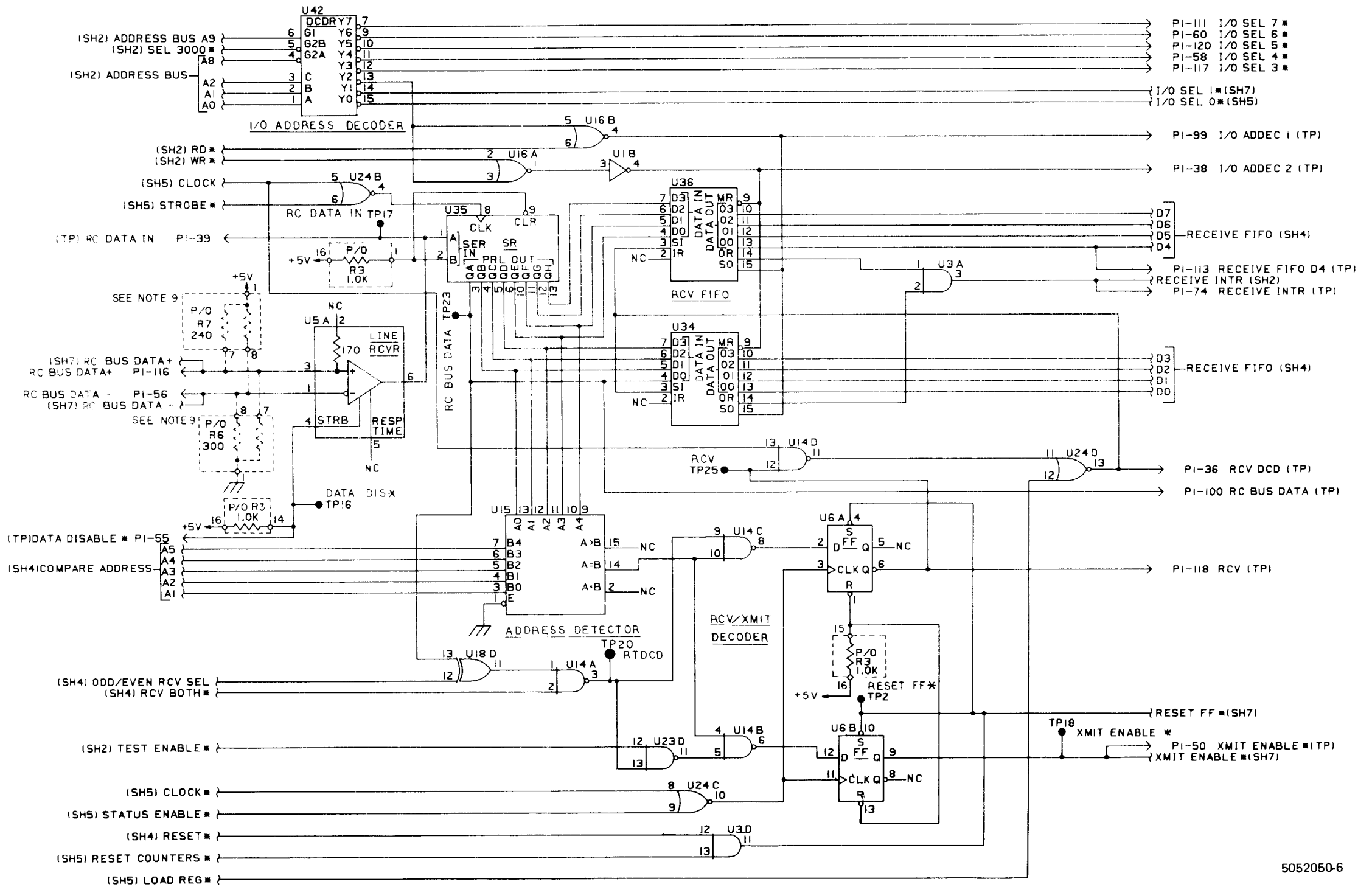
5052050-4

F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram (Sheet 4 of 7)



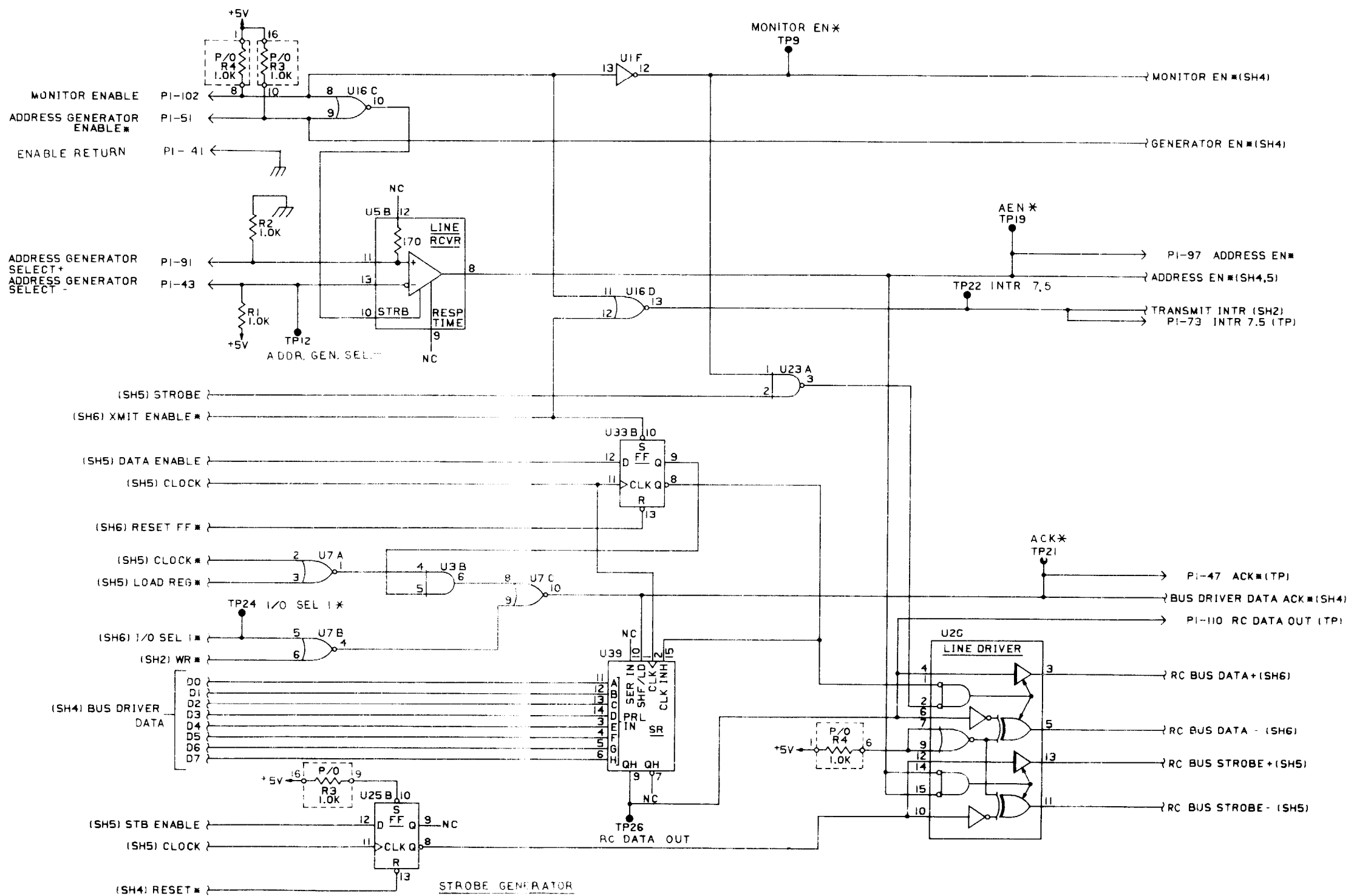
5052050-5

F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram (Sheet 5 of 7)



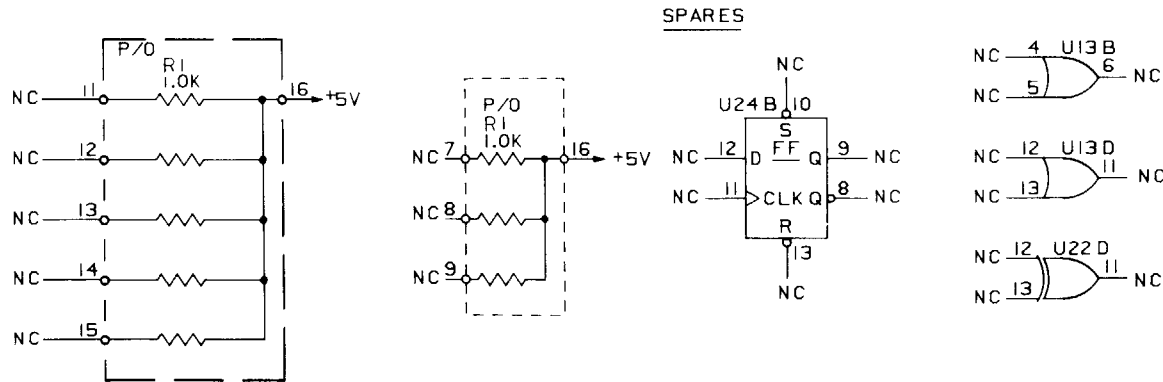
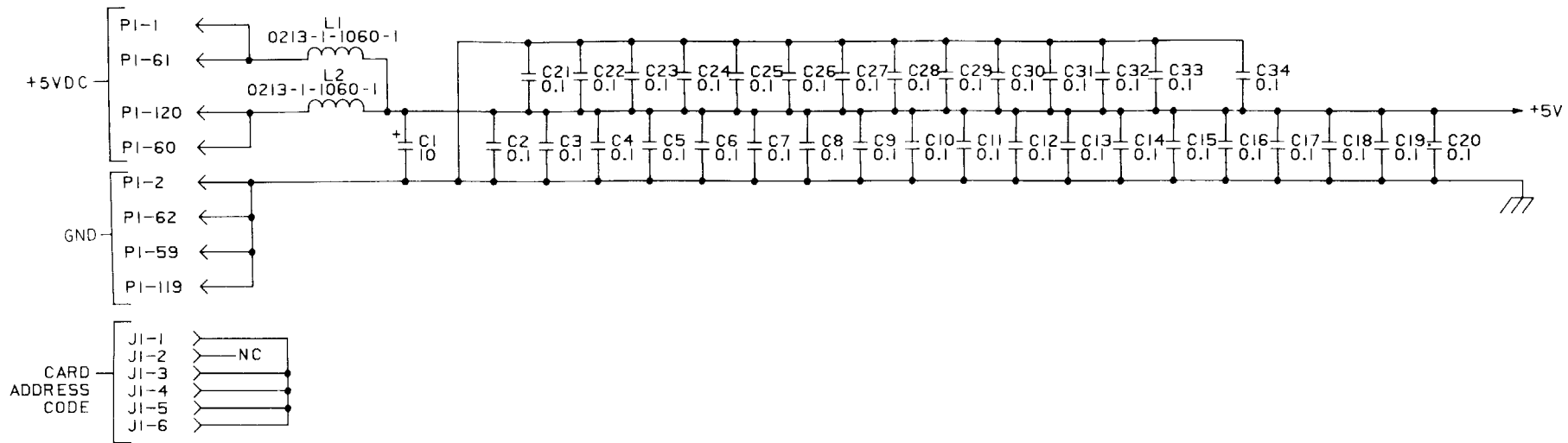
5052050-6

F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram (Sheet 6 of 7)



5052060-7

F0-10. RC Bus Interface/8085 CPU CCA (A7), Schematic Diagram ( Sheet 7 of 7)



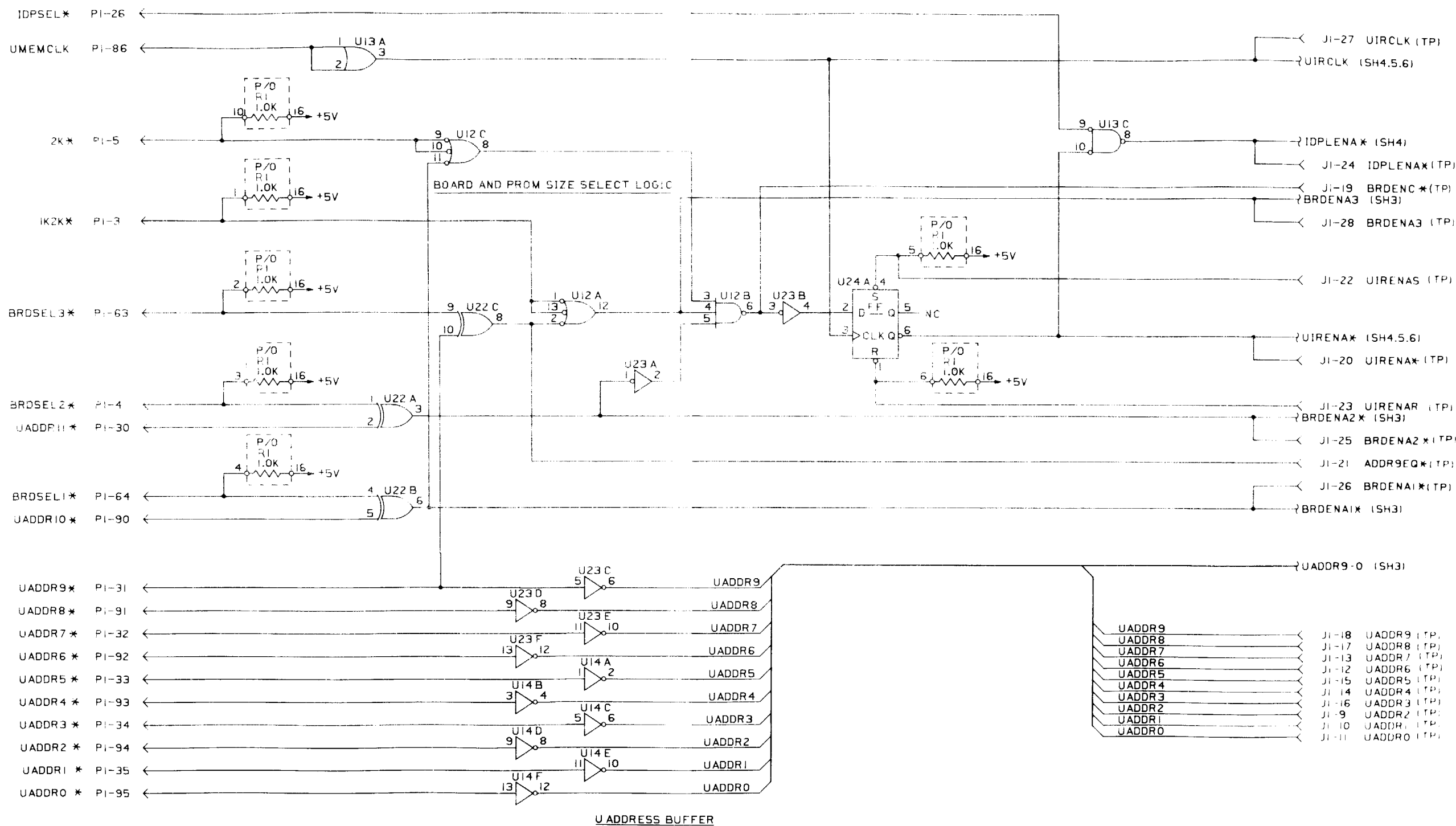
- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS
  2. RESISTANCE VALUES IN OHMS
  3. CAPACITANCE VALUES IN UF
  4. P/O INDICATES PART OF
  5. UNUSED CONNECTOR PINS NOT SHOWN
  6. NC INDICATES NO CONNECTION
  7. \* FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION

SUPPLEMENTARY DATA TABLE

REF DES	PART NUMBER	TYPE	+5V	GND
U1	5053286-1	3636	24	12
U2	5053286-2	3636	24	12
U3	5053286-3	3636	24	12
U4	5053286-4	3636	24	12
U5	5053286-5	3636	24	12
U6	5053286-6	3636	24	12
U7	5053286-7	3636	24	12
U8	5053286-8	3636	24	12
U9	5053286-9	3636	24	12
U10	5053286-10	3636	24	12
U11,16-21,25-27	5068027-1	54S374	20	10
U13	5068021-1	54S32	14	7
U14,23	M38510-07003BCX	54S04	14	7
R1	M8340102M1001GB	--	SHOWN	--
U22	M38510-07501BCX	54S86	14	7
U24	M38510-07101BCX	54S74	14	7
U12	M38510-07005BCX	54S10	14	7

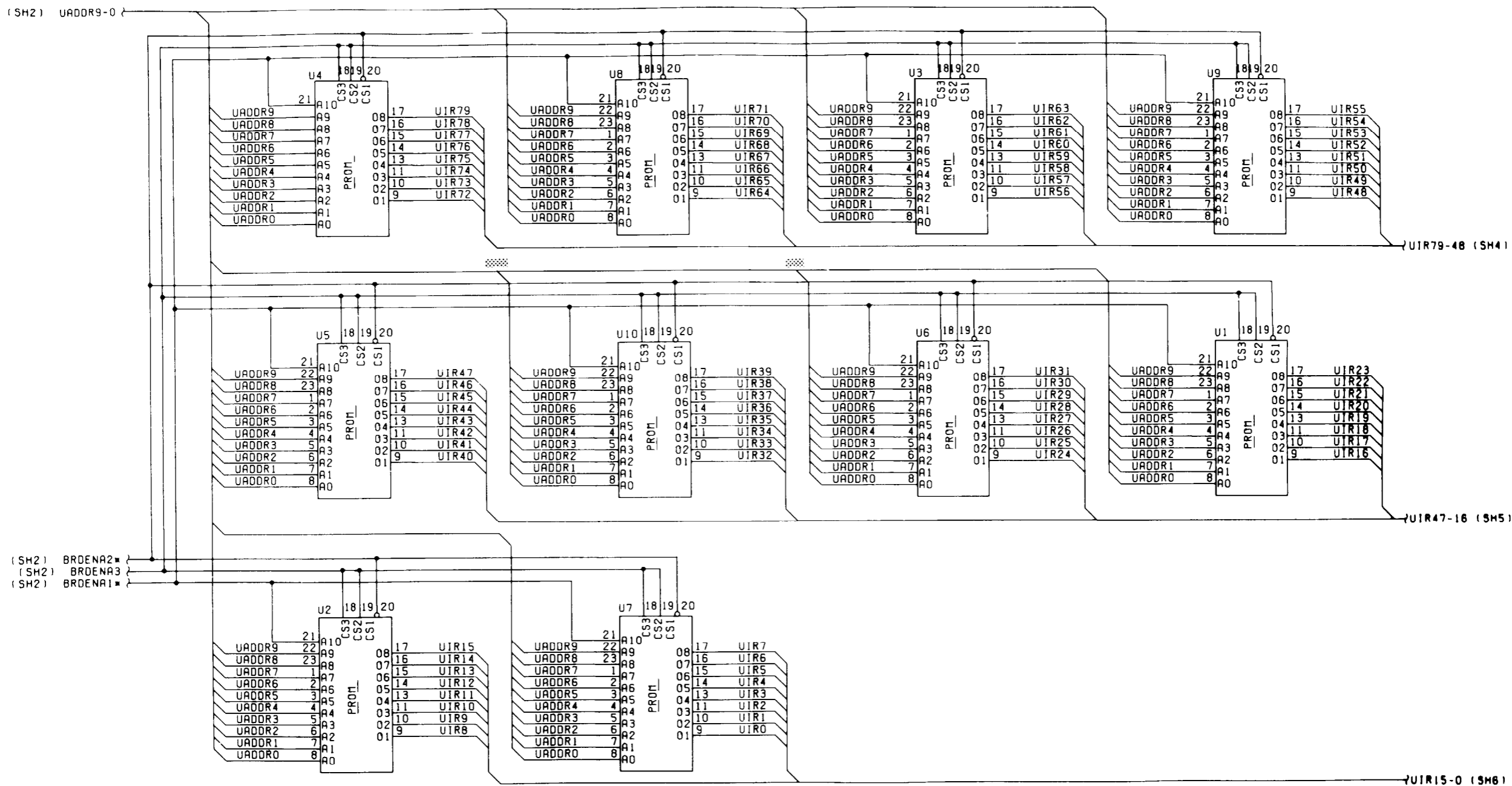
HIGHEST REFERENCE DESIGNATIONS			
L2	PI	C34	J1
U27	PI		
REFERENCE DESIGNATIONS NOT USED			
U15			

5052058-1



F0-11. Micromemory CCA (A8), Schematic Diagram (Sheet 2 of 6)



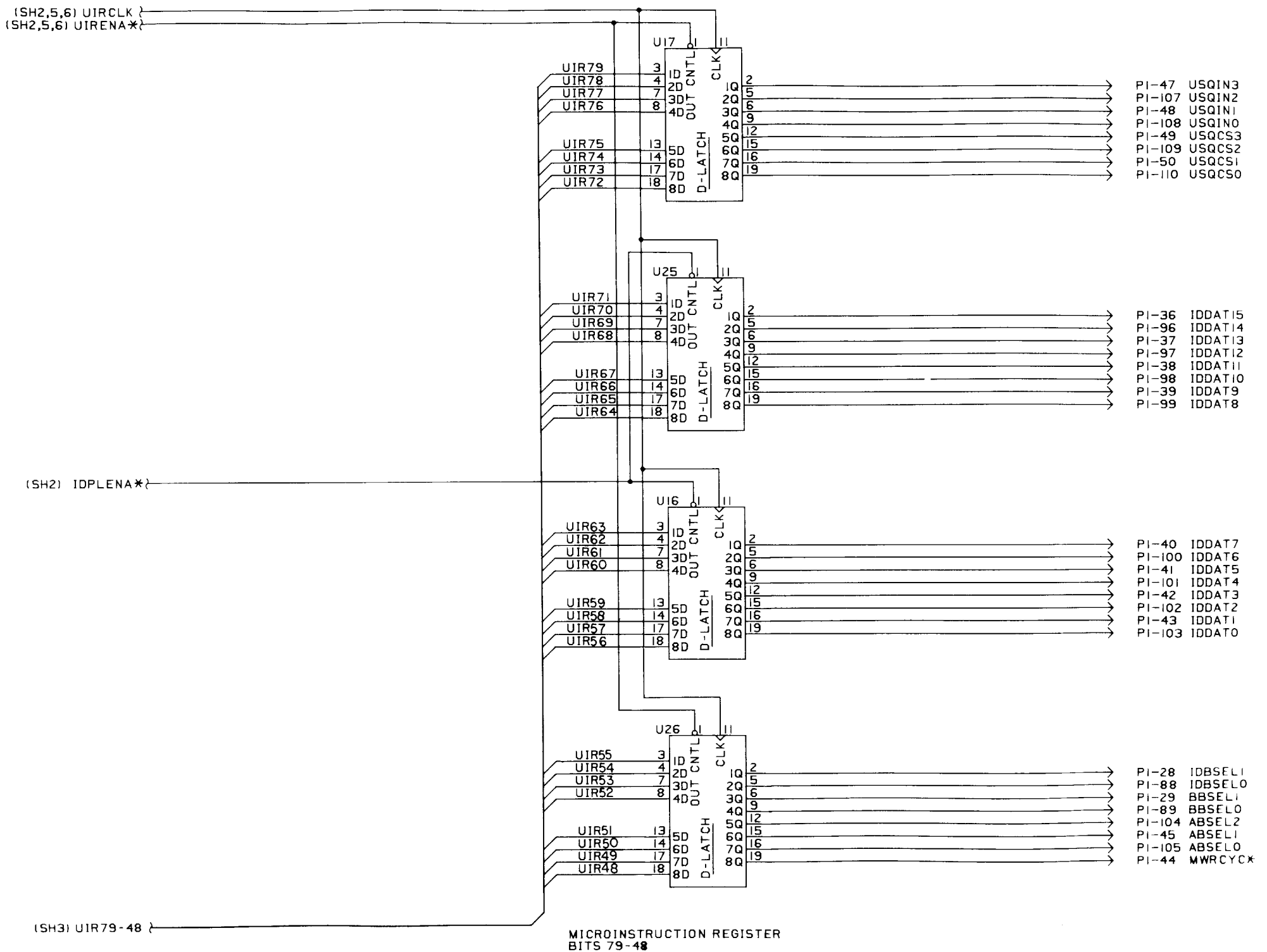


2K X 88-BIT CONTROL MEMORY

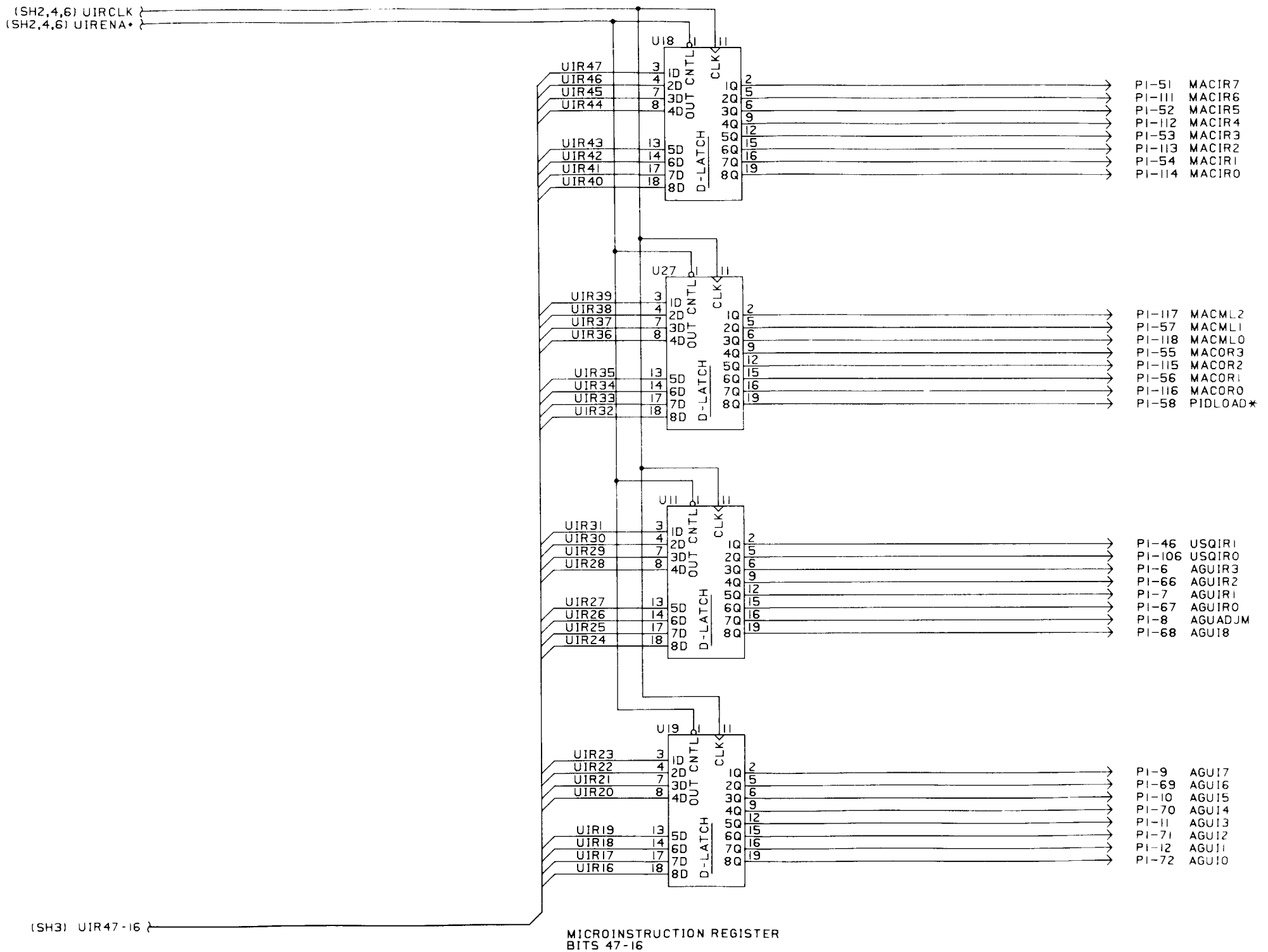
5052058-3

F0-11. Micromemory CCA (A8), Schematic Diagram (Sheet 3 of 6)

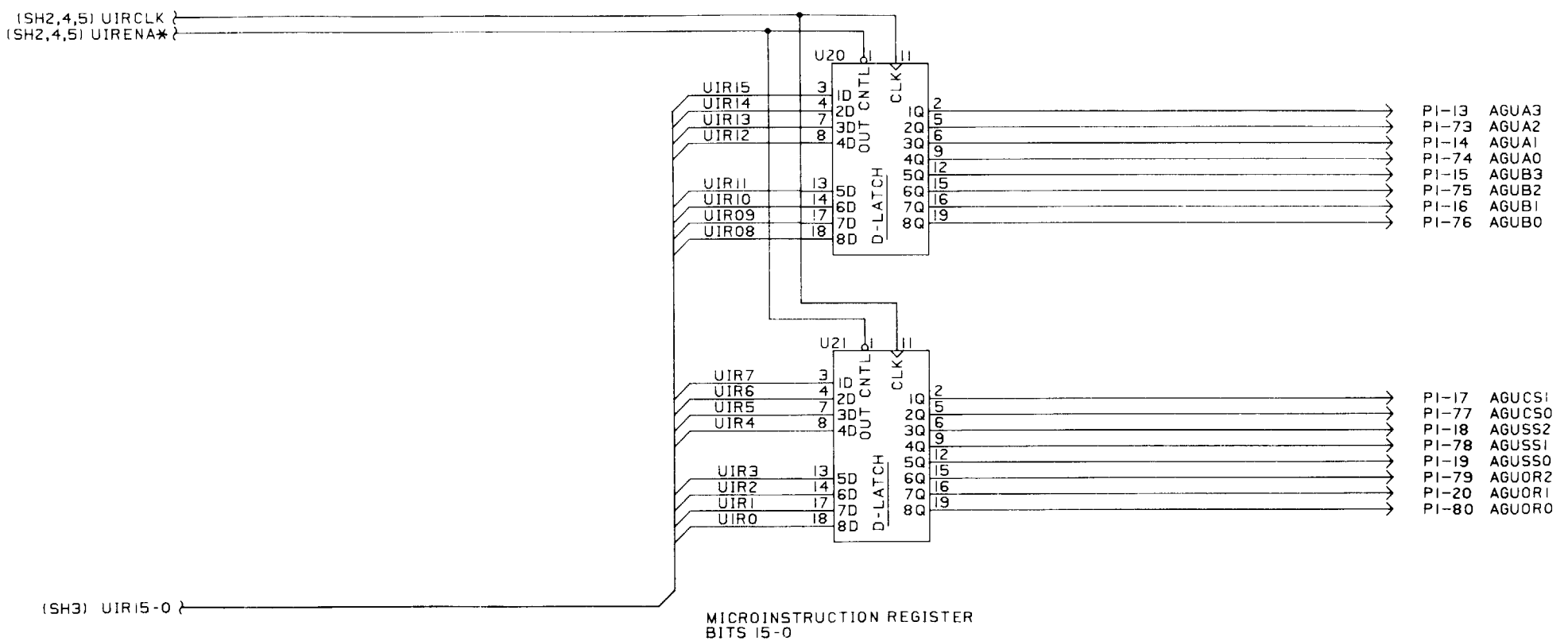
Change 1



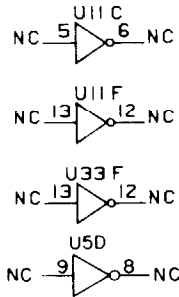
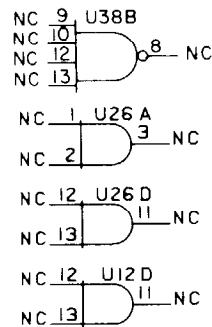
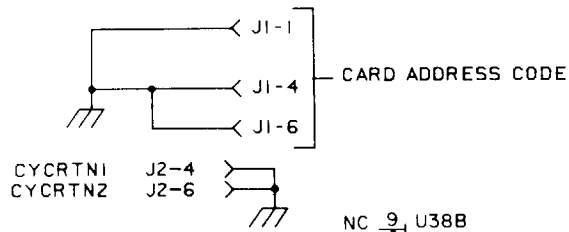
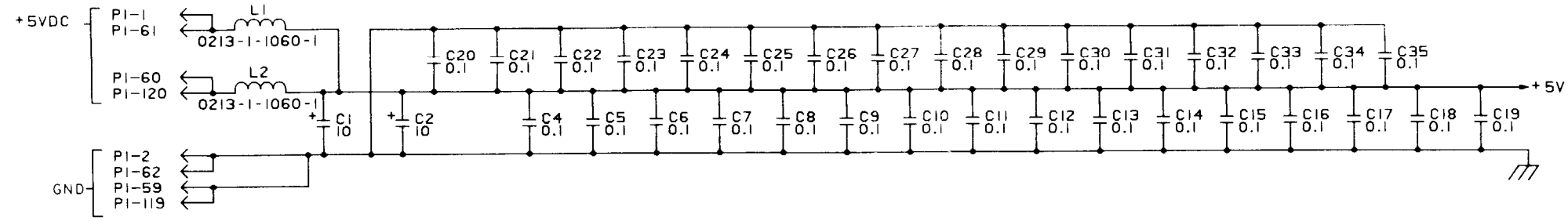
5052058-4



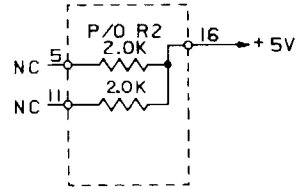
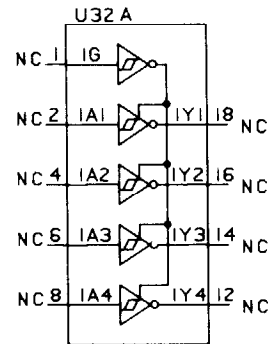
5052058-5



5052058-6



SPARES

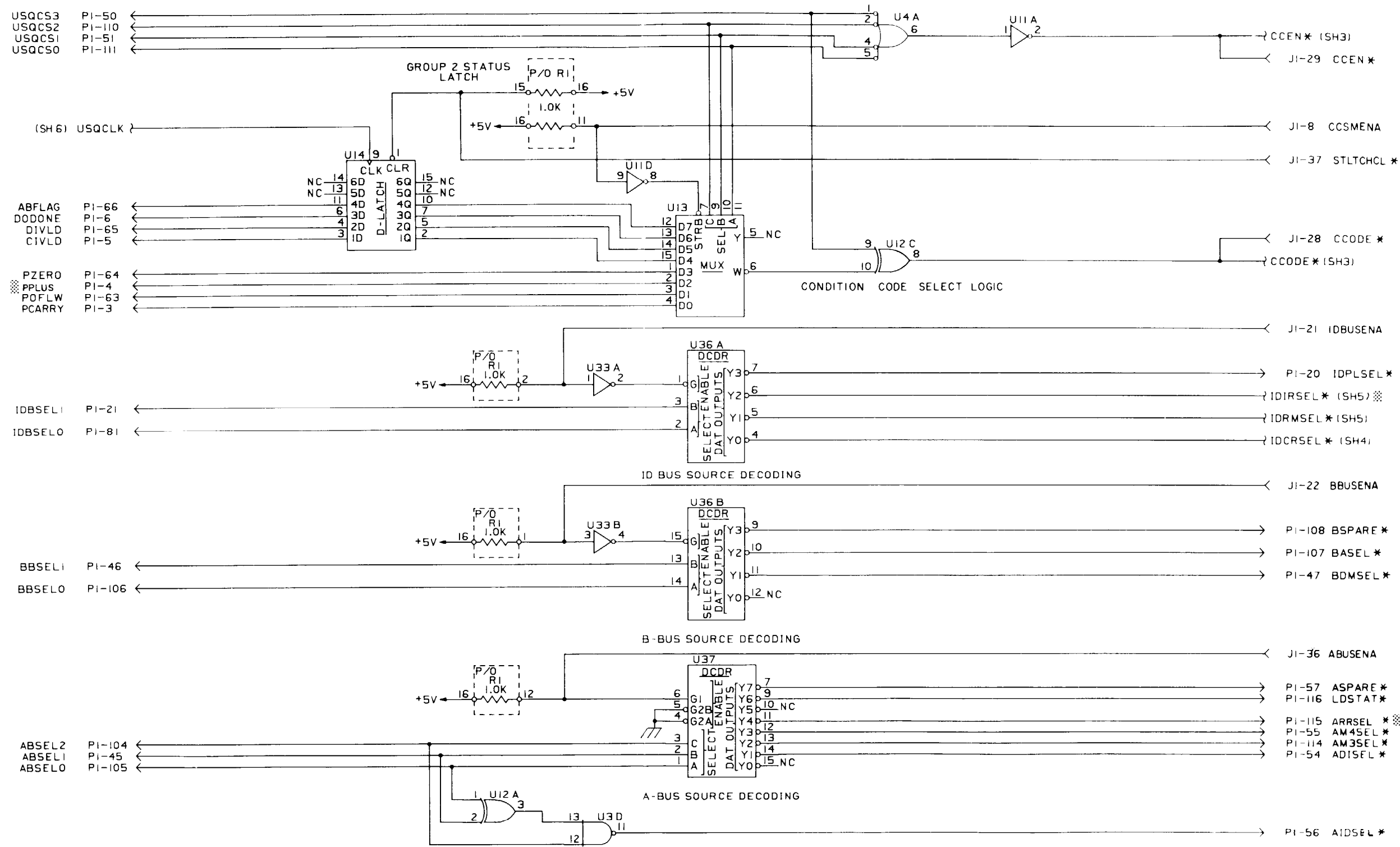


- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS
  2. RESISTANCE VALUES IN OHMS
  3. CAPACITANCE VALUES IN UF
  4. P/O INDICATES PART OF
  5. UNUSED CONNECTOR PINS NOT SHOWN
  6. NC INDICATES NO CONNECTION
  7. \* FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION
  8. ALL DIODES ARE TYPE JAN1N4148 -1

SUPPLEMENTARY DATA TABLE				
REF DES	PART NUMBER	TYPE	VCC	GND
U1	M38510-07106BEX	54S175	16	8
U2	M38510-07401BCX	54S51	14	7
U3	M38510-07001BCX	54S00	14	7
U4	M38510-07006BCX	54S20	14	7
U5,U11	M38510-07003BCX	54S04	14	7
U6	M38510-07101BCX	54S74	14	7
U7,U8,U9	M38510-31512BEX	54LS163	16	8
U10	5068021-1	54S32	14	7
U12	M38510-07501BCX	54S86	14	7
U13	M38510-07901BCX	54S151	16	8
U14,U24,U31	M38510-07105BEX	54S174	16	8
U16,U17,U18	M38510-30903BEX	54LS157	16	8
U19	5053287-1	54S571	16	8
U20	5053287-2	54S571	16	8
U21	5053287-3	54S571	16	8
U22	5053287-4	54S571	16	8
U23	78017020X	2910	10	30
U25,U32	5054354-1	54S240	20	10
U26	M38510-31004BCX	54LS08	14	7
U27,U29	5068035-1	8T97	-	-
U28,U30	5068027-1	54S374	20	10
U33	M38510-31302BCX	54LS14	14	7
U34,U35	5068028-1	54S244	20	10
U36	M38510-07702BEX	54S139	16	8
U37	M38510/07701BEX	54S138	16	8
Y1	5054906-5	24MHZ	4	7
U38	M38510-08101BCX	54S140	14	7

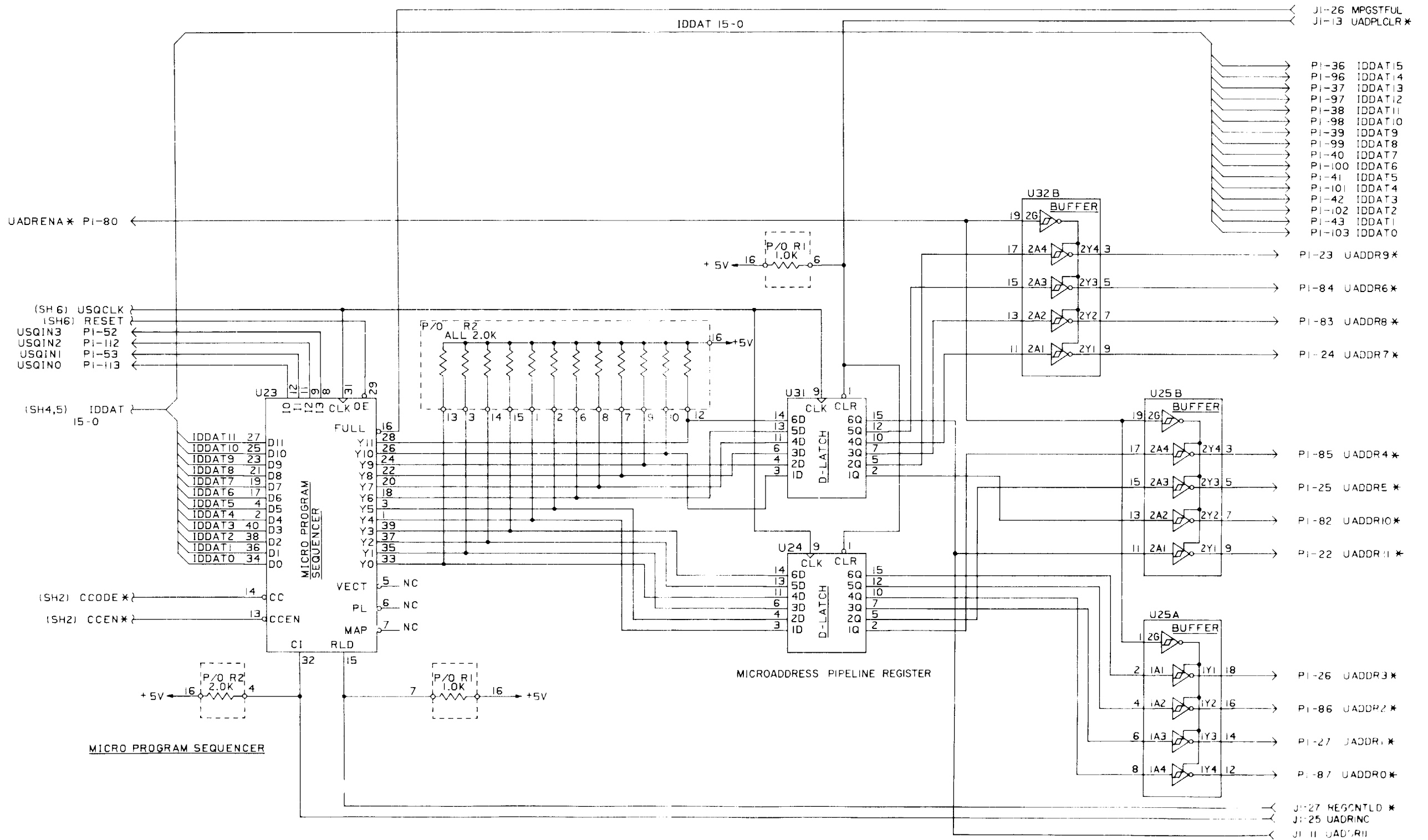
HIGHEST REFERENCE DESIGNATIONS			
CRI	L2	C35	R2
U38	J2	Y1	
REFERENCE DESIGNATIONS NOT USED			
U15			

5052046-1



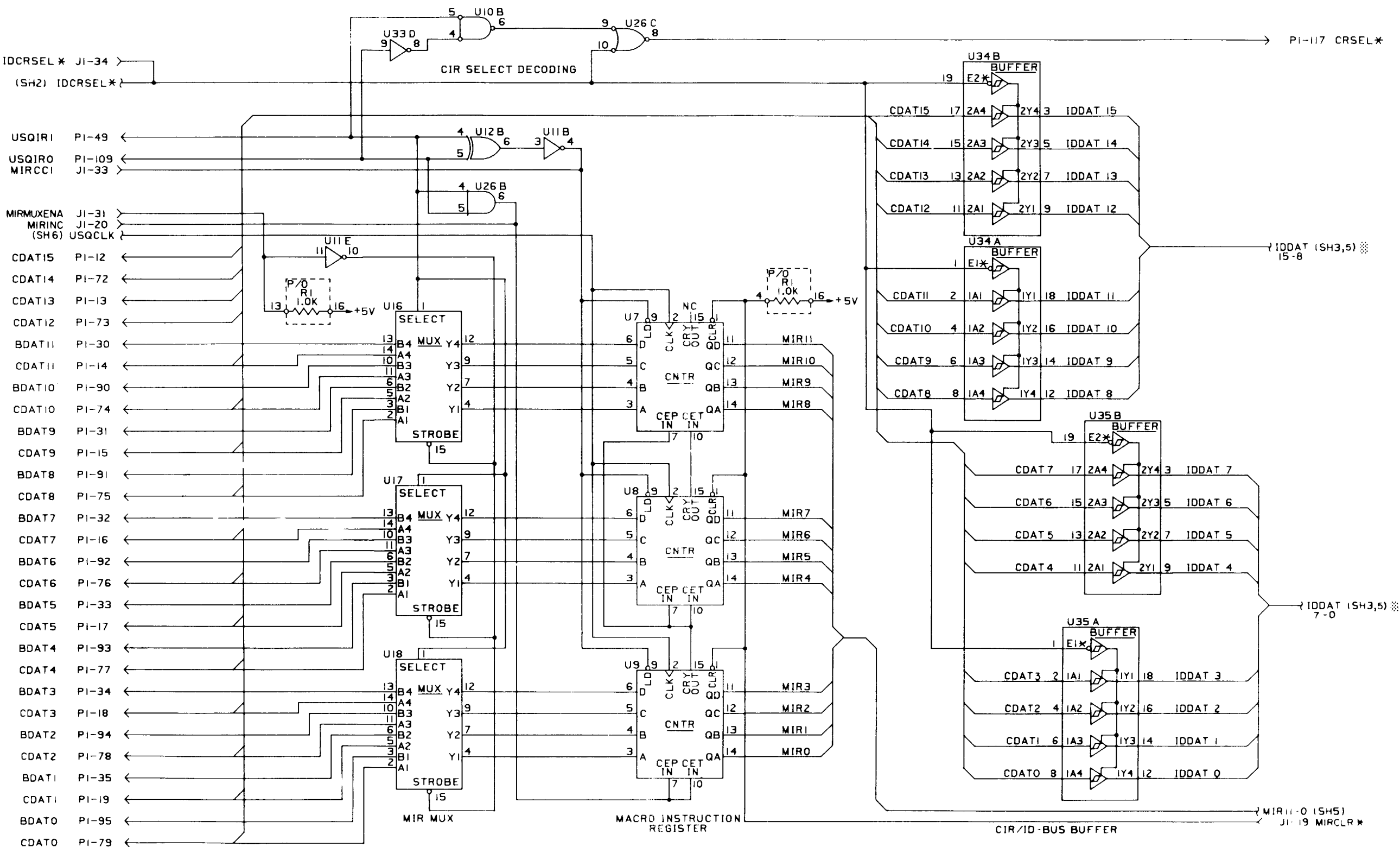
5052046-2

F0-12. Control Sequencer CCA (A9), Schematic Diagram (Sheet 2 of 6) Change 1



5052046-3

F0-12. Control Sequencer CCA (A9), Schematic Diagram (Sheet 3 of 6)

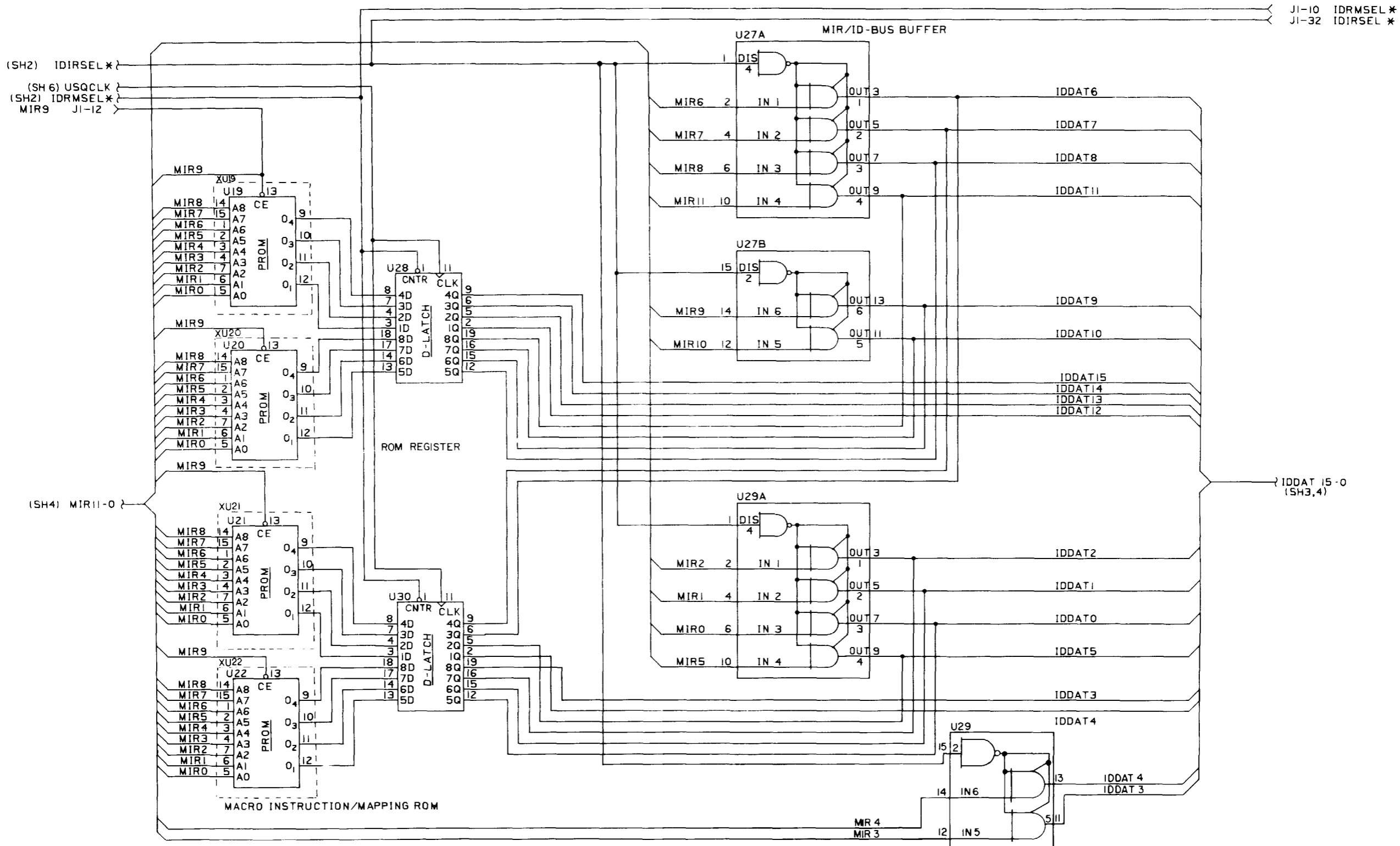


5052046-4

F0-12. Control Sequencer CCA (A9), Schematic Diagram ( Sheet 4 of 6)

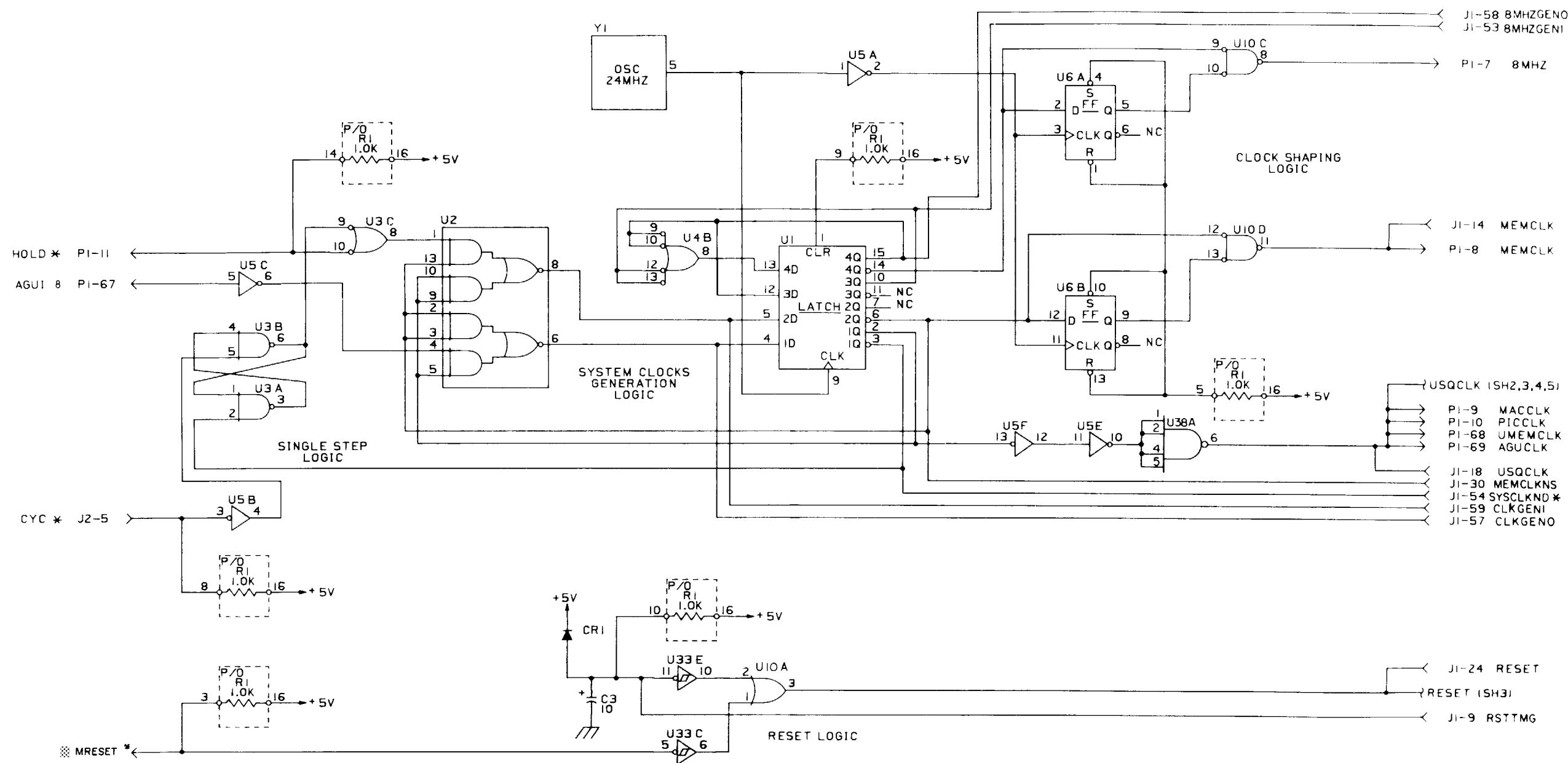
Change 1





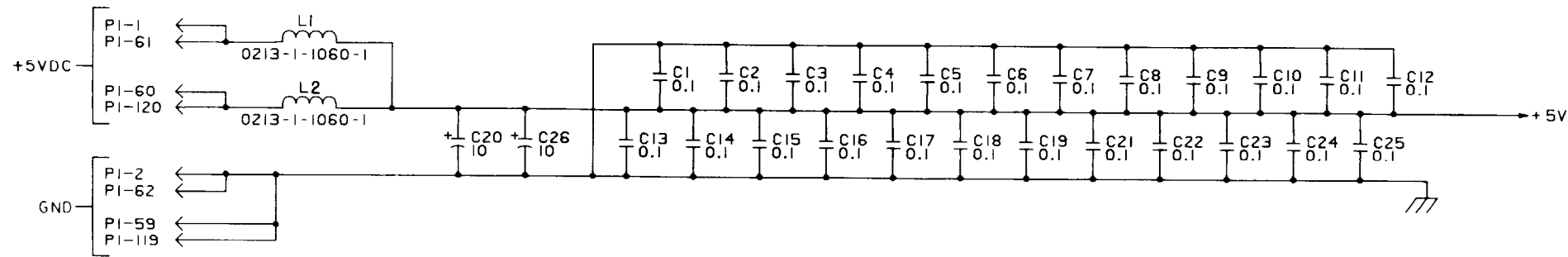
5052046-5

F0-12. Control Sequencer CCA (A9), Schematic Diagram (Sheet 5 of 6)

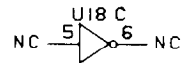
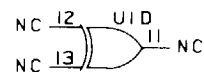


5052046-6

F0-12. Control Sequencer CCA (A9),  
Schematic Diagram  
(Sheet 6 of 6)  
Change 1



SPARES



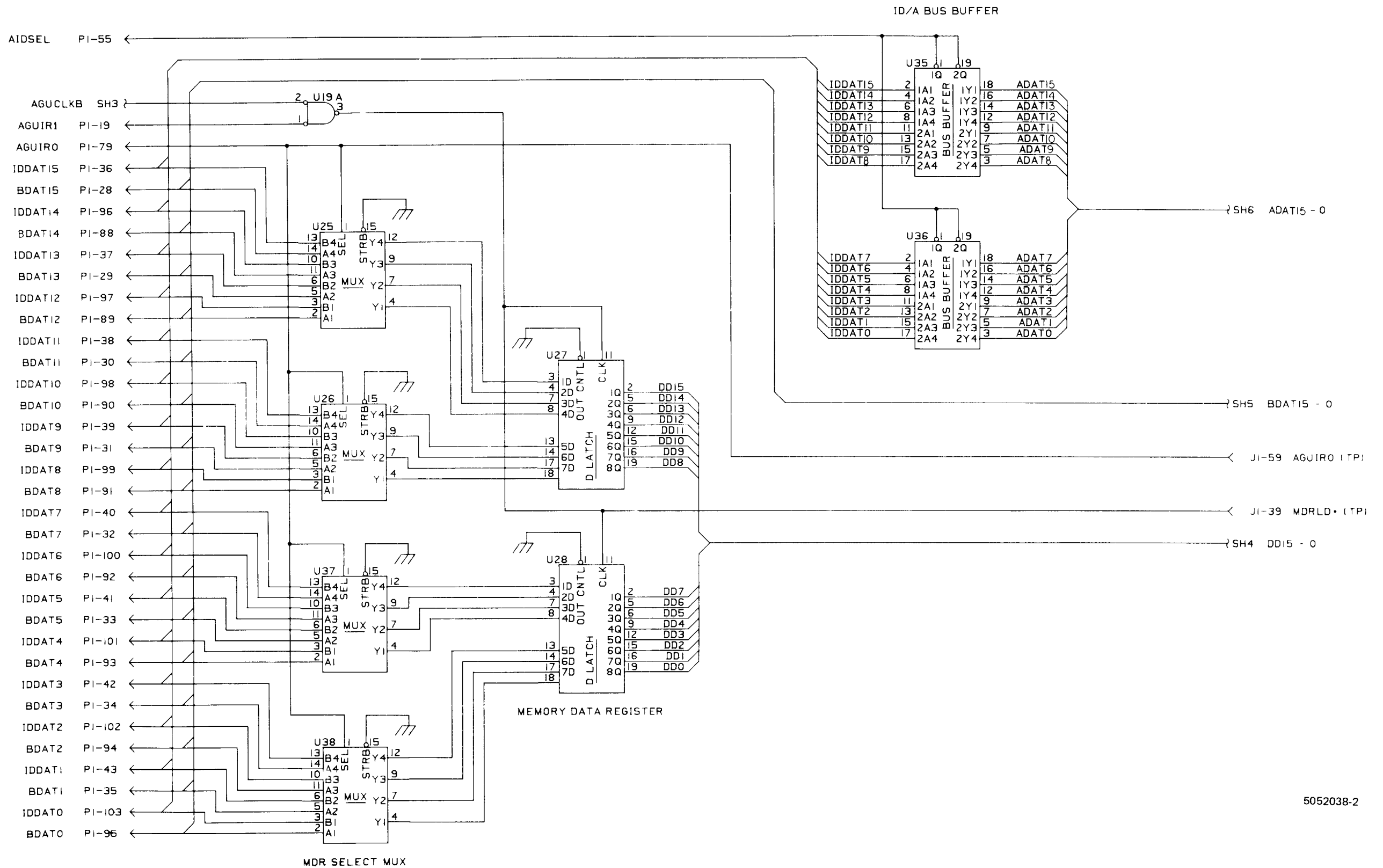
- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS.
  2. RESISTANCE VALUES IN OHMS.
  3. CAPACITANCE VALUES IN UF.
  4. P/O INDICATES PART OF.
  5. UNUSED PINS NOT SHOWN.
  6. NC INDICATES NO CONNECTIONS.
  7. \* FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION.

SUPPLEMENTARY DATA TABLE

REF DES	PART NUMBER	TYPE	+5V	GND			
U1	M38510-07501BCX	54S86	14	7			
U2	5054363-1	54S253	16	8			
U3	M38510-07001BCX	54S00	14	7			
U4-7	5069119-1	2901A-1	10	30			
U8	M38510-01403BEX	54153	16	8			
U9,10	5054364-1	54S251	16	8			
U11	5068052-1	2902A	16	8			
U12	M38510-07105BEX	54S174	16	8			
U13-15,23,24	M38510-07903BEX	54S157	16	8			
U16,19	5068021-1	54S32	14	7			
U17	M38510-08003BCX	54S08	14	7			
U18	M38510-30003BLX	54LS04	14	7			
U20	M38510-07101BCX	54S74	14	7			
U21,22,31,32	5068070-1	54S163	16	8			
U25,26,37,38	M38510-30903BEX	54LS157	16	8			
U27,28	7801101RX	54LS374	20	10			
U29,30,39,40	5068024-1	54LS166	16	8			
U33,34	5068027-1	54S374	20	10			
U35,36	5068028-1	54S244	20	10			

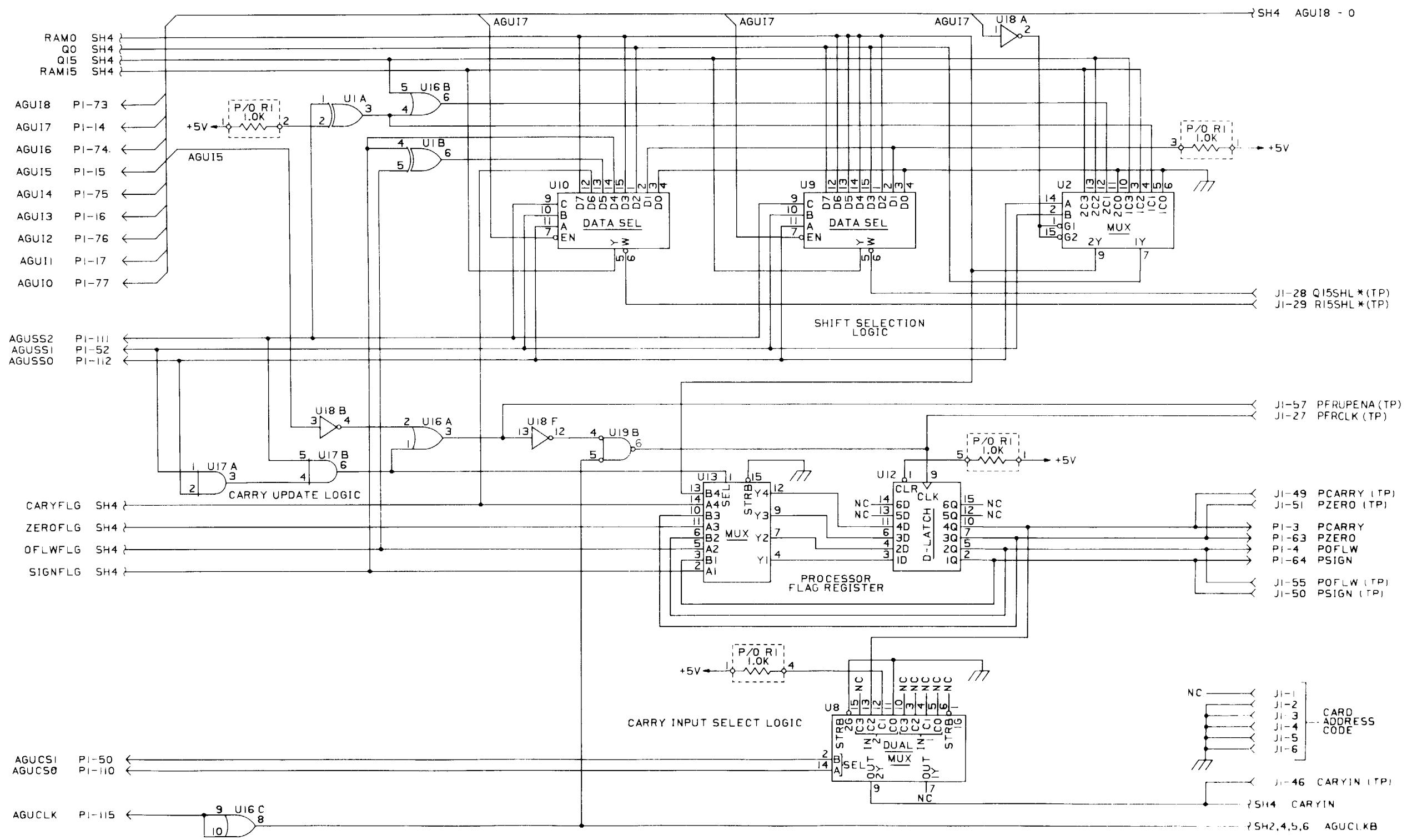
HIGHEST REFERENCE DESIGNATIONS			
U40	L2	R2	C26
J1	PI		
REFERENCE DESIGNATIONS NOT USED			

5052038-1



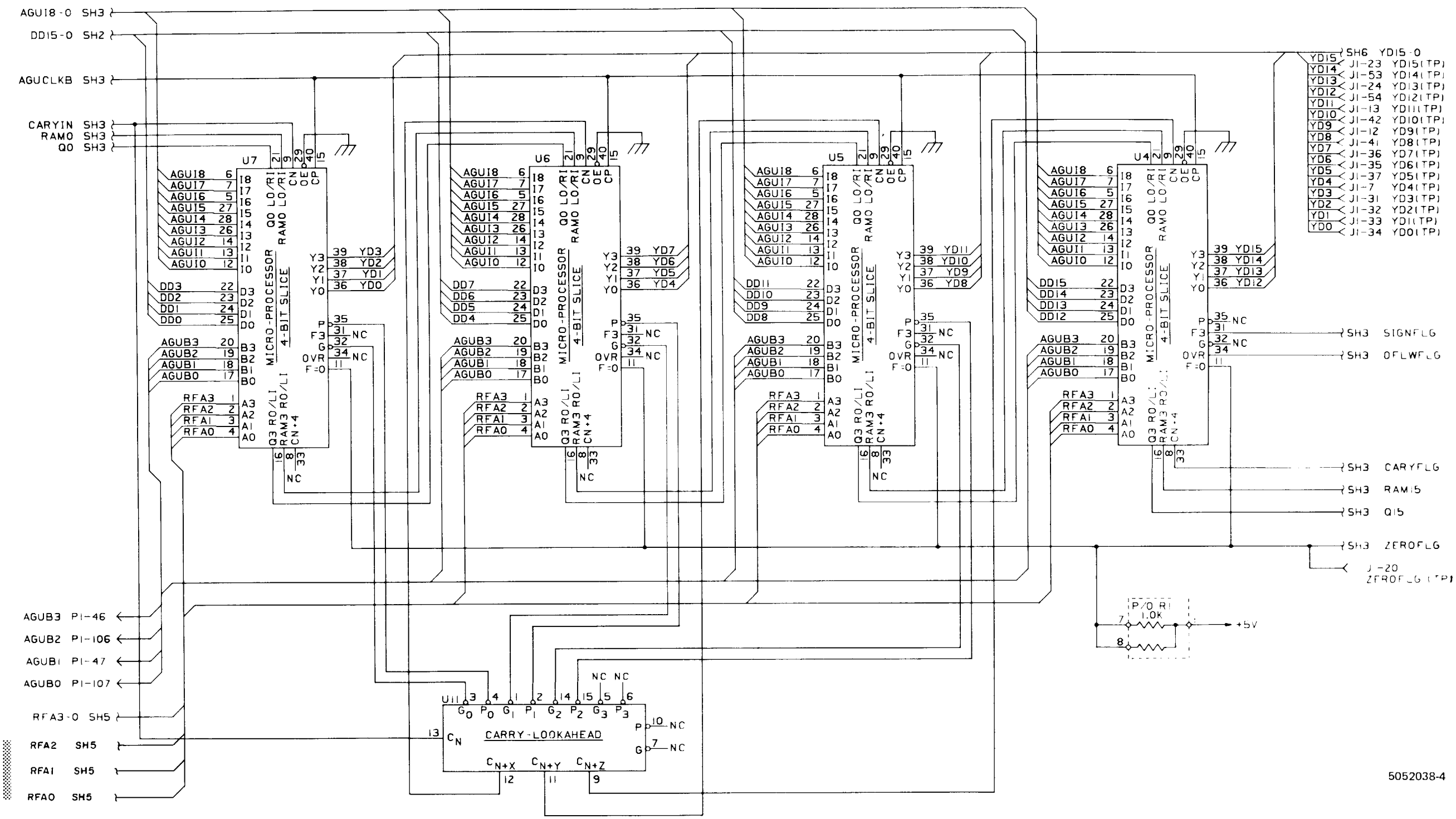
5052038-2

F0-13. Address Generator CCA (A10), Schematic Diagram ( Sheet 2 of 6)



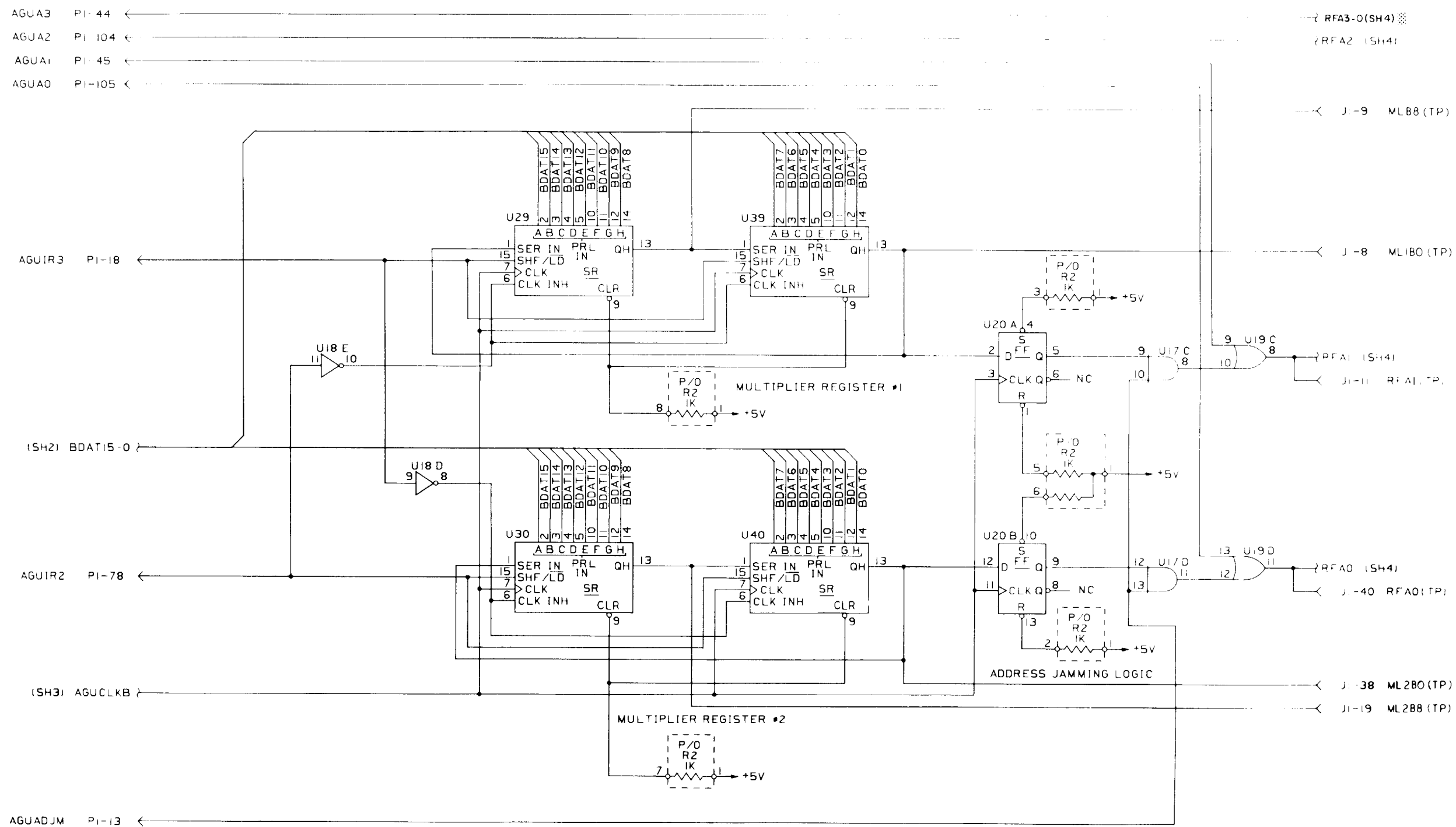
5052038-3

F0-13. Address Generator CCA (A10), Schematic Diagram (Sheet 3 of 6)



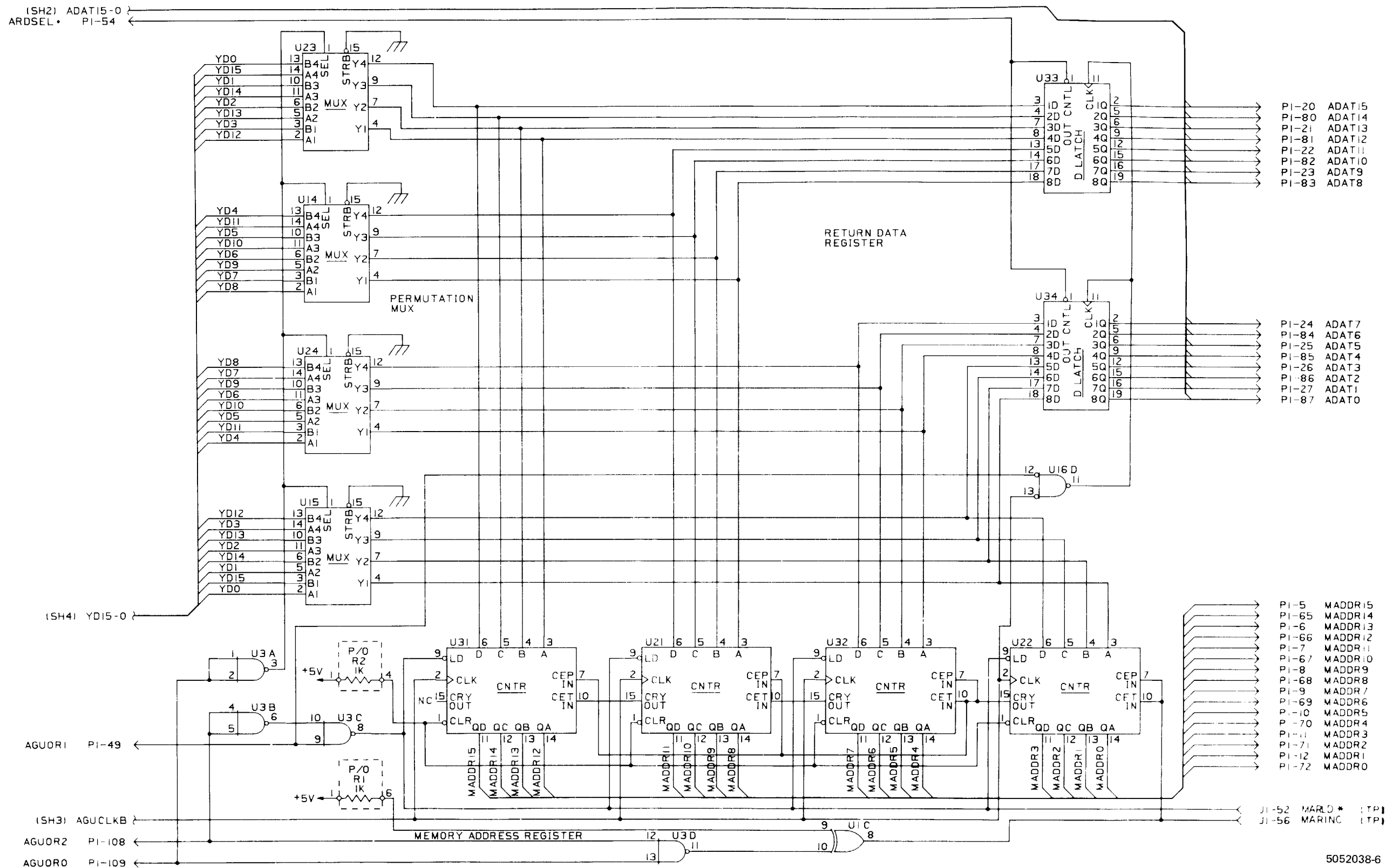
5052038-4

F0-13. Address Generator CCA (AI0), Schematic Diagram (Sheet 4 of 6) Change 1



5052038-5

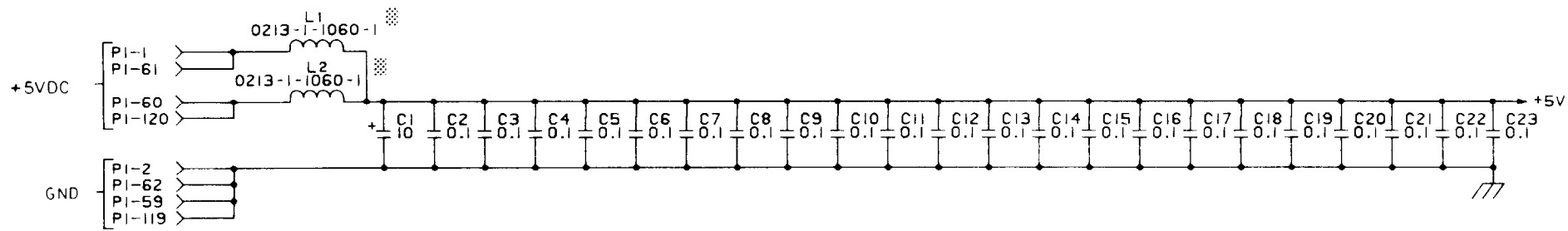
F0-13. Address Generator CCA (A10),  
Schematic Diagram  
(Sheet 5 of 6)  
Change 1



5052038-6

F0-13. Address Generator CCA (AI0), Schematic Diagram (Sheet 6 of 6)

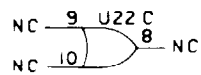




- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS
  2. RESISTANCE VALUES IN OHMS
  3. CAPACITANCE VALUES IN UF
  4. NC INDICATES NO CONNECTION
  5. UNUSED CONNECTOR PINS NOT SHOWN

HIGHEST REFERENCE DESIGNATIONS			
C23	L2	J22	R5
PI			
REFERENCE DESIGNATIONS NOT USED			

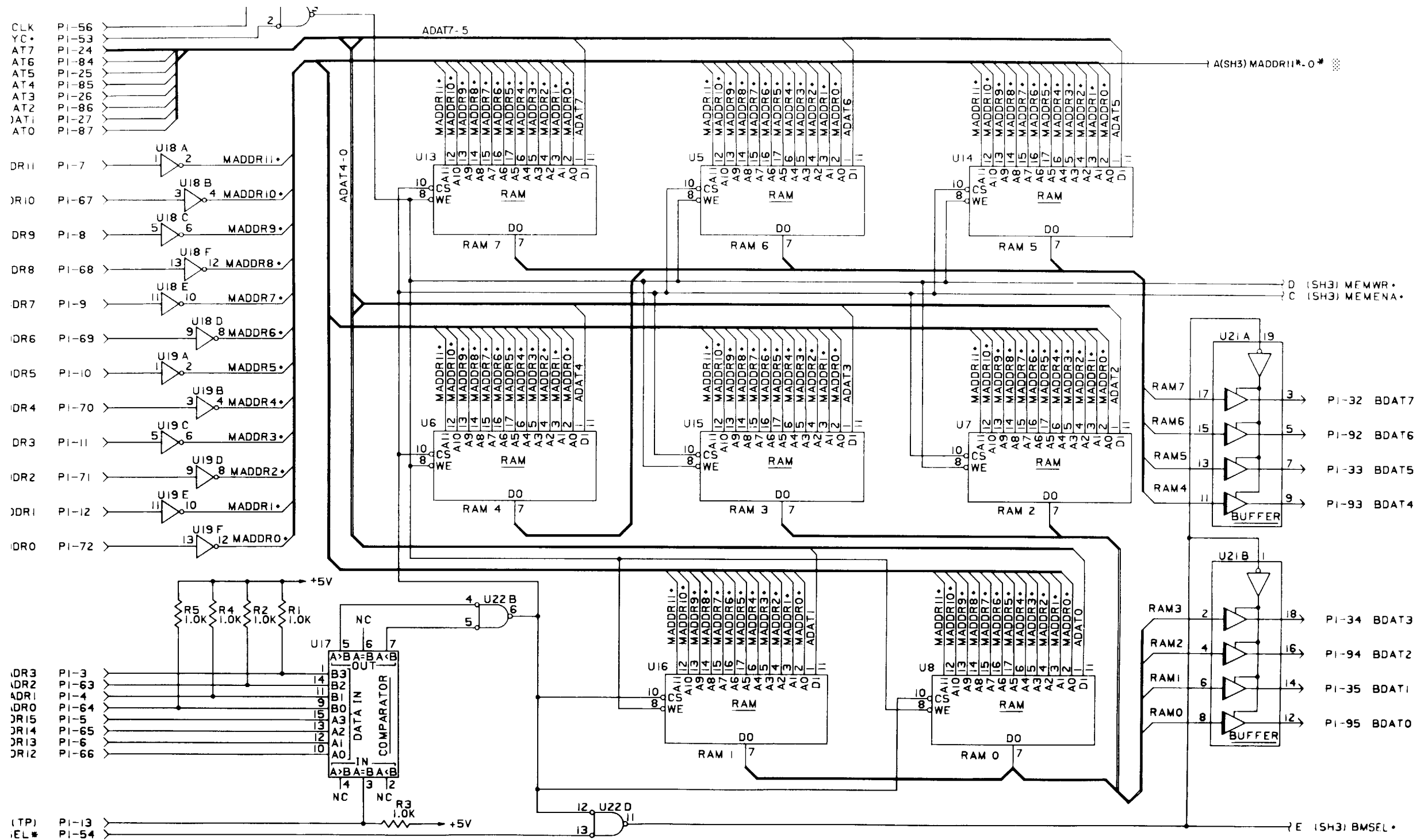
SPARES



SUPPLEMENTARY DATA TABLE				
REF DES	PART NUMBER	TYPE	+5V	GND
U1-16	5054365-1	M2147H-3	18	9
U17	5068020-1	54S85	16	8
U18,U19	M38510-07003BCX	54S04	14	7
U20,U21	5068028-1	54S244	20	10
U22	5068021-1	54S32	14	7

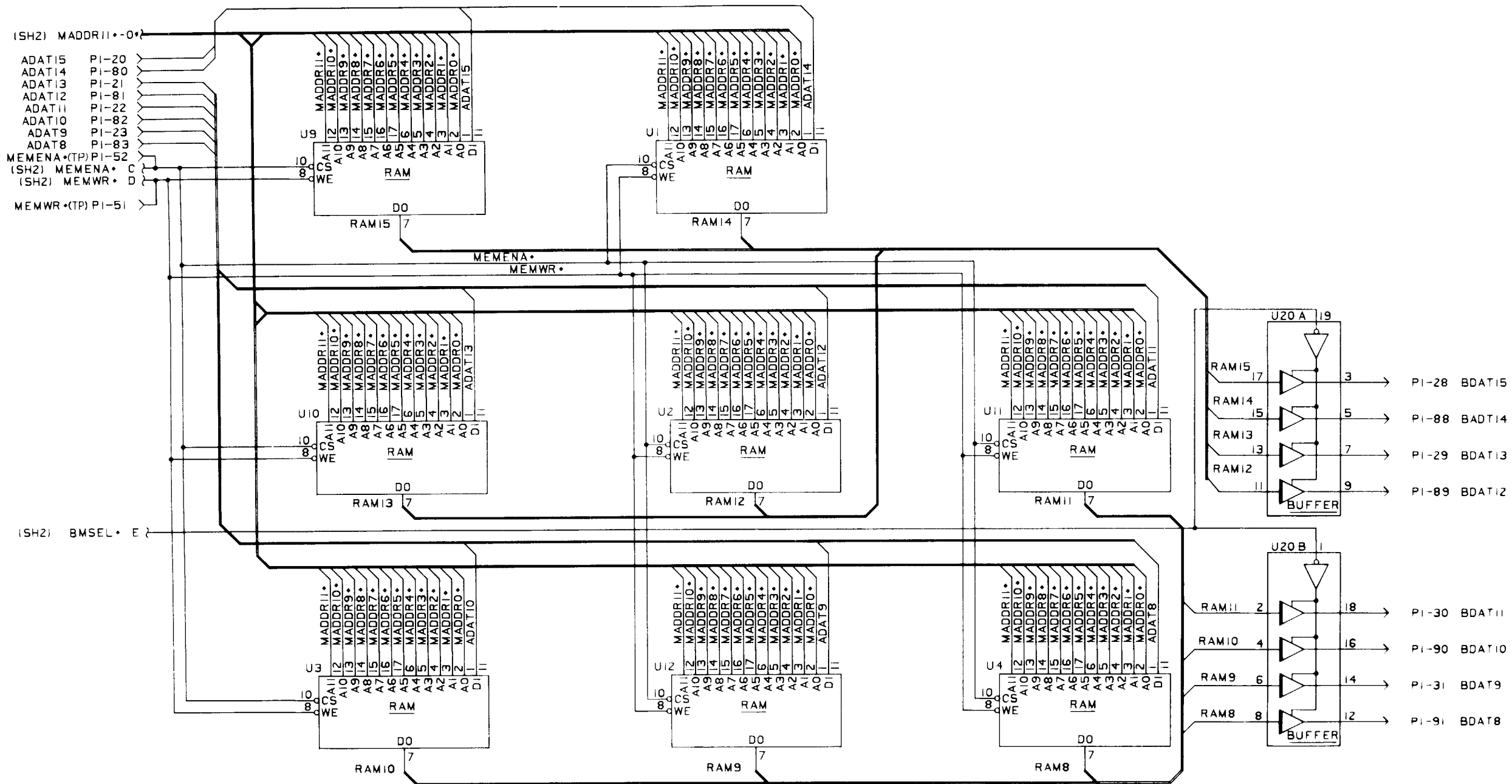
5052034-1

F0-14. 4K RAM CCA (A11),  
Schematic Diagram  
( Sheet 1 of 3 )  
Change 1



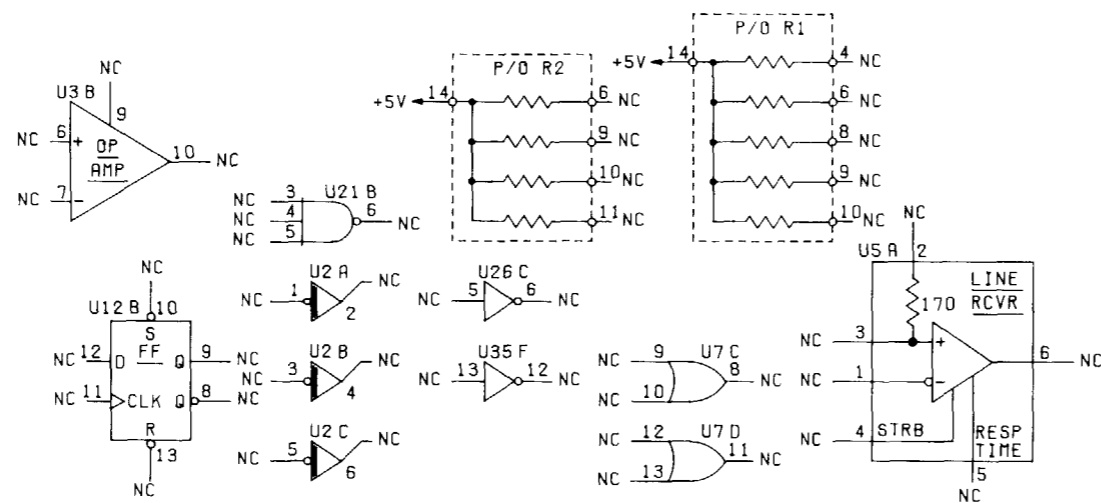
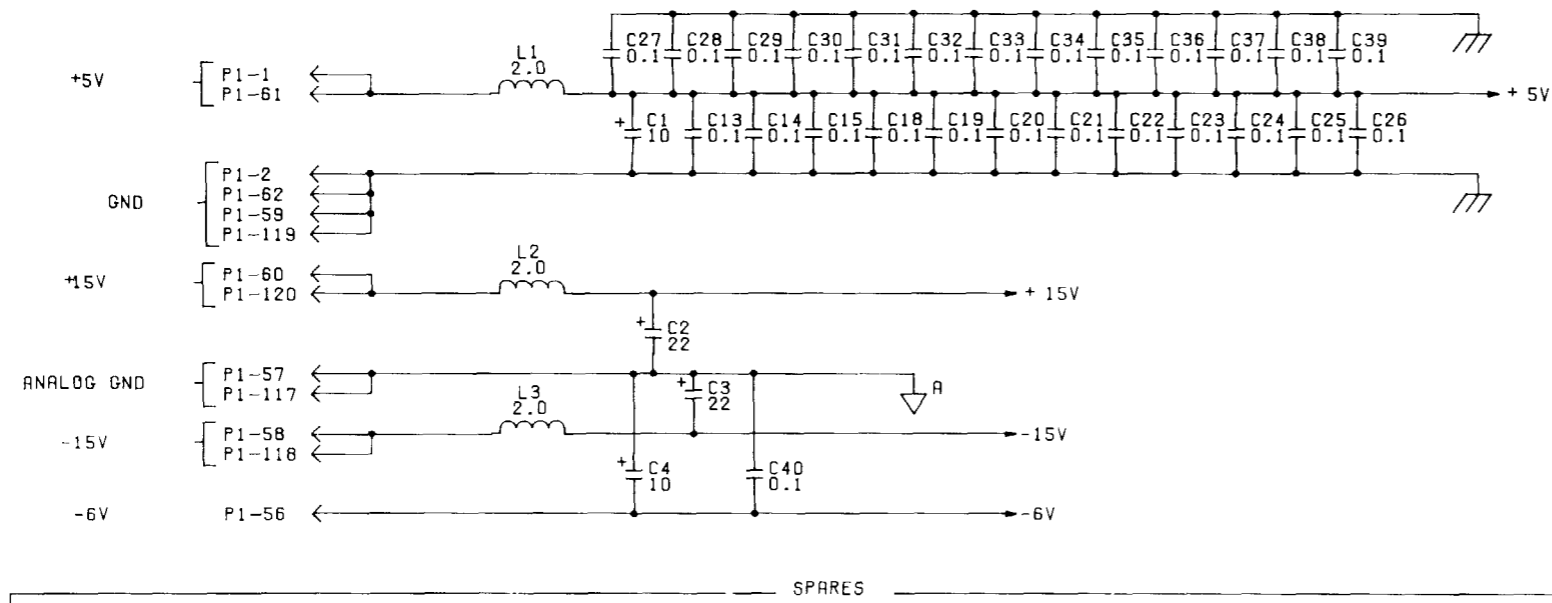
5052034-2

F0-14. 4K RAM CCA (A11),  
Schematic Diagram  
(Sheet 2 of 3)  
Change 1



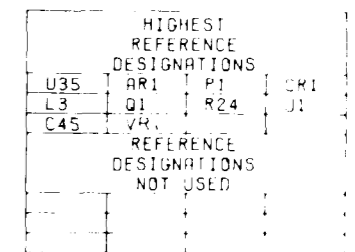
5052034-3

F0-14. 4K RAM CCA (A11), Schematic Diagram (Sheet 3 of 3)

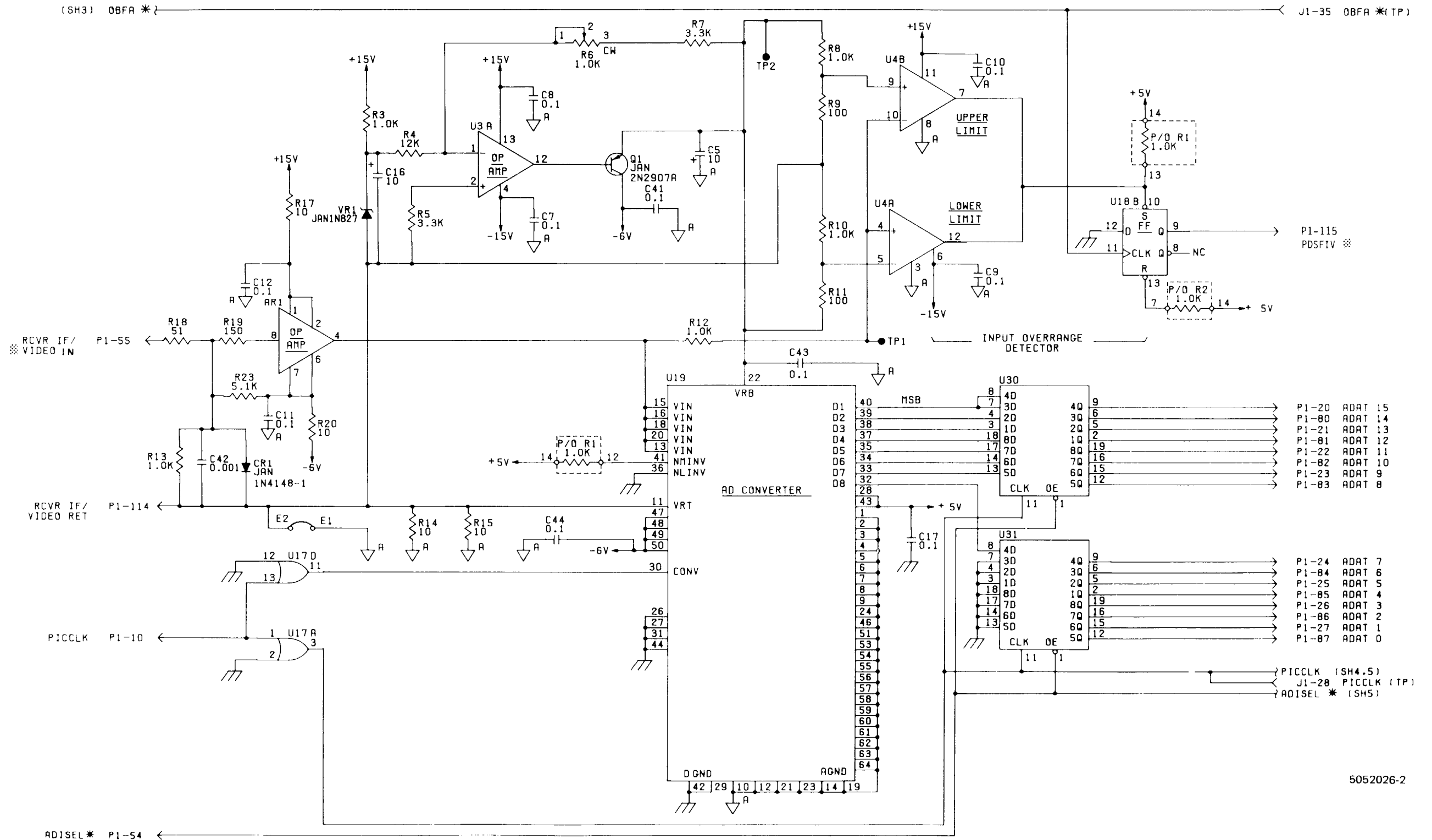


- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS.
  2. RESISTANCE VALUES IN OHMS.
  3. CAPACITANCE VALUES IN UF.
  4. P/O INDICATES PART OF.
  5. UNUSED CONNECTOR PINS NOT SHOWN.
  6. NC INDICATES NO CONNECTION.
  7. INDUCTANCE VALUES IN UH.
  - 8.\* FOLLOWING SIGNAL NAME INDICATES LOW OR NOT FUNCTION.

SUPPLEMENTARY DATA TABLE								
REF DES	PART NUMBER	TYPE	+5V	DGTL GND	+15V	-15V	-6V	ANLG GND
U1	M38510-31401BCX	54LS123	16	8	--	--	--	--
U2	M38510-00801BCX	5406	14	7	--	--	--	--
U3	M38510-10102BCX	LM747	--	--	SHOWN	SHOWN	--	--
U4	5068042-1	LM119	--	--	SHOWN	SHOWN	--	SHOWN
U5,8,9	0213-1-1001-2	7820	14	7	--	--	--	--
U6,13	M38510-30001BCX	54LS00	14	7	--	--	--	--
U7,17	5068021-1	54S32	14	7	--	--	--	--
U10	M38510-30902BCX	54LS153	16	8	--	--	--	--
U11,12,14,15,18	M38510-00205BCX	5474	14	7	--	--	--	--
U19	5054342-1	8-BIT ADC	SHOWN	SHOWN	--	--	SHOWN	SHOWN
U20,27	M38510-08101BCX	54S140	14	7	--	--	--	--
U21	M38510-30005BCX	54LS10	14	7	--	--	--	--
U22-24,26,28,35	M38510-30003BCX	54LS04	14	7	--	--	--	--
U25	5054337-1	8255	26	7	--	--	--	--
U29,32,33	7801101RX	54LS374	20	10	--	--	--	--
U30,31	5068027-1	54S374	20	10	--	--	--	--
U34	M38510-30702BCX	54LS139	16	8	--	--	--	--
AR1	7801301GX	LH0002	--	--	SHOWN	--	SHOWN	--
U16	M38510-07101BCX	54S74	14	7	--	--	--	--

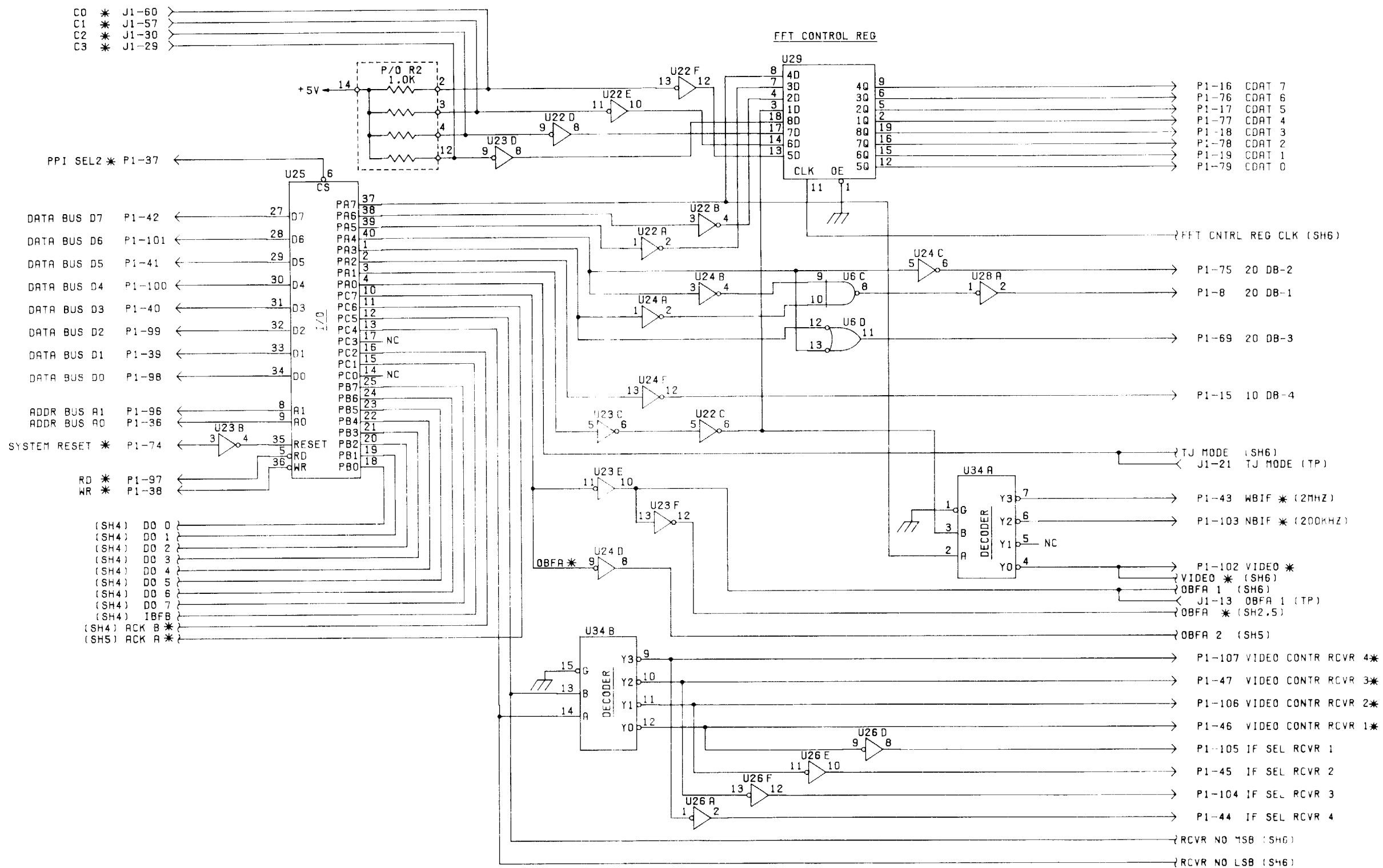


5052026-1



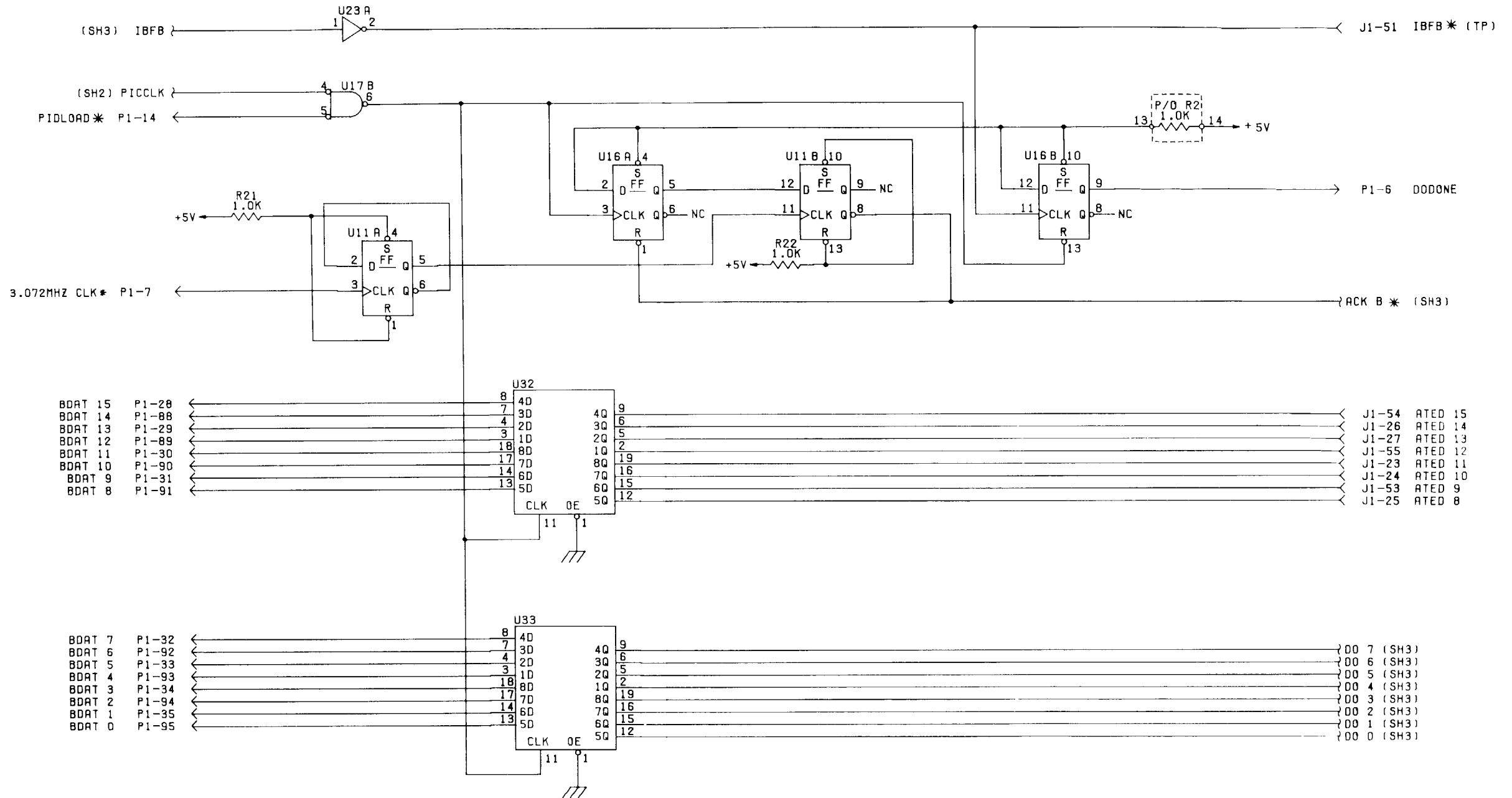
F0-15. I/O Register Set CCA (A12), Schematic Diagram (Sheet 2 of 6) Change 1

5052026-2

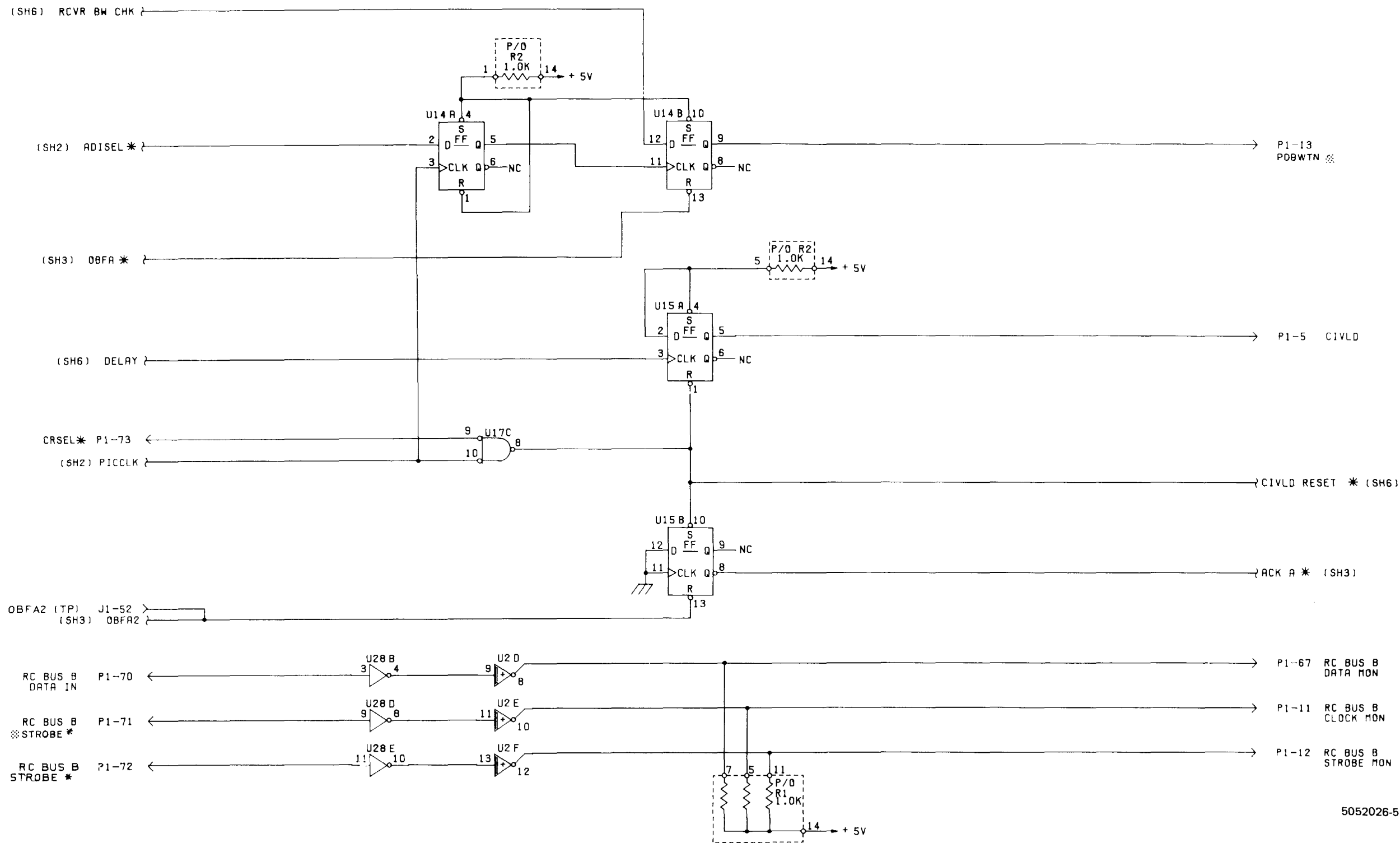


5052026-3

F0-15. I/O Register Set CCA (A12), Schematic Diagram (Sheet 3 of 6)



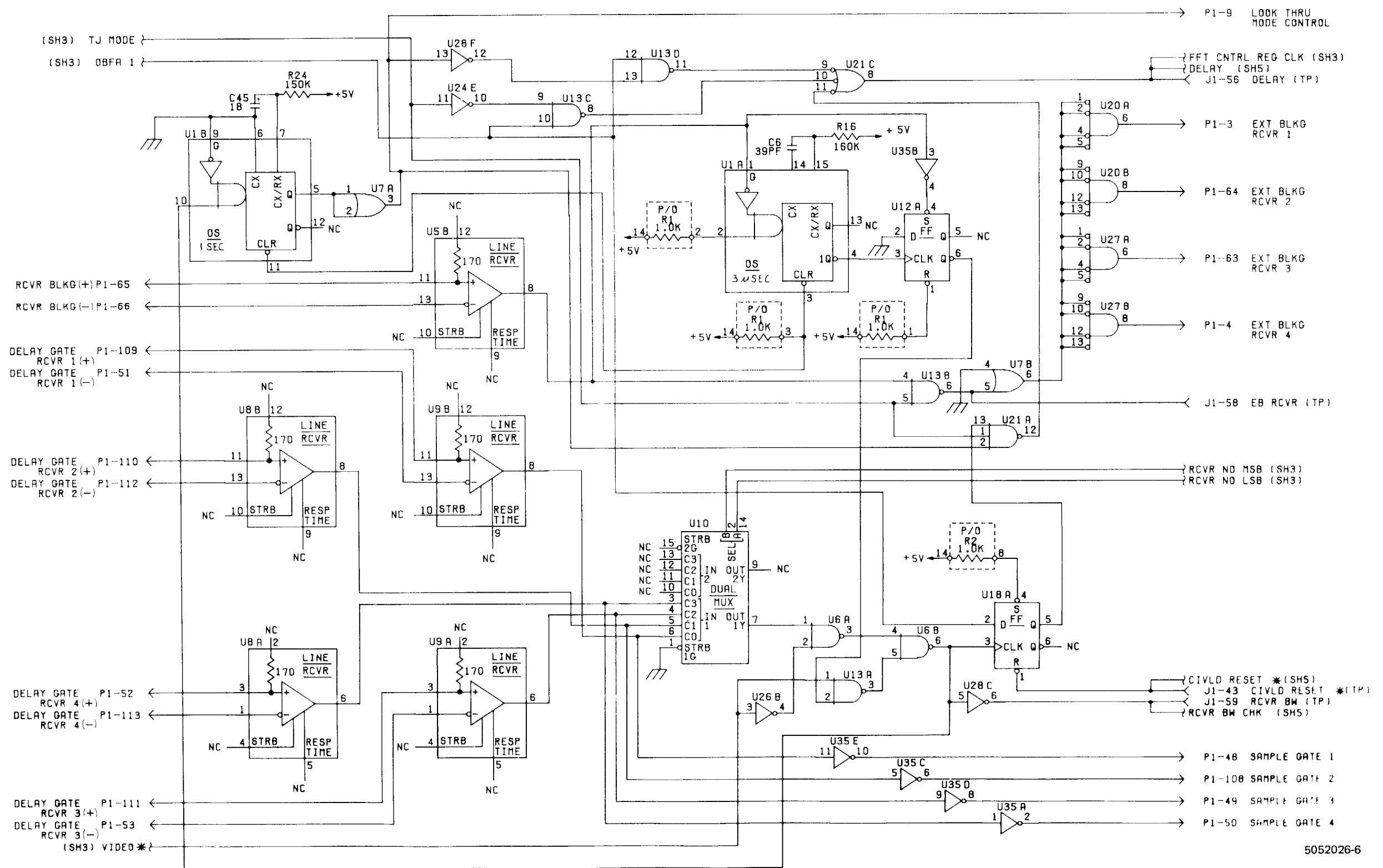
5052026-4



5052026-5

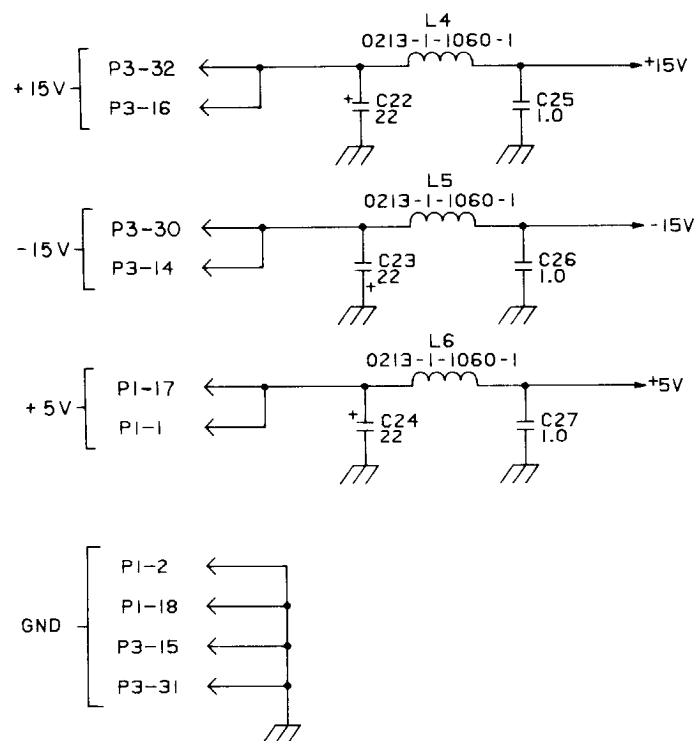
F0-15. I/O Register Set CCA (A12),  
Schematic Diagram  
(Sheet 5 of 6)  
Change 1





5052026-6

F0-15. I/O Register Set CCA (A12), Schematic Diagram (Sheet 6 of 6)



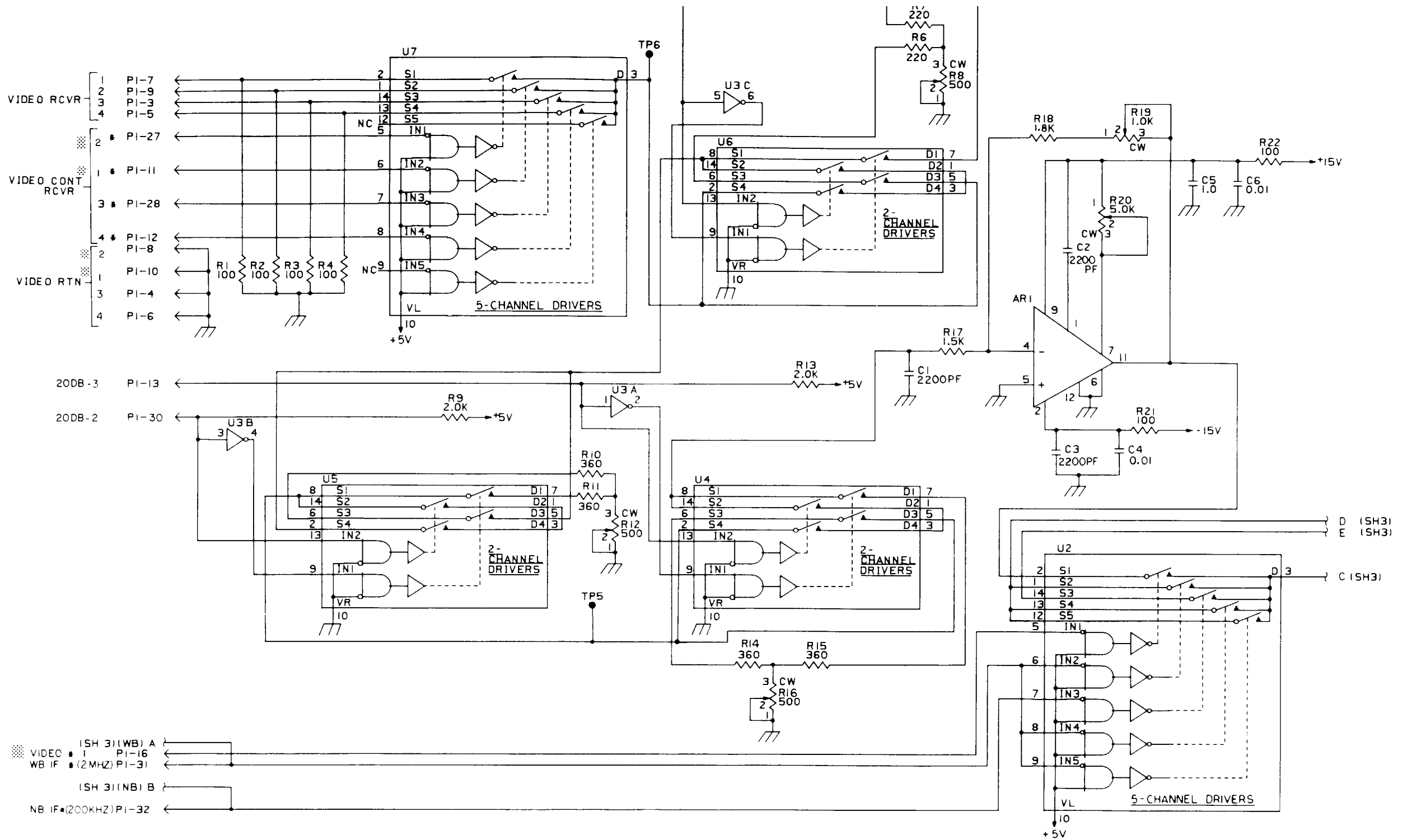
- NOTES: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO. AND ASSEMBLY DESIGNATIONS
  2. RESISTANCE VALUES IN OHMS
  3. CAPACITANCE VALUES IN UF
  4. NC DENOTES NO CONNECTION
  5. \* FOLLOWING SIGNAL INDICATES LOW OR NOT FUNCTION.

HIGHEST REFERENCE DESIGNATIONS			
AR6	R64	C48	
U10	L10	VRI	P3
Q1			
REFERENCE DESIGNATIONS NOT USED			

5052018-1

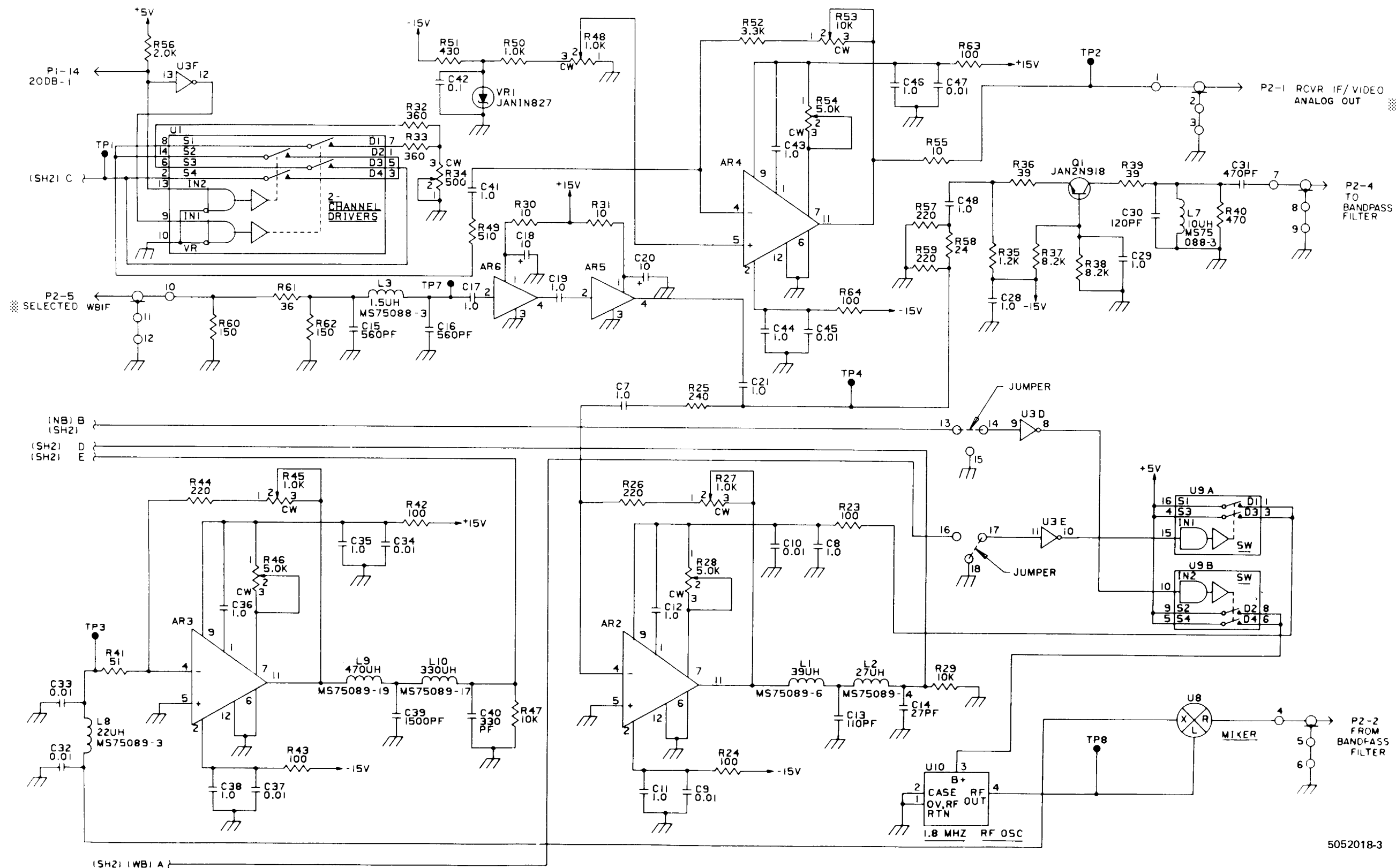
SUPPLEMENTARY DATA TABLE							
REF DES	PART NUMBER	TYPE	+5V	GND	+15V	-15V	
U1, U4, U5, U6	7801401CX	I29	-	-	11	12	
U2, U7	5054347-1	I25	SHOWN	-	11	4	
U3	M38510-00105BCX	5404	14	7	-	-	
U8	5054285-1	MIXER	-	-	-	-	
U9	M38510-11103BEX	184	12	13	11	14	
U10	5054964-3	RF OSC	-	-	-	-	
AR1, AR2, AR3, AR4	5054339-1	720	-	SHOWN	SHOWN	SHOWN	
AR5, AR6	5054640-2	RF AMP	-	SHOWN	SHOWN	-	

F0-16. IF Down Converter CCA (A14),  
Schematic Diagram  
(Sheet 1 of 3)



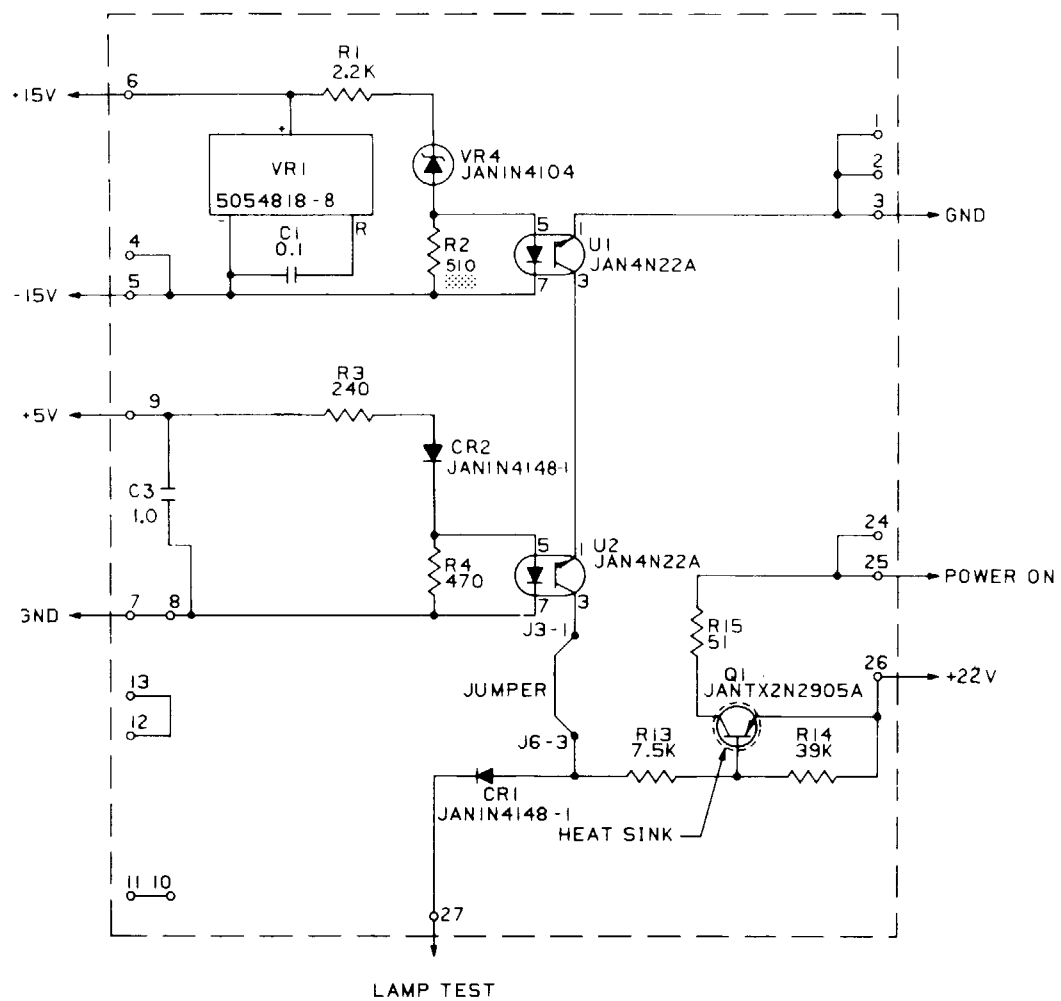
5052018-2

F0-16. IF Down Converter CCA (A14),  
Schematic Diagram  
(Sheet 2 of 3)  
Change 1



5052018-3

F0-16. IF Down Converter CCA (A14),  
Schematic Diagram  
(Sheet 3 of 3)  
Change 1



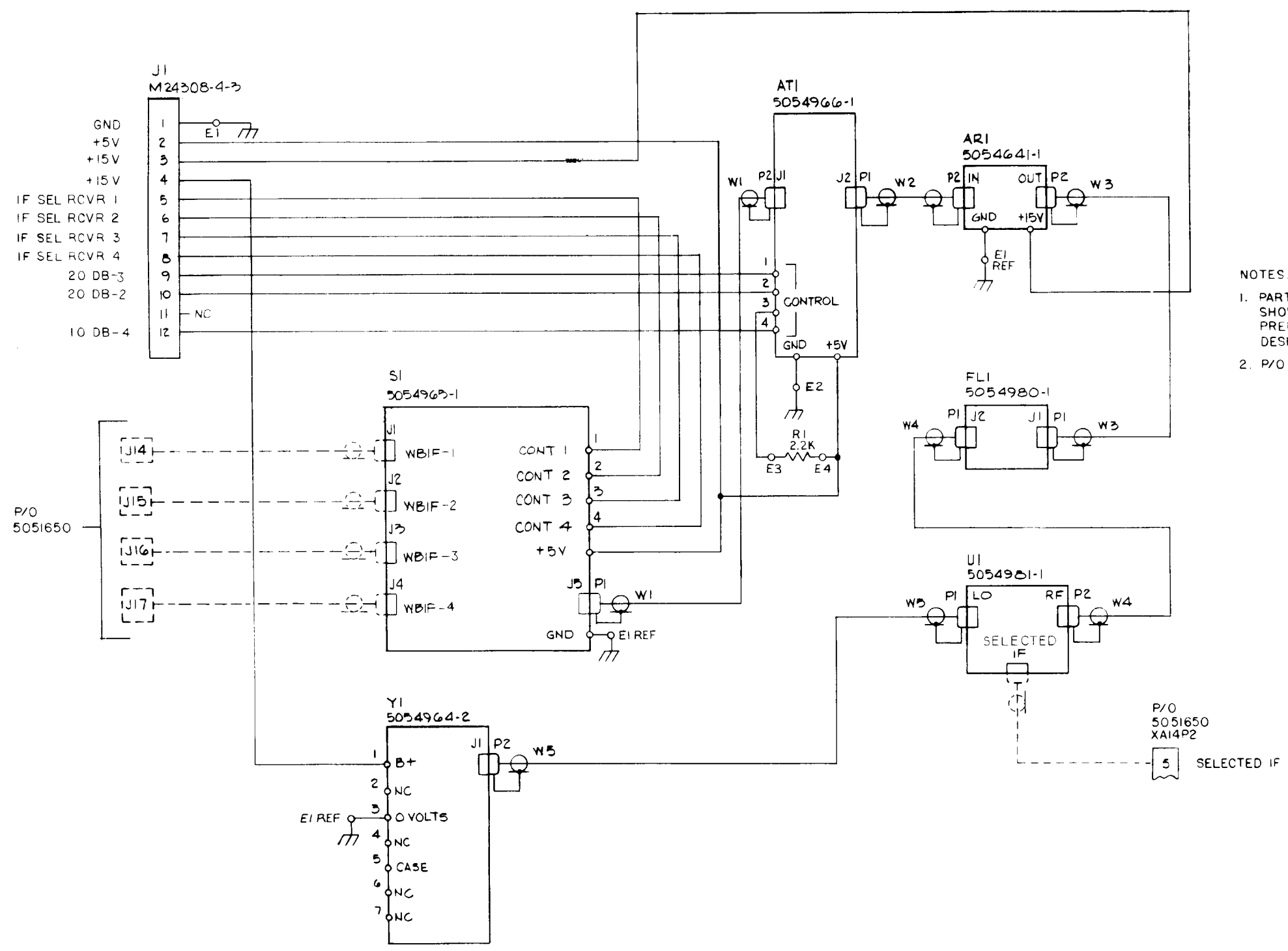
NOTES: UNLESS OTHERWISE SPECIFIED:  
 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO AND ASSEMBLY DESIGNATIONS  
 2. RESISTANCE VALUES IN OHMS  
 3. CAPACITANCE VALUES IN UF

HIGHEST REFERENCE DESIGNATIONS			
C3	CR2	R15	VR4
U2	Q1	E27	
REFERENCE DESIGNATIONS NOT USED			
R5-R12, VR2,3, C2			

5051929-1

F0-17. Power Monitor CCA (A17),  
 Schematic Diagram

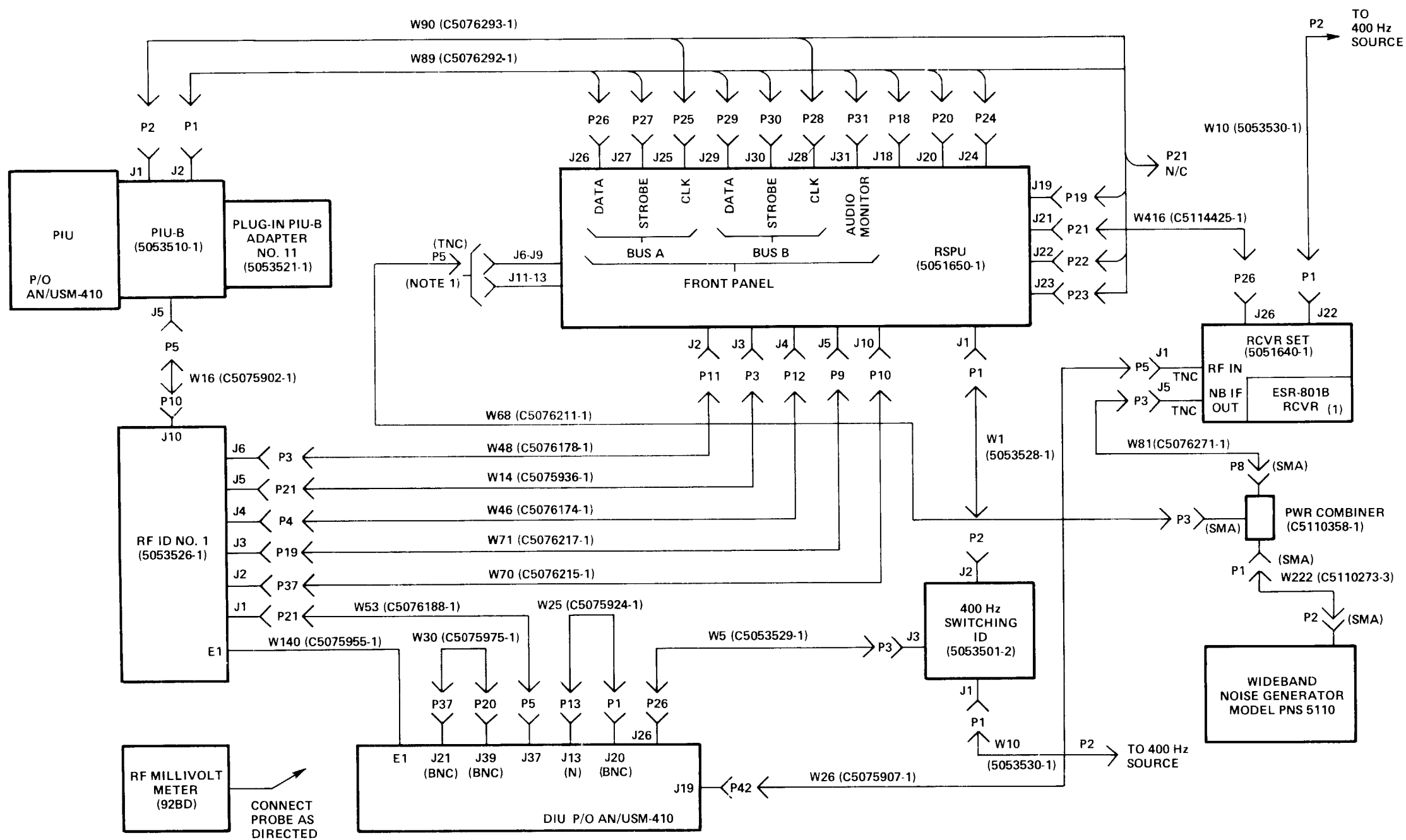
Change 1



NOTES: UNLESS OTHERWISE SPECIFIED;  
 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO. AND ASSEMBLY DESIGNATION  
 2. P/O INDICATES PART OF

5055291-1

F0-18. Converter IF Assembly (A20), Schematic Diagram



NOTES:

1. CONNECT 50 OHM TERMINATIONS TO J6-J9 AND J11-J13
2. HOOK UP W26, W30 AND W38 AS DIRECTED BY THE PROGRAM

F0-19. RSPU CPD Alignment, Test Set-up Diagram





