

Williams[®]

16-9007-103
September, 1982

MOON PATROL

DRAWING SET

LANIEL
AUTOMATIQUE



151 CH. ROCKLAND, MTL. H3P 2V3
TEL. (514) 731-8571



Williams
ELECTRONICS, INC.

3401 N. California Ave., Chicago, IL 60618



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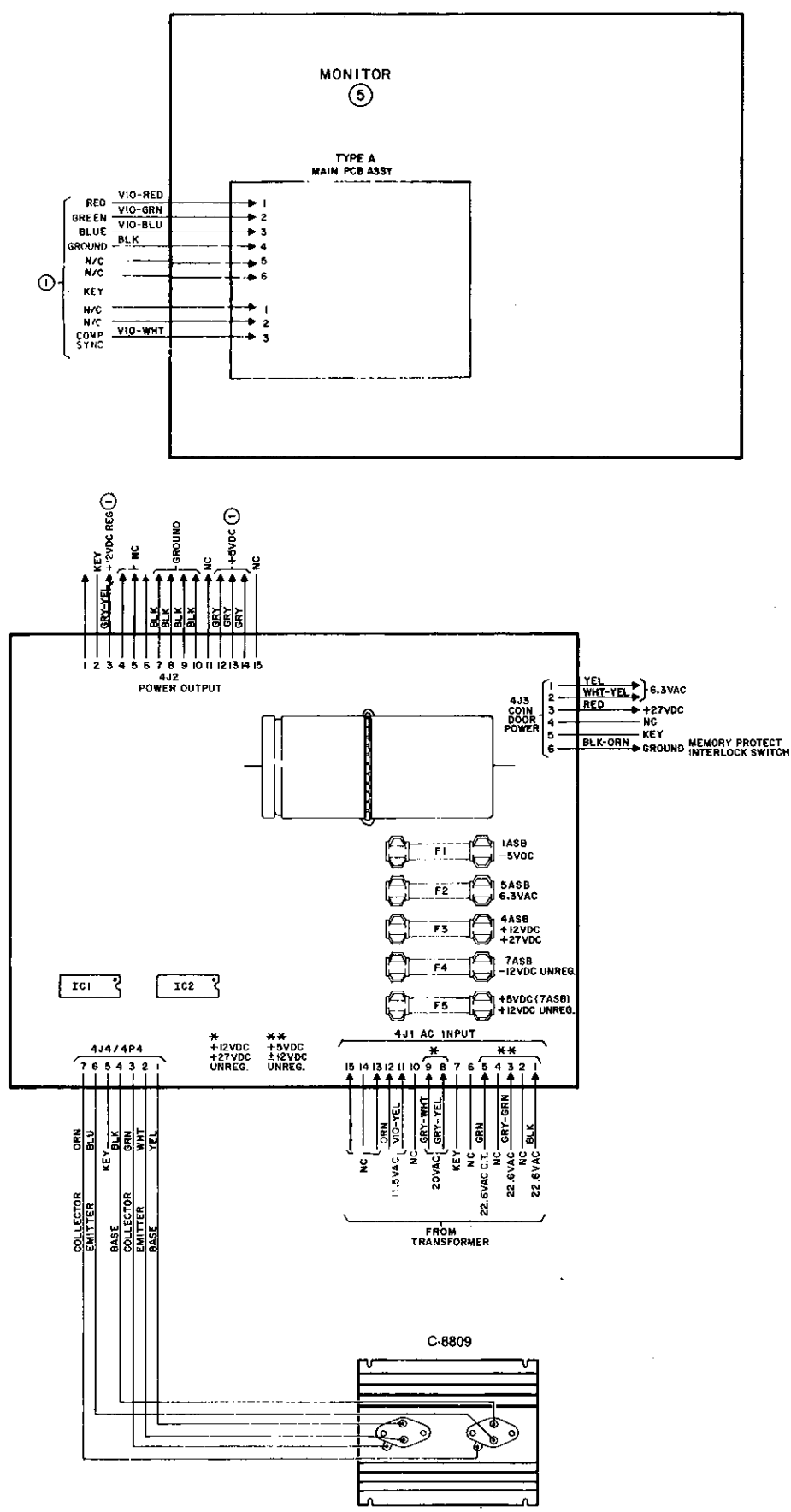
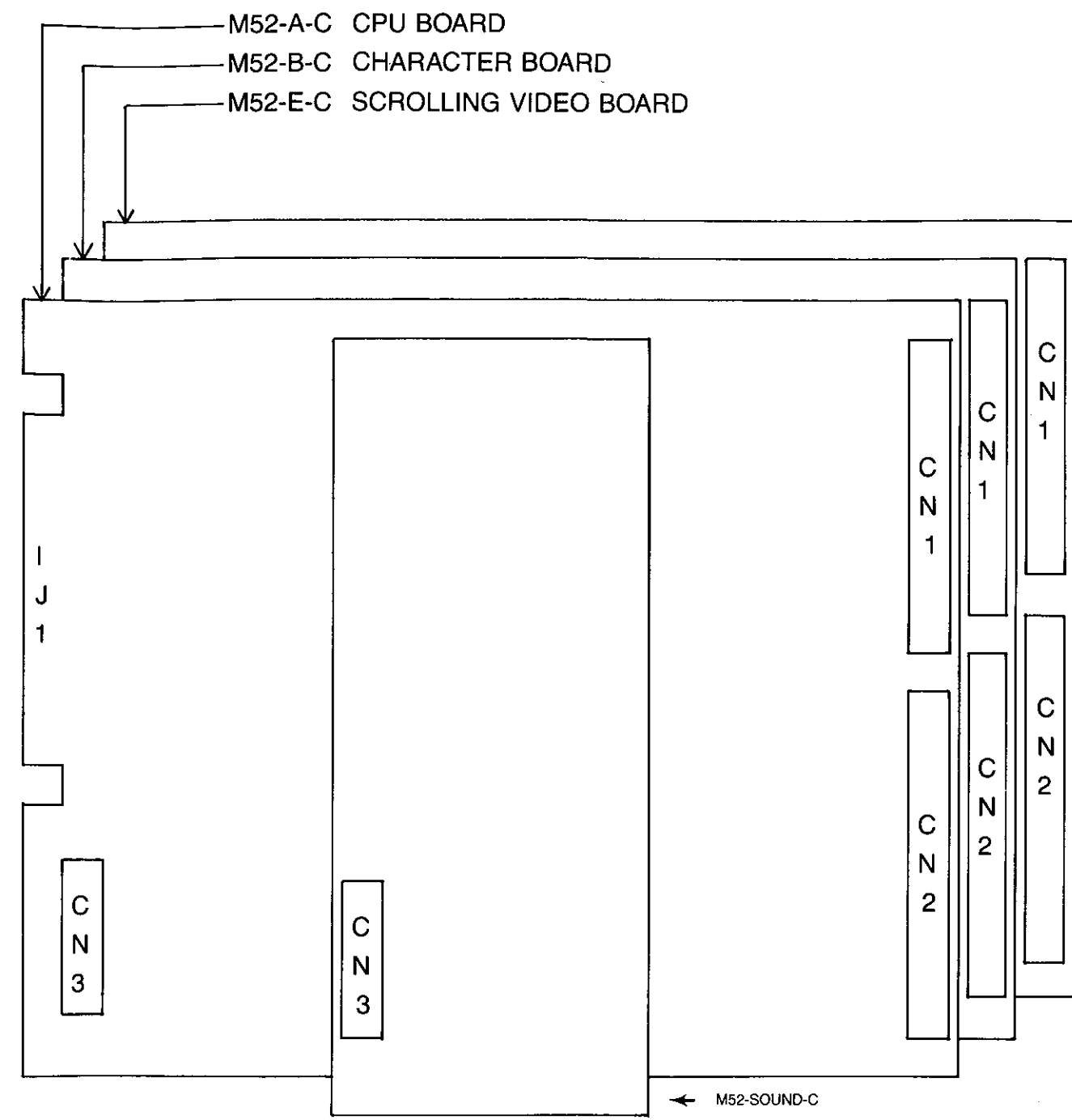
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C-8809 heat sink assembly

Part No.	Description
5162-09425	2N6057, Transistor, NPN
5161-09552	2N3055, Transistor, NPN
5705-09684	Heat Sink
5700-09445	Socket, TO3
5701-09562	Thermal Pad
4006-01003-10	Machine Screw 6-32x5/8"

DIP SWITCH SETTINGS

DIP SWITCH NO. 1

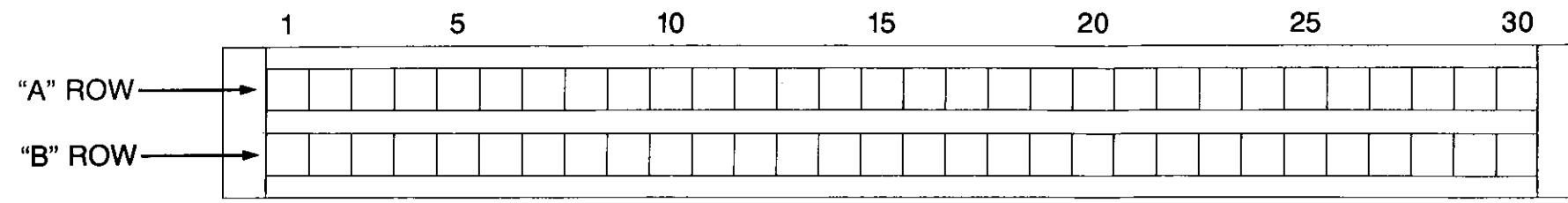
ADJUSTMENT	OPTIONS	SWITCH NUMBER							
		1	2	3	4	5	6	7	8
*RECOMMENDED SETTINGS		ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
†COIN MODE 1	2 PLAYS/1 COIN					OFF	OFF	OFF	ON
	3 PLAYS/1 COIN					ON	OFF	OFF	ON
	4 PLAYS/1 COIN					OFF	ON	OFF	ON
	5 PLAYS/1 COIN					ON	ON	OFF	ON
†COIN MODE 2	6 PLAYS/1 COIN					OFF	OFF	ON	ON
	*1 PLAY/1 COIN					OFF	OFF	OFF	OFF
	1 PLAY/2 COINS					ON	OFF	OFF	OFF
	1 PLAY/3 COINS					OFF	ON	OFF	OFF
# PATROL CARS	1 PLAY/4 COINS					ON	ON	OFF	OFF
	1 PLAY/5 COINS					OFF	OFF	ON	OFF
	1 PLAY/6 COINS					ON	OFF	ON	ON
	FREE PLAY					ON	ON	ON	ON
ADDITIONAL CAR AT:	1 PLAY/1 COIN					OFF	OFF		
	1 PLAY/2 COINS					ON	OFF		
	1 PLAY/3 COINS					OFF	ON		
	FREE PLAY					ON	ON		
# PATROL CARS	2 PLAYS/1 COIN							OFF	OFF
	*4 PATROL CARS	OFF	OFF					ON	ON
	3 PATROL CARS	ON	ON					OFF	OFF
	2 PATROL CARS	ON	ON					ON	ON
ADDITIONAL CAR AT:	5 PATROL CARS								
	*10,000/30,000/50,000				OFF	OFF			
	20,000/40,000/60,000				ON	ON			
	10,000 ONLY				OFF	OFF			
	NO EXTENDED PLAY				ON	ON			

DIP SWITCH NO. 2

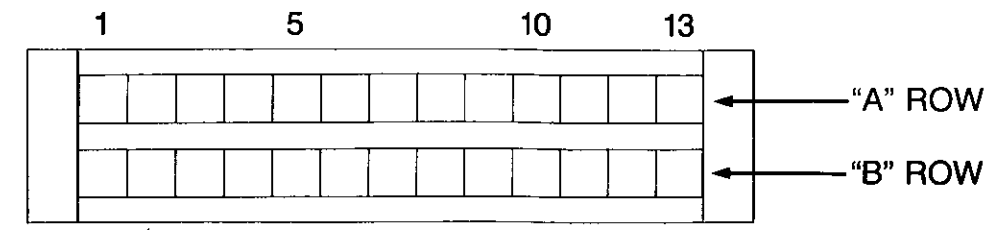
ADJUSTMENT	OPTIONS	SWITCH NUMBER							
		1	2	3	4	5	6	7	8
*RECOMMENDED SETTINGS		OFF	ON	†	OFF	OFF	OFF	OFF	OFF
FLIP PICTURE	NO YES	OFF ON							
**CABINET TYPE	TABLE UPRIGHT		OFF ON						
COIN MODE SETTINGS FOR DIP SWITCH 1	COIN MODE 1 COIN MODE 2			OFF ON					
FREEZE SCREEN	*NO YES					OFF ON			
SECTOR-SELECTION FEATURE	*NO YES						OFF ON		
DEMO MODE	*NO YES							OFF ON	
TEST MODE	*NO YES								OFF ON
SWITCH 4 (not used)					OFF				

*recommended settings
 **For upright games, select ON for switch 2. Table games require OFF for switch 2.
 †For games with a single coin selector or 2 selectors of the same value, S3 must be turned off. For games with selectors for 2 different coin values, S3 must be turned on.

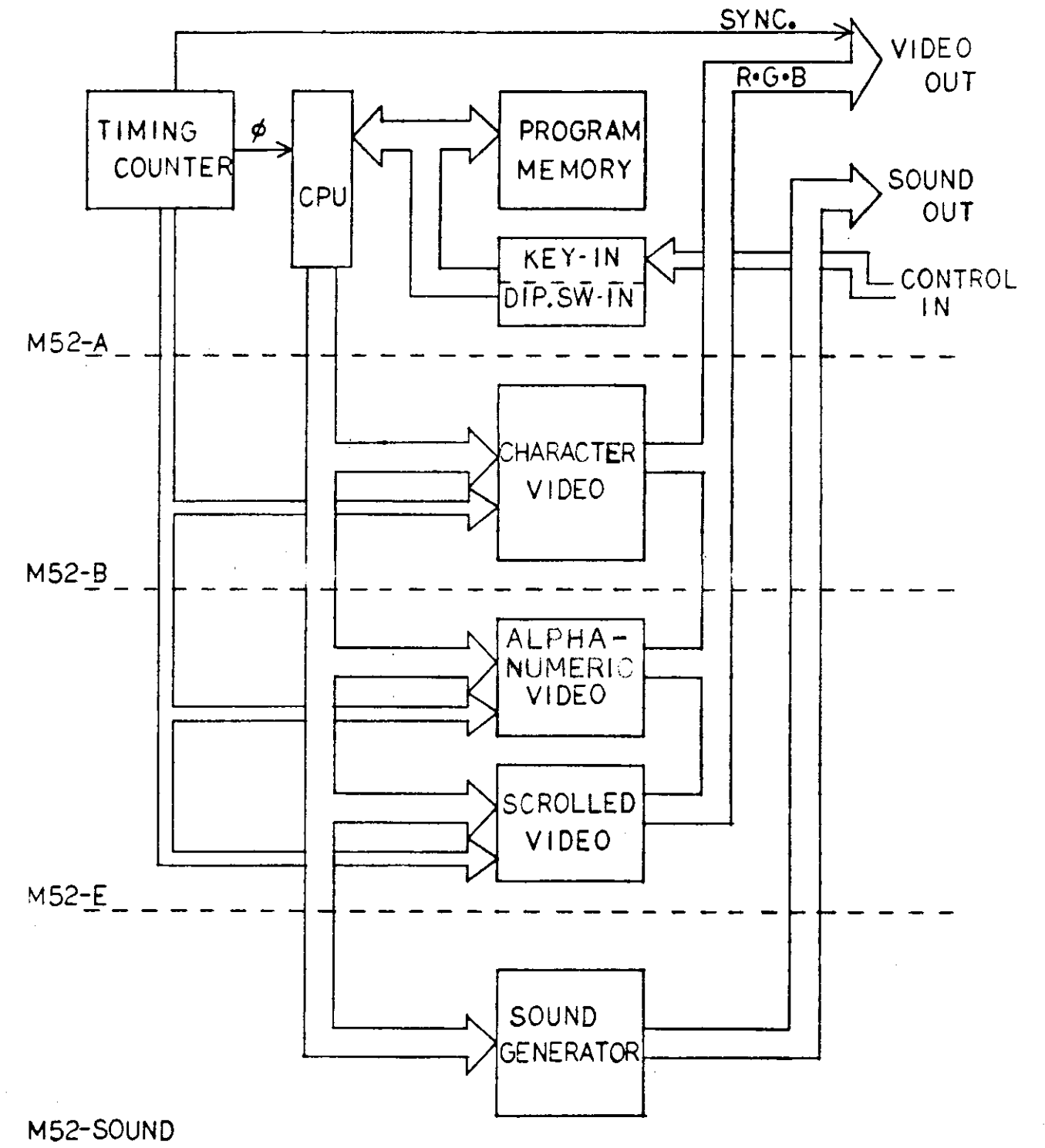
CONNECTORS CN1 & CN2



CONNECTOR CN3



SURFACE FACING PC BOARD



Connector CN1

PIN NO.	DESCRIPTION	PIN NO.	DESC.
1A	6 MHz	16A	VE2
1B	†ANPR	16B	GND
2A	6 MHz	17A	VE4
2B	N.C.	17B	GND
3A	7 HB	18A	VE8
3B	N.C.	18B	GND
4A	7 HB	19A	VE16
4B	†CPR	19B	GND
5A	HBLB	20A	VE32
5B	BLUE	20B	GND
6A	HBLB	21A	VE64
6B	RED	21B	GND
7A	VBLB	22A	VE128
7B	GND	22B	GND
8A	VBLB	23A	DB0
8B	GND	23B	HE1
9A	VB1	24A	DB1
9B	GND	24B	HE2
10A	VB128	25A	DB2
10B	GND	25B	HE4
11A	GREEN	26A	DB3
11B	GND	26B	HE8
12A	C-FLIP 1	27A	DB4
12B	GND	27B	HE16
13A	C-FLIP 2	28A	DB5
13B	GND	28B	HE32
14A	FLIP	29A	DB6
14B	GND	29B	HE64
15A	VE1	30A	DB7
15B	GND	30B	HE128

†ANPR = ALPHA NUMERIC PRIORITY
 †CPR = CHARACTER PRIORITY

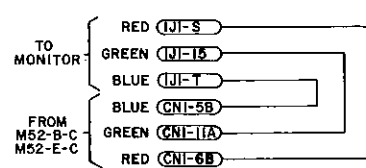
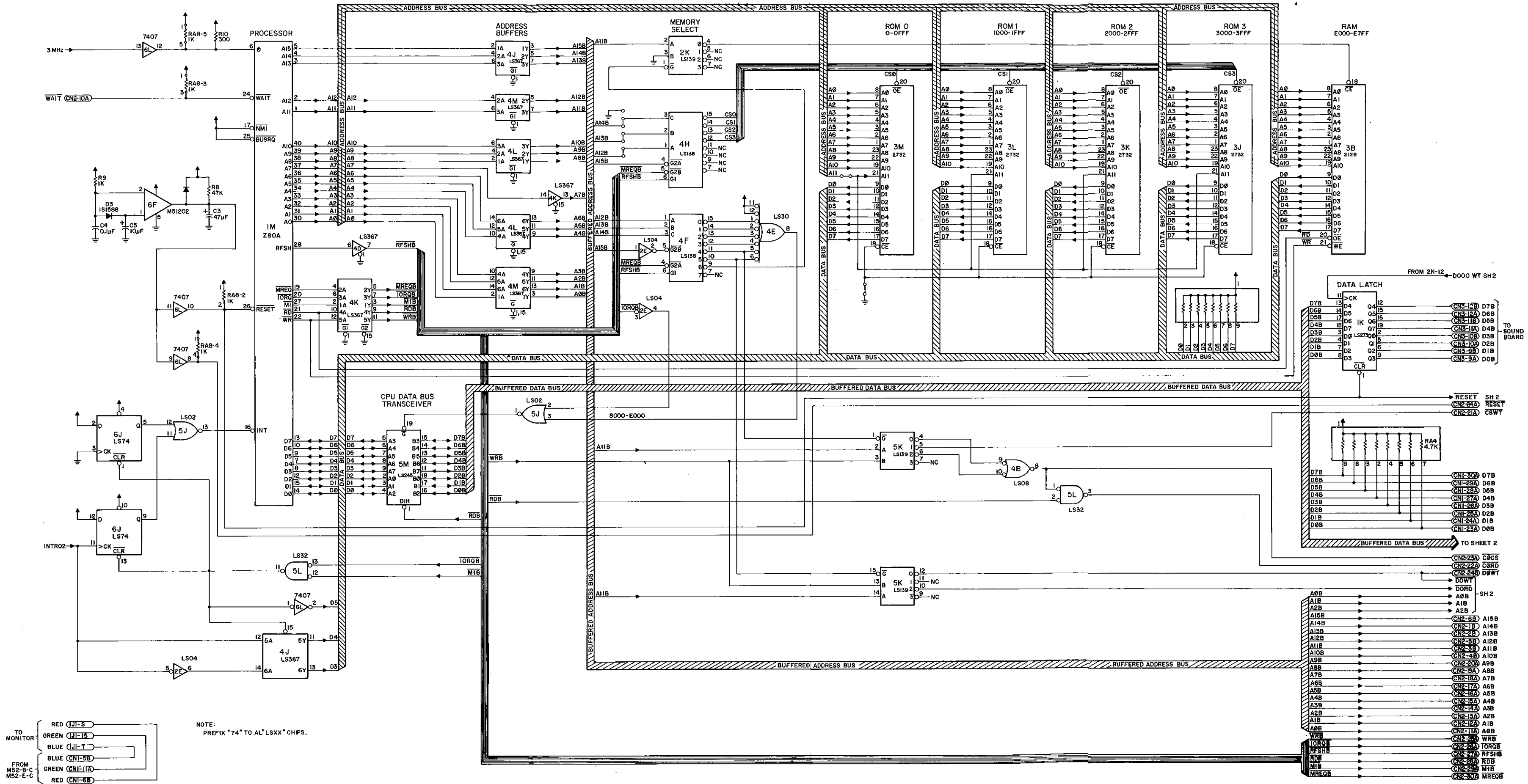
Connector CN2

PIN NO.	DESCRIPTION	PIN NO.	DESC.
1A	HB1	16A	AB5
1B	AB14	16B	+5V
2A	HB2	17A	AB6
2B	AB13	17B	+5V
3A	HB4	18A	AB7
3B	AB11	18B	+5V
4A	HB8	19A	AB8
4B	AB10	19B	+5V
5A	HB16	20A	AB9
5B	AB12	20B	+5V
6A	HB32	21A	C8WT
6B	AB15	21B	+5V
7A	HB64	22A	C00ORD
7B	+5V	22B	+5V
8A	HB128	23A	C00OCS
8B	+5V	23B	V256
9A	HB256	24A	RESET
9B	+5V	24B	DOWT
10A	WAIT	25A	WRB
10B	+5V	25B	H30
11A	AB0	26A	1ORQB
11B	+5V	26B	†CPR*
12A	AB1	27A	RFSHB
12B	+5V	27B	3DIM
13A	AB2	28A	RDB
13B	+5V	28B	NOT USED
14A	AB3	29A	M1B
14B	+5V	29B	NOT USED
15A	AB4	30A	MREQB
15B	+5V	30B	NOT USED

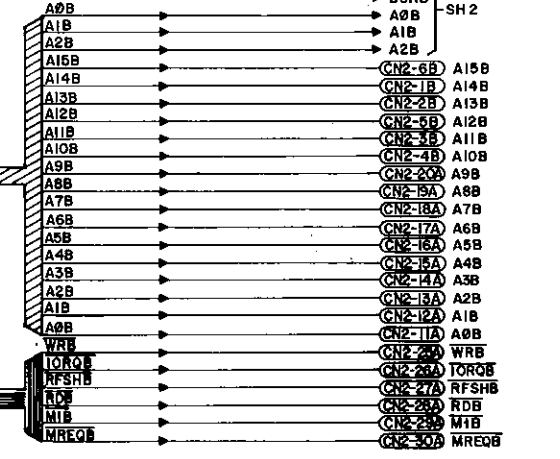
†CPR* = CHARACTER PRIORITY*

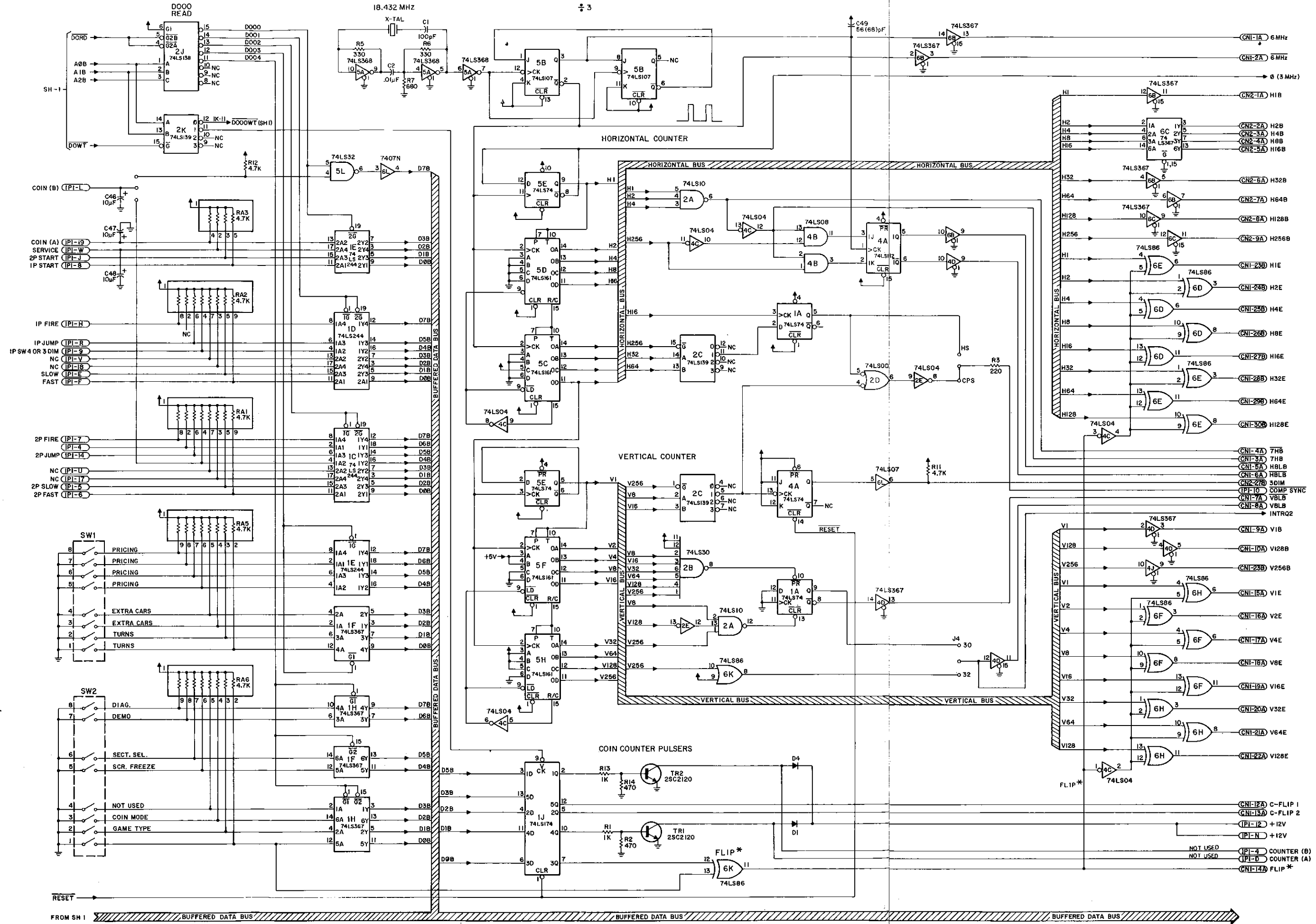
Connector CN3

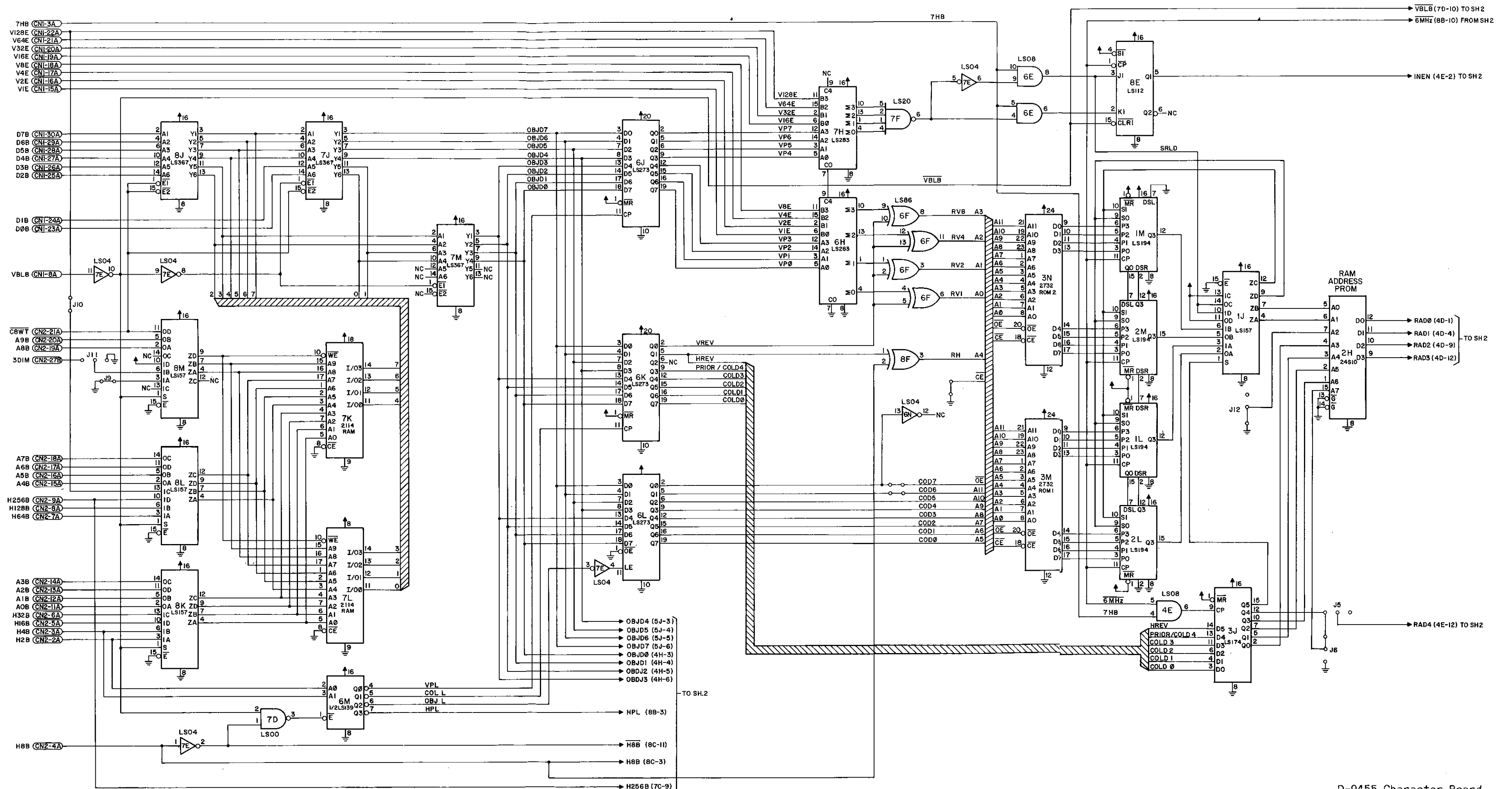
PIN NO.	DESCRIPTION
1A	SP+
1B	SP+
2A	SP-
2B	SP-
3A	+12V
3B	+12V
4A	+5V
4B	GND
5A	+5V
5B	GND
6A	+5V
6B	GND
7A	NOT USED
7B	NOT USED
8A	NOT USED
8B	NOT USED
9A	D0
9B	D1
10A	D2
10B	D3
11A	D4
11B	D5
12A	D6
12B	D7
13A	NOT USED
13B	NOT USED

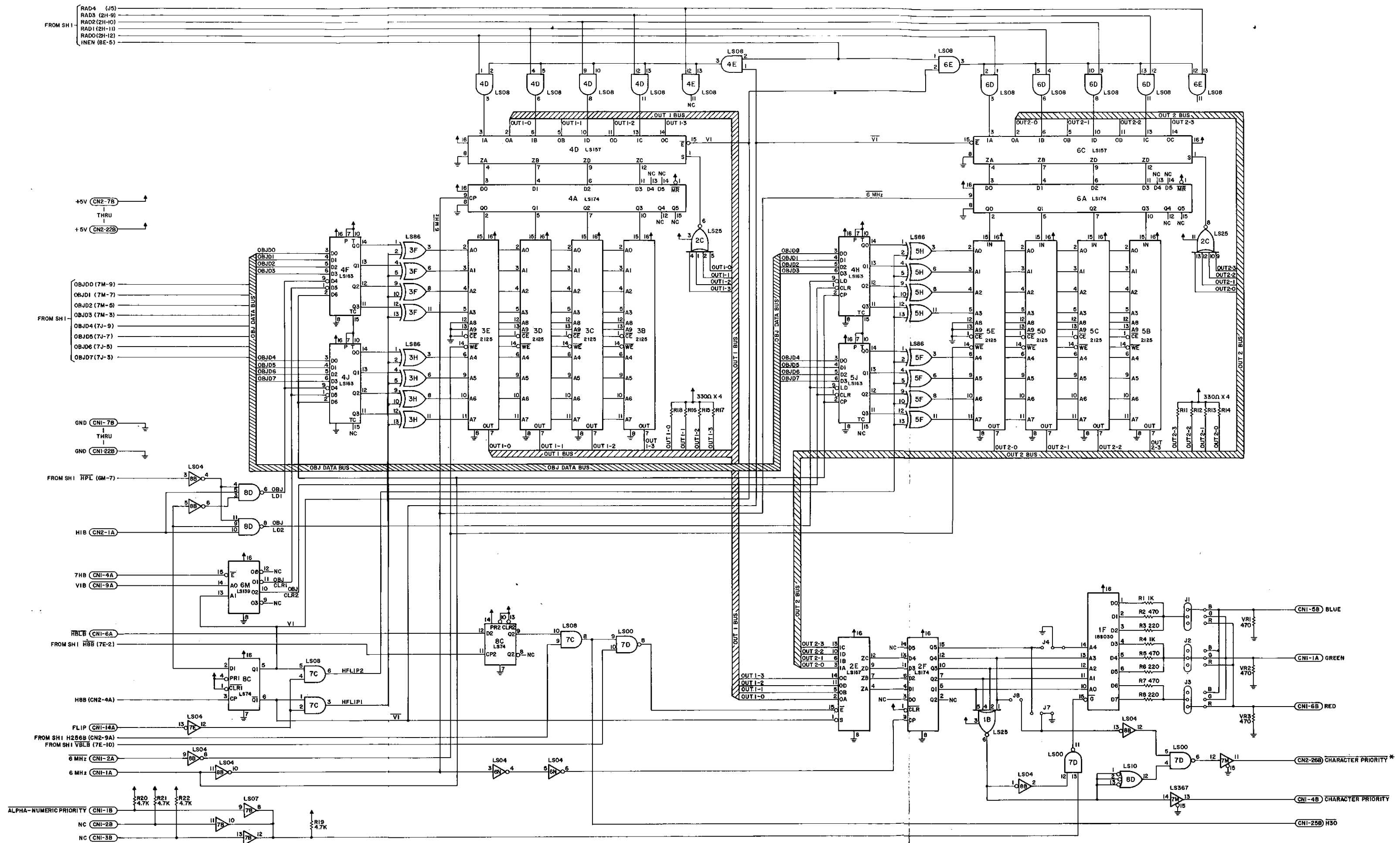


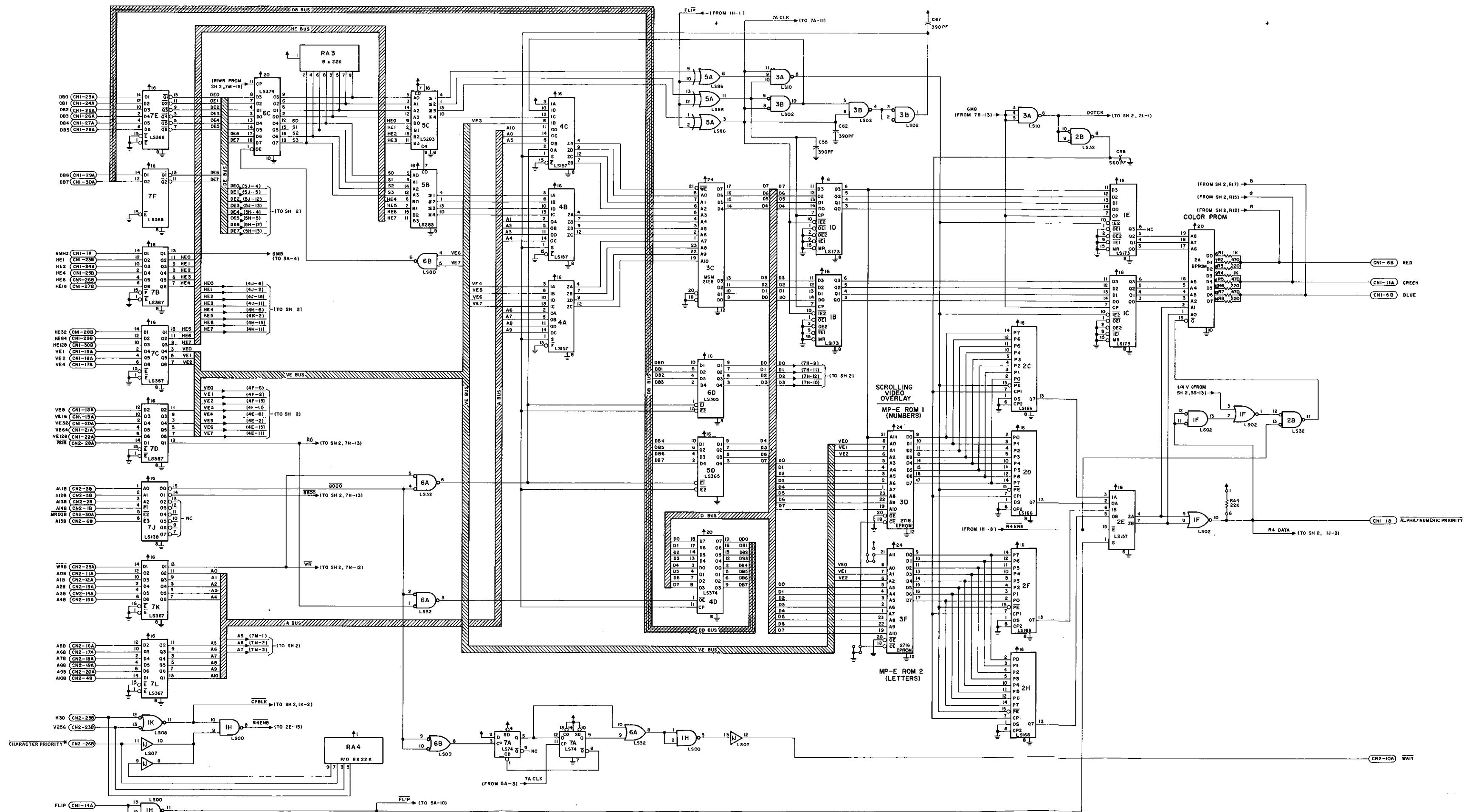
NOTE: PREFIX "74" TO ALL LSXX* CHIPS.



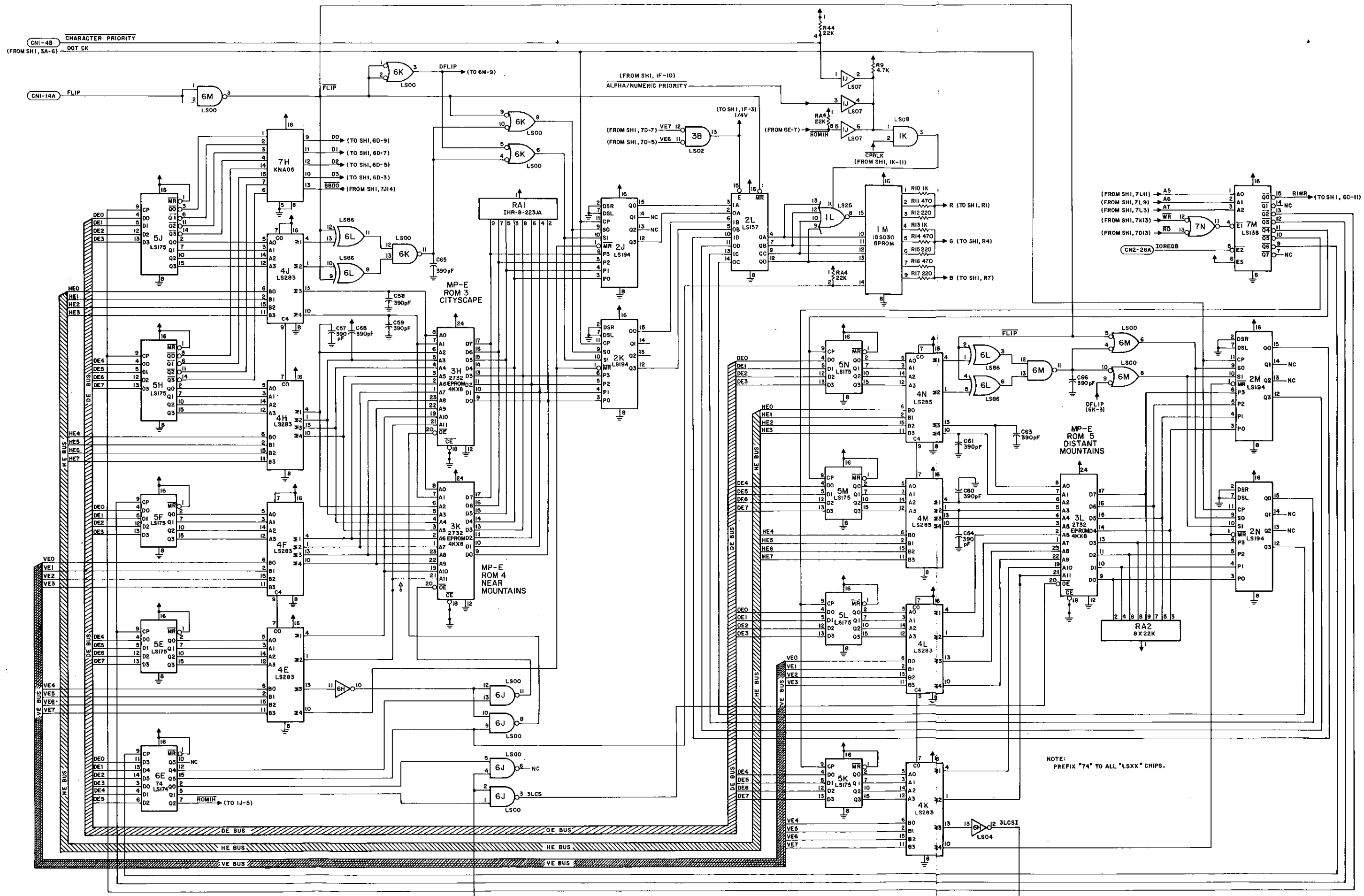


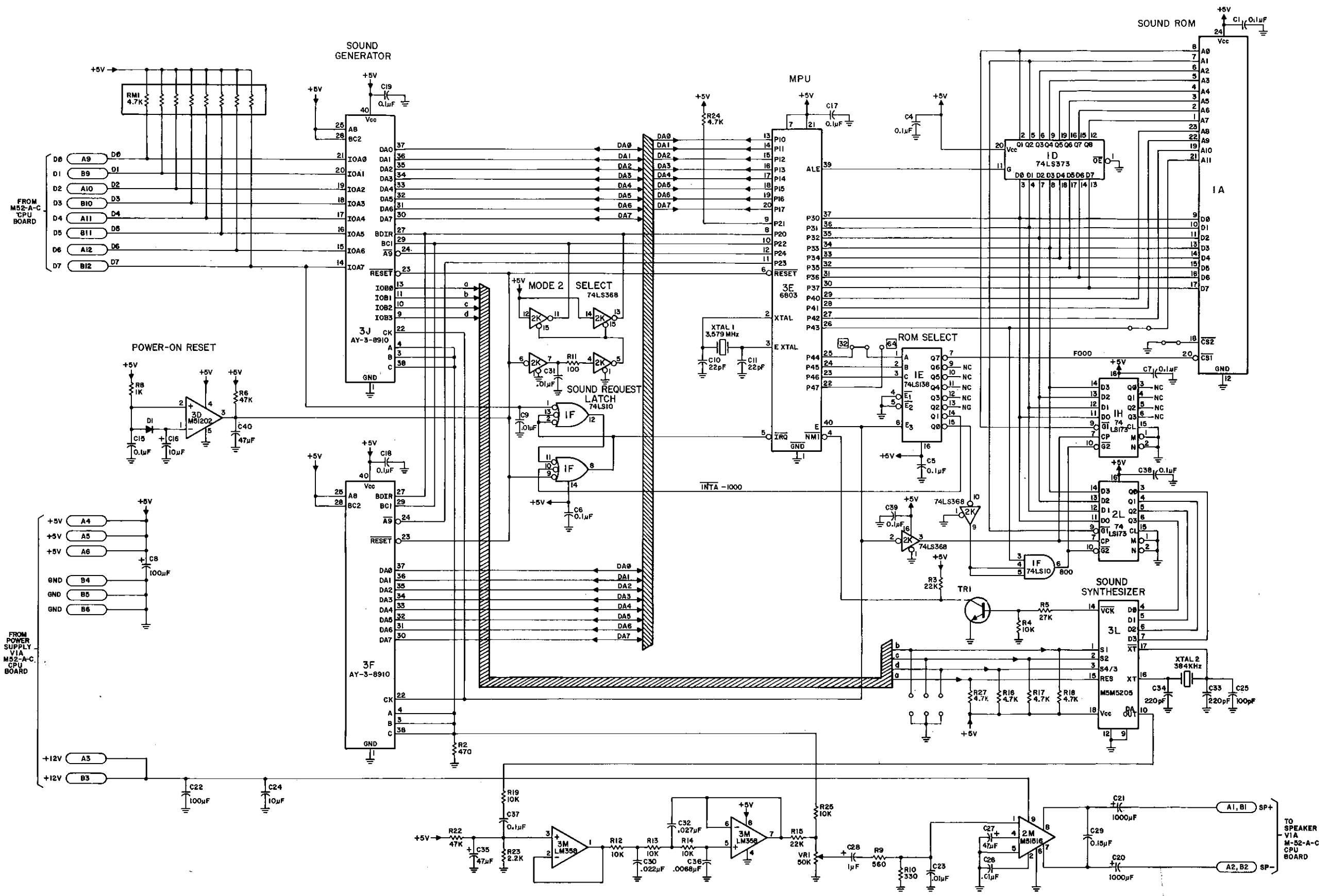


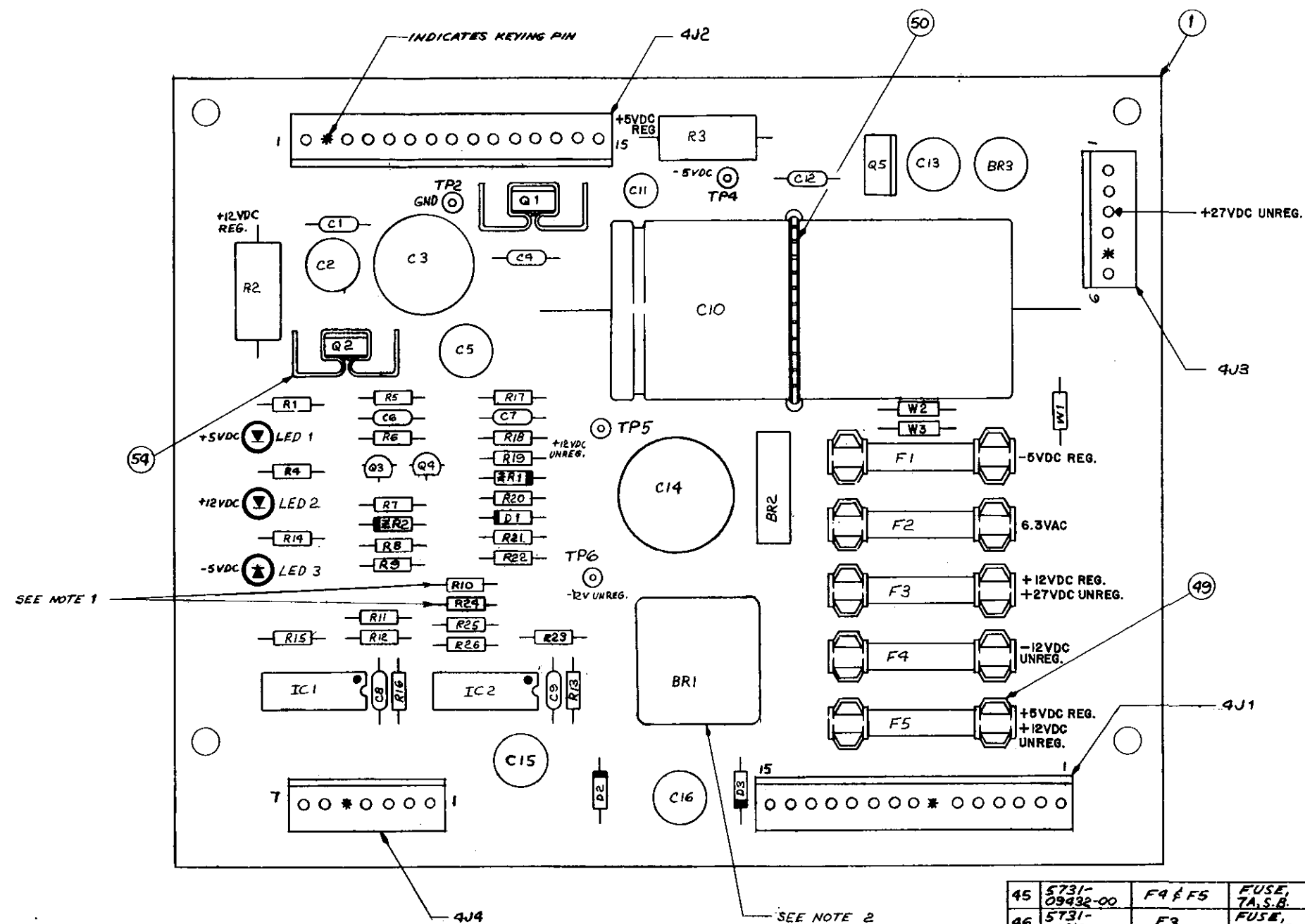




D-9456 Scrolling Video Board
(M-52-E-C) Sheet 1 of 2



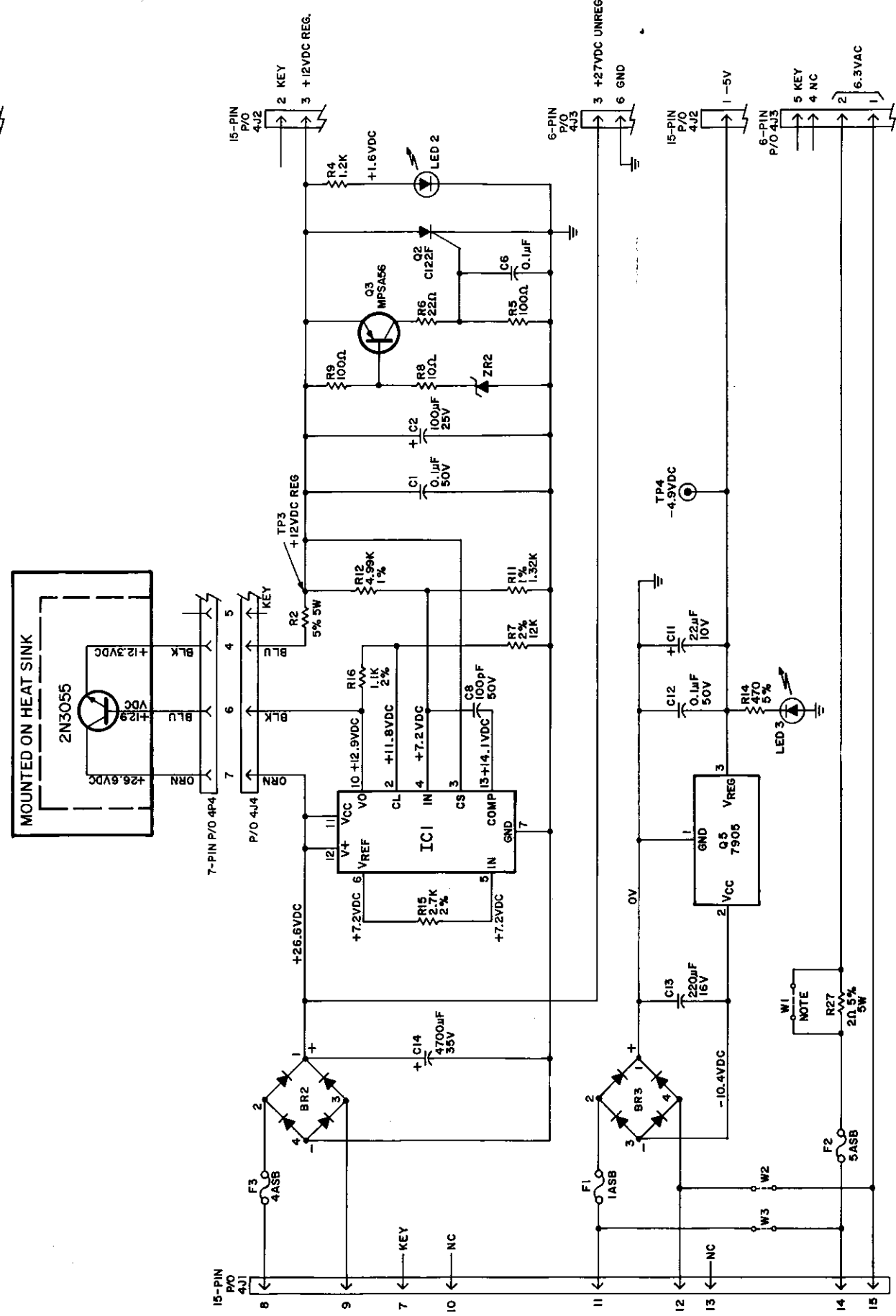
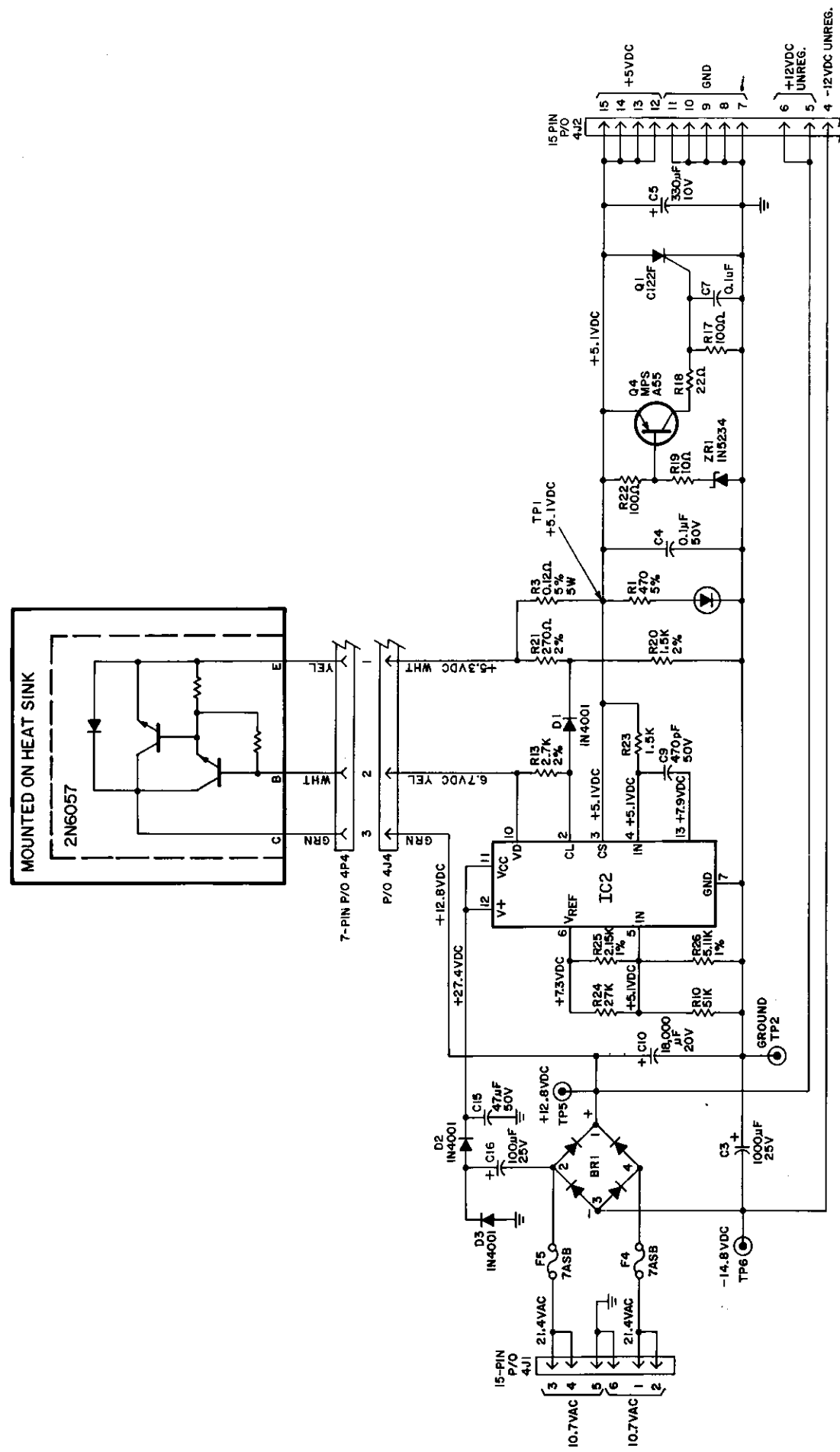




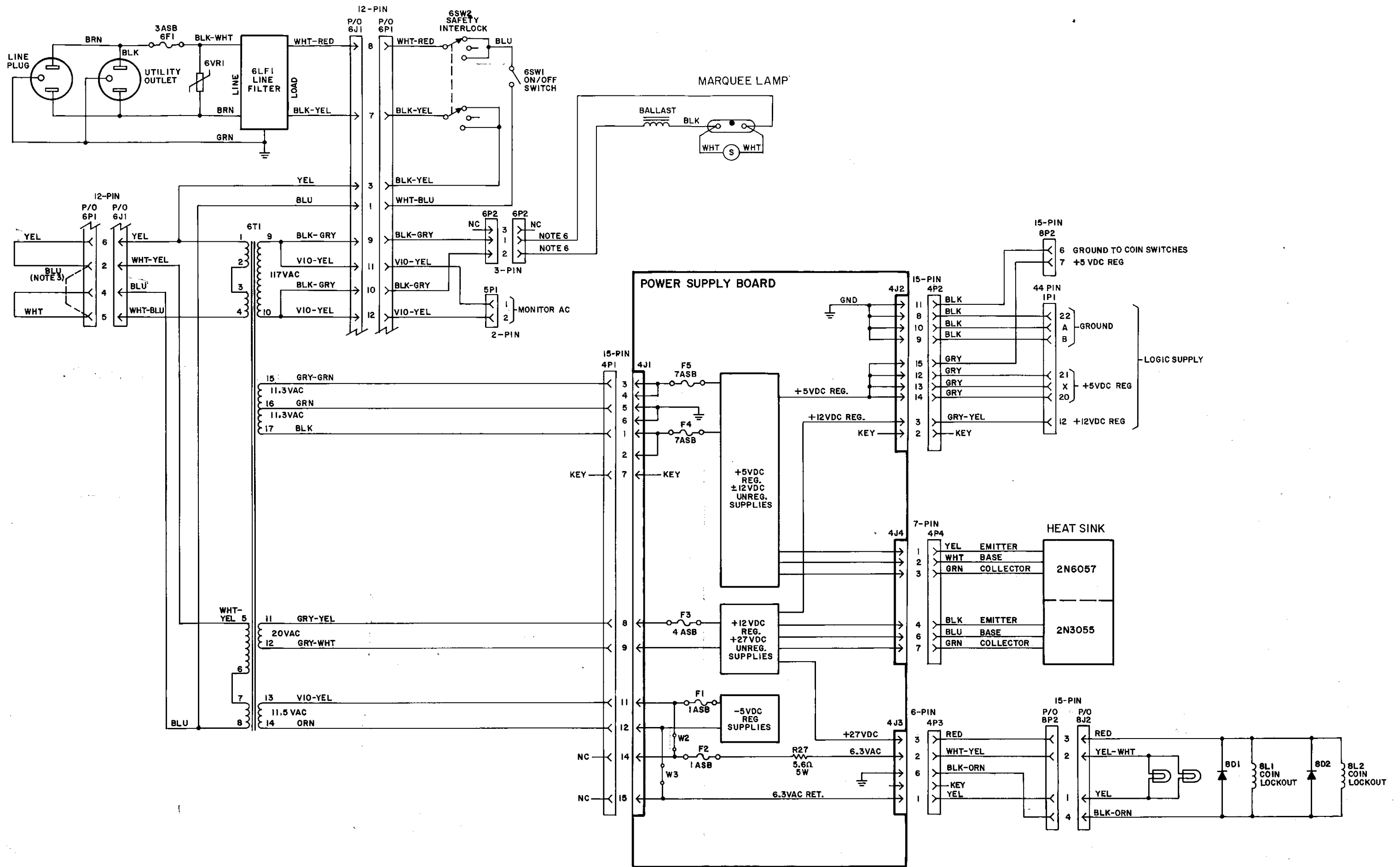
- NOTES:
 1. REMOVE R24 IF +5VDC IS GREATER THAN 5.25 VDC, REMOVE R10 IF +5VDC IS LESS THAN 4.75 VDC.
 2. BR1 MUST BE MOUNTED 1/8" ABOVE SURFACE OF BOARD.
 3. FOR SCHEMATIC REFER TO 16-8811.

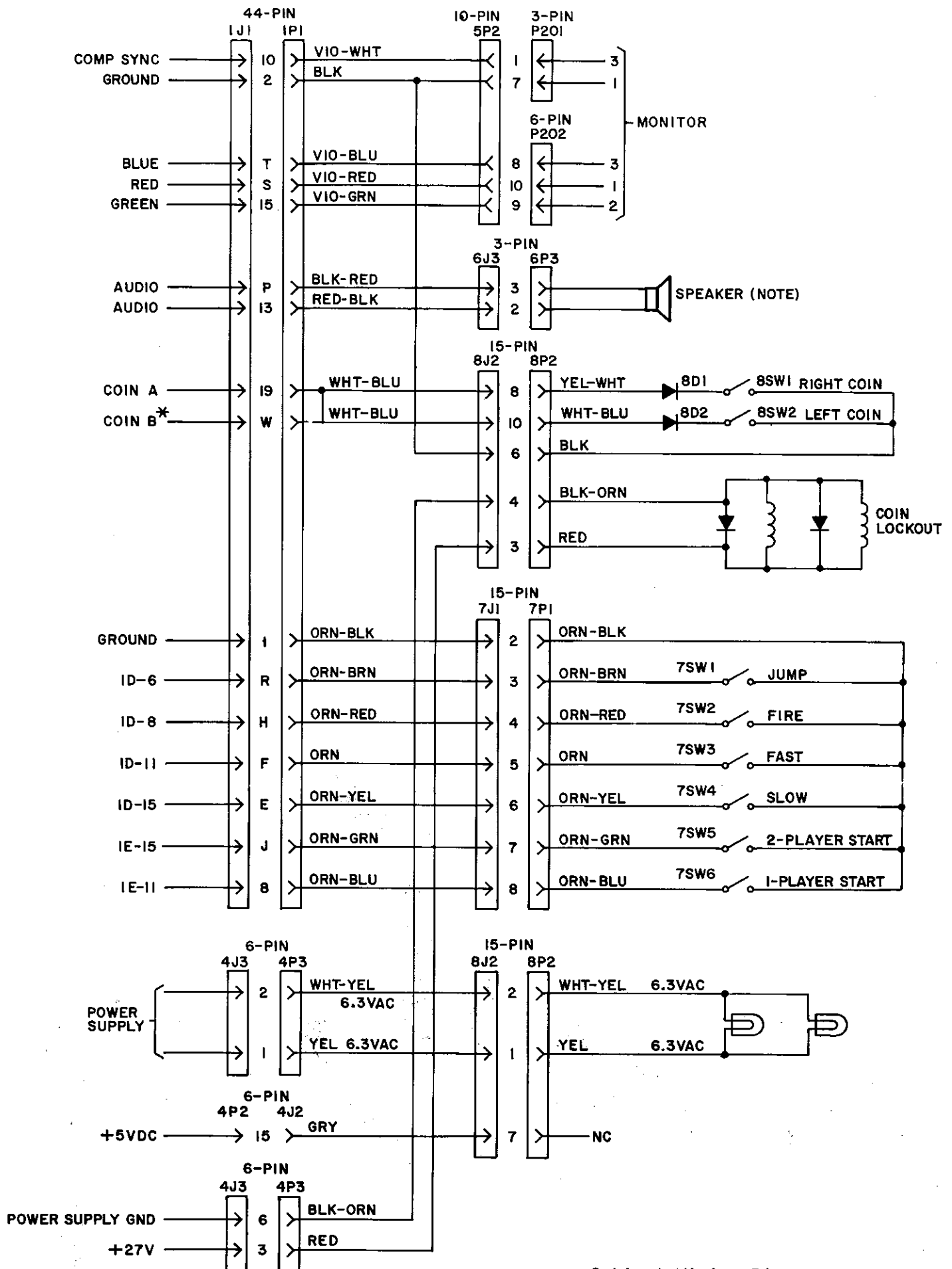
ITEM NO.	PART NO.	PART DESIGNATION	DESCRIPTION	REQ'D
55	5010-09682-00	R10	RESISTOR C.F. 51K ± 5% 1/4W	1
56	5010-09324-00	R24	RESISTOR C.F. 27K ± 5% 1/4W	1
57	5705-09663-00		HEAT SINK	2
58	5705-09698-00		HEAT SINK	0

BILL OF MATERIAL				
ITEM NO.	PART NO.	PART DESIGNATION	DESCRIPTION	REQ'D NO.
1	5773-09678-00		BARE P.C. BOARD	1
2	5010-09085-00	R23	RESISTOR, 1.5K 5% 1/4W	1
3	5010-09541-00	R13, R15	RESISTOR, 2.7K 2% 1/4W	2
4	5010-09508-00	R21	RESISTOR, 270Ω 2% 1/4W	1
5	5010-09428-00	R20	RESISTOR, 1.5K 2% 1/4W	1
6	5010-09509-00	R16	RESISTOR, 1.1K 2% 1/4W	1
7	5010-09510-00	R7	RESISTOR, 12K 2% 1/4W	1
8	5010-09319-00	R4	RESISTOR, 1.2K 5% 1/4W	1
9	5010-09416-00	R1, R14	RESISTOR, 470Ω 5% 1/4W	2
10	5013-09542-00	R11	RESISTOR, 7.32K 1% 1/4W	1
11	5013-09427-00	R12	RESISTOR, 499K 1% 1/4W	1
12	5013-09426-00	R25	RESISTOR, 2.15K 1% 1/4W	1
13	5012-09429-00	R3	RESISTOR, .12Ω 5% 5W	1
14	5012-09512-00	R2	RESISTOR, .27Ω 5% 5W	1
15				
16	5013-09665-00	R26	RESISTOR, 5.11K 1% 1/4W	1
17	5010-09434-00	RG, R18	RESISTOR, C.F. 22Ω ± 5% 1/4W	2
18	5010-09036-00	R5, R9, R17, R22	RESISTOR, C.F. 100Ω ± 5% 1/4W	4
19	5010-09039-00	R8, R19	RESISTOR, C.F. 10Ω ± 5% 1/4W	2
20	5010-09534-00	W1	RESISTOR, 0Ω	1
21	5043-09996-00	C6, C7	CAPACITOR, 0.1μF CERAMIC +80% -20% 50V	2
22	5040-09421-00	C2, C16	CAPACITOR, 100MFD, 25V RADIAL +50% -10%	2
23	5040-09422-00	C15	CAPACITOR, 47 MFD, 50V RADIAL +50% -10%	1
24	5040-09420-00	C3	CAPACITOR, 1000MFD, 25V RADIAL +75% -10%	1
25	5040-09419-00	C10	CAPACITOR, 18,000MFD 20V AXIAL +75% -10%	1
26	5040-09423-00	C5	CAPACITOR, 330 MFD 10V RADIAL +50% -10%	1
27	5040-09504-00	C14	CAPACITOR, 4700MFD 35V RADIAL +50% -10%	1
28	5043-09446-00	C1, C4 & C12	CAPACITOR, 1 MFD, 50V AXIAL 25U -20 +60%	3
29	5043-09065-00	C9	CAPACITOR, 470PFD 50V AXIAL XTR ± 10%	1
30	5043-09492-00	C8	CAPACITOR, 100 PFD 50V AXIAL S2L ± 5%	1
31	5040-09506-00	C13	CAPACITOR, 220MFD 16V RADIAL +50% -10%	1
32	5040-09493-00	C11	CAPACITOR, 22MFD 10V RADIAL +50% -10%	1
33	5070-06258-00	D1, D2 & D3	DIODE, 1N4001	3
34	5075-09406-00	ZR1	ZENER, 1N5234 ± 5% (6.2V)	1
35	5075-09662-00	ZR2	ZENER, 1N5244 ± 5% (14V)	1
36	5190-09430-00	Q3, Q4	TRANSISTOR, MPS 455	2
37	5130-09661-00	Q1, Q2	SCR 8 AMP, 100V	2
38	5250-09515-00	Q5	VOLTAGE REGULATOR, 7905	1
39	5460-09424-00	IC1, IC2	VOLTAGE REGULATOR, 723	2
40	5100-09490-00	BR1	BRIDGE RECTIFIER, 35 AMP, 200V	1
41	5100-09513-00	BR2	BRIDGE RECTIFIER, 4.0A, 50V	1
42	5100-09514-00	BR3	BRIDGE RECTIFIER, 1.0A, 50V	1
43	5671-09018-00	LED1, LED2, LED3	LED, RED	3
44	5824-09248-00	TP1 - TP6	TERMINAL # 1502-1 (TEST POINT)	4



D-8784-3007 Power Supply Board Schematic Diagram





Cabinet Wiring Diagram





