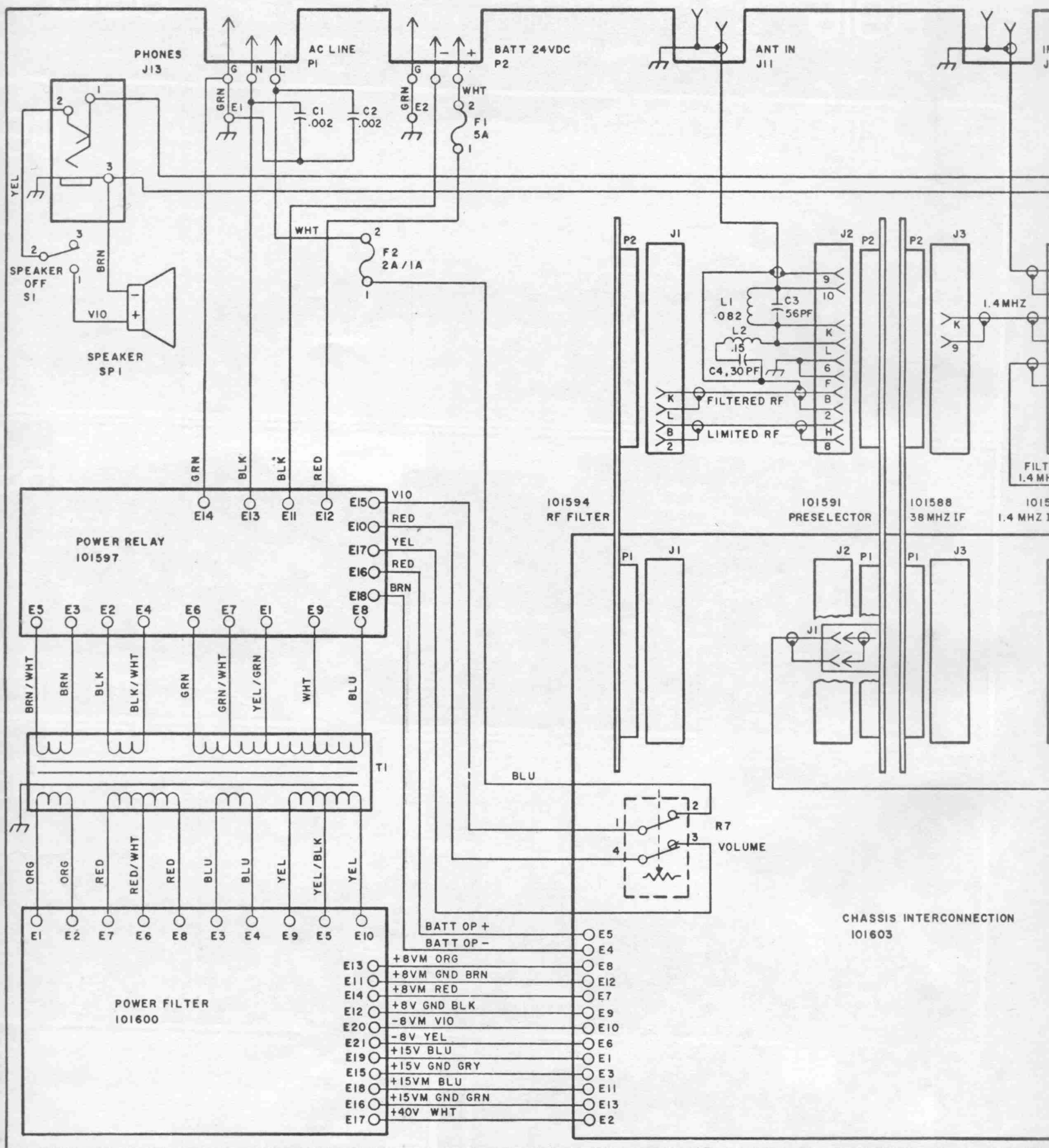




NOTES:

1. UNLESS OTHERWISE SPECIFIED:

A. ALL COILS ARE IN UH.

B. ALL CAPACITORS ARE IN MICROFARADS.

C. ALL RESISTORS ARE IN OHMS.

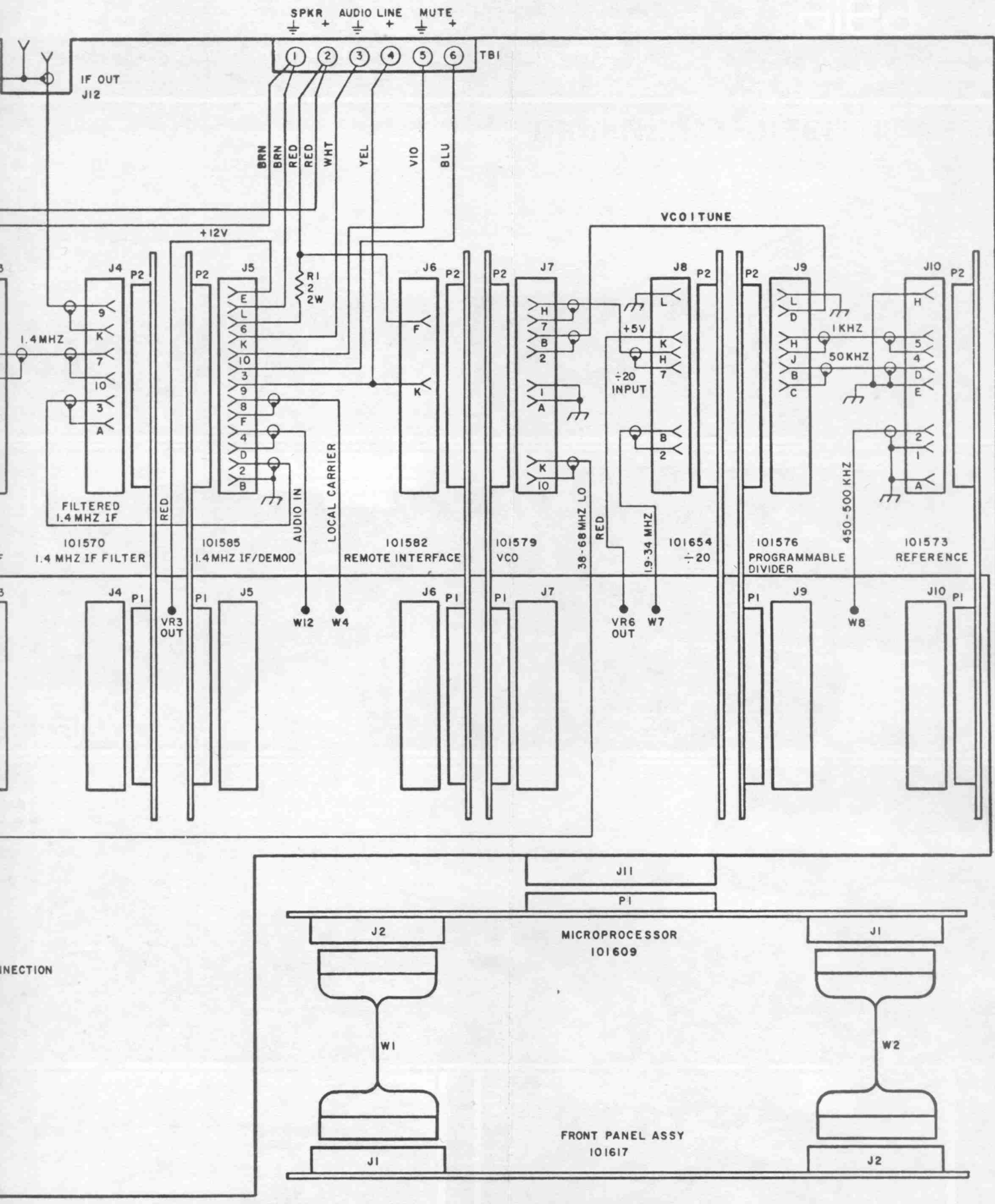
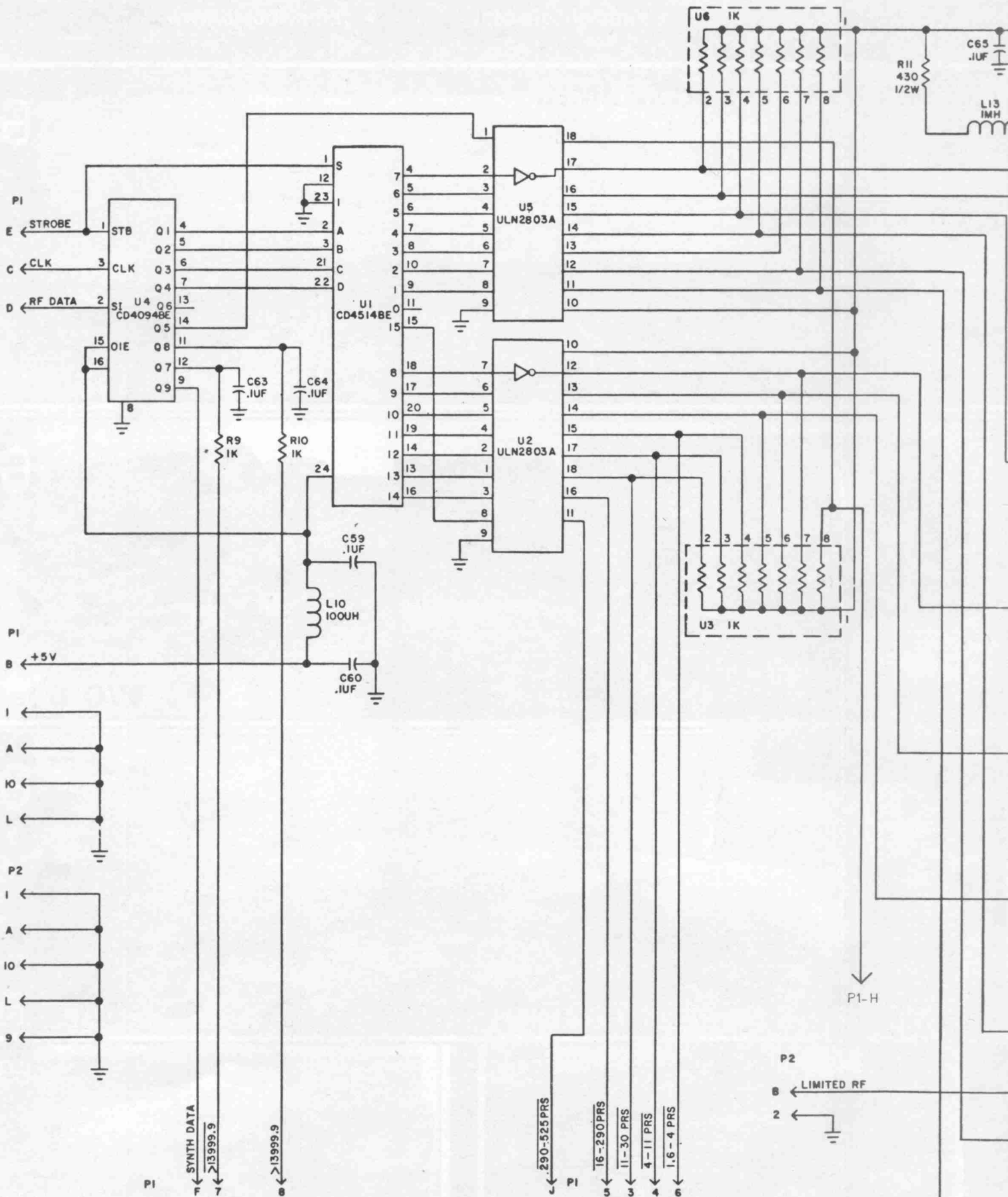


Figure A-1. Chassis Interconnection Diagram



LAST REF DESIGN USED		
C65	CR18	L19
R11	T18	U6
W1		

REF DESIG NOT USED		
T7-12		

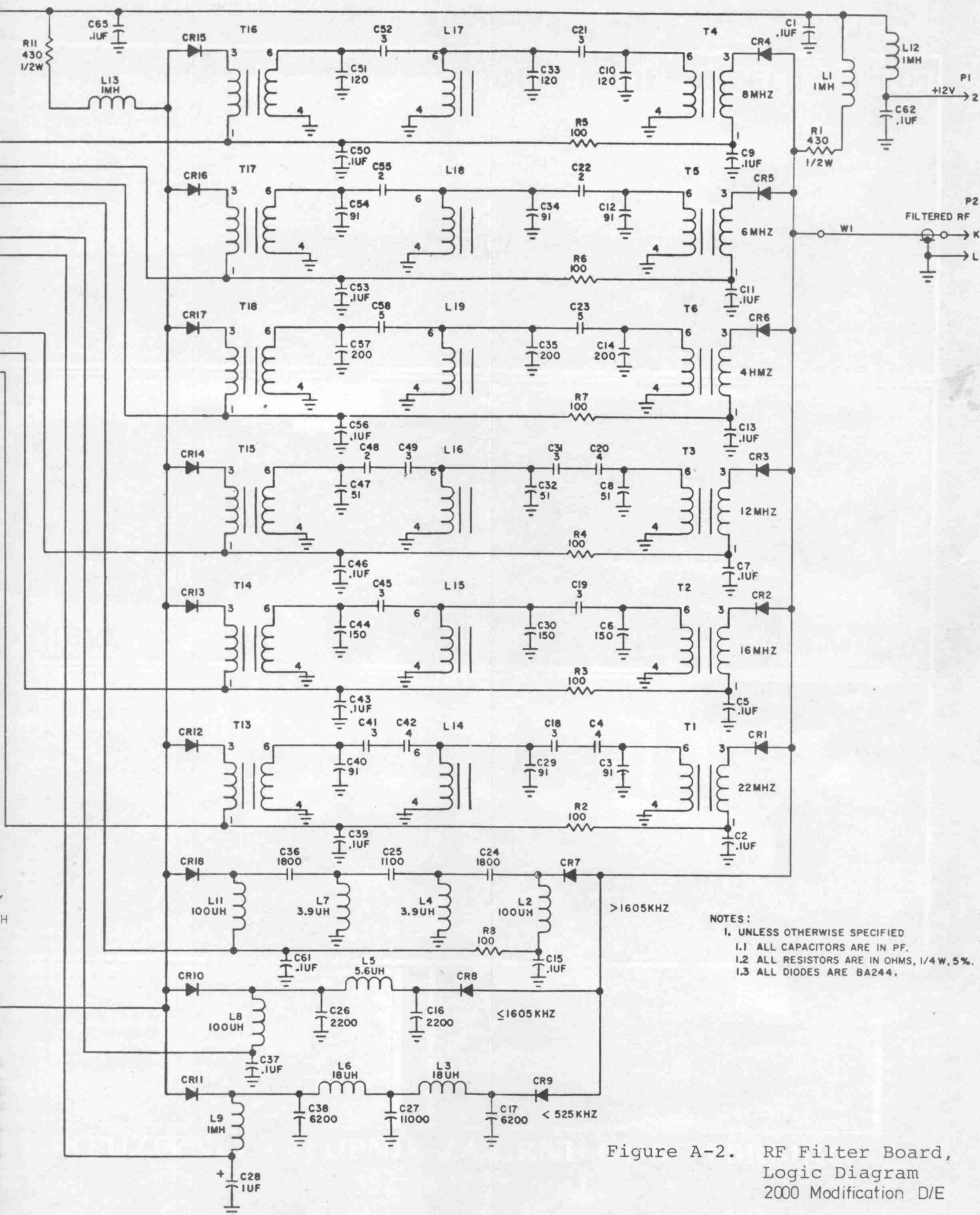


Figure A-2. RF Filter Board,
Logic Diagram
2000 Modification D/E

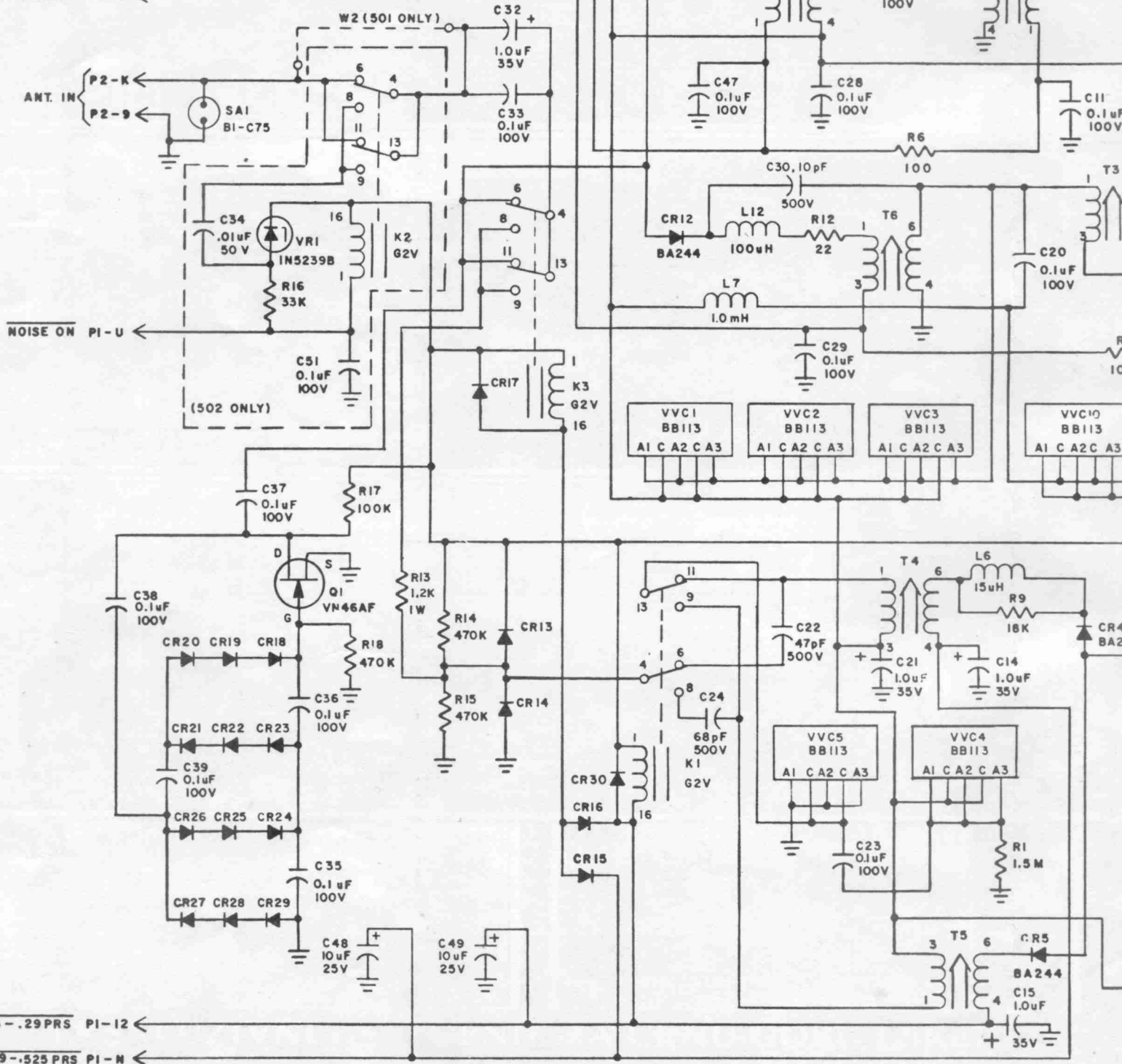
-501 LAST REF DESIGN USED		
A1	C50	CR30
E5	K3	L13
Q2	R20	SA1
T8	U2	VVC12
W2		
-501 REF DESIGN NOT USED		
C1,25-26,34,43	K2	
L8-9	R8,16	

-502 LAST REF DESIGN USED		
A1	C51	CR30
E5	K3	L13
Q2	R20	SA1
T8	U2	VR1
VVC12	W1	
-502 REF DESIGN NOT USED		
C1,25-26,43	L8-9	
R8		

11-30 PRS PI-R ←

4-11 PRS PI-P ←

1.6-4 PRS PI-M ←



.16-.29 PRS PI-12 ←

.29-.525 PRS PI-N ←

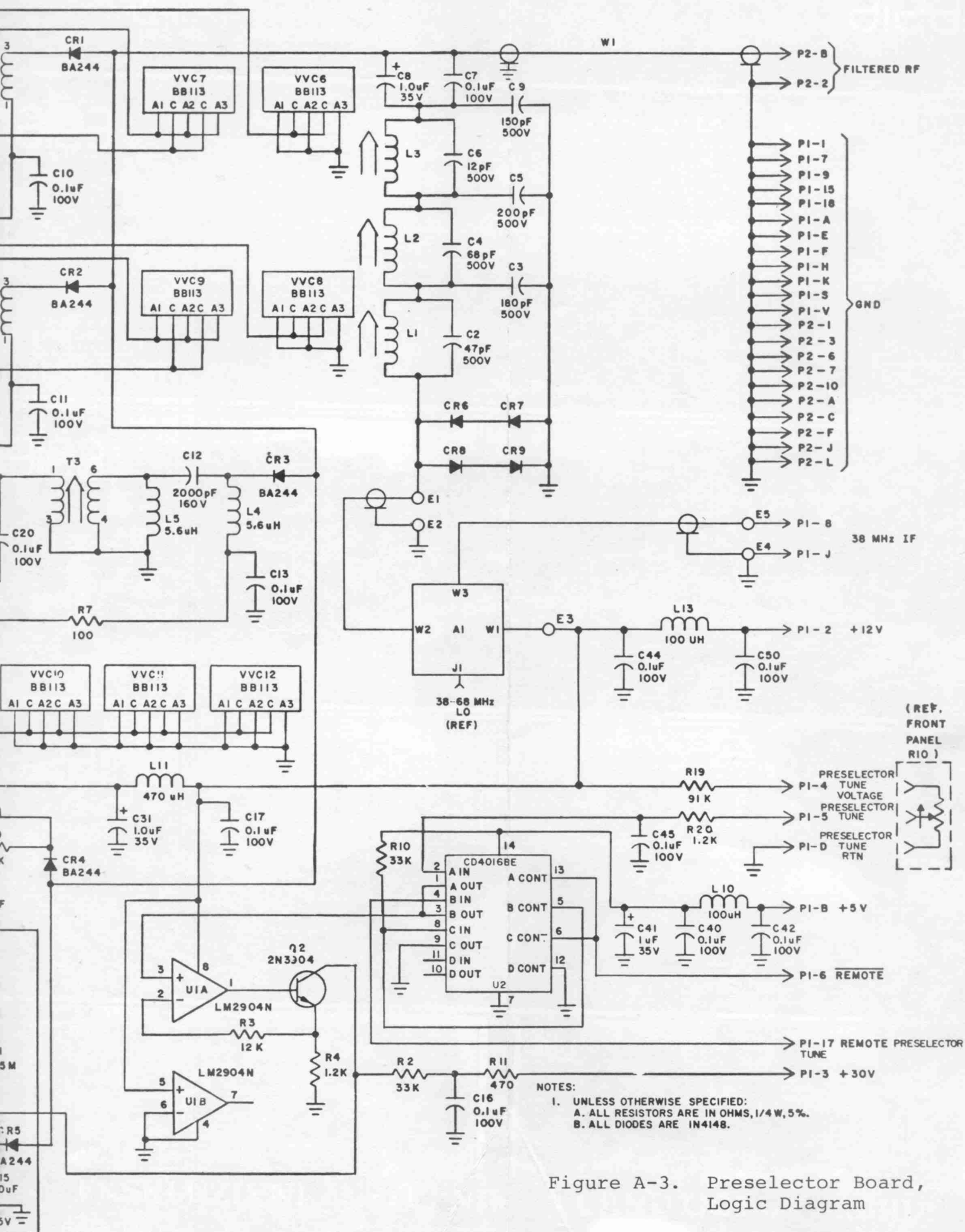
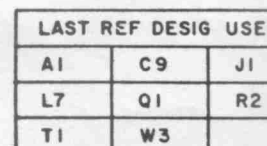
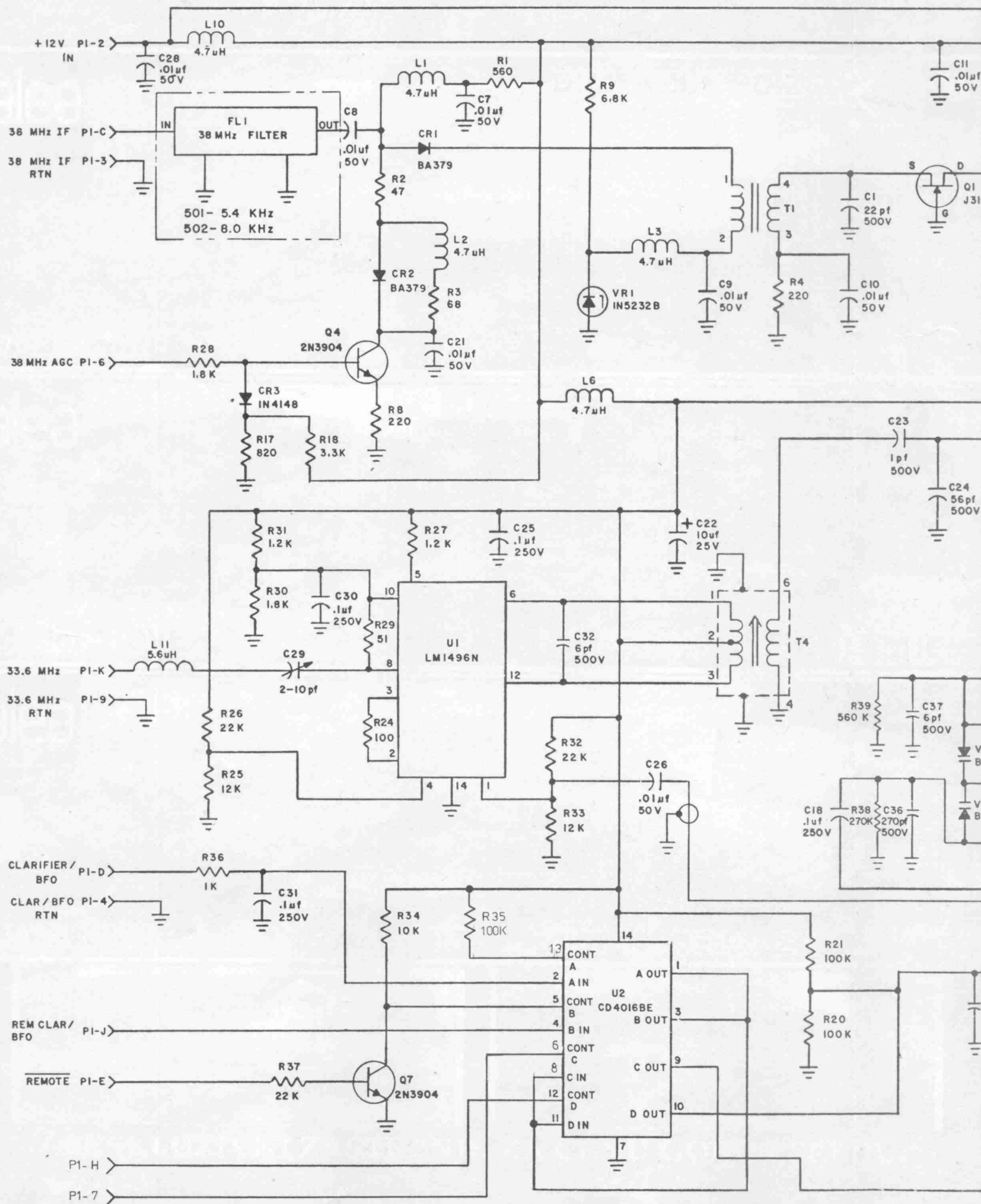


Figure A-3. Pres-selector Board, Logic Diagram



LAST REF DESIG USE		
A1	C9	J1
L7	Q1	R2
T1	W3	



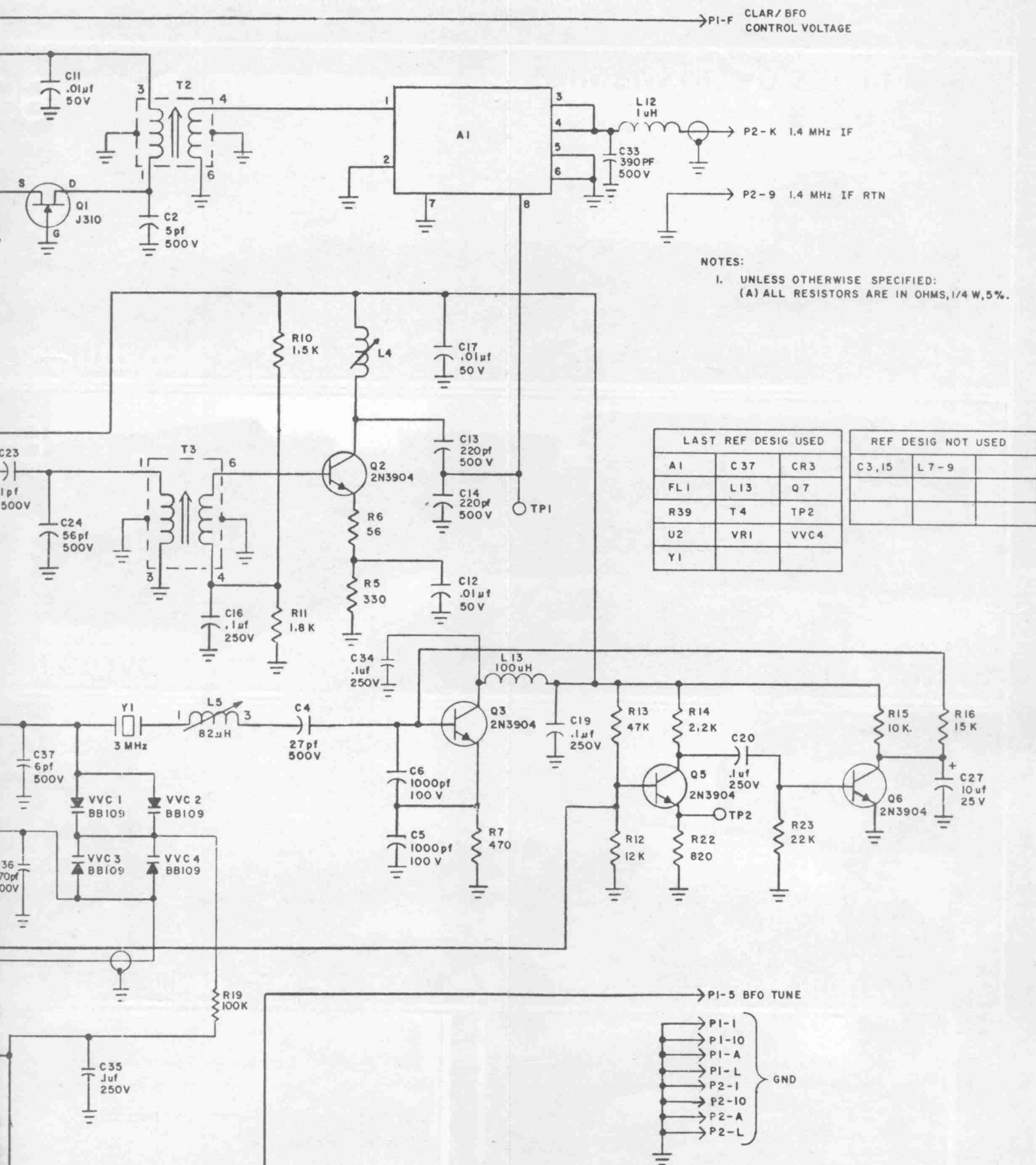
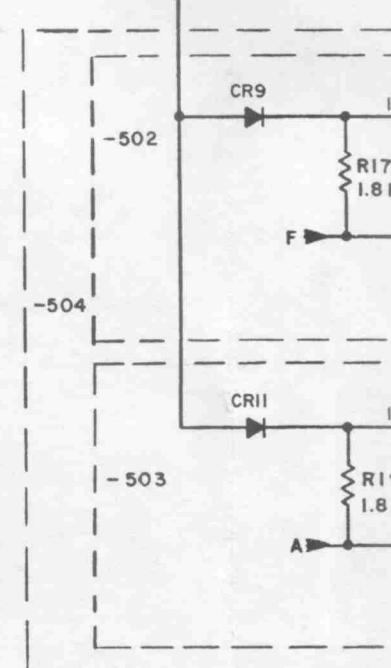


Figure A-5. 38 MHz IF Board, Logic Diagram
2000 Modification D/E



1. UNLESS OTHERWISE SPECIFIED:
(A) ALL RESISTORS ARE IN OHMS, 1/4 W, 5%.
(B) ALL CAPACITORS ARE IN MICROFARADS, 250V, 10%.
(C) ALL DIODES ARE IN 4148.

VARIATION -501			VARIATION - 502			VARIATION - 503			VARIATION - 504		
LAST REF DESIG USED			LAST REF DESIG USED			LAST REF DESIG USED			LAST REF DESIG USED		
C20	CR14	FL3	C20	CR14	FL4	C20	CR14	FL5	C20	CR14	FL5
L5	Q2	R21	L5	Q2	R21	L5	Q2	R21	L5	Q2	R21
T2	U3		T2	U3		T2	U3		T2	U3	
REF DESIG NOT USED			REF DESIG NOT USED			REF DESIG NOT USED			REF DESIG NOT USED		
C5,13-14	CR9-12	R17-20	C5,14	CR11-13	R19-20	C5,13	CR9-10	FL4	C5	CR13	
						R17-18					

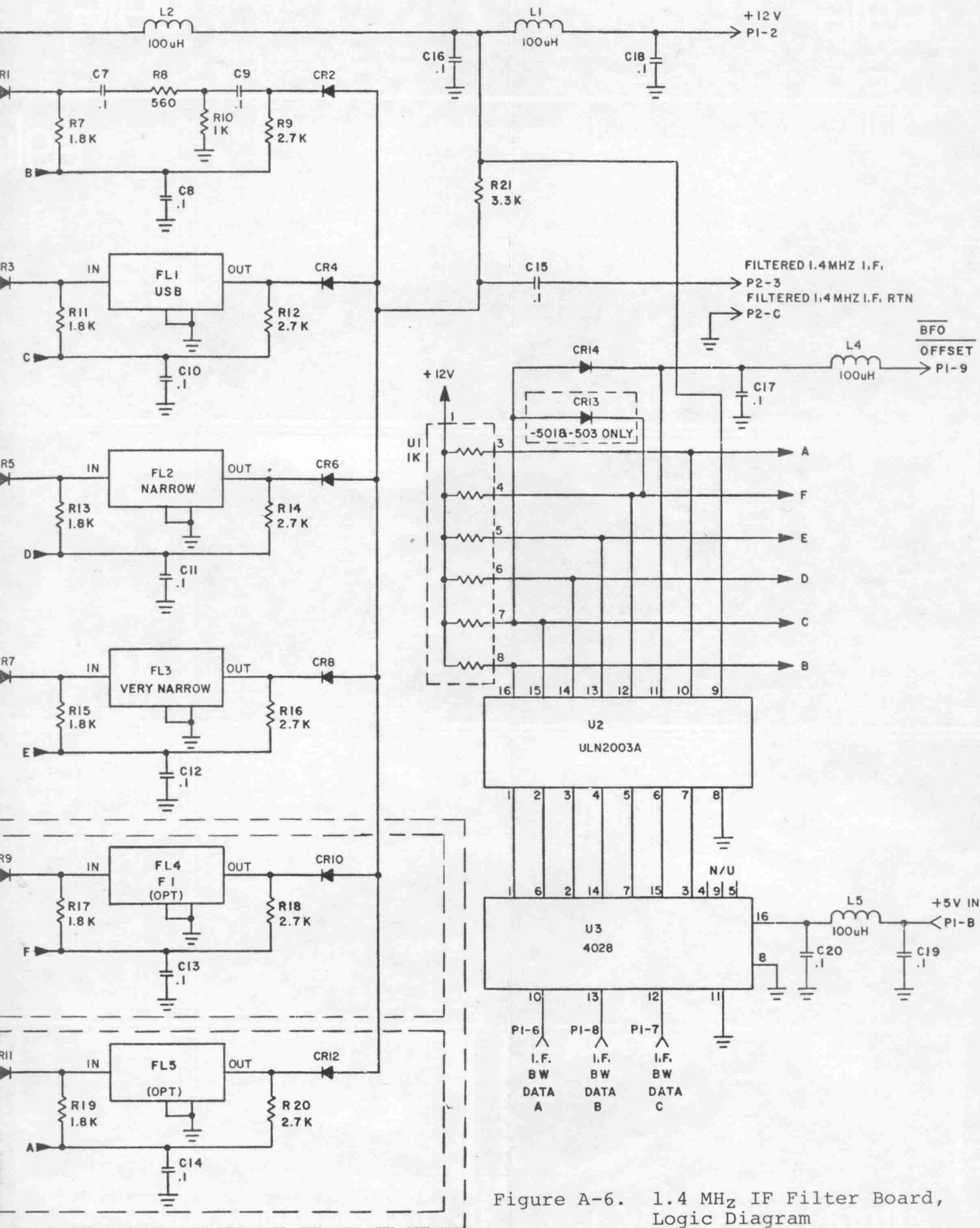
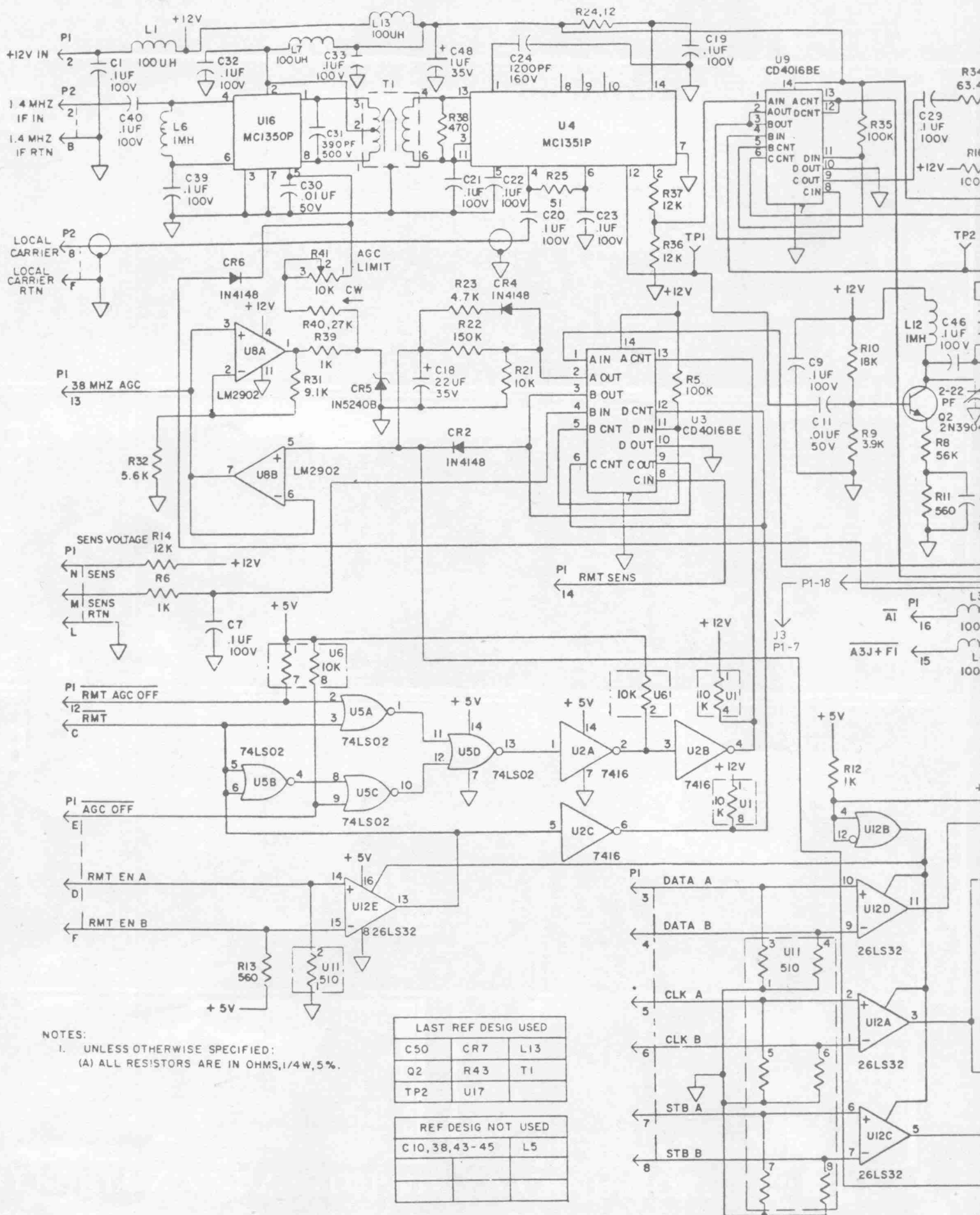


Figure A-6. 1.4 MHz IF Filter Board, Logic Diagram



NOTES:

1. UNLESS OTHERWISE SPECIFIED:
(A) ALL RESISTORS ARE IN OHMS, 1/4W, 5%.

LAST REF DESIG USED		
C50	CR7	L13
Q2	R43	T1
TP2	U17	

REF DESIG NOT USED		
C10, 38, 43-45	L5	

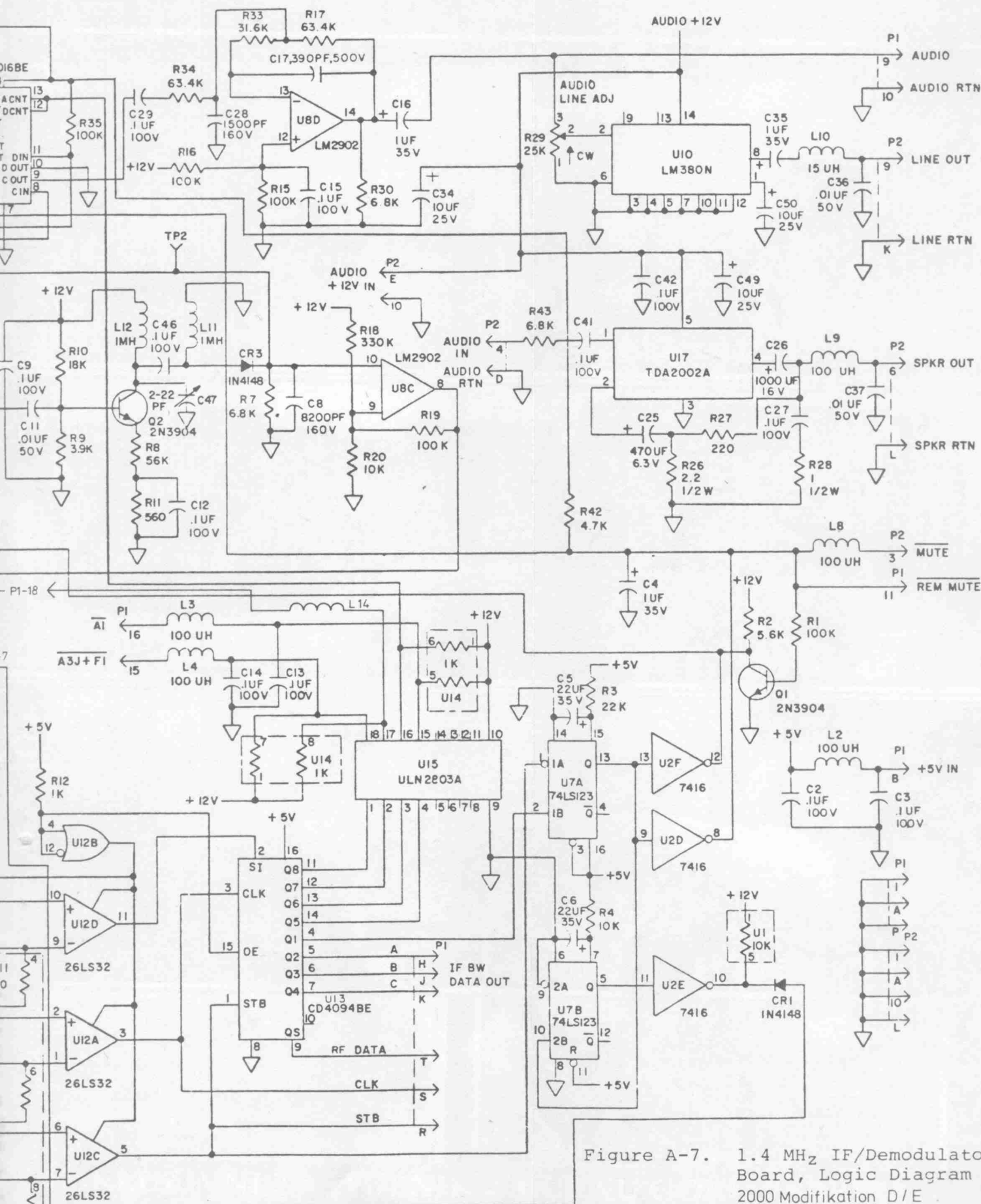
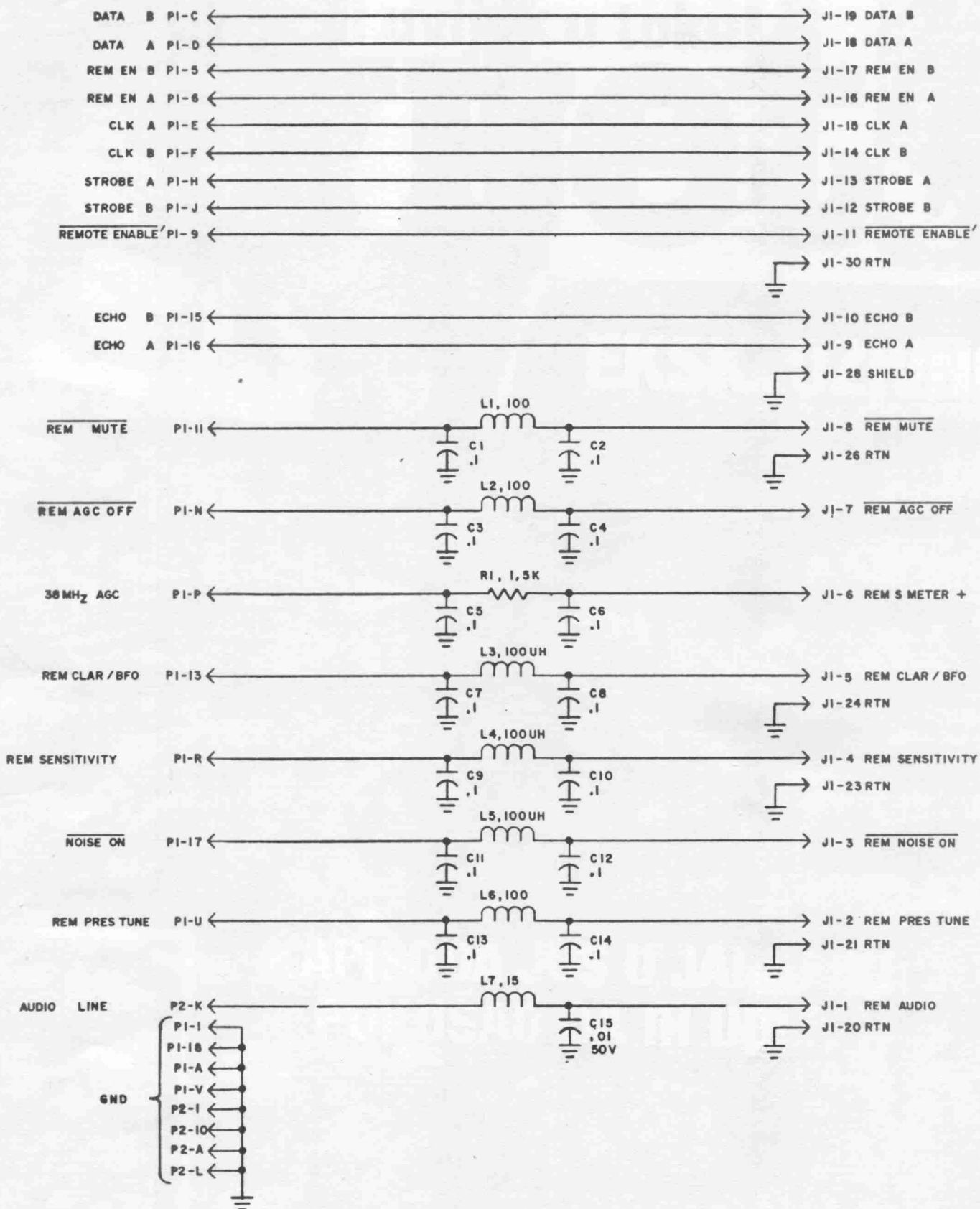


Figure A-7. 1.4 MHz IF/Demodulator Board, Logic Diagram
2000 Modifikation D/E



→ J1-19 DATA B
 → J1-18 DATA A
 → J1-17 REM EN B
 → J1-16 REM EN A
 → J1-15 CLK A
 → J1-14 CLK B
 → J1-13 STROBE A
 → J1-12 STROBE B
 → J1-11 REMOTE ENABLE'
 → J1-30 RTN

 → J1-10 ECHO B
 → J1-9 ECHO A
 → J1-28 SHIELD

 → J1-8 REM MUTE
 → J1-26 RTN

 → J1-7 REM AGC OFF

 → J1-6 REM S METER +

 → J1-5 REM CLAR / BFO
 → J1-24 RTN

 → J1-4 REM SENSITIVITY
 → J1-23 RTN

 → J1-3 REM NOISE ON

 → J1-2 REM PRES TUNE
 → J1-21 RTN

 → J1-1 REM AUDIO
 → J1-20 RTN

NOTES:

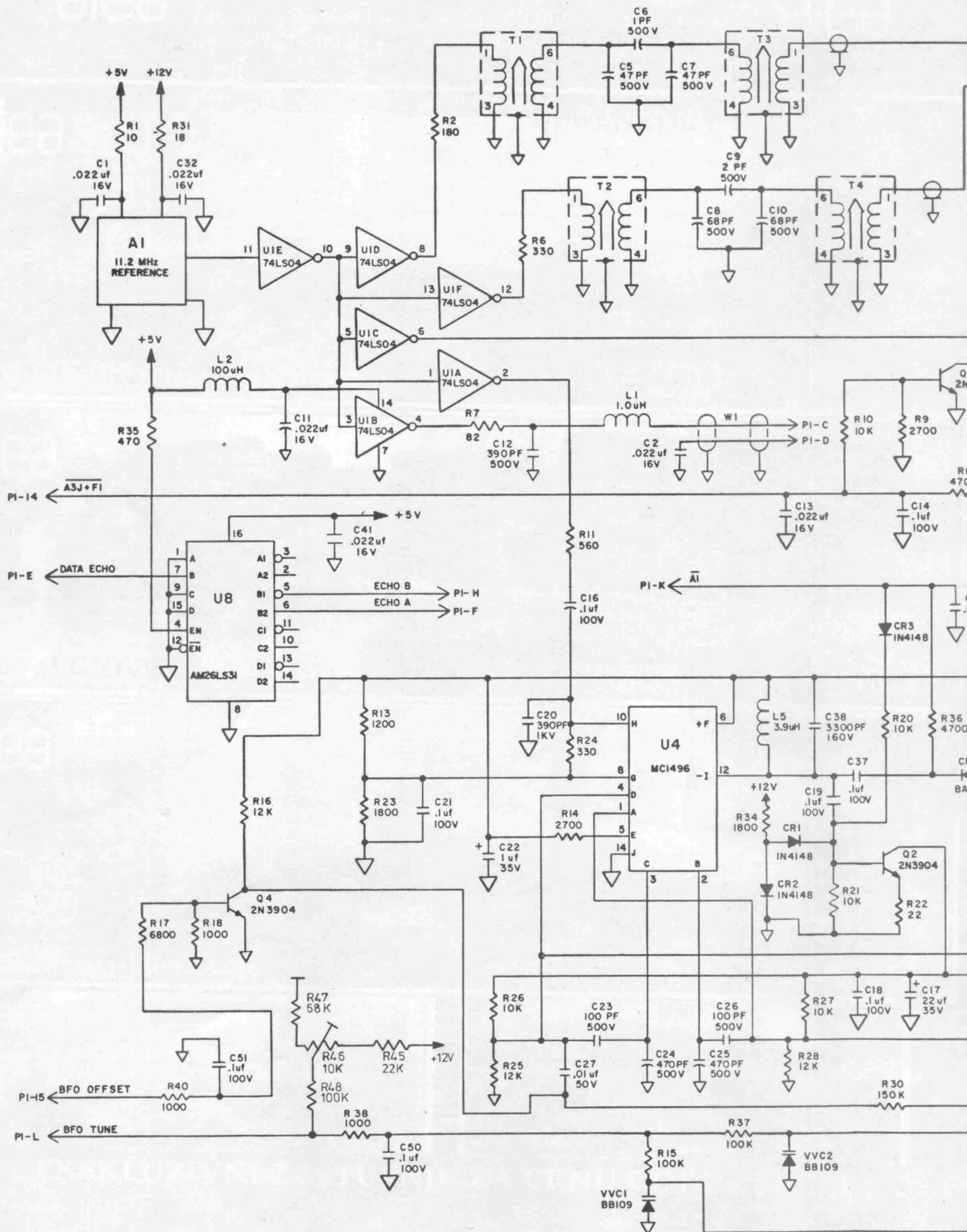
1. UNLESS OTHERWISE SPECIFIED:

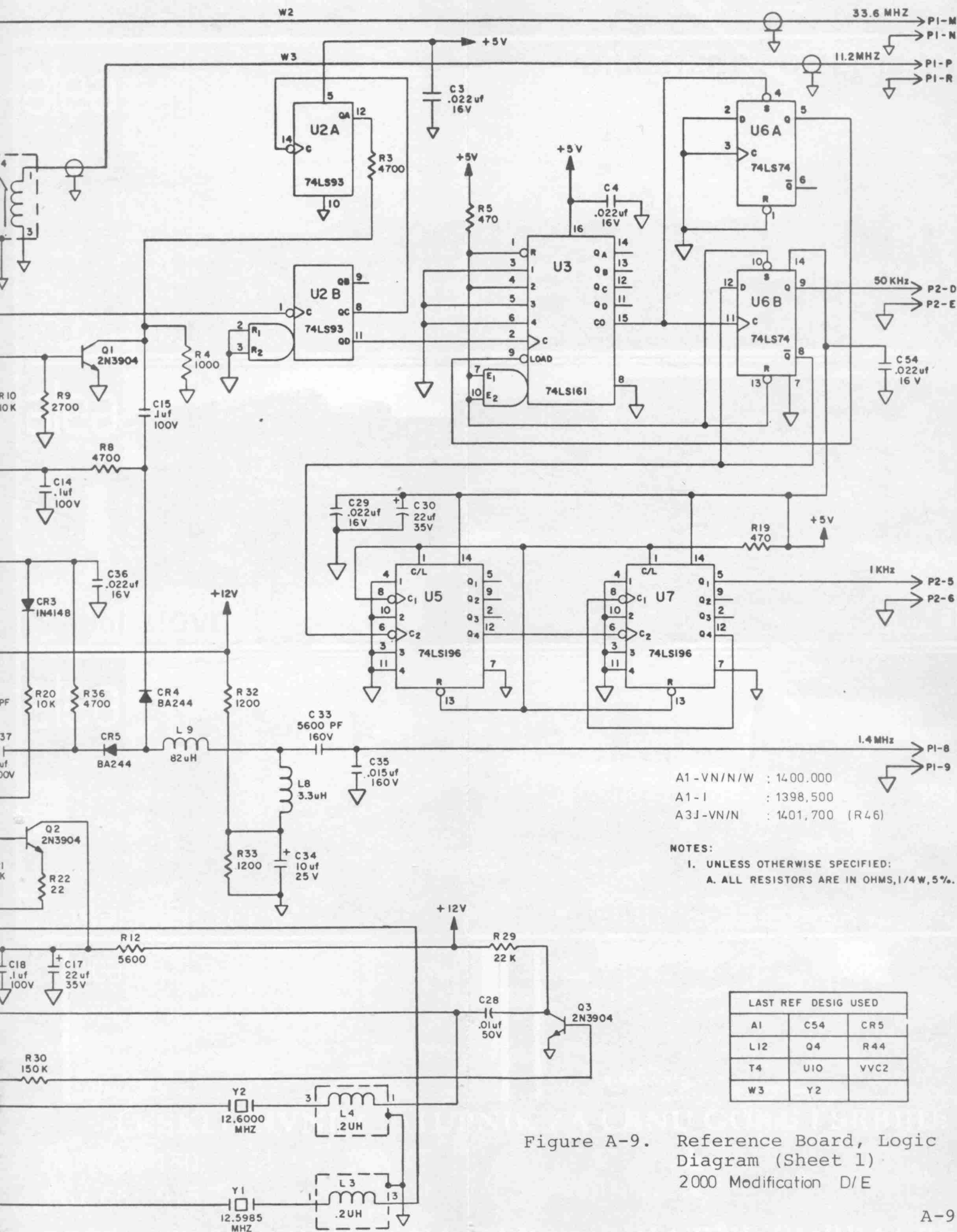
ALL CAPACITORS VALUES ARE IN UF AND ARE 100V.

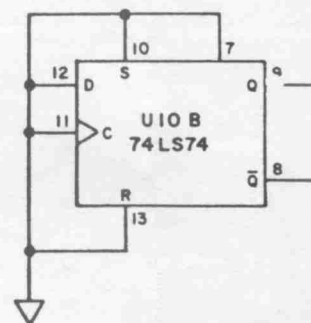
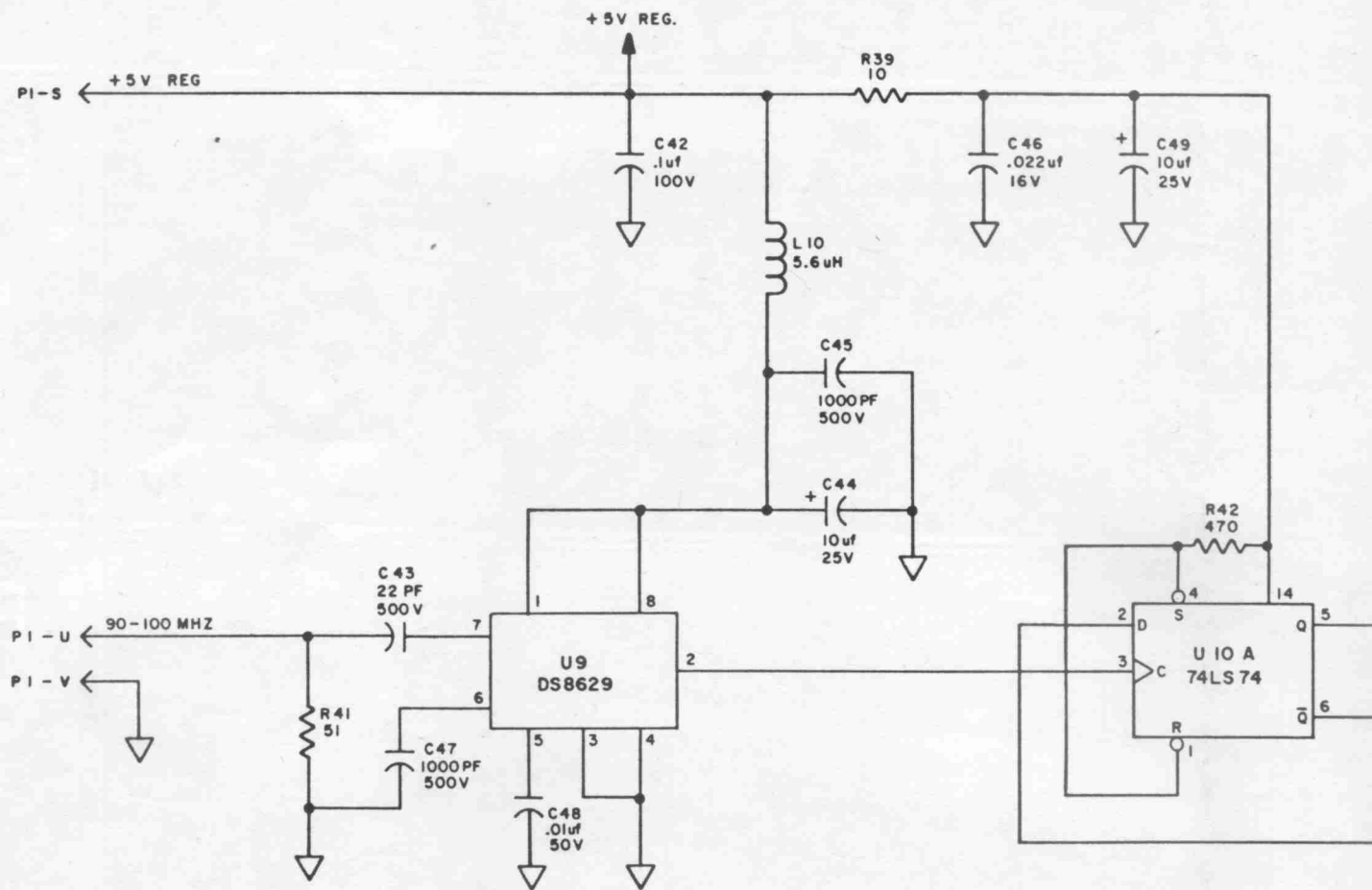
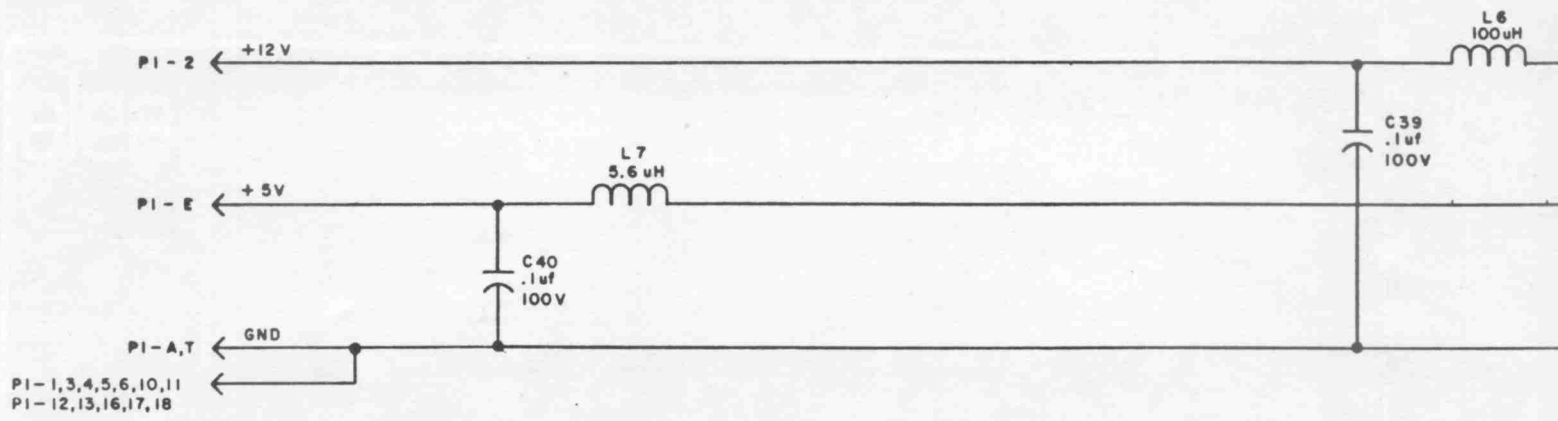
ALL RESISTOR VALUES ARE IN OHMS AND ARE 1/4,5%

ALL COIL VALUES ARE IN UH.

Figure A-8. Remote Interface Board,
Logic Diagram







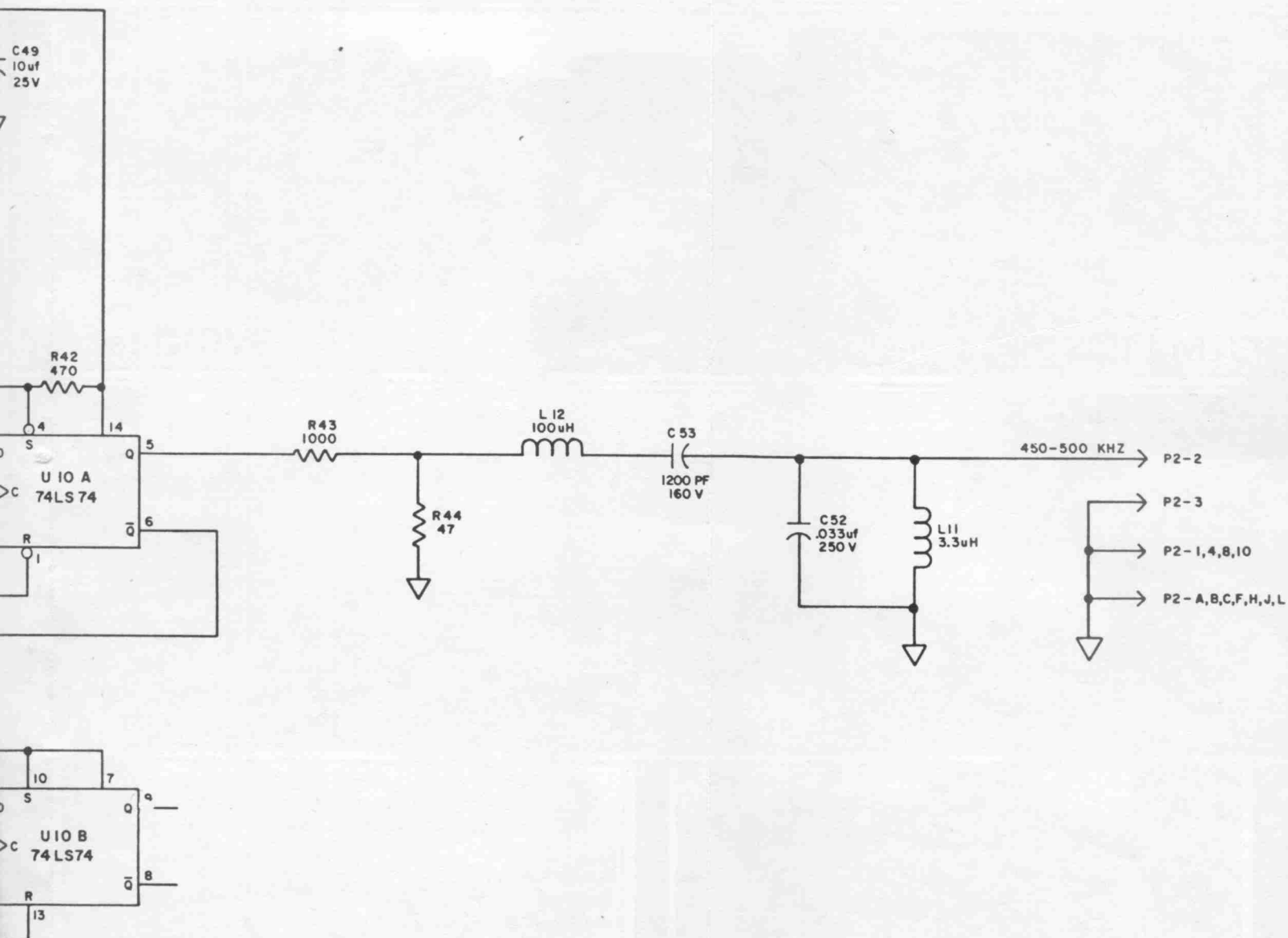
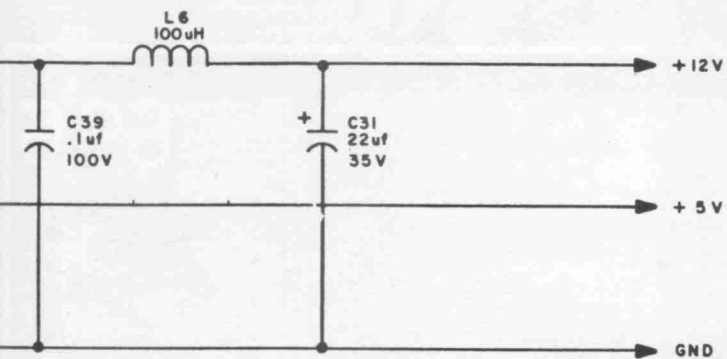
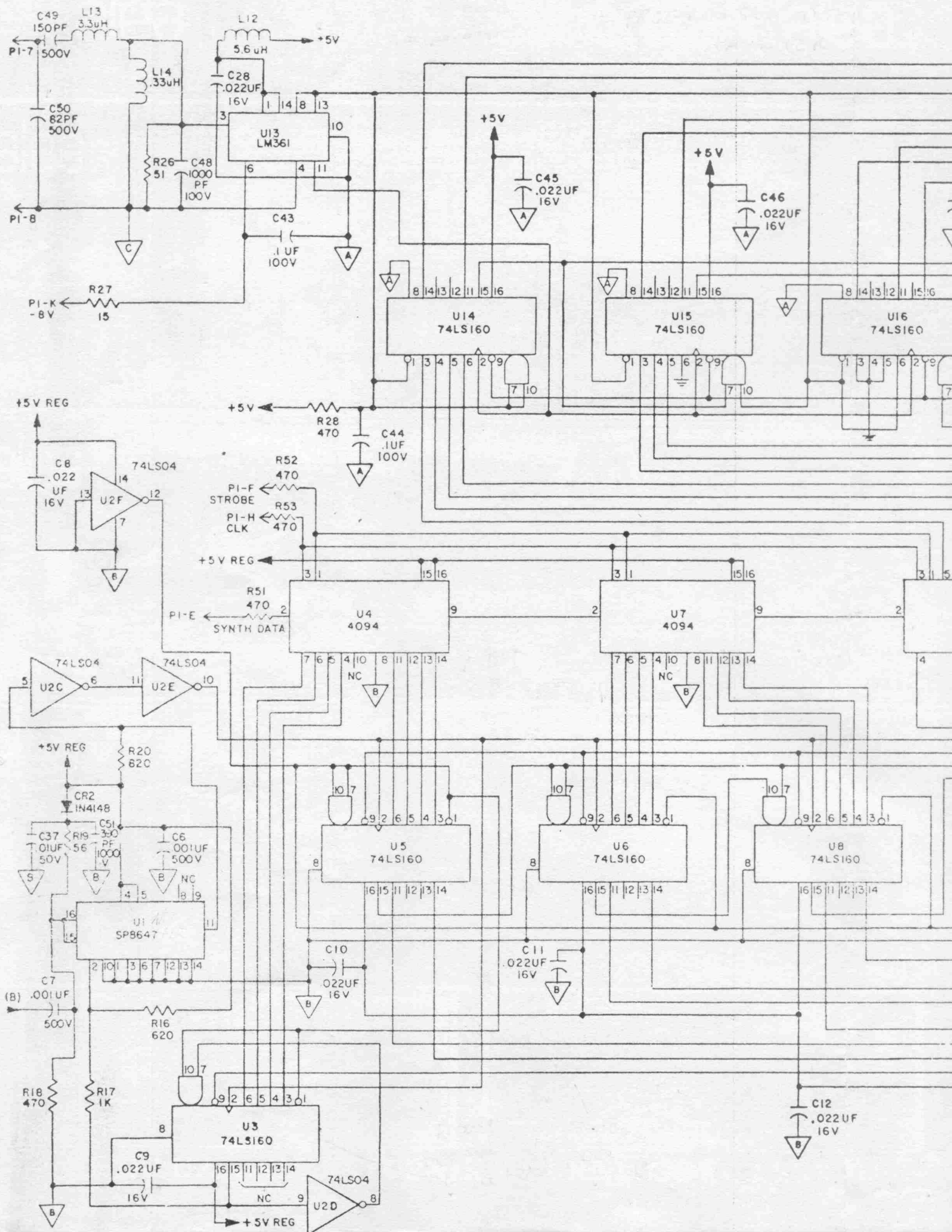
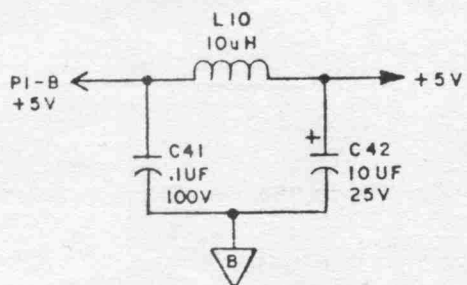
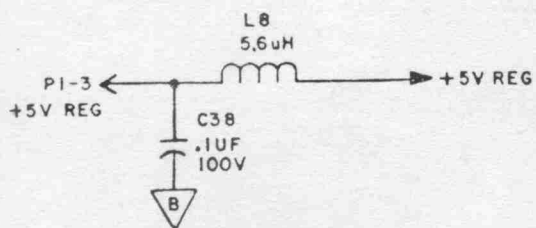
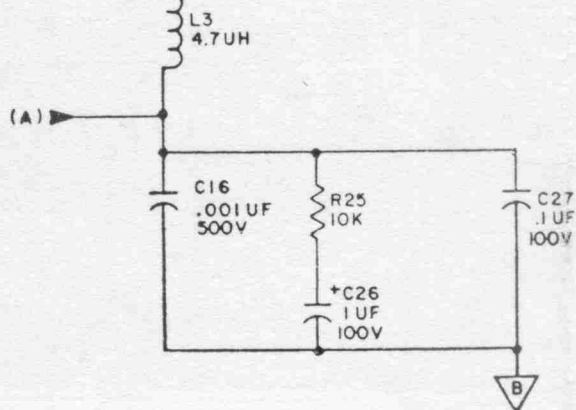
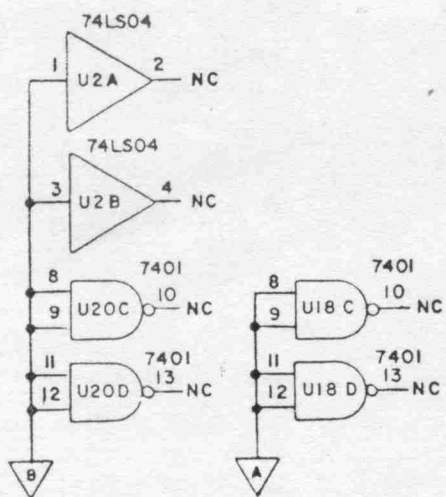
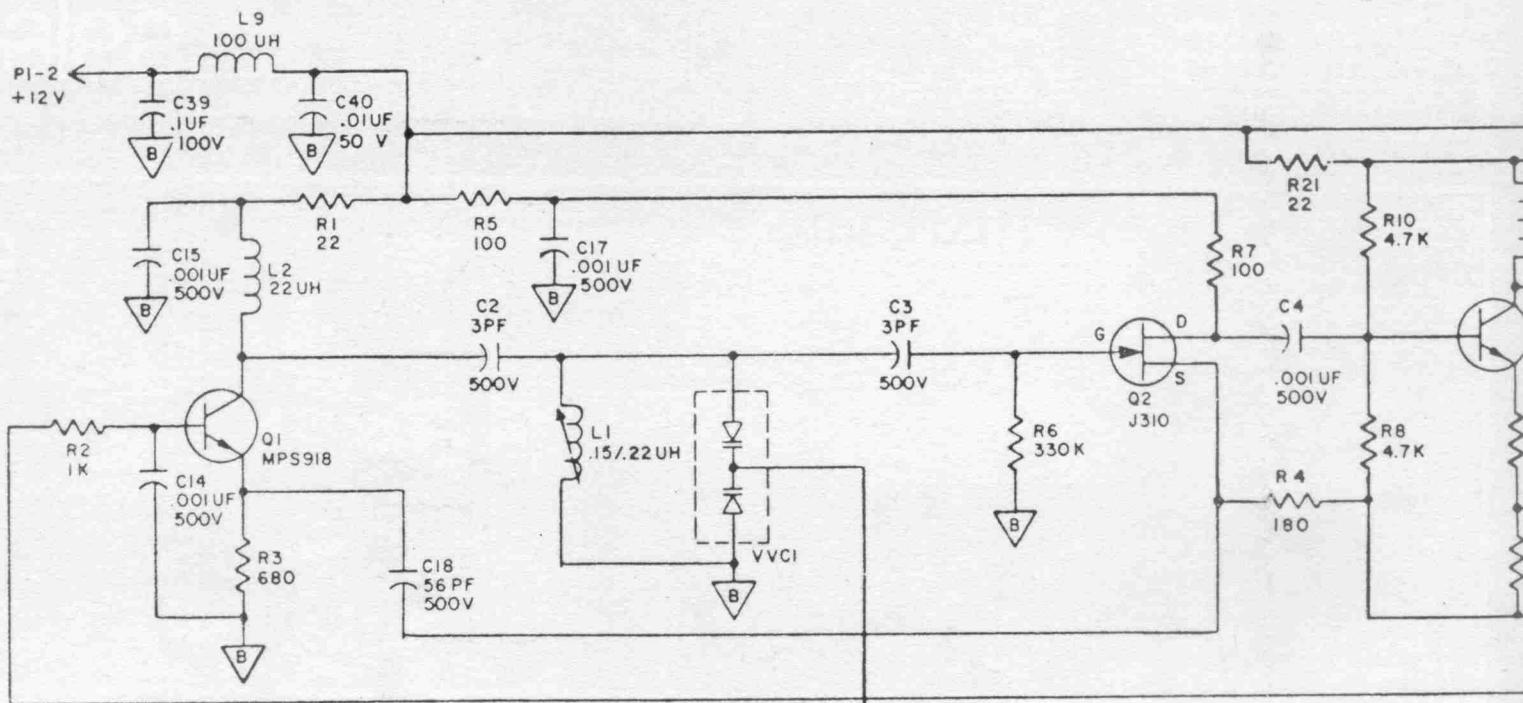


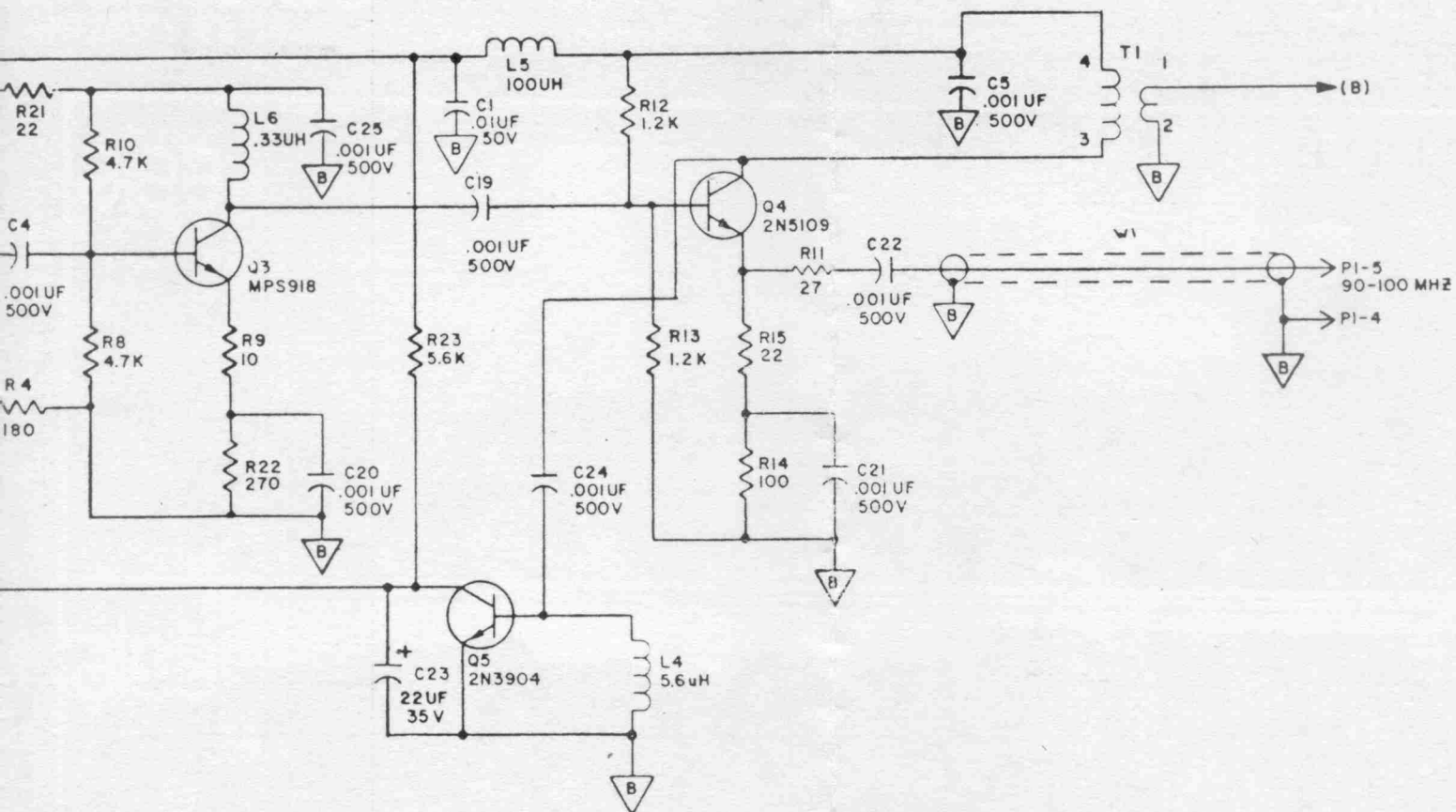
Figure A-10. Reference Board, Logic Diagram (Sheet 2)





LAST REF. DESIGN USED		
C51	CR3	LI4
Q11	R53	T1
U20	VVCI	W1
XQ4		

CO
R24



NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 ALL RESISTORS ARE IN OHMS, 1/4W, 5%.
 ALL CAPACITORS ARE IN MICROFARADS.

USED
L14
T1
W1

COMP. NOT USED		
R24		

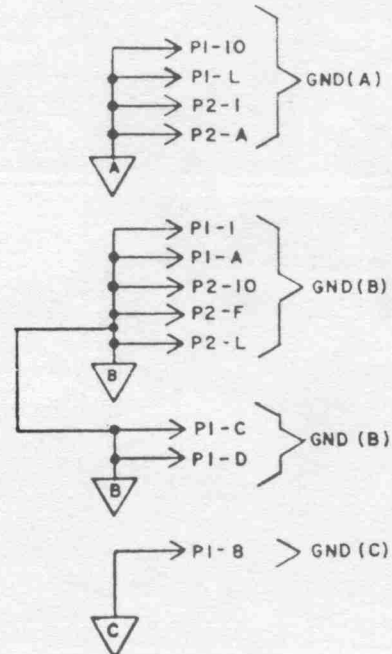
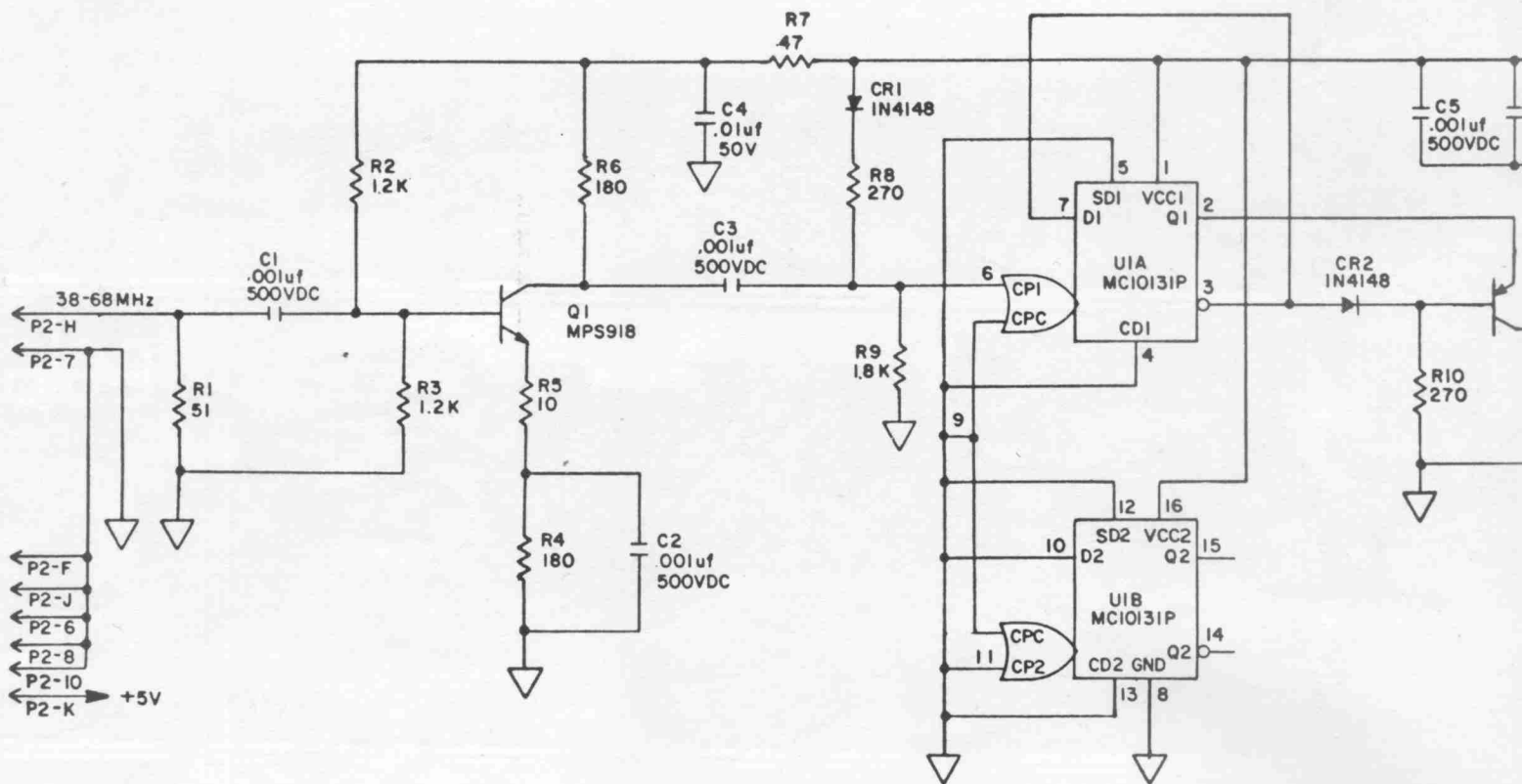
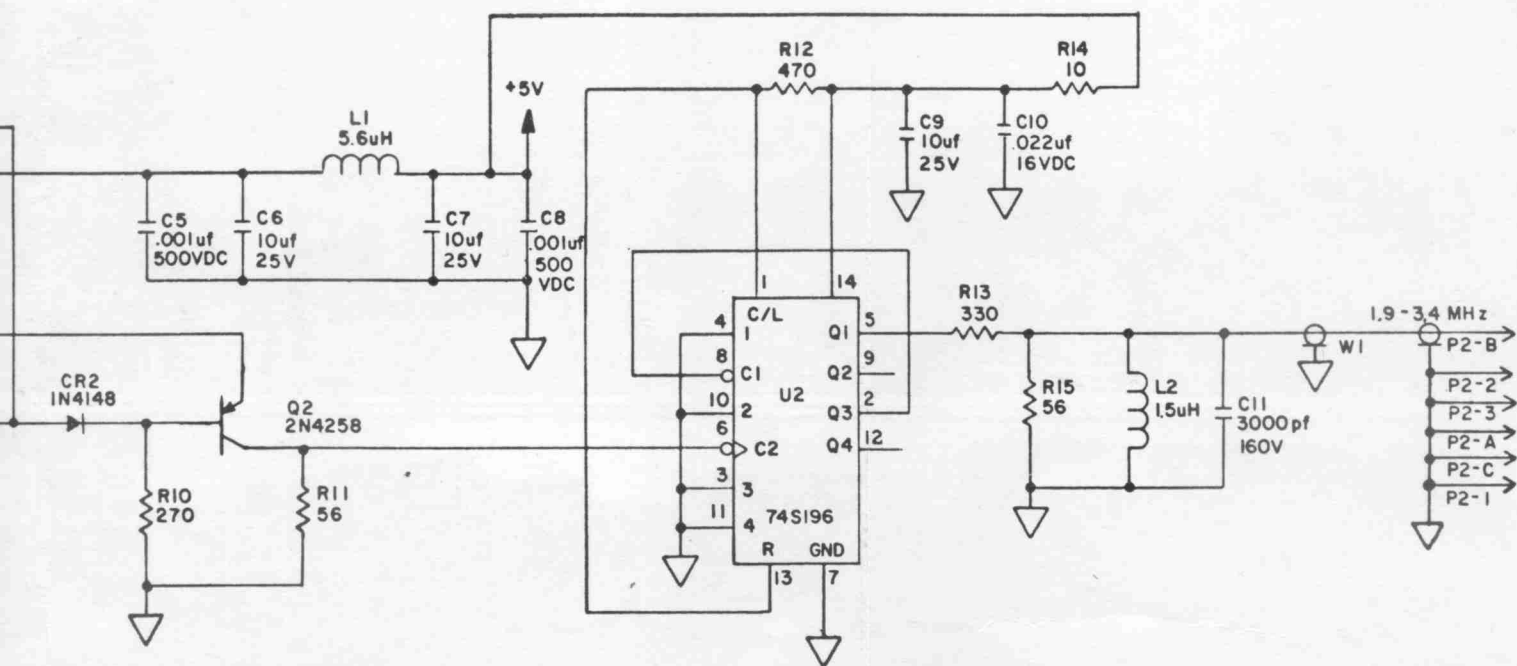


Figure A-12. Programmable Divider Board, Logic Diagram (Sheet 2)



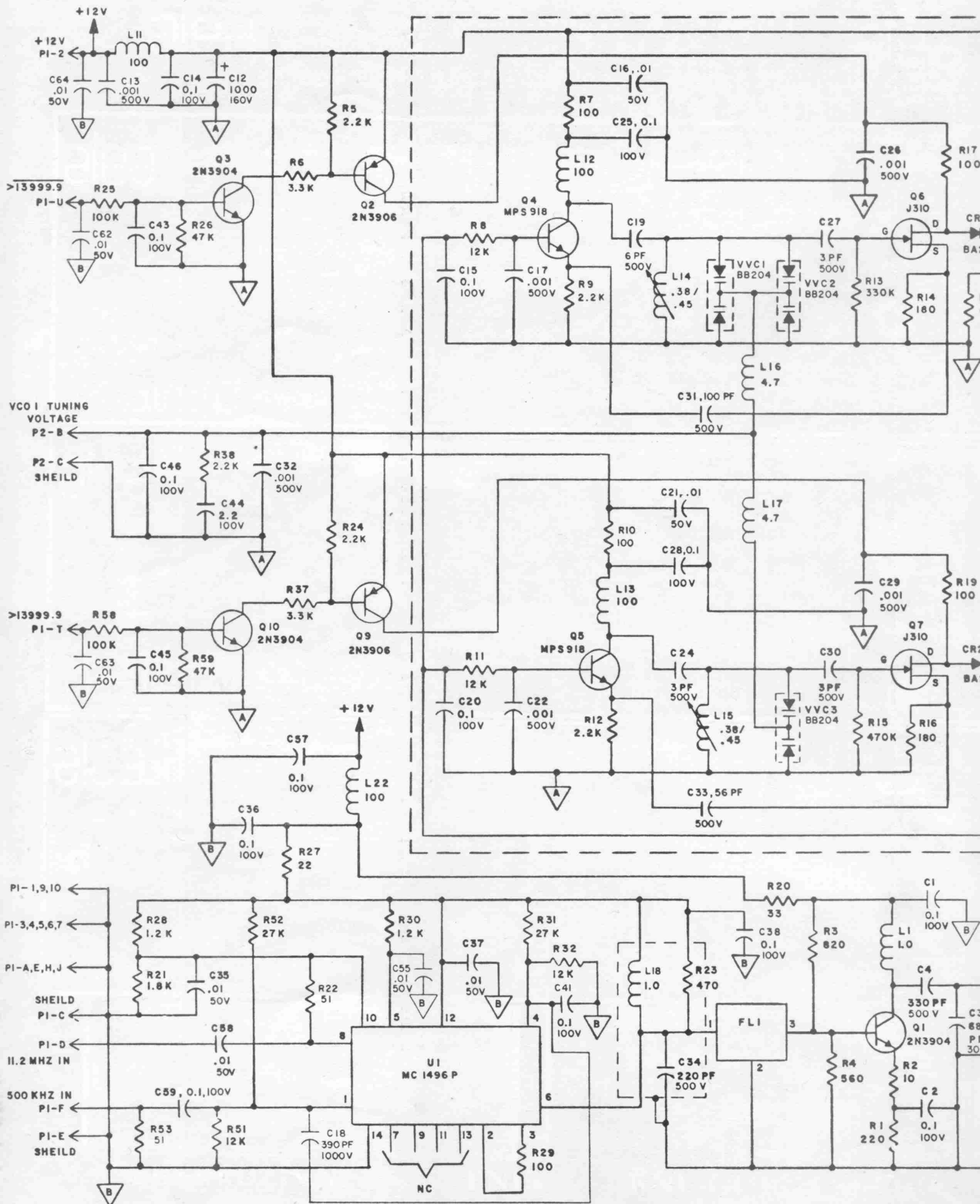


LAST REF. DESIGN USED		
R15	U2	C11
CR2	L2	Q2
W1		

NOTES:

L - UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE IN OHMS, 1/4 W, 5%

Figure A-13. Divide By 20 Board,
Logic Diagram



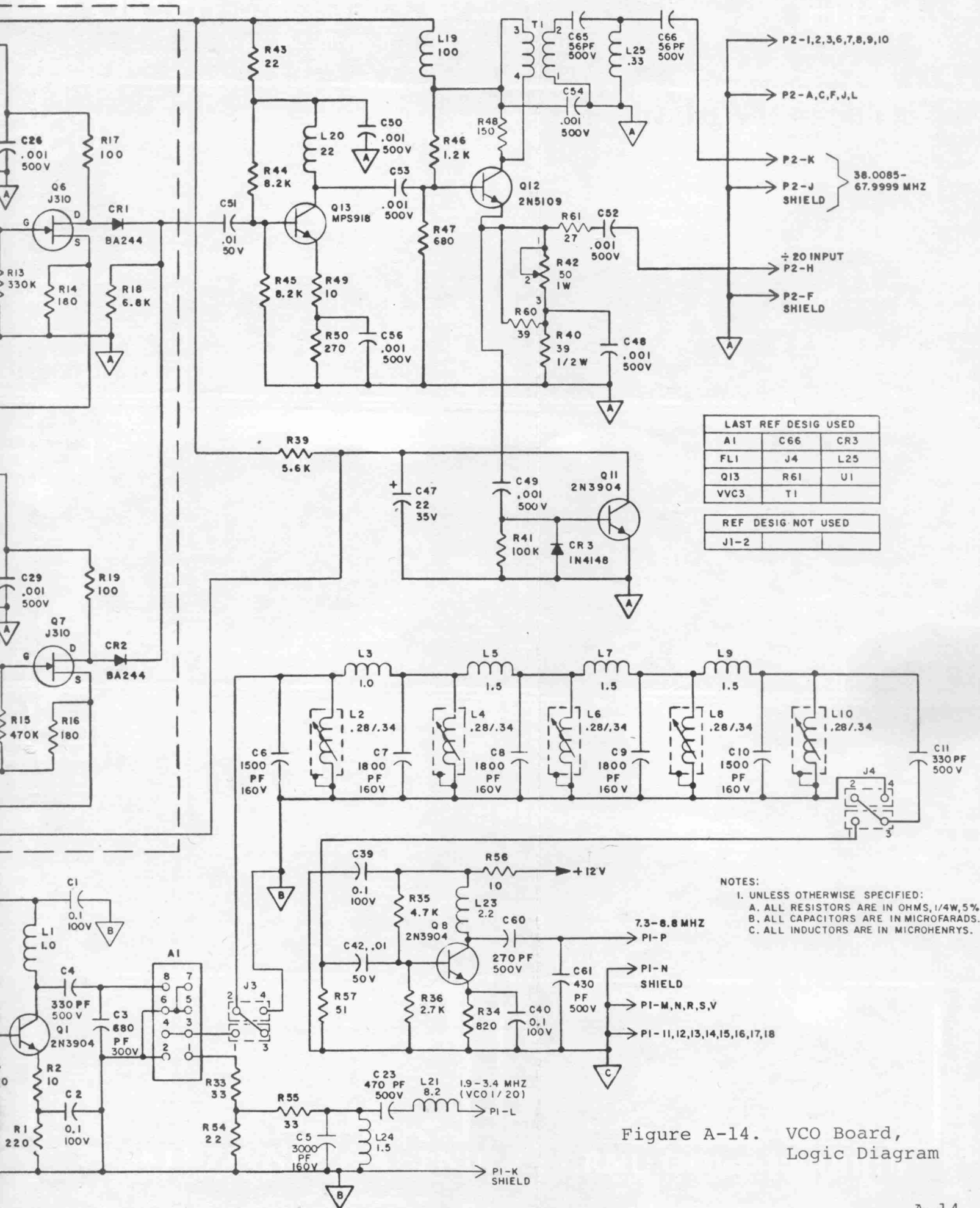
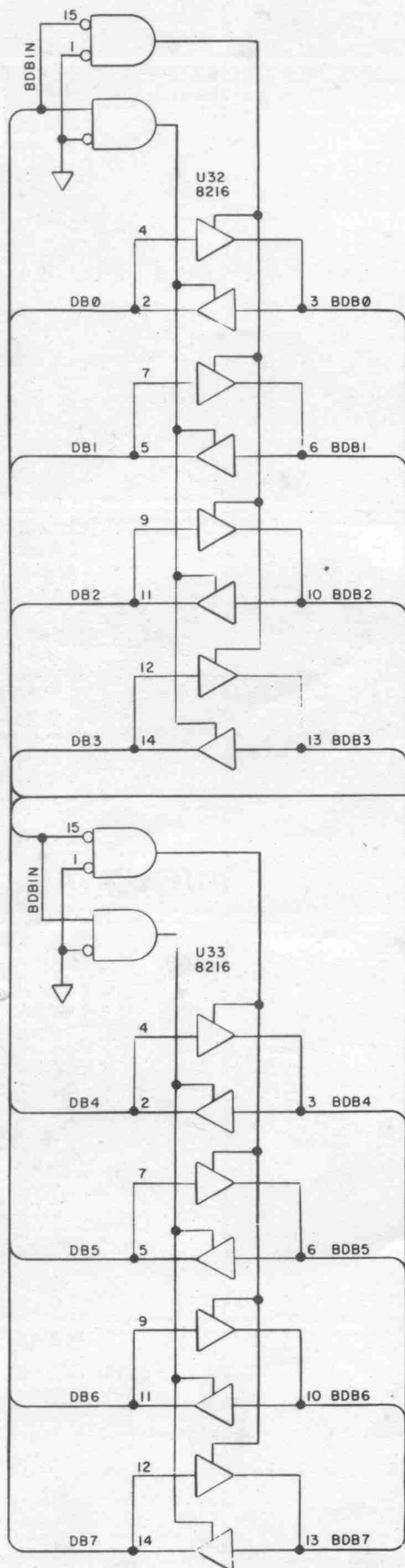


Figure A-14. VCO Board, Logic Diagram



PI-3 > REM ENABLE

PI-17 > +12V

PI-T > +9V UNREG

PI-18 > +5V

PI-V > GND

PI-U > -5V

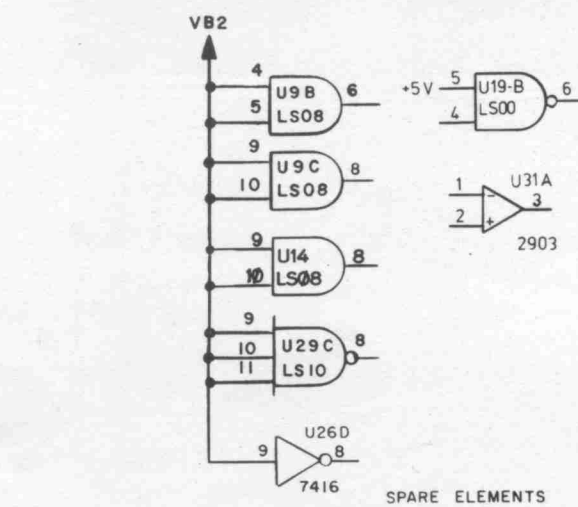
PI-5 > BATT OP +

PI-4 > BATT OP -

PI-A > VARIABLE VOLTS'

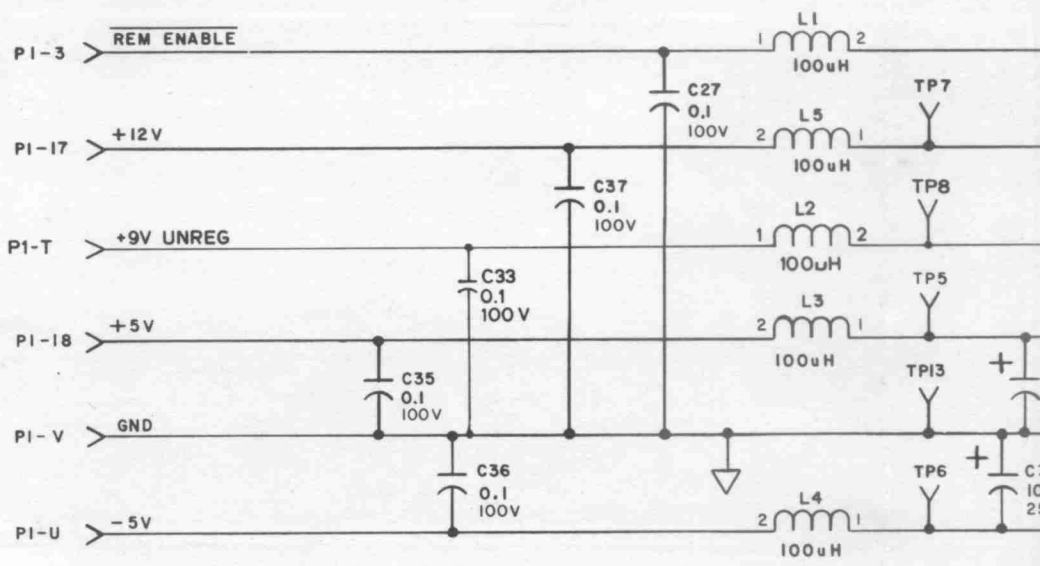
PI-2 > S METER +

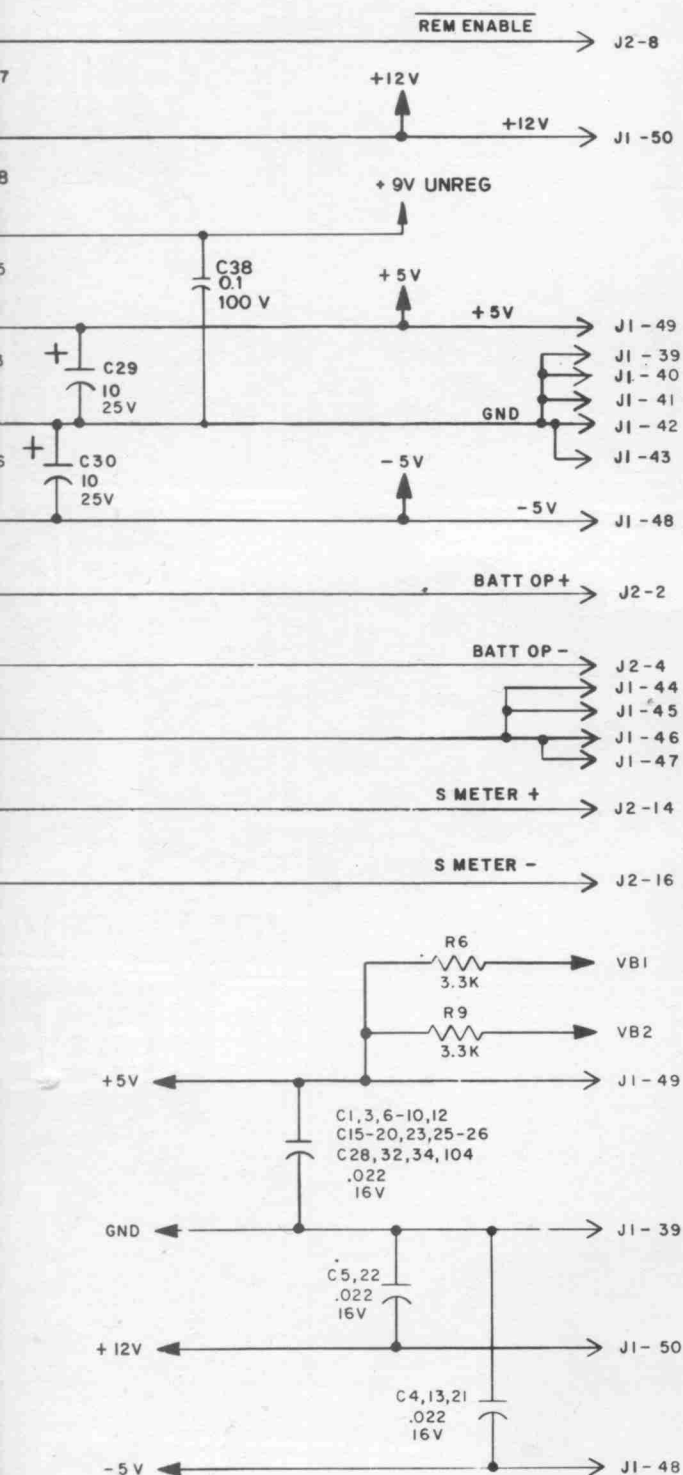
PI-1 > S METER -



DB0-7, BDBIN 2C7 U7-6

BDB0-7 288 U11-15





LAST REF DESIG USED		
C106	CR7	J2
L5		Q1
R49	TP13	U33

REF DESIG NOT USED	
C24, 31, 39-99, 102	R15-19, 21-42
CR4-6	C103, 105

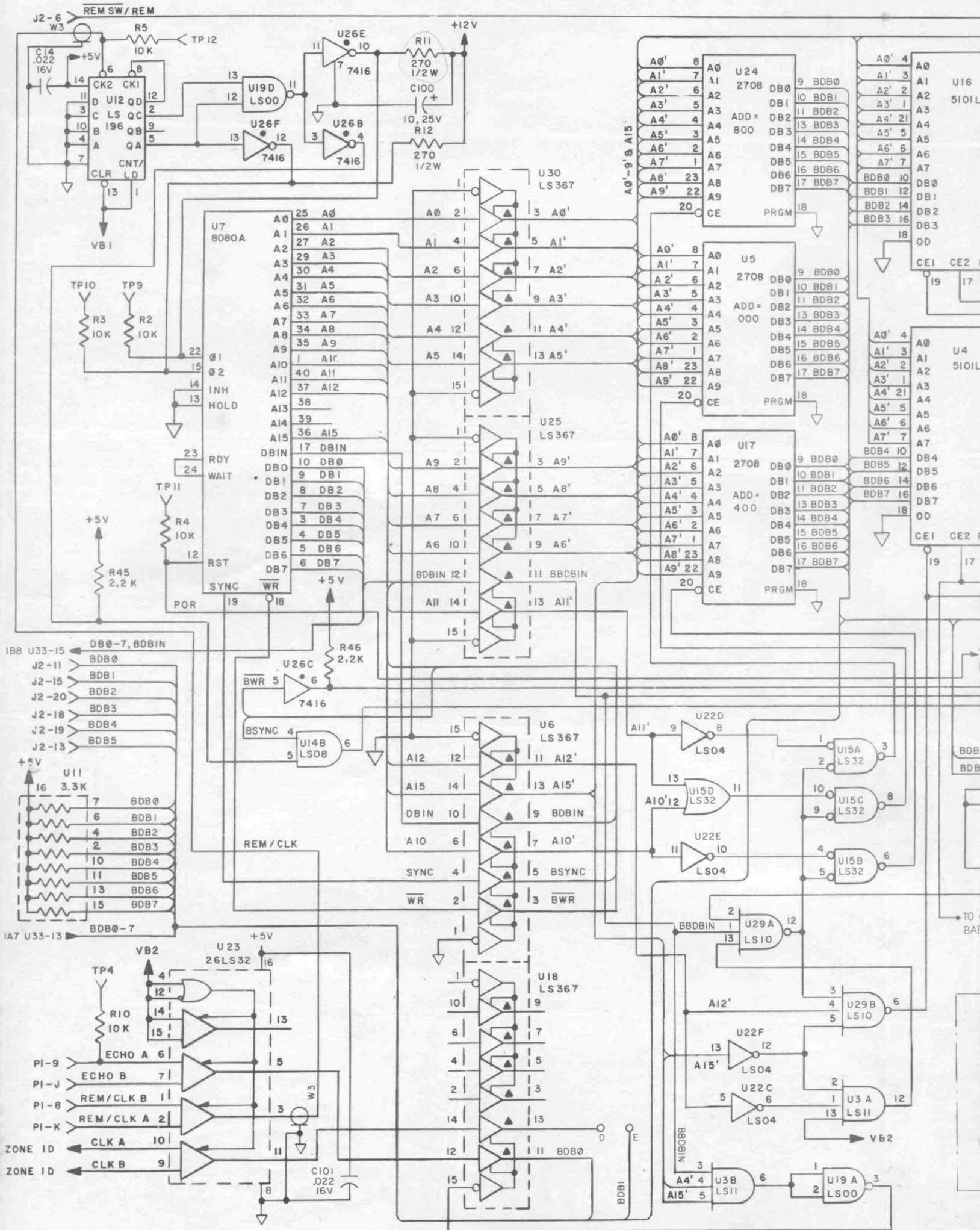
NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL:

CAPACITORS VALUES ARE IN μ F.

RESISTORS ARE 1/4 W, 5% VALUES ARE IN OHMS.

Figure A-15. Microprocessor Board, Logic Diagram (Sheet 1)



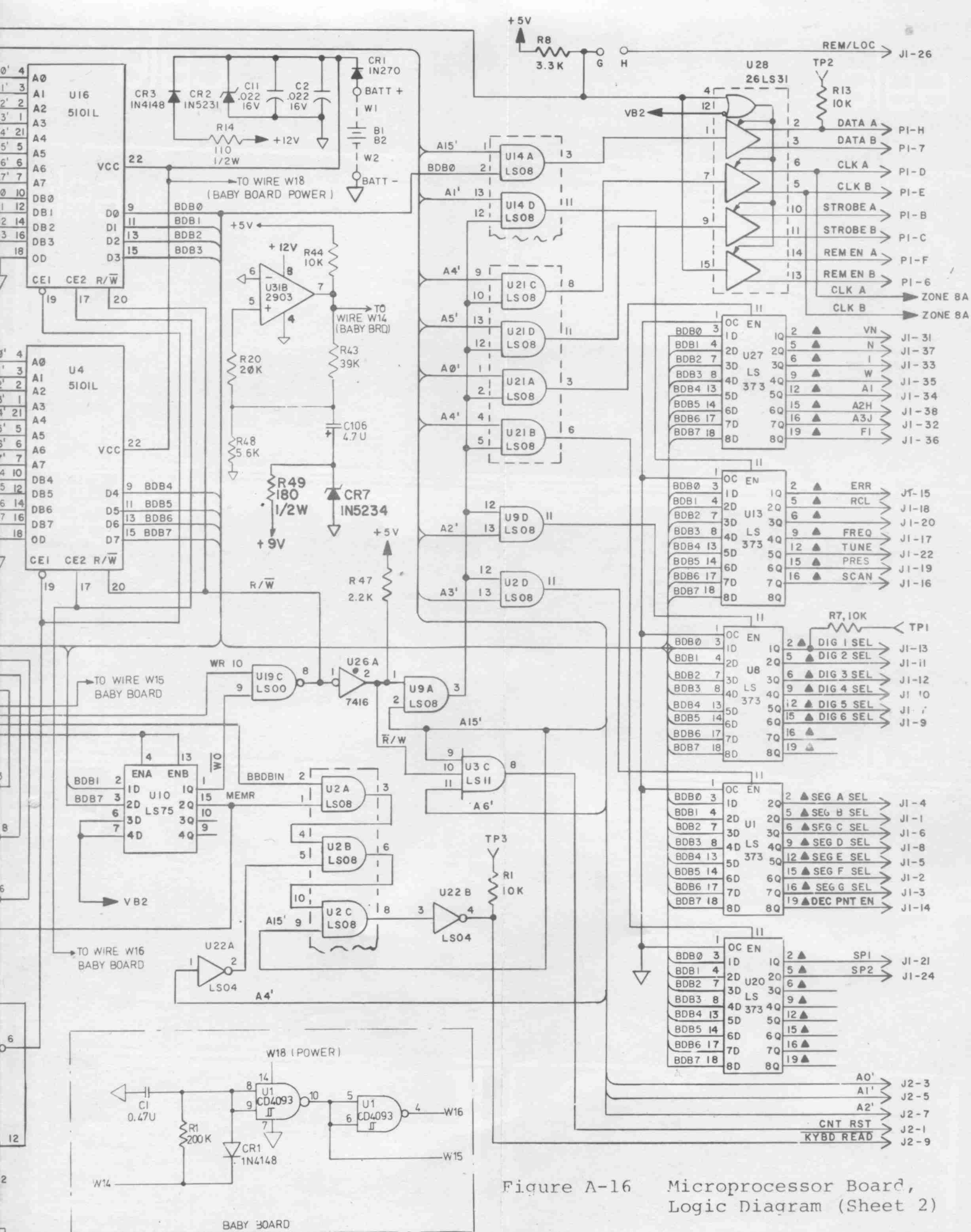
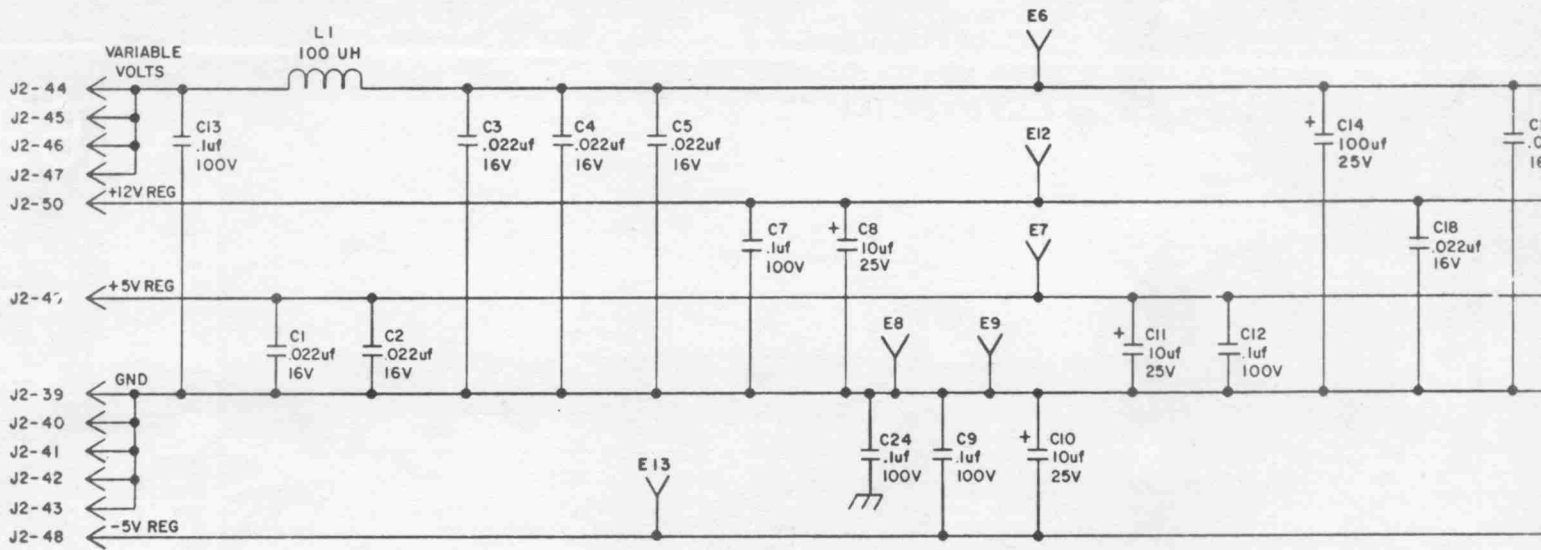
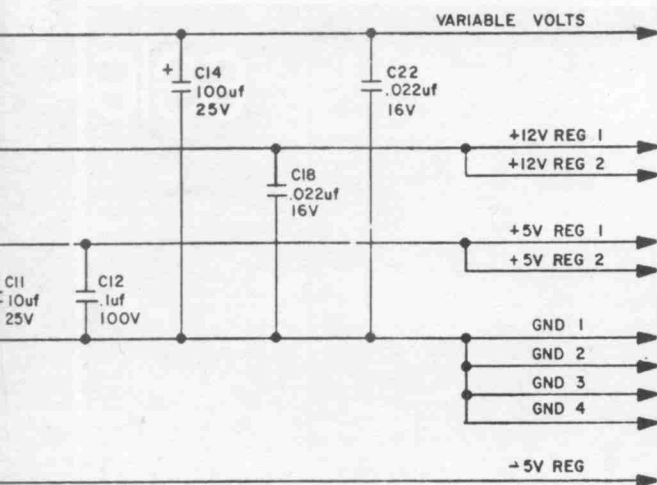


Figure A-16 Microprocessor Board, Logic Diagram (Sheet 2)



LAST REF DESIG USED		
C25	DS11	E20
J2	L1	R27
S28	U25	VR1
W3	XU14	

REF DESIG NOT USED		
DS7,9	XU1-8	



NOTES:

1. UNLESS OTHERWISE SPECIFIED;
A. ALL RESISTOR VALUES ARE IN OHMS 1/4W, 5%
2. ALL INDICATORS MARKED WITH AN (*) ARE PART OF THE SWITCHES S21 THRU S28.

REF DESIG NOT USED		
DS 7,9	XU1-8	

Figure A-17. Display Board, Logic Diagram (Sheet 1)

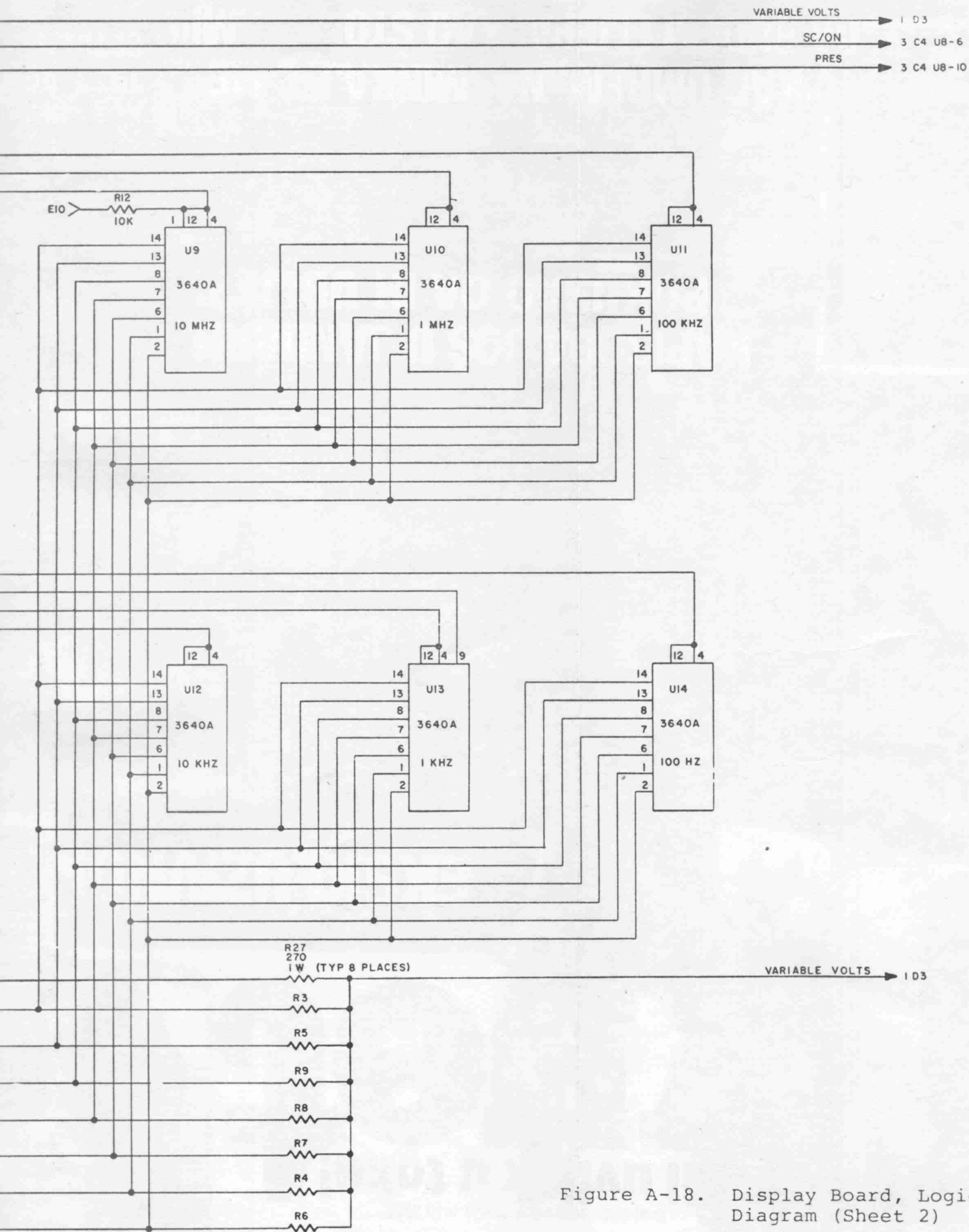
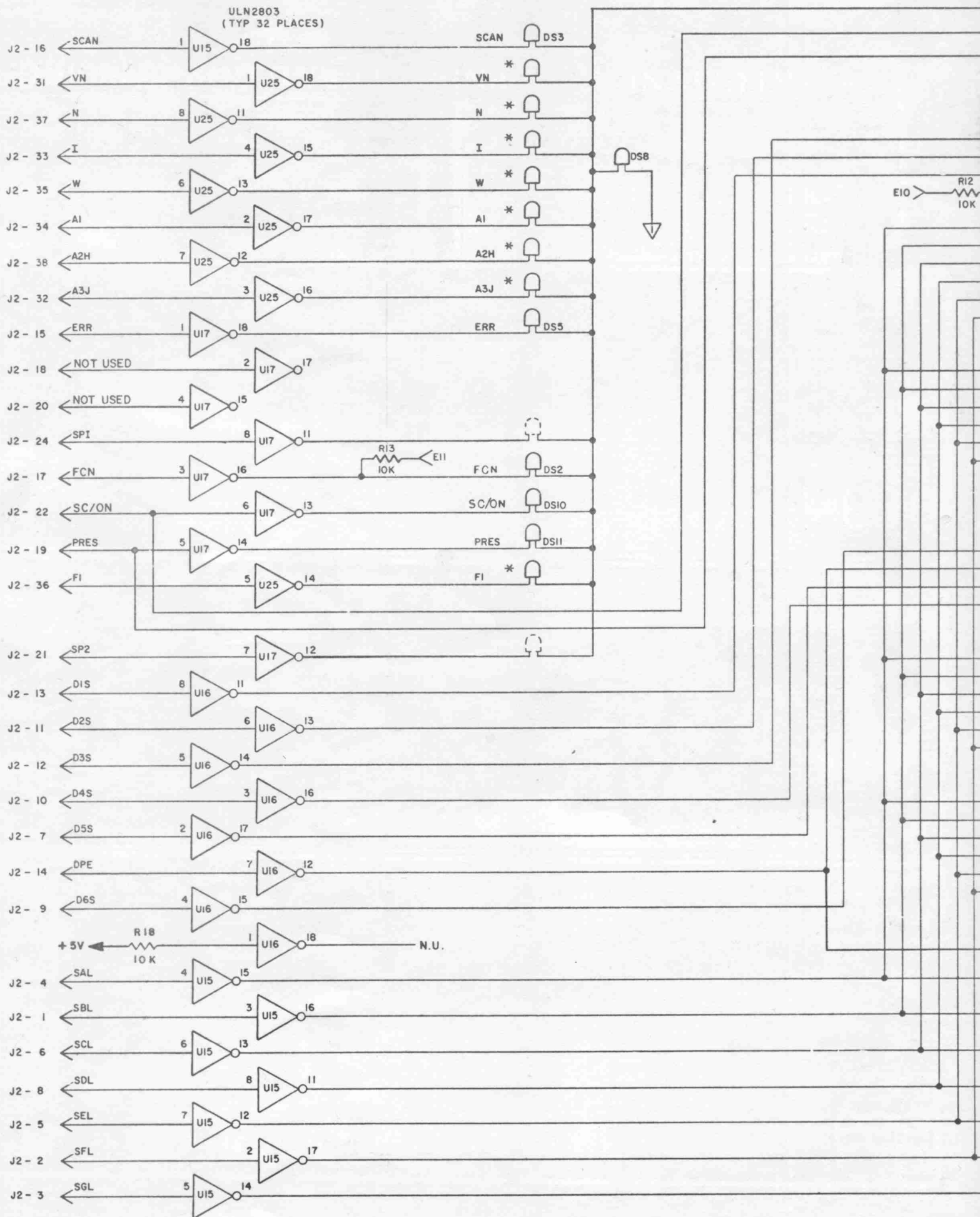
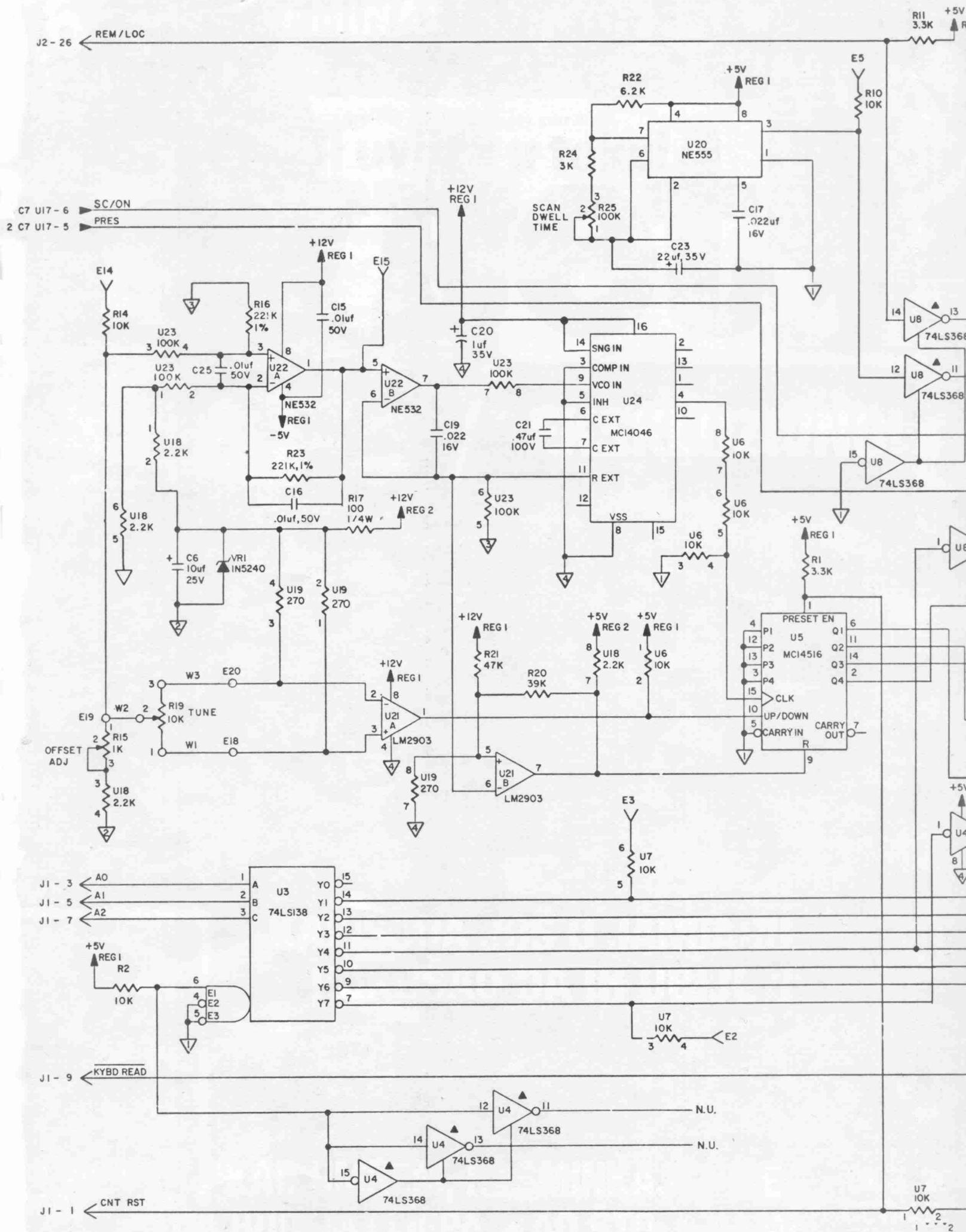
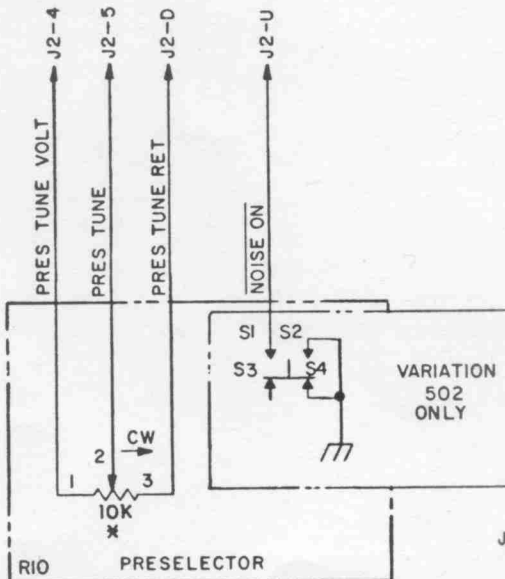
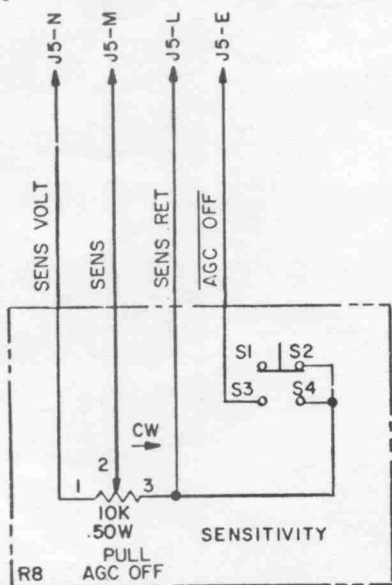
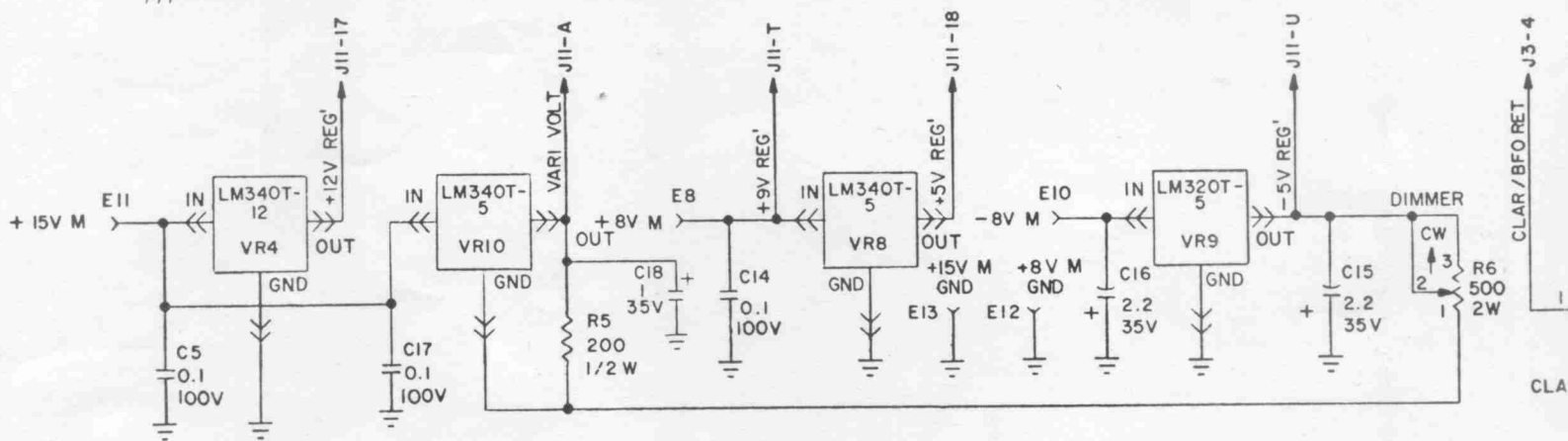
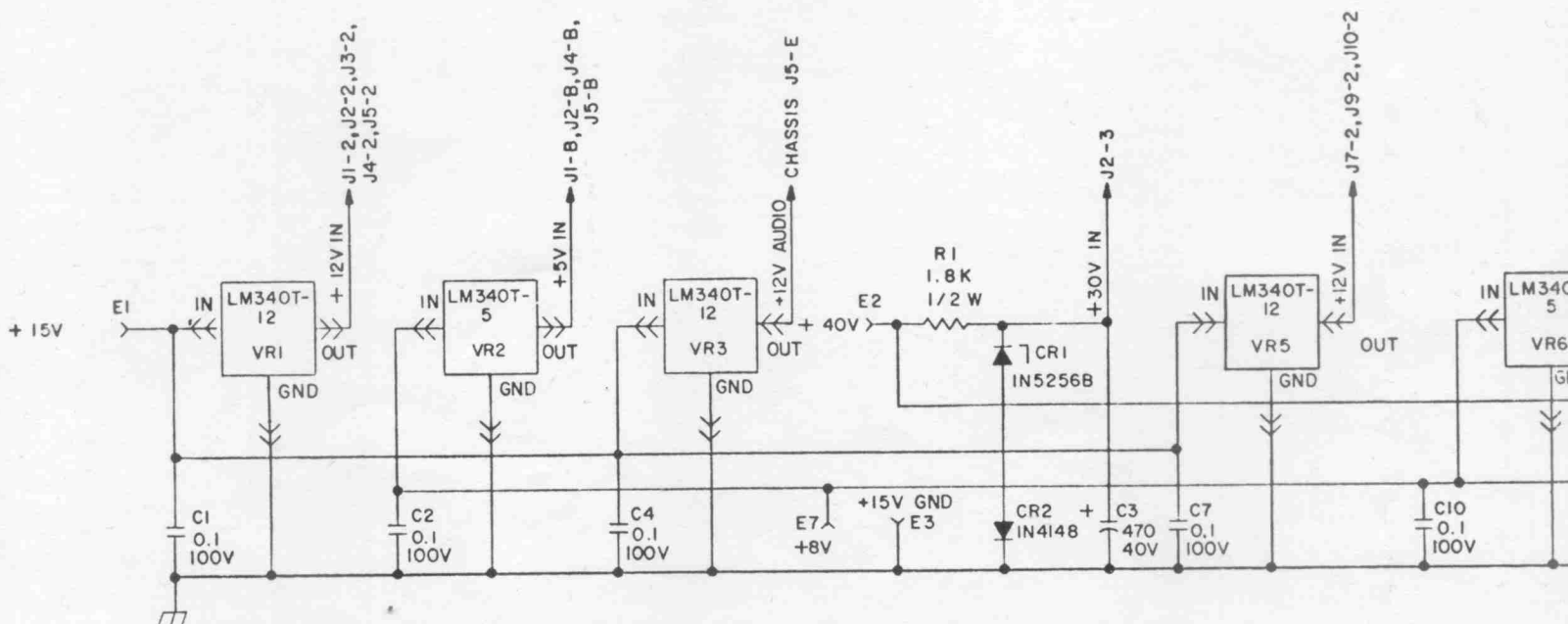


Figure A-18. Display Board, Logic Diagram (Sheet 2)

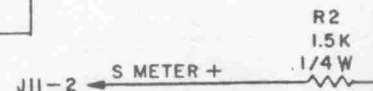




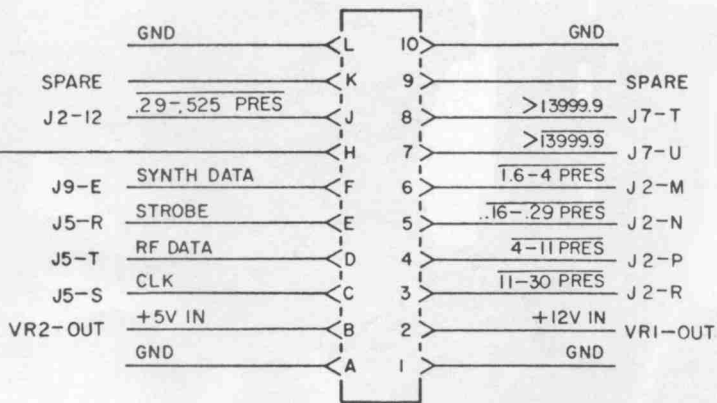


(OPTIONAL SWITCH, PUSH-NOISE ON)
 * 1W FOR -501
 .50W FOR -502

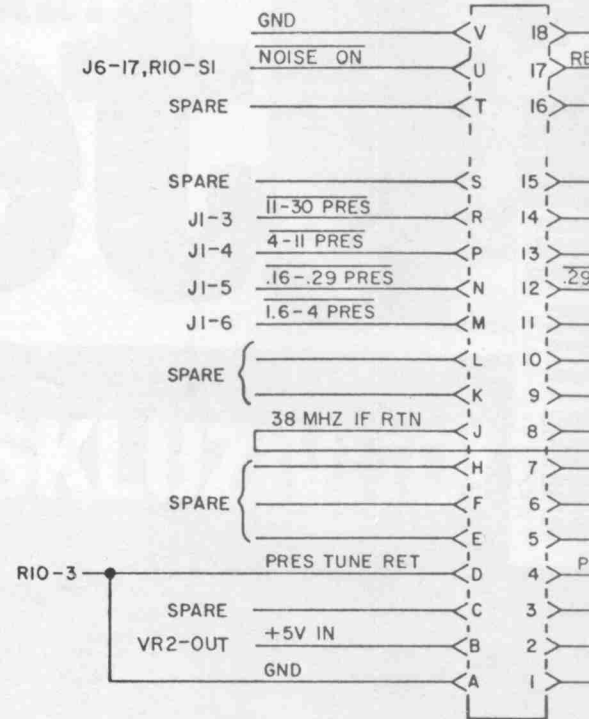
LAST COMP D	
C27	CR4
J11	R11
VR10	



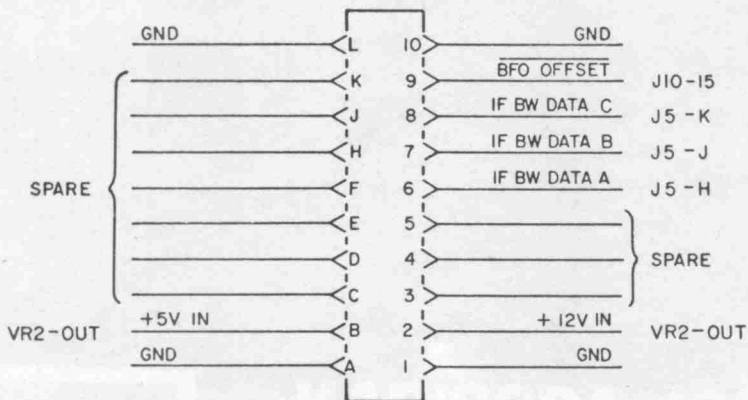
J1
RF FILTERS



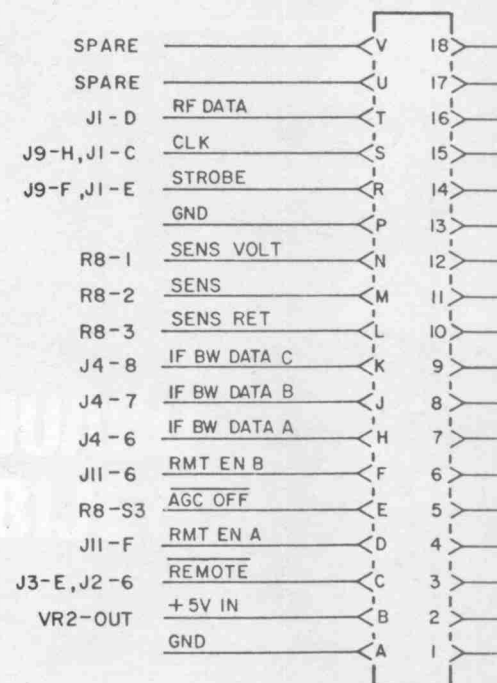
J2
PRE SELECT



J4
1.4 MHZ IF FILTER



J5
1.4 MHZ IF / DE



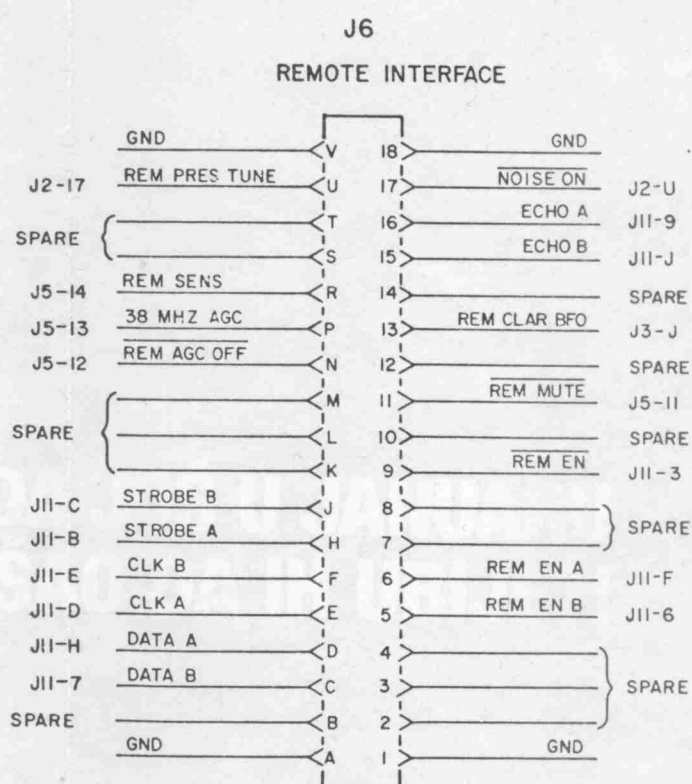
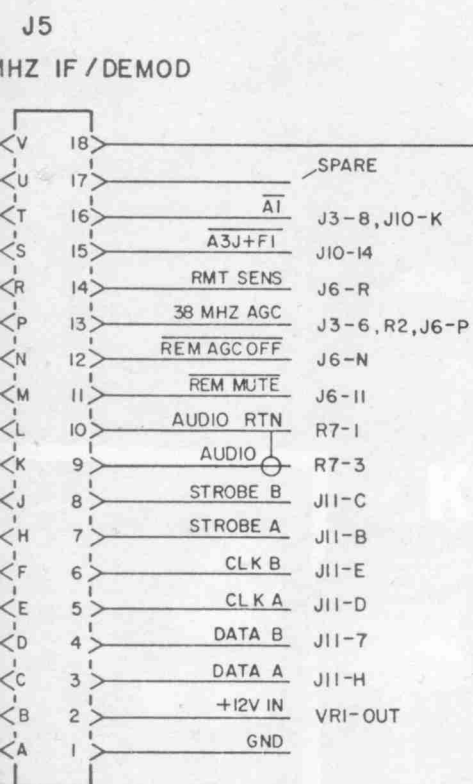
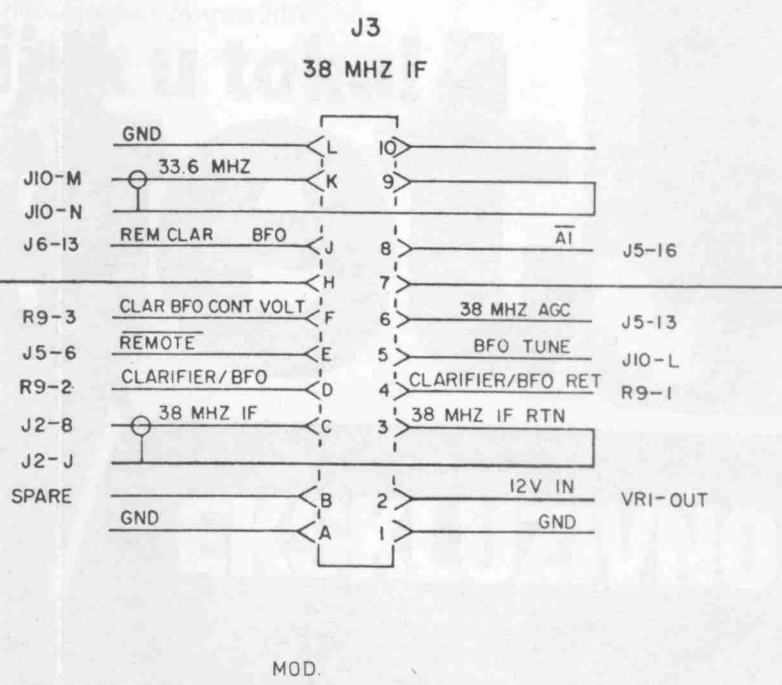
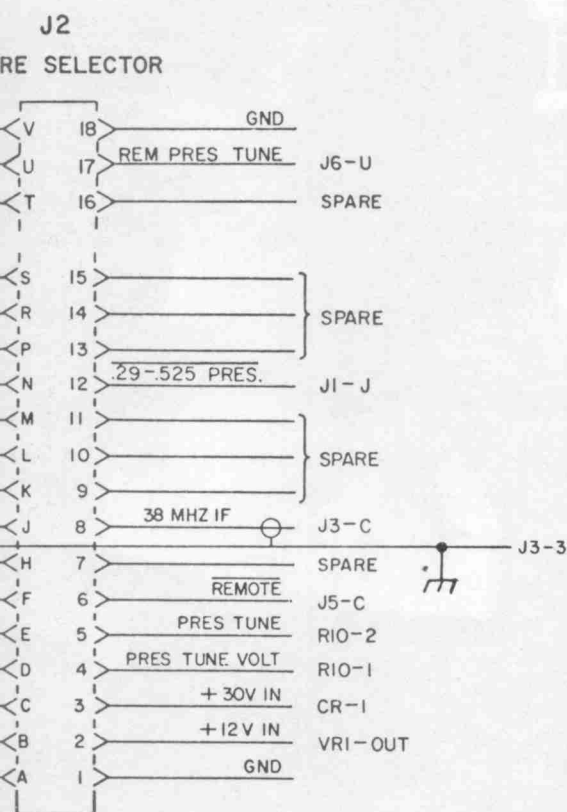
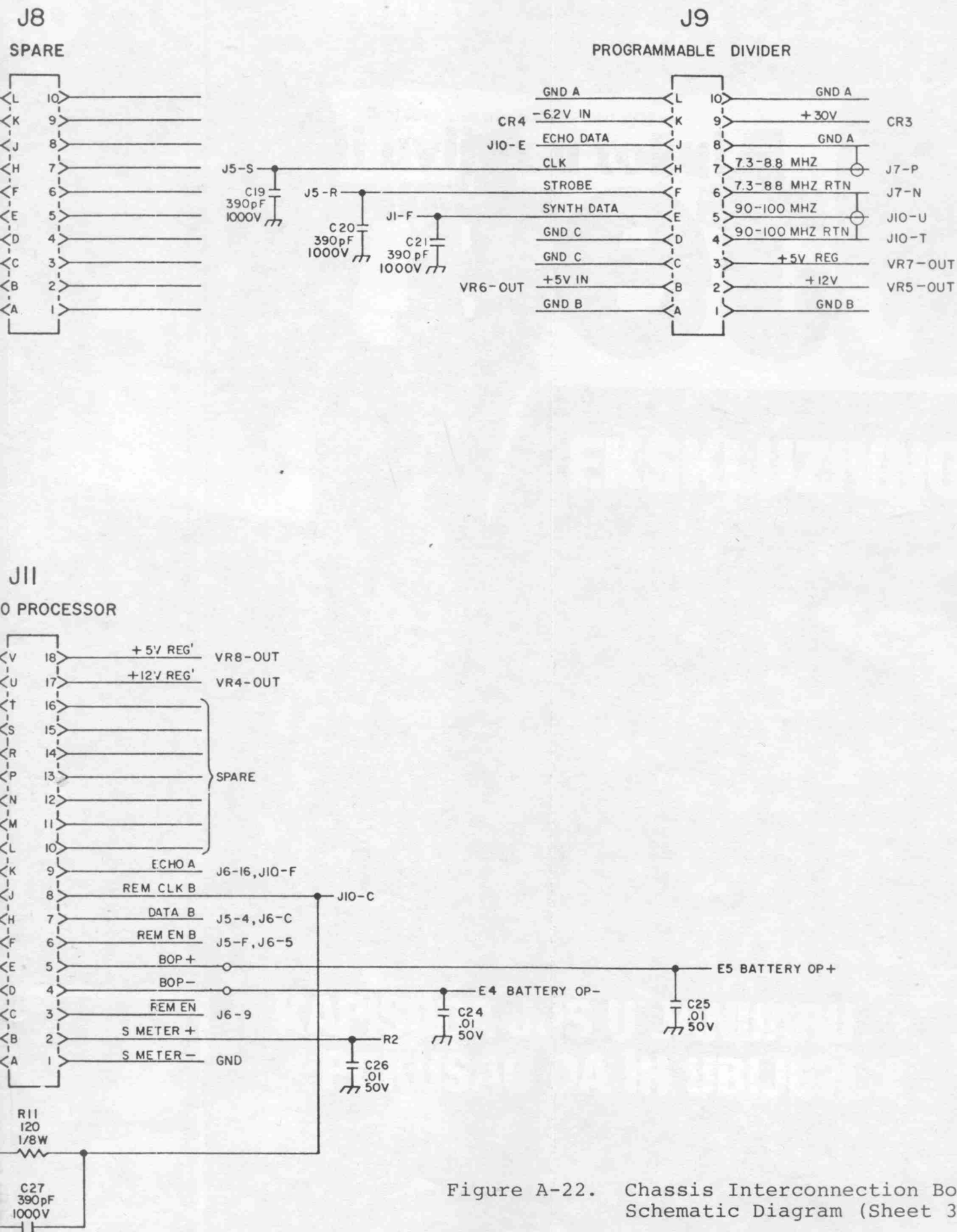
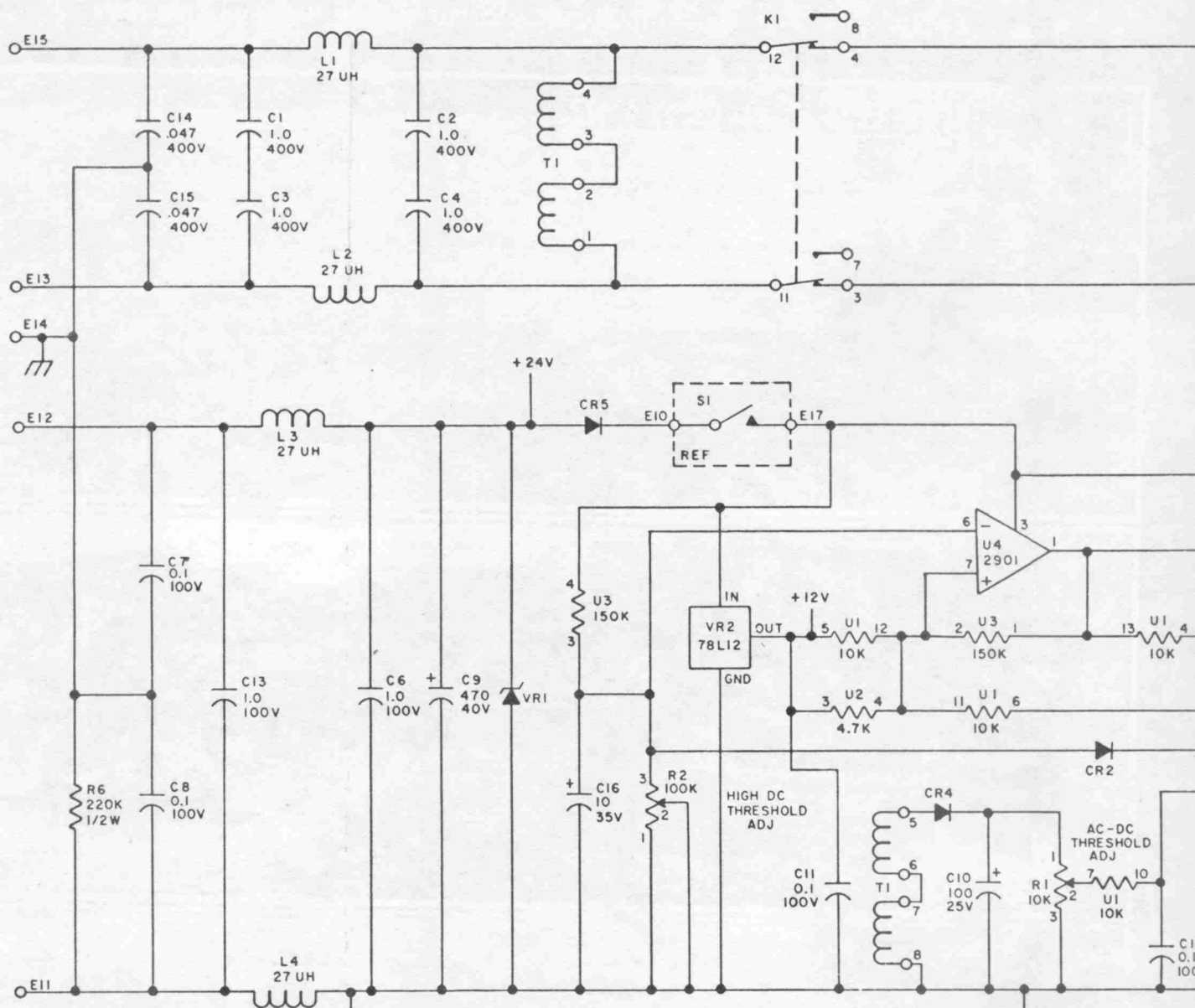


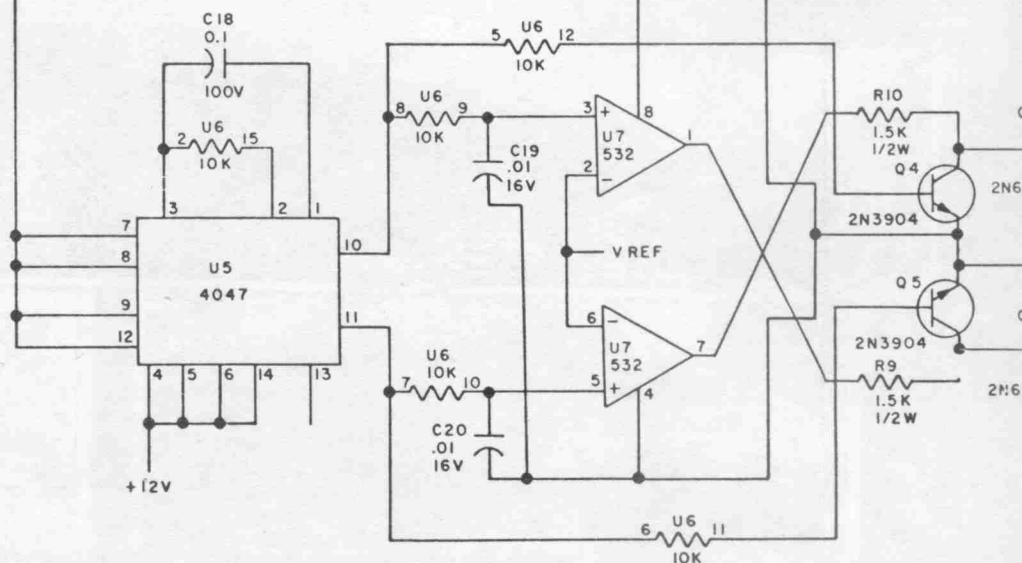
Figure A-21. Chassis Interconnection Board, Schematic Diagram (Sheet 2)
2000 Modification D/E

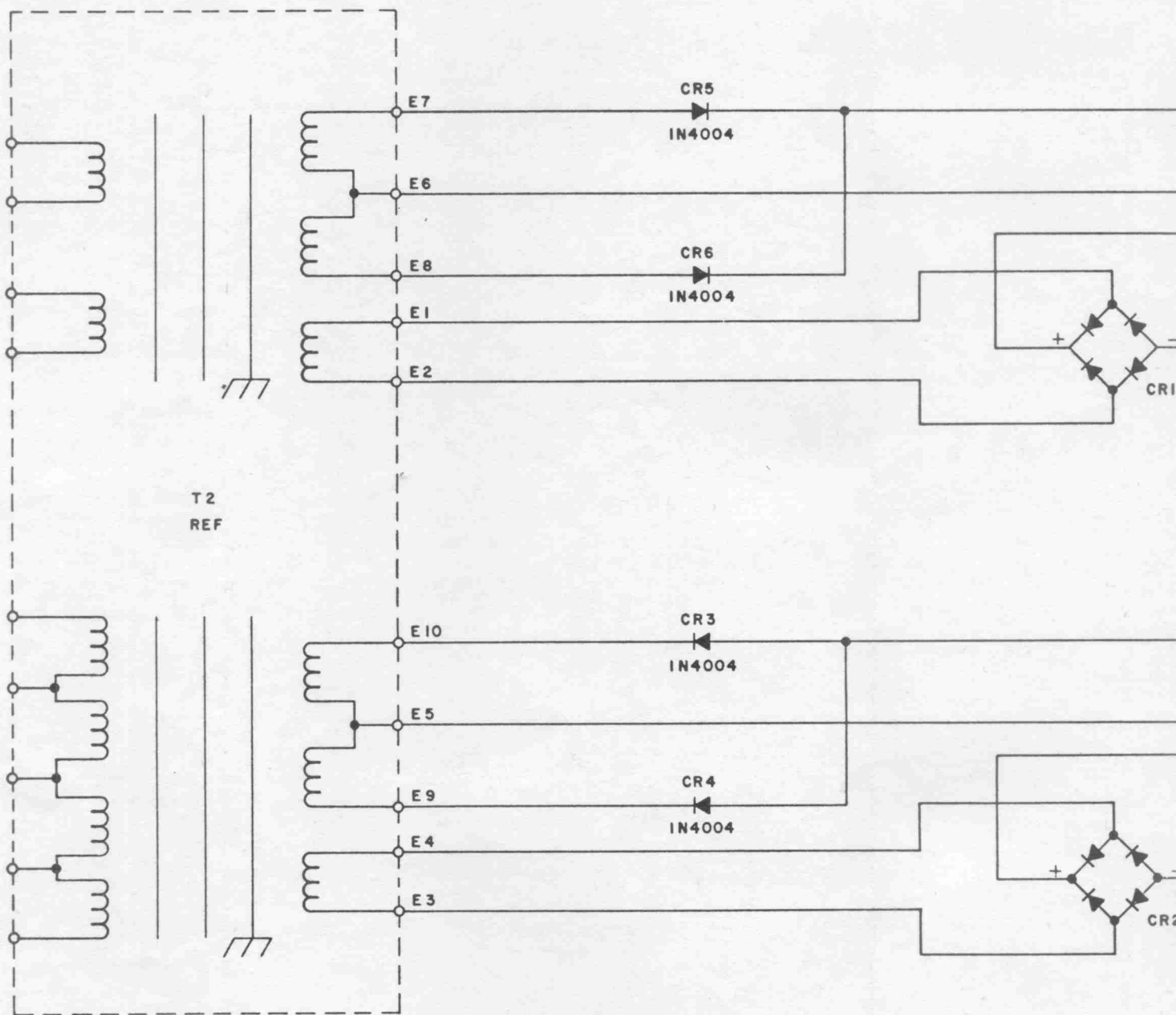




NOTES:

1. UNLESS OTHERWISE SPECIFIED:
 (A) ALL RESISTORS ARE IN OHMS, 5%.
 (B) ALL CAPACITORS ARE IN MICROFARADS.
 (C) ALL DIODES ARE IN4148.
2. VARIATION -501, W3 IS SHOWN FOR 220 VOLT APPLICATION.
3. VARIATION -502, W1-2 IS SHOWN FOR 110 VOLT APPLICATION.





LAST REF DESIG USED		
C4	CR6	E21

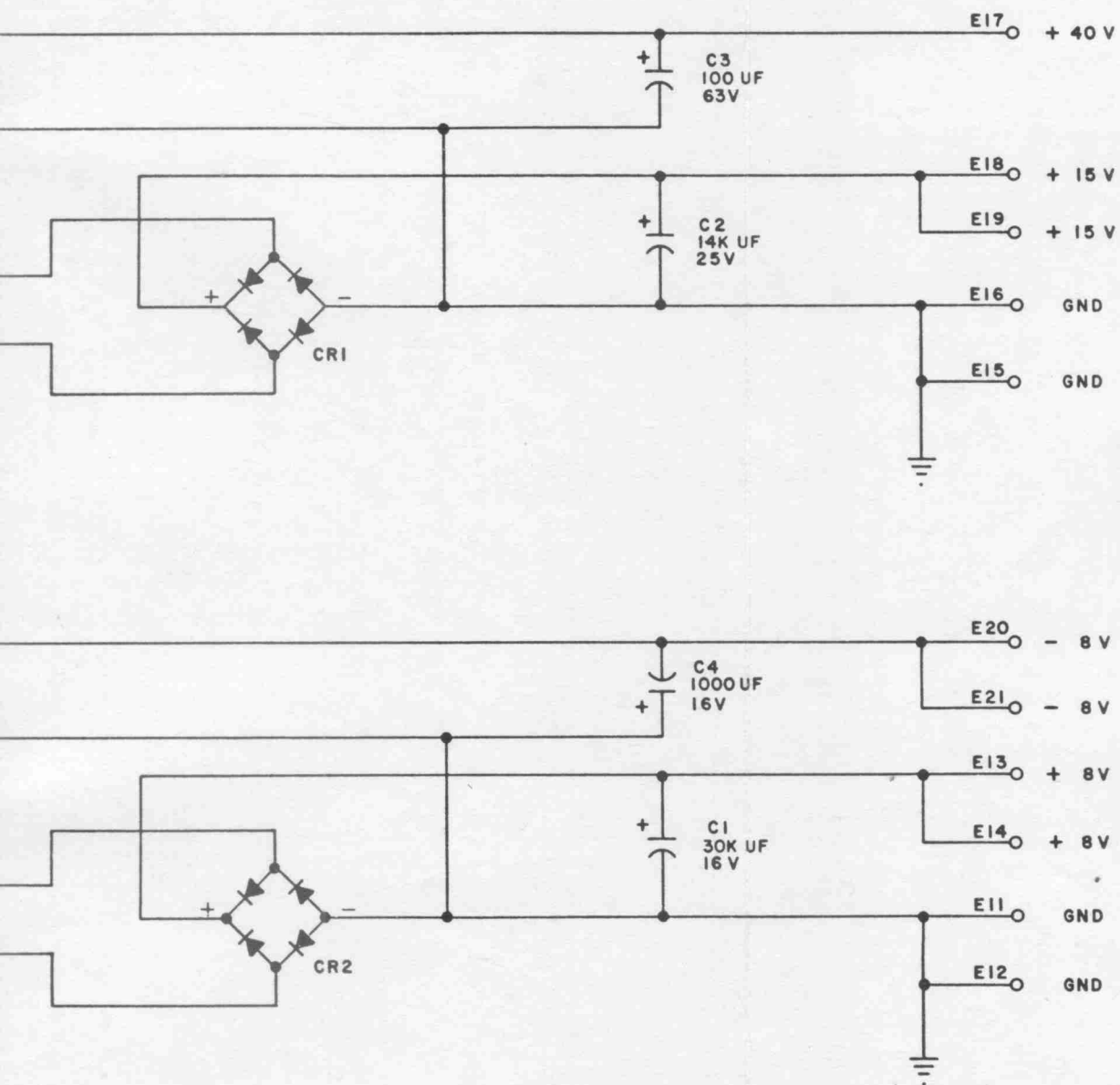


Figure A-24. Power Filter Board, Schematic Diagram