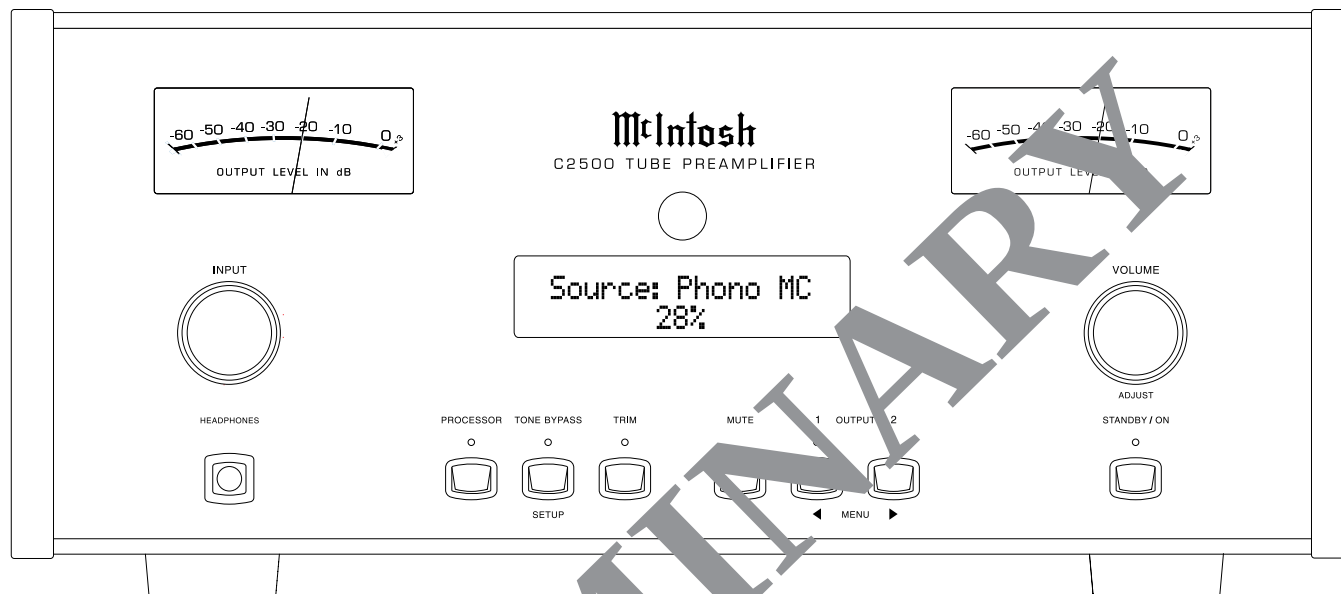




C2500

TUBE PREAMPLIFIER

SERIAL NO. ADF1001 And Above



CONTENTS

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SERVICE MANUAL

PERFORMANCE SPECIFICATIONS

Specifications

Frequency Response

+0, -0.5dB from 20Hz to 20,000Hz
+0, -3dB from 10Hz to 100,000Hz

Total Harmonic Distortion

0.08% from 20Hz to 20,000Hz

Rated Output (Main)

2.5V Unbalanced, 5V Balanced

Maximum Output

8V RMS Unbalanced, 16V RMS Balanced

Sensitivity (for rated output)

High Level, 450mV unbalanced, 900mV balanced
Phono MM, 4.5mV
Phono MC, 0.45mV

Signal To Noise Ratio (A-Weighted)

High Level, 100dB below rated output
Phono MM, 75dB below 5mV input
Phono MC, 75dB below 0.5mV input

Input Impedance

High Level, 22K ohms unbalanced, 44k ohms balanced
Phono MM, 47K ohms; 50 to 750pF, in 50pF steps
Phono MC, 25, 50, 100, 200, 400 or 1,000 ohms;
100pF

Maximum Input Signal

High Level, 8V Unbalanced, 16V Balanced
Phono MM, 80mV
Phono MC, 8mV

Voltage Gain

High Level to Record Output: 0dB
High Level to Main Output: 15dB
Phono MM to Record Output: 40dB
Phono MC to Record Output: 60dB

Output Impedance

220 ohms

Headphone Impedance

20 ohms to 600 ohms

Digital Input Sample Rates

Optical: 16Bit, 24Bit - 32kHz to 96kHz
Coaxial: 16Bit, 24Bit - 32kHz to 96kHz
USB: 16Bit, 24Bit, 32Bit - 32kHz to 192kHz

Power Control and Trigger Output

12VDC, 25mA

Power Requirements

Field AC Voltage conversion of the C2500 is not possible.

The C2500 is factory configured for one of the following AC Voltages:

100 Volts, 50/60Hz at 50 watts
110 Volts, 50/60Hz at 50 watts
120 Volts, 50/60Hz at 50 watts
220 Volts, 50/60Hz at 50 watts
230 Volts, 50/60Hz at 50 watts
240 Volts, 50/60Hz at 50 watts
Standby Power, less than 0.5 watts

Note: Refer to the rear panel of the C2500 for the correct voltage.

Overall Dimensions

Width is 17-1/2 inches (44.45cm)
Height is 7-5/8 inches (19.37cm) including feet
Depth is 18 inches (45.72cm) including the Front Panel,
Knobs and Cables

Weight

30.5 pounds (13.8 kg) net, 46 pounds (20.9 kg) in shipping carton

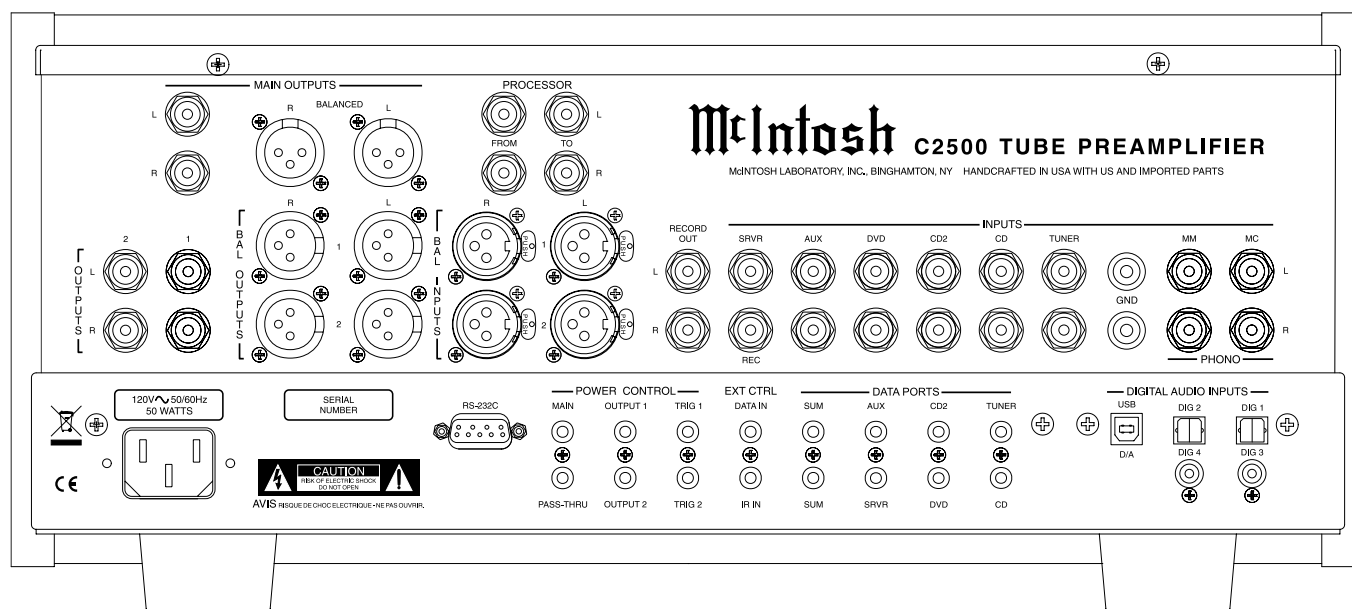
Shipping Carton Dimensions

Width is 27 inches (68.6cm)
Height is 14 inches (35.6cm)
Depth is 25 inches (63.5cm)

NOTES

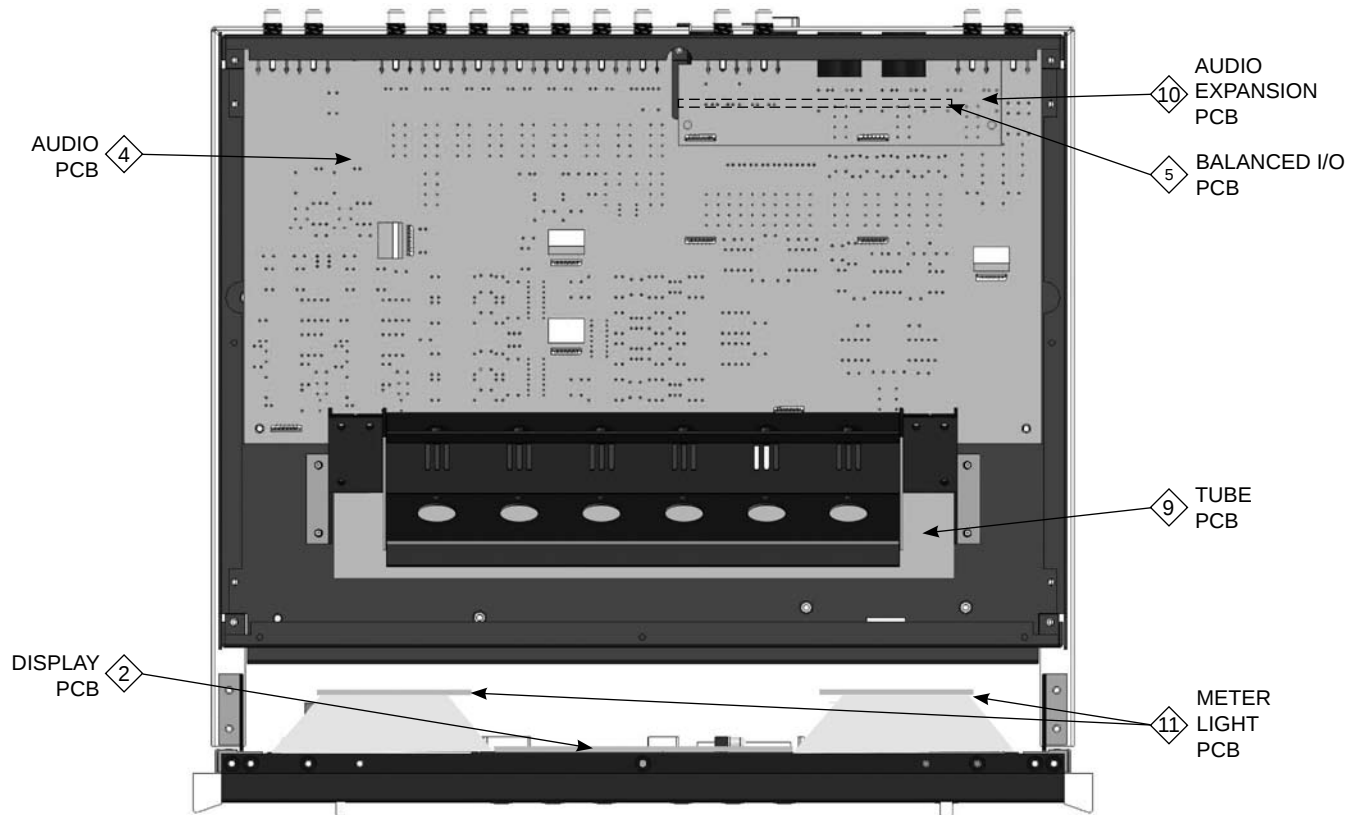
1. The heavy lines on the schematics denote the primary signal path.
2. Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
 - a. AC input at 120 volts, 50/60Hz
 - b. All voltages are $\pm 10\%$ with respect to ground. A high impedance (10megaohm) voltmeter must be used.
3. Unless otherwise specified:
 - a. Resistors values are in ohms.
 - b. Capacitor values are in microfarads (uF).
 - c. Inductor values are in microhenries (uH).
4. On PC Board Drawings, Square Pad Indicates:
 - a. Polarized Capacitors - Positive
 - b. Diode - Cathode
 - c. Others - Pin 1
5. WARNING:
Parts marked with the symbol  have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

REAR PANEL

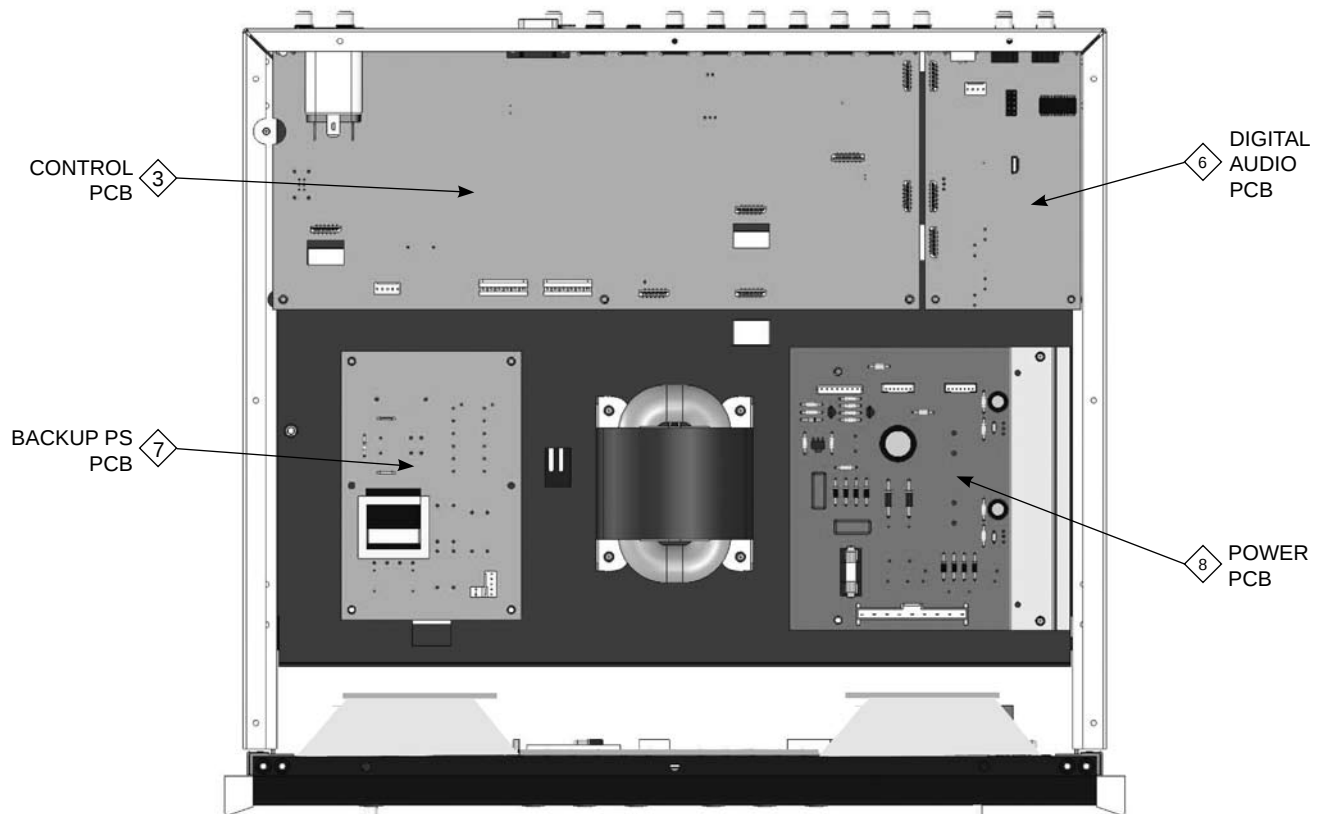


SECTION LOCATIONS

TOP VIEW WITH COVER REMOVED



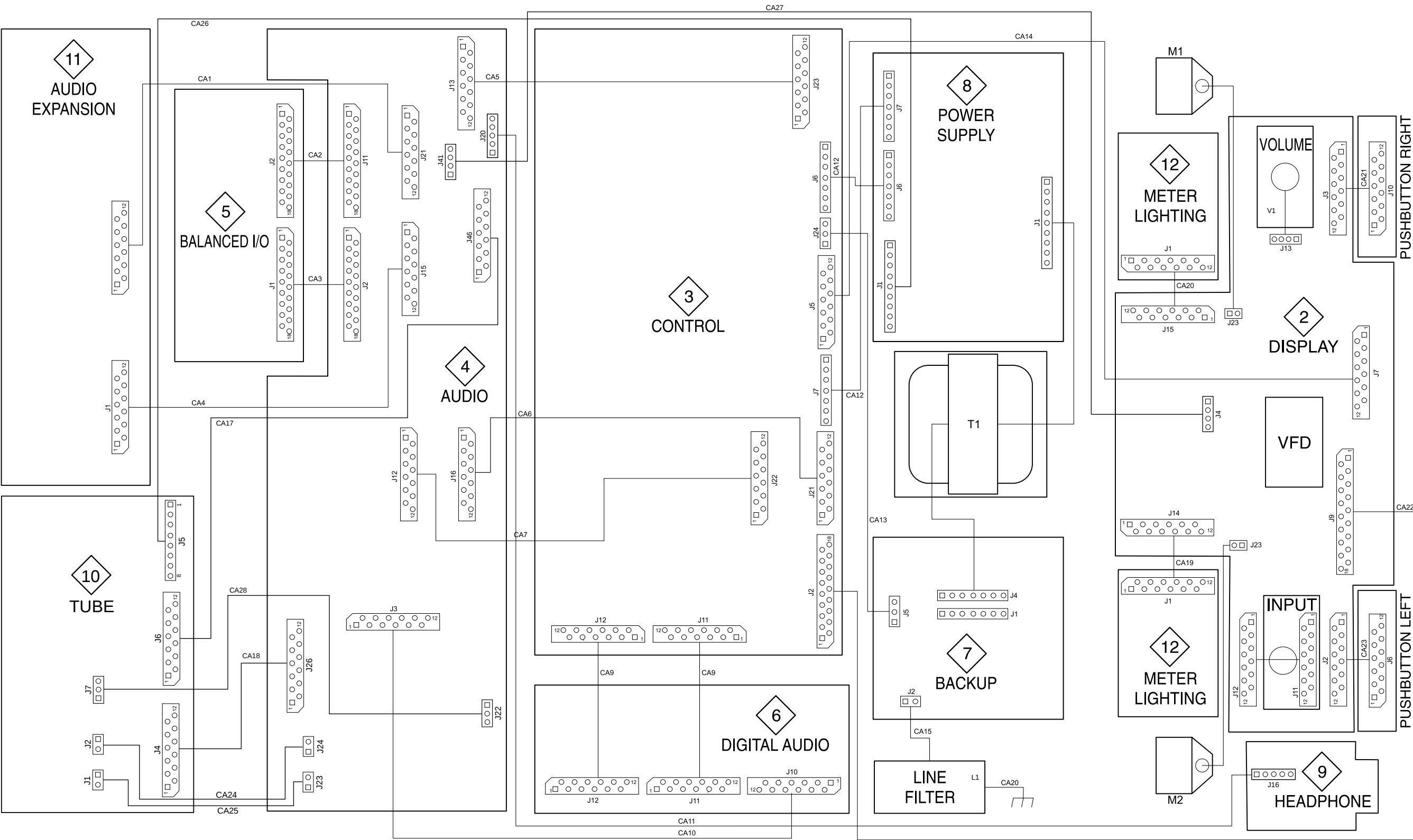
BOTTOM VIEW WITH COVER REMOVED



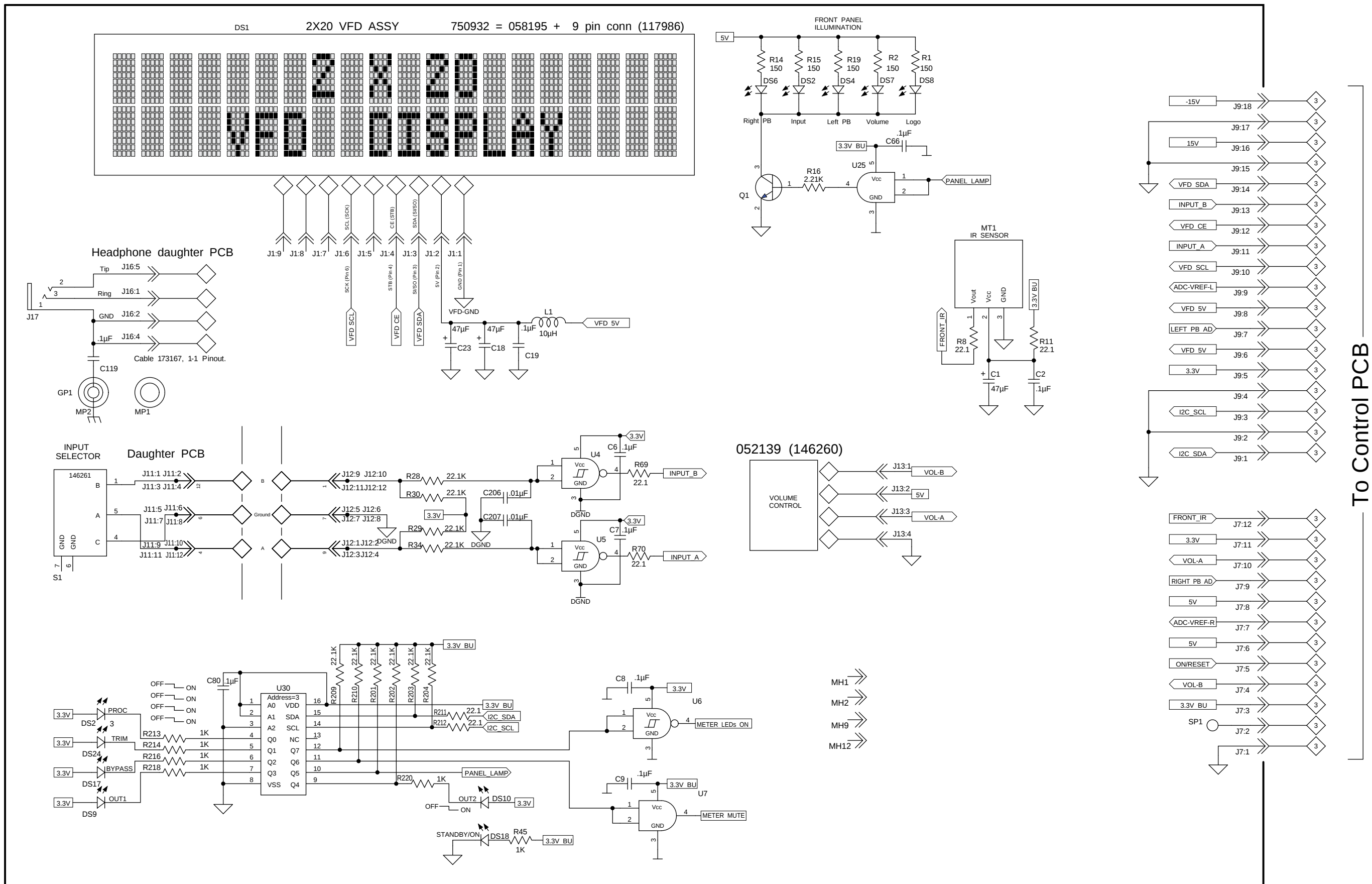
BLOCK DIAGRAM

C2500
TUBE PREAMPLIFIER

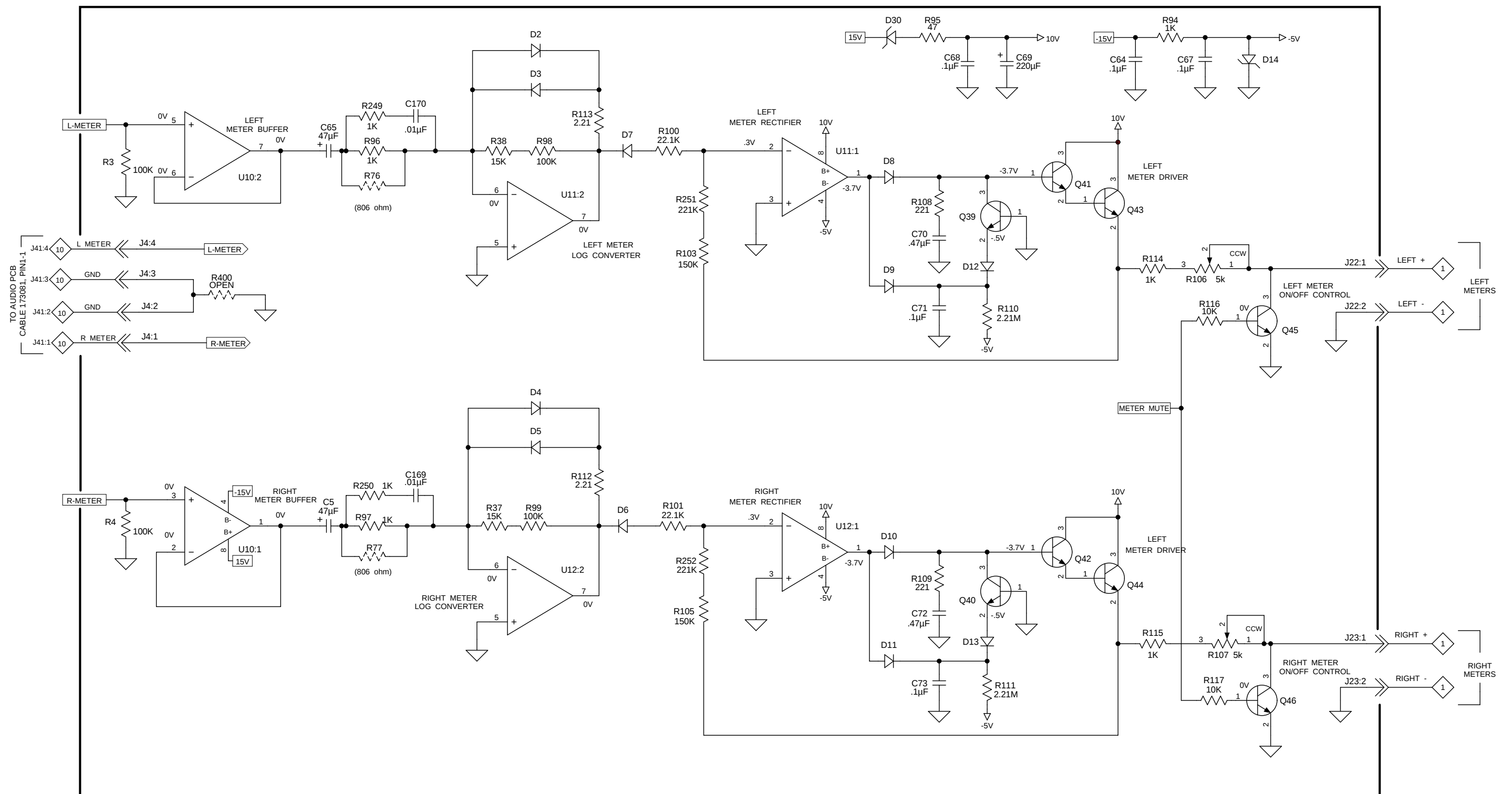
INTERCONNECT

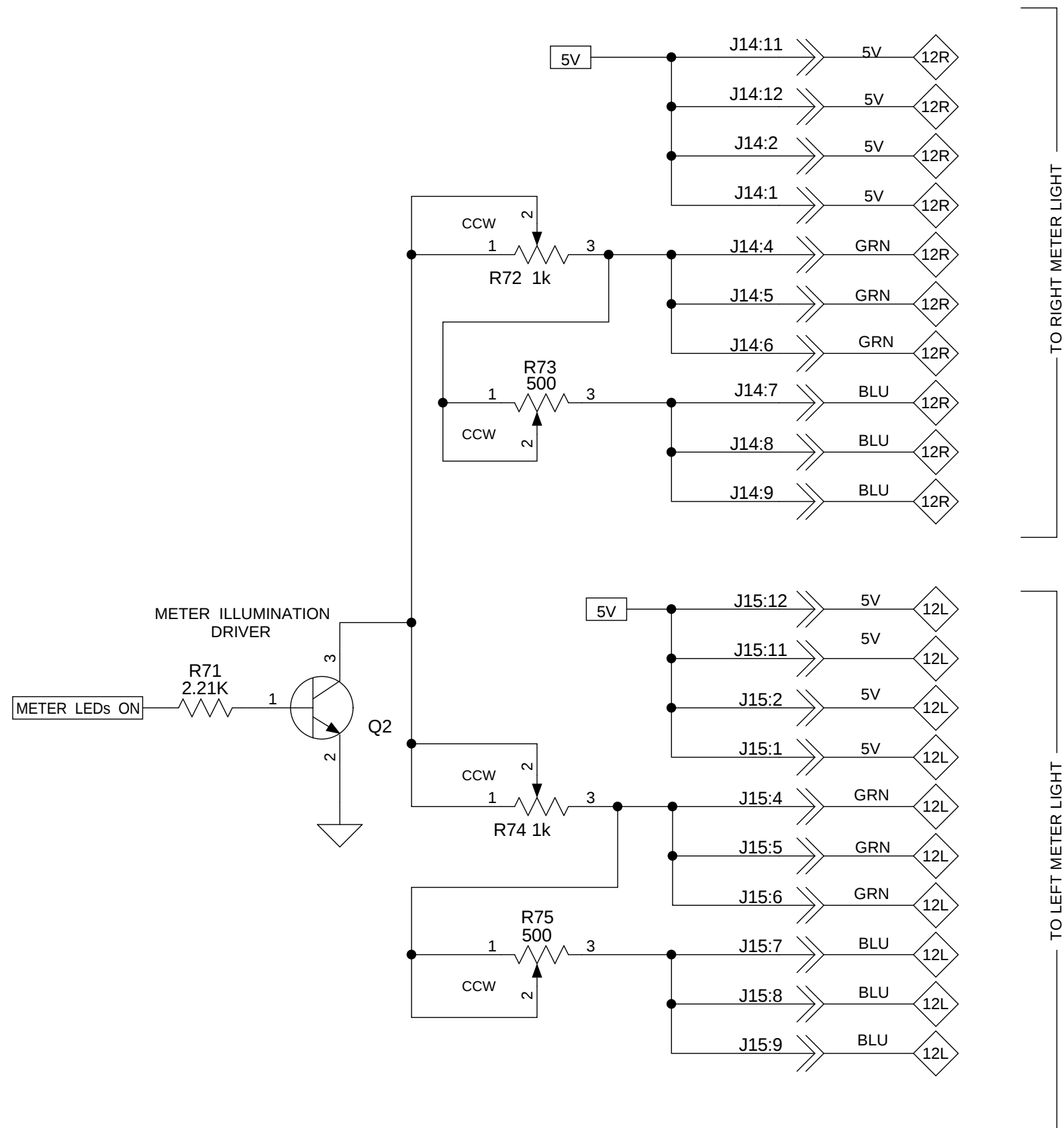


2 DISPLAY 751456 SCH 1 OF 4



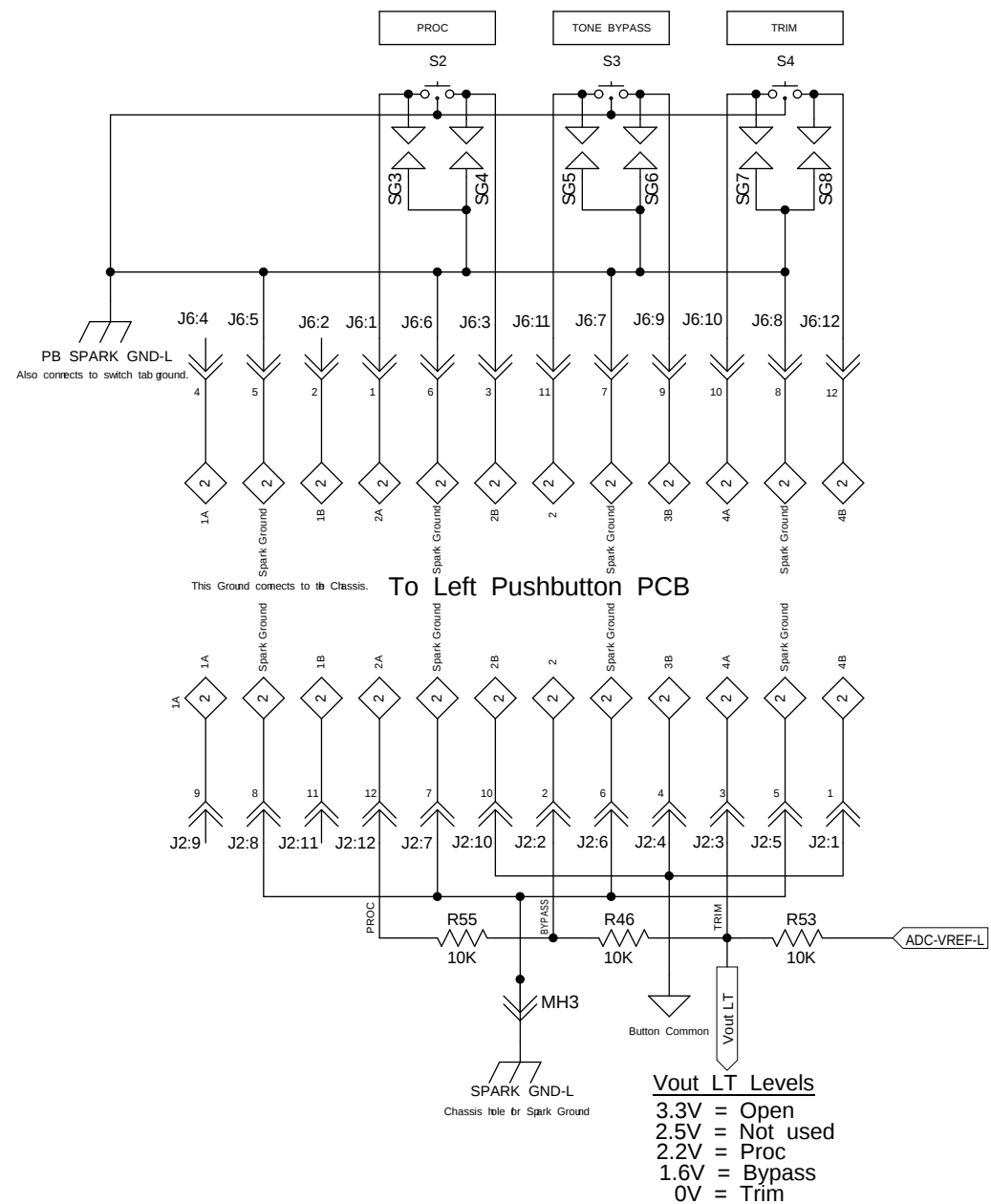
2 DISPLAY 751456 SCH 2 OF 4



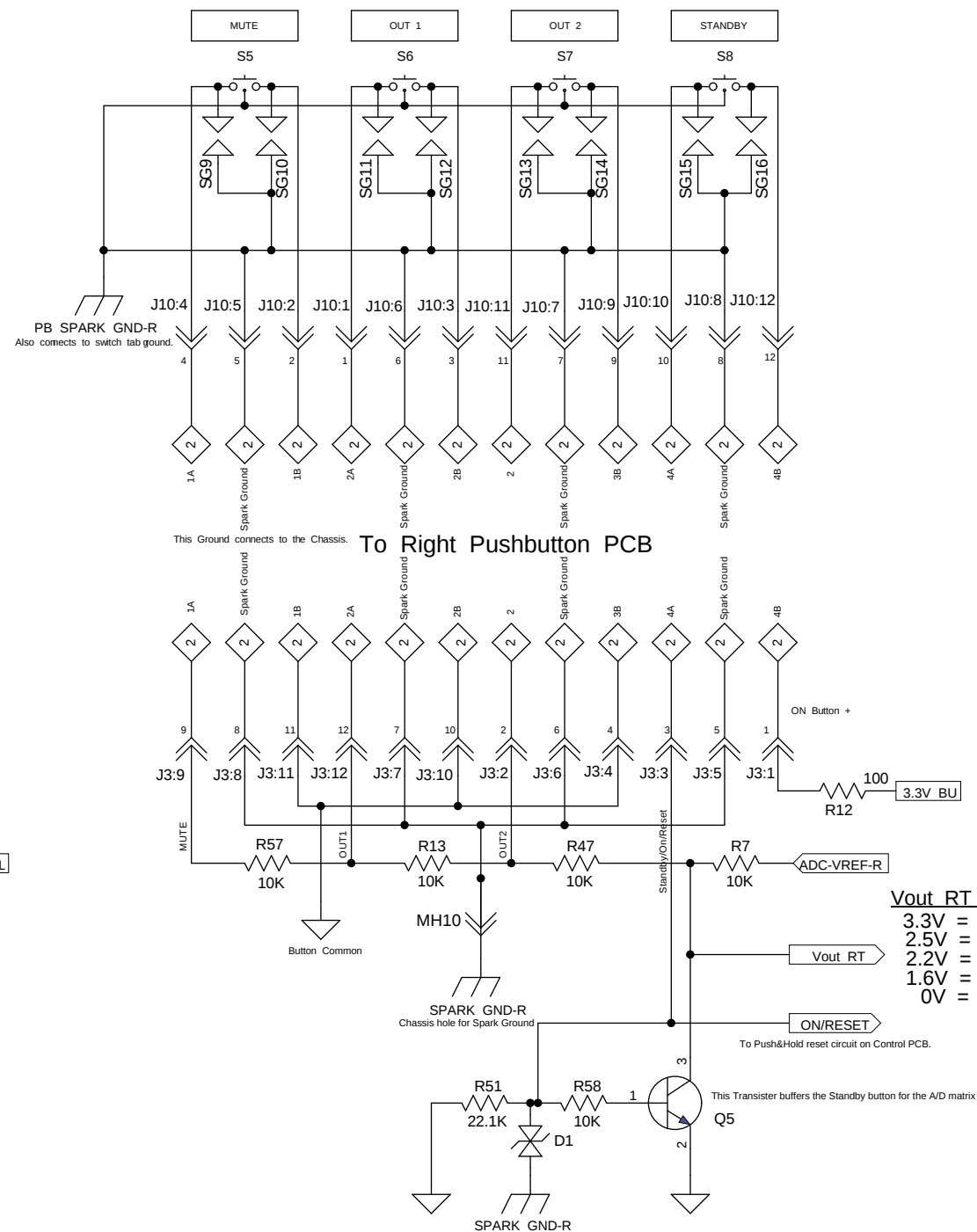


2 *DISPLAY 751456 SCH 4 OF 4*

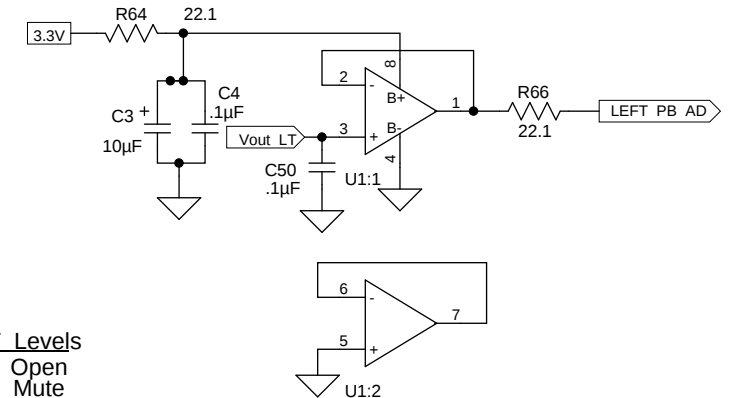
Left Pushbutton PCB



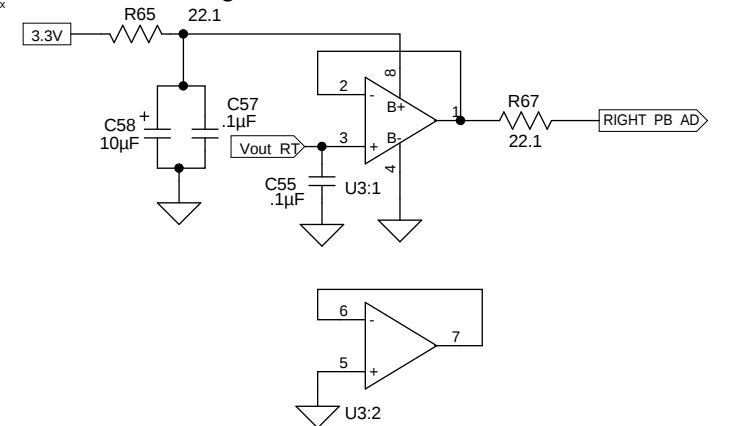
Right Pushbutton PCB



Left Pushbutton A/D Buffer

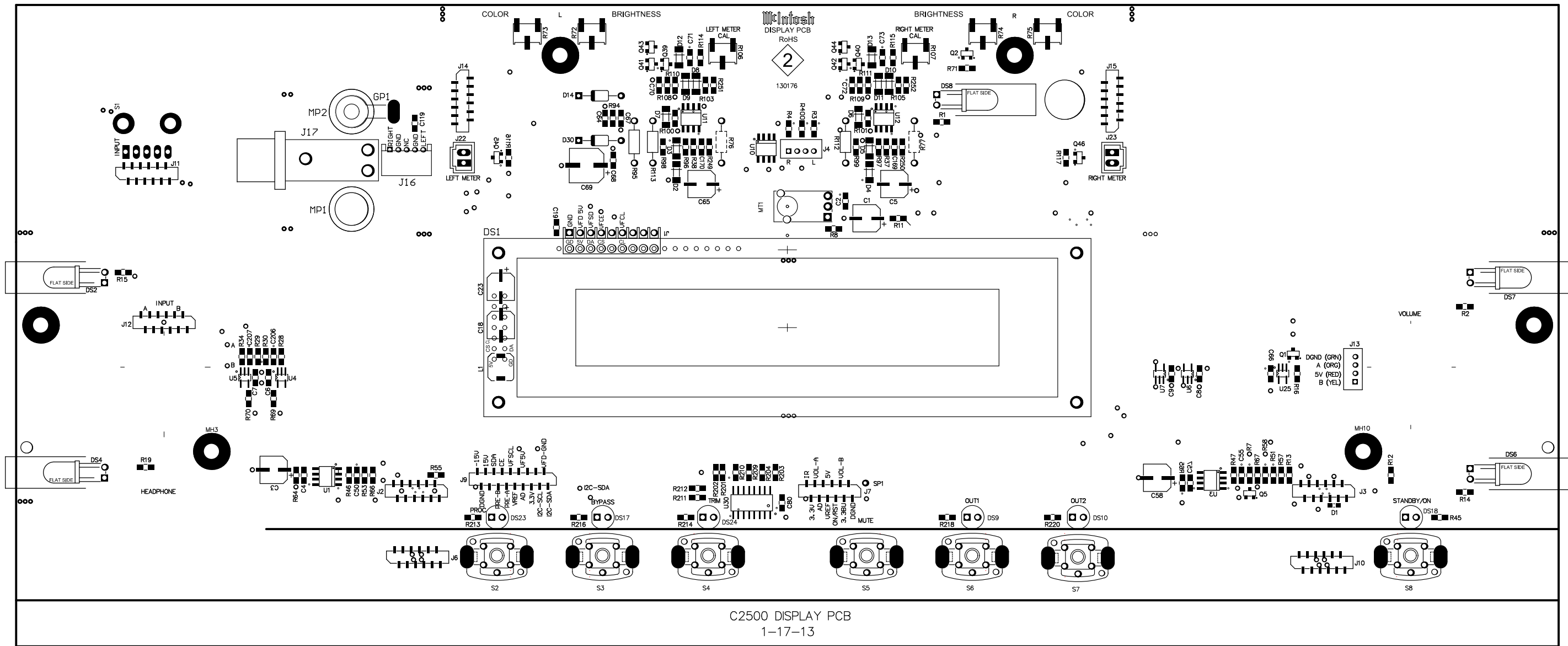


Right Pushbutton A/D Buffer

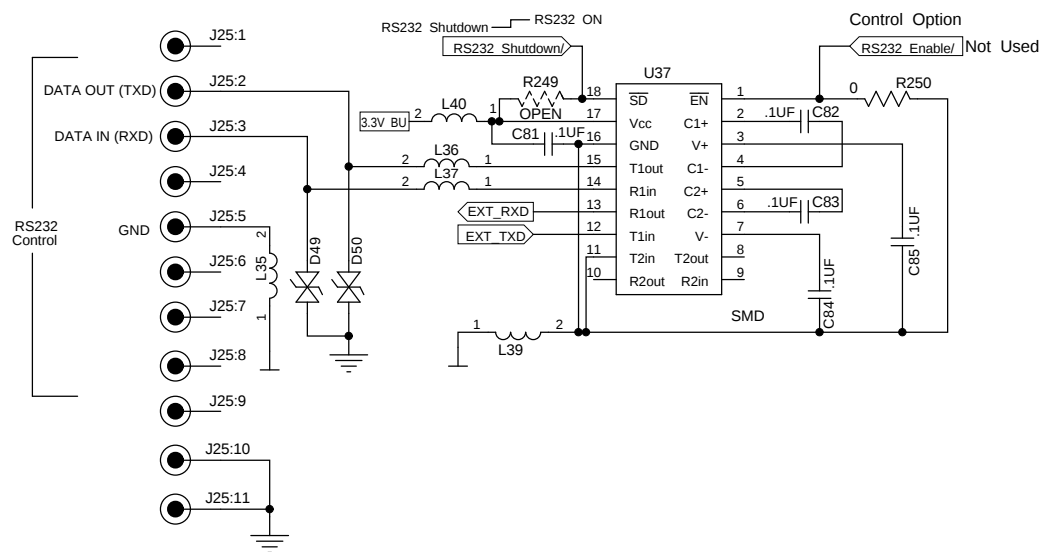
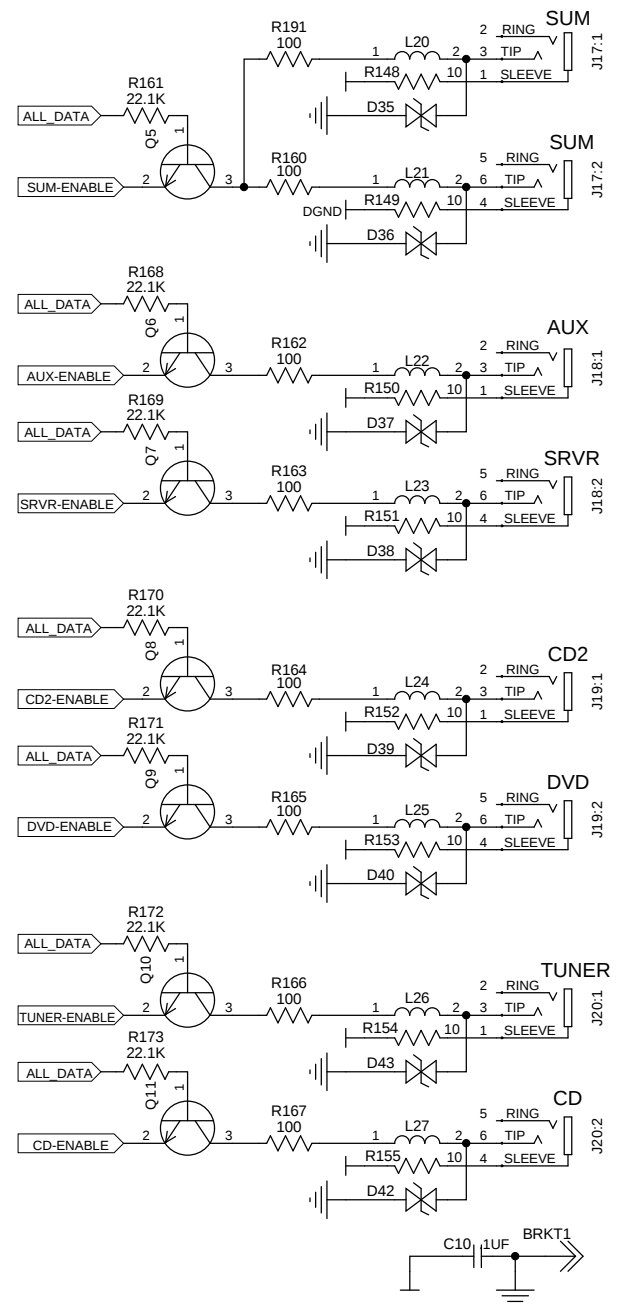
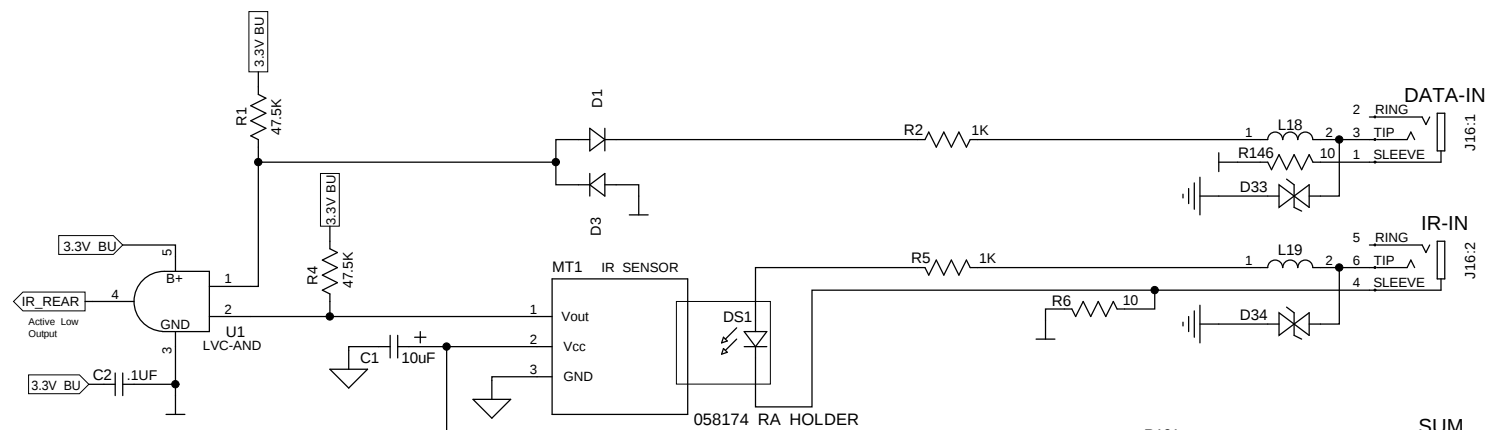
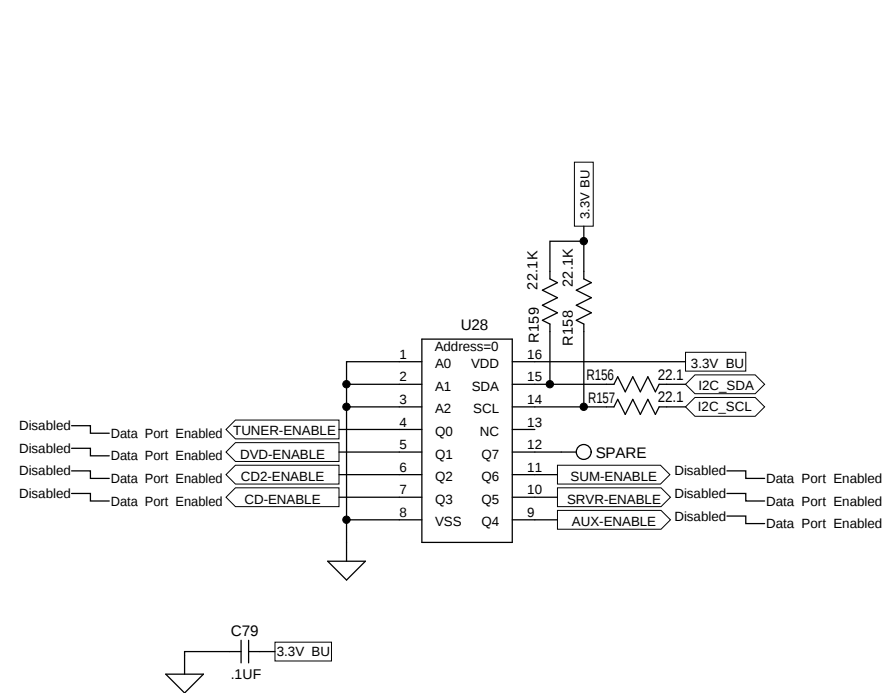


2 *DISPLAY* 751456 PCB

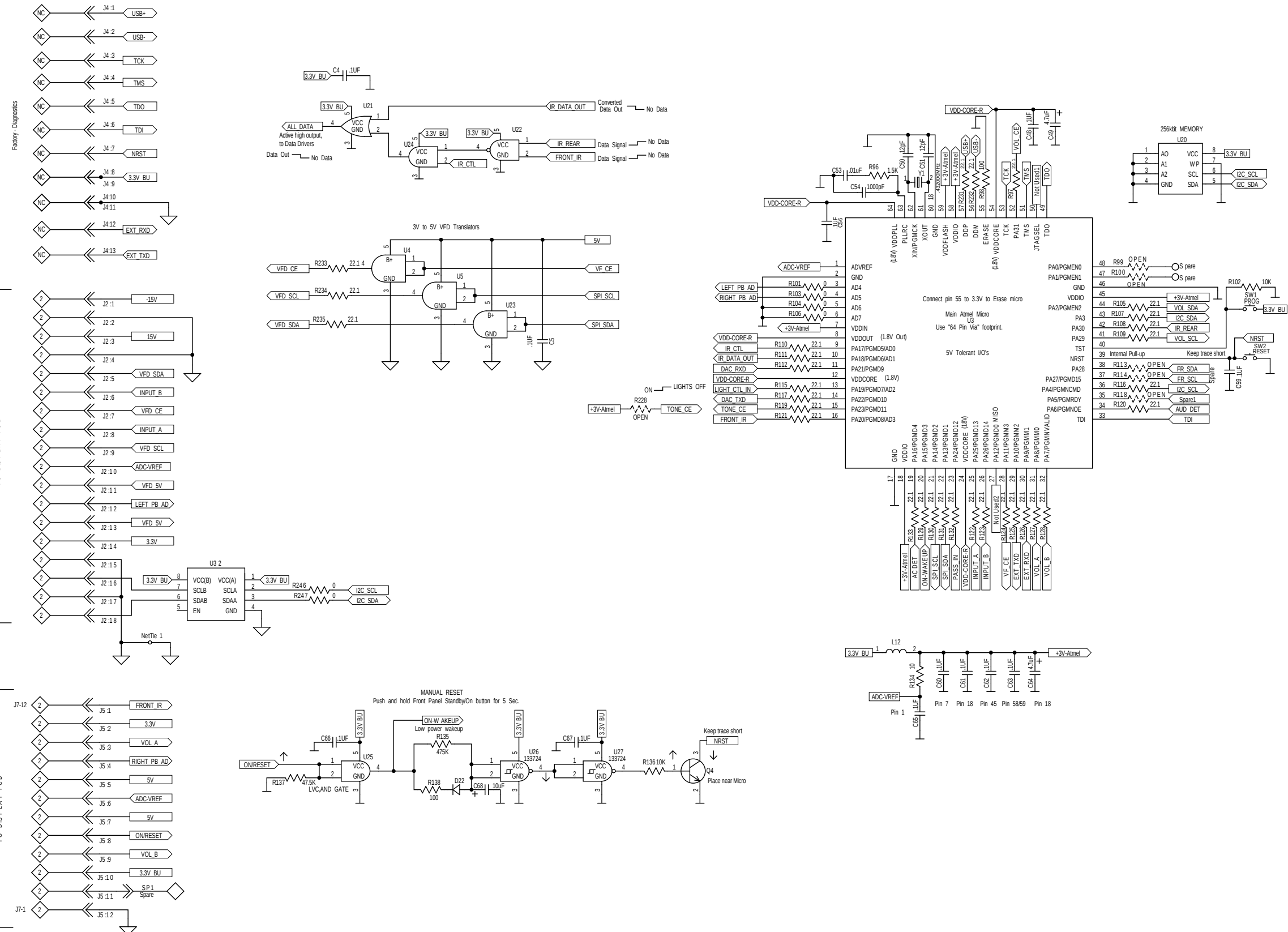
C2500
TUBE PREAMPLIFIER

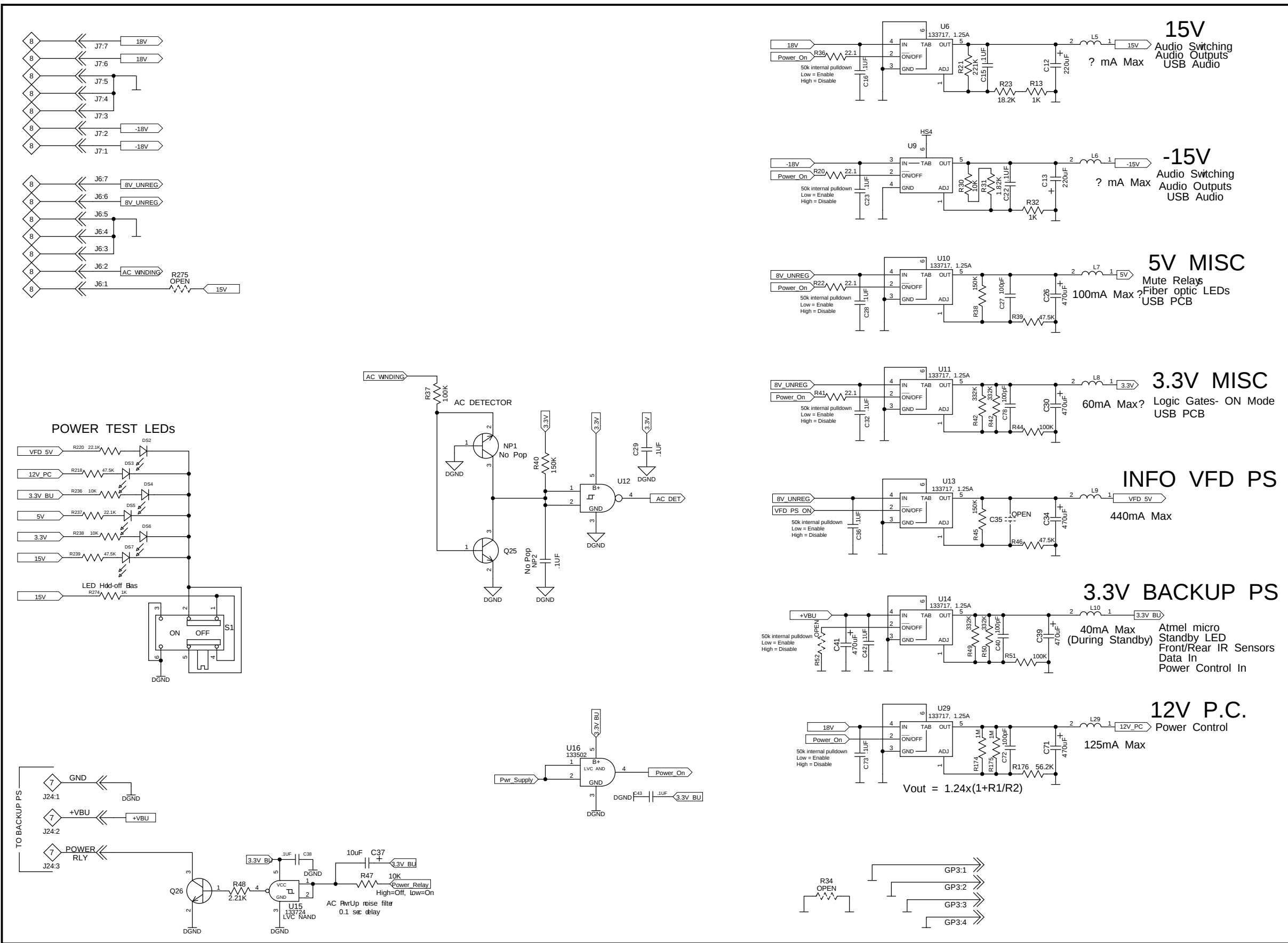


3 CONTROL 751457 SCH 1 of 5

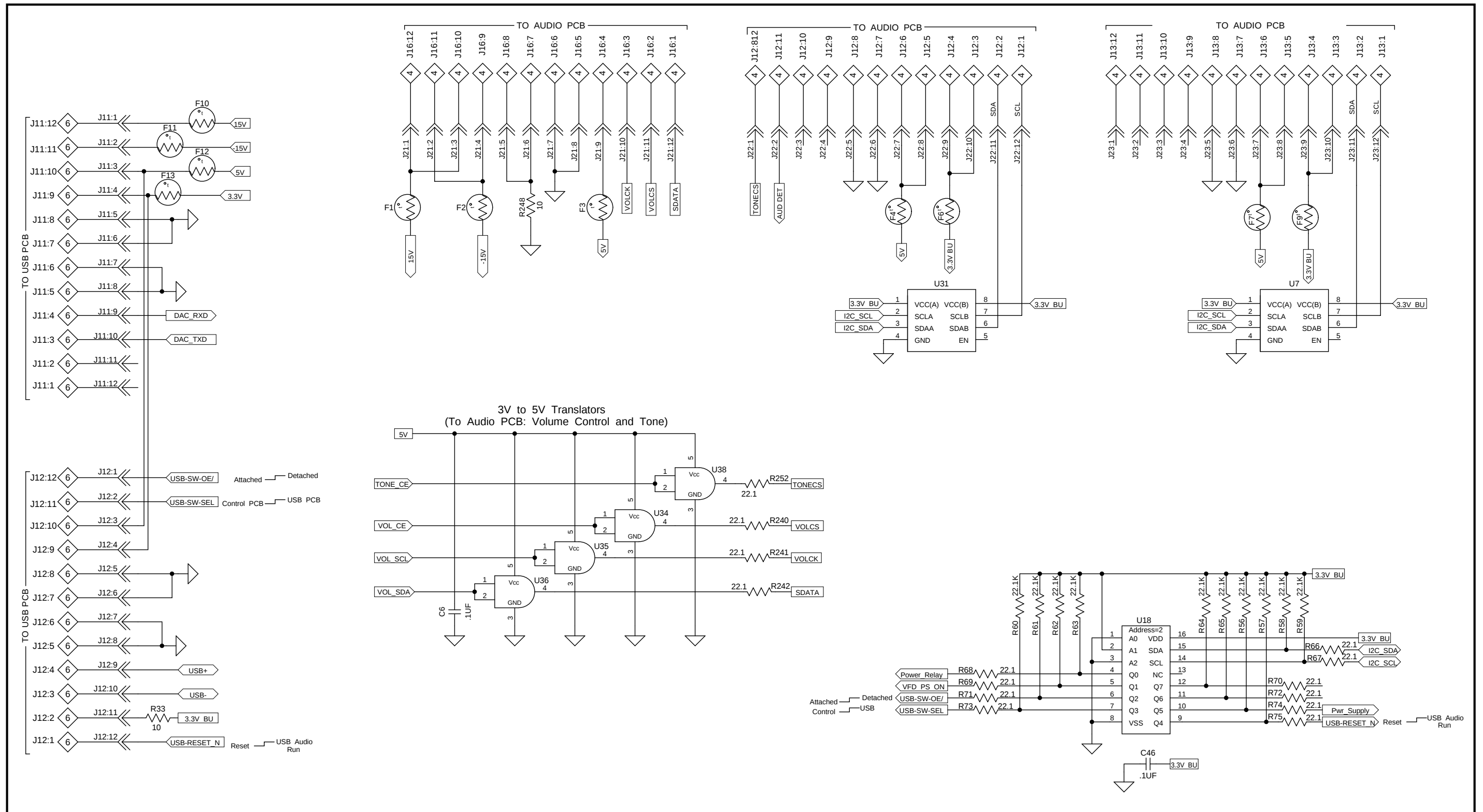


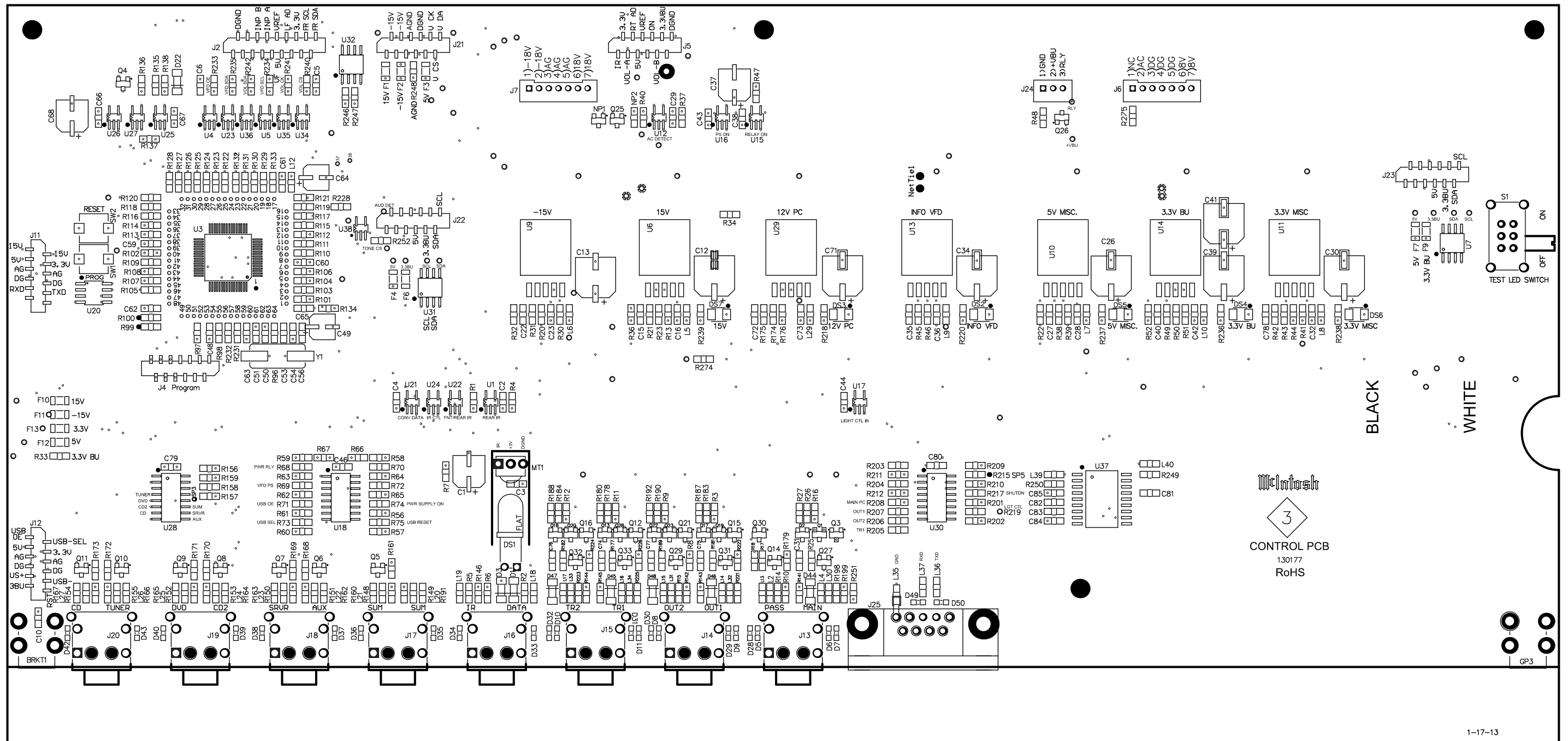
SHDN	EN	T_OUT	R_OUT
0	0	High impedance	Active
0	1	High impedance	High impedance
1	0	Active	Active
1	1	Active	High impedance



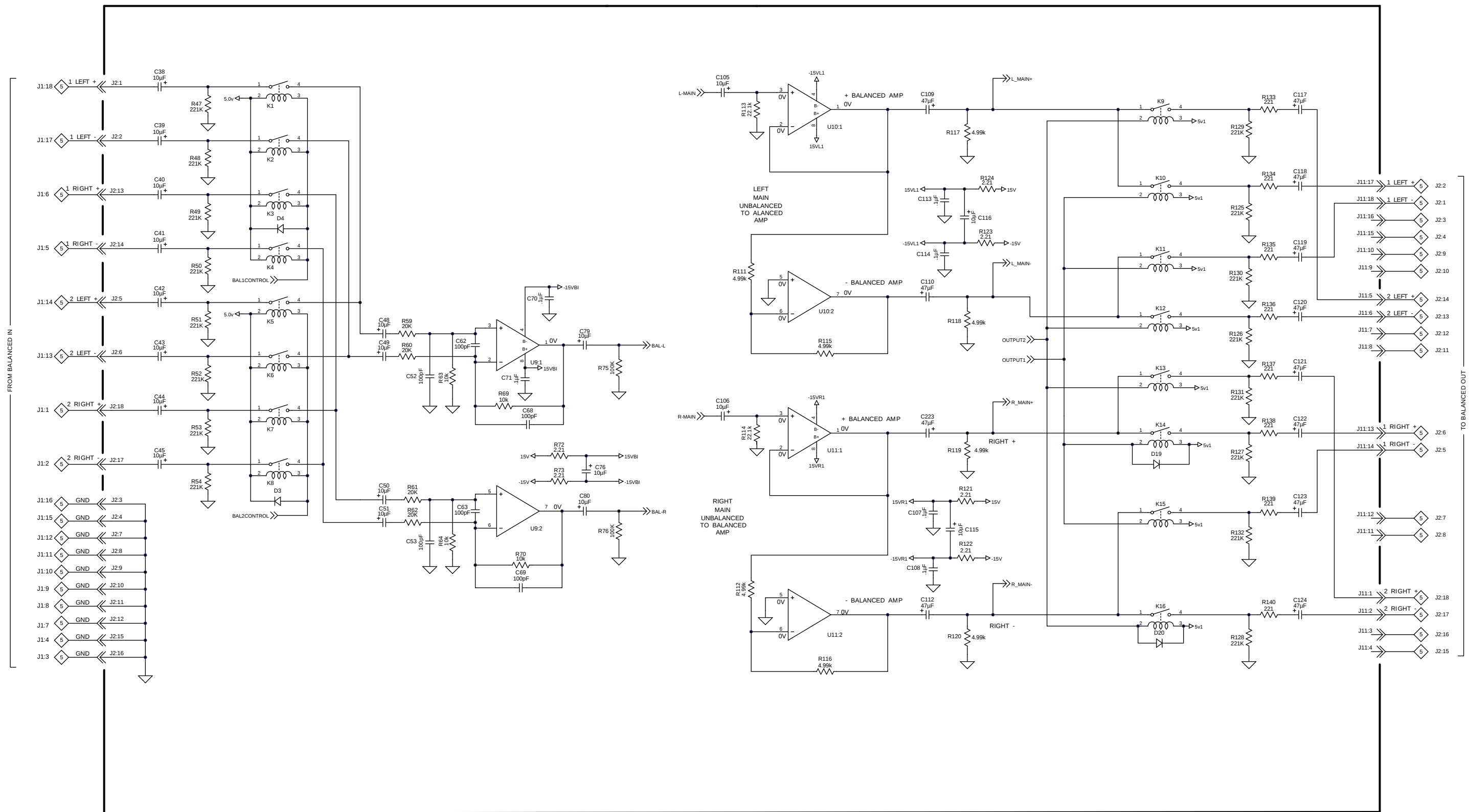


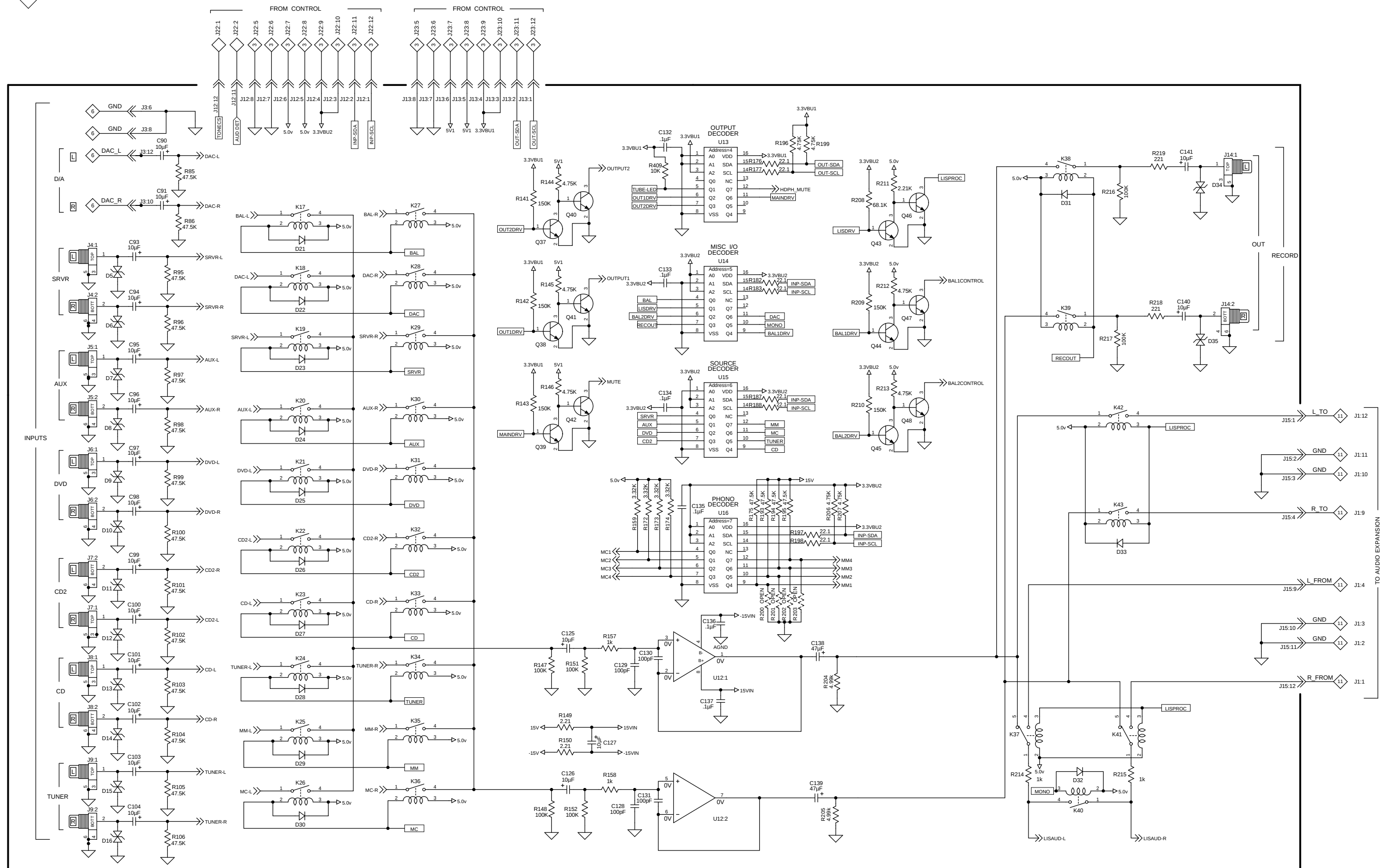
3 CONTROL 751457 SCH 5 of 5

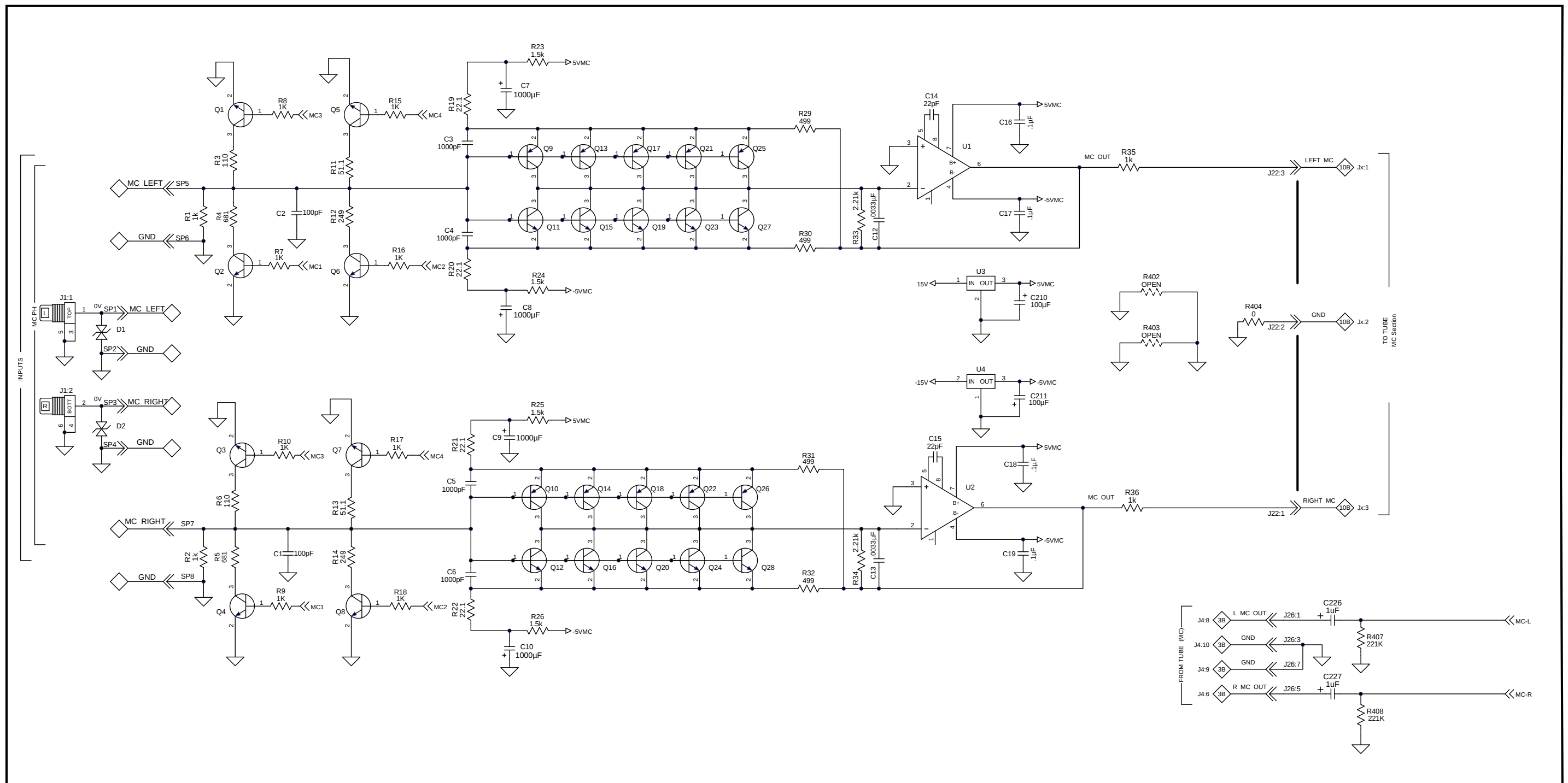


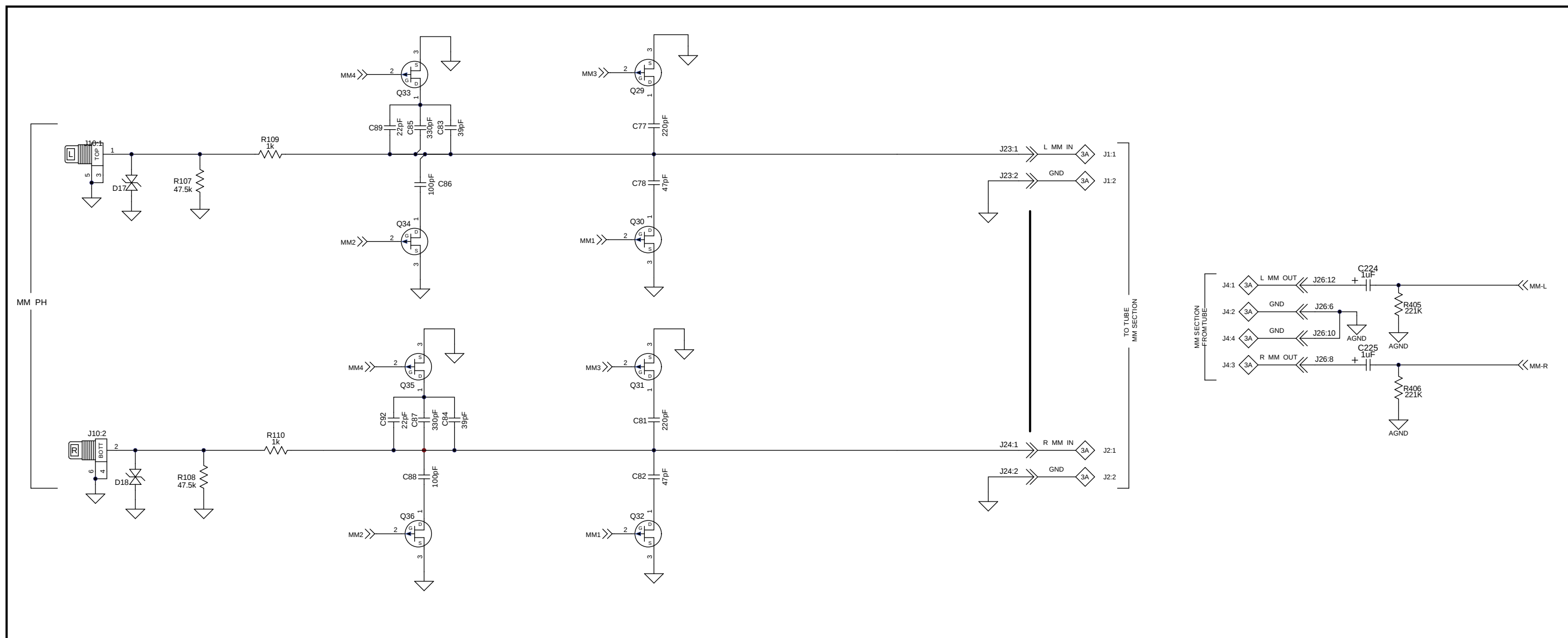


4 AUDIO 751458 SCH 1 of 5

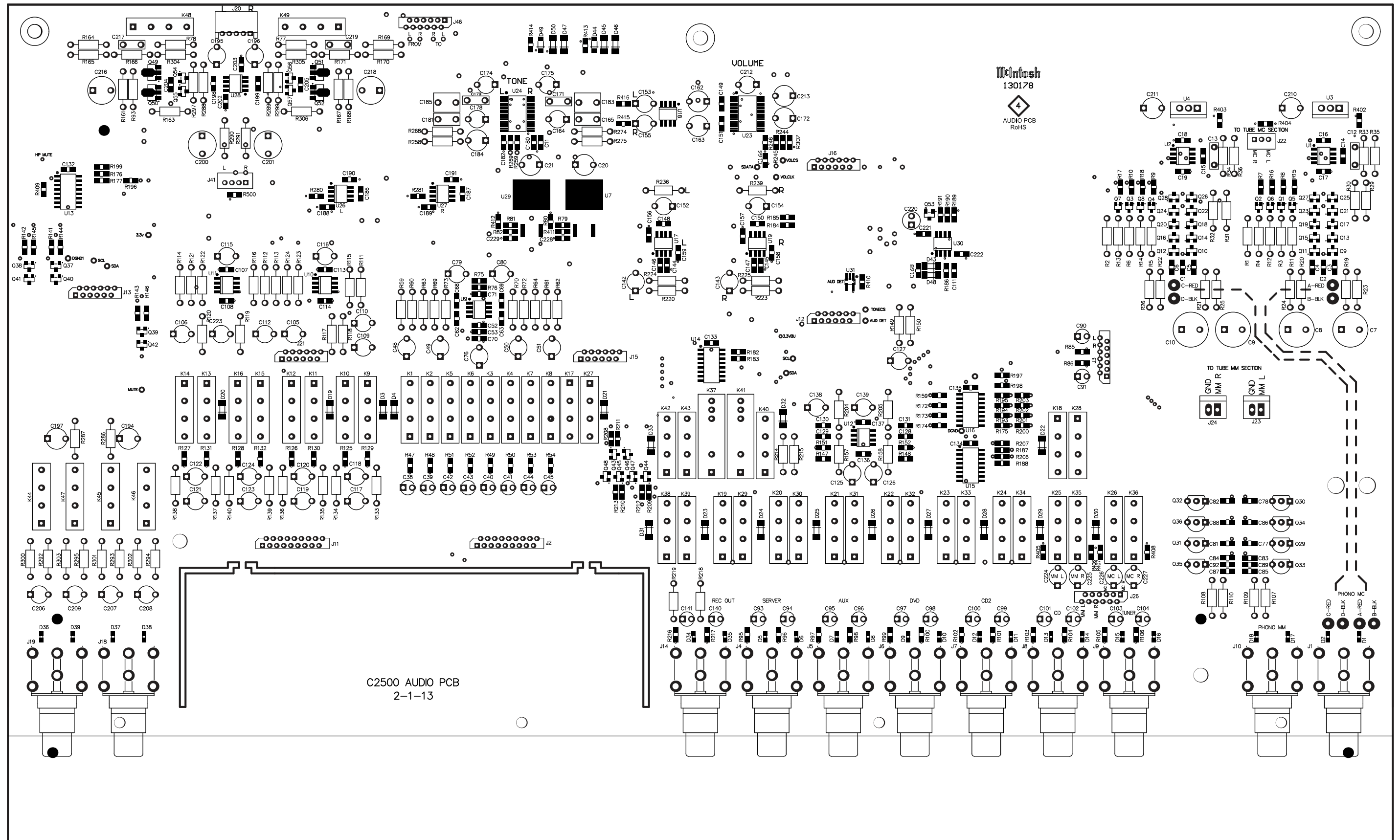




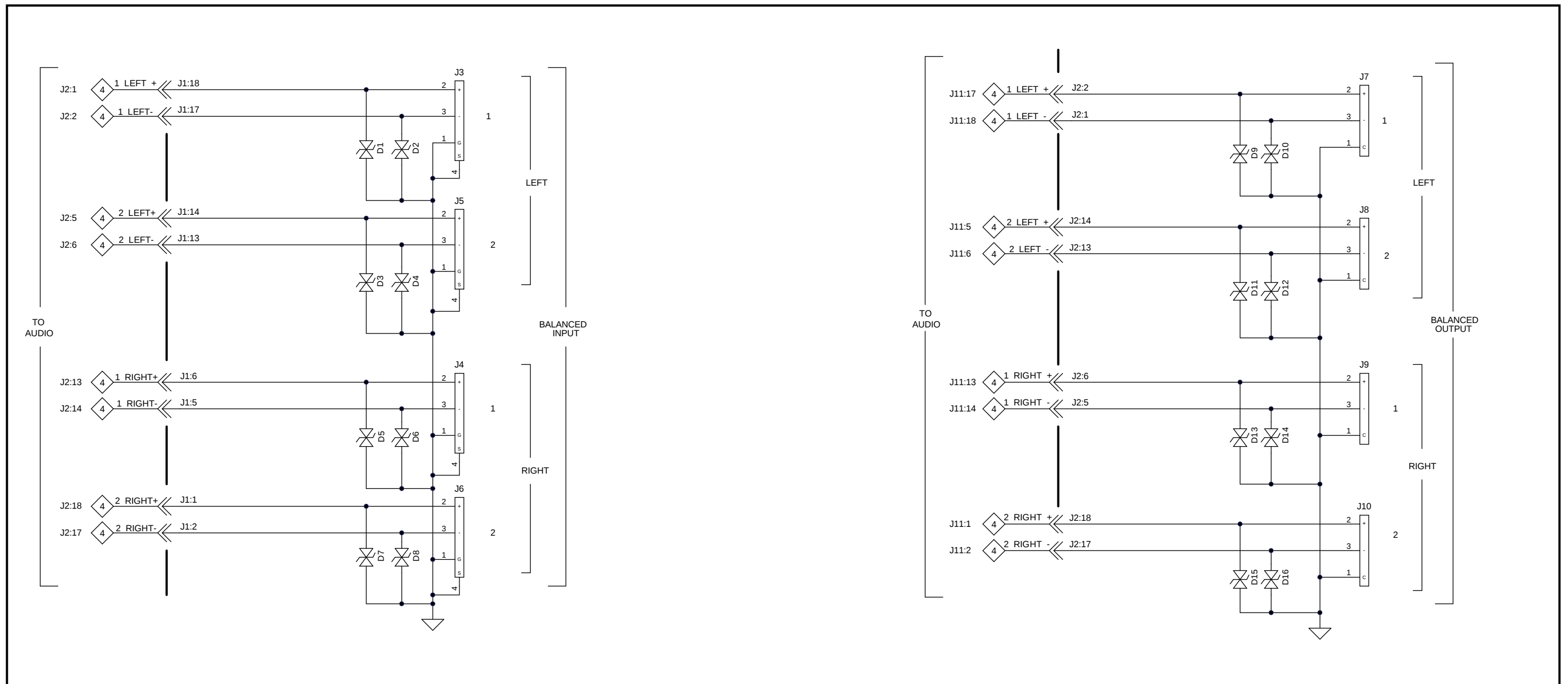




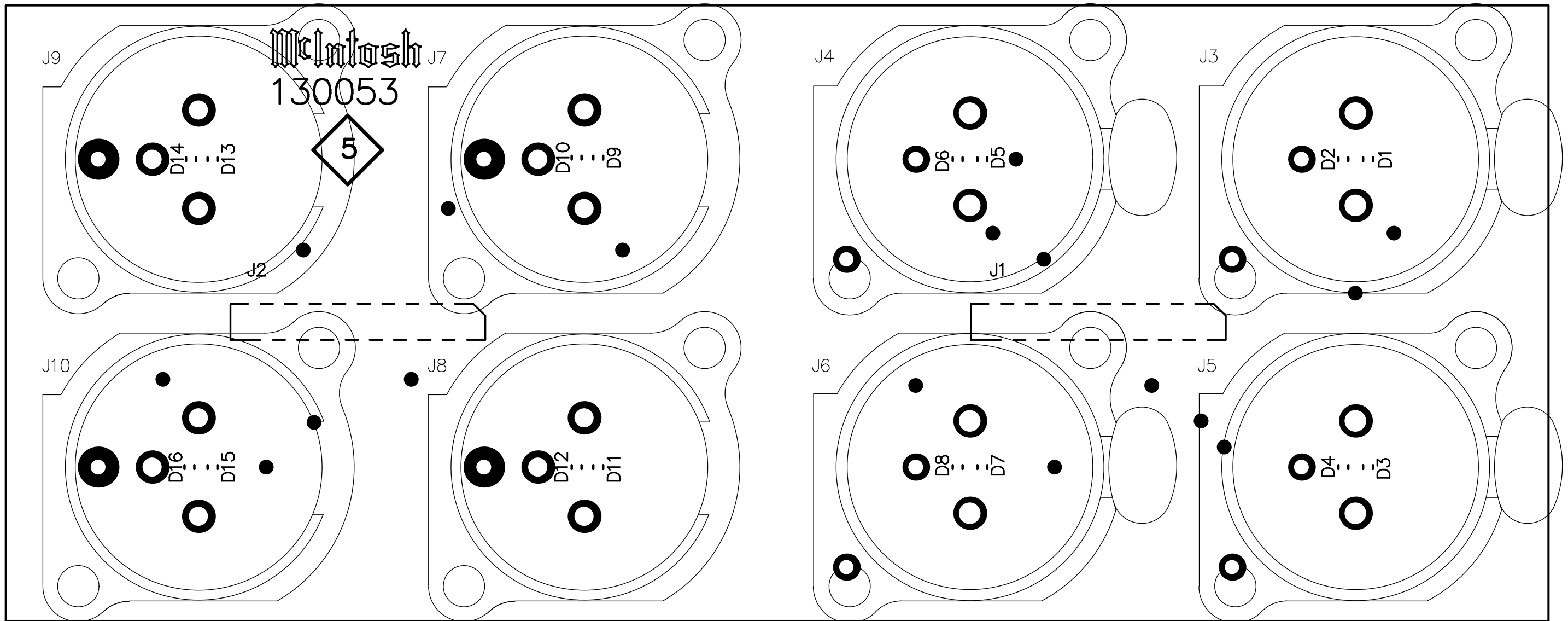


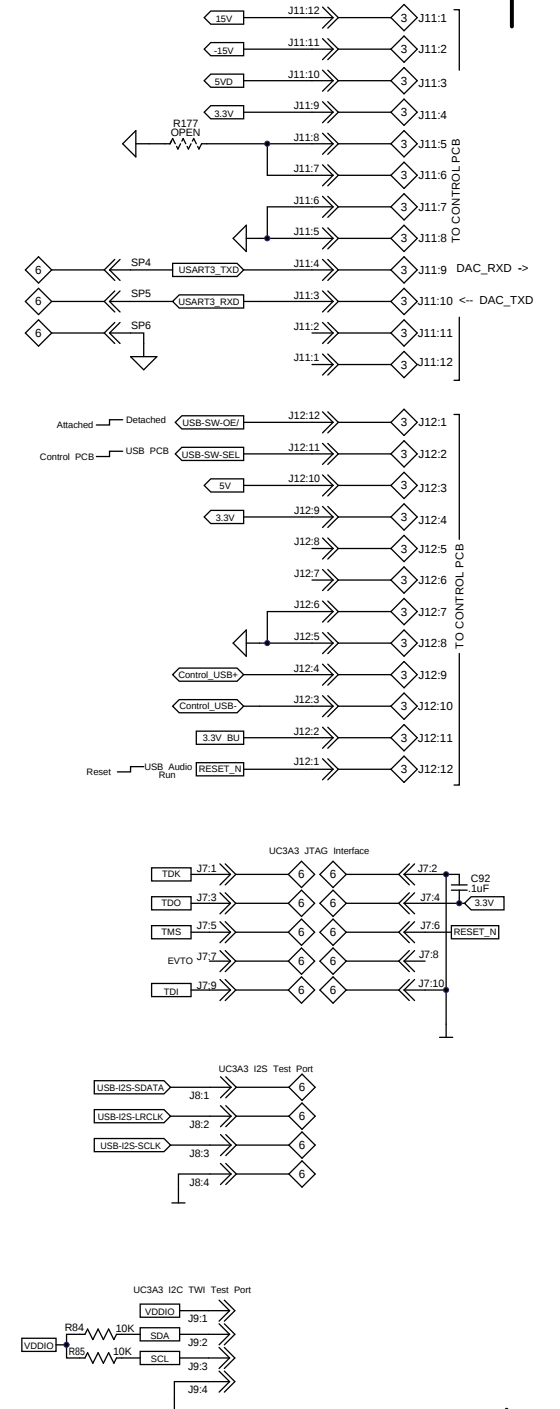
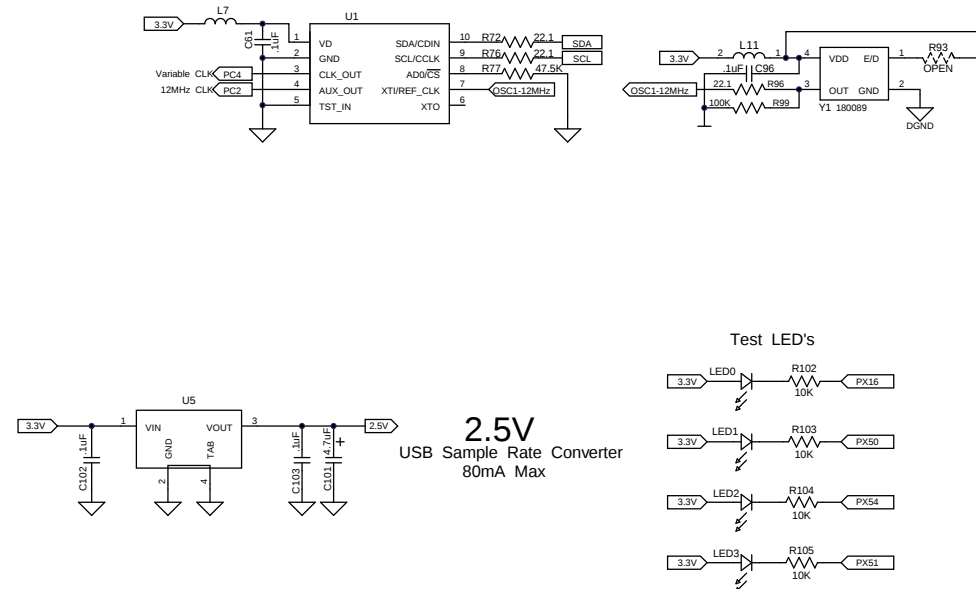
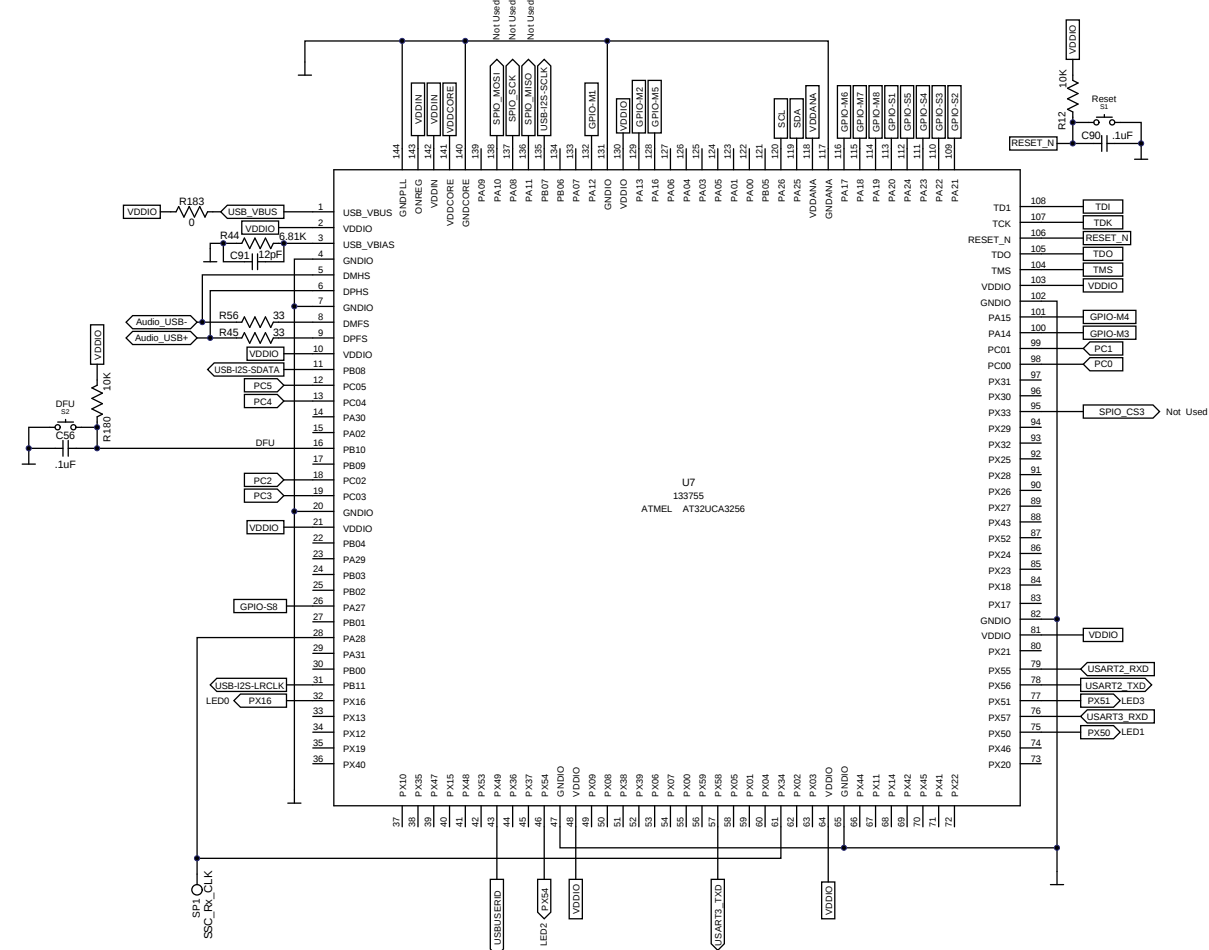
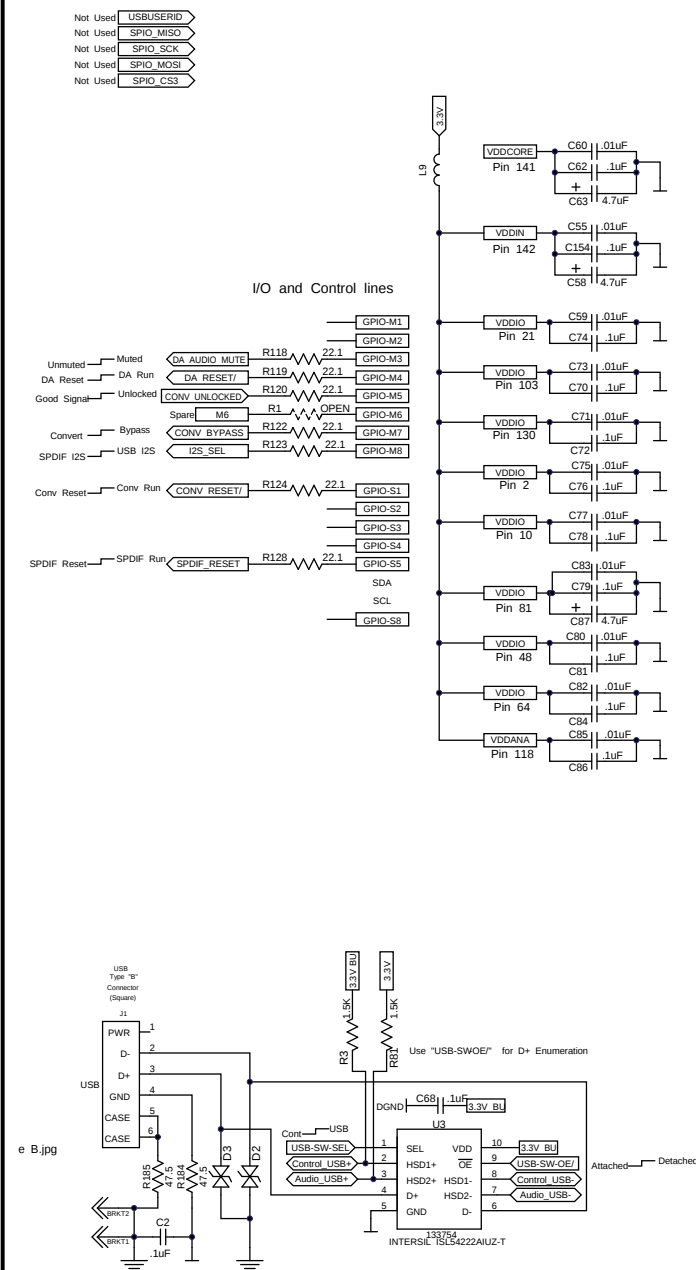


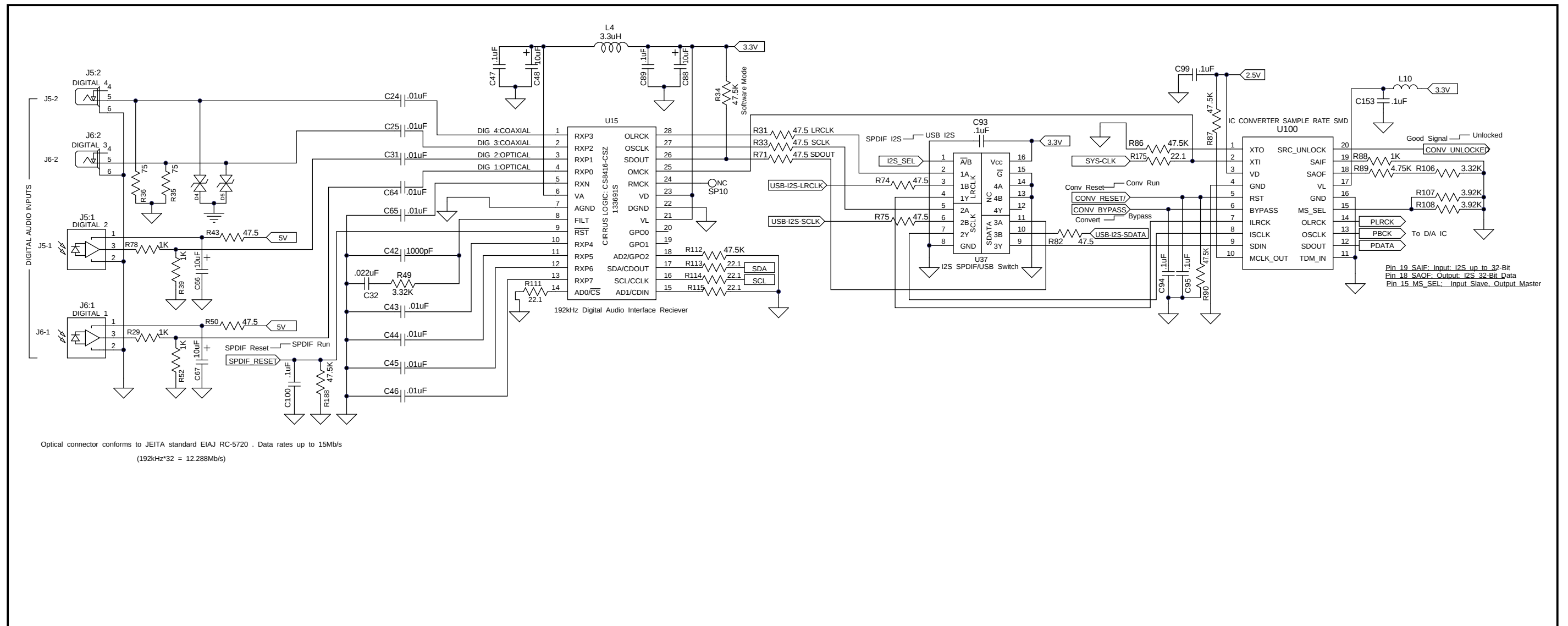
5 BALANCED I/O 751117 SCH



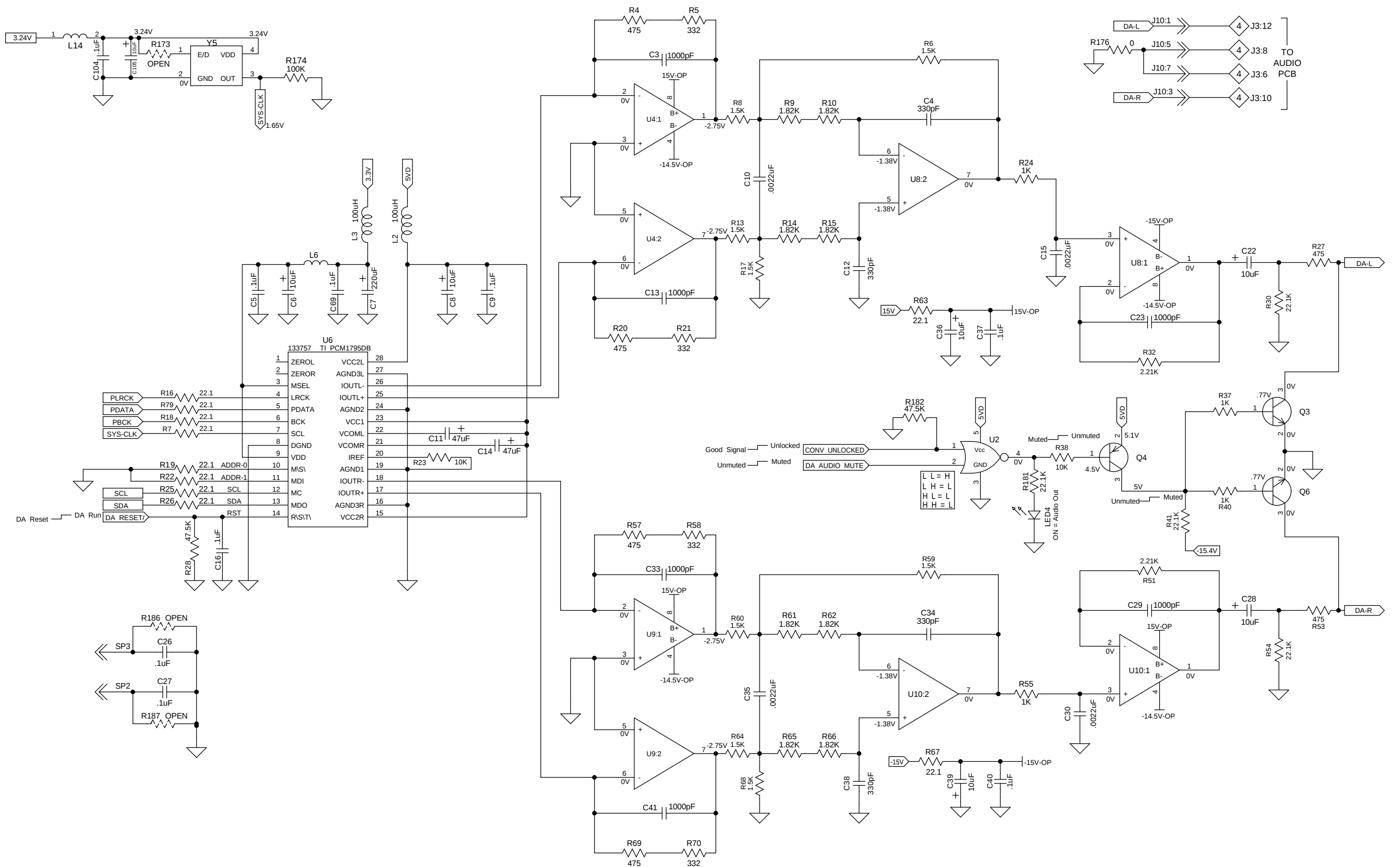
5 *BALANCED I/O* 751117 PCB

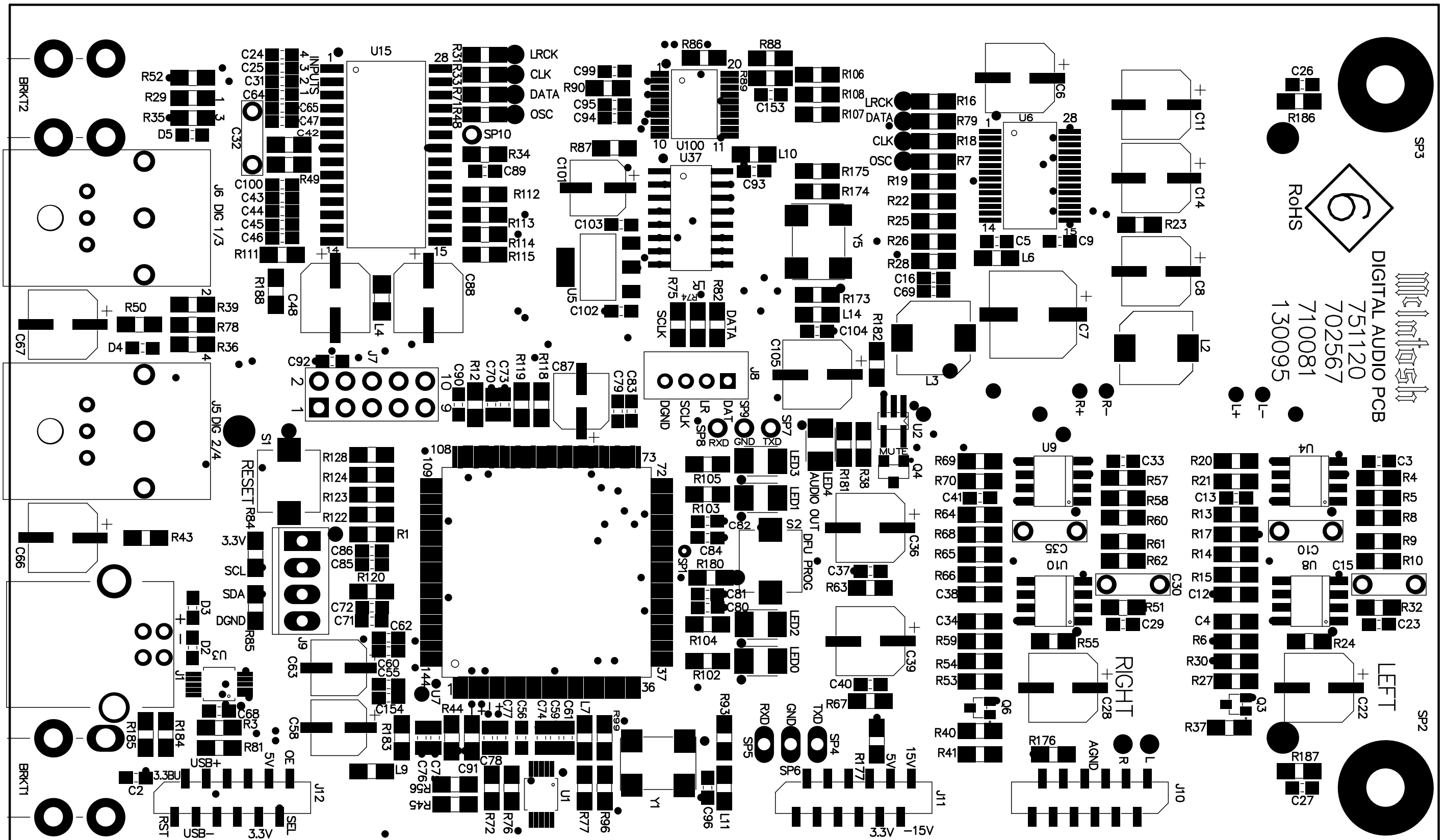




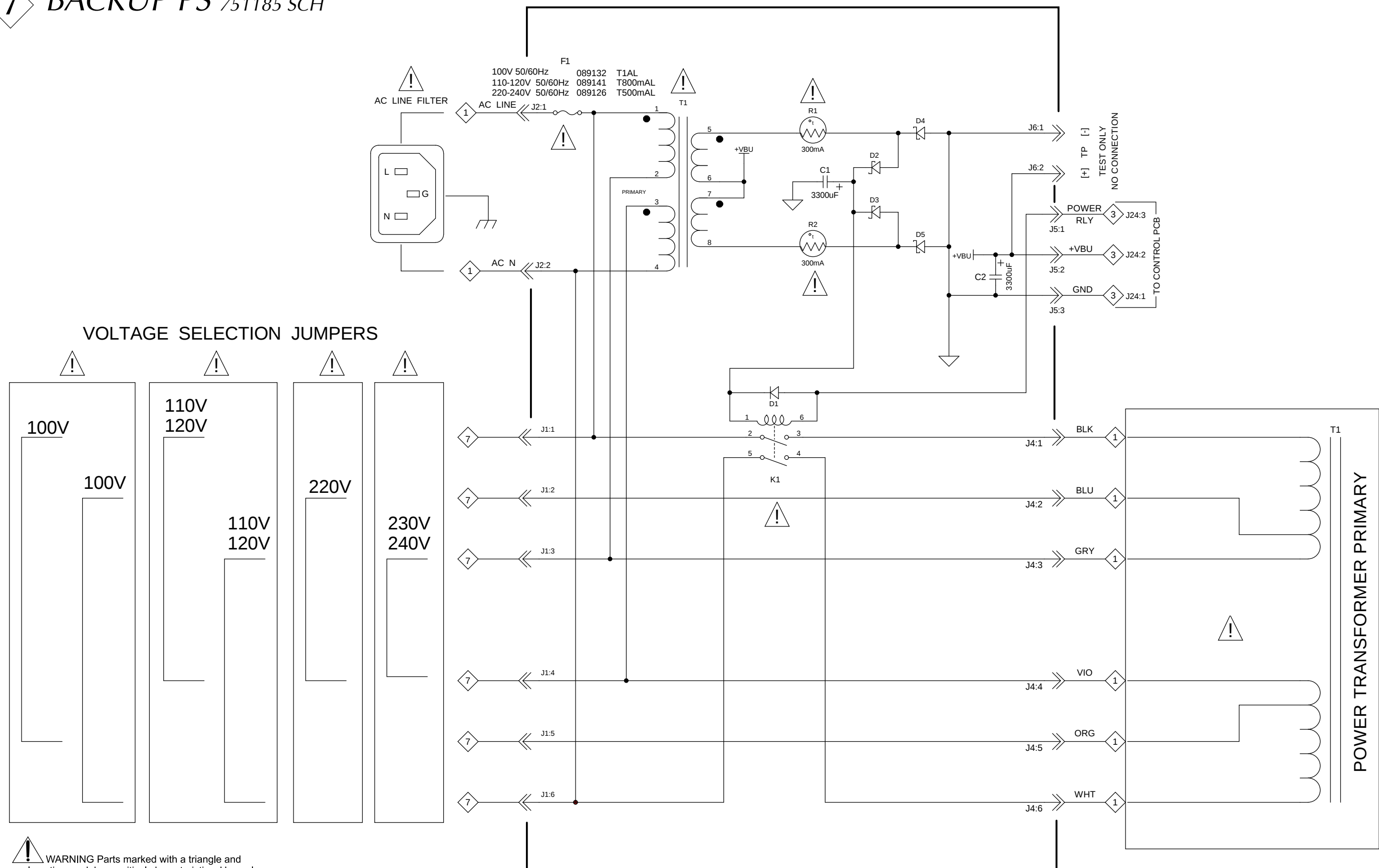


6 DIGITAL AUDIO 751120 SCH 3 of 3



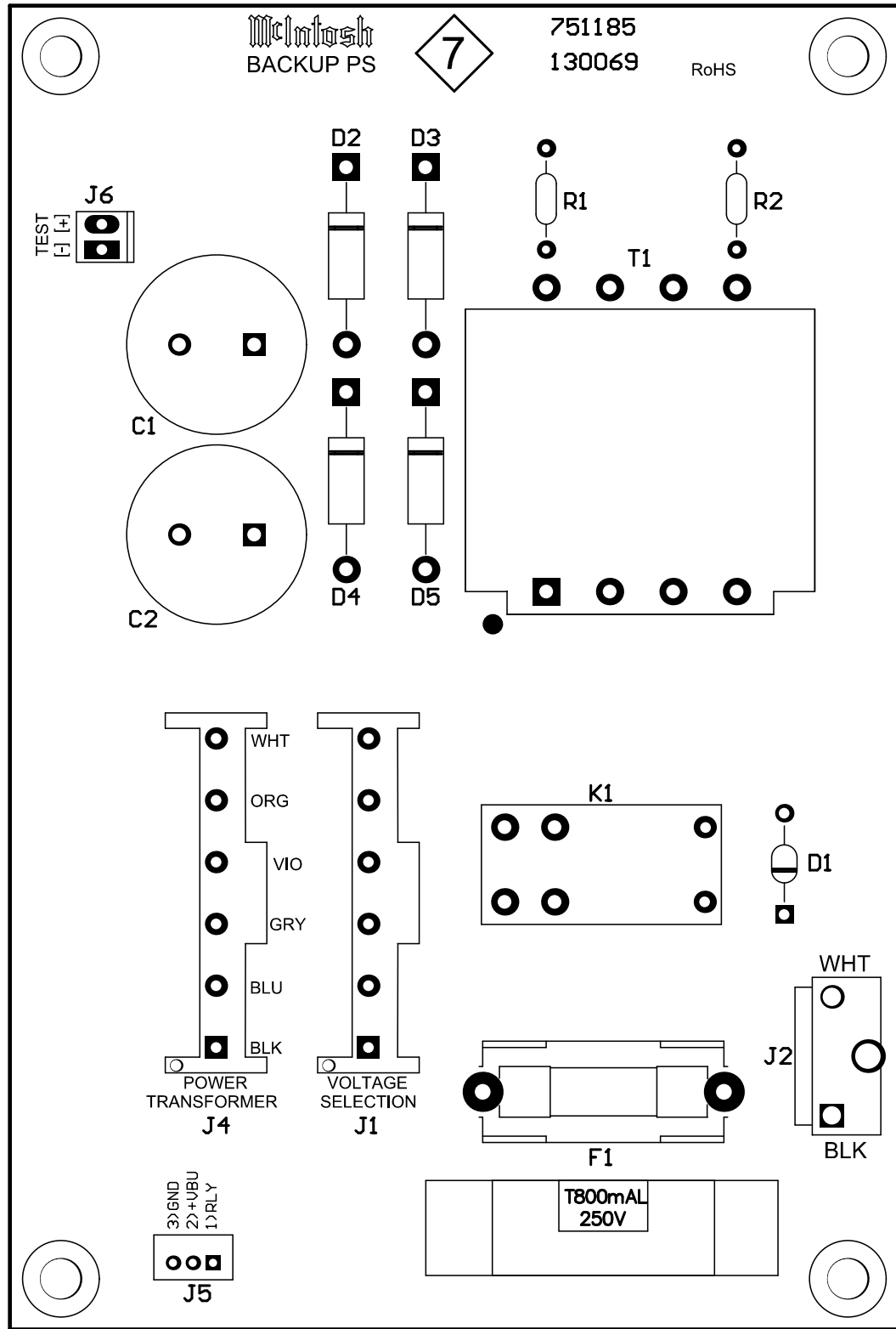


7 *BACKUP PS 751185 SCH*

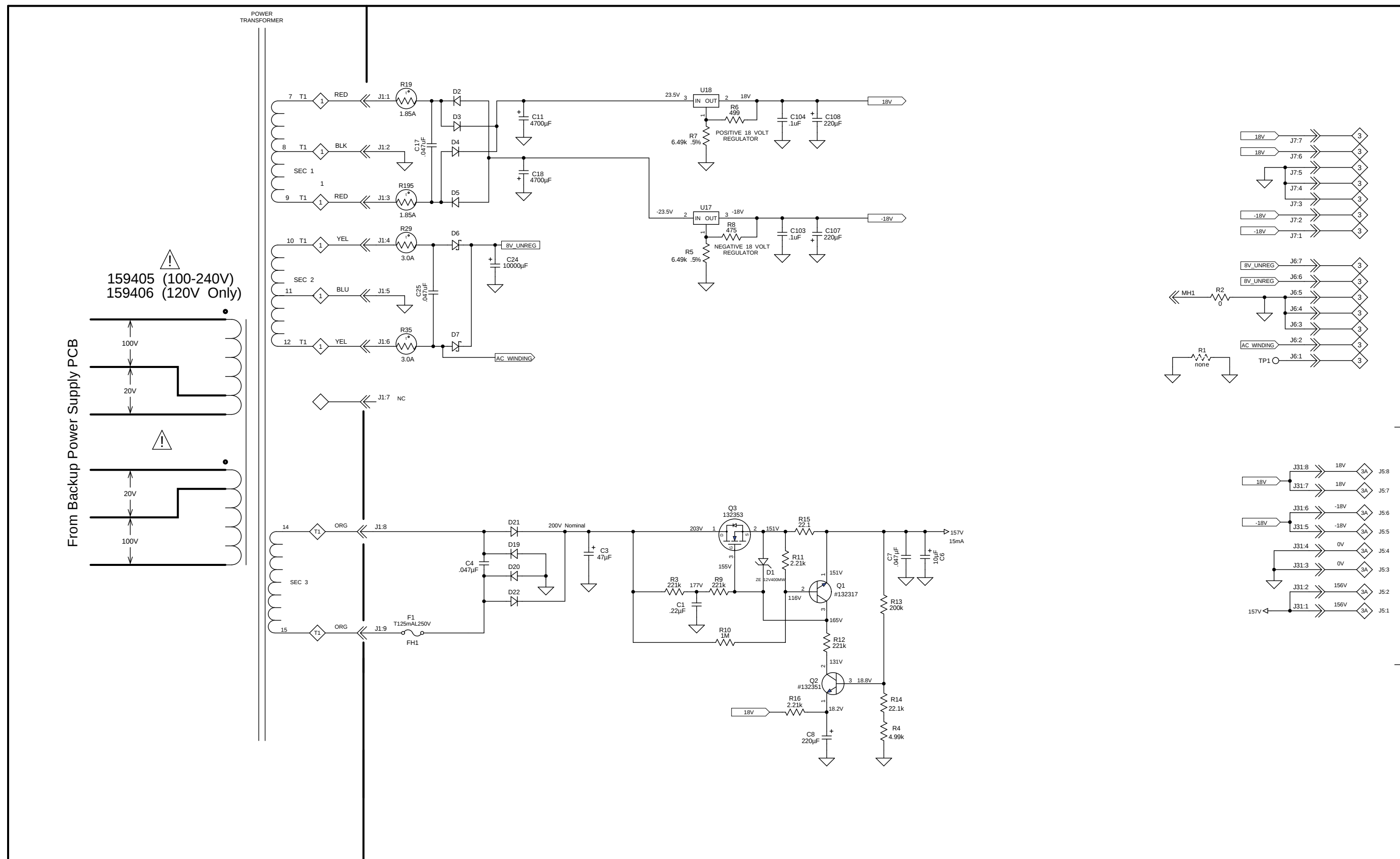


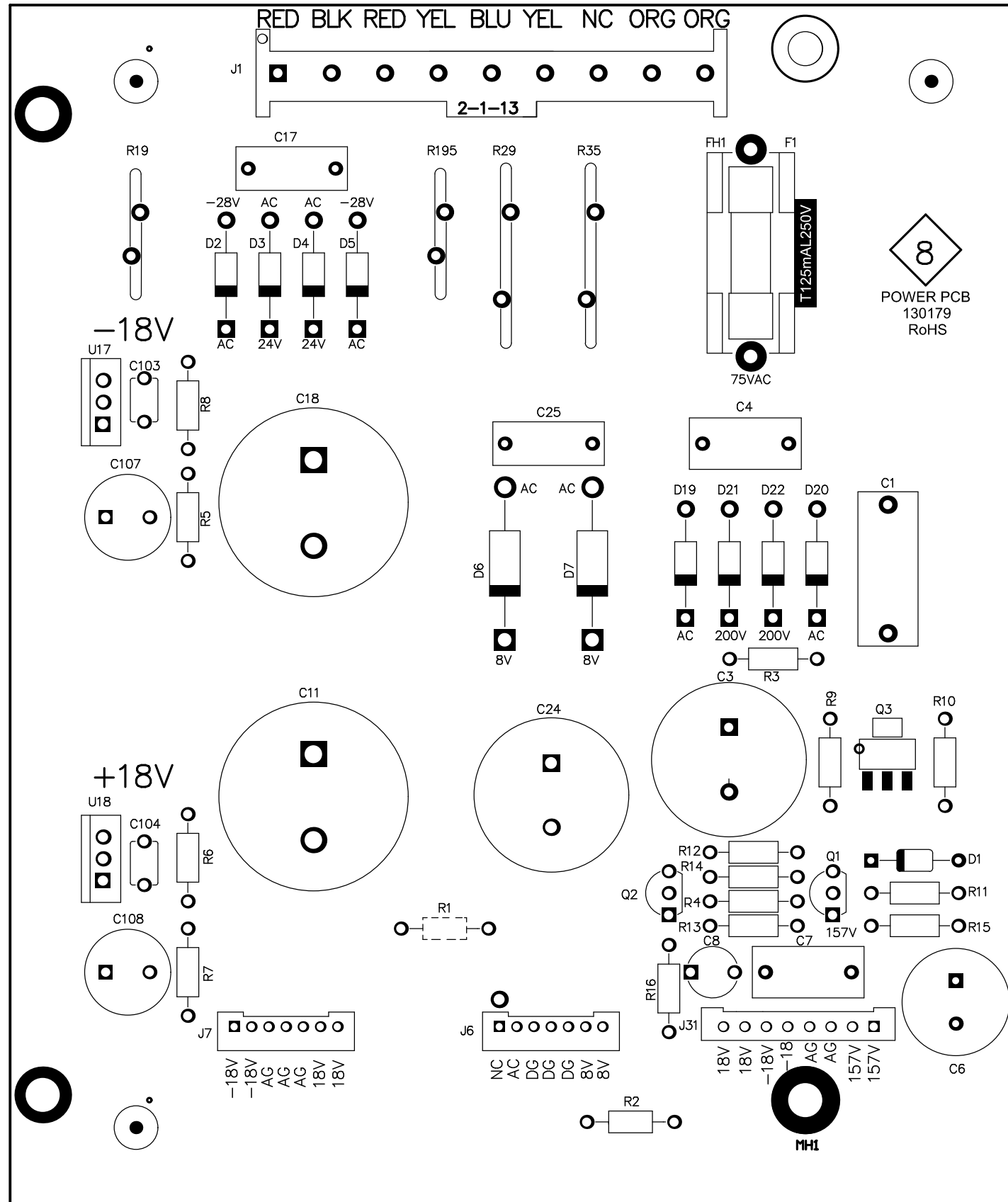
7

BACKUP PS 751185 PCB

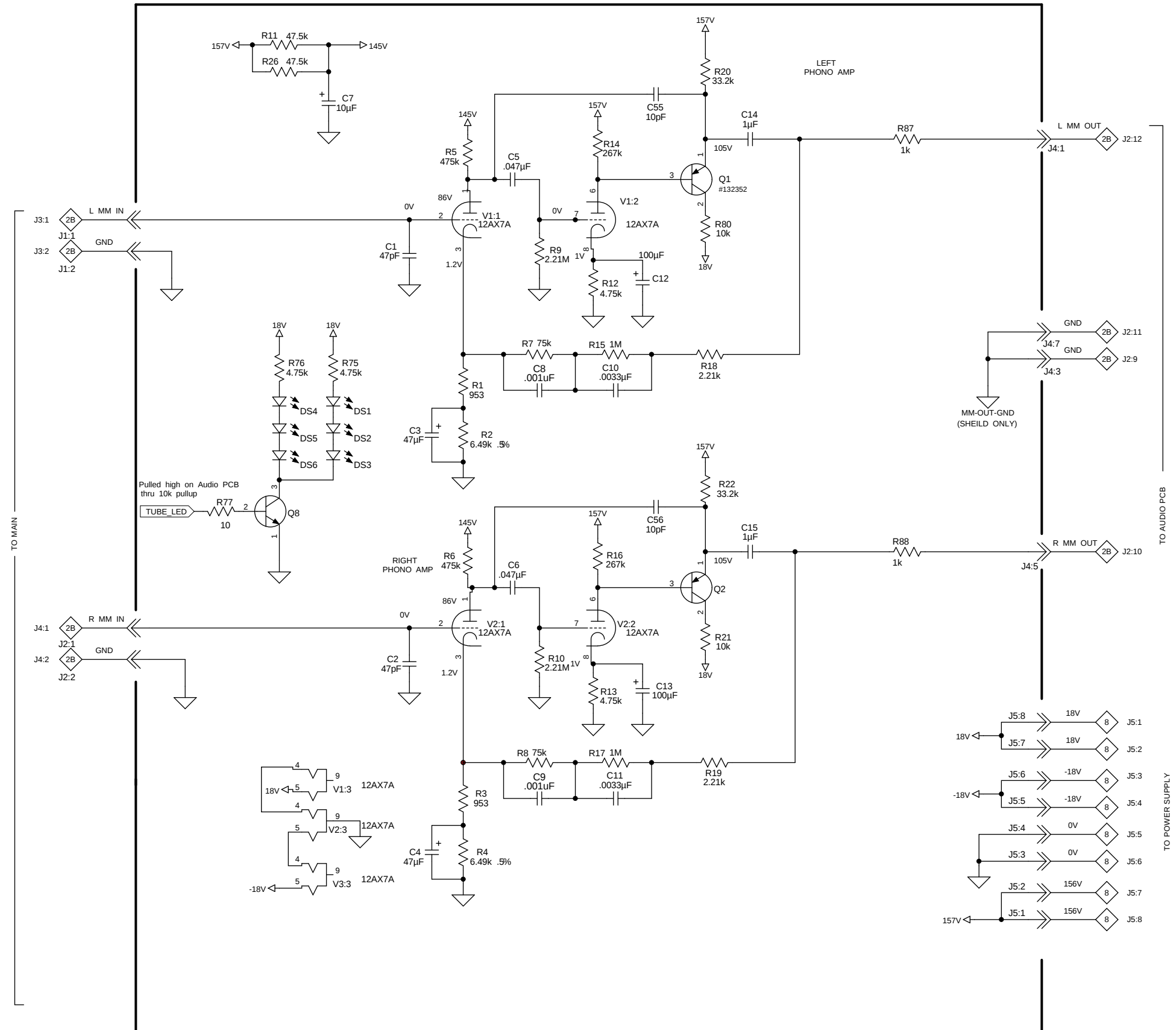


8 POWER 751459 SCH

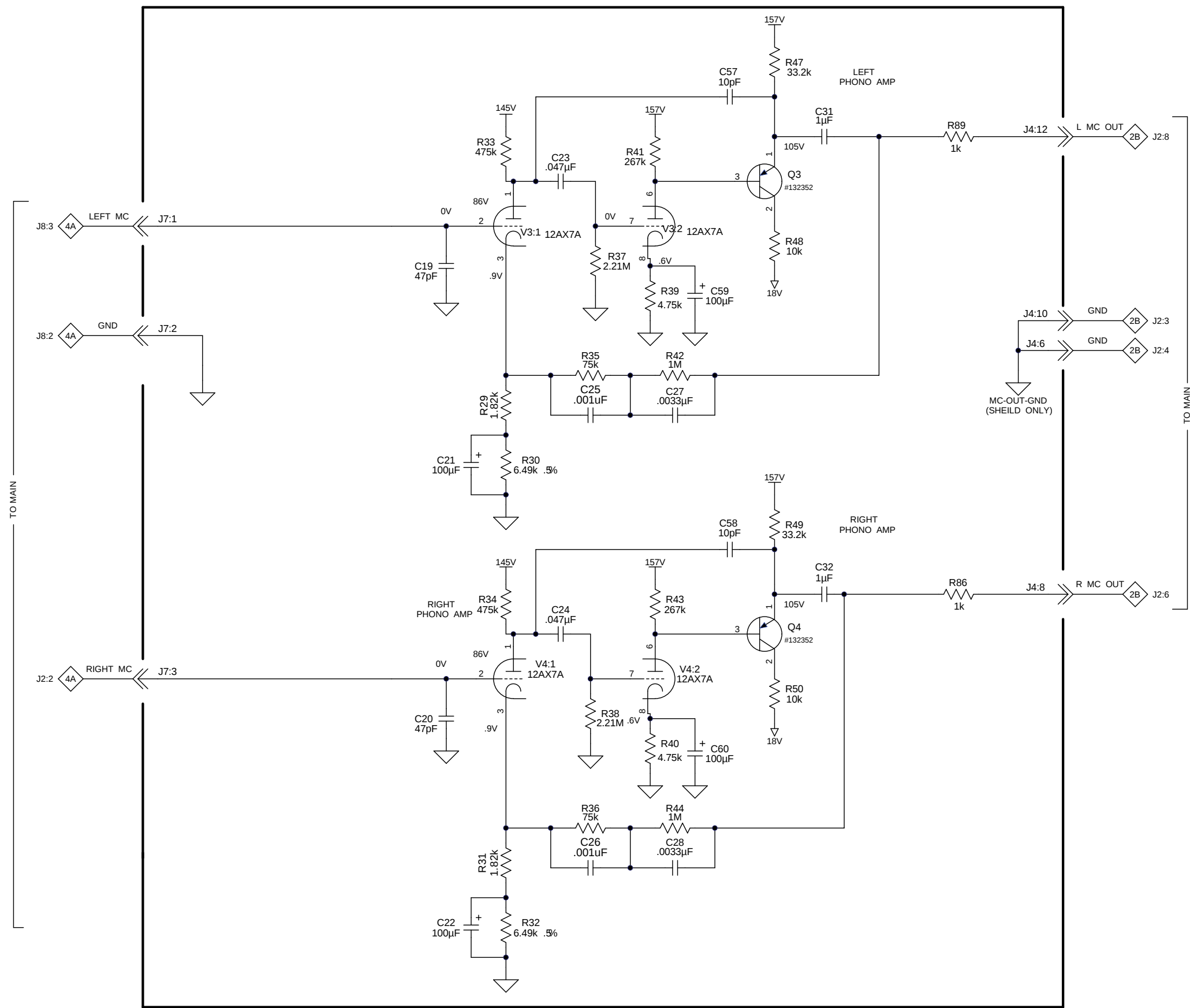




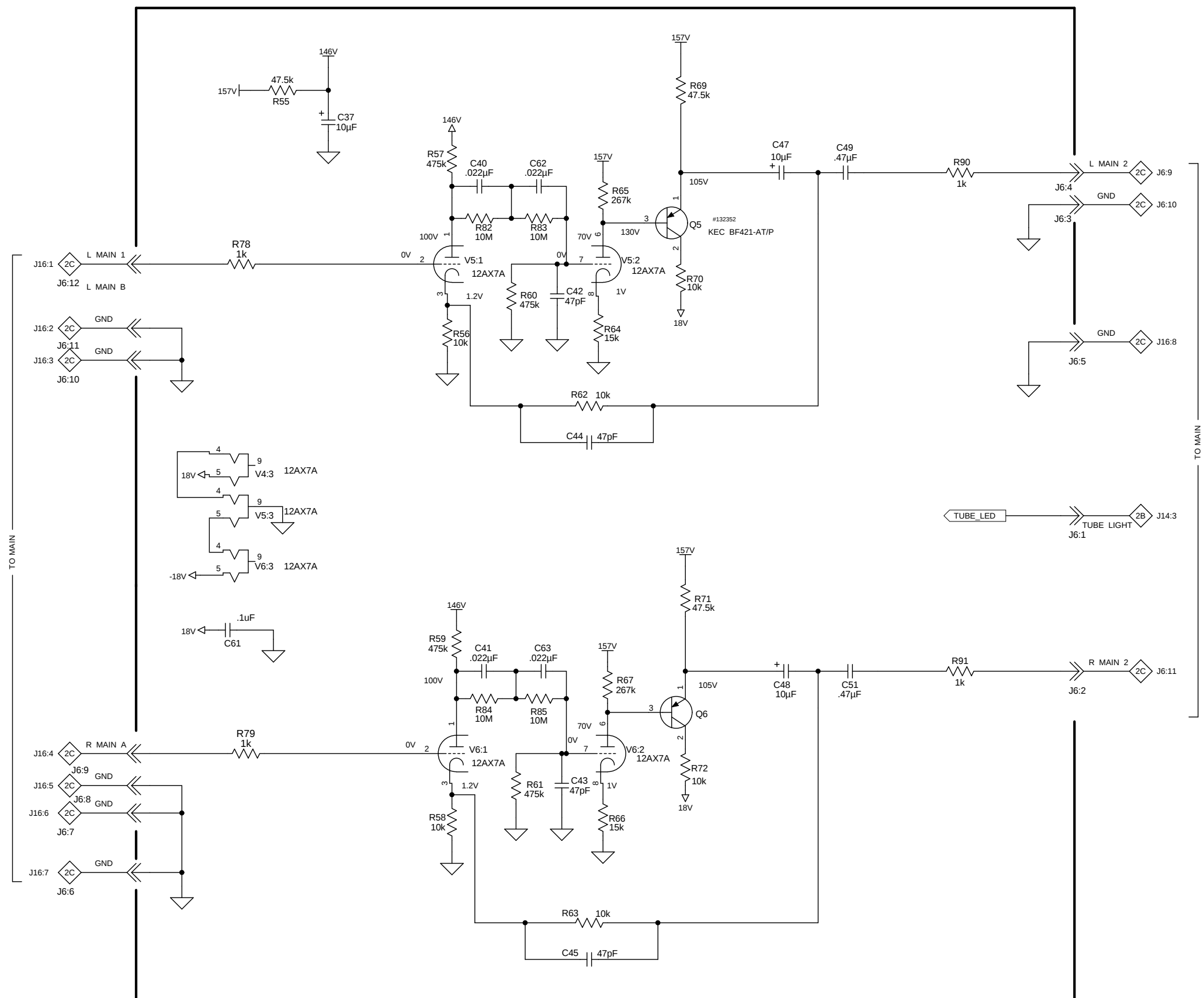
Rename high voltage nets to closely match measurements

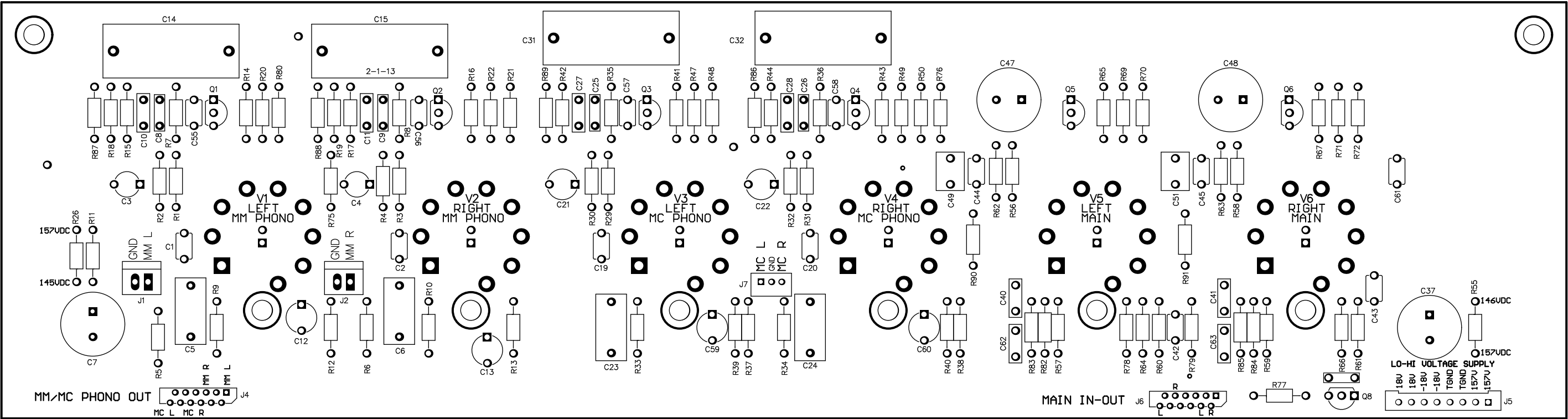


C2500
TUBE PREAMPLIFIER

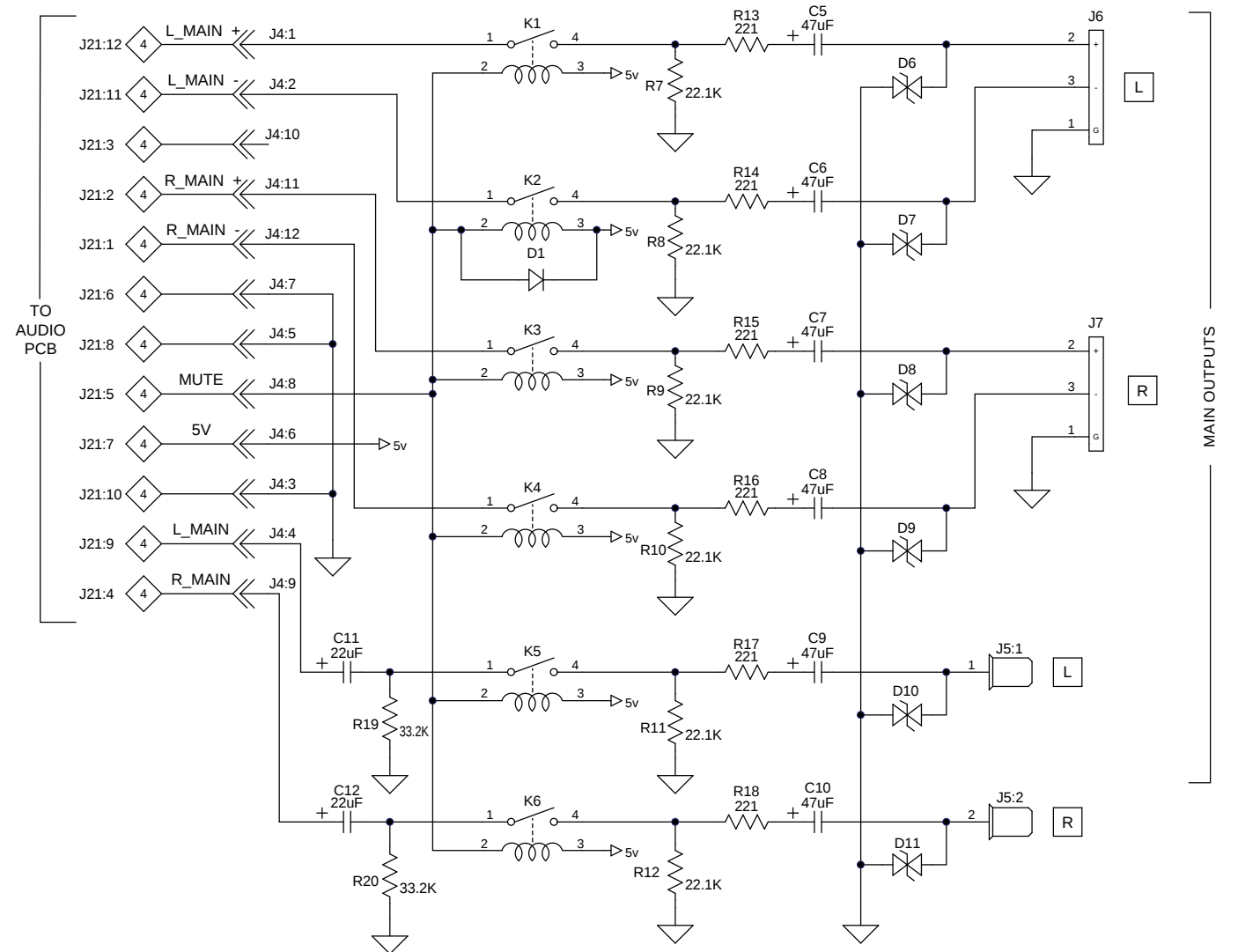
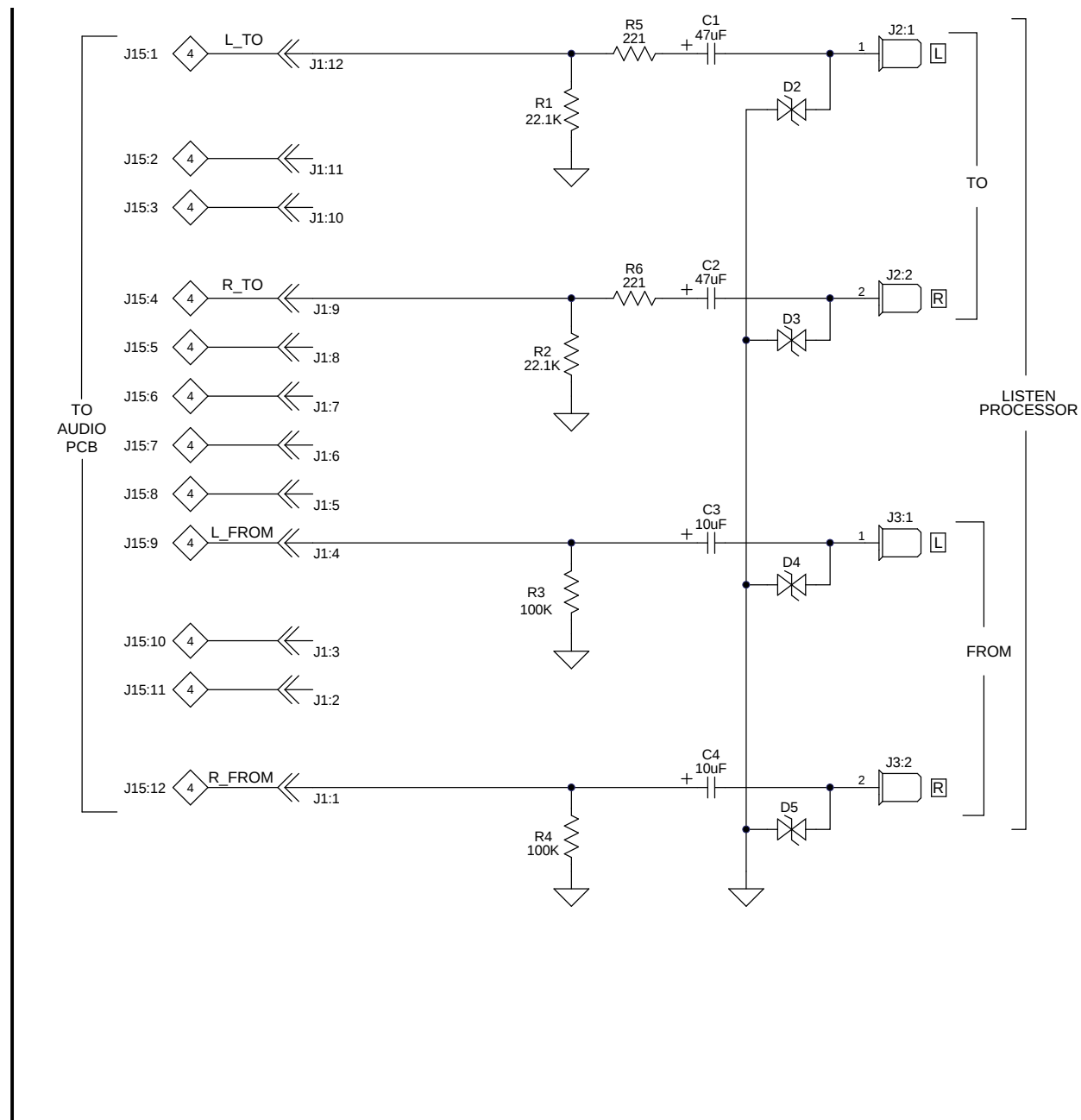


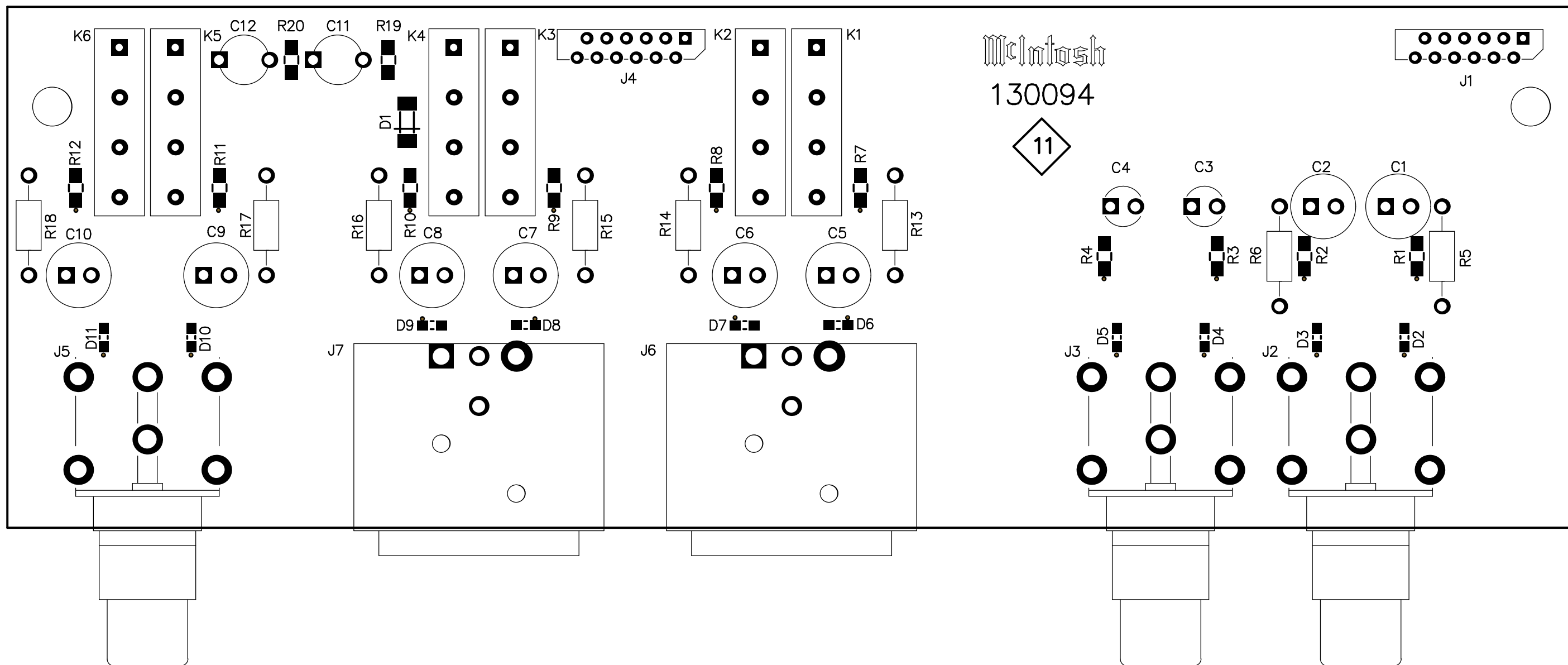
9 *TUBE 751461 SCH 3 of 3*



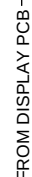


10 AUDIO EXPANSION 751251 SCH





11



PARTS LIST

1 INTERCONNECT

Ref No. Description

Part No.

Ref No. Description

Part No.

2 DISPLAY PCB 751456

C1	CAP ELECT 47UF 35V SMD	066604
C2	CAP MONO .1UF 50V 20% SMD0805	061365
C3	CAP ELECT 10UF 50V SMD	066602
C4	CAP MONO .1UF 50V 20% SMD0805	061365
C5	CAP ELECT 47UF 35V SMD	066604
C6	CAP MONO .1UF 50V 20% SMD0805	061365
C7	CAP MONO .1UF 50V 20% SMD0805	061365
C8	CAP MONO .1UF 50V 20% SMD0805	061365
C9	CAP MONO .1UF 50V 20% SMD0805	061365
C18	CAP ELECT 47UF 35V SMD	066604
C19	CAP MONO .1UF 50V 20% SMD0805	061365
C23	CAP ELECT 47UF 35V SMD	066604
C50	CAP MONO .1UF 50V 20% SMD0805	061365
C55	CAP MONO .1UF 50V 20% SMD0805	061365
C57	CAP MONO .1UF 50V 20% SMD0805	061365
C58	CAP ELECT 10UF 50V SMD	066602
C64	CAP MONO .1UF 50V 20% SMD0805	061365
C65	CAP ELECT 47UF 35V SMD	066604
C66	CAP MONO .1UF 50V 20% SMD0805	061365
C67	CAP MONO .1UF 50V 20% SMD0805	061365
C68	CAP MONO .1UF 50V 20% SMD0805	061365
C69	CAP ELECT 220UF 25V SMD	066606
C70	CAP .47UF 50V 20% SMD0805	061373
C71	CAP MONO .1UF 50V 20% SMD0805	061365
C72	CAP .47UF 50V 20% SMD0805	061373
C73	CAP MONO .1UF 50V 20% SMD0805	061365
C80	CAP MONO .1UF 50V 20% SMD0805	061365
C119	CAP MONO .1UF 50V 20% SMD0805	061365
C169	CAP .01UF 50V 20% SMD0805	061372
C170	CAP .01UF 50V 20% SMD0805	061372
C206	CAP .01UF 50V 20% SMD0805	061372
C207	CAP .01UF 50V 20% SMD0805	061372

D1	DIODE ESD SUPPRESSOR SMD	070198
D2	DIODE SMALL SIGNAL 4148 SMD	070199
D3	DIODE SMALL SIGNAL 4148 SMD	070199
D4	DIODE SMALL SIGNAL 4148 SMD	070199
D5	DIODE SMALL SIGNAL 4148 SMD	070199
D6	DIODE SMALL SIGNAL 4148 SMD	070199
D7	DIODE SMALL SIGNAL 4148 SMD	070199
D8	DIODE SMALL SIGNAL 4148 SMD	070199
D9	DIODE SMALL SIGNAL 4148 SMD	070199
D10	DIODE SMALL SIGNAL 4148 SMD	070199
D11	DIODE SMALL SIGNAL 4148 SMD	070199
D12	DIODE SMALL SIGNAL 4148 SMD	070199
D13	DIODE SMALL SIGNAL 4148 SMD	070199
D14	DIODE ZENER 5.1V	070186
D30	DIODE ZENER 5.1V	070186
DS1	ASSY PCB VFD 2X20 PIN	750931
(DS1)	SCR TS 2-32X5/16 PH PN BLK	401118
DS2	LED GREEN 5MM 30 DEG	058190
(DS2)	SPACER LED RA	112108
DS4	LED GREEN 5MM 30 DEG	058190
(DS4)	SPACER LED RA	112108
DS6	LED GREEN 5MM 30 DEG	058190
(DS6)	SPACER LED RA	112108
DS7	LED GREEN 5MM 30 DEG	058190
(DS7)	SPACER LED RA	112108
DS8	LED GREEN 5MM 30 DEG	058190
(DS8)	SPACER LED RA	112108
DS9	LED RED 5MM ROUND	058187
(DS9)	LED SPACER .220 LENGTH	163001
DS10	LED RED 5MM ROUND	058187
(DS10)	LED SPACER .220 LENGTH	163001
DS17	LED RED 5MM ROUND	058187
(DS17)	LED SPACER .220 LENGTH	163001
DS18	LED RED 5MM ROUND	058187
(DS18)	LED SPACER .220 LENGTH	163001
DS23	LED RED 5MM ROUND	058187
(DS23)	LED SPACER .220 LENGTH	163001
DS24	LED RED 5MM ROUND	058187
(DS24)	LED SPACER .220 LENGTH	163001
GP1	SOLDER LUG	075085
J1	"CONN 9 PIN FEMALE, BOTTOM MOUNT"	117987
J2	CONN 12 PIN FFC SMD	118001
J3	CONN 12 PIN FFC SMD	118001
J4	CONNECTOR 4 PIN HEADER 2MM	118014
J6	CONN 12 PIN FFC SMD	118001
J7	CONN 12 PIN FFC SMD	118001
J9	CONN 18 PIN FFC SMD	118003
J10	CONN 12 PIN FFC SMD	118001
J11	CONN 12 PIN FFC SMD	118001
J12	CONN 12 PIN FFC SMD	118001
J13	CONNECTOR 4 PIN HEADER 2MM	118014
J14	CONN 12 PIN FFC SMD	118001
J15	CONN 12 PIN FFC SMD	118001
J16	CONNECTOR 2MM 5 PIN RA	118032
J17	"HEADPHONE JACK 1/4"'"	117881
J22	HEADER 2 PIN LATCHING	117766
J23	HEADER 2 PIN LATCHING	117766
L1	INDUCTOR 10UH 30% SMD	122438
MP1	GROMMET	078031

PARTS LIST *cont'd.*

4 DISPLAY PCB 751456 (Cont'd.)

Ref No.	Description	Part No.
MP2	GROMMET	078031
MT1	SENSOR IR 38KHZ 3V-5V RA	121066
PCB1	PC BD DISPLAY	130176
Q1	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q2	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q5	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q39	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q40	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q41	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q42	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q43	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q44	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q45	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
Q46	TRANSISTOR NPN 60V MMBTA05LT1G SMD	132333
R1	RES SMD0805 150 1/8W 1%	145019
R2	RES SMD0805 150 1/8W 1%	145019
R3	RES SMD0805 100K 1/8W 1%	145014
R4	RES SMD0805 100K 1/8W 1%	145014
R7	RES SMD0805 10K 1/8W 1%	145010
R8	RES SMD0805 22.1 1/8W 1%	145003
R11	RES SMD0805 22.1 1/8W 1%	145003
R12	RES SMD0805 100 1/8W 1%	145005
R13	RES SMD0805 10K 1/8W 1%	145010
R14	RES SMD0805 150 1/8W 1%	145019
R15	RES SMD0805 150 1/8W 1%	145019
R16	RES SMD0805 2.21K 1/8W 1%	145024
R19	RES SMD0805 150 1/8W 1%	145019
R28	RES SMD0805 22.1K 1/8W 1%	145012
R29	RES SMD0805 22.1K 1/8W 1%	145012
R30	RES SMD0805 22.1K 1/8W 1%	145012
R34	RES SMD0805 22.1K 1/8W 1%	145012
R37	RES SMD0805 15K 1/8W 1%	145011
R38	RES SMD0805 15K 1/8W 1%	145011
R45	RES SMD0805 1K 1/8W 1%	145007
R46	RES SMD0805 10K 1/8W 1%	145010
R47	RES SMD0805 10K 1/8W 1%	145010
R51	RES SMD0805 22.1K 1/8W 1%	145012
R53	RES SMD0805 10K 1/8W 1%	145010
R55	RES SMD0805 10K 1/8W 1%	145010
R57	RES SMD0805 10K 1/8W 1%	145010
R58	RES SMD0805 10K 1/8W 1%	145010
R64	RES SMD0805 22.1 1/8W 1%	145003
R65	RES SMD0805 22.1 1/8W 1%	145003
R66	RES SMD0805 22.1 1/8W 1%	145003
R67	RES SMD0805 22.1 1/8W 1%	145003
R69	RES SMD0805 22.1 1/8W 1%	145003
R70	RES SMD0805 2.21K 1/8W 1%	145024
R72	"POT 1/4"" HORIZ 1K OHM 1/2W SMD"	134518
R73	"POT 1/4"" HORIZ 500 OHM .5W SMD"	134517
R74	"POT 1/4"" HORIZ 1K OHM 1/2W SMD"	134518
R75	"POT 1/4"" HORIZ 500 OHM .5W SMD"	134517
R94	RES SMD0805 1K 1/8W 1%	145007
R95	RES MO 47 OHM .5W 5%	137102
R96	RES SMD0805 1K 1/8W 1%	145007
R97	RES SMD0805 1K 1/8W 1%	145007
R98	RES SMD0805 100K 1/8W 1%	145014
R99	RES SMD0805 100K 1/8W 1%	145014
R100	RES SMD0805 22.1K 1/8W 1%	145012
R101	RES SMD0805 22.1K 1/8W 1%	145012

Ref No.	Description	Part No.
R103	RES SMD0805 150K 1/8W 1%	145037
R105	RES SMD0805 150K 1/8W 1%	145037
R106	"POT 1/4"" HORIZ 5K .5W SMD"	134520
R107	"POT 1/4"" HORIZ 5K .5W SMD"	134520
R108	RES SMD0805 221 1/8W 1%	145001
R109	RES SMD0805 221 1/8W 1%	145001
R110	RES SMD0805 2.21M 1/8W 1%	145043
R111	RES SMD0805 2.21M 1/8W 1%	145043
R112	RES MF 2.21 OHM 1% 1/4W	144607
R113	RES MF 2.21 OHM 1% 1/4W	144607
R114	RES SMD0805 1K 1/8W 1%	145007
R115	RES SMD0805 1K 1/8W 1%	145007
R116	RES SMD0805 10K 1/8W 1%	145010
R117	RES SMD0805 10K 1/8W 1%	145010
R201	RES SMD0805 22.1K 1/8W 1%	145012
R202	RES SMD0805 22.1K 1/8W 1%	145012
R203	RES SMD0805 22.1K 1/8W 1%	145012
R204	RES SMD0805 22.1K 1/8W 1%	145012
R209	RES SMD0805 22.1K 1/8W 1%	145012
R210	RES SMD0805 22.1K 1/8W 1%	145012
R211	RES SMD0805 22.1 1/8W 1%	145003
R212	RES SMD0805 22.1 1/8W 1%	145003
R213	RES SMD0805 1K 1/8W 1%	145007
R214	RES SMD0805 1K 1/8W 1%	145007
R216	RES SMD0805 1K 1/8W 1%	145007
R218	RES SMD0805 1K 1/8W 1%	145007
R220	RES SMD0805 1K 1/8W 1%	145007
R249	RES SMD0805 1K 1/8W 1%	145007
R250	RES SMD0805 1K 1/8W 1%	145007
R251	RES SMD0805 221K 1/8W 1%	145038
R252	RES SMD0805 221K 1/8W 1%	145038
S1	ENCODER INCREMENTAL	146261
S2	SWITCH PB TACT	150058
S3	SWITCH PB TACT	150058
S4	SWITCH PB TACT	150058
S5	SWITCH PB TACT	150058
S6	SWITCH PB TACT	150058
S7	SWITCH PB TACT	150058
S8	SWITCH PB TACT	150058
U1	IC DUAL OP-AMP SMD	133714
U3	IC DUAL OP-AMP SMD	133714
U4	IC SINGLE NAND SCHMITT SMD	133724
U5	IC SINGLE NAND SCHMITT SMD	133724
U6	IC SINGLE NAND SCHMITT SMD	133724
U7	IC SINGLE 2-INPUT AND GATE SMD	133502
U10	IC DUAL AMP 33178 SMD	133720
U11	IC DUAL AMP 33178 SMD	133720
U12	IC DUAL AMP 33178 SMD	133720
U25	IC SINGLE 2-INPUT AND GATE SMD	133502
U30	IC 8 BIT DRIVER SMD	133461

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BRKT1	TERMINAL PC SCREW	117975
C1	CAP ELECT 10UF 50V SMD	066602
C2	CAP MONO .1UF 50V 20% SMD0805	061365
C3	CAP MONO .1UF 50V 20% SMD0805	061365
C4	CAP MONO .1UF 50V 20% SMD0805	061365
C5	CAP MONO .1UF 50V 20% SMD0805	061365
C6	CAP MONO .1UF 50V 20% SMD0805	061365

PARTS LIST *cont'd.*

3 CONTROL PCB 751457

Ref No.	Description	Part No.	Ref No.	Description	Part No.
C10	CAP MONO .1UF 50V 20% SMD0805	061365	D5	DIODE ESD SUPPRESSOR SMD	070198
C12	CAP ELECT 220UF 25V SMD	066606	D6	DIODE ESD SUPPRESSOR SMD	070198
C13	CAP ELECT 220UF 25V SMD	066606	D7	DIODE ESD SUPPRESSOR SMD	070198
C15	CAP MONO .1UF 50V 20% SMD0805	061365	D8	DIODE ESD SUPPRESSOR SMD	070198
C16	CAP MONO .1UF 50V 20% SMD0805	061365	D9	DIODE ESD SUPPRESSOR SMD	070198
C22	CAP MONO .1UF 50V 20% SMD0805	061365	D10	DIODE ESD SUPPRESSOR SMD	070198
C23	CAP MONO .1UF 50V 20% SMD0805	061365	D11	DIODE ESD SUPPRESSOR SMD	070198
C26	CAP ELECT 470UF 16V SMD	066607	D22	DIODE SMALL SIGNAL 4148 SMD	070199
C27	CAP 100PF 50V SMD0805	061316	D28	DIODE ESD SUPPRESSOR SMD	070198
C28	CAP MONO .1UF 50V 20% SMD0805	061365	D29	DIODE ESD SUPPRESSOR SMD	070198
C29	CAP MONO .1UF 50V 20% SMD0805	061365	D30	DIODE ESD SUPPRESSOR SMD	070198
C30	CAP ELECT 470UF 16V SMD	066607	D31	DIODE ESD SUPPRESSOR SMD	070198
C31	CAP MONO .1UF 50V 20% SMD0805	061365	D32	DIODE ESD SUPPRESSOR SMD	070198
C32	CAP MONO .1UF 50V 20% SMD0805	061365	D33	DIODE ESD SUPPRESSOR SMD	070198
C34	CAP ELECT 470UF 16V SMD	066607	D34	DIODE ESD SUPPRESSOR SMD	070198
C36	CAP MONO .1UF 50V 20% SMD0805	061365	D35	DIODE ESD SUPPRESSOR SMD	070198
C37	CAP ELECT 10UF 50V SMD	066602	D36	DIODE ESD SUPPRESSOR SMD	070198
C38	CAP MONO .1UF 50V 20% SMD0805	061365	D37	DIODE ESD SUPPRESSOR SMD	070198
C39	CAP ELECT 470UF 16V SMD	066607	D38	DIODE ESD SUPPRESSOR SMD	070198
C40	CAP 100PF 50V SMD0805	061316	D39	DIODE ESD SUPPRESSOR SMD	070198
C41	CAP ELECT 470UF 16V SMD	066607	D40	DIODE ESD SUPPRESSOR SMD	070198
C42	CAP MONO .1UF 50V 20% SMD0805	061365	D42	DIODE ESD SUPPRESSOR SMD	070198
C43	CAP MONO .1UF 50V 20% SMD0805	061365	D43	DIODE ESD SUPPRESSOR SMD	070198
C44	CAP MONO .1UF 50V 20% SMD0805	061365	D44	DIODE SMALL SIGNAL 4148 SMD	070199
C46	CAP MONO .1UF 50V 20% SMD0805	061365	D45	DIODE SMALL SIGNAL 4148 SMD	070199
C48	CAP MONO .1UF 50V 20% SMD0805	061365	D46	DIODE SMALL SIGNAL 4148 SMD	070199
C49	CAP ELECT 4.7UF 50V SMD	066601	D47	DIODE SMALL SIGNAL 4148 SMD	070199
C50	CAP MNO 12pF 50V 5% NPOSMD0805	061364	D48	DIODE SMALL SIGNAL 4148 SMD	070199
C51	CAP MNO 12pF 50V 5% NPOSMD0805	061364	D49	DIODE ESD SUPPRESSOR SMD	070198
C53	CAP .01UF 50V 20% SMD0805	061372	D50	DIODE ESD SUPPRESSOR SMD	070198
C54	CAP 1000PF 50V SMD0805	061317	DS1	IR LED EMITTER	058174
C56	CAP MONO .1UF 50V 20% SMD0805	061365	(DS1)	SPACER LED	112108
C59	CAP MONO .1UF 50V 20% SMD0805	061365	DS2	LED WHITE SMD	058193
C60	CAP MONO .1UF 50V 20% SMD0805	061365	DS3	LED WHITE SMD	058193
C61	CAP MONO .1UF 50V 20% SMD0805	061365	DS4	LED WHITE SMD	058193
C62	CAP MONO .1UF 50V 20% SMD0805	061365	DS5	LED WHITE SMD	058193
C63	CAP MONO .1UF 50V 20% SMD0805	061365	DS6	LED WHITE SMD	058193
C64	CAP ELECT 4.7UF 50V SMD	066601	DS7	LED WHITE SMD	058193
C65	CAP MONO .1UF 50V 20% SMD0805	061365	F1	FUSE 0.35A 16V RESET 1206 SMD	145054
C66	CAP MONO .1UF 50V 20% SMD0805	061365	F2	FUSE 0.35A 16V RESET 1206 SMD	145054
C67	CAP MONO .1UF 50V 20% SMD0805	061365	F3	RESETTABLE FUSE 750mA SMD	145046
C68	CAP ELECT 10UF 50V SMD	066602	F4	RESETTABLE FUSE 750mA SMD	145046
C71	CAP ELECT 470UF 16V SMD	066607	F6	RESETTABLE FUSE 750mA SMD	145046
C72	CAP 100PF 50V SMD0805	061316	F7	RESETTABLE FUSE 750mA SMD	145046
C73	CAP MONO .1UF 50V 20% SMD0805	061365	F9	RESETTABLE FUSE 750mA SMD	145046
C74	CAP MONO .1UF 50V 20% SMD0805	061365	F10	FUSE 0.35A 16V RESET 1206 SMD	145054
C75	CAP MONO .1UF 50V 20% SMD0805	061365	F11	FUSE 0.35A 16V RESET 1206 SMD	145054
C76	CAP MONO .1UF 50V 20% SMD0805	061365	F12	RESETTABLE FUSE 750mA SMD	145046
C77	CAP MONO .1UF 50V 20% SMD0805	061365	F13	RESETTABLE FUSE 750mA SMD	145046
C78	CAP 100PF 50V SMD0805	061316	GP3	TERMINAL PC SCREW	117975
C79	CAP MONO .1UF 50V 20% SMD0805	061365	J5	CONN 12 PIN FFC SMD	118001
C80	CAP MONO .1UF 50V 20% SMD0805	061365	J6	7PIN SHROUDED HEADER	117910
C81	CAP MONO .1UF 50V 20% SMD0805	061365	J7	7PIN SHROUDED HEADER	117910
C82	CAP MONO .1UF 50V 20% SMD0805	061365	J11	CONN 12 PIN FFC SMD	118001
C83	CAP MONO .1UF 50V 20% SMD0805	061365	J12	CONN 12 PIN FFC SMD	118001
C84	CAP MONO .1UF 50V 20% SMD0805	061365	J13	JACK HEADPHONE DUAL BLACK 1/8	117825
C85	CAP MONO .1UF 50V 20% SMD0805	061365	J14	JACK HEADPHONE DUAL BLACK 1/8	117825
D1	DIODE SMALL SIGNAL 4148 SMD	070199	J15	JACK HEADPHONE DUAL BLACK 1/8	117825
D3	DIODE SMALL SIGNAL 4148 SMD	070199	J16	JACK HEADPHONE DUAL BLACK 1/8	117825

PARTS LIST *cont'd.*

3 CONTROL PCB 751457 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
J17	JACK HEADPHONE DUAL BLACK 1/8	117825	Q12	TRANSISTOR NPN A05 SMD	132333
J18	JACK HEADPHONE DUAL BLACK 1/8	117825	Q13	TRANSISTOR NPN A05 SMD	132333
J19	JACK HEADPHONE DUAL BLACK 1/8	117825	Q14	TRANSISTOR NPN A05 SMD	132333
J20	JACK HEADPHONE DUAL BLACK 1/8	117825	Q15	TRANSISTOR NPN A05 SMD	132333
J21	CONN 12 PIN FFC SMD	118001	Q16	TRANSISTOR NPN A05 SMD	132333
J22	CONN 12 PIN FFC SMD	118001	Q17	TRANSISTOR NPN A05 SMD	132333
J23	CONN 12 PIN FFC SMD	118001	Q18	TRANSISTOR NPN A05 SMD	132333
J25	CONN 9 PIN SUB D	117902	Q19	TRANSISTOR NPN A05 SMD	132333
J4	CONN 13 PIN FFC SMD	118002	Q20	TRANSISTOR NPN A05 SMD	132333
J2	CONN 18 PIN FFC SMD	118003	Q21	TRANSISTOR NPN A05 SMD	132333
J24	CONNECTOR 3PIN HEADER 2MM	118013	Q22	TRANSISTOR NPN A05 SMD	132333
L2	FERRITE 600 OHM 0.5 AMP SMD	076026	Q23	TRANSISTOR NPN A05 SMD	132333
L4	FERRITE 600 OHM 0.5 AMP SMD	076026	Q25	TRANSISTOR NPN A05 SMD	132333
L5	FERRITE 60 OHM 5 AMP SMD	076025	Q26	TRANSISTOR NPN A05 SMD	132333
L6	FERRITE 60 OHM 5 AMP SMD	076025	Q27	TRANSISTOR NPN A05 SMD	132333
L7	FERRITE 60 OHM 5 AMP SMD	076025	Q28	TRANSISTOR NPN A05 SMD	132333
L8	FERRITE 60 OHM 5 AMP SMD	076025	Q29	TRANSISTOR NPN A05 SMD	132333
L9	FERRITE 60 OHM 5 AMP SMD	076025	Q30	TRANSISTOR NPN A05 SMD	132333
L10	FERRITE 60 OHM 5 AMP SMD	076025	Q31	TRANSISTOR NPN A05 SMD	132333
L12	FERRITE 600 OHM 0.5 AMP SMD	076026	Q32	TRANSISTOR NPN A05 SMD	132333
L13	FERRITE 600 OHM 0.5 AMP SMD	076026	Q33	TRANSISTOR NPN A05 SMD	132333
L14	FERRITE 600 OHM 0.5 AMP SMD	076026	R1	RES SMD0805 47.5K 1/8W 1%	145013
L15	FERRITE 600 OHM 0.5 AMP SMD	076026	R2	RES SMD0805 1K 1/8W 1%	145007
L16	FERRITE 600 OHM 0.5 AMP SMD	076026	R3	RES SMD0805 4.75K 1/8W 1%	145008
L17	FERRITE 600 OHM 0.5 AMP SMD	076026	R4	RES SMD0805 47.5K 1/8W 1%	145013
L18	FERRITE 600 OHM 0.5 AMP SMD	076026	R5	RES SMD0805 1K 1/8W 1%	145007
L19	FERRITE 600 OHM 0.5 AMP SMD	076026	R6	RES SMD0805 10 1/8W 1%	145017
L20	FERRITE 600 OHM 0.5 AMP SMD	076026	R7	RES SMD0805 100 1/8W 1%	145005
L21	FERRITE 600 OHM 0.5 AMP SMD	076026	R8	RES SMD0805 22.1K 1/8W 1%	145012
L22	FERRITE 600 OHM 0.5 AMP SMD	076026	R9	RES SMD0805 4.75K 1/8W 1%	145008
L23	FERRITE 600 OHM 0.5 AMP SMD	076026	R10	RES SMD0805 10 1/8W 1%	145017
L24	FERRITE 600 OHM 0.5 AMP SMD	076026	R11	RES SMD0805 4.75K 1/8W 1%	145008
L25	FERRITE 600 OHM 0.5 AMP SMD	076026	R12	RES SMD0805 4.75K 1/8W 1%	145008
L26	FERRITE 600 OHM 0.5 AMP SMD	076026	R13	RES SMD0805 1K 1/8W 1%	145007
L27	FERRITE 600 OHM 0.5 AMP SMD	076026	R14	RES SMD0805 150 1/8W 1%	145019
L29	FERRITE 60 OHM 5 AMP SMD	076025	R15	RES SMD0805 150 1/8W 1%	145019
L30	FERRITE 600 OHM 0.5 AMP SMD	076026	R16	RES SMD0805 4.75K 1/8W 1%	145008
L31	FERRITE 600 OHM 0.5 AMP SMD	076026	R17	RES SMD0805 221K 1/8W 1%	145038
L32	FERRITE 600 OHM 0.5 AMP SMD	076026	R18	RES SMD0805 221K 1/8W 1%	145038
L33	FERRITE 600 OHM 0.5 AMP SMD	076026	R20	RES SMD0805 22.1 1/8W 1%	145003
L34	FERRITE 600 OHM 0.5 AMP SMD	076026	R21	RES SMD0805 221K 1/8W 1%	145038
L35	FERRITE 600 OHM 0.5 AMP SMD	076026	R22	RES SMD0805 22.1 1/8W 1%	145003
L36	FERRITE 600 OHM 0.5 AMP SMD	076026	R23	RES SMD0805 18.2K 1/8W 1%	145031
L37	FERRITE 600 OHM 0.5 AMP SMD	076026	R25	RES SMD0805 4.75K 1/8W 1%	145008
L39	FERRITE 600 OHM 0.5 AMP SMD	076026	R26	RES SMD0805 2.21K 1/8W 1%	145024
L40	FERRITE 600 OHM 0.5 AMP SMD	076026	R27	RES SMD0805 22.1 1/8W 1%	145003
MT1	SENSOR IR 38KHZ 3V-5V	121067	R30	RES SMD0805 10K 1/8W 1%	145010
PCB1	PCB CONTROL	130177	R31	RES SMD0805 1.82K 1/8W 1%	145023
Q1	TRANSISTOR NPN A05 SMD	132333	R32	RES SMD0805 1K 1/8W 1%	145007
Q2	TRANSISTOR NPN A05 SMD	132333	R33	RES SMD0805 10 1/8W 1%	145017
Q3	TRANSISTOR NPN A05 SMD	132333	R36	RES SMD0805 22.1 1/8W 1%	145003
Q4	TRANSISTOR NPN A05 SMD	132333	R37	RES SMD0805 100K 1/8W 1%	145014
Q5	TRANSISTOR NPN A05 SMD	132333	R38	RES SMD0805 150K 1/8W 1%	145037
Q6	TRANSISTOR NPN A05 SMD	132333	R39	RES SMD0805 47.5K 1/8W 1%	145013
Q7	TRANSISTOR NPN A05 SMD	132333	R40	RES SMD0805 150K 1/8W 1%	145037
Q8	TRANSISTOR NPN A05 SMD	132333	R41	RES SMD0805 22.1 1/8W 1%	145003
Q9	TRANSISTOR NPN A05 SMD	132333	R42	RES SMD0805 332K 1/8W 1%	145039
Q10	TRANSISTOR NPN A05 SMD	132333	R43	RES SMD0805 332K 1/8W 1%	145039
Q11	TRANSISTOR NPN A05 SMD	132333	R44	RES SMD0805 100K 1/8W 1%	145014

PARTS LIST *cont'd.*

3 CONTROL PCB 751457 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
R45	RES SMD0805 150K 1/8W 1%	145037	R133	RES SMD0805 22.1 1/8W 1%	145003
R46	RES SMD0805 47.5K 1/8W 1%	145013	R134	RES SMD0805 10 1/8W 1%	145017
R47	RES SMD0805 10K 1/8W 1%	145010	R135	RES SMD0805 475K 1/8W 1%	145040
R48	RES SMD0805 2.21K 1/8W 1%	145024	R136	RES SMD0805 10K 1/8W 1%	145010
R49	RES SMD0805 332K 1/8W 1%	145039	R137	RES SMD0805 47.5K 1/8W 1%	145013
R50	RES SMD0805 332K 1/8W 1%	145039	R138	RES SMD0805 100 1/8W 1%	145005
R51	RES SMD0805 100K 1/8W 1%	145014	R141	RES SMD0805 10 1/8W 1%	145017
R56	RES SMD0805 22.1K 1/8W 1%	145012	R142	RES SMD0805 10 1/8W 1%	145017
R57	RES SMD0805 22.1K 1/8W 1%	145012	R143	RES SMD0805 10 1/8W 1%	145017
R58	RES SMD0805 22.1K 1/8W 1%	145012	R144	RES SMD0805 10 1/8W 1%	145017
R59	RES SMD0805 22.1K 1/8W 1%	145012	R145	RES SMD0805 10 1/8W 1%	145017
R60	RES SMD0805 22.1K 1/8W 1%	145012	R146	RES SMD0805 10 1/8W 1%	145017
R61	RES SMD0805 22.1K 1/8W 1%	145012	R148	RES SMD0805 10 1/8W 1%	145017
R62	RES SMD0805 22.1K 1/8W 1%	145012	R149	RES SMD0805 10 1/8W 1%	145017
R63	RES SMD0805 22.1K 1/8W 1%	145012	R150	RES SMD0805 10 1/8W 1%	145017
R64	RES SMD0805 22.1K 1/8W 1%	145012	R151	RES SMD0805 10 1/8W 1%	145017
R65	RES SMD0805 22.1K 1/8W 1%	145012	R152	RES SMD0805 10 1/8W 1%	145017
R66	RES SMD0805 22.1 1/8W 1%	145003	R153	RES SMD0805 10 1/8W 1%	145017
R67	RES SMD0805 22.1 1/8W 1%	145003	R154	RES SMD0805 10 1/8W 1%	145017
R68	RES SMD0805 22.1 1/8W 1%	145003	R155	RES SMD0805 10 1/8W 1%	145017
R69	RES SMD0805 22.1 1/8W 1%	145003	R156	RES SMD0805 22.1 1/8W 1%	145003
R70	RES SMD0805 22.1 1/8W 1%	145003	R157	RES SMD0805 22.1 1/8W 1%	145003
R71	RES SMD0805 22.1 1/8W 1%	145003	R158	RES SMD0805 22.1K 1/8W 1%	145012
R72	RES SMD0805 22.1 1/8W 1%	145003	R159	RES SMD0805 22.1K 1/8W 1%	145012
R73	RES SMD0805 22.1 1/8W 1%	145003	R160	RES SMD0805 100 1/8W 1%	145005
R74	RES SMD0805 22.1 1/8W 1%	145003	R161	RES SMD0805 22.1K 1/8W 1%	145012
R75	RES SMD0805 22.1 1/8W 1%	145003	R162	RES SMD0805 100 1/8W 1%	145005
R96	RES SMD0805 1.5K 1/8W 1%	145022	R163	RES SMD0805 100 1/8W 1%	145005
R97	RES SMD0805 22.1 1/8W 1%	145003	R164	RES SMD0805 100 1/8W 1%	145005
R98	RES SMD0805 100 1/8W 1%	145005	R165	RES SMD0805 100 1/8W 1%	145005
R101	RES SMD0805 0 1/8W 0%	145016	R166	RES SMD0805 100 1/8W 1%	145005
R102	RES SMD0805 10K 1/8W 1%	145010	R167	RES SMD0805 100 1/8W 1%	145005
R103	RES SMD0805 0 1/8W 0%	145016	R168	RES SMD0805 22.1K 1/8W 1%	145012
R104	RES SMD0805 0 1/8W 0%	145016	R169	RES SMD0805 22.1K 1/8W 1%	145012
R105	RES SMD0805 22.1 1/8W 1%	145003	R170	RES SMD0805 22.1K 1/8W 1%	145012
R106	RES SMD0805 0 1/8W 0%	145016	R171	RES SMD0805 22.1K 1/8W 1%	145012
R107	RES SMD0805 22.1 1/8W 1%	145003	R172	RES SMD0805 22.1K 1/8W 1%	145012
R108	RES SMD0805 22.1 1/8W 1%	145003	R173	RES SMD0805 22.1K 1/8W 1%	145012
R109	RES SMD0805 22.1 1/8W 1%	145003	R174	RES SMD0805 1M 1/8W 1%	145042
R110	RES SMD0805 22.1 1/8W 1%	145003	R175	RES SMD0805 1M 1/8W 1%	145042
R111	RES SMD0805 22.1 1/8W 1%	145003	R176	RES SMD0805 56.2K 1/8W 1%	145034
R112	RES SMD0805 22.1 1/8W 1%	145003	R177	RES SMD0805 4.75K 1/8W 1%	145008
R115	RES SMD0805 22.1 1/8W 1%	145003	R178	RES SMD0805 2.21K 1/8W 1%	145024
R116	RES SMD0805 22.1 1/8W 1%	145003	R179	RES SMD0805 22.1K 1/8W 1%	145012
R117	RES SMD0805 22.1 1/8W 1%	145003	R180	RES SMD0805 22.1 1/8W 1%	145003
R119	RES SMD0805 22.1 1/8W 1%	145003	R181	RES SMD0805 4.75K 1/8W 1%	145008
R120	RES SMD0805 22.1 1/8W 1%	145003	R182	RES SMD0805 4.75K 1/8W 1%	145008
R121	RES SMD0805 22.1 1/8W 1%	145003	R183	RES SMD0805 2.21K 1/8W 1%	145024
R122	RES SMD0805 22.1 1/8W 1%	145003	R184	RES SMD0805 2.21K 1/8W 1%	145024
R123	RES SMD0805 22.1 1/8W 1%	145003	R187	RES SMD0805 22.1 1/8W 1%	145003
R124	RES SMD0805 22.1 1/8W 1%	145003	R188	RES SMD0805 22.1 1/8W 1%	145003
R125	RES SMD0805 22.1 1/8W 1%	145003	R189	RES SMD0805 4.75K 1/8W 1%	145008
R126	RES SMD0805 22.1 1/8W 1%	145003	R190	RES SMD0805 2.21K 1/8W 1%	145024
R127	RES SMD0805 22.1 1/8W 1%	145003	R191	RES SMD0805 100 1/8W 1%	145005
R128	RES SMD0805 22.1 1/8W 1%	145003	R192	RES SMD0805 22.1 1/8W 1%	145003
R129	RES SMD0805 22.1 1/8W 1%	145003	R198	RES SMD0805 100K 1/8W 1%	145014
R130	RES SMD0805 22.1 1/8W 1%	145003	R199	RES SMD0805 100K 1/8W 1%	145014
R131	RES SMD0805 22.1 1/8W 1%	145003	R201	RES SMD0805 22.1K 1/8W 1%	145012
R132	RES SMD0805 22.1 1/8W 1%	145003	R202	RES SMD0805 22.1K 1/8W 1%	145012

PARTS LIST *cont'd.*

3 CONTROL PCB 751457 (Cont'd.)

Ref No.	Description	Part No.
R203	RES SMD0805 22.1K 1/8W 1%	145012
R204	RES SMD0805 22.1K 1/8W 1%	145012
R205	RES SMD0805 22.1K 1/8W 1%	145012
R206	RES SMD0805 22.1K 1/8W 1%	145012
R207	RES SMD0805 22.1K 1/8W 1%	145012
R208	RES SMD0805 22.1K 1/8W 1%	145012
R209	RES SMD0805 22.1K 1/8W 1%	145012
R210	RES SMD0805 22.1K 1/8W 1%	145012
R211	RES SMD0805 22.1 1/8W 1%	145003
R212	RES SMD0805 22.1 1/8W 1%	145003
R215	RES SMD0805 22.1 1/8W 1%	145003
R217	RES SMD0805 22.1 1/8W 1%	145003
R218	RES SMD0805 47.5K 1/8W 1%	145013
R219	RES SMD0805 22.1 1/8W 1%	145003
R220	RES SMD0805 22.1K 1/8W 1%	145012
R221	RES SMD0805 150 1/8W 1%	145019
R222	RES SMD0805 22.1K 1/8W 1%	145012
R223	RES SMD0805 150 1/8W 1%	145019
R224	RES SMD0805 22.1K 1/8W 1%	145012
R225	RES SMD0805 150 1/8W 1%	145019
R226	RES SMD0805 22.1K 1/8W 1%	145012
R231	RES SMD0805 22.1 1/8W 1%	145003
R232	RES SMD0805 22.1 1/8W 1%	145003
R233	RES SMD0805 22.1 1/8W 1%	145003
R234	RES SMD0805 22.1 1/8W 1%	145003
R235	RES SMD0805 22.1 1/8W 1%	145003
R236	RES SMD0805 10K 1/8W 1%	145010
R237	RES SMD0805 22.1K 1/8W 1%	145012
R238	RES SMD0805 10K 1/8W 1%	145010
R239	RES SMD0805 47.5K 1/8W 1%	145013
R240	RES SMD0805 22.1 1/8W 1%	145003
R241	RES SMD0805 22.1 1/8W 1%	145003
R242	RES SMD0805 22.1 1/8W 1%	145003
R246	RES SMD0805 0 1/8W 0%	145016
R247	RES SMD0805 0 1/8W 0%	145016
R248	RES SMD0805 10 1/8W 1%	145017
R250	RES SMD0805 0 1/8W 0%	145016
R251	RES SMD0805 22.1K 1/8W 1%	145012
R252	RES SMD0805 22.1 1/8W 1%	145003
R274	RES SMD0805 1K 1/8W 1%	145007
S1	SWITCH SLIDE DPDT	148076
SW1	SWTCH TACT 1.96N 5.9 X 6MM SMD	150071
SW2	SWTCH TACT 1.96N 5.9 X 6MM SMD	150071
U1	IC SINGLE 2-INPUT AND GATE SMD	133502
U3	IC:MICRO 32-BIT ARM7 SMD	133635
U4	IC SINGLE 2-INPUT AND GATE SMD	133552
U5	IC SINGLE 2-INPUT AND GATE SMD	133552
U6	REG VAR 1.24-26 1A SMD	133717
U7	IC I2C BUS REPEATER SMD	133769
U9	REG NEG ADJ 1A ENA SMD	133731
U10	REG VAR 1.24-26 1A SMD	133717
U11	REG VAR 1.24-26 1A SMD	133717
U12	IC SINGLE NAND SCHMITT SMD	133724
U13	REG VAR 1.24-26 1A SMD	133717
U14	REG VAR 1.24-26 1A SMD	133717
U15	IC SINGLE NAND SCHMITT SMD	133724
U16	IC SINGLE 2-INPUT AND GATE SMD	133502
U17	IC SINGLE 2-INPUT AND GATE SMD	133502
U18	IC 8 BIT DRIVER SMD	133461

Ref No.	Description	Part No.
U20	IC EEPROM 256K BITS 3.3V SMD	133709
U21	IC SINGLE 2 INPUT OR GATE SMD	133700
U22	IC SINGLE 2-INPUT NAND GATE SMD	133501
U23	IC SINGLE 2-INPUT AND GATE SMD	133552
U24	IC SINGLE 2-INPUT AND GATE SMD	133502
U25	IC SINGLE 2-INPUT AND GATE SMD	133502
U26	IC SINGLE NAND SCHMITT SMD	133724
U27	IC SINGLE NAND SCHMITT SMD	133724
U28	IC 8 BIT DRIVER SMD	133461
U29	REG VAR 1.24-26 1A SMD	133717
U30	IC 8 BIT DRIVER SMD	133461
U31	IC I2C BUS REPEATER SMD	133769
U32	IC I2C BUS REPEATER SMD	133769
U34	IC SINGLE 2-INPUT AND GATE SMD	133552
U35	IC SINGLE 2-INPUT AND GATE SMD	133552
U36	IC SINGLE 2-INPUT AND GATE SMD	133552
U37	IC DUAL RS232 3V W/SHUTDWN SMD	133707
U38	IC SINGLE 2-INPUT AND GATE SMD	133552
Y1	CRYSTAL 18.432000MHZ 20PF SMD	180065
	FIRMWARE V1.00 C2500	230039
	ASSY SMD CONTROL	710173

4 AUDIO PCB 751458

C1	CAP 100PF 50V SMD0805	061316
C2	CAP 100PF 50V SMD0805	061316
C3	CAP 1000PF 50V SMD0805	061317
C4	CAP 1000PF 50V SMD0805	061317
C5	CAP 1000PF 50V SMD0805	061317
C6	CAP 1000PF 50V SMD0805	061317
C7	CAP ELECT 1000UF 25V	066513
C8	CAP ELECT 1000UF 25V	066513
C9	CAP ELECT 1000UF 25V	066513
C10	CAP ELECT 1000UF 25V	066513
C11	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C12	CAP MPF 0.0033UF 5% 63VDC	064455
C13	CAP MPF 0.0033UF 5% 63VDC	064455
C14	CAP 22PF 200V 10% NPO SMD0805	061367
C15	CAP 22PF 200V 10% NPO SMD0805	061367
C16	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C17	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C18	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C19	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C20	CAP ELECT 100UF 25V	066573
C21	CAP ELECT 100UF 25V	066573
C38	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C39	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C40	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C41	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C42	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C43	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C44	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C45	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C48	CAP ELECT 10UF 50V	066445
C49	CAP ELECT 10UF 50V	066445
C50	CAP ELECT 10UF 50V	066445
C51	CAP ELECT 10UF 50V	066445
C52	CAP 100PF 50V SMD0805	061316
C53	CAP 100PF 50V SMD0805	061316
C62	CAP 100PF 50V SMD0805	061316

PARTS LIST *cont'd.*

5 AUDIO PCB 751458 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
C63	CAP 100PF 50V SMD0805	061316	C130	CAP 100PF 50V SMD0805	061316
C68	CAP 100PF 50V SMD0805	061316	C131	CAP 100PF 50V SMD0805	061316
C69	CAP 100PF 50V SMD0805	061316	C132	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C70	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C133	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C71	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C134	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C76	CAP ELECT 10UF 50V	066445	C135	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C77	CAP 220PF 200V 10% NPO SMD0805	061369	C136	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C78	CAP 47PF 200V 10% NPO SMD0805	061368	C137	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C79	CAP ELECT 10UF 50V	066445	C138	CAP ELECT 47UF 35V	066446
C80	CAP ELECT 10UF 50V	066445	C139	CAP ELECT 47UF 35V	066446
C81	CAP 220PF 200V 10% NPO SMD0805	061369	C140	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C82	CAP 47PF 200V 10% NPO SMD0805	061368	C141	CAP ELECT 10UF 16V 4X5 CASE T&R	066580
C83	CAP 39pF 100V 5% SMD0805	061378	C142	CAP ELECT 10UF 50V	066445
C84	CAP 39pF 100V 5% SMD0805	061378	C143	CAP ELECT 10UF 50V	066445
C85	CAP 330PF 100V 5% SMD0805	061377	C144	CAP 100PF 50V SMD0805	061316
C86	CAP 100PF 50V SMD0805	061316	C145	CAP 100PF 50V SMD0805	061316
C87	CAP 330PF 100V 5% SMD0805	061377	C146	CAP 100PF 50V SMD0805	061316
C88	CAP 100PF 50V SMD0805	061316	C147	CAP 100PF 50V SMD0805	061316
C89	CAP 22PF 200V 10% NPO SMD0805	061367	C148	CAP 22PF 200V 10% NPO SMD0805	061367
C90	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C149	CAP 47PF 200V 10% NPO SMD0805	061368
C91	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C150	CAP 22PF 200V 10% NPO SMD0805	061367
C92	CAP 22PF 200V 10% NPO SMD0805	061367	C151	CAP 47PF 200V 10% NPO SMD0805	061368
C93	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C152	CAP ELECT 10UF 50V	066445
C94	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C153	CAP ELECT 10UF 50V	066445
C95	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C154	CAP ELECT 10UF 50V	066445
C96	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C155	CAP ELECT 10UF 50V	066445
C97	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C156	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C98	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C157	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C99	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C158	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C100	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C159	CAP .01UF 50V 20% NPO SMD0805	061372
C101	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C162	CAP ELECT 100UF 25V	066573
C102	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C163	CAP ELECT 100UF 25V	066573
C103	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C164	CAP ELECT 10UF 50V	066445
C104	CAP ELECT 10UF 16V 4X5 CASE T&R	066580	C165	CAP MPF 0.22UF 5% 63VDC	064329
C105	CAP ELECT 10UF 50V	066445	C168	CAP 100PF 50V SMD0805	061316
C106	CAP ELECT 10UF 50V	066445	C171	CAP MPF 0.0022UF 5% 63VDC	064454
C107	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C172	CAP ELECT 100UF 25V	066573
C108	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C174	CAP ELECT 10UF 50V	066445
C109	CAP ELECT 47UF 35V	066446	C175	CAP ELECT 10UF 50V	066445
C110	CAP ELECT 47UF 35V	066446	C178	CAP ELECT 10UF 50V	066445
C111	CAP .47UF 50V 20% NPO SMD0805	061373	C179	CAP MPF 0.0022UF 5% 63VDC	064454
C112	CAP ELECT 47UF 35V	066446	C180	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C113	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C181	CAP MPF 0.22UF 5% 63VDC	064329
C114	CAP MONO .1UF 50V 20% X7R SMD0805	061365	C182	CAP 220PF 200V 10% NPO SMD0805	061369
C115	CAP ELECT 10UF 50V	066445	C183	CAP MPF 1UF 5% 63VDC	064337
C116	CAP ELECT 10UF 50V	066445	C184	CAP ELECT 100UF 25V	066573
C117	CAP ELECT 47UF 35V	066446	C185	CAP MPF 1UF 5% 63VDC	064337
C118	CAP ELECT 47UF 35V	066446	C186	CAP 22PF 200V 10% NPO SMD0805	061367
C119	CAP ELECT 47UF 35V	066446	C187	CAP 22PF 200V 10% NPO SMD0805	061367
C120	CAP ELECT 47UF 35V	066446	C188	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C121	CAP ELECT 47UF 35V	066446	C189	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C122	CAP ELECT 47UF 35V	066446	C190	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C123	CAP ELECT 47UF 35V	066446	C191	CAP MONO .1UF 50V 20% X7R SMD0805	061365
C124	CAP ELECT 47UF 35V	066446	C194	CAP ELECT 22UF 100V	066574
C125	CAP ELECT 10UF 50V	066445	C195	CAP ELECT 10UF 50V	066445
C126	CAP ELECT 10UF 50V	066445	C196	CAP ELECT 10UF 50V	066445
C127	CAP ELECT 10UF 50V	066445	C197	CAP ELECT 22UF 100V	066574
C128	CAP 100PF 50V SMD0805	061316	C198	CAP 470PF 100V 10% NPO SMD0805	061370
C129	CAP 100PF 50V SMD0805	061316	C199	CAP 470PF 100V 10% NPO SMD0805	061370

PARTS LIST *cont'd.*

4 AUDIO PCB 751458 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
C200	CAP ELECT 470UF 16V	066508	D31	DIODE SMALL SIGNAL 4148 SMD	070199
C201	CAP ELECT 470UF 16V	066508	D32	DIODE SMALL SIGNAL 4148 SMD	070199
C202	CAP MONO .1UF 50V 20% X7R SMD0805	061365	D33	DIODE SMALL SIGNAL 4148 SMD	070199
C203	CAP MONO .1UF 50V 20% X7R SMD0805	061365	D34	DIODE ESD SUPPRESSOR SMD	070198
C204	CAP MONO .1UF 50V 20% X7R SMD0805	061365	D39	DIODE ESD SUPPRESSOR SMD	070198
C205	CAP MONO .1UF 50V 20% X7R SMD0805	061365	D43	DIODE SMALL SIGNAL 4148 SMD	070199
C206	CAP ELECT 47UF 35V	066446	D44	DIODE ZENER 5.1V 5% SMD	070215
C207	CAP ELECT 47UF 35V	066446	D45	DIODE SMALL SIGNAL 4148 SMD	070199
C208	CAP ELECT 47UF 35V	066446	D46	DIODE SMALL SIGNAL 4148 SMD	070199
C209	CAP ELECT 47UF 35V	066446	D47	DIODE SMALL SIGNAL 4148 SMD	070199
C210	CAP ELECT 100UF 25V	066573	D48	DIODE SMALL SIGNAL 4148 SMD	070199
C211	CAP ELECT 100UF 25V	066573	D49	DIODE ZENER 5.1V 5% SMD	070215
C212	CAP ELECT 10UF 50V	066445	D50	DIODE SMALL SIGNAL 4148 SMD	070199
C213	CAP ELECT 100UF 25V	066573	J1	JACK PHONO GOLD	118020
C216	CAP ELECT 470UF 16V	066508	J2	CONN FFC 18PIN	117908
C217	CAP MPF 0.022UF 5% 63VDC	064316	J3	CONN 12 PIN FFC	117907
C218	CAP ELECT 470UF 16V	066508	J4	JACK PHONO GOLD	118020
C219	CAP MPF 0.022UF 5% 63VDC	064316	J5	JACK PHONO GOLD	118020
C220	CAP ELECT .47UF 50V	066244	J6	JACK PHONO GOLD	118020
C221	CAP MONO .1UF 50V 20% X7R SMD0805	061365	J7	JACK PHONO GOLD	118020
C222	CAP MONO .1UF 50V 20% X7R SMD0805	061365	J8	JACK PHONO GOLD	118020
C223	CAP ELECT 47UF 35V	066446	J9	JACK PHONO GOLD	118020
C224	CAP ELECT 1UF 50V	066510	J10	JACK PHONO GOLD	118020
C225	CAP ELECT 1UF 50V	066510	J11	CONN FFC 18PIN	117908
C226	CAP ELECT 1UF 50V	066510	J12	CONN 12 PIN FFC	117907
C227	CAP ELECT 1UF 50V	066510	J13	CONN 12 PIN FFC	117907
C228	CAP 10UF 16V 20% X5R SMD0805	061392	J14	JACK PHONO GOLD	118020
C229	CAP 10UF 16V 20% X5R SMD0805	061392	J15	CONN 12 PIN FFC	117907
CT1	CABLE TIE PANDUIT PLT1M-M	094255	J16	CONN 12 PIN FFC	117907
D1	DIODE ESD SUPPRESSOR SMD	070198	J18	JACK PHONO GOLD	118020
D2	DIODE ESD SUPPRESSOR SMD	070198	J19	JACK PHONO GOLD	118020
D3	DIODE SMALL SIGNAL 4148 SMD	070199	J20	CONNECTOR 2MM 5 PIN RA	118032
D4	DIODE SMALL SIGNAL 4148 SMD	070199	J21	CONN 12 PIN FFC	117907
D5	DIODE ESD SUPPRESSOR SMD	070198	J22	CONNECTOR 3PIN HEADER 2MM	118013
D6	DIODE ESD SUPPRESSOR SMD	070198	J23	HEADER 2 PIN LATCHING	117766
D7	DIODE ESD SUPPRESSOR SMD	070198	J24	HEADER 2 PIN LATCHING	117766
D8	DIODE ESD SUPPRESSOR SMD	070198	J26	CONN 12 PIN FFC	117907
D9	DIODE ESD SUPPRESSOR SMD	070198	J41	CONNECTOR 4 PIN HEADER 2MM	118014
D10	DIODE ESD SUPPRESSOR SMD	070198	J46	CONN 12 PIN FFC	117907
D11	DIODE ESD SUPPRESSOR SMD	070198	K1	RELAY REED SPST-NO 5V 1.2A	087078
D12	DIODE ESD SUPPRESSOR SMD	070198	K2	RELAY REED SPST-NO 5V 1.2A	087078
D13	DIODE ESD SUPPRESSOR SMD	070198	K3	RELAY REED SPST-NO 5V 1.2A	087078
D14	DIODE ESD SUPPRESSOR SMD	070198	K4	RELAY REED SPST-NO 5V 1.2A	087078
D15	DIODE ESD SUPPRESSOR SMD	070198	K5	RELAY REED SPST-NO 5V 1.2A	087078
D16	DIODE ESD SUPPRESSOR SMD	070198	K6	RELAY REED SPST-NO 5V 1.2A	087078
D17	DIODE ESD SUPPRESSOR SMD	070198	K7	RELAY REED SPST-NO 5V 1.2A	087078
D18	DIODE ESD SUPPRESSOR SMD	070198	K8	RELAY REED SPST-NO 5V 1.2A	087078
D19	DIODE SMALL SIGNAL 4148 SMD	070199	K9	RELAY REED SPST-NO 5V 1.2A	087078
D20	DIODE SMALL SIGNAL 4148 SMD	070199	K10	RELAY REED SPST-NO 5V 1.2A	087078
D21	DIODE SMALL SIGNAL 4148 SMD	070199	K11	RELAY REED SPST-NO 5V 1.2A	087078
D22	DIODE SMALL SIGNAL 4148 SMD	070199	K12	RELAY REED SPST-NO 5V 1.2A	087078
D23	DIODE SMALL SIGNAL 4148 SMD	070199	K13	RELAY REED SPST-NO 5V 1.2A	087078
D24	DIODE SMALL SIGNAL 4148 SMD	070199	K14	RELAY REED SPST-NO 5V 1.2A	087078
D25	DIODE SMALL SIGNAL 4148 SMD	070199	K15	RELAY REED SPST-NO 5V 1.2A	087078
D26	DIODE SMALL SIGNAL 4148 SMD	070199	K16	RELAY REED SPST-NO 5V 1.2A	087078
D27	DIODE SMALL SIGNAL 4148 SMD	070199	K17	RELAY REED SPST-NO 5V 1.2A	087078
D28	DIODE SMALL SIGNAL 4148 SMD	070199	K18	RELAY REED SPST-NO 5V 1.2A	087078
D29	DIODE SMALL SIGNAL 4148 SMD	070199	K19	RELAY REED SPST-NO 5V 1.2A	087078
D30	DIODE SMALL SIGNAL 4148 SMD	070199	K20	RELAY REED SPST-NO 5V 1.2A	087078

PARTS LIST *cont'd.*

4 AUDIO PCB 751458 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
K21	RELAY REED SPST-NO 5V 1.2A	087078	Q30	TRANSISTOR PCH 60V J174	132320
K22	RELAY REED SPST-NO 5V 1.2A	087078	Q31	TRANSISTOR PCH 60V J174	132320
K23	RELAY REED SPST-NO 5V 1.2A	087078	Q32	TRANSISTOR PCH 60V J174	132320
K24	RELAY REED SPST-NO 5V 1.2A	087078	Q33	TRANSISTOR PCH 60V J174	132320
K25	RELAY REED SPST-NO 5V 1.2A	087078	Q34	TRANSISTOR PCH 60V J174	132320
K26	RELAY REED SPST-NO 5V 1.2A	087078	Q35	TRANSISTOR PCH 60V J174	132320
K27	RELAY REED SPST-NO 5V 1.2A	087078	Q36	TRANSISTOR PCH 60V J174	132320
K28	RELAY REED SPST-NO 5V 1.2A	087078	Q37	TRANSISTOR NPN A05 SMD	132333
K29	RELAY REED SPST-NO 5V 1.2A	087078	Q38	TRANSISTOR NPN A05 SMD	132333
K30	RELAY REED SPST-NO 5V 1.2A	087078	Q39	TRANSISTOR NPN A05 SMD	132333
K31	RELAY REED SPST-NO 5V 1.2A	087078	Q40	TRANSISTOR NPN A05 SMD	132333
K32	RELAY REED SPST-NO 5V 1.2A	087078	Q41	TRANSISTOR NPN A05 SMD	132333
K33	RELAY REED SPST-NO 5V 1.2A	087078	Q42	TRANSISTOR NPN A05 SMD	132333
K34	RELAY REED SPST-NO 5V 1.2A	087078	Q43	TRANSISTOR NPN A05 SMD	132333
K35	RELAY REED SPST-NO 5V 1.2A	087078	Q44	TRANSISTOR NPN A05 SMD	132333
K36	RELAY REED SPST-NO 5V 1.2A	087078	Q45	TRANSISTOR NPN A05 SMD	132333
K37	RELAY REED FORM 1C 5V 125 OHM	087056	Q46	TRANSISTOR NPN A05 SMD	132333
K38	RELAY REED SPST-NO 5V 1.2A	087078	Q47	TRANSISTOR NPN A05 SMD	132333
K39	RELAY REED SPST-NO 5V 1.2A	087078	Q48	TRANSISTOR NPN A05 SMD	132333
K40	RELAY REED SPST-NO 5V 1.2A	087078	Q49	TRANSISTOR NPN 2SC5994 SMD	132341
K41	RELAY REED FORM 1C 5V 125 OHM	087056	Q50	TRANSISTOR PNP SMD	132340
K42	RELAY REED SPST-NO 5V 1.2A	087078	Q51	TRANSISTOR NPN 2SC5994 SMD	132341
K43	RELAY REED SPST-NO 5V 1.2A	087078	Q52	TRANSISTOR PNP SMD	132340
K44	RELAY REED SPST-NO 5V 1.2A	087078	Q53	TRANSISTOR NPN A05 SMD	132333
K45	RELAY REED SPST-NO 5V 1.2A	087078	Q54	TRANSISTOR NPN A05 SMD	132333
K46	RELAY REED SPST-NO 5V 1.2A	087078	Q55	TRANSISTOR NPN A05 SMD	132333
K47	RELAY REED SPST-NO 5V 1.2A	087078	Q56	TRANSISTOR NPN A05 SMD	132333
K48	RELAY REED SPST-NO 5V 1.2A	087078	Q57	TRANSISTOR NPN A05 SMD	132333
K49	RELAY REED SPST-NO 5V 1.2A	087078	R1	RES MF 1K 1% 1/4W	144513
PCB1	PC BD AUDIO	130178	R2	RES MF 1K 1% 1/4W	144513
Q1	TRANSISTOR NPN 2SC4694 SMD	132336	R3	RES MF 110 OHM 1% 1/4W	144664
Q2	TRANSISTOR NPN 2SC4694 SMD	132336	R4	RES MF 681 OHM 1% 1/4W	144567
Q3	TRANSISTOR NPN 2SC4694 SMD	132336	R5	RES MF 681 OHM 1% 1/4W	144567
Q4	TRANSISTOR NPN 2SC4694 SMD	132336	R6	RES MF 110 OHM 1% 1/4W	144664
Q5	TRANSISTOR NPN 2SC4694 SMD	132336	R7	RES SMD0805 1K 1/8W 1%	145007
Q6	TRANSISTOR NPN 2SC4694 SMD	132336	R8	RES SMD0805 1K 1/8W 1%	145007
Q7	TRANSISTOR NPN 2SC4694 SMD	132336	R9	RES SMD0805 1K 1/8W 1%	145007
Q8	TRANSISTOR NPN 2SC4694 SMD	132336	R10	RES SMD0805 1K 1/8W 1%	145007
Q9	TRANSISTOR PNP 60V A55 SMD	132334	R11	RES MF 51.1 OHM 2% 1/4W	144720
Q10	TRANSISTOR PNP 60V A55 SMD	132334	R12	RES MF 249 OHM 1% 1/4W	144721
Q11	TRANSISTOR NPN A05 SMD	132333	R13	RES MF 51.1 OHM 2% 1/4W	144720
Q12	TRANSISTOR NPN A05 SMD	132333	R14	RES MF 249 OHM 1% 1/4W	144721
Q13	TRANSISTOR PNP 60V A55 SMD	132334	R15	RES SMD0805 1K 1/8W 1%	145007
Q14	TRANSISTOR PNP 60V A55 SMD	132334	R16	RES SMD0805 1K 1/8W 1%	145007
Q15	TRANSISTOR NPN A05 SMD	132333	R17	RES SMD0805 1K 1/8W 1%	145007
Q16	TRANSISTOR NPN A05 SMD	132333	R18	RES SMD0805 1K 1/8W 1%	145007
Q17	TRANSISTOR PNP 60V A55 SMD	132334	R19	RES MF 22.1 OHM 1% 1/4W	144554
Q18	TRANSISTOR PNP 60V A55 SMD	132334	R20	RES MF 22.1 OHM 1% 1/4W	144554
Q19	TRANSISTOR NPN A05 SMD	132333	R21	RES MF 22.1 OHM 1% 1/4W	144554
Q20	TRANSISTOR NPN A05 SMD	132333	R22	RES MF 22.1 OHM 1% 1/4W	144554
Q21	TRANSISTOR PNP 60V A55 SMD	132334	R23	RES MF 1.5K 1% 1/4W	144539
Q22	TRANSISTOR PNP 60V A55 SMD	132334	R24	RES MF 1.5K 1% 1/4W	144539
Q23	TRANSISTOR NPN A05 SMD	132333	R25	RES MF 1.5K 1% 1/4W	144539
Q24	TRANSISTOR NPN A05 SMD	132333	R26	RES MF 1.5K 1% 1/4W	144539
Q25	TRANSISTOR PNP 60V A55 SMD	132334	R29	RES MF 499 OHM 1% 1/4W	144510
Q26	TRANSISTOR PNP 60V A55 SMD	132334	R30	RES MF 499 OHM 1% 1/4W	144510
Q27	TRANSISTOR NPN A05 SMD	132333	R31	RES MF 499 OHM 1% 1/4W	144510
Q28	TRANSISTOR NPN A05 SMD	132333	R32	RES MF 499 OHM 1% 1/4W	144510
Q29	TRANSISTOR PCH 60V J174	132320	R33	RES MF 2.21K 1% 1/4W	144584

PARTS LIST *cont'd.*

4 AUDIO PCB 751458 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
R34	RES MF 2.21K 1% 1/4W	144584	R122	RES MF 2.21 OHM 1% 1/4W	144607
R35	RES MF 1K 1% 1/4W	144513	R123	RES MF 2.21 OHM 1% 1/4W	144607
R36	RES MF 1K 1% 1/4W	144513	R124	RES MF 2.21 OHM 1% 1/4W	144607
R47	RES SMD0805 221K 1/8W 1%	145038	R125	RES SMD0805 221K 1/8W 1%	145038
R48	RES SMD0805 221K 1/8W 1%	145038	R126	RES SMD0805 221K 1/8W 1%	145038
R49	RES SMD0805 221K 1/8W 1%	145038	R127	RES SMD0805 221K 1/8W 1%	145038
R50	RES SMD0805 221K 1/8W 1%	145038	R128	RES SMD0805 221K 1/8W 1%	145038
R51	RES SMD0805 221K 1/8W 1%	145038	R129	RES SMD0805 221K 1/8W 1%	145038
R52	RES SMD0805 221K 1/8W 1%	145038	R130	RES SMD0805 221K 1/8W 1%	145038
R53	RES SMD0805 221K 1/8W 1%	145038	R131	RES SMD0805 221K 1/8W 1%	145038
R54	RES SMD0805 221K 1/8W 1%	145038	R132	RES SMD0805 221K 1/8W 1%	145038
R59	RES MF 20K 1% 1/4W	144524	R133	RES MF 221 OHM 1% 1/4W	144559
R60	RES MF 20K 1% 1/4W	144524	R134	RES MF 221 OHM 1% 1/4W	144559
R61	RES MF 20K 1% 1/4W	144524	R135	RES MF 221 OHM 1% 1/4W	144559
R62	RES MF 20K 1% 1/4W	144524	R136	RES MF 221 OHM 1% 1/4W	144559
R63	RES MF 10K 1% 1/4W	144504	R137	RES MF 221 OHM 1% 1/4W	144559
R64	RES MF 10K 1% 1/4W	144504	R138	RES MF 221 OHM 1% 1/4W	144559
R69	RES MF 10K 1% 1/4W	144504	R139	RES MF 221 OHM 1% 1/4W	144559
R70	RES MF 10K 1% 1/4W	144504	R140	RES MF 221 OHM 1% 1/4W	144559
R72	RES MF 2.21 OHM 1% 1/4W	144607	R141	RES SMD0805 150K 1/8W 1%	145037
R73	RES MF 2.21 OHM 1% 1/4W	144607	R142	RES SMD0805 150K 1/8W 1%	145037
R75	RES SMD0805 100K 1/8W 1%	145014	R143	RES SMD0805 150K 1/8W 1%	145037
R76	RES SMD0805 100K 1/8W 1%	145014	R144	RES SMD0805 4.75K 1/8W 1%	145008
R77	RES MF 2.21K 1% 1/4W	144584	R145	RES SMD0805 4.75K 1/8W 1%	145008
R78	RES MF 2.21K 1% 1/4W	144584	R146	RES SMD0805 4.75K 1/8W 1%	145008
R79	RES SMD0805 475 1/8W 1%	145020	R147	RES SMD0805 100K 1/8W 1%	145014
R80	RES SMD0805 1.21K 1/8W 1%	145021	R148	RES SMD0805 100K 1/8W 1%	145014
R81	RES SMD0805 475 1/8W 1%	145020	R149	RES MF 2.21 OHM 1% 1/4W	144607
R82	RES SMD0805 1.21K 1/8W 1%	145021	R150	RES MF 2.21 OHM 1% 1/4W	144607
R85	RES SMD0805 47.5K 1/8W 1%	145013	R151	RES SMD0805 100K 1/8W 1%	145014
R86	RES SMD0805 47.5K 1/8W 1%	145013	R152	RES SMD0805 100K 1/8W 1%	145014
R93	RES FP 10 OHM 5% 1/4W	137105	R157	RES MF 1K 1% 1/4W	144513
R95	RES SMD0805 47.5K 1/8W 1%	145013	R158	RES MF 1K 1% 1/4W	144513
R96	RES SMD0805 47.5K 1/8W 1%	145013	R159	RES SMD0805 3.32K 1/8W 1%	145026
R97	RES SMD0805 47.5K 1/8W 1%	145013	R161	RES FP 10 OHM 5% 1/4W	137105
R98	RES SMD0805 47.5K 1/8W 1%	145013	R163	RES MF 4.75K 1% 1/4W	144520
R99	RES SMD0805 47.5K 1/8W 1%	145013	R164	RES MO 47 OHM .5W 5%	137102
R100	RES SMD0805 47.5K 1/8W 1%	145013	R165	RES MO 47 OHM .5W 5%	137102
R101	RES SMD0805 47.5K 1/8W 1%	145013	R166	RES MF 10K 1% 1/4W	144504
R102	RES SMD0805 47.5K 1/8W 1%	145013	R167	RES FP 10 OHM 5% 1/4W	137105
R103	RES SMD0805 47.5K 1/8W 1%	145013	R168	RES FP 10 OHM 5% 1/4W	137105
R104	RES SMD0805 47.5K 1/8W 1%	145013	R169	RES MO 47 OHM .5W 5%	137102
R105	RES SMD0805 47.5K 1/8W 1%	145013	R170	RES MO 47 OHM .5W 5%	137102
R106	RES SMD0805 47.5K 1/8W 1%	145013	R171	RES MF 10K 1% 1/4W	144504
R107	RES MF 47.5K 1% 1/4W	144526	R172	RES SMD0805 3.32K 1/8W 1%	145026
R108	RES MF 47.5K 1% 1/4W	144526	R173	RES SMD0805 3.32K 1/8W 1%	145026
R109	RES MF 1K 1% 1/4W	144513	R174	RES SMD0805 3.32K 1/8W 1%	145026
R110	RES MF 1K 1% 1/4W	144513	R176	RES SMD0805 22.1 1/8W 1%	145003
R111	RES MF 4.99K 1% 1/4W	144521	R177	RES SMD0805 22.1 1/8W 1%	145003
R112	RES MF 4.99K 1% 1/4W	144521	R182	RES SMD0805 22.1 1/8W 1%	145003
R113	RES MF 22.1K 1% 1/4W	144564	R183	RES SMD0805 22.1 1/8W 1%	145003
R114	RES MF 22.1K 1% 1/4W	144564	R184	RES SMD0805 4.75K 1/8W 1%	145008
R115	RES MF 4.99K 1% 1/4W	144521	R185	RES SMD0805 4.75K 1/8W 1%	145008
R116	RES MF 4.99K 1% 1/4W	144521	R186	RES SMD0805 2.21M 1/8W 1%	145043
R117	RES MF 4.99K 1% 1/4W	144521	R187	RES SMD0805 22.1 1/8W 1%	145003
R118	RES MF 4.99K 1% 1/4W	144521	R188	RES SMD0805 22.1 1/8W 1%	145003
R119	RES MF 4.99K 1% 1/4W	144521	R189	RES SMD0805 3.32K 1/8W 1%	145026
R120	RES MF 4.99K 1% 1/4W	144521	R190	RES SMD0805 6.81K 1/8W 1%	145029
R121	RES MF 2.21 OHM 1% 1/4W	144607	R191	RES SMD0805 3.32K 1/8W 1%	145026

PARTS LIST *cont'd.*

4 AUDIO PCB 751458 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
R193	RES SMD0805 47.5K 1/8W 1%	145013	R307	RES SMD0805 10K 1/8W 1%	145010
R194	RES SMD0805 47.5K 1/8W 1%	145013	R404	RES SMD0805 0 1/8W 0%	145016
R195	RES SMD0805 47.5K 1/8W 1%	145013	R405	RES SMD0805 221K 1/8W 1%	145038
R196	RES SMD0805 4.75K 1/8W 1%	145008	R406	RES SMD0805 221K 1/8W 1%	145038
R197	RES SMD0805 22.1 1/8W 1%	145003	R407	RES SMD0805 221K 1/8W 1%	145038
R198	RES SMD0805 22.1 1/8W 1%	145003	R408	RES SMD0805 221K 1/8W 1%	145038
R199	RES SMD0805 4.75K 1/8W 1%	145008	R409	RES SMD0805 10K 1/8W 1%	145010
R204	RES MF 4.99K 1% 1/4W	144521	R410	RES SMD0805 100K 1/8W 1%	145014
R205	RES MF 4.99K 1% 1/4W	144521	R411	RES SMD0805 1.21K 1/8W 1%	145021
R206	RES SMD0805 4.75K 1/8W 1%	145008	R412	RES SMD0805 1.21K 1/8W 1%	145021
R207	RES SMD0805 4.75K 1/8W 1%	145008	R413	RES SMD0805 4.75K 1/8W 1%	145008
R208	RES SMD0805 68.1K 1/8W 1%	145035	R414	RES SMD0805 4.75K 1/8W 1%	145008
R209	RES SMD0805 150K 1/8W 1%	145037	R415	RES SMD0805 332 1/8W 1%	145006
R210	RES SMD0805 150K 1/8W 1%	145037	R416	RES SMD0805 332 1/8W 1%	145006
R211	RES SMD0805 2.21K 1/8W 1%	145024	U1	IC OP AMP LOW NOISE 5534 SMD	133719
R212	RES SMD0805 4.75K 1/8W 1%	145008	U2	IC OP AMP LOW NOISE 5534 SMD	133719
R213	RES SMD0805 4.75K 1/8W 1%	145008	U3	IC REGULATOR +5V	133569
R214	RES MF 1K 1% 1/4W	144513	U4	IC VOLTAGE REGULATOR -5.2V	133567
R215	RES MF 1K 1% 1/4W	144513	U7	IC REG POS ADJ 1.5A SMD	133822
R216	RES SMD0805 100K 1/8W 1%	145014	U9	IC DUAL OP AMP 5532 SMD	133718
R217	RES SMD0805 100K 1/8W 1%	145014	U10	IC DUAL OP AMP 5532 SMD	133718
R218	RES MF 221 OHM 1% 1/4W	144559	U11	IC DUAL OP AMP 5532 SMD	133718
R219	RES MF 221 OHM 1% 1/4W	144559	U12	IC DUAL OP AMP 5532 SMD	133718
R220	RES MF 267K 1% 1/4W	144532	U13	IC 8 BIT DRIVER SMD	133461
R223	RES MF 267K 1% 1/4W	144532	U14	IC 8 BIT DRIVER SMD	133461
R224	RES MF 1K 1% 1/4W	144513	U15	IC 8 BIT DRIVER SMD	133461
R225	RES MF 1K 1% 1/4W	144513	U16	IC 8 BIT DRIVER SMD	133461
R236	RES MF 22.1K 1% 1/4W	144564	U17	IC OP AMP LOW NOISE 5534 SMD	133719
R239	RES MF 22.1K 1% 1/4W	144564	U18	IC DUAL JFET OP AMP SMD	133778
R244	RES SMD0805 1K 1/8W 1%	145007	U19	IC OP AMP LOW NOISE 5534 SMD	133719
R245	RES SMD0805 1K 1/8W 1%	145007	U23	IC 2 CHANNEL VOLUME CNTRL SMD	133779
R246	RES SMD0805 10K 1/8W 1%	145010	U24	IC TONE CONTROL 3-BAND SMD	133668
R258	RES MF 2.21K 1% 1/4W	144584	U26	IC OP AMP LOW NOISE 5534 SMD	133719
R259	RES SMD0805 1K 1/8W 1%	145007	U27	IC OP AMP LOW NOISE 5534 SMD	133719
R268	RES MF 1.65K 1% 1/4W	144516	U28	IC DUAL OP AMP 5532 SMD	133718
R269	RES SMD0805 1K 1/8W 1%	145007	U29	IC REG NEG ADJ 1.5A SMD	133821
R274	RES MF 1.65K 1% 1/4W	144516	U30	IC OP AMP 33178 SMD	133720
R275	RES MF 2.21K 1% 1/4W	144584	U31	IC SINGLE NAND SCHMITT SMD	133724
R280	RES SMD0805 221K 1/8W 1%	145038		CABLE ASSY PHONO	173080
R281	RES SMD0805 221K 1/8W 1%	145038		ASSY SMD AUDIO	701174
R286	RES MF 33.2K 1% 1/4W	144694			
R287	RES MF 33.2K 1% 1/4W	144694			
R288	RES MF 22.1K 1% 1/4W	144564			
R289	RES MF 22.1K 1% 1/4W	144564			
R290	RES FP 10 OHM 5% 1/4W	137105			
R291	RES FP 10 OHM 5% 1/4W	137105			
R292	RES MF 22.1K 1% 1/4W	144564			
R293	RES MF 22.1K 1% 1/4W	144564			
R294	RES MF 22.1K 1% 1/4W	144564			
R295	RES MF 22.1K 1% 1/4W	144564			
R297	RES MF 2.21K 1% 1/4W	144584			
R299	RES MF 2.21K 1% 1/4W	144584			
R300	RES MF 221 OHM 1% 1/4W	144559			
R301	RES MF 221 OHM 1% 1/4W	144559			
R302	RES MF 221 OHM 1% 1/4W	144559			
R303	RES MF 221 OHM 1% 1/4W	144559			
R304	RES MF 4.75K 1% 1/4W	144520			
R305	RES MF 4.75K 1% 1/4W	144520			
R306	RES MF 4.75K 1% 1/4W	144520			

5 BALANCED I/O PCB 751117

D1	DIODE ESD SUPPRESSOR SMD	070198
D2	DIODE ESD SUPPRESSOR SMD	070198
D3	DIODE ESD SUPPRESSOR SMD	070198
D4	DIODE ESD SUPPRESSOR SMD	070198
D5	DIODE ESD SUPPRESSOR SMD	070198
D6	DIODE ESD SUPPRESSOR SMD	070198
D7	DIODE ESD SUPPRESSOR SMD	070198
D8	DIODE ESD SUPPRESSOR SMD	070198
D9	DIODE ESD SUPPRESSOR SMD	070198
D10	DIODE ESD SUPPRESSOR SMD	070198
D11	DIODE ESD SUPPRESSOR SMD	070198
D12	DIODE ESD SUPPRESSOR SMD	070198
D13	DIODE ESD SUPPRESSOR SMD	070198
D14	DIODE ESD SUPPRESSOR SMD	070198
D15	DIODE ESD SUPPRESSOR SMD	070198
D16	DIODE ESD SUPPRESSOR SMD	070198
J1	CONN 18 PIN FFC SMD	118003

PARTS LIST *cont'd.*

5 BALLANCED I/O PCB 751117 (Cont'd.)

Ref No.	Description	Part No.
J2	CONN 18 PIN FFC SMD	118003
J3	CONN XLR FEM VERT PCB LATCH	117813
J4	CONN XLR FEM VERT PCB LATCH	117813
J5	CONN XLR FEM VERT PCB LATCH	117813
J6	CONN XLR FEM VERT PCB LATCH	117813
J7	RECEPTACLE XLR MALE	117669
J8	RECEPTACLE XLR MALE	117669
J9	RECEPTACLE XLR MALE	117669
J10	RECEPTACLE XLR MALE	117669
PCB1	PC BD BALANCED I/O	130053

6 DIGITAL AUDIO PCB 751120

BRKT1	SCREW TERMINAL PC	117975
BRKT2	SCREW TERMINAL PC	117975
C2	CAP .1UF 10% 50V X7R SMD0603	061385
C3	CAP 1000PF 10% 100V SMD0603	061383
C4	CAP 330PF 100V 5% SMD0805	061377
C5	CAP .1UF 10% 50V X7R SMD0603	061385
C6	CAP ELECT 10UF 50V SMD	066602
C7	CAP ELECT 220UF 25V SMD	066606
C8	CAP ELECT 10UF 50V SMD	066602
C9	CAP .1UF 10% 50V X7R SMD0603	061385
C10	CAP MPF 0.0022UF 5% 63VDC	064454
C11	CAP ELECT 47UF 50V SMD	066604
C12	CAP 330PF 100V 5% SMD0805	061377
C13	CAP 1000PF 10% 100V SMD0603	061383
C14	CAP ELECT 47UF 50V SMD	066604
C15	CAP MPF 0.0022UF 5% 63VDC	064454
C16	CAP .1UF 10% 50V X7R SMD0603	061385
C22	CAP ELECT 10UF 50V SMD	066602
C23	CAP 1000PF 10% 100V SMD0603	061383
C24	CAP .01UF 10% 50V X7R SMD0603	061384
C25	CAP .01UF 10% 50V X7R SMD0603	061384
C28	CAP ELECT 10UF 50V SMD	066602
C29	CAP 1000PF 10% 100V SMD0603	061383
C30	CAP MPF 0.0022UF 5% 63VDC	064454
C31	CAP .01UF 10% 50V X7R SMD0603	061384
C32	CAP POLYPROP 7UF 5% 160VAC	064316
C33	CAP 1000PF 10% 100V SMD0603	061383
C34	CAP 330PF 100V 5% SMD0805	061377
C35	CAP MPF 0.0022UF 5% 63VDC	064454
C36	CAP ELECT 10UF 50V SMD	066602
C37	CAP .1UF 10% 50V X7R SMD0603	061385
C38	CAP 330PF 100V 5% SMD0805	061377
C39	CAP ELECT 10UF 50V SMD	066602
C40	CAP .1UF 10% 50V X7R SMD0603	061385
C41	CAP 1000PF 10% 100V SMD0603	061383
C42	CAP 1000PF 50V NPO SMD0805	061317
C43	CAP .01UF 10% 50V X7R SMD0603	061384
C44	CAP .01UF 10% 50V X7R SMD0603	061384
C45	CAP .01UF 10% 50V X7R SMD0603	061384
C46	CAP .01UF 10% 50V X7R SMD0603	061384
C47	CAP .1UF 10% 50V X7R SMD0603	061385
C48	CAP ELECT 10UF 50V SMD	066602
C55	CAP .01UF 10% 50V X7R SMD0603	061384
C56	CAP .1UF 10% 50V X7R SMD0603	061385
C58	CAP ELECT 4.7UF 50V SMD	066601
C59	CAP .01UF 10% 50V X7R SMD0603	061384
C60	CAP .01UF 10% 50V X7R SMD0603	061384

Ref No.	Description	Part No.
C61	CAP .1UF 10% 50V X7R SMD0603	061385
C62	CAP .1UF 10% 50V X7R SMD0603	061385
C63	CAP ELECT 4.7UF 50V SMD	066601
C64	CAP .01UF 10% 50V X7R SMD0603	061384
C65	CAP .01UF 10% 50V X7R SMD0603	061384
C66	CAP ELECT 10UF 50V SMD	066602
C67	CAP ELECT 10UF 50V SMD	066602
C68	CAP .1UF 10% 50V X7R SMD0603	061385
C69	CAP .1UF 10% 50V X7R SMD0603	061385
C70	CAP .1UF 10% 50V X7R SMD0603	061385
C71	CAP .01UF 10% 50V X7R SMD0603	061384
C72	CAP .1UF 10% 50V X7R SMD0603	061385
C73	CAP .01UF 10% 50V X7R SMD0603	061384
C74	CAP .1UF 10% 50V X7R SMD0603	061385
C75	CAP .01UF 10% 50V X7R SMD0603	061384
C76	CAP .1UF 10% 50V X7R SMD0603	061385
C77	CAP .01UF 10% 50V X7R SMD0603	061384
C78	CAP .1UF 10% 50V X7R SMD0603	061385
C79	CAP .1UF 10% 50V X7R SMD0603	061385
C80	CAP .01UF 10% 50V X7R SMD0603	061384
C81	CAP .1UF 10% 50V X7R SMD0603	061385
C82	CAP .01UF 10% 50V X7R SMD0603	061384
C83	CAP .01UF 10% 50V X7R SMD0603	061384
C84	CAP .1UF 10% 50V X7R SMD0603	061385
C85	CAP .01UF 10% 50V X7R SMD0603	061384
C86	CAP .1UF 10% 50V X7R SMD0603	061385
C87	CAP ELECT 4.7UF 50V SMD	066601
C88	CAP ELECT 10UF 50V SMD	066602
C89	CAP .1UF 10% 50V X7R SMD0603	061385
C90	CAP .1UF 10% 50V X7R SMD0603	061385
C91	CAP MNO 12PF 50V 5% NPOSMD0805	061364
C92	CAP .1UF 10% 50V X7R SMD0603	061385
C93	CAP .1UF 10% 50V X7R SMD0603	061385
C94	CAP .1UF 10% 50V X7R SMD0603	061385
C95	CAP .1UF 10% 50V X7R SMD0603	061385
C96	CAP .1UF 10% 50V X7R SMD0603	061385
C99	CAP .1UF 10% 50V X7R SMD0603	061385
C100	CAP .1UF 10% 50V X7R SMD0603	061385
C101	CAP ELECT 4.7UF 50V SMD	066601
C102	CAP .1UF 10% 50V X7R SMD0603	061385
C103	CAP .1UF 10% 50V X7R SMD0603	061385
C104	CAP .1UF 10% 50V X7R SMD0603	061385
C105	CAP ELECT 10UF 50V SMD	066602
C153	CAP .1UF 10% 50V X7R SMD0603	061385
C154	CAP .1UF 10% 50V X7R SMD0603	061385
C155	CAP .01UF 10% 50V X7R SMD0603	061384
D2	DIODE ESD SUPPRESSOR SMD	070198
D3	DIODE ESD SUPPRESSOR SMD	070198
D4	DIODE ESD SUPPRESSOR SMD	070198
D5	DIODE ESD SUPPRESSOR SMD	070198
J1	CONN USB JACK TYPE B RT ANGLE	117905
J5	CONN STACKED OPTICAL/RCA INPUT	118021
J6	CONN STACKED OPTICAL/RCA INPUT	118021
J7	HEADER 10 PIN	117829
J10	CONN 12 PIN FFC SMD	118001
J11	CONN 12 PIN FFC SMD	118001
J12	CONN 12 PIN FFC SMD	118001
L2	INDUCTOR 10UH 30% SMD	122438
L3	INDUCTOR 10UH 30% SMD	122438

PARTS LIST *cont'd.*

6 DIGITAL AUDIO PCB 751120 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
L4	INDUCTOR 3.3UH 375MA SMD	122428	R50	RES SMD0805 47.5 1/8W 1%	145004
L6	FERRITE 1000 OHM 0.5 AMP SMD	076026	R51	RES SMD0805 2.21K 1/8W 1%	145024
L7	FERRITE 1000 OHM 0.5 AMP SMD	076026	R52	RES SMD0805 1K 1/8W 1%	145007
L9	FERRITE 1000 OHM 0.5 AMP SMD	076026	R53	RES SMD0805 475 1/8W 1%	145020
L10	FERRITE 1000 OHM 0.5 AMP SMD	076026	R54	RES SMD0805 22.1K 1/8W 1%	145012
L11	FERRITE 1000 OHM 0.5 AMP SMD	076026	R55	RES SMD0805 1K 1/8W 1%	145007
L14	FERRITE 1000 OHM 0.5 AMP SMD	076026	R56	RES SMD0805 33 1/8W 1%	144729
LED0	LED WHITE SMD	058193	R57	RES SMD0805 475 1/8W 1%	145020
LED1	LED WHITE SMD	058193	R58	RES SMD0805 332 1/8W 1%	145006
LED2	LED WHITE SMD	058193	R59	RES SMD0805 1.5K 1/8W 1%	145022
LED3	LED WHITE SMD	058193	R60	RES SMD0805 1.5K 1/8W 1%	145022
LED4	LED WHITE SMD	058193	R61	RES SMD0805 1.82K 1/8W 1%	145023
PCB1	PC BD DIGITAL AUDIO	130095	R62	RES SMD0805 1.82K 1/8W 1%	145023
Q3	TRANSISTOR NPN 2SC4694 SMD	132336	R63	RES SMD0805 22.1 1/8W 1%	145003
Q4	TRANSISTOR PNP A55 SMD	132334	R64	RES SMD0805 1.5K 1/8W 1%	145022
Q6	TRANSISTOR NPN 2SC4694 SMD	132336	R65	RES SMD0805 1.82K 1/8W 1%	145023
R3	RES SMD0805 1.5K 1/8W 1%	145022	R66	RES SMD0805 1.82K 1/8W 1%	145023
R4	RES SMD0805 475 1/8W 1%	145020	R67	RES SMD0805 22.1 1/8W 1%	145003
R5	RES SMD0805 332 1/8W 1%	145006	R68	RES SMD0805 1.5K 1/8W 1%	145022
R6	RES SMD0805 1.5K 1/8W 1%	145022	R69	RES SMD0805 475 1/8W 1%	145020
R7	RES SMD0805 22.1 1/8W 1%	145003	R70	RES SMD0805 332 1/8W 1%	145006
R8	RES SMD0805 1.5K 1/8W 1%	145022	R71	RES SMD0805 47.5 1/8W 1%	145004
R9	RES SMD0805 1.82K 1/8W 1%	145023	R72	RES SMD0805 22.1 1/8W 1%	145003
R10	RES SMD0805 1.82K 1/8W 1%	145023	R74	RES SMD0805 47.5 1/8W 1%	145004
R12	RES SMD0805 10K 1/8W 1%	145010	R75	RES SMD0805 47.5 1/8W 1%	145004
R13	RES SMD0805 1.5K 1/8W 1%	145022	R76	RES SMD0805 22.1 1/8W 1%	145003
R14	RES SMD0805 1.82K 1/8W 1%	145023	R77	RES SMD0805 47.5K 1/8W 1%	145013
R15	RES SMD0805 1.82K 1/8W 1%	145023	R78	RES SMD0805 1K 1/8W 1%	145007
R16	RES SMD0805 22.1 1/8W 1%	145003	R79	RES SMD0805 22.1 1/8W 1%	145003
R17	RES SMD0805 1.5K 1/8W 1%	145022	R81	RES SMD0805 1.5K 1/8W 1%	145022
R18	RES SMD0805 22.1 1/8W 1%	145003	R82	RES SMD0805 47.5 1/8W 1%	145004
R19	RES SMD0805 22.1 1/8W 1%	145003	R84	RES SMD0805 10K 1/8W 1%	145010
R20	RES SMD0805 475 1/8W 1%	145020	R85	RES SMD0805 10K 1/8W 1%	145010
R21	RES SMD0805 332 1/8W 1%	145006	R86	RES SMD0805 47.5K 1/8W 1%	145013
R22	RES SMD0805 22.1 1/8W 1%	145003	R87	RES SMD0805 47.5K 1/8W 1%	145013
R23	RES SMD0805 10K 1/8W 1%	145010	R88	RES SMD0805 1K 1/8W 1%	145007
R24	RES SMD0805 1K 1/8W 1%	145007	R89	RESSMD0805 4.75K 1/8W 1%	145008
R25	RES SMD0805 22.1 1/8W 1%	145003	R90	RES SMD0805 47.5K 1/8W 1%	145013
R26	RES SMD0805 22.1 1/8W 1%	145003	R96	RES SMD0805 22.1 1/8W 1%	145003
R27	RES SMD0805 475 1/8W 1%	145020	R99	RES SMD0805 100K 1/8W 1%	145014
R28	RES SMD0805 47.5K 1/8W 1%	145013	R102	RES SMD0805 10K 1/8W 1%	145010
R29	RES SMD0805 1K 1/8W 1%	145007	R103	RES SMD0805 10K 1/8W 1%	145010
R30	RES SMD0805 22.1K 1/8W 1%	145012	R104	RES SMD0805 10K 1/8W 1%	145010
R31	RES SMD0805 47.5 1/8W 1%	145004	R105	RES SMD0805 10K 1/8W 1%	145010
R32	RES SMD0805 2.21K 1/8W 1%	145024	R106	RES SMD0805 3.32K 1/8W 1%	145026
R33	RES SMD0805 47.5 1/8W 1%	145004	R107	RES SMD0805 3.92K 1/8W 1%	145027
R34	RES SMD0805 47.5K 1/8W 1%	145013	R108	RES SMD0805 3.92K 1/8W 1%	145027
R35	RES SMD0805 75 1/8W 1%	144727	R111	RES SMD0805 22.1 1/8W 1%	145003
R36	RES SMD0805 75 1/8W 1%	144727	R112	RES SMD0805 47.5K 1/8W 1%	145013
R37	RES SMD0805 1K 1/8W 1%	145007	R113	RES SMD0805 22.1 1/8W 1%	145003
R38	RES SMD0805 10K 1/8W 1%	145010	R114	RES SMD0805 22.1 1/8W 1%	145003
R39	RES SMD0805 1K 1/8W 1%	145007	R115	RES SMD0805 22.1 1/8W 1%	145003
R40	RES SMD0805 1K 1/8W 1%	145007	R118	RES SMD0805 22.1 1/8W 1%	145003
R41	RES SMD0805 22.1K 1/8W 1%	145012	R119	RES SMD0805 22.1 1/8W 1%	145003
R43	RES SMD0805 47.5 1/8W 1%	145004	R120	RES SMD0805 22.1 1/8W 1%	145003
R44	RES SMD0805 6.81K 1/8W 1%	145029	R122	RES SMD0805 22.1 1/8W 1%	145003
R45	RES SMD0805 33 1/8W 1%	144729	R123	RES SMD0805 22.1 1/8W 1%	145003
R48	RES SMD0805 0 1/8W 0%	145016	R124	RES SMD0805 22.1 1/8W 1%	145003
R49	RES SMD0805 3.32K 1/8W 1%	145026	R128	RES SMD0805 22.1 1/8W 1%	145003

PARTS LIST *cont'd.*

6 DIGITAL AUDIO PCB 751120 (Cont'd.)

Ref No.	Description	Part No.
R174	RES SMD0805 100K 1/8W 1%	145014
R175	RES SMD0805 22.1 1/8W 1%	145003
R176	RES SMD0805 0 1/8W 0%	145016
R180	RES SMD0805 10K 1/8W 1%	145010
R181	RES SMD0805 22.1K 1/8W 1%	145012
R182	RES SMD0805 47.5K 1/8W 1%	145013
R184	RES SMD0805 47.5 1/8W 1%	145004
R185	RES SMD0805 47.5 1/8W 1%	145004
R188	RES SMD0805 47.5K 1/8W 1%	145013
S1	SWTCH TACT 1.96N 5.9 X 6MM SMD	150071
S2	SWTCH TACT 1.96N 5.9 X 6MM SMD	150071
U1	IC PROG CLOCK SYNTHESIZER SMD	133774
U2	IC SINGLE 2 INPUT NOR GATE SMD	133651
U3	IC USB 2:1 MUX SWITCH SMD	133754
U4	IC OP AMP FET INPUT DUAL SMD	133725
U5	IC 2.5V 500 MA LDO REGULAT SMD	133773
U6	IC D/A CONVERT 32 BIT 192K SMD	133757
U7	IC 32-BIT MICRO SMD	133755
U8	IC DUAL OP AMP 5532 SMD	133718
U9	IC OP AMP FET INPUT DUAL SMD	133725
U10	IC DUAL OP AMP 5532 SMD	133718
U15	IC DIG INTERFACE RECEIVER SMD	133691
U37	IC QUAD 2 TO 1 DATA SELCTR SMD	133698
U100	IC CONVE S-RATE 32BIT 192K SMD	133765
Y1	CRYSTAL OSCIL 12.0000MHZ SMD	180089
Y5	CRYSTAL OSCLTOR 25.6000MHZ SMD	180092
	FIRMWARE USB AUDIO V1.00	230007

7 BACKUP PS PCB 751185

C1	CAP ELECT 3300UF 35V	066509
C2	CAP ELECT 3300UF 35V	066509
D1	DIODE SILICON	070174
D2	DIODE RECT SCHOTTKEY 2A 40V	070196
D3	DIODE RECT SCHOTTKEY 2A 40V	070196
D4	DIODE RECT SCHOTTKEY 2A 40V	070196
D5	DIODE RECT SCHOTTKEY 2A 40V	070196
F1	HOLDER FUSE 5X20MM PCB MOUNT	178159
J6	CONN 2 PIN MALE	117213
J1	CONN PCB MOUNT POWER RED	117719
J2	CONNECTOR 2 PIN HEADER 11.88MM	118026
J4	CONN PCB MOUNT POWER RED	117719
J5	CONNECTOR 3 PIN HEADER 2MM	118013
K1	RELAY 12VDC 5A 250VAC TV-4	087077
PCB1	PC BD BACKUP POWER SUPPLY	130069
R1	RES POLY SWITCH RXE030	144670
R2	RES POLY SWITCH RXE030	144670
T1	TRANSFORMER BACKUP	159376

8 POWER PCB 751459

C1	CAP POLYPROP 0.22UF 400V 20%	064438
C3	CAP ELEC 47UF 450V	066560
C4	CAP POLYPROP 0.47UF 10% 275V	064466
C6	CAP ELECT 10UF 250V	066558
C7	CAP POLYPROP 0.47UF 10% 275V	064466
C8	CAP ELECT 220UF 25V	066507
C11	CAP ELECT 4700UF 35V	066541
C17	CAP POLYPROP .047UF 10% 250VDC	064364
C18	CAP ELECT 4700UF 35V	066541
C24	CAP ELECT 10000UF 10V	066595

Ref No.	Description	Part No.
C25	CAP POLYPROP .047UF 10% 250VDC	064364
C103	CAP MONO .1UF 50V 20%	061346
C104	CAP MONO .1UF 50V 20%	061346
C107	CAP ELECT 220UF 50V 20%	066254
C108	CAP ELECT 220UF 50V 20%	066254
CL1	CLIP ANGLE RIGHT	414141
CL2	CLIP ANGLE RIGHT	414141
D1	DIODE ZENER 12V 400MW	070099
D2	DIODE SIL 400 PIV @ 1.5A	070031
D3	DIODE SIL 400 PIV @ 1.5A	070031
D4	DIODE SIL 400 PIV @ 1.5A	070031
D5	DIODE SIL 400 PIV @ 1.5A	070031
D6	DIODE RECT SCHOTTKEY 2A 40V	070196
D7	DIODE RECT SCHOTTKEY 2A 40V	070196
D19	DIODE RECTIFIER 1N4007	070178
D20	DIODE RECTIFIER 1N4007	070178
D21	DIODE RECTIFIER 1N4007	070178
D22	DIODE RECTIFIER 1N4007	070178
F1	FUSE 0.125A 250V SLO-BLO	089128
FH1	HOLDER FUSE 5X20 PCB MOUNT	178159
HS1	SUB HEATSINK	018751
IS1	ISO STRATE	084196
J1	HEADER 9 CIRCUIT POST NATURAL	117724
J6	7PIN SHROUDED HEADER	117910
J7	7PIN SHROUDED HEADER	117910
J31	CONN 8 PIN 2.5MM SHROUDED	118046
PCB1	PC BD POWER	130179
Q1	TRANSISTOR NPN 60V MPSA05	132317
Q2	TRANSISTOR NPN 300V BF420	132351
Q3	TRANSISTOR NCH MOSFET 800V SMD	132353
R1	ASSY SMD POWER	710175
R2	RES CF 0 OHM 5% 1/4W	141554
R3	RES MF 221K 1% 1/4W	144629
R4	RES MF 4.99K 1% 1/4W	144521
R5	RES MF 6.49K .5% 1/4W	144617
R6	RES MF 499 OHM 1% 1/4W	144510
R7	RES MF 6.49K .5% 1/4W	144617
R8	RES MF 475 OHM 1% 1/4W	144509
R9	RES MF 221K 1% 1/4W	144629
R10	RES MF 1M 1% 1/4W	144577
R11	RES MF 2.21K 1% 1/4W	144584
R12	RES MF 221K 1% 1/4W	144629
R13	RES MF 200K 1% 1/4W	144531
R14	RES MF 22.1K 1% 1/4W	144564
R15	RES MF 22.1 OHM 1% 1/4W	144554
R16	RES MF 2.21K 1% 1/4W	144584
R19	POLY SWITCH 1.85A 72V	144716
R29	POLY SWITCH RXE300	144681
R35	POLY SWITCH RXE300	144681
R195	POLY SWITCH 1.85A 72V	144716
SC1	SCR MS 6-32 X 1/4	400025
SC2	SCR MS 6-32 X 1/4	400025
U17	IC VOLTAGE REGULATOR VERI NEG	133602
U18	IC VOLTAGE REGULATOR VARI POS	133601
	ASSY INS POWER	701635

9 TUBE PCB 751461

C1	CAP MONO 47PF 200V 10% NPO	061340
C2	CAP MONO 47PF 200V 10% NPO	061340

PARTS LIST *cont'd.*

9 TUBE PCB 751461 (Cont'd.)

Ref No.	Description	Part No.	Ref No.	Description	Part No.
C3	CAP ELECT 47UF 35V	066446	Q6	TRANSISTOR PNP 300V BF421	132352
C4	CAP ELECT 47UF 35V	066446	Q8	TRANSISTOR NPN SILICON	132317
C7	CAP ELECT 10UF 250V	066558	R1	RES MF 953 OHM 1% 1/4W	144661
C8	CAP PF 0.001UF 5% 400VDC	064453	R2	RES MF 6.49K .5% 1/4W	144617
C9	CAP PF 0.001UF 5% 400VDC	064453	R3	RES MF 953 OHM 1% 1/4W	144661
C10	CAP MPF 0.0033UF 5% 63VDC	064455	R4	RES MF 6.49K .5% 1/4W	144617
C11	CAP MPF 0.0033UF 5% 63VDC	064455	R5	RES MF 475K 1% 1/4W	144604
C12	CAP ELECT 100UF 25V	066573	R6	RES MF 475K 1% 1/4W	144604
C13	CAP ELECT 100UF 25V	066573	R7	RES MF 75K 1% 1/4W	144552
C14	CAP POLYPROP 1uF 250V 20%	064433	R8	RES MF 75K 1% 1/4W	144552
C15	CAP POLYPROP 1uF 250V 20%	064433	R9	RES MF 2.21M 1/4W	144576
C19	CAP MONO 47PF 200V 10% NPO	061340	R10	RES MF 2.21M 1/4W	144576
C20	CAP MONO 47PF 200V 10% NPO	061340	R11	RES MF 47.5K 1% 1/4W	144526
C21	CAP ELECT 100UF 25V	066573	R12	RES MF 4.75K 1% 1/4W	144520
C22	CAP ELECT 100UF 25V	066573	R13	RES MF 4.75K 1% 1/4W	144520
C25	CAP PF 0.001UF 5% 400VDC	064453	R14	RES MF 267K 1% 1/4W	144532
C26	CAP PF 0.001UF 5% 400VDC	064453	R15	RES MF 1M 1/4W	144577
C27	CAP MPF 0.0033UF 5% 63VDC	064455	R16	RES MF 267K 1% 1/4W	144532
C28	CAP MPF 0.0033UF 5% 63VDC	064455	R17	RES MF 1M 1/4W	144577
C31	CAP POLYPROP 1uF 250V 20%	064433	R18	RES MF 2.21K 1% 1/4W	144584
C32	CAP POLYPROP 1uF 250V 20%	064433	R19	RES MF 2.21K 1% 1/4W	144584
C37	CAP ELECT 10UF 250V	066558	R20	RES MF 33.2K 1% 1/4W	144694
C40	CAP MPF 0.022UF 5% 63VDC	064316	R21	RES MF 10K 1% 1/4W	144504
C41	CAP MPF 0.022UF 5% 63VDC	064316	R22	RES MF 33.2K 1% 1/4W	144694
C42	CAP MONO 47PF 200V 10% NPO	061340	R26	RES MF 47.5K 1% 1/4W	144526
C43	CAP MONO 47PF 200V 10% NPO	061340	R29	RES MF 1.82K 1% 1/4W	144582
C44	CAP MONO 47PF 200V 10% NPO	061340	R30	RES MF 6.49K .5% 1/4W	144617
C45	CAP MONO 47PF 200V 10% NPO	061340	R31	RES MF 1.82K 1% 1/4W	144582
C47	CAP ELECT 10UF 250V	066558	R32	RES MF 6.49K .5% 1/4W	144617
C48	CAP ELECT 10UF 250V	066558	R33	RES MF 475K 1% 1/4W	144604
C49	CAP MPF 0.47UF 5% 100VDC	064442	R34	RES MF 475K 1% 1/4W	144604
C51	CAP MPF 0.47UF 5% 100VDC	064442	R35	RES MF 75K 1% 1/4W	144552
C55	CAP MONO 10PF 200V 10% NPO	061338	R36	RES MF 75K 1% 1/4W	144552
C56	CAP MONO 10PF 200V 10% NPO	061338	R37	RES MF 2.21M 1/4W	144576
C57	CAP MONO 10PF 200V 10% NPO	061338	R38	RES MF 2.21M 1/4W	144576
C58	CAP MONO 10PF 200V 10% NPO	061338	R39	RES MF 4.75K 1% 1/4W	144520
C59	CAP ELECT 100UF 25V	066573	R40	RES MF 4.75K 1% 1/4W	144520
C60	CAP ELECT 100UF 25V	066573	R41	RES MF 267K 1% 1/4W	144532
C61	CAP MONO .1UF 50V 20% Z5U	061346	R44	RES MF 1M 1/4W	144577
C62	CAP MPF 0.022UF 5% 63VDC	064316	R43	RES MF 267K 1% 1/4W	144532
C63	CAP MPF 0.022UF 5% 63VDC	064316	R44	RES MF 1M 1/4W	144577
DS1	LED GREEN 3MM HI-INTENSITY	058197	R47	RES MF 33.2K 1% 1/4W	144694
DS2	LED GREEN 3MM HI-INTENSITY	058197	R48	RES MF 10K 1% 1/4W	144504
DS3	LED GREEN 3MM HI-INTENSITY	058197	R49	RES MF 33.2K 1% 1/4W	144694
DS4	LED GREEN 3MM HI-INTENSITY	058197	R50	RES MF 10K 1% 1/4W	144504
DS5	LED GREEN 3MM HI-INTENSITY	058197	R56	RES MF 10K 1% 1/4W	144504
DS6	LED GREEN 3MM HI-INTENSITY	058197	R57	RES MF 475K 1% 1/4W	144604
J1	HEADER 2 PIN LATCHING	117766	R58	RES MF 10K 1% 1/4W	144504
J2	HEADER 2 PIN LATCHING	117766	R55	RES MF 47.5K 1% 1/4W	144526
J4	CONN 12 PIN FFC	117907	R59	RES MF 475K 1% 1/4W	144604
J5	8 PIN 2.5MM SHROUDED	118046	R60	RES MF 475K 1% 1/4W	144604
J6	CONN 12 PIN FFC	117907	R61	RES MF 475K 1% 1/4W	144604
J7	CONNECTOR 3PIN HEADER 2MM	118013	R62	RES MF 10K 1% 1/4W	144504
PCB1	PC BD TUBE	130181	R63	RES MF 10K 1% 1/4W	144504
Q1	TRANSISTOR PNP 300V BF421	132352	R64	RES MF 15K 1% 1/4W	144623
Q2	TRANSISTOR PNP 300V BF421	132352	R65	RES MF 267K 1% 1/4W	144532
Q3	TRANSISTOR PNP 300V BF421	132352	R66	RES MF 15K 1% 1/4W	144623
Q4	TRANSISTOR PNP 300V BF421	132352	R67	RES MF 267K 1% 1/4W	144532
Q5	TRANSISTOR PNP 300V BF421	132352	R69	RES MF 47.5K 1% 1/4W	144526

PARTS LIST *cont'd.*

9 TUBE PCB 751461 (Cont'd.)

Ref No.	Description	Part No.
R70	RES MF 10K 1% 1/4W	144504
R71	RES MF 47.5K 1% 1/4W	144526
R72	RES MF 10K 1% 1/4W	144504
R75	RES MF 4.75K 1% 1/4W	144520
R76	RES MF 4.75K 1% 1/4W	144520
R77	RES MF 10 OHM 1% 1/4W	144553
R78	RES MF 1K 1% 1/4W	144513
R79	RES MF 1K 1% 1/4W	144513
R80	RES MF 10K 1% 1/4W	144504
R82	RES MF 10M 1% 1/4W	144575
R83	RES MF 10M 1% 1/4W	144575
R84	RES MF 10M 1% 1/4W	144575
R85	RES MF 10M 1% 1/4W	144575
R86	RES MF 1K 1% 1/4W	144513
R87	RES MF 1K 1% 1/4W	144513
R88	RES MF 1K 1% 1/4W	144513
R89	RES MF 1K 1% 1/4W	144513
R90	RES MF 1K 1% 1/4W	144513
R91	RES MF 1K 1% 1/4W	144513
V1	SOCKET TUBE 9 PIN GOLD	178195
V2	SOCKET TUBE 9 PIN GOLD	178195
V3	SOCKET TUBE 9 PIN GOLD	178195
V4	SOCKET TUBE 9 PIN GOLD	178195
V5	SOCKET TUBE 9 PIN GOLD	178195
V6	SOCKET TUBE 9 PIN GOLD	178195
	ASSY INS TUBE	702636

10 AUDIO EXPANSION PCB 751251

C1	CAP ELECT 47UF 16V	066380
C2	CAP ELECT 47UF 16V	066380
C3	CAP ELECT 10UF 16V	066580
C4	CAP ELECT 10UF 16V	066580
C5	CAP ELECT 47UF 16V	066380
C6	CAP ELECT 47UF 16V	066380
C7	CAP ELECT 47UF 16V	066380
C8	CAP ELECT 47UF 16V	066380
C9	CAP ELECT 47UF 16V	066380
C10	CAP ELECT 47UF 16V	066380
C11	CAP ELECT 22UF 100V	066574
C12	CAP ELECT 22UF 100V	066574
D1	DIODE SMALL SIGNAL 4148 SMD	070199
D2	DIODE ESD SUPPRESSOR SMD	070198
D3	DIODE ESD SUPPRESSOR SMD	070198
D4	DIODE ESD SUPPRESSOR SMD	070198
D5	DIODE ESD SUPPRESSOR SMD	070198
D6	DIODE ESD SUPPRESSOR SMD	070198
D7	DIODE ESD SUPPRESSOR SMD	070198
D8	DIODE ESD SUPPRESSOR SMD	070198
D9	DIODE ESD SUPPRESSOR SMD	070198
D10	DIODE ESD SUPPRESSOR SMD	070198
D11	DIODE ESD SUPPRESSOR SMD	070198
J1	CONN 12 PIN FFC	117907
J2	JACK DUAL RCA	118020
J3	JACK DUAL RCA	118020

Ref No.	Description	Part No.
J4	CONN 12 PIN FFC	117907
J5	JACK DUAL RCA	118020
J6	RECEPTACLE XLR MALE	117686
J7	RECEPTACLE XLR MALE	117686
K1	RELAY REED SPST-NO 5V 1.2A	087078
K2	RELAY REED SPST-NO 5V 1.2A	087078
K3	RELAY REED SPST-NO 5V 1.2A	087078
K4	RELAY REED SPST-NO 5V 1.2A	087078
K5	RELAY REED SPST-NO 5V 1.2A	087078
K6	RELAY REED SPST-NO 5V 1.2A	087078
PCB1	PC BD AUDIO EXPANSION	130094
R1	RES SMD0805 22.1K 1/8W 1%	145012
R2	RES SMD0805 22.1K 1/8W 1%	145012
R3	RES SMD0805 100K 1/8W 1%	145014
R4	RES SMD0805 100K 1/8W 1%	145014
R5	RES MF 221 OHM 1% 1/4W	144559
R6	RES MF 221 OHM 1% 1/4W	144559
R7	RES SMD0805 22.1K 1/8W 1%	145012
R8	RES SMD0805 22.1K 1/8W 1%	145012
R9	RES SMD0805 22.1K 1/8W 1%	145012
R10	RES SMD0805 22.1K 1/8W 1%	145012
R11	RES SMD0805 22.1K 1/8W 1%	145012
R12	RES SMD0805 22.1K 1/8W 1%	145012
R13	RES MF 221 OHM 1% 1/4W	144559
R14	RES MF 221 OHM 1% 1/4W	144559
R15	RES MF 221 OHM 1% 1/4W	144559
R16	RES MF 221 OHM 1% 1/4W	144559
R17	RES MF 221 OHM 1% 1/4W	144559
R18	RES MF 221 OHM 1% 1/4W	144559
R19	RES SMD080533.2K 1/8W 1%	145033
R20	RES SMD080533.2K 1/8W 1%	145033

11 METER LIGHTING PCB 750846

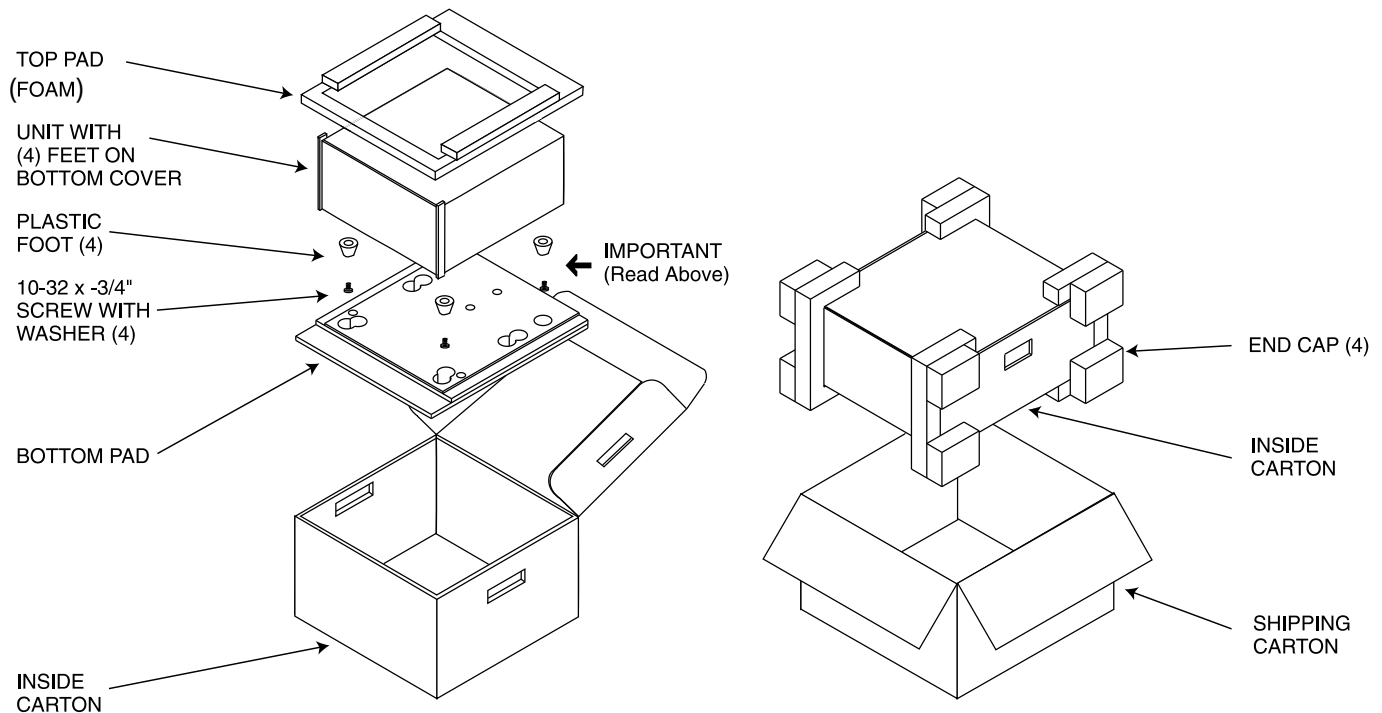
D1	LED RGB SURFACE MOUNT	058178
D2	LED RGB SURFACE MOUNT	058178
D3	LED RGB SURFACE MOUNT	058178
D4	LED RGB SURFACE MOUNT	058178
D5	LED RGB SURFACE MOUNT	058178
D6	LED RGB SURFACE MOUNT	058178
J1	CONN 12 PIN FFC SMD RA	117990
	PCB METER LIGHT	129945
R1	RES SMD0805 332 1/8W 1%	145006
R2	RES SMD0805 332 1/8W 1%	145006
R3	RES SMD0805 1K 1/8W 1%	145007
R4	RES SMD0805 1K 1/8W 1%	145007
R5	RES SMD0805 332 1/8W 1%	145006
R6	RES SMD0805 332 1/8W 1%	145006
R7	RES SMD0805 1K 1/8W 1%	145007
R8	RES SMD0805 1K 1/8W 1%	145007
R9	RES SMD0805 332 1/8W 1%	145006
R10	RES SMD0805 332 1/8W 1%	145006
R11	RES SMD0805 1K 1/8W 1%	145007
R12	RES SMD0805 1K 1/8W 1%	145007

REPACKING INSTRUCTION

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below. It is very important that the four plastic feet are attached to the bottom of the equipment. Four 1/4 - 20x2-1/4 inch screws and washers must be used to fasten the unit securely to the bottom pad and wood skid. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory. Refer to page 3. Please see the Part List for the correct part numbers.

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	033888	Shipping carton
4	033887	End Cap
1	033697	Inner carton only
1	034414	Top pad (foam)
1	034301	Bottom pad
4	017937	Plastic foot
4	400159	#10-32 x 3/4" screw
4	404080	#10-7/16" Flat washer



MA5200

TUBE PREAMPLIFIER

SERVICE MANUAL

SERIAL NO. ADF1001 And Above



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