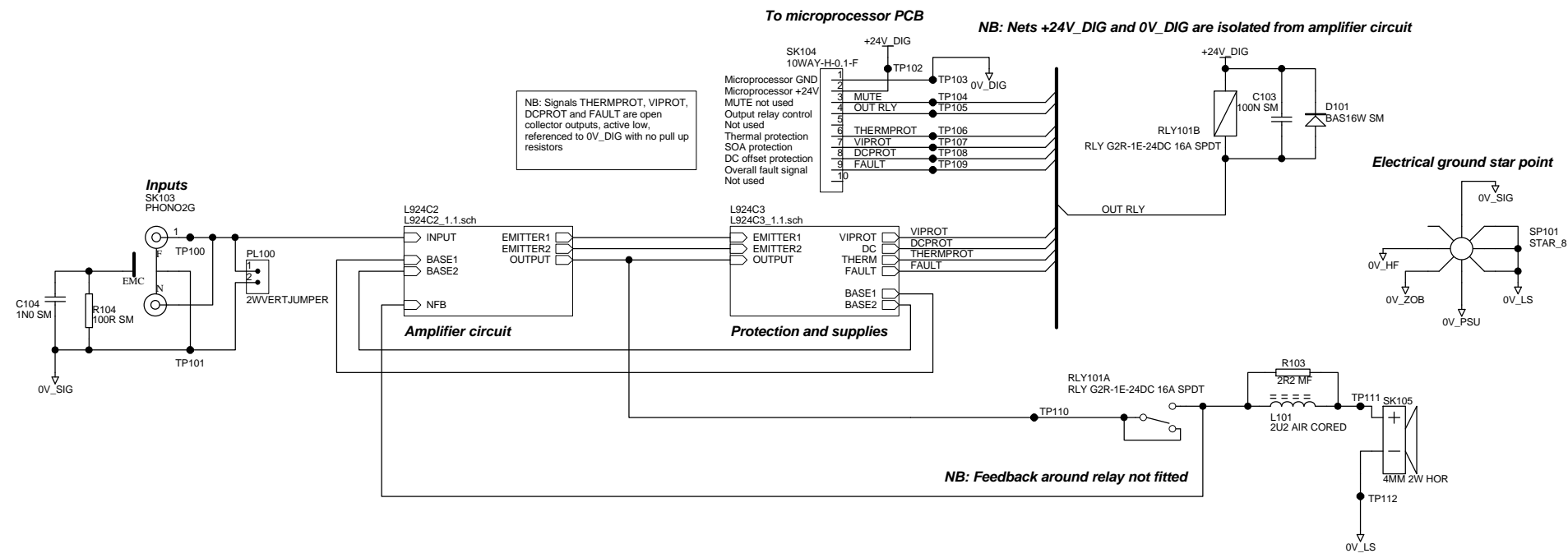
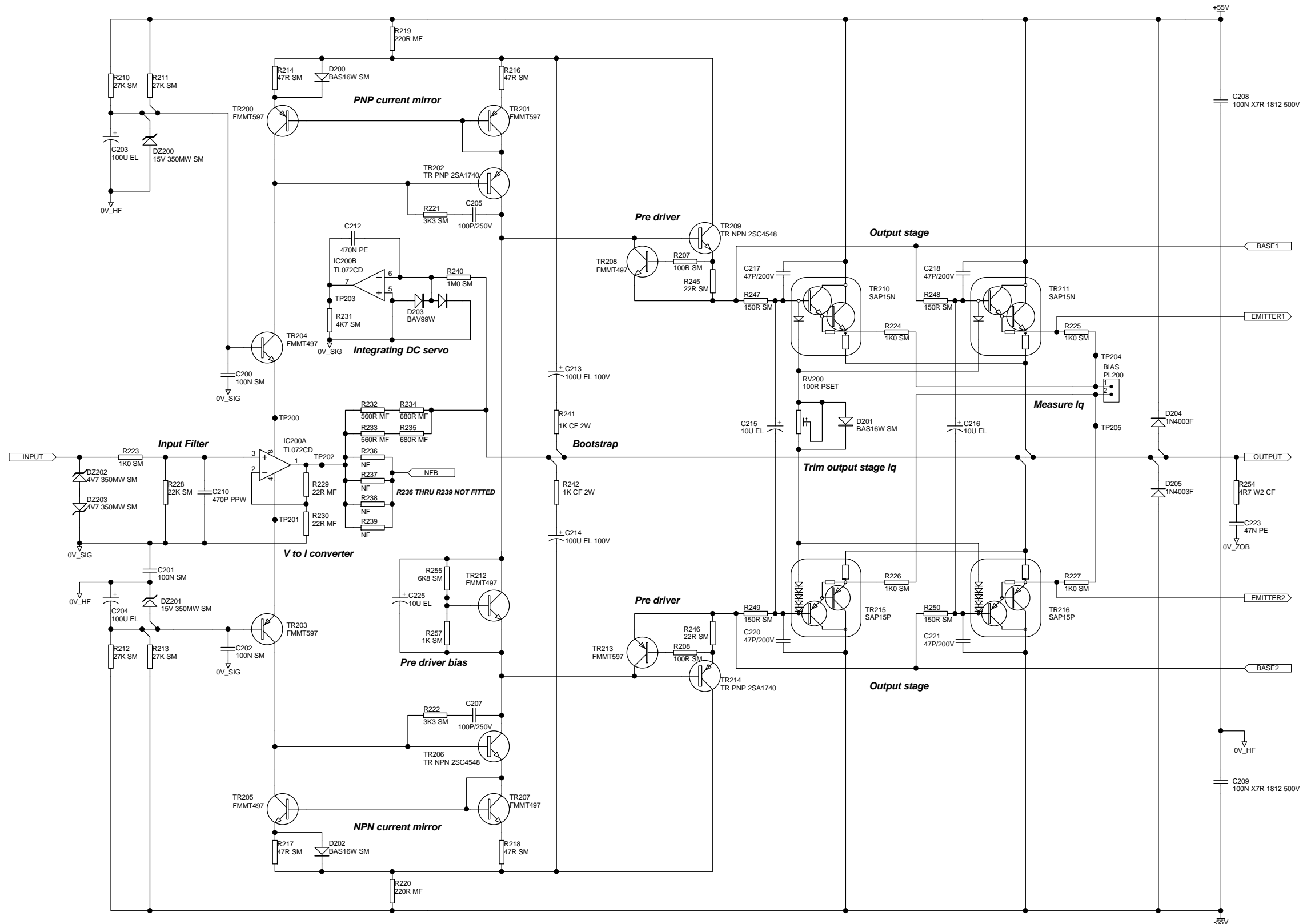


Downloaded from <http://receiverfaq.ru/>

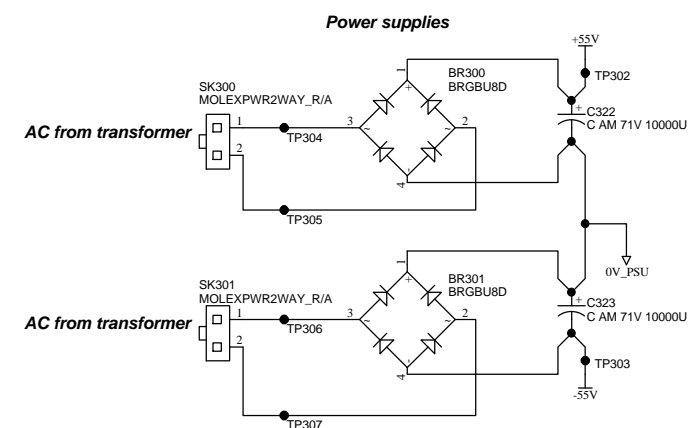
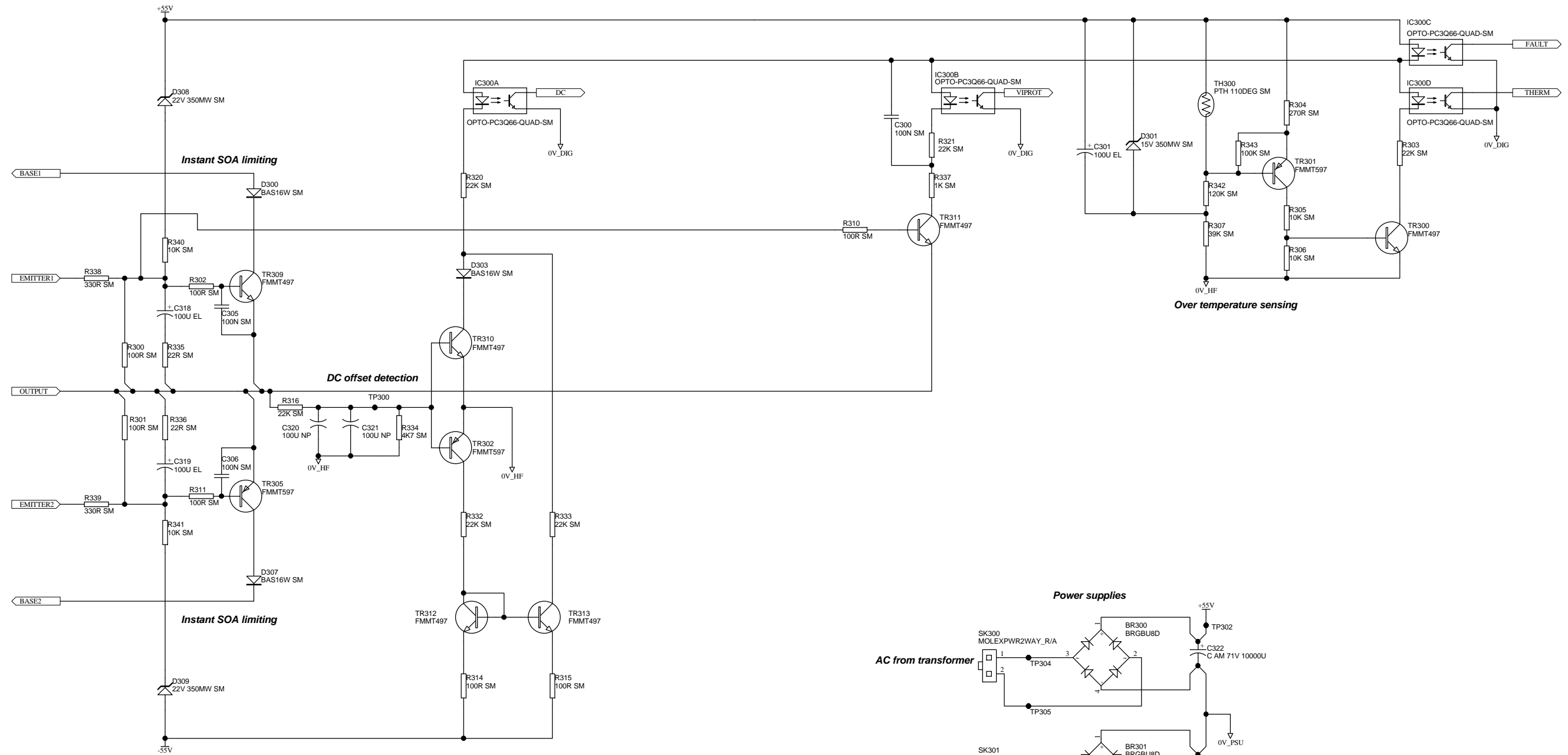


Z100 PCB L924PB	Z102 HEATSINK E915HK	Z106 TRANSISTOR INSULATOR E950MC	Z107 M3 TAPTITE HB3B12A	Z108 M3 TAPTITE HB3B12A	Z109 M3 TAPTITE HB3B12A	Z110 M3 TAPTITE HB3B12A
Z101 SUB PANEL E107AY	Z103 SUB PANEL SCREW HF4V09B	Z104 SUB PANEL SCREW HF4V09B	Z105 SUB PANEL SCREW HF4V09B			

DRAWING TITLE P7 Amplifier Module					
Filename: L924C1_1.1.sch					
Notes:					
A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB		02_E055	JR	4/3/2002	FIXED DC FAULT AT POWER ON SEQUENCE BY FEEDBACK
Contact Engineer: Jonny Reckless	Contact Tel: (01223) 203200	ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE
Printed: 7-Mar-2002		Sheet 1 of 3		DRAWING NO. L924CT	
				ISSUE	

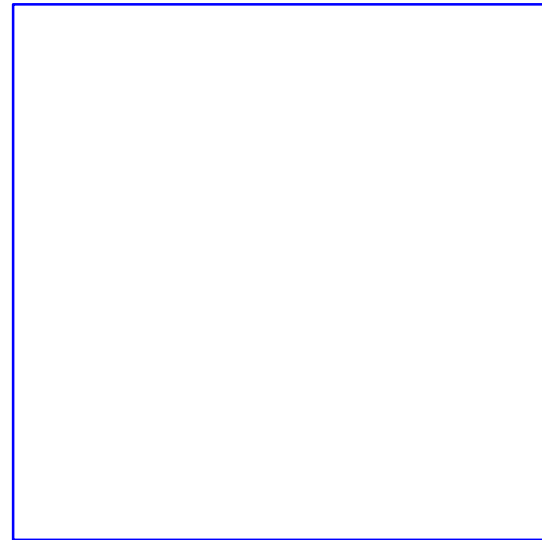


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Notes:									
A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB		ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE	ISSUE			
Contact Engineer: Jonny Reckless		Contact Tel: (01223) 203200	Printed: 7-Mar-2002	Sheet 2 of 3	DRAWING NO. L924CT				

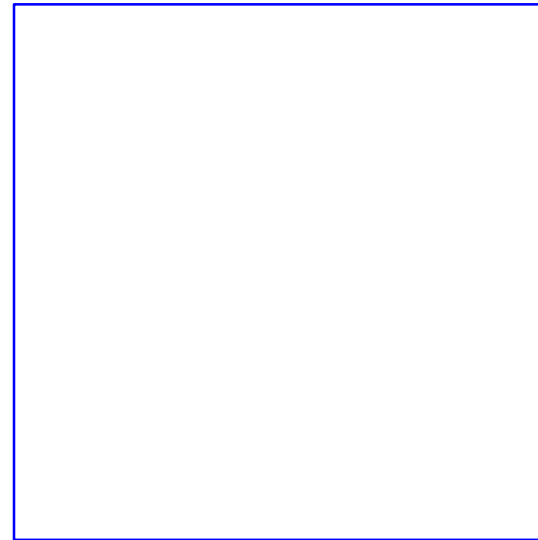


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Filename:		L924C3_1.1.sch							
Notes:									
A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB		Contact Engineer: Jonny Reckless		Contact Tel: (01223) 203200		Printed: 7-Mar-2002		Sheet 3 of 3	
		ECO No.		INITIALS		DATE		DESCRIPTION OF CHANGE	
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								ISSUE	
								DRAWING NO. L924CT	

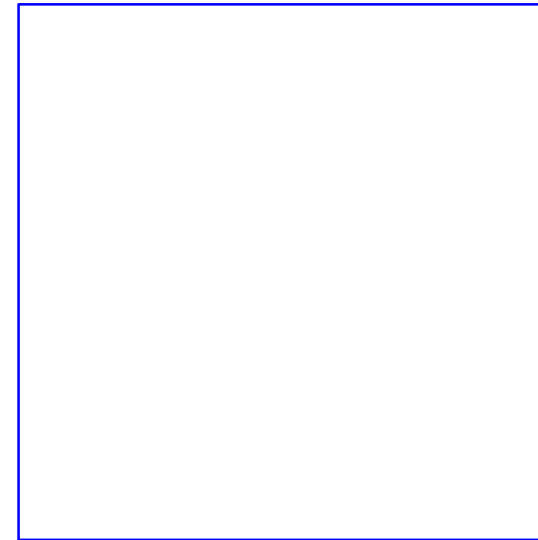
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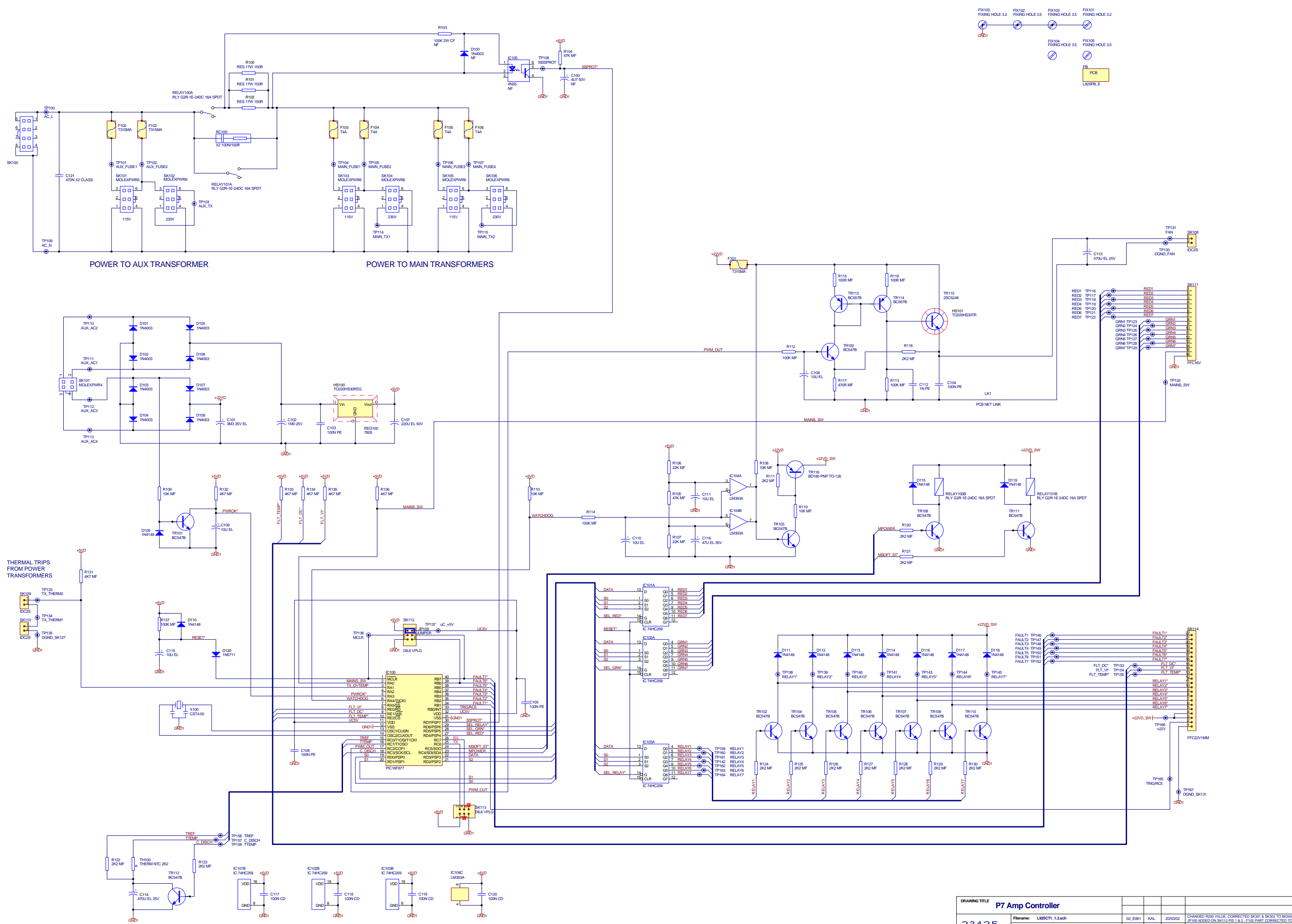
Interface PCB
L925CT2_1.2.SCH



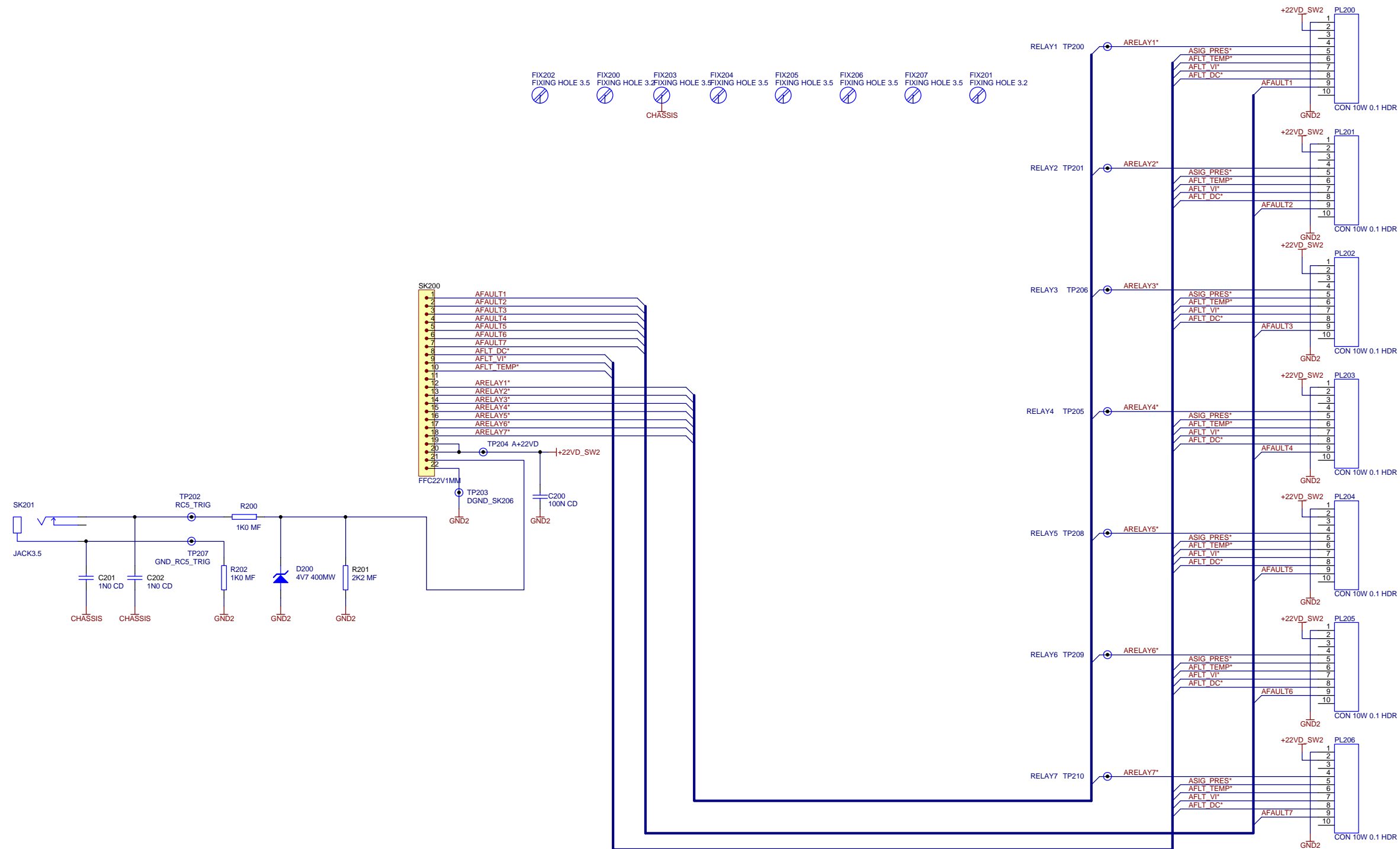
Main Switch and LED Display
L925CT3_1.2.sch



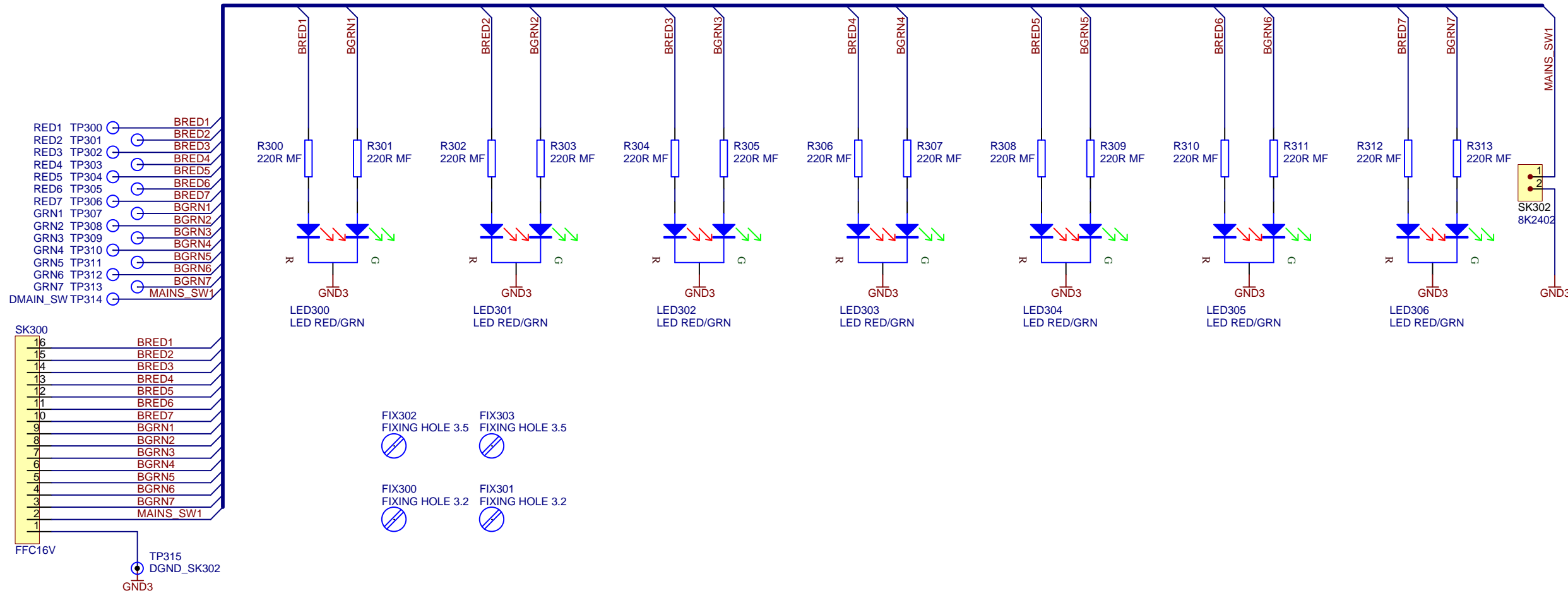
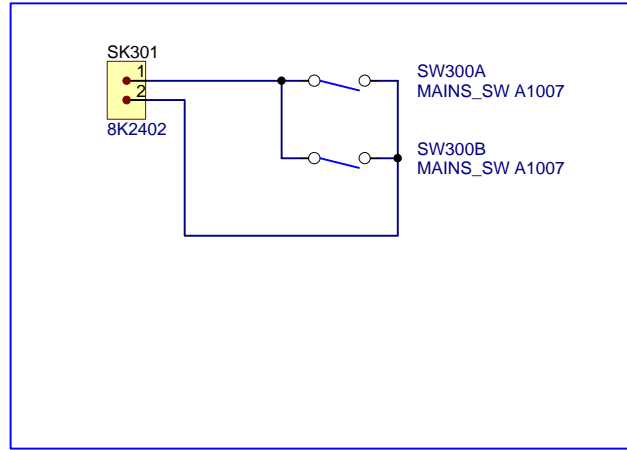
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P7 Amp Controller						
23425 A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB	Filename: L925CT0_1.2.Sch	02_E061	KAL	20/03/02	CHANGED R200 VALUE. CORRECTED SK301 & SK302 TO 8K2402 JP100 ADDED ON SK112 PIS 1 & 2 , F102 PART CORRECTED TO 315mA	1.2
	Notes:	02_E054	KAL	7/03/02	CHANGED C121 VALUE. REMOVED SOFT START PROTECTION	1.1
		02_E041	KAL	7/02/02	PRODUCTION ISSUE PCB CHANGES ONLY	1.0
		ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE	ISSUE
Contact Engineer: Kevin Lamb	Contact Tel: (01223) 203252	Printed: 18-Apr-2002	Sheet 1 of 4	DRAWING NO. L925CT		



DRAWING TITLE		P7 Amp Controller	
23425	Filename: L925CT1_1.2.sch	02_E061	KAL 20/03/02
A & R Cambridge Ltd. Pembroke Avenue Waterbeach Cambridge CB5 9PB		02_E054	KAL 7/03/02
Contact Engineer: Kevin Lamb	Contact Tel: (01223) 203252	02_E041	KAL 7/02/02
Printed: 18-Apr-2002	Sheet 2 of 4	DRAWING NO. L925CT	

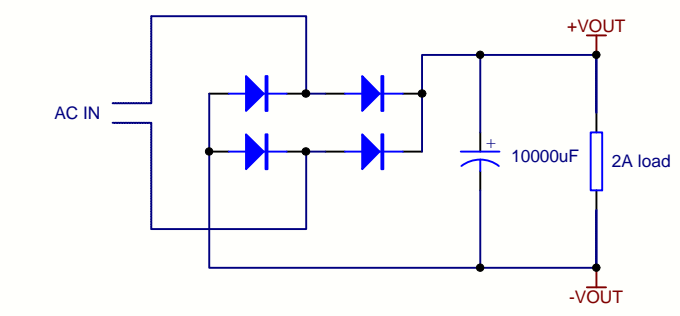
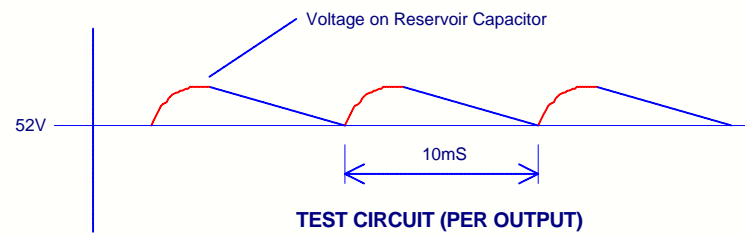
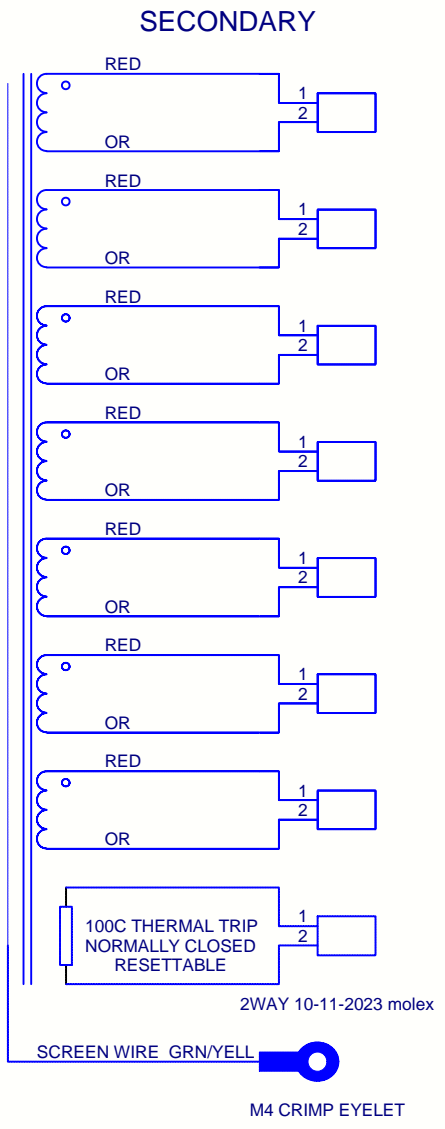
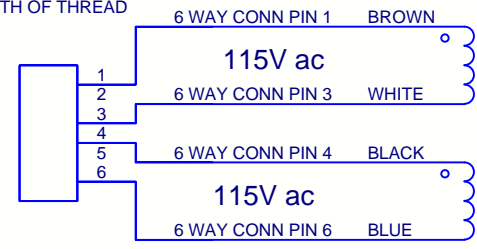
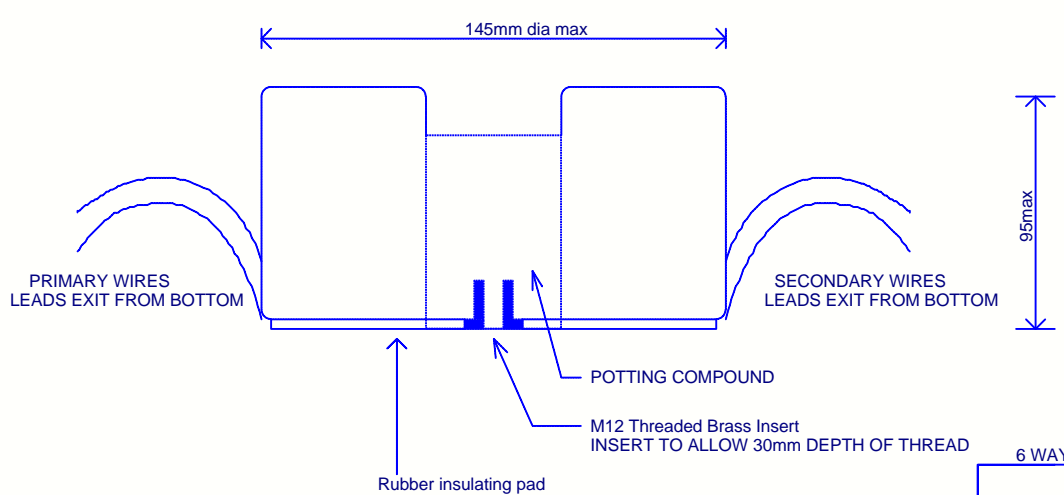
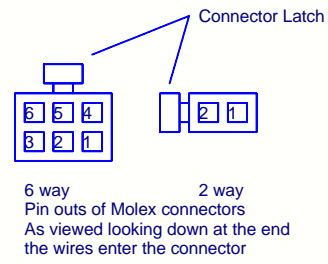


DRAWING TITLE									
P7 Amp Controller									
23425	Filename: L925CT2_1.2.Sch	02_E061	KAL	20/03/02	CHANGED R200 VALUE. CORRECTED SK301 & SK302 TO 8K2402	1.2			
	Notes:	02_E054	KAL	7/03/02	JP100 ADDED ON SK112 PIS 1 & 2. F102 PART CORRECTED TO 315mA	1.1			
		02_E041	KAL	7/02/02	CHANGED C121 VALUE. REMOVED SOFT START PROTECTION	1.0			
		ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE	ISSUE			
Contact Engineer: Kevin Lamb		Contact Tel: (01223) 203252		Printed: 18-Apr-2002	Sheet 3 of 4	DRAWING NO. L925CT			

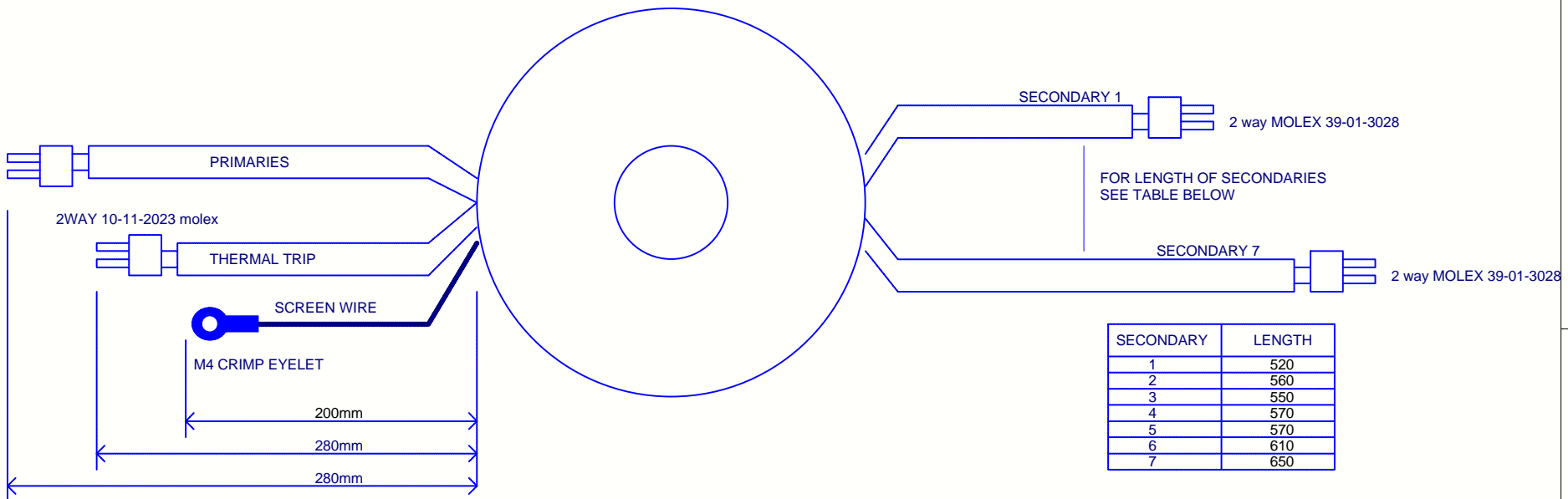


DRAWING TITLE		P7 Amp Controller					
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	Notes:		02_E054	KAL	7/03/02	CHANGED C121 VALUE. REMOVED SOFT START PROTECTION	1.1
			02_E041	KAL	7/02/02	PRODUCTION ISSUE PCB CHANGES ONLY	1.0
	ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE		ISSUE	
Contact Engineer:	Kevin Lamb	Contact Tel:	(01223) 203252	Printed:	18-Apr-2002	Sheet 4 of 4	DRAWING NO. L925CT

Transformer Specification For 115/230V P7 transformer
 Arcam Part Number L911TX
 Material Safety Specification
 1. Winding Wire to be Grade 2 (130C rating) to BS 60317-4 1995
 2. Mylar Polyester Insulator 130C Rated
 3. Potting Compound PC3502 E135297(M)
 Mechanical Specification
 1. Middle of transformer to be potted (as shown).
 2. Primary windings connect to 6 way MOLEX connector 39-01-2065. Secondary windings connect to 2 way molex connector 39-01-3028. Use MOLEX pin 44476-3112. MOLEX connectors have pin numbers indicated on them.
 3. Primary wires are enclosed in a common sleeve. Each secondary winding is individually sleeved. Use PVC sleeving.
 4. All wire lengths in mm. Lengths are +5.0, -0
 5. Please adhere rubber insulating pad to bottom of transformer as shown.
 Electrical Specification
 1. Transformer to have dual 115V primaries to allow parallel operation for 115V input and series operation with 230V input.
 2. Transformer input voltage range
 115V -18% +14% (97.5V to 132.5V)
 230V -18% +14% (195V to 265V)
 3. Transformer to have 7 secondary windings as show in the adjacent drawing.
 4. Loaded DC voltages specified at 230V AC in (with transformer primaries in series)
 5. Each secondary winding to have a full wave (4diode) bridge to produce a single DC rail.
 (AS shown in diagram)
 Output Capacitance to be 10000uF per rail.
 $V_{OUTmin} = 52V$ dc @ $I_o = 2A$ (with 230V AC in) See dwg
 This figure to be the minimum voltage on the reservoir capacitor as shown in the diagram



6 way MOLEX 39-01-2065 UL94- V0



SECONDARY	LENGTH
1	520
2	560
3	550
4	570
5	570
6	610
7	650

DRAWING TITLE				
POWER TRANSFORMER FOR P7 115/230V				
A & R Cambridge Ltd. 23425 Pembroke Avenue Denny Industrial Centre Waterbeach Cambridge CB5 9PB		Circuit Diagram		
Notes:				
	KAL	05-03-2002	Lead Out Changes to suit new wiring arrangement in amplifier	1
	KAL	4-12-2001	Lead Out Changes Mechanical Changes	D
ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE	ISSUE
		Date Printed 6-Mar-2002	Drawn by: KAL	Sheet 1 of 1 DRAWING NO. L911TX

Filename
 J:\Development_Projects\P7_Amp\Transformer Design\L911TX_1.dwg - Documents\L911TX_1.sch

Transformer Specification For 100V P7 Amplifier
 Arcam Part Number L920TX

Material Safety Specification

1. Winding Wire to be Grade 2 (130C rating) to BS 60317-4 1995
2. Mylar Polyester Insulator 130C Rated
3. Potting Compound PC3502 E135297(M)

Mechanical Specification

1. Middle of transformer to be potted (as shown).
2. Primary windings connect to 6 way MOLEX connector 39-01-2065. Secondary windings connect to 2 way molex connector 39-01-3028. Use MOLEX pin 44476-3112. MOLEX connectors have pin numbers indicated on them.
3. Primary wires are enclosed in a common sleeve. Each secondary winding is individually sleeved. Use PVC sleeving.
4. All wire lengths in mm. Lengths are +5.0, -0
5. Please adhere rubber insulating pad to bottom of transformer as shown.

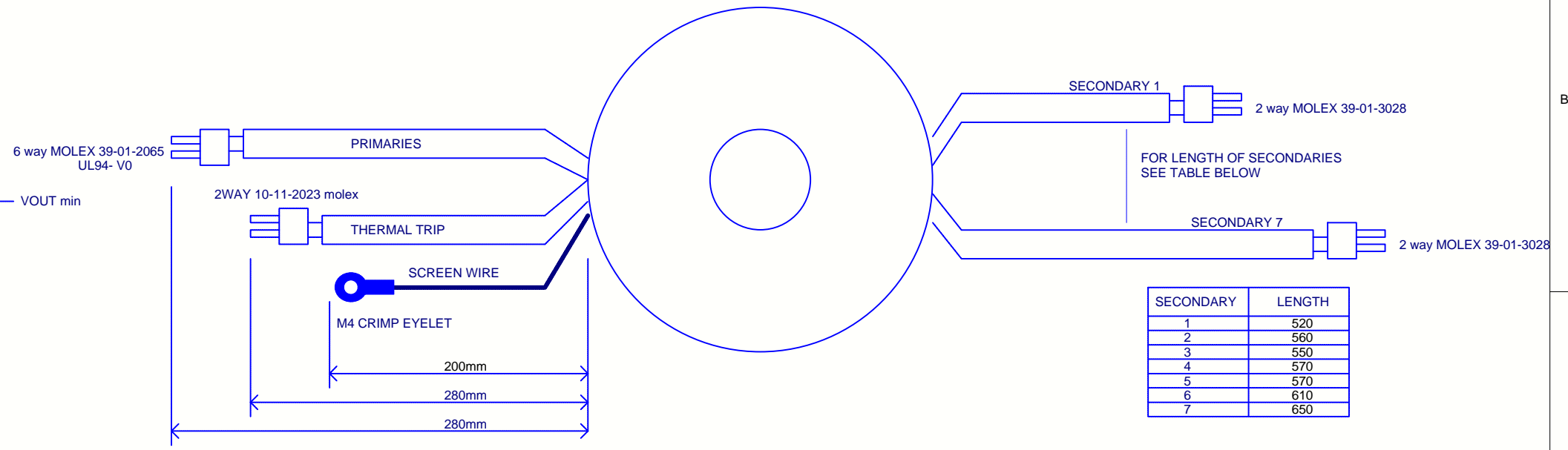
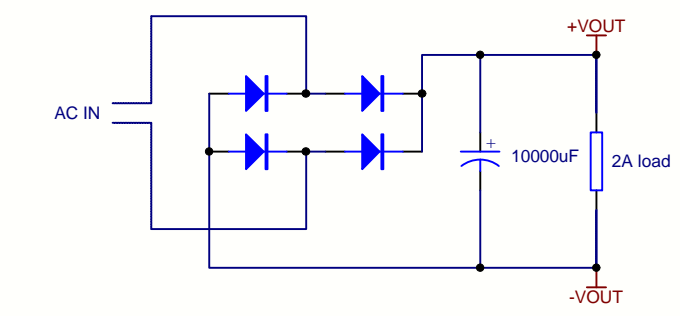
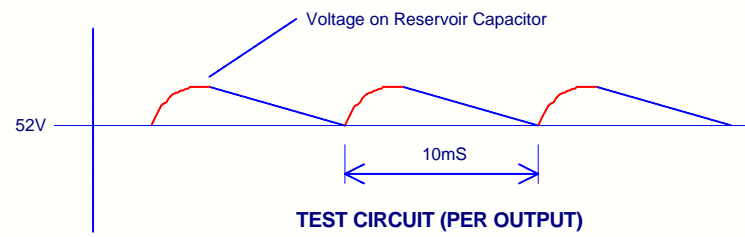
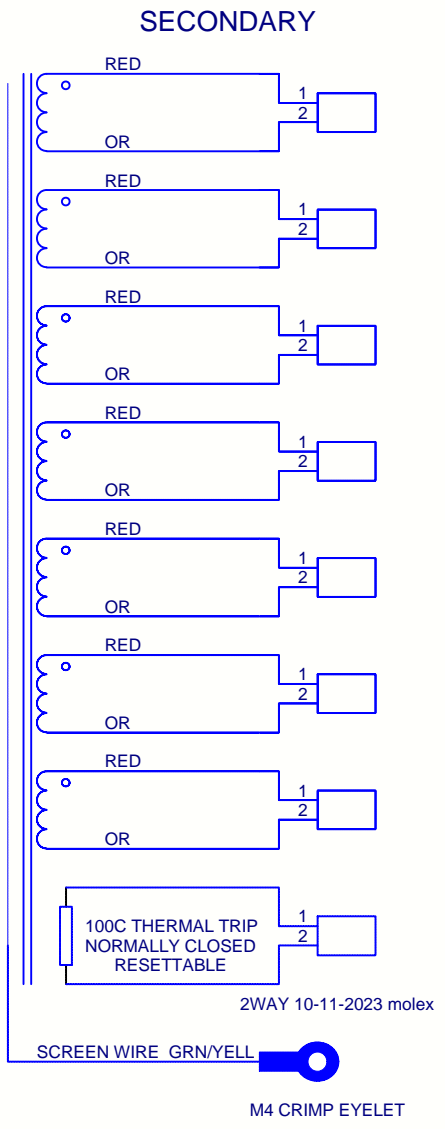
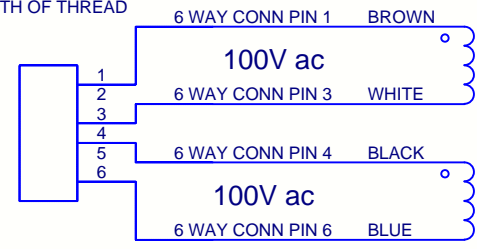
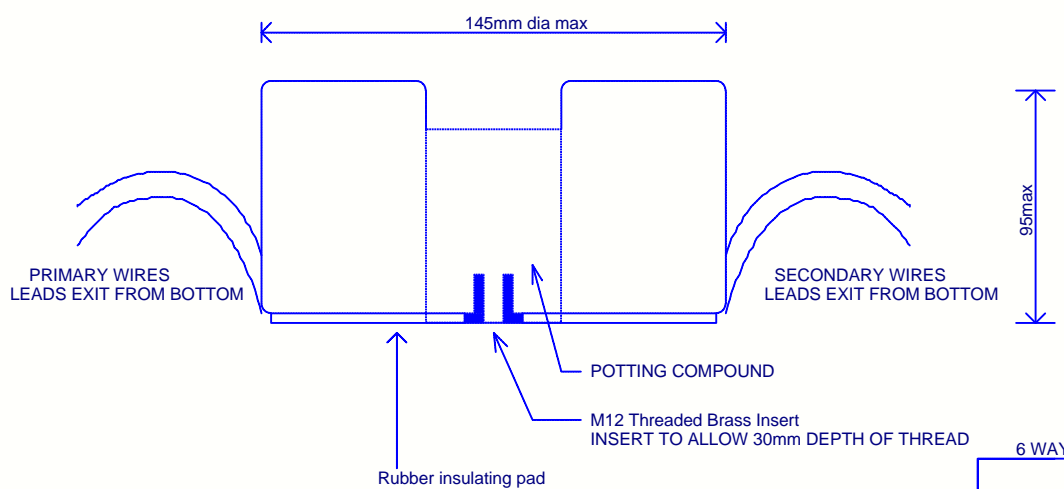
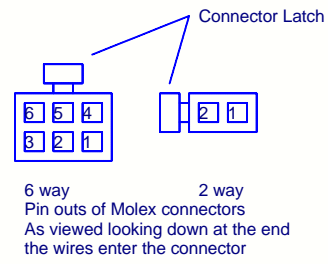
Electrical Specification

1. Transformer to have dual 100V primaries to allow parallel operation for 100V input
2. Transformer input voltage range
100V -18% +14% (82V to 114V)
3. Transformer to have 7 secondary windings as show in the adjacent drawing.
4. Loaded DC voltages specified at 100V AC in (with transformer primaries in parallel)
5. Each secondary winding to have a full wave (4diode) bridge to produce a single DC rail.
(AS shown in diagram)

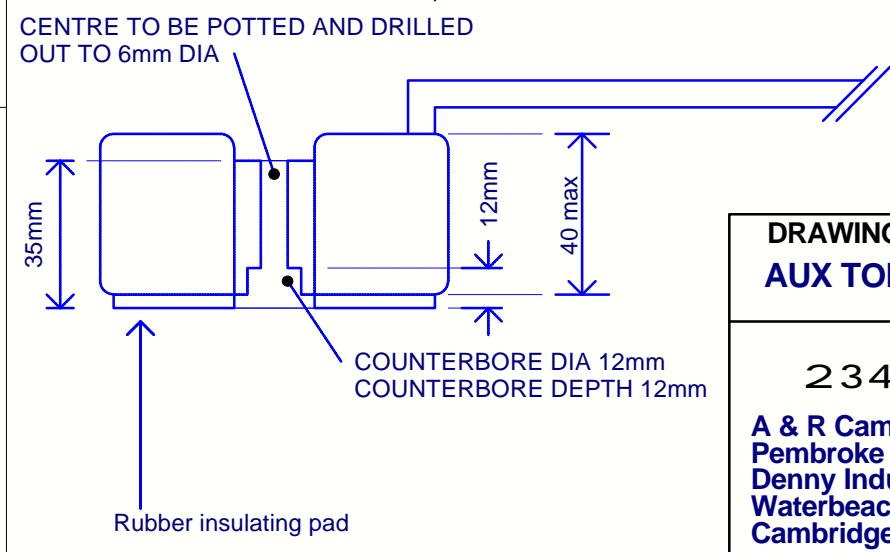
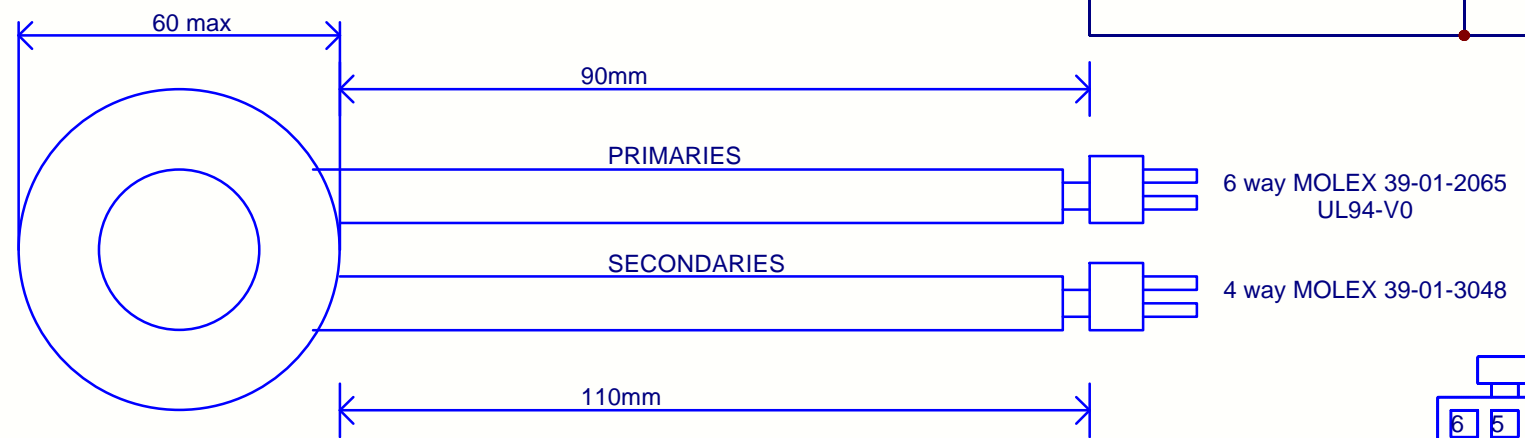
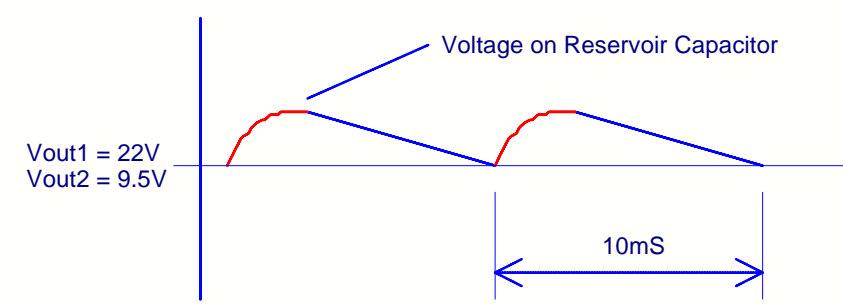
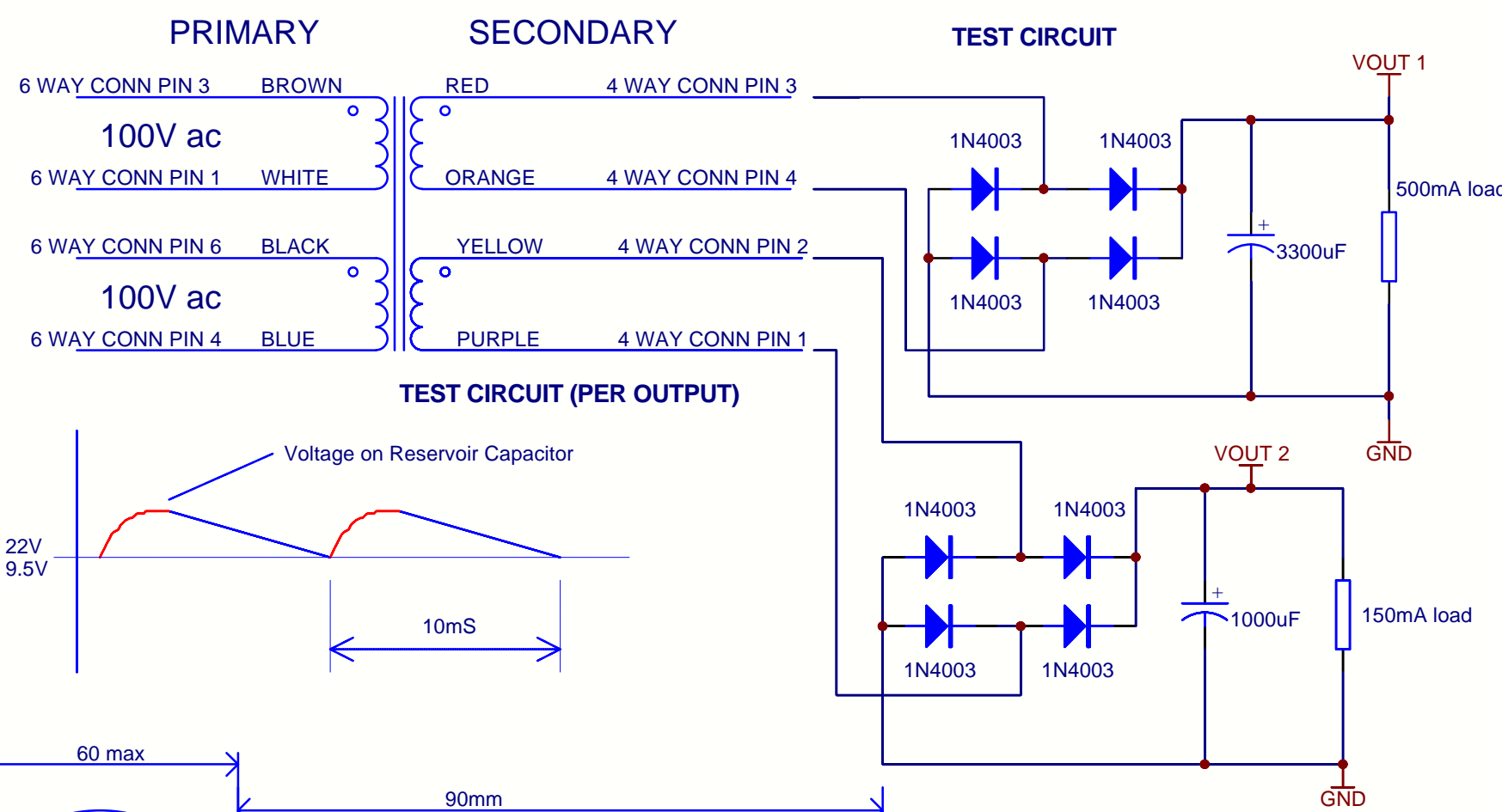
Output Capacitance to be 10000uF per rail.

$V_{OUTmin} = 52V$ dc @ $I_o = 2A$ (with 100V AC in) See dwg

This figure to be the minimum voltage on the reservoir capacitor as shown in the diagram



DRAWING TITLE							
POWER TRANSFORMER FOR P7 100V (JAPAN)							
A & R Cambridge Ltd. 23425 Pembroke Avenue Denny Industrial Centre Waterbeach Cambridge CB5 9PB		Circuit Diagram		Notes:			
ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE		ISSUE		
	KAL	05-03-2002	Based on spec of 115/230V part (L911TX)		1		
Filename	Date Printed	Drawn by:	Sheet 1 of 1		DRAWING NO. L920TX		
J:\Development_Projects\P7_Amp\Transformer Design\L920TX_1.ddb - Documents\L920TX_1.sch	6-Mar-2002	KAL					



Transformer Specification For 100V (JAPAN) P7 Auxilliary Transformer
 Arcam Part Number L921TX

Material Safety Specification

1. Winding Wire to be Grade 2 (130C rating) to BS 60317-4 1995
2. Mylar Polyester Insulator 130C Rated
3. Potting Compound PC3502 E135297(M)

Mechanical Specification

1. Middle of transformer to be potted. Potting to be drilled out with an 6mm DIA Hole and then the bottom surface counterbored to a depth of 12mm with a 12mm dia drill as shown. Actual part which the counterbore is designed to clear extends up to 10mm from transformer mounting surface into counterbore.
2. Primary windings connect to 6 way MOLEX 39-01-2065. Secondary windings connect to 4 way molex connector 39-01-3048. Use MOLEX pin 44476-3112. MOLEX connectors have pin numbers indicated on them.
3. Use 24 AWG wire with colours as shown. Primary wires are enclosed in a common sleeve. Secondary wires are enclosed in a common screen. Use PVC sleeving.
4. All wire lengths in mm. Lengths are +5.0, -0
5. Please adhere rubber insulating pad to bottom of transformer as shown.

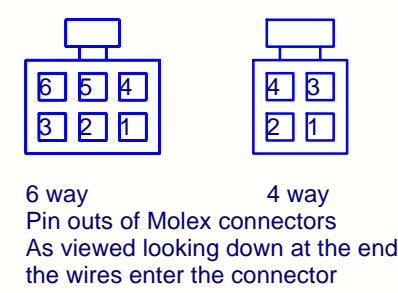
Electrical Specification

1. Transformer to have dual 100V primaries to allow parallel operation for 100V input.
2. Transformer input voltage range
 100V -18% +14% (82V to 114V)
3. Transformer to have two secondary windings as show in the adjacent drawing.
4. Loaded DC voltages specified at 100V AC in (with transformer primaries in parallel)

DC supplies to be generated by configuring the seconday windings with a full wave bridge (see diagram).
 Output Capacitance to be 3300uF. 22V dc
 Output Capacitance to be 1000uF. 9.5V dc

VOUT1 = 22.0V dc @ Io = 250mA (With 100V AC in)
 VOUT2 = 9.5V dc @ Io = 150mA (With 100V AC in)

(this will ensure that VOUT2 is 8V at 82V AC in)



DRAWING TITLE AUX TOROIDAL TRANSFORMER P7 100V (JAPAN)					
23425 A & R Cambridge Ltd. Pembroke Avenue Denny Industrial Centre Waterbeach Cambridge CB5 9PB	Circuit Diagram				
	Notes:				
Filename J:\Development_Projects\P7_Amp\Transformer Design\L921tx_1.ddb - Documents\L921TX_1.Sch		ECO No.	INITIALS	DATE	DESCRIPTION OF CHANGE
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				6-Mar-2002	Sheet 1 of 1
				Drawn by: KAL	DRAWING NO. L921TX
					ISSUE 1