



NORMARC 7033

INSTRUMENT LANDING SYSTEM

Transmitter Figures



NAVIA AVIATION

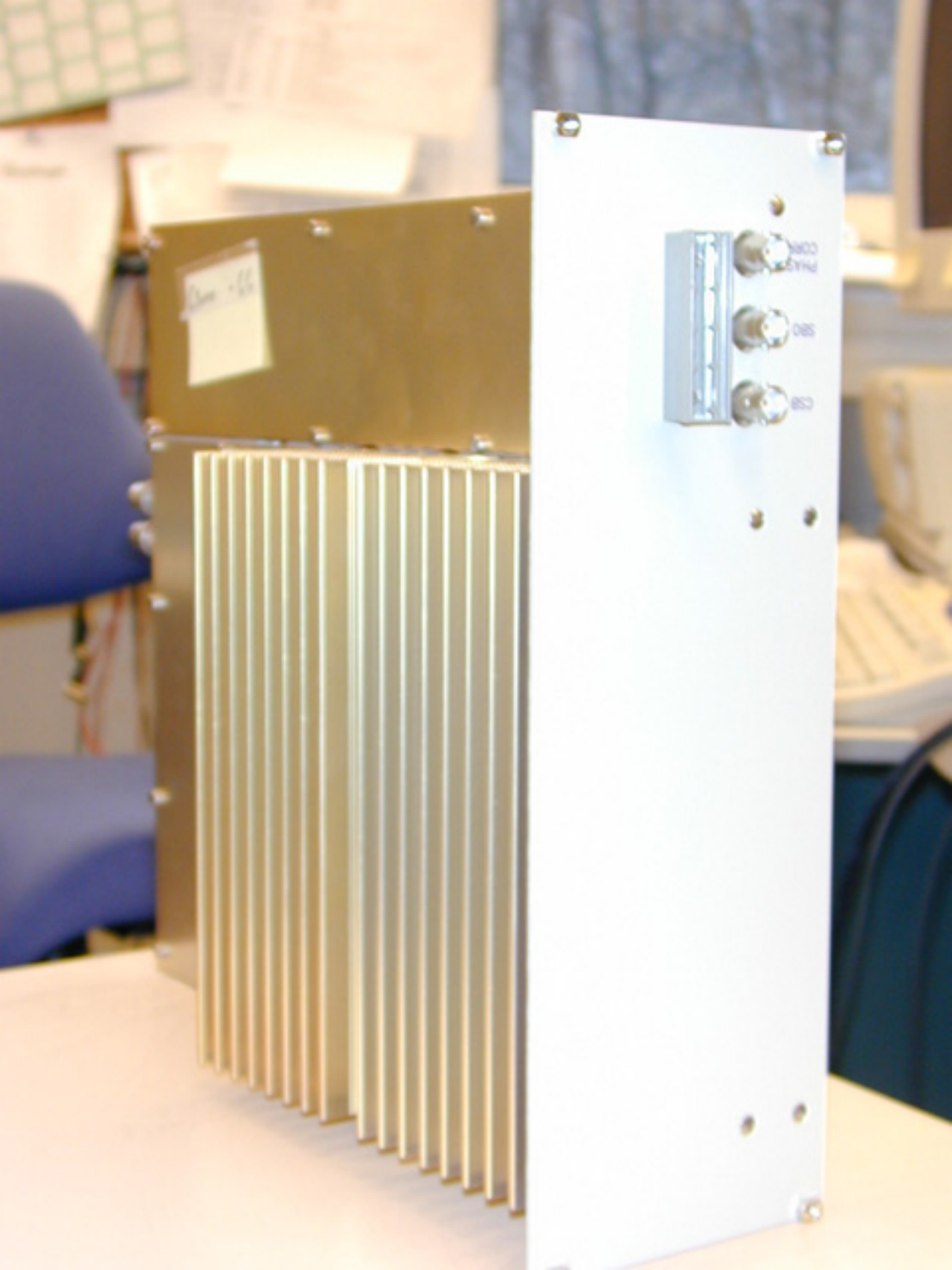


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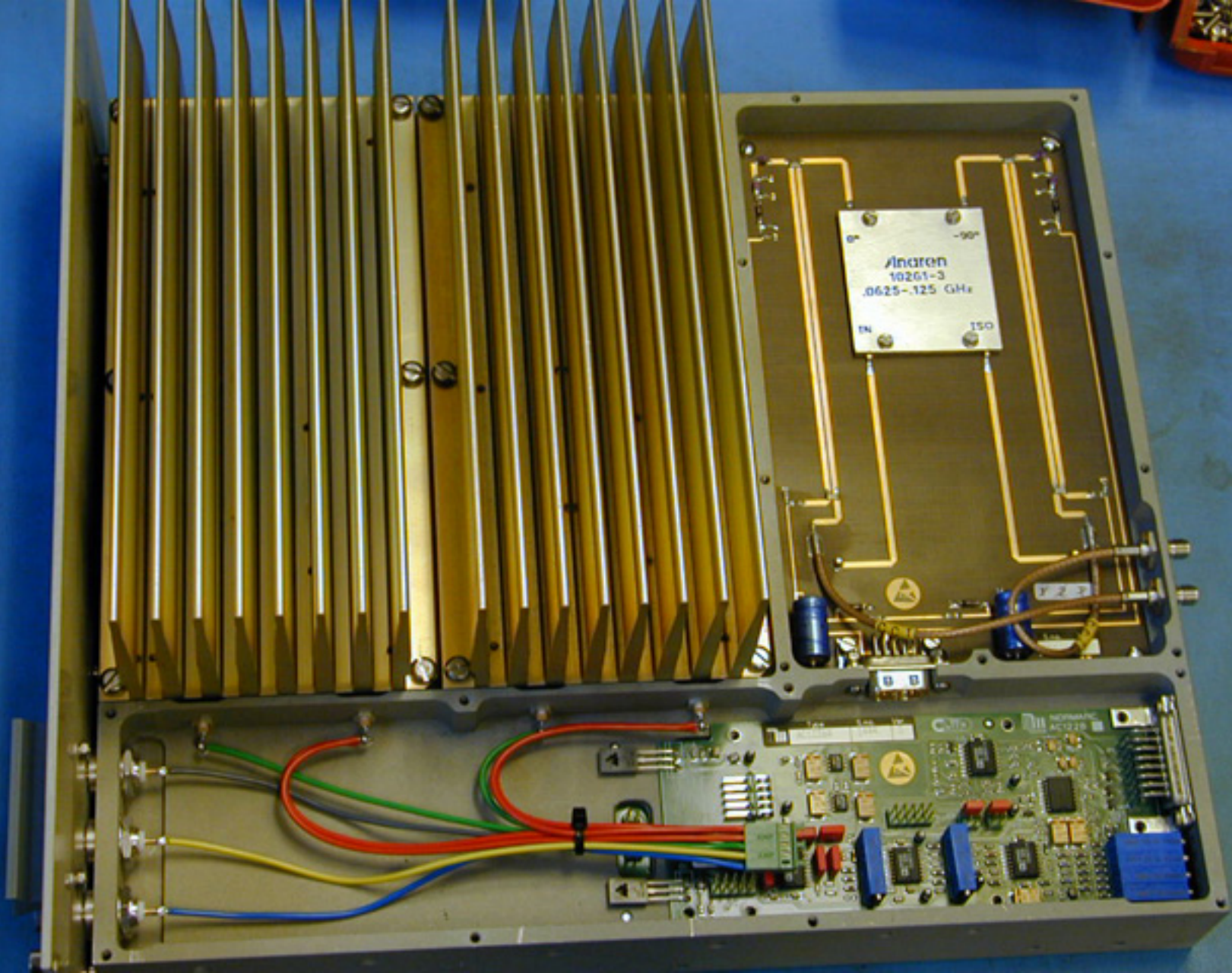
3 GPA1231A POWER AMPLIFIER

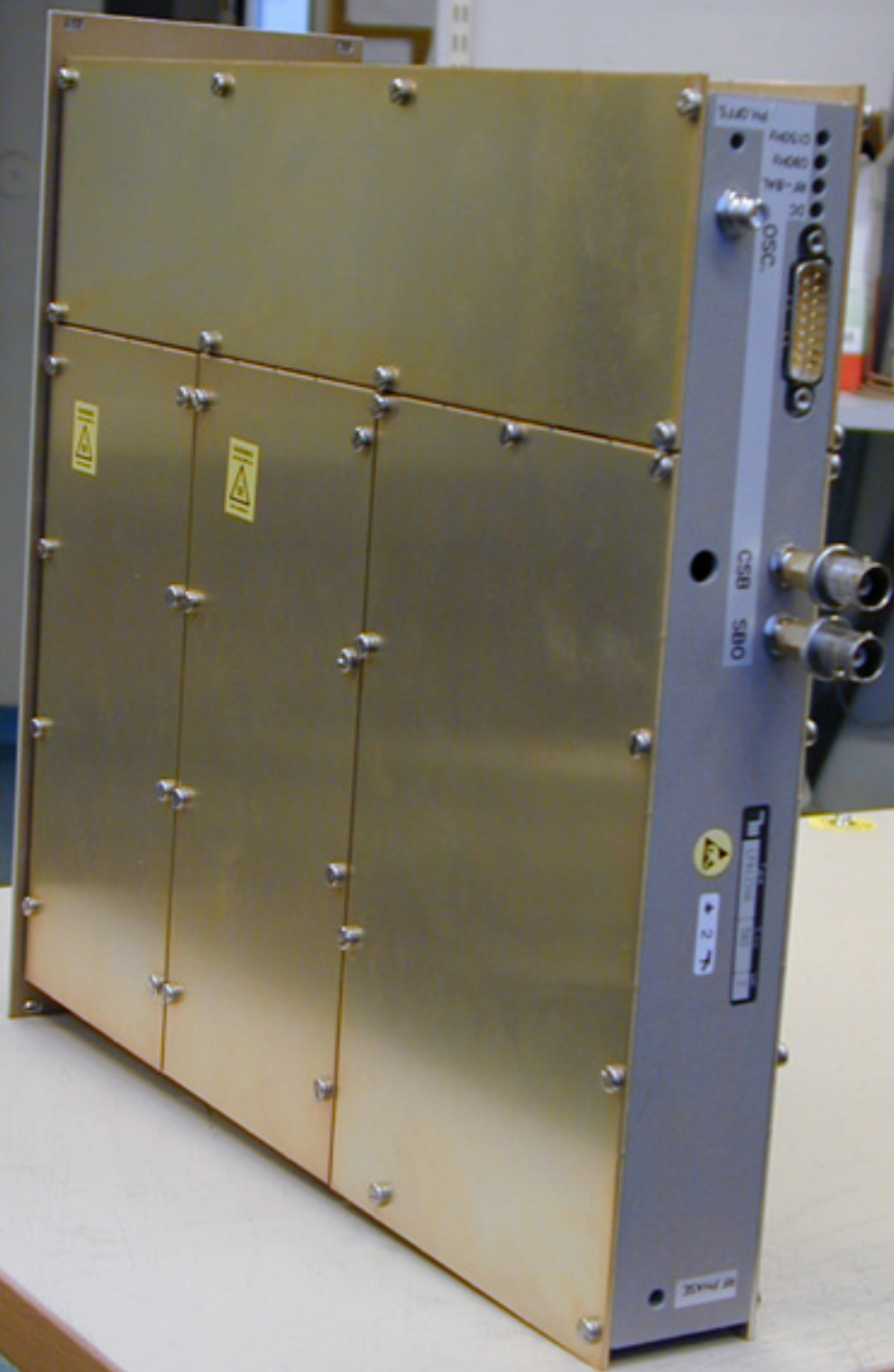
3.1 *Photos (LPA1230A/GPA1231A)*

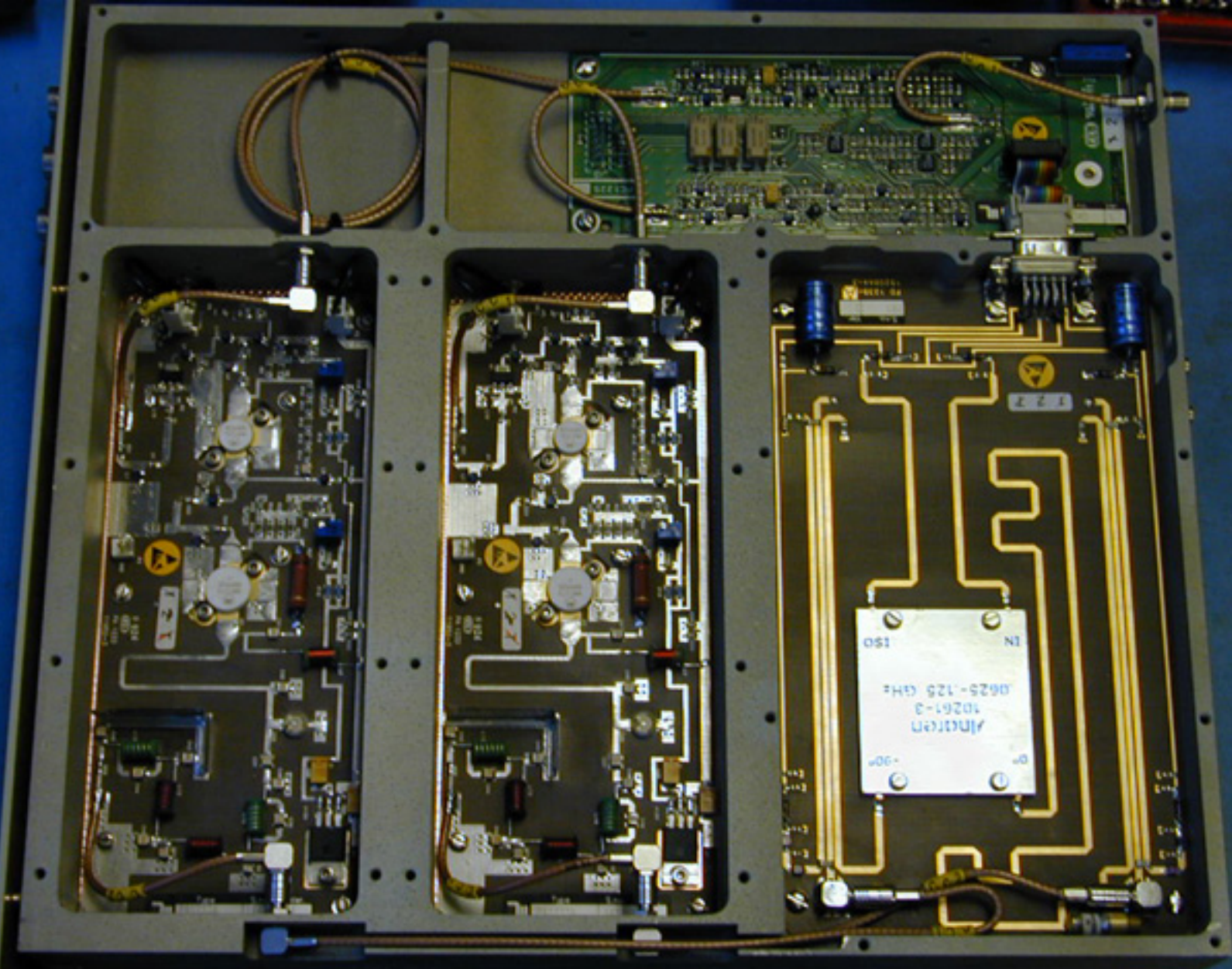


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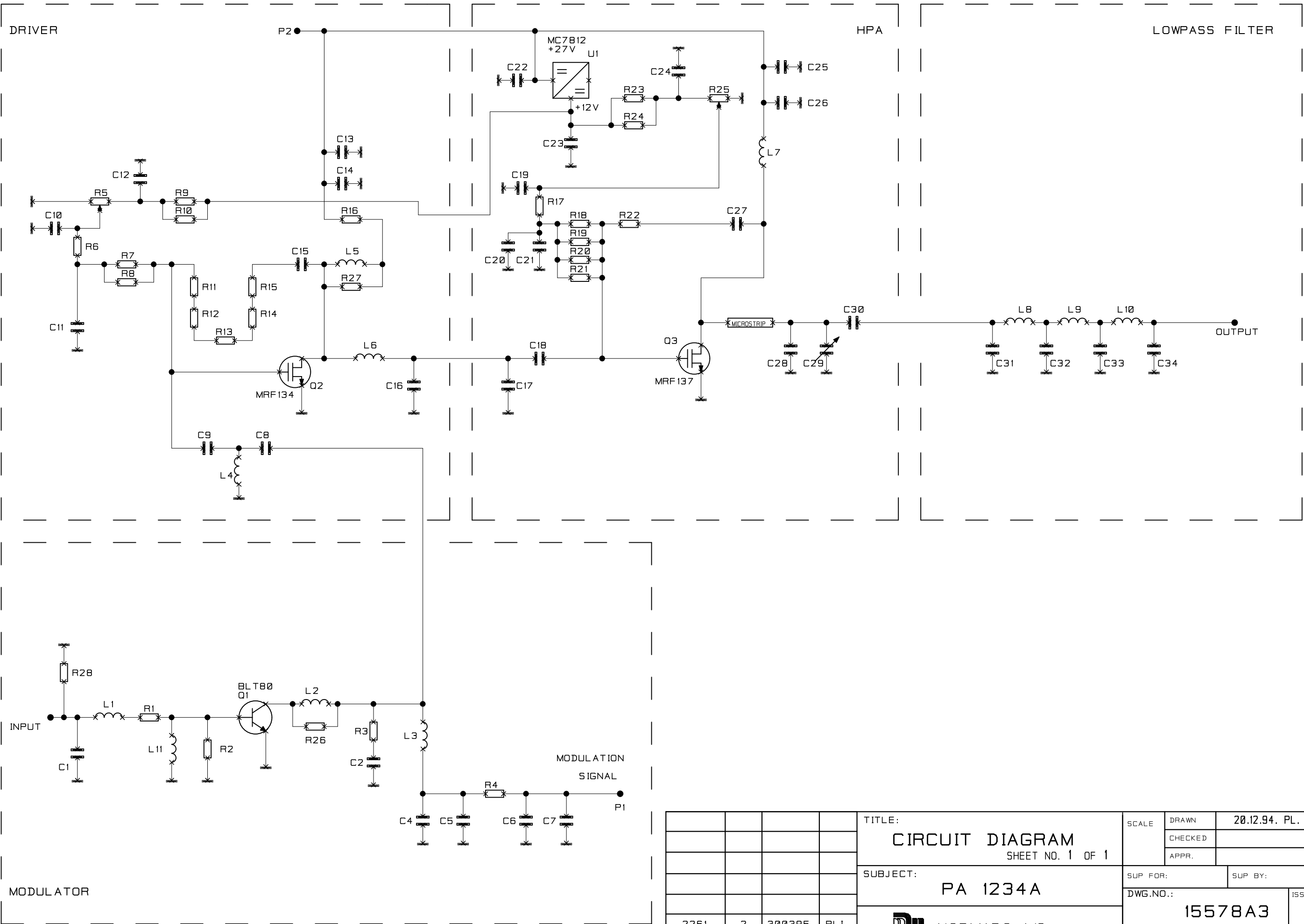






4 PA1234A Power Amplifier

4.1 *Schematic Diagrams*



				TITLE:	SCALE	DRAWN	20.12.94. PL.	
				CIRCUIT DIAGRAM		CHECKED		
				SHEET NO. 1 OF 1		APPR.		
				SUBJECT:	SUP FOR:		SUP BY:	
				PA 1234A	DWG.NO.:			ISSUE
				 NORMARC A/S	15578A3			2
2261	2	300395	PL I		FILENAME : CADSTAR\15578A3			
REF.NO.	ISSUE	DATE	SIGN					

4.2 *Parts List*

Product: 18636 Rev 2

PA 1234A POWER AMPLIFIER

Issue: 4

Change Order: 3479

Appr.:

Date:

Tot.Quant.	Pos.	Part no.	Component Manu. Description	Drwg.no.	Rev.	Value/Dim. Ratings	Tol. Function	Quant./Pos.
1 PCS	18637	18637	PA 1234A POWER AMPLIFIER PL	18637/9	4			1 PCS
1 PCS	18638	18638	PA 1234A POWER AMPLIFIER MPL	-	4			1 PCS
1 PCS	18639	18639	PA 1234A POWER AMPLIFIER CPL	-	1			1 PCS
1 PCS	C08	19832	CAP.SMD	-		27P	5%	1 PCS
			XXXX 0805C270J50			50V		
1 PCS	C09	19836	CAP.SMD	-		56P	5%	1 PCS
			XXXX 0805C560J50			50V		
1 PCS	C18	10208	CAP.CERAMIC	-		150p	0.05	1 PCS
			ATC 700A151JP150X			150V		
1 PCS	Q02	11296	TRANSISTOR	-				1 PCS
			MOT MRF 134				5W	
1 PCS	Q03	11297	TRANSISTOR	-				1 PCS
			MOT MRF 137				30W	
1 PCS	U01	11510	IC	-				1 PCS
			MOT MCT7812CT / MC7812					

Product: 18637 Rev.4

PA 1234A POWER AMPLIFIER PL

Issue: 10

Change Order: 3489

Appr.: HSA

Date: 090399

Tot.Quant.	Pos.	Part no.	Component	Manu. Description	Drwg.no.	Value/Dim.	Tol.	Quant./Pos.
					Rev.	Ratings	Function	

1 PCS	11953	11953	PCB PA1234		11953/2			1 PCS
1 PCS	13231	13231	-	LABEL SER.NO.	2		PA1234A	1 PCS
1 PCS	13298	13298	-	LABEL ESD	1			1 PCS
1 PCS	20325	20325		TYPE 52404				
				LABEL PROGRESS 2				
1 PCS	21072	21072	PA 1234A GP POWER AMPL.	ESPL	16037A4 P3	1-2-T		1 PCS
					2			
					7			
2 PCS	C15	10094	CAP.CERAMIC			100p	0.05	1 PCS
			ATC 100B101JP500X			500V		
1 PCS	C16	10209	CAP.CERAMIC			30p	0.02	1 PCS
			ATC 100A300GP150DR			150V		
1 PCS	C17	10210	CAP.CERAMIC			33p	0.05	1 PCS
			ATC 100A330JP150X			150V		
2 PCS	C22	10571	CAP.TANTALUM			1.5u	20%	1 PCS
			KYOC TAJJD155M050R			50V		
	C23	10571	CAP.TANTALUM			1.5u	20%	1 PCS
			KYOC TAJJD155M050R			50V		
	C27	10094	CAP.CERAMIC			100p	0.05	1 PCS
			ATC 100B101JP500X			500V		
1 PCS	C28	10092	CAP.CERAMIC			12p	0.05	1 PCS
			ATC 100B120JP500DR			500V		
1 PCS	C29	10593	CAP.TRIMMER			3-20p		1 PCS
			TLEC 9612SL					
1 PCS	C30	10090	CAP.CERAMIC			22p	0.05	1 PCS
			ATC 100B220JP500DR			500V		
2 PCS	C31	10080	CAP.CERAMIC			9.1p	0.05	1 PCS
			ATC 100B9R1JP500DR			500V		

Product: 18637

PA 1234A POWER AMPLIFIER PL

Issue: 10

Change Order: 3489

Appr.: HSA

Date: 090399

Tot.Quant.	Pos.	Part no.	Component Manu. Description	Drwg.no.	Value/Dim. Ratings	Tol. Function	Quant./Pos.
2 PCS	C32	10101	CAP.CERAMIC	-	15p	0.05	1 PCS
			ATC 100B150JP500DR		500V		
	C33	10101	CAP.CERAMIC	-	15p	0.05	1 PCS
			ATC 100B150JP500DR		500V		
	C34	10080	CAP.CERAMIC	-	9.1p	0.05	1 PCS
			ATC 100B9R1JP500DR		500V		
1 PCS	L01	13538	INDUCTOR	-	18n	20%	1 PCS
			COIL 1008CS-180XMBC				
2 PCS	L02	13523	INDUCTOR	-	10n	20%	1 PCS
			COIL 1008CS-100XMBC				
1 PCS	L03	13482	INDUCTOR	-	1u		1 PCS
			COIL 1008CS 102XKBC ALT.HS				
	L04	13523	INDUCTOR	-	10n	20%	1 PCS
			COIL 1008CS-100XMBC				
1 PCS	L05	13528	INDUCTOR	-	270n	10%	1 PCS
			COIL 1008CS-271XKBC				
1 PCS	L06	13524	INDUCTOR	-	4.7n	20%	1 PCS
			COIL 1008CT-040XMBC				
1 PCS	L07	13532	INDUCTOR	-	345n	5%	1 PCS
			COIL 132-15 345nH +-5%				
2 PCS	L08	13536	INDUCTOR	-	44n	5%	1 PCS
			COIL 132-03 44nH +-5%				
1 PCS	L09	13535	INDUCTOR	-	53.5n	5%	1 PCS
			COIL 132-04 53.5nH +-5%				
	L10	13536	INDUCTOR	-	44n	5%	1 PCS
			COIL 132-03 44nH +-5%				
1 PCS	L11	13531	INDUCTOR	-	27n	20%	1 PCS
			COIL 1008CS-270XMBC				
3 PCS	P01	12303	CONN.	-			1 PCS
			MOLX 22-27-2021				
	P02	12303	CONN.	-			1 PCS
			MOLX 22-27-2021				

Product: 18637 PA 1234A POWER AMPLIFIER PL Issue: 10 Change Order: 3489 Appr.: HSA Date: 090399

Tot.Quant.	Pos.	Part no.	Component Manu. Description	Drwg.no.	Rev.	Value/Dim. Ratings	Tol. Function	Quant./Pos.
	P03	12303	CONN.	-				1 PCS
			MOLX 22-27-2021					
1 PCS	Q01	11302	TRANSISTOR	-		SOT-223		1 PCS
			PH BLT80,115 (TAPE)					
2 PCS	R05	11134	POTENTIOMETER	-		10k	10%	1 PCS
			BOUR 3266W-1-103			0.25W		
1 PCS	R22	10622	RES.METALFILM	-		150	5%	1 PCS
			PH 2322 195 13151			750V		
	R25	11134	POTENTIOMETER	-		10k	10%	1 PCS
			BOUR 3266W-1-103			0.25W		

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PARTS LIST

Page 1/1

Product: 18639

PA 1234A POWER AMPLIFIER KAB

Issue: 1

Change Order:

Appr.: *A.S.* Date: 26.11.92

Tot.Quant.	Pos.	Part no.	Component Manu. Description	Drwg.no.	Value/Dim. Rev. Ratings	Tol. Function	Quant./Pos.
------------	------	----------	--------------------------------	----------	----------------------------	------------------	-------------

.18 M

19676

COAX CABLE

-

180 MM

2 PCS

12128

CONN.COAX

-

2 PCS

SUHN 16 SMB-50-2-10/133

SMB-MALE

Product: 21072

PA 1234A GP POWER AMPL. ESPL

Issue: 7

Change Order: 3386

Appr.: *A.S.*

Date: 10.11.98

Tot.Quant.	Pos.	Part no.	Component Manu. Description	Drwg.no.	Value/Dim. Ratings	Tol. Function	Quant./Pos.
1 PCS	C01	19824	CAP.SMD XXXX 0805C5P6J50	-	5.6P	5%	1 PCS
9 PCS	C02	19852	CAP.SMD XXXX 0805C102J50	-	50V 1N	5%	1 PCS
	C04	19852	CAP.SMD XXXX 0805C102J50	-	50V 1N	5%	1 PCS
7 PCS	C05	19840	CAP.SMD XXXX 0805C102J50	-	50V 100P	5%	1 PCS
	C06	19840	CAP.SMD XXXX 0805C101J50	-	50V 100P	5%	1 PCS
	C07	19852	CAP.SMD XXXX 0805C101J50	-	50V 1N	5%	1 PCS
	C10	19840	CAP.SMD XXXX 0805C102J50	-	50V 100P	5%	1 PCS
	C11	19852	CAP.SMD XXXX 0805C101J50	-	50V 1N	5%	1 PCS
	C12	19852	CAP.SMD XXXX 0805C102J50	-	50V 1N	5%	1 PCS
	C13	19852	CAP.SMD XXXX 0805C102J50	-	50V 1N	5%	1 PCS
	C14	19840	CAP.SMD XXXX 0805C102J50	-	50V 100P	5%	1 PCS
	C19	19840	CAP.SMD XXXX 0805C101J50	-	50V 100P	5%	1 PCS
	C20	19840	CAP.SMD XXXX 0805C101J50	-	50V 100P	5%	1 PCS
	C21	19852	CAP.SMD XXXX 0805C101J50	-	50V 1N	5%	1 PCS
	C24	19852	CAP.SMD XXXX 0805C102J50	-	50V 1N	5%	1 PCS
	C25	19840	CAP.SMD XXXX 0805C102J50	-	50V 100P	5%	1 PCS

Product: 21072

PA 1234A GP POWER AMPL. ESPL

Issue: 7

Change Order: 3386

Appr.: *21.3*

Date: 0.11.99

Tot.Quant.	Pos.	Part no.	Component	Manu. Description	Drwg.no.	Rev.	Value/Dim. Ratings	Tol.	Function	Quant./Pos.
	C26	19852	XXXX 0805C101J50		-		50V			
			CAP.SMD		-		1N	5%		1 PCS
			XXXX 0805C102J50		-		50V			
1 PCS	R01	10909	SMD RESISTOR		-		10	1%		1 PCS
			XXXX 1206F100		-			0.25W		
1 PCS	R02	10926	SMD RESISTOR		-		51	1%		1 PCS
			XXXX 1206F510		-			0.25W		
1 PCS	R03	10940	SMD RESISTOR		-		300	1%		1 PCS
			XXXX 1206F301		-			0.25W		
1 PCS	R04	10903	SMD RESISTOR		-		5.6	1%		1 PCS
			XXXX 1206F5R6		-			0.25W		
2 PCS	R06	10977	SMD RESISTOR		-		10K	1%		1 PCS
			XXXX 1206F103		-			0.25W		
2 PCS	R07	10943	SMD RESISTOR		-		390	1%		1 PCS
			XXXX 1206F391		-			0.25W		
	R08	10943	SMD RESISTOR		-		390	1%		1 PCS
			XXXX 1206F391		-			0.25W		
4 PCS	R09	10967	SMD RESISTOR		-		3.9K	1%		1 PCS
			XXXX 1206F392		-			0.25W		
	R10	10967	SMD RESISTOR		-		3.9K	1%		1 PCS
			XXXX 1206F392		-			0.25W		
6 PCS	R11	18943	SMD RESISTOR		-		100	1%		1 PCS
			XXXX 1206F101		-			0.25W		
	R12	18943	SMD RESISTOR		-		100	1%		1 PCS
			XXXX 1206F101		-			0.25W		
	R13	18943	SMD RESISTOR		-		100	1%		1 PCS
			XXXX 1206F101		-			0.25W		
	R14	18943	SMD RESISTOR		-		100	1%		1 PCS
			XXXX 1206F101		-			0.25W		
	R15	18943	SMD RESISTOR		-		100	1%		1 PCS
			XXXX 1206F101		-			0.25W		
1 PCS	R16	20100	JUMPER		-		0	1%		1 PCS

Product: 21072

PA 1234A GP POWER AMPL. ESPL

Issue: 7

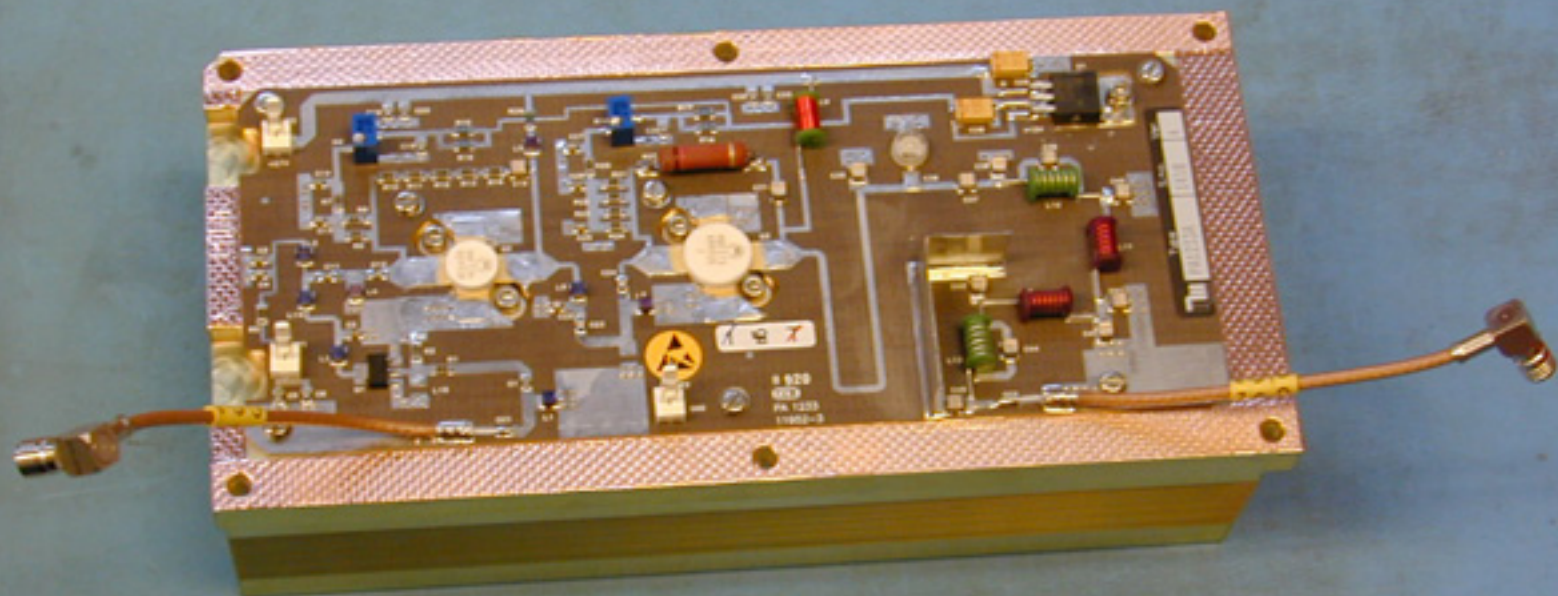
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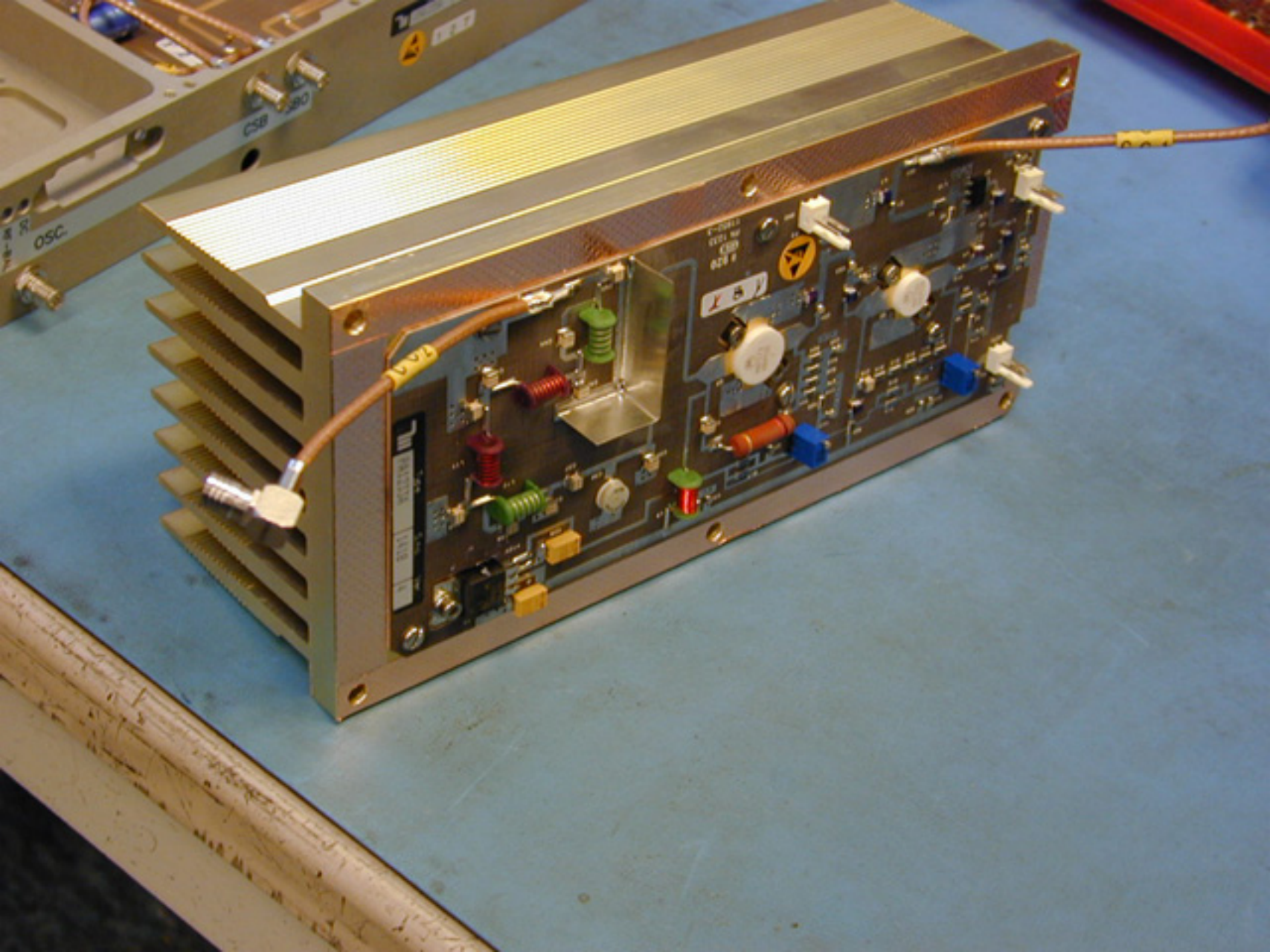
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Date: 10.11.98

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	R17	10977	XXXX 1206F000 SMD RESISTOR	-		10K	1%	1 PCS
4 PCS	R18	10991	XXXX 1206F103 SMD RESISTOR	-		39K	1%	1 PCS
	R19	10991	XXXX 1206F393 SMD RESISTOR	-		39K	1%	1 PCS
	R20	10991	XXXX 1206F393 SMD RESISTOR	-		39K	1%	1 PCS
	R21	10991	XXXX 1206F393 SMD RESISTOR	-		39K	1%	1 PCS
	R23	10967	XXXX 1206F392 SMD RESISTOR	-		3.9K	1%	1 PCS
	R24	10967	XXXX 1206F392 SMD RESISTOR	-		3.9K	1%	1 PCS
	R26	18943	XXXX 1206F101 SMD RESISTOR	-		100	1%	1 PCS
1 PCS	R27	10951	XXXX 1206F821 SMD RESISTOR	-		820	1%	1 PCS
1 PCS	R28	10937	XXXX 1206F201 SMD RESISTOR	-		200	1%	1 PCS

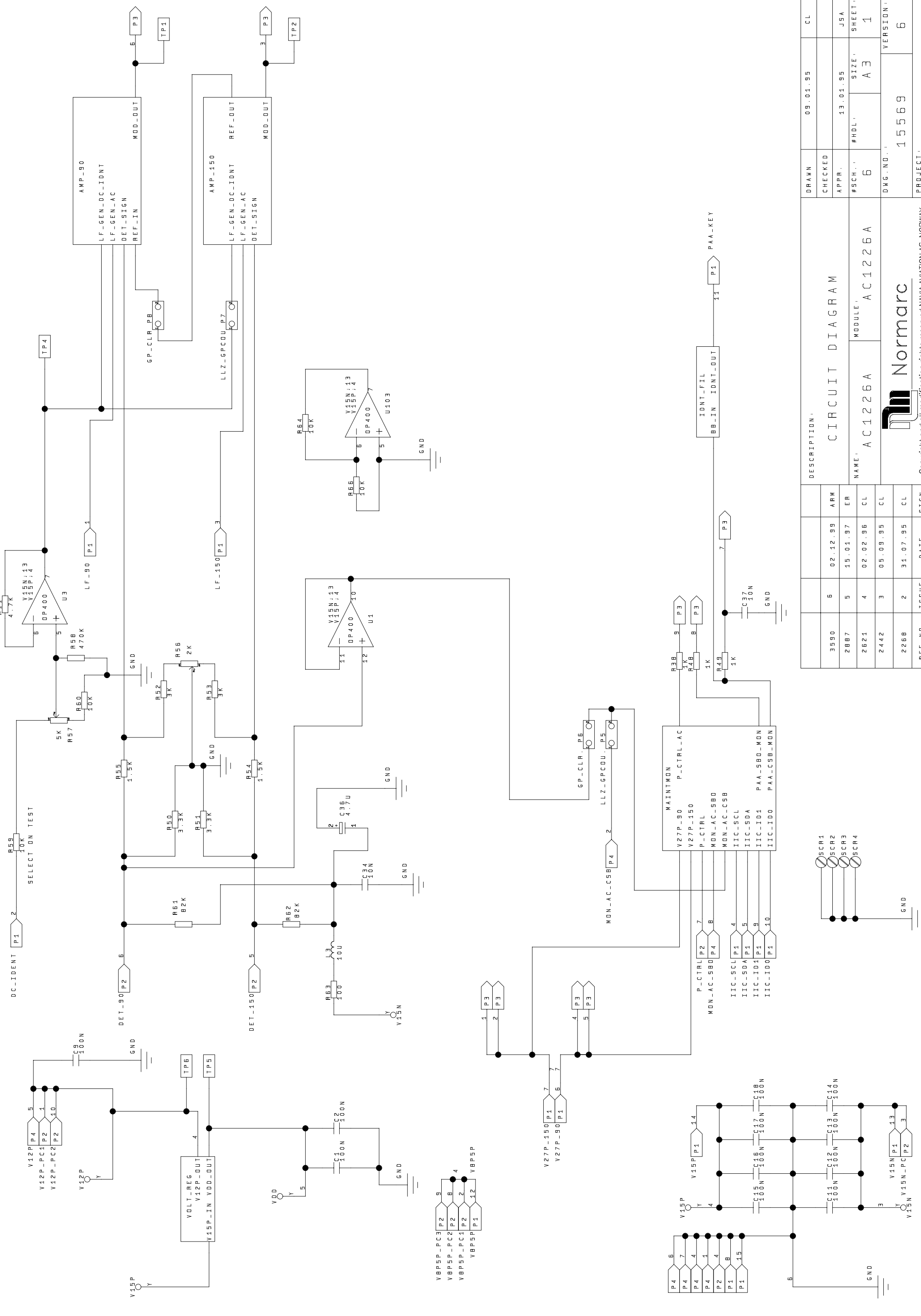
4.3 *Photos*



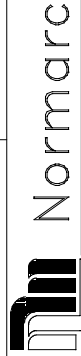


5 AC1226A AMPLITUDE CONTROL

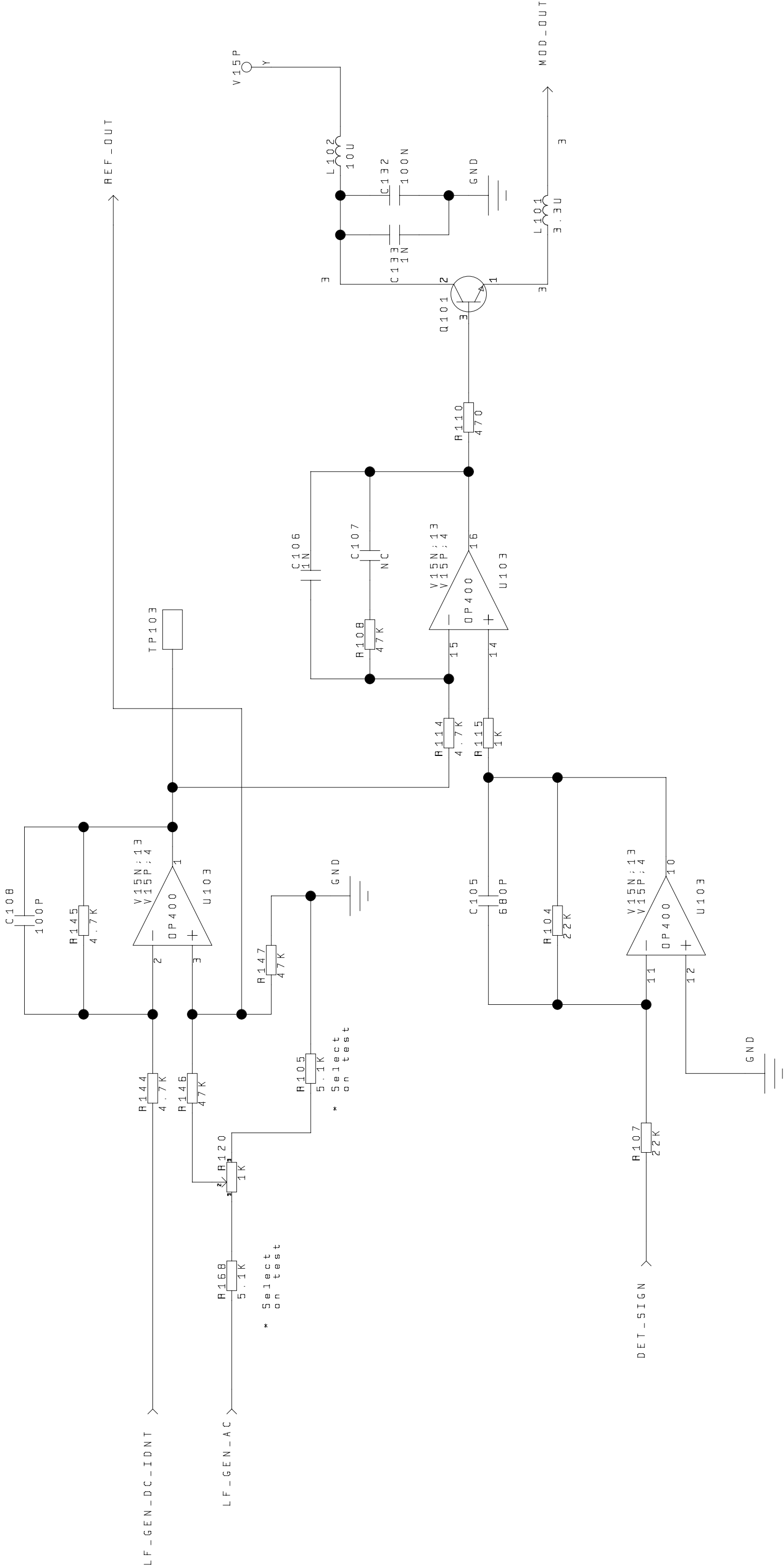
5.1 *Schematic Diagrams*



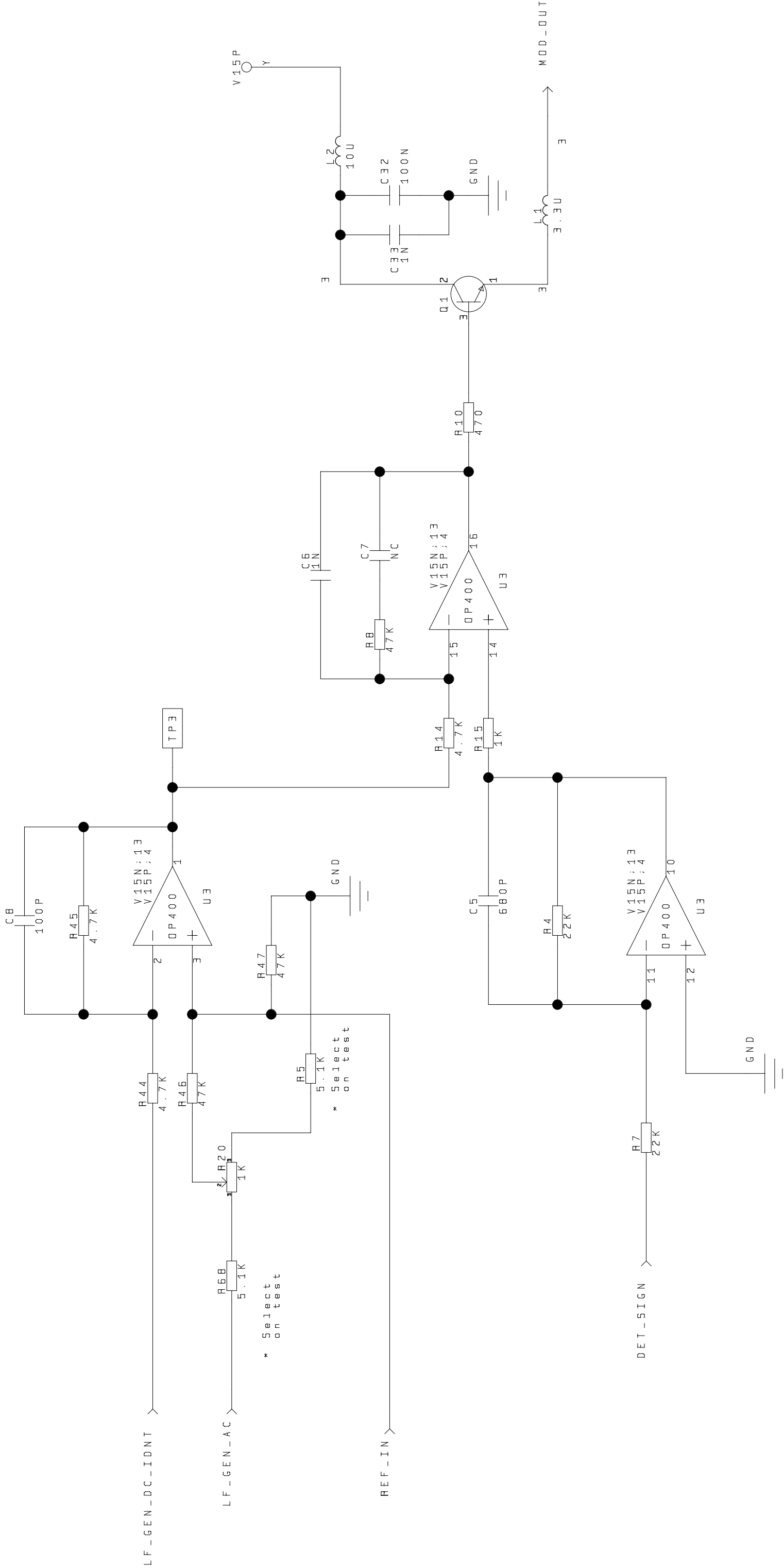
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2887		5	NAME :		MODULE :		#SCH. :	#HDL :	SIZE :	SHEET	
2621		4	A C 1 2 2 6 A		A C 1 2 2 6 A		6		A 3	1	
2442		3									
							DWG. NO. :		VERSION :		
2268		2					15569		6		
REF. NO.	ISSUE	DATE	SIGN				PROJECT :				
							Copyright and all modification rights reserved NAVIAVIATION AS, NORWAY				



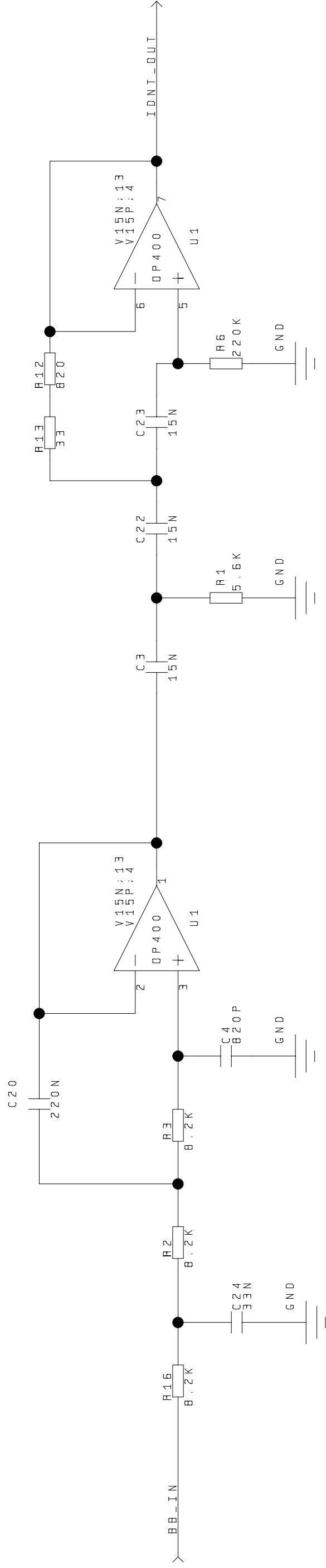
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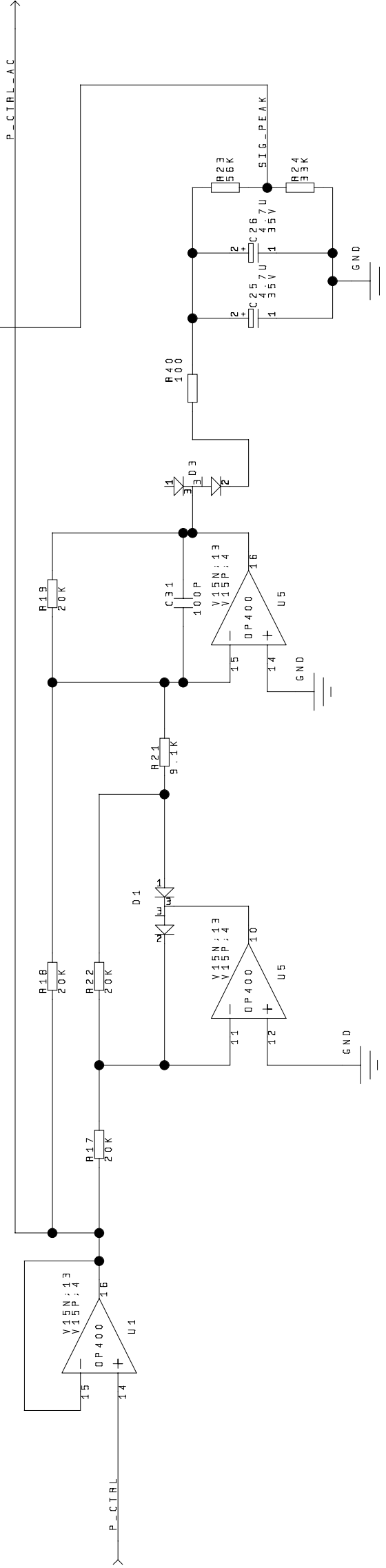
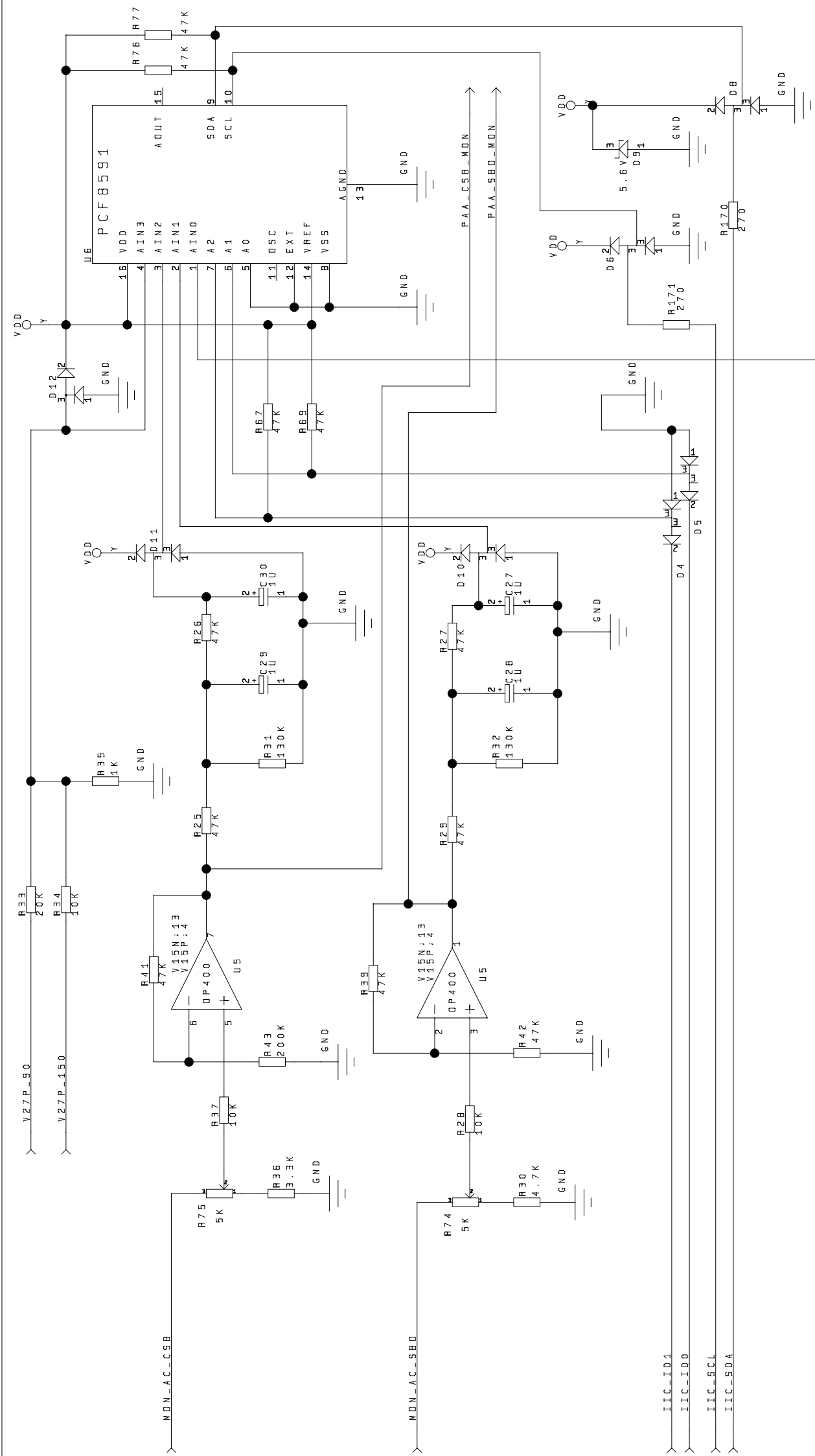


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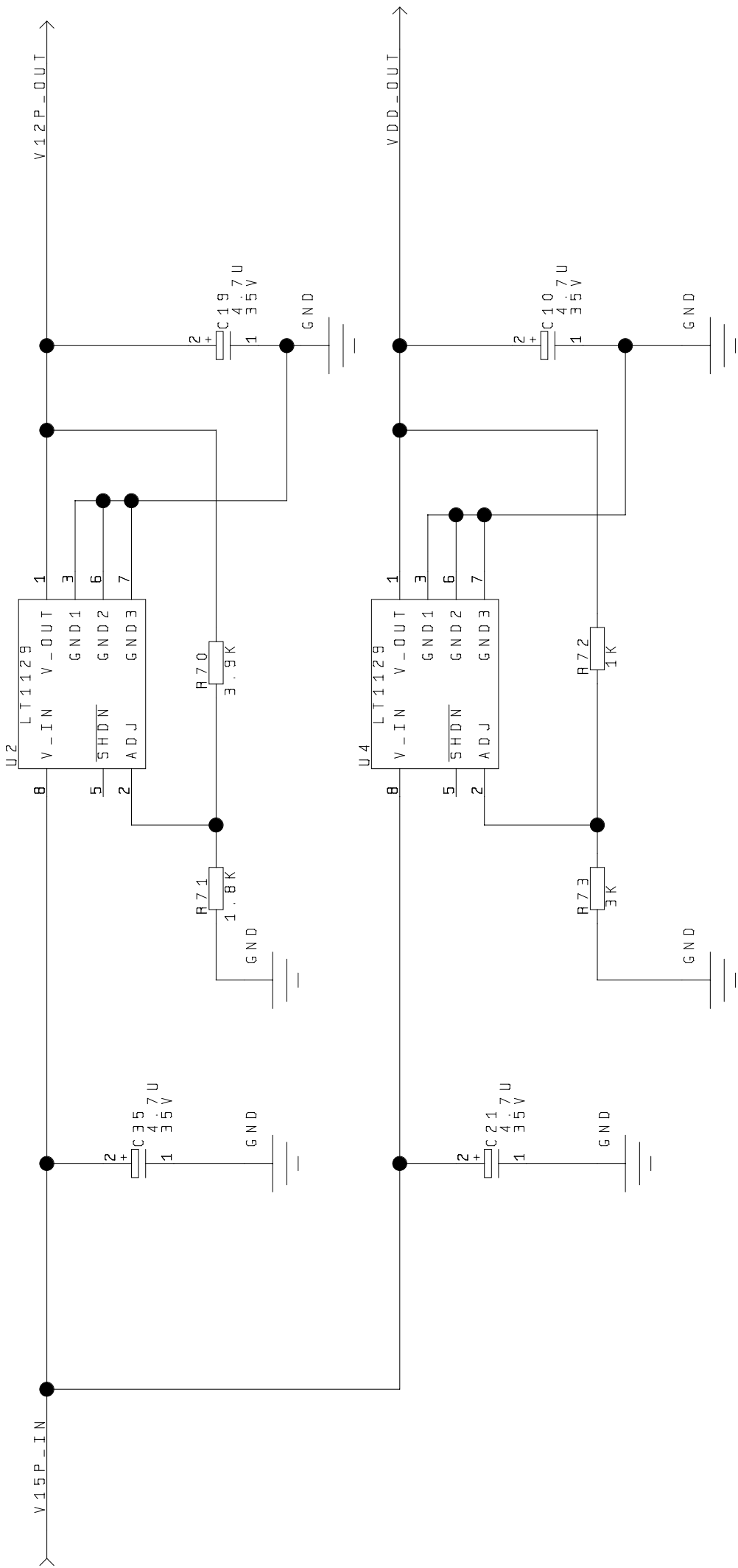


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2887	5	15.01.97	ER				APPR.		13.01.95		JSA
2621	4	02.02.96	CL		NAME : AMP_90		#SCH. :		#HDL :	SIZE :	SHEET :
					MODULE : AC1226A		6		A3		3
2442	3	05.09.95	CL				DWG. NO. :		15569		VERSION : 6
2268	2	31.07.95	CL								
REF. NO.	ISSUE	DATE	SIGN		Normarc		PROJECT :				
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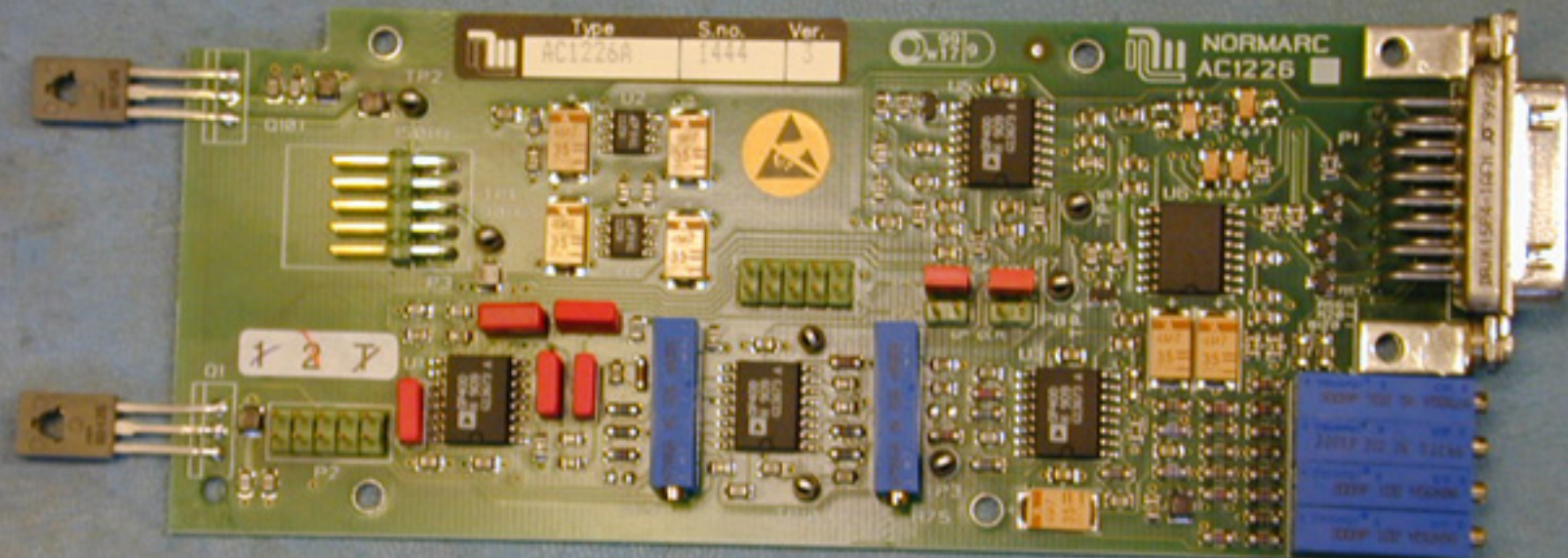


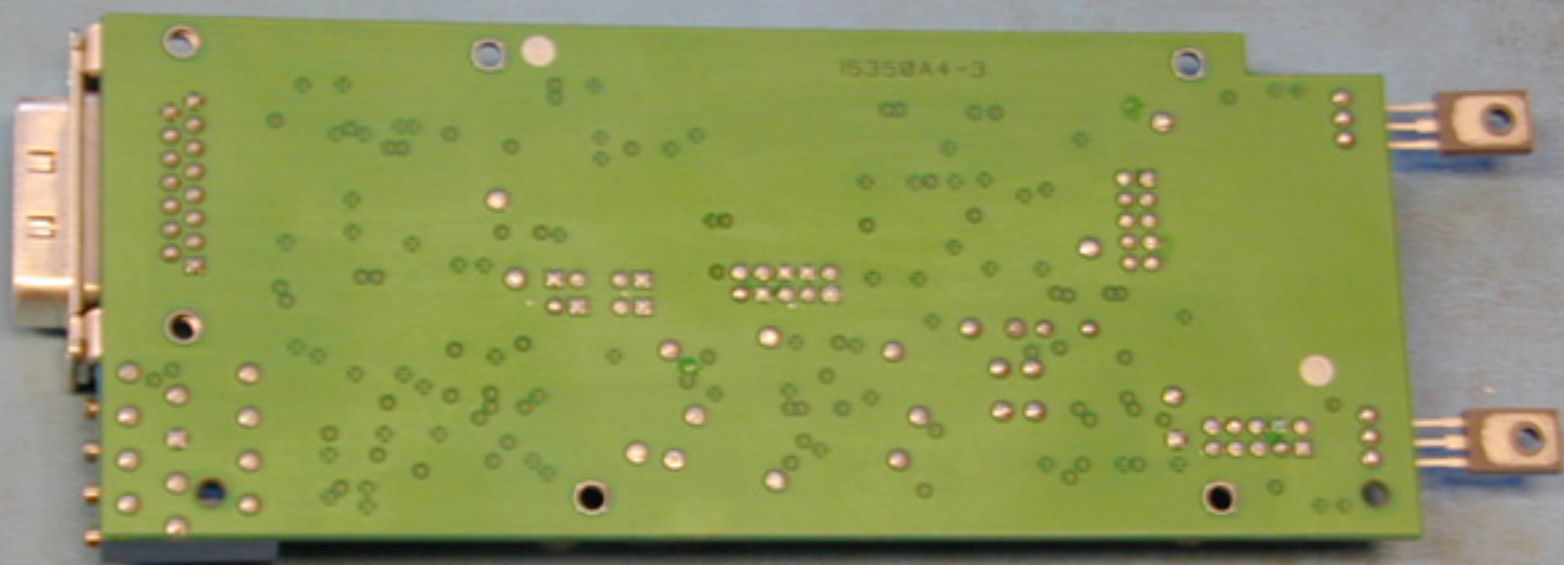
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2621	4	02 . 02 . 96	CL		MODULE , AC1226A	#SCH . ,	SIZE , A 3	SHEET , 5
2442	3	05 . 09 . 95	CL			6		
2268	2	31 . 07 . 95	CL		 Normarc	DWG . NO . ,	15569	VERSION : 6
REF . NO .	ISSUE	DATE	SIGN		Copyright and all modification rights reserved NAVIA AVIATION AS, NORWAY	PROJECT ,		



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2887		5	15.01.97	ER		APPR.		13.01.95		JSA
2621		4	02.02.96	CL		#SCH. :		6	#HDL :	SHEET :
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								AC1226A		SIZE :
								A3		SHEET :
								6		6
2442		3	05.09.95	CL		DWG. NO. :		15569		VERSION :
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REF. NO.		ISSUE	DATE	SIGN		PROJECT :				
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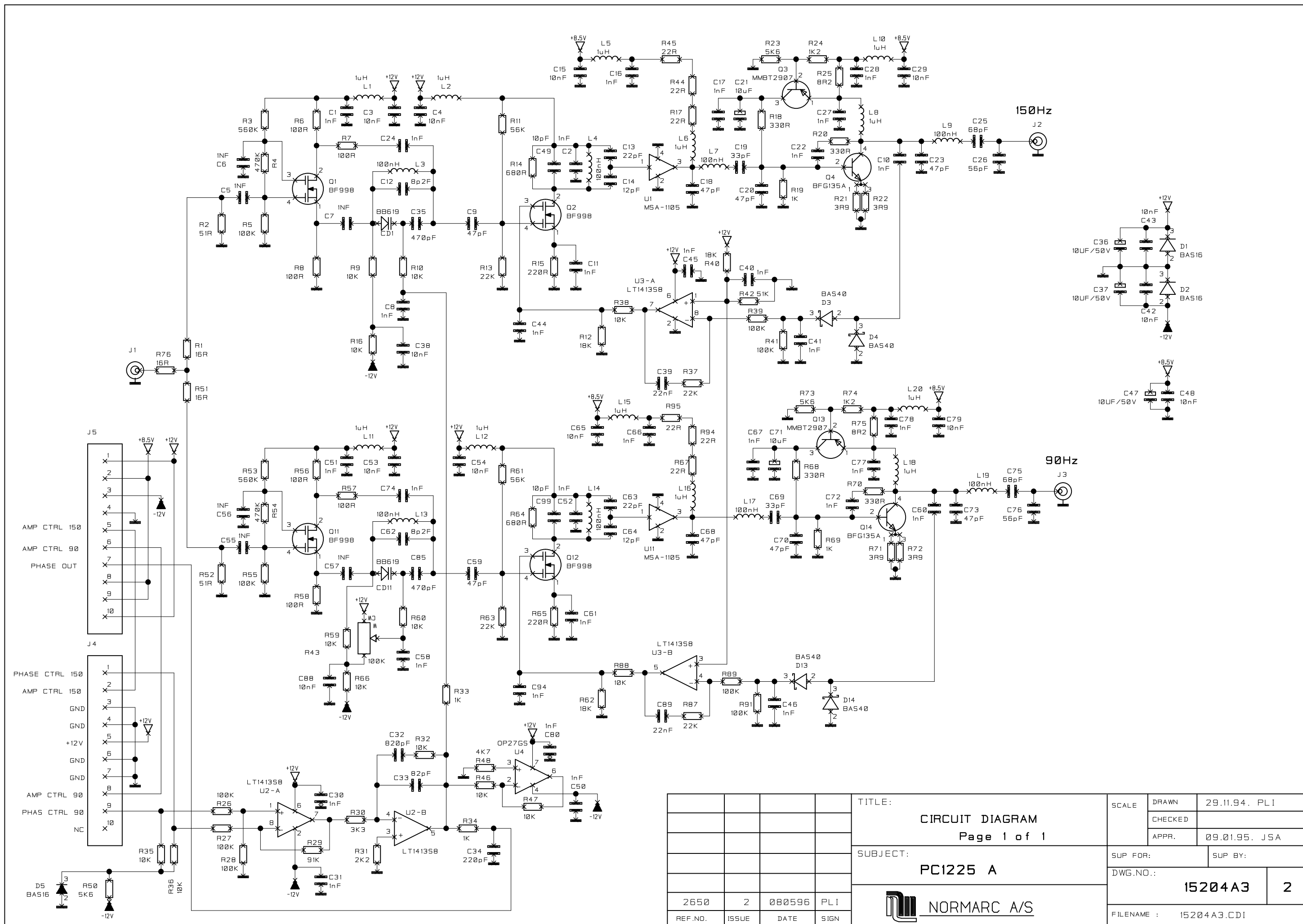
5.2 *Photos*



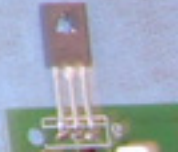
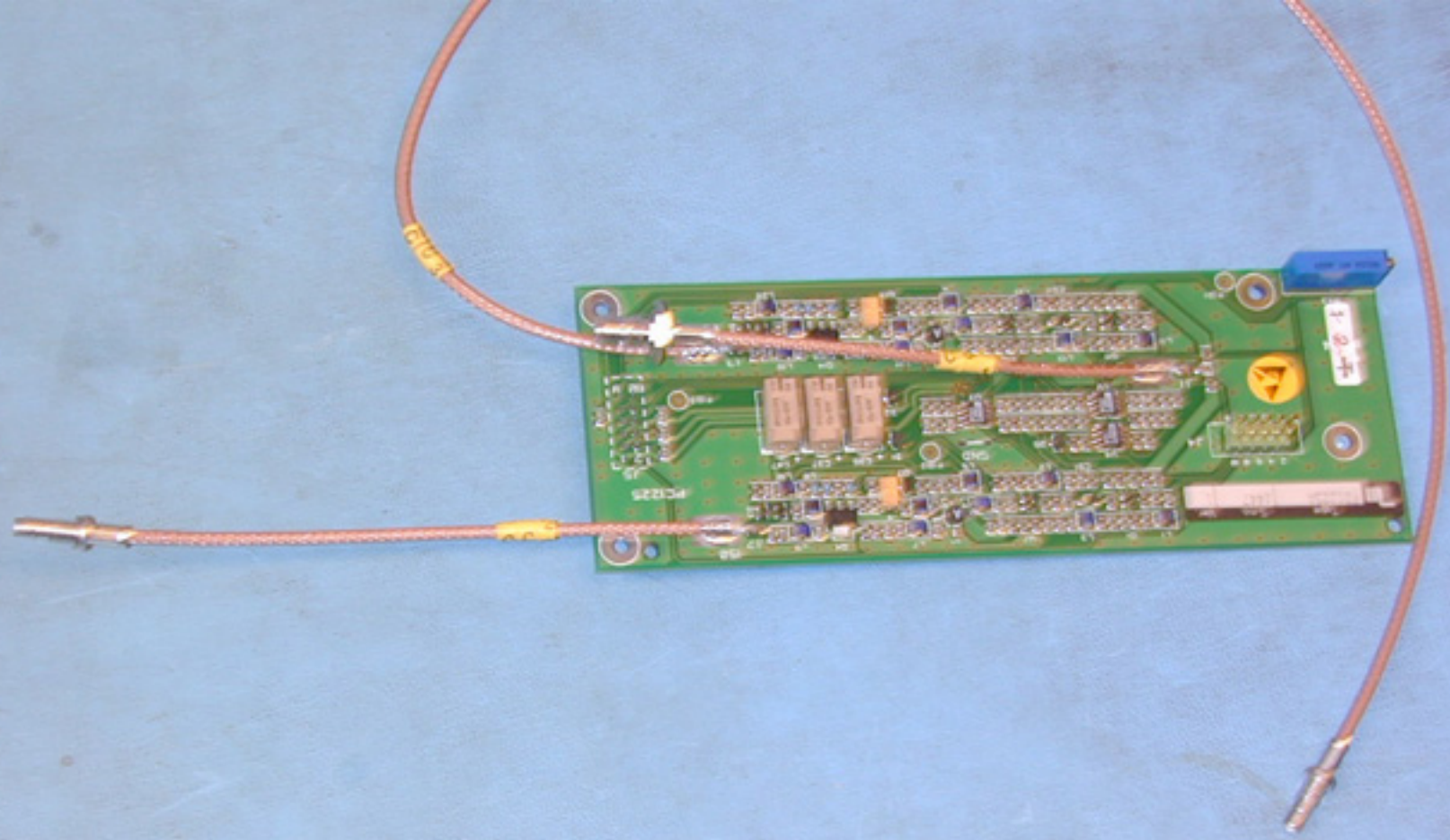


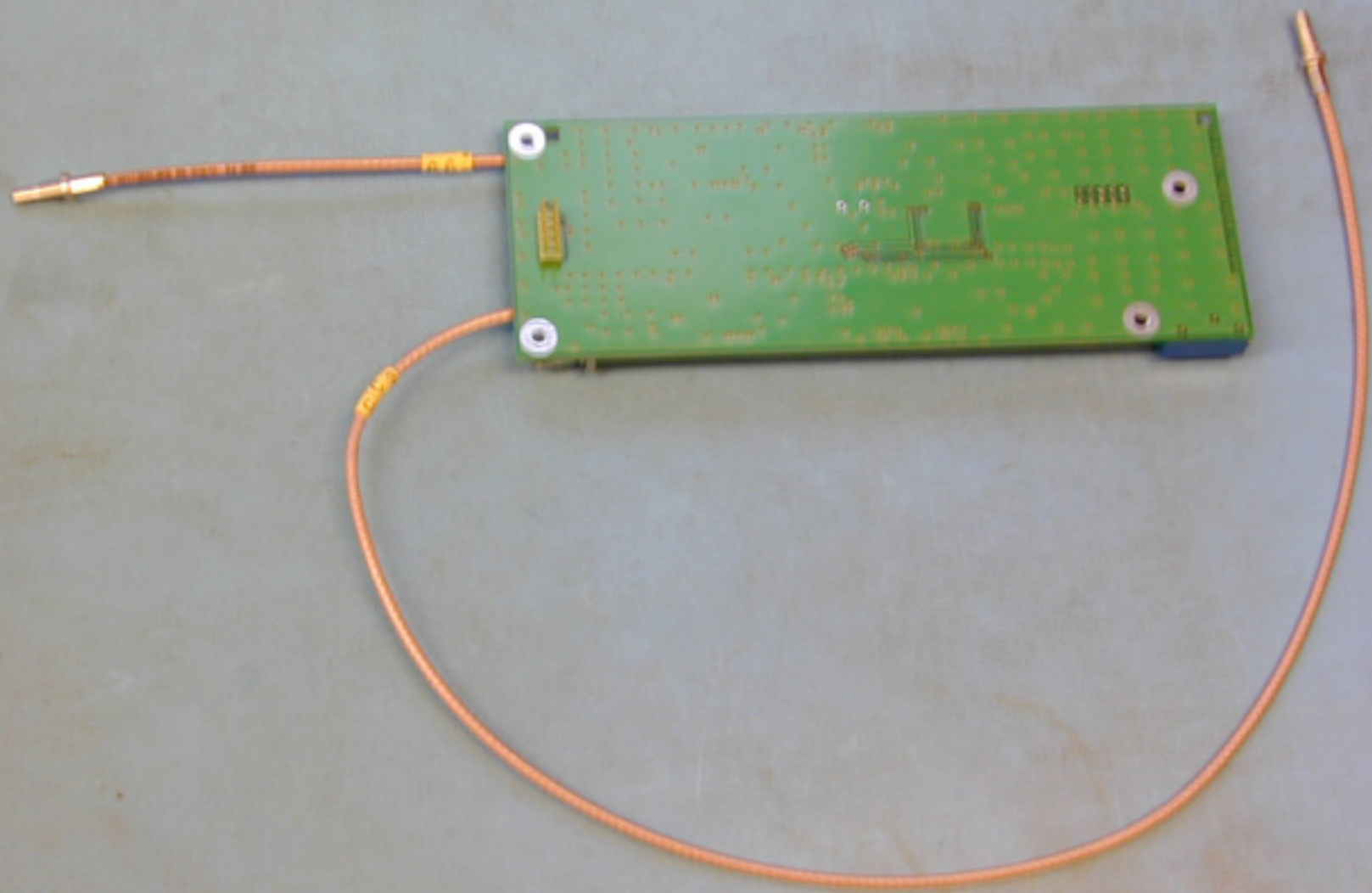
6 PC1225A PHASE CONTROL

6.1 *Schematic Diagrams*



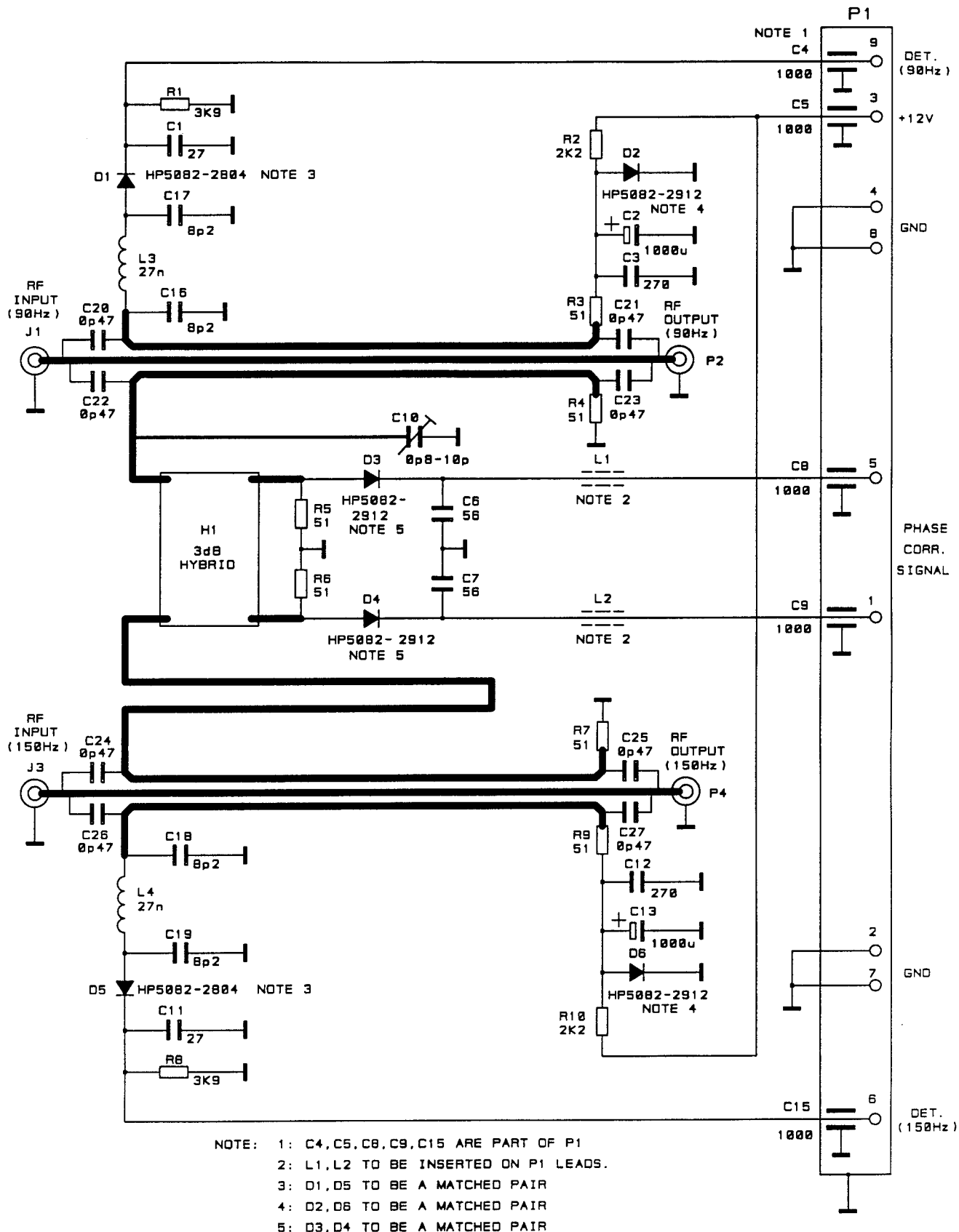
6.2 *Photos*





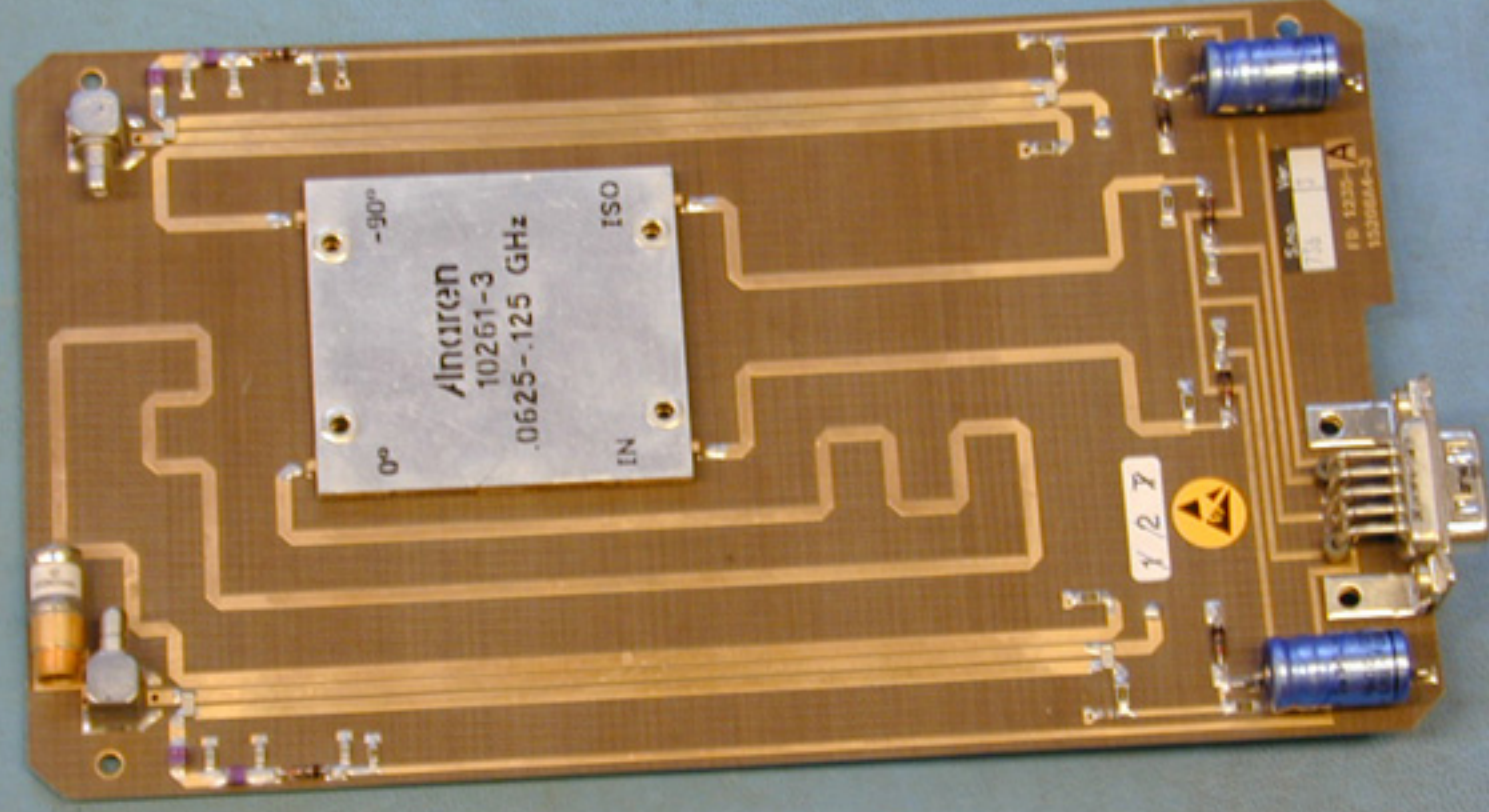
7 FD1236A FEEDBACK DETECTOR

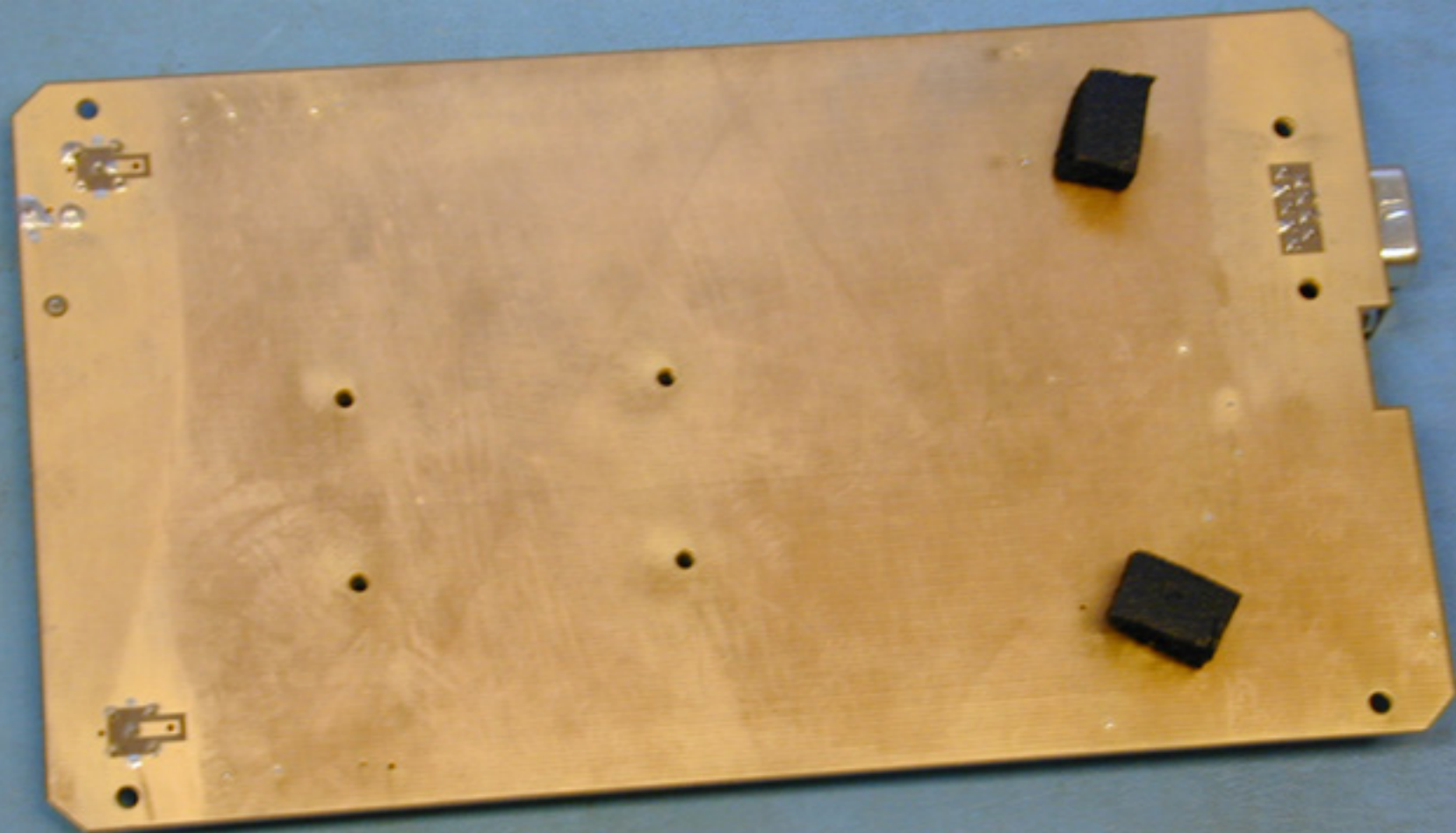
7.1 *Schematic Diagrams*



				TITLE: CIRCUIT DIAGRAM GP COURSE FEEDBACK DETECTORS	SCALE	DRAWN	27.05.94	TBJ	
						CHECKED	29.08.95	S.H.	
						APPR.	27.09.94	JSa	
					SUBJECT: FD 1236A		SUP FOR:		SUP BY:
				 NORMARC A/S	DWG. NO. :		15390A4	2	
2413	2	290895	TBJ		FILENAME :				
REF. NO.	ISSUE	DATE	SIGN						

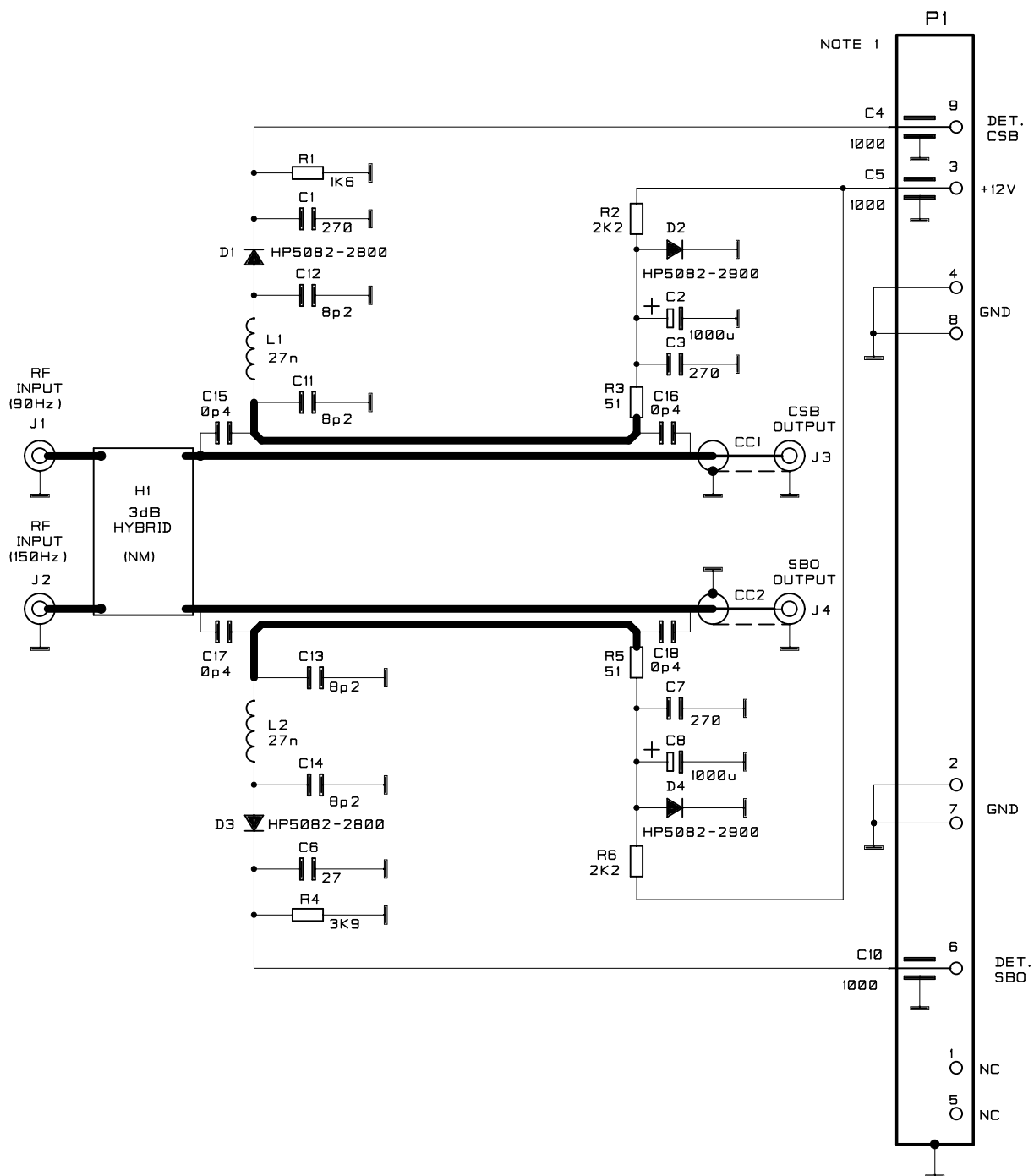
7.2 *Photos (FD1235A)*





8 CD 1238A COMBINER DETECTOR

8.1 *Schematic Diagrams*



				TITLE: CIRCUIT DIAGRAM GP COURSE COMBINER/DETECTOR	SCALE	DRAWN	27.05.94	TBj		
						CHECKED				
						APPR.	13.12.94	JSa		
3069	4	031097	TBj		SUBJECT:		CD 1238A		SUP FOR:	SUP BY:
2620	3	310196	TBj	 NORMARC A/S	DWG.NO.:			15393A4	4	
2085	2	131294	TBj		FILENAME :					
REF.NO.	ISSUE	DATE	SIGN							

8.2 *Photos (CD1237A)*

