U_CONN
CONN.SchDoc

SWR_HF
SWR_HF.SchDoc

U_CONTROL
CONTROL.SchDoc

U_LNA
LNA.SchDoc

SWR_VHF
SWR_VHF.SchDoc

HF_AMP
HF_AMP.SchDoc

HF_TUNER
HF_TUNER.SchDoc

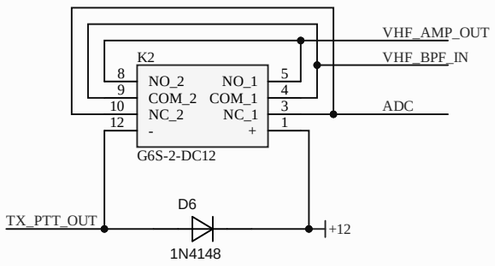
U_BPF
BPF.SchDoc

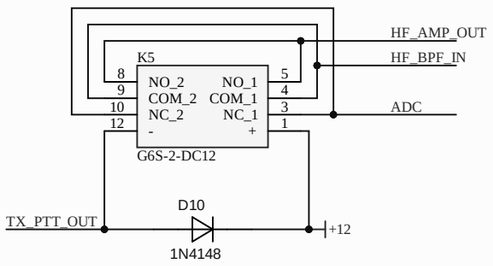
HF_AMP_DRIVER
HF_AMP_DRIVER.SchDoc

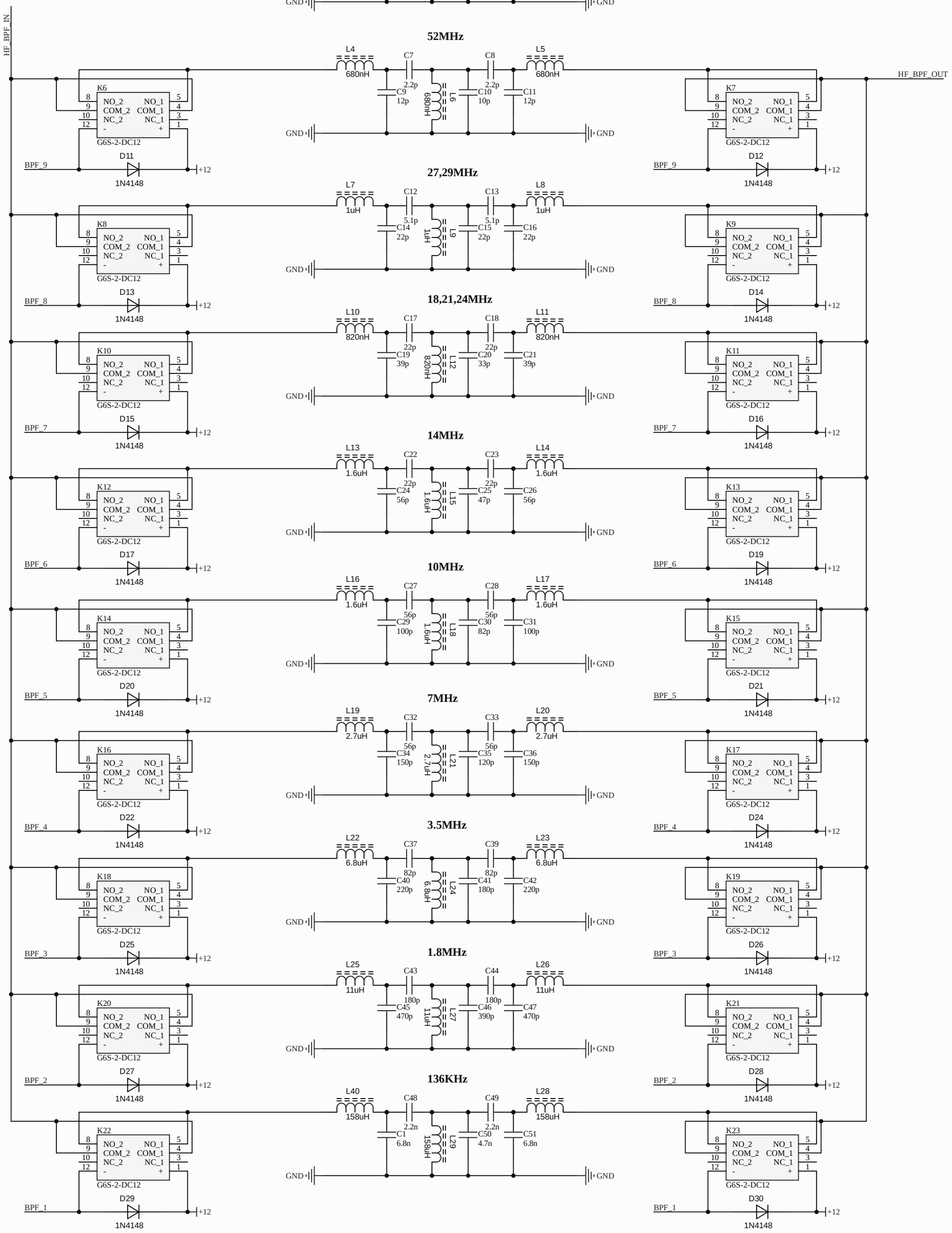
VHF_AMP
VHF_AMP.SchDoc

Title	***RF-UNIT BIG***		
Size: A4	Number:12	Revision:2.0	
Date: 21.06.2021	Time: 12:56:18	Sheet 12 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\RF-UNIT-BIG-35W.SCHDOC		

BPF





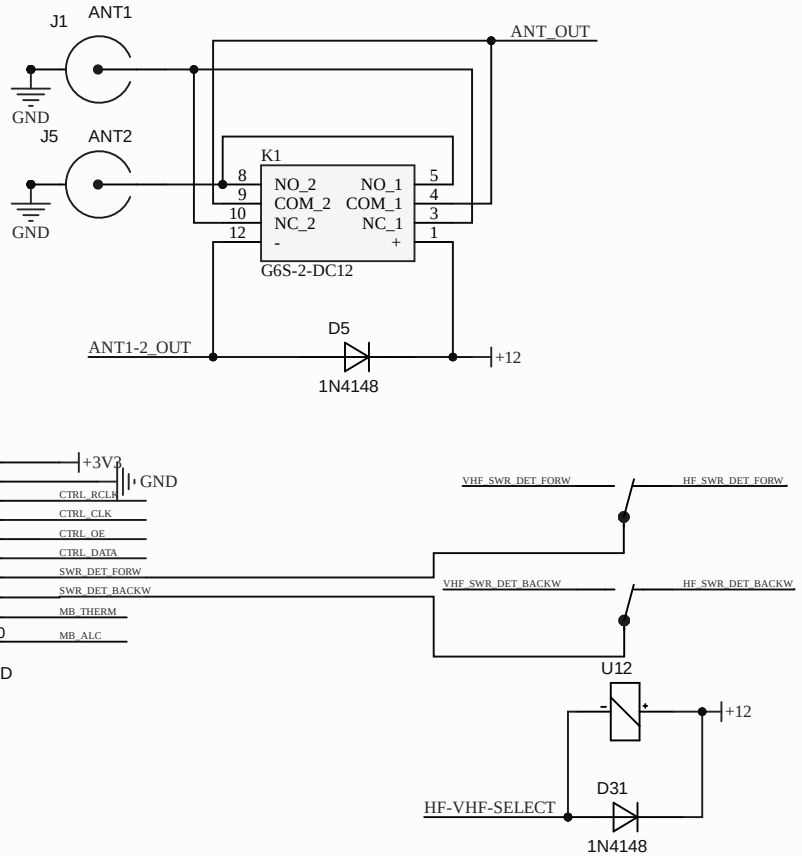


0.5mm cord

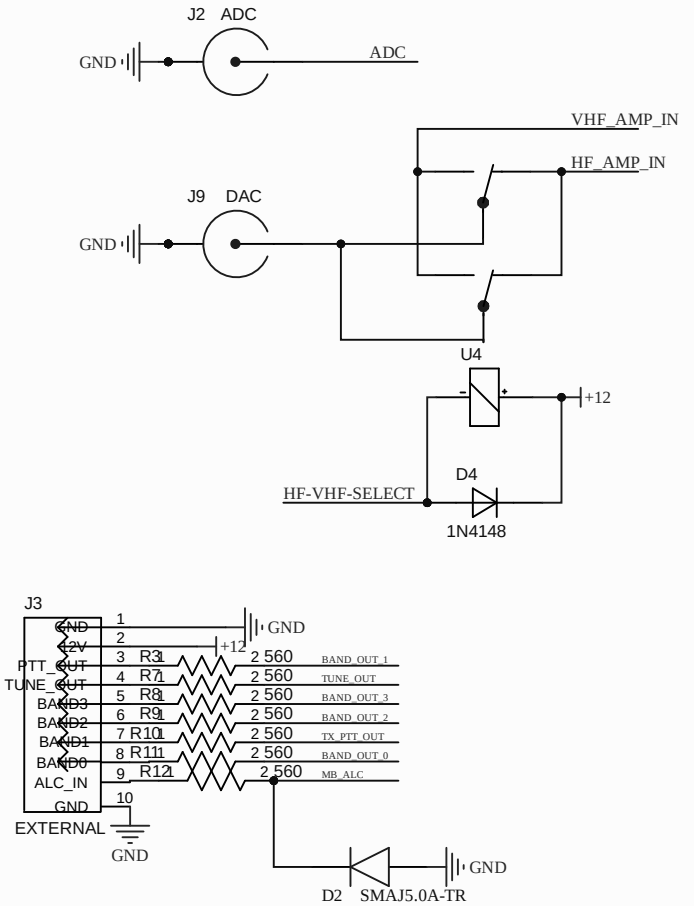
2200m - 158uH - M1000HM3-5 K16*10*4,5 - 19.5 turns
160m - 11uH - T68-2 - 44 turns
80m - 6.8uH - T68-2 - 35 turns
40m - 2.7uH - T68-2 - 22 turns
30m - 1.6uH - T68-2 - 17 turns
20m - 1.6uH - T68-2 - 17 turns
17,15,12m - 820nH - T68-2 - 12 turns
CB,10m - 1uH - T68-2 - 13 turns
6m - 680nH - T50-6 - 12 turns
2m - 200nH - air - 6 turns, 7mm diam

Title *BPF*			
Size: A2	Number: 13	Revision: 2.0	
Date: 21.06.2021	Time: 12:56:18	Sheet 13 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\BPF.SchDoc			

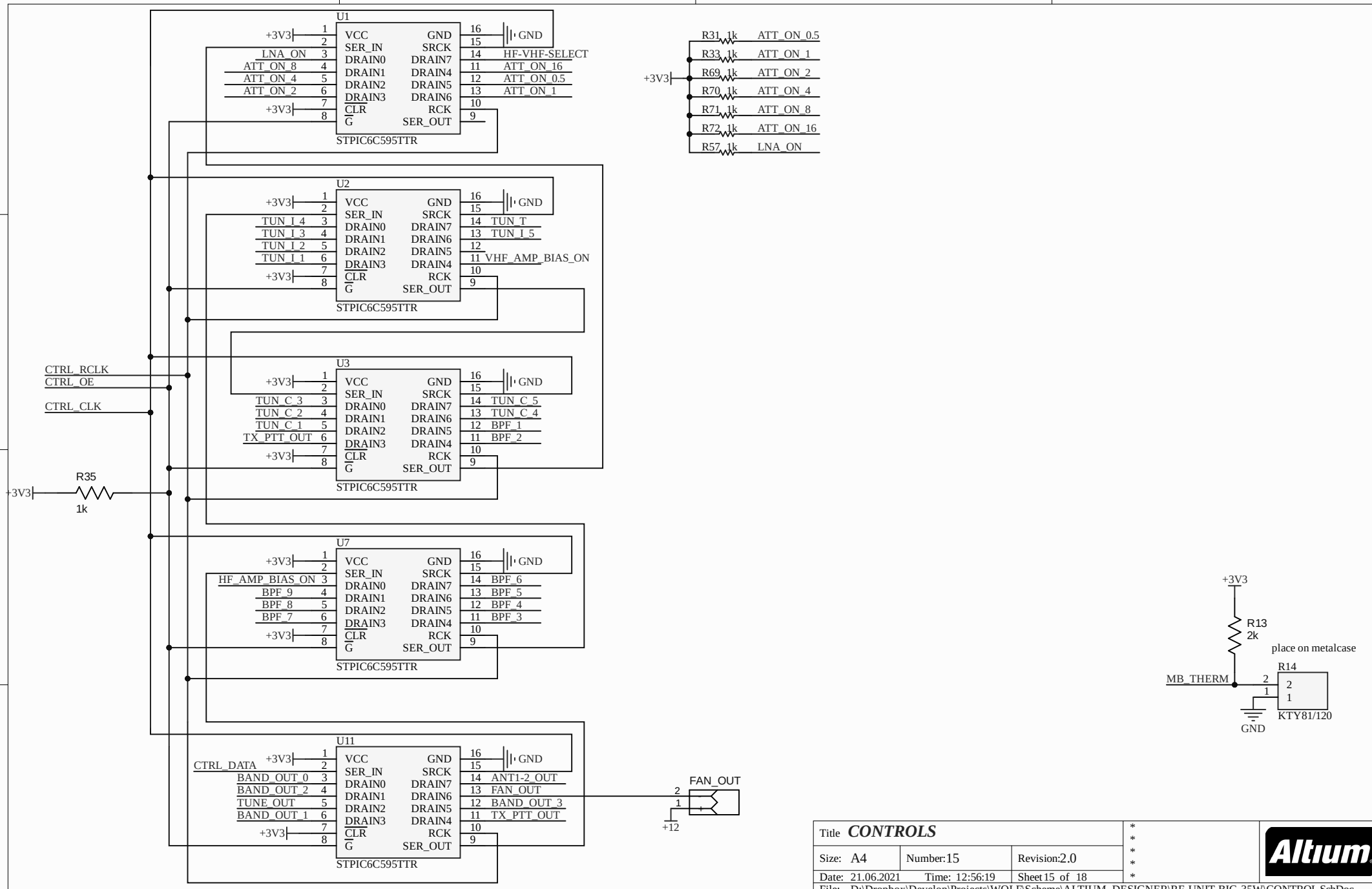
TXRX_COMUTATOR



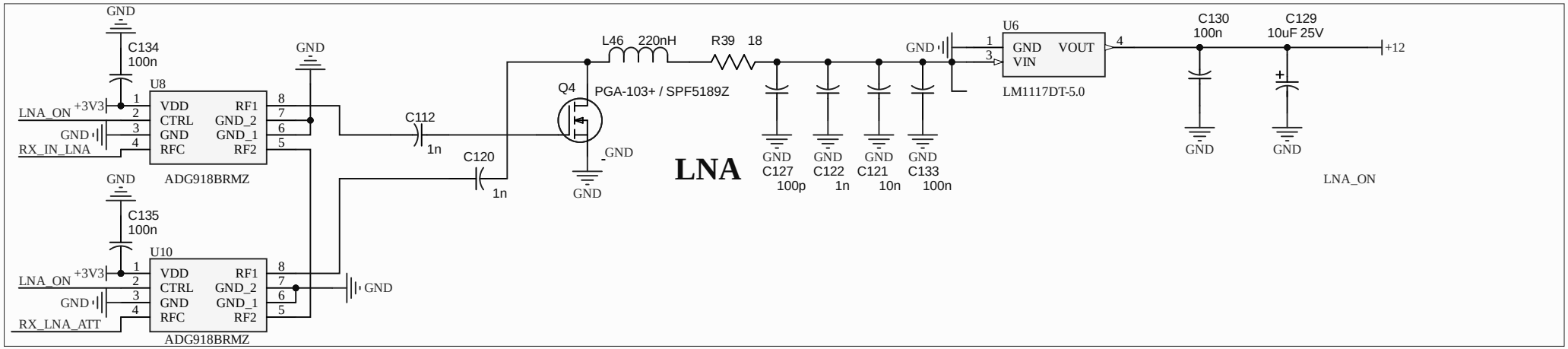
CONN

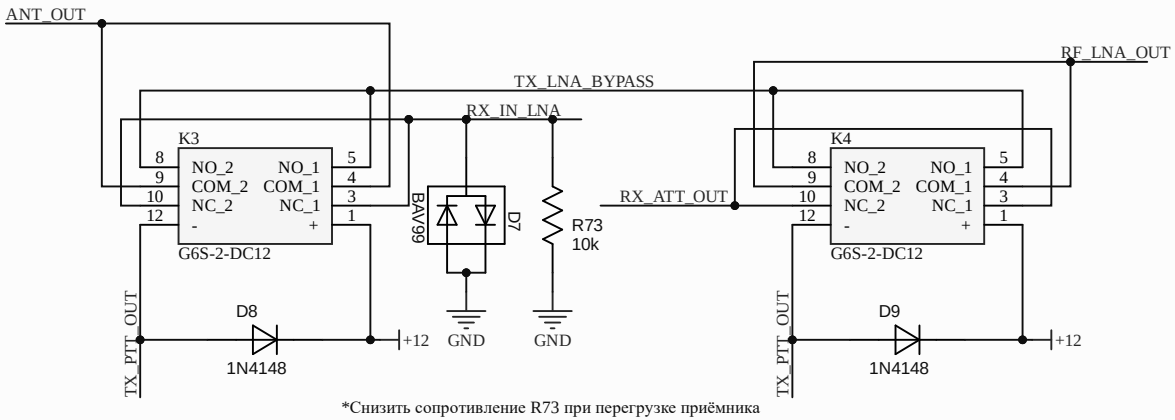


Title	***CONNECTIONS***		
Size: A4	Number:14	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 14 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\CONN.SchDoc			

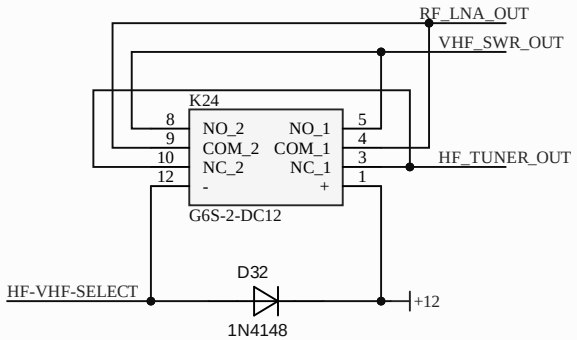


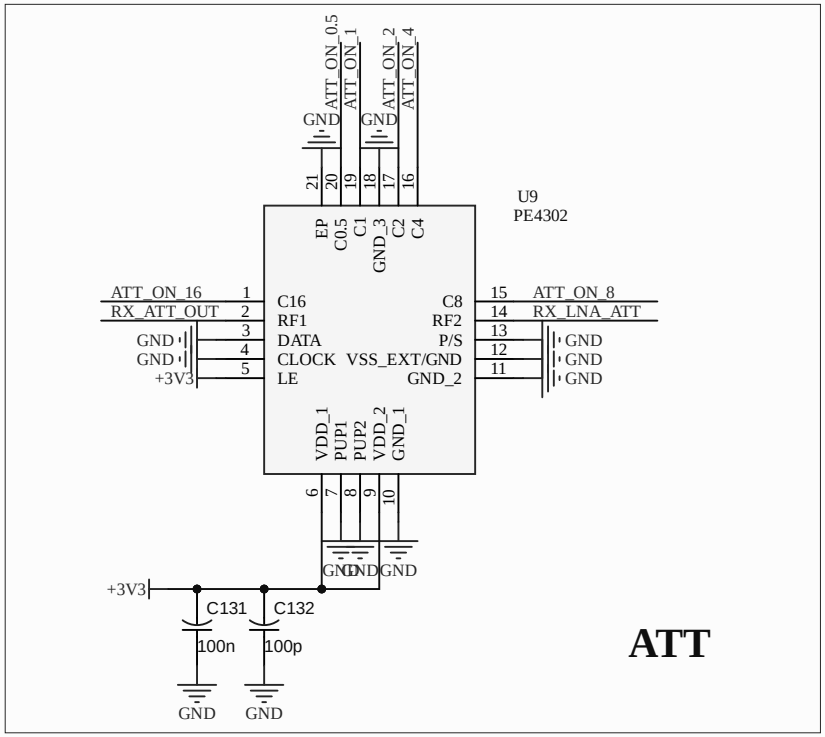
Title	***CONTROLS***		
Size: A4	Number:15	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 15 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\CONTROL.SchDoc			





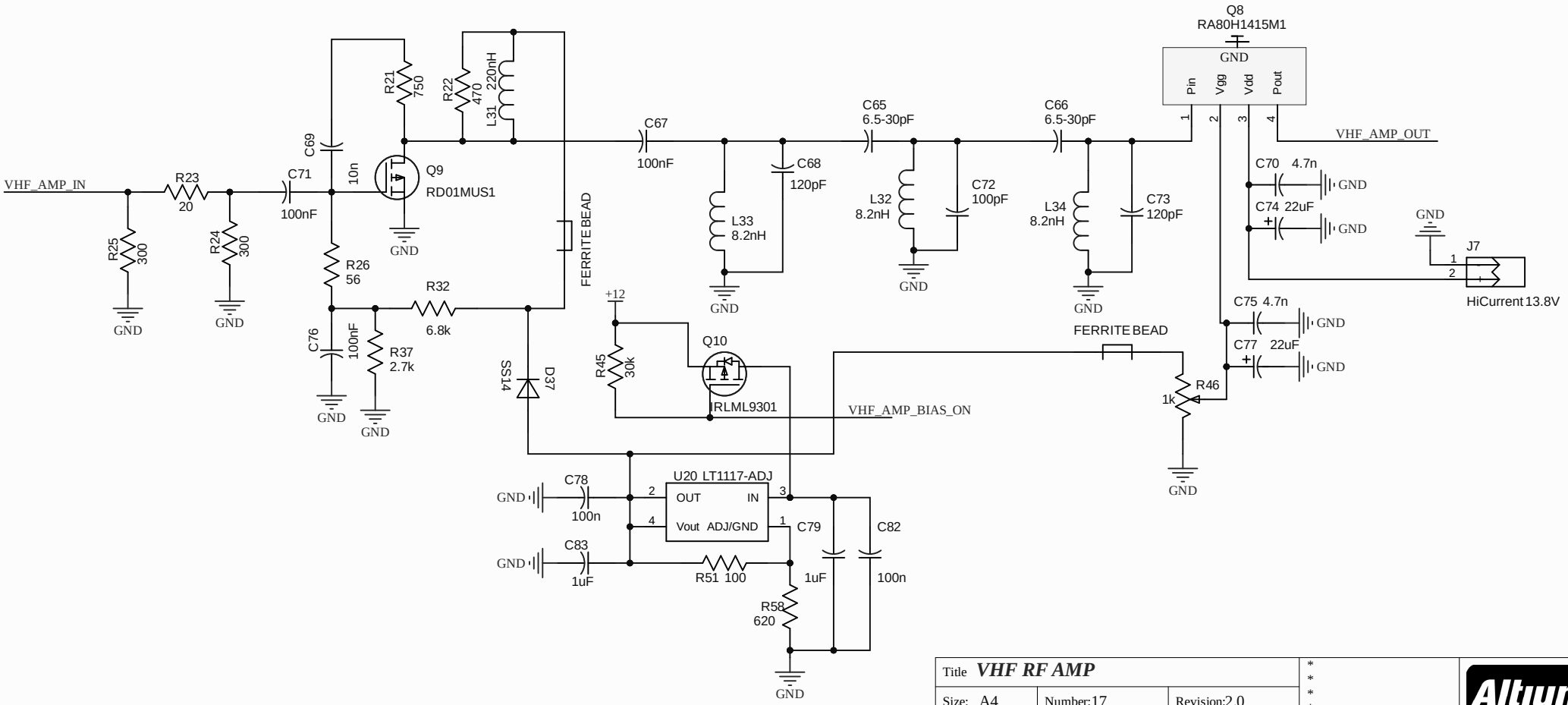
*Снизить сопротивление R73 при перегрузке приёмника





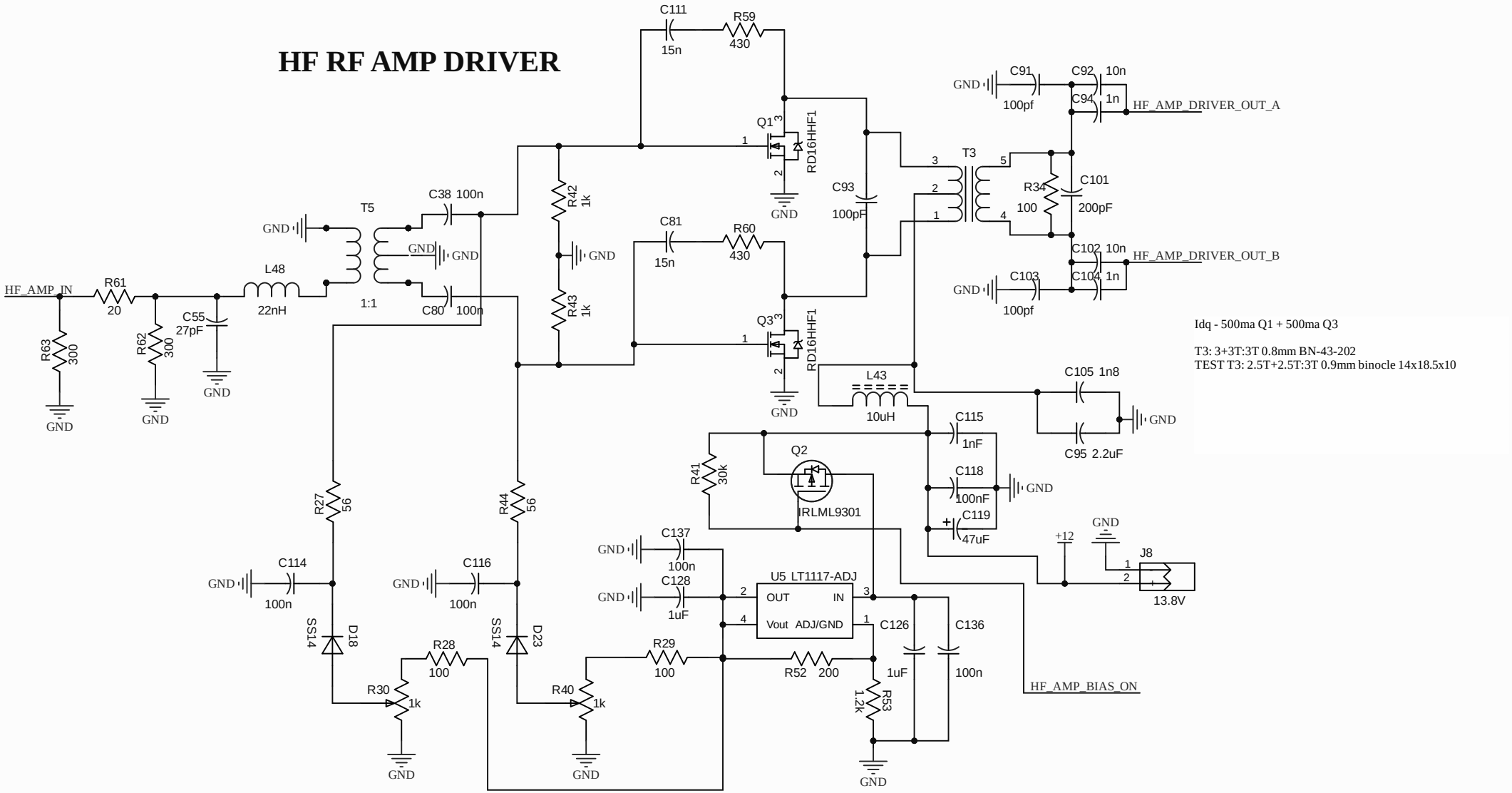
Title	***LNA+ATT***		
Size: A4	Number:16	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 16 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\LNA.SchDoc			

VHF RF AMP



Title	*VHF RF AMP*		
Size: A4	Number:17	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 17 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\VHF_AMP.SchDoc		

HF RF AMP DRIVER



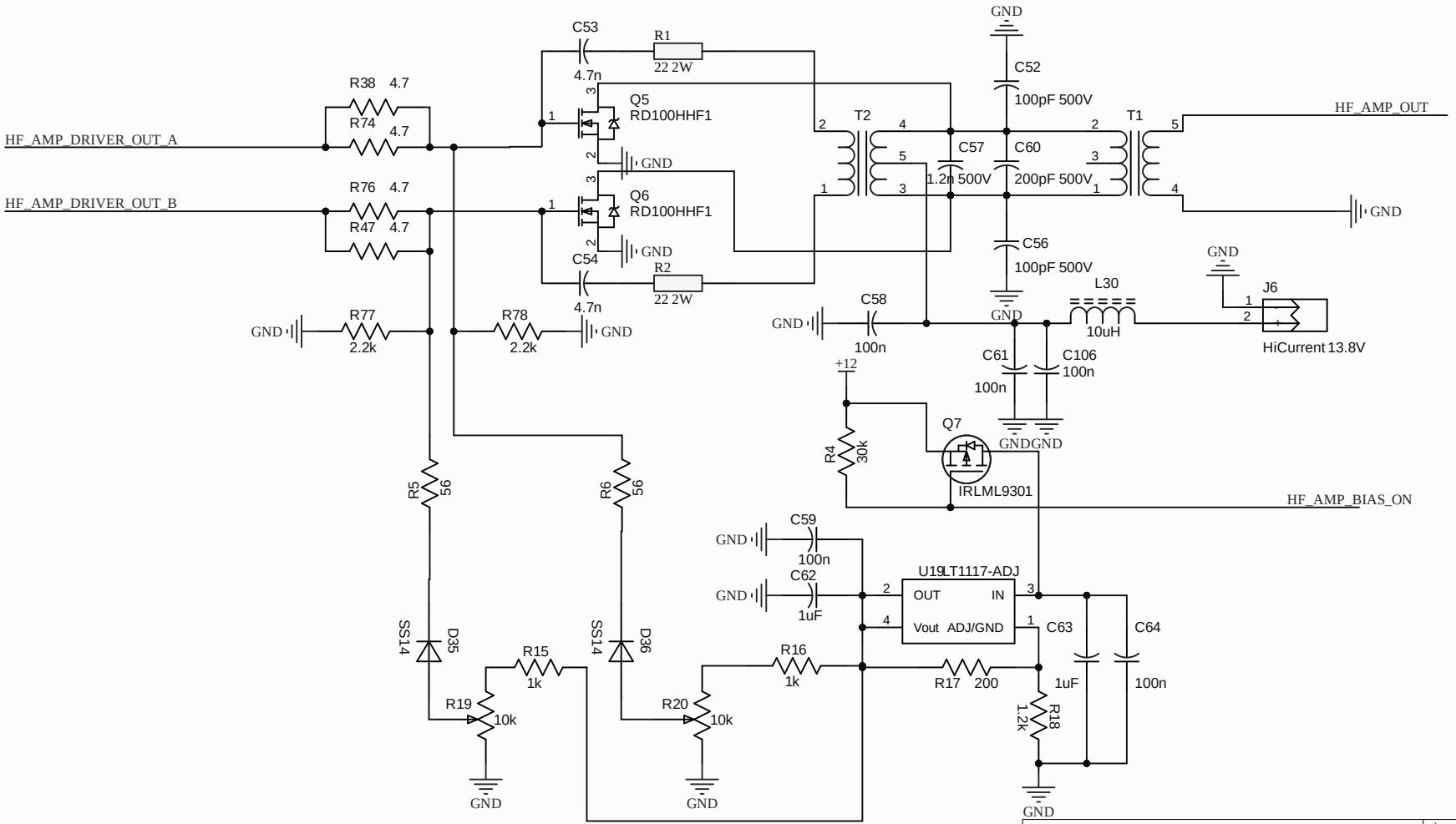
Title	*HF RF AMP DRIVER*		
Size: A4	Number:17	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 17 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\HF_AMP_DRIVER.SchDoc		

HF RF AMP

Idq - 500ma Q5 + 500ma Q6

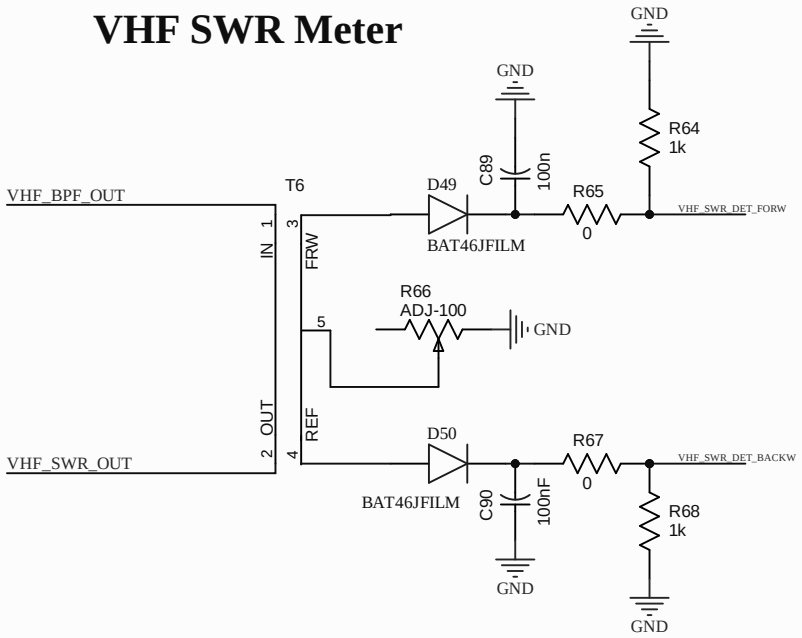
T1: 1T:4T 25ohms coaxial BN-61-002
T2: 13+13T:1T 0.8mm FT-82-43-TR

TEST T2: M2000HM 20x12x6 13+13T:1T МГТФ 0.5mm^2
TEST T1: 2 tube 28x10x6 1T:4T copper tube+МГТФ 0.5mm^2



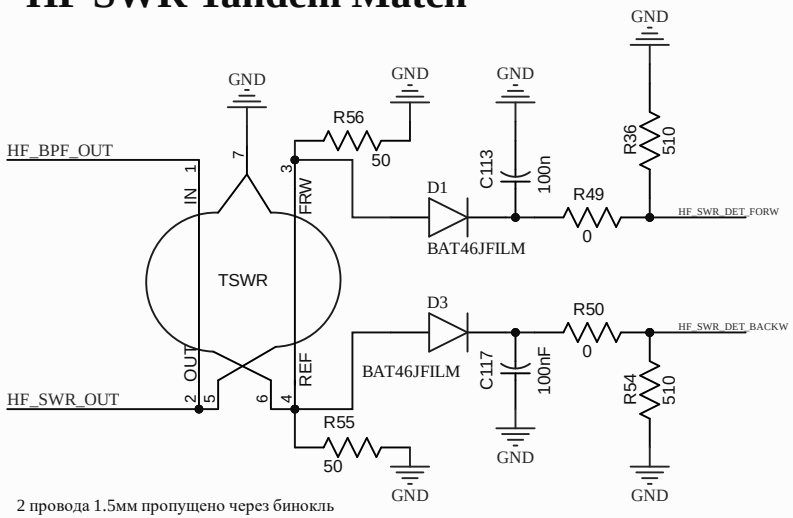
Title	*HF RF AMP*		
Size: A4	Number:17	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 17 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\HF_AMP.SchDoc			

VHF SWR Meter



Title	***VHF SWR Meter***		
Size: A4	Number:18	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 18 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\SWR_VHF.SchDoc		

HF SWR Tandem Match

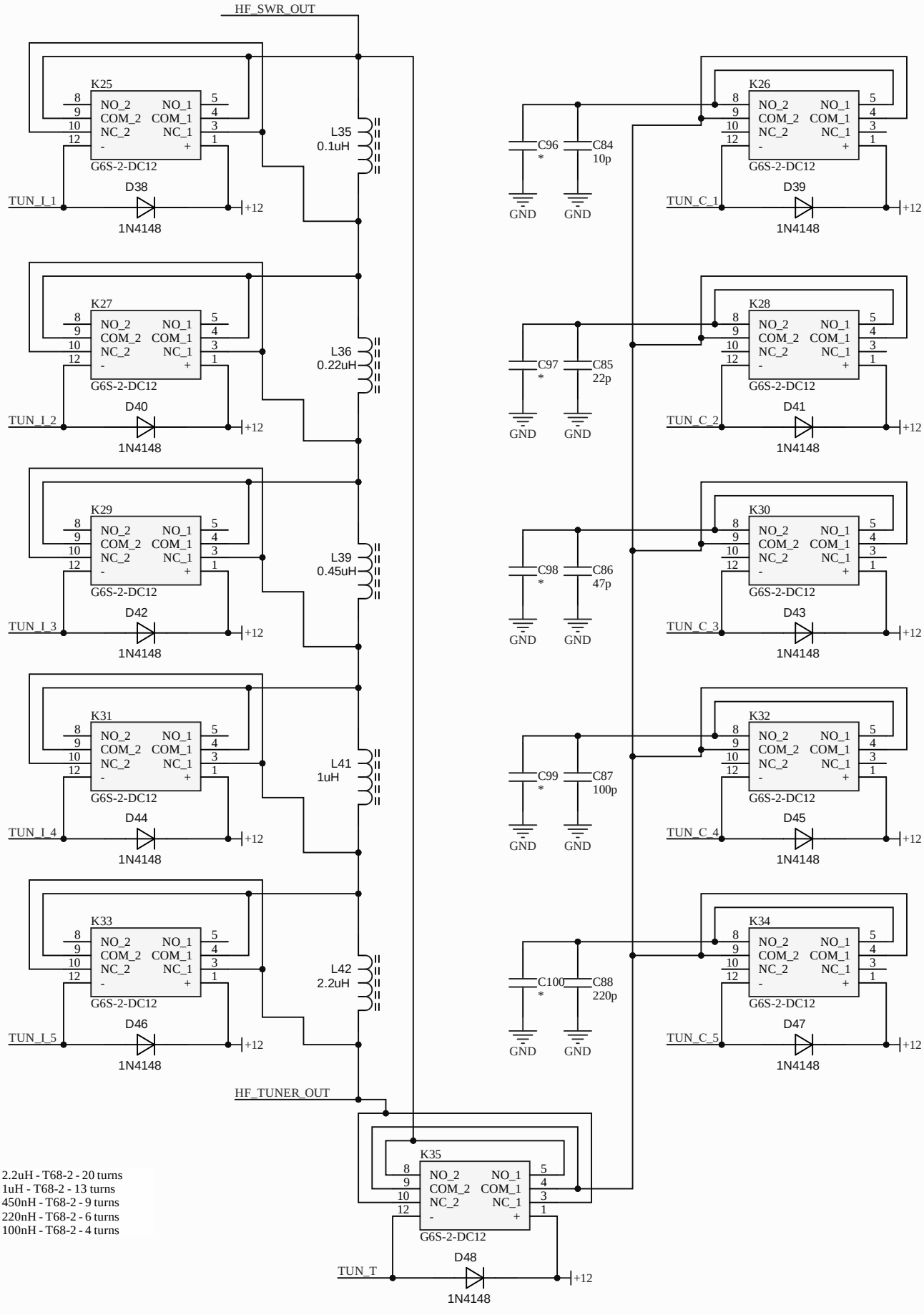


2 провода 1.5мм пропущено через бинокль

по диогонали пропущено и намотано по 20 витков 0.5мм

Title	***HF SWR Meter***		
Size: A4	Number:18	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 18 of 18	
File:	D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\SWR_HF.SchDoc		

HF Antenna Tuner



2.2uH - T68-2 - 20 turns
1uH - T68-2 - 13 turns
450nH - T68-2 - 9 turns
220nH - T68-2 - 6 turns
100nH - T68-2 - 4 turns

Title	***HF Tuner***		
Size: A4	Number:18	Revision:2.0	
Date: 21.06.2021	Time: 12:56:19	Sheet 18 of 18	
File: D:\Dropbox\Develop\Projects\WOLF\Scheme\ALTIUM_DESIGNER\RF-UNIT-BIG-35W\HF_TUNER.SchDoc			

Altium

Comment	Description	Designator	Footprint	LibRef	Quantity
0.8n	Capacitor NP0 HiVolt	C1, C52	CAP_1206	81B52DA0682D000	2
5p	Capacitor NP0 HiVolt	C2, C3	CAP_1206	81B52DA0682D000	2
3p	Capacitor NP0 HiVolt	C4, C5, C6	CAP_1206	81B52DA0682D000	3
7.3p	Capacitor NP0 HiVolt	C7, C8	CAP_1206	81B52DA0682D000	2
10p	Capacitor NP0 HiVolt	C9, C11	CAP_1206	81B52DA0682D000	2
12p	Capacitor NP0 HiVolt	C10	CAP_1206	81B52DA0682D000	1
5.1p	Capacitor NP0 HiVolt	C12, C13	CAP_1206	81B52DA0682D000	2
22p	Capacitor NP0 HiVolt	C14, C15, C16, C17, C18, C22, C23	CAP_1206	81B52DA0682D000	7
39p	Capacitor NP0 HiVolt	C19, C21	CAP_1206	81B52DA0682D000	2
33p	Capacitor NP0 HiVolt	C20	CAP_1206	81B52DA0682D000	1
99p	Capacitor NP0 HiVolt	C24, C26, C27, C28, C50, C53	CAP_1206	81B52DA0682D000	6
47p	Capacitor NP0 HiVolt	C25	CAP_1206	81B52DA0682D000	1
100p	Capacitor NP0 HiVolt	C29, C31	CAP_1206	81B52DA0682D000	2
82p	Capacitor NP0 HiVolt	C30, C37, C39	CAP_1206	81B52DA0682D000	3
150p	Capacitor NP0 HiVolt	C34, C36	CAP_1206	81B52DA0682D000	2
120p	Capacitor NP0 HiVolt	C35	CAP_1206	81B52DA0682D000	1
100n	CAP_0805	C38, C59, C64, C78, C80, C82, C93, C113, C114, C116, C130, C133, C134, C135, C136, C137	CAP_0805	CAP_0805	16
220p	Capacitor NP0 HiVolt	C40, C42	CAP_1206	81B52DA0682D000	2
180p	Capacitor NP0 HiVolt	C41, C43, C44	CAP_1206	81B52DA0682D000	3
470p	Capacitor NP0 HiVolt	C45, C47	CAP_1206	81B52DA0682D000	2
560p	Capacitor NP0 HiVolt	C46	CAP_1206	81B52DA0682D000	1
1.2n	Capacitor NP0 HiVolt	C48, C49	CAP_1206	81B52DA0682D000	2
4.7n	Capacitor NP0 HiVolt	C50, C53, C54	CAP_1206	81B52DA0682D000; CAP_1206	3
100uF 500V	CAP_1206	C52, C58	CAP_1206	CAP_1206	2
27pF	CAP_0805	C55	CAP_0805	CAP_0805	1
6.2n 500V	CAP_1206	C57	CAP_1206	CAP_1206	1
100n	CAP_1206	C60, C61, C106	CAP_1206	CAP_1206	3
100uF 500V	CAP_1206	C63	CAP_1206	CAP_1206	1
1uF	CAP_0805	C65, C83, C79, C83, C126, C129	CAP_0805	CAP_0805	6
6.5-30pF	CT-3F300A110	C65, C66	5025[2510]	CAP_0805	2
100nF	CAP_0805	C67, C71, C76, C90, C117, C118	CAP_0805	CAP_0805	6
120pF	CAP_0805	C68, C73	CAP_0805	CAP_0805	2
10n	CAP_1206	C69, C82, C102	CAP_1206	CAP_1206	3
4.7n	CAP_0805	C70, C75	CAP_0805	CAP_0805	2
100pF	CAP_0805	C72	CAP_0805	CAP_0805	1
22uF	CAPAE_6.6x6.6R6.4	C74, C77	CAPAE_6.6x6.6R6.4	CAPAE_6.6x6.6R6.4	2
15n	CAP_1206	C81, C111	CAP_1206	CAP_1206	2
30p	Capacitor	C84	B3528A0682D000	81B52DA0682D000	1
22p	Capacitor	C85	B3528A0682D000	81B52DA0682D000	1
47p	Capacitor	C86	B3528A0682D000	81B52DA0682D000	1
100p	Capacitor	C87	B3528A0682D000	81B52DA0682D000	1
20p	Capacitor	C88	B3528A0682D000	81B52DA0682D000	1
100pF	CAP_1206	C91, C93, C103	CAP_1206	CAP_1206	3
1n	CAP_1206	C94, C104	CAP_1206	CAP_1206	2
2.2uF	CAP_1206	C95	CAP_1206	CAP_1206	1
330pF	Capacitor NP0 HiVolt	C96, C97, C98, C99, C100	CAP_1206	81B52DA0682D000	5
220pF	CAP_1206	C101	CAP_1206	CAP_1206	1
1nB	CAP_1206	C105	CAP_1206	CAP_1206	1
1n	CAP_0805	C112, C120	CAP_0805	CAP_0805	2
2nF	CAP_0805	C115	CAP_0805	CAP_0805	1
47uF	CAPAE_6.6x6.6R6.4	C119	CAPAE_6.6x6.6R6.4	CAPAE_6.6x6.6R6.4	1
10n	CAP_0805	C121	R-0805_M	CAP_0805	1
2n	CAP_0805	C122	R-0805_M	CAP_0805	1
100p	CAP_0805	C127, C132	R-0805_M	CAP_0805	2
10uF 25V	CAPAE_5.3x5.3R6.1	C128	CAPAE_5.3x5.3R6.1	CAPAE_5.3x5.3R6.1	1
100n	CAP_0805	C131	R-0805_M	CAP_0805	1
BAT46JFILM	Diode	D1, D3, D49, D50	SOD523-3L-117N	BAT46JFILM	4
SMAJ5.0A-TR	Diode	D2	SMB/DBCATR	SMLV73V3	1
1N4148	1N4148	D4, D5, D6, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D19, D20, D21, D22, D24, D25, D26, D27, D28, D29, D30, D31, D32, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48	0114	1N4148	37
BAV99	BAV99	D7	SOT23	BAV99	1
0114	0114	D18, D23, D35, D36, D37	0114	0114	5
FERRITE BEAD	IND_FERRITE_BEAD	F1, F2	885	IND_FERRITE_BEAD	2
51022-0200	51022-0200	FAN_OUT	51022-0200	51022-0200	1
ANT1	SMA	J1	31-5431	31-5431	1
ADC	SMA	J2	31-5431	31-5431	1
EXTERNAL	2*5 PIN	J3	90131-0126	90131-0126	1
MOTHERBOARD	2*5 PIN	J4	90131-0126	90131-0126	1
AIN72	SMA	J5	31-5431	31-5431	1
HComment 13.8V	2*2	J6, J7	1188717-2	1188717-2	2
13.8V	2*2	J8	1188717-2	1188717-2	1
DAC	SMA	J9	31-5431	31-5431	1
G6S-2-DC12	Relay or Contactor	K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, K16, K17, K18, K19, K20, K21, K22, K23, K24, K25, K26, K27, K28, K29, K30, K31, K32, K33, K34, K35	G6S2DC12	G6S-2-DC12	35
200nH	Inductor	L1, L2, L3	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
880nH	Inductor	L4, L5, L6	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
1uH	Inductor	L7, L8, L9, L41	IND_FERRITE_CORE_1	IND_FERRITE_CORE	4
820nH	Inductor	L10, L11, L12	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
1.6uH	Inductor	L13, L14, L15, L16, L17, L18	IND_FERRITE_CORE_1	IND_FERRITE_CORE	6
2.7uH	Inductor	L19, L20, L21	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
6.8uH	Inductor	L22, L23, L24	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
11uH	Inductor	L25, L26, L27	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
056uH	Inductor	L28, L29, L40	IND_FERRITE_CORE_1	IND_FERRITE_CORE	3
0luH	Inductor	L30, L43	IND_FERRITE_CORE	IND_FERRITE_CORE	2
10uH	IND_1206	L31	IND_1206	IND_1206	1
6.2nH	IND_0805	L32, L33, L34	IND_0805	IND_0805	3
6.1uH	Inductor	L35	IND_FERRITE_CORE_1	IND_FERRITE_CORE	1
6.22uH	Inductor	L36	IND_FERRITE_CORE_1	IND_FERRITE_CORE	1
6.45uH	Inductor	L39	IND_FERRITE_CORE_1	IND_FERRITE_CORE	1
2.2uH	Inductor	L42	IND_FERRITE_CORE_1	IND_FERRITE_CORE	1
220nH	IND_1206	L46	IND_1206	IND_1206	1
33nH	IND_0805	L48	IND_0805	IND_0805	1
0010HHF1	0010HHF1	Q1, Q3	0038_V2	0038HHF1	2
IRLML6301	MOSFET	Q2, Q7, Q10	SOT23	MOSFET_ENH_PD	3
PGA-103+ / SPF5189Z	PGA-103+ / SPF5189Z	Q4	SOT89	PGA-103+	1
0010HHF1	0010HHF1	Q5, Q6	0010_V2	0010HHF1	2
FA80H1412AS1	FA80H1412AS1	Q8	FA80H1412AS1	FA80H1412AS1	1
0010MUS1	0010MUS1	Q9	SOT89	0010MUS1	1
12.2W	CRD3321030	R1, R2	RES_2W	CRD3321030	2
0Ω	RES_0805	R3, R7, R8, R9, R10, R11, R12	RES_0805	RES_0805	7
10k	RES_0805	R4, R41, R45	RES_0805	RES_0805	3
5Ω	RES_0805	R5, R6, R26, R27, R44	RES_0805	RES_0805	5
2k	RES_0805	R13	RES_0805	RES_0805	1
KTY81/120	Integrated Circuit	R14	TO254P420X480X775-3P	KTY83_150	1
1k	RES_0805	R15, R16, R35, R42, R43, R54, R68	RES_0805	RES_0805	7
150	RES_0805	R17, R52	RES_0805	RES_0805	2
1.2k	RES_0805	R18, R53	RES_0805	RES_0805	2
ADJ-10k	10kΩ	R19, R20	3362	3362	2
750	RES_1206	R21	RES_1206	RES_1206	1
470	RES_1206	R22	RES_1206	RES_1206	1
68	RES_1206	R23, R61	RES_1206	RES_1206	2
300	RES_1206	R24, R25, R62, R63	RES_1206	RES_1206	4
100	RES_0805	R28, R29, R51	RES_0805	RES_0805	3
ADJ-1k	10kΩ	R30, R40, R46	3362	3362	3
1k	RES_0805	R31, R33, R57, R69, R70, R71, R72	RESC2013X60X40N1.25	CMP-2001-00626-1	7
6.8k	RES_0805	R32	RES_0805	RES_0805	1
100	RES_1206	R34	RES_1206	RES_1206	1
510	RES_0805	R36, R54	RES_0805	RES_0805	2
0.7k	RES_0805	R37	RES_0805	RES_0805	1
4.7	RES_1206	R38, R47, R74, R76	RES_1206	RES_1206	4
18	RES_1206	R39	RES_1206	RES_1206	1
0	RES_0805	R40, R50, R65, R67	RES_0805	RES_0805	4
68	RES_1206	R48, R56	RES_1206	RES_1206	2
200	RES_0805	R49	RES_0805	RES_0805	1
430	RES_1206	R55, R60	RES_1206	RES_1206	2
ADJ-100	10kΩ	R66	3362	3362	1
10k	RES_1206	R73	RES_1206	RES_1206	1
1.2k	RES_0805	R77, R78	RES_0805	RES_0805	2
TRANSF_HF2	TRANSF_HF2	T1	TRANSF_HF2-3	TRANSF_RF2	1
TRANSF_HF1	TRANSF_HF1	T2	TRANSF_HF1	TRANSF_RF1	1
TRANSF_HF3	TRANSF_HF3	T3	TRANSF_HF3	TRANSF_RF3	1
1:1	1:1	T5	TRANSF_ACORE2	TRANSF_ACORE2	1
SWR_VHF	SWR_VHF	T6	SWR_VHF	SWR_VHF	1
SWR_TANDEM_MATCH	SWR_TANDEM_MATCH	TSWR	SWR_TANDEM_MATCH	SWR_TANDEM_MATCH	1
STPCB7S9ST8	Integrated Circuit	U1, U2, U3, U7, U11	SOP65P840X125-16N	STPCB7S9ST8	1
Accom IMBI	Accom IMBI	U4, U12	IMBI18	Accom IMBI	2
LT1117ST-ADJ	LT1117ST-ADJ	U5, U13, U20	LT1117ST-ADJ	LT1117ST-ADJ	3
LM1117DT-5.0	Integrated Circuit	U6	TO252P991X238-3N	LM1117DT-ADJ	1
MAX4188EAZ	Integrated Circuit	U8, U10	SOP65P490X110-8N	MAX4188EAZ	2
R54302	Integrated Circuit	U9	QFN50P4000X4000X90-33N	R54312C-Z	1