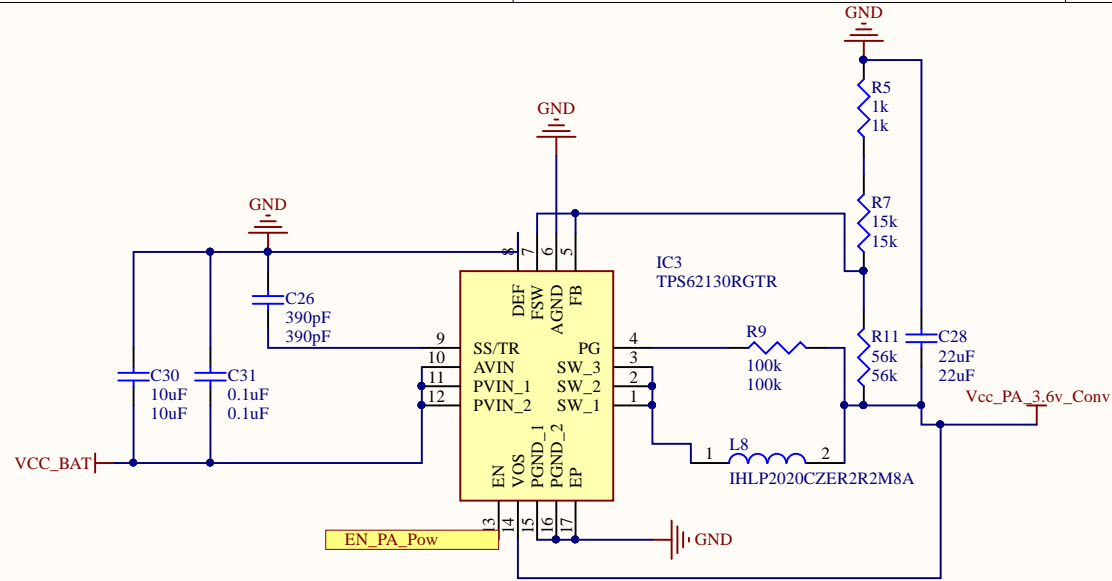
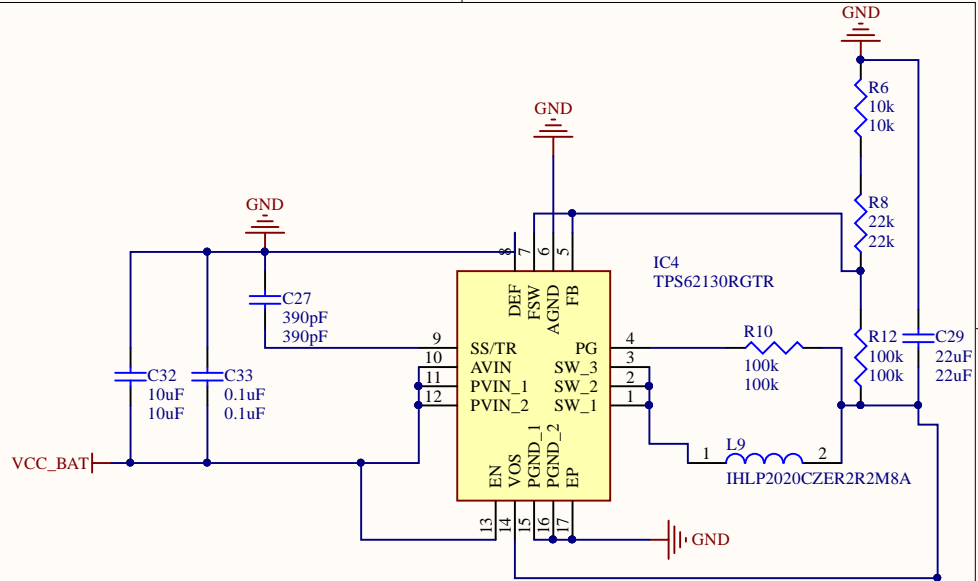


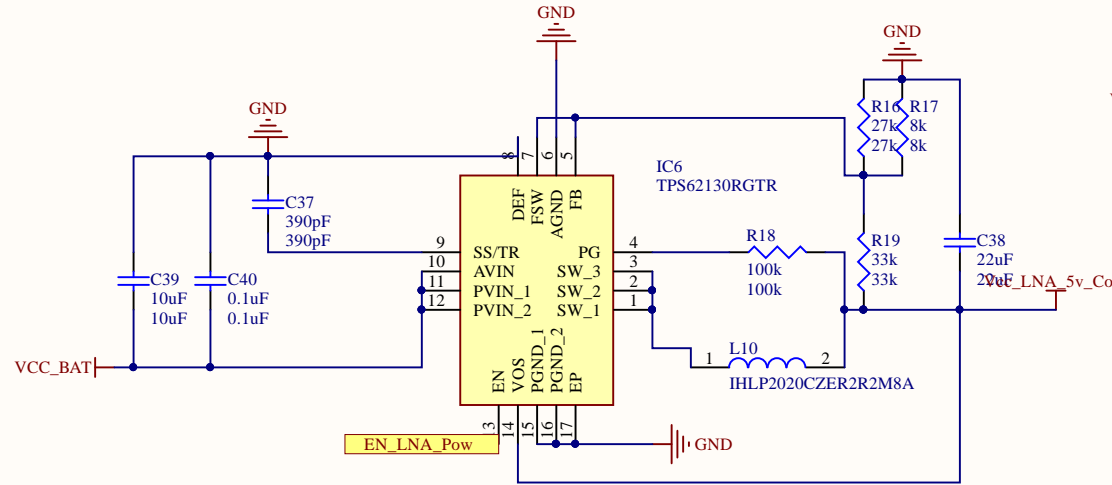
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UHF Communication Board - LNA and BPF		
Size	Number	Revision
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Date:	04-04-2022	Sheet of
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Power Amplifier Power Circuit



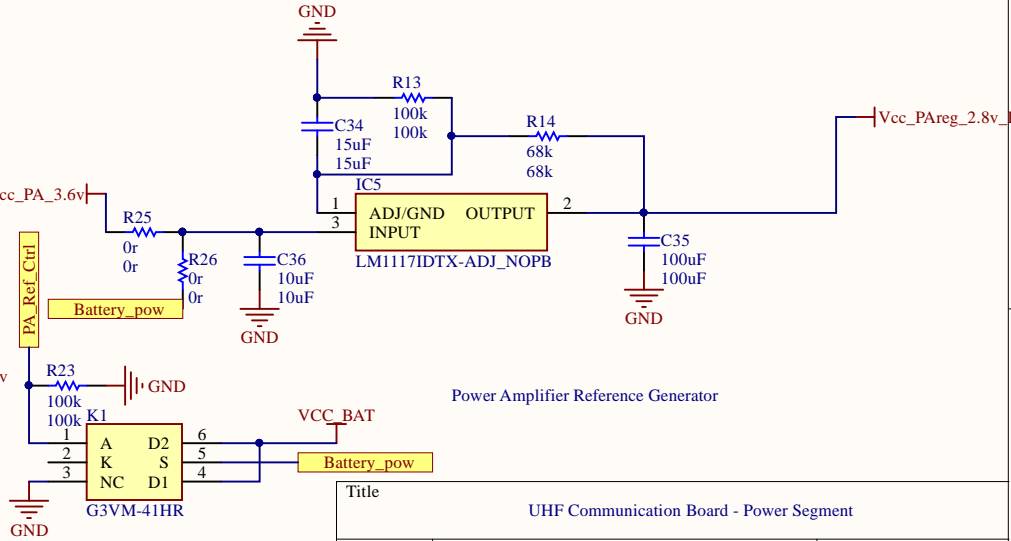
RFIC Power Circuit



LNA Power Circuit

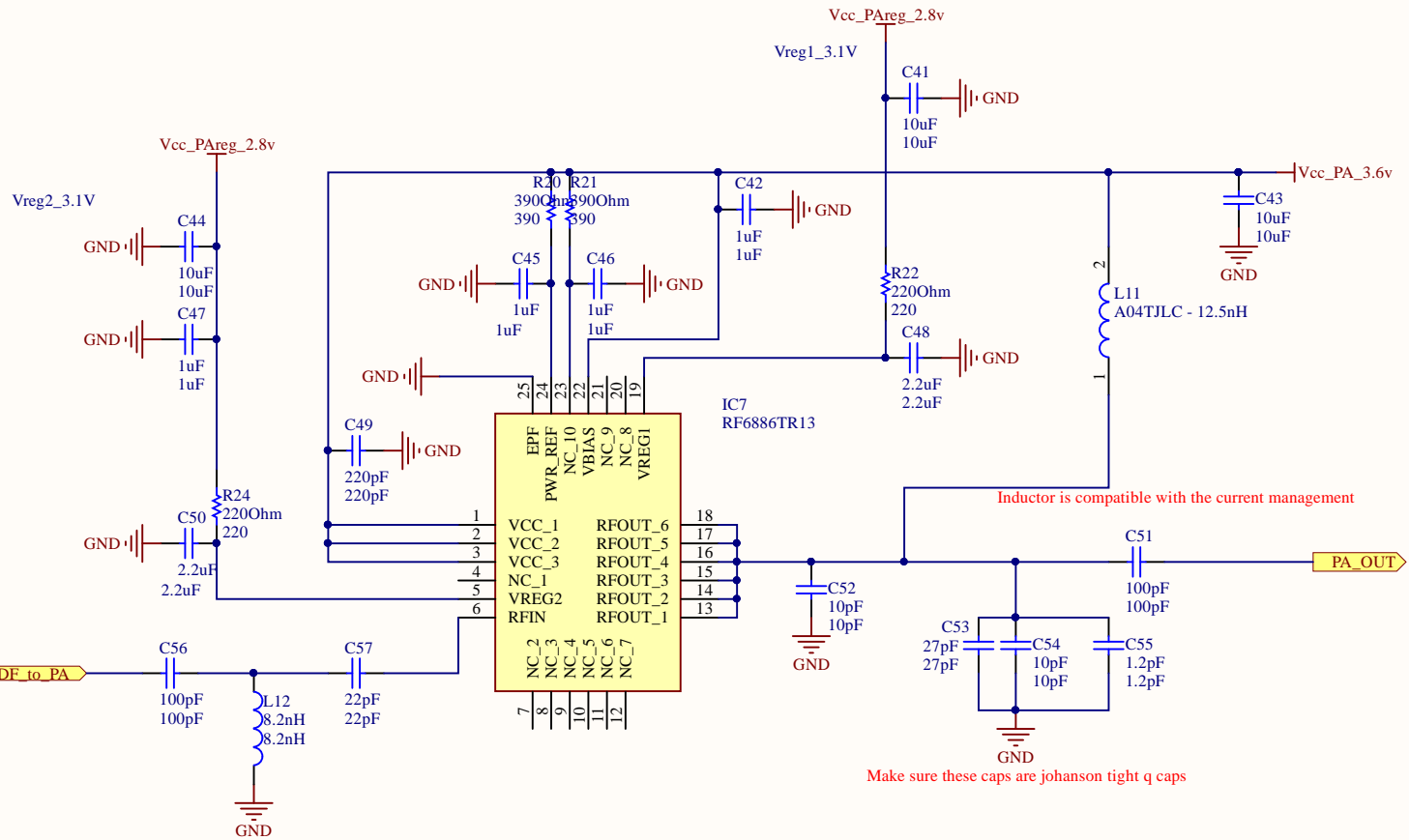
0.03% More than 5V generation

Connect the Converter output and check for the power on delay

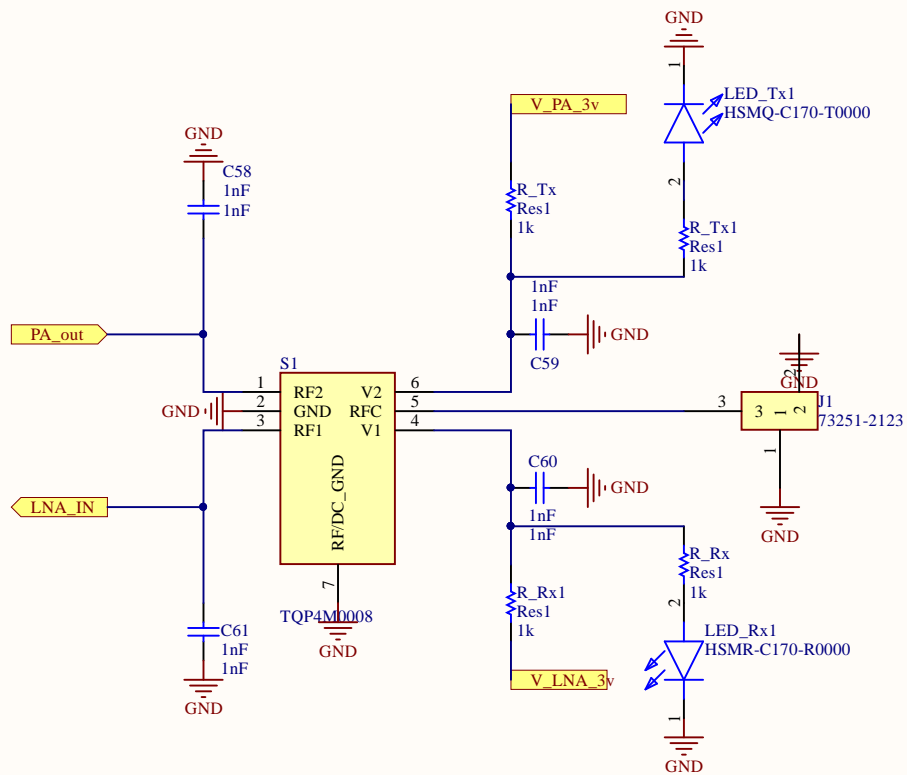


Power Amplifier Reference Generator

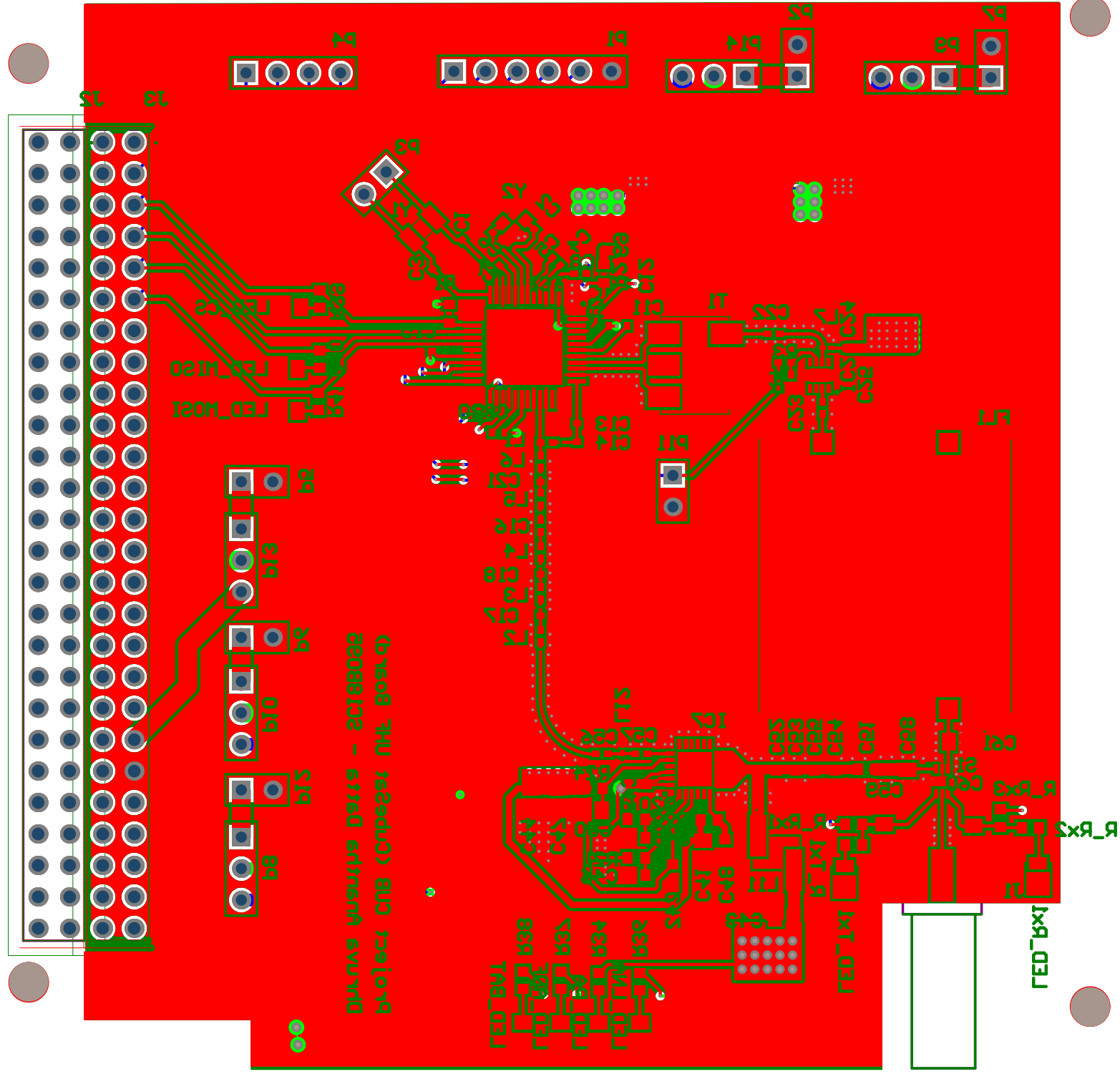
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UHF Communication Board - Power Segment		
Size	Number	Revision
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Title		
UHF Communication Board - Power Amplifiers		
Size	Number	Revision
A4		
Date:	04-04-2022	Sheet of
File:	D:\NanoSat\RF6886_Power_Amp.Sch	Drawn By: Dhruva Anantha Datta - SC18B095



Title			
UHF Communication Board -TxRx switch			
Size	Number		Revision
A4			
Date:	04-04-2022	Sheet	of
File:	D:\NanoSat\...\TxRx_Switch.SchDoc	Drawn By:	Dhruva Anantha Datta - SC18B095



Item #	Designator	Description	Name	Quantity	Manufacturer 1	Manufacturer PartNo 1	Footprint	LibRef	Note
1	C1, C3	Capacitor	5.6pF	2			0402	Cap	
2	C2, C6	Capacitor, low temp coeff	11pF	2			0402	Cap	
3	C4, C5, C7, C11, C12, C20	Capacitor	220nF	6			0402	Cap	
4	C8	Capacitor	1.2nF	1			0402	Cap	
5	C9, C10, C15, C19	Capacitor	100nF	4			0402	Cap	
6	C13	Capacitor	47pF	1			0402	Cap	
7	C14, C49	Capacitor	220pF	2			0402_1608[0603]	Cap	
8	C16	Capacitor	270pF	1			0402	Cap	
9	C17, C18, C21	Capacitor	6.8pF	3			0402	Cap	
10	C22, C23	Capacitor	1000pf	2			0402	CGA2B2NP01H101J050BA	
11	C24	Capacitor	1000pF	1			0402	CGA2B2NP01H101J050BA	
12	C25	Capacitor	1uF	1			0402	CGA2B2NP01H101J050BA	
13	C26, C27, C37	Capacitor	390pF	3			1608[0603]	Cap	
14	C28, C29, C38	Capacitor	22uF	3			1608[0603]	Cap	
15	C30, C32, C36, C39, C41, C43	Capacitor	10uF	6			1608[0603], C0805	Cap	
16	C31, C33, C40	Capacitor	0.1uF	3			1608[0603]	Cap	
17	C34	Capacitor	15uF	1			1608[0603]	Cap	
18	C35	Capacitor	100uF	1			C0805	Cap	
19	C42, C45, C46, C47	Capacitor	1uF	4			1608[0603], C0805	Cap	
20	C44	Capacitor - C0805C106J9RACAUTO	10uF	1			C0805	Cap	
21	C48, C50	Capacitor	2.2uF	2			1608[0603], C0805	Cap	
22	C51, C56	Capacitor	100pF	2			1608[0603], 0402	Cap	
23	C52, C54	Capacitor	10pF	2			1608[0603]	Cap	
24	C53	Capacitor	27pF	1			1608[0603]	Cap	
25	C55	Capacitor	1.2pF	1			1608[0603]	Cap	
26	C57	Capacitor	22pF	1			0402	Cap	
27	C58, C59, C60, C61	Capacitor	1nF	4			C0805	Cap	
28	FL1	Filter	BPF-C450+	1			BPFC450	BPF-C450+	
29	IC1	Integrated Circuit	ADF7030-1BSTZN	1			QFP50P900X900X160-48N	ADF7030-1BSTZN	
30	IC2	Integrated Circuit	TOP3M9035	1			SON50P200X200X90-9N-D	TOP3M9035	
31	IC3, IC4, IC6	Integrated Circuit	TPS62130RGTR	3			QFN50P300X300X100-17N-D	TPS62130RGTR	
32	IC5	Integrated Circuit	LM1117IDTX-ADJ_NOPB	1			LM1117IDTXADJNOPB	LM1117IDTX-ADJ_NOPB	
33	IC7	Integrated Circuit	RF6886TR13	1			QFN50P400X400X90-25N-D	RF6886TR13	
34	J1	Connector	73251-2123	1			73251-2123	73251-2123	
35	J2, J3	Connector	ESQ-126-13-G-D	2			ESQ-126-Y-X-D	ESQ-126-13-G-D	
36	K1	Relay or Contactor	G3VM-41HR	1			SOP254P700X210-6N	G3VM-41HR	
37	L1	Inductor	82nH	1			0402-A	Inductor	
38	L2, L4	Inductor	20nH	2			0402-A	Inductor	
39	L3	Inductor	40nH	1			0402-A	Inductor	
40	L5	Inductor	11nH	1			0402-A	Inductor	
41	L6	Inductor	18nH	1			0402-A	Inductor	
42	L7	Inductor	82nH 0603	1			0603	Inductor	
43	L8, L9, L10	Inductor	IHL P2020CZER2R2	3			INDPM5552X300N	IHL P2020CZER2R2M8A	
44	L11	Inductor	A04TJLC - 12.5nH	1			A04TJLC	A04TJLC	
45	L12	Inductor	8.2nH	1			0603	Inductor	
46	LED_ADF, LED_BAT, LED_CS, LED_LNA, LED_LNA_EN_Pow, LED_LNA_SHDWN, LED_PA, LED_PA_Pow, LED_PA_ref_Ctrl	LED	LED	9			C0805	HSMR-C170-R0000	
47	LED_Rx1	LED	HSMR-C170-R0000	1			LEDC2012X90N	HSMR-C170-R0000	
48	LED_Tx1	LED	HSMQ-C170-T0000	1			LEDC2012X90N	HSMQ-C170-T0000	
49	P2	Header, 2-Pin	Header 2	1			HDR1X2	Header 2	
50	P5	Header, 2-Pin	Ext_Bat	1			HDR1X2	Header 2	
51	P6, P12	Header, 2-Pin	PA_Pow	2			HDR1X2	Header 2	
52	P7	Header, 2-Pin	LNA_Pow	1			HDR1X2	Header 2	
53	R1, R2, R9, R10, R12, R18	Resistor	100k	6			J1-0603	Res3	
54	R3	Resistor	CRG0402J33K	1			0402	CRG0402J33K	
55	R4	Resistor	CRCW040210K0JNED	1			0402	CRCW040210K0JNED	
56	R5	Resistor	1k	1			J1-0603	Res3	
57	R6	Resistor	10k	1			J1-0603	Res3	
58	R7	Resistor	15k	1			J1-0603	Res3	
59	R8	Resistor	22k	1			J1-0603	Res3	
60	R11	Resistor	56k	1			J1-0603	Res3	
61	R13, R23	Resistor	100k	2			1608[0603]	Res1	
62	R14	Resistor	68k	1			1608[0603]	Res1	
63	R15, R27, R28, R34, R36, R37, R38, R39, R41	Resistor	1k	9			1608[0603]	Res1	
64	R16	Resistor	27k	1			J1-0603	Res3	
65	R17	Resistor	8k	1			J1-0603	Res3	
66	R19	Resistor	33k	1			J1-0603	Res3	
67	R20, R21	Resistor	390Ohm	2			1608[0603]	Res1	
68	R22, R24	Resistor	220Ohm	2			1608[0603]	Res1	
69	R25, R26	Resistor	or	2			1608[0603]	Res1	
70	R30, R31, R32, R33, R35, R40, R43, R44, R45, R46	Resistor	CRCW25120000Z0EG	10			RES06332X70N	CRCW25120000Z0EG	
71	R_Rx, R_Rx1, R_Tx, R_Tx1	Resistor	Res1	4			1608[0603]	Res1	
72	S1	Switch	TOP4M0008	1			SON50P200X200X90-7N-D	TOP4M0008	
73	T1	Transformer	ADT1.5-1+	1			ADT1.5-1+		
74	Y1	Crystal or Oscillator	ABS07-120-32.768KHZ-T	1			ABS0712032768KH2T	ABS07-120-32.768KHZ-T	
75	Y2	Crystal or Oscillator	FA-128_26.0000MF10Z-W5	1			FA128260000MF10ZW5	FA-128_26.0000MF10Z-W5	