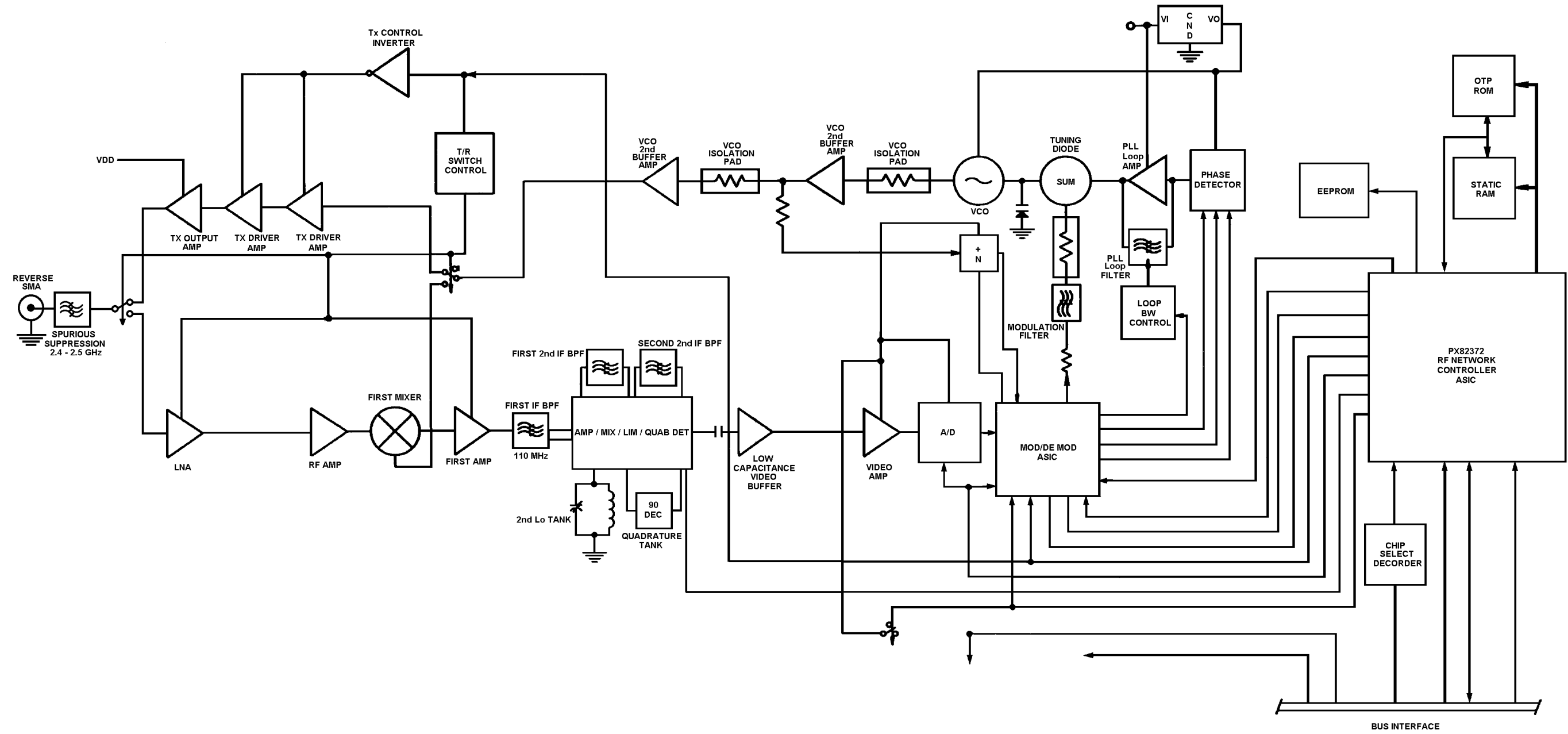




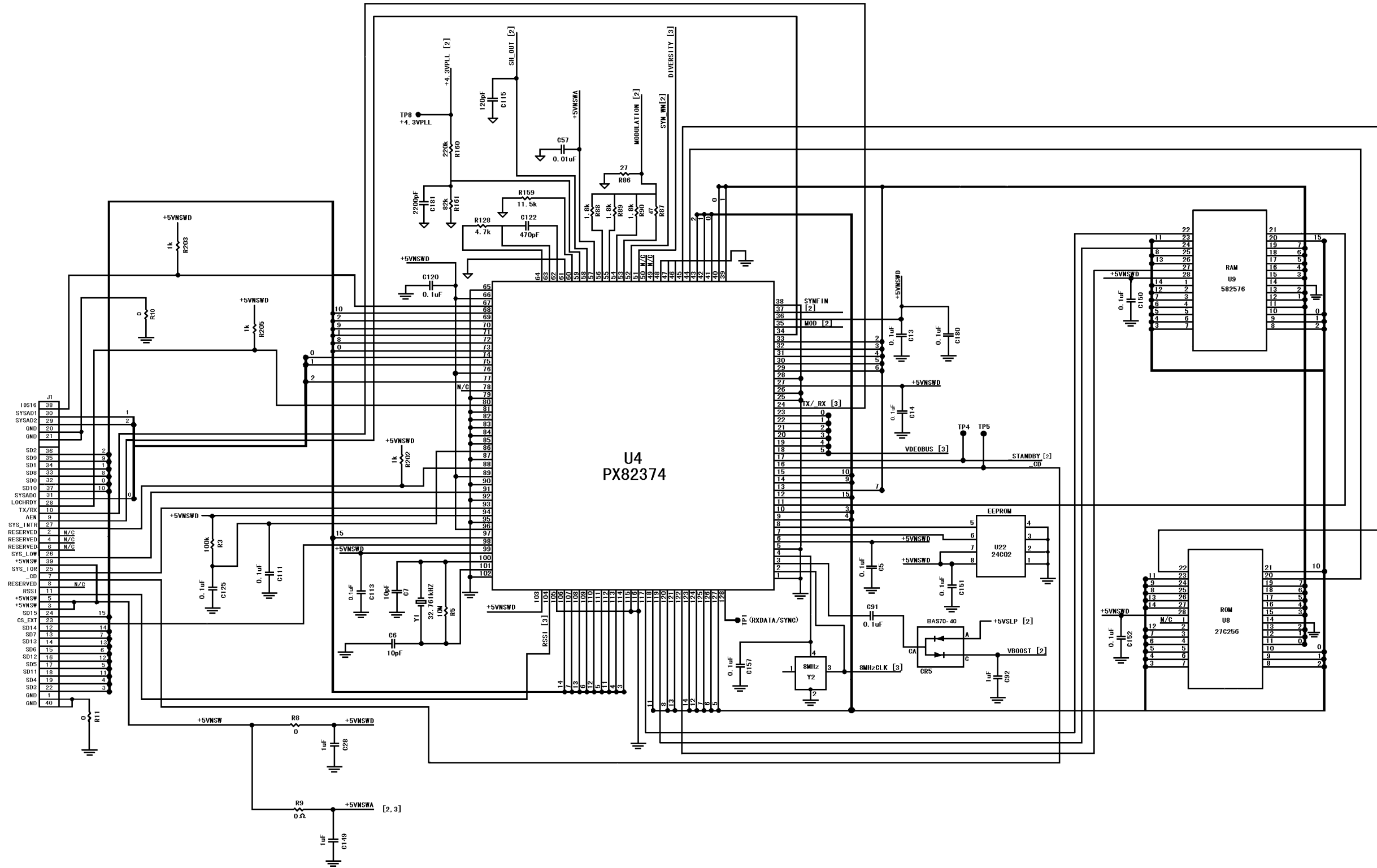
Technical Document for RF module

Product Name : Range LAN II
ID No. : 6330

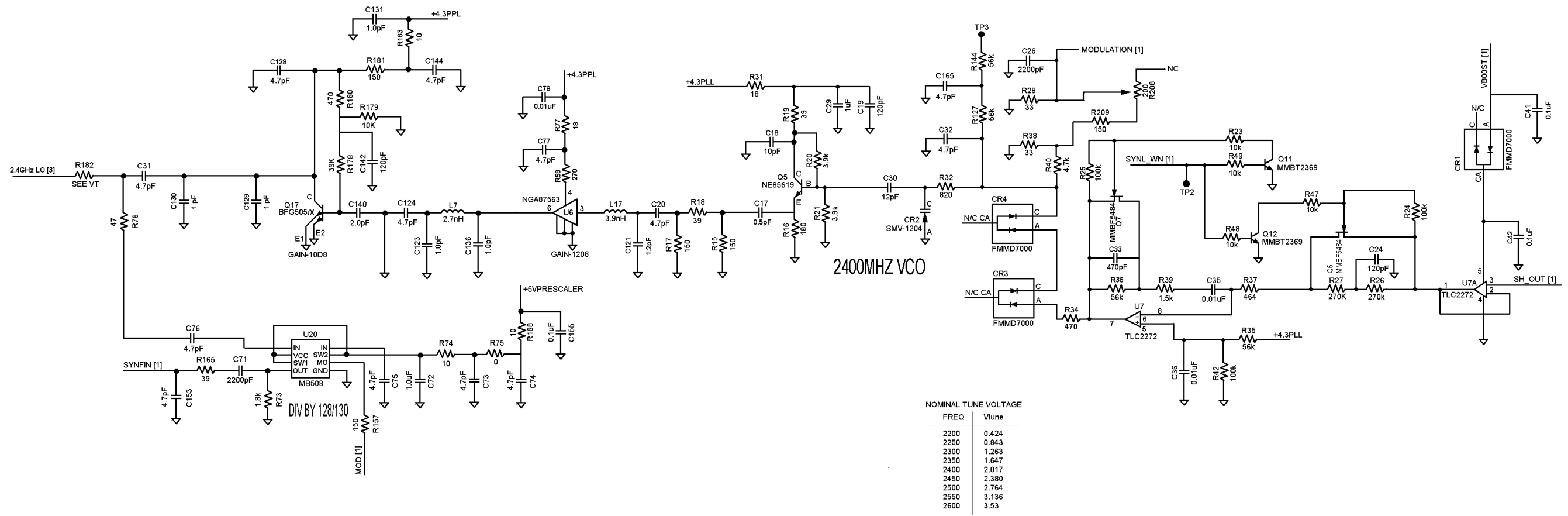
Block diagram



Circuit diagram 1



Circuit diagram 2

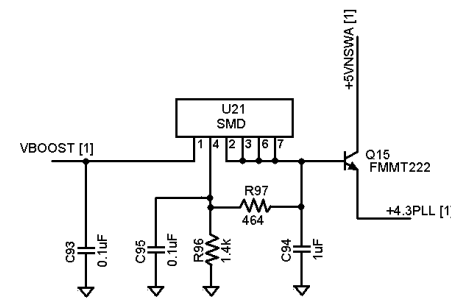
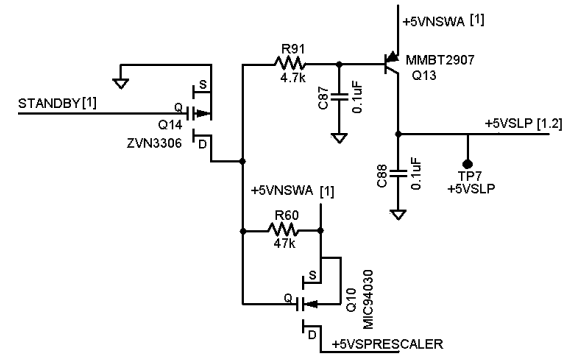


NOMINAL TUNE VOLTAGE

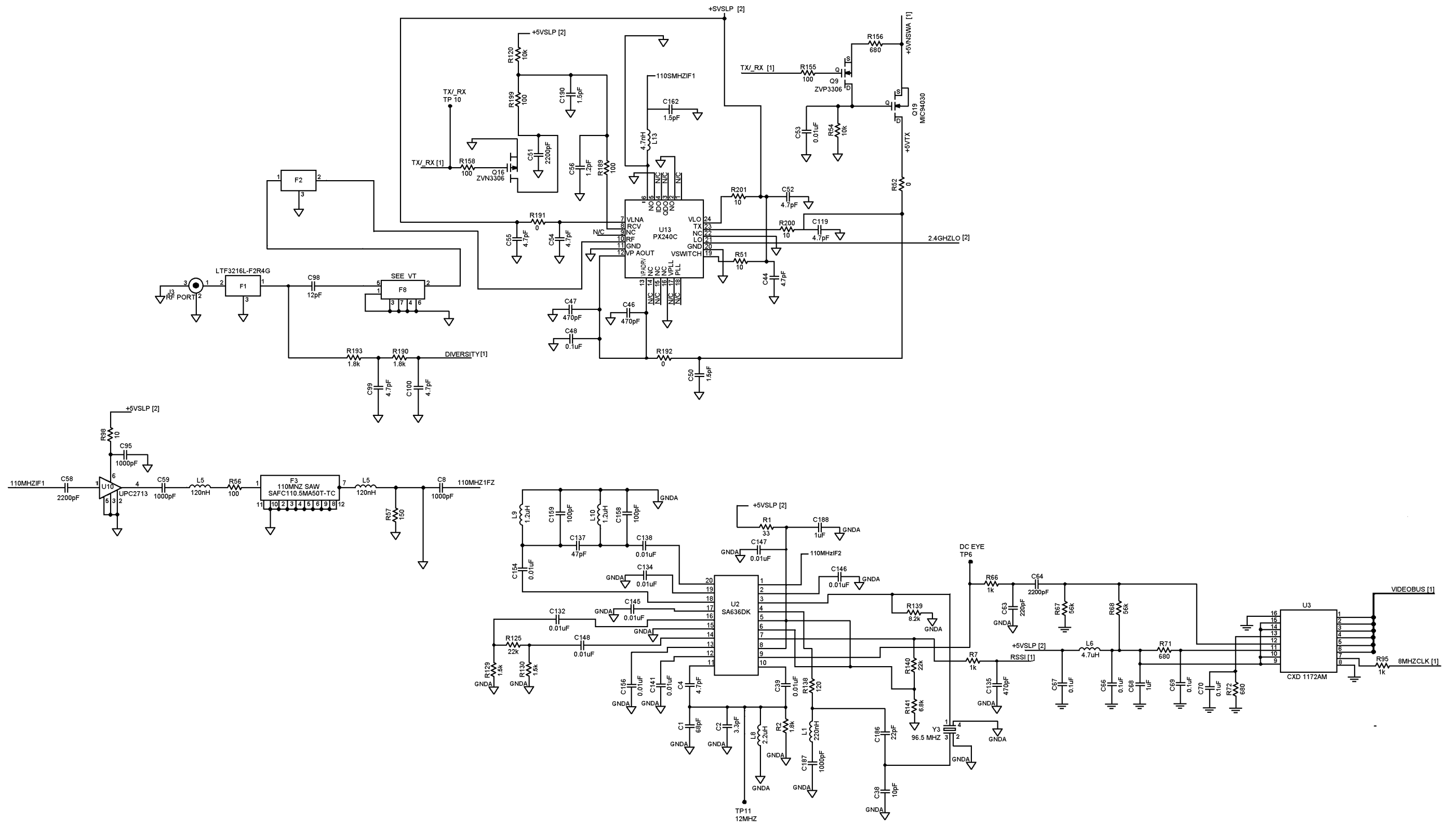
FREQ	Vtune
2200	0.424
2250	0.843
2300	1.263
2350	1.647
2400	2.017
2450	2.380
2500	2.764
2550	3.136
2600	3.53

VALUE TABLE

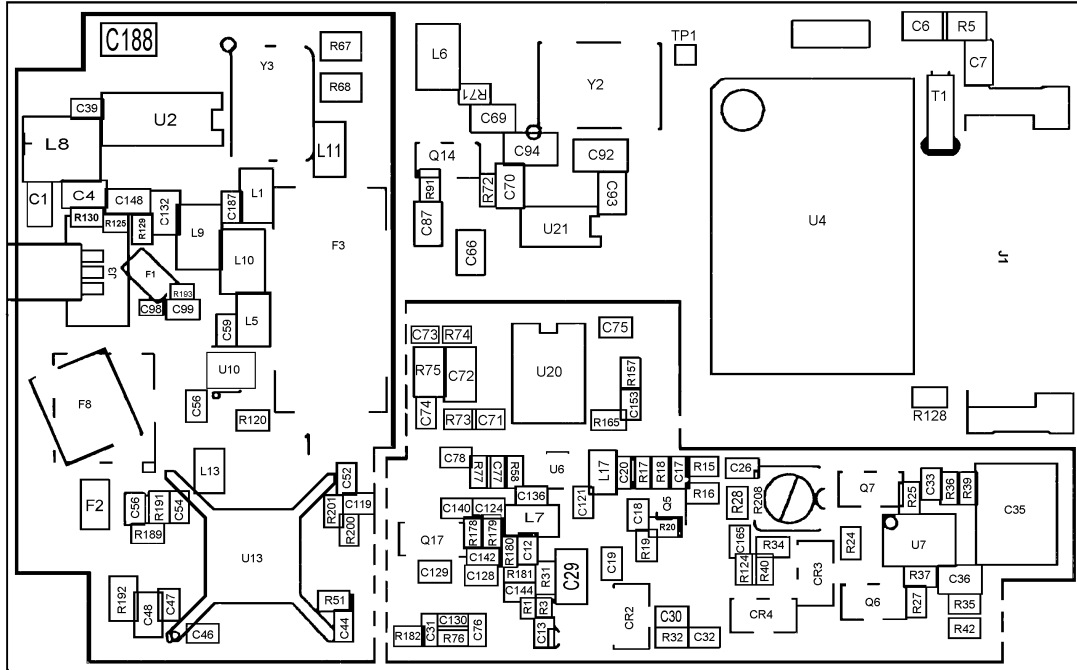
REF DES	0142.01	0142.02
R182	18 OHM	18 OHM
F6	2700.0019	2700.0015



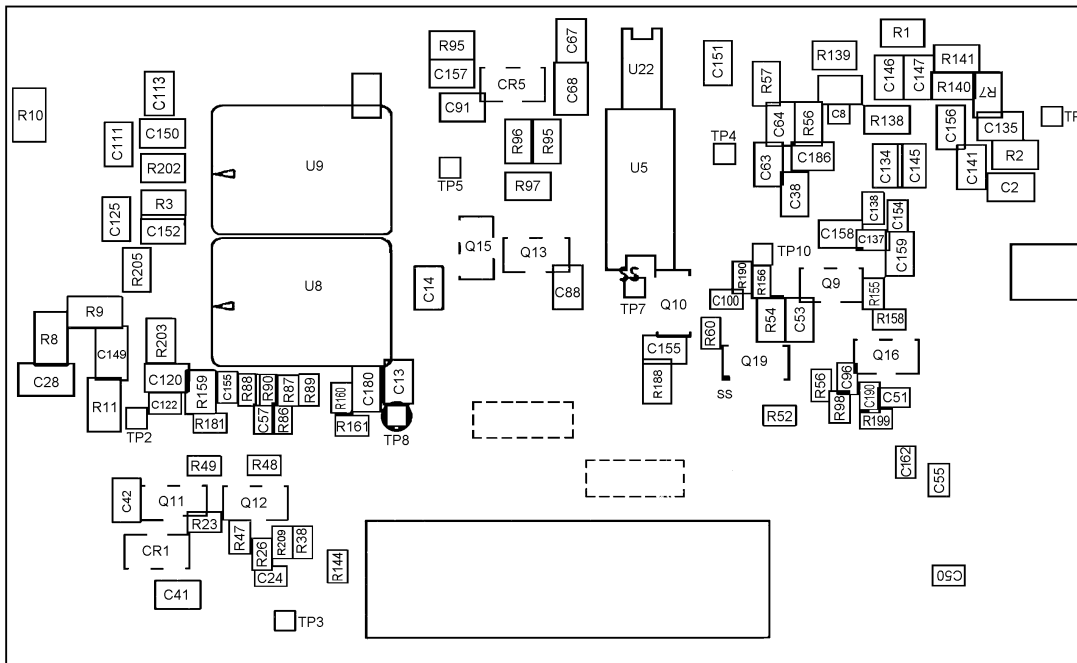
Circuit diagram 3



Component layout



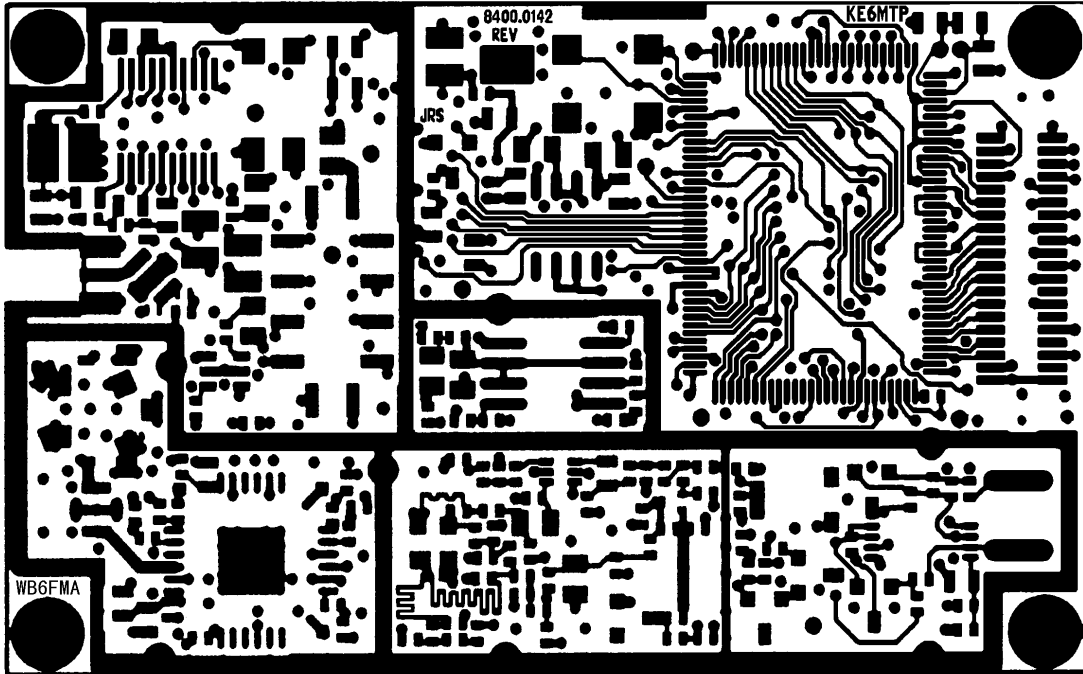
Component side



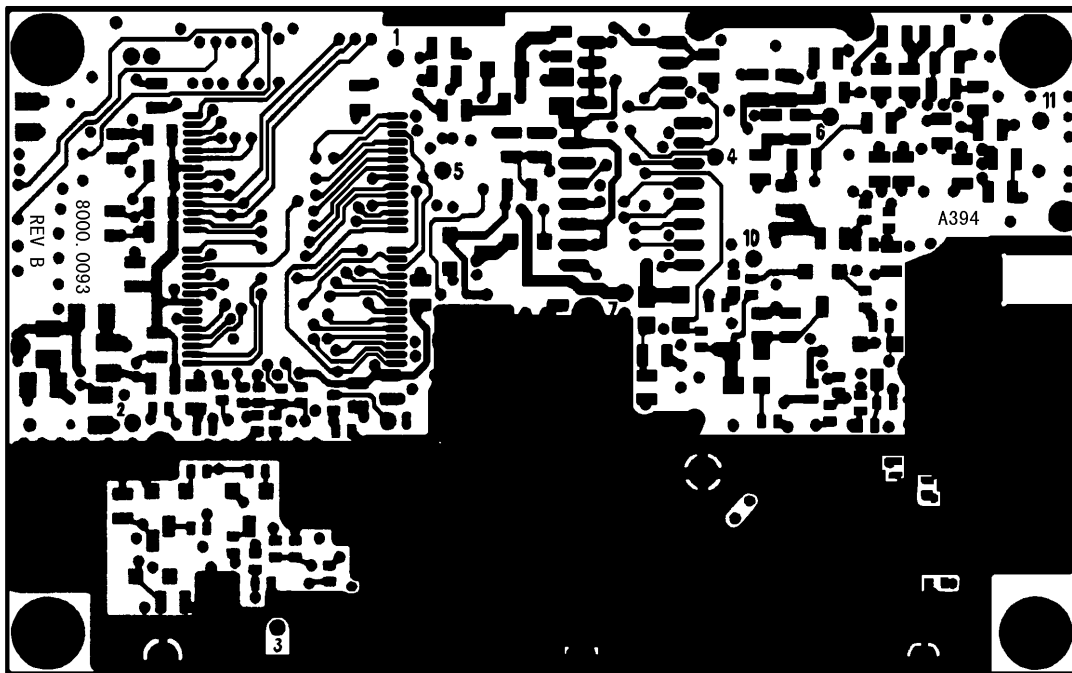
Solder side

Scale : Free

PWC layout



Component side



Solder side

Scale : Free



Part list

Part list of Circuit diagram 1

Part No.	Part name	Description
J1	Connector	
U8	IC	27C256
C6, 7	Capacitor	10 pF
C5, 13, 14, 91, 111, 113, 120 125, 150, 151, 152, 157, 180	Capacitor	0.1 uF
C28, 92, 149	Capacitor	1 uF
C115	Capacitor	120 pF
C181	Capacitor	2200 pF
C57	Capacitor	0.01 uF
C122	Capacitor	470 pF
Y1	Crystal	32.768 MHz
Y2	Crystal	8 MHz
U4	IC	PX82374
U9	IC	32KX8
U22	IC	256X8
R8, 9, 10, 11	Resistor	0 Ω
R202, 203, 205	Resistor	1 k Ω
R3	Resistor	100 k Ω
R5	Resistor	10 M Ω
R159	Resistor	11.5 k Ω
R128	Resistor	4.7 k Ω
R86	Resistor	27 Ω
R87	Resistor	47 Ω
R160	Resistor	220 k Ω
R161	Resistor	82 k Ω
R88, 89, 90	Resistor	1.8 k Ω
CR5	Diode	BAS70-40



Part list of Circuit diagram 2

Part No.	Part name	Description
R182	Resistor	18 Ω
C35, 36	Capacitor	0.01 μ F
C41, 42, 87, 88, 93, 95, 155	Capacitor	0.1 μ F
C29, 72, 94	Capacitor	1 μ F
C19, 24, 142	Capacitor	120 pF
C20, 31, 32, 73, 74, 75, 76, 77 124, 128, 144, 153, 165	Capacitor	4.7 pF
C121	Capacitor	1.2 pF
C26, 71	Capacitor	2200 pF
C78	Capacitor	0.01 μ F
C17	Capacitor	0.5 pF
C123, 129, 130, 131, 136	Capacitor	1 pF
C30	Capacitor	12 pF
C18	Capacitor	10 pF
C140	Capacitor	2 pF
C33	Capacitor	470 pF
L7	Inductor	2.7 nH
L17	Inductor	3.9 nH
U20	IC	MB508
U21	IC	SMD
U7	IC	TLC2272
R208	Resistor	200 Ω
R75	Resistor	0 Ω
R188	Resistor	10 Ω
R97	Resistor	464 Ω
R96	Resistor	1.4 k Ω
R74, 183	Resistor	10 Ω
R40, 91	Resistor	4.7 k Ω
R60	Resistor	47 k Ω
R18, 19, 165	Resistor	36 Ω
R15, 17, 157, 181, 209	Resistor	150 Ω
R39	Resistor	1.5 k Ω
R26, 27	Resistor	270 k Ω
R23, 47, 48, 49, 179	Resistor	10 k Ω
R28, 38	Resistor	33 Ω
R20	Resistor	3.9 k Ω
R31, 77	Resistor	18 Ω
R76	Resistor	47 Ω
R34, 180	Resistor	470 Ω
R32	Resistor	820 Ω
R178	Resistor	39 k Ω
R58	Resistor	270 Ω
R16	Resistor	180 Ω
R73	Resistor	1.8 k Ω
R35, 36, 127, 144	Resistor	56 k Ω
R37	Resistor	464 Ω
R24, 25, 42	Resistor	100 k Ω



Part No.	Part name	Description
CR1, 3, 4	Diode	FMMD7000
CR2	Diode	SMV1204-33
Q15	Transistor	FMMT-2222ATA
Q13	Transistor	MMBT2907A
Q6, 7	Transistor	MMBF5484LT
Q11, 12	Transistor	MMBT2369
Q17	Transistor	BFG505/X
Q5	Transistor	NE85619
Q14	Transistor	ZVN3306FTA
Q10	Transistor	MIC94030



Part list of Circuit diagram 3

Part No.	Part name	Description
F8	Filter	2.4 GHz
C4	Capacitor	4.7 pF
C38	Capacitor	10 pF
C186	Capacitor	22 pF
C8	Capacitor	1000 pF
C64	Capacitor	2200 pF
C53, 132, 134, 141, 145, 146 147, 148, 156	Capacitor	0.01 uF
C48, 66, 67, 69, 70,	Capacitor	0.1 uF
C63	Capacitor	220 pF
C135	Capacitor	470 pF
C2	Capacitor	3.3 pF
C158, 159	Capacitor	100 pF
C1	Capacitor	68 pF
C68, 188	Capacitor	1 uF
C50, 162, 190	Capacitor	1.5 pF
C44, 52, 54, 55, 99, 100, 119	Capacitor	4.7 pF
C56	Capacitor	1.2 pF
C51, 58	Capacitor	2200 pF
C39, 138, 154	Capacitor	0.01 uF
C98	Capacitor	12 pF
C46, 47	Capacitor	470 pF
C137	Capacitor	47 pF
C59, 96, 187	Capacitor	1000 pF
L6	Inductor	4.7 nH
L5, 11	Inductor	120 nH
L1	Inductor	220 nH
L8	Inductor	2.2 nH
L9, 10	Inductor	1.2 nH
L13	Inductor	4.7 nH
J3	Connector	
Y3	Crystal	98.5 MHz
F3	Filter	110.6 MHz
F1	Filter	2.4 GHz
U13	IC	PX240C
U3	IC	CXD1172AM
U10	IC	uPC2713
U6	IC	MGA87563
U2	IC	SA636DK
F2	Resistor	0 Ω
R1	Resistor	33 Ω
R7, 66, 95	Resistor	1 k Ω
R2, 190, 193	Resistor	1.8 k Ω
R139	Resistor	8.2 k Ω
R54	Resistor	10 k Ω
R67, 68	Resistor	56 k Ω
R57	Resistor	150 Ω
R138	Resistor	120 Ω



Part No.	Part name	Description
R52, 191, 192	Resistor	0 Ω
R140	Resistor	22 k Ω
R141	Resistor	6.8 k Ω
R51, 98, 200, 201	Resistor	10 Ω
R56, 155, 158, 189, 199	Resistor	100 Ω
R129, 130	Resistor	1.5 k Ω
R120	Resistor	10 k Ω
R71, 72, 156	Resistor	680 Ω
R125	Resistor	22 k Ω
Q9	Transistor	ZVP3306FTA
Q16	Transistor	ZVN3306FTA
Q19	Transistor	MIC94030



Marking location

