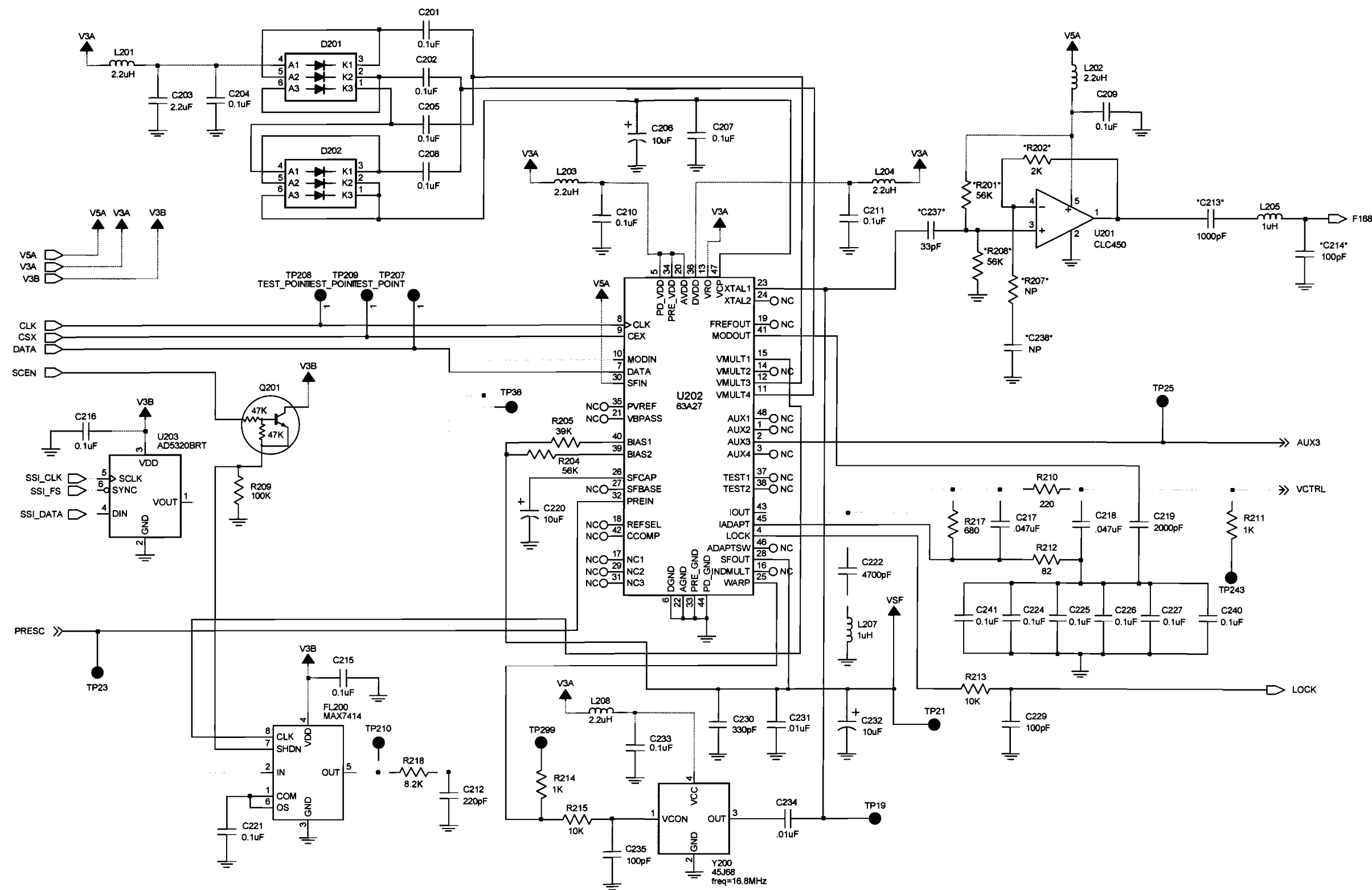
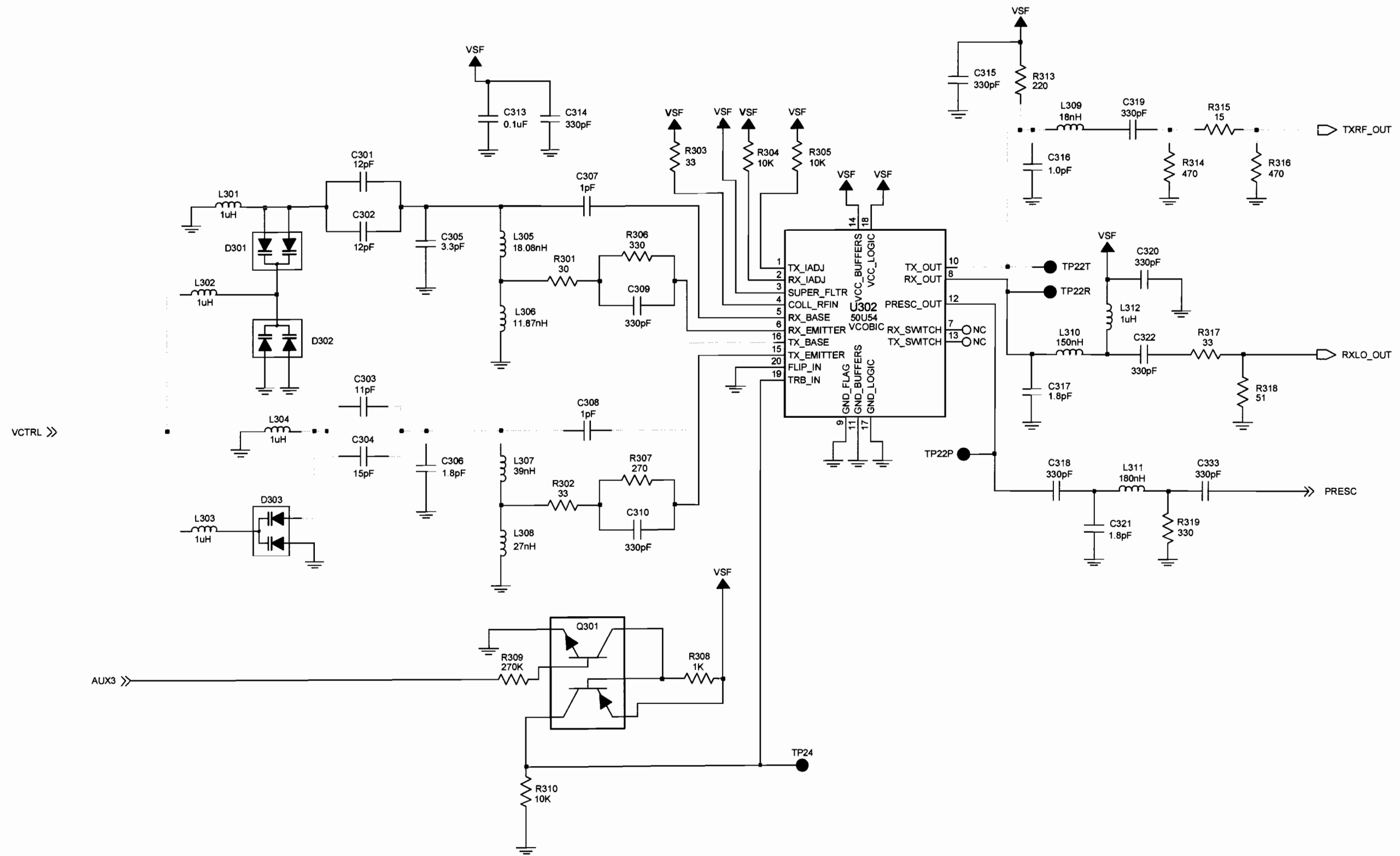




63B81096C59-O

Figure 8-27. NLD8910B VHF Frequency Generation Unit (Synthesizer) Circuit



63B81096C60-O

Figure 8-28. NLD8910B VHF Frequency Generation Unit (VCO) Circuit

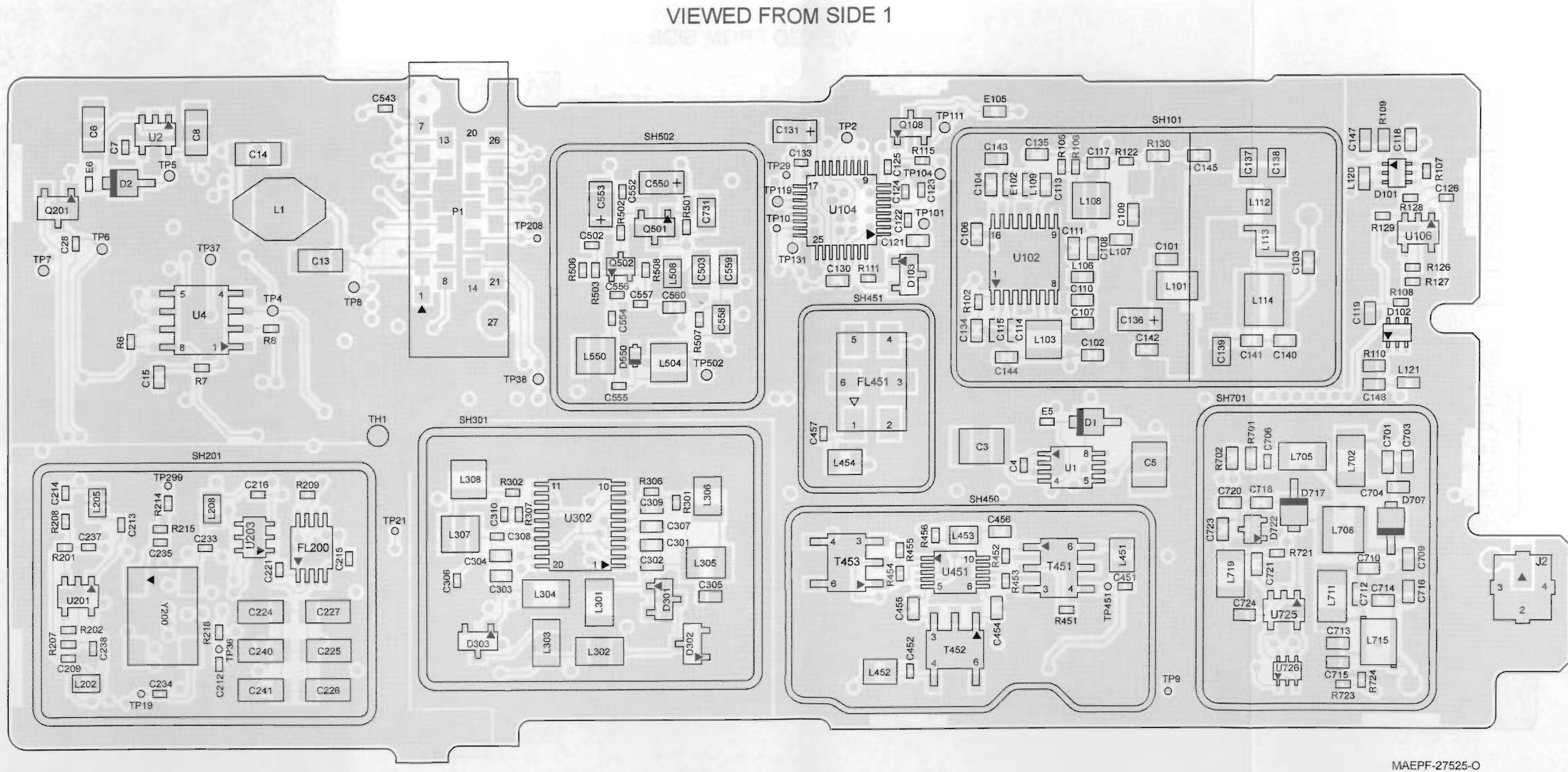


Figure 8-29. NLD8910B VHF Transceiver (RF) Board Layout—Side 1

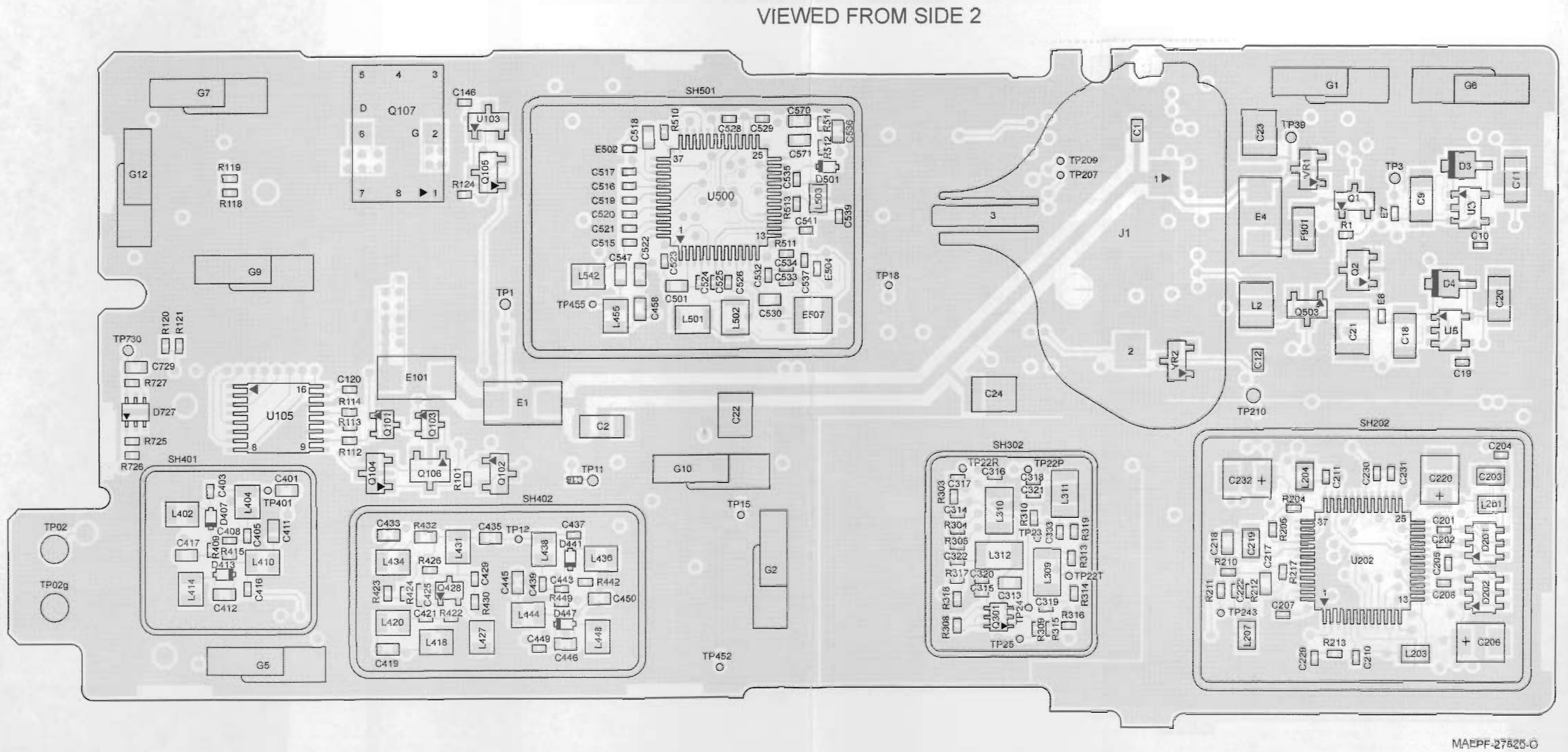


Figure 8-30. NLD8910B VHF Transceiver (RF) Board Layout—Side 2

NLD8910B VHF Transceiver (RF) Board Parts List

Ref. Des.	Part Number	Description
—	0005075C01	RF & VOCON BD TEST FOR XTS5000
—	1105033S02	RIBBON LABEL LT. PACK LABEL
—	1105033S13	RIBBON LBL
—	5405569Y02	LBL BARCODE APC
—	5405569Y03	LABEL BARCODE
—	5685647D01	UNI-BOARD CLAMSHELL
C1	2113741F49	CAP CHIP CL2 X7R REEL 10000
C10	2113743L41	CAP CHIP 10000 PF 10% X7R
C101	2113743E20	CAP CHIP .10 UF 10%
C102	2113741F49	CAP CHIP CL2 X7R REEL 10000
C103	2113740F63	CAP CHIP CL1 +/-30 330 5%
C104	2113741F49	CAP CHIP CL2 X7R REEL 10000
C106	2113740F63	CAP CHIP CL1 +/-30 330 5%
C107	2113740F63	CAP CHIP CL1 +/-30 330 5%
C108	2113740F38	CAP CHIP REEL CL1 +/-30 30
C109	2113740F49	CAP CHIP REEL CL1 +/-30 82
C11	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C110	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C111	2113740F27	CAP CHIP REEL CL1 +/-30 10
C113	2113740F45	CAP CHIP REEL CL1 +/-30 56
C114	2113740F63	CAP CHIP CL1 +/-30 330 5%

Ref. Des.	Part Number	Description
C115	2113740F63	CAP CHIP CL1 +/-30 330 5%
C117	2113740F63	CAP CHIP CL1 +/-30 330 5%
C118	2113740F63	CAP CHIP CL1 +/-30 330 5%
C119	2113740F63	CAP CHIP CL1 +/-30 330 5%
C12	2113740F63	CAP CHIP CL1 +/-30 330 5%
C120	2113743L41	CAP CHIP 10000 PF 10% X7R
C121	2113740F63	CAP CHIP CL1 +/-30 330 5%
C122	2113743L21	CAP CHIP 1500 PF 10% X7R
C123	2113743L09	CAP CHIP 470 PF 10% X7R
C124	2113946A01	CAP CER CHP 0.015UF 16V 10%
C125	2113743L41	CAP CHIP 10000 PF 10% X7R
C126	2113743L41	CAP CHIP 10000 PF 10% X7R
C13	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C130	2113743E20	CAP CHIP .10 UF 10%
C131	2311049A37	CAP TANT CHIP 1 20 20
C133	2113743L41	CAP CHIP 10000 PF 10% X7R
C134	2113740F63	CAP CHIP CL1 +/-30 330 5%
C135	2113740F63	CAP CHIP CL1 +/-30 330 5%
C136	2311049A37	CAP TANT CHIP 1 20 20
C137	2113742J08	CAP 33.0 PF 5%
C138	2113742J08	CAP 33.0 PF 5%
C139	2113742J04	CAP, 22PF 5% 0805 ACCU-P
C14	2113743S01	CAP CER CHIP 1.0 UF 10% 16V

Ref. Des.	Part Number	Description
C140	2113740F31	CAP CHIP REEL CL1 +/-30 15
C141	2113740F31	CAP CHIP REEL CL1 +/-30 15
C142	2113740F63	CAP CHIP CL1 +/-30 330 5%
C143	2113740F63	CAP CHIP CL1 +/-30 330 5%
C144	2113740F63	CAP CHIP CL1 +/-30 330 5%
C145	2113740F31	CAP CHIP REEL CL1 +/-30 15
C146	2113743L41	CAP CHIP 10000 PF 10% X7R
C147	2113740F47	CAP CHIP REEL CL1 +/-30 68
C148	2113740F47	CAP CHIP REEL CL1 +/-30 68
C15	2113743E20	CAP CHIP .10 UF 10%
C16	2113743N13	CAP CHIP 3.0 PF +/-25PF COG
C18	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C19	2113743L41	CAP CHIP 10000 PF 10% X7R
C2	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C20	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C201	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C202	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C203	2113743F18	CAP CHIP 2.2 UF 16V
C204	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C205	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C206	2311049A57	CAP TANT CHIP A/P 10UF 10% 16V

Ref. Des.	Part Number	Description
C207	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C208	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C209	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C21	2113743T19	CAP 10UF 16V CER 3225 X5R
C210	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C211	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C212	2113743L01	CAP CHIP 220 PF 10% X7R
C213	2113743L17	CAP CHIP 1000 PF 10% X7R
C214	2113743N50	CAP CHIP 100 PF 5% COG
C215	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C216	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C217	2113743E12	CAP CHIP .047 UF 10% X7R
C218	2113743E12	CAP CHIP .047 UF 10% X7R
C219	2109720D20	CAP CHIP LOW DIST 2000 SOV
C22	2113743T19	CAP 10UF 16V CER 3225 X5R
C220	2311049A57	CAP TANT CHIP A/P 10UF 10% 16V
C221	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C222	2113743L33	CAP CHIP 4700 PF 10% X7R
C224	2109720D14	CAP CER CHIP LOW DIST .1 UF
C225	2109720D14	CAP CER CHIP LOW DIST .1 UF
C226	2109720D14	CAP CER CHIP LOW DIST .1 UF

Ref. Des.	Part Number	Description
C227	2109720D14	CAP CER CHIP LOW DIST .1 UF
C229	2113743N50	CAP CHIP 100 PF 5% COG
C23	2113743T19	CAP 10UF 16V CER 3225 X5R
C230	2113743L05	CAP CHIP 330 PF 10% X7R
C231	2113743L41	CAP CHIP 10000 PF 10% X7R
C232	2311049A57	CAP TANT CHIP A/P 10UF 10% 16V
C233	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C234	2113743L41	CAP CHIP 10000 PF 10% X7R
C235	2113743N50	CAP CHIP 100 PF 5% COG
C237	2113743N38	CAP CHIP 33.0 PF 5% COG
C238	NOTPLACED	NOT PLACED
C24	2113743T19	CAP 10UF 16V CER 3225 X5R
C240	2109720D14	CAP CER CHIP LOW DIST .1 UF
C241	2109720D14	CAP CER CHIP LOW DIST .1 UF
C28	2113743L17	CAP CHIP 1000 PF 10% X7R
C3	2113743T19	CAP 10UF 16V CER 3225 X5R
C301	2113740F29	CAP CHIP REEL CL1 +/-30 12
C302	2113740F29	CAP CHIP REEL CL1 +/-30 12
C303	2113740F28	CAP CHIP REEL CL1 +/-30 11
C304	2113740F31	CAP CHIP REEL CL1 +/-30 15
C305	2113740F15	CAP CHIP REEL CL1 +/-30 3.3
C306	2104801Z12	CAP CER NPO 1.8PF 16V 1005 SMD

Ref. Des.	Part Number	Description
C307	2113740F03	CAP CHIP REEL CL1 +/-30 1.0
C308	2113743Q03	CAP CHIP 1.0 PF +/- .1PF 20*40
C309	2113740F63	CAP CHIP CL1 +/-30 330 5%
C310	2113743L05	CAP CHIP 330 PF 10% X7R
C313	2113743E20	CAP CHIP .10 UF 10%
C314	2113743L05	CAP CHIP 330 PF 10% X7R
C315	2113743L05	CAP CHIP 330 PF 10% X7R
C316	2104801Z06	CAP CER NPO 1.0PF 16V 1005 SMD
C317	2104801Z12	CAP CER NPO 1.8PF 16V 1005 SMD
C318	2113743L05	CAP CHIP 330 PF 10% X7R
C319	2113743L05	CAP CHIP 330 PF 10% X7R
C320	2113743L05	CAP CHIP 330 PF 10% X7R
C321	2104801Z12	CAP CER NPO 1.8PF 16V 1005 SMD
C322	2113743L05	CAP CHIP 330 PF 10% X7R
C333	2113743L05	CAP CHIP 330 PF 10% X7R
C4	2113743L41	CAP CHIP 10000 PF 10% X7R
C401	2113743E20	CAP CHIP .10 UF 10%
C403	2113743N30	CAP CHIP 15.0 PF 5% COG
C405	2113743N26	CAP CHIP 10.0 PF 5% COG
C408	2113743N30	CAP CHIP 15.0 PF 5% COG
C411	2113740F67	CAP CHIP CL1 +/-30 470 5%
C412	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C416	2113743N40	CAP CHIP 39.0 PF 5% COG
C417	2113743E20	CAP CHIP .10 UF 10%
C419	2113743E20	CAP CHIP .10 UF 10%
C421	2113743N25	CAP CHIP 9.1 PF + .5PF COG
C425	2113743E20	CAP CHIP .10 UF 10%

Ref. Des.	Part Number	Description
C429	2113743Q22	CAP CHIP 6.8 PF +/-0.25 PF 16V
C433	2113743E20	CAP CHIP .10 UF 10%
C435	2113743E20	CAP CHIP .10 UF 10%
C437	2113743N30	CAP CHIP 15.0 PF 5% COG
C439	2113743N26	CAP CHIP 10.0 PF 5% COG
C443	2113743N30	CAP CHIP 15.0 PF 5% COG
C445	2113740F67	CAP CHIP CL1 +/-30 470 5%
C446	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C449	2113743N40	CAP CHIP 39.0 PF 5% COG
C450	2113743E20	CAP CHIP .10 UF 10%
C451	2113743N35	CAP 24PF 20X40
C452	2113743N14	CAP CHIP 3.3 PF +/- .25PF COG
C454	2113740F63	CAP CHIP CL1 +/-30 330 5%
C455	2113740F63	CAP CHIP CL1 +/-30 330 5%
C456	2113743E20	CAP CHIP .10 UF 10%
C457	2113743N30	CAP CHIP 15.0 PF 5% COG
C458	2113740F33	CAP CHIP REEL CL1 +/-30 18
C5	2113743T19	CAP 10UF 16V CER 3225 X5R
C501	2113740F58	CAP CHIP REEL CL1 +/-30 200
C502	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C503	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C515	2113743L41	CAP CHIP 10000 PF 10% X7R
C516	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C517	2113743M24	CAP CHIP 100000 PF +80-20% Y5V

Ref. Des.	Part Number	Description
C518	2113743E12	CAP CHIP .047 UF 10% X7R
C519	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C520	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C521	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C522	2113743E12	CAP CHIP .047 UF 10% X7R
C523	2113743N50	CAP CHIP 100 PF 5% COG
C524	2113743N50	CAP CHIP 100 PF 5% COG
C525	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C526	2113743L25	CAP CHIP 2200 PF 10% X7R
C528	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C529	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C530	2113743E12	CAP CHIP .047 UF 10% X7R
C532	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C533	2113743N50	CAP CHIP 100 PF 5% COG
C534	2113743N50	CAP CHIP 100 PF 5% COG
C535	2113743N46	QAP CHIP 68.0 PF 5% COG
C536	2113743E10	CAP CHIP .033 UF 10% X7R
C537	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C539	2113743L41	CAP CHIP 10000 PF 10% X7R
C541	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C543	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C547	2113740F33	CAP CHIP REEL CL1 +/-30 18

Ref. Des.	Part Number	Description
C550	2311049A62	CAP TAN CHIP A/P 4.7 10 10
C552	2113743L41	CAP CHIP 10000 PF 10% X7R
C553	2311049A62	CAP TAN CHIP A/P 4.7 10 10
C554	2113743N43	CAP CHIP 51.0 PF 5% COG
C555	2113743N45	CAP CHIP 62.0 PF 5% COG
C556	2113743N46	QAP CHIP 68.0 PF 5% COG
C557	2113743N50	CAP CHIP 100 PF 5% COG
C558	2113743A24	CAP CHIP .330 UF 10% 16V
C559	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C560	2113740F33	CAP CHIP REEL CL1 +/-30 18
C570	2113743E20	CAP CHIP .10 UF 10%
C571	2113743E20	CAP CHIP .10 UF 10%
C6	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C7	2113743L41	CAP CHIP 10000 PF 10% X7R
C701	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C703	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C704	2113740F30	CAP CHIP REEL CL1 +/-30 13
C706	2113743L41	CAP CHIP 10000 PF 10% X7R
C709	2113740F31	CAP CHIP REEL CL1 +/-30 15
C710	2113740F41	CAP CHIP REEL CL1 +/-30 39
C712	2113740F27	CAP CHIP REEL CL1 +/-30 10
C713	2113740F30	CAP CHIP REEL CL1 +/-30 13

Ref. Des.	Part Number	Description
C714	2113740F18	CAP CHIP REEL CL1 +/-30 4.3
C715	2113740F27	CAP CHIP REEL CL1 +/-30 10
C716	2113740F26	CAP CHIP REEL CL1 +/-30 9.1
C718	2113740F59	CAP CHIP REEL CL1 +/-30 220
C720	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C721	2113743E20	CAP CHIP .10 UF 10%
C723	2113740F59	CAP CHIP REEL CL1 +/-30 220
C724	2113740F63	CAP CHIP CL1 +/-30 330 5%
C729	NOTPLACED	NOT PLACED
C731	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C8	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C9	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
D1	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D101	4802197J83	DUAL SHOTTKY DIODE MBD330DWT1
D102	4802197J83	DUAL SHOTTKY DIODE MBD330DWT1
D103	4805129M06	DIODE MMBD7000
D2	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D201	4802233J09	DIODE TRIPLE SOT25-RH
D202	4802233J09	DIODE TRIPLE SOT25-RH
D3	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D301	4805649Q13	DIODE VCTR ISV 228
D302	4805649Q13	DIODE VCTR ISV 228
D303	4805649Q13	DIODE VCTR ISV 228

Ref. Des.	Part Number	Description
D4	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D407	4809877C13	DIODE VARACTOR ISV305 SMD
D413	4809877C13	DIODE VARACTOR ISV305 SMD
D441	4809877C13	DIODE VARACTOR ISV305 SMD
D447	4809877C13	DIODE VARACTOR ISV305 SMD
D501	4809877C08	DIODE VARACTOR 1SV279 SMD
D550	4805656W41	DIODE VARACTOR 40PF@1V 15PF@3V
D707	4805656W24	DIODE, PIN RF
D717	4805656W24	DIODE, PIN RF
D722	4805656W40	DIODES SCHOTTKY BAR-RIER
D727	NOTPLACED	NOT PLACED
E1	2405688Z01	INDUCTOR FERRITE BEAD
E101	2405688Z01	INDUCTOR FERRITE BEAD
E102	2480574F01	IND FERRITE CHIP 600 OHM 0603
E105	2480574F01	IND FERRITE CHIP 600 OHM 0603
E4	2405688Z01	INDUCTOR FERRITE BEAD
E5	2480640Z01	SURFACE MOUNT FER-RITE BEAD
E502	2480640Z01	SURFACE MOUNT FER-RITE BEAD
E504	2480640Z01	SURFACE MOUNT FER-RITE BEAD
E507	2462587N76	CHIP IND 4700 NH 5%
E6	2480640Z01	SURFACE MOUNT FER-RITE BEAD
E7	2480640Z01	SURFACE MOUNT FER-RITE BEAD

Ref. Des.	Part Number	Description
E8	2480640Z01	SURFACE MOUNT FER-RITE BEAD
F901	6505757V02	FUSE SURFACE MT 2AMP
FL200	9185130D01	FLTR SW CAP 3 POLE BUTTERW
FL451	9185875D01	CRYSTAL FILTER 44.85 MHZ
G1	3905643V01	CONTACT ANT GRD
G10	3905643V01	CONTACT ANT GRD
G12	3905643V01	CONTACT ANT GRD
G2	3905643V01	CONTACT ANT GRD
G5	3905643V01	CONTACT ANT GRD
G6	3905643V01	CONTACT ANT GRD
G7	3905643V01	CONTACT ANT GRD
G9	3905643V01	CONTACT ANT GRD
J1	NOTPLACED	NOT PLACED
J2	0905304Z01	CONN COAXIAL SMT
L1	2486085A06	COIL 47UH SMT POWER INDUCTOR
L101	2460591E24	COIL AIR WOUND INDUC 23.75
L103	2462587N56	CHIP IND 180 NH 5%
L106	2485930A13	IND 33.0NH 5%
L107	2413926G11	IND 22.0 NH 5%
L108	2462587N68	CHIP IND 1000 NH 5%
L109	2485930A05	IND 6.8 NH 5%
L112	2479990B01	AIR WND COIL/GREEN COLOR 11.03
L113	2409348J01	IND AIR CORE 1.65NH 10% 2214
L114	2460591M62	COIL AIR WOUND INDUC 25.22
L120	2485930A10	IND 18.0NH 5%
L121	2485930A10	IND 18.0NH 5%
L2	2462587L50	FERRITE INDUCTOR 100UH

Ref. Des.	Part Number	Description
L201	2462587Q20	IND CHIP 2,200 NH 20%
L202	2462587Q20	IND CHIP 2,200 NH 20%
L203	2462587Q20	IND CHIP 2,200 NH 20%
L204	2462587Q20	IND CHIP 2,200 NH 20%
L205	2462587Q47	IND CHIP 1,000 NH 10%
L207	2462587Q47	IND CHIP 1,000 NH 10%
L208	2462587Q20	IND CHIP 2,200 NH 20%
L301	2462587T30	IND CHIP 1000NH 5% LOW PRO
L302	2462587T30	IND CHIP 1000NH 5% LOW PRO
L303	2462587T30	IND CHIP 1000NH 5% LOW PRO
L304	2462587T30	IND CHIP 1000NH 5% LOW PRO
L305	2460591C35	COIL AIR WOUND INDUC 18.08
L306	2460591C03	COIL AIR WOUND INDUC 11.87
L307	2462587N48	CHIP IND 39 NH 5%
L308	2462587N46	COIL INDUCTOR
L309	2462587T37	IND CHIP 18NH 5% LOW PRO
L310	2462587T17	IND CHIP 150NH 5% LOW PRO
L311	2462587T18	IND CHIP 180NH 5% LOW PRO
L312	2462587T30	IND CHIP 1000NH 5% LOW PRO
L402	2462587V33	CHIP IND 82 NH 5% 0805
L404	2462587V34	CHIP IND 100 NH 5% 0805
L410	2462587V27	CHIP IND 27 NH 5% 0805
L414	2462587V26	CHIP IND 22 NH 5% 0805
L418	2462587V38	CHIP IND 220 NH 5% 0805
L420	2462587V31	CHIP IND 56 NH 5% 0805
L427	2462587V26	CHIP IND 22 NH 5% 0805
L431	2462587V34	CHIP IND 100 NH 5% 0805

Ref. Des.	Part Number	Description
L434	2462587V35	CHIP IND 120 NH 5% 0805
L436	2462587V33	CHIP IND 82 NH 5% 0805
L438	2462587V34	CHIP IND 100 NH 5% 0805
L444	2462587V27	CHIP IND 27 NH 5% 0805
L448	2462587V26	CHIP IND 22 NH 5% 0805
L451	2462587V23	CHIP IND 12 NH 5% 0805
L452	2462587V29	CHIP IND 39 NH 5% 0805
L453	2462587Q40	IND CHIP 270 NH 10%
L454	2462587V73	IND CHIP 820.0 NH 5%
L455	2462587V74	INDUCTOR
L501	2405769X05	COIL INDUCTOR
L502	2405769X05	COIL INDUCTOR
L503	2462587Q54	IND CHIP 3,900 NH 10%
L504	2462587N76	CHIP IND 4700 NH 5%
L508	2462587Q51	IND CHIP 2,200 NH 10%
L542	2462587V74	INDUCTOR
L550	2462587N59	CHIP IND 330NH 5%
L702	2460591G24	COIL AIR WOUND INDUC 33.47
L705	2462587T30	IND CHIP 1000NH 5% LOW PRO
L708	2460591E81	COIL AIR WOUND INDUC 52.29
L711	2460591G24	COIL AIR WOUND INDUC 33.47
L715	2460591D81	COIL AIR WOUND INDUC 43.41
L719	2462587T19	IND CHIP 220NH 5% LOW PRO
P1	NOTPLACED	NOT PLACED
PCB	8485369D01	PCB RF VHF
Q1	4813821A47	TSTR P-CH HDTMOS 20V
Q101	4813824A42	TSTR PNP 50V BIAS RES 10K 10K
Q102	4813821A47	TSTR P-CH HDTMOS 20V

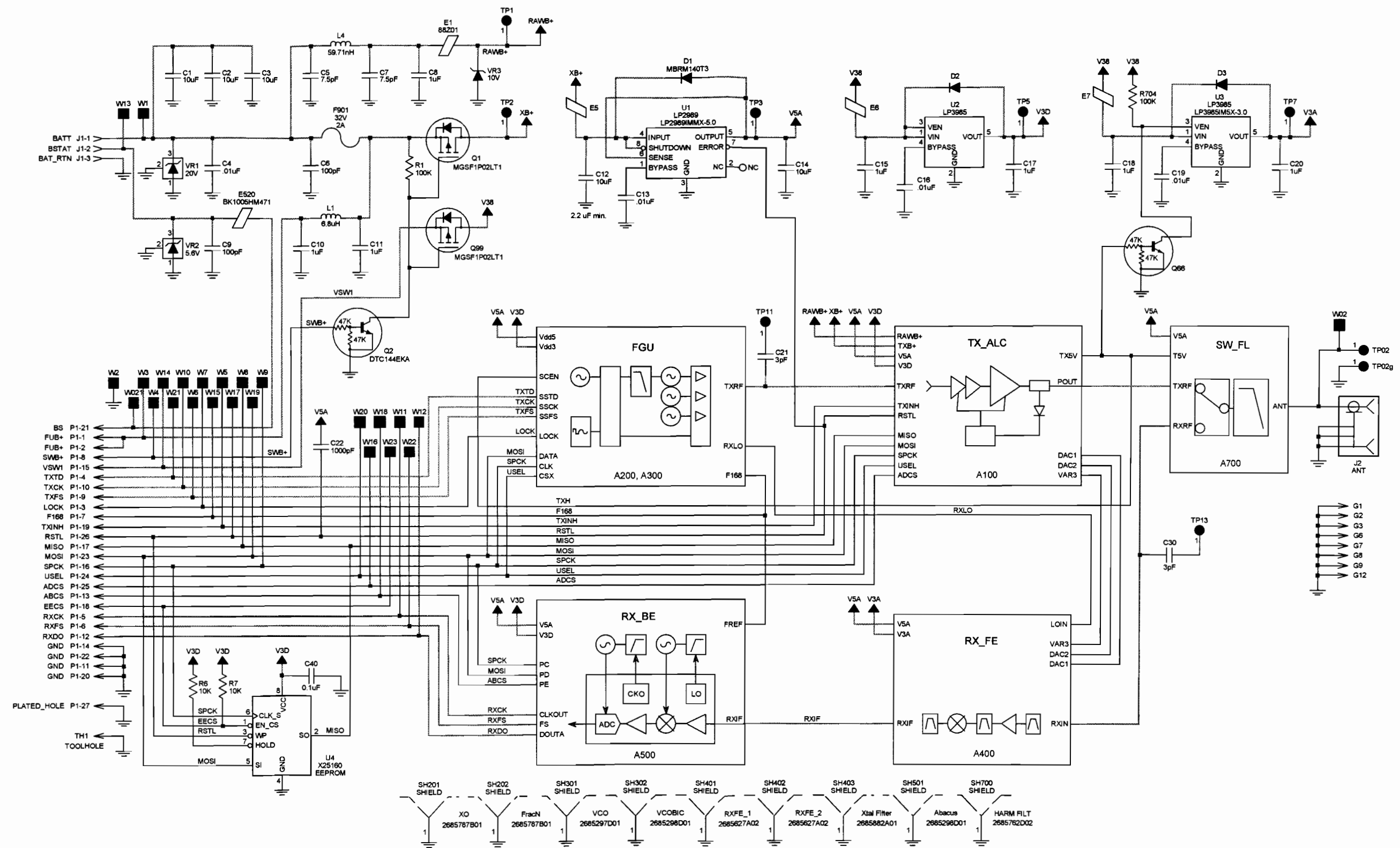
Ref. Des.	Part Number	Description
Q103	4813824A42	TSTR PNP 50V BIAS RES 10K 10K
Q104	4813821A47	TSTR P-CH HDTMOS 20V
Q105	4805128M12	TSTR SOT BCW60B (RH)
Q106	4880048M01	TSTR NPN DIG 47K/47K
Q107	5185633C28	MODULE 24 CELL PWR AMPLIFIER
Q108	4805128M12	TSTR SOT BCW60B (RH)
Q2	4880048M01	TSTR NPN DIG 47K/47K
Q201	4880048M01	TSTR NPN DIG 47K/47K
Q301	4805921T11	XSTR DUAL PNP
Q428	4805218N63	RF TRANS SOT 323 Bfq67W
Q501	4805128M19	TSTR SOT23 MMBTA13 RH
Q502	4805218N63	RF TRANS SOT 323 Bfq67W
Q503	4813821A47	TSTR P-CH HDTMOS 20V
R1	0662057N23	RES. CHIP 100K 5% 20X40
R101	0662057N23	RES. CHIP 100K 5% 20X40
R102	0662057M01	RES. CHIP 0 5% 20X40
R105	0662057M98	RES. CHIP 10K 5% 20X40
R106	0662057N13	RES. CHIP 39K 5% 20X40
R107	0662057M90	RES. CHIP 4700 5% 20X40
R108	0662057M90	RES. CHIP 4700 5% 20X40
R109	0662057T68	RES CHIP1.0K 1% 30X60
R110	0662057T68	RES CHIP1.0K 1% 30X60
R111	0662057N23	RES. CHIP 100K 5% 20X40
R112	0662057N23	RES. CHIP 100K 5% 20X40
R113	0662057N23	RES. CHIP 100K 5% 20X40
R114	0662057N23	RES. CHIP 100K 5% 20X40
R115	0662057M74	RES. CHIP 1000 5% 20X40
R118	0662057M50	RES. CHIP 100 5% 20X40
R119	0662057M50	RES. CHIP 100 5% 20X40
R120	0662057M50	RES. CHIP 100 5% 20X40

Ref. Des.	Part Number	Description
R121	0662057M50	RES. CHIP 100 5% 20X40
R122	0662057M74	RES. CHIP 1000 5% 20X40
R124	0662057N23	RES. CHIP 100K 5% 20X40
R126	0662057M98	RES. CHIP 10K 5% 20X40
R127	0662057M98	RES. CHIP 10K 5% 20X40
R128	0662057M98	RES. CHIP 10K 5% 20X40
R129	0662057M98	RES. CHIP 10K 5% 20X40
R130	0662057A37	CHIP RES 330 OHMS 5%
R201	0662057N17	RES. CHIP 56K 5% 20X40
R202	0662057M81	RES. CHIP 2000 5% 20X40
R204	0662057N17	RES. CHIP 56K 5% 20X40
R205	0662057N13	RES. CHIP 39K 5% 20X40
R207	NOTPLACED	NOT PLACED
R208	0662057N17	RES. CHIP 56K 5% 20X40
R209	0662057N23	RES. CHIP 100K 5% 20X40
R210	0662057M58	RES. CHIP 220 5% 20X40
R211	0662057M74	RES. CHIP 1000 5% 20X40
R212	0662057M48	RES. CHIP 82 5% 20X40
R213	0662057M98	RES. CHIP 10K 5% 20X40
R214	0662057M74	RES. CHIP 1000 5% 20X40
R215	0662057M98	RES. CHIP 10K 5% 20X40
R217	0662057M70	DES. CHIP 680 5% 20X40
R218	0662057M96	RES. CHIP 8200 5% 20X40
R301	0662057M37	20X40 30 OMH 5% CHIP RESISTOR
R302	0662057M38	RES. CHIP 33 5% 20X40
R303	0662057M38	RES. CHIP 33 5% 20X40
R304	0662057M98	RES. CHIP 10K 5% 20X40
R305	0662057M98	RES. CHIP 10K 5% 20X40
R306	0662057M62	RES. CHIP 330 5% 20X40
R307	0662057M60	RES. CHIP 270 5% 20X40
R308	0662057M74	RES. CHIP 1000 5% 20X40
R309	0662057N33	RES CHIP 270K 5% 20X40

Ref. Des.	Part Number	Description
R310	0662057M98	RES. CHIP 10K 5% 20X40
R313	0662057M58	RES. CHIP 220 5% 20X40
R314	0662057M66	RES. CHIP 470 5% 20X40
R315	0662057M30	RES. CHIP 15 5% 20X40
R316	0662057M66	RES. CHIP 470 5% 20X40
R317	0662057M38	RES. CHIP 33 5% 20X40
R318	0662057M43	RES. CHIP 51 5% 20X40
R319	0662057M62	RES. CHIP 330 5% 20X40
R409	0662057N29	RES CHIP 180K 5% 20X40
R415	0662057N29	RES CHIP 180K 5% 20X40
R422	0662057M26	RES. CHIP 10 5% 20X40
R423	0662057N29	RES CHIP 180K 5% 20X40
R424	0662057N29	RES CHIP 180K 5% 20X40
R426	0662057M84	RES. CHIP 2700 5% 20X40
R430	0662057M26	RES. CHIP 10 5% 20X40
R432	0662057A09	CHIP RES 22 OHMS 5%
R442	0662057N29	RES CHIP 180K 5% 20X40
R449	0662057N29	RES CHIP 180K 5% 20X40
R451	0662057M37	20X40 30 OMH 5% CHIP RESISTOR
R452	0662057M36	RES. CHIP 27 5% 20X40
R453	0662057M36	RES. CHIP 27 5% 20X40
R454	0662057M92	RES. CHIP 5600 5% 20X40
R455	0662057M92	RES. CHIP 5600 5% 20X40
R456	0662057M54	RES. CHIP 150 5% 20X40
R501	0662057N17	RES. CHIP 56K 5% 20X40
R502	0662057M63	RES CHIP 360 5% 20X40
R503	0662057N05	RES. CHIP 18K 5% 20X40
R506	0662057N01	RES CHIP 12K 5% 20X40
R507	0662057M75	RESISTOR
R508	0662057M69	RES. CHIP 620 5% 20X40
R510	0662057M98	RES. CHIP 10K 5% 20X40
R511	0662057N23	RES. CHIP 100K 5% 20X40

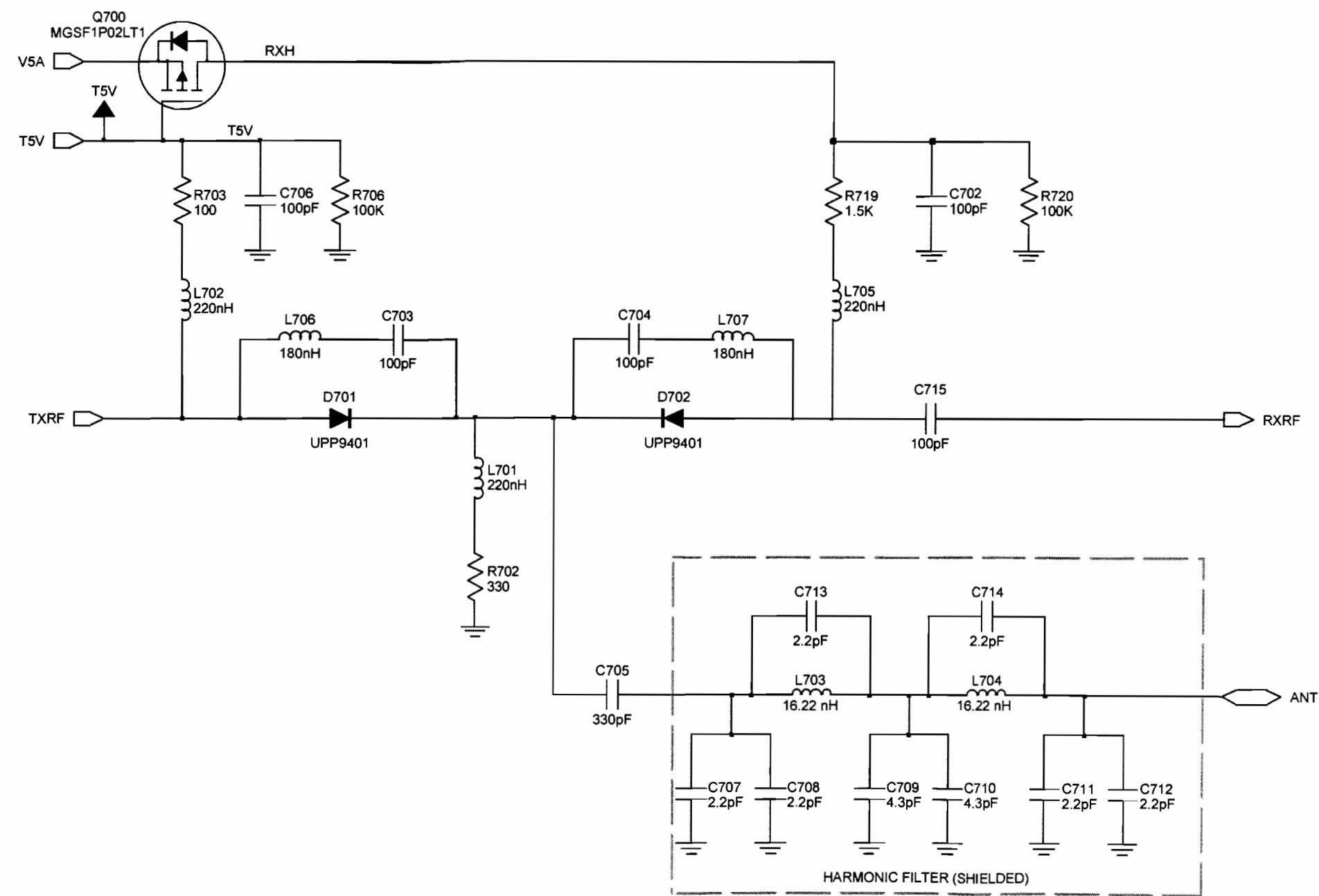
Ref. Des.	Part Number	Description
R512	0662057M98	RES. CHIP 10K 5% 20X40
R513	0662057M98	RES. CHIP 10K 5% 20X40
R514	0662057M80	RES. CHIP 1800 5% 20X40
R6	0662057M98	RES. CHIP 10K 5% 20X40
R7	0662057M98	RES. CHIP 10K 5% 20X40
R701	0662057A23	CHIP RES 82 OHMS 5%
R702	0662057A23	CHIP RES 82 OHMS 5%
R721	NOTPLACED	NOT PLACED
R723	0662057M50	RES. CHIP 100 5% 20X40
R724	0662057M50	RES. CHIP 100 5% 20X40
R725	0662057M81	RES. CHIP 2000 5% 20X40
R726	0662057M81	RES. CHIP 2000 5% 20X40
R727	NOTPLACED	NOT PLACED
R8	0662057M50	RES. CHIP 100 5% 20X40
SH101	2685074D01	SHIELD PA
SH201	2685787B01	SHLD FRAC-N
SH202	2685787B01	SHLD FRAC-N
SH301	2685297D01	SHLD VCO
SH302	2685310E01	SHIELD VCO BUFFER
SH401	2685071D01	SHIELD 16.8 REF
SH402	2685153E01	SHIELD LNA
SH450	2685965D01	SHIELD MIXER
SH451	2685070D01	SHIELD CRYSTAL FILTER
SH501	2685787B01	SHLD FRAC-N
SH502	2685786D01	SHIELD ABACUS 2ND LO
SH701	2685784D01	SHIELD HARMONIC FILTER
T451	2580541Z02	BALUN TRANSFORMER (NEW)
T452	2585918C02	XFRMR SMALL SIGNAL SURFACE MOUNT
T453	2585918C01	XFMR SMALL SIGNAL SURFACE MT
U1	5185353D13	IC MINI SO-8 HI PRECISION REG 5V

Ref. Des.	Part Number	Description
U102	5185130C65	IC VHF/UHF/800 MHZ LDMOS DRIVER
U103	5185963A15	IC TEMPERTURE SENSOR 1M50C
U104	5185765B26	IC PWR CTRL IN MOS20
U105	5185368C19	IC QUAD 10 BIT A/D CONV
U106	5185963A60	OP AMP IC
U2	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U201	5186358E01	IC ANALOG OP-AMP CLC450
U202	5185963A27	IC TESTED AT25016 48 PIN GFP
U203	5185368C83	IC 12 BIT DAC
U3	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U302	5105750U54	IC PKG DIE VCO BUFFER
U4	5105462G78	IC EEPROM 16K SPEI CMOS
U451	5185130C91	IC MIXER RF SOIC 10
U5	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U500	5185963A85	IC-ABACUS III-LP
U725	5185130C83	IC 15DB DIGITAL ATTEUA-TOR SOT25 PKG
U726	5185143E12	IC INVERTER DUAL SC70
VR1	4813830A33	DIODE 20V 5% 225MW MMBZ5250B_
VR2	4813830A33	DIODE 20V 5% 225MW MMBZ5250B_
Y200	4802245J68	OSC REF 16.8 MHZ 1.5 PPM



63B81096C96-O

Figure 8-31. NLE4272A UHF Range 1 Transceiver (RF) Board Overall Circuit Schematic



63B81096C97-O

Figure 8-32. NLE4272A UHF Range 1 Antenna Switch and Harmonic Filter Circuits

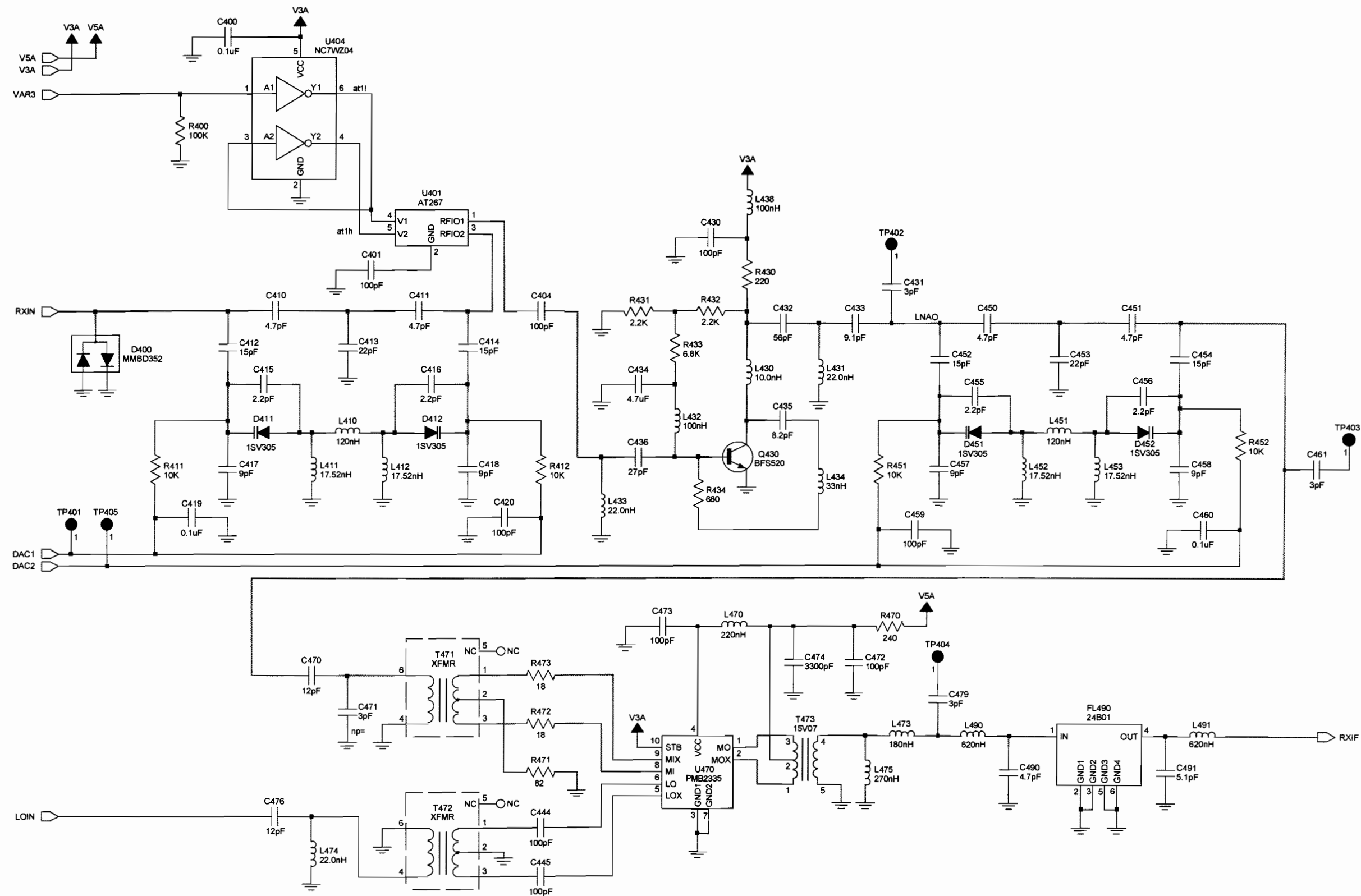


Figure 8-33. NLE4272A UHF Range 1 Receiver Front End (RX_FE) Circuit

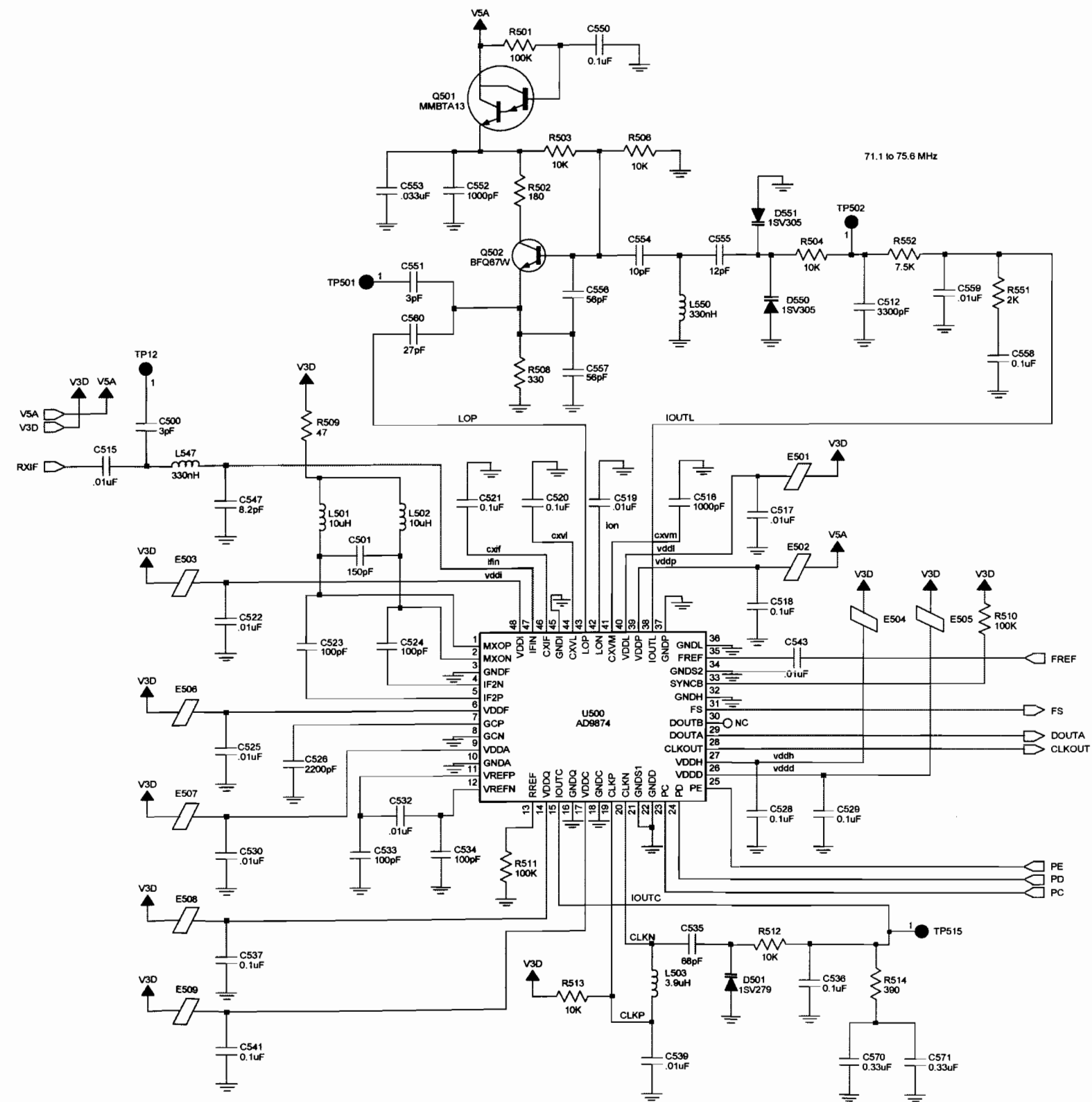
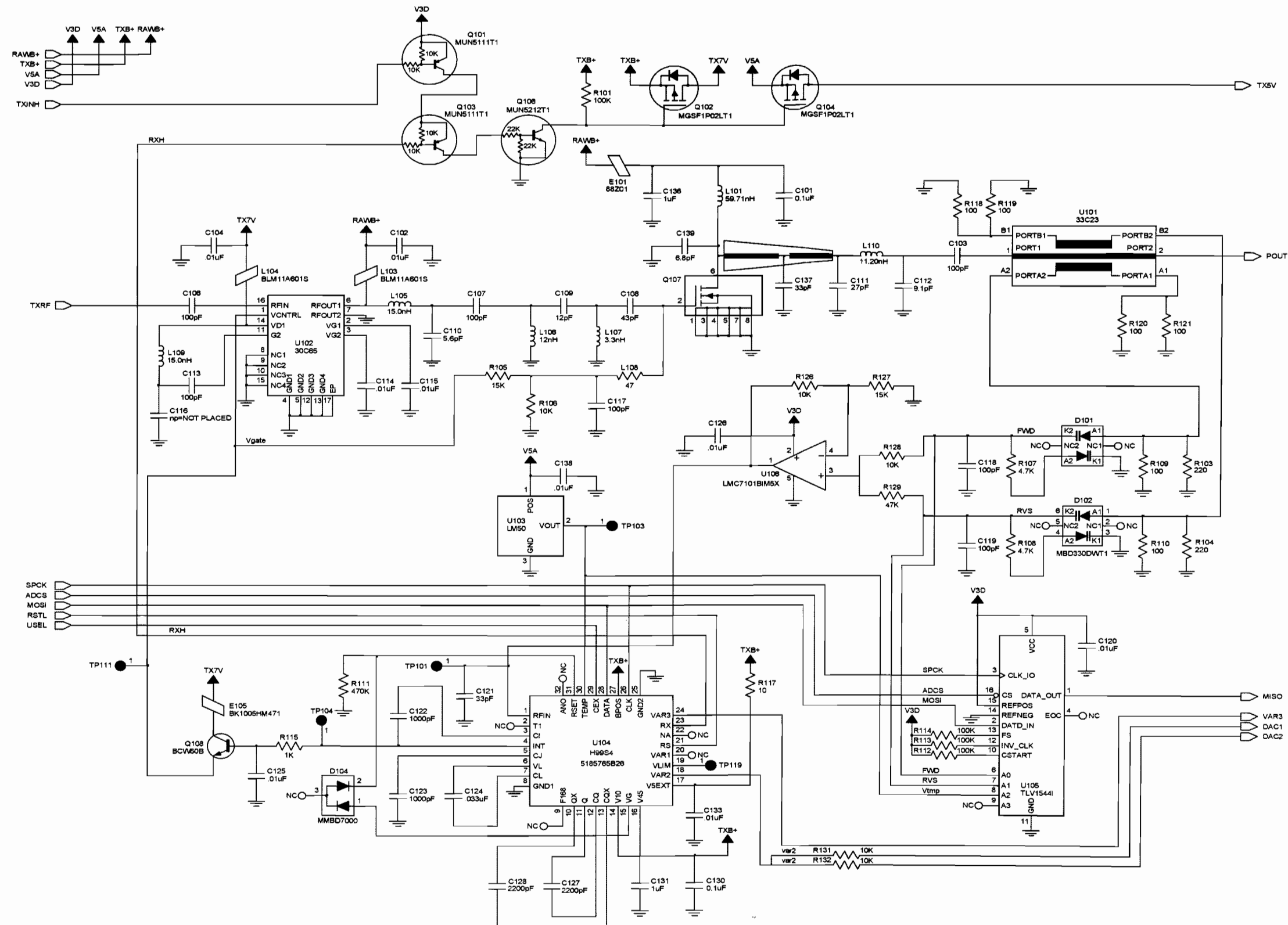
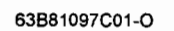


Figure 8-34. NLE4272A UHF Range 1 Receiver Back End (RX_BE) Circuit

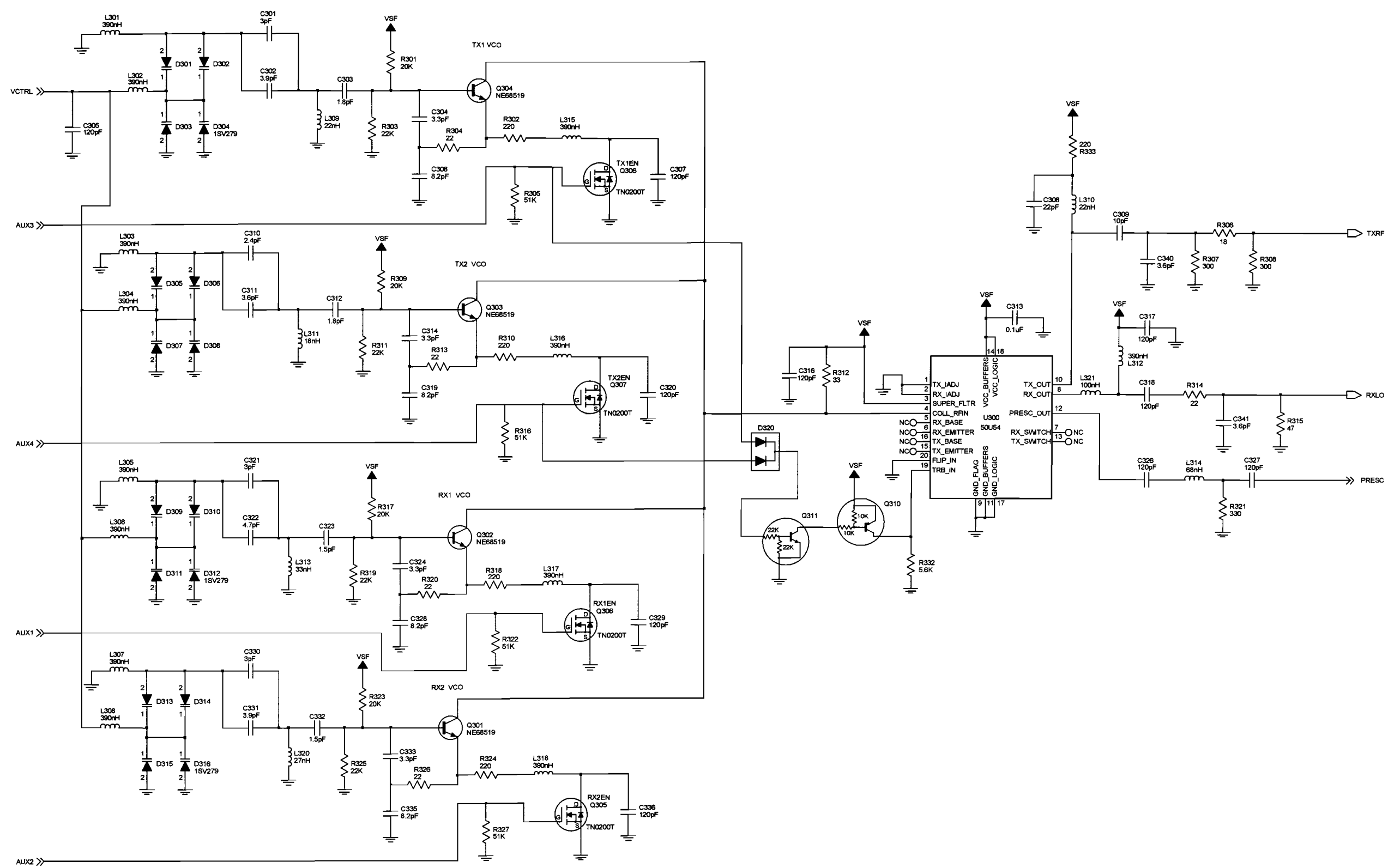


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Figure 8-35. NLE4272A UHF Range 1 Transmitter Power Amplifier and Automatic Level Control (TX_ALC) Circuit

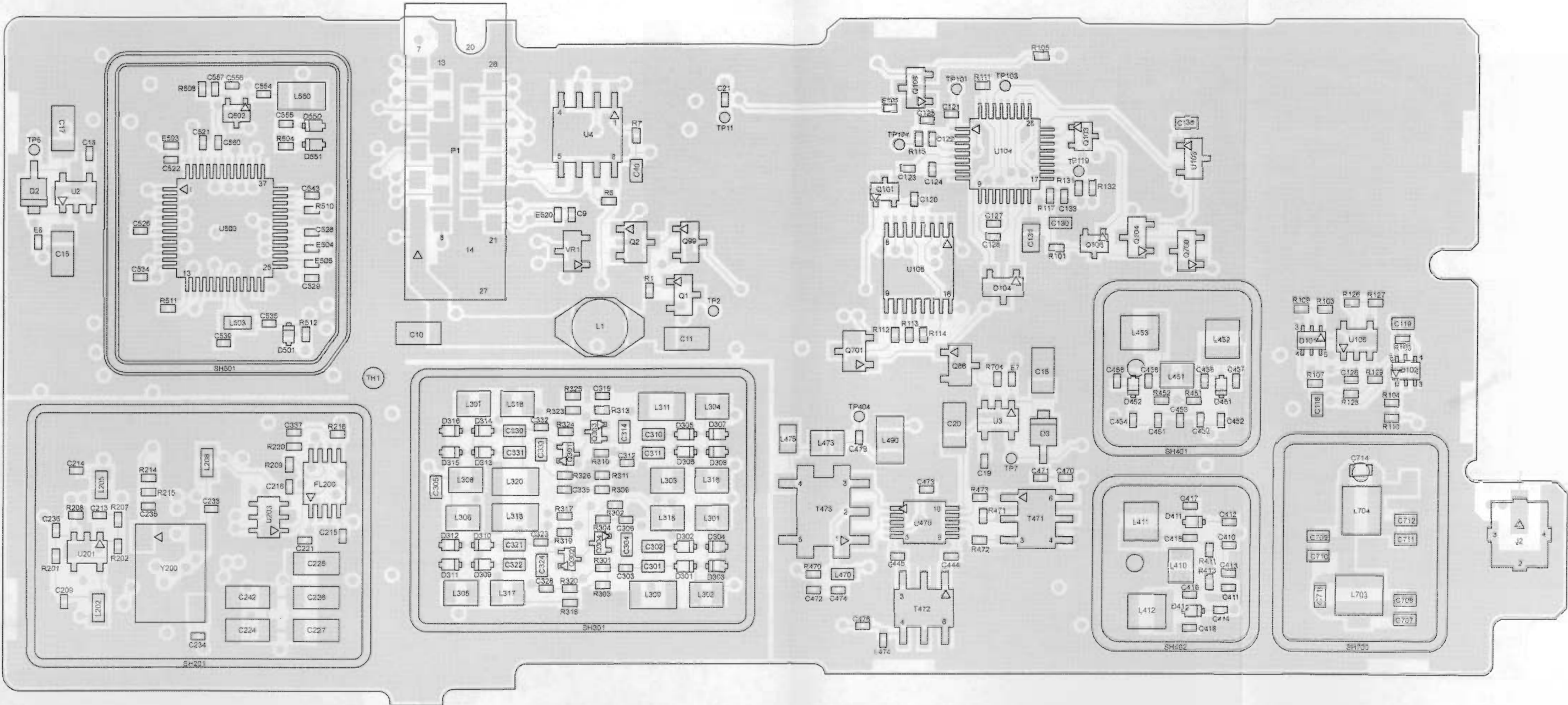


6881094C31-D



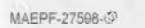
63B81097C29-O

Figure 8-37. NLE4272A UHF Range 1 Frequency Generation Unit (VCO) Circuit



MAEPF-37697-0

Figure 8-38. NLE4272A UHF Range 1 Transceiver (RF) Board Layout—Side 1



July 21, 2004

NLE4272A UHF Range 1 Transceiver (RF)
Board Parts List

Ref. Des.	Part Number	Description
C1	2113743T19	CAP 10UF 16V CER 3225 X5R
C10	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C101	2113743E20	CAP CHIP .10 UF 10%
C102	2113741F49	CAP CHIP CL2 X7R REEL 10000
C103	2113740F51	CAP CHIP REEL CL1 +/-30 100
C104	2113741F49	CAP CHIP CL2 X7R REEL 10000
C106	2113740F51	CAP CHIP REEL CL1 +/-30 100
C107	2113740F51	CAP CHIP REEL CL1 +/-30 100
C108	2113740F42	CAP CHIP REEL CL1 +/-30 43
C109	2113740F29	CAP CHIP REEL CL1 +/-30 12
C11	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C110	2113740F21	CAP CHIP REEL CL1 +/-30 5.6
C111	2113740F37	CAP CHIP REEL CL1 +/-30 27
C112	2113740F26	CAP CHIP REEL CL1 +/-30 9.1
C113	2113740F51	CAP CHIP REEL CL1 +/-30 100
C114	2113741F49	CAP CHIP CL2 X7R REEL 10000
C115	2113741F49	CAP CHIP CL2 X7R REEL 10000
C116	2113740F27	CAP CHIP REEL CL1 +/-30 10
C117	2113740F51	CAP CHIP REEL CL1 +/-30 100
C118	2113740F51	CAP CHIP REEL CL1 +/-30 100

Ref. Des.	Part Number	Description
C119	2113740F51	CAP CHIP REEL CL1 +/-30 100
C12	2113743T19	CAP 10UF 16V CER 3225 X5R
C120	2113743L41	CAP CHIP 10000 PF 10% X7R
C121	2113743N38	CAP CHIP 33.0 PF 5% COG
C122	2113743L17	CAP CHIP 1000 PF 10% X7R
C123	2113743L17	CAP CHIP 1000 PF 10% X7R
C124	2113743L41	CAP CHIP 10000 PF 10% X7R
C125	2113743L41	CAP CHIP 10000 PF 10% X7R
C126	2113743L41	CAP CHIP 10000 PF 10% X7R
C127	2113743L25	CAP CHIP 2200 PF 10% X7R
C128	2113743L25	CAP CHIP 2200 PF 10% X7R
C13	2113743L41	CAP CHIP 10000 PF 10% X7R
C130	2113743E20	CAP CHIP .10 UF 10%
C131	2113743A31	CAP CHIP 1.0UF 10% X7R
C133	2113743L41	CAP CHIP 10000 PF 10% X7R
C136	2113743A31	CAP CHIP 1.0UF 10% X7R
C137	2113742J08	CAP 33.0 PF 5%
C138	2113741F49	CAP CHIP CL2 X7R REEL 10000
C139	2113740F23	CAP CHIP REEL CL1 +/-30 6.8
C14	2113743T19	CAP 10UF 16V CER 3225 X5R
C15	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C16	2113743L41	CAP CHIP 10000 PF 10% X7R

Ref. Des.	Part Number	Description
C17	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C18	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C19	2113743L41	CAP CHIP 10000 PF 10% X7R
C2	2113743T19	CAP 10UF 16V CER 3225 X5R
C20	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C201	2113743M24	CAP CHIP 100000 PF +80-20% Y
C202	2113743M24	CAP CHIP 100000 PF +80-20% Y
C203	2113743F18	CAP CHIP 2.2 UF 16V
C204	2113743M24	CAP CHIP 100000 PF +80-20% Y
C205	2113743M24	CAP CHIP 100000 PF +80-20% Y
C206	2113743T19	CAP 10UF 16V CER 3225 X5R
C207	2113743M24	CAP CHIP 100000 PF +80-20% Y
C208	2113743M24	CAP CHIP 100000 PF +80-20% Y
C209	2113743M24	CAP CHIP 100000 PF +80-20% Y
C21	2113743N13	CAP CHIP 3.0 PF +/-25PF COG
C210	2113743M24	CAP CHIP 100000 PF +80-20% Y
C211	2113743M24	CAP CHIP 100000 PF +80-20% Y
C213	2113743L17	CAP CHIP 1000 PF 10% X7R
C214	2113743N50	CAP CHIP 100 PF 5% COG
C215	2113743M24	CAP CHIP 100000 PF +80-20% Y
C216	2113743M24	CAP CHIP 100000 PF +80-20% Y

Ref. Des.	Part Number	Description
C217	2113743E12	CAP CHIP .047 UF 10% X7R
C218	2113743E12	CAP CHIP .047 UF 10% X7R
C219	2109720D20	CAP CHIP LOW DIST 2000 SOV
C22	2113743L17	CAP CHIP 1000 PF 10% X7R
C220	2113743T19	CAP 10UF 16V CER 3225 X5R
C221	2113743M24	CAP CHIP 100000 PF +80-20% Y
C222	2113741F41	CAP CHIP CL2 X7R REEL 4700
C224	2109720D14	CAP CER CHIP LOW DIST .1 UF
C225	2109720D14	CAP CER CHIP LOW DIST .1 UF
C226	2109720D14	CAP CER CHIP LOW DIST .1 UF
C227	2109720D14	CAP CER CHIP LOW DIST .1 UF
C229	2113743N50	CAP CHIP 100 PF 5% COG
C230	2113743N52	CAP CHIP 120 PF 5% COG
C231	2113743L41	CAP CHIP 10000 PF 10% X7R
C232	2113743T19	CAP 10UF 16V CER 3225 X5R
C233	2113743M24	CAP CHIP 100000 PF +80-20% Y
C234	2113743L41	CAP CHIP 10000 PF 10% X7R
C235	2113743N50	CAP CHIP 100 PF 5% COG
C236	2113743L17	CAP CHIP 1000 PF 10% X7R
C242	2109720D14	CAP CER CHIP LOW DIST .1 UF
C3	2113743T19	CAP 10UF 16V CER 3225 X5R
C30	2113743N13	CAP CHIP 3.0 PF +/-25PF COG

Ref. Des.	Part Number	Description
C301	2113740L05	CAP CER CHIP 3.0 PF +/- 0.1PF
C302	2113740L08	CAP CER CHIP 3.9 PF +/- 0.1PF
C303	2104801Z12	CAP CER NPO 1.8PF 16V 1005 S
C304	2113740L06	CAP CER CHIP 3.3 PF +/- 0.1PF
C305	2113740F53	CAP CHIP REEL CL1 +/-30 120
C306	2113743N24	CAP CHIP 8.2 PF +/- .5PF COG
C307	2113743N52	CAP CHIP 120 PF 5% COG
C308	2113743N34	CAP CHIP 22.0 PF 5% COG
C309	2113743N26	CAP CHIP 10.0 PF 5% COG
C310	2113740L03	CAP CER CHIP 2.4 PF +/- 0.1PF
C311	2113740L07	CAP CER CHIP 3.6 PF +/- 0.1PF
C312	2104801Z12	CAP CER NPO 1.8PF 16V 1005 S
C313	2113743E20	CAP CHIP .10 UF 10%
C314	2113740L06	CAP CER CHIP 3.3 PF +/- 0.1PF
C316	2113743N52	CAP CHIP 120 PF 5% COG
C317	2113743N52	CAP CHIP 120 PF 5% COG
C318	2113743N52	CAP CHIP 120 PF 5% COG
C319	2113743N24	CAP CHIP 8.2 PF +/- .5PF COG
C320	2113743N52	CAP CHIP 120 PF 5% COG
C321	2113740L05	CAP CER CHIP 3.0 PF +/- 0.1PF
C322	2113740L10	CAP CER CHIP 4.7 PF +/- 0.1PF
C323	2104801Z10	CAP CER NPO 1.5PF 16V 1005 S
C324	2113740L06	CAP CER CHIP 3.3 PF +/- 0.1PF
C326	2113743N52	CAP CHIP 120 PF 5% COG

Ref. Des.	Part Number	Description
C327	2113743N52	CAP CHIP 120 PF 5% COG
C328	2113743N24	CAP CHIP 8.2 PF +/- .5PF COG
C329	2113743N52	CAP CHIP 120 PF 5% COG
C330	2113740L05	CAP CER CHIP 3.0 PF +/- 0.1PF
C331	2113740L08	CAP CER CHIP 3.9 PF +/- 0.1PF
C332	2104801Z10	CAP CER NPO 1.5PF 16V 1005 S
C333	2113740L06	CAP CER CHIP 3.3 PF +/- 0.1PF
C335	2113743N24	CAP CHIP 8.2 PF +/- .5PF COG
C336	2113743N52	CAP CHIP 120 PF 5% COG
C337	2113743L01	CAP CHIP 220 PF 10% X7R
C340	2113743N15	CAP CHIP 3.6PF +/- .25PF COG
C341	2113743N15	CAP CHIP 3.6PF +/- .25PF COG
C4	2113741F49	CAP CHIP CL2 X7R REEL 10000
C40	2113743E20	CAP CHIP .10 UF 10%
C400	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C401	2113743N50	CAP CHIP 100 PF 5% COG
C404	2113743N50	CAP CHIP 100 PF 5% COG
C410	2113743N18	CAP CHIP 4.7 PF +/- .25PF COG
C411	2113743N18	CAP CHIP 4.7 PF +/- .25PF COG
C412	2113743N30	CAP CHIP 15.0 PF 5% COG
C413	2113743N34	CAP CHIP 22.0 PF 5% COG
C414	2113743N30	CAP CHIP 15.0 PF 5% COG
C415	2113743N10	CAP CHIP 2.2 PF +/- .25PF COG
C416	2113743N10	CAP CHIP 2.2 PF +/- .25PF COG

Ref. Des.	Part Number	Description
C417	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C418	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C419	2113743E20	CAP CHIP .10 UF 10%
C420	2113743N50	CAP CHIP 100 PF 5% COG
C430	2113743N50	CAP CHIP 100 PF 5% COG
C431	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C432	2113743N44	CAP CHIP 56.0 PF 5% COG
C433	2113743N25	CAP CHIP 9.1 PF +/- .5PF COG
C434	2113928C04	CAP CER CHIP 4.7UF 6.3V10%08
C435	2113743N24	CAP CHIP 8.2 PF +/- .5PF COG
C436	2113743N36	CAP CHIP 27.0 PF 5% COG
C444	2113743N50	CAP CHIP 100 PF 5% COG
C445	2113743N50	CAP CHIP 100 PF 5% COG
C450	2113743N18	CAP CHIP 4.7 PF +/- .25PF COG
C451	2113743N18	CAP CHIP 4.7 PF +/- .25PF COG
C452	2113743N30	CAP CHIP 15.0 PF 5% COG
C453	2113743N34	CAP CHIP 22.0 PF 5% COG
C454	2113743N30	CAP CHIP 15.0 PF 5% COG
C455	2113743N10	CAP CHIP 2.2 PF +/- .25PF COG
C456	2113743N10	CAP CHIP 2.2 PF +/- .25PF COG
C457	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C458	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C459	2113743N50	CAP CHIP 100 PF 5% COG
C460	2113743E20	CAP CHIP .10 UF 10%
C461	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG

Ref. Des.	Part Number	Description
C470	2113743N28	CAP CHIP 12.0 PF 5% COG
C471	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C472	2113743N50	CAP CHIP 100 PF 5% COG
C473	2113743N50	CAP CHIP 100 PF 5% COG
C474	2113743L29	CAP CHIP 3300 PF 10% X7R
C476	2113743N28	CAP CHIP 12.0 PF 5% COG
C479	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C490	2113743N18	CAP CHIP 4.7 PF +/- .25PF COG
C491	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C5	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C500	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C501	2113743N54	CAP CHIP 150 PF 5% COG
C512	2113743L29	CAP CHIP 3300 PF 10% X7R
C515	2113743L41	CAP CHIP 10000 PF 10% X7R
C516	2113743L17	CAP CHIP 1000 PF 10% X7R
C517	2113743L41	CAP CHIP 10000 PF 10% X7R
C518	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C519	2113743L41	CAP CHIP 10000 PF 10% X7R
C520	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C521	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C522	2113743L41	CAP CHIP 10000 PF 10% X7R
C523	2113743N50	CAP CHIP 100 PF 5% COG
C524	2113743N50	CAP CHIP 100 PF 5% COG

Ref. Des.	Part Number	Description
C525	2113743L41	CAP CHIP 10000 PF 10% X7R
C526	2113743L25	CAP CHIP 2200 PF 10% X7R
C528	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C529	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C530	2113743L41	CAP CHIP 10000 PF 10% X7R
C532	2113743L41	CAP CHIP 10000 PF 10% X7R
C533	2113743N50	CAP CHIP 100 PF 5% COG
C534	2113743N50	CAP CHIP 100 PF 5% COG
C535	2113743N46	QAP CHIP 68.0 PF 5% COG
C536	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C537	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C539	2113743L41	CAP CHIP 10000 PF 10% X7R
C541	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C543	2113743L41	CAP CHIP 10000 PF 10% X7R
C547	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C550	2113743E20	CAP CHIP .10 UF 10%
C551	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C552	2113743L17	CAP CHIP 1000 PF 10% X7R
C553	2113743L50	CAP CHIP 33000 PF 10%
C554	2113743N26	CAP CHIP 10.0 PF 5% COG
C555	2113743N28	CAP CHIP 12.0 PF 5% COG
C556	2113743N44	CAP CHIP 56.0 PF 5% COG
C557	2113743N44	CAP CHIP 56.0 PF 5% COG

Ref. Des.	Part Number	Description
C558	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C559	2113743L41	CAP CHIP 10000 PF 10% X7R
C560	2113743N36	CAP CHIP 27.0 PF 5% COG
C570	2113743A24	CAP CHIP .330 UF 10% 16V
C571	2113743A24	CAP CHIP .330 UF 10% 16V
C6	2113740F51	CAP CHIP REEL CL1 +/-30 100
C331	2113740L08	CAP CER CHIP 3.9 PF +- 0.1PF
C332	2104801Z10	CAP CER NPO 1.5PF 16V 1005 S
C333	2113740L06	CAP CER CHIP 3.3 PF +- 0.1PF
C335	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C336	2113743N52	CAP CHIP 120 PF 5% COG
C337	2113743L01	CAP CHIP 220 PF 10% X7R
C340	2113743N15	CAP CHIP 3.6PF +/- .25PF COG
C341	2113743N15	CAP CHIP 3.6PF +/- .25PF COG
C4	2113741F49	CAP CHIP CL2 X7R REEL 10000
C40	2113743E20	CAP CHIP .10 UF 10%
C400	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C401	2113743N50	CAP CHIP 100 PF 5% COG
C404	2113743N50	CAP CHIP 100 PF 5% COG
C410	2113743N18	CAP CHIP 4.7 PF +-.25PF COG
C411	2113743N18	CAP CHIP 4.7 PF +-.25PF COG
C412	2113743N30	CAP CHIP 15.0 PF 5% COG
C413	2113743N34	CAP CHIP 22.0 PF 5% COG
C414	2113743N30	CAP CHIP 15.0 PF 5% COG

Ref. Des.	Part Number	Description
C415	2113743N10	CAP CHIP 2.2 PF +-.25PF COG
C416	2113743N10	CAP CHIP 2.2 PF +-.25PF COG
C417	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C418	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C419	2113743E20	CAP CHIP .10 UF 10%
C420	2113743N50	CAP CHIP 100 PF 5% COG
C430	2113743N50	CAP CHIP 100 PF 5% COG
C431	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C432	2113743N44	CAP CHIP 56.0 PF 5% COG
C433	2113743N25	CAP CHIP 9.1 PF + -.5PF COG
C434	2113928C04	CAP CER CHIP 4.7UF 6.3V10%08
C435	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C436	2113743N36	CAP CHIP 27.0 PF 5% COG
C444	2113743N50	CAP CHIP 100 PF 5% COG
C445	2113743N50	CAP CHIP 100 PF 5% COG
C450	2113743N18	CAP CHIP 4.7 PF +-.25PF COG
C451	2113743N18	CAP CHIP 4.7 PF +-.25PF COG
C452	2113743N30	CAP CHIP 15.0 PF 5% COG
C453	2113743N34	CAP CHIP 22.0 PF 5% COG
C454	2113743N30	CAP CHIP 15.0 PF 5% COG
C455	2113743N10	CAP CHIP 2.2 PF +-.25PF COG
C456	2113743N10	CAP CHIP 2.2 PF +-.25PF COG
C457	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C458	2113743N67	CAP CHIP 9.0PF 16V .5PF COG

Ref. Des.	Part Number	Description
C459	2113743N50	CAP CHIP 100 PF 5% COG
C460	2113743E20	CAP CHIP .10 UF 10%
C461	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C470	2113743N28	CAP CHIP 12.0 PF 5% COG
C471	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C472	2113743N50	CAP CHIP 100 PF 5% COG
C473	2113743N50	CAP CHIP 100 PF 5% COG
C474	2113743L29	CAP CHIP 3300 PF 10% X7R
C476	2113743N28	CAP CHIP 12.0 PF 5% COG
C479	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C490	2113743N18	CAP CHIP 4.7 PF +-.25PF COG
C491	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C5	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C500	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C501	2113743N54	CAP CHIP 150 PF 5% COG
C512	2113743L29	CAP CHIP 3300 PF 10% X7R
C515	2113743L41	CAP CHIP 10000 PF 10% X7R
C516	2113743L17	CAP CHIP 1000 PF 10% X7R
C517	2113743L41	CAP CHIP 10000 PF 10% X7R
C518	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C519	2113743L41	CAP CHIP 10000 PF 10% X7R
C520	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C521	2113928N01	CAP CER CHIP 0.1UF 10% 6.3

Ref. Des.	Part Number	Description
C522	2113743L41	CAP CHIP 10000 PF 10% X7R
C523	2113743N50	CAP CHIP 100 PF 5% COG
C524	2113743N50	CAP CHIP 100 PF 5% COG
C525	2113743L41	CAP CHIP 10000 PF 10% X7R
C526	2113743L25	CAP CHIP 2200 PF 10% X7R
C528	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C529	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C530	2113743L41	CAP CHIP 10000 PF 10% X7R
C532	2113743L41	CAP CHIP 10000 PF 10% X7R
C533	2113743N50	CAP CHIP 100 PF 5% COG
C534	2113743N50	CAP CHIP 100 PF 5% COG
C535	2113743N46	QAP CHIP 68.0 PF 5% COG
C536	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C537	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C539	2113743L41	CAP CHIP 10000 PF 10% X7R
C541	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C543	2113743L41	CAP CHIP 10000 PF 10% X7R
C547	2113743N24	CAP CHIP 8.2 PF + .5PF COG
C550	2113743E20	CAP CHIP .10 UF 10%
C551	2113743N13	CAP CHIP 3.0 PF +-.25PF COG
C552	2113743L17	CAP CHIP 1000 PF 10% X7R
C553	2113743L50	CAP CHIP 33000 PF 10%
C554	2113743N26	CAP CHIP 10.0 PF 5% COG

Ref. Des.	Part Number	Description
C555	2113743N28	CAP CHIP 12.0 PF 5% COG
C556	2113743N44	CAP CHIP 56.0 PF 5% COG
C557	2113743N44	CAP CHIP 56.0 PF 5% COG
C558	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C559	2113743L41	CAP CHIP 10000 PF 10% X7R
C560	2113743N36	CAP CHIP 27.0 PF 5% COG
C570	2113743A24	CAP CHIP .330 UF 10% 16V
C571	2113743A24	CAP CHIP .330 UF 10% 16V
C6	2113740F51	CAP CHIP REEL CL1 +/-30 100
C7	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C702	2113743N50	CAP CHIP 100 PF 5% COG
C703	2113740F51	CAP CHIP REEL CL1 +/-30 100
C704	2113740F51	CAP CHIP REEL CL1 +/-30 100
C705	2113740F63	CAP CHIP CL1 +/-30 330 5%
C706	2113743N50	CAP CHIP 100 PF 5% COG
C707	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C708	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C709	2113740F18	CAP CHIP REEL CL1 +/-30 4.3
C710	2113740F18	CAP CHIP REEL CL1 +/-30 4.3
C711	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C712	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C713	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C714	2113740F11	CAP CHIP REEL CL1 +/-30 2.2

Ref. Des.	Part Number	Description
C715	2113740F51	CAP CHIP REEL CL1 +/-30 100
C8	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C9	2113743N50	CAP CHIP 100 PF 5% COG
C925	2109720D14	CAP CER CHIP LOW DIST .1 UF
D1	4813833A20	DIODE SCHOTTKY 1A 40V PWRMIT
D101	4802197J83	DUAL SHOTTKY DIODE MBD330DWT
D102	4802197J83	DUAL SHOTTKY DIODE MBD330DWT
D104	4805129M06	DIODE MMBD7000
D2	4813833A20	DIODE SCHOTTKY 1A 40V PWRMIT
D201	4802233J09	DIODE TRIPLE SOT25-RH
D202	4802233J09	DIODE TRIPLE SOT25-RH
D3	4813833A20	DIODE SCHOTTKY 1A 40V PWRMIT
D301	4809877C08	DIODE VARACTOR 1SV279 SMD
D302	4809877C08	DIODE VARACTOR 1SV279 SMD
D303	4809877C08	DIODE VARACTOR 1SV279 SMD
D304	4809877C08	DIODE VARACTOR 1SV279 SMD
D305	4809877C08	DIODE VARACTOR 1SV279 SMD
D306	4809877C08	DIODE VARACTOR 1SV279 SMD
D307	4809877C08	DIODE VARACTOR 1SV279 SMD
D308	4809877C08	DIODE VARACTOR 1SV279 SMD
D309	4809877C08	DIODE VARACTOR 1SV279 SMD
D310	4809877C08	DIODE VARACTOR 1SV279 SMD

Ref. Des.	Part Number	Description
D311	4809877C08	DIODE VARACTOR 1SV279 SMD
D312	4809877C08	DIODE VARACTOR 1SV279 SMD
D313	4809877C08	DIODE VARACTOR 1SV279 SMD
D314	4809877C08	DIODE VARACTOR 1SV279 SMD
D315	4809877C08	DIODE VARACTOR 1SV279 SMD
D316	4809877C08	DIODE VARACTOR 1SV279 SMD
D320	4805218N57	DIODE DUAL
D400	4813825A19	DIODE SCHOTTKY BARRIER SERIE
D411	4809877C13	DIODE VARACTOR ISV305 SMD
D412	4809877C13	DIODE VARACTOR ISV305 SMD
D451	4809877C13	DIODE VARACTOR ISV305 SMD
D452	4809877C13	DIODE VARACTOR ISV305 SMD
D501	4809877C08	DIODE VARACTOR 1SV279 SMD
D550	4809877C13	DIODE VARACTOR ISV305 SMD
D551	4809877C13	DIODE VARACTOR ISV305 SMD
D701	4805656W24	DIODE, PIN RF
D702	4805656W24	DIODE, PIN RF
E1	2405688Z01	INDUCTOR FERRITE BEAD
E101	2405688Z01	INDUCTOR FERRITE BEAD
E105	2480640Z01	SURFACE MOUNT FERRITE BEAD
E5	2480640Z01	SURFACE MOUNT FERRITE BEAD
E501	2480640Z01	SURFACE MOUNT FERRITE BEAD

Ref. Des.	Part Number	Description
E502	2480640Z01	SURFACE MOUNT FERRITE BEAD
E503	2480640Z01	SURFACE MOUNT FERRITE BEAD
E504	2480640Z01	SURFACE MOUNT FERRITE BEAD
E505	2480640Z01	SURFACE MOUNT FERRITE BEAD
E506	2480640Z01	SURFACE MOUNT FERRITE BEAD
E507	2480640Z01	SURFACE MOUNT FERRITE BEAD
E508	2480640Z01	SURFACE MOUNT FERRITE BEAD
E509	2480640Z01	SURFACE MOUNT FERRITE BEAD
E520	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6	2480640Z01	SURFACE MOUNT FERRITE BEAD
E7	2480640Z01	SURFACE MOUNT FERRITE BEAD
F901	6505757V02	FUSE SURFACE MT 2AMP
FL200	9185130D01	FLTR SW CAP 3 POLE BUTTERW
FL490	9185924B01	FILTER, 73.35 MHZ 3-POLE CRY
G1	3905643V01	CONTACT ANT GRD
G12	3905643V01	CONTACT ANT GRD
G2	3905643V01	CONTACT ANT GRD
G3	3905643V01	CONTACT ANT GRD
G6	3905643V01	CONTACT ANT GRD
G7	3905643V01	CONTACT ANT GRD
G8	3905643V01	CONTACT ANT GRD
G9	3905643V01	CONTACT ANT GRD
J1	NOTPLACED	NOTPLACED
J2	0905304Z01	CONN COAXIAL SMT

Ref. Des.	Part Number	Description
L1	2486085A04	COIL, 6.8 UH POWER INDUCTOR
L101	2460591K40	COIL AIR WOUND INDUC 59.71
L103	2480574F01	IND FERRITE CHIP 600 OHM 060
L104	2480574F01	IND FERRITE CHIP 600 OHM 060
L105	2413926H14	IND CHIP 15.0 NH 5%
L106	2413926H13	IND CHIP 12.0 NH 5%
L107	2413926H06	IND CHIP 3.3 NH +/-0.3NH
L108	0662057A17	CHIP RES 47 OHMS 5%
L109	2413926H14	IND CHIP 15.0 NH 5%
L110	2460591B62	COIL AIR WOUND INDUC 11.20
L201	2462587Q20	IND CHIP 2,200 NH 20%
L202	2462587Q20	IND CHIP 2,200 NH 20%
L203	2462587Q20	IND CHIP 2,200 NH 20%
L204	2462587Q20	IND CHIP 2,200 NH 20%
L205	2462587Q47	IND CHIP 1,000 NH 10%
L207	2462587Q47	IND CHIP 1,000 NH 10%
L208	2462587Q20	IND CHIP 2,200 NH 20%
L301	2462587V59	IND CHIP 390 NH 5%
L302	2462587V59	IND CHIP 390 NH 5%
L303	2462587V59	IND CHIP 390 NH 5%
L304	2462587V59	IND CHIP 390 NH 5%
L305	2462587V59	IND CHIP 390 NH 5%
L306	2462587V59	IND CHIP 390 NH 5%
L307	2462587V59	IND CHIP 390 NH 5%
L308	2462587V59	IND CHIP 390 NH 5%
L309	2462587T38	IND CHIP 22NH 5% LOW PRO
L310	2462587T38	IND CHIP 22NH 5% LOW PRO
L311	2462587T37	IND CHIP 18NH 5% LOW PRO

Ref. Des.	Part Number	Description
L312	2462587V59	IND CHIP 390 NH 5%
L313	2462587T40	IND CHIP 33NH 5% LOW PRO
L314	2409377M14	IND CHIP WW68 NH 5% 1608
L315	2462587V59	IND CHIP 390 NH 5%
L316	2462587V59	IND CHIP 390 NH 5%
L317	2462587V59	IND CHIP 390 NH 5%
L318	2462587V59	IND CHIP 390 NH 5%
L320	2462587T39	IND CHIP 27NH 5% LOW PRO
L321	2409377M17	IND CHIP WW 100 NH 5% 1608
L4	2460591K40	COIL AIR WOUND INDUC 59.71
L410	2462587V35	CHIP IND 120 NH 5% 0805
L411	2460591C63	COIL AIR WOUND INDUC 17.52
L412	2460591C63	COIL AIR WOUND INDUC 17.52
L430	2409154M88	IND CER MLTILYR 10.0NH 1005
L431	2409154M17	IND CER MLTILYR 22.0NH 1005
L432	2409154M50	IND CER MLTILYR 100 NH 1005
L433	2409154M92	IND CER MLTILYR 22.0NH 1005
L434	2409377M10	IND CHIP WW 33NH 5%
L438	2409154M50	IND CER MLTILYR 100 NH 1005
L451	2462587V35	CHIP IND 120 NH 5% 0805
L452	2460591C63	COIL AIR WOUND INDUC 17.52
L453	2460591C63	COIL AIR WOUND INDUC 17.52
L470	2409377M36	IND CHIP WW 220 NH 5% 1608
L473	2462587V37	CHIP IND 180 NH 5% 0805

Ref. Des.	Part Number	Description
L474	2409154M17	IND CER MLTILYR 22.0NH 1005
L475	2404574Z14	IND CHIP WW 270NH 2% 2012 SM
L490	2462587T25	IND CHIP 620NH 5% LOW PRO
L491	2462587T25	IND CHIP 620NH 5% LOW PRO
L501	2405769X05	COIL INDUCTOR
L502	2405769X05	COIL INDUCTOR
L503	2462587Q54	IND CHIP 3,900 NH 10%
L547	2404574Z15	IND CHIP WW 330NH 2% 2012 SM
L550	2462587T21	IND CHIP 330NH 5% LOW PRO
L701	2462587V38	CHIP IND 220 NH 5% 0805
L702	2462587V38	CHIP IND 220 NH 5% 0805
L703	2460591L49	COIL AIR WOUND INDUC 20.53
L704	2460591L49	COIL AIR WOUND INDUC 20.53
L705	2462587V38	CHIP IND 220 NH 5% 0805
L706	2413926N27	COIL 30X60 INDUCTOR 180.0 NH
L707	2413926N27	COIL 30X60 INDUCTOR 180.0 NH
P1	NOTPLACED	NOTPLACED
PCB	8485370D01	PCB RF UHF RNG 1
Q1	4813821A47	TSTR P-CH HDTMOS 20V
Q101	4813824A42	TSTR PNP 50V BIAS RES 10K 10
Q102	4813821A47	TSTR P-CH HDTMOS 20V
Q103	4813824A42	TSTR PNP 50V BIAS RES 10K 10
Q104	4813821A47	TSTR P-CH HDTMOS 20V
Q106	4813824A39	TSTR NPN 50V BIAS RES 22K 22
Q107	5185633C10	MODE 800MHZ RING

Ref. Des.	Part Number	Description
Q108	4805128M12	TSTR SOT BCW 60B (RH)
Q2	4880048M01	TSTR NPN DIG 47K/47K
Q301	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q302	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q303	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q304	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q305	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q306	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q307	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q308	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q310	4813824A42	TSTR PNP 50V BIAS RES 10K 10
Q311	4813824A39	TSTR NPN 50V BIAS RES 22K 22
Q430	4805585Q19	TRANSISTOR
Q501	4805128M19	TSTR SOT23 MMBTA13 RH
Q502	4805218N63	RF TRANS SOT 323 BFQ67W
Q66	4880048M01	TSTR NPN DIG 47K/47K
Q700	4813821A47	TSTR P-CH HDTMOS 20V
Q701	4880048M01	TSTR NPN DIG 47K/47K
Q99	4813821A47	TSTR P-CH HDTMOS 20V
R1	0662057N23	RES. CHIP 100K 5% 20X40
R101	0662057N23	RES. CHIP 100K 5% 20X40
R103	0662057M58	RES. CHIP 220 5% 20X40
R104	0662057M58	RES. CHIP 220 5% 20X40
R105	0662057N03	RES. CHIP 15K 5% 20X40
R106	0662057M98	RES. CHIP 10K 5% 20X40
R107	0662057M90	RES. CHIP 4700 5% 20X40

Ref. Des.	Part Number	Description
R108	0662057M90	RES. CHIP 4700 5% 20X40
R109	0662057M50	RES. CHIP 100 5% 20X40
R110	0662057M50	RES. CHIP 100 5% 20X40
R111	0662057N39	RES. CHIP 470K 5% 20X40
R112	0662057N23	RES. CHIP 100K 5% 20X40
R113	0662057N23	RES. CHIP 100K 5% 20X40
R114	0662057N23	RES. CHIP 100K 5% 20X40
R115	0662057M74	RES. CHIP 1000 5% 20X40
R117	0662057M26	RES. CHIP 10 5% 20X40
R118	0662057M50	RES. CHIP 100 5% 20X40
R119	0662057M50	RES. CHIP 100 5% 20X40
R120	0662057M50	RES. CHIP 100 5% 20X40
R121	0662057M50	RES. CHIP 100 5% 20X40
R126	0662057M98	RES. CHIP 10K 5% 20X40
R127	0662057N03	RES. CHIP 15K 5% 20X40
R128	0662057M98	RES. CHIP 10K 5% 20X40
R129	0662057N15	RES. CHIP 47K 5% 20X40
R131	0662057M98	RES. CHIP 10K 5% 20X40
R132	0662057M98	RES. CHIP 10K 5% 20X40
R201	0662057N11	RES. CHIP 33K 5% 20X40
R202	0662057M81	RES. CHIP 2000 5% 20X40
R204	0662057N17	RES. CHIP 56K 5% 20X40
R205	0662057N13	RES. CHIP 39K 5% 20X40
R207	0662057M40	RES. CHIP 39 5% 20X40
R208	0662057N11	RES. CHIP 33K 5% 20X40
R209	0662057M98	RES. CHIP 10K 5% 20X40
R210	0662057M64	RES. CHIP 390 5% 20X40
R211	0662057M74	RES. CHIP 1000 5% 20X40
R212	0662057M52	RES. CHIP 120 5% 20X40
R213	0662057M98	RES. CHIP 10K 5% 20X40
R214	0662057M74	RES. CHIP 1000 5% 20X40
R215	0662057M98	RES. CHIP 10K 5% 20X40
R216	0662057M96	RES. CHIP 8200 5% 20X40

Ref. Des.	Part Number	Description
R217	0662057M76	RES. CHIP 1200 5% 20X40
R220	NOTPLACED	NOTPLACED
R301	0662057N06	RES. CHIP 20K 5% 20X40
R302	0662057M58	RES. CHIP 220 5% 20X40
R303	0662057N07	RES. CHIP 22K 5% 20X40
R304	0662057M34	RES. CHIP 22 5% 20X40
R305	0662057N16	RES. CHIP 51K 5% 20X40
R306	0662057M32	RES. CHIP 18 5% 20X40
R307	0662057M61	RES. CHIP 300 5% 20X40
R308	0662057M61	RES. CHIP 300 5% 20X40
R309	0662057N06	RES. CHIP 20K 5% 20X40
R310	0662057M58	RES. CHIP 220 5% 20X40
R311	0662057N07	RES. CHIP 22K 5% 20X40
R312	0662057M38	RES. CHIP 33 5% 20X40
R313	0662057M34	RES. CHIP 22 5% 20X40
R314	0662057M34	RES. CHIP 22 5% 20X40
R315	0662057M42	RES. CHIP 47 5% 20X40
R316	0662057N16	RES. CHIP 51K 5% 20X40
R317	0662057N06	RES. CHIP 20K 5% 20X40
R318	0662057M58	RES. CHIP 220 5% 20X40
R319	0662057N07	RES. CHIP 22K 5% 20X40
R320	0662057M34	RES. CHIP 22 5% 20X40
R321	0662057M62	RES. CHIP 330 5% 20X40
R322	0662057N16	RES. CHIP 51K 5% 20X40
R323	0662057N06	RES. CHIP 20K 5% 20X40
R324	0662057M58	RES. CHIP 220 5% 20X40
R325	0662057N07	RES. CHIP 22K 5% 20X40
R326	0662057M34	RES. CHIP 22 5% 20X40
R327	0662057N16	RES. CHIP 51K 5% 20X40
R332	0662057M92	RES. CHIP 5600 5% 20X40
R333	0662057M58	RES. CHIP 220 5% 20X40
R400	0662057N23	RES. CHIP 100K 5% 20X40
R411	0662057M98	RES. CHIP 10K 5% 20X40

Ref. Des.	Part Number	Description
R412	0662057M98	RES. CHIP 10K 5% 20X40
R430	0662057M58	RES. CHIP 220 5% 20X40
R431	0662057M82	RES. CHIP 2200 5% 20X40
R432	0662057M82	RES. CHIP 2200 5% 20X40
R433	0662057M94	RES. CHIP 6800 5% 20X40
R434	0662057M70	DES. CHIP 680 5% 20X40
R451	0662057M98	RES. CHIP 10K 5% 20X40
R452	0662057M98	RES. CHIP 10K 5% 20X40
R470	0662057M59	RES. CHIP 240 5% 20X40
R471	0662057M48	RES. CHIP 82 5% 20X40
R472	0662057M32	RES. CHIP 18 5% 20X40
R473	0662057M32	RES. CHIP 18 5% 20X40
R501	0662057N23	RES. CHIP 100K 5% 20X40
R502	0662057M56	RES. CHIP 180 5% 20X40
R503	0662057M98	RES. CHIP 10K 5% 20X40
R504	0662057M98	RES. CHIP 10K 5% 20X40
R506	0662057M98	RES. CHIP 10K 5% 20X40
R508	0662057M62	RES. CHIP 330 5% 20X40
R509	0662057M42	RES. CHIP 47 5% 20X40
R510	0662057N23	RES. CHIP 100K 5% 20X40
R511	0662057N23	RES. CHIP 100K 5% 20X40
R512	0662057M98	RES. CHIP 10K 5% 20X40
R513	0662057M98	RES. CHIP 10K 5% 20X40
R514	0662057M64	RES. CHIP 390 5% 20X40
R551	0662057M81	RES. CHIP 2000 5% 20X40
R552	0662057M95	RES. CHIP 7500 5% 20X40
R6	0662057M98	RES. CHIP 10K 5% 20X40
R7	0662057M98	RES. CHIP 10K 5% 20X40
R702	0662057A37	CHIP RES 330 OHMS 5%
R703	0662057M50	RES. CHIP 100 5% 20X40
R704	0662057N23	RES. CHIP 100K 5% 20X40
R706	0662057N23	RES. CHIP 100K 5% 20X40
R719	0662057M78	RES. CHIP 1500 5% 20X40

Ref. Des.	Part Number	Description
R720	0662057N23	RES. CHIP 100K 5% 20X40
SH201	2685787B01	SHLD FRAC-N
SH202	2685787B01	SHLD FRAC-N
SH301	2685297D01	SHLD VCO
SH302	2685298D01	SHLD VCO BUFFER
SH401	2685627A02	SHLD DUAL INDUCTOR
SH402	2685627A02	SHLD DUAL INDUCTOR
SH403	2685882A01	SHLD VCO TANK
SH501	2685298D01	SHLD VCO BUFFER
SH700	2685762D02	SHIELD HARMONIC FILTER
T471	2580541Z02	BALUN TRANSFORMER (NEW)
T472	2580541Z02	BALUN TRANSFORMER (NEW)
T473	2505515V07	XFMR JEDI MIXER 25:1
TH1	NOTPLACED	NOTPLACED
U1	5185353D13	IC MINI SO-8 HI PRECISION RE
U101	5185633C23	MODULE DIRECT COUPLER
U102	5185130C65	IC VHF/UHF/800 MHZ LDMOS DRI
U103	5185963A15	IC TEMPERTURE SENSOR 1M50C
U104	5185765B26	IC PWR CTRL IN MOS20
U105	5185368C19	IC QUAD 10 BIT A/D CONV
U106	5185963A60	OP AMP IC
U2	5185353D14	IC SOT23-5 HI PRECISION REG
U201	51863580	IC ANALOG OP-AMP CLC450
U202	5185963A27	IC TESTED AT25016 48 PIN GFP
U203	5185368C83	IC 12 BIT DAC
U3	5185353D14	IC SOT23-5 HI PRECISION REG

Ref. Des.	Part Number	Description
U300	5105750U54	IC PKG DIE VCO BUFFER
U4	5105462G78	IC EEPROM 16K SPEI CMOS
U401	5185130C83	IC 15DB DIGITAL ATTEUATOR SO
U404	5185143E12	IC INVERTER DUAL SC70
U470	5185130C91	IC MIXER RF SOIC 10
U500	5185963A85	IC-ABACUS III-LP
VR1	4813830A33	DIODE 20V 5% 225MW MMBZ5250B
VR2	4813830A15	DIODE 5.6V 5% 225MW MMBZ5232
VR3	4805656W45	DIODE TRANSIENT VOLTAGE SUPP
W02	NOTPLACED	NOTPLACED
W021	NOTPLACED	NOTPLACED
W1	NOTPLACED	NOTPLACED
W10	NOTPLACED	NOTPLACED
W11	NOTPLACED	NOTPLACED
W12	NOTPLACED	NOTPLACED
W13	NOTPLACED	NOTPLACED
W14	NOTPLACED	NOTPLACED
W15	NOTPLACED	NOTPLACED
W16	NOTPLACED	NOTPLACED
W17	NOTPLACED	NOTPLACED
W18	NOTPLACED	NOTPLACED
W19	NOTPLACED	NOTPLACED
W2	NOTPLACED	NOTPLACED
W20	NOTPLACED	NOTPLACED
W21	NOTPLACED	NOTPLACED
W22	NOTPLACED	NOTPLACED
W23	NOTPLACED	NOTPLACED
W3	NOTPLACED	NOTPLACED
W4	NOTPLACED	NOTPLACED
W5	NOTPLACED	NOTPLACED

Ref. Des.	Part Number	Description
W6	NOTPLACED	NOTPLACED
W7	NOTPLACED	NOTPLACED
W8	NOTPLACED	NOTPLACED
W9	NOTPLACED	NOTPLACED
Y200	4802245J68	OSC REF 16.8 MHZ 1.5 PPM

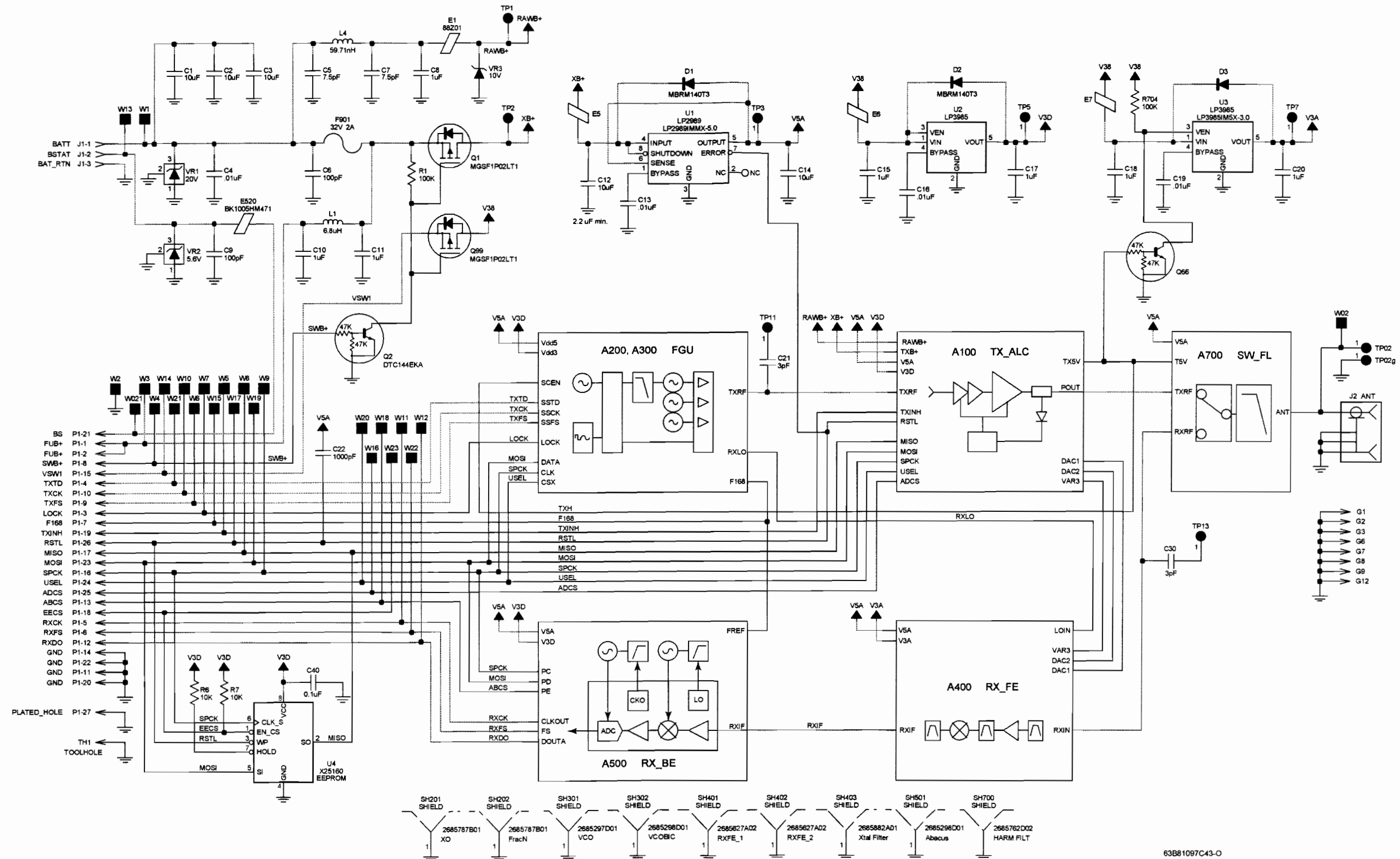


Figure 8-40. NLE4278A UHF Range 1 Transceiver (RF) Board Overall Circuit Schematic

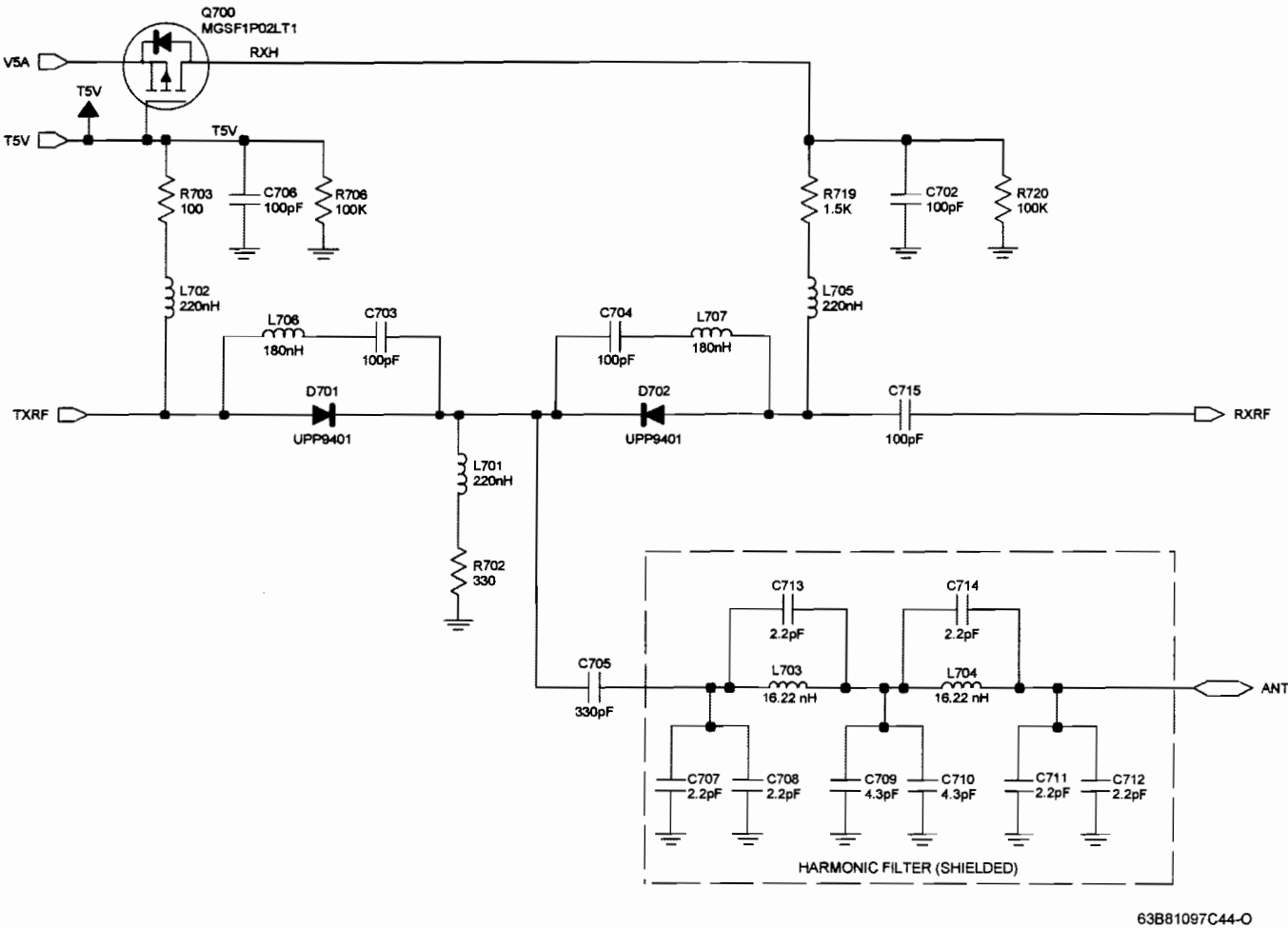


Figure 8-41. NLE4278A UHF Range 1 Antenna Switch and Harmonic Filter Circuits

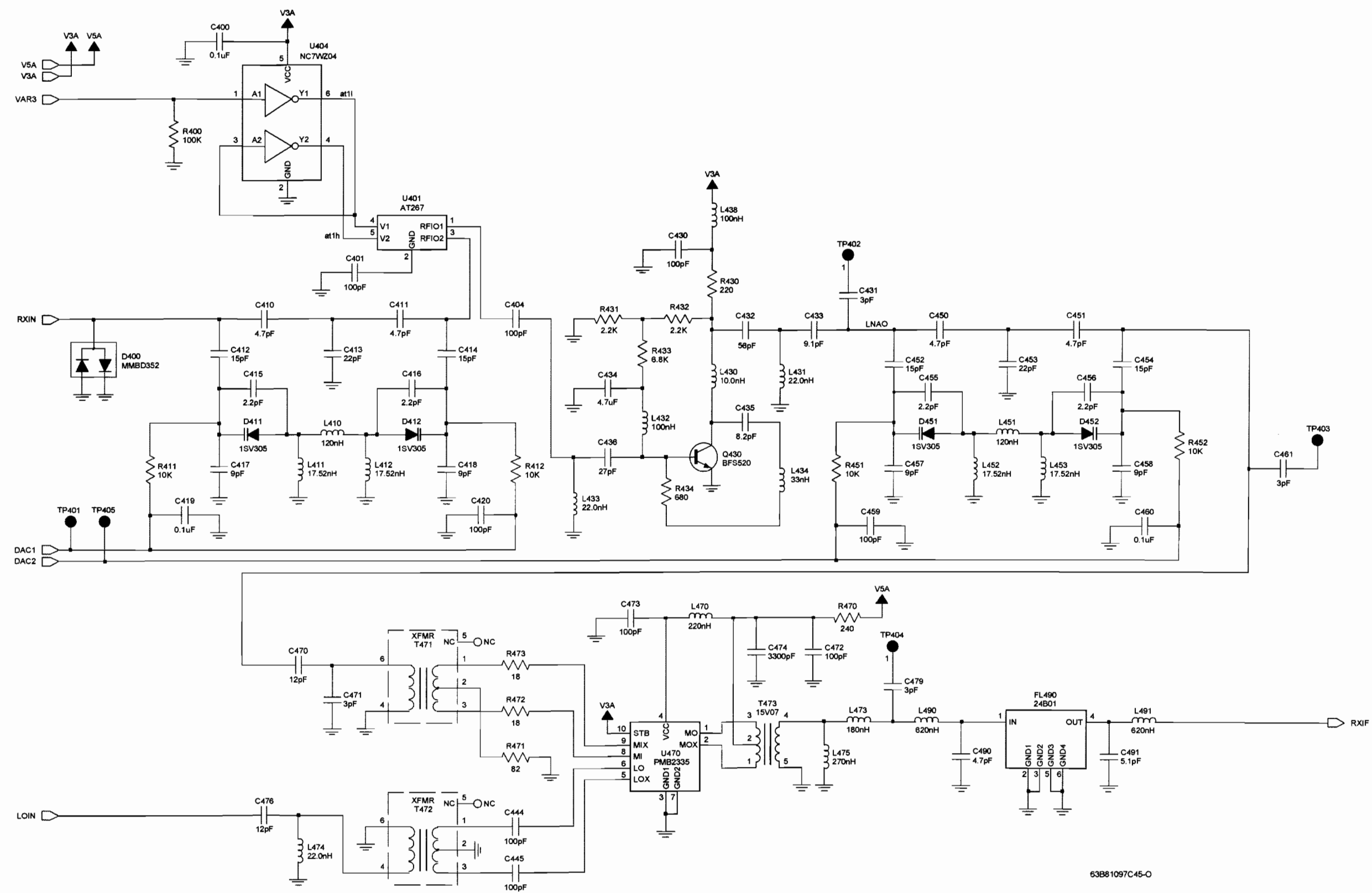


Figure 8-42. NLE4278A UHF Range 1 Receiver Front End Circuit

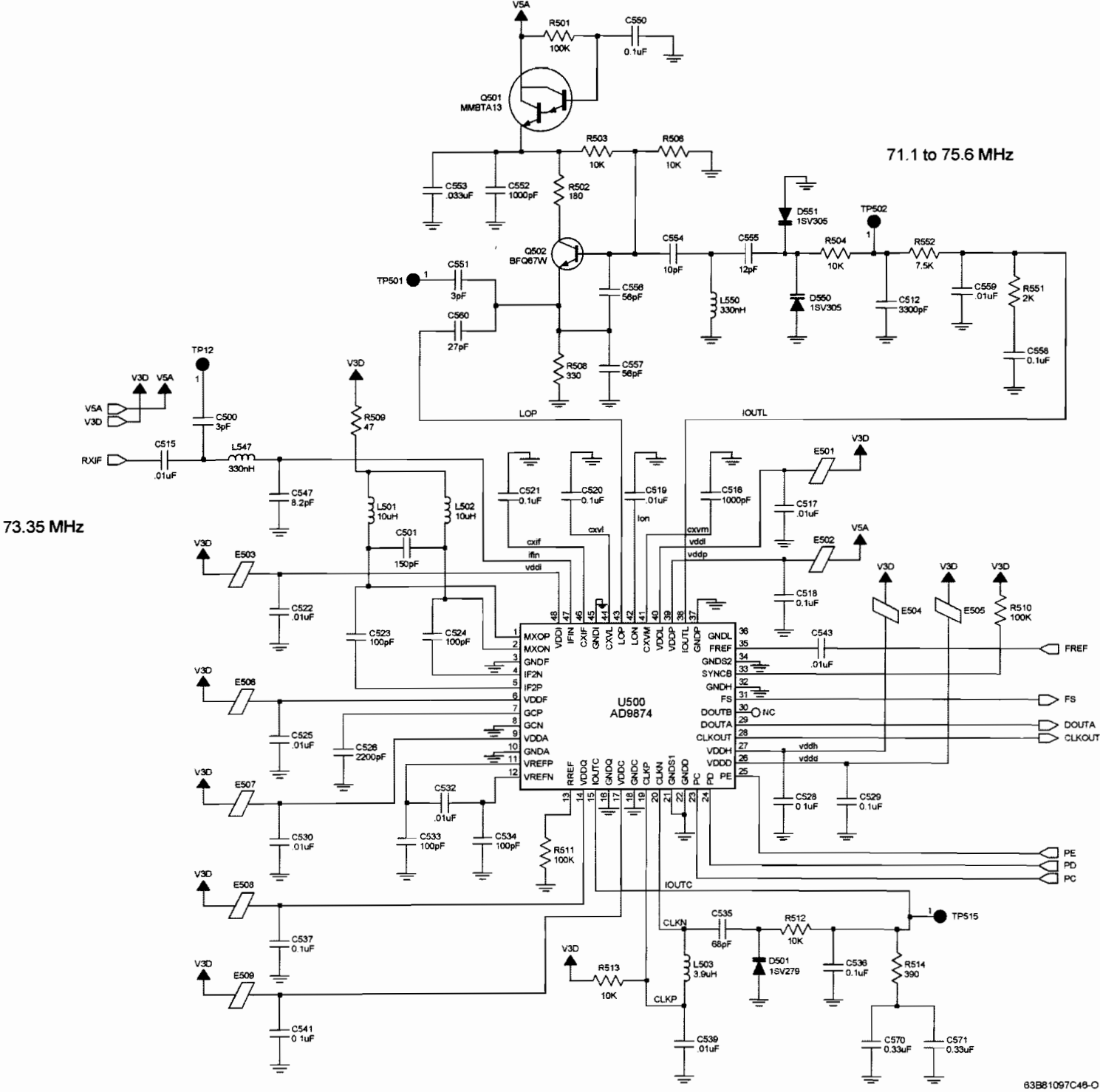


Figure 8-43. NLE4278A UHF Range 1 Receiver Back End Circuit

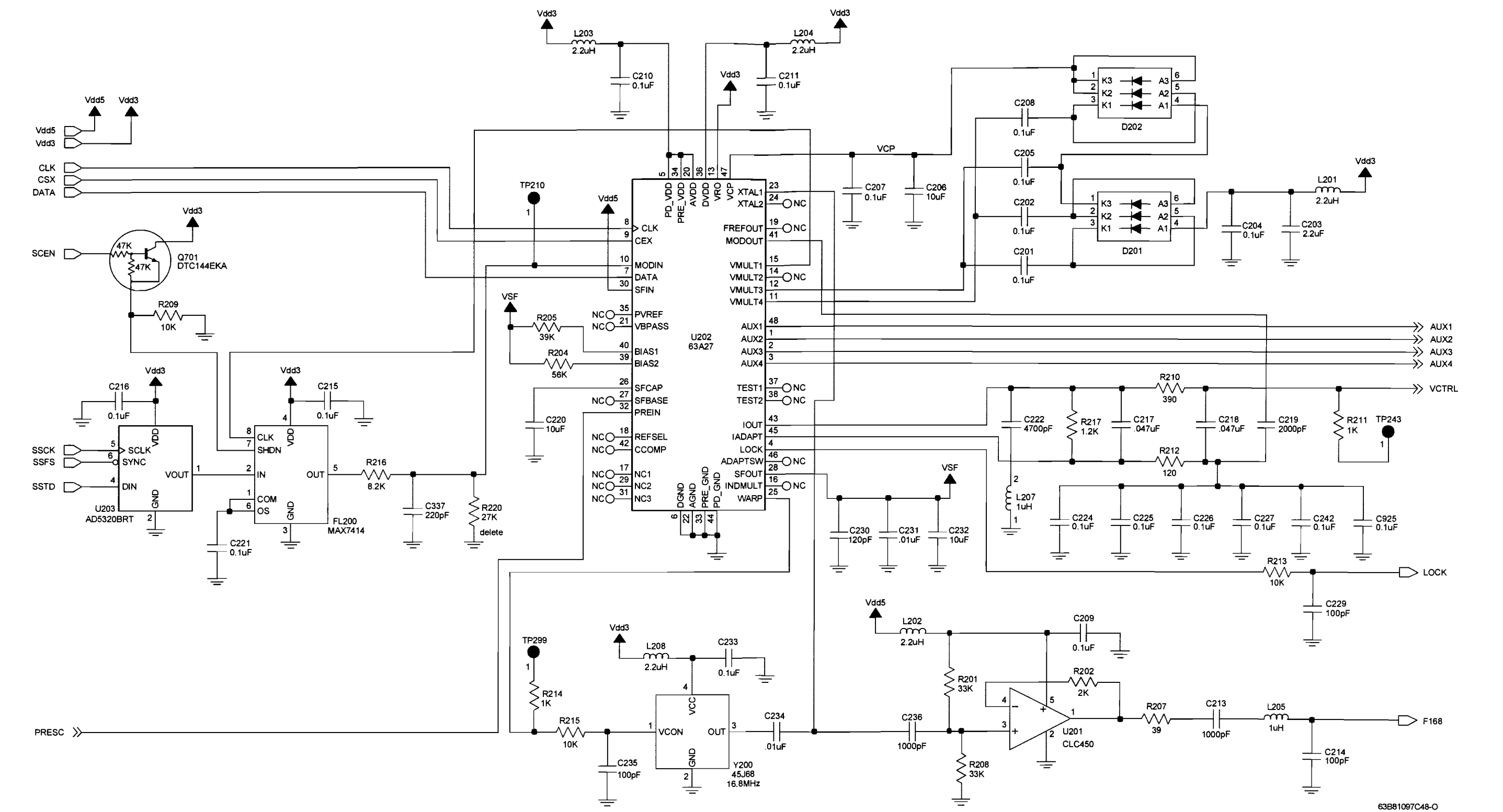


Figure 8-45. NLE4278A UHF Range 1 Frequency Unit (Synthesizer) Circuit

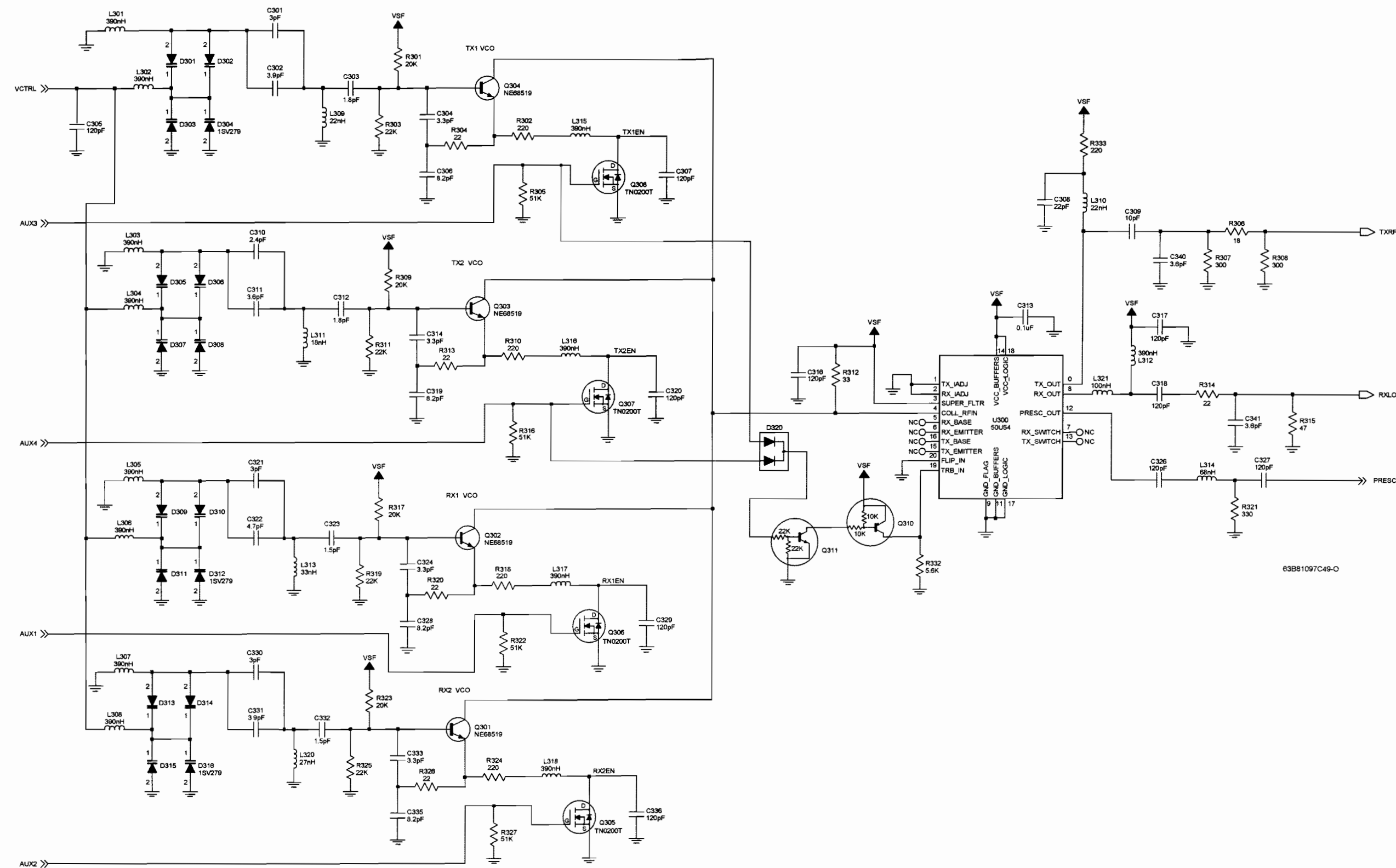


Figure 8-46. NLE4278A UHF Range 1 Frequency Generation Unit (VCO) Circuit

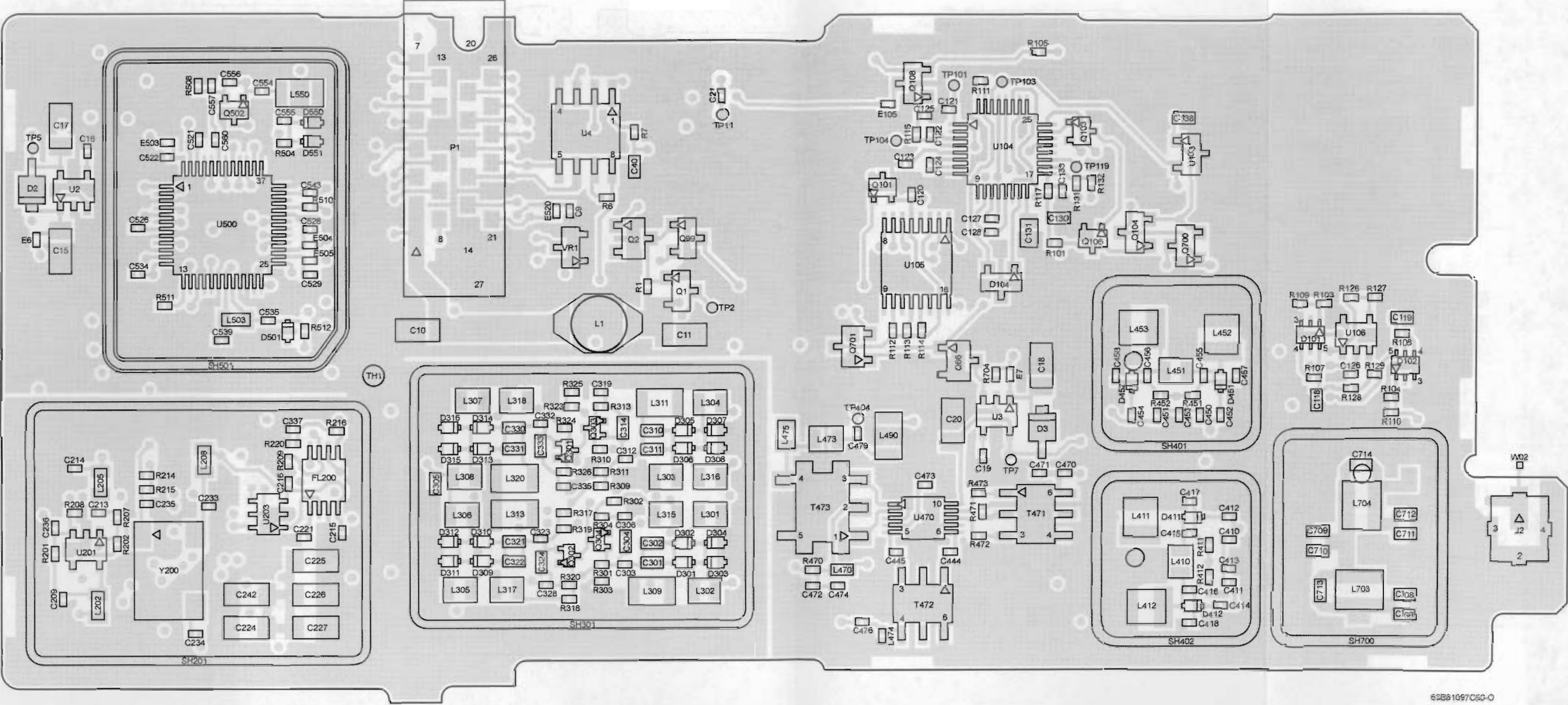
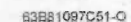


Figure 8-47. NLE4278A UHF Range 1 Transceiver (RF) Board Layout—Side 1



July 21, 2004

NLE4278A UHF Range 1 Navy Low-Power
Parts List

Ref. Des.	Part Number	Description
C1	2113743T19	CAP 10UF 16V CER 3225 X5R
C10	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C101	2113743E20	CAP CHIP .10 UF 10%
C102	2113741F49	CAP CHIP CL2 X7R REEL 10000
C103	2113740F51	CAP CHIP REEL CL1 +/-30 100
C104	2113741F49	CAP CHIP CL2 X7R REEL 10000
C106	2113740F51	CAP CHIP REEL CL1 +/-30 100
C107	2113740F51	CAP CHIP REEL CL1 +/-30 100
C108	2113740F42	CAP CHIP REEL CL1 +/-30 43
C109	2113740F29	CAP CHIP REEL CL1 +/-30 12
C11	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C110	2113740F21	CAP CHIP REEL CL1 +/-30 5.6
C111	2113740F37	CAP CHIP REEL CL1 +/-30 27
C112	2113740F26	CAP CHIP REEL CL1 +/-30 9.1
C113	2113740F51	CAP CHIP REEL CL1 +/-30 100
C114	2113741F49	CAP CHIP CL2 X7R REEL 10000
C115	2113741F49	CAP CHIP CL2 X7R REEL 10000
C116	2113740F27	CAP CHIP REEL CL1 +/-30 10
C117	2113740F51	CAP CHIP REEL CL1 +/-30 100
C118	2113740F51	CAP CHIP REEL CL1 +/-30 100
C119	2113740F51	CAP CHIP REEL CL1 +/-30 100
C12	2113743T19	CAP 10UF 16V CER 3225 X5R

Ref. Des.	Part Number	Description
C120	2113743L41	CAP CHIP 10000 PF 10% X7R
C121	2113743N38	CAP CHIP 33.0 PF 5% COG
C122	2113743L17	CAP CHIP 1000 PF 10% X7R
C123	2113743L17	CAP CHIP 1000 PF 10% X7R
C124	2113743L50	CAP CHIP 33000 PF 10%
C125	2113743L41	CAP CHIP 10000 PF 10% X7R
C126	2113743L41	CAP CHIP 10000 PF 10% X7R
C127	2113743L25	CAP CHIP 2200 PF 10% X7R
C128	2113743L25	CAP CHIP 2200 PF 10% X7R
C13	2113743L41	CAP CHIP 10000 PF 10% X7R
C130	2113743E20	CAP CHIP .10 UF 10%
C131	2113743A31	CAP CHIP 1.0 UF 10% X7R
C133	2113743L41	CAP CHIP 10000 PF 10% X7R
C136	2113743A31	CAP CHIP 1.0 UF 10% X7R
C137	2113742H43	CAP 15.0 PF 5%
C138	2113741F49	CAP CHIP CL2 X7R REEL 10000
C139	2113740F23	CAP CHIP REEL CL1 +/-30 6.8
C14	2113743T19	CAP 10UF 16V CER 3225 X5R
C15	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C16	2113743L41	CAP CHIP 10000 PF 10% X7R
C17	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C18	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C19	2113743L41	CAP CHIP 10000 PF 10% X7R
C2	2113743T19	CAP 10UF 16V CER 3225 X5R
C20	2113743S01	CAP CER CHIP 1.0 UF 10% 16V

Ref. Des.	Part Number	Description
C201	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C202	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C203	2113743F18	CAP CHIP 2.2 UF 16V +80-20%
C204	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C205	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C206	2113743T19	CAP 10UF 16V CER 3225 X5R
C207	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C208	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C209	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C21	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C210	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C211	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C213	2113743L17	CAP CHIP 1000 PF 10% X7R
C214	2113743N50	CAP CHIP 100 PF 5% COG
C215	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C216	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C217	2113743E12	CAP CHIP .047 UF 10% X7R
C218	2113743E12	CAP CHIP .047 UF 10% X7R
C219	2109720D20	CAP CHIP LOW DIST 2000 SOV
C22	2113743L17	CAP CHIP 1000 PF 10% X7R
C220	2113743T19	CAP 10UF 16V CER 3225 X5R
C221	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C222	2113741F41	CAP CHIP CL2 X7R REEL 4700

Ref. Des.	Part Number	Description
C224	2109720D14	CAP CER CHIP LOW DIST .1 UF
C225	2109720D14	CAP CER CHIP LOW DIST .1 UF
C226	2109720D14	CAP CER CHIP LOW DIST .1 UF
C227	2109720D14	CAP CER CHIP LOW DIST .1 UF
C229	2113743N50	CAP CHIP 100 PF 5% COG
C230	2113743N52	CAP CHIP 120 PF 5% COG
C231	2113743L41	CAP CHIP 10000 PF 10% X7R
C232	2113743T19	CAP 10UF 16V CER 3225 X5R
C233	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C234	2113743L41	CAP CHIP 10000 PF 10% X7R
C235	2113743N50	CAP CHIP 100 PF 5% COG
C236	2113743L17	CAP CHIP 1000 PF 10% X7R
C242	2109720D14	CAP CER CHIP LOW DIST .1 UF
C3	2113743T19	CAP 10UF 16V CER 3225 X5R
C30	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C301	2113740L05	CAP CER CHIP 3.0 PF +/- 0.1PF
C302	2113740L08	CAP CER CHIP 3.9 PF +/- 0.1PF
C303	2104801Z12	CAP CER NPO 1.8PF 16V 1005 SMD
C304	2113740L06	CAP CER CHIP 3.3 PF +/- 0.1PF
C305	2113740F53	CAP CHIP REEL CL1 +/-30 120
C306	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C307	2113743N52	CAP CHIP 120 PF 5% COG
C308	2113743N34	CAP CHIP 22.0 PF 5% COG
C309	2113743N26	CAP CHIP 10.0 PF 5% COG
C310	2113740L03	CAP CER CHIP 2.4 PF +/- 0.1PF

Ref. Des.	Part Number	Description
C311	2113740L07	CAP CER CHIP 3.6 PF +- 0.1PF
C312	2104801Z12	CAP CER NPO 1.8PF 16V 1005 SMD
C313	2113743E20	CAP CHIP .10 UF 10%
C314	2113740L06	CAP CER CHIP 3.3 PF +- 0.1PF
C316	2113743N52	CAP CHIP 120 PF 5% COG
C317	2113743N52	CAP CHIP 120 PF 5% COG
C318	2113743N52	CAP CHIP 120 PF 5% COG
C319	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C320	2113743N52	CAP CHIP 120 PF 5% COG
C321	2113740L05	CAP CER CHIP 3.0 PF +- 0.1PF
C322	2113740L10	CAP CER CHIP 4.7 PF +- 0.1PF
C323	2104801Z10	CAP CER NPO 1.5PF 16V 1005 SMD
C324	2113740L06	CAP CER CHIP 3.3 PF +- 0.1PF
C326	2113743N52	CAP CHIP 120 PF 5% COG
C327	2113743N52	CAP CHIP 120 PF 5% COG
C328	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C329	2113743N52	CAP CHIP 120 PF 5% COG
C330	2113740L05	CAP CER CHIP 3.0 PF +- 0.1PF
C331	2113740L08	CAP CER CHIP 3.9 PF +- 0.1PF
C332	2104801Z10	CAP CER NPO 1.5PF 16V 1005 SMD
C333	2113740L06	CAP CER CHIP 3.3 PF +- 0.1PF
C335	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C336	2113743N52	CAP CHIP 120 PF 5% COG
C337	2113743L01	CAP CHIP 220 PF 10% X7R
C340	2113743N15	CAP CHIP 3.6 PF +- .25PF COG
C341	2113743N15	CAP CHIP 3.6 PF +- .25PF COG
C4	2113741F49	CAP CHIP CL2 X7R REEL 10000

Ref. Des.	Part Number	Description
C40	2113743E20	CAP CHIP .10 UF 10%
C400	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C401	2113743N50	CAP CHIP 100 PF 5% COG
C404	2113743N50	CAP CHIP 100 PF 5% COG
C410	2113743N18	CAP CHIP 4.7 PF +- .25PF COG
C411	2113743N18	CAP CHIP 4.7 PF +- .25PF COG
C412	2113743N30	CAP CHIP 15.0 PF 5% COG
C413	2113743N34	CAP CHIP 22.0 PF 5% COG
C414	2113743N30	CAP CHIP 15.0 PF 5% COG
C415	2113743N10	CAP CHIP 2.2 PF +- .25PF COG
C416	2113743N10	CAP CHIP 2.2 PF +- .25PF COG
C417	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C418	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C419	2113743E20	CAP CHIP .10 UF 10%
C420	2113743N50	CAP CHIP 100 PF 5% COG
C430	2113743N50	CAP CHIP 100 PF 5% COG
C431	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C432	2113743N44	CAP CHIP 56.0 PF 5% COG
C433	2113743N25	CAP CHIP 9.1 PF + -.5PF COG
C434	2113928C04	CAP CER CHIP 4.7UF 6.3V10%0805
C435	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C436	2113743N36	CAP CHIP 27.0 PF 5% COG
C444	2113743N50	CAP CHIP 100 PF 5% COG
C445	2113743N50	CAP CHIP 100 PF 5% COG
C450	2113743N18	CAP CHIP 4.7 PF +- .25PF COG
C451	2113743N18	CAP CHIP 4.7 PF +- .25PF COG
C452	2113743N30	CAP CHIP 15.0 PF 5% COG
C453	2113743N34	CAP CHIP 22.0 PF 5% COG
C454	2113743N30	CAP CHIP 15.0 PF 5% COG

Ref. Des.	Part Number	Description
C455	2113743N10	CAP CHIP 2.2 PF +- .25PF COG
C456	2113743N10	CAP CHIP 2.2 PF +- .25PF COG
C457	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C458	2113743N67	CAP CHIP 9.0PF 16V .5PF COG
C459	2113743N50	CAP CHIP 100 PF 5% COG
C460	2113743E20	CAP CHIP .10 UF 10%
C461	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C470	2113743N28	CAP CHIP 12.0 PF 5% COG
C471	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C472	2113743N50	CAP CHIP 100 PF 5% COG
C473	2113743N50	CAP CHIP 100 PF 5% COG
C474	2113743L29	CAP CHIP 3300 PF 10% X7R
C476	2113743N28	CAP CHIP 12.0 PF 5% COG
C479	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C490	2113743N18	CAP CHIP 4.7 PF +- .25PF COG
C491	2113740F20	CAP CHIP REEL CL1 +/-30 5.1
C5	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C500	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C501	2113743N54	CAP CHIP 150 PF 5% COG
C512	2113743L29	CAP CHIP 3300 PF 10% X7R
C515	2113743L41	CAP CHIP 10000 PF 10% X7R
C516	2113743L17	CAP CHIP 1000 PF 10% X7R
C517	2113743L41	CAP CHIP 10000 PF 10% X7R
C518	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C519	2113743L41	CAP CHIP 10000 PF 10% X7R
C520	2113928N01	CAP CER CHIP 0.1UF 10% 6.3

Ref. Des.	Part Number	Description
C521	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C522	2113743L41	CAP CHIP 10000 PF 10% X7R
C523	2113743N50	CAP CHIP 100 PF 5% COG
C524	2113743N50	CAP CHIP 100 PF 5% COG
C525	2113743L41	CAP CHIP 10000 PF 10% X7R
C526	2113743L25	CAP CHIP 2200 PF 10% X7R
C528	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C529	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C530	2113743L41	CAP CHIP 10000 PF 10% X7R
C532	2113743L41	CAP CHIP 10000 PF 10% X7R
C533	2113743N50	CAP CHIP 100 PF 5% COG
C534	2113743N50	CAP CHIP 100 PF 5% COG
C535	2113743N46	QAP CHIP 68.0 PF 5% COG
C536	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C537	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C539	2113743L41	CAP CHIP 10000 PF 10% X7R
C541	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C543	2113743L41	CAP CHIP 10000 PF 10% X7R
C547	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C550	2113743E20	CAP CHIP .10 UF 10%
C551	2113743N13	CAP CHIP 3.0 PF +- .25PF COG
C552	2113743L17	CAP CHIP 1000 PF 10% X7R
C553	2113743L50	CAP CHIP 33000 PF 10%
C554	2113743N26	CAP CHIP 10.0 PF 5% COG
C555	2113743N28	CAP CHIP 12.0 PF 5% COG
C556	2113743N44	CAP CHIP 56.0 PF 5% COG
C557	2113743N44	CAP CHIP 56.0 PF 5% COG

Ref. Des.	Part Number	Description
C558	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C559	2113743L41	CAP CHIP 10000 PF 10% X7R
C560	2113743N36	CAP CHIP 27.0 PF 5% COG
C570	2113743A24	CAP CHIP .330 UF 10% 16V
C571	2113743A24	CAP CHIP .330 UF 10% 16V
C6	2113740F51	CAP CHIP REEL CL1 +/-30 100
C7	2113740F24	CAP CHIP REEL CL1 +/-30 7.5
C702	2113743N50	CAP CHIP 100 PF 5% COG
C703	2113740F51	CAP CHIP REEL CL1 +/-30 100
C704	2113740F51	CAP CHIP REEL CL1 +/-30 100
C705	2113740F63	CAP CHIP CL1 +/-30 330 5%
C706	2113743N50	CAP CHIP 100 PF 5% COG
C707	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C708	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C709	2113740F18	CAP CHIP REEL CL1 +/-30 4.3
C710	2113740F18	CAP CHIP REEL CL1 +/-30 4.3
C711	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C712	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C713	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C714	2113740F11	CAP CHIP REEL CL1 +/-30 2.2
C715	2113740F51	CAP CHIP REEL CL1 +/-30 100
C8	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C9	2113743N50	CAP CHIP 100 PF 5% COG
C925	2109720D14	CAP CER CHIP LOW DIST .1 UF

Ref. Des.	Part Number	Description
D1	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D101	4802197J83	DUAL SHOTTKY DIODE MBD330DWT1
D102	4802197J83	DUAL SHOTTKY DIODE MBD330DWT1
D104	4805129M06	DIODE MMBD7000
D2	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D201	4802233J09	DIODE TRIPLE SOT25-RH
D202	4802233J09	DIODE TRIPLE SOT25-RH
D3	4813833A20	DIODE SCHOTTKY 1A 40V PWRMITE
D301	4809877C08	DIODE VARACTOR 1SV279 SMD
D302	4809877C08	DIODE VARACTOR 1SV279 SMD
D303	4809877C08	DIODE VARACTOR 1SV279 SMD
D304	4809877C08	DIODE VARACTOR 1SV279 SMD
D305	4809877C08	DIODE VARACTOR 1SV279 SMD
D306	4809877C08	DIODE VARACTOR 1SV279 SMD
D307	4809877C08	DIODE VARACTOR 1SV279 SMD
D308	4809877C08	DIODE VARACTOR 1SV279 SMD
D309	4809877C08	DIODE VARACTOR 1SV279 SMD
D310	4809877C08	DIODE VARACTOR 1SV279 SMD
D311	4809877C08	DIODE VARACTOR 1SV279 SMD
D312	4809877C08	DIODE VARACTOR 1SV279 SMD
D313	4809877C08	DIODE VARACTOR 1SV279 SMD
D314	4809877C08	DIODE VARACTOR 1SV279 SMD
D315	4809877C08	DIODE VARACTOR 1SV279 SMD
D316	4809877C08	DIODE VARACTOR 1SV279 SMD

Ref. Des.	Part Number	Description
D320	4805218N57	DIODE DUAL
D400	4813825A19	DIODE SCHOTTKY BARRIER SERIES
D411	4809877C13	DIODE VARACTOR ISV305 SMD
D412	4809877C13	DIODE VARACTOR ISV305 SMD
D451	4809877C13	DIODE VARACTOR ISV305 SMD
D452	4809877C13	DIODE VARACTOR ISV305 SMD
D501	4809877C08	DIODE VARACTOR 1SV279 SMD
D550	4809877C13	DIODE VARACTOR ISV305 SMD
D551	4809877C13	DIODE VARACTOR ISV305 SMD
D701	4805656W24	DIODE, PIN RF
D702	4805656W24	DIODE, PIN RF
E1	2405688Z01	INDUCTOR FERRITE BEAD
E101	2405688Z01	INDUCTOR FERRITE BEAD
E105	2480640Z01	SURFACE MOUNT FERRITE BEAD
E5	2480640Z01	SURFACE MOUNT FERRITE BEAD
E501	2480640Z01	SURFACE MOUNT FERRITE BEAD
E502	2480640Z01	SURFACE MOUNT FERRITE BEAD
E503	2480640Z01	SURFACE MOUNT FERRITE BEAD
E504	2480640Z01	SURFACE MOUNT FERRITE BEAD
E505	2480640Z01	SURFACE MOUNT FERRITE BEAD
E506	2480640Z01	SURFACE MOUNT FERRITE BEAD
E507	2480640Z01	SURFACE MOUNT FERRITE BEAD
E508	2480640Z01	SURFACE MOUNT FERRITE BEAD
E509	2480640Z01	SURFACE MOUNT FERRITE BEAD

Ref. Des.	Part Number	Description
E520	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6	2480640Z01	SURFACE MOUNT FERRITE BEAD
E7	2480640Z01	SURFACE MOUNT FERRITE BEAD
F901	6505757V02	FUSE SURFACE MT 2AMP
FL200	9185130D01	FLTR SW CAP 3 POLE BUTTERW
FL490	9185924B01	FILTER, 73.35 MHZ 3-POLE CRYSTAL
G1	3905643V01	CONTACT ANT GRD
G12	3905643V01	CONTACT ANT GRD
G2	3905643V01	CONTACT ANT GRD
G3	3905643V01	CONTACT ANT GRD
G6	3905643V01	CONTACT ANT GRD
G7	3905643V01	CONTACT ANT GRD
G8	3905643V01	CONTACT ANT GRD
G9	3905643V01	CONTACT ANT GRD
J1	NOTPLACED	64AM DUMMY PART NUMBER
J2	0905304Z01	CONN COAXIAL SMT
L1	2486085A04	COIL, 6.8 UH POWER INDUCTOR
L101	2460591K40	COIL AIR WOUND INDUC 59.71
L103	2480574F01	IND FERRITE CHIP 600 OHM 0603
L104	2480574F01	IND FERRITE CHIP 600 OHM 0603
L105	2413926H14	IND CHIP 15.0 NH 5%
L106	2413926H13	IND CHIP 12.0 NH 5%
L107	2413926H06	IND CHIP 3.3 NH +/- 0.3NH
L108	0662057A17	CHIP RES 47 OHMS 5%
L109	2413926H14	IND CHIP 15.0 NH 5%
L110	2460591B62	COIL AIR WOUND INDUC 11.20
L201	2462587Q20	IND CHIP 2,200 NH 20%
L202	2462587Q20	IND CHIP 2,200 NH 20%
L203	2462587Q20	IND CHIP 2,200 NH 20%
L204	2462587Q20	IND CHIP 2,200 NH 20%
L205	2462587Q47	IND CHIP 1,000 NH 10%

Ref. Des.	Part Number	Description
L207	2462587Q47	IND CHIP 1,000 NH 10%
L208	2462587Q20	IND CHIP 2,200 NH 20%
L301	2462587V59	IND CHIP 390 NH 5%
L302	2462587V59	IND CHIP 390 NH 5%
L303	2462587V59	IND CHIP 390 NH 5%
L304	2462587V59	IND CHIP 390 NH 5%
L305	2462587V59	IND CHIP 390 NH 5%
L306	2462587V59	IND CHIP 390 NH 5%
L307	2462587V59	IND CHIP 390 NH 5%
L308	2462587V59	IND CHIP 390 NH 5%
L309	2462587T38	IND CHIP 22NH 5% LOW PRO
L310	2462587T38	IND CHIP 22NH 5% LOW PRO
L311	2462587T37	IND CHIP 18NH 5% LOW PRO
L312	2462587V59	IND CHIP 390 NH 5%
L313	2462587T40	IND CHIP 33NH 5% LOW PRO
L314	2409377M14	IND CHIP VW 68 NH 5% 1608
L315	2462587V59	IND CHIP 390 NH 5%
L316	2462587V59	IND CHIP 390 NH 5%
L317	2462587V59	IND CHIP 390 NH 5%
L318	2462587V59	IND CHIP 390 NH 5%
L320	2462587T39	IND CHIP 27NH 5% LOW PRO
L321	2409377M17	IND CHIP VW 100 NH 5% 1608
L4	2460591K40	COIL AIR WOUND INDUC 59.71
L410	2462587V35	CHIP IND 120 NH 5% 0805
L411	2460591C63	COIL AIR WOUND INDUC 17.52
L412	2460591C63	COIL AIR WOUND INDUC 17.52
L430	2409154M88	IND CER MLTILYR 10.0NH 1005
L431	2409154M17	IND CER MLTILYR 22.0NH 1005
L432	2409154M50	IND CER MLTILYR 100 NH 1005

Ref. Des.	Part Number	Description
L433	2409154M92	IND CER MLTILYR 22.0NH 1005
L434	2409377M10	IND CHIP VW 33NH 5%
L438	2409154M50	IND CER MLTILYR 100 NH 1005
L451	2462587V35	CHIP IND 120 NH 5% 0805
L452	2460591C63	COIL AIR WOUND INDUC 17.52
L453	2460591C63	COIL AIR WOUND INDUC 17.52
L470	2409377M36	IND CHIP VW 220 NH 5% 1608
L473	2462587V37	CHIP IND 180 NH 5% 0805
L474	2409154M17	IND CER MLTILYR 22.0NH 1005
L475	2404574Z14	IND CHIP VW 270NH 2% 2012 SMD
L490	2462587T25	IND CHIP 620NH 5% LOW PRO
L491	2462587T25	IND CHIP 620NH 5% LOW PRO
L501	2405769X05	COIL INDUCTOR
L502	2405769X05	COIL INDUCTOR
L503	2462587Q54	IND CHIP 3,900 NH 10%
L547	2404574Z15	IND CHIP VW 330NH 2% 2012 SMD
L550	2462587T21	IND CHIP 330NH 5% LOW PRO
L701	2462587V38	CHIP IND 220 NH 5% 0805
L702	2462587V38	CHIP IND 220 NH 5% 0805
L703	2460591L49	COIL AIR WOUND INDUC 20.53
L704	2460591L49	COIL AIR WOUND INDUC 20.53
L705	2462587V38	CHIP IND 220 NH 5% 0805
L706	2413926N27	COIL 30X60 INDUCTOR 180.0 NH
L707	2413926N27	COIL 30X60 INDUCTOR 180.0 NH
P1	NOTPLACED	64AM DUMMY PART NUMBER
PCB	8485370D01	PCB RF UHF RNG 1
Q1	4813821A47	TSTR P-CH HDTMOS 20V

Ref. Des.	Part Number	Description
Q101	4813824A42	TSTR PNP 50V BIAS RES 10K 10K
Q102	4813821A47	TSTR P-CH HDTMOS 20V
Q103	4813824A42	TSTR PNP 50V BIAS RES 10K 10K
Q104	4813821A47	TSTR P-CH HDTMOS 20V
Q106	4813824A39	TSTR NPN 50V BIAS RES 22K 22K
Q107	5185633C44	RING PA
Q108	4805128M12	TSTR SOT BCW 60B (RH)
Q2	4880048M01	TSTR NPN DIG 47K/47K
Q301	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q302	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q303	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q304	4805793Y01	TRANS MINI SOT NPN LOW NOISE
Q305	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q306	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q307	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q308	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q310	4813824A42	TSTR PNP 50V BIAS RES 10K 10K
Q311	4813824A39	TSTR NPN 50V BIAS RES 22K 22K
Q430	4805585Q19	TRANSISTOR
Q501	4805128M19	TSTR SOT23 MMBA13 RH
Q502	4805218N63	RF TRANS SOT 323 BFQ67W
Q66	4880048M01	TSTR NPN DIG 47K/47K
Q700	4813821A47	TSTR P-CH HDTMOS 20V
Q701	4880048M01	TSTR NPN DIG 47K/47K
Q99	4813821A47	TSTR P-CH HDTMOS 20V
R1	0662057N23	RES. CHIP 100K 5% 20X40
R101	0662057N23	RES. CHIP 100K 5% 20X40
R103	0662057M58	RES. CHIP 220 5% 20X40
R104	0662057M58	RES. CHIP 220 5% 20X40

Ref. Des.	Part Number	Description
R105	NOTPLACED	64AM DUMMY PART NUMBER
R106	0662057M98	RES. CHIP 10K 5% 20X40
R107	0662057M90	RES. CHIP 4700 5% 20X40
R108	0662057M90	RES. CHIP 4700 5% 20X40
R109	0662057M50	RES. CHIP 100 5% 20X40
R110	0662057M50	RES. CHIP 100 5% 20X40
R111	0662057N39	RES. CHIP 470K 5% 20X40
R112	0662057N23	RES. CHIP 100K 5% 20X40
R113	0662057N23	RES. CHIP 100K 5% 20X40
R114	0662057N23	RES. CHIP 100K 5% 20X40
R115	0662057M74	RES. CHIP 1000 5% 20X40
R117	0662057M26	RES. CHIP 10 5% 20X40
R118	0662057M50	RES. CHIP 100 5% 20X40
R119	0662057M50	RES. CHIP 100 5% 20X40
R120	0662057M50	RES. CHIP 100 5% 20X40
R121	0662057M50	RES. CHIP 100 5% 20X40
R126	0662057N06	RES. CHIP 20K 5% 20X40
R127	0662057M98	RES. CHIP 10K 5% 20X40
R128	0662057M98	RES. CHIP 10K 5% 20X40
R129	NOTPLACED	64AM DUMMY PART NUMBER
R131	0662057M98	RES. CHIP 10K 5% 20X40
R132	0662057M98	RES. CHIP 10K 5% 20X40
R201	0662057N11	RES. CHIP 33K 5% 20X40
R202	0662057M81	RES. CHIP 2000 5% 20X40
R204	0662057N17	RES. CHIP 56K 5% 20X40
R205	0662057N13	RES. CHIP 39K 5% 20X40
R207	0662057M40	RES. CHIP 39 5% 20X40
R208	0662057N11	RES. CHIP 33K 5% 20X40
R209	0662057M98	RES. CHIP 10K 5% 20X40
R210	0662057M64	RES. CHIP 390 5% 20X40
R211	0662057M74	RES. CHIP 1000 5% 20X40
R212	0662057M52	RES. CHIP 120 5% 20X40
R213	0662057M98	RES. CHIP 10K 5% 20X40
R214	0662057M74	RES. CHIP 1000 5% 20X40
R215	0662057M98	RES. CHIP 10K 5% 20X40
R216	0662057M96	RES. CHIP 8200 5% 20X40
R217	0662057M76	RES. CHIP 1200 5% 20X40

Ref. Des.	Part Number	Description
R220	NOTPLACED	64AM DUMMY PART NUMBER
R301	0662057N06	RES. CHIP 20K 5% 20X40
R302	0662057M58	RES. CHIP 220 5% 20X40
R303	0662057N07	RES. CHIP 22K 5% 20X40
R304	0662057M34	RES. CHIP 22 5% 20X40
R305	0662057N16	RES. CHIP 51K 5% 20X40
R306	0662057M32	RES. CHIP 18 5% 20X40
R307	0662057M61	RES. CHIP 300 5% 20X40
R308	0662057M61	RES. CHIP 300 5% 20X40
R309	0662057N06	RES. CHIP 20K 5% 20X40
R310	0662057M58	RES. CHIP 220 5% 20X40
R311	0662057N07	RES. CHIP 22K 5% 20X40
R312	0662057M38	RES. CHIP 33 5% 20X40
R313	0662057M34	RES. CHIP 22 5% 20X40
R314	0662057M34	RES. CHIP 22 5% 20X40
R315	0662057M42	RES. CHIP 47 5% 20X40
R316	0662057N16	RES. CHIP 51K 5% 20X40
R317	0662057N06	RES. CHIP 20K 5% 20X40
R318	0662057M58	RES. CHIP 220 5% 20X40
R319	0662057N07	RES. CHIP 22K 5% 20X40
R320	0662057M34	RES. CHIP 22 5% 20X40
R321	0662057M62	RES. CHIP 330 5% 20X40
R322	0662057N16	RES. CHIP 51K 5% 20X40
R323	0662057N06	RES. CHIP 20K 5% 20X40
R324	0662057M58	RES. CHIP 220 5% 20X40
R325	0662057N07	RES. CHIP 22K 5% 20X40
R326	0662057M34	RES. CHIP 22 5% 20X40
R327	0662057N16	RES. CHIP 51K 5% 20X40
R332	0662057M92	RES. CHIP 5600 5% 20X40
R333	0662057M58	RES. CHIP 220 5% 20X40
R400	0662057N23	RES. CHIP 100K 5% 20X40
R411	0662057M98	RES. CHIP 10K 5% 20X40
R412	0662057M98	RES. CHIP 10K 5% 20X40
R430	0662057M58	RES. CHIP 220 5% 20X40
R431	0662057M82	RES. CHIP 2200 5% 20X40
R432	0662057M82	RES. CHIP 2200 5% 20X40
R433	0662057M94	RES. CHIP 6800 5% 20X40
R434	0662057M70	RES. CHIP 680 5% 20X40

Ref. Des.	Part Number	Description
R451	0662057M98	RES. CHIP 10K 5% 20X40
R452	0662057M98	RES. CHIP 10K 5% 20X40
R470	0662057M59	RES CHIP 240 5% 20X40
R471	0662057M48	RES. CHIP 82 5% 20X40
R472	0662057M32	RES. CHIP 18 5% 20X40
R473	0662057M32	RES. CHIP 18 5% 20X40
R501	0662057N23	RES. CHIP 100K 5% 20X40
R502	0662057M56	RES. CHIP 180 5% 20X40
R503	0662057M98	RES. CHIP 10K 5% 20X40
R504	0662057M98	RES. CHIP 10K 5% 20X40
R506	0662057M98	RES. CHIP 10K 5% 20X40
R508	0662057M62	RES. CHIP 330 5% 20X40
R509	0662057M42	RES. CHIP 47 5% 20X40
R510	0662057N23	RES. CHIP 100K 5% 20X40
R511	0662057N23	RES. CHIP 100K 5% 20X40
R512	0662057M98	RES. CHIP 10K 5% 20X40
R513	0662057M98	RES. CHIP 10K 5% 20X40
R514	0662057M64	RES. CHIP 390 5% 20X40
R551	0662057M81	RES. CHIP 2000 5% 20X40
R552	0662057M95	RES. CHIP 7500 5% 20X40
R6	0662057M98	RES. CHIP 10K 5% 20X40
R7	0662057M98	RES. CHIP 10K 5% 20X40
R702	0662057A37	CHIP RES 330 OHMS 5%
R703	0662057M50	RES. CHIP 100 5% 20X40
R704	0662057N23	RES. CHIP 100K 5% 20X40
R706	0662057N23	RES. CHIP 100K 5% 20X40
R719	0662057M78	RES. CHIP 1500 5% 20X40
R720	0662057N23	RES. CHIP 100K 5% 20X40
SH201	2685787B01	SHLD FRAC-N
SH202	2685787B01	SHLD FRAC-N
SH301	2685297D01	SHLD VCO
SH302	2685298D01	SHLD VCO BUFFER
SH401	2685627A02	SHLD DUAL INDUCTOR
SH402	2685627A02	SHLD DUAL INDUCTOR
SH403	2685882A01	SHLD VCO TANK
SH501	2685298D01	SHLD VCO BUFFER
SH700	2685762D02	SHIELD HARMONIC FILTER

Ref. Des.	Part Number	Description
T471	2580541Z02	BALUN TRANSFORMER (NEW)
T472	2580541Z02	BALUN TRANSFORMER (NEW)
T473	2505515V07	XFMR JEDI MIXER 25:1
TH1	NOTPLACED	64AM DUMMY PART NUMBER
U1	5185353D13	IC MINI SO-8 HI PRECISION REG 5V
U101	5185633C23	MODULE DIRECT COUPLER
U102	5185130C65	IC VHF/UHF/800 MHZ LD MOS DRIVER
U103	5185963A15	IC TEMPERTURE SENSOR 1M50C
U104	5185765B26	IC PWR CTRL IN MOS20
U105	5185368C19	IC QUAD 10 BIT A/D CONV
U106	5185963A60	IC OP AMP
U2	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U201	5186358E01	IC ANALOG OP-AMP CLC450
U202	5185963A27	IC TESTED AT25016 48 PIN GFP
U203	5185368C83	IC 12 BIT DAC
U3	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U300	5105750U54	IC PKG DIE VCO BUFFER
U4	5105462G78	IC EEPROM 16K SPEI CMOS
U401	5185130C83	IC 15DB DIGITAL ATTENUATOR SOT25 PKG
U404	5185143E12	IC INVERTER DUAL SC70
U470	5185130C91	IC MIXER RF SOIC 10
U500	5185963A85	IC-ABACUS III-LP
VR1	4813830A33	DIODE 20V 5% 225MW MMBZ5250B_
VR2	4813830A15	DIODE 5.6V 5% 225MW MMBZ5232B_
VR3	4805656W45	DIODE TRANSIENT VOLTAGE SUPPRESSOR
W02	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
W021	NOTPLACED	64AM DUMMY PART NUMBER
W1	NOTPLACED	64AM DUMMY PART NUMBER
W10	NOTPLACED	64AM DUMMY PART NUMBER
W11	NOTPLACED	64AM DUMMY PART NUMBER
W12	NOTPLACED	64AM DUMMY PART NUMBER
W13	NOTPLACED	64AM DUMMY PART NUMBER
W14	NOTPLACED	64AM DUMMY PART NUMBER
W15	NOTPLACED	64AM DUMMY PART NUMBER
W16	NOTPLACED	64AM DUMMY PART NUMBER
W17	NOTPLACED	64AM DUMMY PART NUMBER
W18	NOTPLACED	64AM DUMMY PART NUMBER
W19	NOTPLACED	64AM DUMMY PART NUMBER
W2	NOTPLACED	64AM DUMMY PART NUMBER
W20	NOTPLACED	64AM DUMMY PART NUMBER
W21	NOTPLACED	64AM DUMMY PART NUMBER
W22	NOTPLACED	64AM DUMMY PART NUMBER
W23	NOTPLACED	64AM DUMMY PART NUMBER
W3	NOTPLACED	64AM DUMMY PART NUMBER
W4	NOTPLACED	64AM DUMMY PART NUMBER
W5	NOTPLACED	64AM DUMMY PART NUMBER
W6	NOTPLACED	64AM DUMMY PART NUMBER
W7	NOTPLACED	64AM DUMMY PART NUMBER
W8	NOTPLACED	64AM DUMMY PART NUMBER

Ref. Des.	Part Number	Description
W9	NOTPLACED	64AM DUMMY PART NUMBER
Y200	4802245J68	"OSC, REF 16.8 MHZ 1.5 PPM"

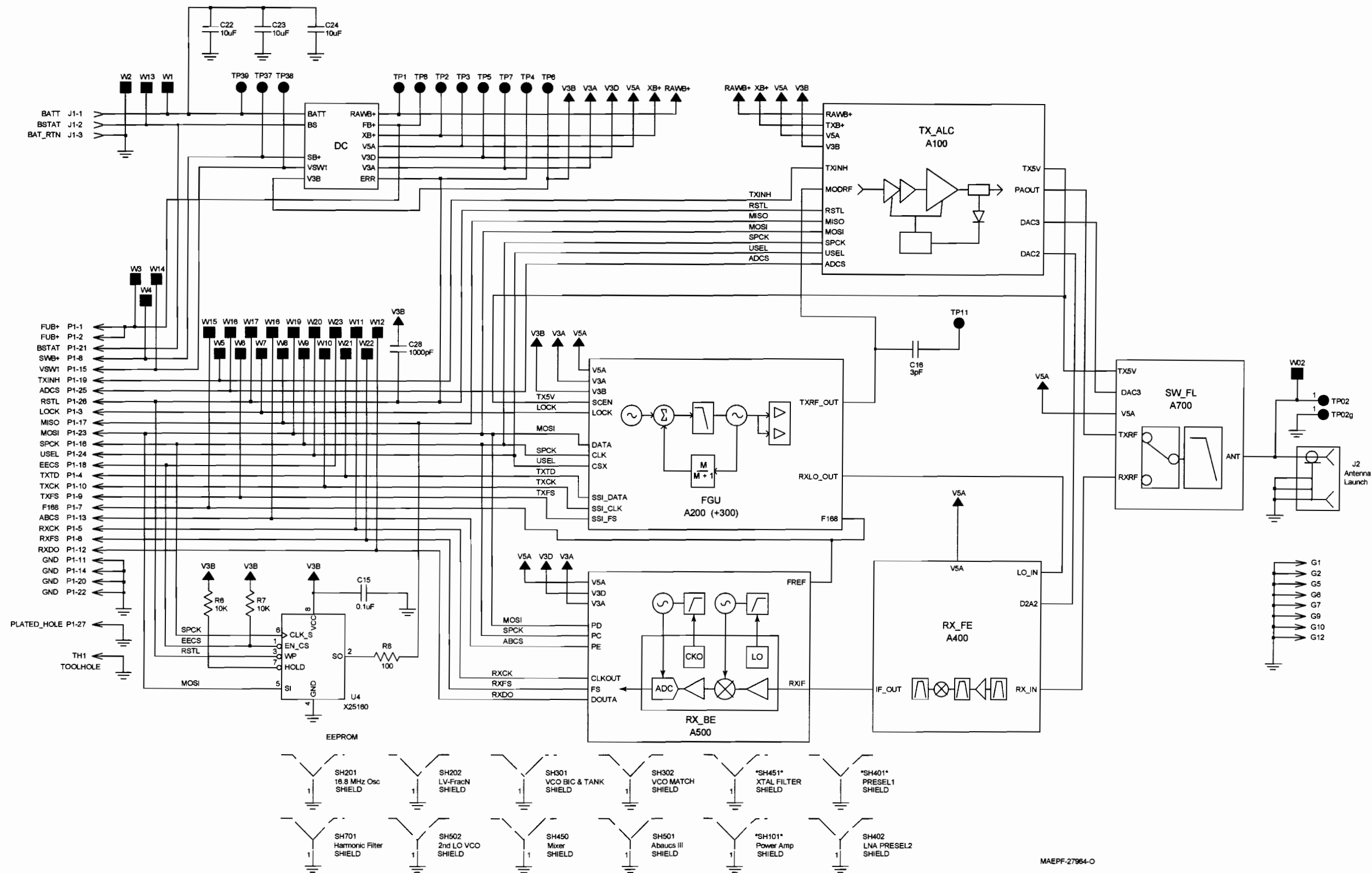


Figure 8-49. NLE 4273A UHF Range 2 Transceiver (RF) Board Overall Circuit Schematic

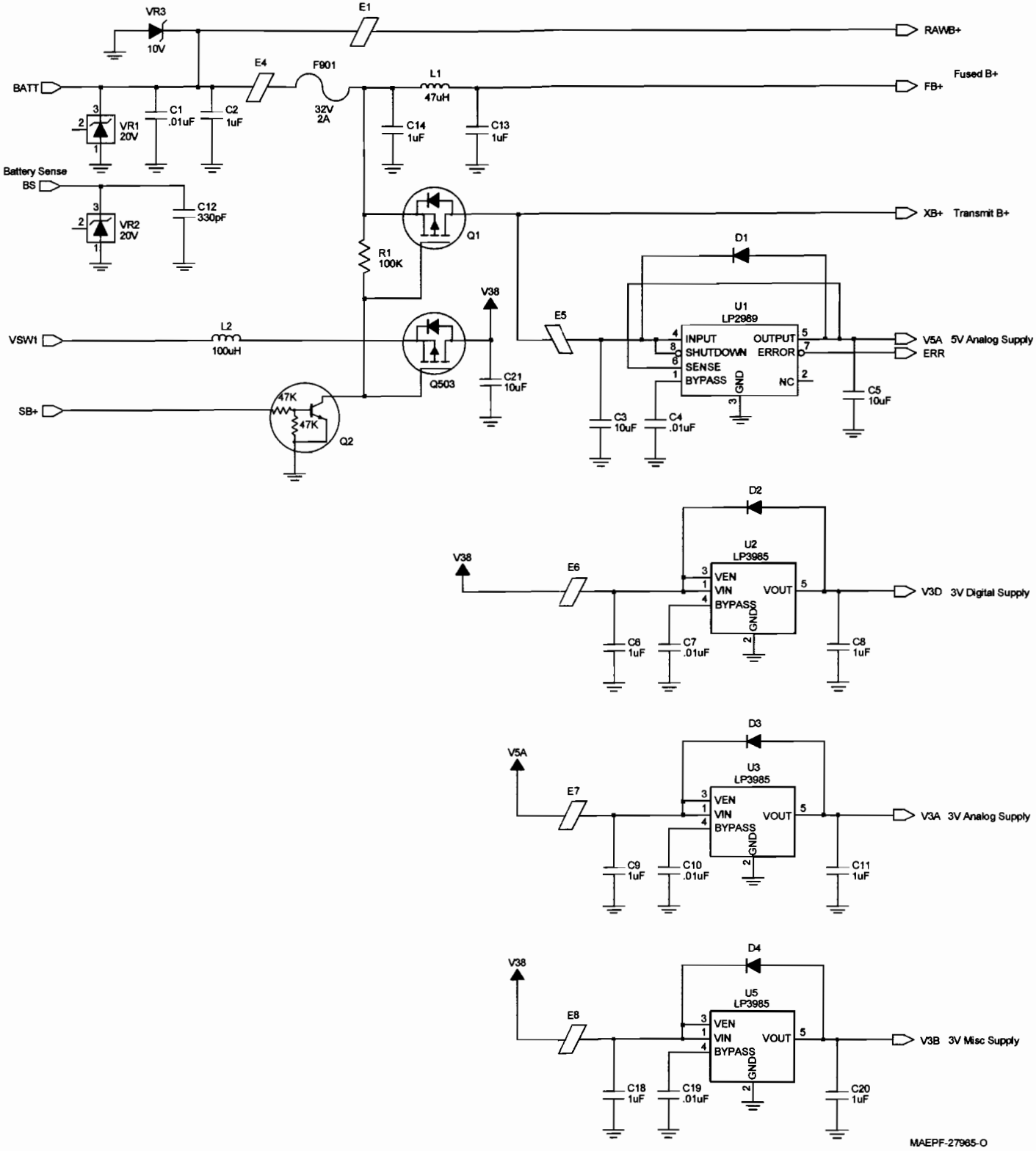


Figure 8-50. NLE 4273A UHF Range 2 D/C Power Circuit Schematic

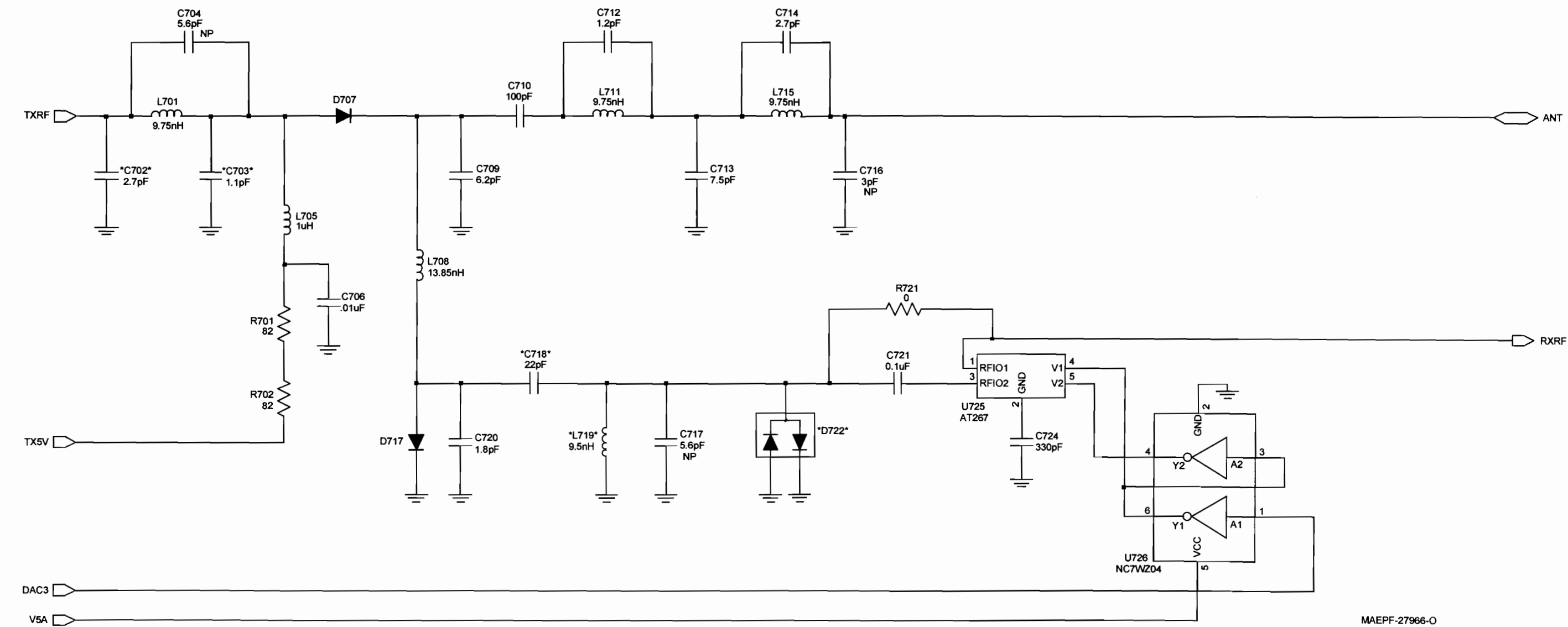


Figure 8-51. NLE 4273A UHF Range 2 Antenna Switch and Harmonic Filter Circuit Schematic

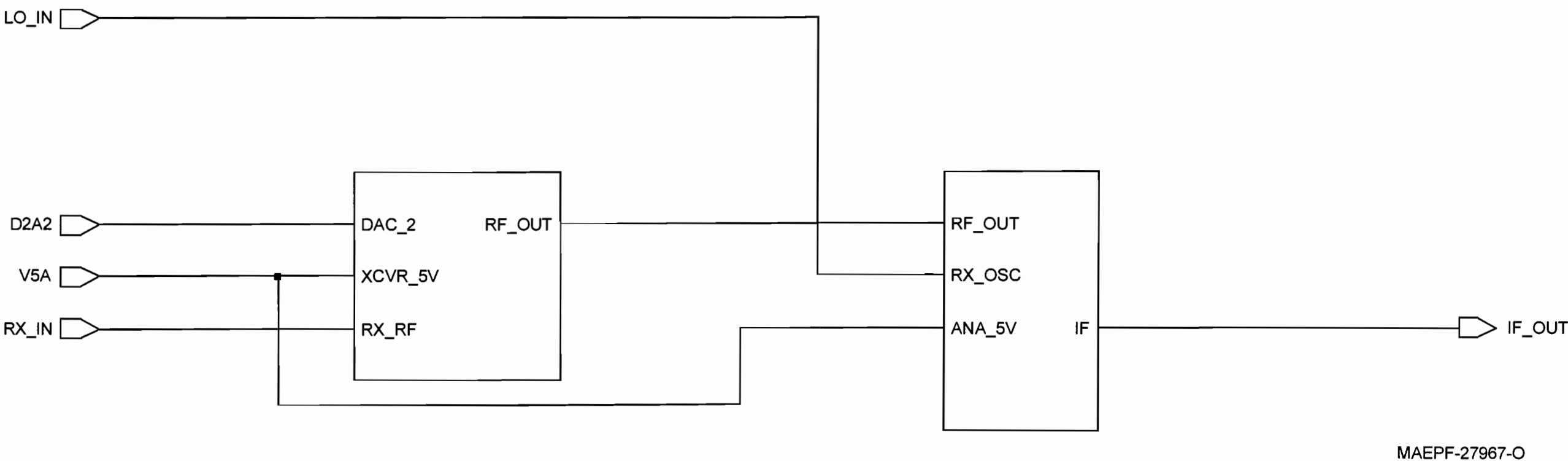


Figure 8-52. NLE 4273A UHF Range 2 Receiver Front End Circuit Schematic