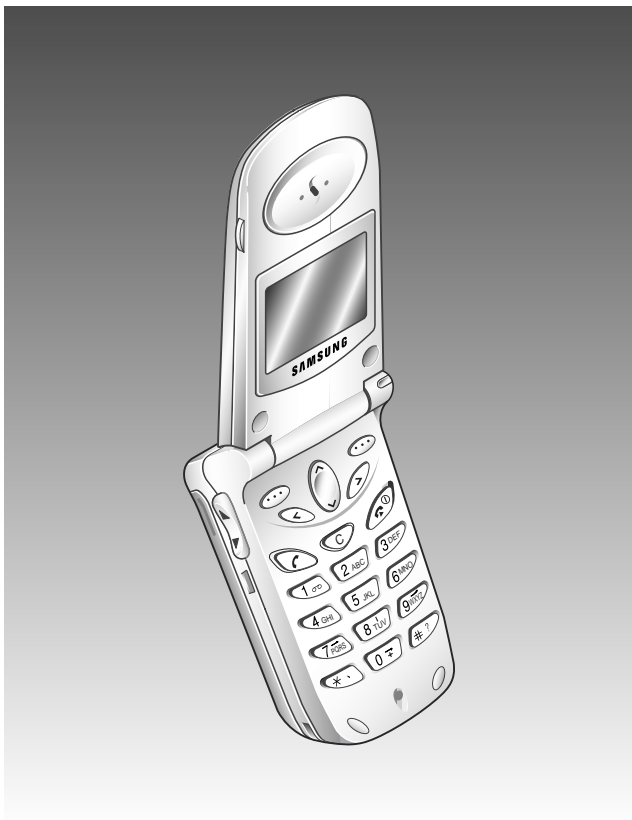




DUAL BAND Mobile Cellular Phone SGH-A288

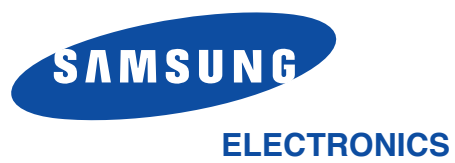
SERVICE Manual

DUAL BAND MOBILE CELLULAR PHONE



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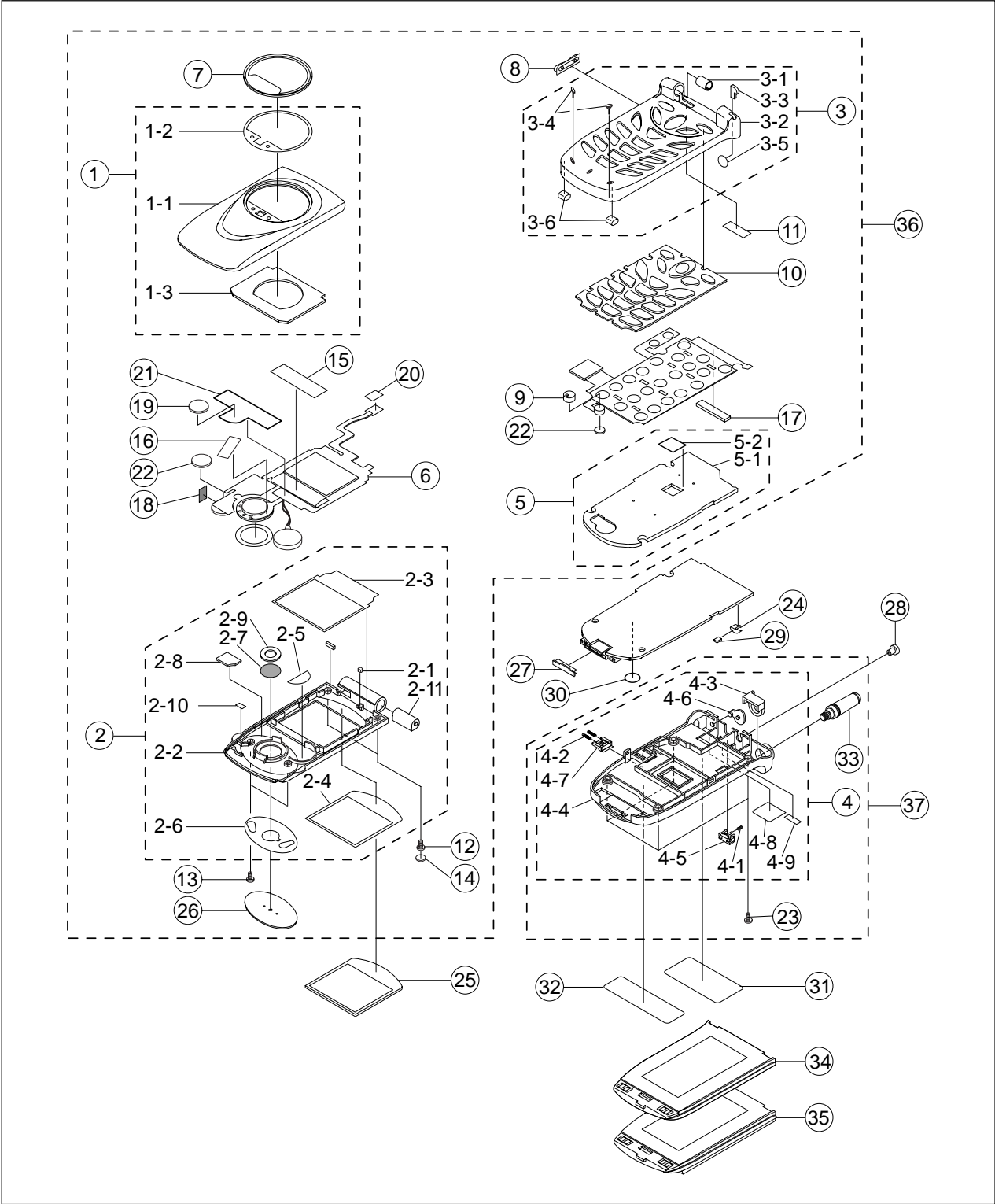
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-

1. Exploded Views and Parts List

1-1 Main

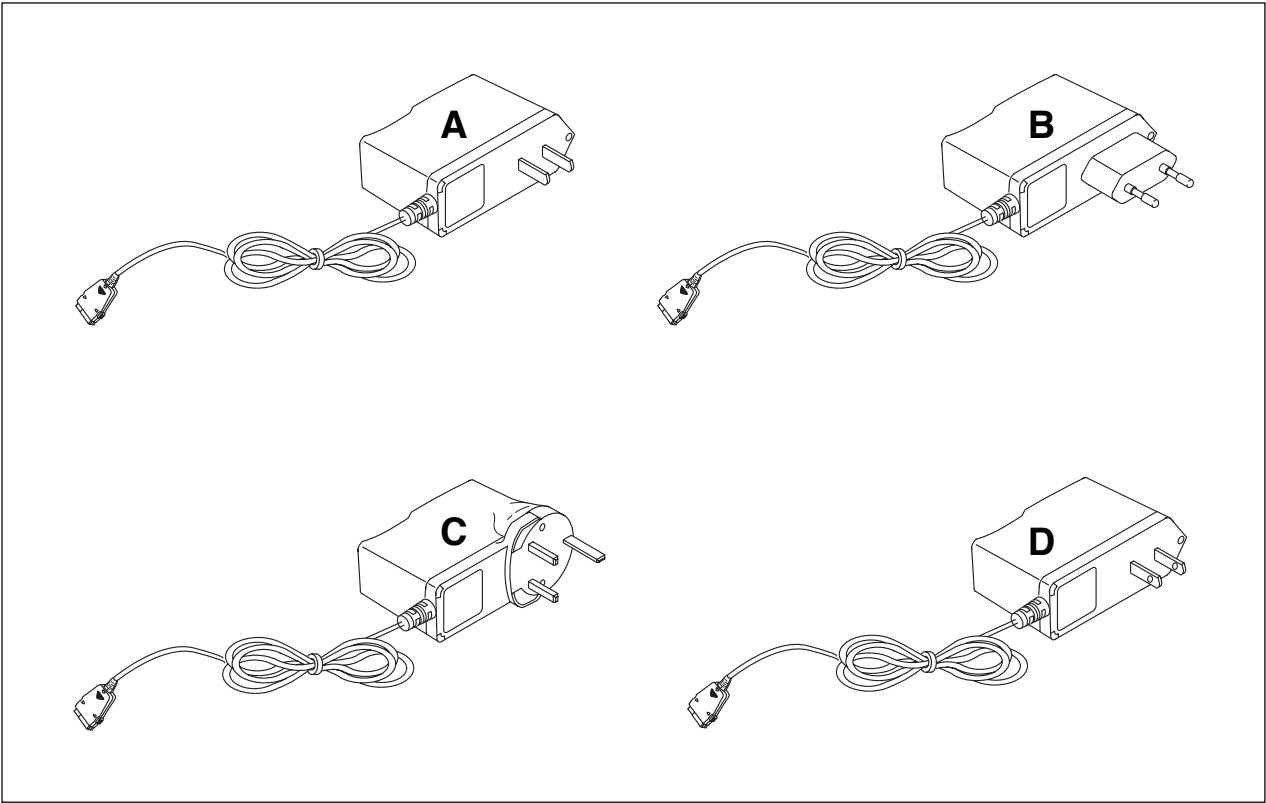


1-2 Main Parts List

NO		SEC CODE	DESCRIPTION	COLOR	SVC	Q`TY	REMARKS
1		GH75-00925A	MEC-FOLDER UPPER	WHITE	SA	1	
	1-1	GH72-02098A	PMO-FOLDER UPPER		SNA	1	
	1-2	GH74-00307A	MPR-TAPE WATCH WINDOW		SNA	1	
	1-3	GH74-01114A	MPR-SPONGE WATCH LCD		SNA	1	
2		GH75-00926A	MEC-FOLDER LOWER	WHITE	SA	1	
	2-1	GH70-00039A	ICT-MAGNETIC		SNA	1	
	2-2	GH72-02099A	PMO-FOLDER LOWER		SNA	1	
	2-3	GH74-00309A	MPR-SPONGE MAIN LCD		SNA	1	
	2-4	GH74-00310A	MPR-TAPE MAIN LCD		SNA	1	
	2-5	GH74-00311A	MPR-TAPE VIBRATOR		SNA	1	
	2-6	GH74-00312A	MPR-TAPE SPEAKER COVER		SNA	1	
	2-7	GH74-00580A	MPR-EMI MESH SPEAKER		SNA	1	
	2-8	GH74-00721A	MPR-SPONGE COIL		SNA	1	
	2-9	GH74-01240A	MPR-SPONGE SPEAKER		SNA	1	
	2-10	GH74-01241A	MPR-TAPE BUZZER		SNA	1	
	2-11	GH75-00928A	MEC-HINGE		SA	1	
3		GH75-00924A	MEC-FRONT COVER	WHITE	SA	1	
	3-1	GH72-00636A	PMO-HINGE DUMMY		SNA	1	
	3-2	GH72-02097A	PMO-FRONT COVER		SNA	1	
	3-3	GH72-02394A	PMO-REFLECTOR LED		SNA	1	
	3-4	GH73-00266B	RMO-DAMPER(L)		SNA	2	
	3-5	GH74-00445A	MPR-SPONGE CMIC		SNA	1	
	3-6	GH74-01296A	MPR-SHIELD FOAM		SNA	2	
4		GH75-00927A	MEC-REAR COVER	WHITE	SA	1	
	4-1	GH61-00008A	SPRING-LOCKER		SNA	1	
	4-2	GH61-00011A	SPRING-SIM LOCKER		SNA	2	
	4-3	GH71-00380A	NPR-BRACKET ANT		SNA	1	
	4-4	GH72-02102A	PMO-REAR COVER	WHITE	SNA	1	
	4-5	GH72-02103A	PMO-LOCKER BATT	WHITE	SNA	1	
	4-6	GH72-02104A	PMO-EAR JACK COVER	LIGHT/GRAY	SNA	1	
	4-7	GH72-02330A	PMO-SIM KNOB	WHITE	SNA	1	
	4-8	GH74-01236A	MPR-TAPE EARPHONE	WHITE	SNA	1	
	4-9	GH74-01237A	MPR-TAPE MOBILE	WHITE	SNA	1	
5		GH75-01022A	MEC-SHIELD COVER		SA	1	
	5-1	GH72-02101A	PMO-SHIELD COVER		SNA	1	
	5-2	GH74-01238A	MCT-SHIELD GASKET		SNA	1	
6		GH07-00051A	LCD-SGHA288		SA	1	
7		GH72-00640A	PMO-WATCH WINDOW		SA	1	
8		GH72-00940A	PMO-KNOB VOLUME		SA	1	
9		GH73-00504A	RMO-HOLDER MIC		SA	1	
10		GH73-00580A	RMO-KEY PAD		SA	1	
11		GH74-00587A	MPR-DUMMY SHEET		SA	1	
12		6001-000464	SCREW-MACHINE		SA	2	PH,+,M1.4,L4,BLK
13		6001-001402	SCREW-MACHINE		SA	2	PH,+,M1.4,L3,WHT
14		GH74-00611B	MPR-SCREW CAP	WHITE	SA	2	
15		GH74-00770A	MPR-ESD SHEET		SA	1	
16		GH74-00979A	MPR-SHEET SPEAKER		SA	1	
17		GH74-01254A	MPR-SPONGE EARJACK		SA	1	

NO		SEC CODE	DESCRIPTION	COLOR	SVC	Q`TY	REMARKS
18		GH74-01294A	MPR-CLOTH BUZZER		SA	1	
19		GH74-01295A	MPR-SPONGE VIB SPEAKER		SA	1	
20		GH74-01297A	MPR-SHIELD FOAM CONN		SA	1	
21		GH74-01332A	MPR-GASKET LOWER		SA	1	
22		GH74-40518A	MCT-BACKUP TAPE		SA	2	
23		6001-000464	SCREW-MACHINE		SA	4	
24		GH71-00095A	NPR-CONTACT ANT		SA	1	
25		GH72-00602A	PCT-WINDOW LCD		SA	1	
26		GH72-00647B	PMO-SPEAKER COVER		SA	1	
27		GH73-00578A	RMO-CONNECTOR COVER		SA	4	
28		GH73-00579A	RMO-MOBILE CAP		SA	1	
29		GH73-00667A	RMO-ANT.CONTACT RUBBER		SA	1	
30		GH74-40518A	MCT-BACKUP TAPE		SA	1	
31		GH68-01684A	LABEL(R)-MAIN(CHNA)		SNA	1	
32		GH68-01685A	LABEL(R)-MAIN(A288)		SNA	1	
33		GH42-00076B	ANTENNA-SGHA288		SA	1	
34		GH43-00283A	BATTERY-SLIM-SGHA288		SA	1	
35		GH43-00305A	BATTERY-STD-SGHA288		SA	1	
36		GH97-01829A	MEA FRONT-TOTAL(WHT)		SNA	1	
37		GH97-01830A	MEA REAR-TOTAL(WHT)		SNA	1	

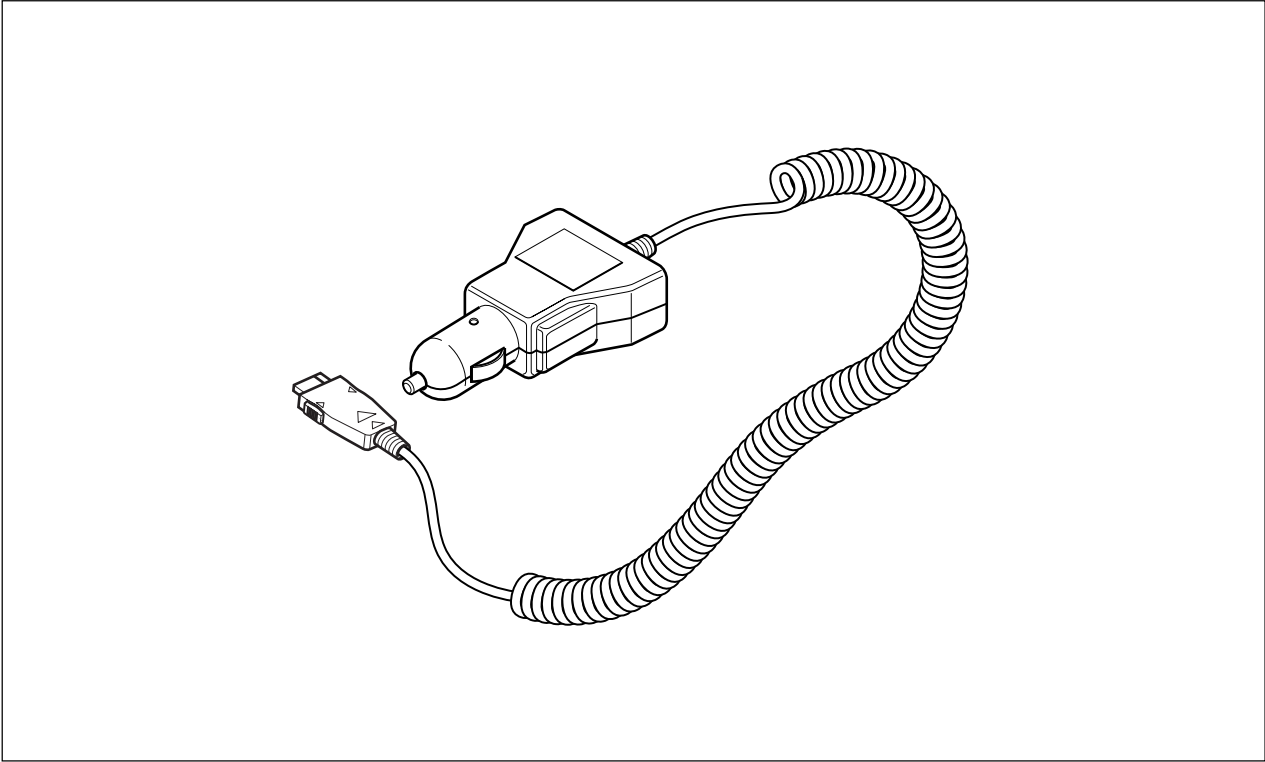
1-3 Travel Adapter



1-4 Travel Adapter Parts List

TYPE	SEC CODE	REMARK
A	GH44-00171A	CHINA
B	GH44-00184A	EUROPE
C	GH44-00171C	UNITED KINGDOM
D	Gh44-00171E	TAIWAN

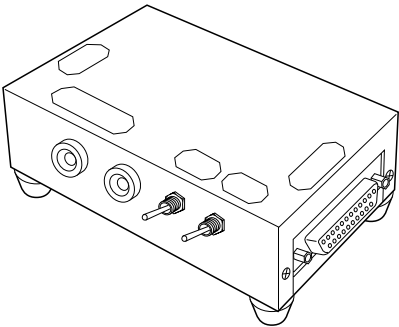
1-5 Ciger Light Adapter

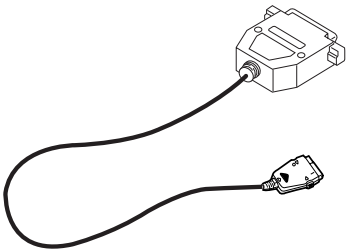


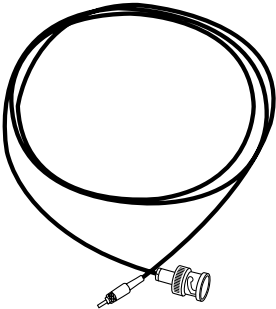
1-6 Ciger Light Adapter Parts List

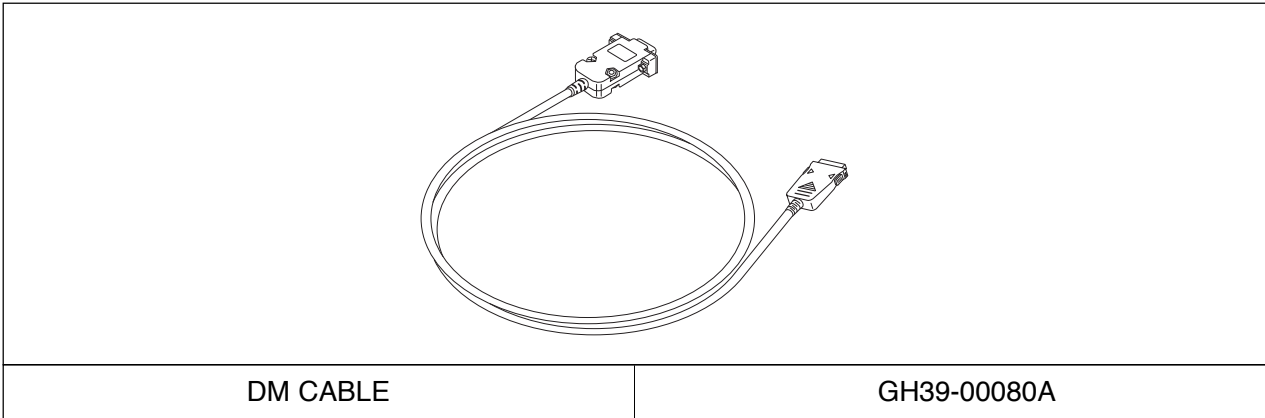
DESCRIPTION	SEC CODE	REMARK
Ciger Light Adapter Code	GH44-00170A	BLACK

1-7 Test Jig

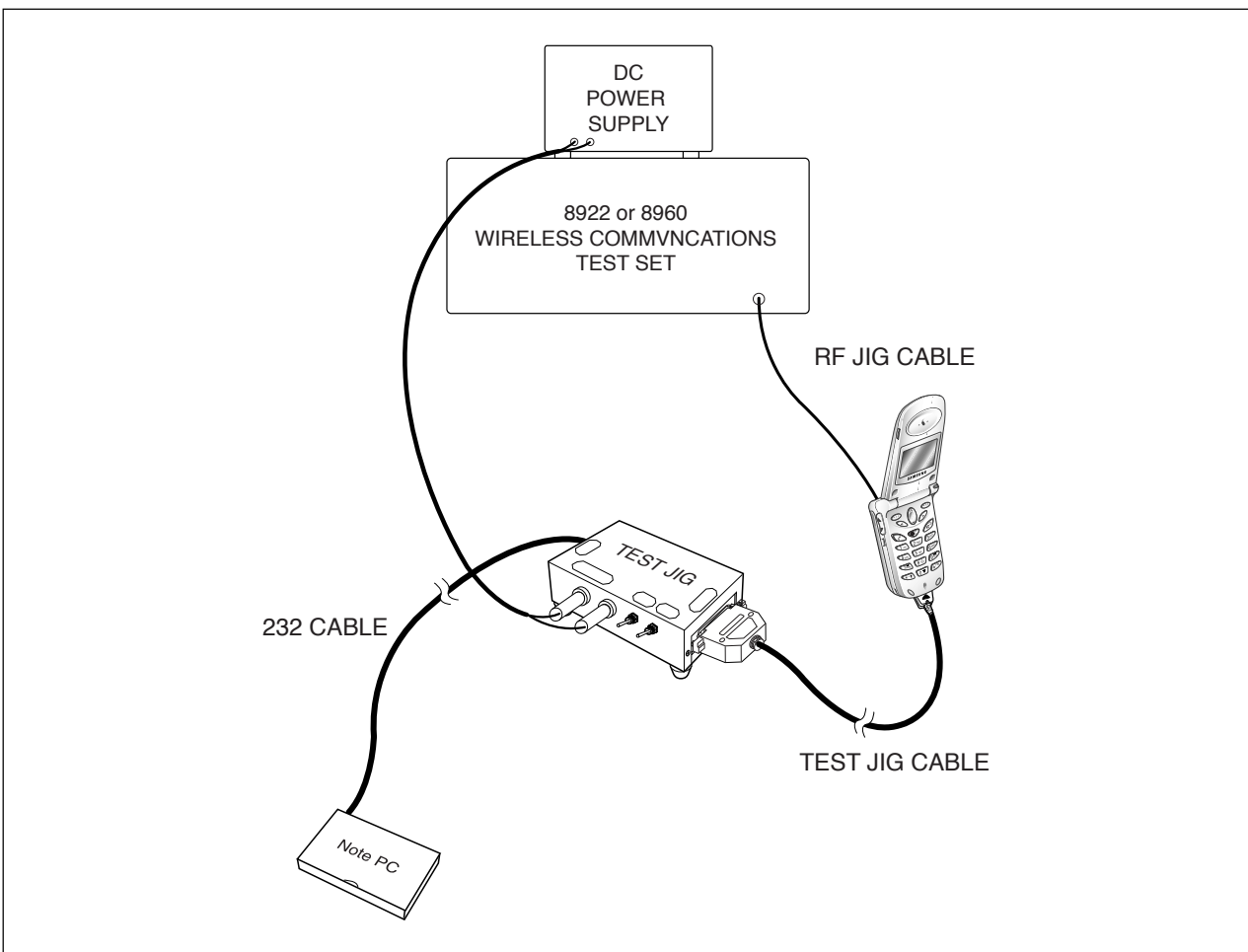
	
TEST JIG	GH80-10508A

	
TEST JIG CABLE	GH39-00079A

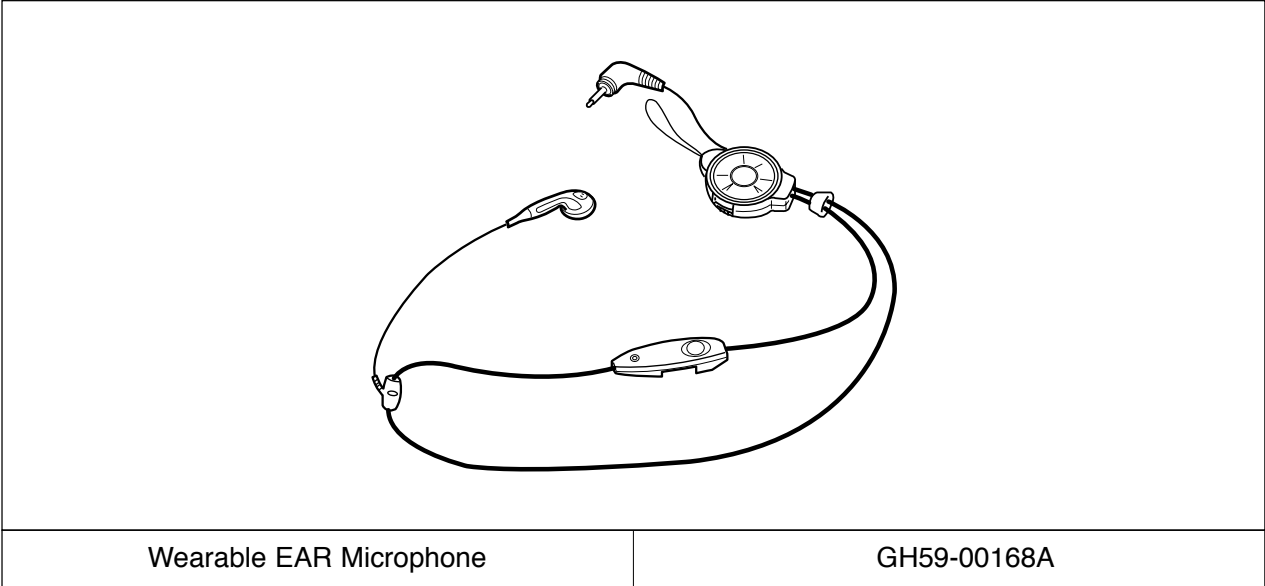
	
RF JIG CABLE	GH39-00089A



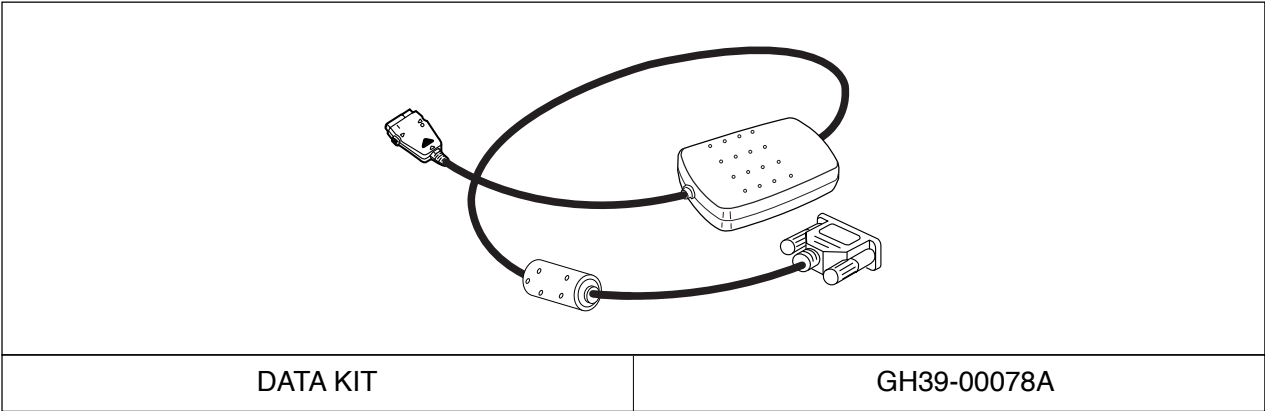
1-7-1 Test Jig



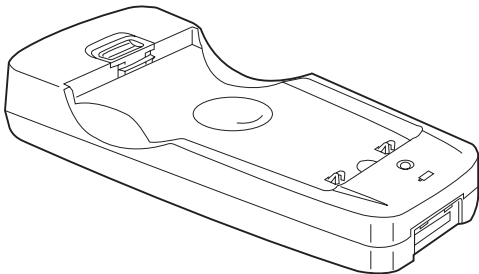
1-8 Wearable EAR Microphone



1-9 Data Kit



1-10 Battery Charger

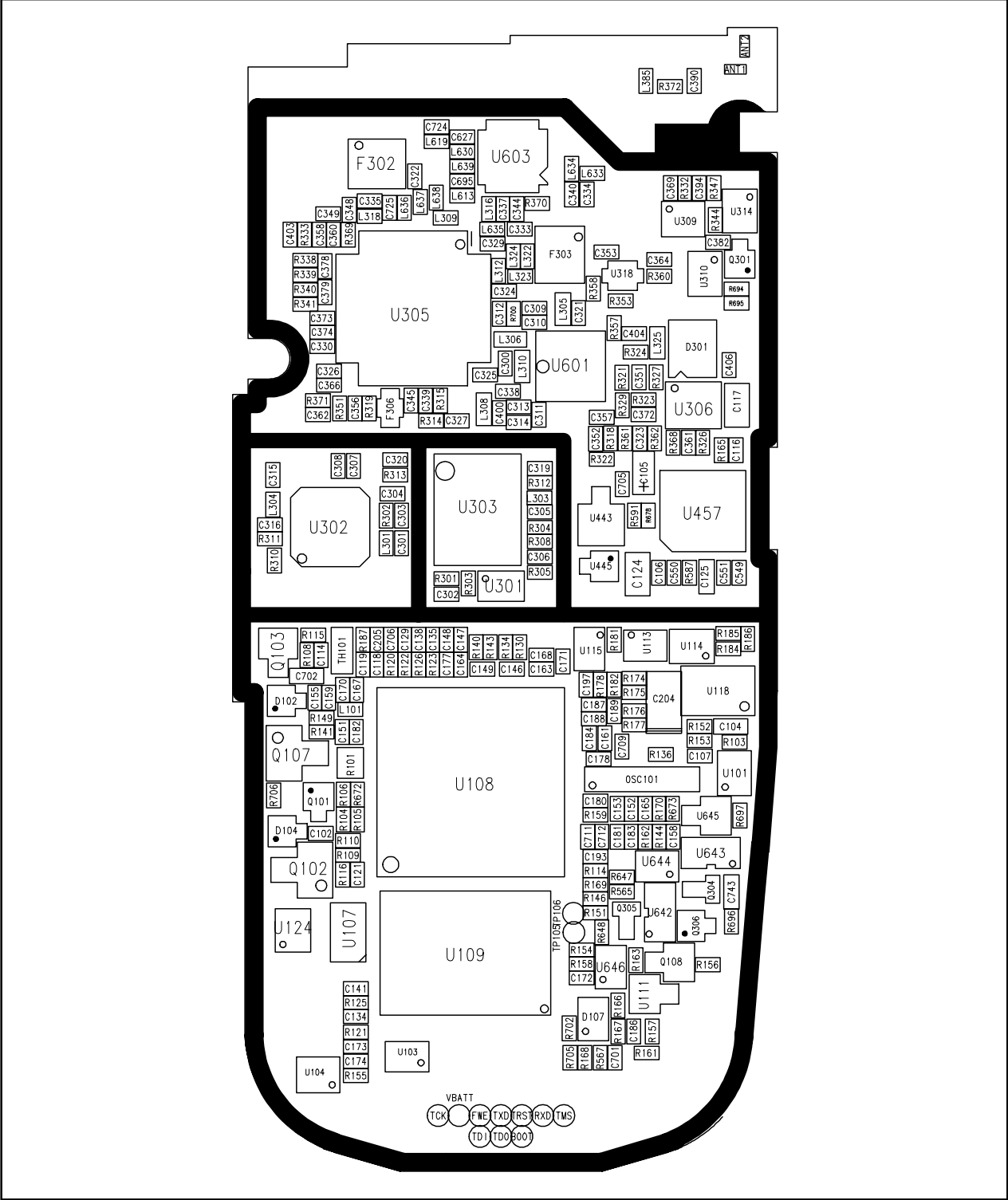


BATTERY CHAGER

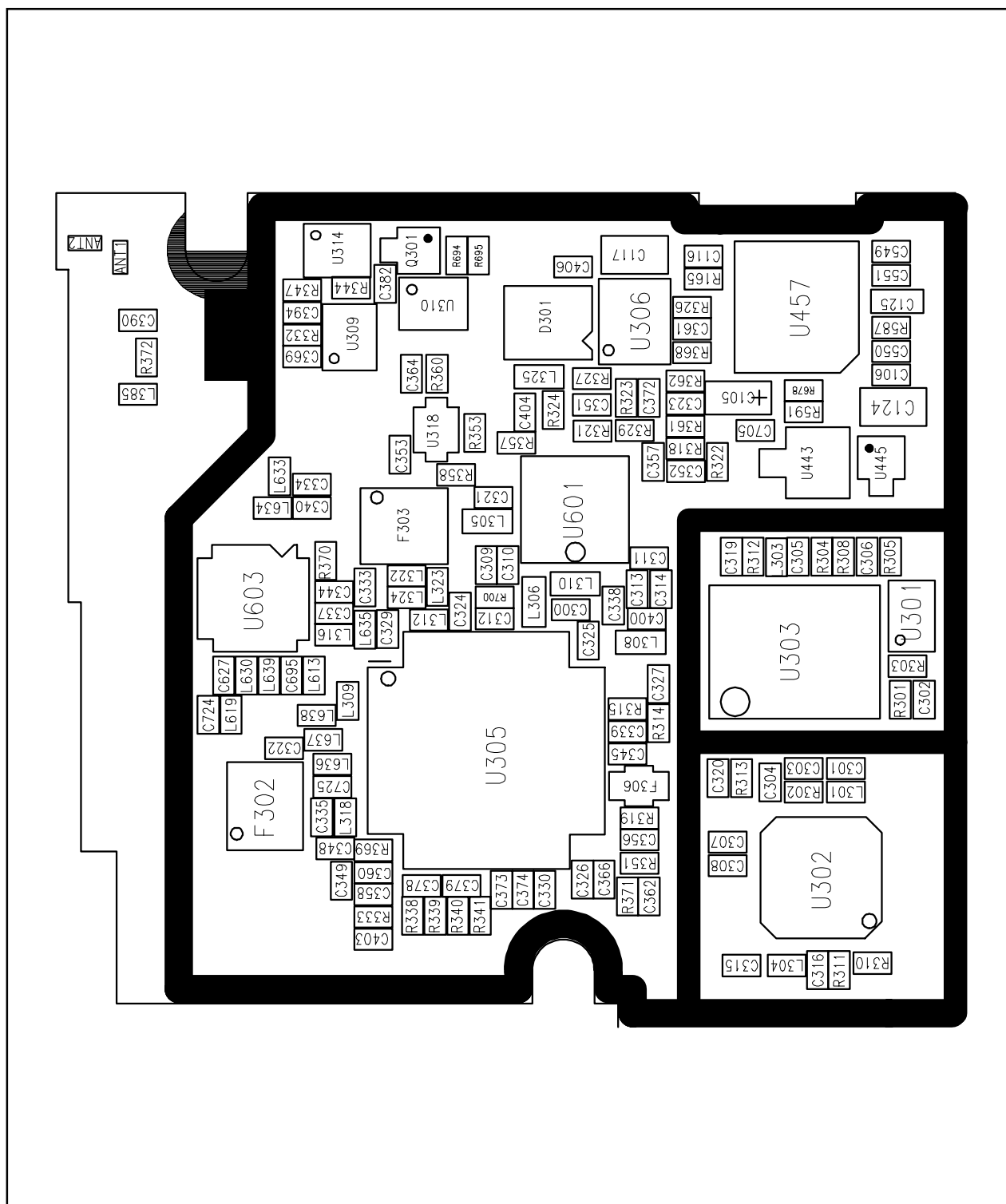
GH44-00177A

2. PCB Diagrams

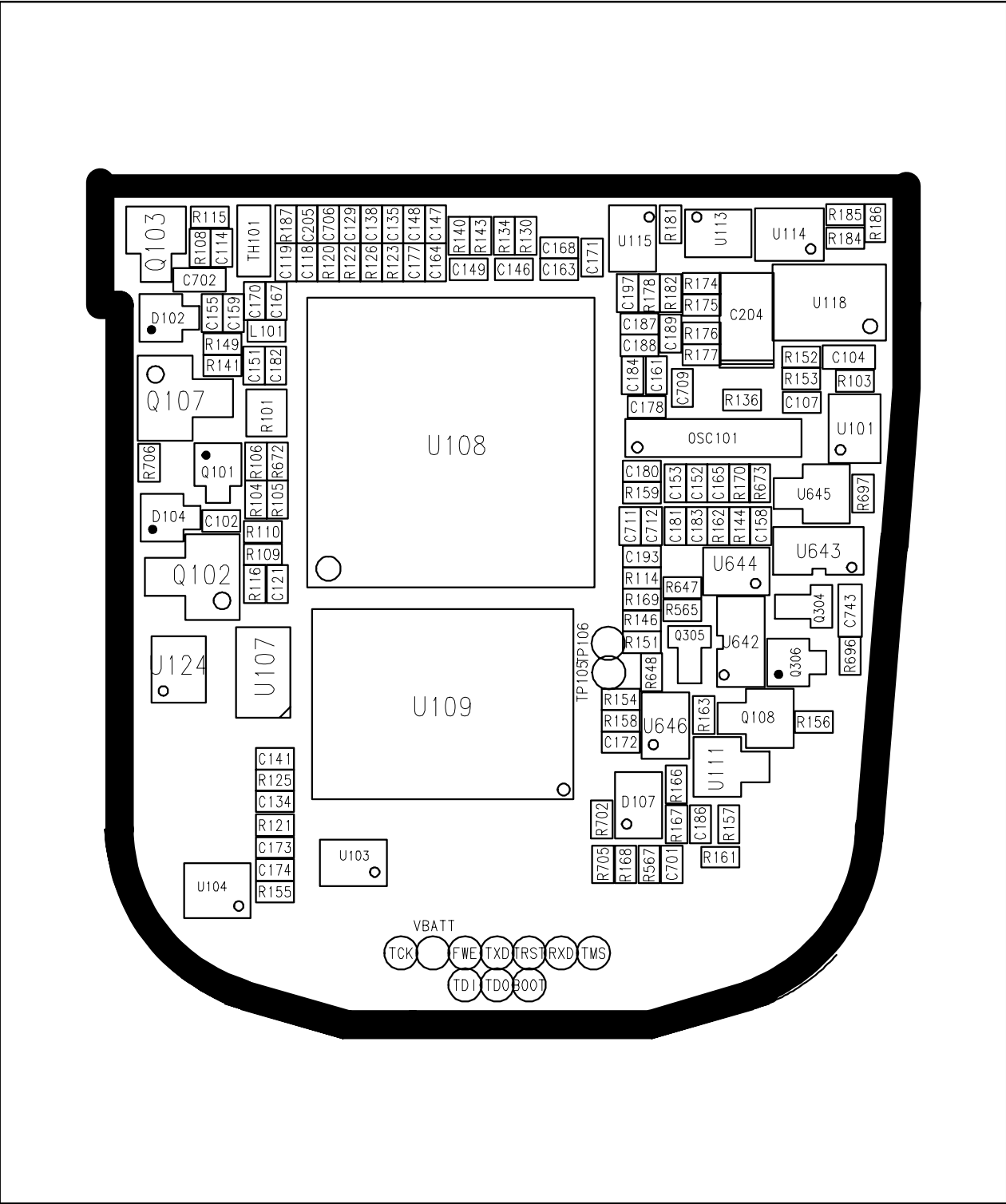
2-1 Main Top



2-1-1 Main RF Top

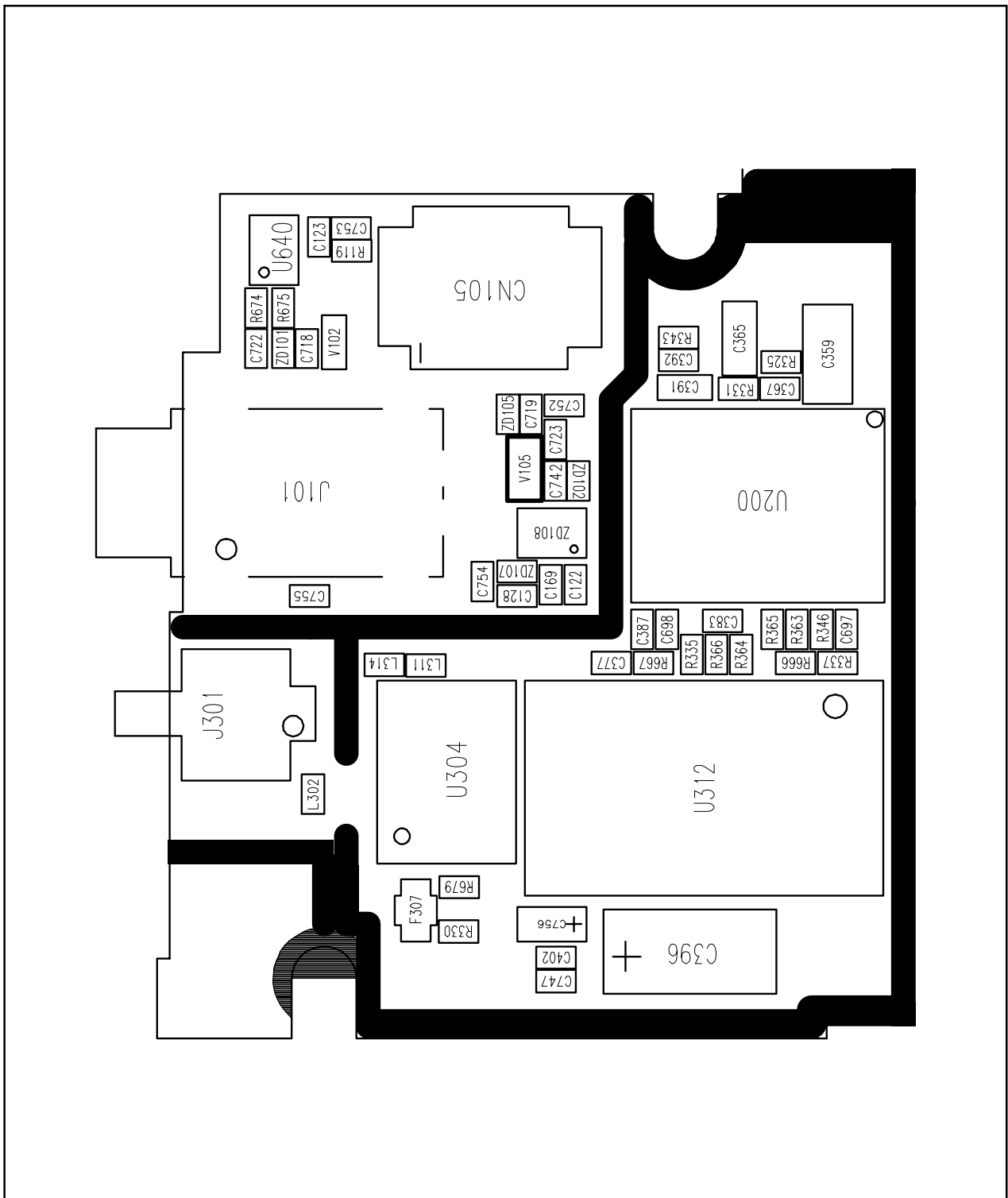


2-1-2 Main Base Band Top

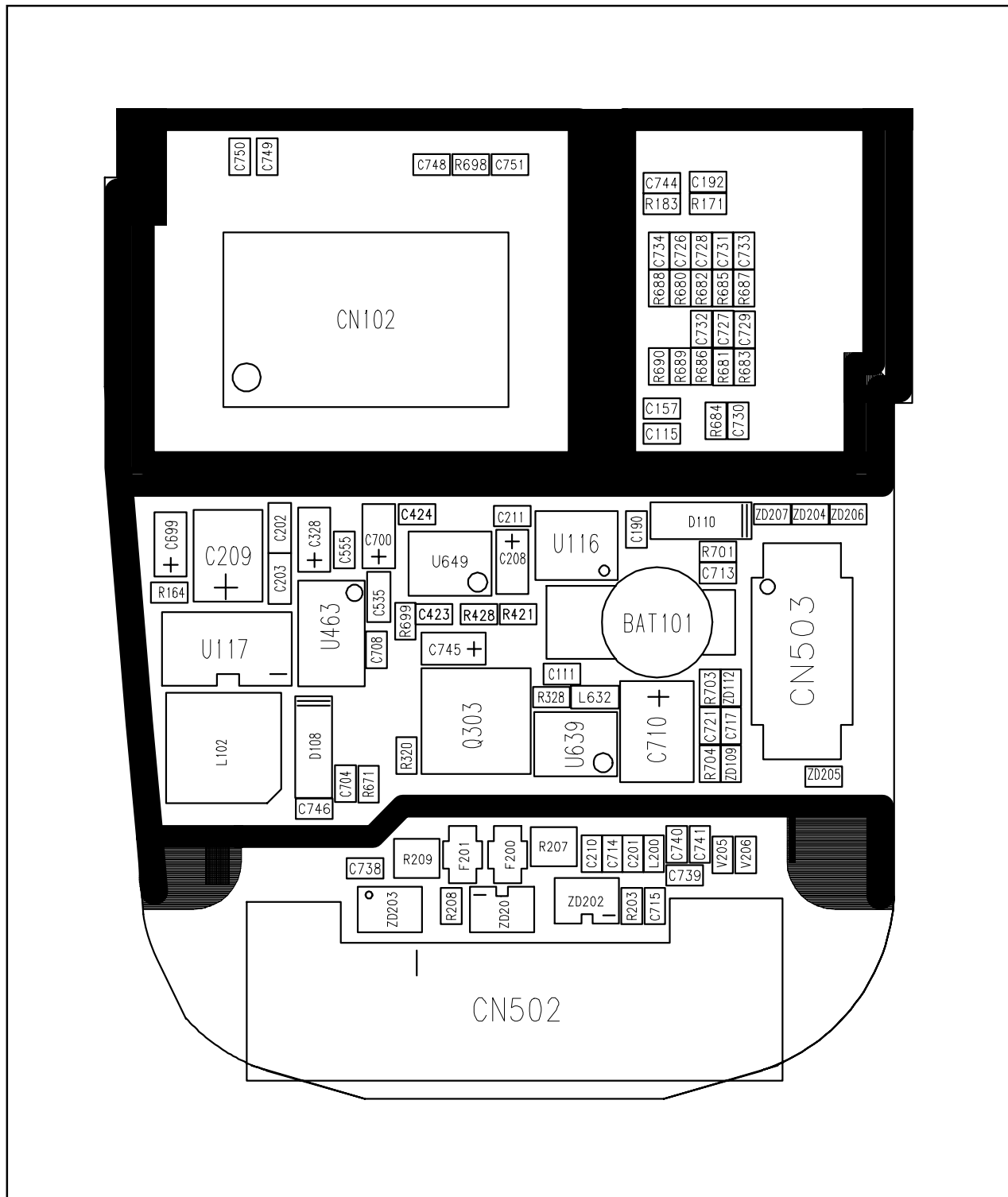




2-2-1 Main RF Bottom



2-2-2 Main Base Band Bottom



3. Electrical Parts List

3-1 Main Parts List Top

	SEC CODE	Reference	Part Description	Vendor Part No.
1	D301	0404-001054	TR-SMALL SIGNAL;HSMS-2805-L31	HSMS-2805-L31
2	D102,D104	0407-001002	TR-SMALL SIGNAL;DAN222TL	DAN222TL
3	D107	0407-001007	TR-SMALL SIGNAL;UMN1	UMN1
4	Q108	0501-000162	TR-SMALL SIGNAL;2SA1576FRT106	2SA1576FRT106
5	Q103	0501-000218	TR-SMALL SIGNAL;2SC4081BRT106	2SC4081BRT106
6	Q102,Q107	0501-002011	TR-SMALL SIGNAL;2SD2114KT146V	2SD2114KT146V
7	U111	0501-002202	TR-SMALL SIGNAL;MMBT2222AWT1	MMBT2222AWT1
8	U445	0504-000167	TR-SMALL SIGNAL;DTC114EE/TR	DTC114EE/TR
9	Q304,Q305	0504-000168	TR-SMALL SIGNAL;DTC144EE/TR	DTC144EE/TR
10	Q101,Q301	0504-001012	TR-SMALL SIGNAL;DTC114YE	DTC114YE
11	Q306	0504-001016	TR-SMALL SIGNAL;DTA114EE-TL	DTA114EE-TL
12	U443	0504-001021	TR-SMALL SIGNAL;DTB113ZK	DTB113ZK
13	U104,U124	0504-001042	TR-SMALL SIGNAL;BCR10PN	BCR10PN
14	U309,U314	0504-001058	TR-SMALL SIGNAL;BCR08PN	BCR08PN
15	U114	0505-001332	TR-SMALL SIGNAL;FDG6301N	FDG6301N
16	U101,U310	0505-001423	TR-SMALL SIGNAL;FDG6323L	FDG6323L
17	U301	0506-000151	LED;UMZ1N-TR	UMZ1N-TR
18	U644	0801-000794	IC;TC7S08FUTE85L	TC7S08FUTE85L
19	U646	0801-002345	IC;TC7S04FU(TE85L)	TC7S04FU(TE85L)
20	U642,U643	0801-002510	IC;TC7W74FK(TE85L)	TC7W74FK(TE85L)
21	U103	0801-002540	IC;NC7SZ19P6X	NC7SZ19P6X
22	U113,U115	1001-001145	IC;MAX4599EXT-T	NC7SZ19P6X
23	U109	1106-001301	IC;LRS1337	LRS1337
24	U306	1201-001018	IC;LM7131ACM5	LM7131ACM5
25	U118	1202-001022	IC;TC75W56FU-TE12L	TC75W56FU-TE12L
26	U457	1203-002142	IC;MM1448CYFE	MM1448CYFE
27	U645	1203-002187	IC;MAX6326	MAX6326
28	U108	1205-001881	IC;VP40575	VP40575
29	U305	1205-001935	IC;HD155128TF	HD155128TF
30	U302	1209-001337	IC;SI4133-MLP28	SI4133-MLP28
31	TH101	1404-001005	IC;NTH5G40B473J01TE	NTH5G40B473J01TE
32	R331	2007-000138	R-CHIP;100,5%	RK73K1ETP101J
33	R174,R177	2007-000139	R-CHIP;220,5%	ERJ2GEJ221X
34	R141,R303,R305,R308	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
35	R313,R315,R319	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
36	R681,R683	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
37	R686	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
38	R696	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
39	R700	2007-000143	R-CHIP;4.7K,5%	RK73K1ETP472J

	SEC CODE	Reference	Part Description	Vendor Part No.
40	R103,R105,R106,R114	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
41	R121,R125,R154,R155	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
42	R156,R159,R161,R162	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
43	R163,R165,R178,R182	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
44	R332,R344,R347,R673	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
45	R678,R694	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
46	R136	2007-000152	R-CHIP;20K,5%	RK73K1ETP203J
47	R144,R170	2007-000157	R-CHIP;47K,5%	RK73K1ETP473J
48	R187	2007-000159	R-CHIP;56K,5%	ERJ2GEJ563X
49	R108,R109,R116,R146	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
50	R149,R151,R157,R166	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
51	R167,R168,R169	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
52	R181,R565,R567,R695	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
53	R702,R706,R647,R648	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
54	R184,R185,R186	2007-000170	R-CHIP;1M,5%	ERJ2GEJ105X
55	R312	2007-000172	R-CHIP;10,5%	ERJ2GEJ100X
56	R369,R370	2007-000173	R-CHIP;22,5%	ERJ2GEJ220X
57	R371	2007-000174	R-CHIP;47,5%	ERJ2GEJ470X
58	R310,R301	2007-000242	R-CHIP;1.5K,5%	ERJ2GEJ152X
59	R115	2007-000982	R-CHIP;5.6K,5%	ERJ2GEJ562X
60	R329	2007-001119	R-CHIP;680,5%	ERJ2GEJ681X
61	R314,R360	2007-001298	R-CHIP;51,5%	ERJ2GEJ510X
62	R110,R175,R176,R323	2007-002796	R-CHIP;510,5%	ERJ2GEJ511X
63	R324	2007-002797	R-CHIP;560,5%	ERJ2GEJ561X
64	R304	2007-007021	R-CHIP;75K,5%	ERJ2GEJ753X
65	R333	2007-007135	R-CHIP;18K,1%	ERJ2RKF1802X
66	R322	2007-007137	R-CHIP;1.2K,1%	ERJ2GEJ122X
67	R368	2007-007309	R-CHIP;12K,1%	RK73H1ETP1202F
68	R321	2007-007310	R-CHIP;8.2K,1%	RK73H1ETP8201F
69	R326	2007-007311	R-CHIP;22K,1%	RK73H1ETP2202F
70	R338,R339,R340,R341	2007-007313	R-CHIP;6.8K,1%	RK73H1ETP6801F
71	R361	2007-007315	R-CHIP;3.9K,1%	RK73H1ETP3901F
72	R120,R122,R123,R126	2007-007317	R-CHIP;2.2K,1%	RK73H1ETP3901F
73	R130,R134,R140,R143	2007-007318	R-CHIP;1K,1%	RK73H1ETP1001F
74	R327	2007-007318	R-CHIP;1K,1%	RK73H1ETP1001F
75	R153	2007-007480	R-CHIP;130K,1%	RK73H1ETP1303F
76	R318	2007-007588	R-CHIP;1.8K,1%	RK73H1ETP1801F
77	R362	2007-008117	R-CHIP;2.7Kohm,1%	RK73H1ETP2701F
78	R158,R302	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
79	R311,R351,R357	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
80	R358,R372,R587	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
81	R705	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
82	R152	2007-007981	R-CHIP;180K,1%	ERJ2GEJ0R0E

	SEC CODE	Reference	Part Description	Vendor Part No.
83	R101	2011-001345	R-CHIP;EXB28V103JX	EXB28V103JX
84	C129,C135,C138	2203-000233	C-CERAMIC,CHIP;C101J,100PF,50V	GRM36C0G101J50PT
85	C333,C351,C695	2203-000233	C-CERAMIC,CHIP;C101J,100PF,50V	GRM36C0G101J50PT
86	C706,C725	2203-000233	C-CERAMIC,CHIP;C101J,100PF,50V	GRM36C0G101J50PT
87	C107,C119,C147	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
88	C151,C164,C171,C181	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
89	C183,C197,C306	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
90	C319,C320,C321,C366	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
91	C374,C382,C549	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
92	C550,C551	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
93	C724	2203-000278	C-CERAMIC,CHIP;C100D,10PF,50V	GRM36C0G100D50PT
94	C313,C314	2203-000330	C-CERAMIC,CHIP;C120J,12PF,50V	GRM36C0G120J50PT
95	C300	2203-000359	C-CERAMIC,CHIP;C151J,150PF,50V	GRM36C0G151J50PT
96	C348	2203-000425	C-CERAMIC,CHIP;C180J,18PF,50V	GRM36C0G180J50PT
97	C302,C307,C324,C325	2203-000438	C-CERAMIC,CHIP;C102K,1NF,50V	GRM36X7R102K50PT
98	C326,C327,C330,C338	2203-000438	C-CERAMIC,CHIP;C102K,1NF,50V	GRM36X7R102K50PT
99	C344,C349,C358,C360	2203-000438	C-CERAMIC,CHIP;C102K,1NF,50V	GRM36X7R102K50PT
100	C362,C373,C357	2203-000438	C-CERAMIC,CHIP;C102K,1NF,50V	GRM36X7R102K50PT
101	C406	2203-000585	C-CERAMIC,CHIP;C221K,220PF,50V	GRM36X7R221K50PT
102	C353	2203-000628	C-CERAMIC,CHIP;C220J,22PF,50V	GRM36C0G220J50PT
103	C152,C153,C158	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
104	C159,C161,C165,C167	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
105	C337,C339	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
106	C345,C356,C369	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
107	C394,C709	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
108	C118,C121,C134,C141	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
109	C148,C177,C182	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
110	C193	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
111	C711,C712	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
112	C334,C627	2203-000995	C-CERAMIC,CHIP;C470J,47PF,50V	GRM36C0G470J50PT
113	C334,C627	2203-000995	C-CERAMIC,CHIP;C470J,47PF,50V	GRM36C0G470J50PT
114	C361	2203-001072	C-CERAMIC,CHIP;0.056nF,5%	GRM36C0G560J50PT
115	C178,C180	2203-001201	C-CERAMIC,CHIP;0.007nF,0.5pF,50V	GRM36C0G070D50PT
116	C323	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36X7R821K50PT
117	C312	2203-001383	C-CERAMIC,CHIP;C0R5C,0.5PF,50V	GRM36C0G0R5C50PT
118	C301,C315	2203-002525	C-CERAMIC,CHIP;C561K,560PF,50V	GRM36X7R561K50PT
119	C403	2203-002687	C-CERAMIC,CHIP;C122K,1.2NF,50V	GRM36X7R122K50PT
120	C155,C168,C170	2203-003054	C-CERAMIC,CHIP;C090C,9PF,50V	GRM36C0G090C50PT
121	C400	2203-005054	C-CERAMIC,CHIP;C4R7C,4.7PF,50V	GRM36C0G4R7C50PT
122	C404,C340	2203-005056	C-CERAMIC,CHIP;C6R8C,6.8PF,50V	GRM36C0G6R8D50PT
123	C378,C379	2203-005057	C-CERAMIC,CHIP;C8R2C,8.2PF,50V	GRM36C0G8R2D50PT
124	C102,C106,C114,C116	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36Y5V104Z16PT
125	C163,C173,C174,C186	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36Y5V104Z16PT

	SEC CODE	Reference	Part Description	Vendor Part No.
126	C205,C303,C304	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36Y5V104Z16PT
127	C308,C316	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36Y5V104Z16PT
128	C705	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36Y5V104Z16PT
129	C104,C125	2203-005065	C-CERAMIC,CHIP;C105Z,1UF,10V	GRM39Y5V105Z10PT
130	C702,C743	2203-005065	C-CERAMIC,CHIP;C105Z,1UF,10V	GRM39Y5V105Z10PT
131	C352	2203-005138	C-CERAMIC,CHIP;C182K,1.8NF,50V	GRM36X7R182K50PT
132	C309,C310	2203-005382	C-CERAMIC,CHIP;C060B,6PF,50V	GRM36C0G060B50PT
133	C364	2203-005446	C-CERAMIC,CHIP;C2R7B,2.7PF,50V	GRM36C0G2R7B50PT
134	C335	2203-005450	C-CERAMIC,CHIP;C5R6B,5.6PF,50V	GRM36C0G5R6B50PT
135	C187,C188	2203-005480	C-CERAMIC,CHIP;C333K,33NF,10V	GRM36X7R333K10PT
136	C184	2203-005481	C-CERAMIC,CHIP;C473K,47NF,10V	GRM36X7R473K10PT
137	C146,C149	2203-005503	C-CERAMIC,CHIP;C1801J,180PF,25V	GRM36C0H181J25PT
138	C117,C124	2203-005664	C-CERAMIC,CHIP;C475K,4.7UF,6.3V	GRM40034X5R475K6.3PT
139	C710	2404-000318	C-TA,CHIP;6.8UF/16V	TCSCS1C685MBAR
140	C105	2404-001105	C-TA,CHIP;10UF/6.3V	TAJR106M006R
141	C204	2404-001162	C-TA,CHIP;F950G476MAAJZTQ2	F950G476MAAJZTQ2
142	L325	2703-001174	INDUCTOR-SMD;LL1608-FH33NJ	LL1608-FH33NJ
143	L305,L306	2703-001293	INDUCTOR-SMD;HK1608-82NJ-T	HK1608-82NJ-T
144	L308	2703-001514	INDUCTOR-SMD;0603CS-68NXJBC	0603CS-68NXJBC
145	L310	2703-001685	INDUCTOR-SMD;0603CS-82NXJBC	0603CS-82NXJBC
146	L385	2703-001708	INDUCTOR-SMD;HK1005-5N6K-T	HK1005-5N6K-T
147	L316	2703-001726	INDUCTOR-SMD;LL1005-FH27NJ	LL1005-FH27NJ
148	L323,L324	2703-001727	INDUCTOR-SMD;LL1005-FH22NJ	LL1005-FH22NJ
149	L635	2703-001730	INDUCTOR-SMD;LL1005-FH15NJ	LL1005-FH15NJ
150	L318,L634	2703-001734	INDUCTOR-SMD;LL1005-FH6N8J	LL1005-FH6N8J
151	L301	2703-001750	INDUCTOR-SMD;LL1005-FH2N2S	LL1005-FH2N2S
152	L101	2703-001752	INDUCTOR-SMD;LL1005-FH39NJ	LL1005-FH39NJ
153	L304	2703-001786	INDUCTOR-SMD;LL1005-FH10NJ	LL1005-FH10NJ
154	L637,L638	2703-001798	INDUCTOR-SMD;HK1005-2N2S	HK1005-2N2S
155	L303	2703-001944	INDUCTOR-SMD;LL1055-F27NJ	LL1055-F27NJ
156	L639,L613	2703-001954	INDUCTOR-SMD;2.7nH	HK1005-2N7S-T
157	L636	2703-001992	INDUCTOR-SMD;MLK1005S1N0ST	MLK1005S1N0ST
158	OSC101	2801-003856	COMP-SMD;MC-146(32.768KHz,20ppm)	MC-146
159	U303	2809-001237	COMP-SMD;KT16-KEU28L-13.000M	KT16-KEU28L-13.000M
160	F306	2901-001116	COMP-SMD;NFM39R12C471T1	NFM39R12C471T1
161	U601	2903-001266	COMP-SMD;MKFC225.000MBA701X-TC11	MKFC225.000MBA701X- TC11
162	F303	2904-001226	COMP-SMD;B4121	B4121
163	F302	2904-001228	COMP-SMD;B4133	B4133
164	U603	2904-001235	COMP-SMD;FAR-G6CH-1G8425-L218	FAR-G6CH-1G8425-L218
165	U318	4709-001174	COMP-SMD;LDC15D140A0001	DC15D140A0001
166	ZD105	1405-001082	IC;VC040205X150R	VC040205X150R

3-2 Main Parts List Bottom

	SEC CODE	Reference	Part Description	Vendor Part No.
1	J301	3705-001239	COMP-SMD;MHC-175	MHC-175
2	L302	2703-001772	INDUCTOR-SMD;18NH,5%,1.0X0.5X0.5MM	MLK1005S18NJ
3	F307	2901-001116	COMP-SMD;NFM39R12C471T1	FM39R12C471T1
4	R330	2007-001305	R-CHIP;120,5%	ERJ2GEJ121X
5	C747	2203-005057	C-CERAMIC,CHIP;C8R2C,8.2PF,50V	GRM36C0G8R2D50PT
6	C402	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
7	C756	2404-001105	C-TA,CHIP;10UF/6.3V	TAJR106M006R
8	C396	2404-001210	C-TA,CHIP;220UF/6.3V	952D227X06R3U2T
9	U304	2909-001126	COMP-SMD;SHS-L090DE	SHS-L090DE
10	U312	1201-001689	IC;PF08107B-TB	PF08107B-TB
11	L311,L314	2703-001723	INDUCTOR-SMD;LL1005-FH33NJ	LL1005-FH33NJ
12	R335,R366	2007-002965	R-CHIP;15,5%	RK73K1ETP150J
13	R364	2007-007009	R-CHIP;75ohm,5%	ERJ2GEJ750X
14	R365,R346	2007-001288	R-CHIP;18,5%	ERJ2GEJ180X
15	R363	2007-003022	R-CHIP;62,5%	ERJ2GEJ620X
16	C697	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
17	C387	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
18	C387	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
19	C377	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
20	R667	2007-000138	R-CHIP;100,5%	RK73K1ETP101J
21	C383	2203-000278	C-CERAMIC,CHIP;C100D,10PF,50V	GRM36C0G100D50PT
22	R666	2007-000174	R-CHIP;47,5%	ERJ2GEJ470X
23	R337	2007-001313	R-CHIP;330,5%	ERJ2GEJ331X
24	C755	2203-000995	C-CERAMIC,CHIP;C470J,47PF,50V	GRM36C0G470J50PT
25	C754	2203-000995	C-CERAMIC,CHIP;C470J,47PF,50V	GRM36C0G470J50PT
26	ZD107	1405-001082	IC;VC040205X150R	VC040205X150R
27	C169	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
28	C122	2203-005444	C-CERAMIC,CHIP;C030B,3PF,50V	GRM36C0G470J112PT
29	J101	3722-001587	COMP-SMD;02-828D0-53BKA	02-828D0-53BKA
30	ZD108	0406-001083	TR-SMALL SIGNAL;ESDA6V1W5	ESDA6V1W5
31	V105	1405-001019	IC;VC060305A150R	VC060305A150R
32	ZD102	1405-001082	IC;VC040205X150R	VC040205X150R
33	C723	2203-005444	C-CERAMIC,CHIP;C030B,3PF,50V	GRM36C0G470J112PT
34	C719	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
35	C752	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
36	C722	2203-005444	C-CERAMIC,CHIP;C030B,3PF,50V	GRM36C0G470J112PT
37	ZD101	1405-001082	IC;VC040205X150R	VC040205X150R
38	C718	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
39	V102	1405-001019	IC;VC060305A150R	IC;VC060305A150R
40	R674	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
41	R675	2007-000148	R-CHIP;10K,5%	RK73K1ETP103J
42	U640	0801-002540	IC;NC7SZ19P6X	NC7SZ19P6X

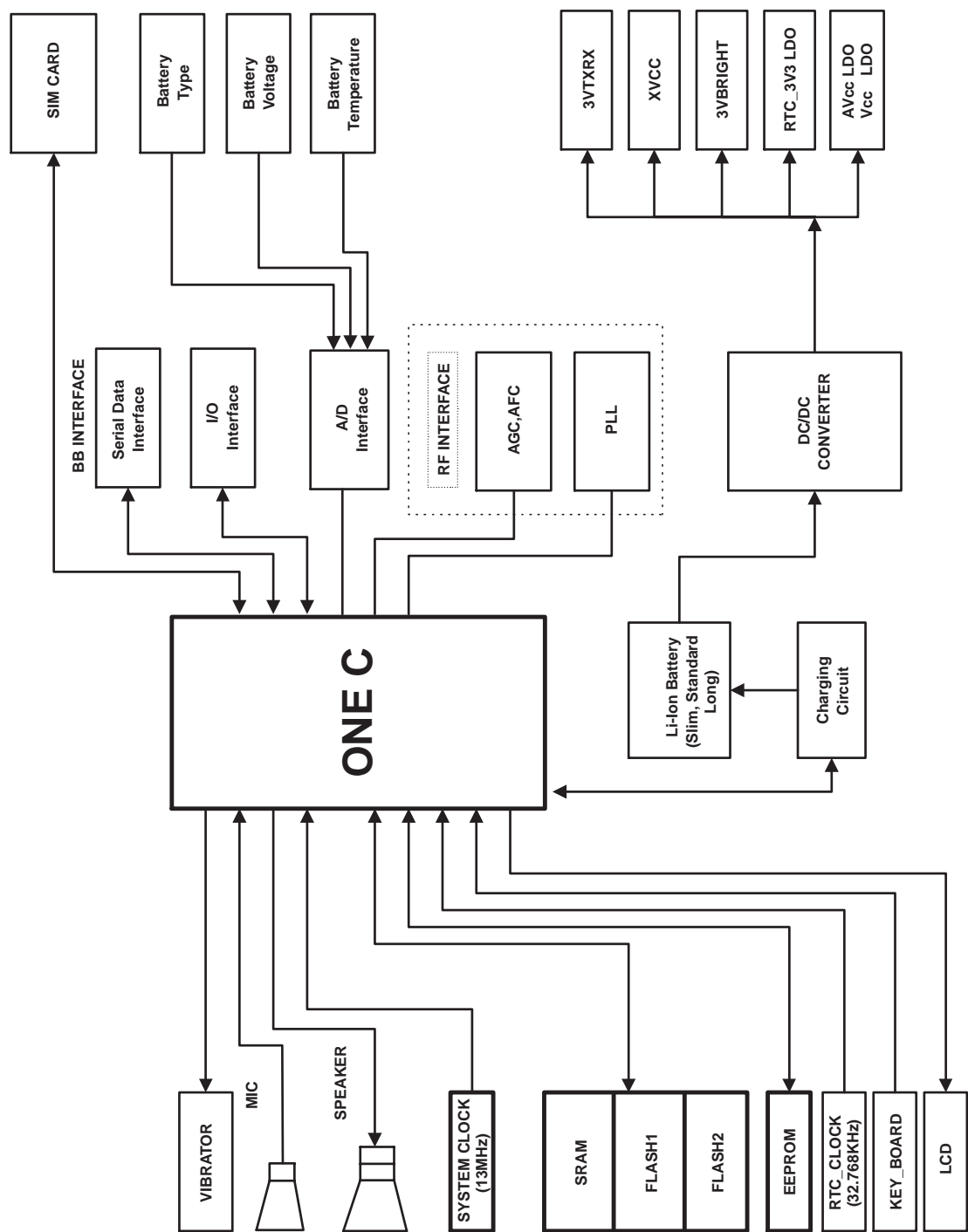
	SEC CODE	Reference	Part Description	Vendor Part No.
43	R119	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
44	C753	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
45	CN105	3710-001428	COMP-SMD;AXK5F24335J	AXK5F24335J
46	U200	2806-001239	COMP-SMD;V0F1748C28KRD	V0F1748C28KRD
47	C391	2203-005065	C-CERAMIC,CHIP;C105Z,1UF,10V	GRM36C0G470J101PT
48	C392	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
49	R343	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
50	R331	2007-000138	R-CHIP;100,5%	RK73K1ETP101J
51	C365	2301-001232	C-CERAMIC,CHIP;470PF,50V	GRM36C0G470J125PT
52	R325	2007-001290	R-CHIP;24,5%	RK73K1ETP240J
53	C359	2301-001199	C-CERAMIC,CHIP;22NF,16V	GRM36C0G470J124PT
54	C750	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
55	C749	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
56	C748	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
57	R698	2007-000147	R-CHIP;8.2K,5%	ERJ2GEJ822X
58	C751	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
59	CN102	3709-001144	COMP-SMD;1318723-6	1318723-6
60	C744	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
61	R183	2007-000157	R-CHIP;47K,5%	RK73K1ETP473J
62	C192	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
63	R171	2007-000162	R-CHIP;100K,5%	RK73K1ETP104J
64	C157	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
65	C115	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
66	C732	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
67	C727	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
68	C729	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
69	R684	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
70	C730	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
71	R688	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
72	R680	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
73	R682	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
74	R685	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
75	R687	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
76	C734	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
77	C726	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
78	C728	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
79	C731	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
80	C733	2203-001221	C-CERAMIC,CHIP;C821K,820PF,50V	GRM36C0G470J58PT
81	C699	2404-001105	C-TA,CHIP;10UF/6.3V	GRM36C0G470J127PT
82	R164	2007-001308	R-CHIP;200,5%	ERJ2GEJ201X
83	C209	2404-001134	C-TA,CHIP;100UF/6.3V	GRM36C0G470J134PT
84	U117	1203-001702	IC;MAX1676EUB-T	MAX1676EUB-T

	SEC CODE	Reference	Part Description	Vendor Part No.
85	L102	2703-002025	INDUCTOR-SMD;BTC-0309-470	BTC-0309-470
86	F307	2203-005065	C-CERAMIC,CHIP;C105Z,1UF,10V	GRM36C0G470J101PT
87	C328	2404-001105	C-TA,CHIP;10UF/6.3V	GRM36C0G470J127PT
88	U463	1203-002227	IC;R5320G002-TR	R5320G002-TR
89	D108	0402-001331	TR-SMALL SIGNAL;CRS04-TE85L	CRS04-TE85L
90	C746	2203-003054	C-CERAMIC,CHIP;C090C,9PF,50V	GRM36C0G470J73PT
91	C704	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36C0G470J84PT
92	R671	2007-007107	R-CHIP;100K,1%	ERJ2RKF1003X
93	C555	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
94	C700	2404-001105	C-TA,CHIP;10UF/6.3V	GRM36C0G470J127PT
95	C535	2203-005065	C-CERAMIC,CHIP;C105Z,1UF,10V	GRM36C0G470J101PT
96	C708	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
97	C424	2203-001432	C-CERAMIC,CHIP;C473K,47NF,16V	GRM36C0G470J69PT
98	R699	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
99	R320	2007-007590	R-CHIP;82K,1%	RK73H1ETP8202F
100	U649	1203-001903	IC;LTC1986ES6	LTC1986ES6
101	C211	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
102	C208	2404-001105	C-TA,CHIP;10UF/6.3V	GRM36C0G470J127PT
103	C423	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36C0G470J84PT
104	R428	2007-003028	R-CHIP;750K,5%	ERJ2GEJ754X
105	R421	2007-000170	R-CHIP;1M,5%	ERJ2GEJ105X
106	C745	2404-001105	C-TA,CHIP;10UF/6.3V	GRM36C0G470J127PT
107	Q303	0501-002346	TR-SMALL SIGNAL;2SB1427	2SB1427
108	U116	1203-002077	IC;LP2985AIM5-3.3	LP2985AIM5-3.3
109	C190	2203-000233	C-CERAMIC,CHIP;C101J,100PF,50V	GRM36C0G101J50PT
110	C111	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
111	R328	2007-000142	R-CHIP;2.7K,5%	ERJ2GEJ272X
112	F307	3301-001208	COMP-SMD;BLM11P600SPT	BLM11P600SPT
113	U639	1203-002127	IC;LTC1734ES6-4.2#TR	LTC1734ES6-4.2#TR
114	BAT101	4302-001119	COMP-SMD;MS414 FL26N	MS414 FL26N
115	D110	0402-001331	TR-SMALL SIGNAL;CRS04-TE85L	CRS04-TE85L
116	R701	2007-000140	R-CHIP;1K,5%	RK73K1ETP102J
117	C713	2203-000254	C-CERAMIC,CHIP;C103K,10NF,16V	GRM36X7R103K16PT
118	R703	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
119	R703	1405-001082	IC;VC040205X150R	VC040205X150R
120	C721	2203-005057	C-CERAMIC,CHIP;C8R2C,8.2PF,50V	GRM36C0G470J80PT
121	C717	2203-000812	C-CERAMIC,CHIP;C330J,33PF,50V	GRM36C0G330J50PT
122	ZD109	1405-001082	IC;VC040205X150R	VC040205X150R
123	CN503	3711-004234	COMP-SMD;connector	AXK6F24335P
124	ZD205	1405-001082	IC;VC040205X150R	VC040205X150R
125	C738	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G470J84PT
126	ZD203	0406-001083	TR-SMALL SIGNAL;ESDA6V1W5	ESDA6V1W5

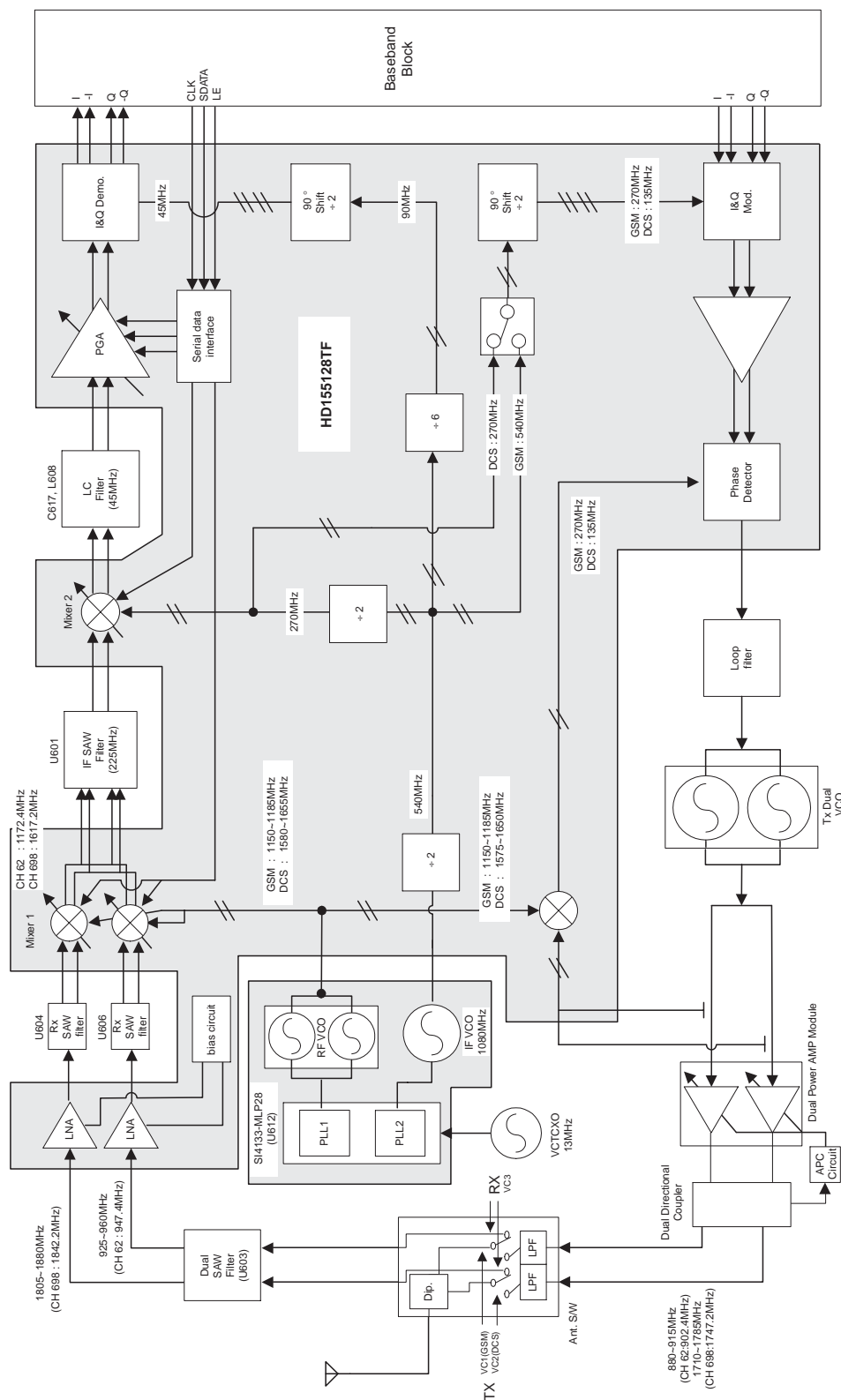
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127	R209	2011-001344	R-CHIP;CRB2A4E101JT	CRB2A4E101JT
128	F201	2901-001116	COMP-SMD;NFM39R12C471T1	NFM39R12C471T1
129	F200	2901-001116	COMP-SMD;NFM39R12C471T1	NFM39R12C471T1
130	ZD201	0406-001104	TR-SMALL SIGNAL;ESDA6V1-5W6	ESDA6V1-5W6
131	R207	2011-001344	R-CHIP;CRB2A4E101JT	CRB2A4E101JT
132	C210	2203-005061	C-CERAMIC,CHIP;C104Z,100NF,16V	GRM36C0G470J84PT
133	C714	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
134	C201	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
135	L200	2703-001752	INDUCTOR-SMD;LL1005-FH39NJ	LL1005-FH39NJ
136	C740,C741	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
137	V205,V206	1405-001082	IC;VC040205X150R	VC040205X150R
138	C739	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
139	ZD202	0406-001104	TR-SMALL SIGNAL;ESDA6V1-5W6	ESDA6V1-5W6
140	R203	2007-007771	R-CHIP;0,5%	ERJ2GEJ0R0E
141	C715	2203-000679	C-CERAMIC,CHIP;C270J,27PF,50V	GRM36C0G270J50PT
142	CN502	3710-001599	COMP-SMD;1004-0018-305	1004-0018-305

4. Block Diagrams

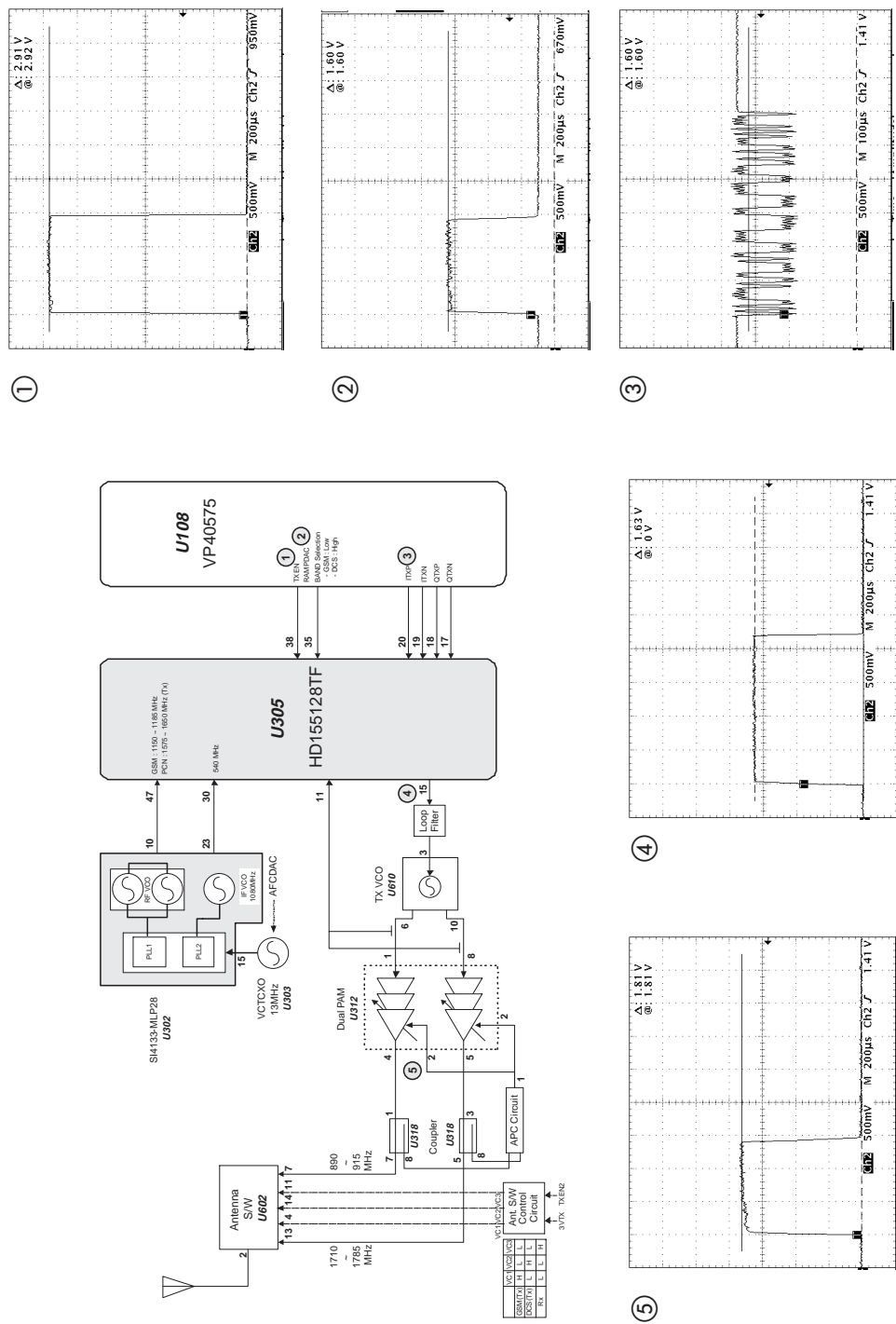
4-1 Main Base Band



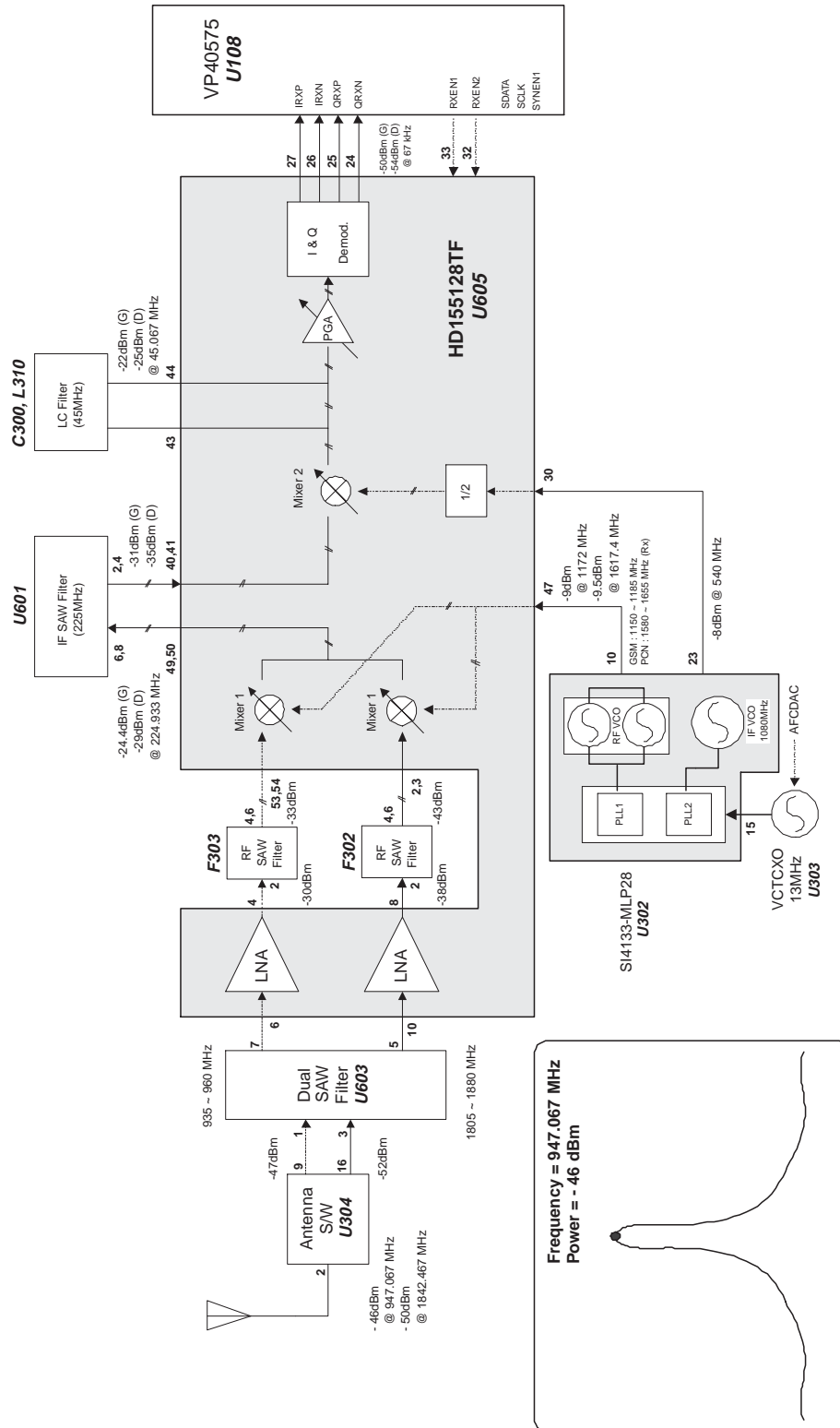
4-2 Main RF



4-2-1 RF Transmit Part

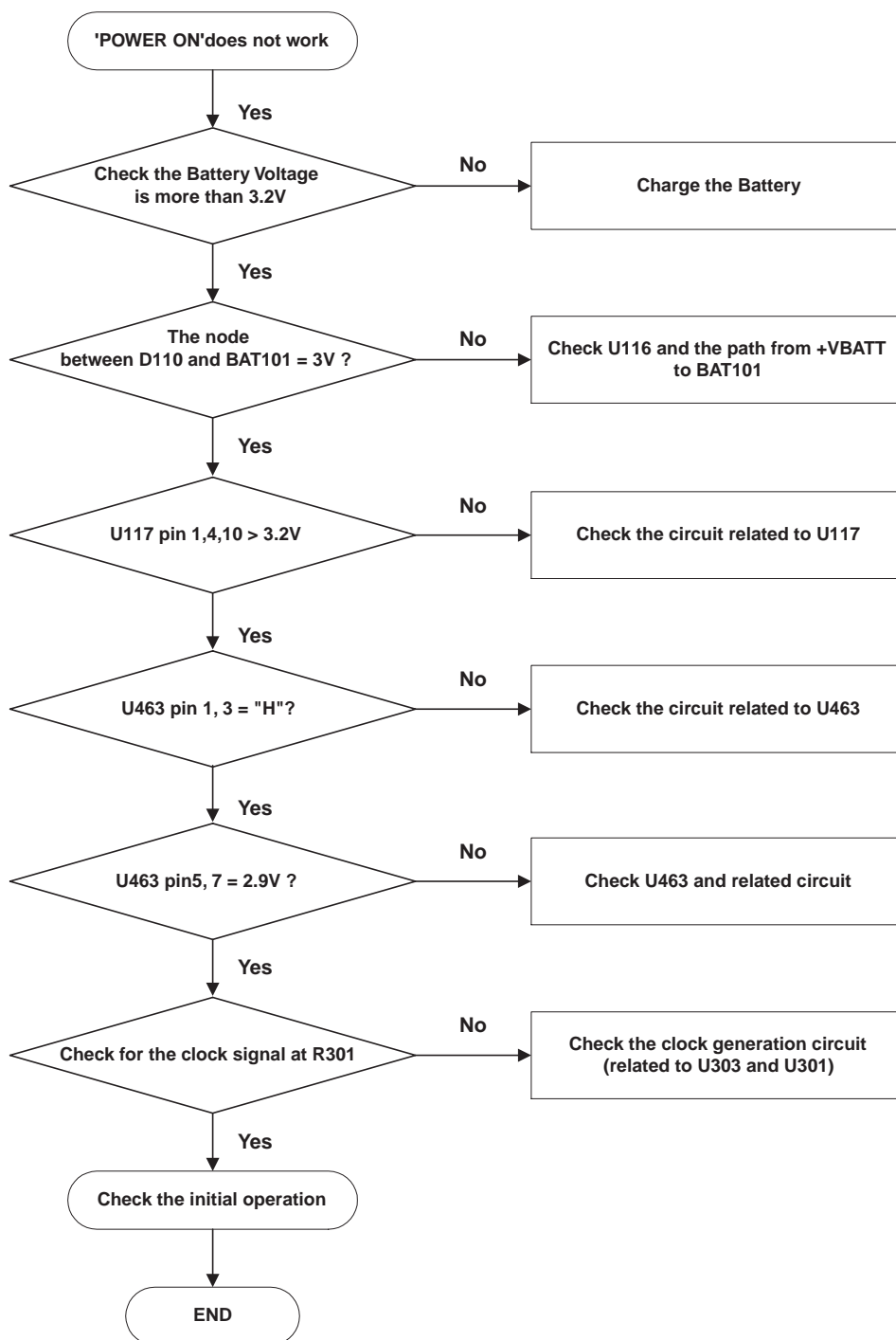


Block Diagrams

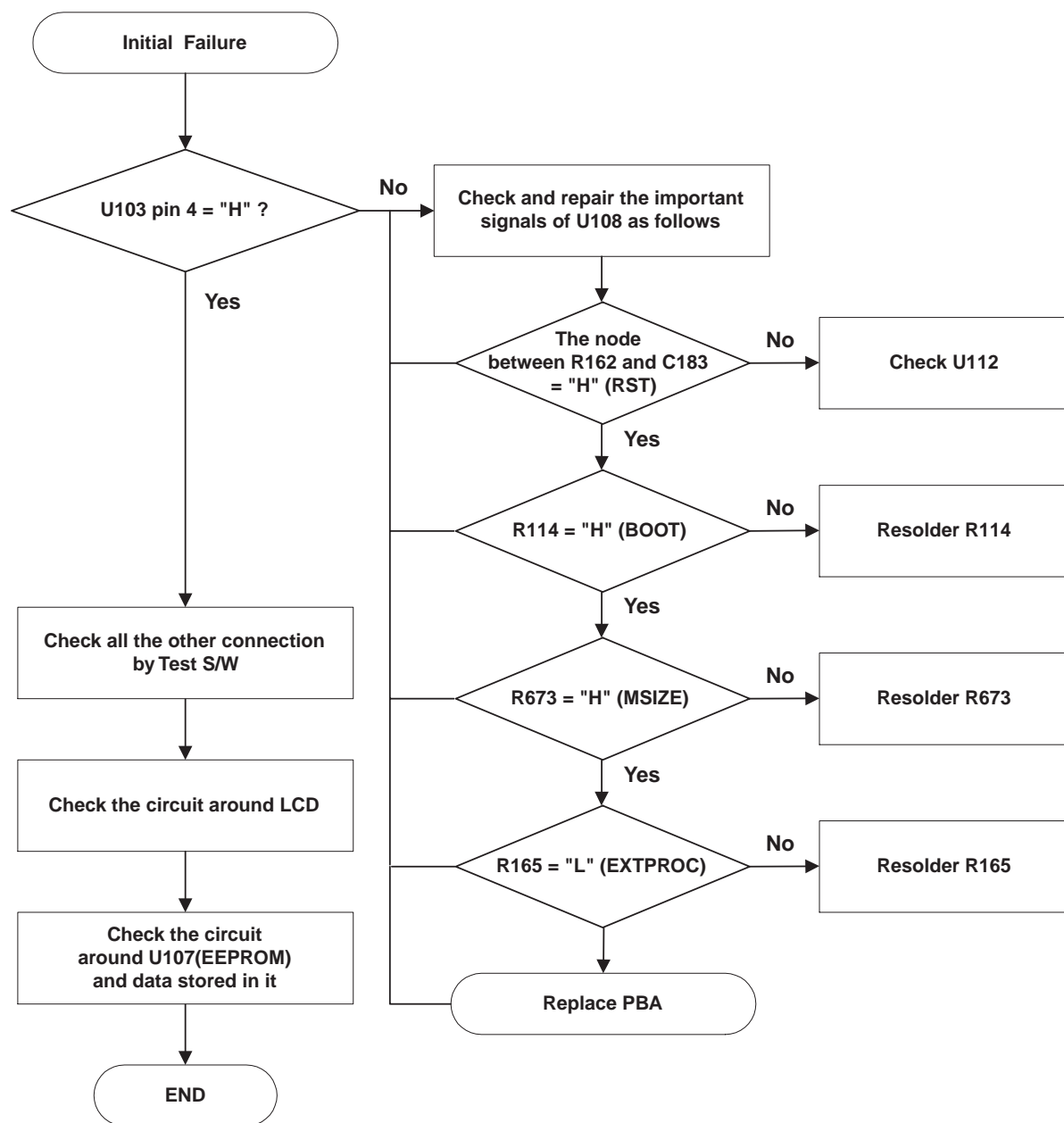


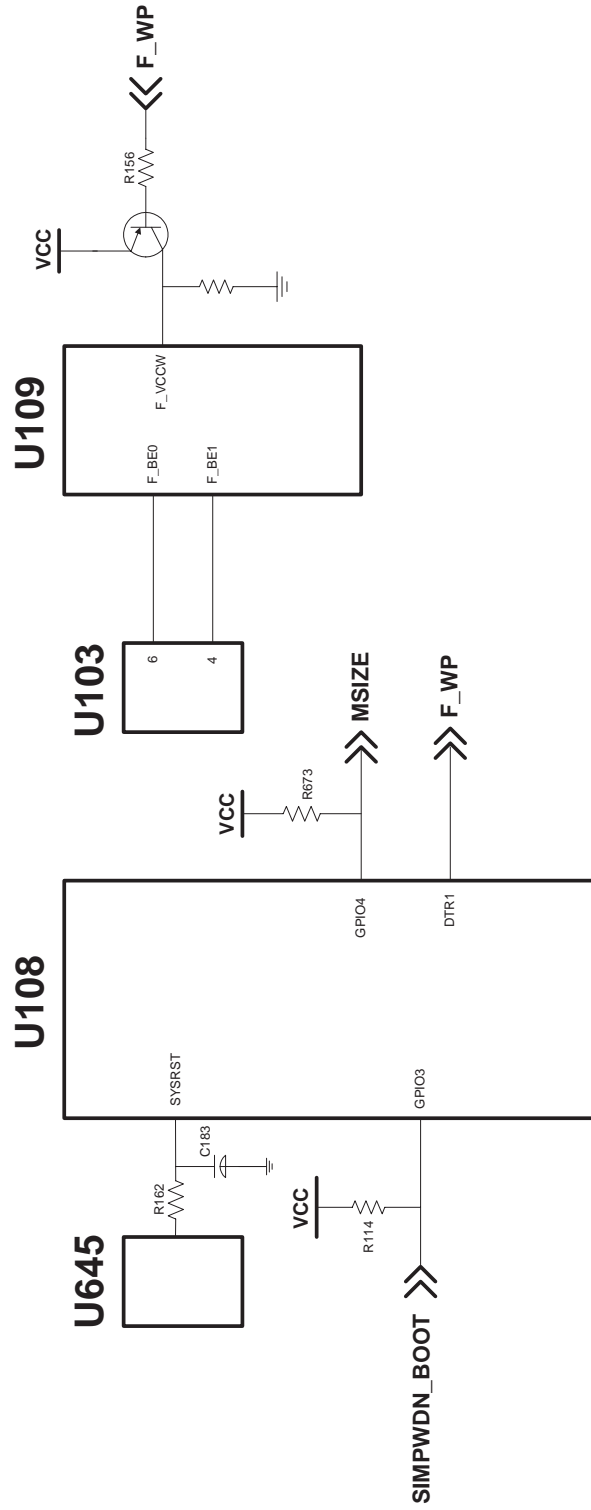
5. Flow chart of trouble shooting and Circuit Diagram

5-1 Power ON

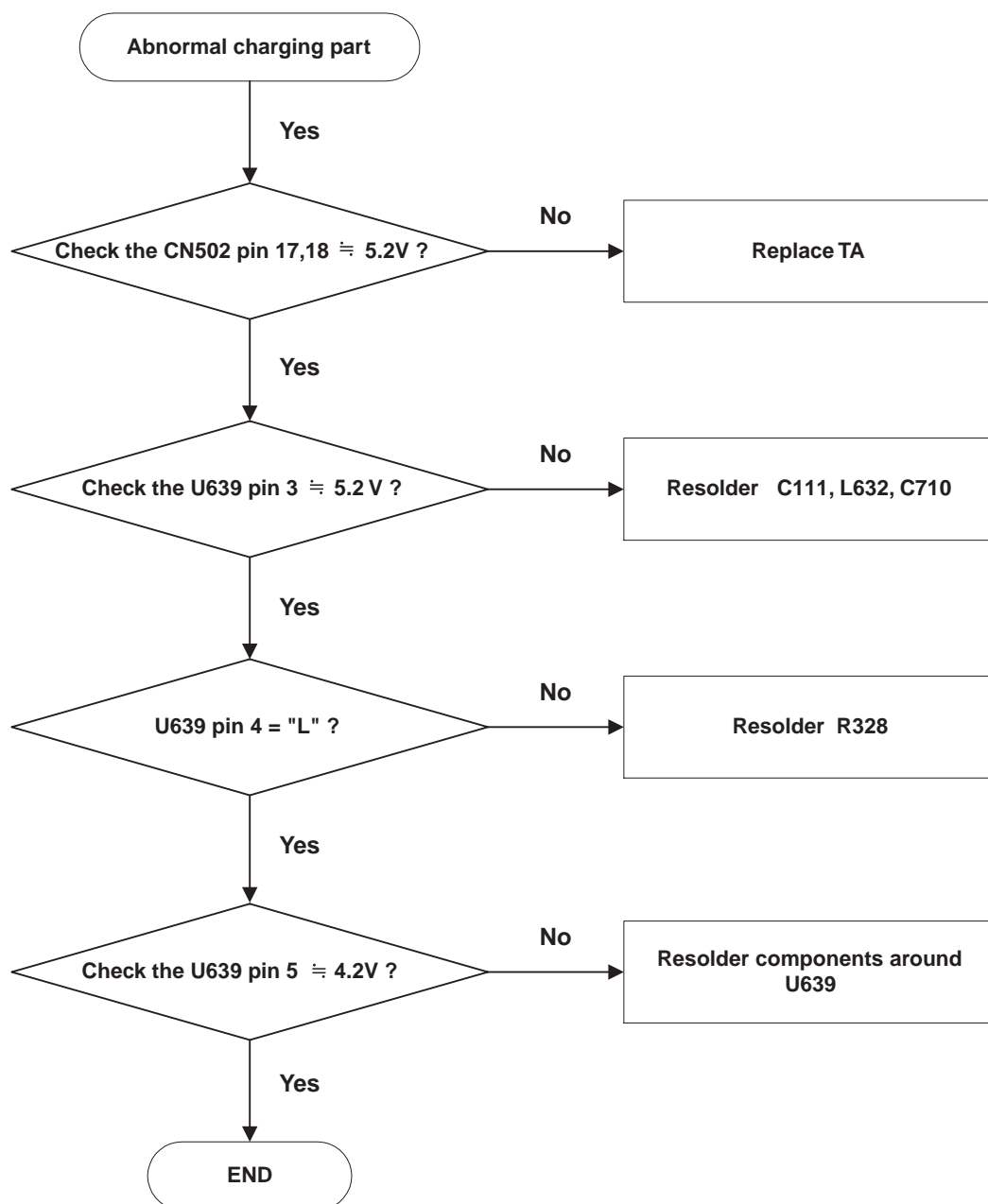


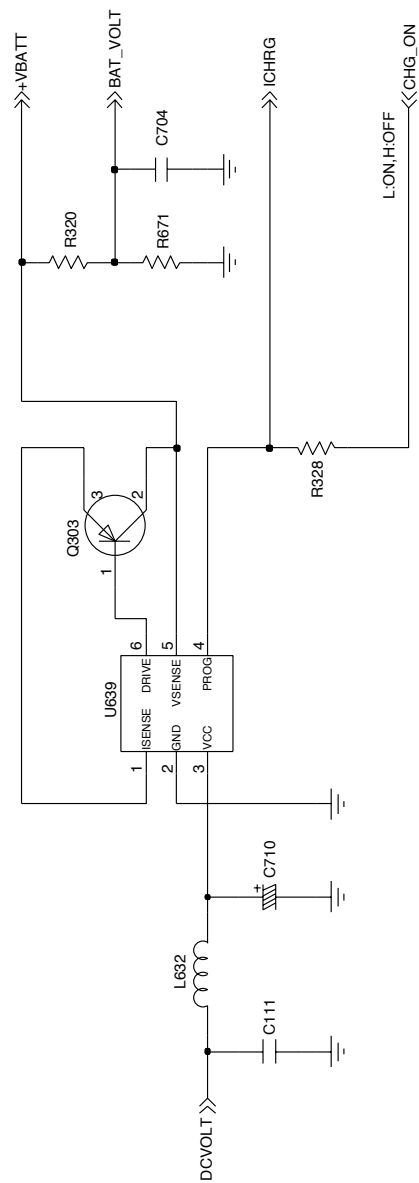
5-2 Initial



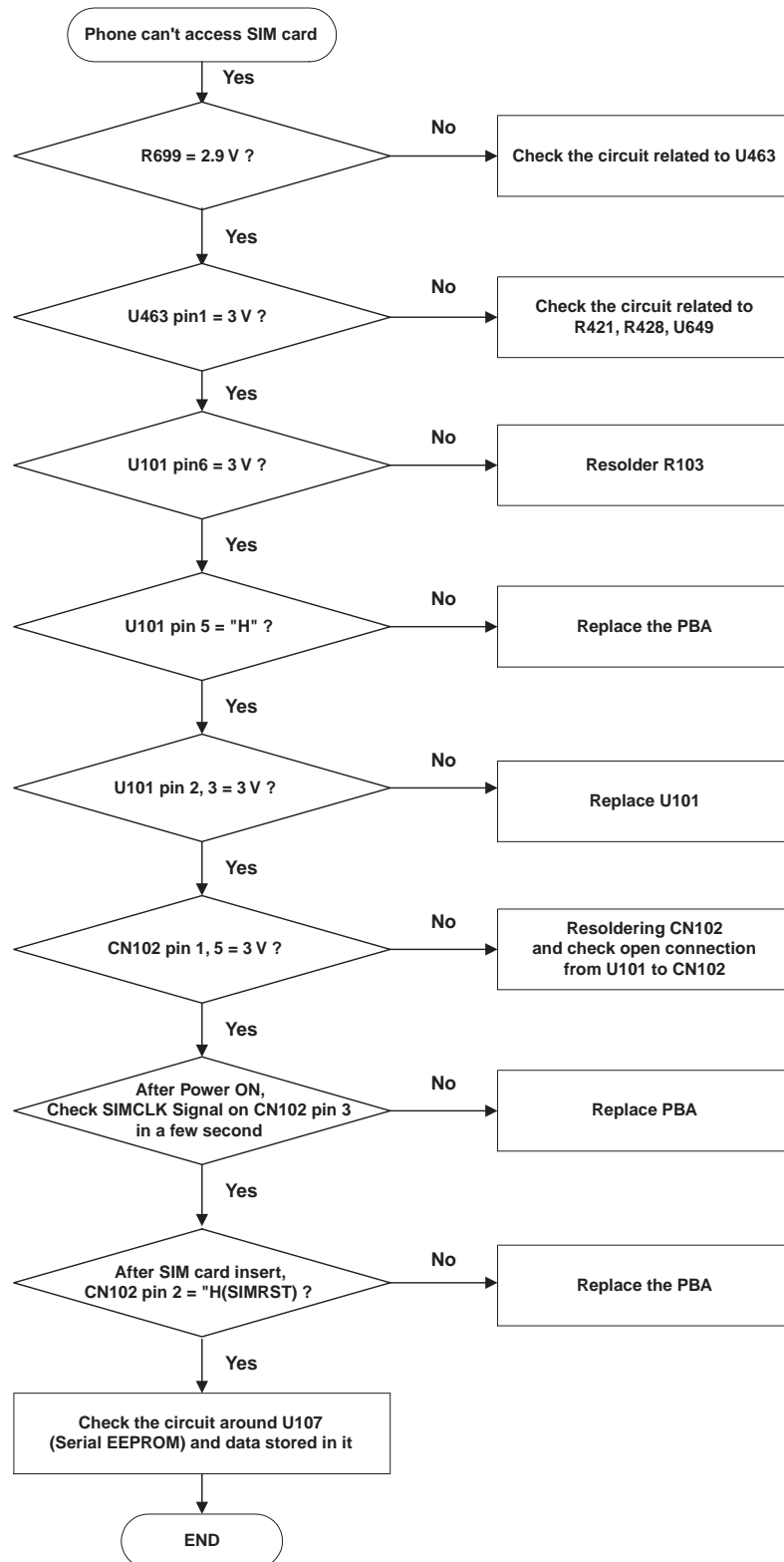


5-3 Charging Part

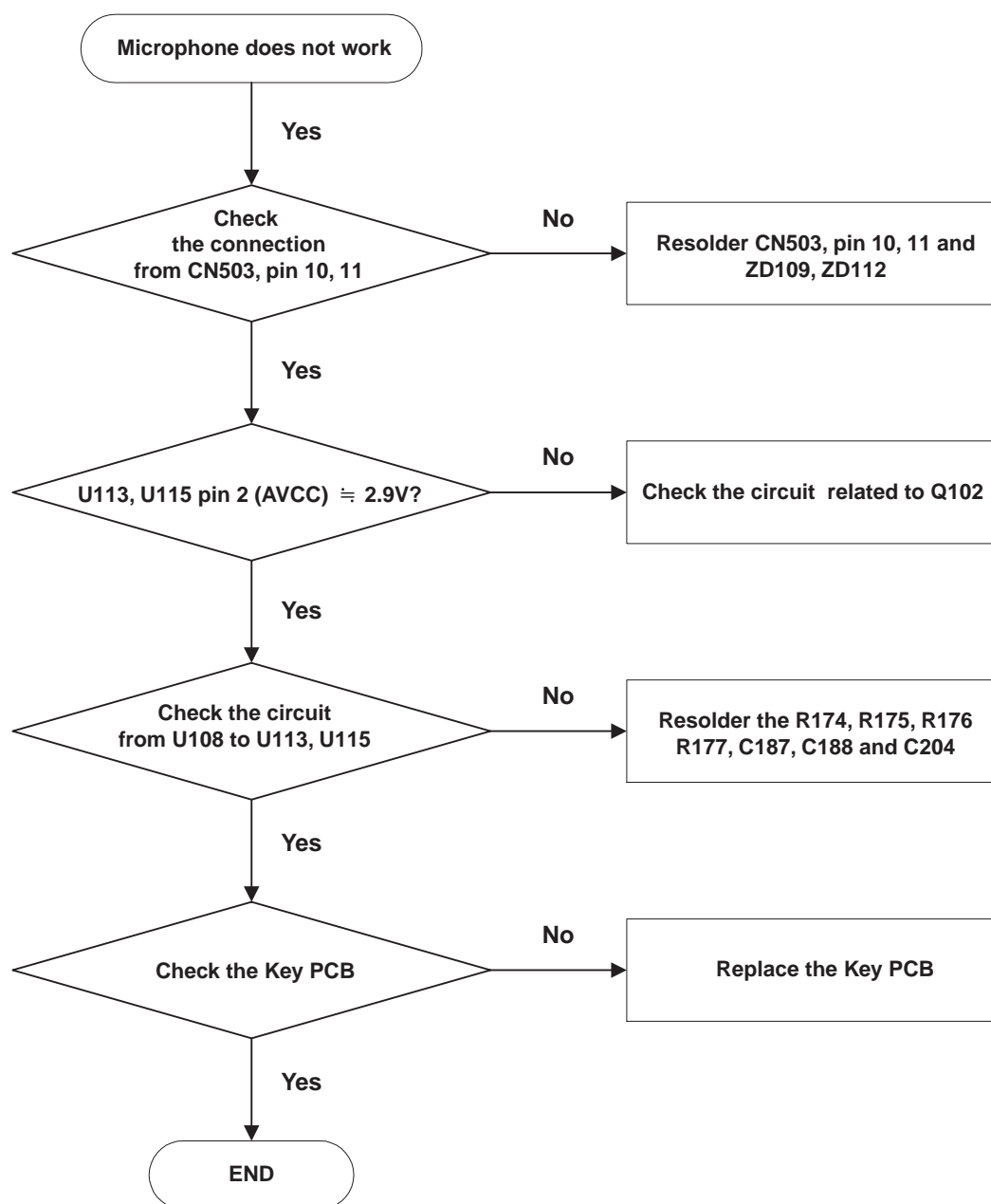


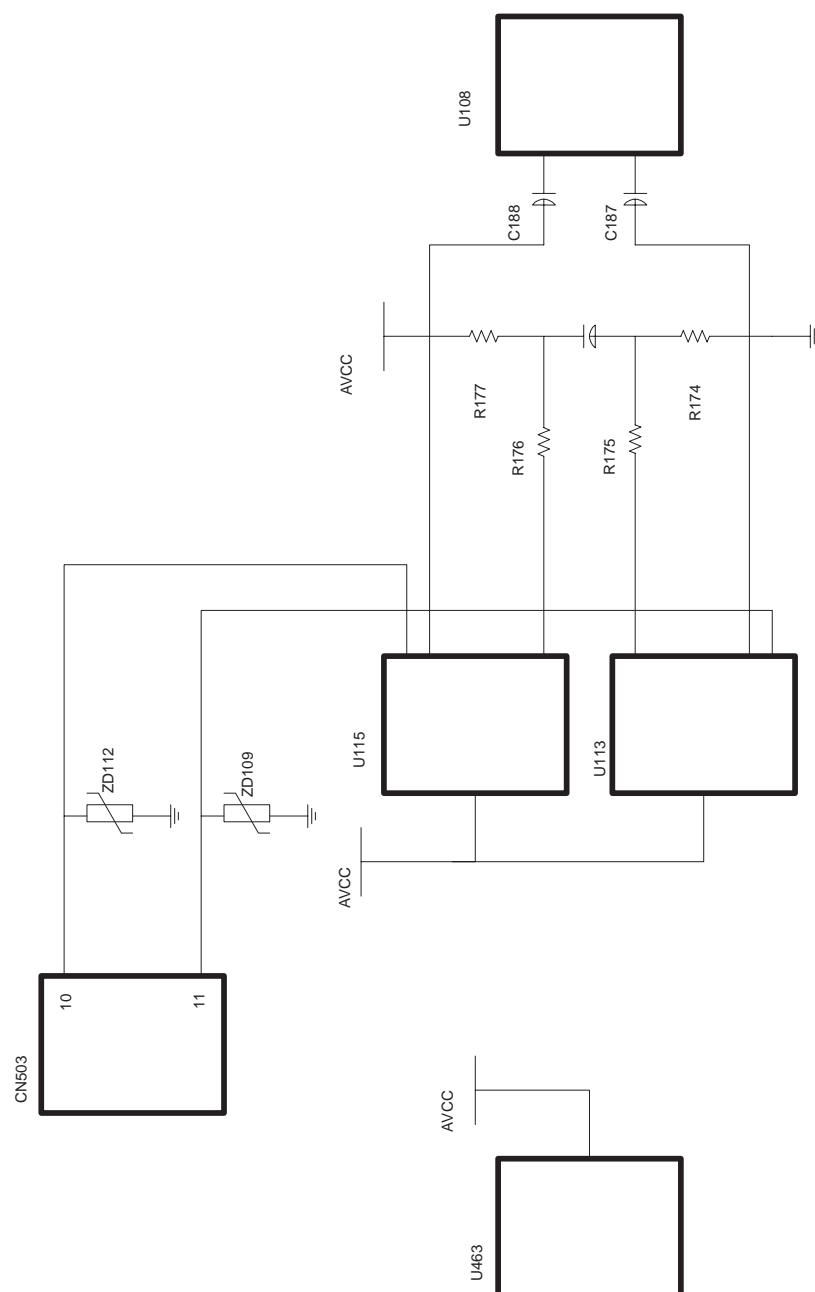


5-4 Sim Part

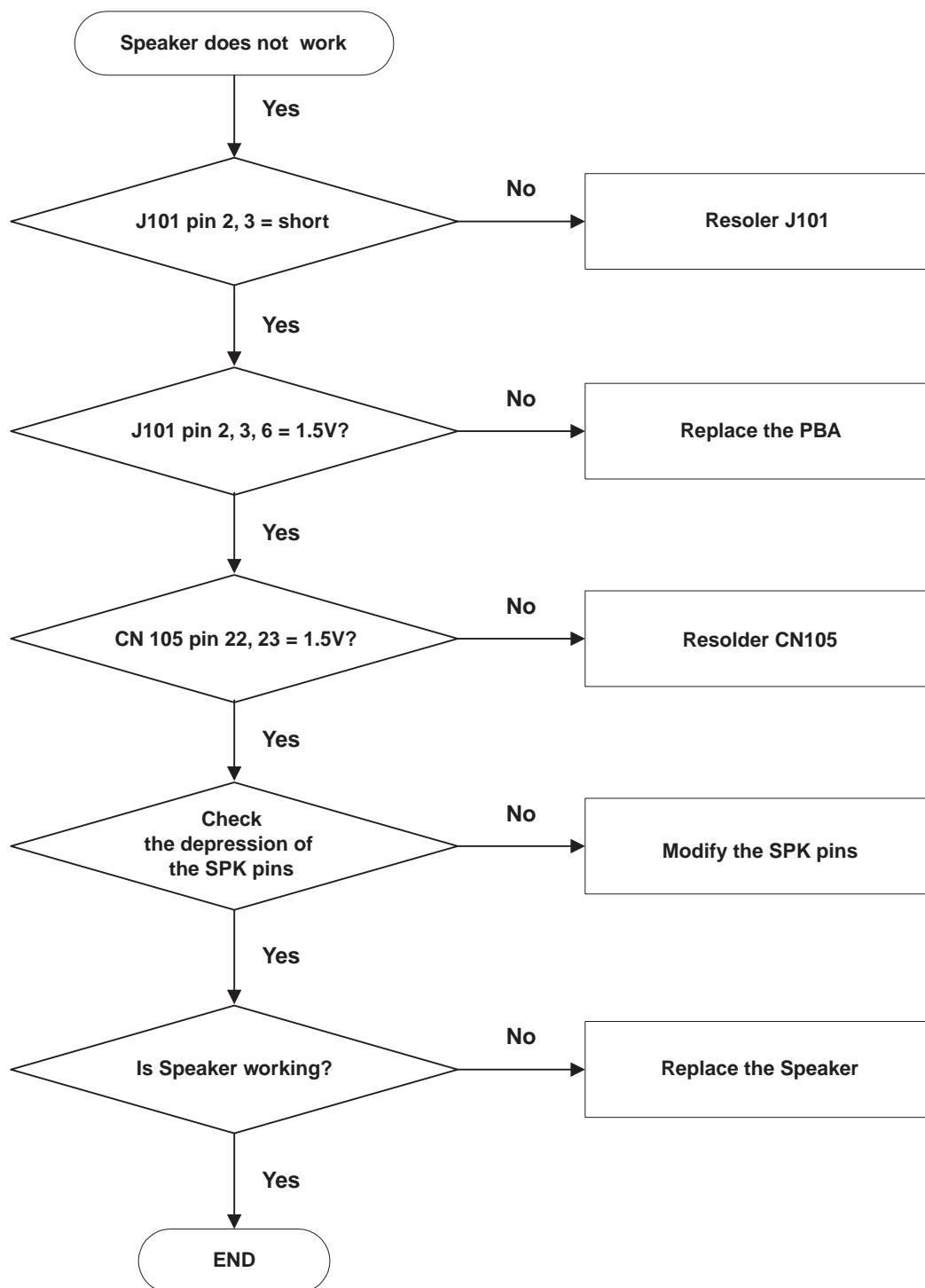


5-5 Microphone Part

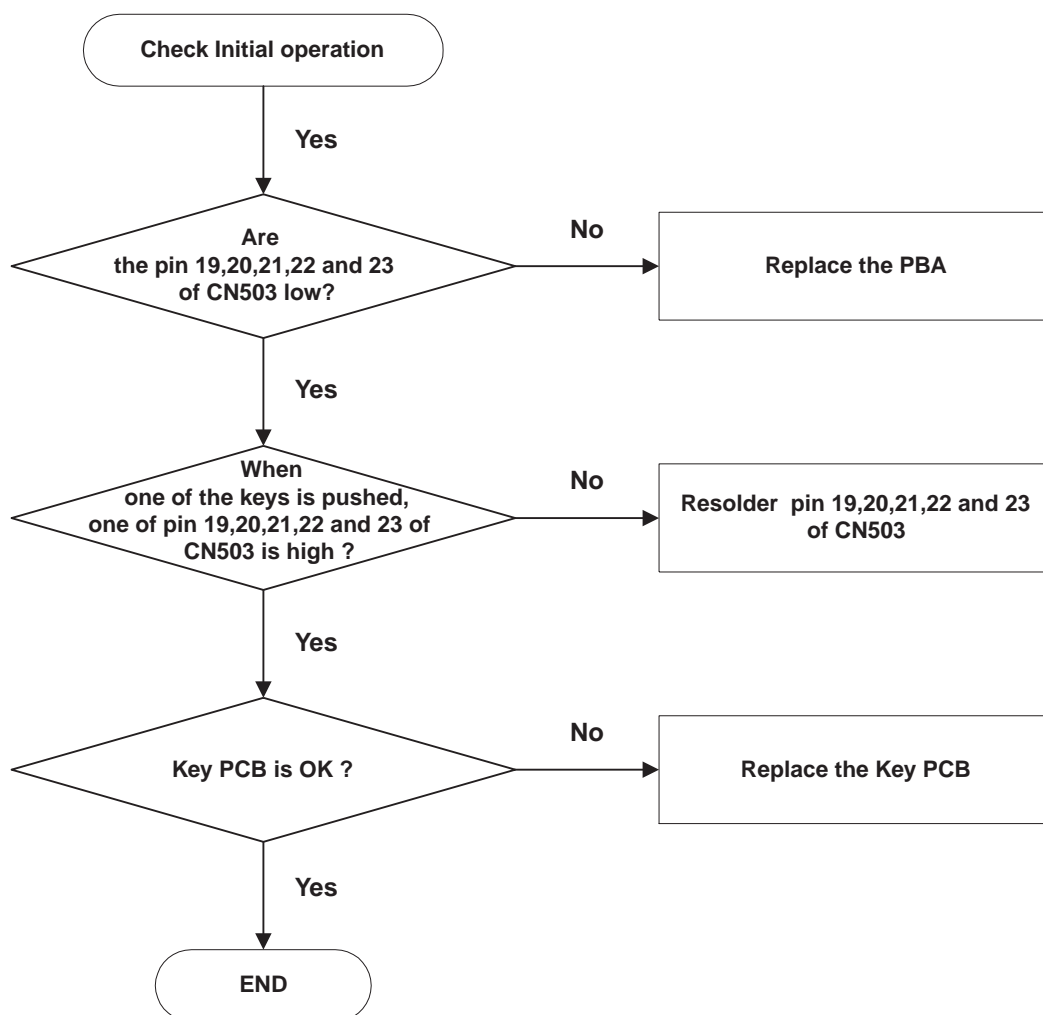




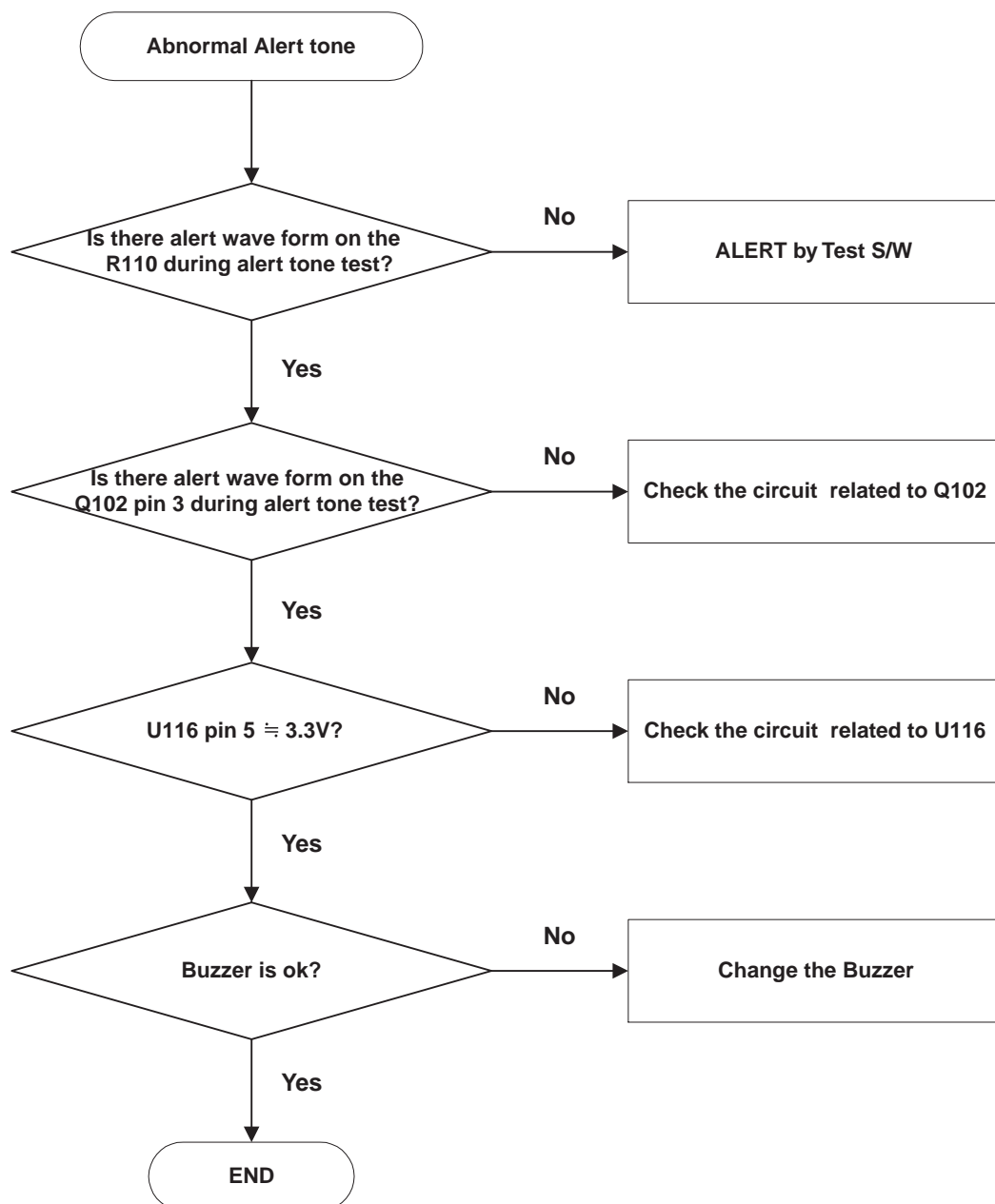
5-6 Speaker Part

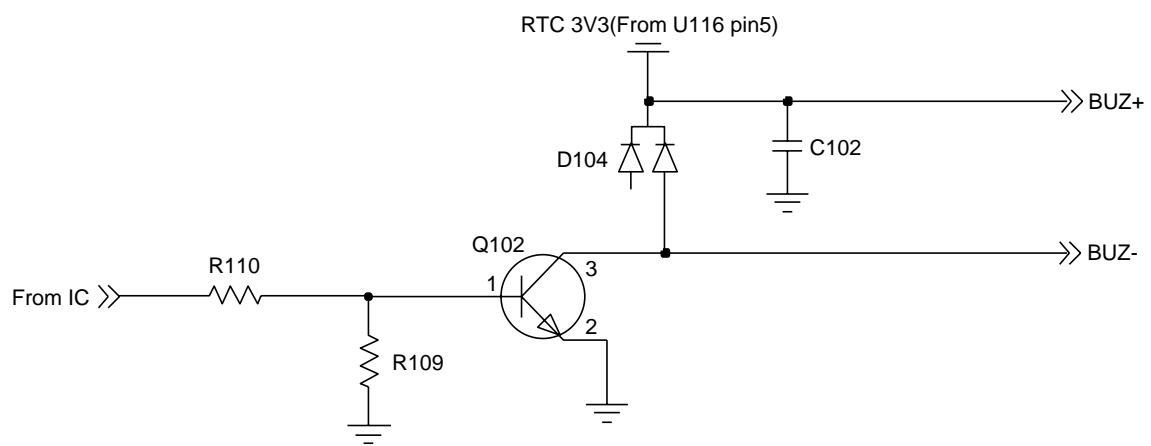


5-7 Key Data Input

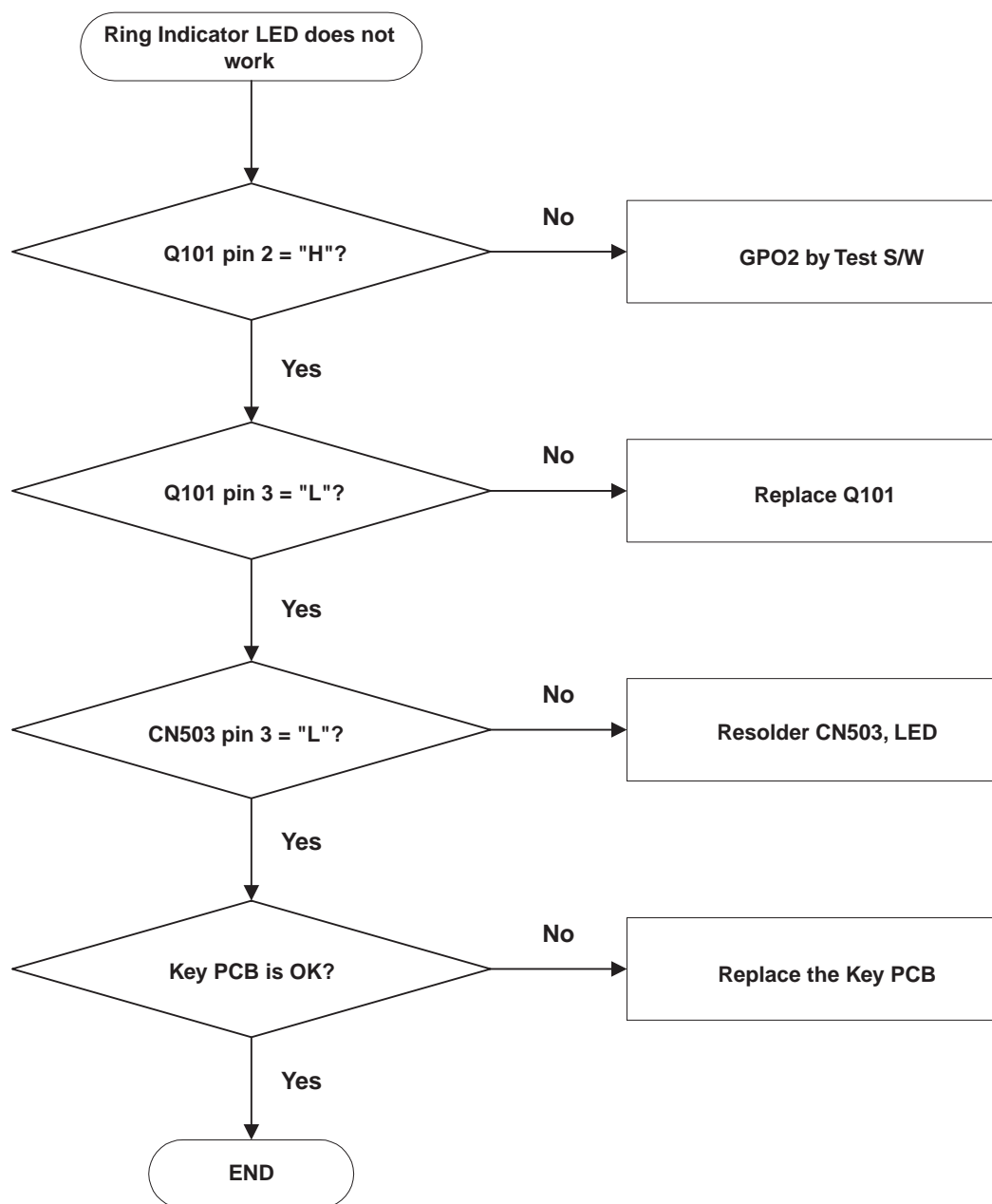


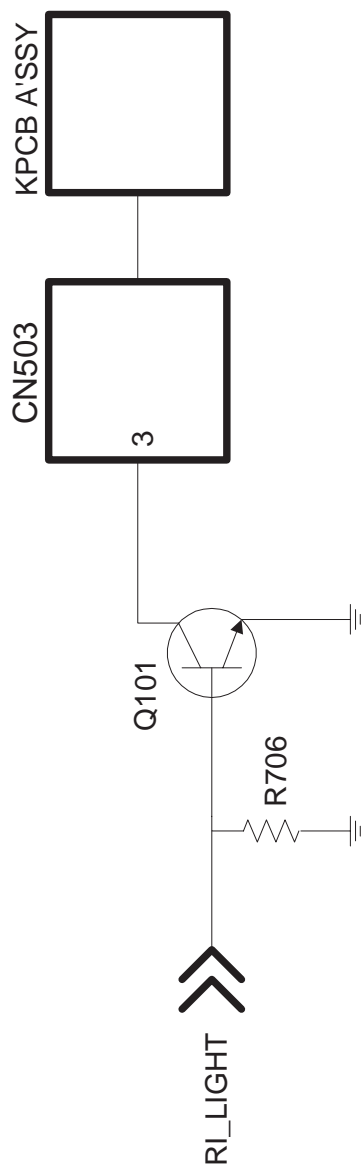
5-8 Alert Tone



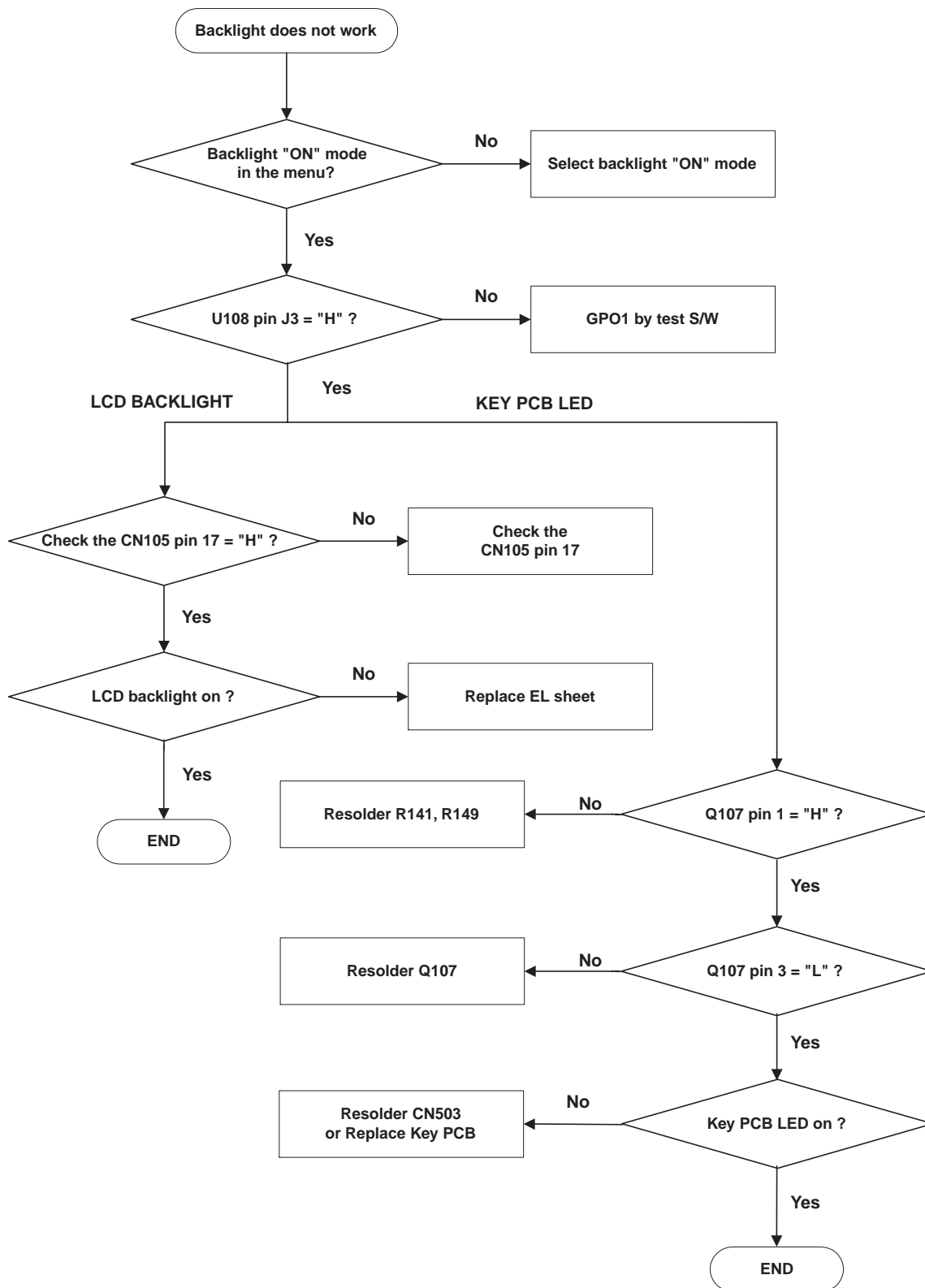


5-9 Ring Indicator

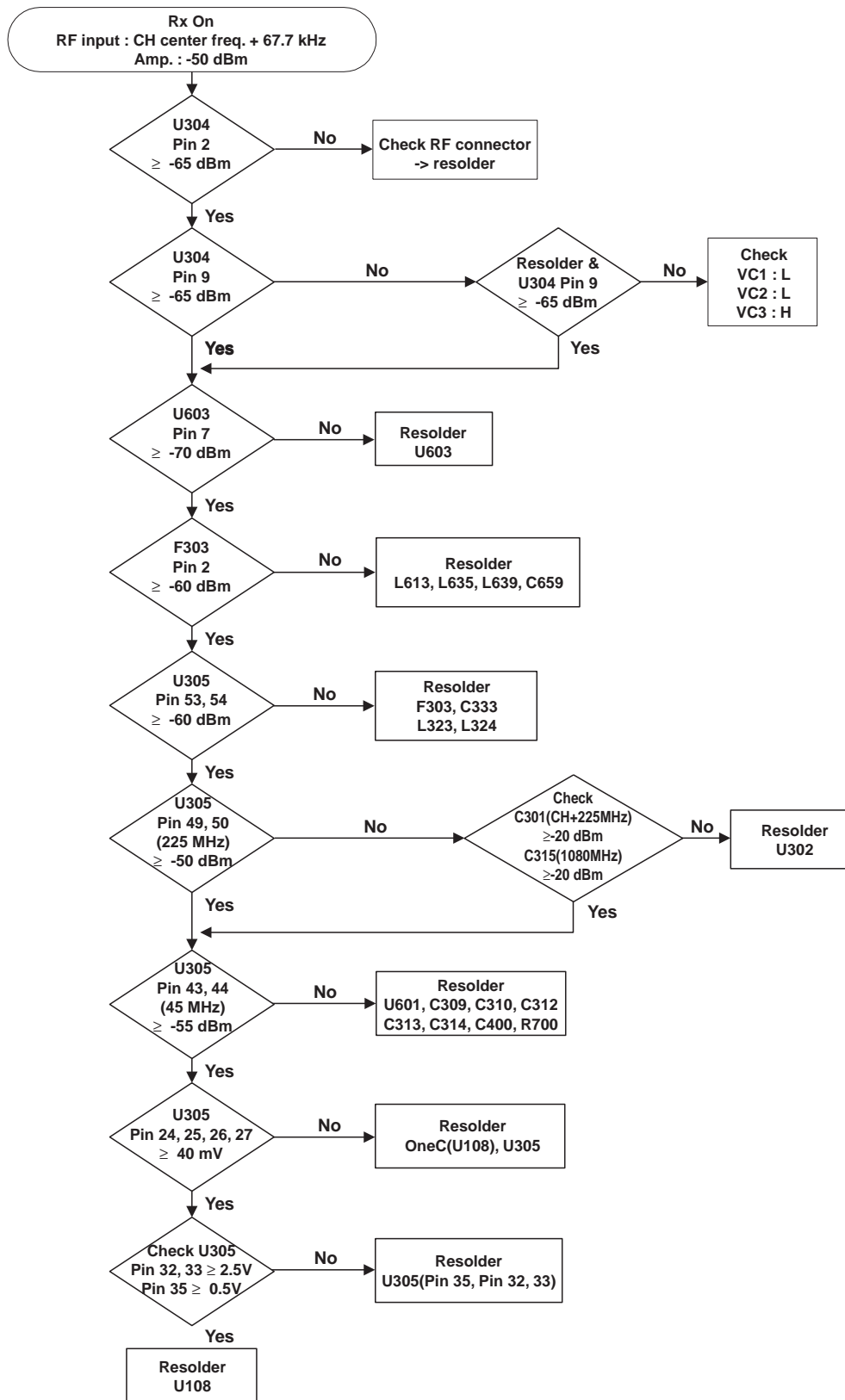




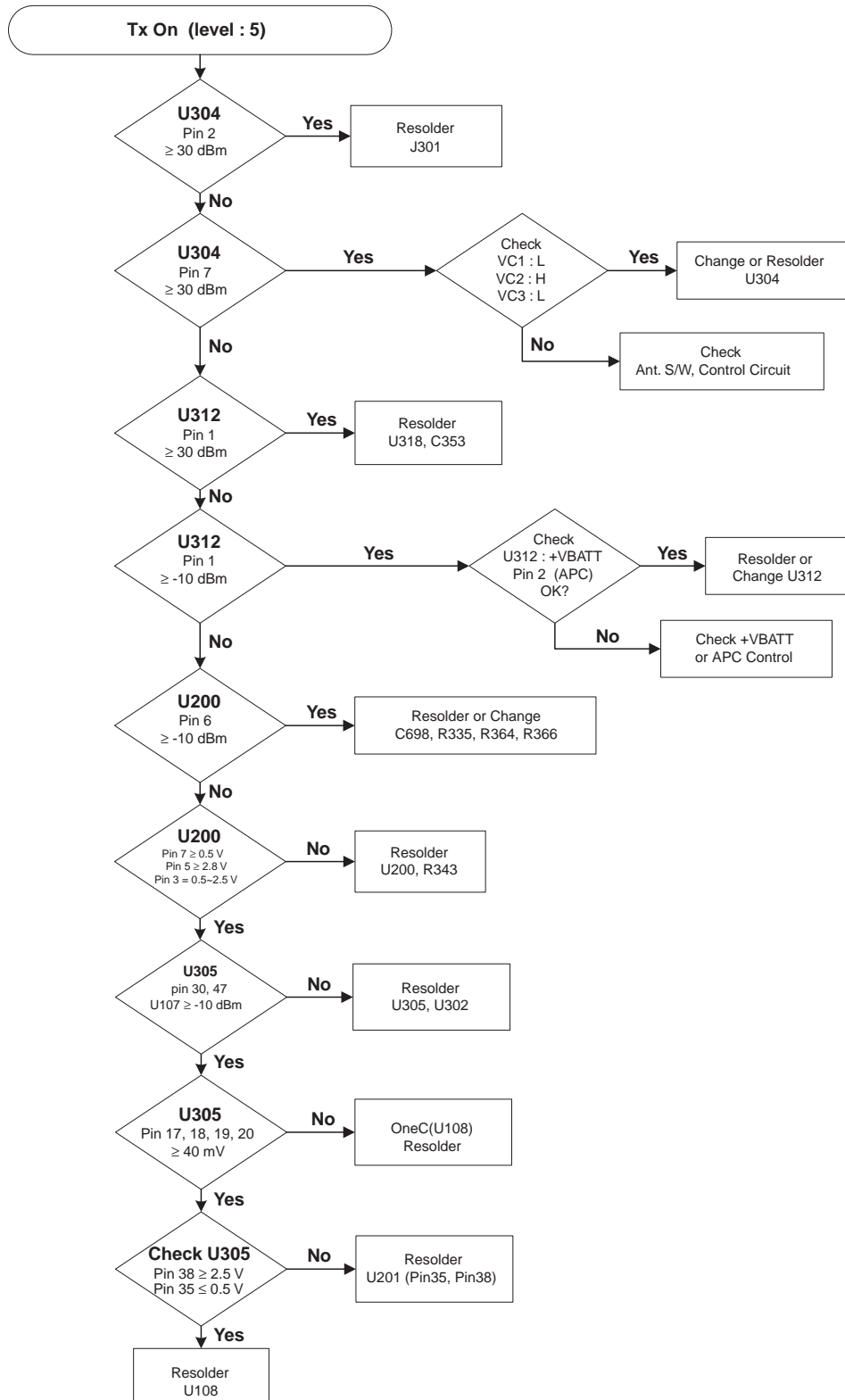
5-10 Back Light



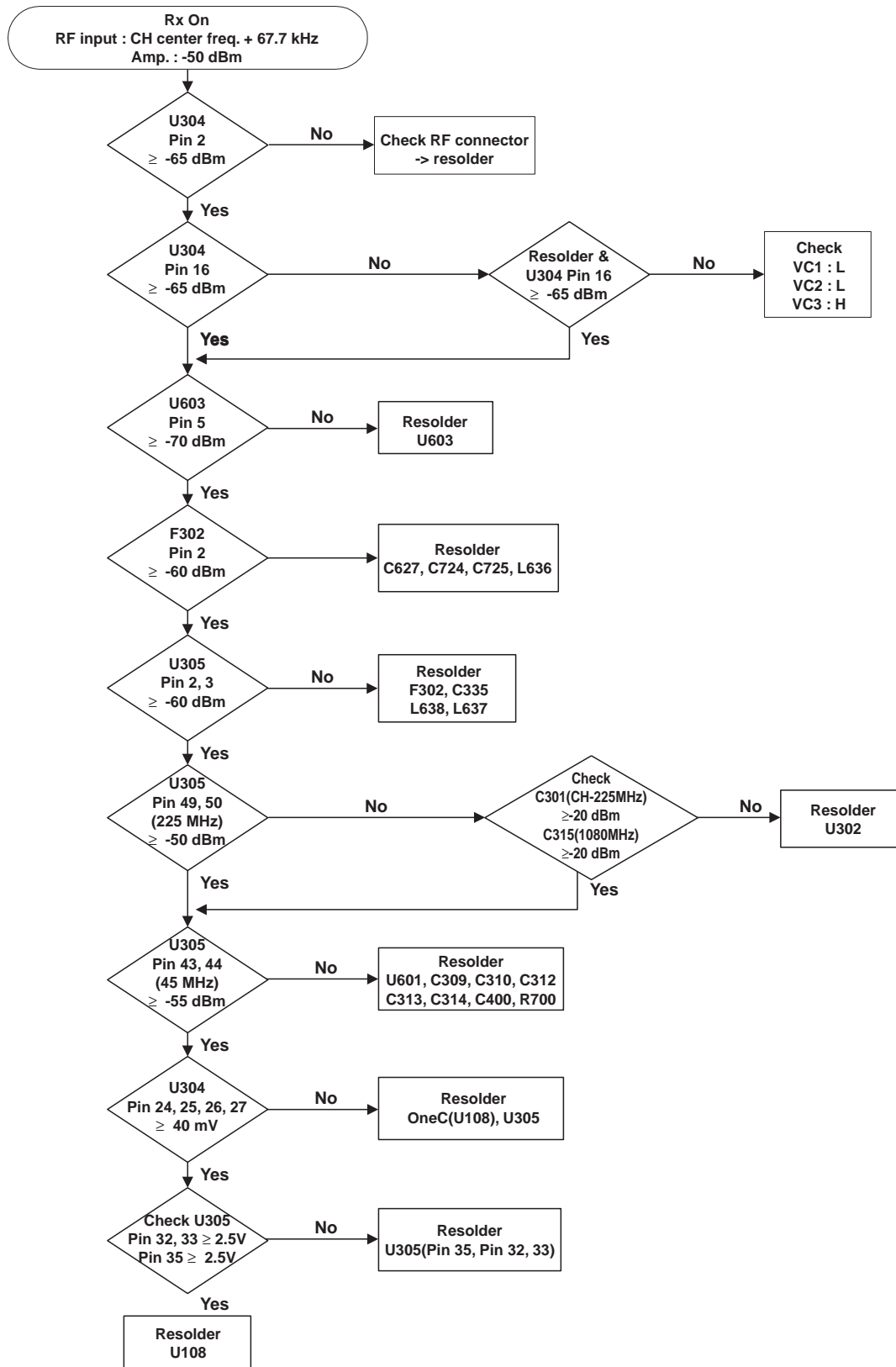
5-11 GSM Receiver



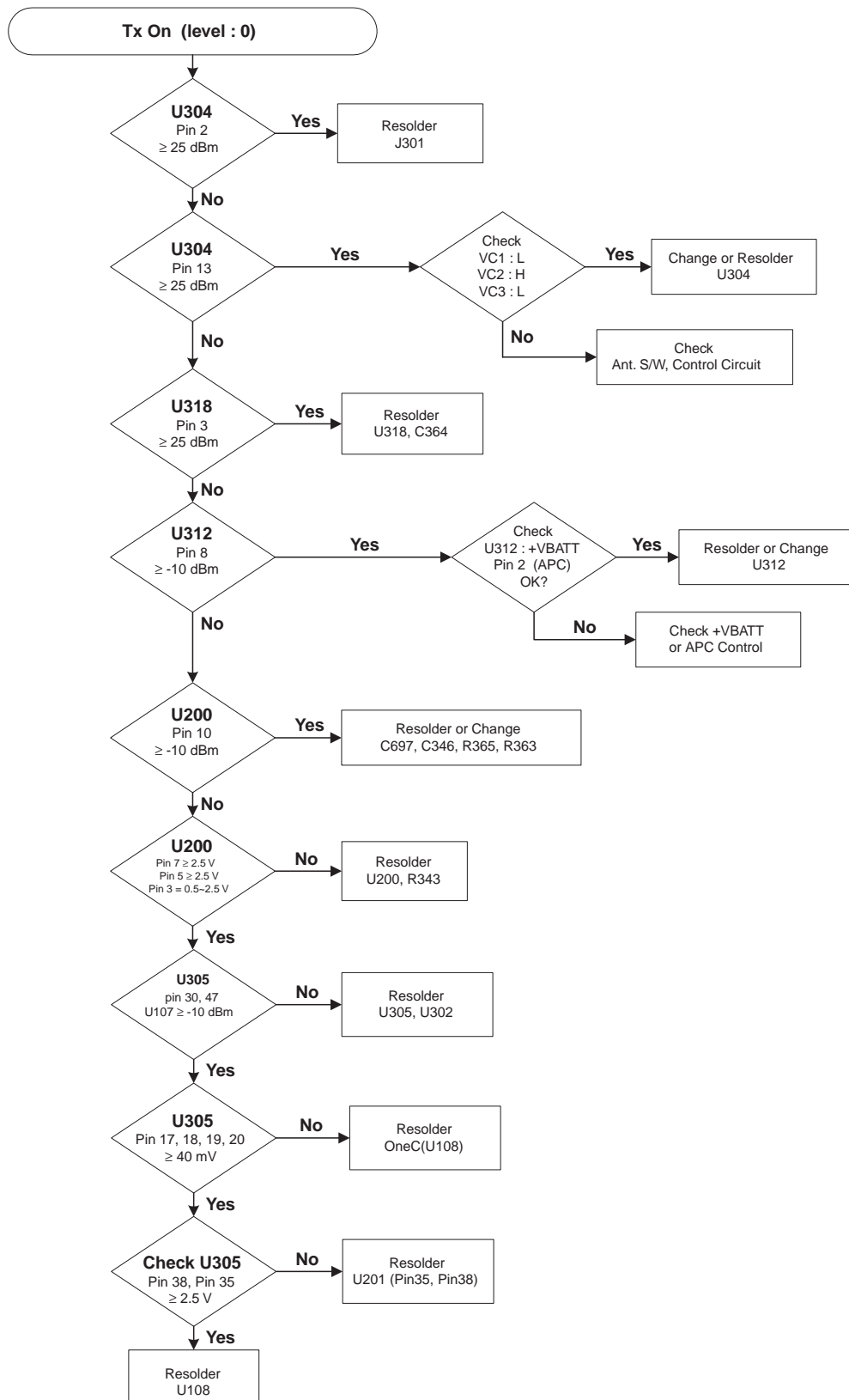
5-12 GSM Transmit

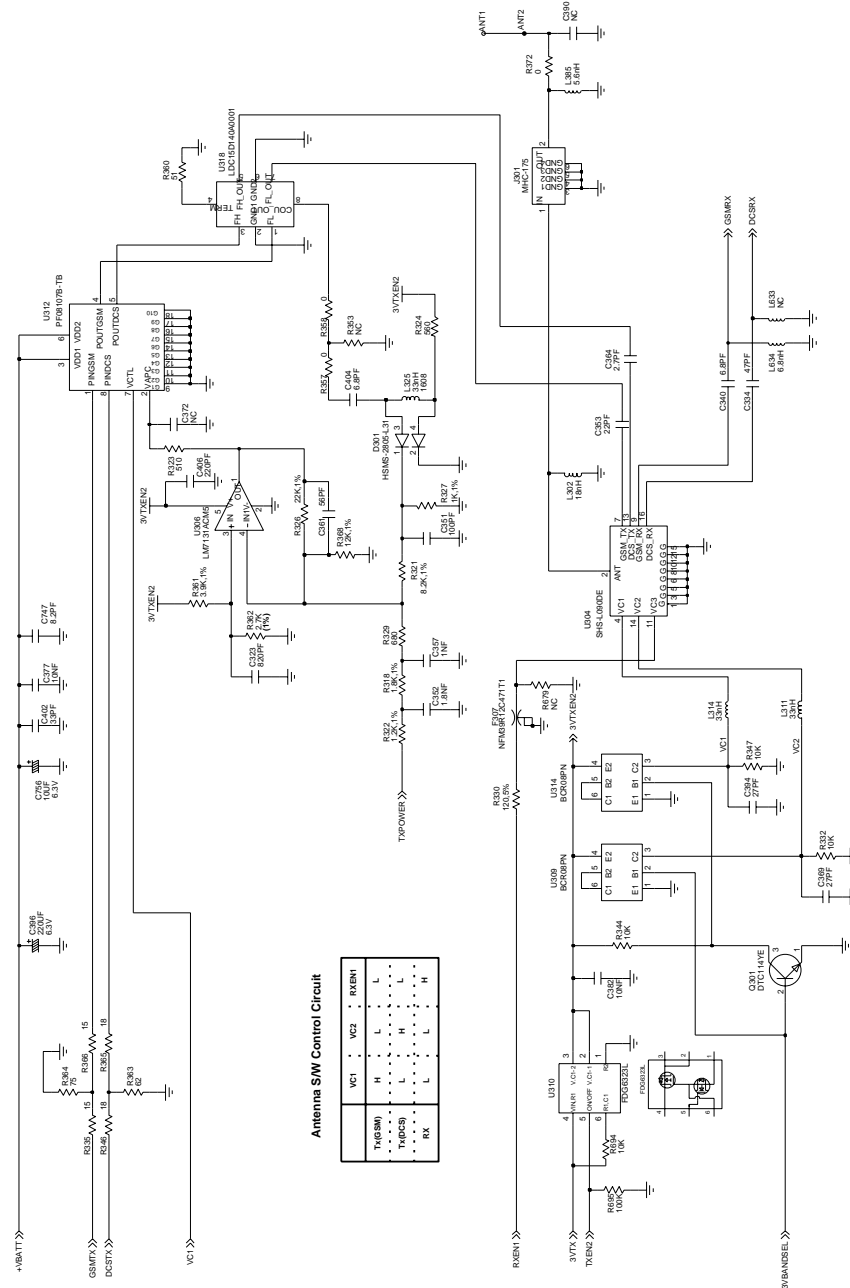


5-13 DCS Receiver



5-14 DCS Transmit





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