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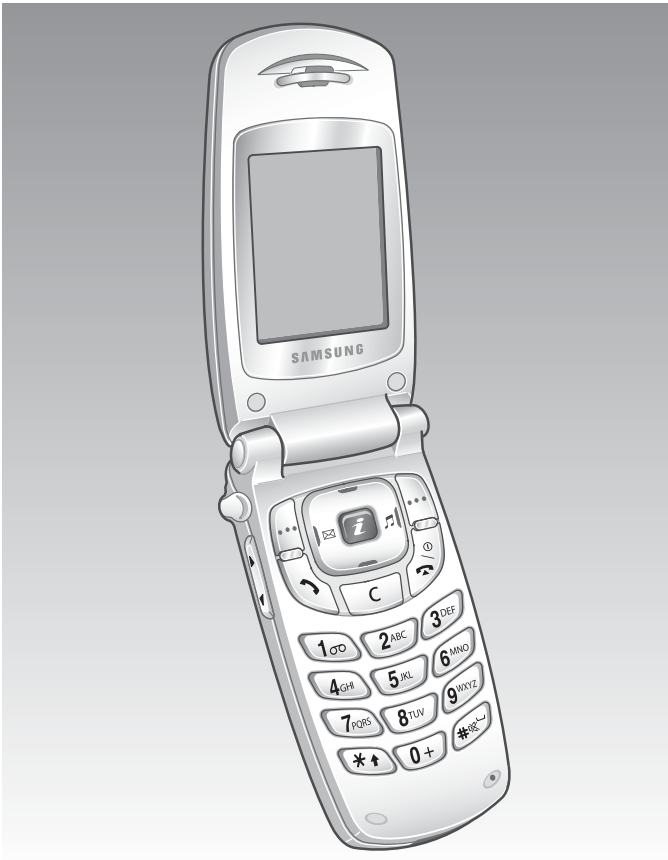
Samsung Electronics Co.,Ltd.  
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GH68-03692A



# DUAL BAND Mobile Cellular Phone SGH-S500

# SERVICE Manual

## DUAL BAND MOBILE CELLULAR PHONE



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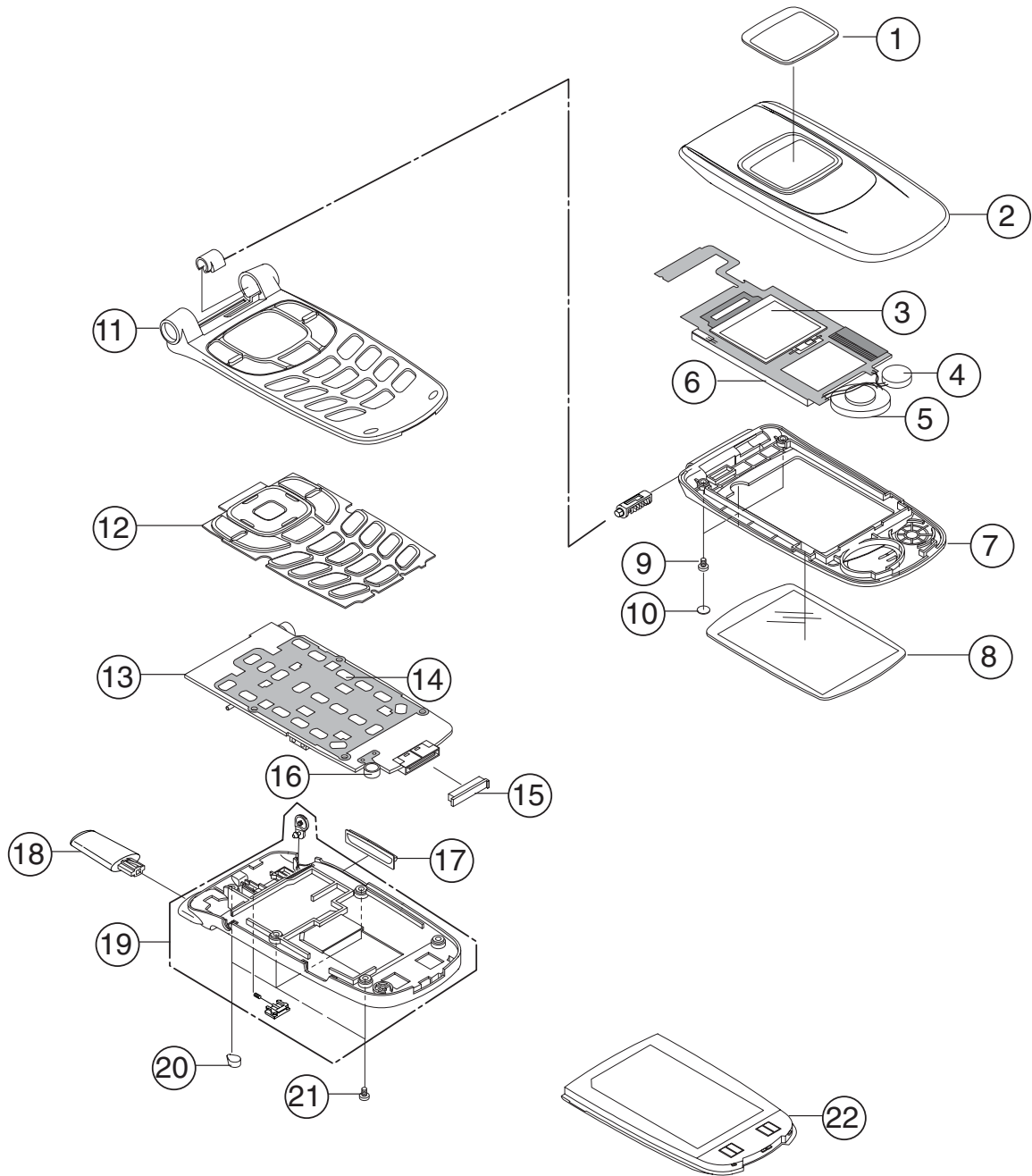
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# 1. SGH-S500 Exploded Views and Parts List

## 1-1 Main



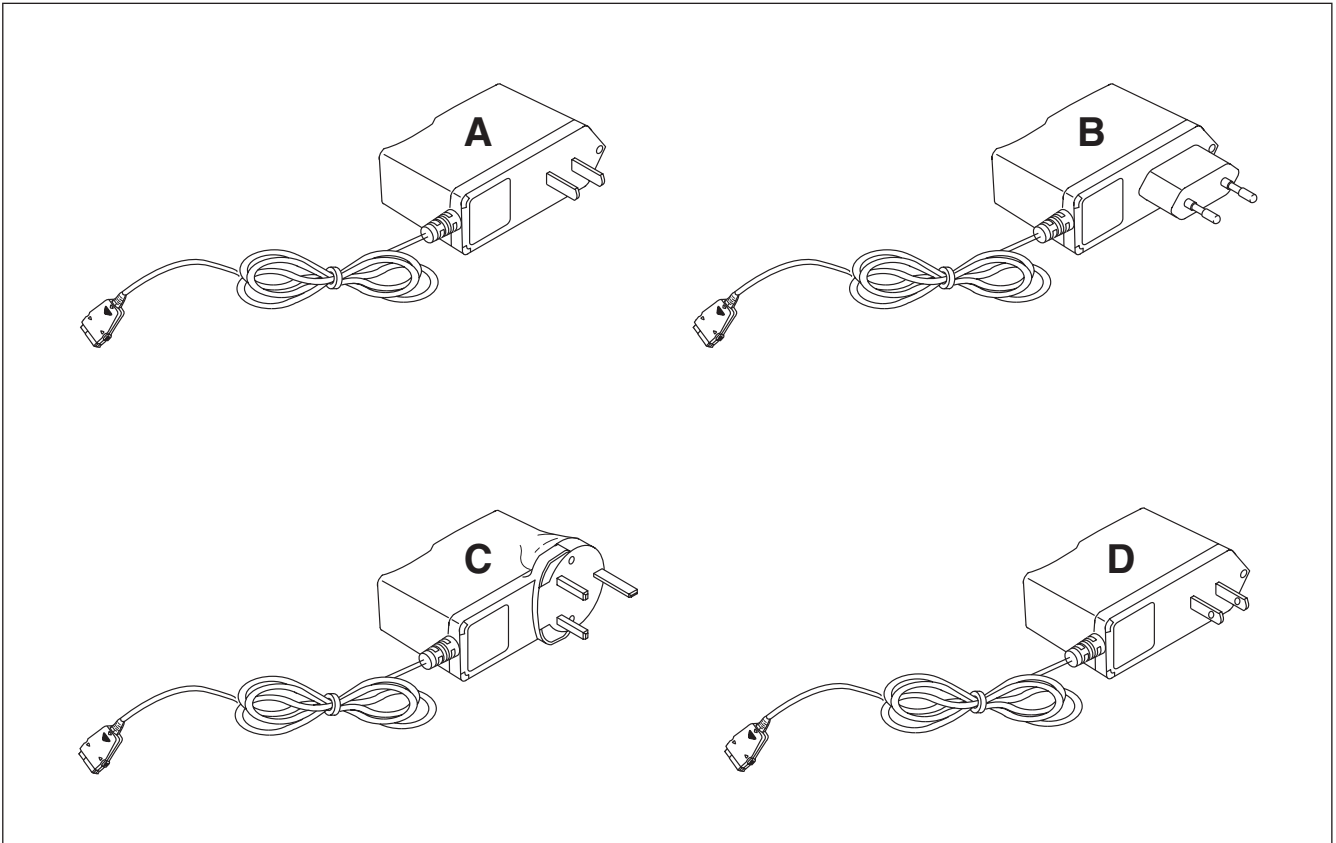
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## 1-2 Main Parts List

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Location No.	Description	SEC CODE	Remark
1	SUB WINDOW LCD	GH72-05977A	
2	FOLDER UPPER	GH75-02248A	
3	LCD	GH07-00316A	
4	MOTOR	3101-001294	
5	SPEAKER	3001-001390	
6	MAIN LCD	GH07-00190A	
7	FOLDER LOWER	GH75-02249A	
8	MAIN WINDOW LCD	GH75-02999A	
9	SCREW	6001-001479	
10	SCREW CAP	GH74-03662A	
11	FRONT COVER	GH75-02250A	
12	KEYPAD	GH75-02247A	
13	MAIN PBA	GH92-01368A	
14	DOME SHEET	GH59-00727A	
15	CONNECTOR COVER	GH73-01394A	
16	MIC	GH30-00014A	
17	SIDE KEY	GH75-02264A	
18	ANTENNA	GH42-00292A	
19	REAR COVER	GH75-02251A	
20	RF COVER	GH73-01553A	
21	SCREW	6001-001479	
22	BATTERY	GH43-00836A	

## 1-3 Travel Adapter



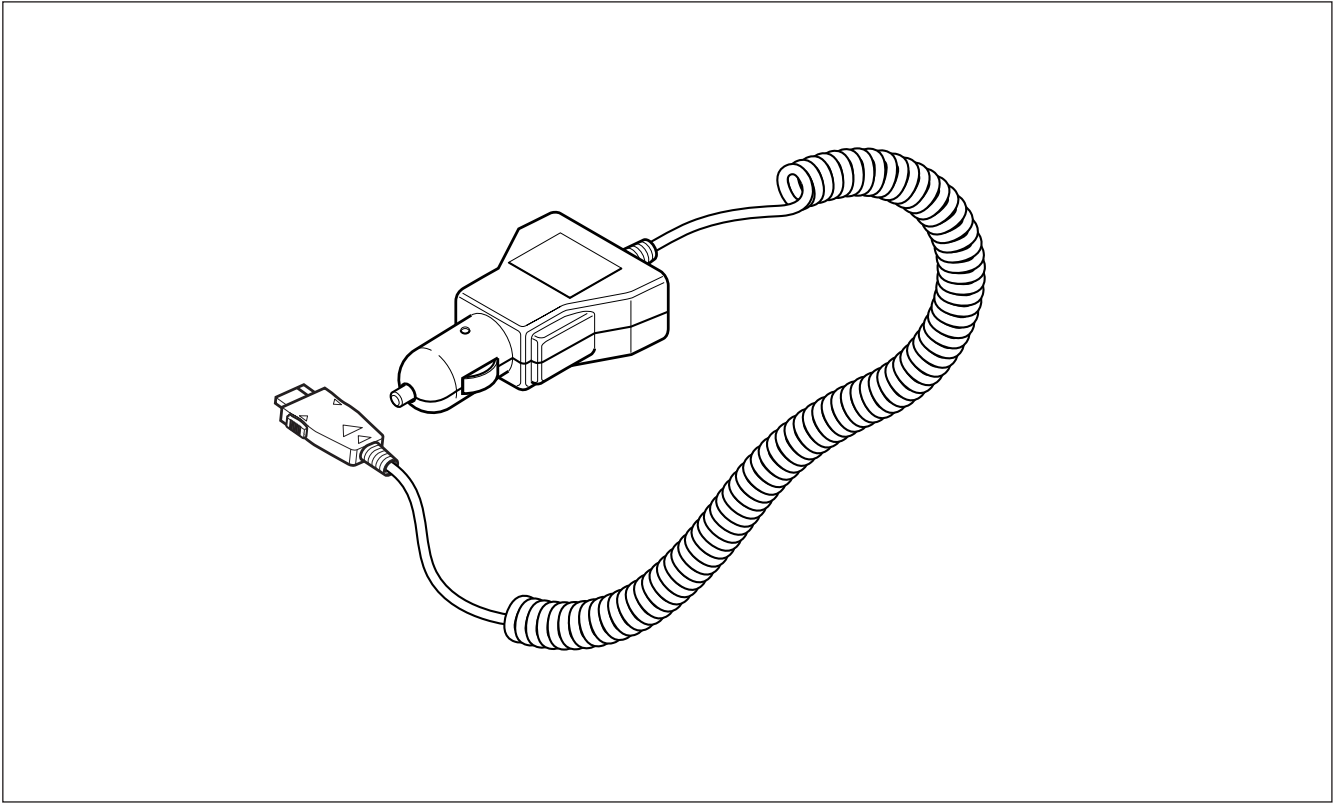
## 1-4 Travel Adapter Parts List

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

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## 1-5 Ciger Light Adapter

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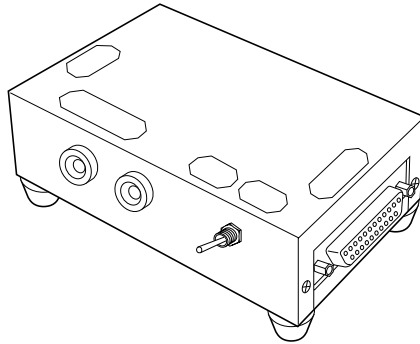


## 1-6 Ciger Light Adapter Parts List

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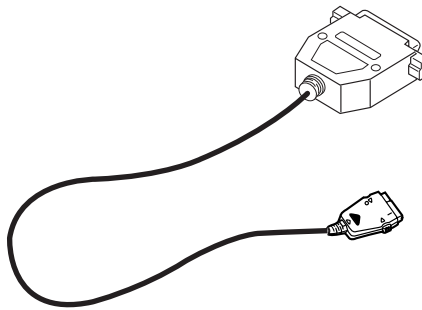
DESCRIPTION	SEC CODE	REMARK
Ciger Light Adapter Code	GH44-00170A	BLACK

## 1-7 Test Jig



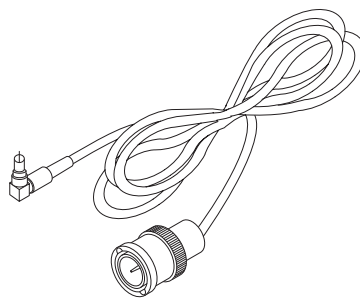
TEST JIG

GH80-01909A



TEST JIG CABLE

GH39-000217A

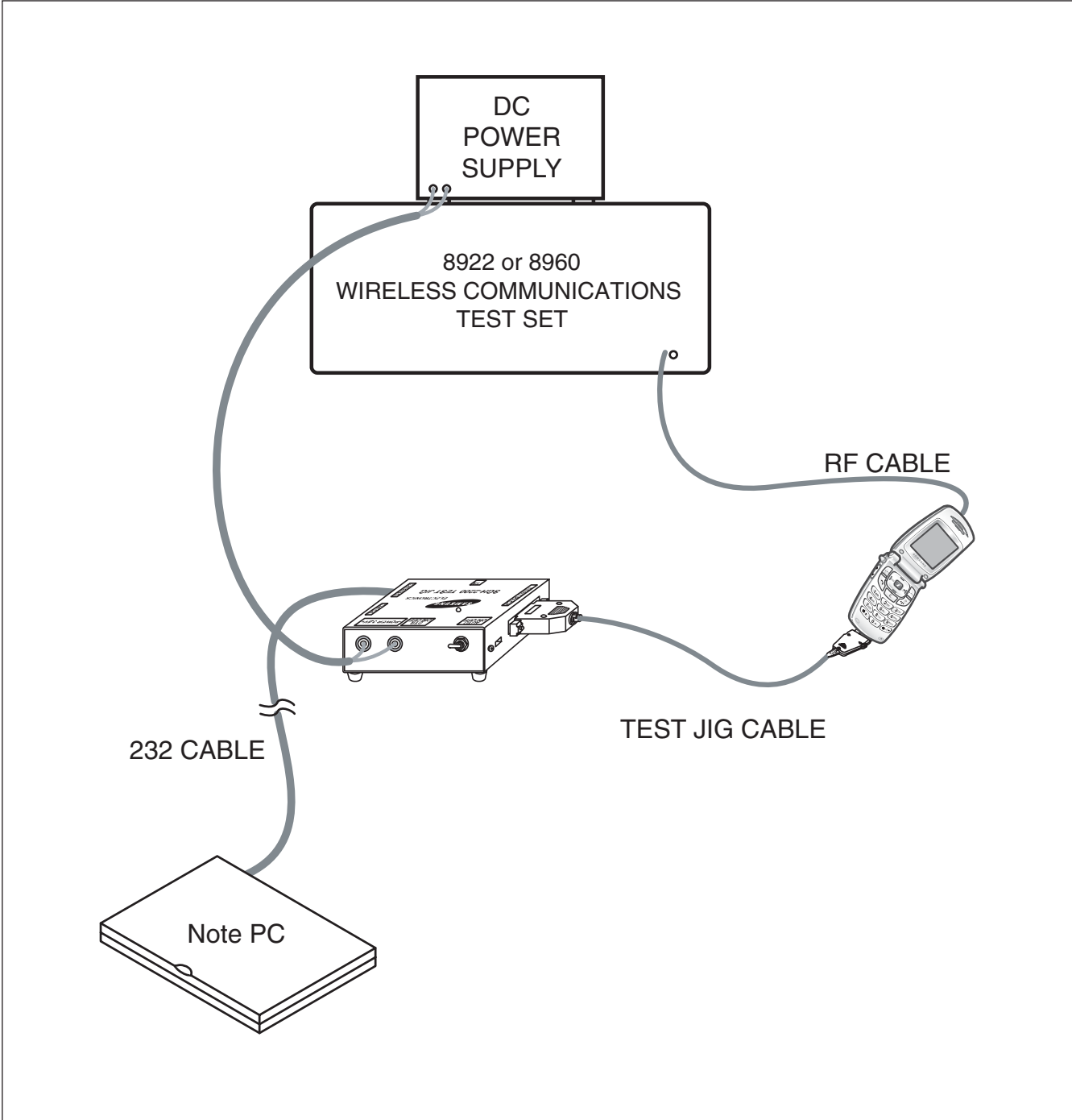


RF CABLE

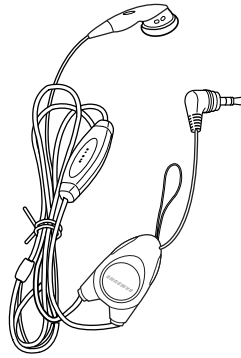
GH39-00172A



1-7-1 Test Jig



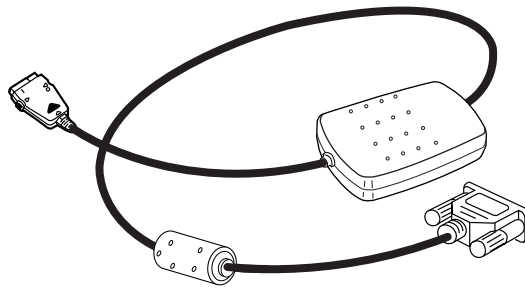
## 1-8 Wearable EAR Microphone



Wearable EAR Microphone

GH59-00394B

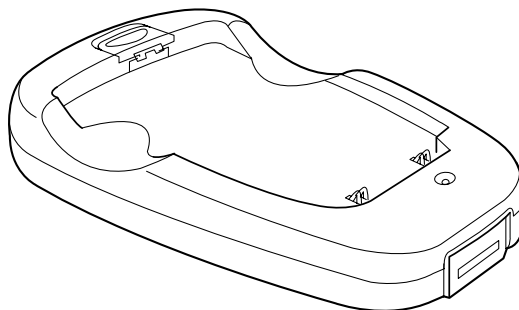
## 1-9 Data Kit



DATA KIT

GH39-00143B

## 1-10 Battery Charger

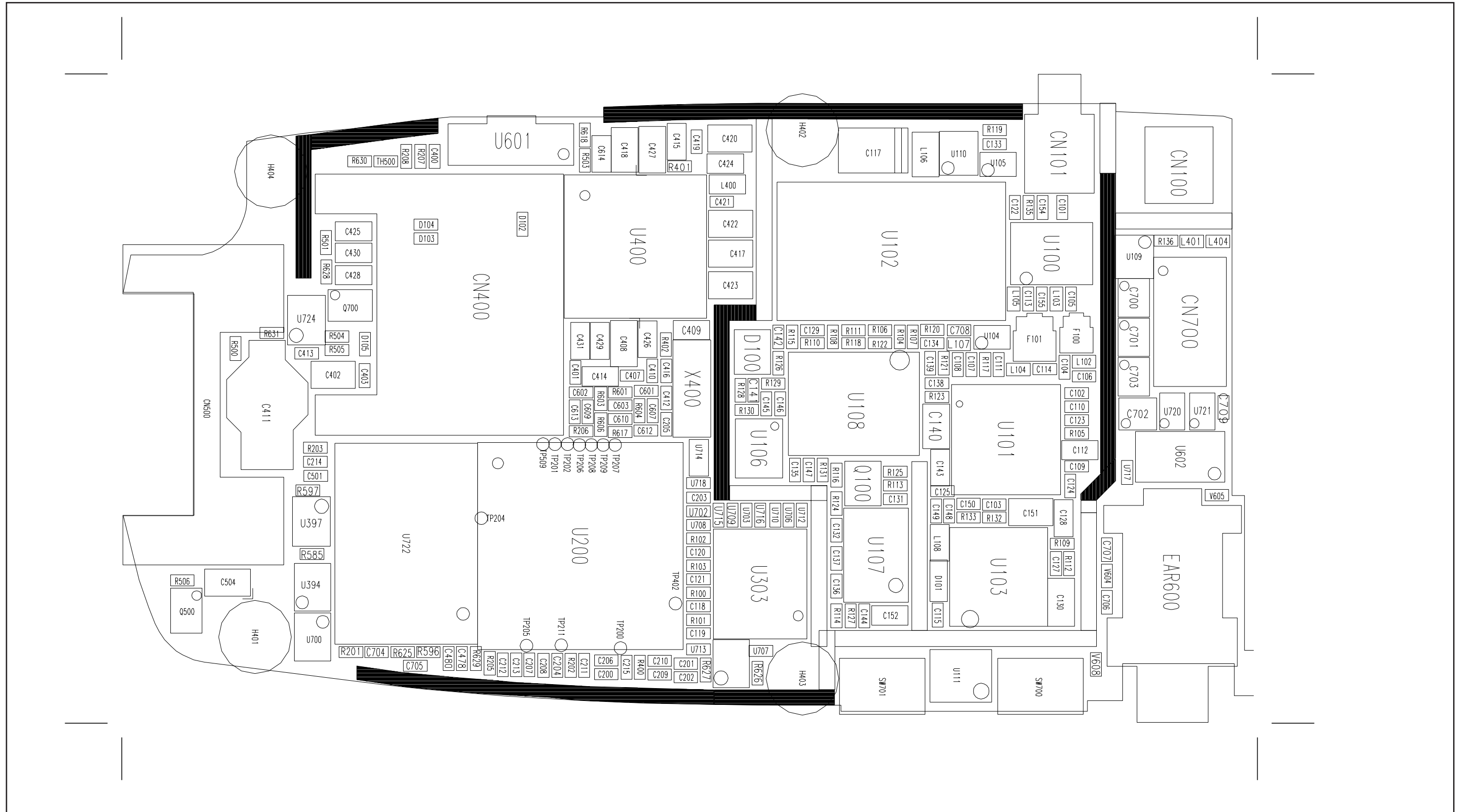


BATTERY CHARGER

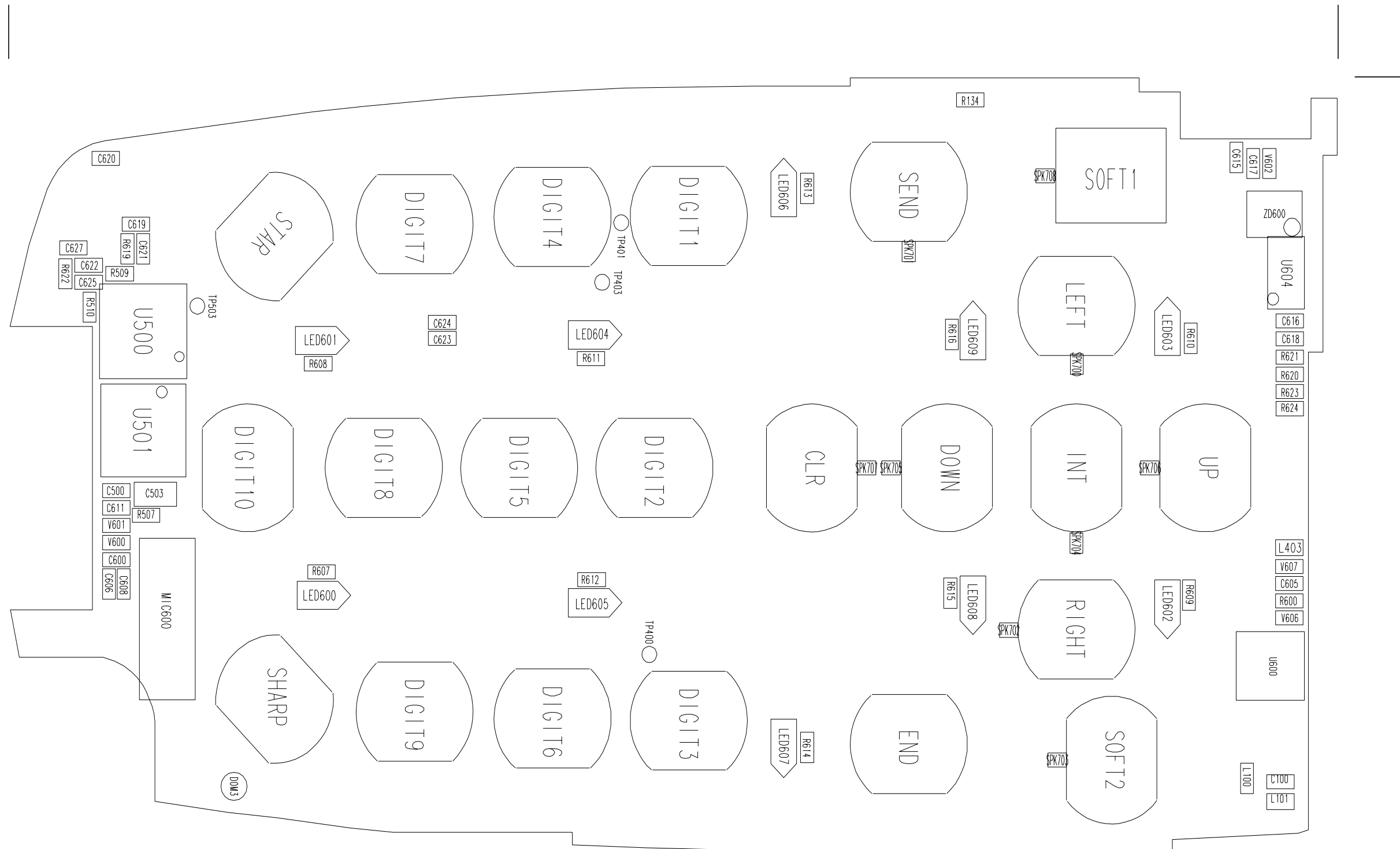
GH44-00279A

## 2. PCB Diagrams

### 2-1 Main Top



## 2-2 Main Bottom



### 3. Electrical Parts List

NO	SEC CODE	DESIGN LOC
1	0404-001077	D100
2	0405-001122	D101
3	0501-002051	Q100
4	0504-001060	U109
5	0504-001060	U110
6	0505-001423	U397
7	0505-001423	U724
8	0506-000107	Q500
9	0506-000107	Q700
10	0604-001146	U601
11	0801-002237	U300
12	0801-002540	U394
13	0801-002540	U700
14	1001-001183	U602
15	1001-001231	U720
16	1001-001231	U721
17	1109-001243	U722
18	1201-001785	U102
19	1203-002824	U111
20	1204-001960	U303
21	1205-002257	U400
22	1205-002264	U101
23	1205-002276	U200
24	1209-001429	U106
25	1404-001221	TH500
26	1405-001082	D102
27	1405-001082	D103
28	1405-001082	D104
29	1405-001082	D105
30	1405-001082	V604
31	1405-001082	V605
32	1405-001082	V608
33	2007-000138	R105
34	2007-000140	R126
35	2007-000140	R128
36	2007-000140	R401
37	2007-000141	R207
38	2007-000141	R208
39	2007-000141	U708

NO	SEC CODE	DESIGN LOC
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41	2007-000142	R101
42	2007-000142	R102
43	2007-000142	R103
44	2007-000142	R113
45	2007-000146	U709
46	2007-000148	R130
47	2007-000148	R135
48	2007-000148	R136
49	2007-000148	R201
50	2007-000148	R400
51	2007-000148	R203
52	2007-000148	R506
53	2007-000148	R604
54	2007-000148	R625
55	2007-000151	R116
56	2007-000151	R109
57	2007-000155	R124
58	2007-000162	R202
59	2007-000162	R205
60	2007-000162	R500
61	2007-000162	R501
62	2007-000162	R585
63	2007-000162	R597
64	2007-000162	R628
65	2007-000162	R618
66	2007-000162	R629
67	2007-000162	R630
68	2007-000162	R631
69	2007-000171	R115
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72	2007-000171	R596
73	2007-000171	R626
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76	2007-000173	R104
77	2007-000173	R108
78	2007-000242	R601

NO	SEC CODE	DESIGN LOC
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80	2007-000932	R114
81	2007-000982	R112
82	2007-001305	R118
83	2007-001305	R122
84	2007-001306	R106
85	2007-001306	R107
86	2007-001306	R110
87	2007-001306	R111
88	2007-001313	R132
89	2007-001313	U707
90	2007-001319	U703
91	2007-001323	R131
92	2007-001325	U706
93	2007-002797	R121
94	2007-003030	R123
95	2007-007001	R206
96	2007-007009	R125
97	2007-007100	R402
98	2007-007334	R505
99	2007-007573	R504
100	2007-007588	R117
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102	2007-007699	R119
103	2007-007699	R120
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107	2203-000233	C129
108	2203-000233	C131
109	2203-000233	C132
110	2203-000233	C136
111	2203-000233	C138
112	2203-000233	C149
113	2203-000254	C144
114	2203-000254	C204
115	2203-000254	C410
116	2203-000254	C478
117	2203-000254	C704

NO	SEC CODE	DESIGN LOC
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119	2203-000254	C707
120	2203-000278	C102
121	2203-000278	C122
122	2203-000278	C123
123	2203-000278	C133
124	2203-000278	C154
125	2203-000278	C155
126	2203-000278	C407
127	2203-000278	C609
128	2203-000278	C613
129	2203-000278	C115
130	2203-000330	C412
131	2203-000330	C416
132	2203-000330	C601
133	2203-000330	C612
134	2203-000330	C708
135	2203-000374	C140
136	2203-000386	C709
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141	2203-000585	C119
142	2203-000585	C120
143	2203-000585	C121
144	2203-000628	C139
145	2203-000679	C101
146	2203-000812	C105
147	2203-000812	C111
148	2203-000812	C113
149	2203-000812	C114
150	2203-000836	C147
151	2203-000854	C110
152	2203-000854	C137
153	2203-000854	C146
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155	2203-000885	U717
156	2203-000995	C607

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161	2203-001607	C128
162	2203-001652	C414
163	2203-001652	C425
164	2203-002687	U715
165	2203-005056	C141
166	2203-005057	C134
167	2203-005061	C200
168	2203-005061	C201
169	2203-005061	C202
170	2203-005061	C203
171	2203-005061	C205
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183	2203-005061	C401
184	2203-005061	C403
185	2203-005061	C480
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188	2203-005061	C610
189	2203-005061	U712
190	2203-005061	U713
191	2203-005065	C112
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194	2203-005065	C614
195	2203-005446	C142

NO	SEC CODE	DESIGN LOC
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207	2203-006053	C430
208	2203-006053	C431
209	2203-006053	U714
210	2203-006053	C152
211	2203-006090	C423
212	2203-006208	C409
213	2203-006274	C151
214	2301-001512	C130
215	2404-001105	C422
216	2404-001105	C408
217	2404-001105	C427
218	2404-001105	C504
219	2404-001276	C117
220	2503-001045	C700
221	2503-001045	C701
222	2503-001045	C702
223	2503-001045	C703
224	2703-001709	L108
225	2703-002370	L103
226	2703-002485	R603
227	2703-002485	R606
228	2703-002519	L102
229	2703-002586	L104
230	2703-002596	L107
231	2703-002597	L401
232	2703-002597	L404
233	2703-002606	L105
234	2801-004025	X400

NO	SEC CODE	DESIGN LOC
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237	2809-001271	U107
238	2904-001417	F100
239	2904-001424	F101
240	2909-001197	U100
241	3301-001105	L400
242	3301-001630	L106
243	3404-001152	SW700
244	3404-001152	SW701
245	3705-001242	CN101
246	3709-001250	CN400
247	3710-001816	CN500
248	3711-005078	CN700
249	3722-001715	EAR600
250	4302-001119	C411
251	4709-001296	U105
252	4709-001297	U104

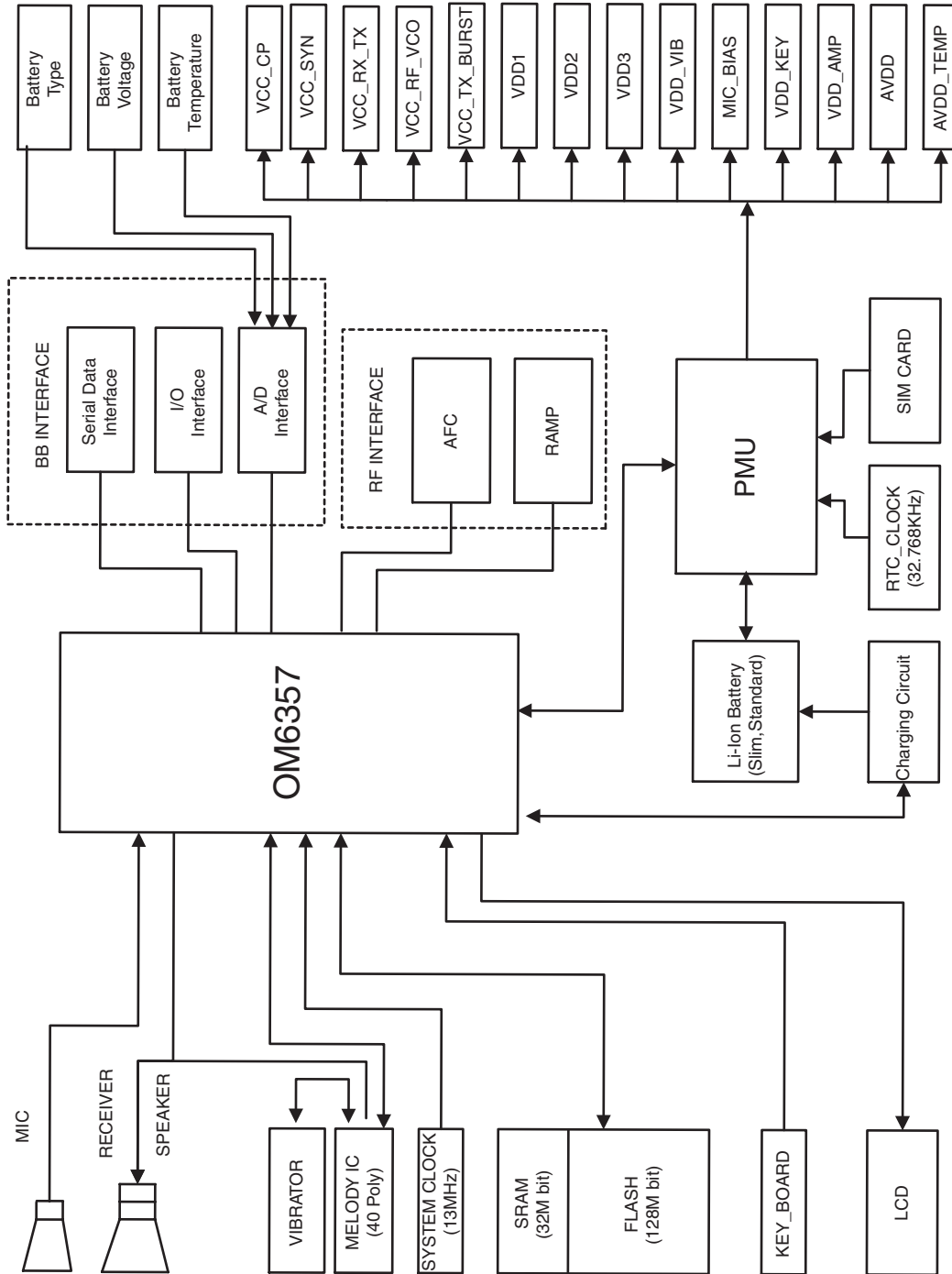
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25	2007-001298	R611
26	2007-001301	R609
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29	2007-001301	R616
30	2007-003030	R614
31	2007-003030	R607
32	2007-003030	R612
33	2007-003030	R613
34	2007-007334	R623
35	2007-007480	R624
36	2007-007528	R510
37	2007-007981	R621
38	2007-008117	R509
39	2007-008312	R620
40	2203-000330	C611
41	2203-000330	C600
42	2203-000425	C608
43	2203-000438	C621
44	2203-000438	C620
45	2203-000628	C606
46	2203-000995	C617
47	2203-000995	C615
48	2203-000995	C618
49	2203-001383	C100
50	2203-005061	C605
51	2203-005281	L100
52	2203-005482	C619
53	2203-005482	C622
54	2203-006053	C503
55	2703-001284	L101
56	2703-002597	L403
57	2901-001246	U500

NO	SEC CODE	DESIGN LOC
1	0406-001104	ZD600
2	0601-001647	LED600
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4	0601-001647	LED601
5	0601-001647	LED603
6	0601-001647	LED604
7	0601-001647	LED605
8	0601-001647	LED606
9	0601-001647	LED607
10	0601-001647	LED608
11	0601-001647	LED609
12	1009-001010	U600
13	1202-001036	U604
14	1203-002764	U501
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18	1405-001082	V600

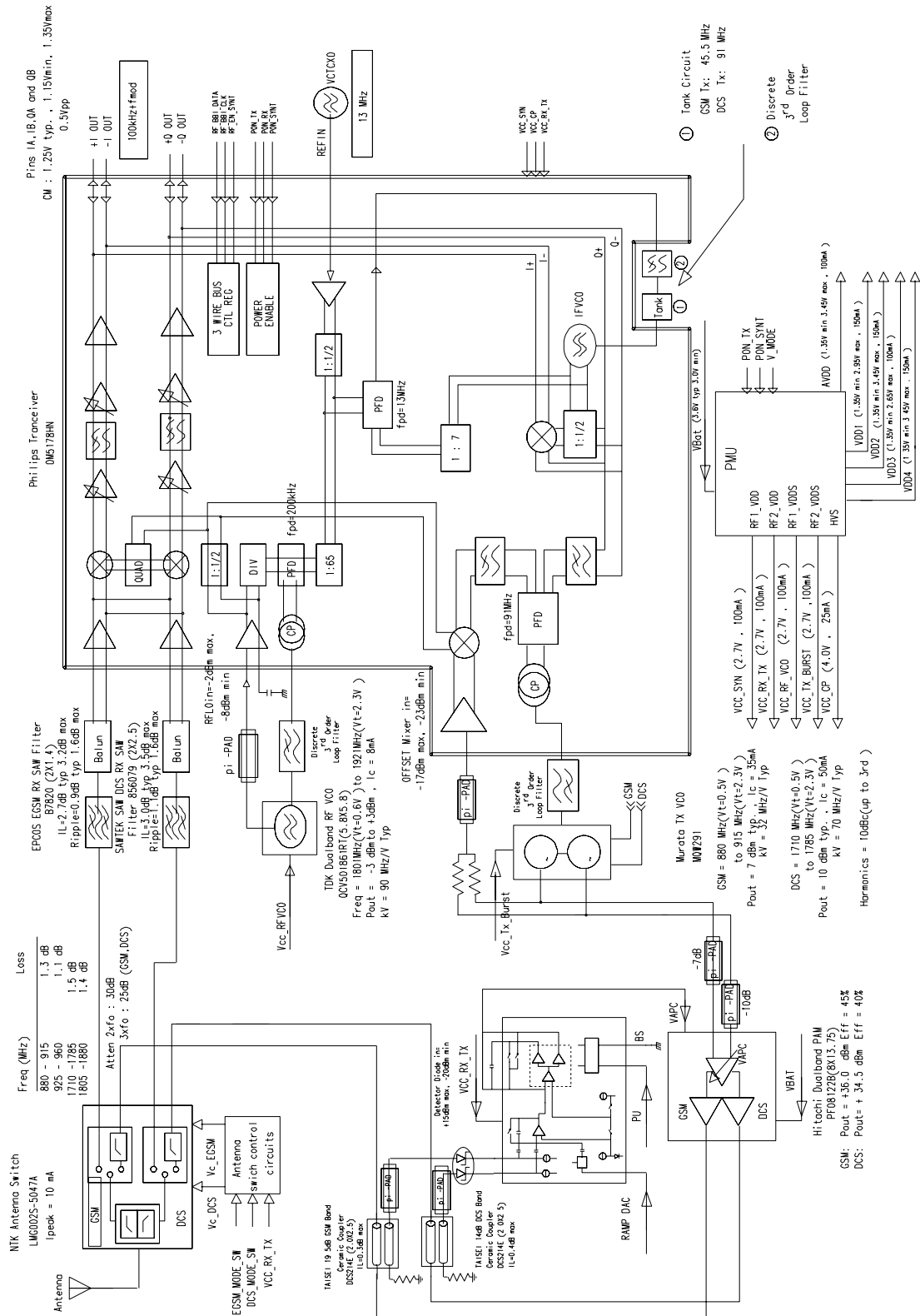


# 4. Block Diagrams

## 4-1 Main Baseband

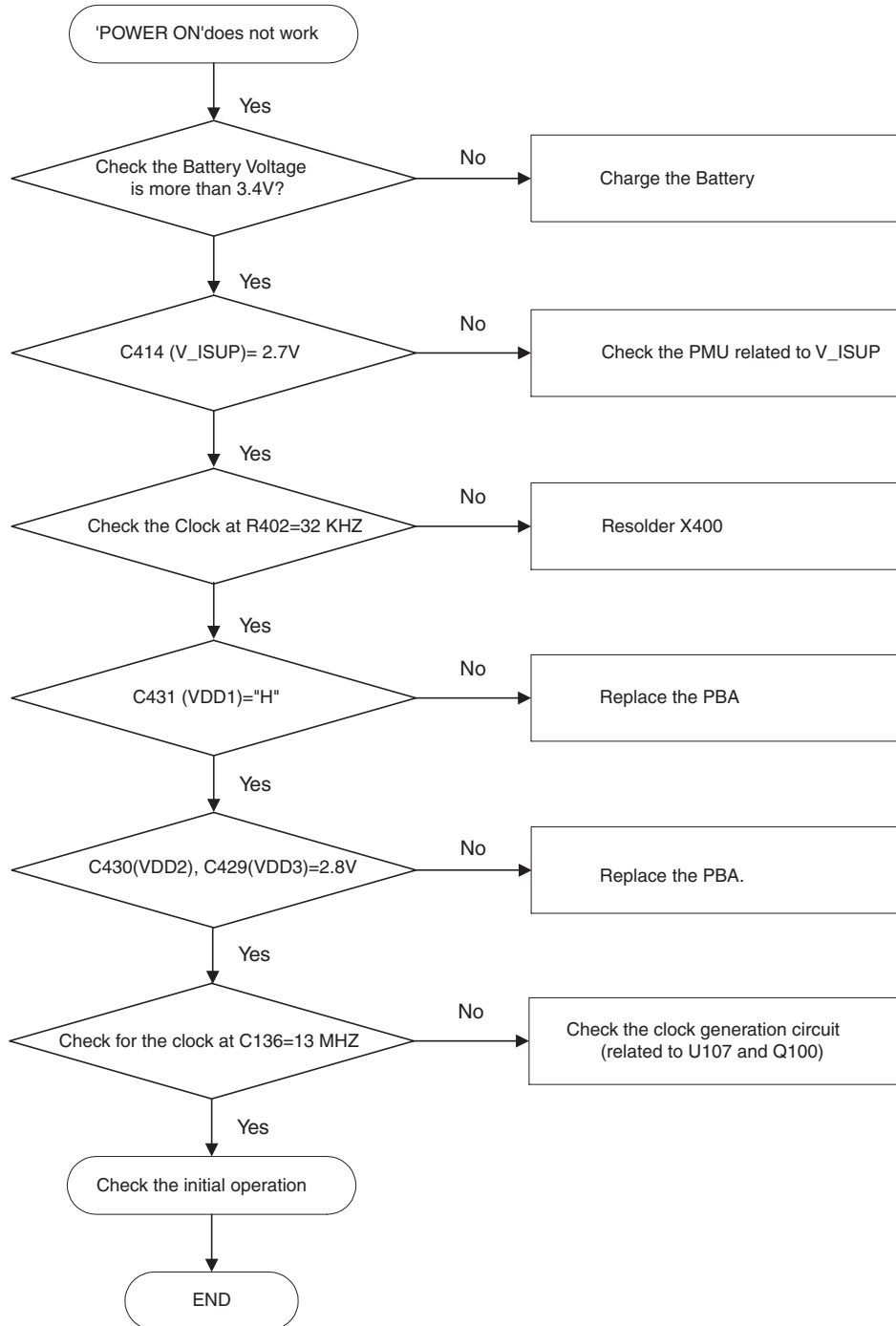


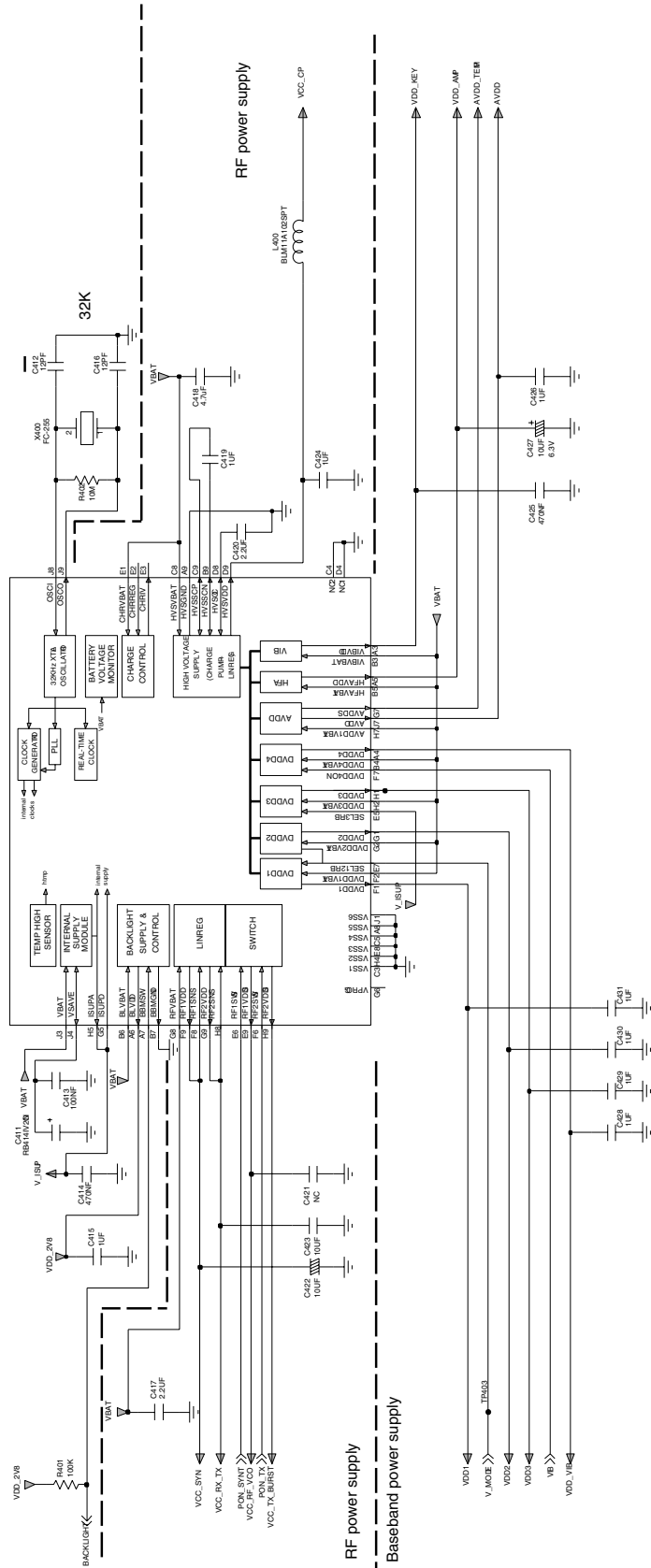
# 4-2 Main RF



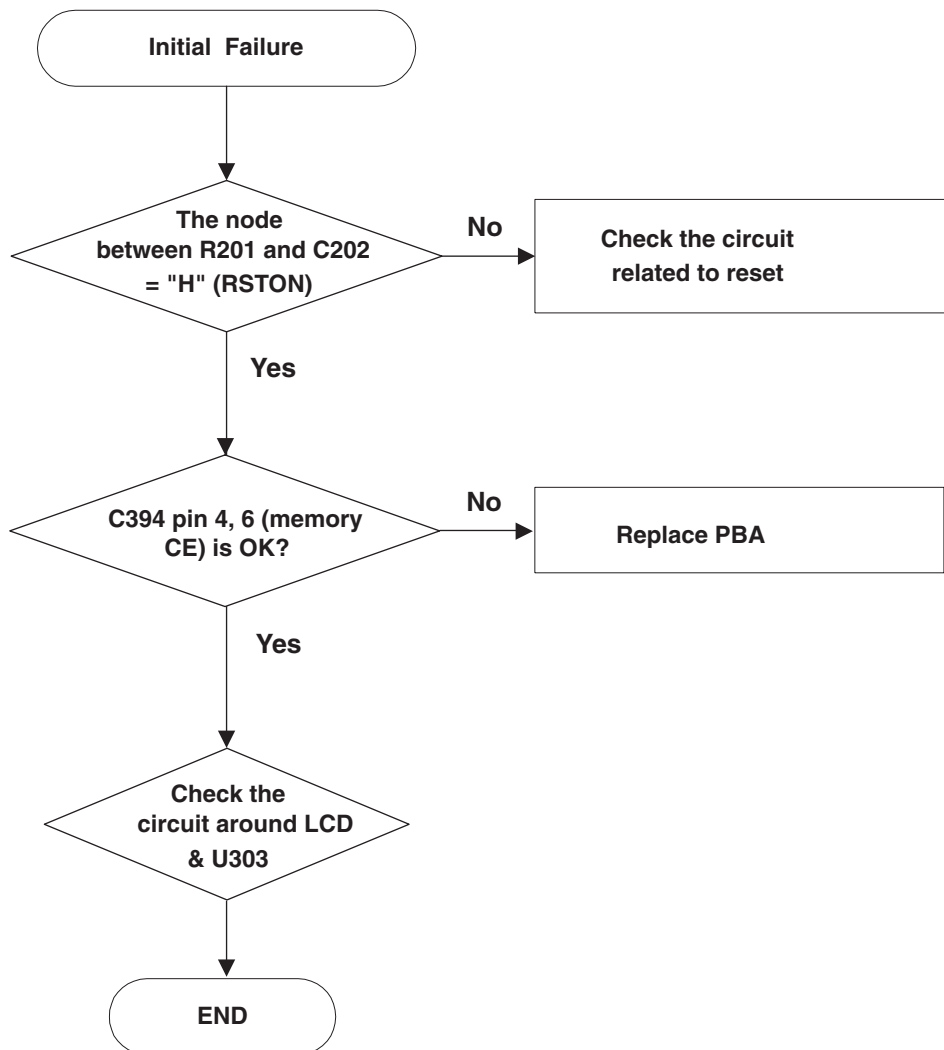
# 5. Flow Chart of Troubleshooting and Circuit Diagrams

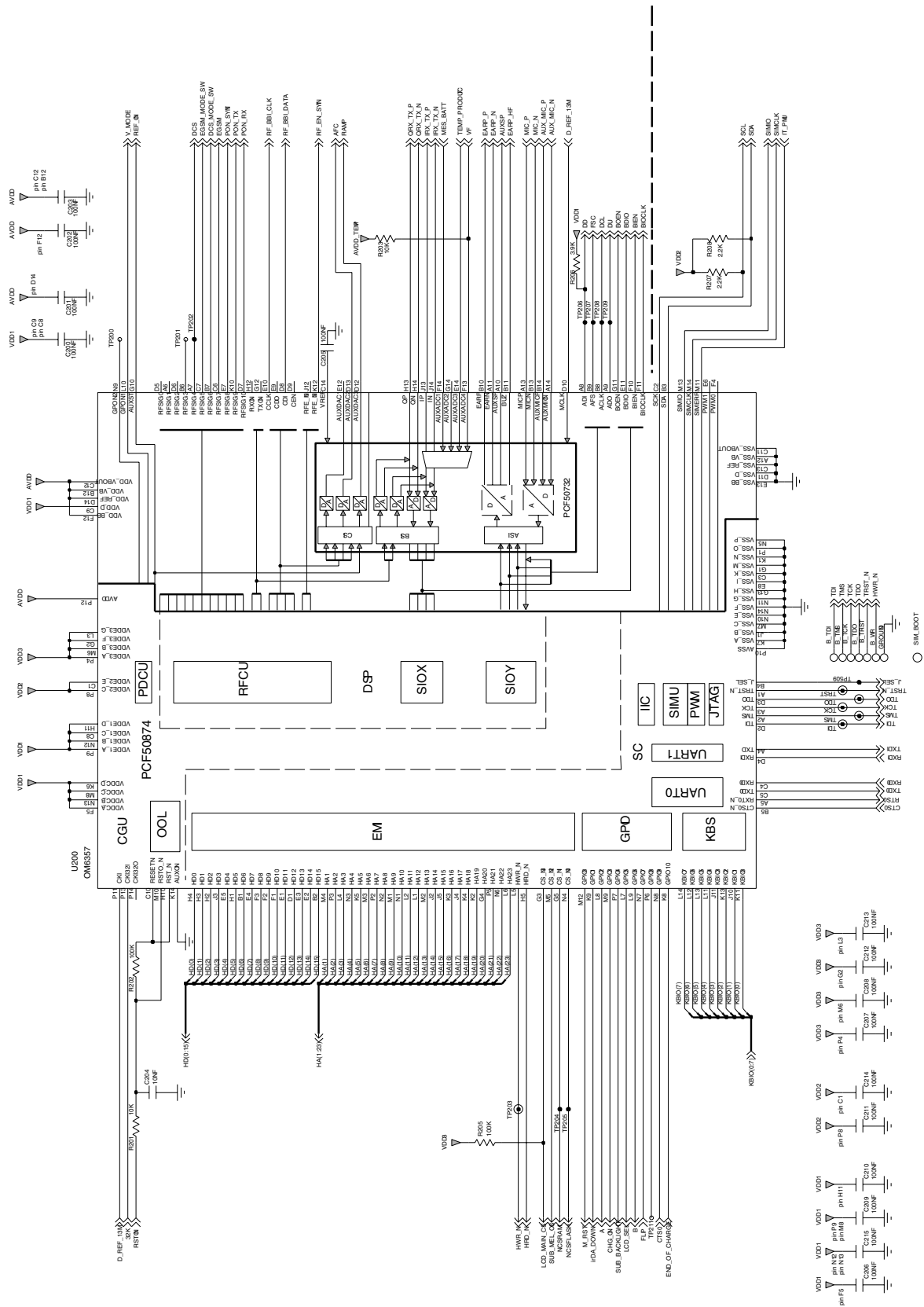
## 5-1 Power ON



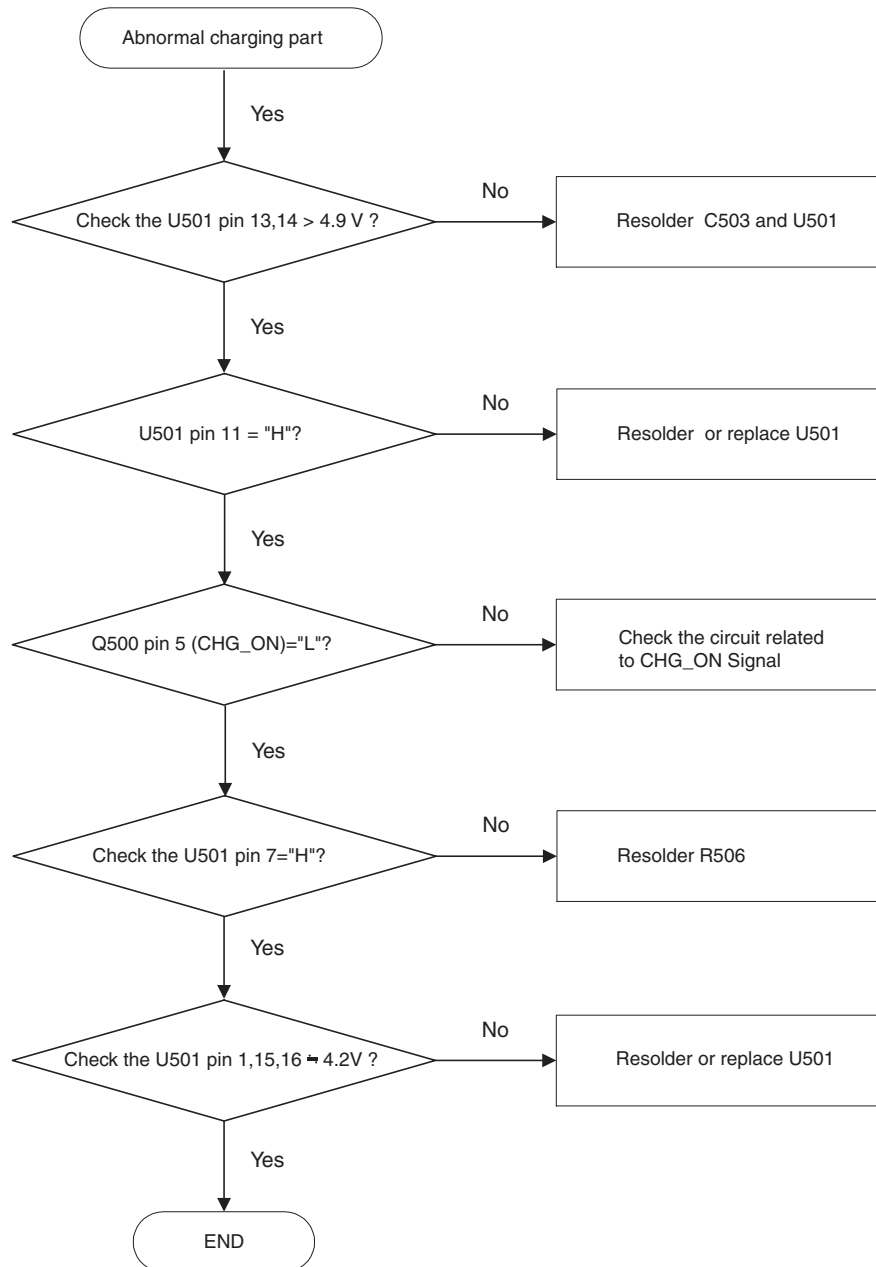


## 5-2 Initial

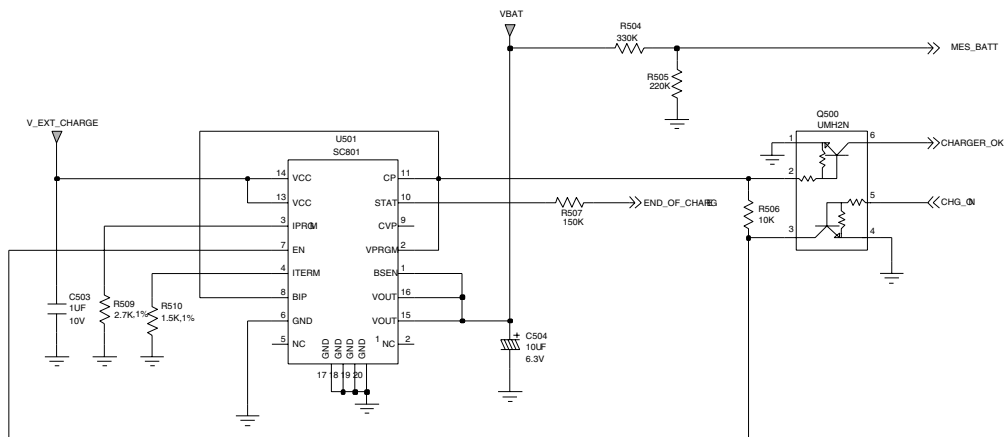




## 5-3 Charging Part

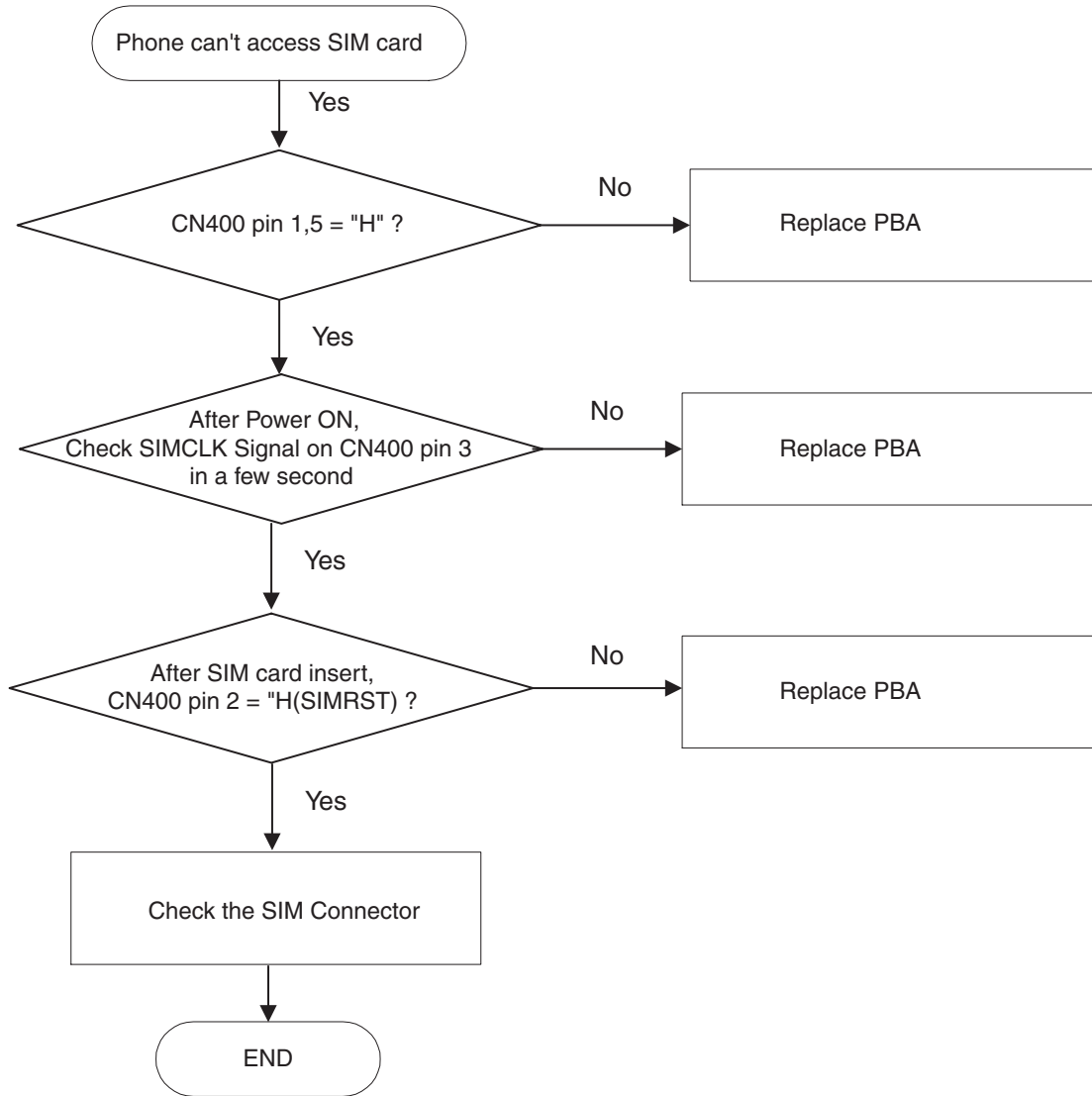


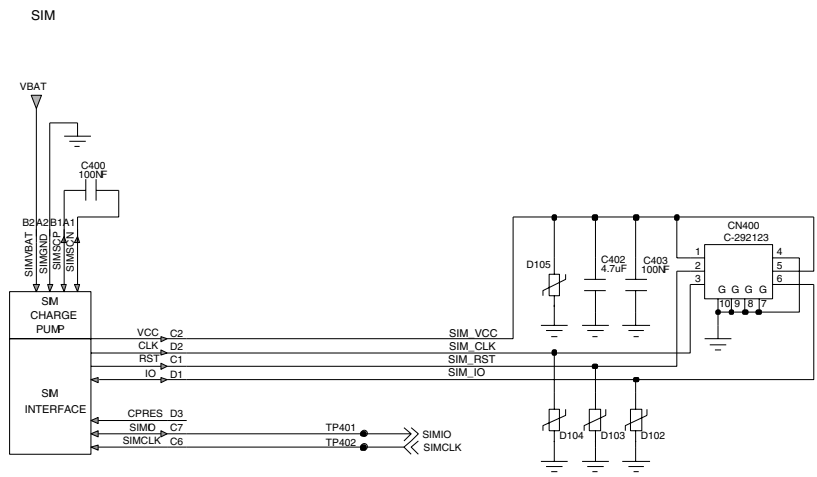
### Charge of Battery



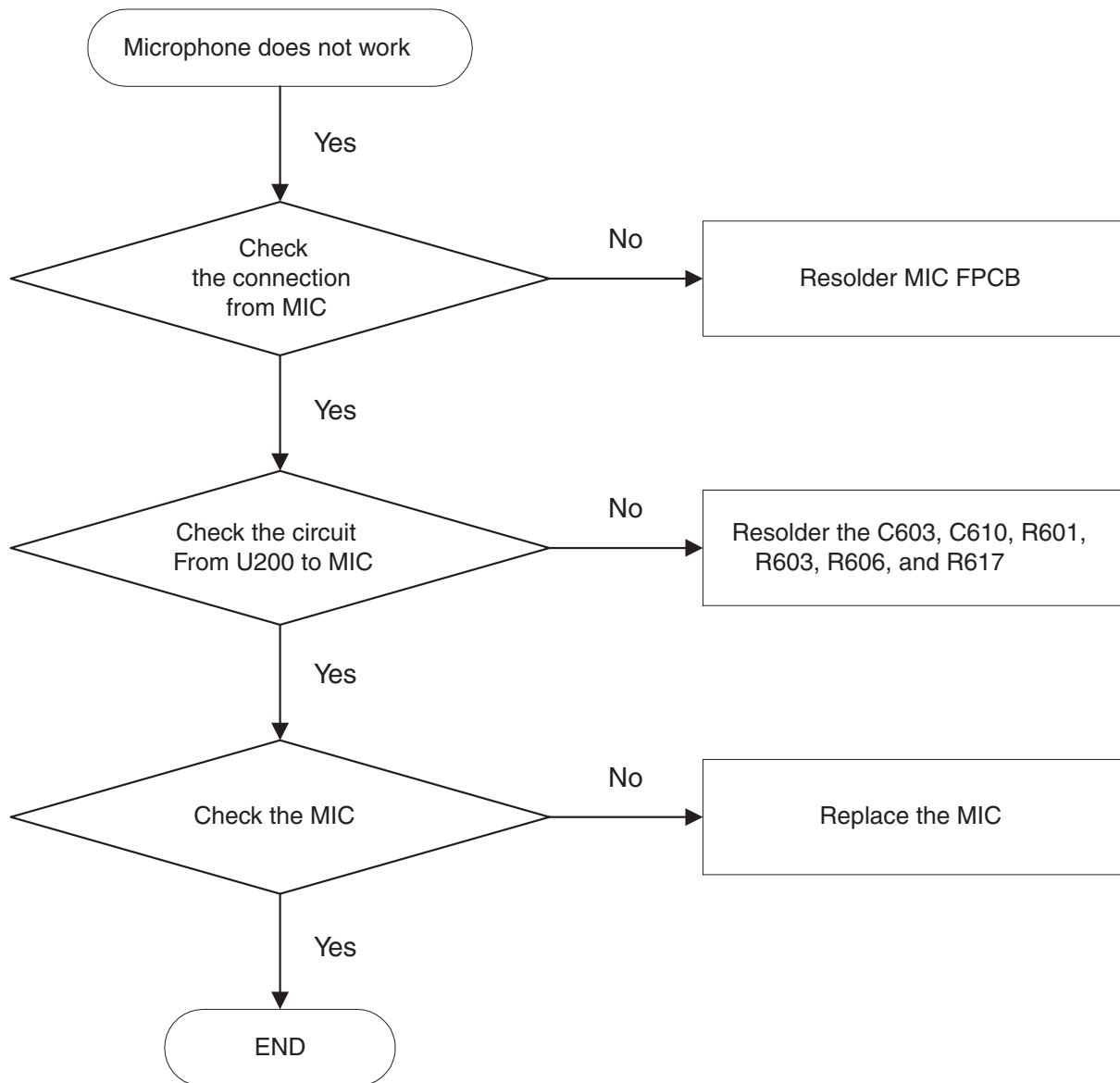


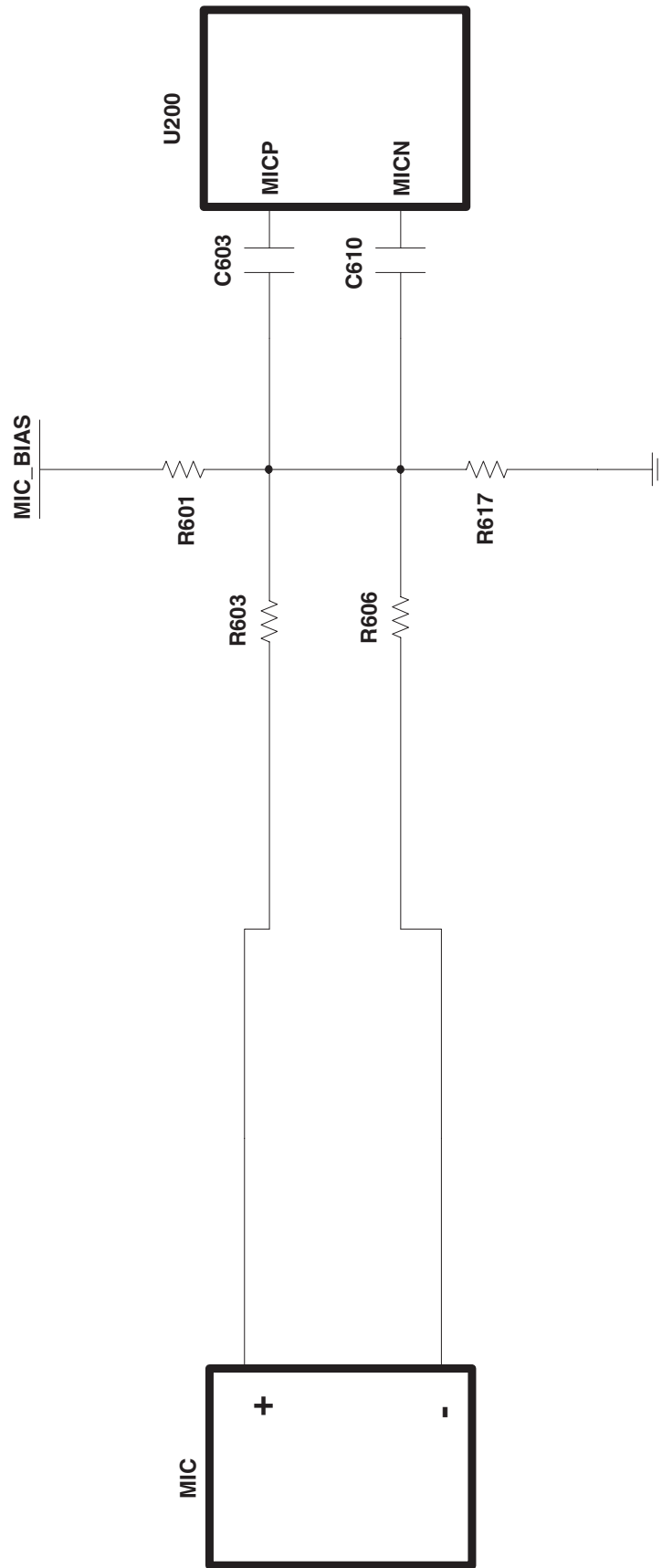
## 5-4 Sim Part



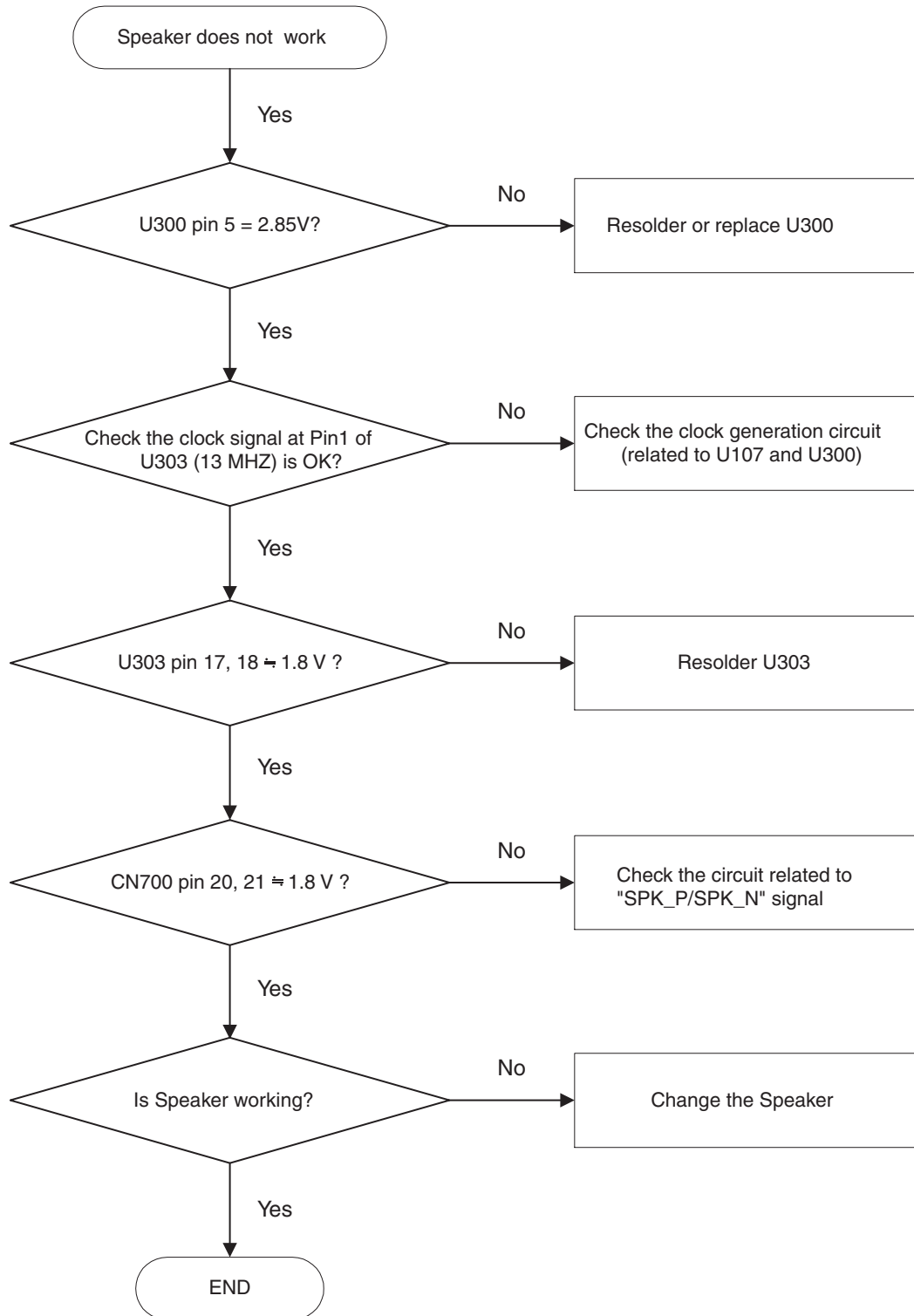


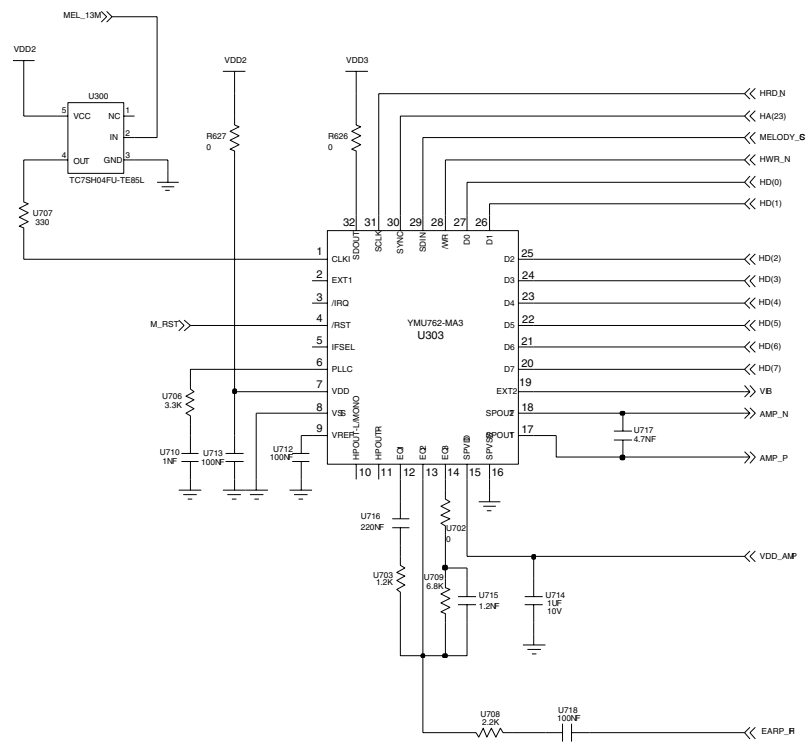
## 5-5 Microphone Part





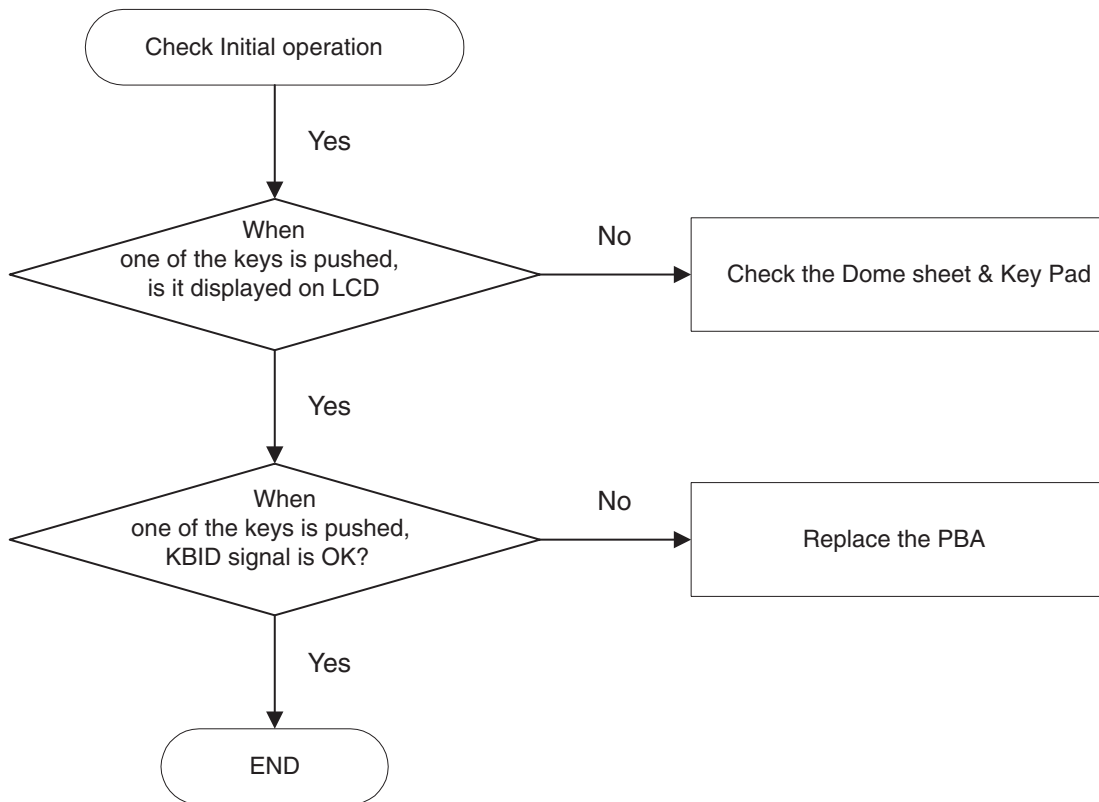
## 5-6 Speaker Part (Melody)



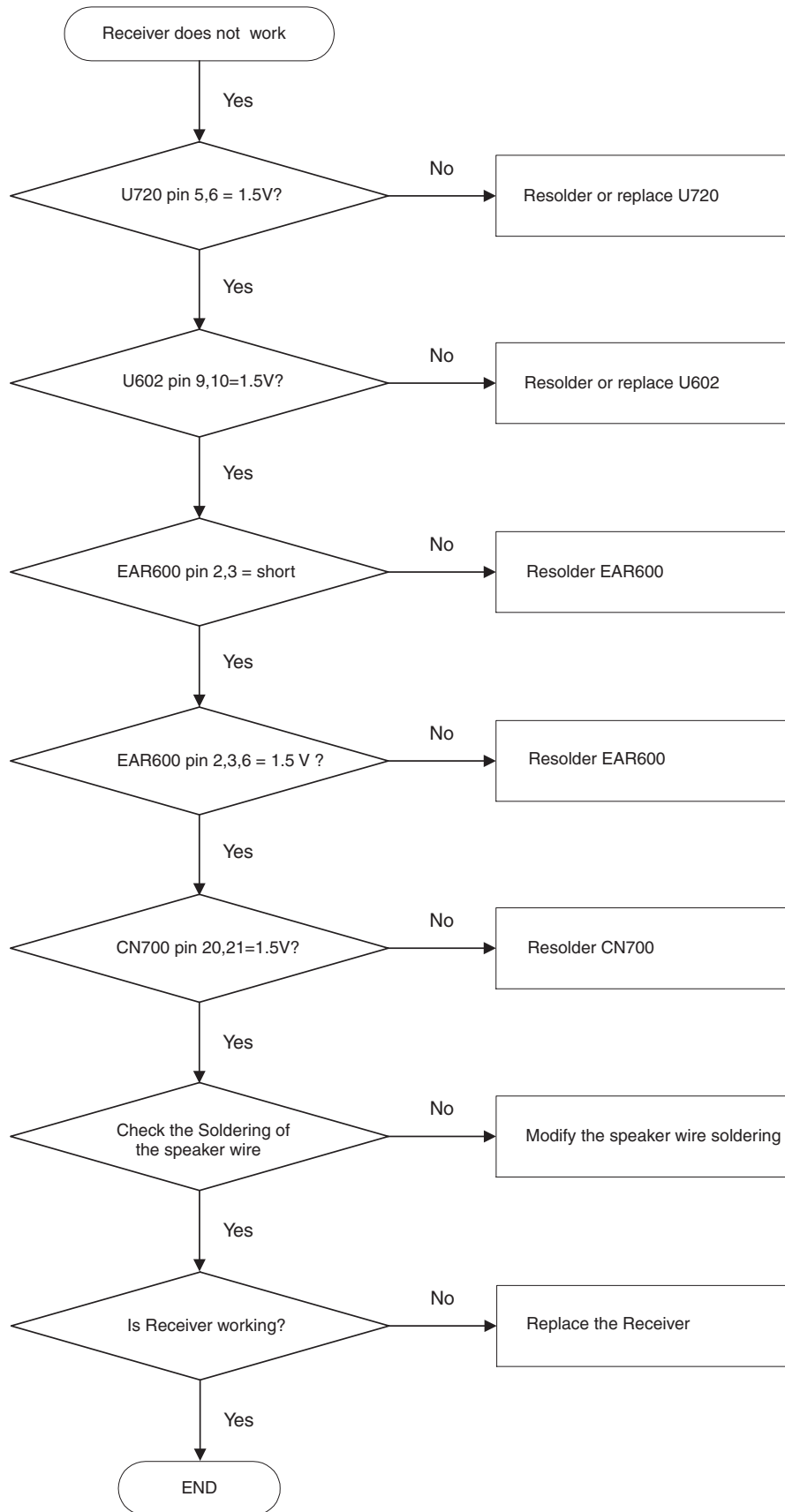


MELODY IC

## 5-7 Key Data Input

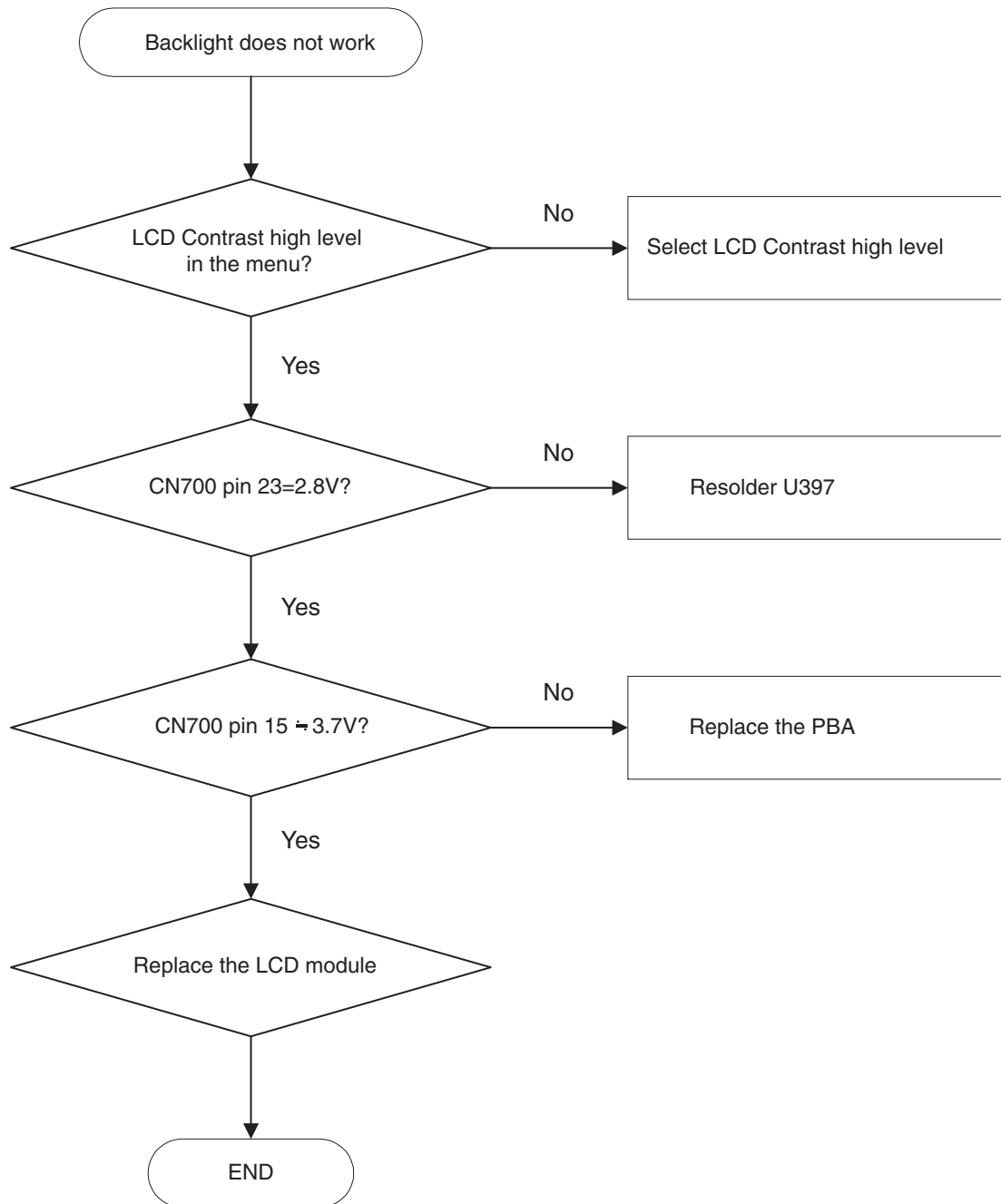


## 5-8 Receiver Part

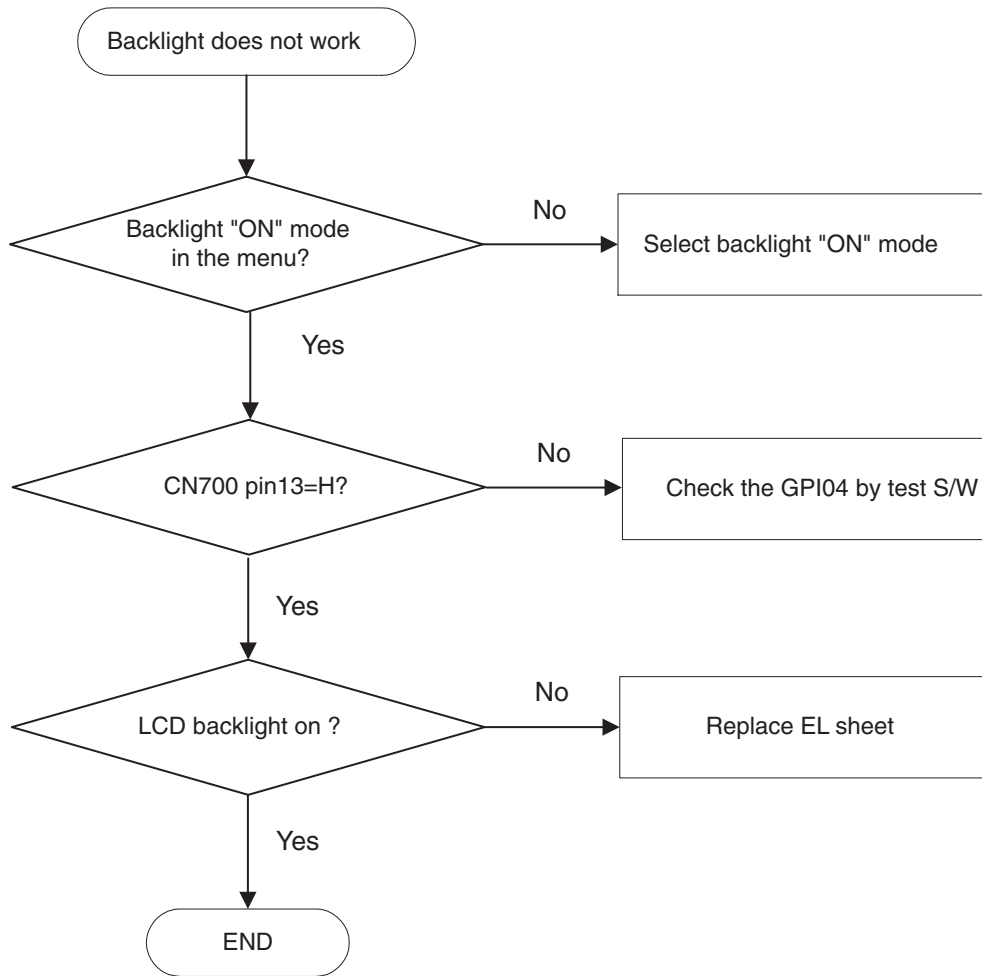




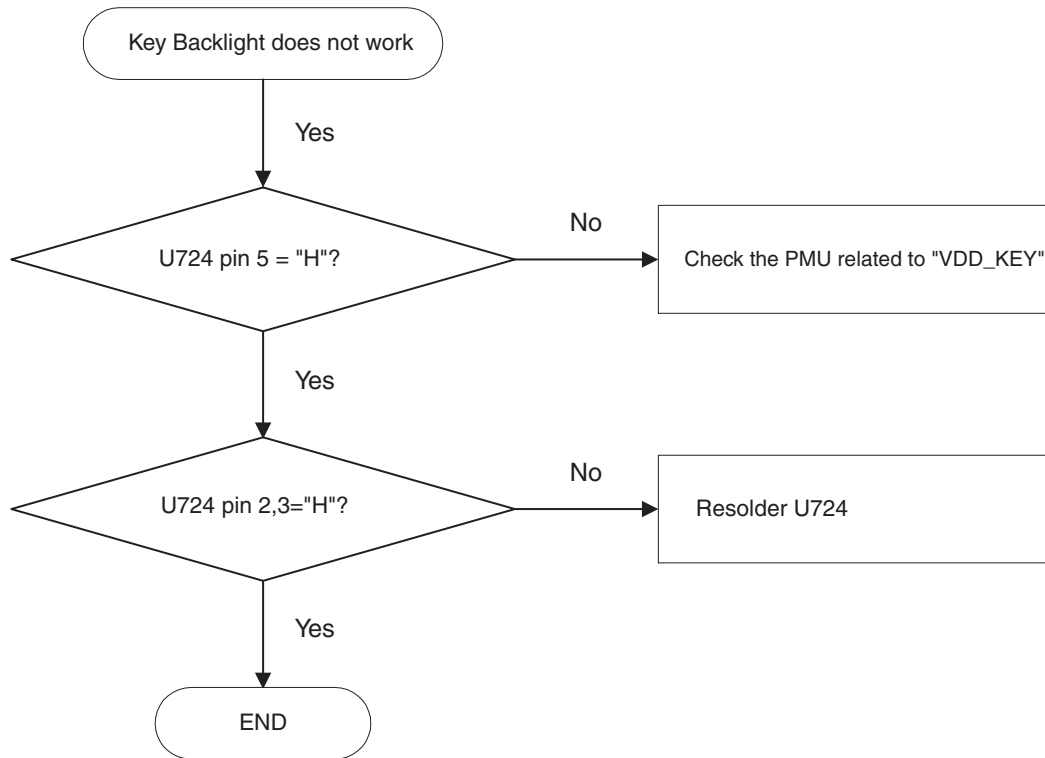
## 5-9 Back Light (for Color Main LCD)



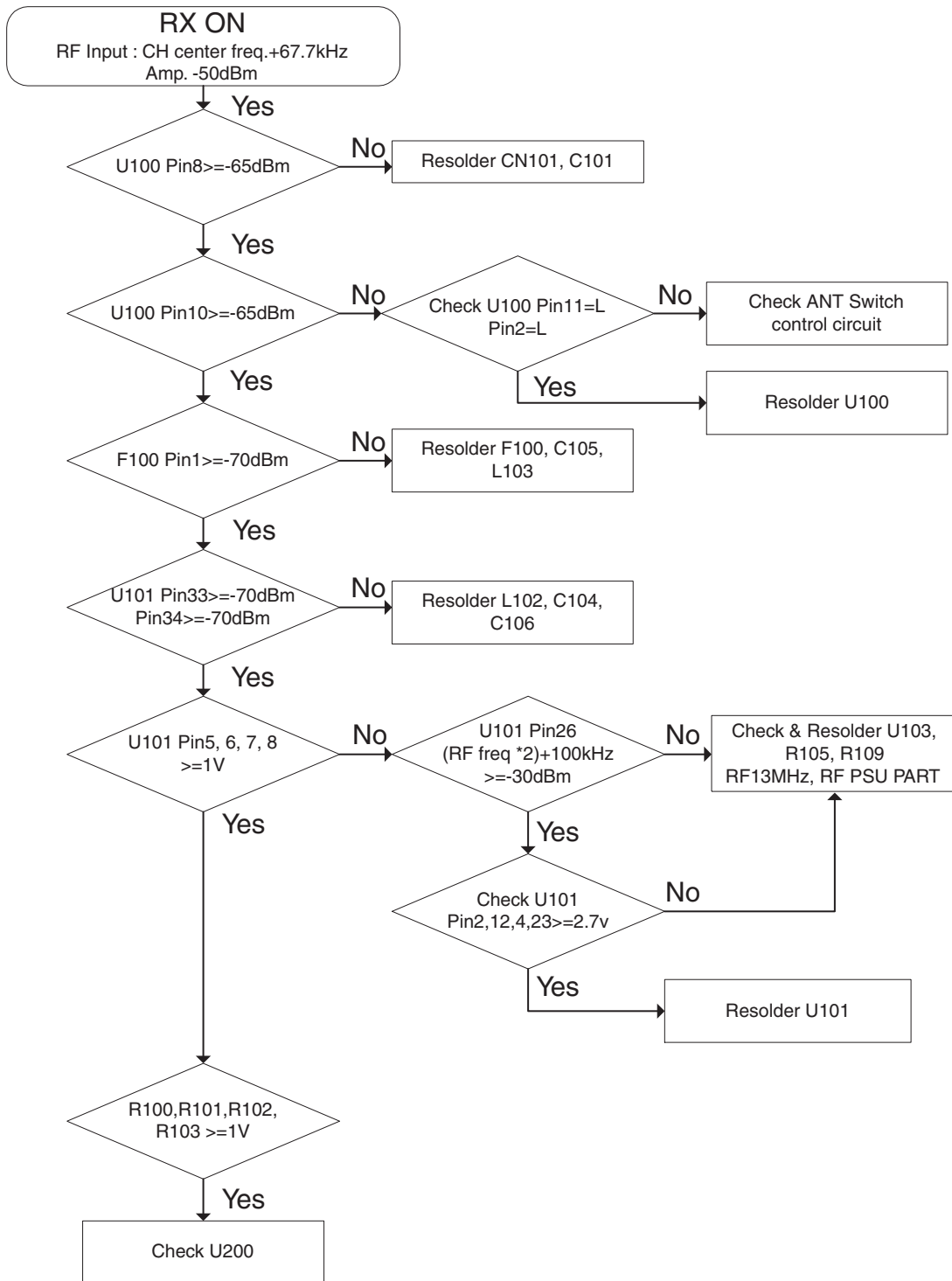
## 5-10 Back Light (for Sub LCD)



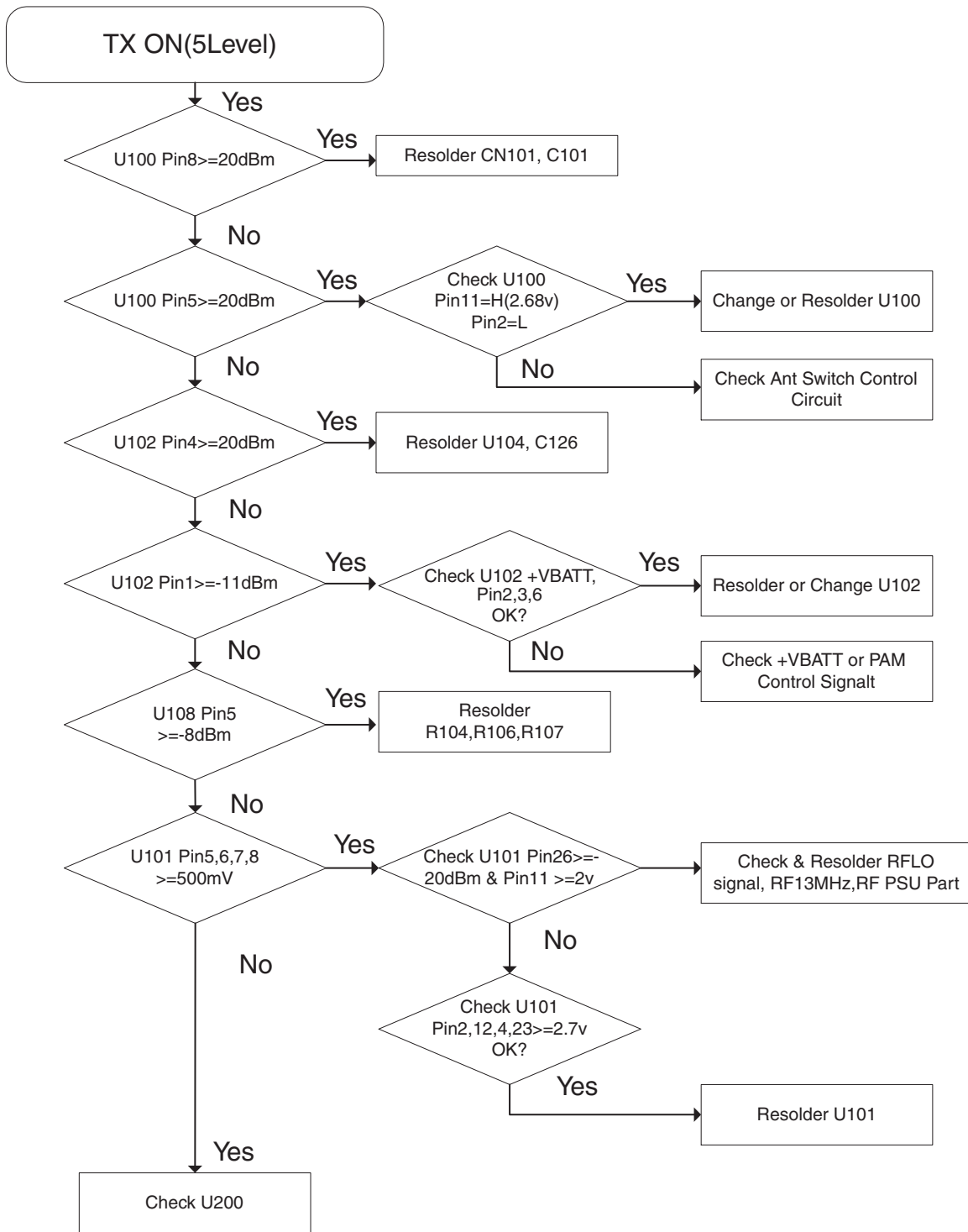
## 5-11 Key Back Light



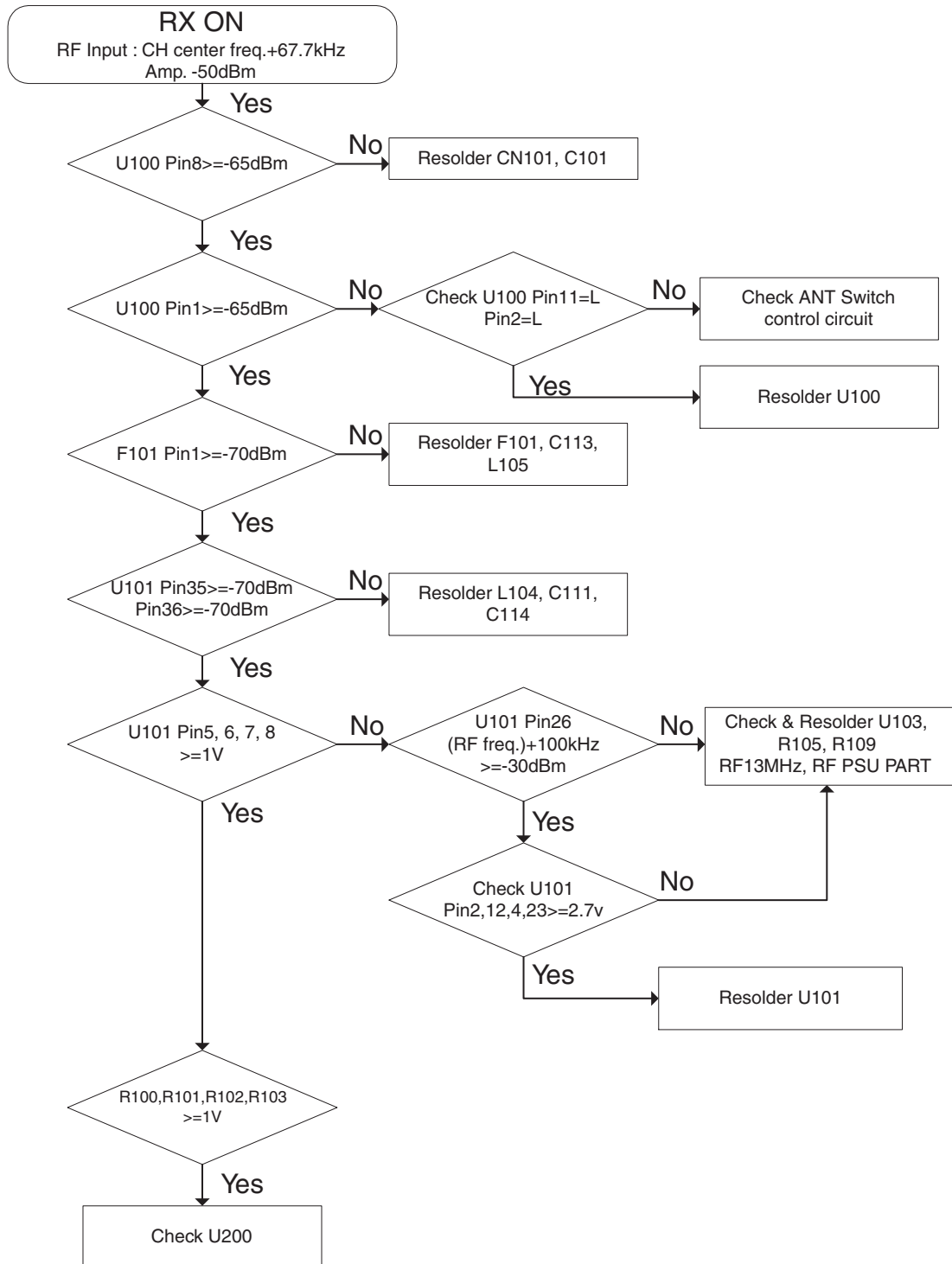
## 5-12 GSM Receiver



## 5-13 GSM Trasmmitter



## 5-14 DCS Receiver



## 5-15 DCS Transmitter

