



# DUAL BAND Mobile Cellular Phone SGH-N188

# SERVICE Manual

## DUAL BAND Mobile Cellular Phone



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Samsung Electronics Co.,Ltd.  
Printed in Korea  
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GH68-01480A

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-

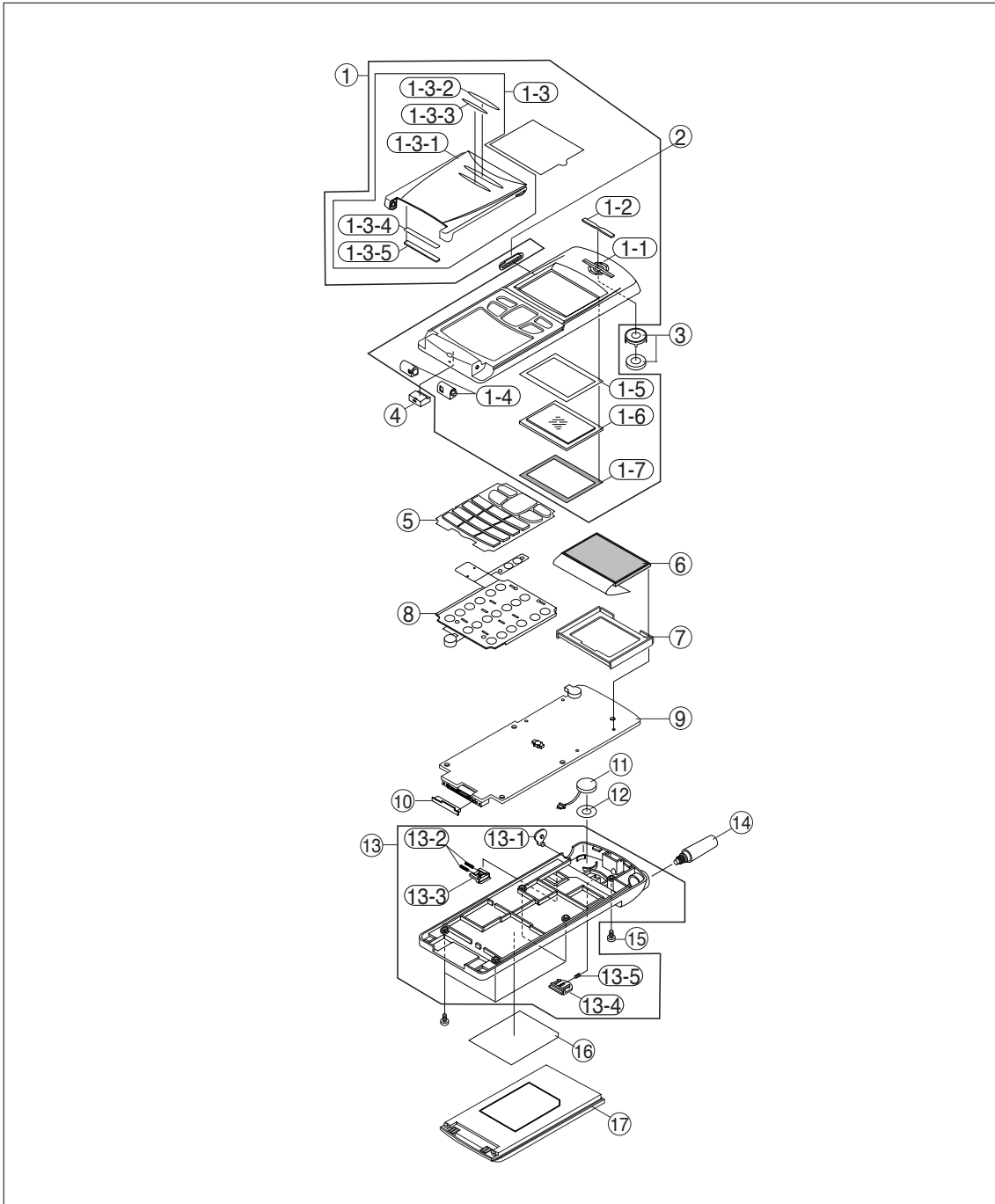
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# 1. Exploded Views and Parts List

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## 1-1 Main

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## 1-2 Main Parts List

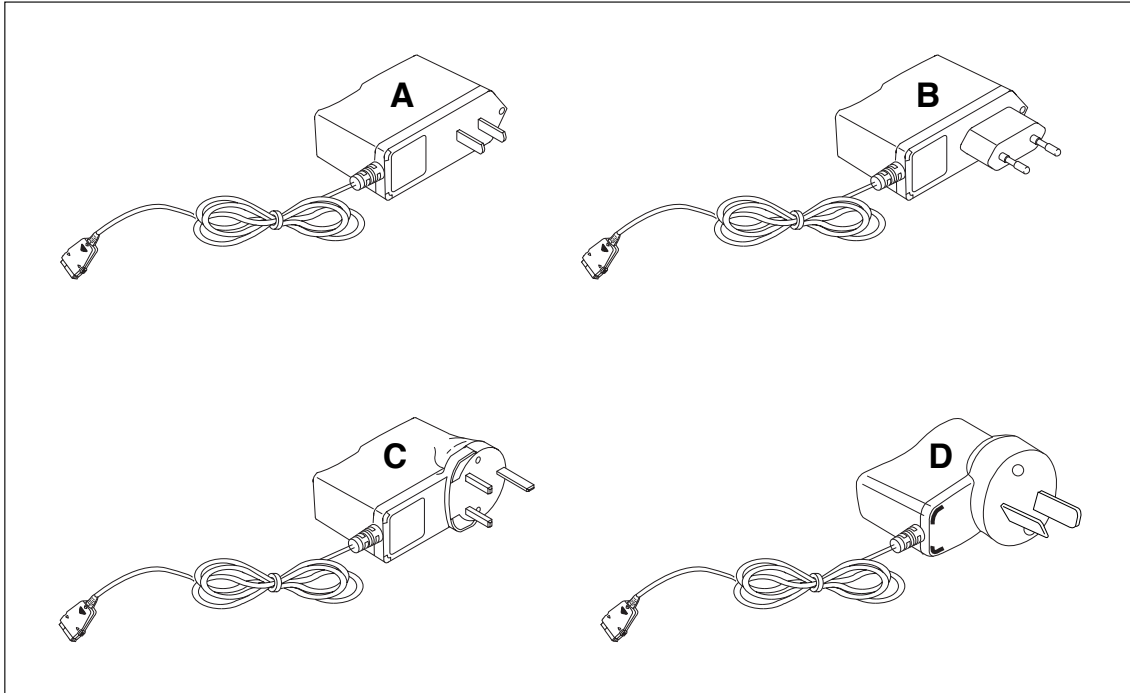
NO	PARTS NAME	NO	SEC CODE	COLOR	Q`TY	REMARK
1	FRONT ASS`Y		GH75-00960A	DARK GRAY	1	
			GH75-00960B	SILVER	1	
			GH75-00960C	GOLD	1	
			GH75-00960D	BLUE	1	
		1-1	GH72-02146A	DARK GRAY	1	
			GH72-02146B	SILVER	1	
			GH72-02146C	GOLD	1	
			GH72-02146D	BLUE	1	
		1-2	GH72-01674A		1	
		1-3	GH75-00959A	DARK GRAY	1	
	EARPIECE DECORATION FLIP ASS`Y		GH75-00959B	SILVER	1	
			GH75-00959C	GOLD	1	
			GH75-00959D	BLUE	1	
		1-3-2	GH72-01530A		1	
		1-3-3	GH72-01531A		1	
		1-3-4	GH70-00079A		1	
		1-3-5	GH74-00687A	DARK GRAY	1	
			GH74-00687B	SILVER	1	
			GH74-00687D	GREEN	1	
			GH74-00687E	BLUE	1	
GH74-00687F	WINE RED		1			
1-4	GH74-00687G	GOLD	1			
1-4	GH75-00287A		2			
1-5	GH74-00233A		1			
1-6	GH72-01532A		1			
1-7	GH74-00684A		1			
2	SIDE KEY ASS`Y		GH75-00672A		1	
3	SPEAKER UNIT		GH96-000908A		1	
4	MIC HOLDER		GH73-00145A		1	
5	3X4 KEY ASS`Y		GH75-00686A	DARK GRAY	1	
6	LCD ASS`Y		GH96-00937A		1	
7	LCD BRACKET ASS`Y		GH75-00429A		1	
8	KEY PAD		GH59-00171A		1	
9	PBA		GH92-00961A		1	
10	I/F CONNECTOR COVER		GH73-00549A	GRAY BLACK	1	
			GH73-00549B	LIGHT GRAY	1	
			GH73-00549C	DARK GRAY	1	
			GH31-00019A		1	
			GH74-00466A		1	
11	VIBRATOR		GH75-00675A	GRAY BLACK	1	
12	VIBRATOR TAPE		GH75-00675F	LIGHT GRAY	1	
13	REAR ASS`Y		GH75-00675G	DARK GRAY	1	
			GH73-00148A	GRAY BLACK	1	
			GH73-00148F	LIGHT GRAY	1	
			GH73-00148G	DARK GRAY	1	
			GH61-00011A		2	
	13-2	GH72-01534A	GRAY BLACK	1		
	13-3	SIM LOCKER SPRING SIM KNOB ASS`Y	GH72-01534F	LIGHT GRAY	1	
			GH72-01534G	DARK GRAY	1	
			GH72-01535A	GRAY BLACK	1	
	13-4	GH72-01535F	LIGHT GRAY	1		
	LOCKER MAIN					

<b>NO</b>	<b>PARTS NAME</b>	<b>NO</b>	<b>SEC CODE</b>	<b>COLOR</b>	<b>Q`TY</b>	<b>REMARK</b>
	MAIN LOCKER SPRING	13-5	GH72-01535G	DARK GRAY	1	
	REAR COVER	13-6	GH61-00009A		1	
			GH72-01533A	GRAY BLACK	1	
			GH72-01533F	LIGHT GRAY	1	
14	ANTENNA		GH72-01533G	DARK GRAY	1	
			GH42-00058E	GRAY BLACK	1	
			GH42-00058A	DARK GRAY	1	
15	SCREW		6001-001346		5	
16	LABEL MAIN		GH68-01629A		1	TEC&OTHER
			GH68-01629B		1	BRI
17	BATTERY STANDARD		GH43-00285A	GRAY BLACK	1	
			GH43-00285B	LIGHT GRAY	1	
			GH43-00285C	DARK GRAY	1	

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### 1-3 Travel Adapter

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### 1-4 Travel Adapter Parts List

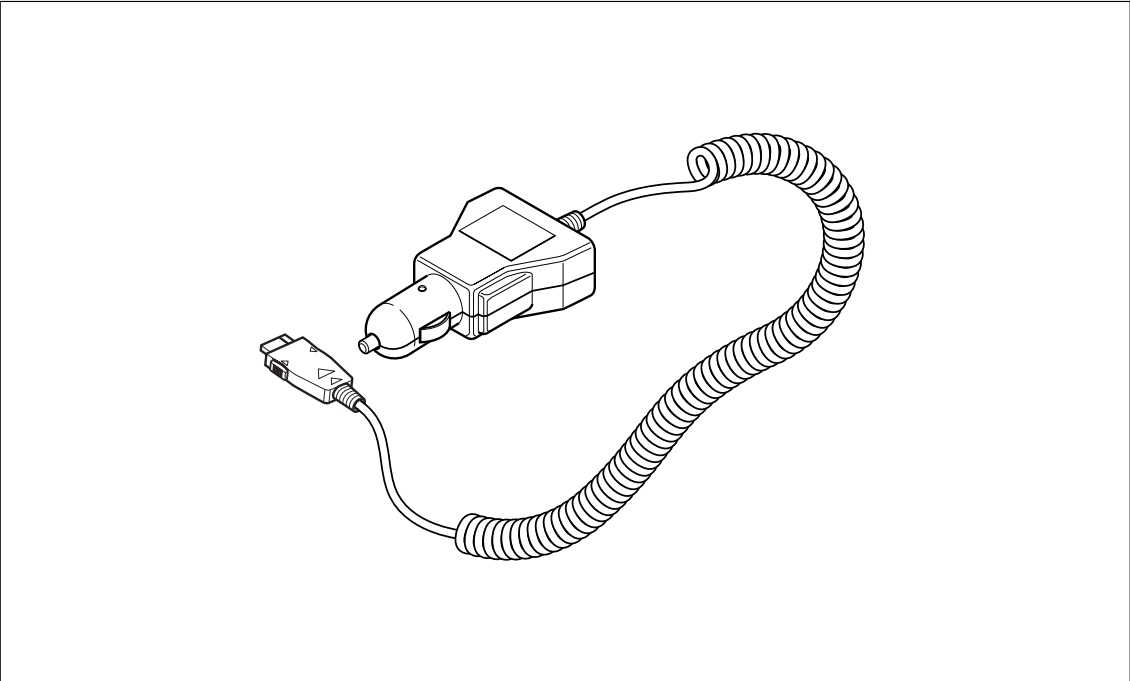
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TYPE	SEC CODE	REMARK
A	GH44-00119C	CHINA
B	GH44-00119A	EUROPE
C	GH44-00119B	UNITED KINGDOM
D	Gh44-00119D	AUSTRALIA

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### 1-5 Ciger Light Adapter

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### 1-6 Ciger Light Adapter Parts List

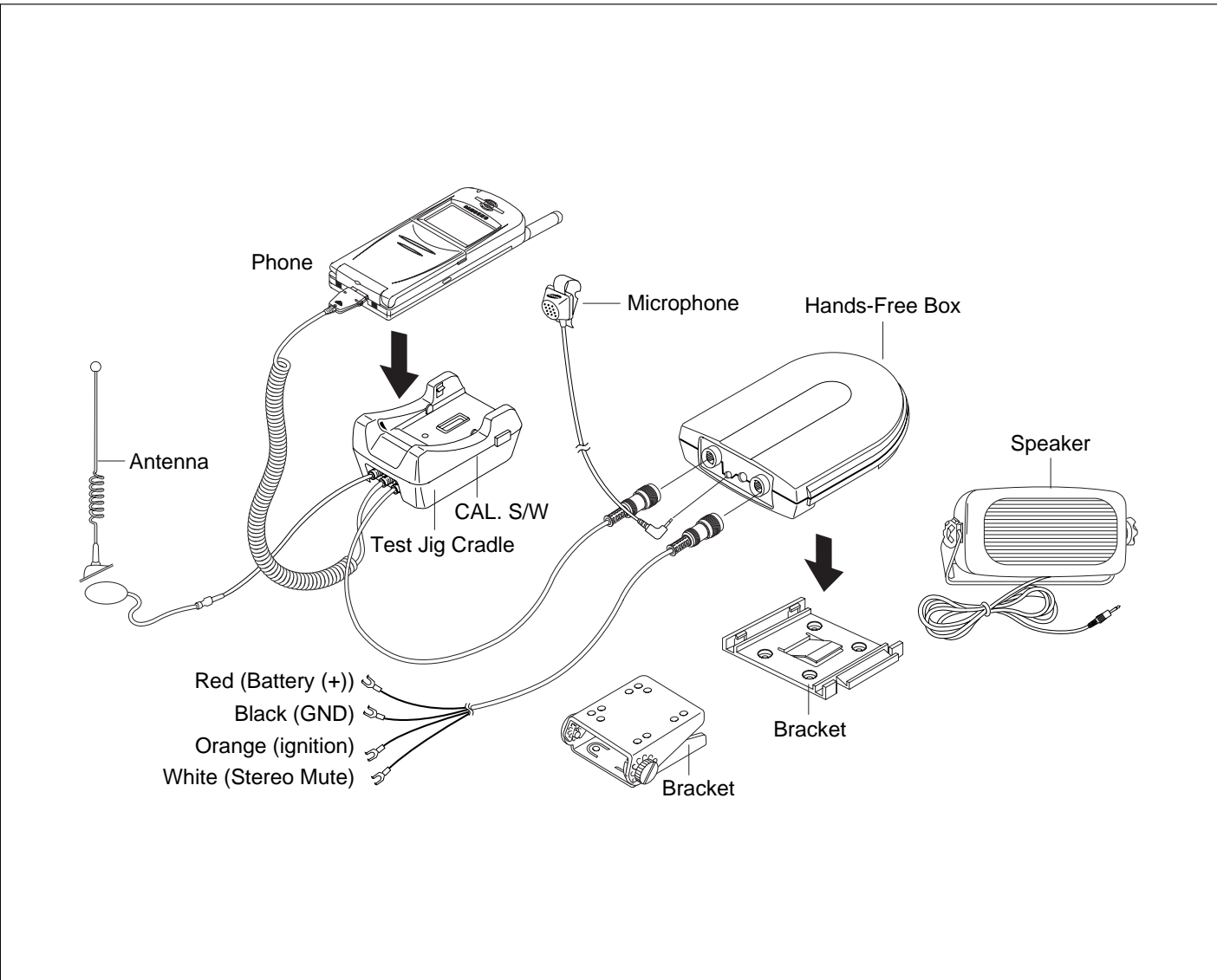
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DESCRIPTION	SEC CODE	REMARK
Ciger Light Adapter Code	GH44-00040A	BLACK



1-7 Hands Free Kit

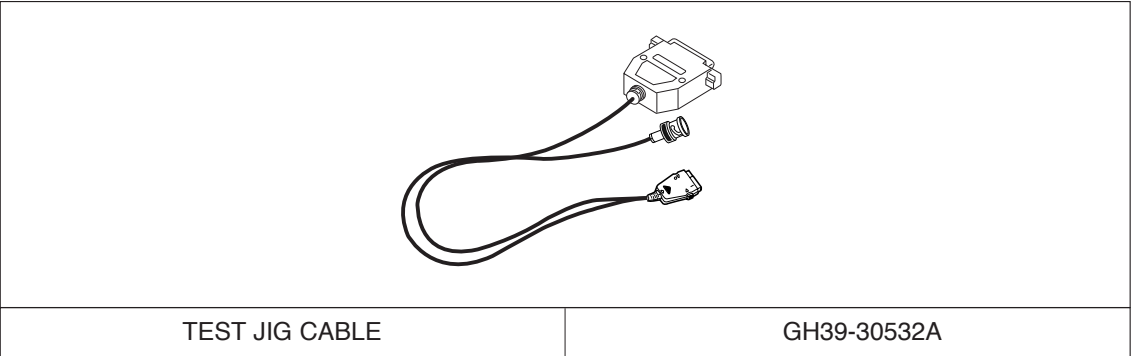
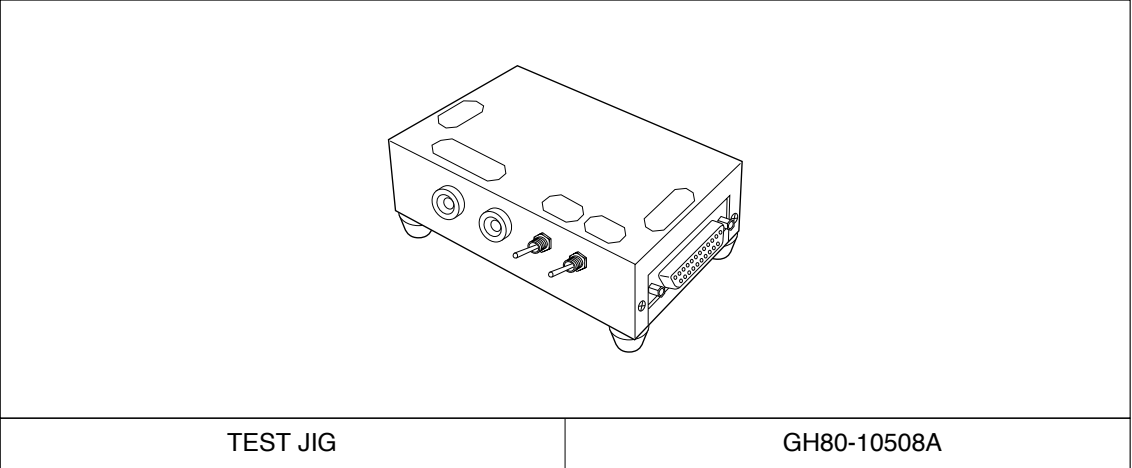
SEC CODE : GH96-00941A



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**1-8 Test Zig**

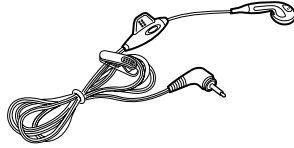
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## 1-9 Earphone

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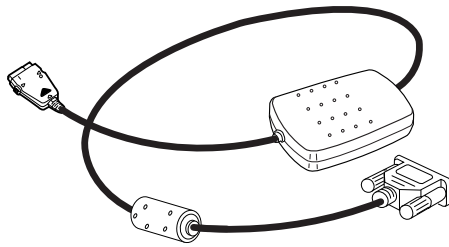
EARPHONE

GH96-00830A

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## 1-10 Data Kit

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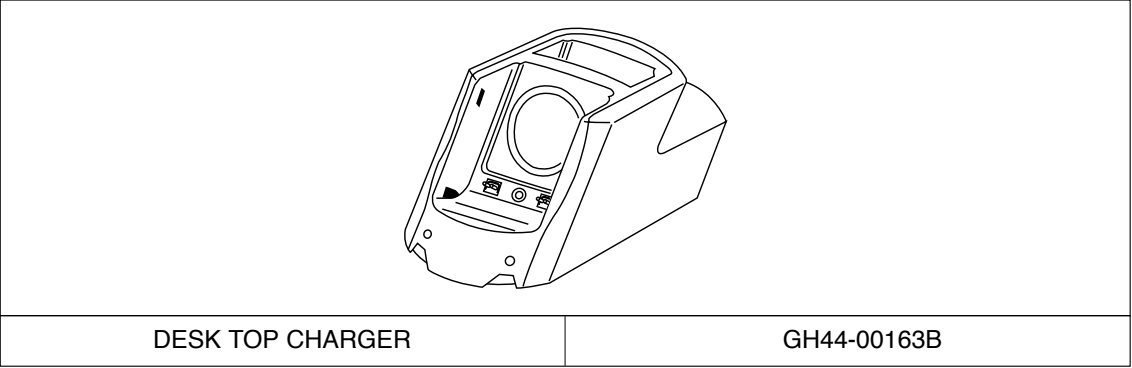
DATA KIT

GH39-30533A

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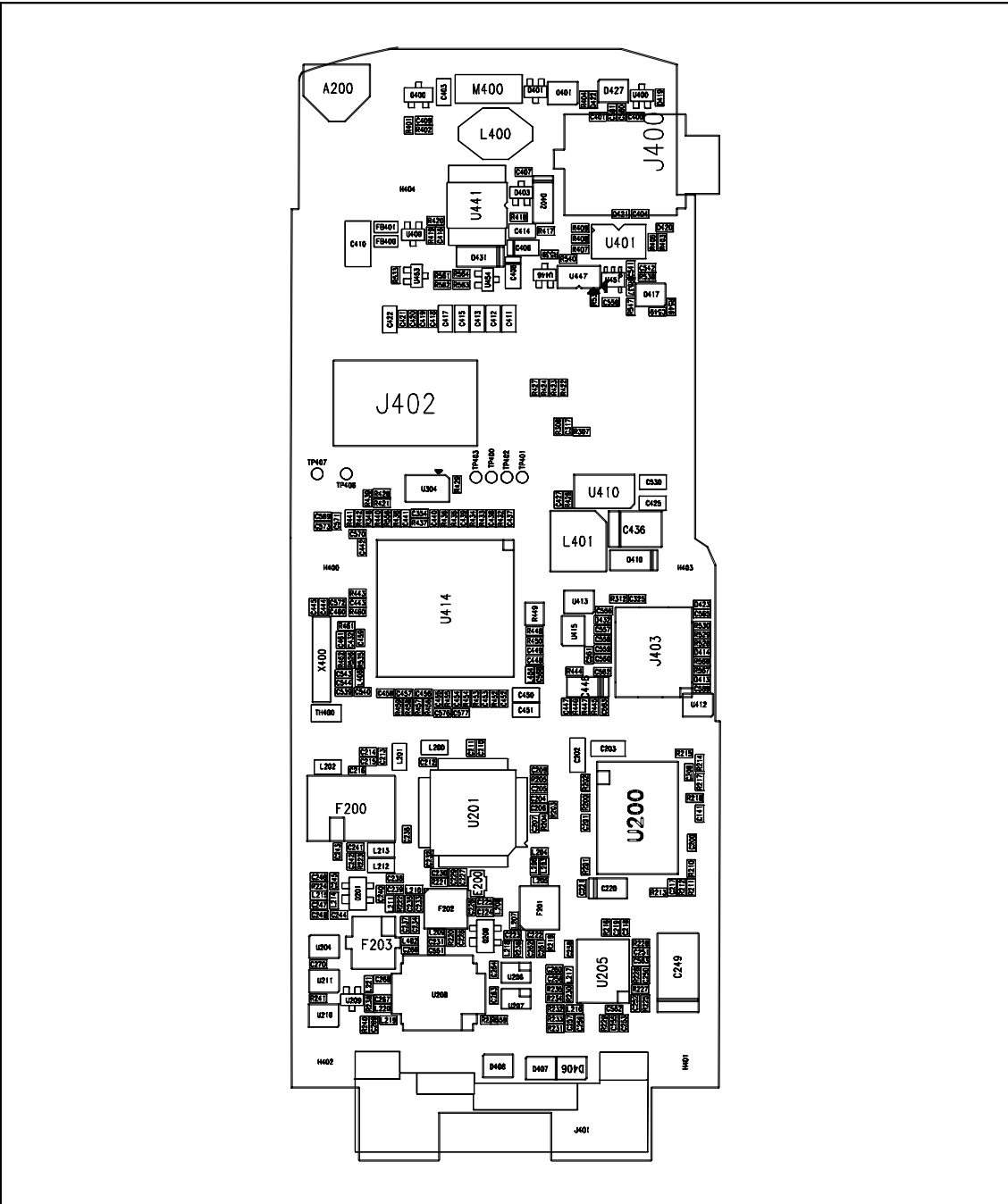
**1-11 Desk Top Charger**

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2-2 Main Bottom



## 3. Electrical Parts List

### 3-1 Main Parts List

NO	Reference	SEC CODE	Part Description
1	D303	0401-001033	"DIODE-SWITCHING;MCL4154,25V,200mA,M-MELF,TP"
2	D431	0402-001329	"DIODE-RECTIFIER;STPS140Z,40,1A,SOD-123,TP"
3	"D402,D410"	0402-001331	"DIODE-RECTIFIER;CRS04,40V,1A,S-FLAT,TP"
4	"D406,D427"	0406-001083	"DIODE-TVS;-6.1/-7.2V,150W,SOT-323-5L"
5	"D407,D408"	0406-001104	"DIODE-TVS;ESDA6V1-5W6,6.1/-7.2V,100W,SOT-323-6L"
6	"D302,D401,D403"	0407-001002	"DIODE-ARRAY;DAN222,80V,300mA,CA2-3,EM3,TP"
7	D304	0407-001007	"DIODE-ARRAY;UMN1,80V,25mA,CA4-2,UM5,TR"
8	"Q301,Q403"	0501-000162	"TR-SMALL SIGNAL;2SA1576,PNP,200MW,SOT-323,TP"
9	Q400	0501-000218	"TR-SMALL SIGNAL;2SC4081,NPN,200mW,UMT,TP,180-3"
10	Q100	0501-000225	"TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP,120-5"
11	"Q300,Q302"	0501-002011	"TR-SMALL SIGNAL;2SD2114K,NPN,200mW,SOT-23,TP,8"
12	Q200	0501-002096	"TR-SMALL SIGNAL;BFP420,NPN,160MW,SOT-343,TP"
13	Q201	0501-002226	"TR-SMALL SIGNAL;BFP520,NPN,100MW,SOT-343,TP"
14	U445	0504-000167	"TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,TP"
15	"U409,U453,U454"	0504-000168	"TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,TP"
16	"U209,U400"	0504-001012	"TR-DIGITAL;DTC114YE,NPN,150MW,10K/47K"
17	U443	0504-001021	"TR-DIGITAL;DTB113ZK,PNP,200MW,10K,SC-59,TP"
18	"U204,U210,U211,U312"	0504-001058	"TR-DIGITAL;RN4985,NPN/PNP,200mW,2.2Kohm"
	U412	0504-001058	"TR-DIGITAL;RN4985,NPN/PNP,200mW,2.2Kohm"
19	Q401	0505-001332	"FET-SILICON;FDG6301,N,25V,0.22A,4OHM,.3W"
20	"Q101,Q402"	0505-001423	"FET-SILICON;FDG6323L,N/P,-,-,0.3W,SC70-6"
21	U309	0506-001004	"TR-ARRAY;UMC5N,NPN/PNP,2,50V,-,-,100mA,3"
22	D300	0601-000276	"LED;CHIP,Y/GRN,1.6x2.0mm,570nm"
23	U452	0801-002540	"IC-CMOS LOGIC;7SZ19,DECODER,SOP,6P,49MIL,SINGLE,TP"
24	"U413,U415"	1001-001145	"IC-ANALOG SWITCH;MAX4599EXT,-,SC70,6P,49MIL,SINGLE"
25	U305	1003-001226	"IC-POWER DRIVER;D361A,SOP,8P,120MIL,SINGLE,90MA,TP"
26	U313	1009-001006	"IC-HALL EFFECT S/W;A3210ELH,SC-74A,3P,-,TP,-,5V,"
27	U304	1103-001184	"IC-EEPROM;24C256,32Kx8Bit,dBGA,8P,92MIL,-,2.7V,-,P"
28	U448	1106-001301	"IC-SRAM;1337,262Kx16Bit,CSP,72P,-,85nS,3V,-,PLASTI"
29	U105	1201-001583	"IC-POWER AMP;08109,QFP,16P,-,-,PLASTIC,8V,-,30I"
30	U401	1202-001022	"IC-VOLTAGE COMP.;75W56,SSOP,8P,110MIL,DUAL,7V,C"
31	U303	1203-001204	"IC-VOLTAGE REGULATOR;2981,SOT-23,5P,59MIL,PLASTIC,"
32	"U102,U103,U306,U308"	1203-001454	"IC-VOLTAGE REGULATOR;2981,SOT-23,5P,59MIL,PLASTIC,"
	U442	1203-001454	"IC-VOLTAGE REGULATOR;2981,SOT-23,5P,59MIL,PLASTIC,"
33	U307	1203-001511	"IC-RESET;809,SOT-23,3P,-,PLASTIC,0.36."
34	U101	1203-001701	"IC-VOLTAGE REGULATOR;2982,SOT-23,5P,-,PLASTIC,3.0V"
35	U410	1203-001702	"IC-DC/DC CONVERTER;1676,SOP,10P,112MIL,PLASTIC,2/5"
36	U411	1203-001903	"IC-DC/DC CONVERTER;1986,SOT-23,6P,-,PLASTIC,2.75/3"
37	U441	1203-002101	"IC-BATTERY;1410,SOP,16P,150MIL,PLASTIC,-,-,0to+70C"

NO	Reference	SEC CODE	Part Description
38	U201	1205-001653	"IC-TRANSCEIVER;HD155121F,QFP,48P,-,PLASTIC,4V,400M"
39	U414	1205-001881	"IC-COMM. CONTROLLER;VP40575,BGA,180P,472MIL,PLASTI"
40	U106	1209-001251	"IC-PLL/SYNTHESISER;LMX2336LSLB,CSP,20P,-,PLASTIC,5"
41	U205	1209-001292	"IC-ETC, LINEAR;HD155171NP01EL,QFP,24P,165MIL,PLAST"
42	TH400	1404-001005	"THERMISTOR-NTC;47Kohm,5%,4050K,2.0mW/C,TP"
43	"D305,U311"	1405-001018	"VARISTOR;14V,-,1.6x0.8mm,TP"
44	"D306,D415"	1405-001019	"VARISTOR;5.6V,-,1.6x0.8mm,TP"
45	"D411,D413,D414,D419"	1405-001082	"VARISTOR;5.6V,20A,1x0.5x0.6mm,TP"
	"D420,D421,D422,D423"	1405-001082	"VARISTOR;5.6V,20A,1x0.5x0.6mm,TP"
	"D425,D426,D429,D430"	1405-001082	"VARISTOR;5.6V,20A,1x0.5x0.6mm,TP"
46	"C558,D432"	1405-001093	"VARISTOR;14V,20A,1x0.5x0.6mm,TP"
47	"R200,R213,R215,R321"	2007-000138	"R-CHIP;100ohm,5%,1/16W,DA,TP,1005"
	"R528,R530"	2007-000138	"R-CHIP;100ohm,5%,1/16W,DA,TP,1005"
48	"R300,R444,R447,R567"	2007-000139	"R-CHIP;220ohm,5%,1/16W,DA,TP,1005"
	R568	2007-000139	"R-CHIP;220ohm,5%,1/16W,DA,TP,1005"
49	"R106,R117,R306,R310"	2007-000140	"R-CHIP;1Kohm,5%,1/16W,DA,TP,1005"
	R419	2007-000140	"R-CHIP;1Kohm,5%,1/16W,DA,TP,1005"
50	"R103,R114,R223,R433"	2007-000141	"R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005"
	R434	2007-000141	"R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005"
51	"R220,R224,R305,R327"	2007-000143	"R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1005"
52	"R101,R109,R128,R238"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R240,R241,R303,R312"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R313,R315,R348,R420"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R424,R427,R430,R435"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R438,R450,R461,R526"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R527,R535,R542,R550"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R551,R552,R553,R554"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
	"R560,R573"	2007-000148	"R-CHIP;10Kohm,5%,1/16W,DA,TP,1005"
53	R429	2007-000152	"R-CHIP;20Kohm,5%,1/16W,DA,TP,1005"
54	R205	2007-000153	"R-CHIP;22Kohm,5%,1/16W,DA,TP,1005"
55	R104	2007-000155	"R-CHIP;27Kohm,5%,1/16W,DA,TP,1005"
56	"R441,R442,R443"	2007-000157	"R-CHIP;47Kohm,5%,1/16W,DA,TP,1005"
57	R462	2007-000159	"R-CHIP;56Kohm,5%,1/16W,DA,TP,1005"
58	"R304,R309,R316,R402"	2007-000162	"R-CHIP;100Kohm,5%,1/16W,DA,TP,1005"
	"R404,R422,R423,R432"	2007-000162	"R-CHIP;100Kohm,5%,1/16W,DA,TP,1005"
	"R437,R439,R460,R533"	2007-000162	"R-CHIP;100Kohm,5%,1/16W,DA,TP,1005"
	"R540,R555,R556,R564"	2007-000162	"R-CHIP;100Kohm,5%,1/16W,DA,TP,1005"
59	R440	2007-000168	"R-CHIP;470Kohm,5%,1/16W,DA,TP,1005"
60	"R407,R408,R409,R421"	2007-000170	"R-CHIP;1Mohm,5%,1/16W,DA,TP,1005"
61	"R102,R110,R111,R124"	2007-000172	"R-CHIP;10ohm,5%,1/16W,DA,TP,1005"
	R125	2007-000172	"R-CHIP;10ohm,5%,1/16W,DA,TP,1005"
62	R118	2007-000242	"R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005"



NO	Reference	SEC CODE	Part Description
63	R401	2007-000982	"R-CHIP;5.6Kohm,5%,1/16W,DA,TP,1005"
64	R105	2007-001244	"R-CHIP;91Kohm,5%,1/16W,DA,TP,1005"
65	"R119,R120,R121,R122"	2007-001288	"R-CHIP;18ohm,5%,1/16W,DA,TP,1005"
	"R123,R126,R211"	2007-001288	"R-CHIP;18ohm,5%,1/16W,DA,TP,1005"
66	R217	2007-001291	"R-CHIP;30ohm,5%,1/16W,DA,TP,1005"
67	"R203,R204,R221,R529"	2007-001298	"R-CHIP;51ohm,5%,1/16W,DA,TP,1005"
68	"R202,R230,R234"	2007-001301	"R-CHIP;68ohm,5%,1/16W,DA,TP,1005"
69	R236	2007-001305	"R-CHIP;120ohm,5%,1/16W,DA,TP,1005"
70	"R222,R235"	2007-001306	"R-CHIP;150ohm,5%,1/16W,DA,TP,1005"
71	"R107,R214,R218"	2007-001307	"R-CHIP;180ohm,5%,1/16W,DA,TP,1005"
72	R426	2007-001308	"R-CHIP;200ohm,5%,1/16W,DA,TP,1005"
73	R113	2007-001323	"R-CHIP;3Kohm,5%,1/16W,DA,TP,1005"
74	"R445,R446"	2007-002796	"R-CHIP;510ohm,5%,1/16W,DA,TP,1005"
75	"R231,R232"	2007-003022	"R-CHIP;620HM,5%,1/16W,DA,TP,1005"
76	R428	2007-003028	"R-CHIP;750KOHM,5%,1/16W,DA,TP,1005"
77	R127	2007-007001	"R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1005"
78	"R210,R212,R417"	2007-007008	"R-CHIP;300OHM,5%,1/16W,DA,TP,1005"
79	R308	2007-007107	"R-CHIP;100Kohm,1%,1/16W,DA,TP,1005"
80	R216	2007-007132	"R-CHIP;15Kohm,1%,1/16W,DA,TP,1005"
81	R562	2007-007135	"R-CHIP;18Kohm,1%,1/16W,DA,TP,1005"
82	R226	2007-007139	"R-CHIP;47Kohm,1%,1/16W,DA,TP,1005"
83	R233	2007-007141	"R-CHIP;240OHM,5%,1/16W,DA,TP,1005"
84	"R227,R229,R418"	2007-007142	"R-CHIP;10Kohm,1%,1/16W,DA,TP,1005"
85	R563	2007-007309	"R-CHIP;12Kohm,1%,1/16W,DA,TP,1005"
86	R228	2007-007311	"R-CHIP;22Kohm,1%,1/16W,DA,TP,1005"
87	"R452,R453,R454,R455"	2007-007317	"R-CHIP;2.2Kohm,1%,1/16W,DA,TP,1005"
88	"R456,R457,R458,R459"	2007-007318	"R-CHIP;1Kohm,1%,1/16W,DA,TP,1005"
89	R403	2007-007480	"R-CHIP;130Kohm,1%,1/16W,DA,TP,1005"
90	R307	2007-007590	"R-CHIP;82Kohm,1%,1/16W,DA,TP,1005"
91	R561	2007-007592	"R-CHIP;270Kohm,1%,1/16W,DA,TP,1005"
92	R225	2007-007698	"R-CHIP;5.1Kohm,1%,1/16W,DA,TP,1005"
93	"R201,R311,R319,R558"	2007-007771	"R-CHIP;0OHM,5%,1/16W,DA,TP,1005"
	R559	2007-007771	"R-CHIP;0OHM,5%,1/16W,DA,TP,1005"
94	R405	2007-007981	"R-CHIP;180Kohm,1%,1/16W,DA,TP,1005"
95	"R320,R324"	2011-001344	"R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP"
96	R449	2011-001345	"R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP"
97	"C127,C132,C133,C134"	2203-000233	"C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005"
	"C135,C138,C146,C222"	2203-000233	"C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005"
	"C223,C237,C255,C262"	2203-000233	"C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005"
	"C305,C452,C453,C454"	2203-000233	"C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005"
	C455	2203-000233	"C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005"
98	"C101,C102,C123,C144"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"

NO	Reference	SEC CODE	Part Description
	"C147,C210,C236,C238"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
	"C251,C307,C309,C313"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
	"C314,C319,C325,C326"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
	"C331,C333,C334,C335"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
	"C354,C432,C434,C440"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
	"C449,C536"	2203-000254	"C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-"
99	"C263,C268,C554"	2203-000278	"C-CERAMIC,CHIP;0.01nF,0.5pF,50V,NP0,TP,1005"
100	"C239,C580,C581"	2203-000330	"C-CERAMIC,CHIP;0.012nF,5%,50V,NP0,TP,1005"
101	C212	2203-000359	"C-CERAMIC,CHIP;0.15nF,5%,50V,NP0,TP,1005"
102	"C131,C233,C244"	2203-000425	"C-CERAMIC,CHIP;0.018nF,5%,50V,NP0,TP,1005"
103	"C126,C136,C139,C205"	2203-000438	"C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-"
	"C207,C209,C211,C221"	2203-000438	"C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-"
	"C227,C229,C230,C240"	2203-000438	"C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-"
	"C261,C270"	2203-000438	"C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-"
104	C100	2203-000466	"C-CERAMIC,CHIP;0.001nF,0.25pF,50V,NP0,TP,1005"
105	"C214,C215"	2203-000550	"C-CERAMIC,CHIP;0.02nF,5%,50V,NP0,TP,1005"
106	"C141,C241,C243"	2203-000628	"C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,1005"
107	"C130,C148,C200,C231"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C232,C258,C267,C269"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C540,C555,C556,C557"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C559,C560,C561,C562"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C563,C565,C568,C569"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C570,C571,C572,C573"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
	"C576,C577,C578,C579"	2203-000679	"C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005"
108	"C256,C257,C259,C260"	2203-000696	"C-CERAMIC,CHIP;0.002nF,0.25pF,50V,NP0,TP,1005"
109	C538	2203-000697	"C-CERAMIC,CHIP;0.002nF,0.25pF,50V,NP0,TP,1608"
110	"C450,C451"	2203-000800	"C-CERAMIC,CHIP;33nF,10%,25V,X7R,TP,1608"
111	"C137,C143,C204,C206"	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
	"C208,C217,C264,C266"	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
	"C310,C311,C312,C327"	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
	"C330,C437,C438,C439"	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
	"C441,C442,C443,C448"	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
	C460	2203-000812	"C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,1005"
112	"C218,C253"	2203-000836	"C-CERAMIC,CHIP;390pF,10%,50V,X7R,TP,1005,-"
113	C404	2203-000870	"C-CERAMIC,CHIP;0.003nF,0.25pF,50V,NP0,TP,1005"
114	C552	2203-000872	"C-CERAMIC,CHIP;0.003nF,0.25pF,50V,NP0,TP,1608"
115	"C121,C400,C401"	2203-000995	"C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,1005"
116	C315	2203-001101	"C-CERAMIC,CHIP;6.8nF,10%,25V,X7R,TP,1005,-"
117	C583	2203-001124	"C-CERAMIC,CHIP;680pF,10%,50V,X7R,TP,1005,-"
118	C235	2203-001201	"C-CERAMIC,CHIP;0.007nF,0.5pF,50V,NP0,TP,1005"
119	C219	2203-001239	"C-CERAMIC,CHIP;0.082nF,5%,50V,NP0,TP,1005"
120	C247	2203-001259	"C-CERAMIC,CHIP;0.008nF,0.5pF,50V,NP0,TP,1005"

NO	Reference	SEC CODE	Part Description
121	"C424,C459"	2203-001432	"C-CERAMIC,CHIP;47nF,+80-20%,16V,Y5V,TP,1005"
122	C338	2203-002443	"C-CERAMIC,CHIP;0.33nF,10%,50V,X7R,TP,1005"
123	C120	2203-002525	"C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,1005"
124	C589	2203-002687	"C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP,1005"
125	"C329,C444,C445,C539"	2203-003054	"C-CERAMIC,CHIP;0.009nF,0.25pF,50V,NP0,TP,1005"
126	"C106,C107,C110,C111"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C112,C114,C116,C246"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C301,C308,C316,C317"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C332,C339,C407,C409"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C418,C419,C420,C421"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C423,C427,C458,C461"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
	"C534,C545,C551"	2203-005061	"C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005"
127	"C108,C109,C125,C323"	2203-005065	"C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608"
	"C403,C411,C412,C413"	2203-005065	"C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608"
	"C415,C417,C422,C425"	2203-005065	"C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608"
	"C431,C530,C537"	2203-005065	"C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608"
128	C414	2203-005148	"C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608,-"
129	C234	2203-005234	"C-CERAMIC,CHIP;0.0012nF,0.25pF,50V,NP0,TP,1005"
130	"C213,C224,C225"	2203-005446	"C-CERAMIC,CHIP;0.0027nF,0.1pF,50V,NP0,TP,1005"
131	"C456,C457"	2203-005503	"C-CERAMIC,CHIP;0.18nF,5%,25V,NP0,TP,1005"
132	C416	2203-005509	"C-CERAMIC,CHIP;330nF,+80-20%,10V,Y5V,TP,1005"
133	C529	2203-005562	"C-CERAMIC,CHIP;10000nF,+80-20%,10V,Y5V,TP,3216"
134	"C250,C252"	2203-005707	"C-CERAMIC,CHIP;0.091nF,5%,50V,NP0,TP,1005"
135	C202	2301-001197	"C-FILM,CHIP;0.39nF,5%,50V,TP,2x1.25x0.8mm,-"
136	C203	2301-001213	"C-FILM,CHIP;6.8nF,5%,16V,TP,2012,-"
137	"C118,C128"	2301-001230	"C-FILM,CHIP;10nF,5%,16V,TP,2012,-"
138	C129	2301-001231	"C-FILM,CHIP;680pF,5%,50V,TP,2012,-"
139	C119	2301-001350	"C-FILM,CHIP;1.5nF,5%,50V,TP,2.0x1.25x0.8mm,-"
140	C410	2404-000318	"C-TA,CHIP;6.8uF,20%,16V,-,TP,3528,-"
141	C220	2404-001101	"C-TA,CHIP;1uF,20%,16V,GP,TP,2012,-"
142	"C105,C117,C124,C142"	2404-001105	"C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012"
	"C145,C149,C306,C318"	2404-001105	"C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012"
	"C324,C328,C406,C408"	2404-001105	"C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012"
	"C433,C535"	2404-001105	"C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012"
143	C446	2404-001162	"C-TA,CHIP;47uF,20%,4V,LZ,TP,3216"
144	C436	2404-001209	"C-TA,CHIP;100uF,20%,6.3V,LZ,TP,4028"
145	C249	2404-001210	"C-TA,CHIP;220uF,20%,6.3V,LZ,TP,7132"
146	L403	2703-001166	"INDUCTOR-SMD;5.6nH,10%,1.6x0.8X0.8mm"
147	"L215,L402"	2703-001409	"INDUCTOR-SMD;12nH,10%,1x0.5x0.5mm"
148	L201	2703-001514	"INDUCTOR-SMD;68nH,5%,1.8x1.12x1.02mm"
149	"L212,L213"	2703-001545	"INDUCTOR-SMD;47nH,5%,1.8x1.12x1.02mm"
150	L200	2703-001685	"INDUCTOR-SMD;82nH,5%,1.7x1.14x1.02mm"

NO	Reference	SEC CODE	Part Description
151	L211	2703-001722	"INDUCTOR-SMD;18nH,5%,1.0x0.5x0.5mm"
152	"L218,L219,L220"	2703-001723	"INDUCTOR-SMD;33nH,5%,1.0x0.5x0.5mm"
153	L204	2703-001726	"INDUCTOR-SMD;27nH,5%,1x0.5x0.5mm"
154	"L203,L205,L206"	2703-001727	"INDUCTOR-SMD;22nH,5%,1x0.5x0.5mm"
155	"L207,L217"	2703-001730	"INDUCTOR-SMD;15nH,5%,1x0.5x0.5mm"
156	"L210,L214"	2703-001735	"INDUCTOR-SMD;3.9nH,10%,1x0.5x0.5mm"
157	L400	2703-001740	"INDUCTOR-SMD;10uH,20%,6.6x4.45x2.8mm"
158	"L404,L406"	2703-001752	"INDUCTOR-SMD;39nH,5%,1.0x0.5x0.5mm"
159	L216	2703-001770	"INDUCTOR-SMD;3.3NH,0.3NH,1.0X0.5X0.5MM"
160	L209	2703-001786	"INDUCTOR-SMD;10NH,5%,1.0X0.5X0.5MM"
161	L100	2703-001791	"INDUCTOR-SMD;15NH,5%,1.8X1.12X1.02MM"
162	L202	2703-001794	"INDUCTOR-SMD;120NH,2%,1.8X1.12X1.02MM"
163	L208	2703-001798	"INDUCTOR-SMD;2.2NH,0.3NH,1.0X0.5X0.5MM"
164	L401	2703-002025	"INDUCTOR-SMD;47uH,20%,4.8x4.8x1.8mm"
165	L300	2703-002052	"INDUCTOR-SMD;1.5mH,20%,3.8x3.8x2.0mm"
166	X400	2801-003856	"CRYSTAL-SMD;0.032786MHz,20ppm,28-ACP,7pF,65kohm"
167	U104	2806-001210	"OSCILLATOR-VCO;ENFVJ152S20,545MHZ,-,-,TP,2.85V"
168	U107	2806-001224	"OSCILLATOR-VCO;ENFVF1B2SF7,1167.5/1615MHZ,"
169	U200	2806-001239	"OSCILLATOR-VCO;VOF1748C28KRF,1748MHz,-,50ohm"
170	U100	2809-001237	"OSCILLATOR-VCTCXO;TCO-9131B,13MHz,5ppm"
171	"E200,E201,E202"	2901-001116	"FILTER-EMI SMD;NFM2012R13C471R,50V,0.3A,-,470pF"
172	F201	2904-001226	FILTER-SAW;B4121
173	F200	2904-001227	FILTER-SAW;B4833
174	F202	2904-001228	FILTER-SAW;B4133
175	F203	2904-001235	FILTER-SAW;FAR-G6CH-1G8425-L218
176	U208	2909-001086	ANTENA SWITCH;SHS-L090D
177	BUZ300	3002-001098	"BUZZER-MAGNETIC;94dB,3V,150mA,2700Hz,TP"
178	"FB400,FB401"	3301-001208	"CORE-FERRITE BEAD;AB,1.6x0.8x0.8mm,-,-"
179	J402	3709-001144	"CONNECTOR-CARD EDGE;6P,2.54mm,SMD-S,AU30U"
180	M400	3710-001105	"CONNECTOR-SOCKET;2P,1R,1.27mm,SMD-S,AU"
181	J403	3710-001633	"CONNECTOR-SOCKET;20P,2R,0.5mm,SMD-S,AUF"
182	J401	3710-001649	IF CONNECTOR;AXR31210203
183	J400	3722-001380	"JACK-PHONE;6P,2.6PI,AG,BLK,-"
184	BAT301	4301-001031	BACKUP BATTERY;RB414II06N
185	U207	4709-001213	"COUPLER-DIRECTION;DCS214E-1747,1710-1785MHz,14+-1dB"
186	U206	4709-001214	"COUPLER-DIRECTION;DCS214E-0897,880-915MHz,19.5+-1dB"
187	PCB	GH41-00122B	PCB-SGHN188 MAIN PCB
188	W200	GH39-00067A	SEM-RIGID CABLE
189		GH71-00178A	NPR-ANTENNA BRACKET
190		GH74-01029A	MPR-SHIELD SOFT REAR
191		GH75-00429A	MEC-LCD BRACKET ASS'Y
192		GH96-00937A	LCD ASS'Y

### 3-2 Main Parts List Bottom

NO	Reference	SEC CODE	Part Description	Vendor Part No.
1	BAT301	4301-001031	BACKUP BATTERY	RB414II06N
2	BUZ300	3002-001098	BUZZER-SMD	BRT-03S
3	C100	2203-000466	C-CHIP, 1pF, 0.25pF, 50V, TP, 1005	GRM36C0G010C50PT
4	C101	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
5	C102	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
6	C105	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
7	C106	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
8	C107	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
9	C108	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
10	C109	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
11	C110	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
12	C111	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
13	C112	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
14	C114	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
15	C116	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
16	C117	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
17	C118	2301-001230	C-FILM, 10nF, 5%, 16V, TP, 2012	ECHU1C103JB5
18	C119	2301-001350	C-FILM, 1.5nF, 5%, 16V, TP, 2012	ECHU1C152JB5
19	C120	2203-002525	C-CHIP, 560pF, 10%, 50V, TP, 1005	GRM36X7R561K50PT
20	C121	2203-000995	C-CHIP, 47pF, 10%, 50V, TP, 1005	GRM36COG470C50PT
21	C123	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
22	C124	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
23	C125	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
24	C126	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
25	C127	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
26	C128	2301-001230	C-FILM, 10nF, 5%, 16V, TP, 2012	ECHU1C103JB5
27	C129	2301-001231	C-FILM, 680pF, 5%, 50V, TP, 2012	ECHU1H681JB5
28	C130	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
29	C131	2203-000425	C-CHIP, 18pF, 5%, 50V, TP, 1005	GRM36COG180J50PT
30	C132	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
31	C133	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
32	C134	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
33	C135	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
34	C136	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
35	C137	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
36	C138	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
37	C139	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
38	C142	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
39	C143	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
40	C145	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R

NO	Reference	SEC CODE	Part Description	Vendor Part No.
41	C146	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
42	C147	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
43	C148	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
44	C149	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
45	C150	2404-001101	CAP-TANTAL 1uF,2012,16V	TAJR105M016R
46	C301	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
47	C305	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
48	C306	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
49	C307	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
50	C308	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
51	C309	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
52	C310	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
53	C311	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
54	C312	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
55	C313	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
56	C314	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
57	C315	2203-001101	C-CHIP, 6.8nF, 10%, 25V, X7R, TP, 1005	GRM36X7R682K25PT
58	C316	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
59	C318	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
60	C319	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
61	C323	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
62	C324	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
63	C326	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
64	C327	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
65	C328	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
66	C329	2203-003054	C-CHIP, 9pF, 0.5pF, 50V, TP, 1005	GRM36COG090D50PT
67	C330	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
68	C331	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
69	C332	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
70	C333	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
71	C334	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
72	C335	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
73	C338	2203-002443	C-CHIP, 330pF, 10%, 50V, X7R, TP, 1005	GRM36X7R331K50PT
74	C339	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
75	C431	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
76	C434	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
77	C529	2203-005562	C-CHIP, 10uF, +80-20%, 10V, 3216	GRM230Y5V106Z10PT
78	C534	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
79	C535	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSP0J106M8R
80	C536	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
81	C537	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
82	C538	2203-000697	C-CHIP, 2pF, 0.25pF, 50V, TP, 1608	GRM39C0G020C50PT

NO	Reference	SEC CODE	Part Description	Vendor Part No.
83	C545	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
84	C552	2203-000872	C-CHIP, 3pf, 1608	CLIOCL30CBNC
85	C554	2203-000278	C-CHIP, 10pF, 5%, 50V, TP, 1005	GRM36COG050C50PT
86	C555	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
87	C578	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
88	C579	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
89	D300	0601-000276	LED, CHIP, Y/GRN, 1.6x2.0mm	CL-150YG-CD-T
90	D302	0407-001002	DIODE-ARRAY, 80V, 300mA, CA2-3, EM3	DAN222
91	D303	0401-001033	DIODE-SWITCHING, 25V,200mA,M-MELF,TP	MCL4154
92	D304	0407-001007	DIODE-ARRAY, 80V, 25mA, CA4-2, UM5	UMN1
93	D305	1405-001018	Zener Diode, 14V, 1.6x0.8mm, TP	VC060314A300
94	D306	1405-001019	Zener Diode, 5.6V, 1.6x0.8mm, TP	VC060305A150
95	D411	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
96	D415	1405-001019	Zener Diode, 5.6V, 1.6x0.8mm, TP	VC060305A150
97	D425	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
98	D426	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
99	D429	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
100	D430	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
101	E201	2901-001116	FILTER-EMI, 50V, 300mA, 470pF, 2x1.25x0.5	NFM39R12C471T1M
102	E202	2901-001116	FILTER-EMI, 50V, 300mA, 470pF, 2x1.25x0.5	NFM39R12C471T1M
103	L100	2703-001791	Inductor, 15nH, 5%,1.8x1.12x1.02mm	0603CS-15NXJBC
104	L300	2703-002052	Inductor 1.5mH	BDS-3516-152M
105	L403	2703-001166	Inductor, 5.6nH, 5%, 1608	ELJRE5N6JF2
106	Q100	0501-000225	TR-SMALL SIGNAL, NPN, 200mW, EM3, TP	2SC4617R
107	Q101	0505-001423	FET-SILICON, FDG6323L,N/P,0.3W,SC70-6	FDG6323L
108	Q300	0501-002011	TR-SMALL SIGNAL, NPN, 200mW, SOT-23	2SD2114KT146
109	Q301	0501-000162	TR-SMALL SIGNAL, PNP, 200mW, SOT-323, TP	2SA1576A-R-T106
110	Q302	0501-002011	TR-SMALL SIGNAL, NPN, 200mW, SOT-23	2SD2114KT146
111	Q402	0505-001423	FET-SILICON, FDG6323L,N/P,0.3W,SC70-6	FDG6323L
112	Q403	0501-000162	TR-SMALL SIGNAL, PNP, 200mW, SOT-323, TP	2SA1576A-R-T106
113	R101	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
114	R102	2007-000172	R-CHIP, 10ohm, 5%, 1/16W, DA, TP, 1005	RC1005J100CS
115	R103	2007-000141	R-CHIP, 2.2Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ222X
116	R104	2007-000155	R-CHIP, 27Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ273X
117	R105	2007-001244	R-CHIP, 91Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ913X
118	R106	2007-000140	R-CHIP, 1Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ102X
119	R107	2007-001307	R-CHIP, 180ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ181
120	R109	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
121	R110	2007-000172	R-CHIP, 10ohm, 5%, 1/16W, DA, TP, 1005	RC1005J100CS
122	R111	2007-000172	R-CHIP, 10ohm, 5%, 1/16W, DA, TP, 1005	RC1005J100CS
123	R113	2007-001323	R-CHIP, 3Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ302X
124	R114	2007-000141	R-CHIP, 2.2Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ222X

NO	Reference	SEC CODE	Part Description	Vendor Part No.
125	R117	2007-000140	R-CHIP, 1Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ102X
126	R118	2007-000242	R-CHIP, 1.5Kohm, 5%, 1/16w, TP, 1005	ERJ2GEJ152X
127	R119	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
128	R120	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
129	R121	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
130	R122	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
131	R123	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
132	R124	2007-000172	R-CHIP, 10ohm, 5%, 1/16W, DA, TP, 1005	RC1005J100CS
133	R125	2007-000172	R-CHIP, 10ohm, 5%, 1/16W, DA, TP, 1005	RC1005J100CS
134	R126	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
135	R127	2007-007001	R-CHIP, 3.9Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ392X
136	R128	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
137	R300	2007-000139	R-CHIP, 220ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GE221X
138	R303	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
139	R304	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
140	R305	2007-000143	R-CHIP, 4.7Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J472CS
141	R306	2007-000140	R-CHIP, 1Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ102X
142	R309	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
143	R310	2007-000140	R-CHIP, 1Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ102X
144	R311	2007-007771	R-CHIP, 0ohm, 5%, 1/16W, DA, TP, 1005	RC1005J000CS
145	R313	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
146	R315	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
147	R316	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
148	R319	2007-007771	R-CHIP, 0ohm, 5%, 1/16W, DA, TP, 1005	RC1005J000CS
149	R320	2011-001344	R-NETWORK, 100ohm,5%,1/16W,L,CHIP,8P,TP	EXB28V101JX
150	R321	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
151	R324	2011-001344	R-NETWORK, 100ohm,5%,1/16W,L,CHIP,8P,TP	EXB28V101JX
152	R327	2007-000143	R-CHIP, 4.7Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J472CS
153	R421	2007-000170	1Mohm,1005	RC1005J105CS
154	R428	2007-003028	750Kohm,1005	RC1005J754CS
155	R430	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
156	R527	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
157	R542	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
158	R550	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
159	R551	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
160	R552	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
161	R553	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
162	R554	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
163	R555	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
164	R558	2007-007771	R-CHIP, 0ohm, 5%, 1/16W, DA, TP, 1005	RC1005J000CS
165	R560	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
166	R573	2007-000148	R-CHIP, 10Kohm, 1005	RC1005J103CS



NO	Reference	SEC CODE	Part Description	Vendor Part No.
167	U100	2809-001237	OSCILLATOR-VCTCXO, 13MHz,5ppm,10Kohm//10pF,TP,3V,2mA	TCO-9131B 13MHz
168	U101	1203-001701	IC-VOLTAGE REGULATOR,SOT-23,5P	LP2982AIM5X-3.0
169	U102	1203-001454	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.0
170	U103	1203-001454	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.0
171	U104	2806-001210	VCO-DUAL 545MHZ,-,-,TP,2.85V,5MA	ENFVJ152S20
172	U105	1201-001583	IC-POWER AMP, 08109,QFP,16P,PLASTIC,8V,-30to+100C,	PF08109B-TL
173	U106	1209-001251	IC-Synthesizer, MTC20, 20P	LMX2336LSLBX
174	U107	2806-001224	OSCILLATOR-VCO(RX), 1167.5/1615MHz,0+-3dBm,TP,2.85V	ENFVF1B2SF7(ENFVZ4E76)
175	U303	1203-001204	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.3
176	U305	1003-001226	IC-POWER DRIVER, SOP, 8P, 120MIL, SINGLE	D361A
177	U306	1203-001454	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.0
178	U307	1203-001511	IC-RESET, 809, SOT-23, 3P, PLASTIC, 0.3/6.	MAX809REUR-T
179	U308	1203-001454	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.0
180	U309	0506-001004	TR-ARRAY, NPN/PNP, 2.50V, 300mW, UM5	UMC5N
181	U311	1405-001018	Zener Diode, 14V, 1.6x0.8mm, TP	VC060314A300
182	U312	0504-001058	TR-DIGITAL, RN4985	RN4985
183	U313	1009-001006	HALL SWITCH	A3210ELH
184	U442	1203-001454	IC-VOLTAGE REGULATOR, SOT-23, 5P, 59MIL	LP2981AIM5X-3.0
185	U443	0504-001021	DTB113ZK,PNP,200MW,10K,SC-59,TP	DTB113ZK
186	U445	0504-000167	TR-DIGITAL, NPN, 100mW, 10K-10Kohm, SSM	DTC114EEA
187	U448	1106-001301	IC-4M SRAM+32M FLASH MEMORY,1337,262Kx1	LRS1337
188	U452	0801-002540	GATE	NC7SZ19
189	U458	N.C POINT		
190	C103	N.C POINT		
191	C104	N.C POINT		
192	C115	N.C POINT		
193	C321	N.C POINT		
194	C553	N.C POINT		
195	C584	N.C POINT		
196	C585	N.C POINT		
197	C586	N.C POINT		
198	C304	N.C POINT		

### SMD

NO	Reference	SEC CODE	Part Description	Vendor Part No.
1	SPK300	GH96-00908A	SPEAKER	WD00518/32
2	W200	GH39-00067A	SEMIRIGID CABLE	SDA81718
3	CON1	GH96-00937A	LCD	HLM751-010300

### 3-3 Main Parts List TOP

NO	Reference	SEC CODE	Part Description	Vendor Part No.
1	C141	2203-000628	C-CHIP, 22pF, 5%, 50V, TP, 1005	GRM36COG220J50PT
2	C144	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K16PT
3	C200	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
4	C202	2301-001197	C-CHIP, 390pF,5%, 16V TP,2012	ECHU1H391JB5
5	C203	2301-001213	C-CHIP, 6.8nF, 5%, 16V, TP, 2012	ECHU1C682JB5
6	C204	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
7	C205	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
8	C206	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
9	C207	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
10	C208	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
11	C209	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
12	C210	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K16PT
13	C211	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
14	C212	2203-000359	C-CHIP, 150pF, 5%, 50V, TP, 1005	GRM36COG151J50PT
15	C213	2203-005446	C-CHIP, 2.7pF, 0.25pF, 50V, NPO, TP, 1005	GRM36COG2R7C50PT
16	C214	2203-000550	C-CHIP, 20pF, 5%1005	GRM36COG200J50PT
17	C215	2203-000550	C-CHIP, 20pF, 5%1005	GRM36COG200J50PT
18	C217	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
19	C218	2203-000836	C-CHIP, 390pF, 10%, 50V, TP, 1005	GRM36COG301J50PT
20	C219	2203-001239	C-CHIP, 82pF, 10%, 50V, TP, 1005	GRM36C0G820J50PT
21	C220	2404-001017	CAP-TANTAL, 1uF,20%,10V,GP,TP,2012	TAJR105M010R
22	C221	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
23	C222	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
24	C223	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
25	C224	2203-005446	C-CHIP, 2.7pF, 0.25pF, 50V, NPO, TP, 1005	GRM36COG2R7C50PT
26	C225	2203-005446	C-CHIP, 2.7pF, 0.25pF, 50V, NPO, TP, 1005	GRM36COG2R7C50PT
27	C227	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
28	C229	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
29	C230	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
30	C231	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
31	C232	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
32	C233	2203-000425	C-CHIP, 18pF, 5%, 50V, TP, 1005	GRM36COG180J50PT
33	C234	2203-005234	C-CHIP, 1.2pF, 5%, 50V, TP, 1005	GRM36COG1R2C50PT
34	C235	2203-001201	C-CHIP, 7pF, 0.5pF, 50V, NPO, TP, 1005	GRM36COG070D50PT
35	C236	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K16PT
36	C237	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
37	C238	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K16PT
38	C239	2203-000330	C-CHIP, 12pF, 5%, 50V, TP, 1005	GRM36COG120J50PT
39	C240	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
40	C241	2203-000628	C-CHIP, 22pF, 5%, 50V, TP, 1005	GRM36COG220J50PT

NO	Reference	SEC CODE	Part Description	Vendor Part No.
41	C243	2203-000628	C-CHIP, 22pF, 5%, 50V, TP, 1005	GRM36COG220J50PT
42	C244	2203-000425	C-CHIP, 18pF, 5%, 50V, TP, 1005	GRM36COG180J50PT
43	C246	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
44	C247	2203-001259	C-CHIP, 8pF, 0.5pF, 50V, TP, 1005	GRM36COG080D50PT
45	C249	2404-001210	C-TA, CHIP, 220uF, 20%	592D227X06R3U2T
46	C250	2203-005707	C-CHIP, 91pF, 10%, 50V, TP, 1005	GRM36C0G910J50PT
47	C251	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K16PT
48	C252	2203-005707	C-CHIP, 91pF, 10%, 50V, TP, 1005	GRM36C0G910J50PT
49	C253	2203-000836	C-CHIP, 390pF, 10%, 50V, TP, 1005	GRM36COG301J50PT
50	C255	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
51	C256	2203-000696	C-CHIP, 2pF, 0.25pF, 50V, TP, 1005	GRM36COG020C50PT
52	C257	2203-000696	C-CHIP, 2pF, 0.25pF, 50V, TP, 1005	GRM36COG020C50PT
53	C258	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
54	C259	2203-000696	C-CHIP, 2pF, 0.25pF, 50V, TP, 1005	GRM36COG020C50PT
55	C260	2203-000696	C-CHIP, 2pF, 0.25pF, 50V, TP, 1005	GRM36COG020C50PT
56	C261	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
57	C262	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
58	C263	2203-000278	C-CHIP, 10pF, 5%, 50V, TP, 1005	GRM36COG050C50PT
59	C264	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
60	C266	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
61	C267	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
62	C268	2203-000278	C-CHIP, 10pF, 5%, 50V, TP, 1005	GRM36COG050C50PT
63	C269	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
64	C270	2203-000438	C-CHIP, 1nF, 10%, 50V, TP, 1005	GRM36X7R102K50PT
65	C317	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
66	C325	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
67	C354	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
68	C400	2203-000995	C-CHIP, 47pF, 10%, 50V, TP, 1005	GRM36COG470C50PT
69	C401	2203-000995	C-CHIP, 47pF, 10%, 50V, TP, 1005	GRM36COG470C50PT
70	C403	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
71	C404	2203-000870	C-CHIP, 3pF, 0.25pF, 50V, TP, 1005	GRM36COG030C50PT
72	C406	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSPOJ106M8R
73	C407	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
74	C408	2404-001105	CAP-TANTAL, 10uF, 20%, 6.3V, 2012	TESVSPOJ106M8R
75	C409	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
76	C410	2404-000318	C-TA, CHIP, 6.8uF,20%,16V,-,TP,3528,-	TAJB685K016R
77	C411	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
78	C412	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
79	C413	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
80	C414	2203-005148	100nF, 1608	GRM39X7R104K16PT
81	C415	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
82	C416	2203-005509	300nF, 1005	GRM36V5V334Z10PT

NO	Reference	SEC CODE	Part Description	Vendor Part No.
83	C417	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
84	C418	2203-005061	C-CHIP, 100nF, 1005	CL05F104Z0NC
85	C419	2203-005061	C-CHIP, 100nF, 1005	CL05F104Z0NC
86	C420	2203-005061	C-CHIP, 100nF, 1005	CL05F104Z0NC
87	C421	2203-005061	C-CHIP, 100nF, 1005	CL05F104Z0NC
88	C422	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
89	C425	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
90	C427	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
91	C432	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
92	C436	2404-001209	C-TA, CHIP, 100uF, 20%, 6.3V, TP	592D107X06R3T2T
93	C437	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
94	C438	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
95	C439	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
96	C440	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
97	C441	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
98	C442	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
99	C443	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
100	C444	2203-003054	C-CHIP, 9pF, 0.5pF, 50V, TP, 1005	GRM36COG090D50PT
101	C445	2203-003054	C-CHIP, 9pF, 0.5pF, 50V, TP, 1005	GRM36COG090D50PT
102	C446	2404-001162	Capacitor, 47uF,20%,4V,LZ,TP,3216	F950G476MAAJZTQ2
103	C448	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
104	C449	2203-000254	C-CHIP, 10nF, 10%, 16V, TP, 1005	GRM36X7R103K25PT
105	C450	2203-000800	C-CHIP, 33nF, 10%, 16V, TP, 1608	GRM39X7R333K16PT
106	C451	2203-000800	C-CHIP, 33nF, 10%, 16V, TP, 1608	GRM39X7R333K16PT
107	C452	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
108	C453	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
109	C454	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
110	C455	2203-000233	C-CHIP, 100pF, 5%, 50V, TP, 1005	GRM36COG101J50PT
111	C456	2203-005503	C-CHIP, 180pF, +80-20%, 25V, 1005	GRM36COG181J25PT
112	C457	2203-005503	C-CHIP, 180pF, +80-20%, 25V, 1005	GRM36COG181J25PT
113	C458	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
114	C459	2203-001432	C-CHIP, 47nF, 10%, 16V, TP, 1005	GRM36Y5V473K6PT
115	C460	2203-000812	C-CHIP, 33pF, 5%, 50V, TP, 1005	GRM36COG330J50PT
116	C461	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
117	C530	2203-005065	C-CHIP, 1uF, +80-20%, 10V, TP, 1608	GRM39Y5V105Z10PT
118	C539	2203-003054	C-CHIP, 9pF, 0.5pF, 50V, TP, 1005	GRM36COG090D50PT
119	C540	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
120	C551	2203-005061	C-CHIP, 100nF, +80-20%, 16V, TP, 1005	GRM36Y5V104Z16PT
121	C556	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
122	C557	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
123	C558	1405-001093	VARISTOR	AVL14K 02 200
124	C559	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT

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125	C560	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
126	C561	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
127	C562	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
128	C563	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
129	C565	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
130	C568	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
131	C569	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
132	C570	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
133	C571	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
134	C572	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
135	C573	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
136	C576	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
137	C577	2203-000679	C-CHIP, 27pF, 5%, 50V, TP, 1005	GRM36COG270J50PT
138	C580	2203-000330	C-CHIP, 12pF, 5%, 50V, TP, 1005	GRM36COG120J50PT
139	C581	2203-000330	C-CHIP, 12pF, 5%, 50V, TP, 1005	GRM36COG120J50PT
140	C583	2203-001124	C-CHIP, 680pF,10%,50V,X7R,TP,1005	CMO5X7R681K50PT
141	C589	2203-002687	1.2nF, 1005	GRM36X7R122K50PT
142	D401	0407-001002	DIODE-ARRAY, 80V, 300mA, CA2-3, EM3	DAN222
143	D402	0402-001331	DIODE-RECTIFIER, CRS04,40V,1A,S-FLAT,TP	CRS04(TE85L)
144	D403	0407-001002	DIODE-ARRAY, 80V, 300mA, CA2-3, EM3	DAN222
145	D431	0402-001329	DIODE-RECTIFIER, STPS140Z,40,1A,SOD-123,TP	STPS140Z
146	D406	0406-001083	ESD DIODE	ESDA6V1W5
147	D407	0406-001104	ESD DIODE	ESDA6V1-5W6
148	D408	0406-001104	ESD DIODE	ESDA6V1-5W6
149	D410	0402-001331	DIODE-RECTIFIER, CRS04,40V,1A,S-FLAT,TP	CRS04(TE85L)
150	D413	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
151	D414	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
152	D419	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
153	D420	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
154	D421	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
155	D422	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
156	D423	1405-001082	VARISTOR, 5.6V,20A,1x0.5x0.6mm,TP	VC040205X150
157	D432	1405-001093	VARISTOR;	AVL 14K 02 200
158	E200	2901-001116	FILTER-EMI, 50V, 300mA, 470pF, 2x1.25x0.5	NFM39R12C471T1M
159	F200	2904-001227	FILTER-SAW, 225MHz,0.26MHz,+/-67.5KHz/2dB,TP,5.5dB	B4833
160	F201	2904-001226	FILTER-SAW, 942.5MHz,35MHz,925-960MHz/2dB,TP,925-960MHz/3.8dB	B4121
161	F202	2904-001228	FILTER-SAW, 1.8425GHz,1805-1880MHz/1dB,TP,1805-1880MHz/3.5dB	B4133
162	F203	2904-001235	FILTER-SAW, 945MHz,35MHz,0.8DB/0.9DB,TP	FAR-G6CH-1G8425-L218
163	FB400	3301-001208	CORE-FERRITE BEAD, AB,1.6x0.8x0.8mm	BLM11P600SPT
164	FB401	3301-001208	CORE-FERRITE BEAD, AB,1.6x0.8x0.8mm	BLM11P600SPT
165	J400	3722-001380	EARPHONE JACK, 6P, 2.6PI, AG, BLK	02-787B2-53BKA
166	J401	3710-001649	IF CONNECTOR, 18P, 1R, 0.5mm, SMD-A, AUF	MQ179B-SAA-18P/4

NO	Reference	SEC CODE	Part Description	Vendor Part No.
167	J402	3709-001144	SIM CONNECTOR	1318723-6
168	J403	3710-001633	B'd CONNECTOR	AXK59302005
169	L200	2703-001685	Inductor, 82nH, 5%, 1608	0603HS-82NXJBC
170	L201	2703-001514	Inductor, 68nH, 5%, 1.8x1.12x1.02mm	0603CS-68NXJBC
171	L202	2703-001794	Inductor, 120nH, 10%, 1.6x0.8x0.8mm	0603HS-N12XJBC
172	L203	2703-001727	Inductor, 22nH, 5%, 1005	HK1005-22NJ-T
173	L204	2703-001726	Inductor, 27nH, 5%, 1005	HK1005-27NJ-T
174	L205	2703-001727	Inductor, 22nH, 5%, 1005	HK1005-22NJ-T
175	L206	2703-001727	Inductor, 22nH, 5%, 1005	HK1005-22NJ-T
176	L207	2703-001730	Inductor, 15nH, 5%, 1005	HK1005-15NJ-T
177	L208	2703-001798	Inductor, 2.2NH, 0.3NH, 1005	HK1005-2N2S
178	L209	2703-001786	Inductor, 10NH, 1%, 1.0X0.5X0.5MM	LL1005-FH10NJ
179	L210	2703-001735	Inductor, 3.9nH, 10%, 1005	HK1005-3N9K-T
180	L211	2703-001722	Inductor, 18nH, 5%, 1005	HK1005-18NJ-T
181	L212	2703-001545	Inductor, 47nH, 5%, 1608	0603HS-47NXJBC
182	L213	2703-001545	Inductor, 47nH, 5%, 1608	0603HS-47NXJBC
183	L214	2703-001735	Inductor, 3.9nH, 10%, 1005	HK1005-3N9K-T
184	L215	2703-001409	Inductor, 12nH, 10%, 1005	HK1005-12NK-T
185	L216	2703-001770	Inductor, 3.3NH, 0.3NH, 1.0X0.5X0.5MM	MLK1005S3N3ST
186	L217	2703-001730	Inductor, 15nH, 5%, 1005	HK1005-15NJ-T
187	L218	2703-001723	Inductor, 33nH, 5%, 1005	HK1005-33NJ-T
188	L219	2703-001723	Inductor, 33nH, 5%, 1005	HK1005-33NJ-T
189	L220	2703-001723	Inductor, 33nH, 5%, 1005	HK1005-33NJ-T
190	L400	2703-001740	Inductor, 10uH, 20%, 6.6x4.45x2.8	BDS-4020R-100M
191	L401	2703-002025	Inductor 47uH, 20%	BTC-0309-470
192	L402	2703-001409	Inductor, 12nH, 10%, 1005	HK1005-12NK-T
193	L404	2703-001752	Inductor, 39nH, 5%, 1.0x0.5x0.5mm	LL1005-FH39NJ
194	L406	2703-001752	Inductor, 39nH, 5%, 1.0x0.5x0.5mm	LL1005-FH39NJ
195	M400	3710-001105	CONNECTOR-SOCKET, 2P, 1R, 1.27mm, SMD-S	24-8005-002-000-007
196	Q200	0501-002096	TR-SMALL SIGNAL, NPN, 160mW, SOT343	BFP420
197	Q201	0501-002226	TR-SMALL SIGNAL, NPN, 100MW, SOT-343	BFP520
198	Q400	0501-000218	TR-SMALL SIGNAL, NPN, 200mW, UMT	2SC4081
199	Q401	0505-001332	FET-SILICON, FDG6301, N, 0.22A, 4OHM, SC70-6	FDG6301N
200	R200	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
201	R201	2007-007771	R-CHIP, 0ohm, 5%, 1/16W, DA, TP, 1005	RC1005J000CS
202	R202	2007-001301	R-CHIP, 68ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ680
203	R203	2007-001298	R-CHIP, 51ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ510
204	R204	2007-001298	R-CHIP, 51ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ510
205	R205	2007-000153	R-CHIP, 22Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J223CS
206	R210	2007-007008	R-CHIP, 300ohm, 5%, 1/16W, DA, TP, 1005	RC1005J301CS
207	R211	2007-001288	R-CHIP, 18ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ180
208	R212	2007-007008	R-CHIP, 300ohm, 5%, 1/16W, DA, TP, 1005	RC1005J301CS

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209	R213	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
210	R214	2007-001307	R-CHIP, 180ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ181
211	R215	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
212	R216	2007-007132	R-CHIP, 15Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1502F
213	R217	2007-001291	R-CHIP, 3okm, 5%, 1/16W, DA, 1005	ERJ2GEJ300X
214	R218	2007-001307	R-CHIP, 180ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ181
215	R220	2007-000143	R-CHIP, 4.7Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J472CS
216	R221	2007-001298	R-CHIP, 51ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ510
217	R222	2007-001306	R-CHIP, 150ohm, 1005	ERJ2GEJ151X
218	R223	2007-000141	R-CHIP, 2.2Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ222X
219	R224	2007-000143	R-CHIP, 4.7Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J472CS
220	R225	2007-007698	R-CHIP, 5.1Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP5101F
221	R226	2007-007139	R-CHIP, 47Kohm, 1%, 1/16W, DA, TP, 1005	MCRO1MZSF4702
222	R227	2007-007142	R-CHIP, 10Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETD1002F
223	R228	2007-007311	R-CHIP, 22Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2202F
224	R229	2007-007142	R-CHIP, 10Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETD1002F
225	R230	2007-001301	R-CHIP, 68ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ680
226	R231	2007-003022	R-CHIP, 62ohm, 5%, 1/16W, DA, TP, 1005	TSR16GJ620V
227	R232	2007-003022	R-CHIP, 62ohm, 5%, 1/16W, DA, TP, 1005	TSR16GJ620V
228	R233	2007-007141	R-CHIP, 240ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ241X
229	R234	2007-001301	R-CHIP, 68ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ680
230	R235	2007-001306	R-CHIP, 150ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ151X
231	R236	2007-001305	R-CHIP, 120ohm, 1005	ERJ2GEJ121X
232	R238	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
233	R240	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
234	R241	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
235	R307	2007-007590	R-CHIP, 82Kohm, 1%, 1/16W, DA, TP	RK73H1ETP8202F
236	R308	2007-007107	R-CHIP, 100Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETD1003F
237	R312	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
238	R348	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
239	R401	2007-000982	R-CHIP, 5.6Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ562X
240	R402	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
241	R403	2007-007480	R-CHIP, 130Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1303F
242	R404	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
243	R405	2007-007981	R-CHIP, 180Kohm, 1%, 1/16W, DA, TP, 1005	RC1005J184CS
244	R407	2007-000170	R-CHIP, 1Mohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ105X
245	R408	2007-000170	R-CHIP, 1Mohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ105X
246	R409	2007-000170	R-CHIP, 1Mohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ105X
247	R417	2007-007008	R-CHIP, 300ohm, 5%, 1/16W, DA, TP, 1005	RC1005J301CS
248	R418	2007-007142	10Kohm, 1%, 1005	ERJ2GEF103X
249	R419	2007-000140	R-CHIP, 1Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ102X
250	R420	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS

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251	R422	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
252	R423	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
253	R424	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
254	R426	2007-003008	R-CHIP, 200ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ200X
255	R427	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
256	R429	2007-000152	R-CHIP, 20Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J203CS
257	R432	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
258	R433	2007-000141	R-CHIP, 2.2Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ222X
259	R434	2007-000141	R-CHIP, 2.2Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ222X
260	R435	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
261	R437	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
262	R438	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
263	R439	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
264	R440	2007-000168	R-CHIP, 470Kohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ474X
265	R441	2007-000157	R-CHIP, 47Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J473CS
266	R442	2007-000157	R-CHIP, 47Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J473CS
267	R443	2007-000157	R-CHIP, 47Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J473CS
268	R444	2007-000139	R-CHIP, 220ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GE221X
269	R445	2007-002796	R-CHIP, 510ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ511X
270	R446	2007-002796	R-CHIP, 510ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ511X
271	R447	2007-000139	R-CHIP, 220ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GE221X
272	R449	2011-001345	R-NETWORK, 10Kohm,5%,1/16W,L,CHIP,8P,TP	EXB28V103JX
273	R450	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
274	R452	2007-007317	R-CHIP, 2.2Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2201F
275	R453	2007-007317	R-CHIP, 2.2Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2201F
276	R454	2007-007317	R-CHIP, 2.2Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2201F
277	R455	2007-007317	R-CHIP, 2.2Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2201F
278	R456	2007-007318	R-CHIP, 1Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1001F
279	R457	2007-007318	R-CHIP, 1Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1001F
280	R458	2007-007318	R-CHIP, 1Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1001F
281	R459	2007-007318	R-CHIP, 1Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1001F
282	R460	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
283	R461	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
284	R462	2007-000159	R-CHIP, 56Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J563CS
285	R526	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
286	R528	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
287	R529	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
288	R530	2007-000138	R-CHIP, 100ohm, 5%, 1/16W, DA, TP, 1005	ERJ2GEJ101X
289	R533	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
290	R535	2007-000148	R-CHIP, 10Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J103CS
291	R540	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS
292	R556	2007-000162	R-CHIP, 100Kohm, 5%, 1/16W, DA, TP, 1005	RC1005J104CS

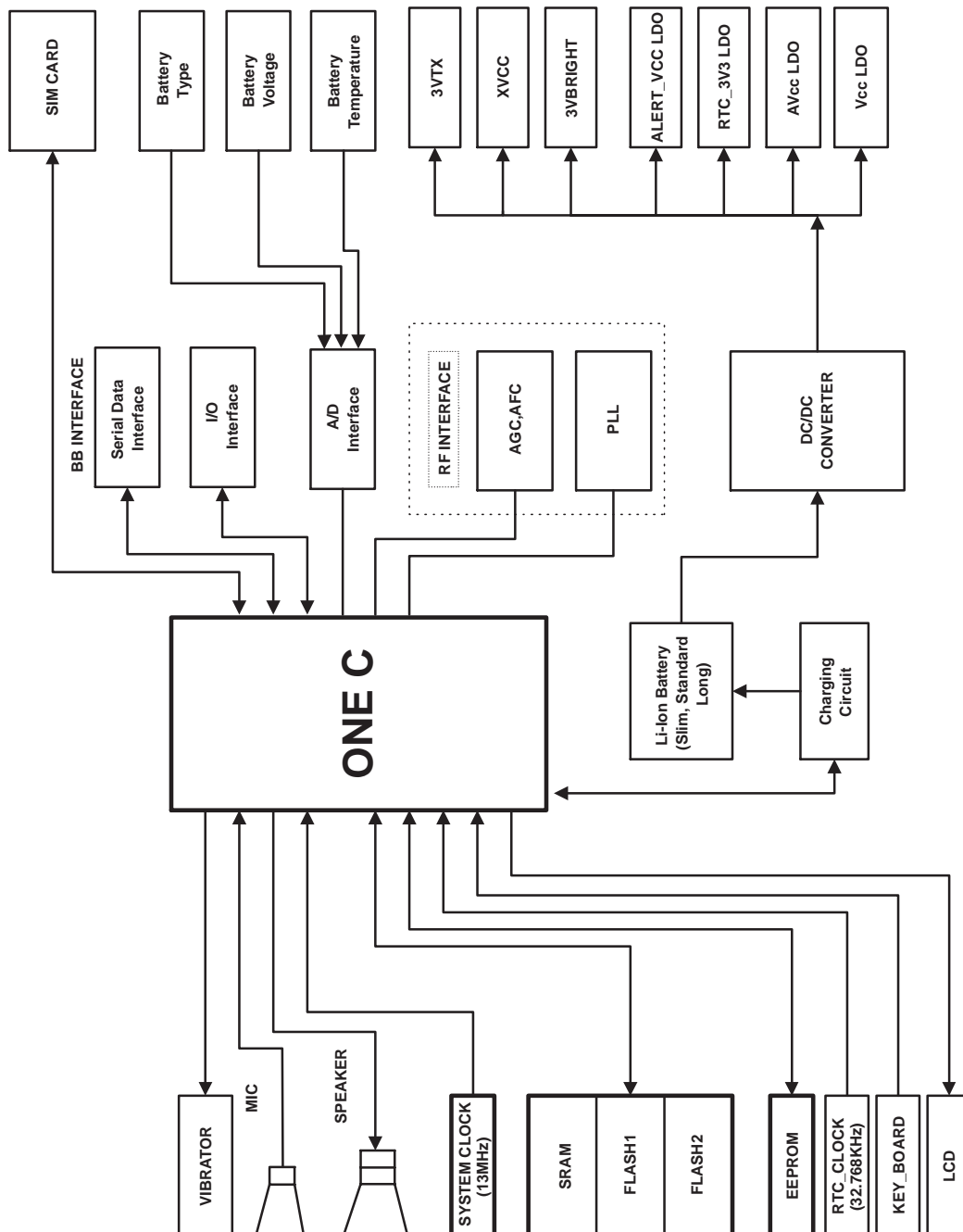


NO	Reference	SEC CODE	Part Description	Vendor Part No.
293	R559	2007-007771	R-CHIP, 0ohm, 5%, 1/16W, DA, TP, 1005	RC1005J000CS
294	R561	2007-007592	R-CHIP, 270Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP2703F
295	R562	2007-007135	R-CHIP, 18Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1802F
296	R563	2007-007309	R-CHIP, 12Kohm, 1%, 1/16W, DA, TP, 1005	RK73H1ETP1202F
297	R564	2007-007309	R-CHIP, 12Kohm, 1%, 1/16W, DA, TP, 1005	RC1005J104CS
298	R567	2007-000139	R-CHIP, 220ohm, 5%, 1/16W, DA, TP, 1005	RC1005J221CS
299	R568	2007-000139	R0CHIP, 220ohm, 5%, TP, 1005	RC1005J221CS
300	TH400	1404-001005	THERMISTOR, 47Kohm, 5%, 4050K, 2.0mW/C, TP	NTH5G40B473
301	U200	2806-001239	VCO	VOF1748C28KRF
302	U201	1205-001653	IC-TRANSCEIVER, QFP, 48P, 4V, 400MW, TR	HD155121F
303	U205	1209-001292	IC-APC, QFP,24P,165MIL,3.6V,240mW,-25to+85C,TP	HD155171NP01EL
304	U206	4709-001214	COUPLER-DIRECTION, 880-915MHz,19.5+1dB,13dB,2.0X1.25X0.7mm,TP	DCS214E-0897TR
305	U207	4709-001213	COUPLER-DIRECTION, 1710-1785MHz,14+1dB,12dB,2.0X1.25X0.7mm,TP	DCS214E-1747TR
306	U208	2909-001086	FILTER-DUPLEXER 942.5MHZ,897.5MHZ,1.1/1.	SHS-L090D
307	U209	0504-001012	TR-DIGITAL, NPN, 150mW, 10K-47Kohm, EMT	DTC114YETL
308	U304	1103-001184	24C256,32Kx8Bit,dBGA,8P,92MIL,-,2.7V TR	AT24C256-10UI-2.7-T.R
309	U400	0504-001012	TR-DIGITAL, NPN, 150mW, 10K-47Kohm, EMT	DTC114YETL
310	U401	1202-001022	IC-VOLFAGECOMP, 8P, DUAL, 36V, CMOS	TC75W56FU
311	U409	0504-000168	TR-DIGITAL, NPN, 100mW, 47K-47Kohm, SSM	DTC144EEA
312	U410	1203-001702	IC-DC/DC CONVERTER, 1676, SOP, 10P, 112MIL	MAX1676EUB-T
313	U411	1203-001903	LTC1986	LTC1986
314	U413	1001-001145	ANALOG SWITCH	MAX4599
315	U414	1205-001881	ONE C	VP40575
316	U415	1001-001145	ANALOG SWITCH	MAX4599
317	U454	0504-000168	TR-DIGITAL, NPN, 100mW, 47K-47Kohm, SSM	DTC144EEA
318	X400	2801-003856	CRYSTAL, 32.768KHz, 30ppm, 9pF	MC-146
319	C201	N.C POINT		
320	U204	0504-001058	TR-DIGITAL, RN4985	RN4985
321	U210	0504-001058	TR-DIGITAL, RN4985	RN4985
322	U211	0504-001058	TR-DIGITAL, RN4985	RN4985
323	U412	0504-001058	TR-DIGITAL, RN4985	RN4985
324	U441	1203-002101	IC-BATTERY	SC1410CQS
325	U453	0504-000168	TR-DIGITAL	DTC144EEA
326	C216	N.C POINT		
327	C226	N.C POINT		
328	C228	N.C POINT		
329	C242	N.C POINT		
330	C245	N.C POINT		
331	C248	N.C POINT		
332	C423	2203-005061	C-CHIP, 100nF, 1005	CLO5F104ZON
333	C424	2203-001432	C-CHIP, 47nF, 1005	CLO5F473ZON
334	C433	2404-001105	10uF, 2012	ECSTOZ106R

<b>NO</b>	<b>Reference</b>	<b>SEC CODE</b>	<b>Part Description</b>	<b>Vendor Part No.</b>
335	C447	N.C POINT		
336	C543	N.C POINT		
337	C544	N.C POINT		
338	C566	N.C POINT		
339	C567	N.C POINT		
340	C582	N.C POINT		
341	R219	N.C POINT		
342	R237	N.C POINT		
343	R436	N.C POINT		
344	R448	N.C POINT		
345	L221	N.C POINT		
346	R572	N.C POINT		
347	C541	N.C POINT		
348	C542	N.C POINT		
349	C549	N.C POINT		
350	C550	N.C POINT		
351	D417	N.C POINT		
352	R536	N.C POINT		
353	R537	N.C POINT		
354	R538	N.C POINT		
355	R539	N.C POINT		
356	R546	N.C POINT		
357	R547	N.C POINT		
358	U446	N.C POINT		
359	U447	N.C POINT		
360	R454	N.C POINT		
361	U451	N.C POINT		

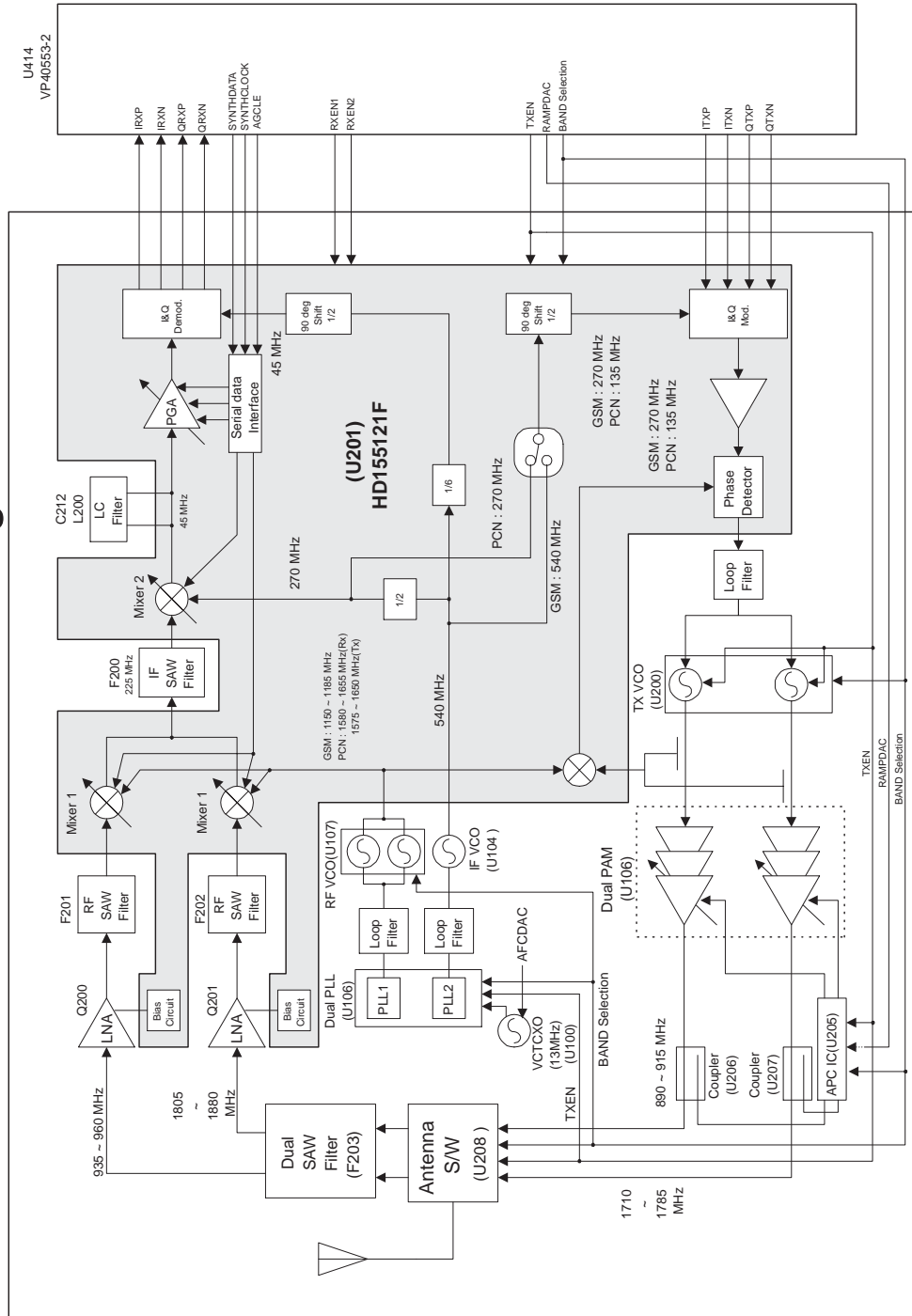
## 4. Block Diagrams

### 4-1 Main Base Band



## 4-2 Main RF

# Main RF Block Diagram



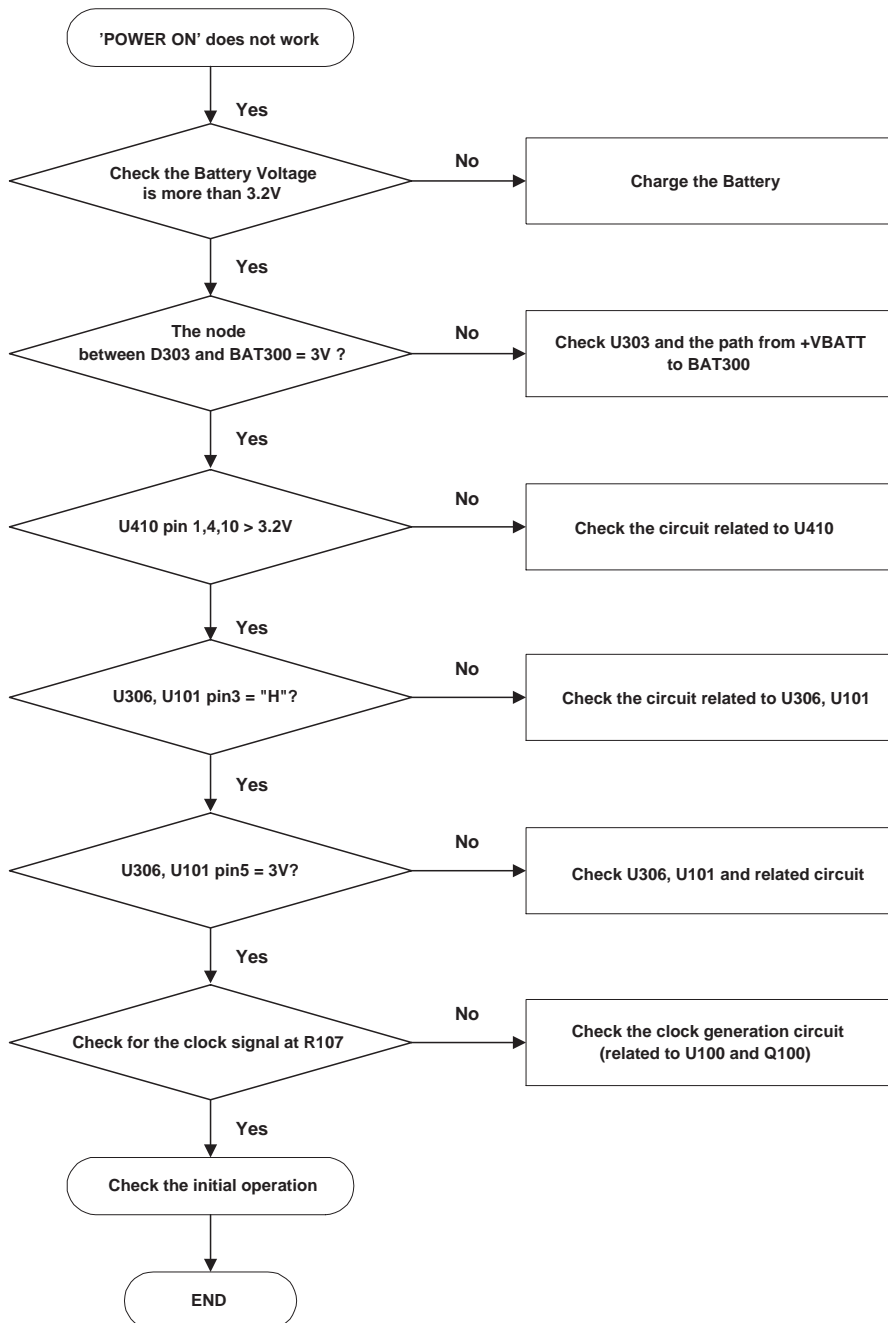
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## 5. Flow chart of trouble shooting

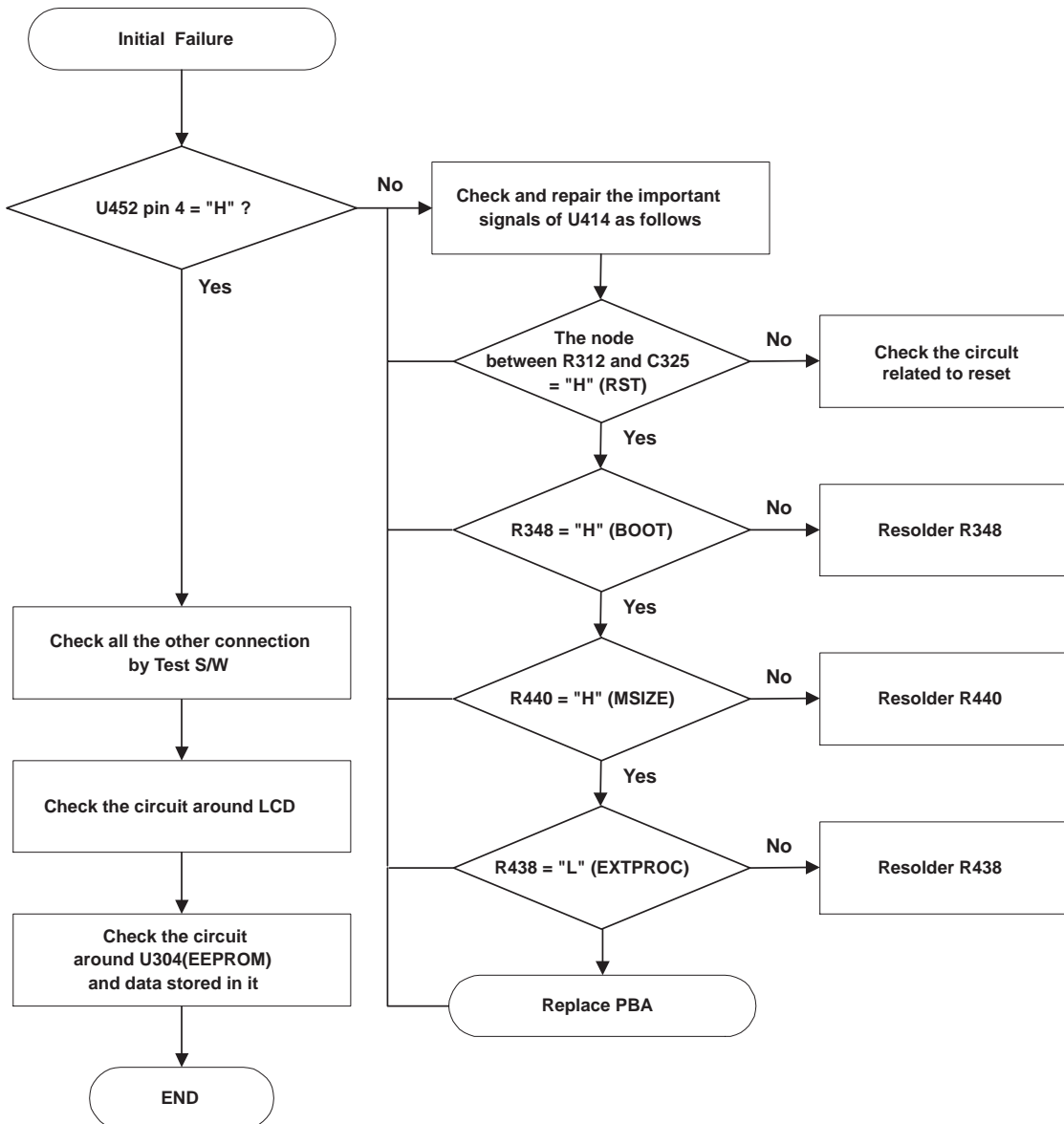
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### 5-1 Power ON

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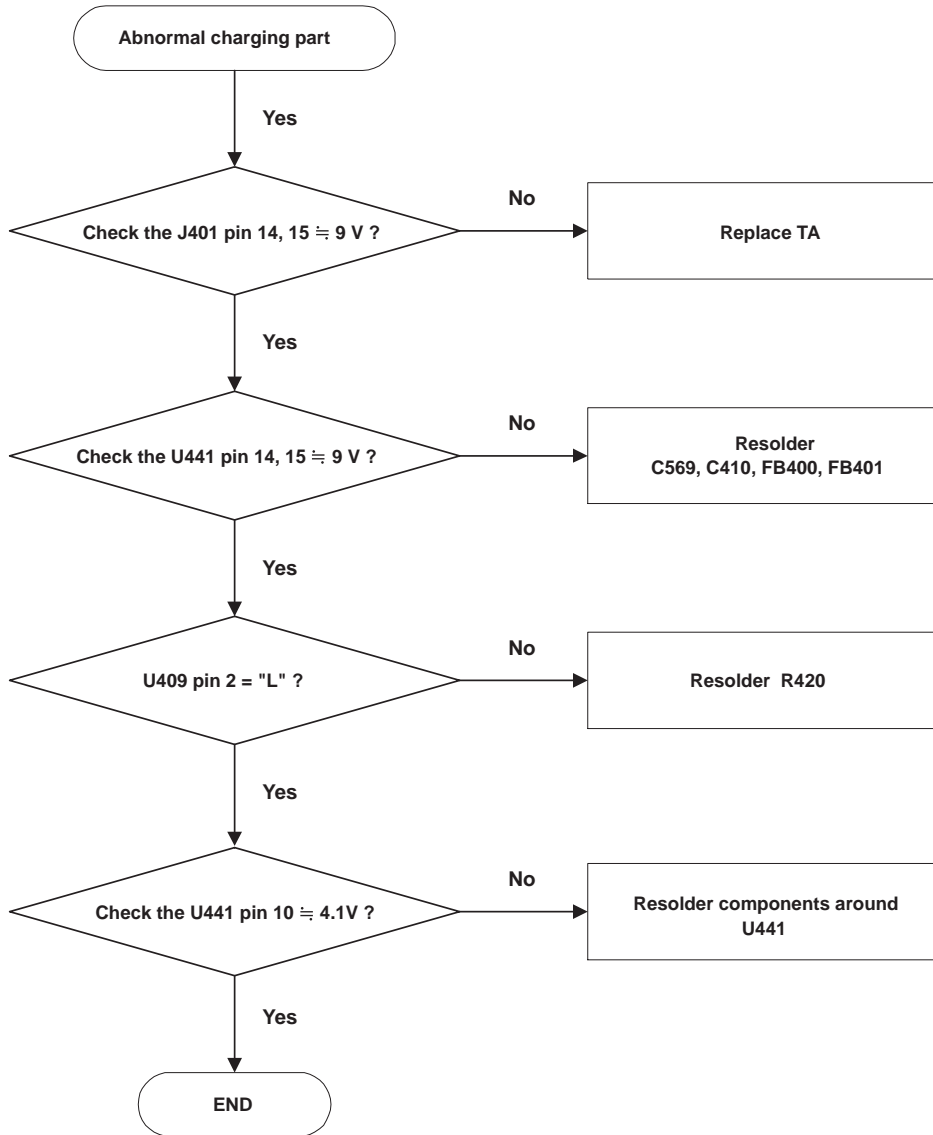
## 5-2 Initial



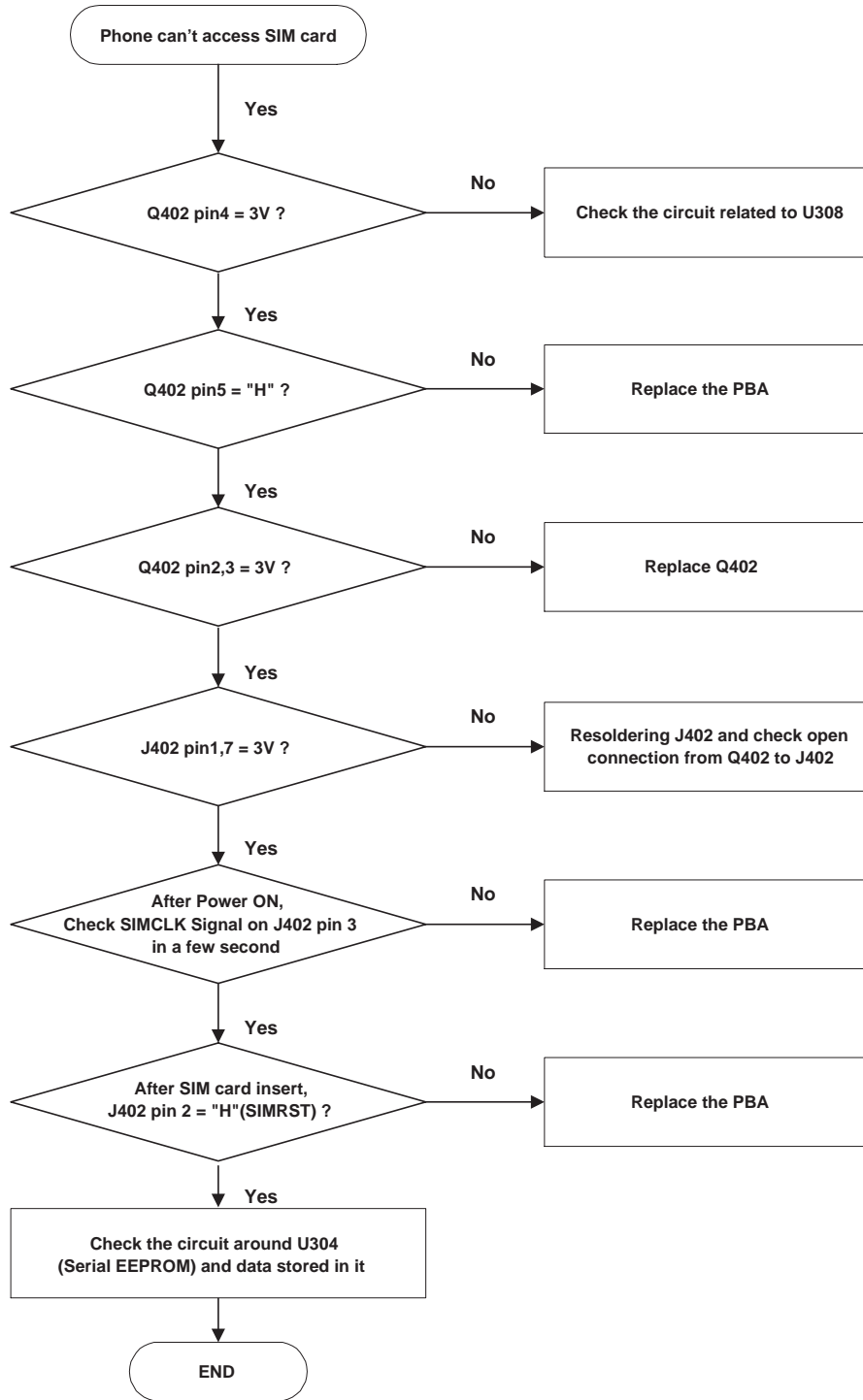
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## 5-3 Charging Part

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## 5-4 Sim Part

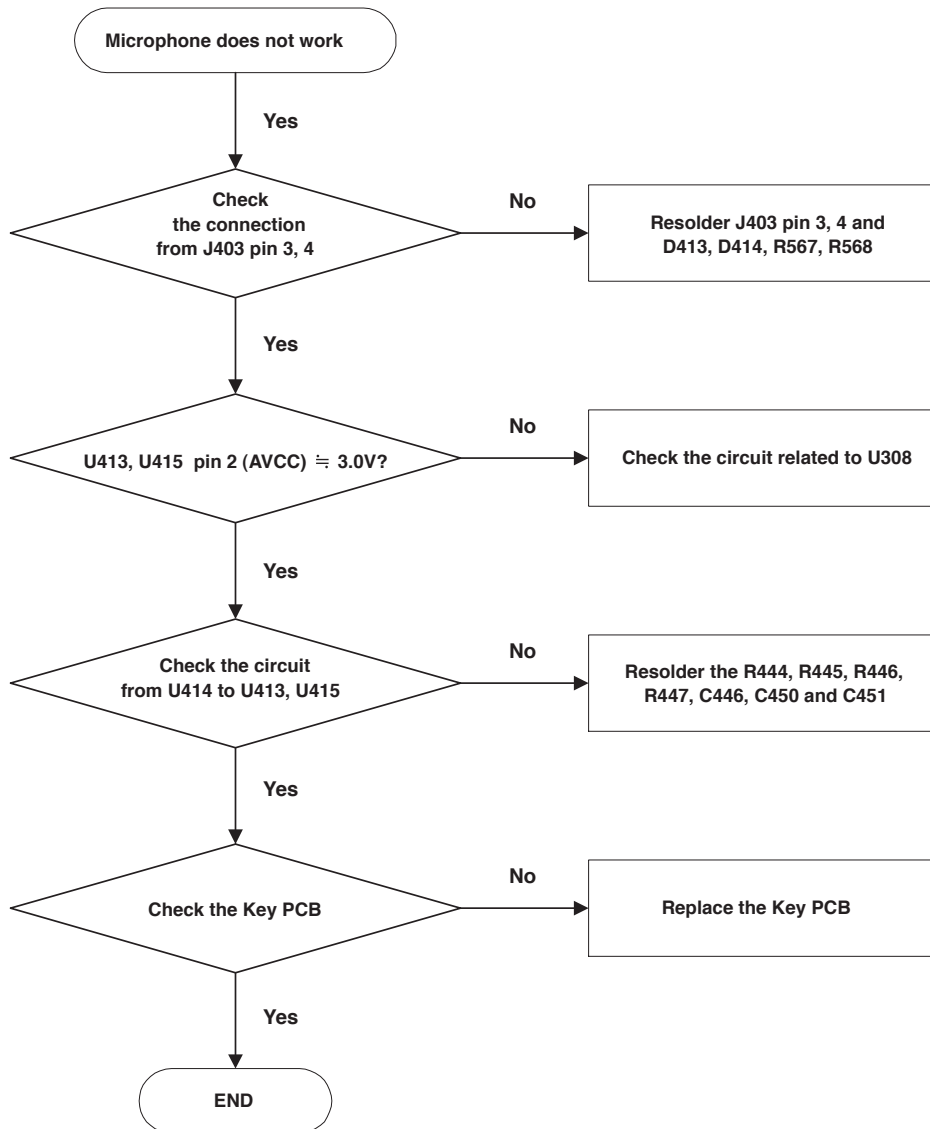




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## 5-5 Microphone Part

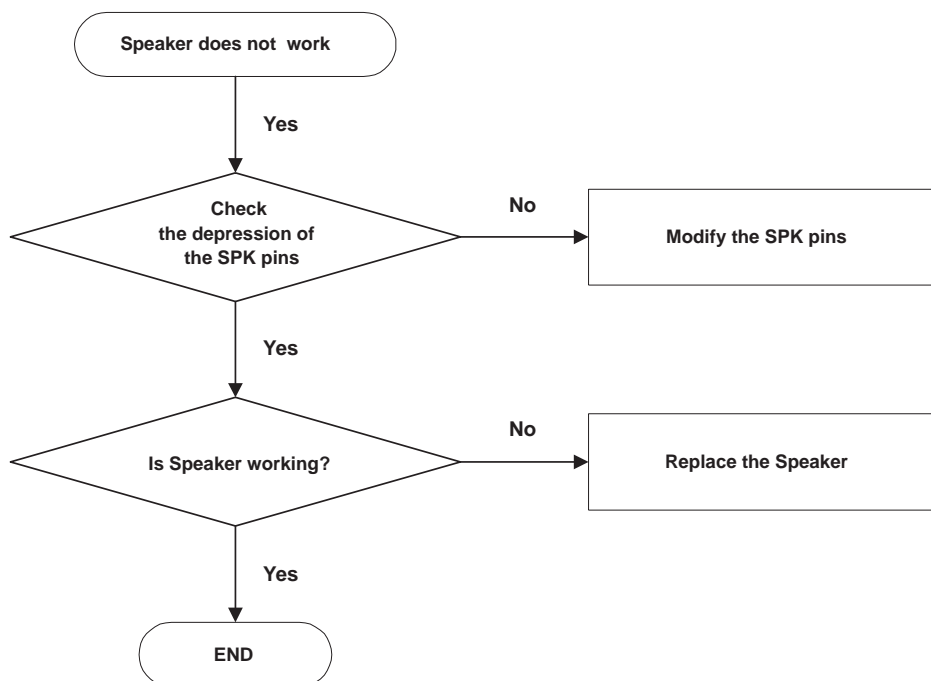
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## 5-6 Speaker Part

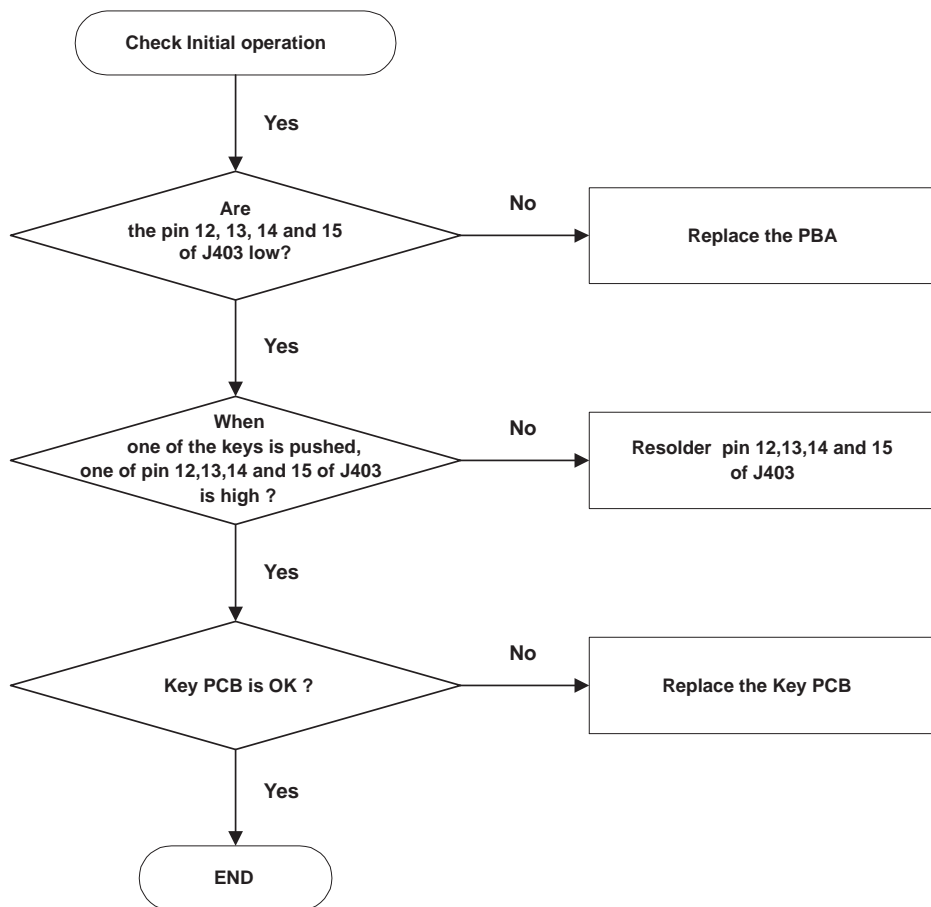
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## 5-7 Key Data Input

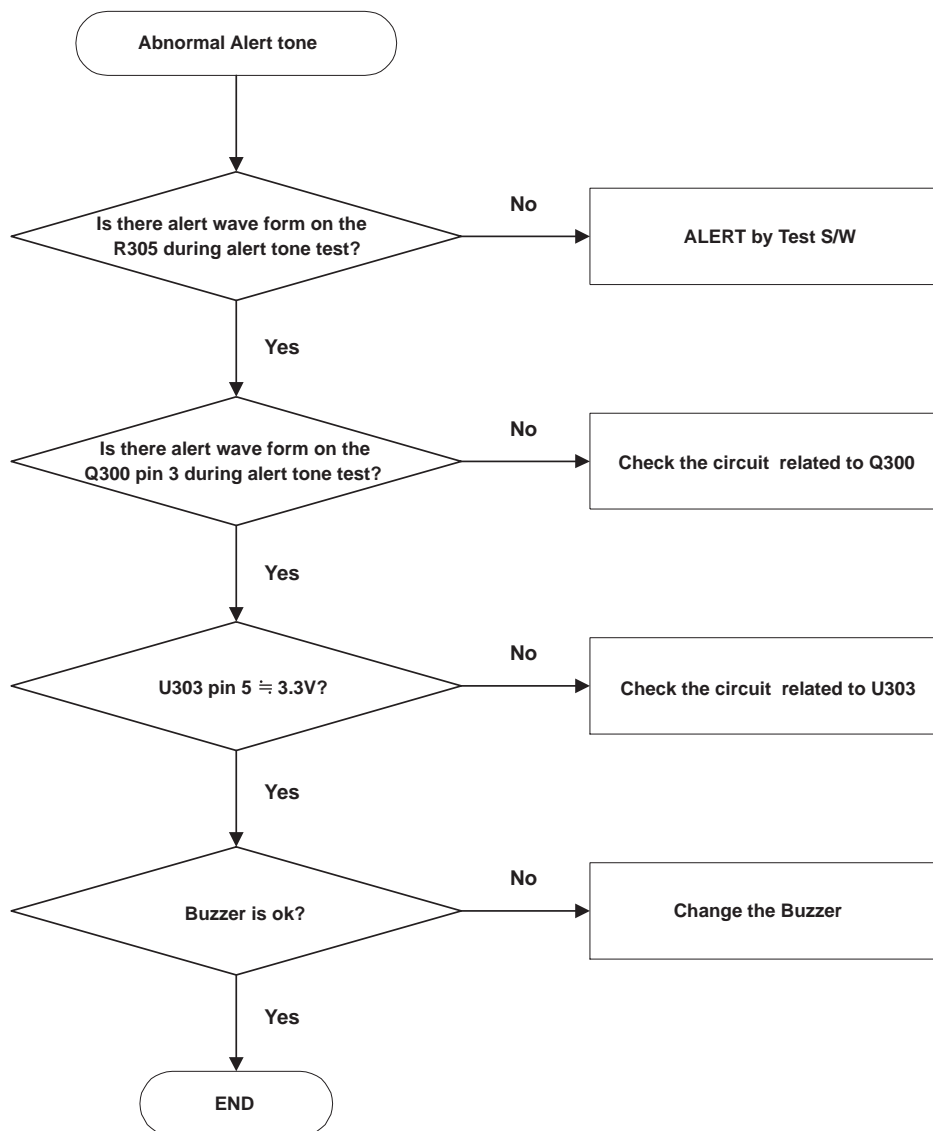
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## 5-8 Alert tone

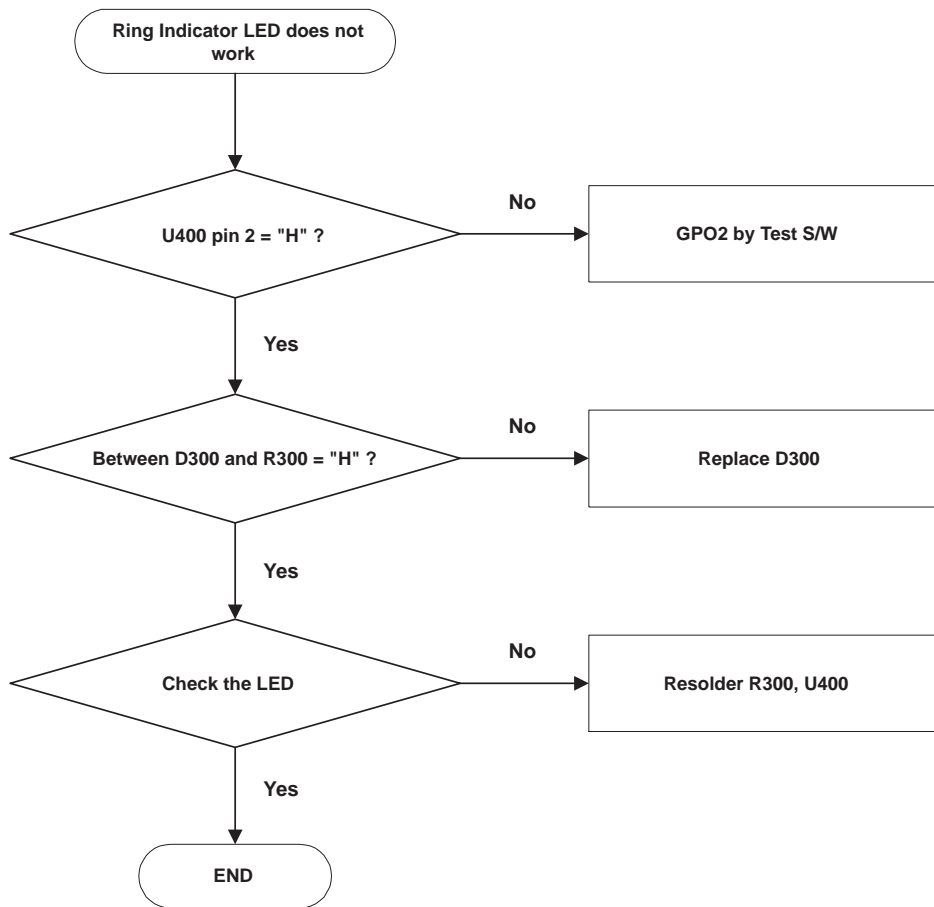
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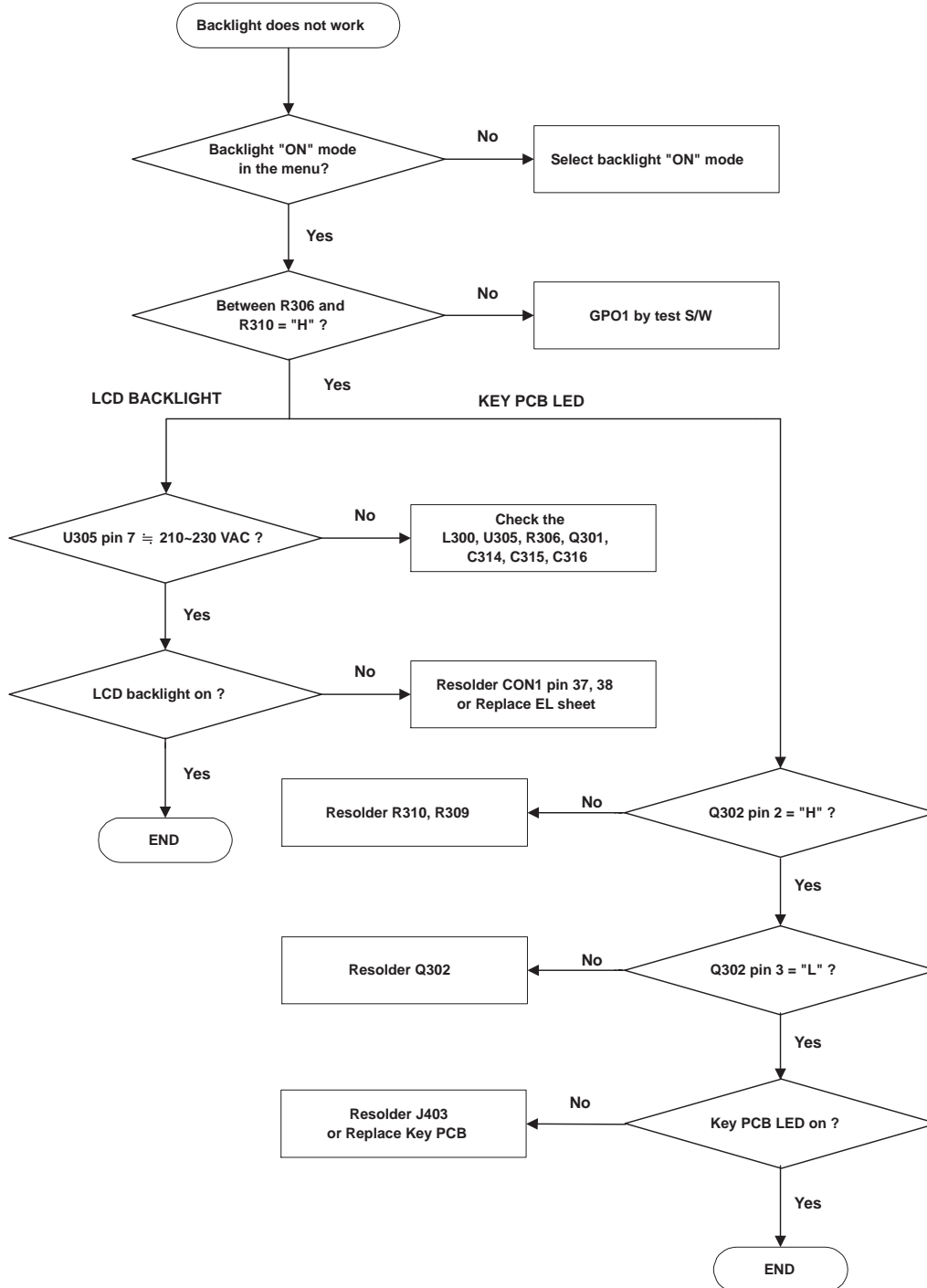
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## 5-9 Ring Indicator

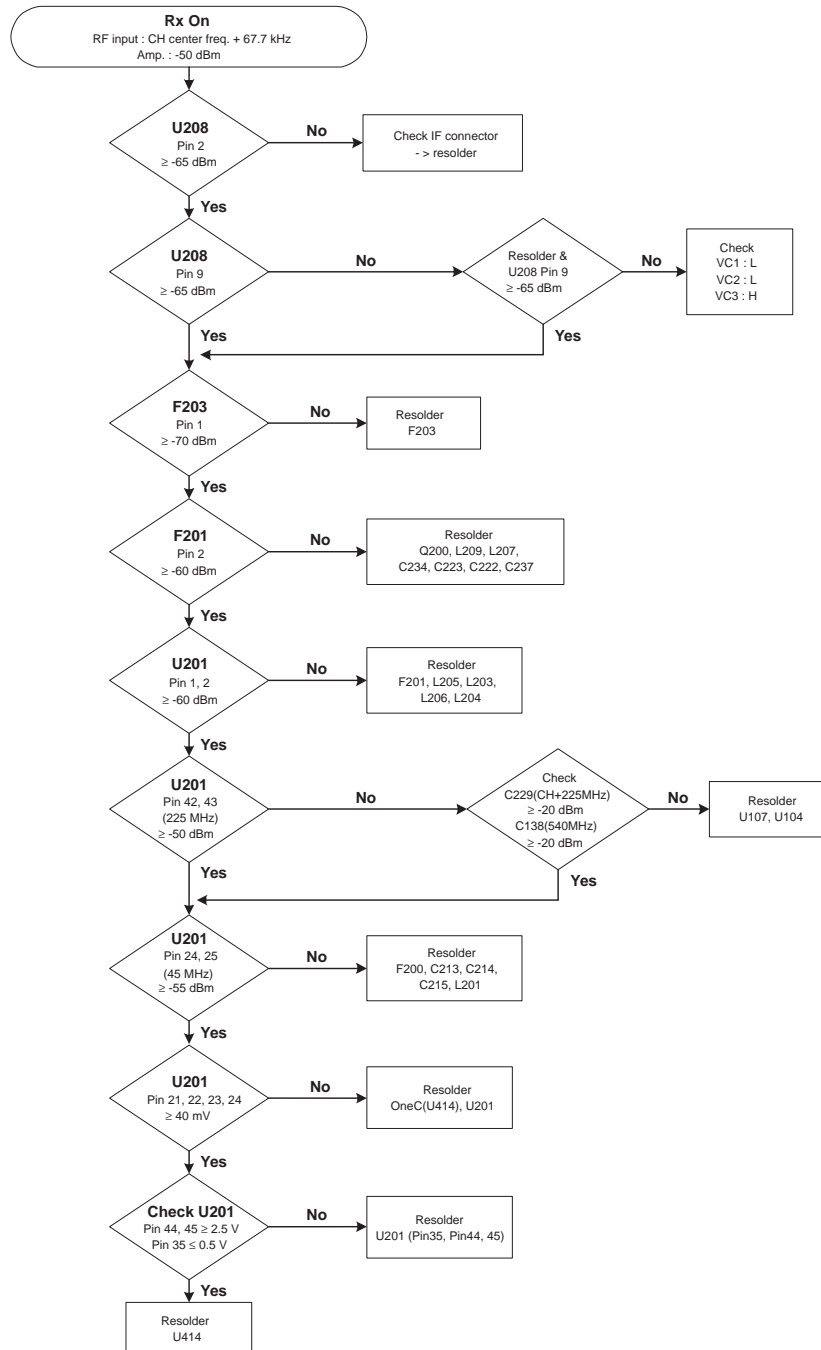
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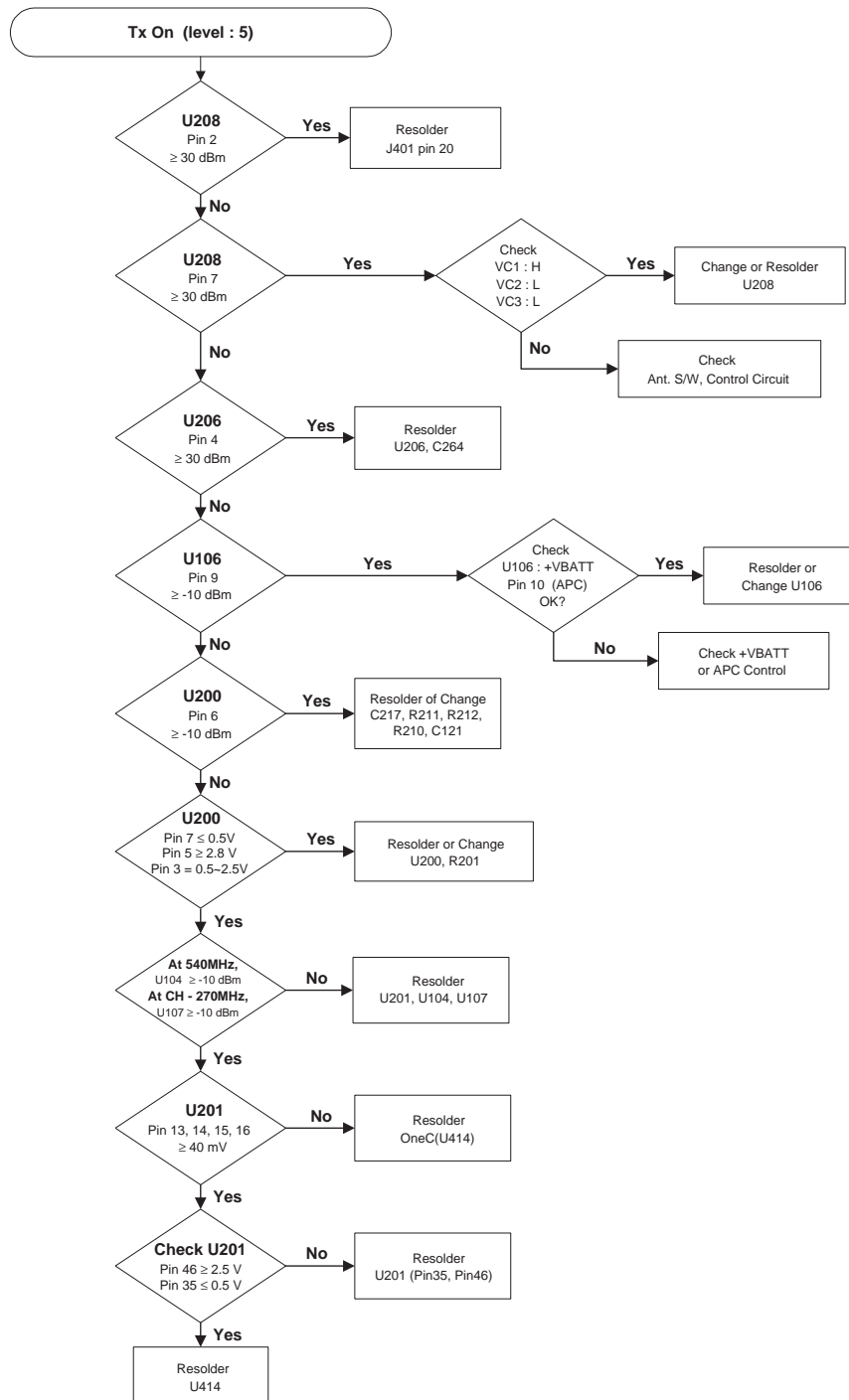
## 5-10 Back Light



## 5-11 GSM Receiver

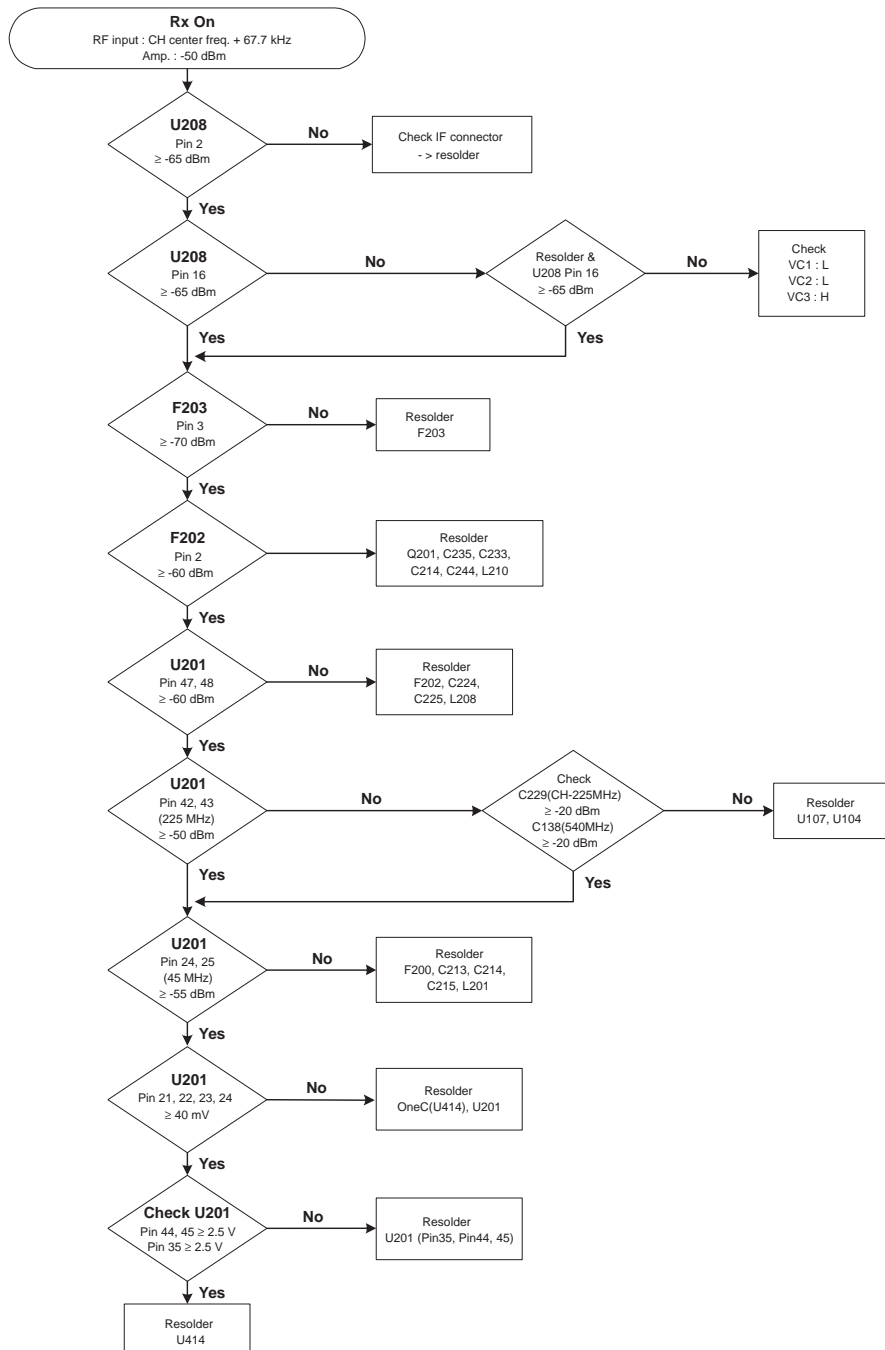


## 5-12 GSM Transmit





## 5-13 DCS Receiver



## 5-14 DCS Transmit

