

SAMSUNG

GSM TELEPHONE SGH-S341i

SERVICE *Manual*

GSM TELEPHONE



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1. SGH-S341i Specification

1. GSM General Specification

	GSM900 Phase 1	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900
Freq. Band[MHz] Uplink/Downlink	890~915 935~960	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFCN range	1~124	0~124 & 975~1023	512~885	512~810
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK
MS Power	33dBm~13dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm
Power Class	5pcl ~ 15pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm
TDMA Mux	8	8	8	8
Cell Radius	35Km	35Km	2Km	-

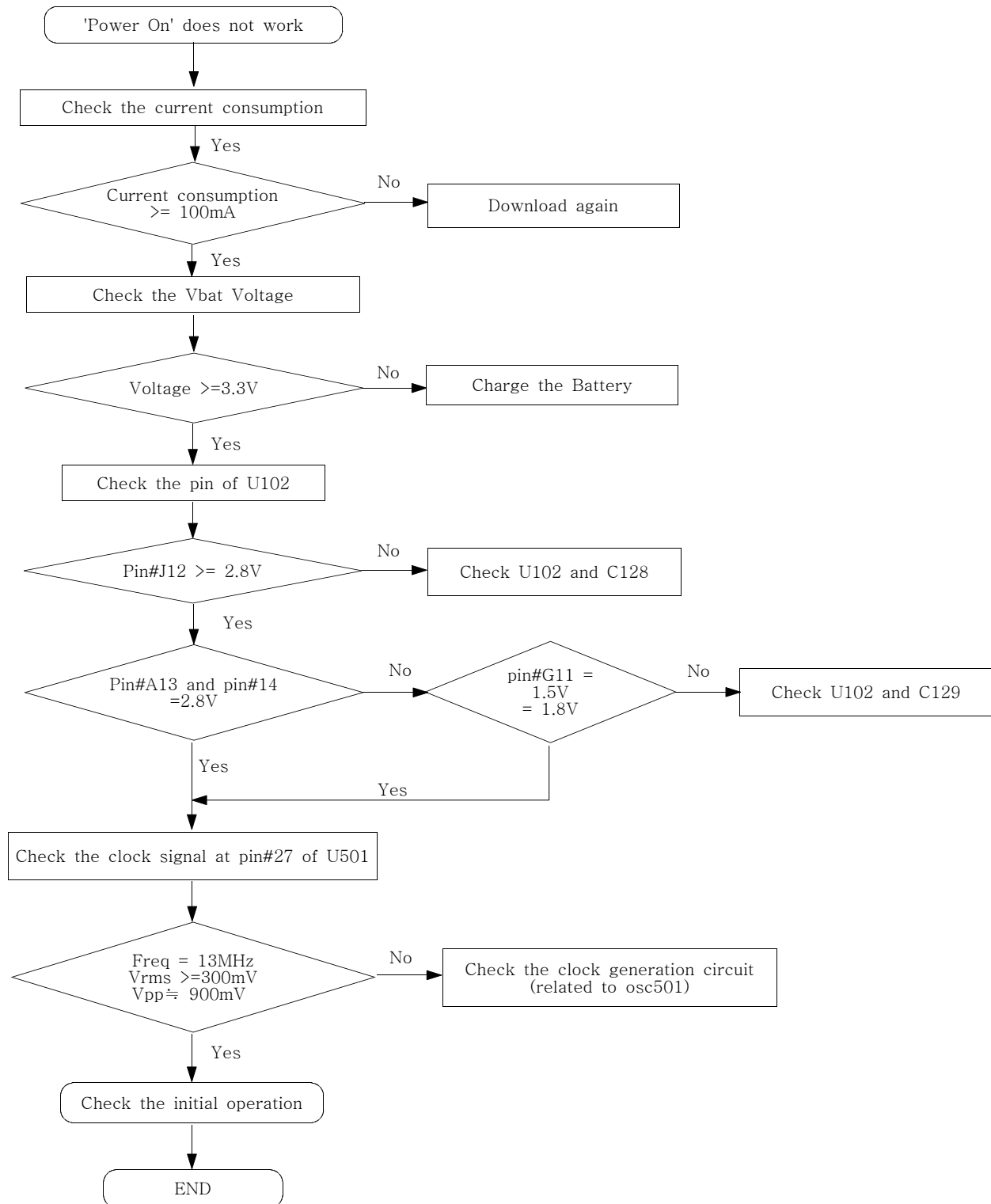
2. GSM TX power class

TX Power control level	GSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4dBm	11	8±4dBm
17	9±3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

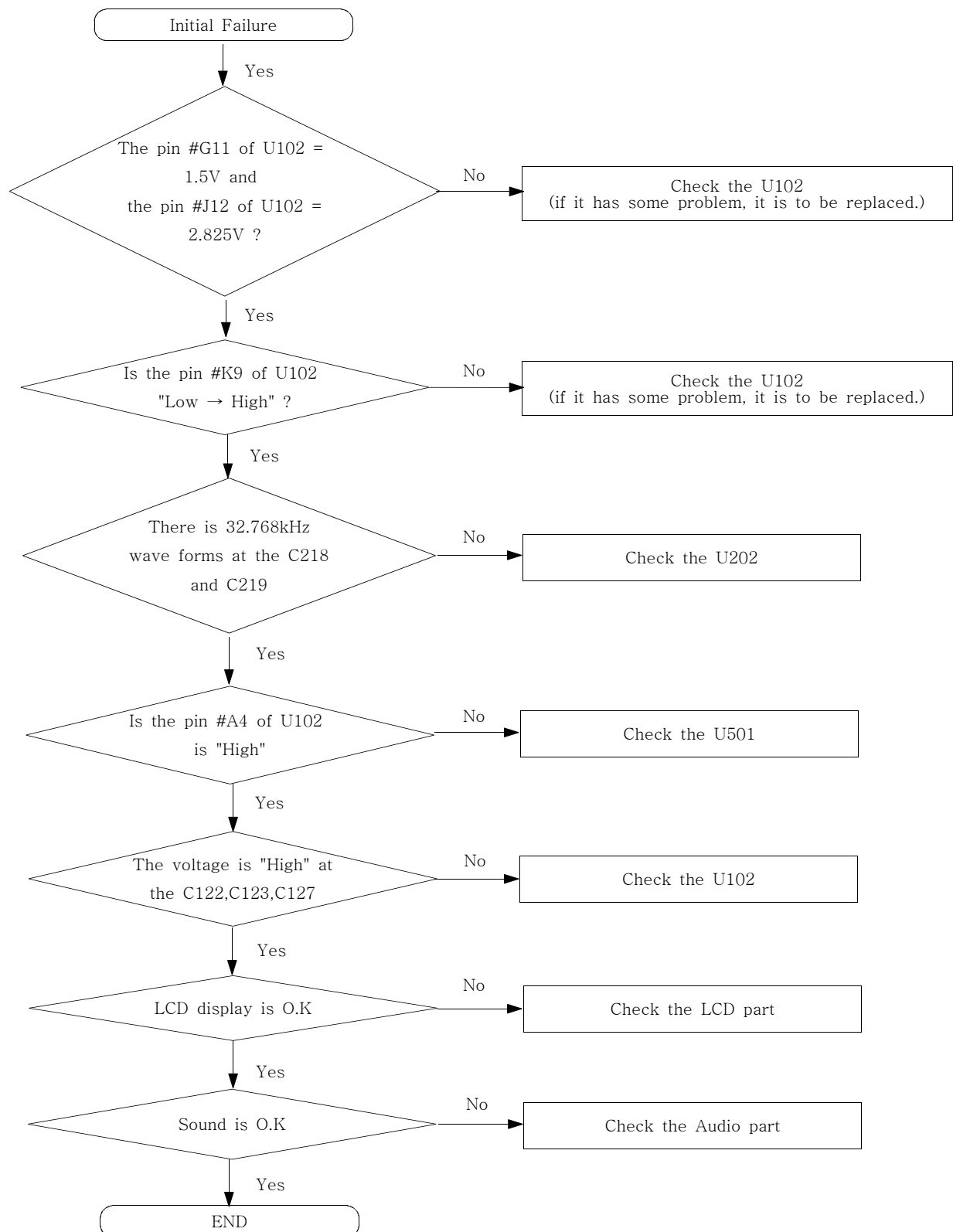
2. SGH-S341i Flow Chart of Troubleshooting

1.Baseband

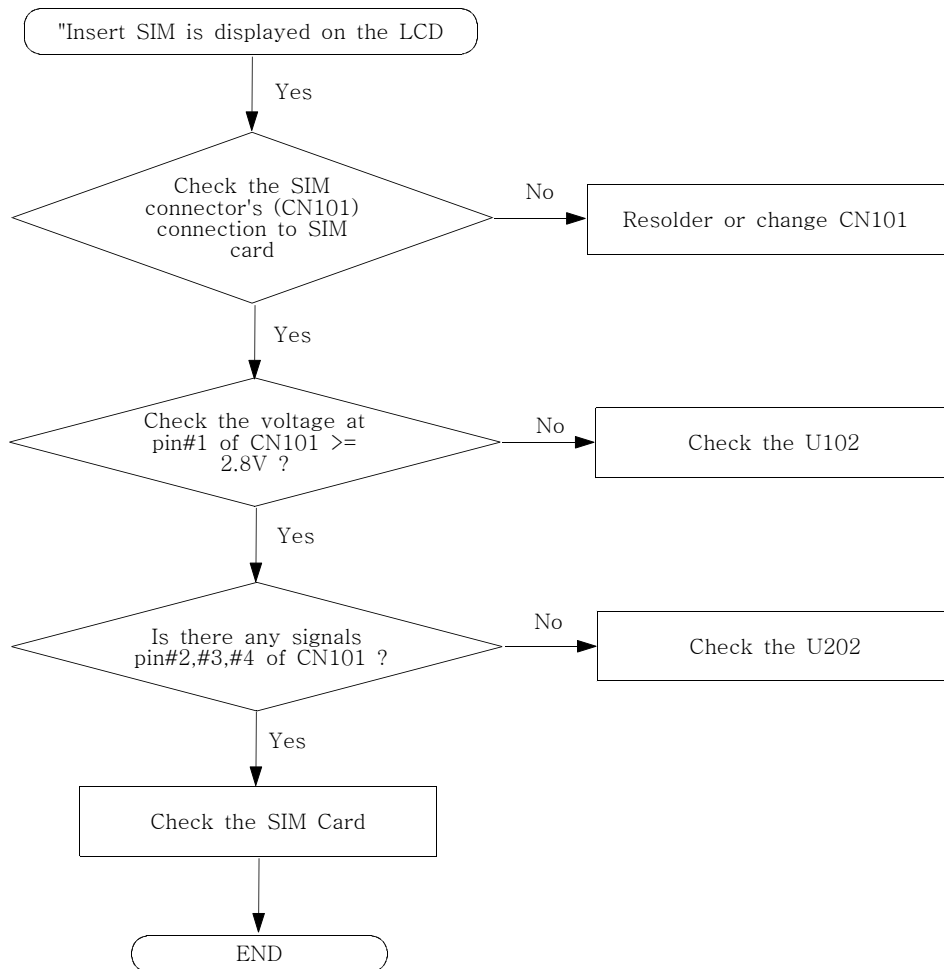
1. Power ON

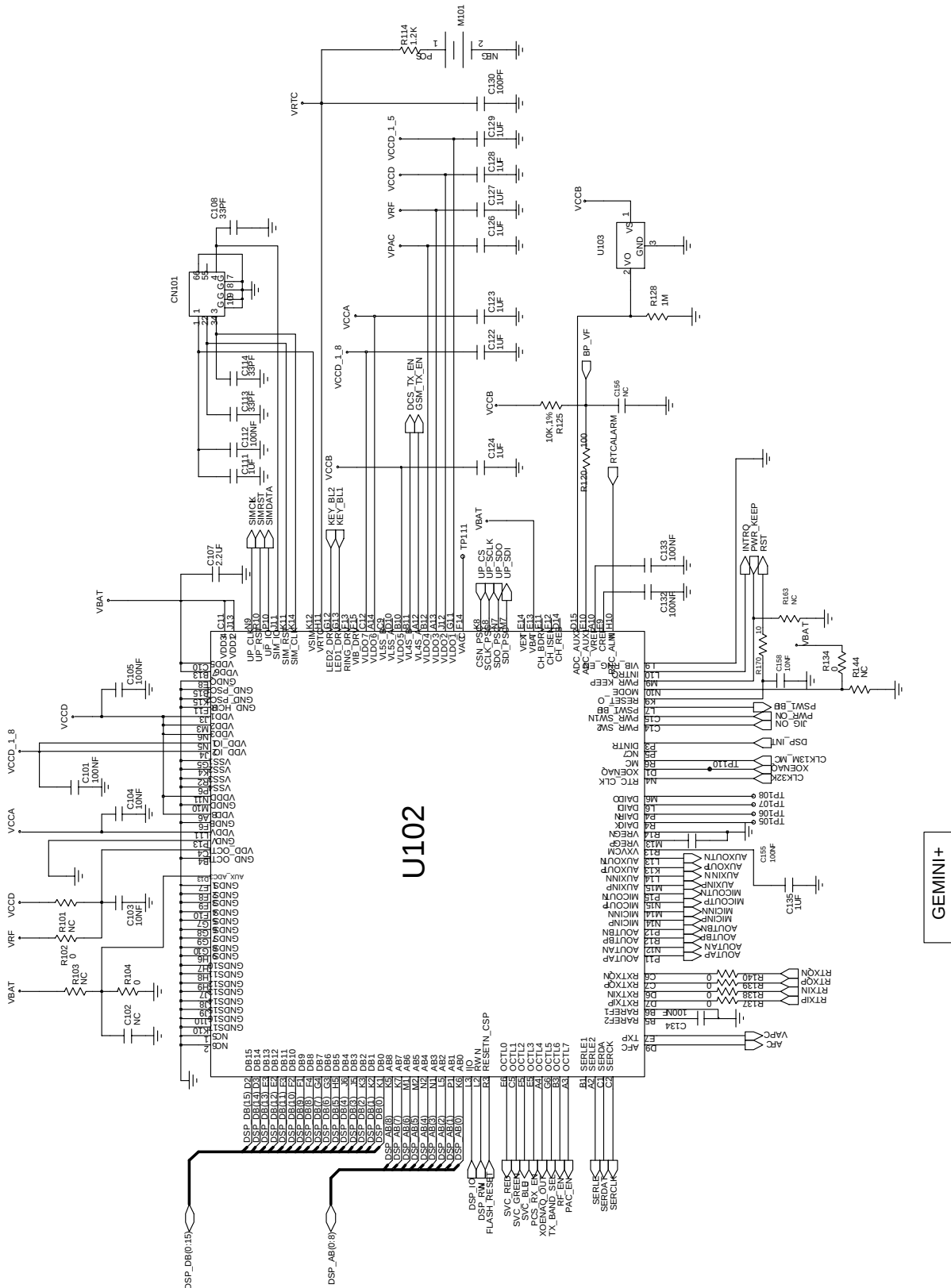


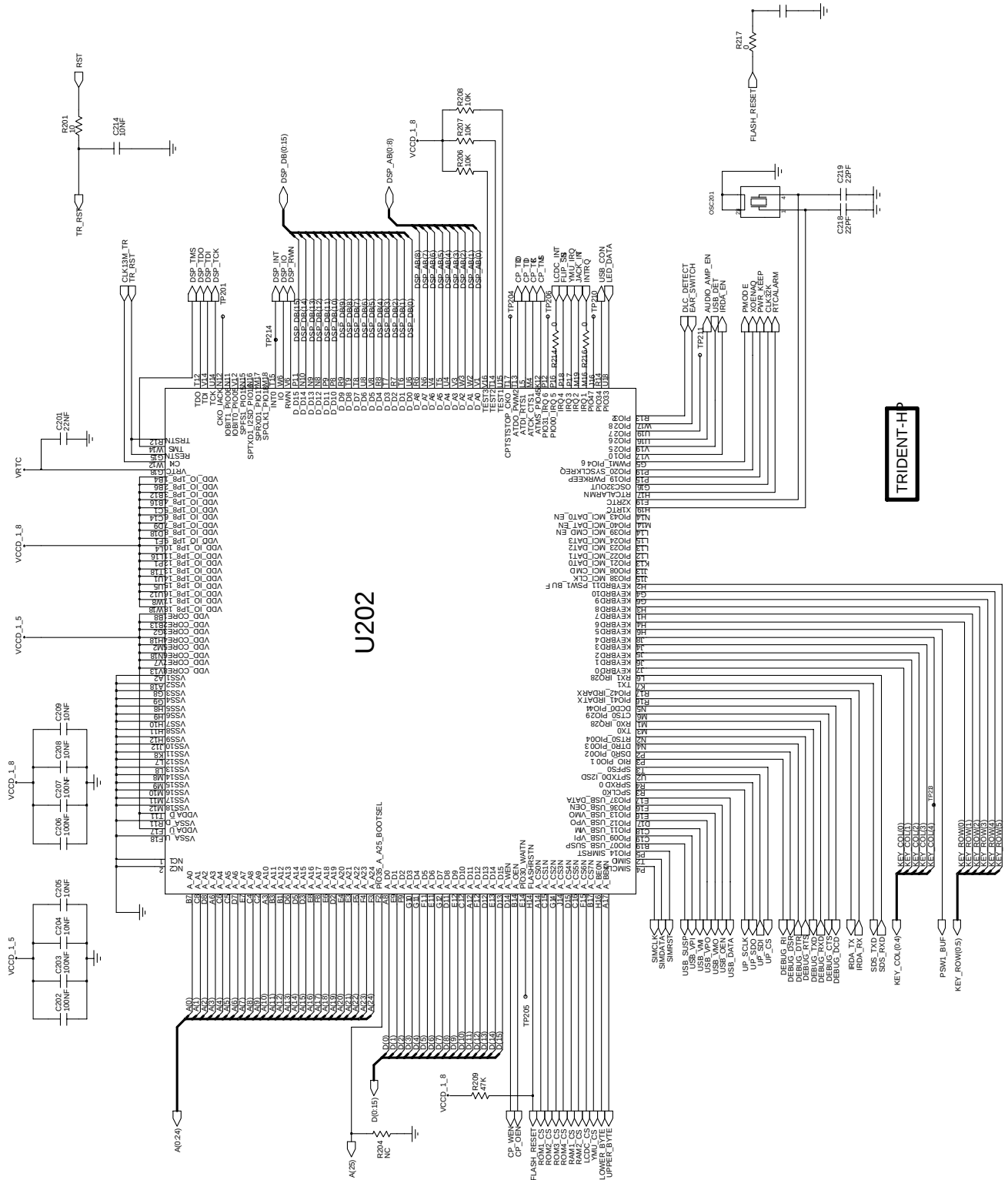
2. Initial

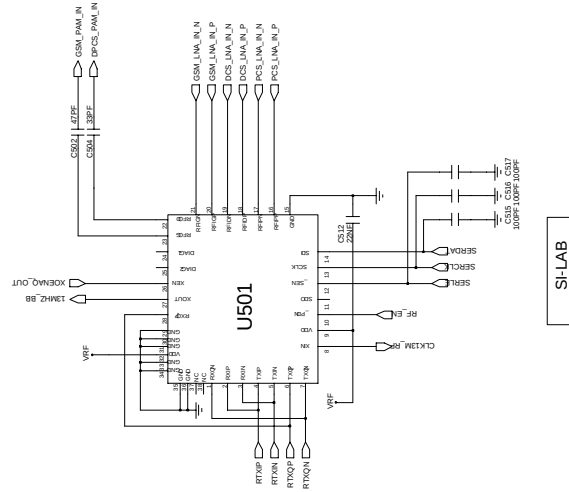


3. Sim Part

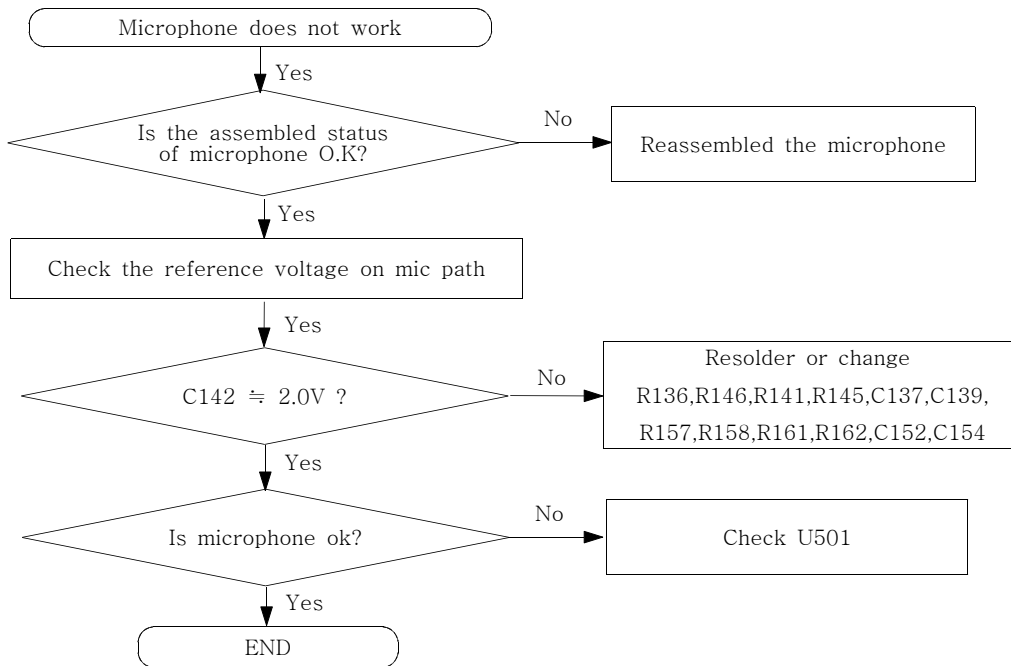


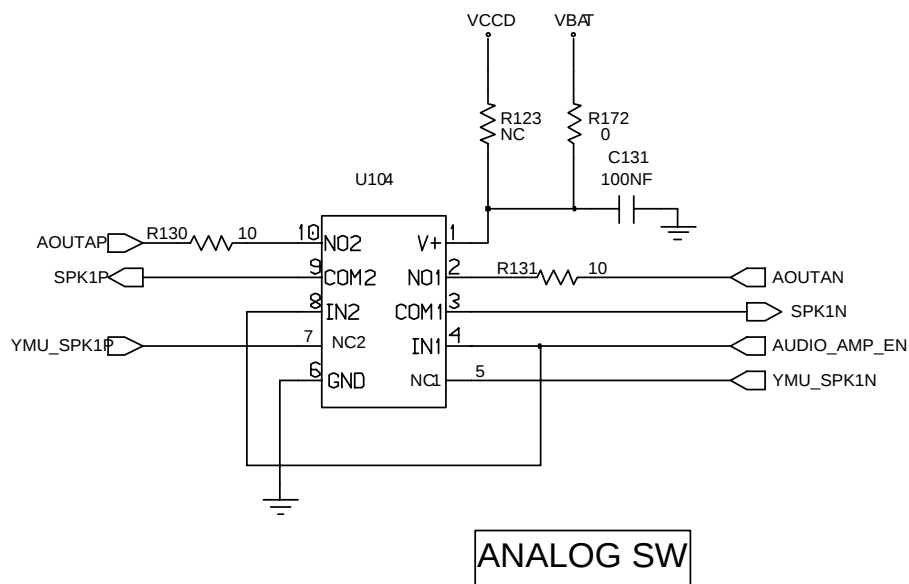
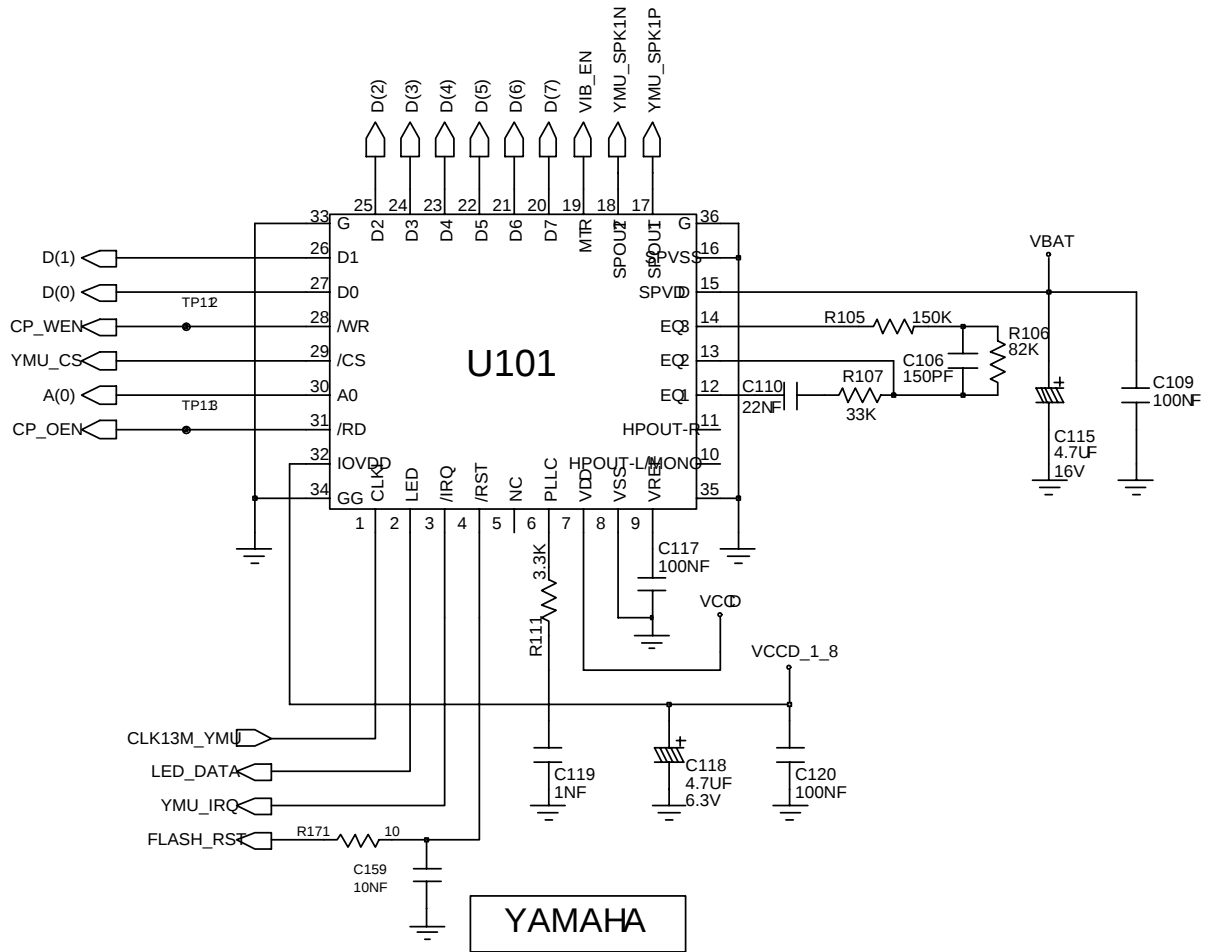






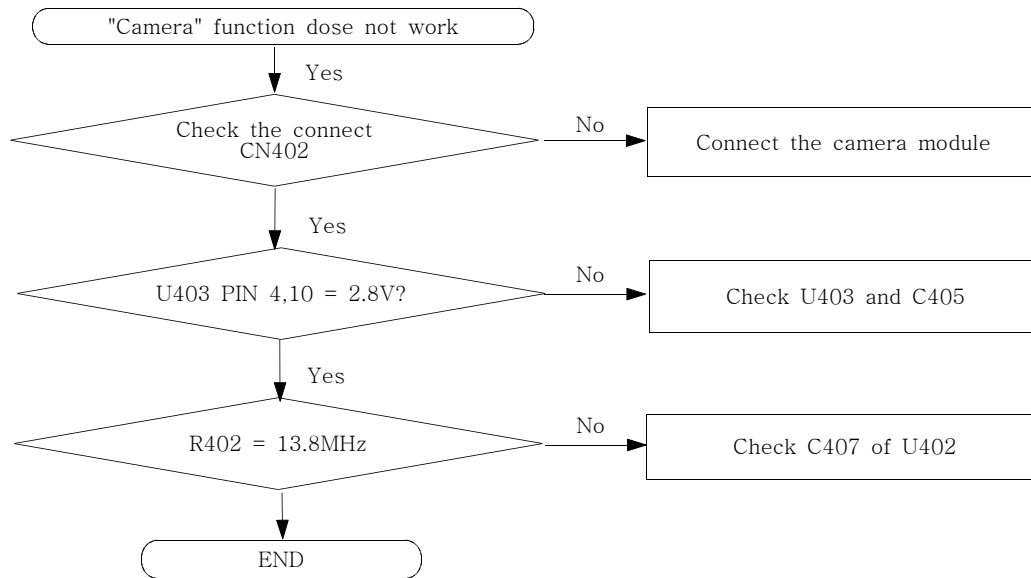
4. Microphone Part







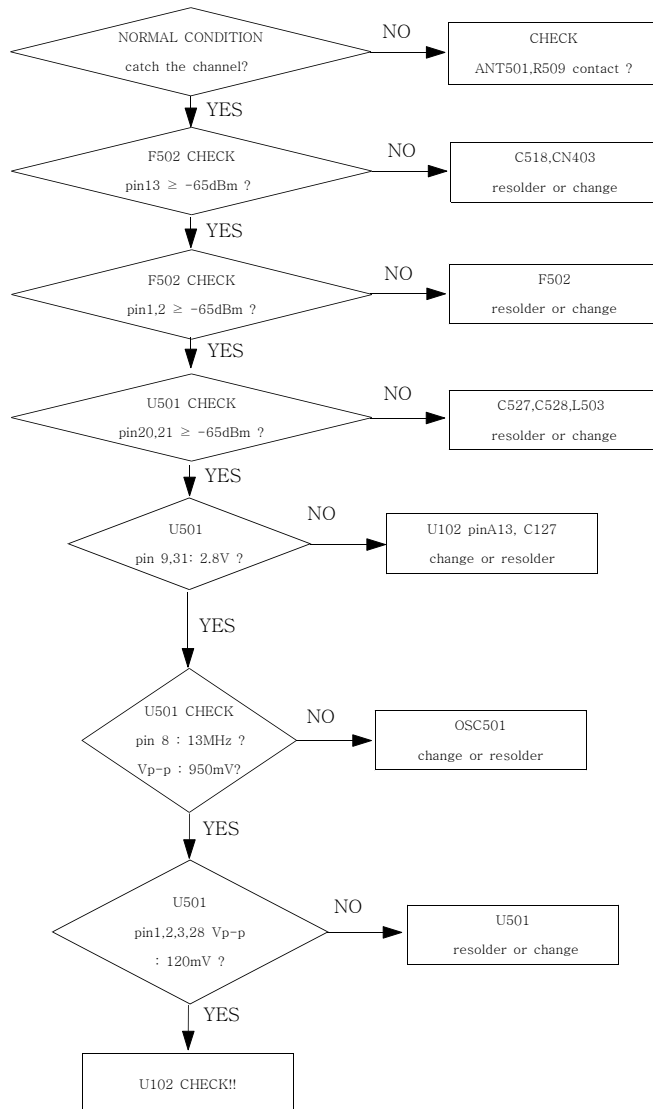
6. Camera Part





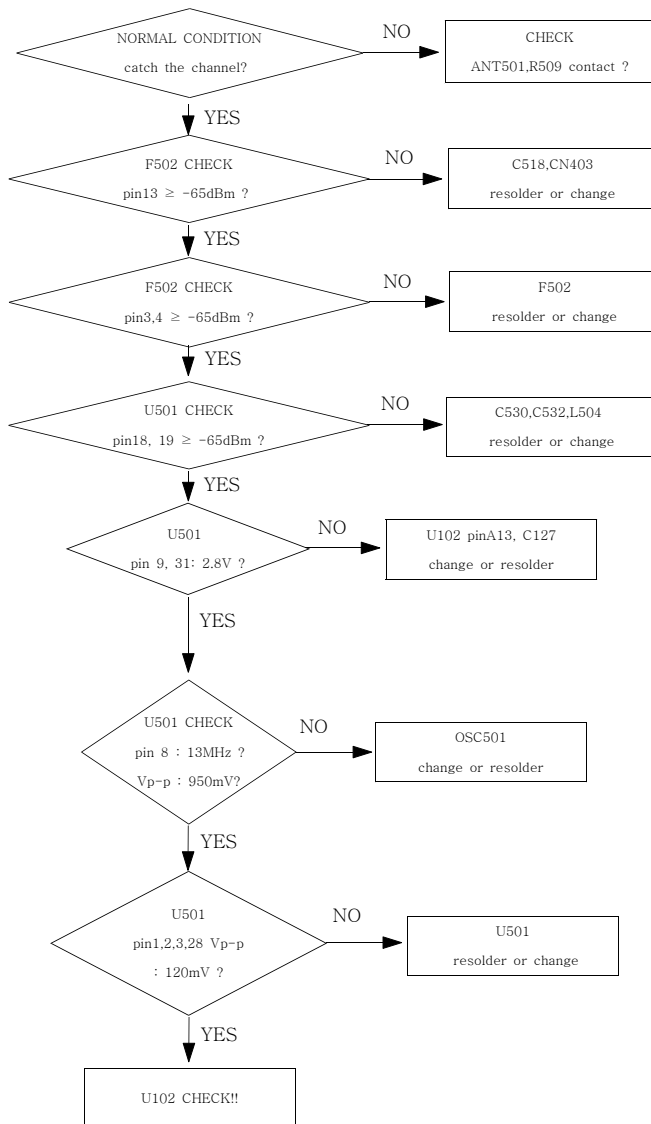
2.RF

1. EGSM RX



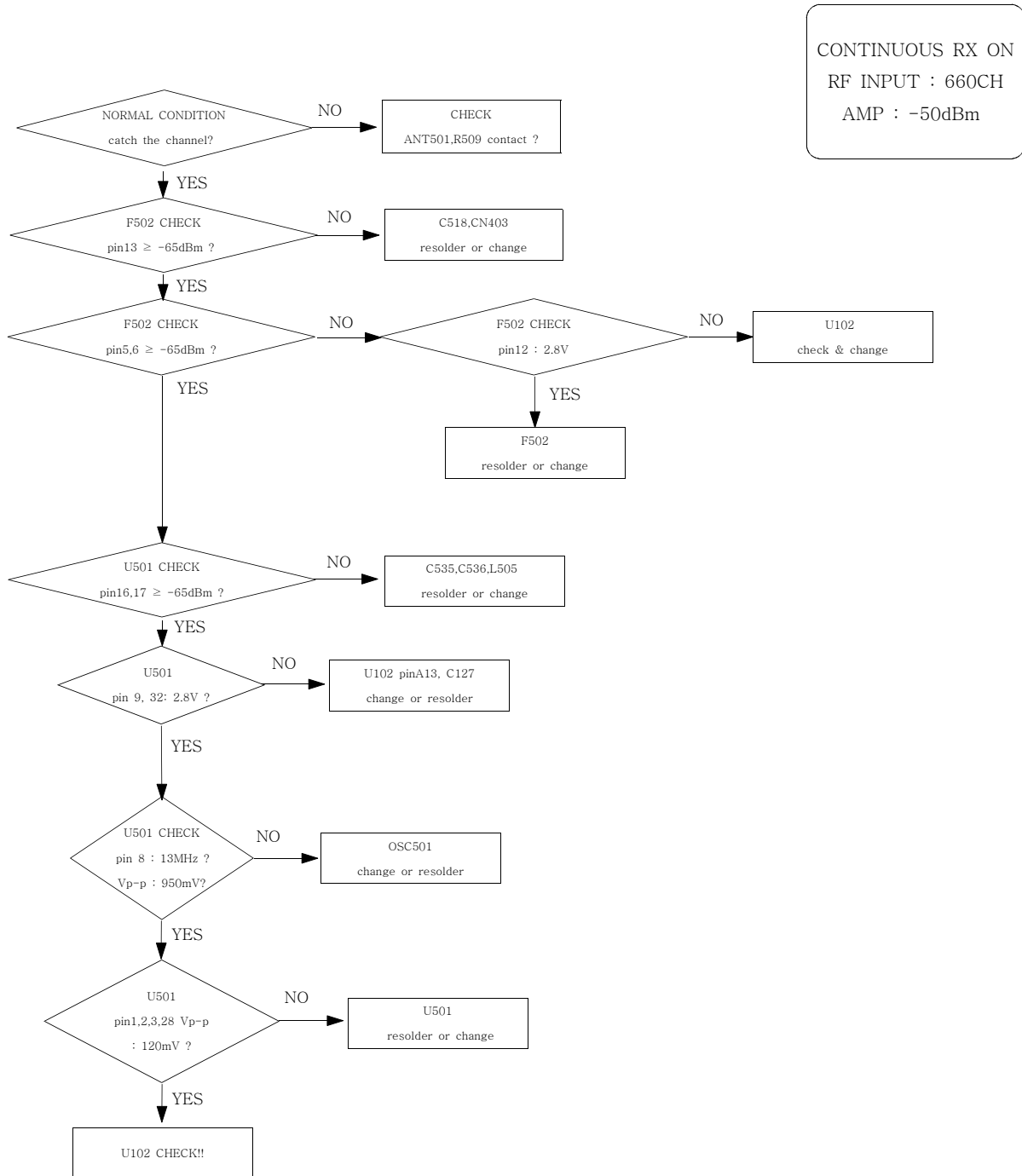
CONTINUOUS RX ON
RF INPUT : 62CH
AMP : -50dBm

2. DCS RX

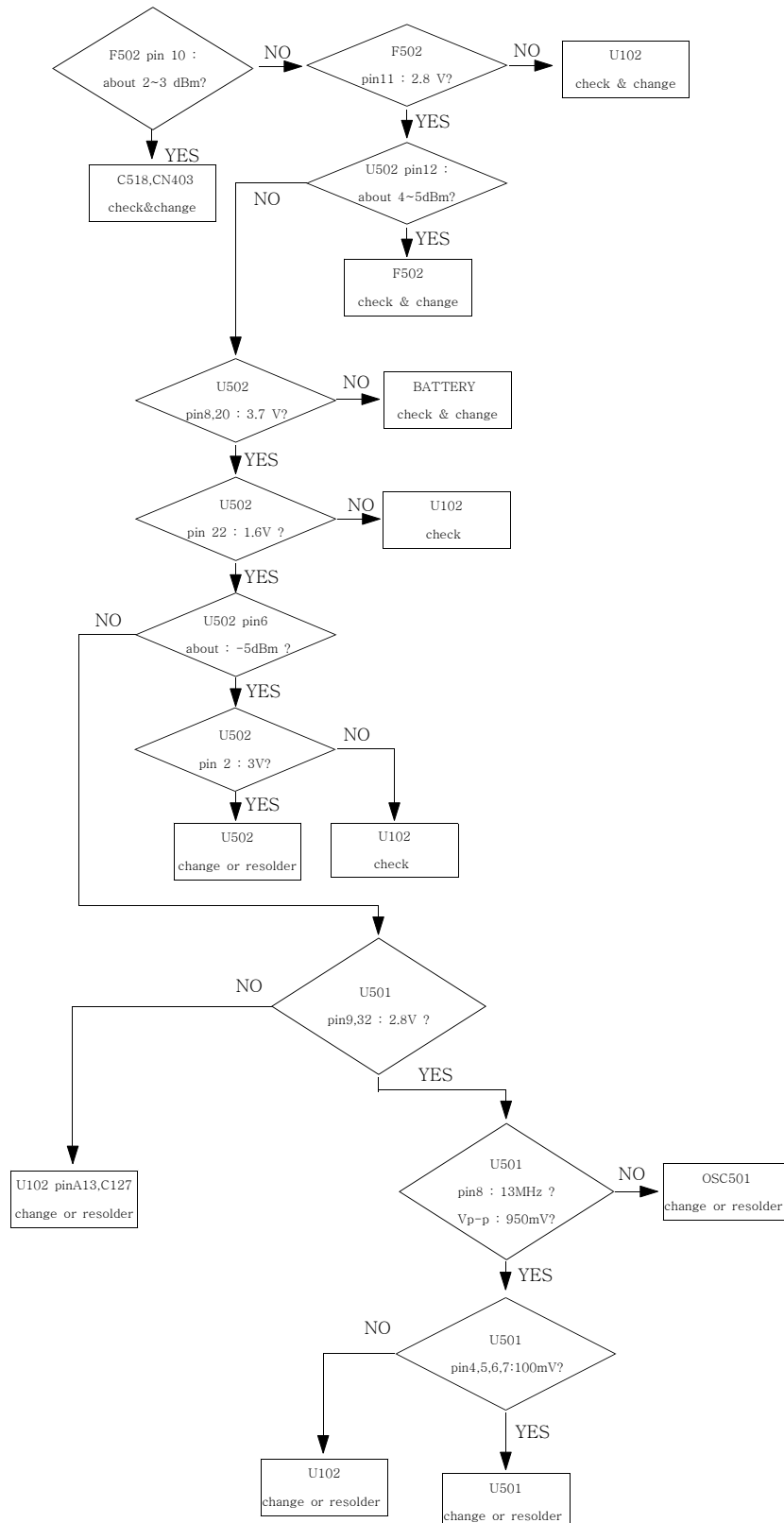


CONTINUOUS RX ON
RF INPUT : 698CH
AMP : -50dBm

3. PCS RX



4. EGSM TX



CONTINUOUS TX ON CONDITION

TX POWER DAC: 600 CODE APPLIED

CH : 62

RBW : 100KHz

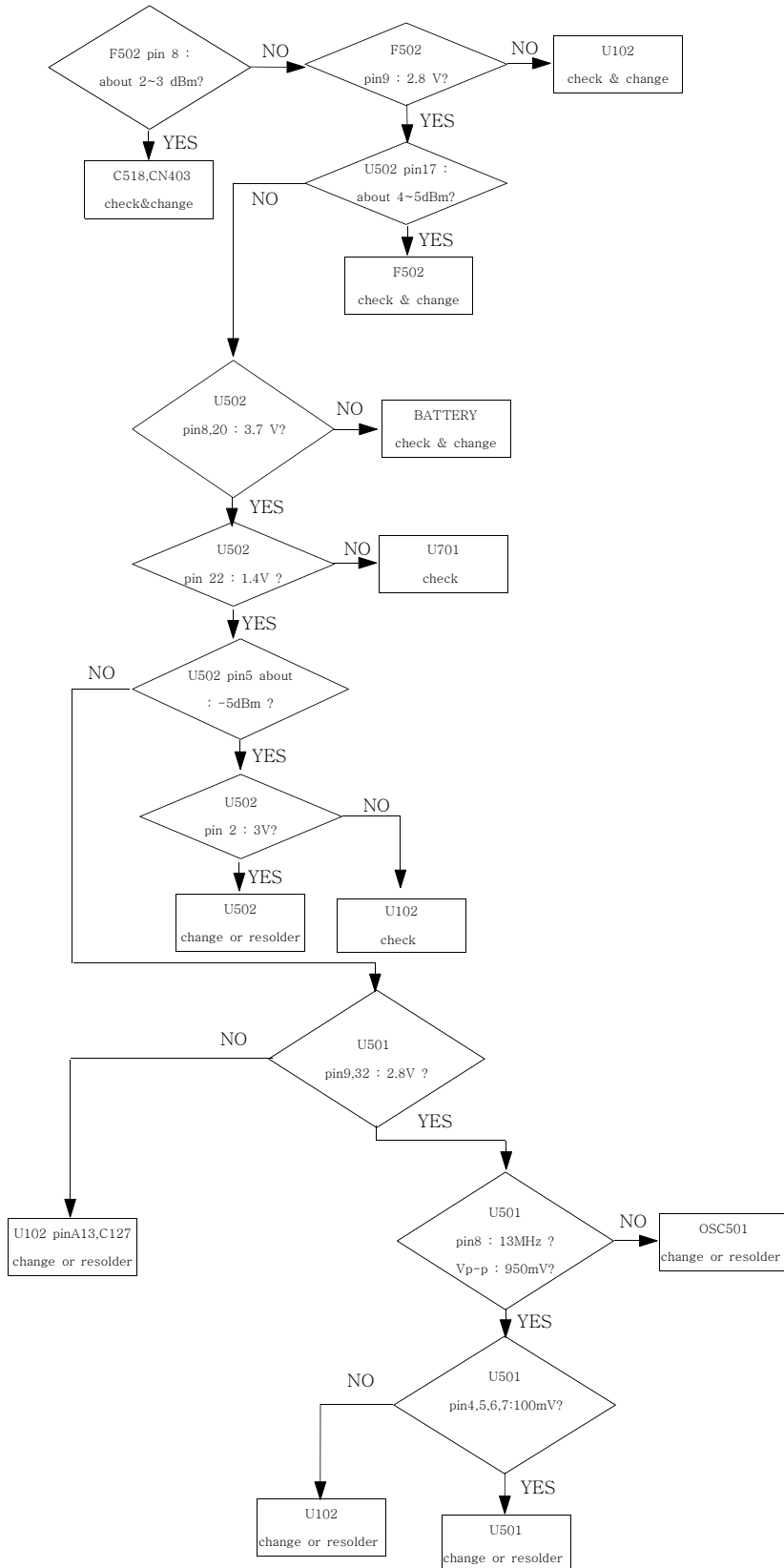
VBW : 100KHz

SPAN : 10MHz

REF LEV. : 10dBm

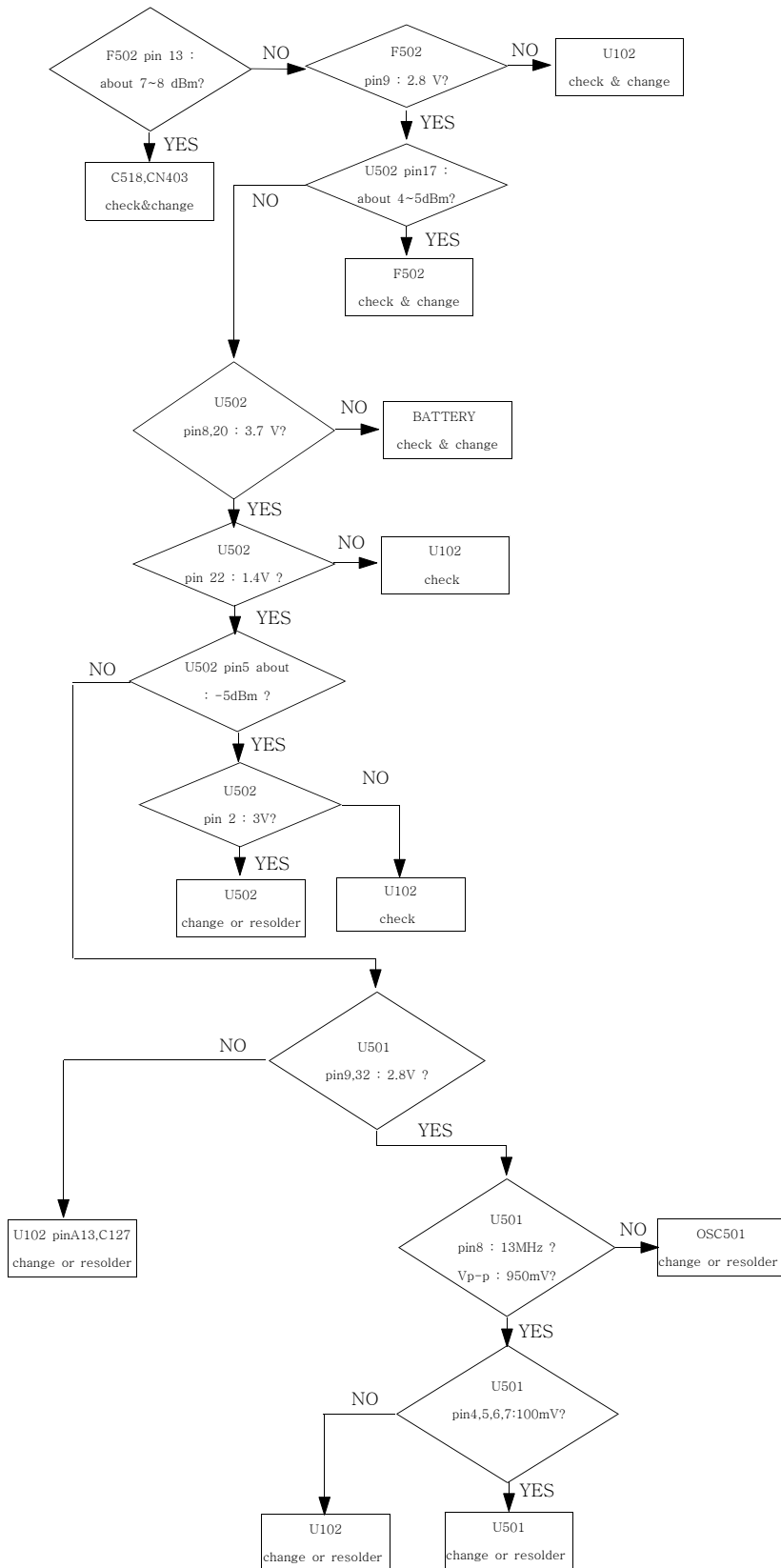
ATT. : 20dB

5. DCS TX



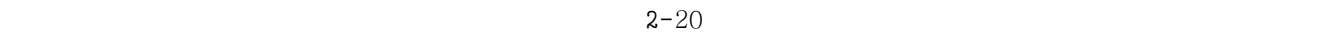
CONTINUOUS TX ON CONDITION
 CH : 698CH(DCS)
 TX POWER CODE: 520 CODE Applied
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

6. PCS TX



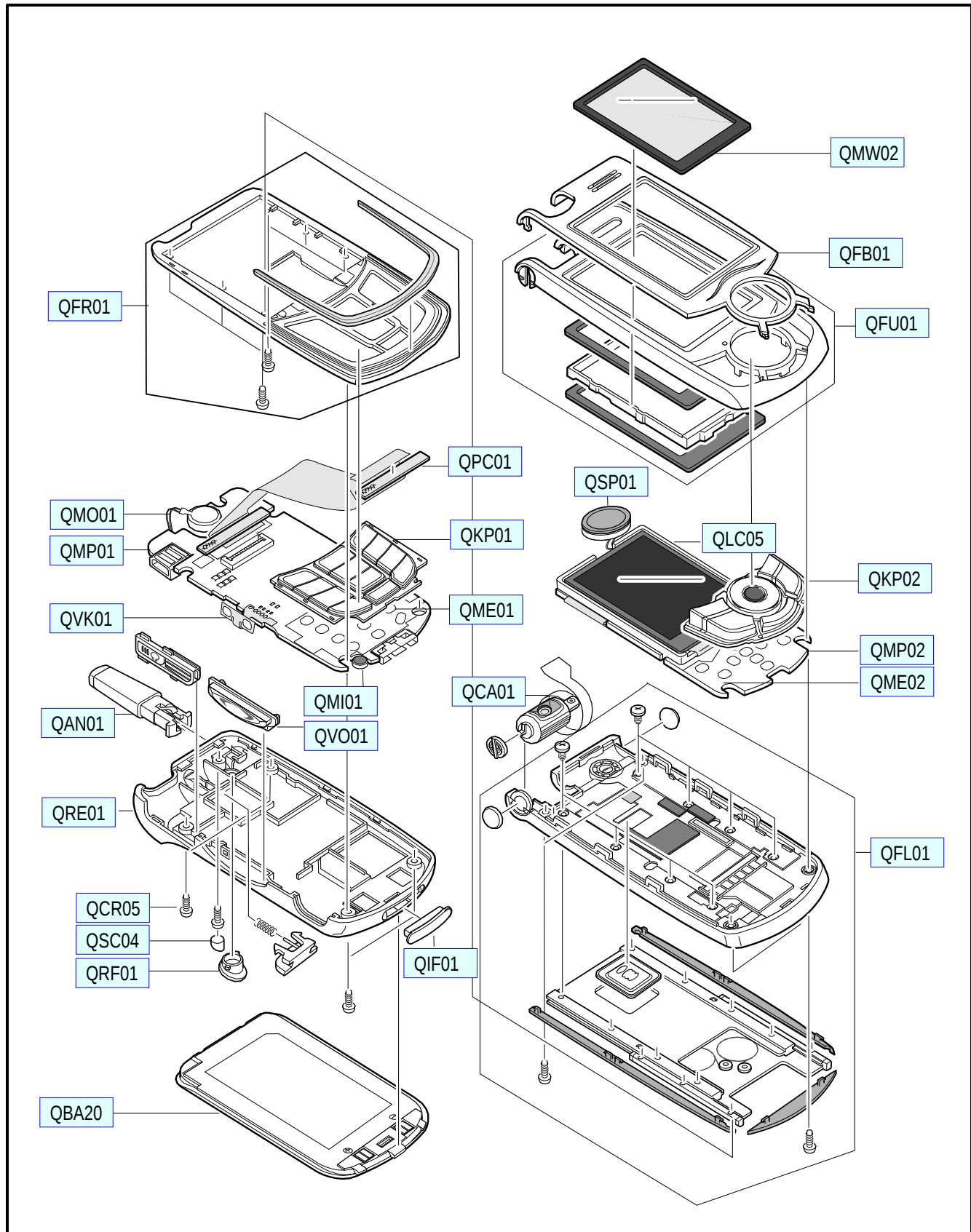
CONTINUOUS TX ON CONDITION
 CH : 660CH(PCS)
 TX POWER CODE: 520 CODE Applied
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB





3. SGH-S341i Exploded View and Parts List

1. Cellular phone Exploded View



2. Cellular phone Parts list

Location NO.		Description	SEC CODE	Remark
QMW02		LCD WINDOW	GH72-12227A	
QFB01		SLIDER UPPER DECO	GH71-03504A	
QFU01		SUB S/UPPER	GH75-04225A	
QSP01		SPEAKER	3001-001482	
QLC05		LCD	GH07-00416A	
QKP02		FUNCTION KEY	GH75-04230A	
QMP02		LCD PBA	GH92-01770A	
QME02		UNIT METAL DOME	GH59-01504A	
QFL01		SLIDING HINGE ASSY	GH75-04234A	
QFR01		FRONT COVER	GH75-04223A	
QMO01		MOTOR	GH31-00092A	
QMP01		MIAN PBA	GH92-01768A	
QVK01		UNIT VOLUME KEY	GH59-01471A	
QPC01		PCB	GH41-00539A	
QKP01		MAIN KEYPAD	GH75-04229A	
QME01		UNIT METAL DOME	GH59-01503A	
QCA01		CAMERA	GH59-01395A	
QAN01		ANTENNA	GH42-00418A	
QMI01		MICROPHONE	GH30-00128A	
QVO01		VOLUME KEY	GH75-04228A	
QRE01		REAR COVER	GH75-04224A	
QCR05		SCREW	6001-001478	
QSC04		MAIN SCREW CAP	GH73-03236A	
QRF01		RF COVER	GH73-03235A	
QIF01		IF CONN COVER	GH72-12230A	
QBA20		BATTERY	GH43-01434A	

3. Test Jig (GH80-06022A)



3-1. RF Test Cable (GH39-00283A)



3-2. Test Cable (GH39-00304A)



3-3. Serial Cable



3-4. Power Supply Cable



3-5. DATA CABLE (GH39-00305A)



3-6. TA (GH44-00701A)



4. SGH-S341i MAIN Electrical Parts List

1.Main Parts List

SEC Code	Design LOC
GH92-01768A	–
GH71-01052A	ANT501
2203-005482	C101,C105,C132,C133
2203-000254	C103,C104,C204,C205
2203-000359	C106
2203-006201	C107
2203-000812	C108,C113,C114,C320
2203-005061	C109,C112,C117,C120
2203-001405	C110,C512
2203-006053	C111,C122,C123,C124
2404-001350	C115
2404-001086	C118
2203-000438	C119
2203-006053	C126,C127,C128,C129
2203-000233	C130,C146,C157,C407
2203-005061	C131,C150,C151,C302
2203-005482	C134,C155,C202,C203
2203-006093	C135,C137,C139,C152
2404-001151	C142,C539,C540
2203-006093	C154,C301
2203-006137	C201
2203-005482	C206,C207,C212,C213
2203-000254	C208,C209,C210,C211
2203-000254	C214,C324,C505,C506
2203-000628	C218,C219
2203-005482	C220,C223,C307,C404
2203-001101	C221
2203-005065	C222
2203-006208	C308
2203-005571	C309
2203-006257	C310,C325
2203-005682	C311,C312,C313,C314
2203-005682	C315,C316,C317,C318
2203-005682	C319,C417,C418,C430
2203-000812	C321,C322,C504,C537
2203-000550	C401

SEC Code	Design LOC
2203-006053	C402
2404-001225	C405
2203-005482	C406,C408,C411,C412
2203-005482	C415
2203-005682	C431,C432,C433,C434
2203-005682	C435,C436,C439,C440
2203-005682	C441,C442,C443,C444
2203-005682	C445,C446,C447,C461
2203-005682	C462
2203-000386	C501
2203-000995	C502,C518,C538
2203-001412	C503
2203-000254	C507,C508,C541,C542
2203-000233	C515,C516,C517,C526
2203-005288	C519
2203-002677	C527,C528,C530,C532
2203-000233	C529,C543,C548
2203-002677	C535,C536
2203-000254	C544,C158,C159
2203-001383	C545
2203-000812	C546,C547
3709-001229	CN101
NEW-IC00009	CN102
NEW-IC00010	CN302
3711-004621	CN303
3710-001105	CN401
3708-001853	CN402
NEW-IC00012	CN403
0404-001172	D401
2901-001260	F401,F402,F403,F406
2901-001260	F407,F408
NEW-IC00013	F502
3301-001362	L101
2703-001734	L502
2703-002485	L503
2703-002484	L504
2703-002608	L505

SEC Code	Design LOC
0601-001790	LED301,LED302,LED303
0601-001790	LED304,LED305,LED306
0601-001790	LED307,LED308,LED309
0601-001790	LED310
NEW-IC00011	LED311
NEW-IC00008	M101
2801-003856	OSC201
2809-001260	OSC501
0504-000168	Q201
2007-000171	R102,R104,R134,R137
2007-000164	R105,R136,R146
2007-000161	R106
2007-000775	R107
2007-001325	R111
2007-001319	R114
2007-000138	R120,R503,R504
2007-007142	R125,R141,R145,R158
2007-000170	R128
2007-000172	R130,R131,R170,R171
2007-000171	R138,R139,R140,R153
2007-000139	R148
2007-007308	R157,R161
2007-000171	R159,R212,R214,R215
2007-007142	R162
2007-000148	R165,R206,R207,R208
2007-007766	R166,R167,R168,R169
2007-000172	R172,R201,R502
2007-000157	R203,R209,R229,R301
2007-000171	R216,R217,R224,R227
2007-000242	R221
2007-001290	R222,R223
2007-000171	R230,R342,R401,R410
2007-000157	R302,R344
2007-000140	R307,R308,R312,R313
2007-000140	R314,R315,R316,R317
2007-000140	R318,R319,R320,R334
2007-001301	R321,R343

SEC Code	Design LOC
2007-000148	R338,R339,R340,R341
2007-000162	R405,R406
2007-000171	R411,R412,R425
2007-002797	R501
2007-000070	R509
2007-000148	R517
2007-008275	R518
2007-001288	R519,R522
2007-007008	R520,R521,R523,R524
1204-002138	U101
NEW-IC00001	U102
1209-001219	U103
1001-001248	U104
1009-001010	U107
NEW-IC00002	U201
NEW-IC00003	U202
NEW-IC00004	U204
1203-001256	U205
NEW-IC00005	U402
1203-002236	U403
NEW-IC00006	U404
1205-002433	U501
NEW-IC00007	U502
1203-001285	U503
0406-001190	ZD101,ZD304,ZD305
0406-001150	ZD102,ZD310,ZD311
0406-001184	ZD302
0403-001387	ZD303
0406-001190	ZD306
0406-001169	ZD308,ZD309
0406-001150	ZD312,ZD313,ZD314

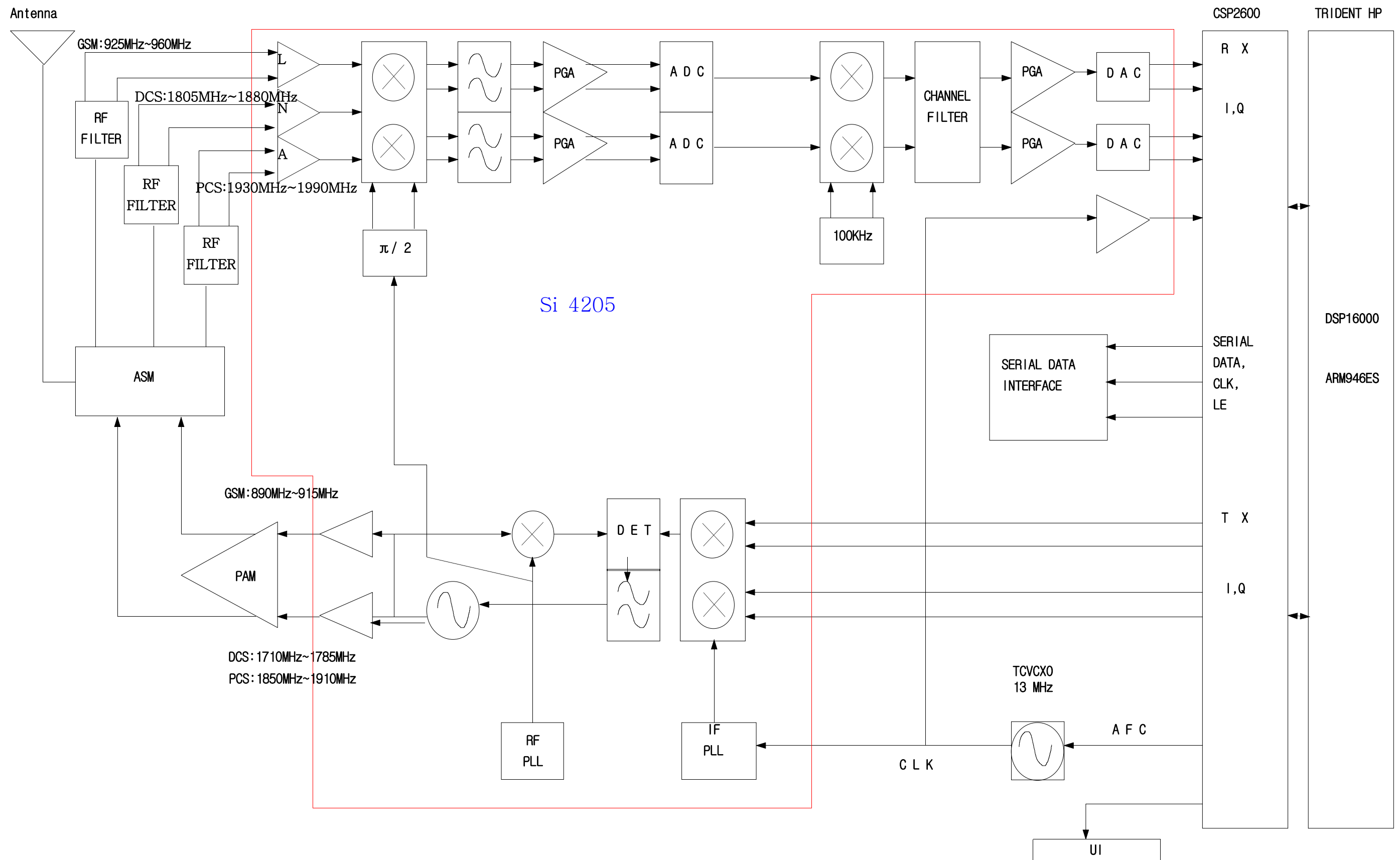
2.LCD Parts List

SEC Code	Design LOC
GH92-01770A	–
2203-002443	C11
2203-001598	C12,C40
2203-000995	C16,C17,C18
2203-006053	C19
2203-005482	C20
2203-000550	C22
2203-000254	C24,C41
2203-000438	C25
3708-001938	CN12
3708-001853	CN13
3708-001852	CN14
2703-002339	L11
3301-001362	L13,L14
0601-001654	LED11,LED12,LED13
0601-001654	LED14
0504-001141	Q12,Q13,Q14
0505-001518	Q15
2007-001306	R15,R19,R40,R43
2007-000138	R16,R20,R41,R44
2007-003010	R17,R18,R42,R45
2007-000151	R21,R22,R23
2007-000162	R24
2007-000172	R31,R47
2007-000140	R37
2007-003025	R38
2007-001292	R39
2007-000171	R46
1203-002633	U11
1203-002690	U12
0406-001150	ZD1,ZD13,ZD14,ZD15
0404-001172	ZD11
0403-001446	ZD12
0406-001150	ZD16,ZD19,ZD2,ZD3
0406-001169	ZD17,ZD18
0406-001150	ZD4,ZD5,ZD6,ZD7,ZD8

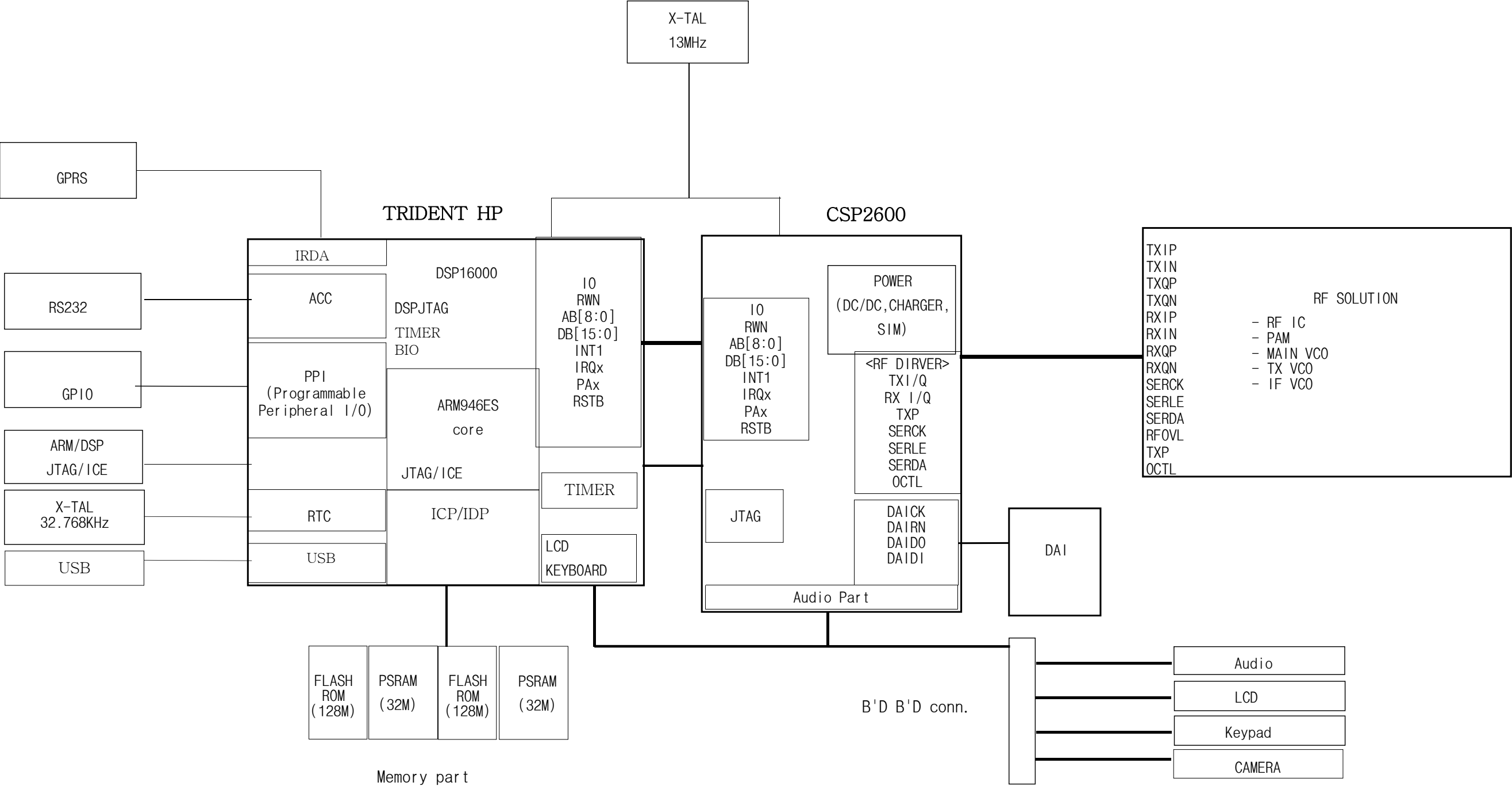
SEC Code	Design LOC
0406-001150	ZD9

5. SGH-S341i Block Diagrams

1. RF Solution Block Diagram

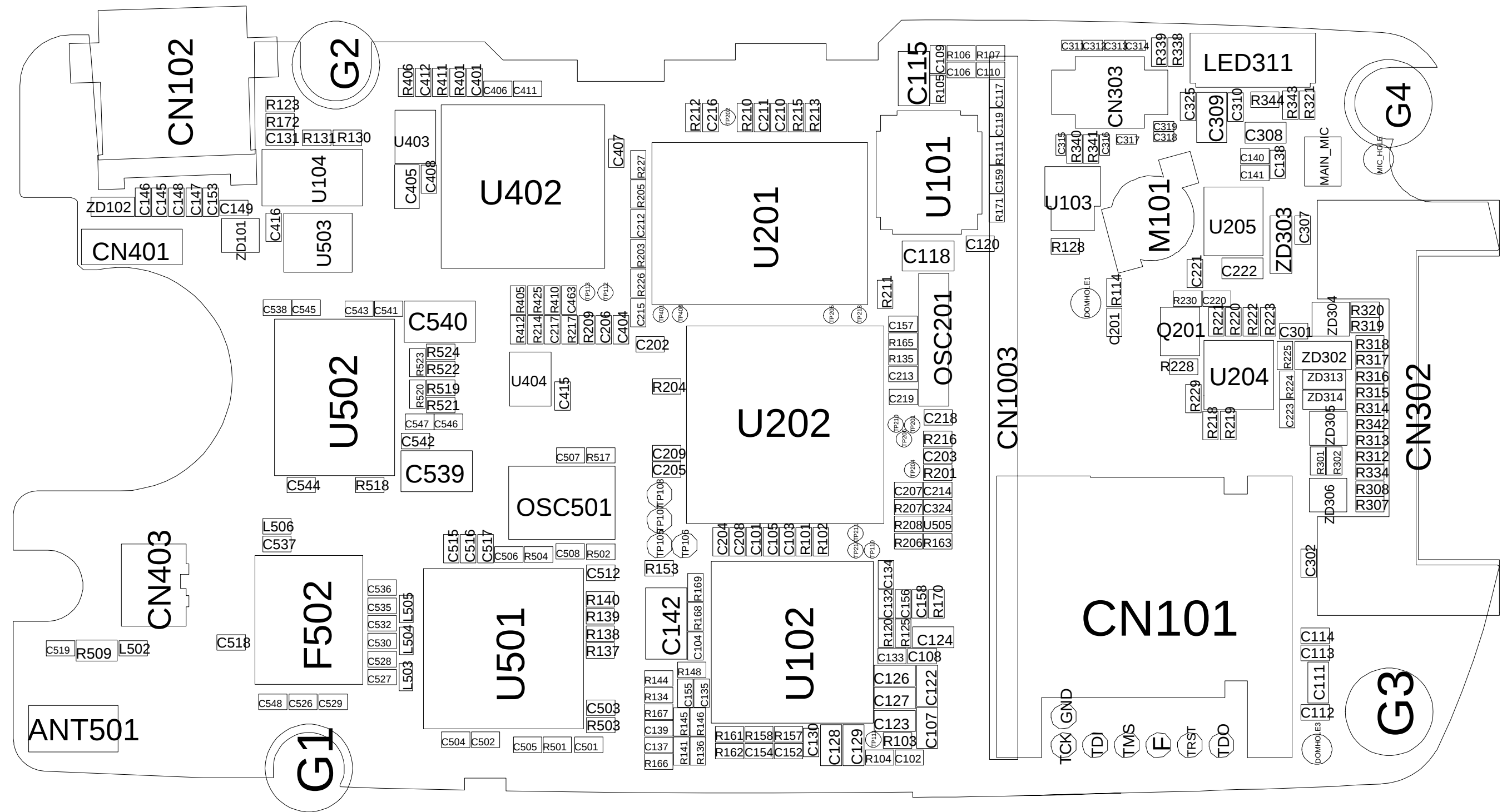


2. Base Band Solution Block Diagram



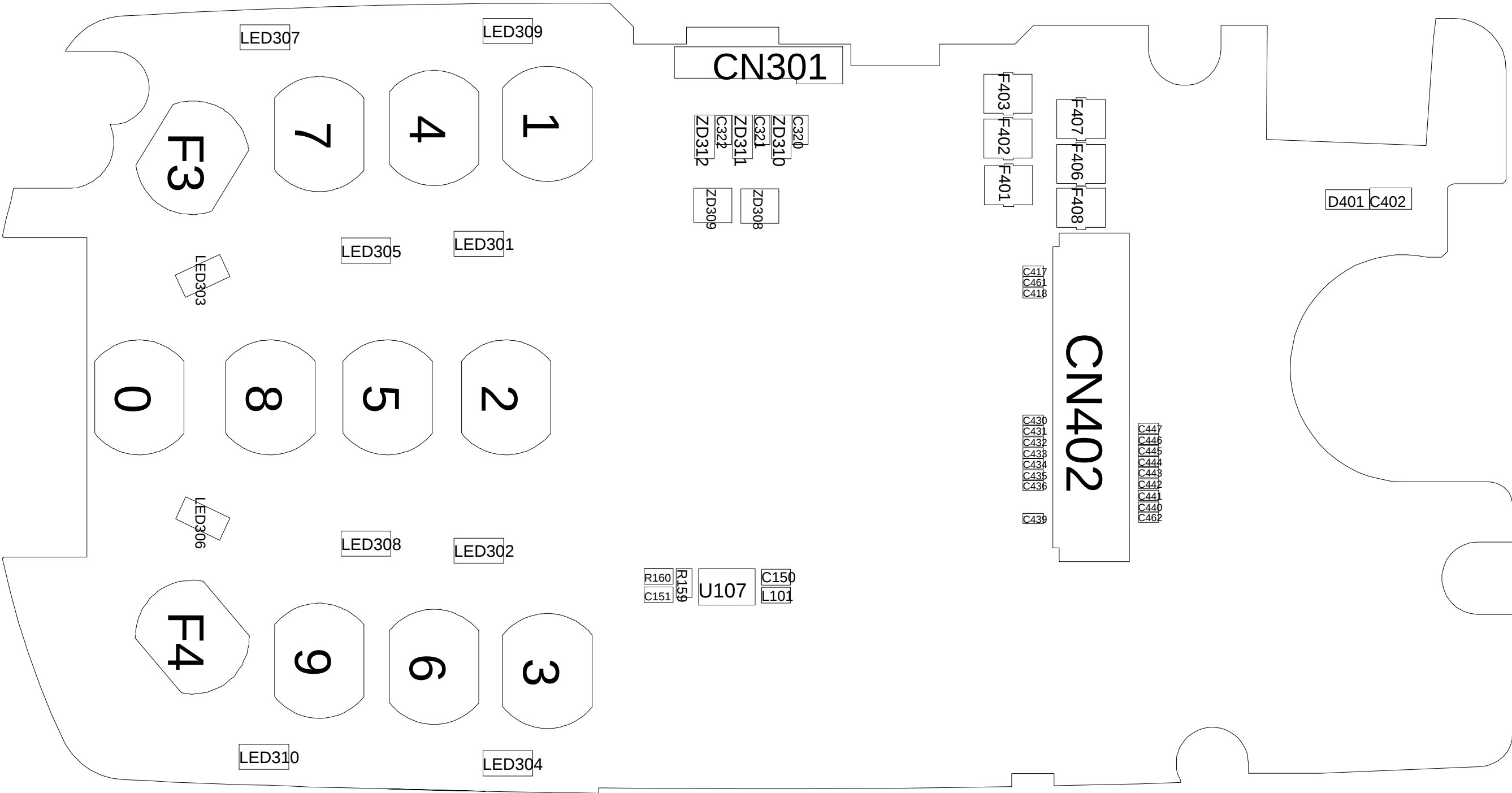
6. SGH-S341i PCB Diagrams

1. Main PCB Top Diagram

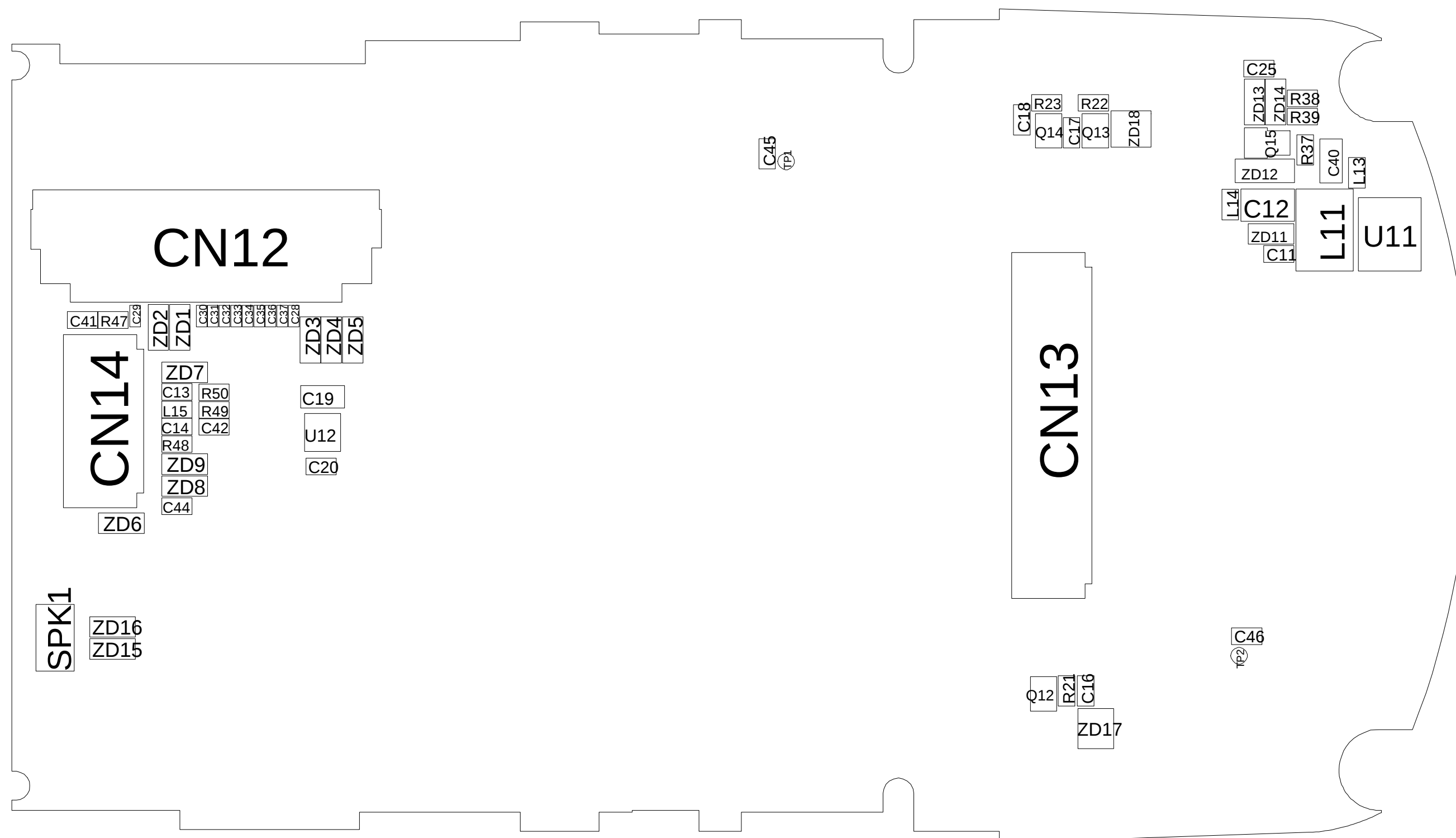


2. Main PCB Bottom Diagram

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3. LCD PCB Top Diagram



4. LCD PCB Bottom Diagram

