

SAMSUNG

GSM TELEPHONE

GT-i5700

SERVICE *Manual*

GSM TELEPHONE



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1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning. Take specially care of tuning or test, because specipcty of cellular phone is sensitive for surrounding interference(RF noise).
- Be careful to use a kind of magnetic object or tool, because performance of parts is damaged by the influence of magnetic force.
- Surely use a standard screwdriver when you disassemble this product, otherwise screw will be worn away.
- Use a thicken twisted wire when you measure level.
A thicken twisted wire has low resistance, therefore error of measurement is few.
- Repair after separate Test Pack and Set because for short danger (for example an overcurrent and furious flames of parts etc) when you repair board in condition of connecting Test Pack and tuning on.
- Take specially care of soldering, because Land of PCB is small and weak in heat.
- Surely tune on/off while using AC power plug, because a repair of battery charger is dangerous when tuning ON/OFF PBA and Connector after disassembling charger.
- Don't use as you pleases after change other material than replacement registered on SEC System. Otherwise engineer in charge isn't charged with problem that you don't keep this rules.

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD (Electrostatically Sensitive Devices), for example IC,BGA chip etc. Read Precaution below.

You can prevent from ESD damage by static electricity.

- Remove static electricity remained your body before you touch semiconductor or parts with semiconductor. There are ways that you touch an earthed place or wear static electricity prevention string on wrist.
- Use earthed soldering steel when you connect or disconnect ESD.
- Use soldering removing tool to break static electricity. , otherwise ESD will be damaged by static electricity.
- Don't unpack until you set up ESD on product. Because most of ESD are packed by box and aluminum plate to have conductive power,they are prevented from static electricity.
- You must maintain electric contact between ESD and place due to be set up until ESD is connected completely to the proper place or a circuit board.

2. Specification

2-1. GSM General Specification

	GSM850	EGSM 900	DCS1800	PCS1900	W-CDMA 900	W-CDMA 2100
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	882~913 927~958	1920~1980 2110~2170
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL:2712~2863 DL:2937~3088	UL:9612~9888 DL:10562~10838
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	45MHz	130MHz
Mod. Bit rate/ Bit Period	270.833kbp 3.692us	270.833kbp 3.692us	270.833kbp 3.692us	270.833kbp 3.692us	3.84Mcps	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length:10ms Slot length: 0.667ms	Frame length:10ms Slot length: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK	QPSK HQPSK
MS Power	33dBm ~5dBm	33dBm ~5dBm	30dBm ~0dBm	30dBm ~0dBm	24dBm~ -50dBm	24dBm~ -50dBm
Power Class	4 (max +33dBm)	4 (max +33dBm)	1 (max +33dBm)	1 (max +33dBm)	3 (max +24dBm)	3 (max +24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8		
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM850 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

3. Operation Instruction and Installation

Main Function

- Slim Bar Design 3G MITS
- 3.0 Megapixel Camera
- 3.2" WHVGA 262K Color TFT Screen
- External Memory microSD (T-Flash)
- Video Recording & Messaging
- Music Player(MP3/AAC/AAC+)
- A-GPS Support
- Bluetooth Wireless Technology V 2.0 + EDR
- Multimedia Message Service (MMS) / SMS / E-mail
- Voice recorder
- Speaker Phone
- Java MIDP 2.0/ WAP2.0
- GSM/GPRS Class 10
- Quad-band(850/900/1800/1900MHz)
- WCDMA Dual(900/2100MHz)

4. Array course control

4-1. Software Adjustments



Test Jig (GH99-36900A)



Test Cable (GH39-01339A)



RF Test Cable (GH39-00985A)



Adapter (GH99-38251A)

4-2. Software Downloading

4-2-1. Downloading Binary Files

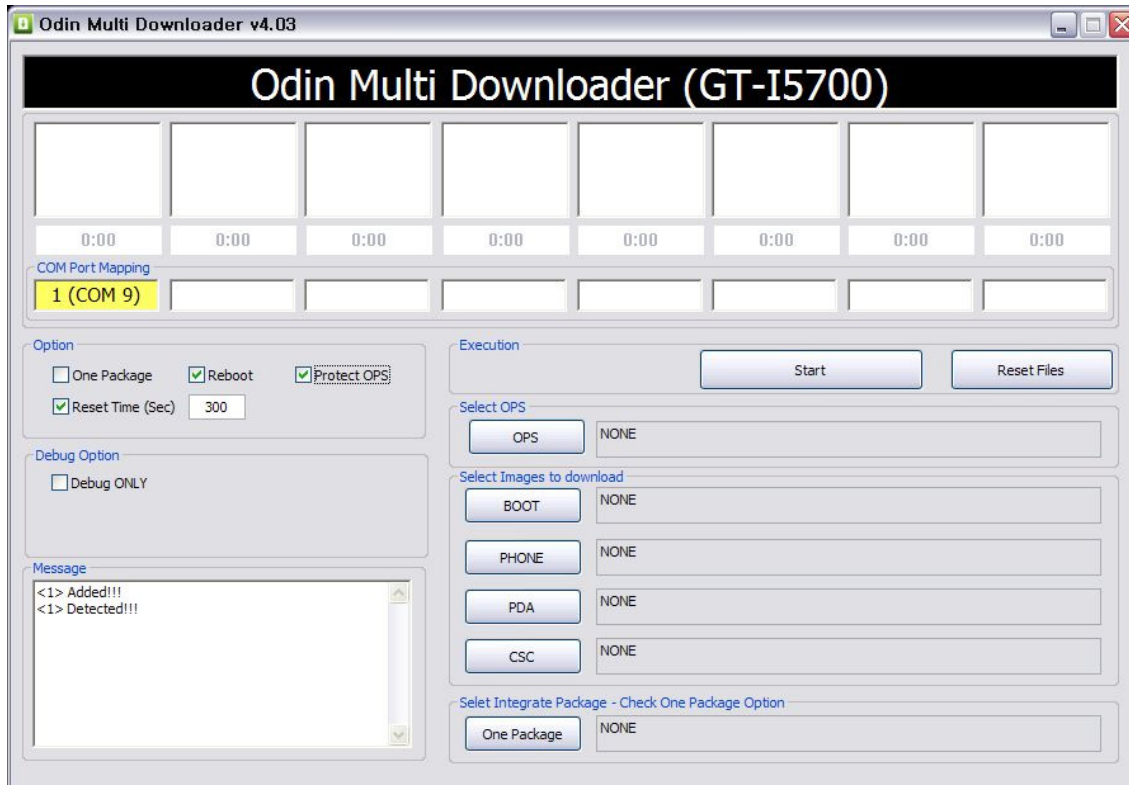
- I5700XXII5_CL76223_Bootloader.tar
- i5700XXII5_Phone_RC3.tar
- I5700XXII5_CLP76423_CLK76376_PDA.tar
- I5700XXII4-CSC-CL71843-OPEN.tar
- Odin Multi Downloader v4.03.exe

4-2-2. Pre-requisite for Downloading

- Downloader Program : (Odin Multi Downloader v4.03.exe)
- Binary files
- GT-I5700 Mobile Phone
- USB cable
- USB drivers for I5700 which is already installed

4-2-3. S/W Downloader Program

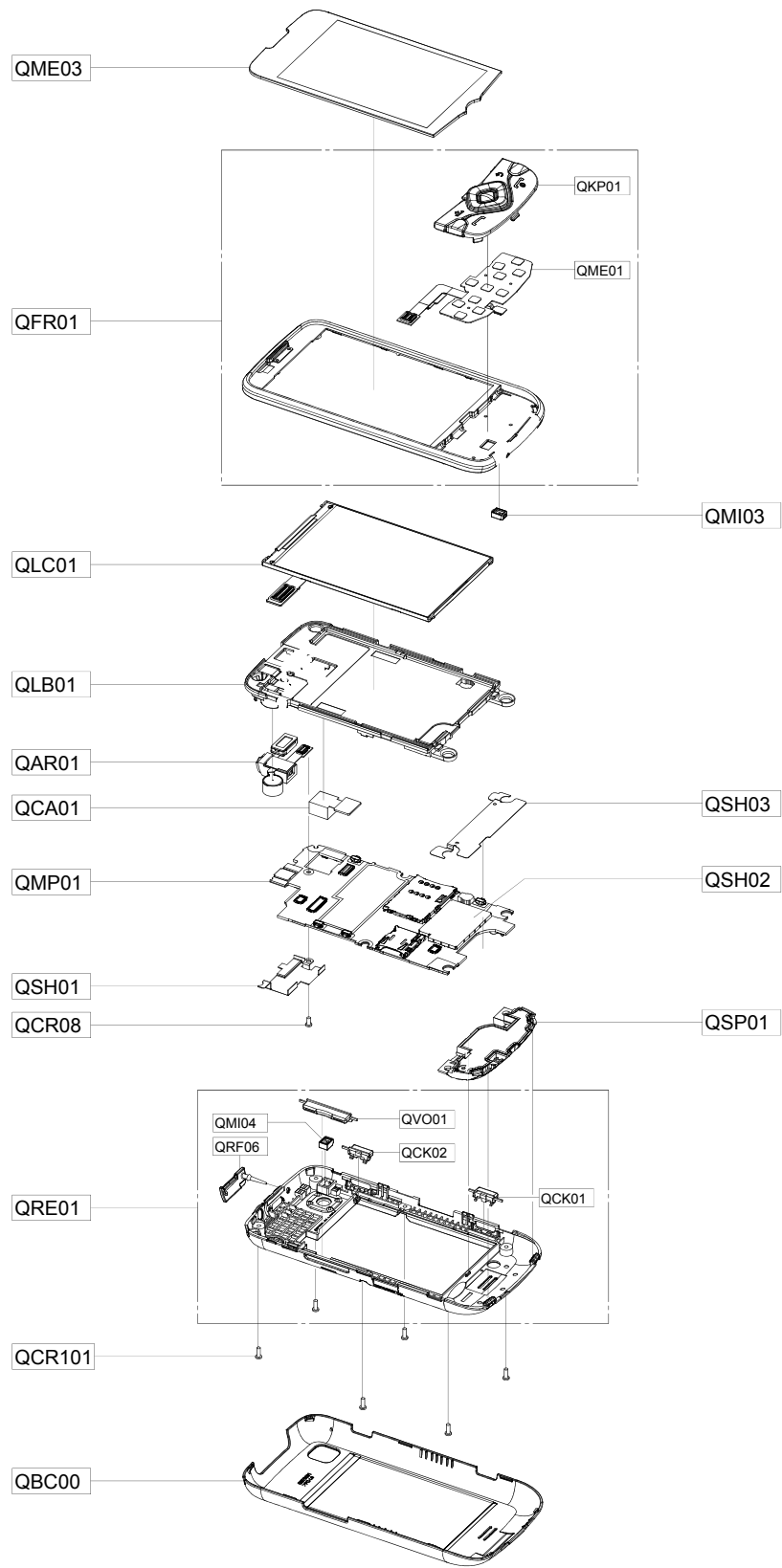
- 1) Load the binary download program by executing the "Odin Multi Downloader v4.03.exe"



- 2) Select the binary files that you want to download
 - Press the "OPS" button and select "spica.ops"
 - Press the "BOOT" button and select "I5700XXII5_CL76223_Bootloader.tar"
 - Press the "PHONE" button and select "i5700XXII5_Phone_RC3.tar"
 - Press the "PDA" button and select "I5700XXII5_CLP76423_CLK76376_PDA.tar"
 - Press the "CSC" button and select "I5700XXII4-CSC-CL71843-OPEN.tar"
- 3) Make a I5700 device to download mode with 'volume down + camera + power key'
- 3) Connect USB cable
- 4) Confirm that correct port is recognized by Multi Downloader.
- 5) Press 'Start' button to download binary files.

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



- This Document can not be used without Samsung's authorization -

5-2. Cellular phone Parts list : GT-I5700HKATEB

Design LOC	Description	SEC CODE
QAR01	MODULE-RCV_MOT FPCB ASSY(GT_I5700)	GH59-08293A
QBC00	ASSY COVER-BATT	GH98-15383B
QCA01	ASSY CAMERA-3M MODULE(GT_I5700)	GH96-04122A
QCK01	PMO KEY-CAMERA	GH72-56488B
QCK02	PMO KEY-HOLD	GH72-56491B
QCR08	SCREW-MACHINE	6001-001456
QCR101	SCREW-MACHINE	6001-002005
QFR01	ASSY CASE-FRONT	GH98-14962B
QKP01	ASSY KEYPAD-(EU/BLACK)	GH98-14965B
QLB01	ASSY BRACKET-LCD BRK	GH98-14961A
QLC01	ASSY LCD-3.2 TFT (GT_I5700)	GH96-04103A
QME01	KEY FPCB-KEY FPCB ASSY (I5700)	GH59-08248A
QME03	TOUCH/PANEL-GT-I5700 TSP ,BLK	GH59-08256B
QMI03	RMO RUBBER-MIC A	GH73-13463A
QMI04	ASSY RUBBER-MIC B	GH98-15597A
QMP01	A/S ASSY-PBA MAIN GT-I5700 SVC	GH82-04221A
QRE01	ASSY CASE-REAR	GH98-14963B
QRF06	PMO COVER-USB	GH72-56492B
QSH01	ASSY COVER-SHIELD CAN	GH98-14964A
QSH02	ASSY COVER-SHIELD	GH98-15165A
QSH03	ICT COVER-SHILED BRACKET	GH70-05865A
QSP01	MODULE-INTENNA SPK MODULE (GT_I5700)	GH59-08295A
QVO01	PMO KEY-VOLUME	GH72-56489B

6. MAIN Electrical Parts List

Design LOC	SEC CODE	Description
D400	0401-001144	SUD492H
ZD401	0403-001547	TDZ5.6
ZD605	0404-001089	RB551V-30
D300	0404-001172	RB520S-30
D500,D501,D502,D503	0406-001293	ESD9B3.3ST5G
D505,D506,D507,D700	0406-001293	ESD9B3.3ST5G
D701,D702,D703,D704	0406-001293	ESD9B3.3ST5G
ZD400,ZD600,ZD603	0406-001293	ESD9B3.3ST5G
ZD700,ZD701,ZD702	0406-001293	ESD9B3.3ST5G
ZD601,ZD602,ZD703	0406-001329	ESD9L5.0ST5G
ZD704,ZD705	0406-001329	ESD9L5.0ST5G
Q600	0504-001138	DTA114EM
TR300,TR400	0505-002088	2SK3541
U301	0801-003016	NC7SV08L6X
U200	0801-003022	NC7SV04L6X
U304	0801-003200	NC7SZ00L6X
U300	0801-003265	74AUP1G74GM
U801	0801-003271	74AUP2G08GM
UCP800	0902-002440	SC36410A8N-A040
U400	1001-001394	NLAS5123MNR2G
U600	1001-001461	NLAST9431
U601	1001-001580	FSA9480UCX
U604	1003-002047	ISA1000
U302,U800,U803	1003-002185	NLSV1T34AMX1TCG
F201	1201-002581	ALM-1412
U500	1201-002864	MAX9877AERP-T
PAM101	1201-002889	SKY77186
PAM103	1201-002890	SKY77189
PAM100	1201-002961	TQM7M5012H
U503	1202-001088	NCS2220AMUT1G
U607	1203-003643	XC6401FF20DR
U402	1203-003924	XC61CN3202NR
U602	1203-004571	RP150K002A-TR
U501	1203-004806	RP100K281D-TR
U405	1203-004819	RP103K281D-TR

Design LOC	SEC CODE	Description
U606	1203-004845	TPS61161DRVR
U609	1203-005076	XC6401EE27DR
U401	1203-005434	MAX8674EWN+
U404	1203-005667	MAX8698EWO-T
U403	1203-005783	MAX8845YETC
U100	1205-003297	RTR6285
U303	1205-003467	AAT4285IJS-3-T1
U502	1205-003488	AK4671EG-L
UCP300	1205-003726	MSM6246
U700	1205-003903	AT42QT5480-CU-S1
U701	1209-001817	BMA023
U702	1209-001872	AK8973B
TH800	1404-001221	NCP15WB473J04RC
R521	2007-000169	TSR16GJ514V
R201	2007-003006	TSR16GJ160V
R400	2007-003014	TSR16GJ244V
R321,R823,R824,R830	2007-007107	RC1005F1003CS
R831	2007-007107	RC1005F1003CS
R419	2007-007309	MCR01MZP5F1202
R503	2007-007313	RK73H1ETP6801F
R420	2007-007316	RK73H1ETP3301F
R417	2007-007318	MCR01MZP5F1001
R406	2007-007480	RK73H1ETP1303F
R315	2007-007529	RK73H1ETP9102F
R403	2007-007698	RK73H1ETP5101F
R502	2007-007741	M5534204B10E0R
R623	2007-007798	RC1005F0100CS
R622	2007-007875	RK73H1ETP1603F
R801	2007-007942	RC-1005F105CS
R605	2007-007943	RK73H1ETP5603F
R200,R202,R305,R308	2007-008045	ERJ1GEJ101C
R329,R404,R519,R602	2007-008045	ERJ1GEJ101C
R603,R806	2007-008045	ERJ1GEJ101C
R102,R103	2007-008047	RK73B1HTTB181J
R307	2007-008049	MCR006YZPJ202

Design LOC	SEC CODE	Description
R412,R413,R501,R807	2007-008052	ERJ1GENJ472X
R813,R814,R815,R816	2007-008052	ERJ1GENJ472X
R832,R833,R834,R835	2007-008052	ERJ1GENJ472X
R845,R846	2007-008052	ERJ1GENJ472X
R203,R213,R312,R327	2007-008055	ERJ1GENJ104X
R407,R415,R416,R418	2007-008055	ERJ1GENJ104X
R423,R517,R714,R723	2007-008055	ERJ1GENJ104X
R800,R840,R847,R849	2007-008055	ERJ1GENJ104X
R108,R109,R110,R111	2007-008419	ERJ1GEJ102C
R117,R322,R323,R325	2007-008419	ERJ1GEJ102C
R511,R624,R701,R702	2007-008419	ERJ1GEJ102C
R704,R705,R706,R707	2007-008419	ERJ1GEJ102C
R808,R809,R810,R811	2007-008419	ERJ1GEJ102C
R309,R328	2007-008420	RMC-1/20-330JPA
R204,R300,R303,R304	2007-008516	ERJ1GEJ103C
R306,R409,R421,R422	2007-008516	ERJ1GEJ103C
R604,R716,R718,R720	2007-008516	ERJ1GEJ103C
R841,R842,R848	2007-008516	ERJ1GEJ103C
R115,R512,R513	2007-008531	MCR006MZPJ0100
R505	2007-008544	ERJ1GEJ681C
R105,R106	2007-008579	RMC1/20221JPA
R212	2007-008581	RK73B1HTTB271J
R211	2007-008587	ERJ1GEJ561C
R100	2007-008588	MCR006YZPJ222
R326	2007-008766	ERJ2RKF6041X
R114	2007-008774	ERJ1GEJ2R2C
R715,R837,R838	2007-008798	MCR006YZPJ153
R618	2007-008806	RC0603J510CS
R316,R509,R510,R708	2007-009084	MCR006YZPJ105
R709,R710,R711,R712	2007-009084	MCR006YZPJ105
R713	2007-009084	MCR006YZPJ105
R514,R516	2007-009111	RC0603J220CS
R104,R107,R112,R119	2007-009115	RC0603J240CS
R310	2007-009115	RC0603J240CS
R408,R411	2007-009155	MCR006YZPJ474

Design LOC	SEC CODE	Description
R425,R817	2007-009157	MCR006YZPF1003
R405	2007-009158	MCR006MZPF1503
R206,R207,R208,R209	2007-009171	MCR006YZPJ513
R210,R611,R700,R802	2007-009171	MCR006YZPJ513
R803,R804,R805	2007-009171	MCR006YZPJ513
R101	2007-009201	MCR006YZPJ300
R518	2007-009233	MCR006YZPJ514
R410	2007-009361	MCR006YZPJ304
R507	2007-009402	RC0603F152CS
R113	2007-009410	RC0603F123CS
R703	2007-009793	MCR006YZPF3002
R414	2007-009838	RK73H1HTTC1203F
R401	2007-009954	MCR006YZPF6802
R839	2007-009964	MCR01MZP5F44R2
R836	2007-010030	MCR01MZP5F6491
C400,C425	2203-000233	GRP1555C1H101J
C823,ZD402	2203-000254	GRP155R71C103K
C415	2203-000359	GRP1555C1H151JD01E
C822,C824	2203-000386	GRP1555C1H150J
C206,C209,C212	2203-000438	GRP155R71H102K
C225	2203-000696	GRP1555C1H2R0C
C609	2203-000725	GRP155R71H392KA01E
C204	2203-000812	GRP1555C1H330J
C103	2203-000854	GRP1555C1H390J
C540,C544	2203-001072	GRP1555C1H560JD01E
C101	2203-002677	CL05CR75BBNC
C829	2203-005138	04025C182KAT2A
C528	2203-005483	GRP155R61A683KA01E
C100,C104,C120,C121	2203-005682	GRP0335C1E330JD01E
C122,C126,C151,C152	2203-005682	GRP0335C1E330JD01E
C176,C183,C186,C205	2203-005682	GRP0335C1E330JD01E
C208,C302,C714,C716	2203-005682	GRP0335C1E330JD01E
C723	2203-005682	GRP0335C1E330JD01E
C125	2203-005683	GRP0335C1E8R0DD01E
C181,C189	2203-005717	GRP0335C1E270JD01E

Design LOC	SEC CODE	Description
C141,C148,C157,C158	2203-005725	GRP0335C1E220JD01E
C164,C165,C166,C167	2203-005725	GRP0335C1E220JD01E
C168,C173,C199,U807	2203-005725	GRP0335C1E220JD01E
C531,C542,C546,C548	2203-005726	GRM0335C1E560J
C530,C541,C547,C549	2203-005729	CL03C150JAGC
C109,C710,C711	2203-005731	GRM0335C1E180J
C131,C135	2203-005732	GRP0335C1E680JD01E
C129,C130,C139,C146	2203-005736	GRP0335C1E101JD01E
C147,C170,C174,C187	2203-005736	GRP0335C1E101JD01E
C190,C196,C197	2203-005736	GRP0335C1E101JD01E
C114	2203-005777	CL03C010CA3GNNC
C194	2203-005779	CL03C090DA3GNNC
C192,C198	2203-005792	CL03C1R5CA3GNNC
C118,C172,C179,C227	2203-005806	GRP033R71C102KD01E
C308,C313,C315	2203-005806	GRP033R71C102KD01E
C115,C116	2203-006187	GRM0335C1E3R9B
C171,C193,C207,C211	2203-006194	GRP033R70J103KA01E
C330,C331,C332,C410	2203-006194	GRP033R70J103KA01E
C411,C517,C704,C705	2203-006194	GRP033R70J103KA01E
C706,C707,C708,C709	2203-006194	GRP033R70J103KA01E
C803,U808	2203-006194	GRP033R70J103KA01E
C604,C605	2203-006257	GRM155R60J474KE19E
C533	2203-006305	CM03CG100J25AH
C613	2203-006348	CV105X5R105K25AT
C614	2203-006377	GRM21BR61E475KA12L
C509	2203-006379	GRP033R70J472KA01
C216,C221,C305,C306	2203-006399	GRM155R60J105KE19D
C312,C314,C316,C321	2203-006399	GRM155R60J105KE19D
C322,C323,C325,C327	2203-006399	GRM155R60J105KE19D
C328,C335,C340,C408	2203-006399	GRM155R60J105KE19D
C409,C422,C423,C424	2203-006399	GRM155R60J105KE19D
C436,C437,C438,C439	2203-006399	GRM155R60J105KE19D
C441,C442,C443,C602	2203-006399	GRM155R60J105KE19D
C606,C610,C611,C615	2203-006399	GRM155R60J105KE19D
C616,C617,C618,C713	2203-006399	GRM155R60J105KE19D

Design LOC	SEC CODE	Description
C802	2203-006399	GRM155R60J105KE19D
C127	2203-006410	CL03C1R8CA3GNNC
C105,C140,C142,C159	2203-006423	GRM33X5R104K6.3
C169,C175,C191,C200	2203-006423	GRM33X5R104K6.3
C201,C202,C222,C223	2203-006423	GRM33X5R104K6.3
C228,C301,C304,C309	2203-006423	GRM33X5R104K6.3
C310,C311,C317,C318	2203-006423	GRM33X5R104K6.3
C319,C320,C324,C326	2203-006423	GRM33X5R104K6.3
C329,C333,C334,C336	2203-006423	GRM33X5R104K6.3
C338,C403,C417,C418	2203-006423	GRM33X5R104K6.3
C504,C505,C512,C600	2203-006423	GRM33X5R104K6.3
C700,C701,C702,C703	2203-006423	GRM33X5R104K6.3
C717,C718,C719,C720	2203-006423	GRM33X5R104K6.3
C800,C801,C804,C806	2203-006423	GRM33X5R104K6.3
C807,C808,C809,C810	2203-006423	GRM33X5R104K6.3
C811,C812,C813,C814	2203-006423	GRM33X5R104K6.3
C815,C816,C817,C818	2203-006423	GRM33X5R104K6.3
C819,C820,C821,C826	2203-006423	GRM33X5R104K6.3
C827,C828,U806	2203-006423	GRM33X5R104K6.3
C303	2203-006462	GRM033R60J333K
C337	2203-006556	GRM0335C1E470JD01D
C502,C507,C516,C518	2203-006562	CV05X5R105K10AH
C521	2203-006562	CV05X5R105K10AH
C108	2203-006611	GRM0335C1E2R7CD01D
C825	2203-006626	GRM155R61A334KE15D
C612	2203-006636	GRM188R71E224KA88D
C117,C178	2203-006642	GRM033R71E331KA01D
C508,C513	2203-006648	GRM033R60J223KE01D
C300	2203-006668	GRM033R61A222K
C111,C112	2203-006674	CL03C3R3BA3GNN
C435,C607	2203-006681	GRM155F51E104ZA01D
C220,C406,C427,C428	2203-006824	CV105X5R475K10AT
C429	2203-006824	CV105X5R475K10AT
C210,C414,C506,C529	2203-006839	CL03A104KP3NNNC
C532,C534,C830	2203-006839	CL03A104KP3NNNC

Design LOC	SEC CODE	Description
C434,C522,C523,C524	2203-006841	CV05X5R105K16AH
C525,C526,C527,C608	2203-006841	CV05X5R105K16AH
L102,L103	2203-006846	ECJZEC1E2R0B
C217,C219,C307,C419	2203-006872	GRM155R60J225ME15D
C420,C421,C440,C444	2203-006872	GRM155R60J225ME15D
C503,C511	2203-006872	GRM155R60J225ME15D
U809	2203-006979	CL03B103KP3NNNC
C182,C402,C416,C426	2203-007165	CL05A475KQ5NRNC
C430,C431,C432	2203-007165	CL05A475KQ5NRNC
C510,C514,C515	2203-007210	CV03X5R224K06AH
TA500	2203-007230	CL21A476MQYNNNE
C405,C407,C412,C413	2203-007271	CL05A225KP5NSNC
C433,C445	2203-007271	CL05A225KP5NSNC
C107,C119,C180,C224	2203-007279	CV105X5R106M10AT
C404,C500,C501,C601	2203-007279	CV105X5R106M10AT
C603	2203-007279	CV105X5R106M10AT
C218,C520,C805	2203-007317	CV05X5R475M06AH
C215	2203-007393	CL05A475KP5NRNC
TA300	2404-001339	TEESVJ1A475M8R
TA400	2404-001506	TCTP1A476M8R-D
L100	2703-001178	LL1005-FH3N3S
L201	2703-001748	LL1005-FH5N6S
L204	2703-002774	VLF3010AT-3R3MR87
L205	2703-002782	VLF3010AT-4R7MR70
L108,L122	2703-002793	LQP03TN5N6J00D
C106,C185,L104,L107	2703-002795	LQP03TN22NG00D
L123	2703-002795	LQP03TN22NG00D
L112,L113	2703-002842	LLV0603-F2N2S
L602	2703-002856	LPF3015T-220M
L200	2703-002858	HK0603-4N7S-T
L121,L125	2703-002901	LLV0603-F15NJ
C177,L119	2703-002917	LQP03TN2N2B04D
L111,L120	2703-002918	LQP03TN3N3B00D
L124	2703-002919	LQP03TN12NJ04D
L105	2703-002960	MLG0603S82NJT

Design LOC	SEC CODE	Description
L101	2703-002961	MLG0603SR10JT
L109	2703-003003	LQP03TN1N5B04D
L600,L60	2703-003205	LQG15HS82NJ02
C110	2703-003239	LQP03TN18NG00D
L400	2703-003258	APIS05G4R7MT
L401,L402,L403,L404	2703-003260	CIG21W2R2MNE
L405	2703-003260	CIG21W2R2MNE
L110	2703-003335	LQP03TN5N1H00D
OSC800	2801-004543	DSX321G(12MHZ,10PPM)
OSC700	2801-004568	CX3225SB16000D0KHQZZ
OSC400	2804-001700	SG-3040LC(32.768KHZ)
OSC801	2804-001704	SG-8002CESC(48MHZ,50PPM)
OSC201	2804-001762	KC2520B26.0000C1WE00
OSC500	2804-001796	CSC3M192000EEVRS00
OSC200	2809-001345	KT3225P19200ACW28ZN0
F701,F702,F703	2901-001361	ICVE31056E250R101FR
F700	2901-001413	ICVE10184E070R101FR
F704,F705,F706	2901-001434	ICVE10184E150R500FR
U505	2901-001522	EMIF02-MIC03M6
U608	2901-001552	EMIF06-MSD01C2
F104	2904-001756	SAFEB2G14FA0F00
F200	2904-001759	FAR-F6KA-1G5754-L4AAHZ
F103	2904-001785	FAR-F5KA-897M50-D4DCHZ
F101	2904-001789	FAR-F6KA-1G9500-D4DGHZ
DUF102	2910-000065	SAYFP897MCA0B00
DUF100	2910-000070	SAYFP1G95AA0B00
F100	2911-000136	LMSP43QLA003
MIC500	3003-001136	SPU0410HR5H
L202,L502	3301-001756	BLM15HG102SN1D
L500,L501,L504,L505	3301-001885	BLM15HD182SN1D
TAC700,TAC701,TAC702	3404-001303	LS12K2-T
TAC703	3404-001303	LS12K2-T
RFS100	3705-001503	KMS-560
SIM700	3709-001540	SCGC1B0102
CD600	3709-001575	SCHA4B0301

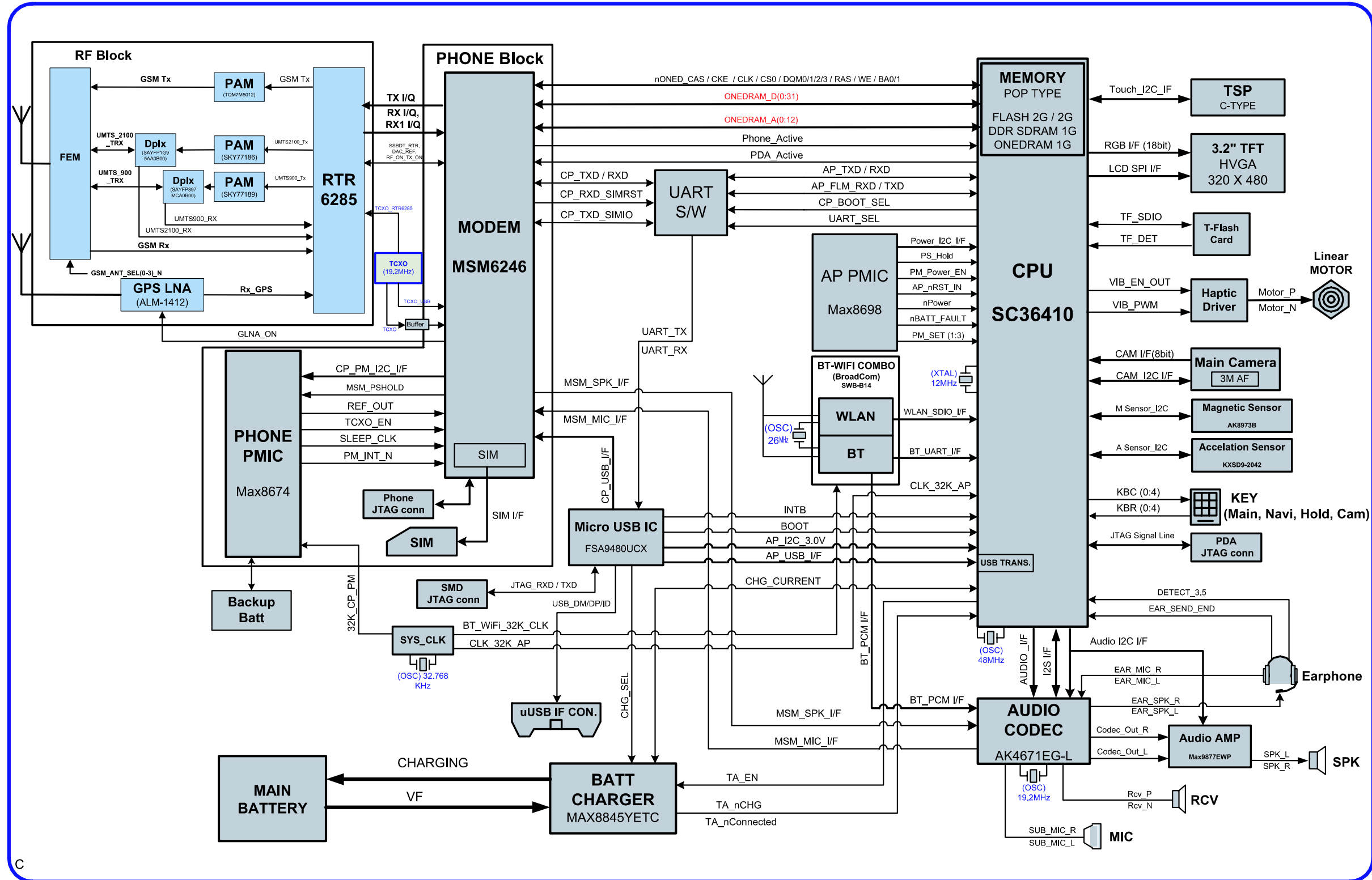
Design LOC	SEC CODE	Description
HDC702,HDC703	3711-005976	AXK8L16125S
HDC701	3711-005981	14-5805-030-000-829
HDC700	3711-006352	AXK8L44125S
HEA500	3711-006650	AXT416164AW1
BTC400	3711-006803	202-02760-00347
IFC600	3722-002871	HY07-AB0720
BAT400	4302-001181	ML414RU2-TT36-TP1
U201	4709-001783	SWB-B14
SC200,SC201	GH70-04828A	PTC0801
SC100	GH70-05810A	SHIELDKAN-SPICA-B
ANT100,ANT101,ANT200	GH71-08731A	HJ-ICT-05
ANT201,ANT203,SPK500	GH71-08731A	HJ-ICT-05
SPK501	GH71-08731A	HJ-ICT-05

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

7. Block Diagrams



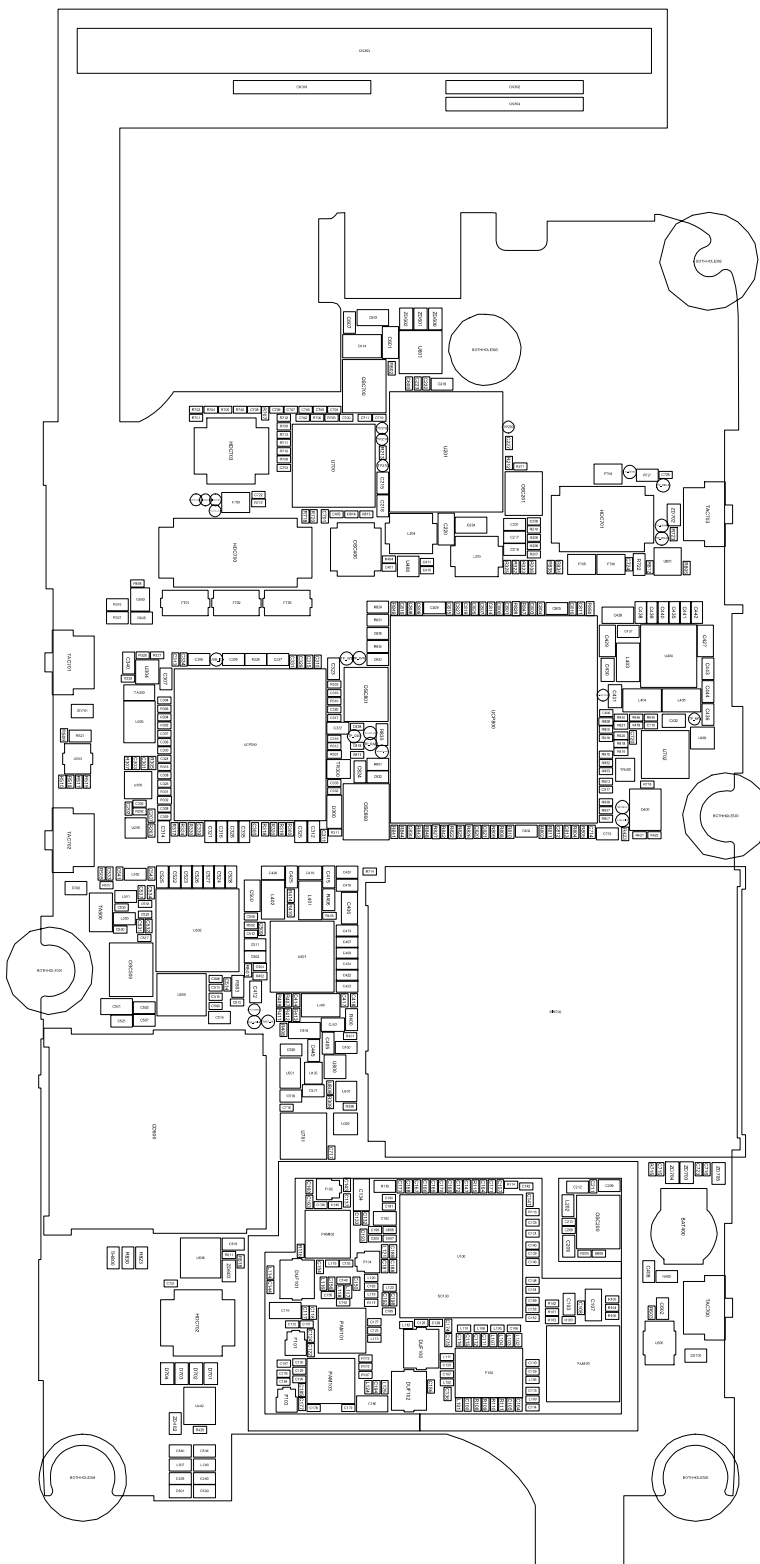
GT-I5700 BlockDiagram



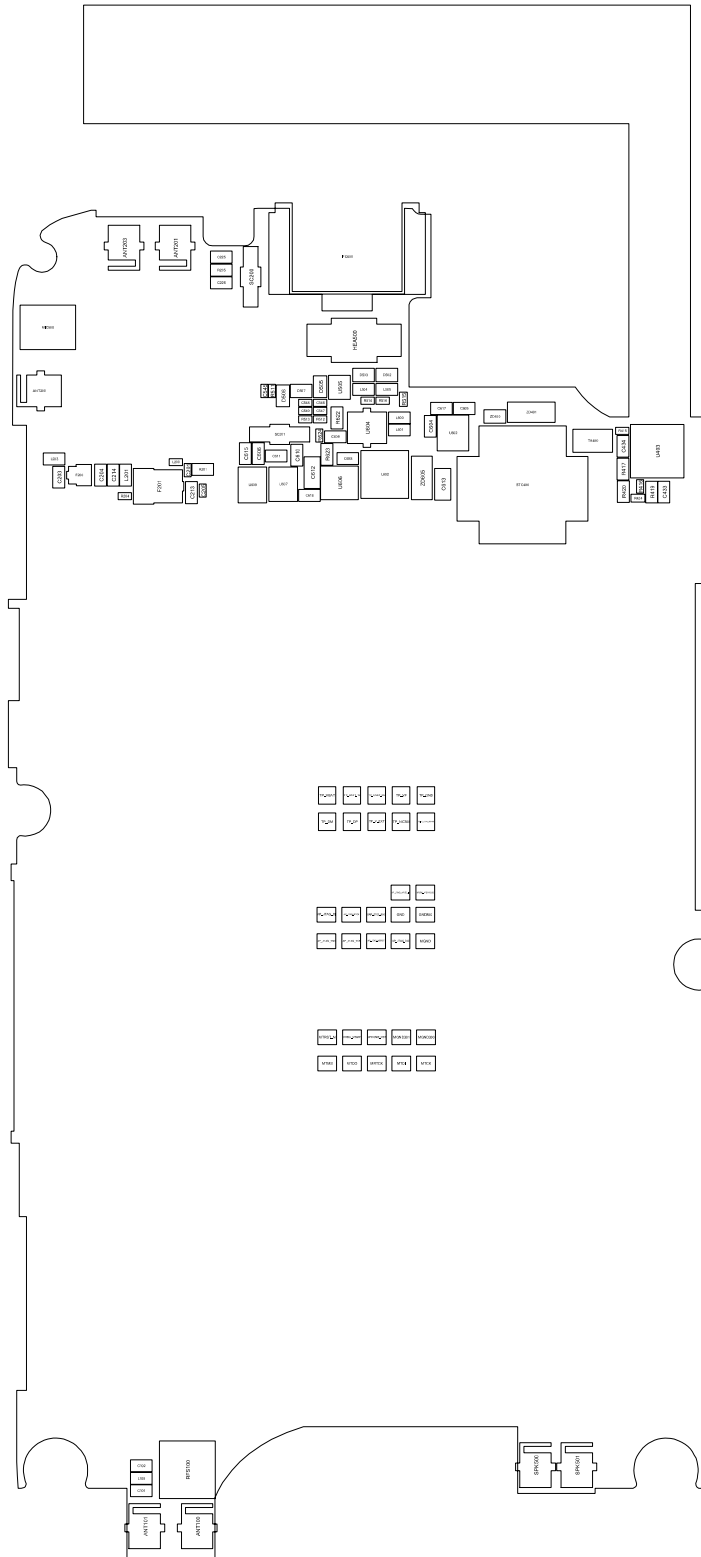
SAMSUNG CONFIDENTIAL

8. PCB Diagrams

Top



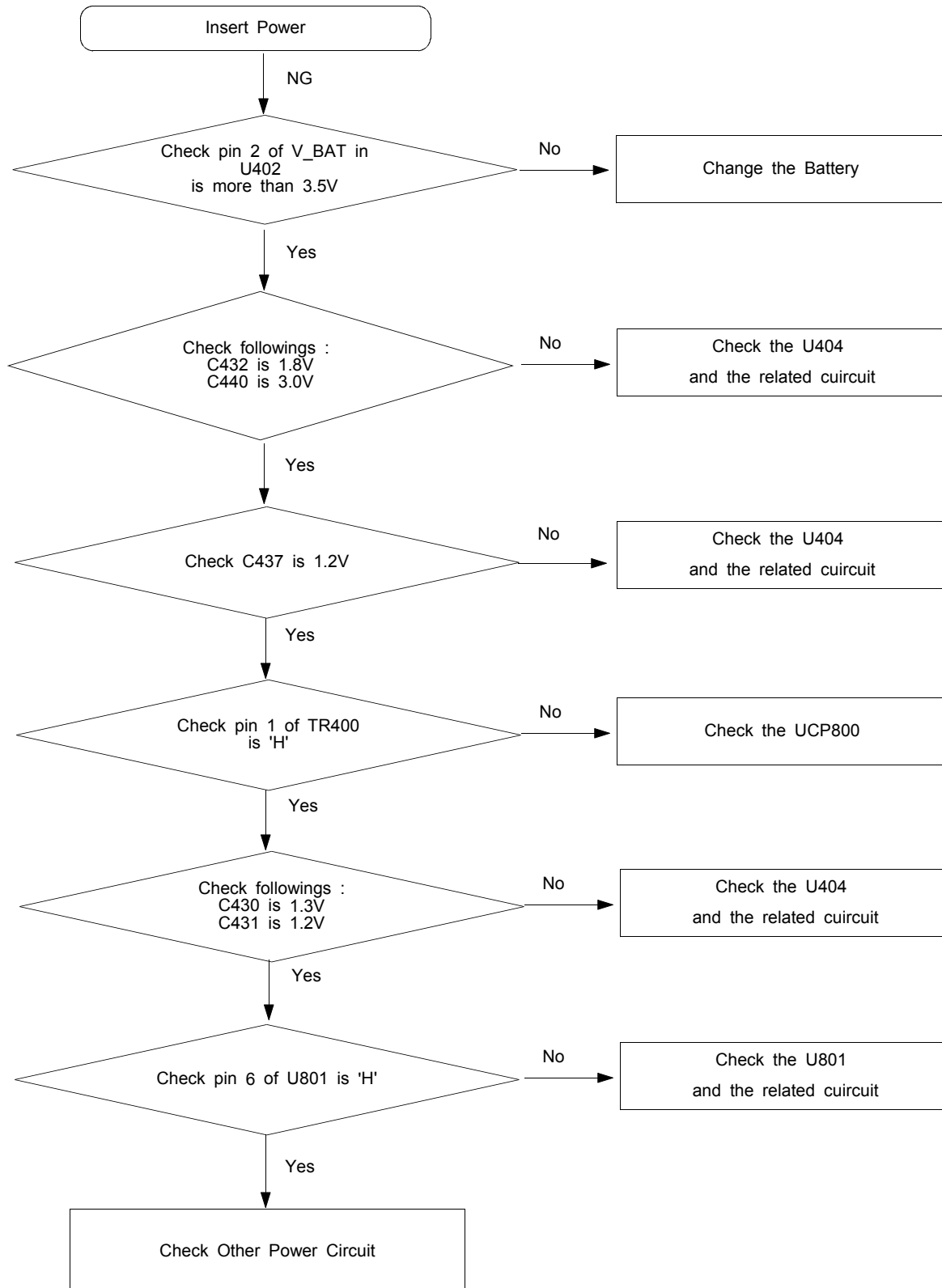
Bottom



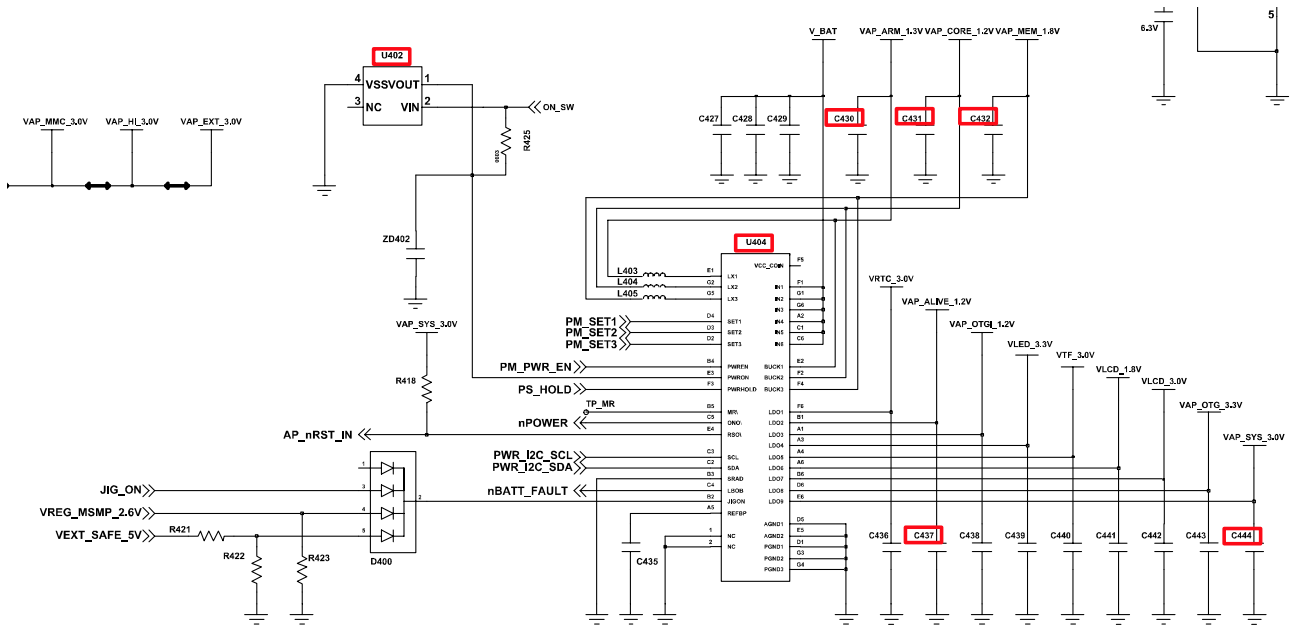
9. Flow Chart of Troubleshooting

9-1. Power On

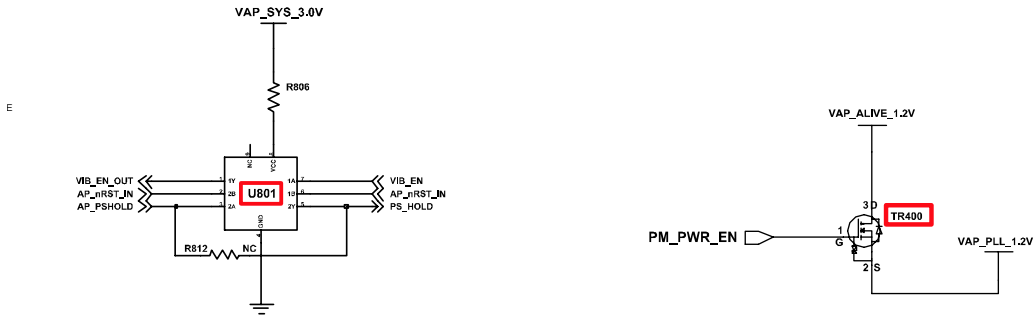
9-1-1. PDA Part

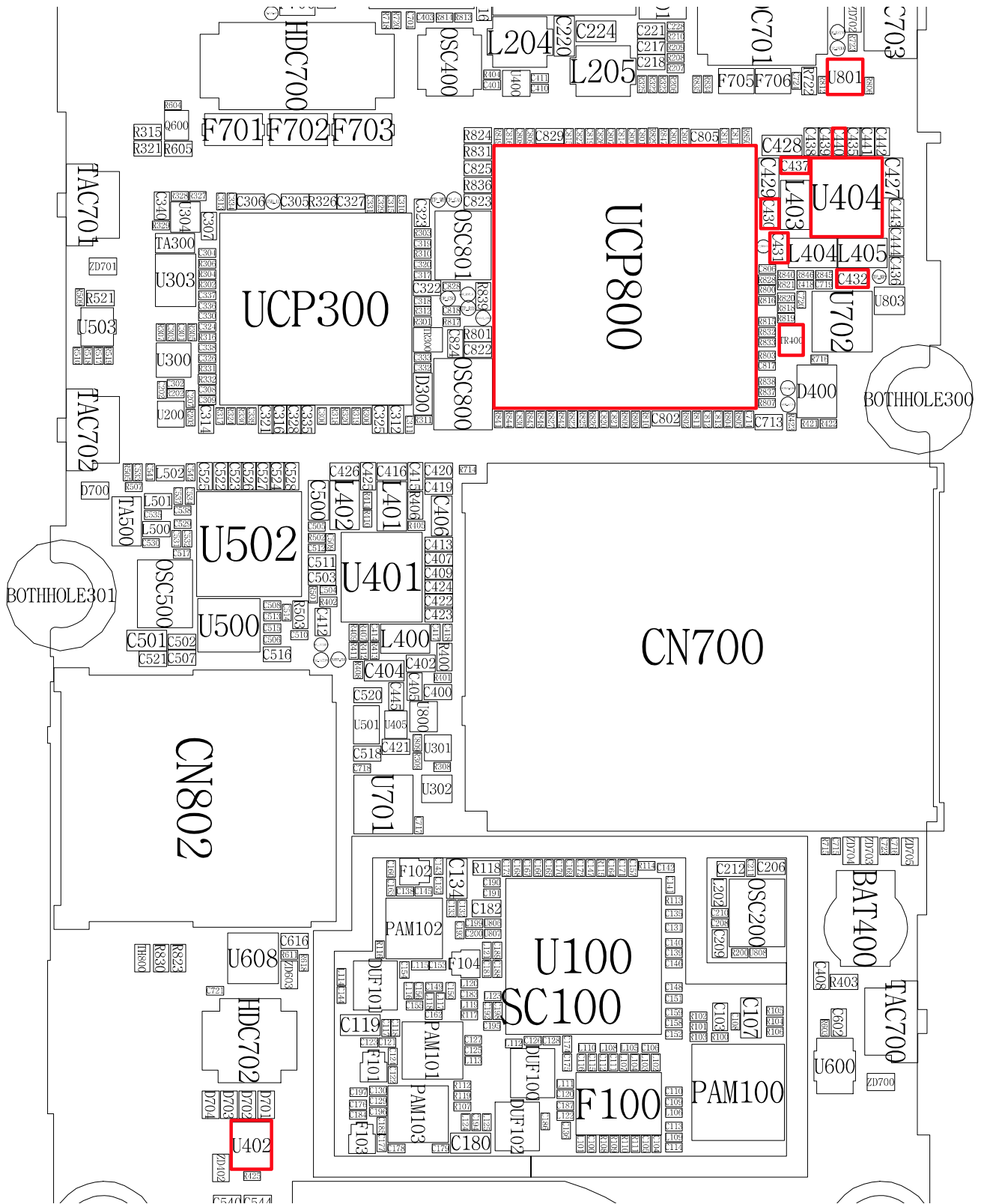


Flow Chart of Troubleshooting

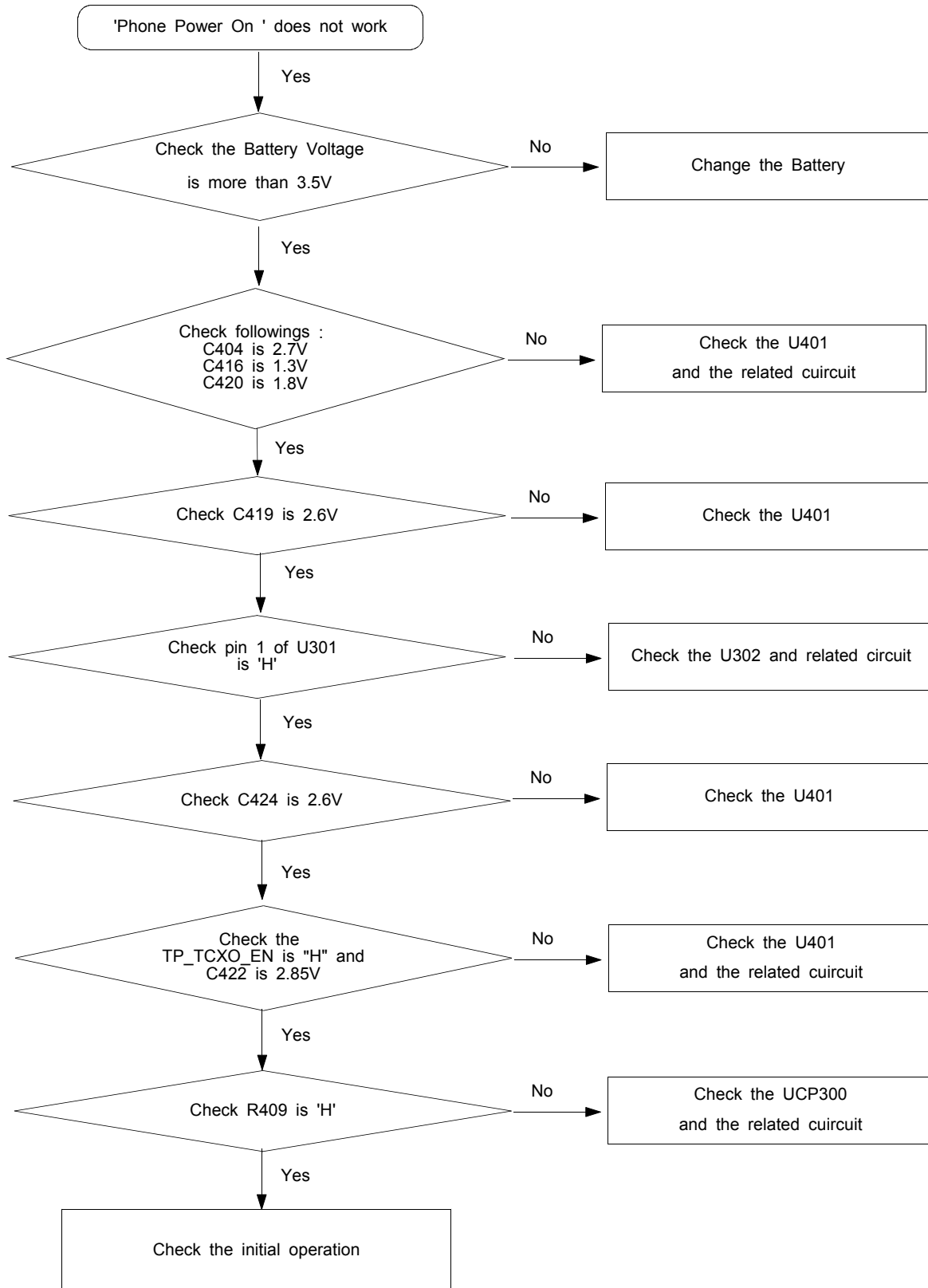


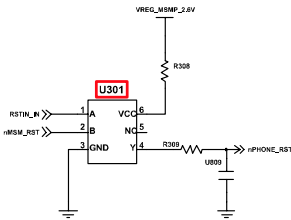
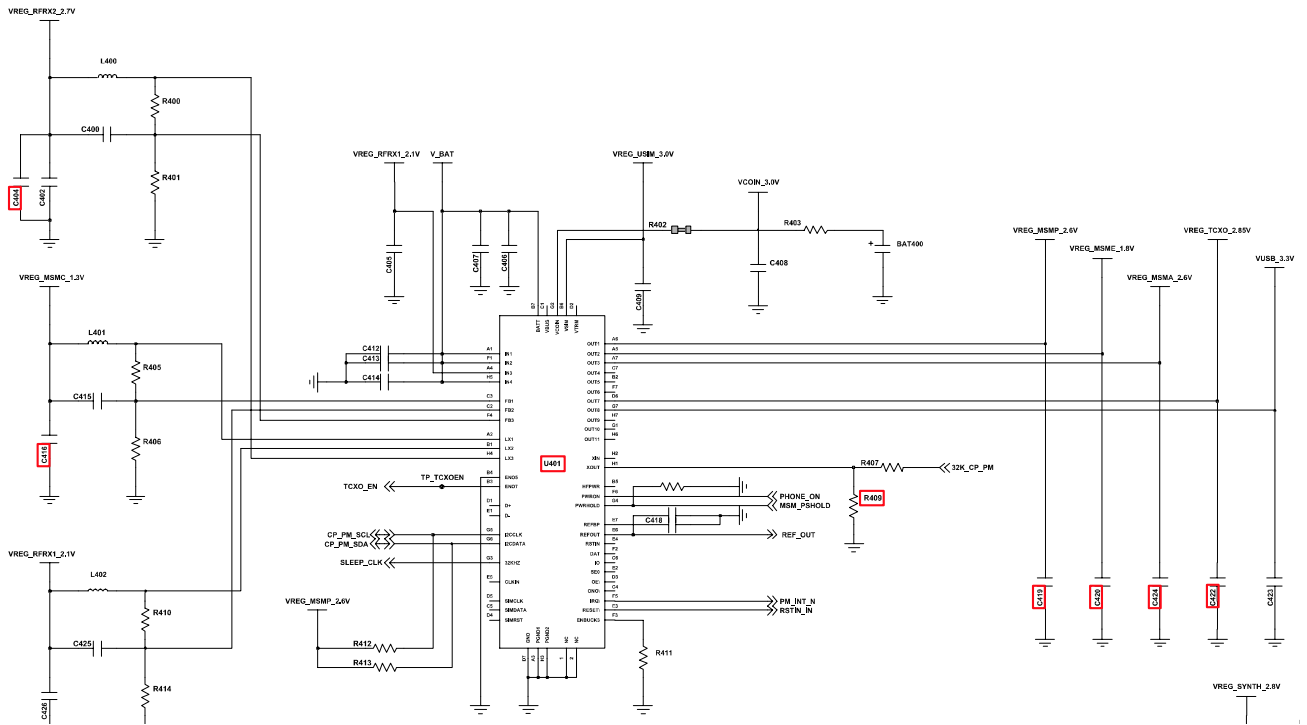
AP PMIC



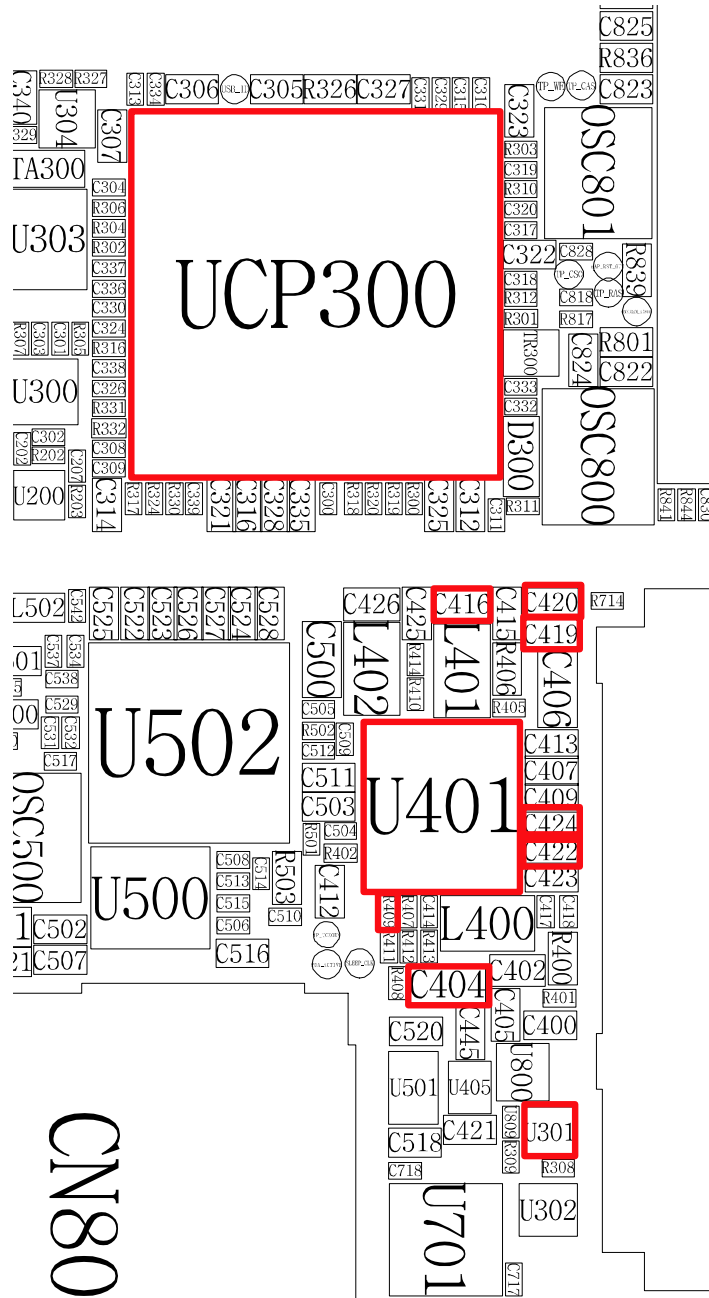


9-1-2. Phone Part

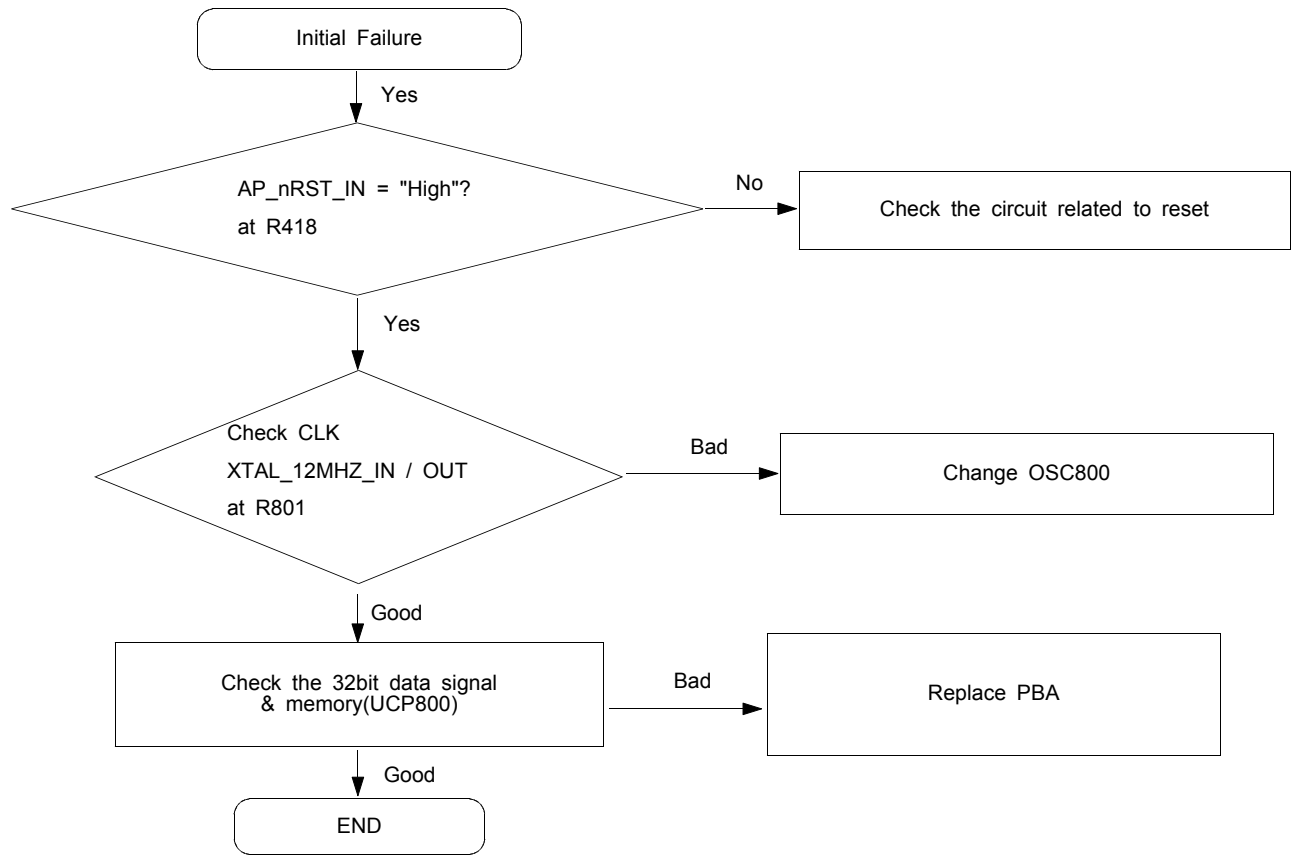




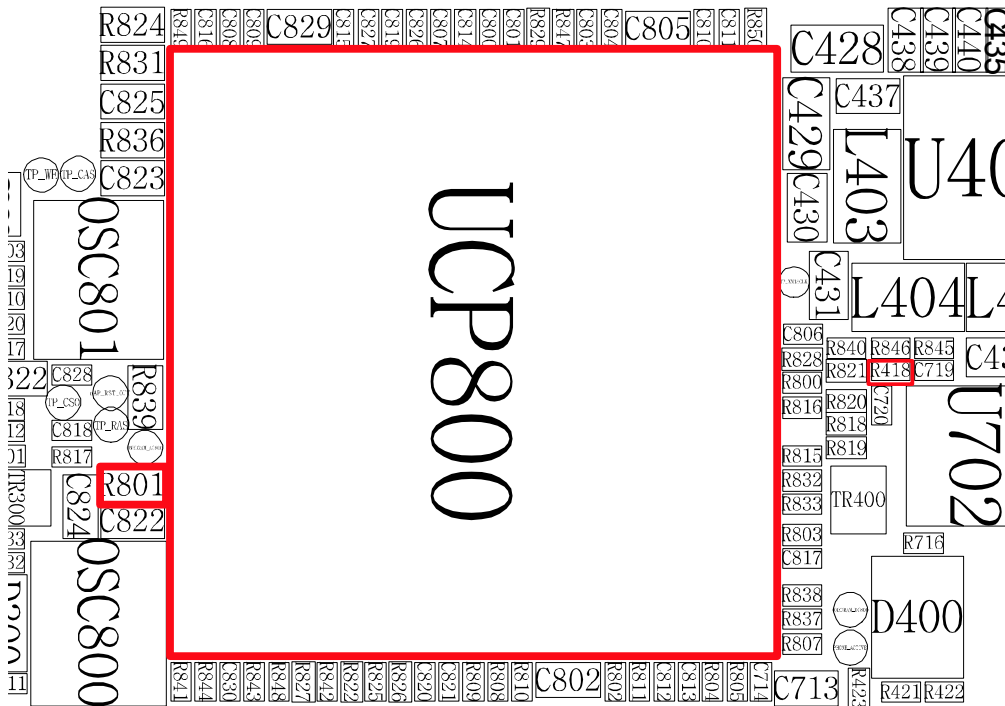
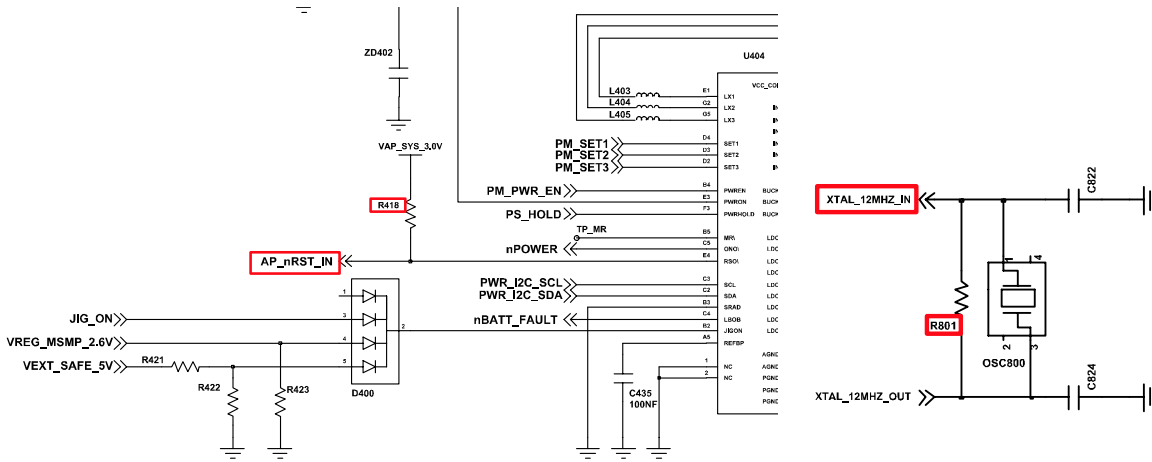
PHONE RESET



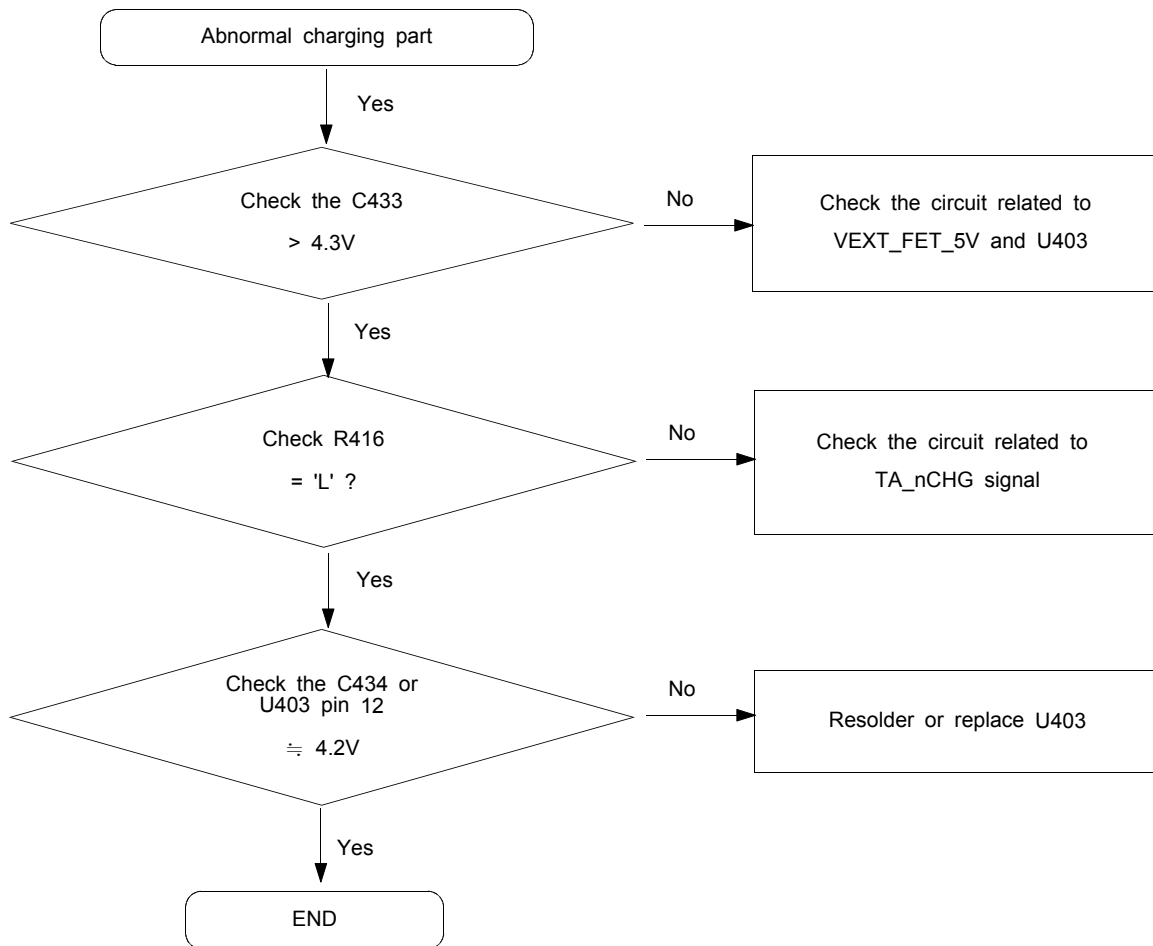
9-2. Initial

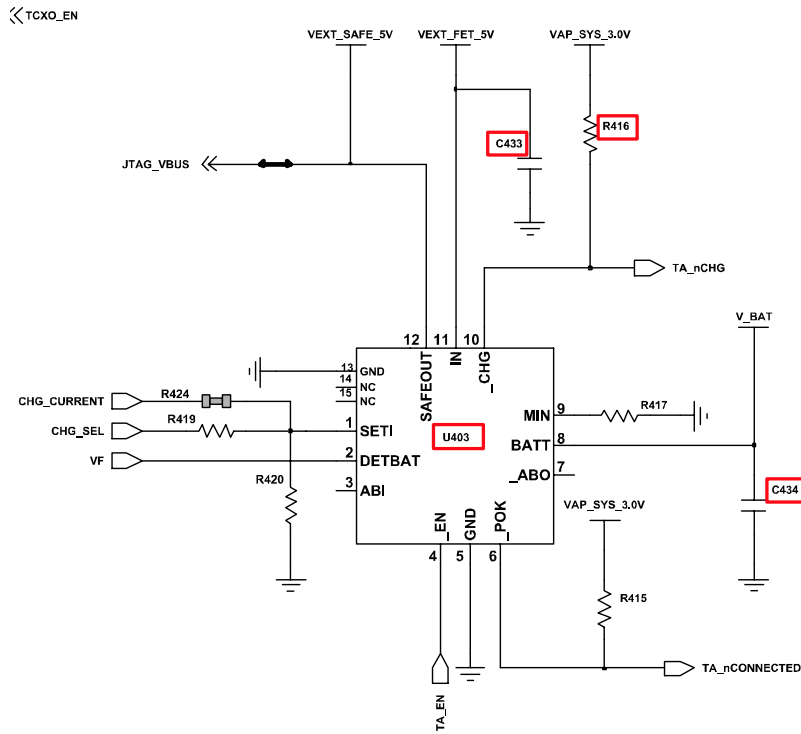


Flow Chart of Troubleshooting

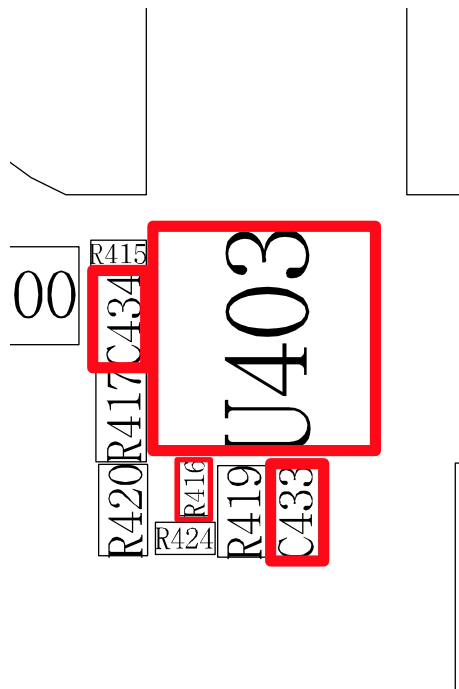


9-3. Charging Part

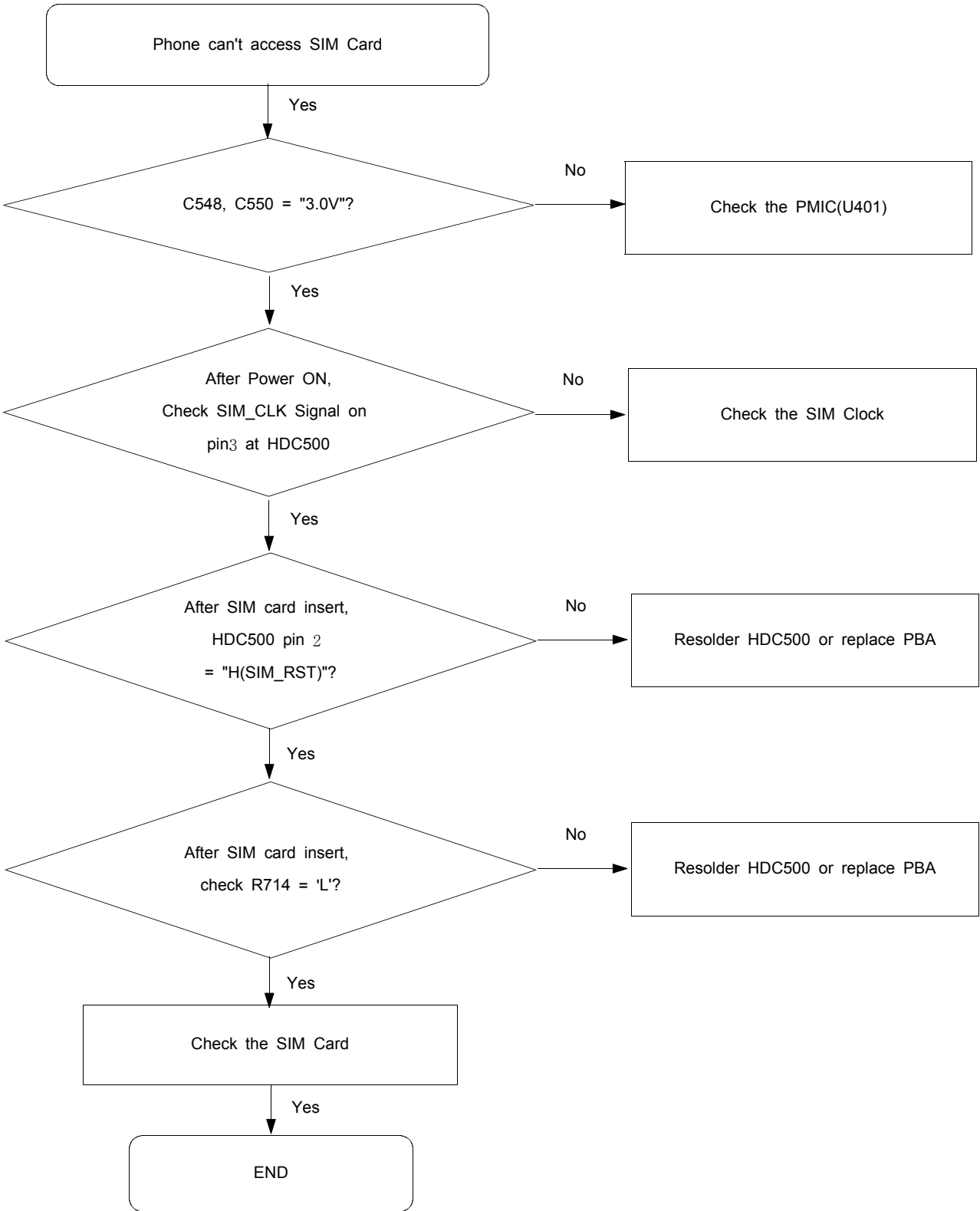


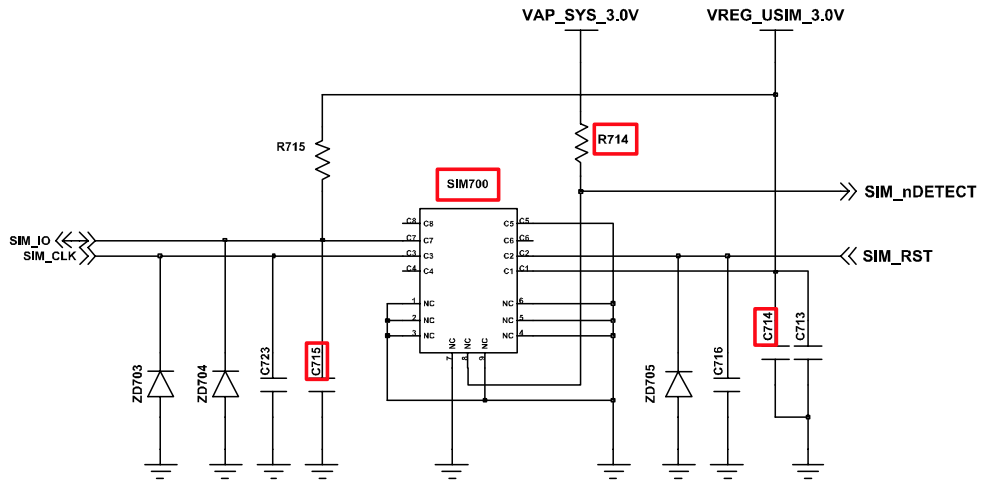


CHARGER

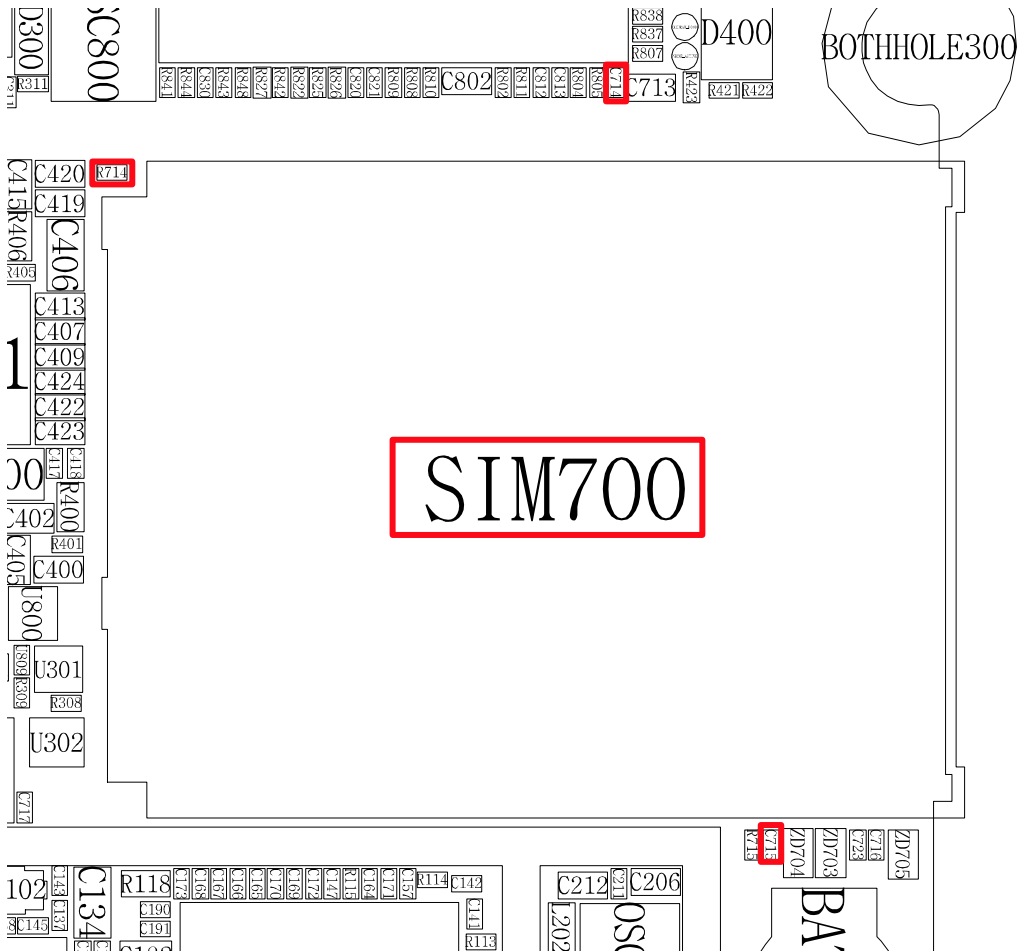


9-4. Sim Part

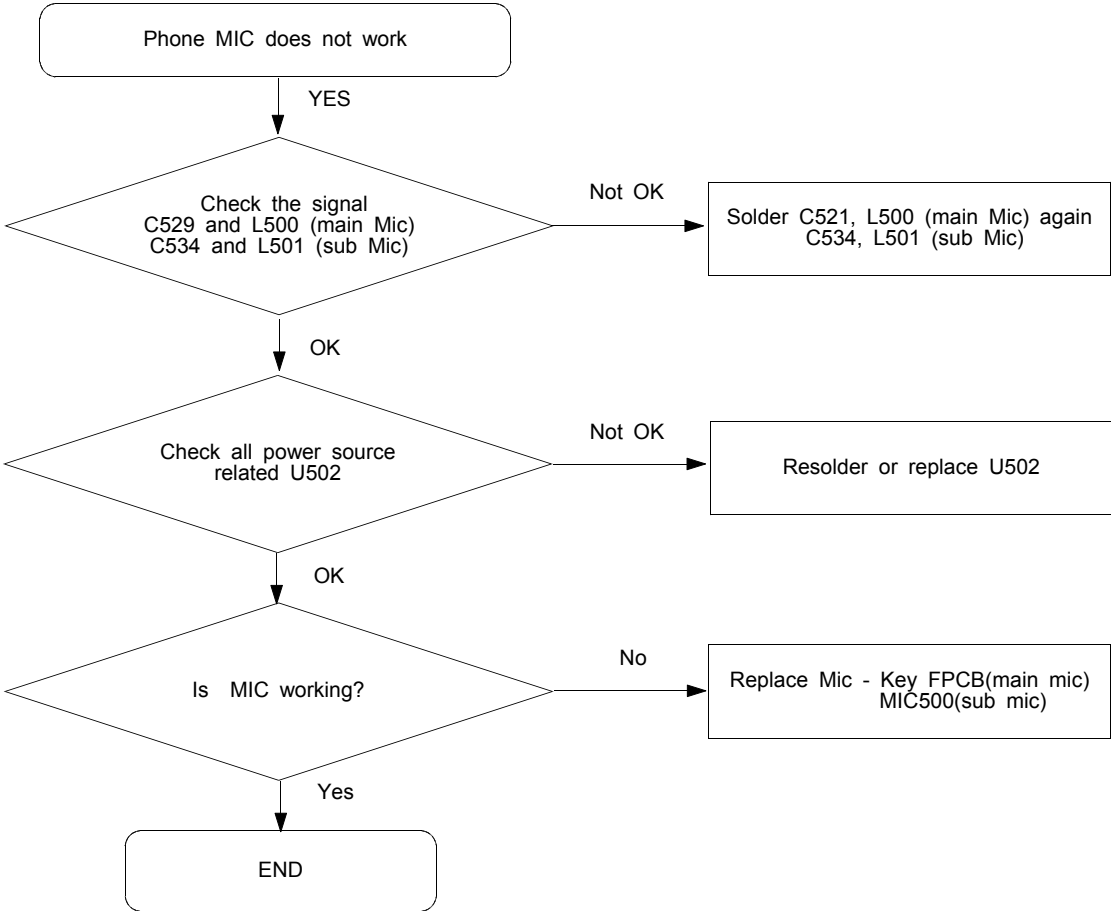




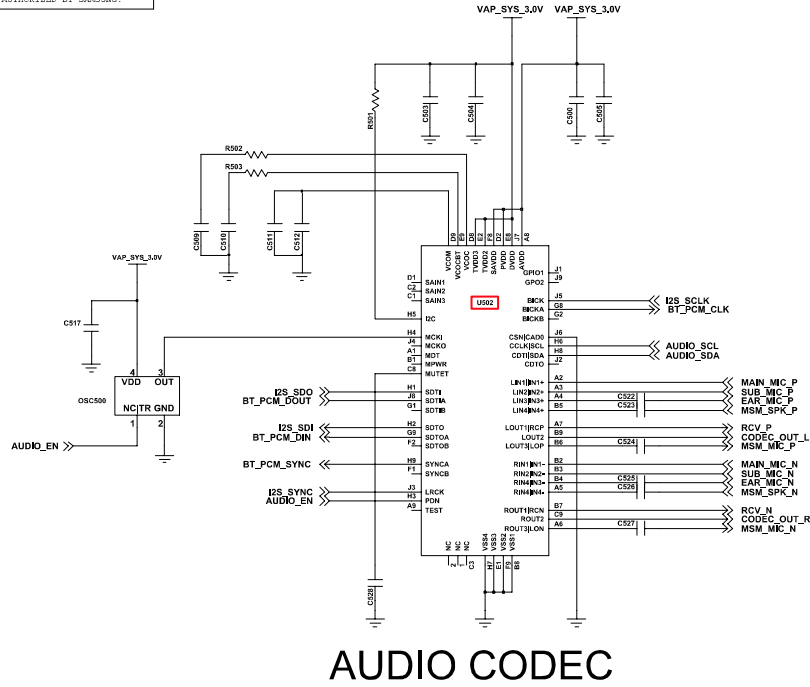
SIM CONN



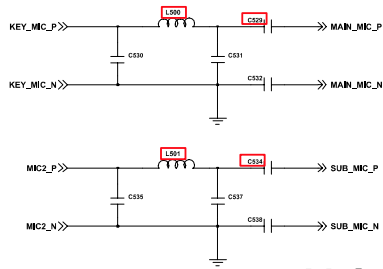
9-5. Microphone Part



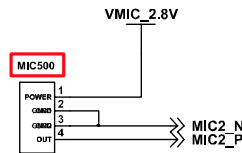
BY INFORMATION THAT IS
SAMSUNG CO.'S PROPERTY.
IS TO OR DUPLICATE FOR OTHERS
AUTHORIZED BY SAMSUNG.



AUDIO CODEC

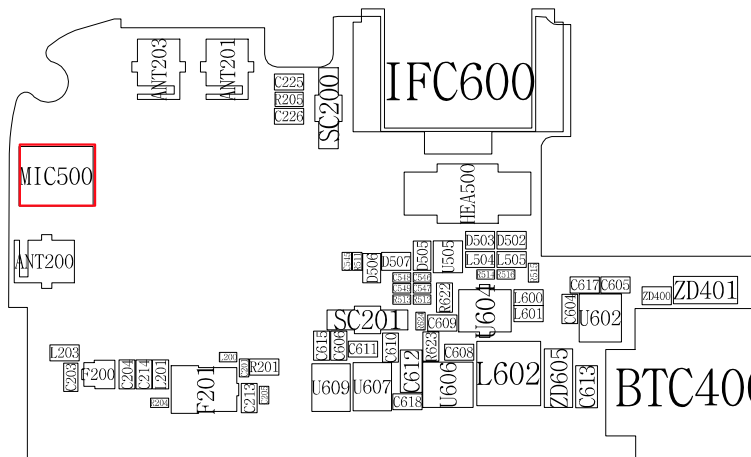
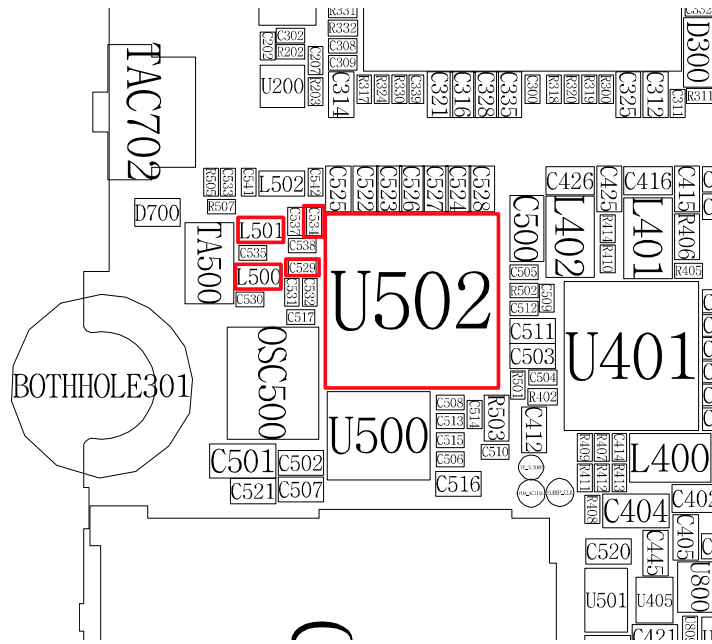


MIC FIL

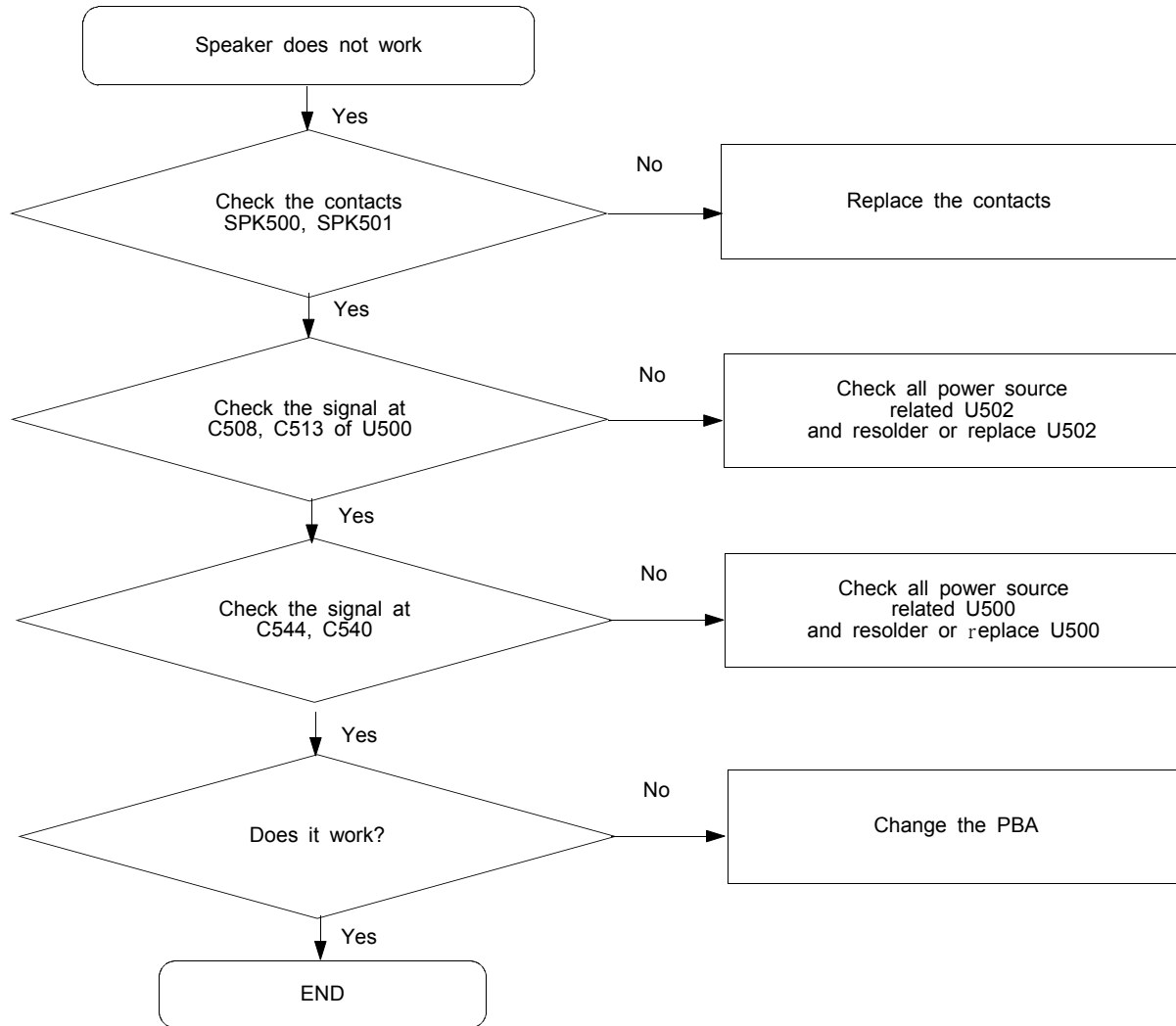


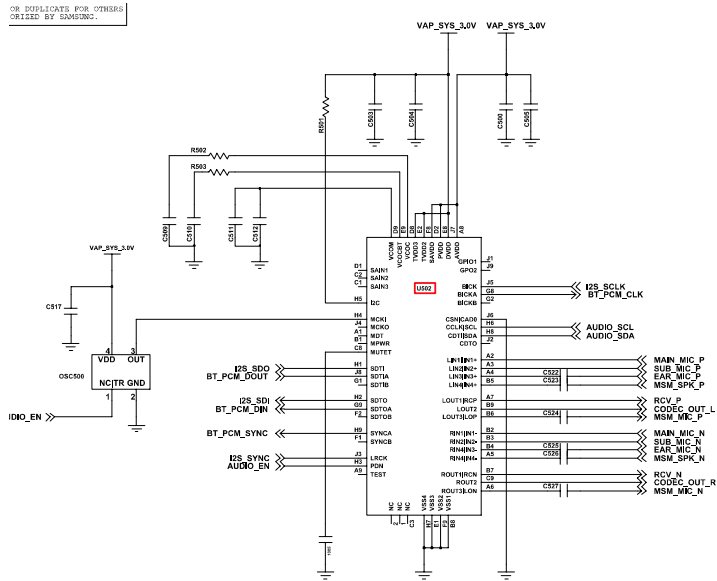
SUB MIC



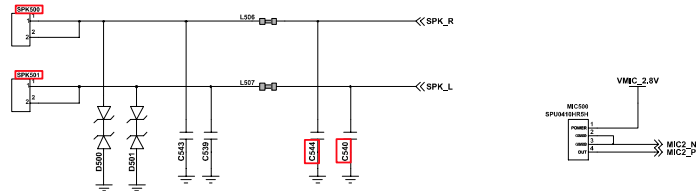


9-6. Speaker Part(Melody)



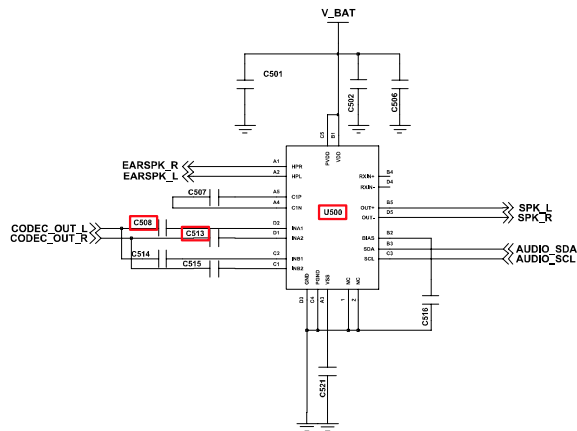


AUDIO CODEC

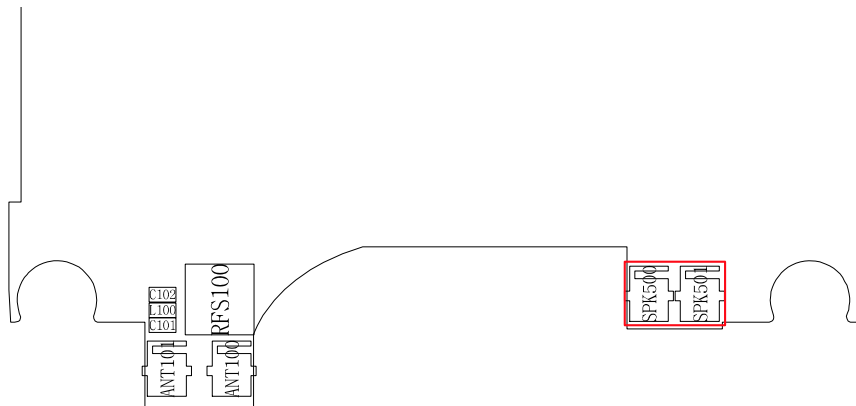
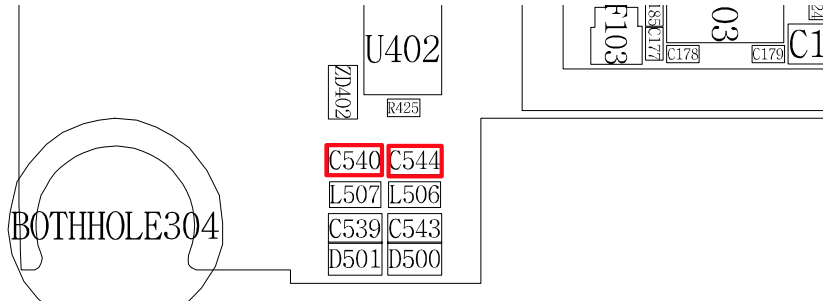
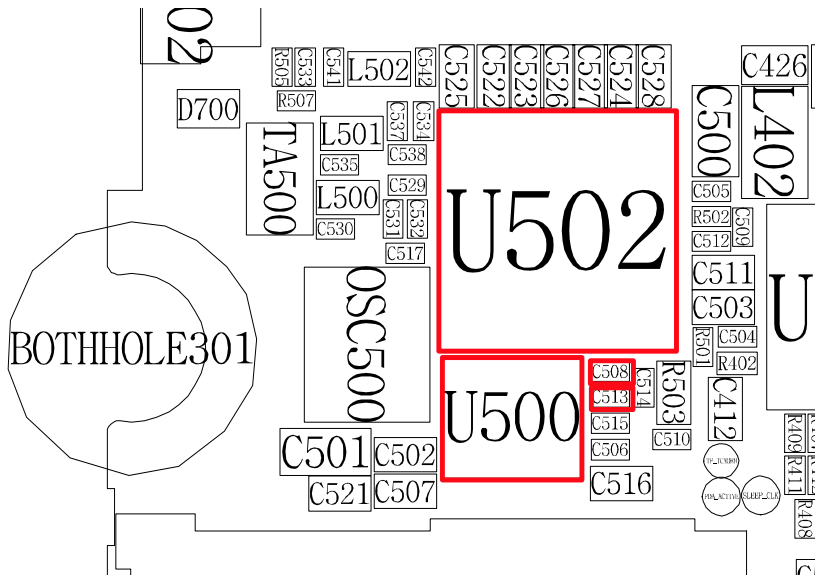


SPK CONTACT

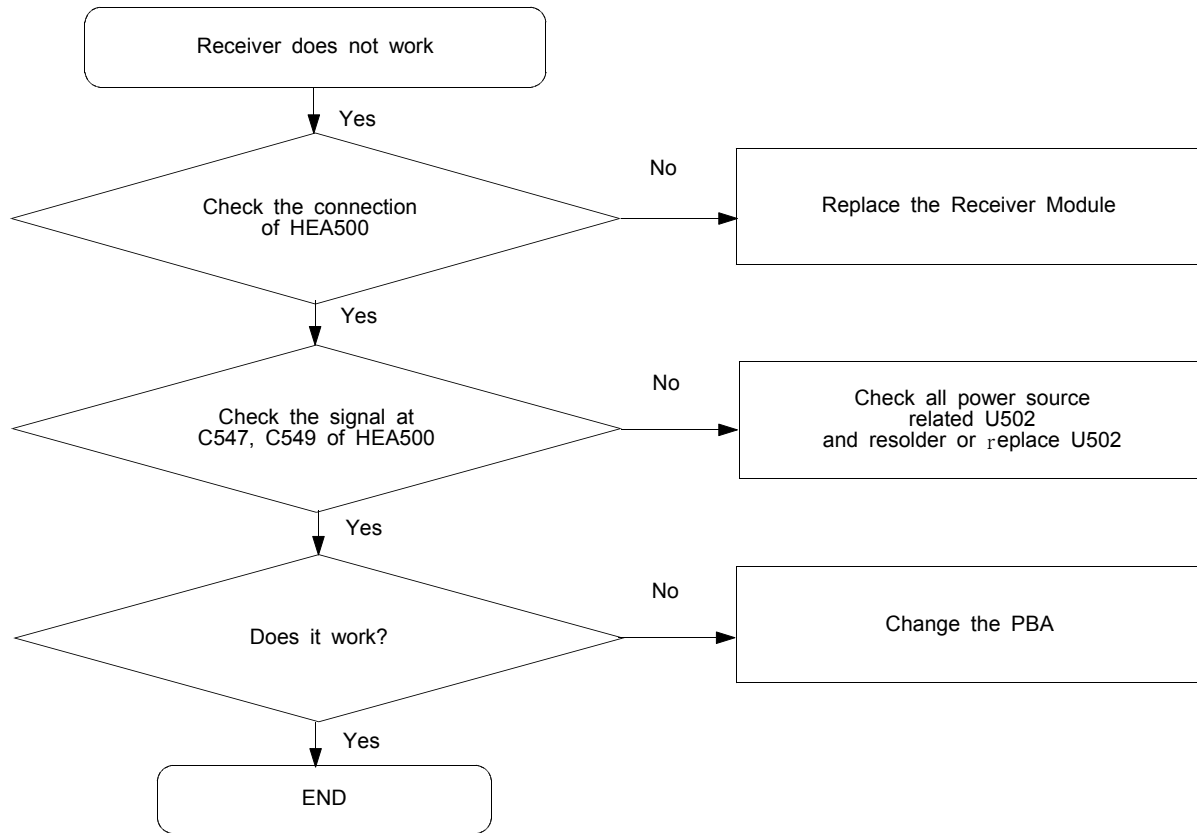
SUB MIC

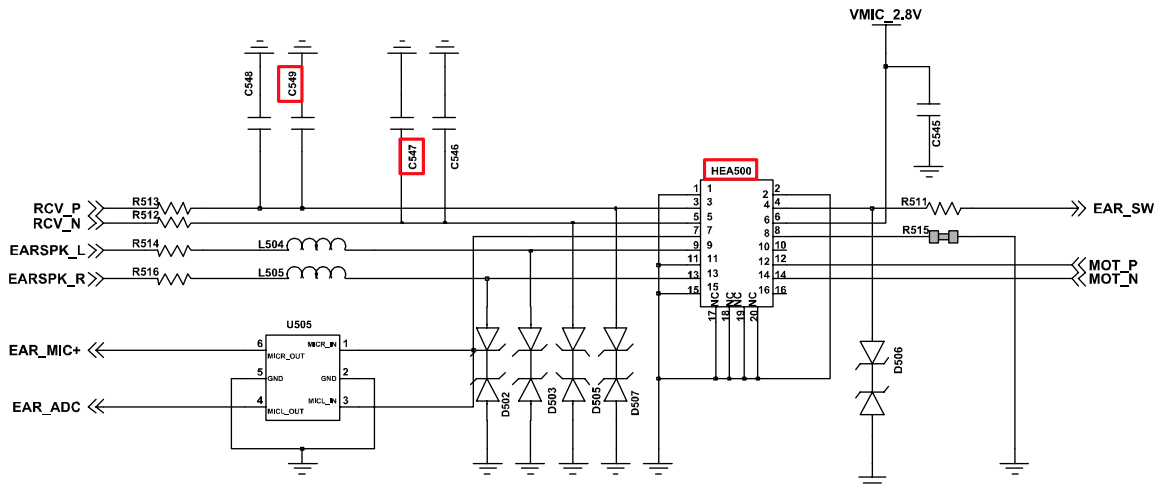


AUDIO AMP



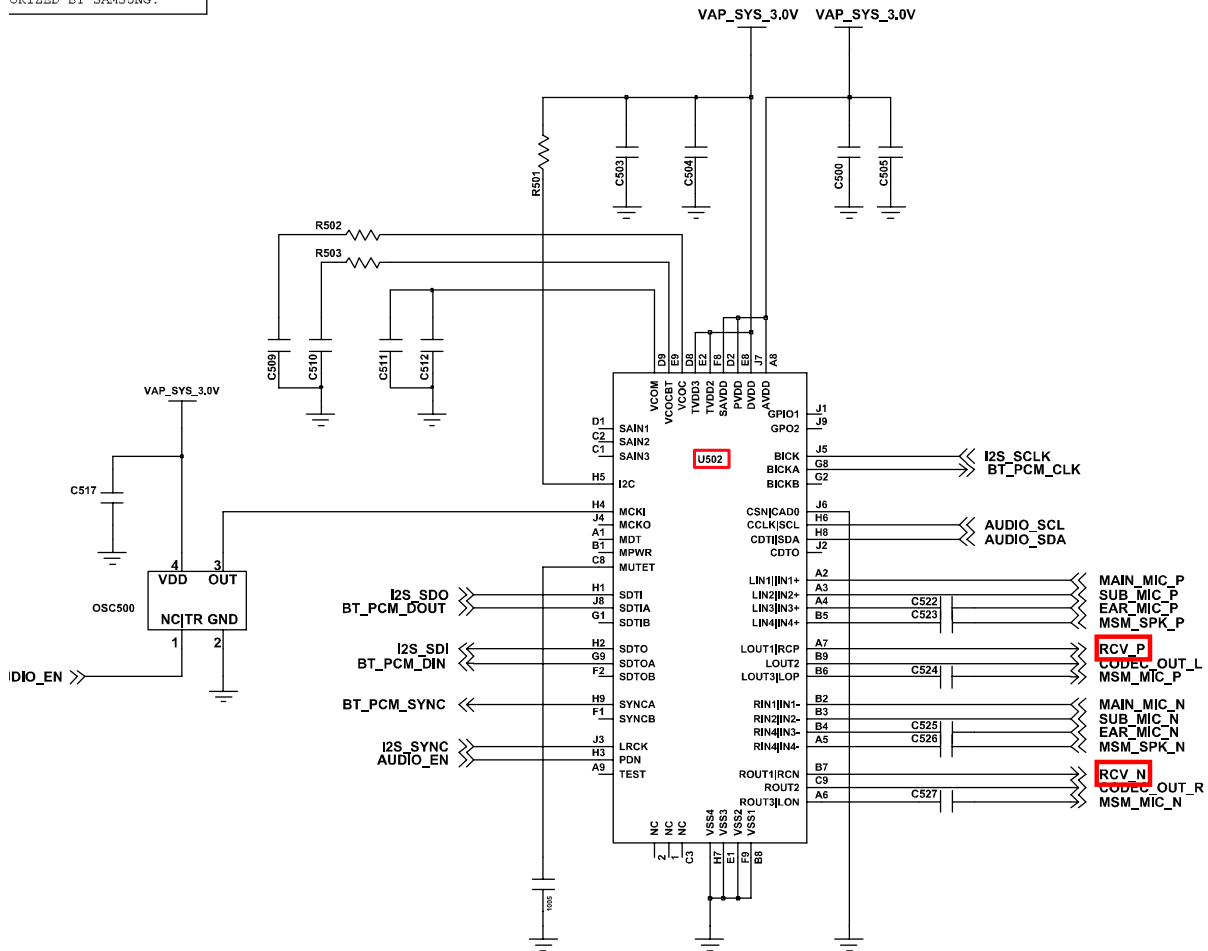
9-7. Receiver Part



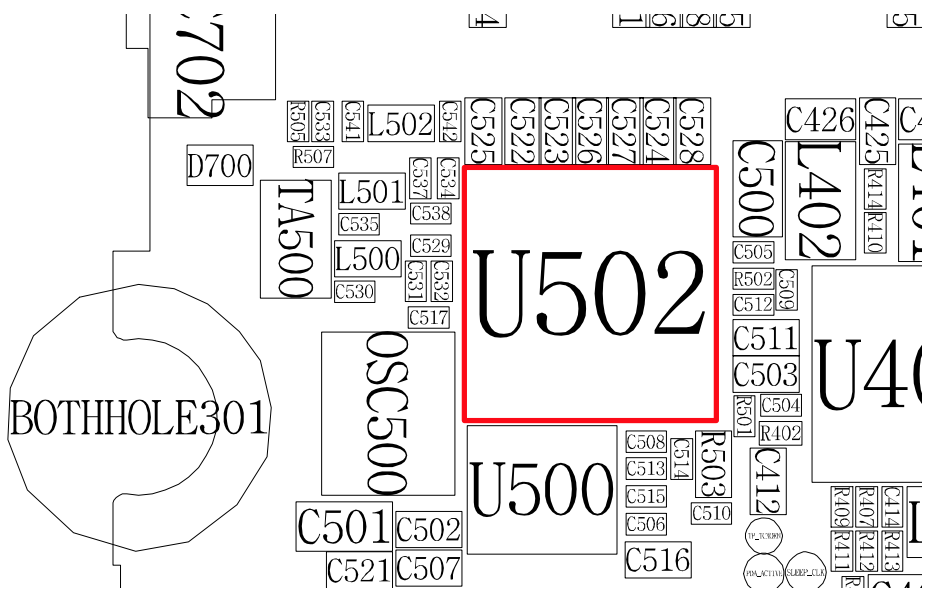
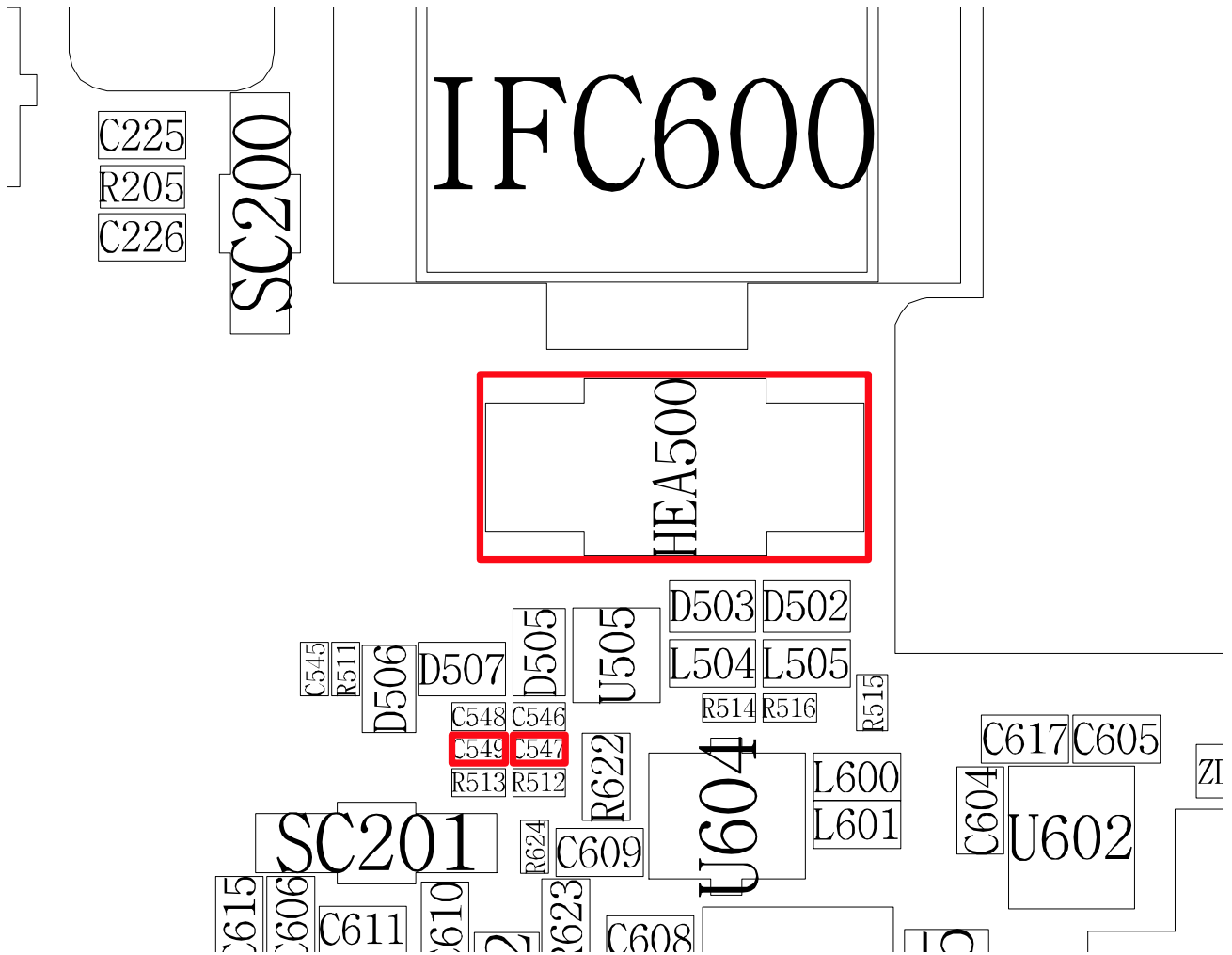


RCV / EARJACK / MOT CONN

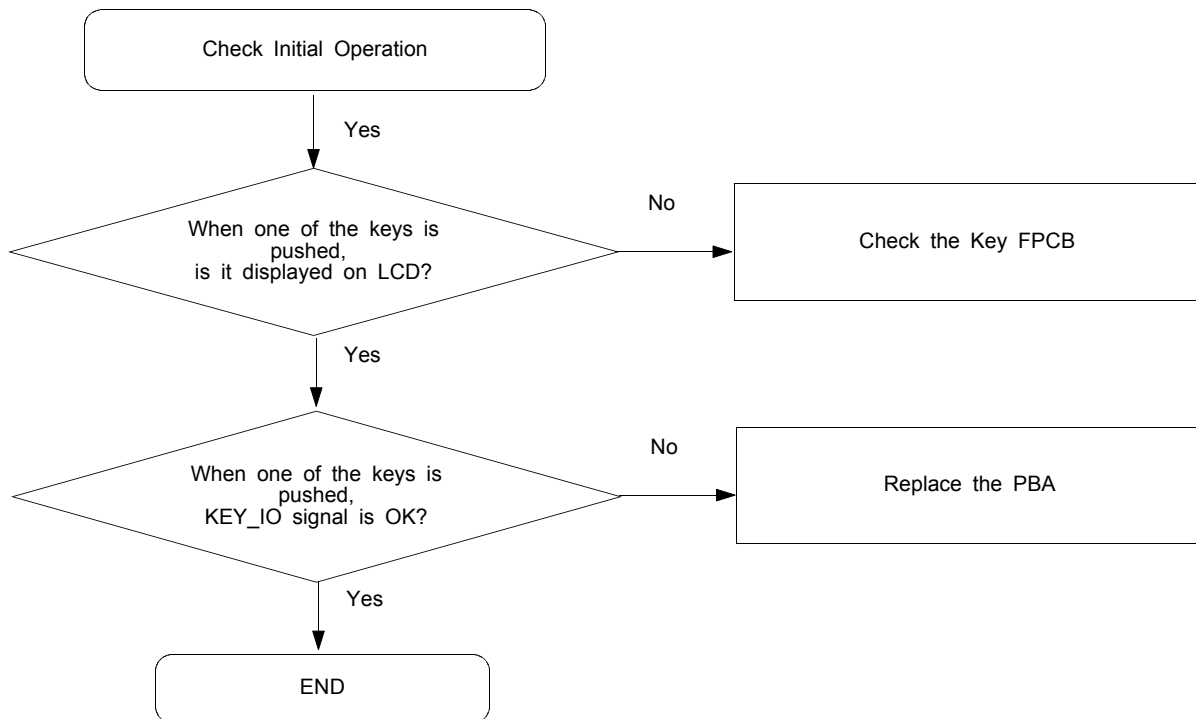
ORIZED BY SAMSUNG.

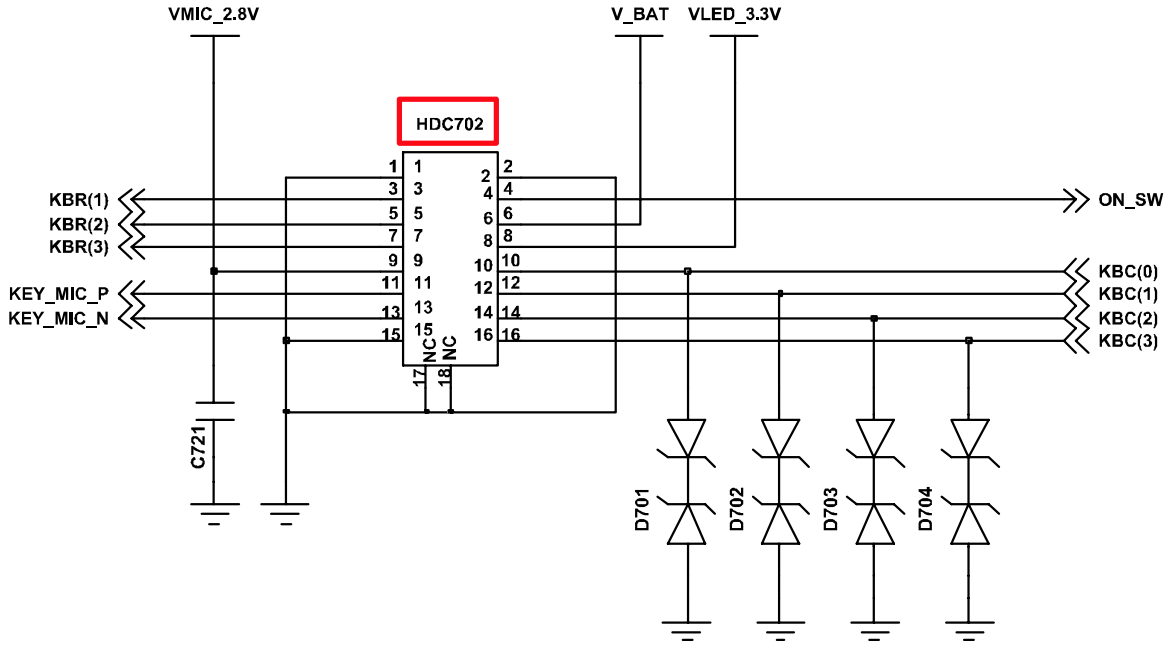


AUDIO CODEC

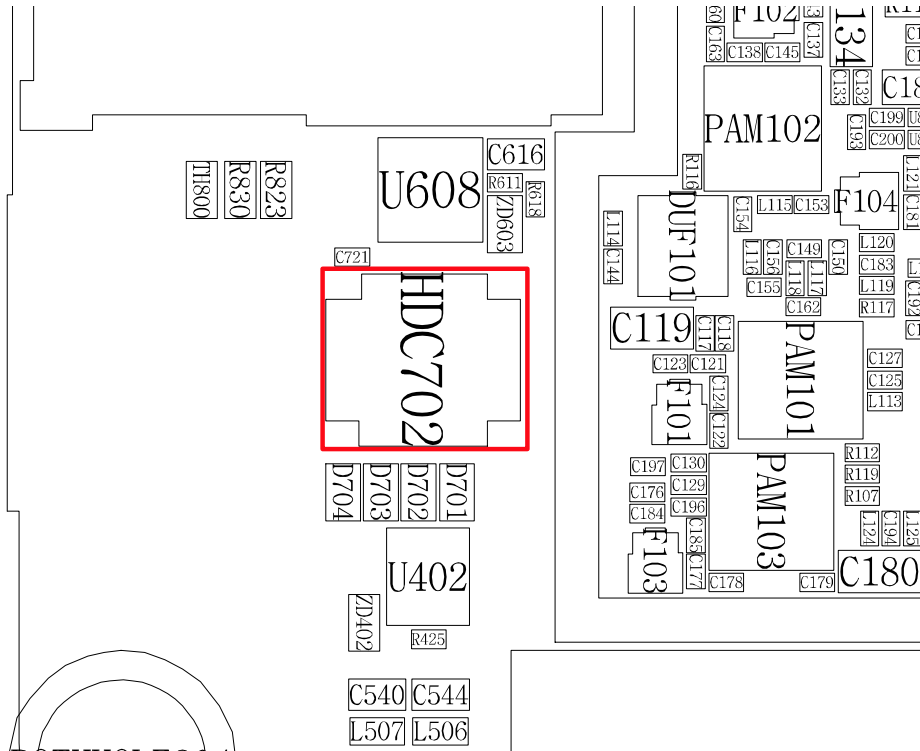


9-8. Key Data Input

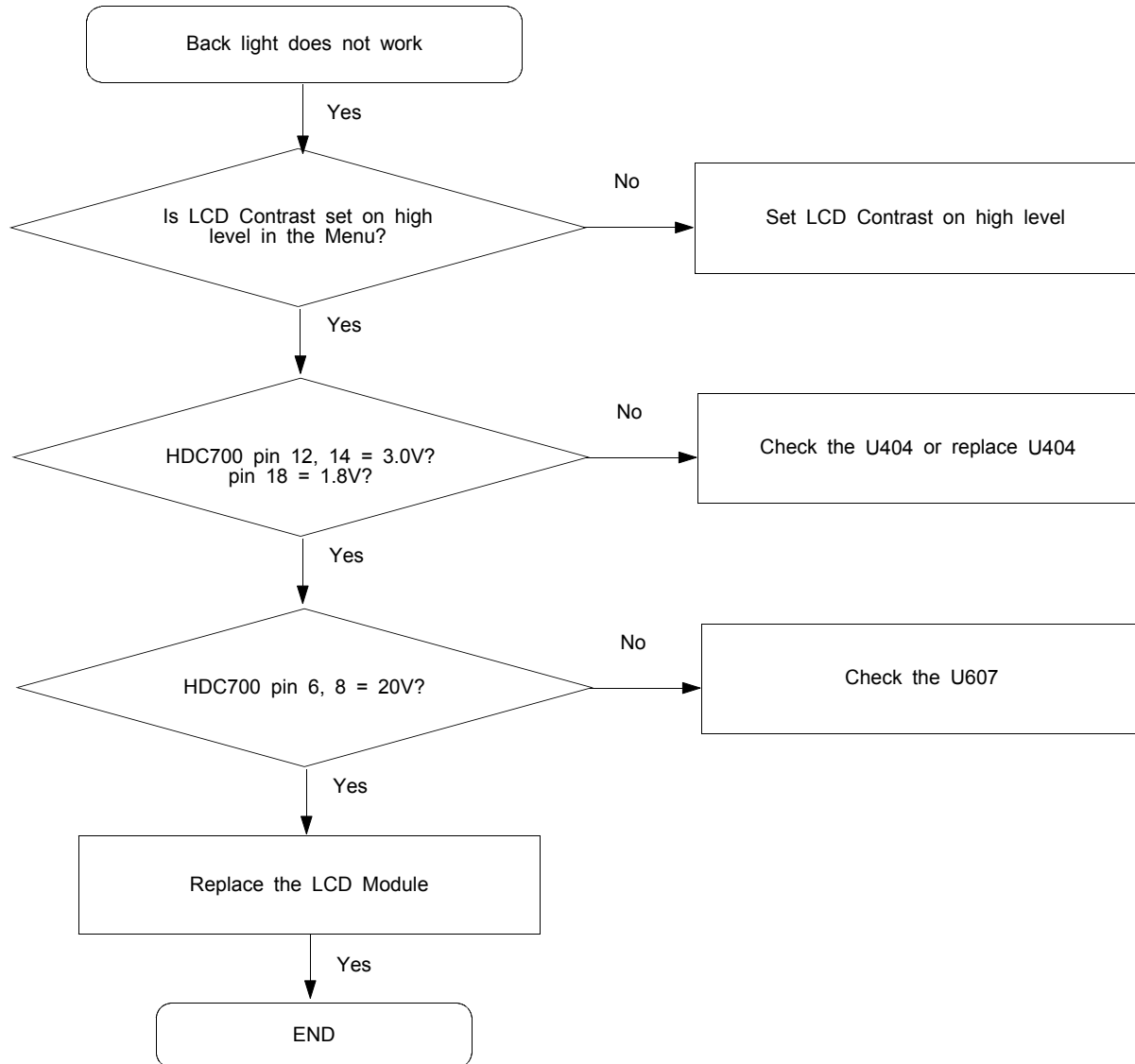


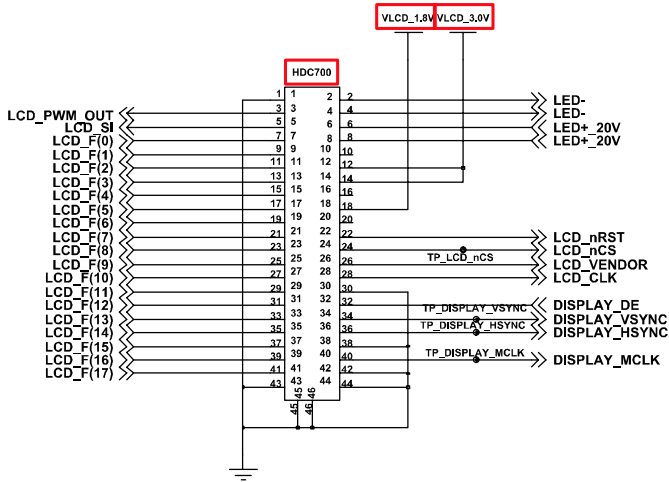


MAIN KEY CONN

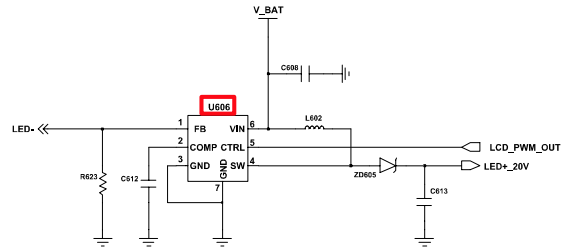


9-9. Back Light (for Color Main LCD)

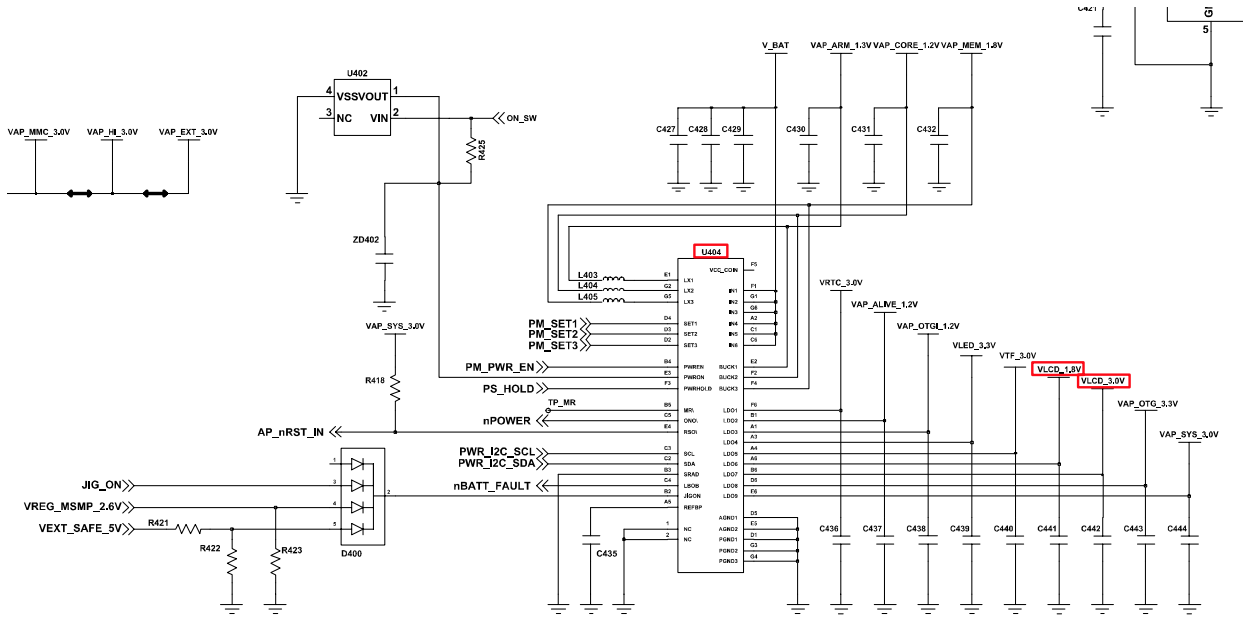




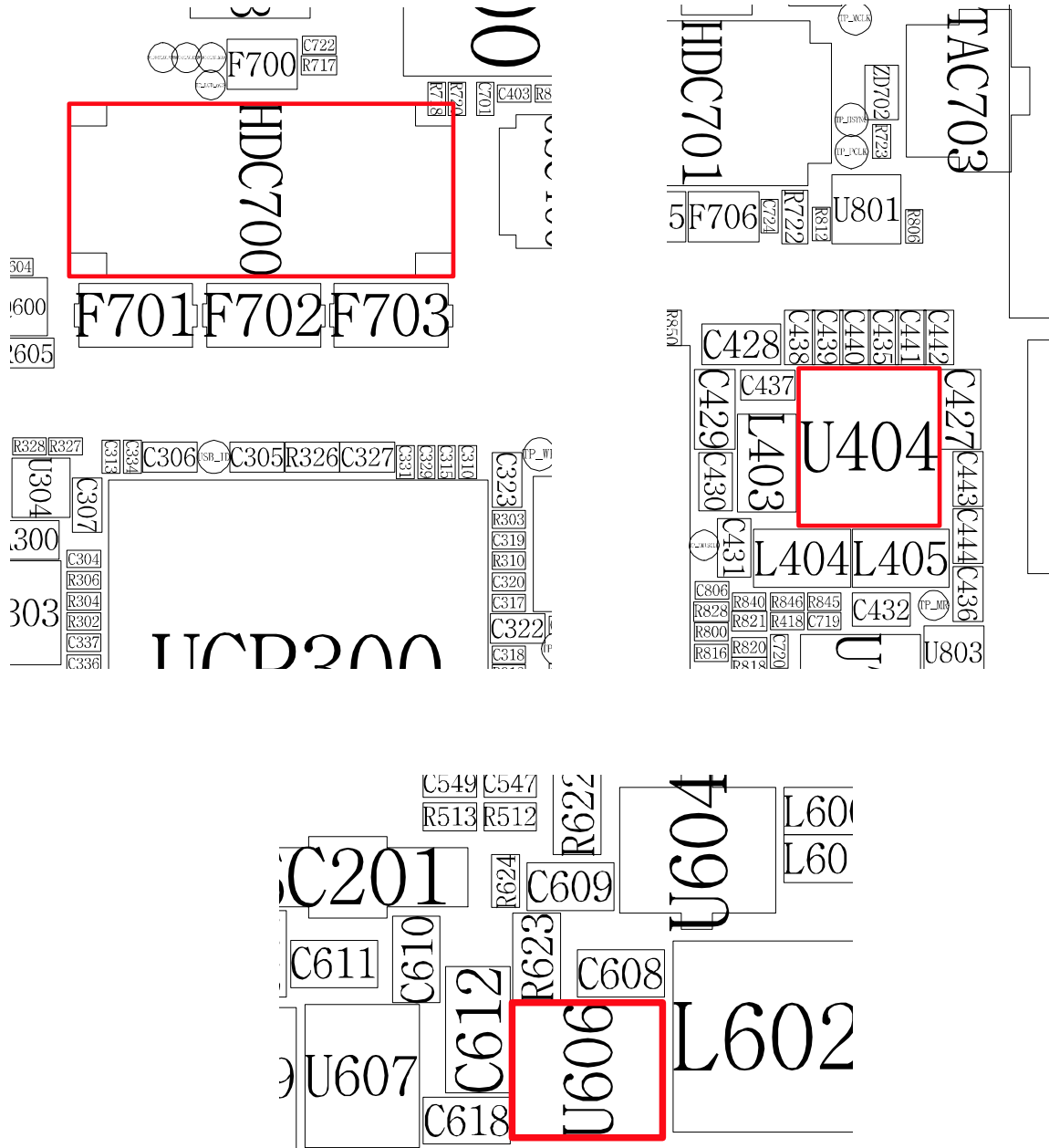
LCD CONN



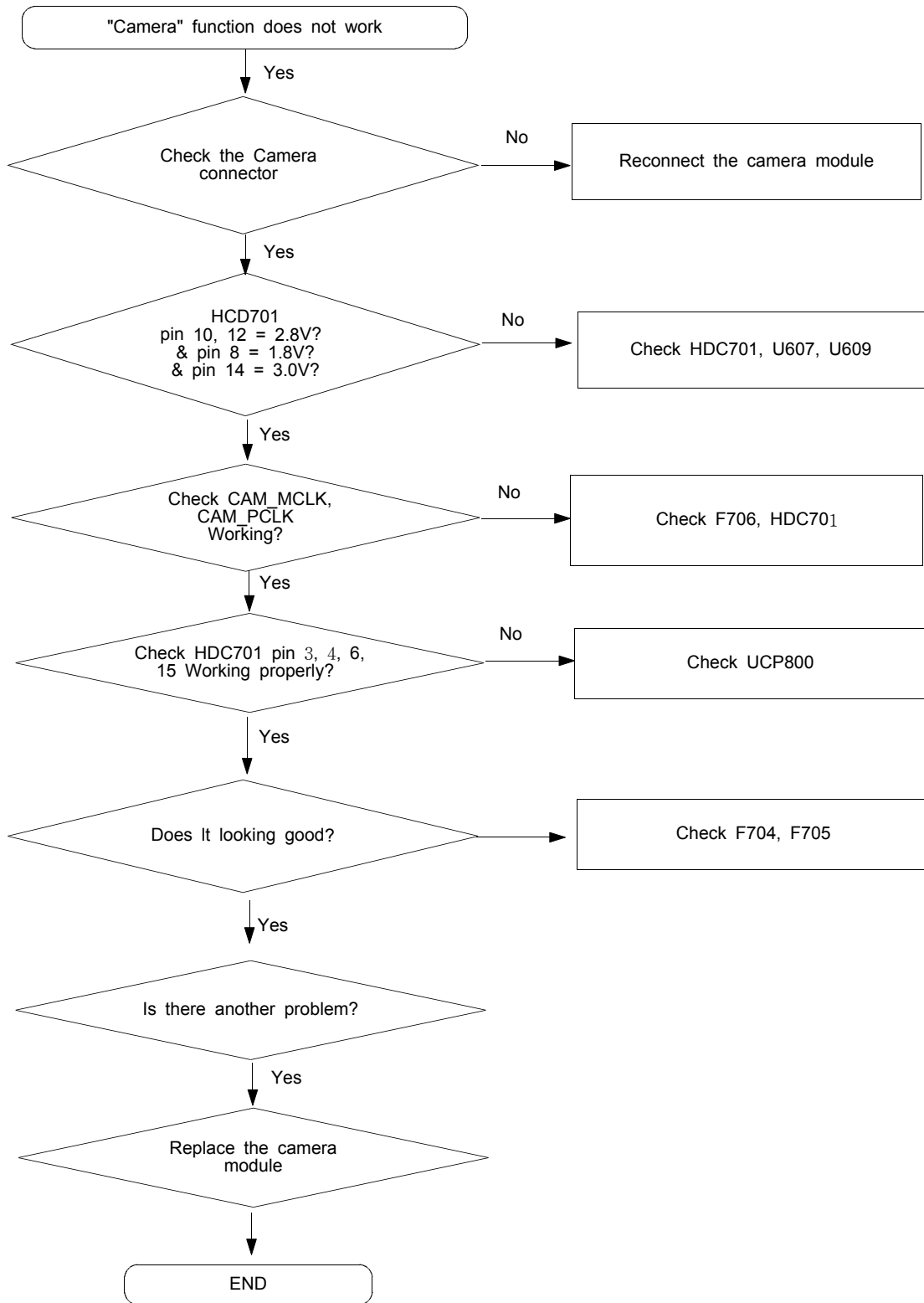
LCD BLU DRIVER

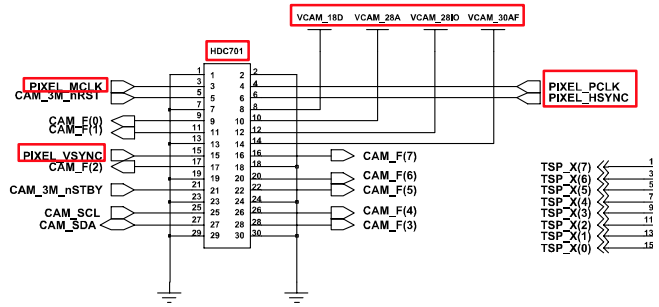
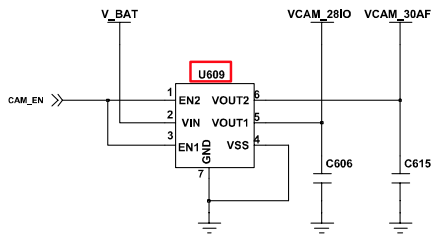
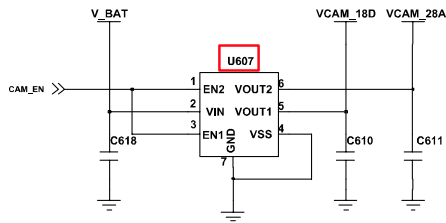


AP PMIC



9-10. Camera part (3M CAMERA)

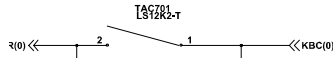
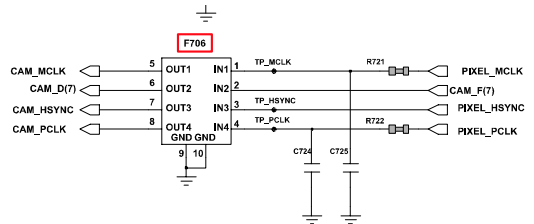
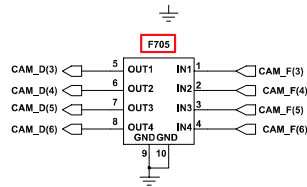
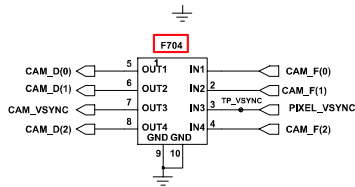




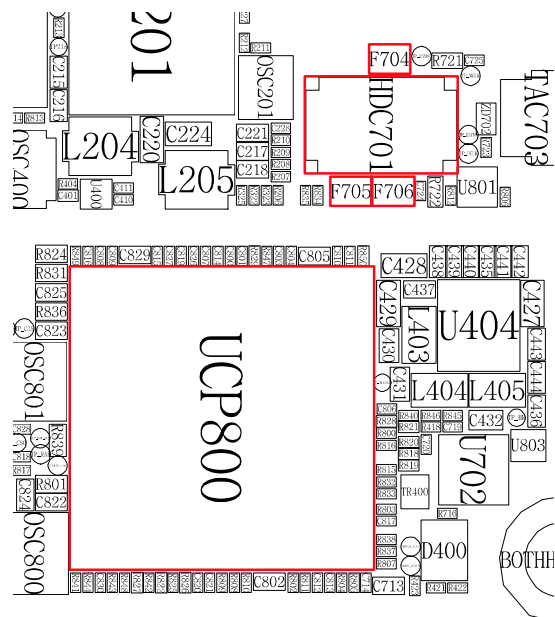
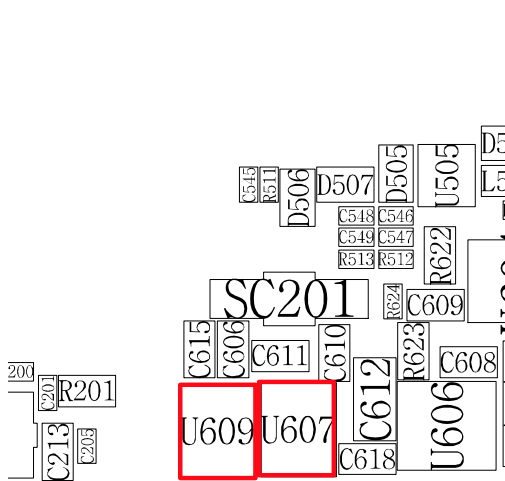
Camera LDOs

3M CAM CONN

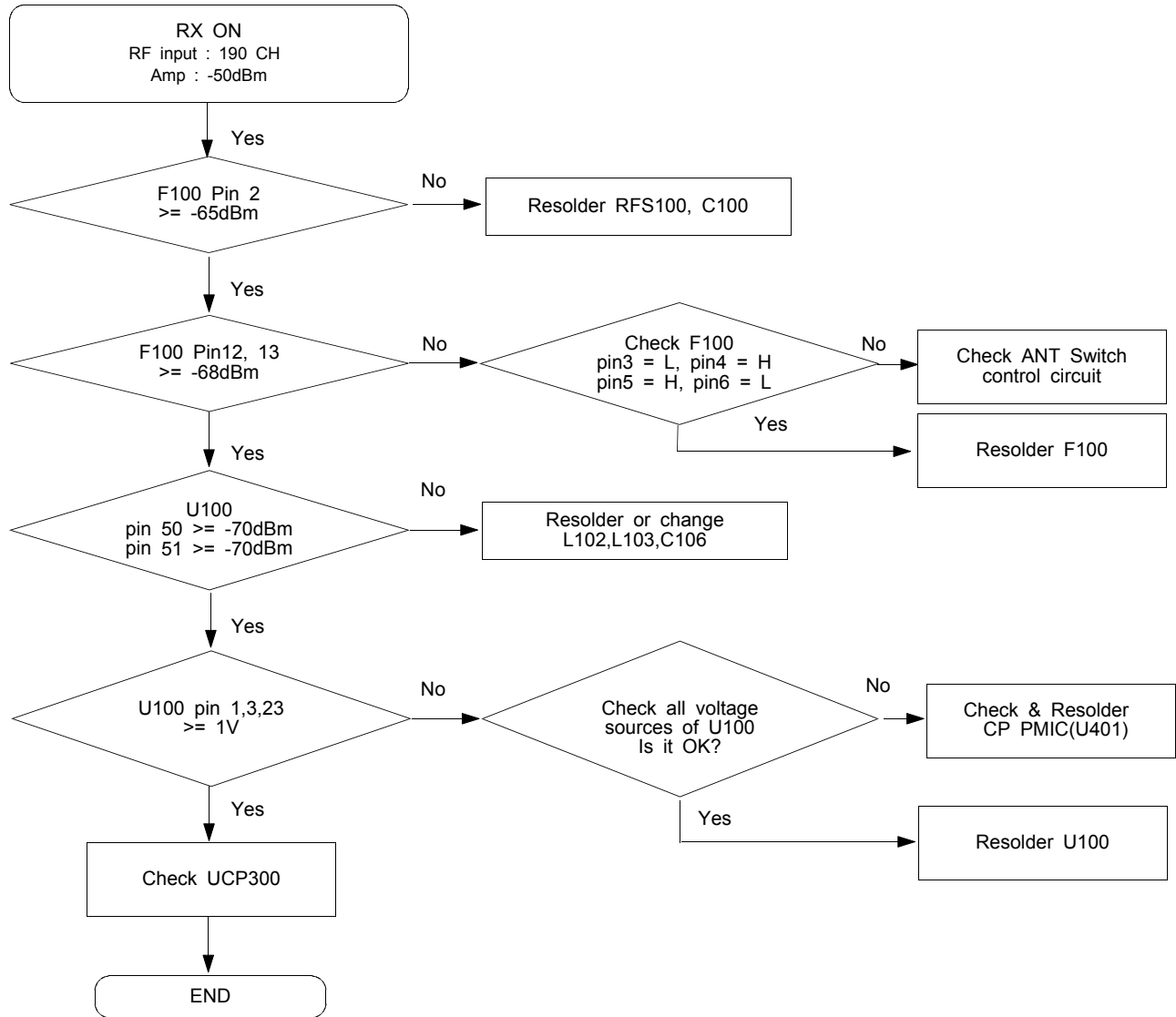
TSP

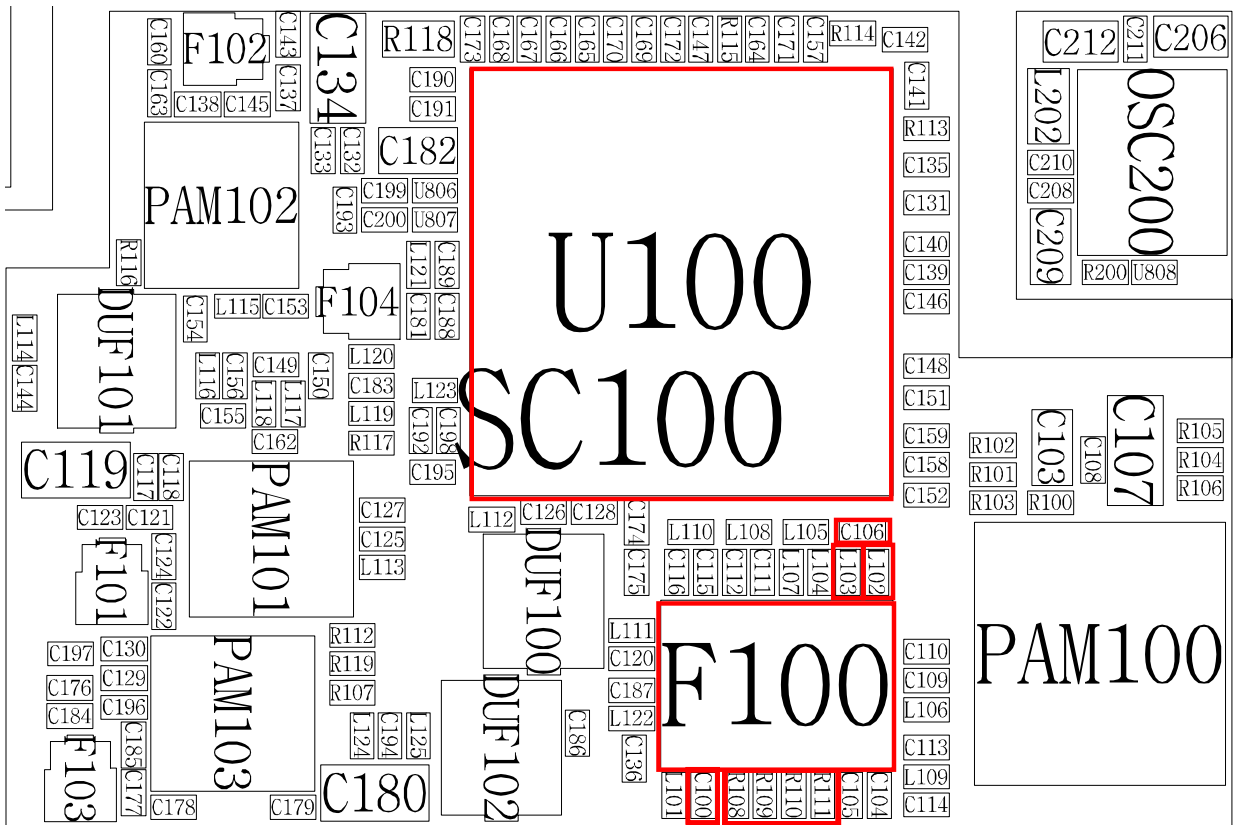
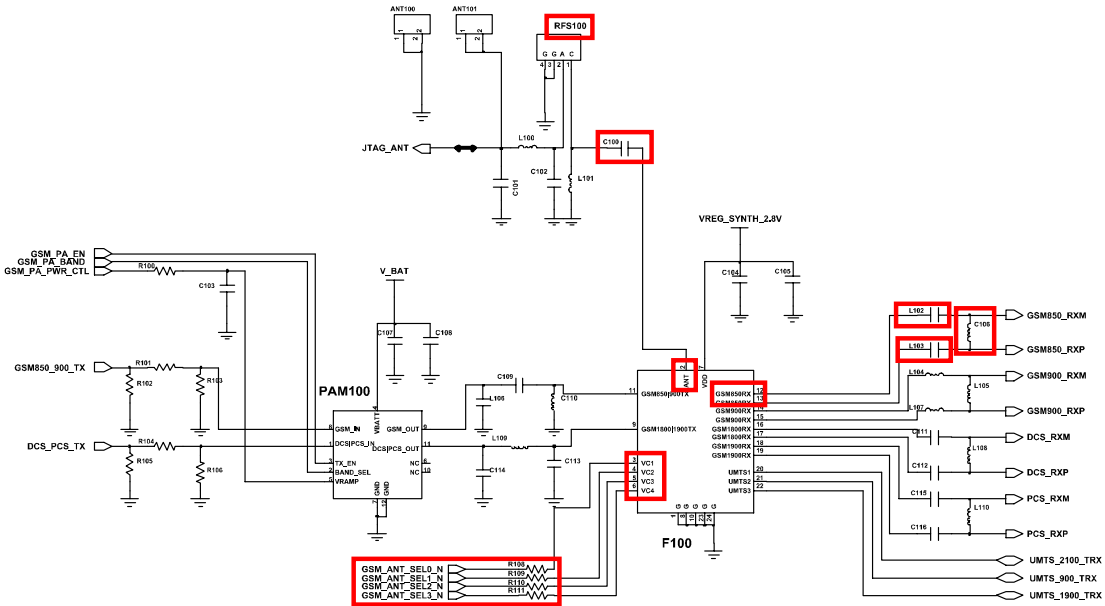


ESD&EMI FILTER

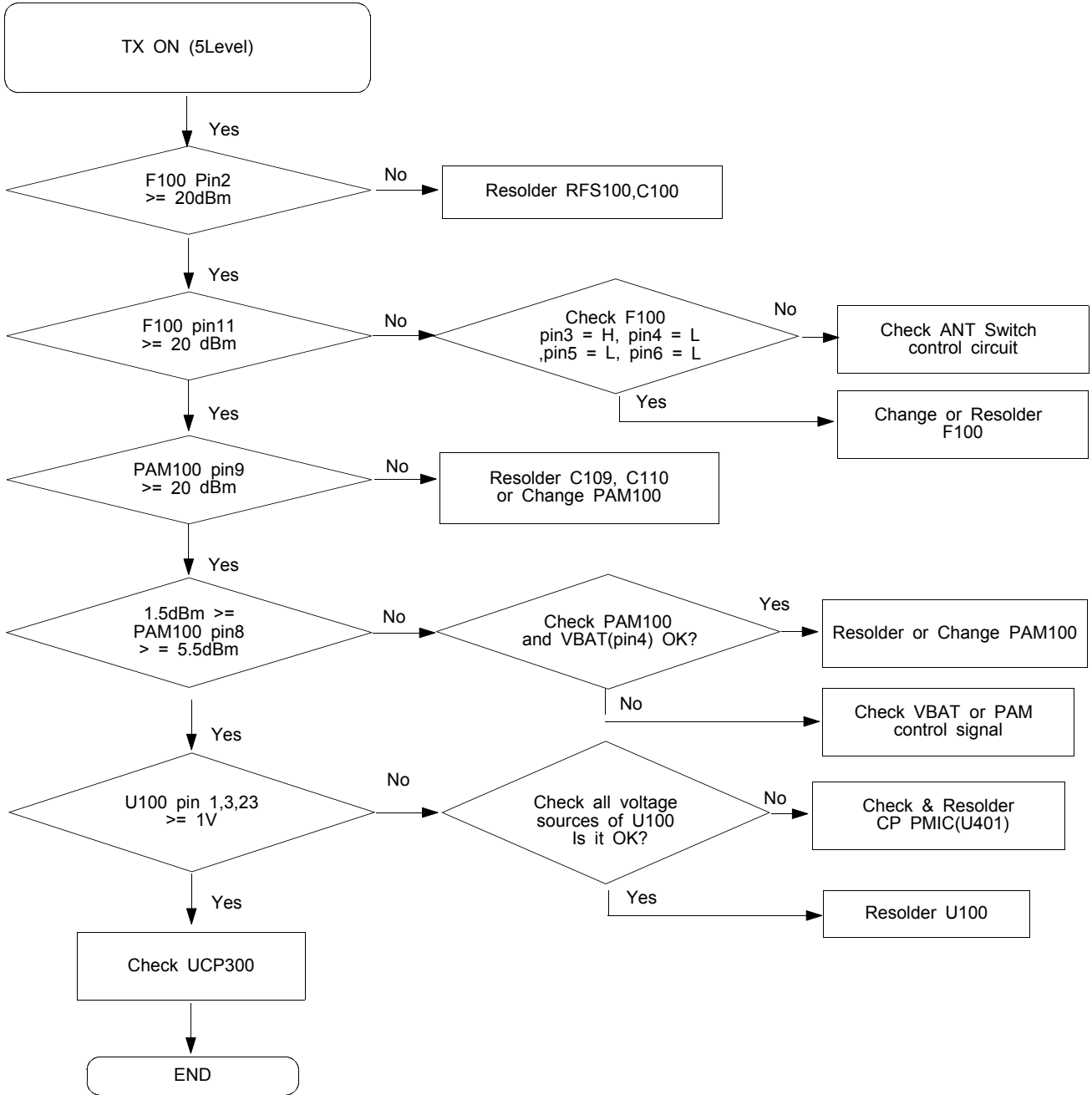


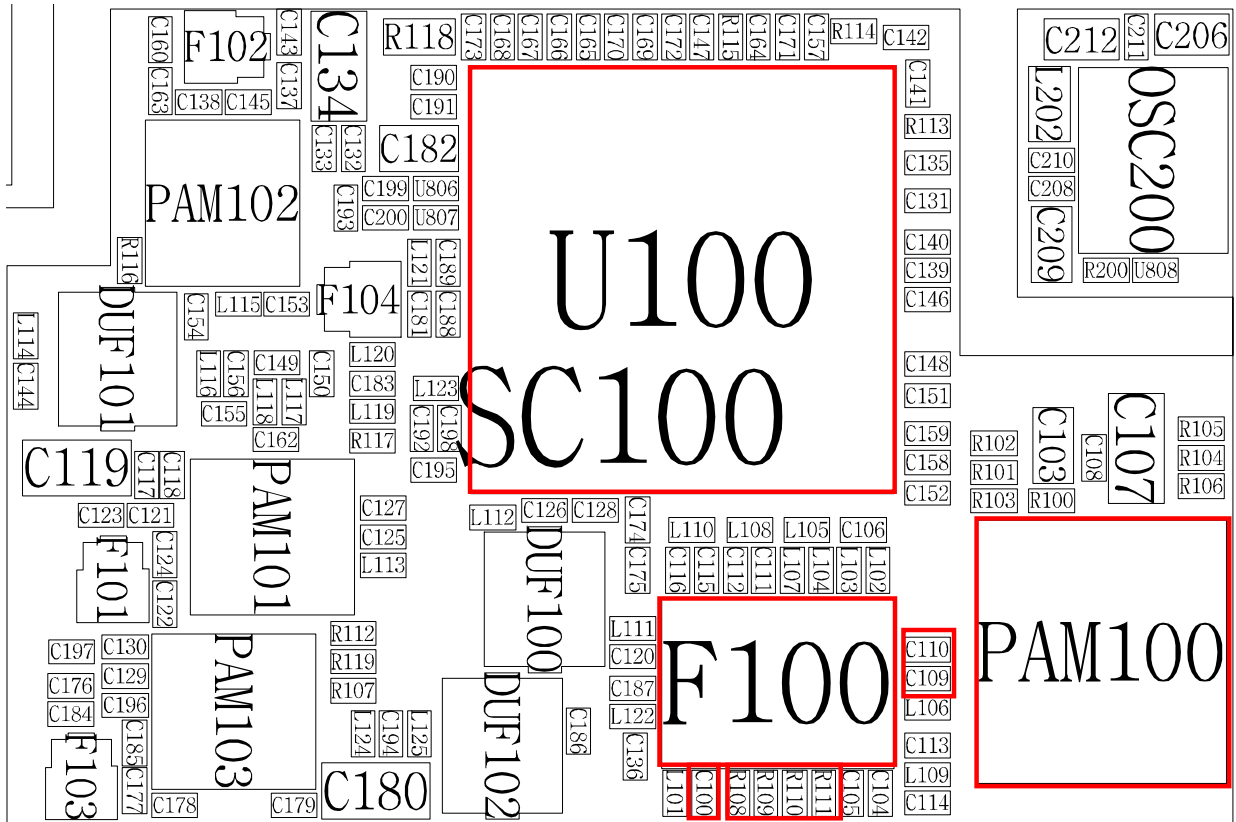
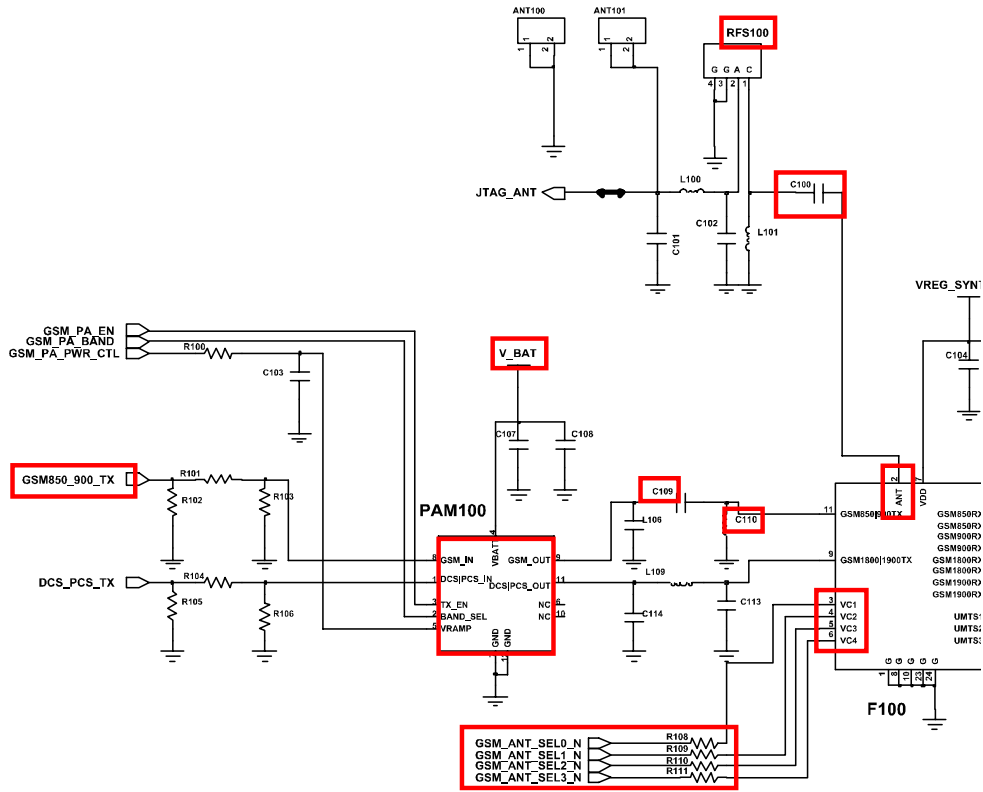
9-11. GSM850 Receiver



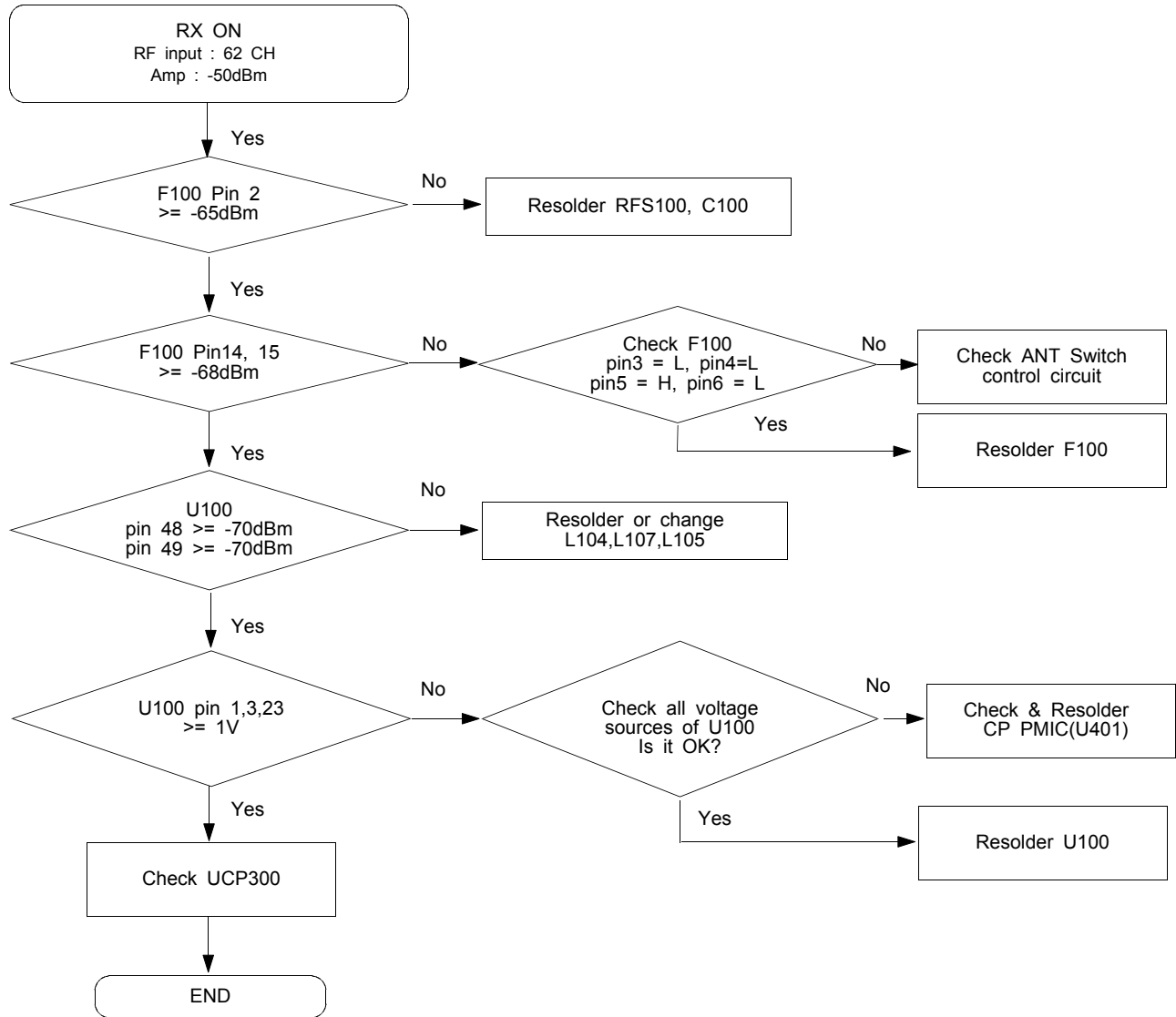


9-12. GSM850 Transmitter

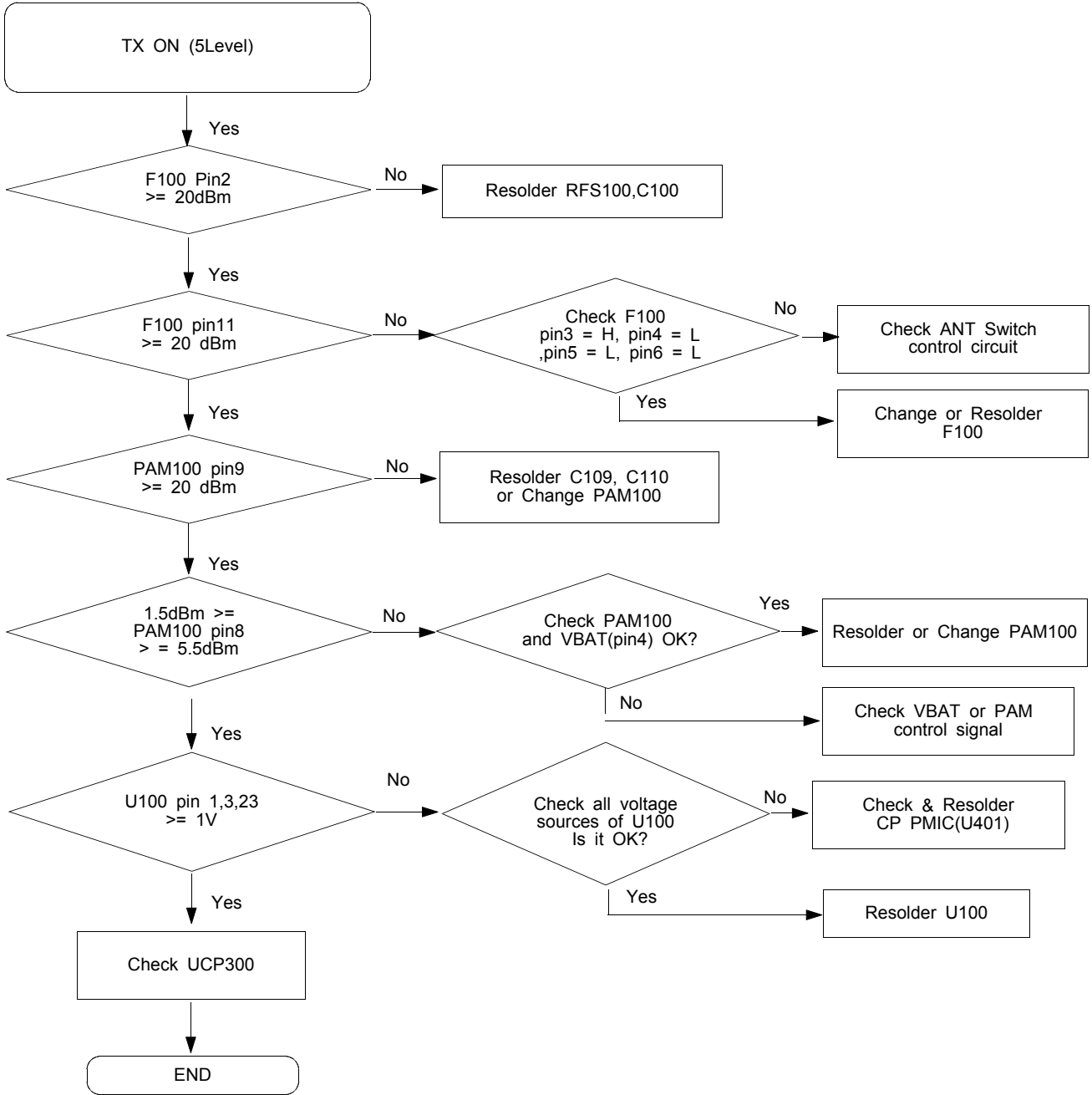


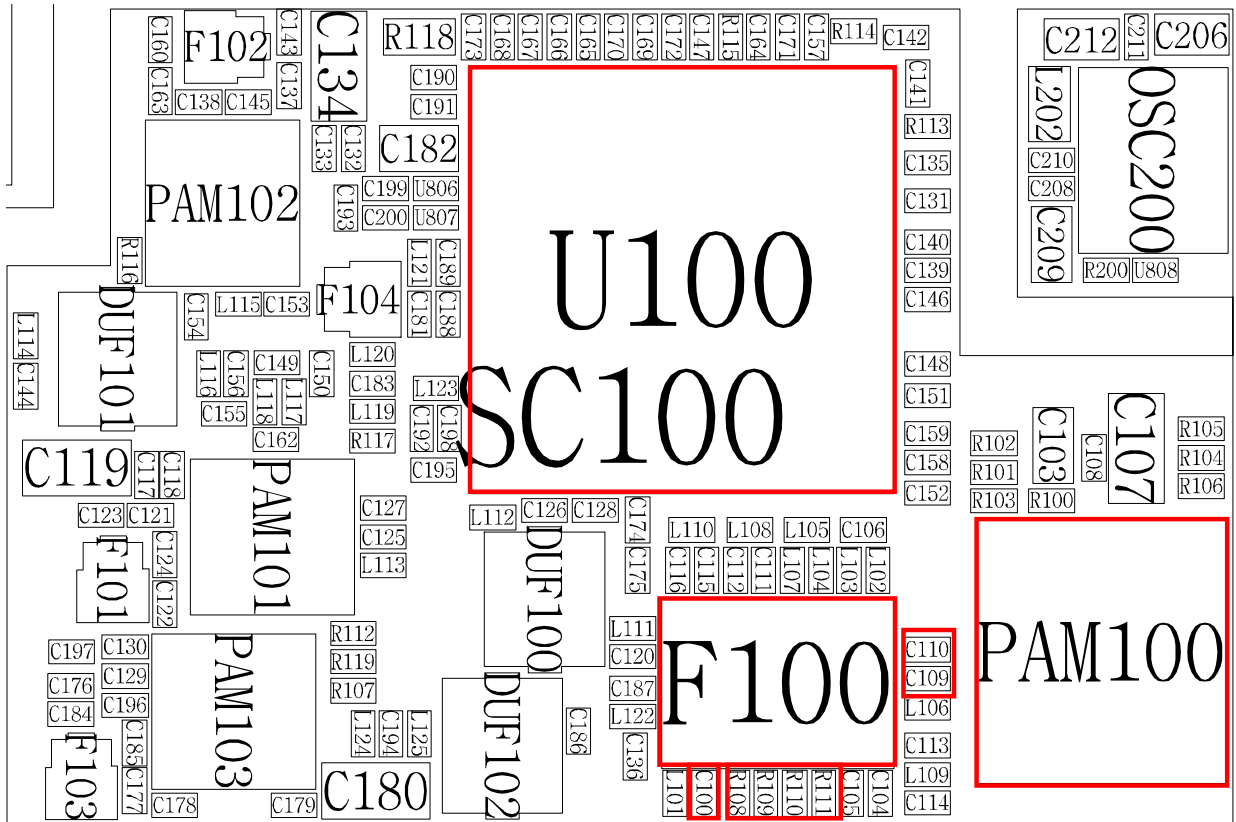
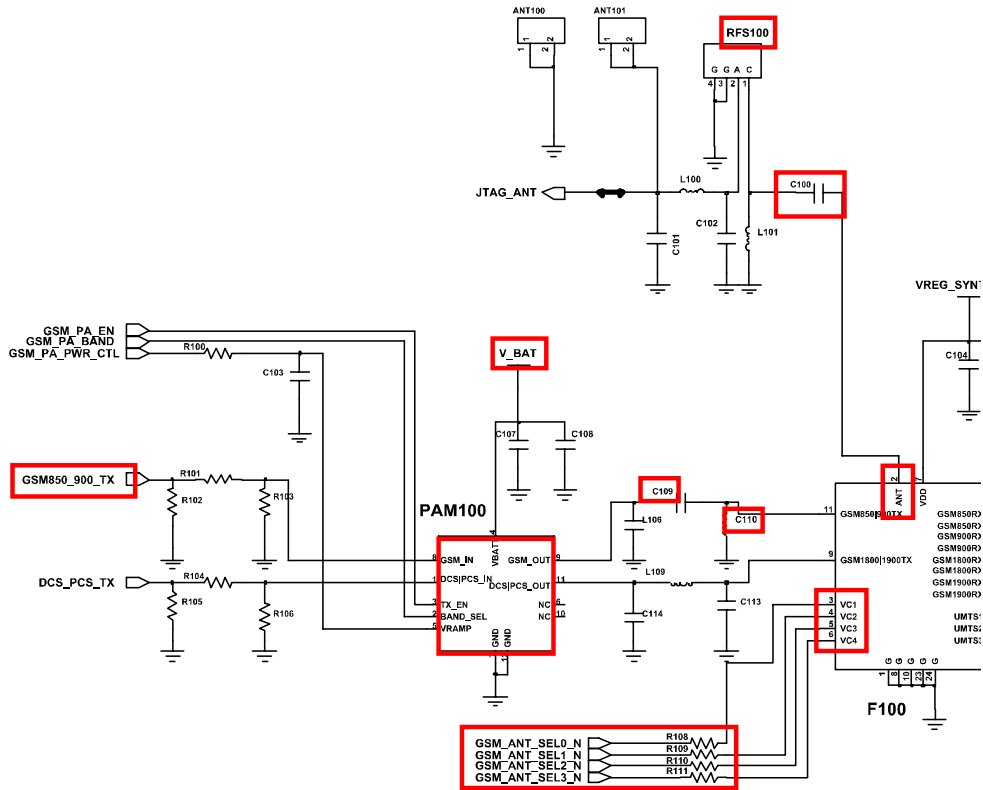


9-13. GSM900 Receiver

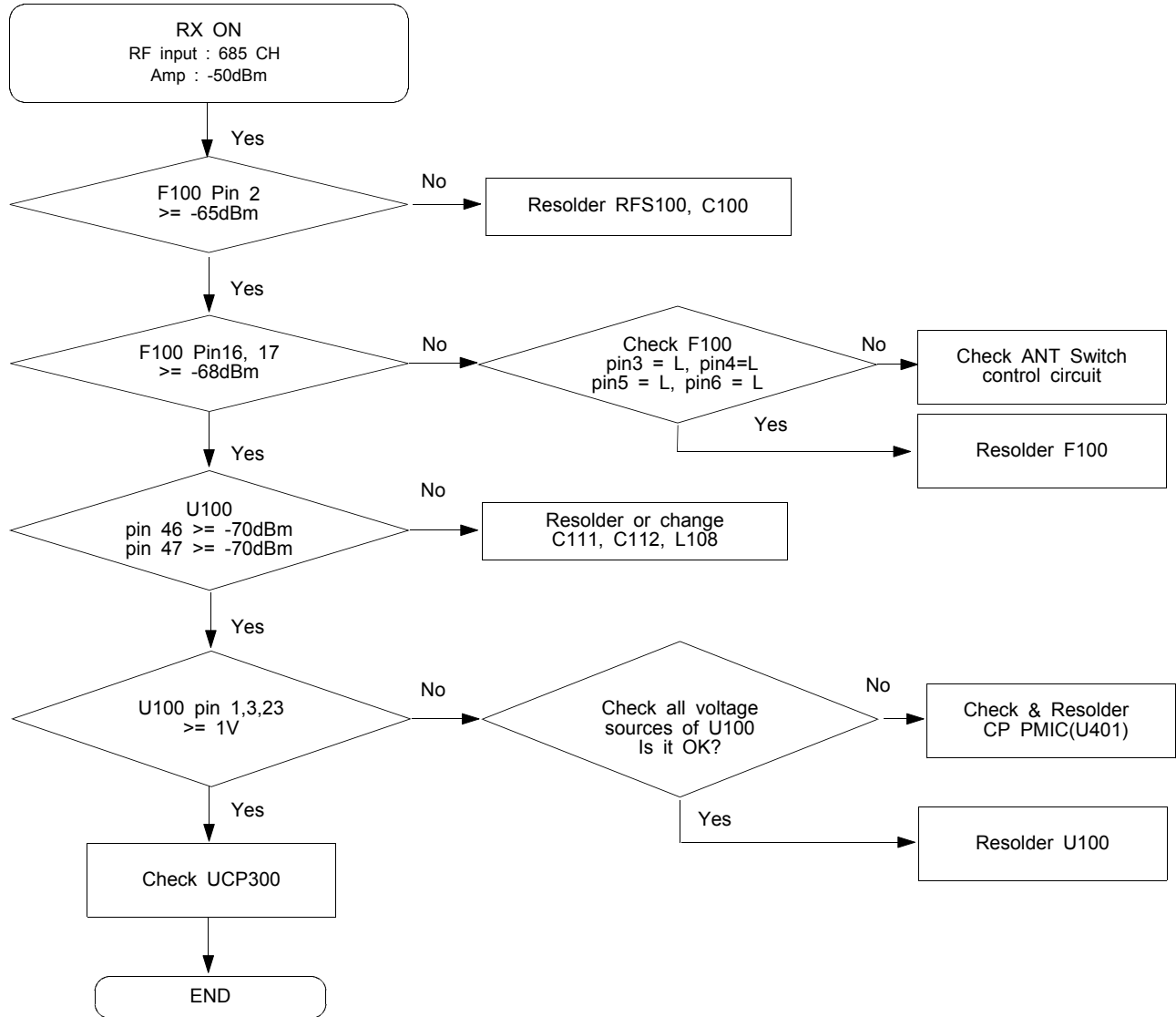


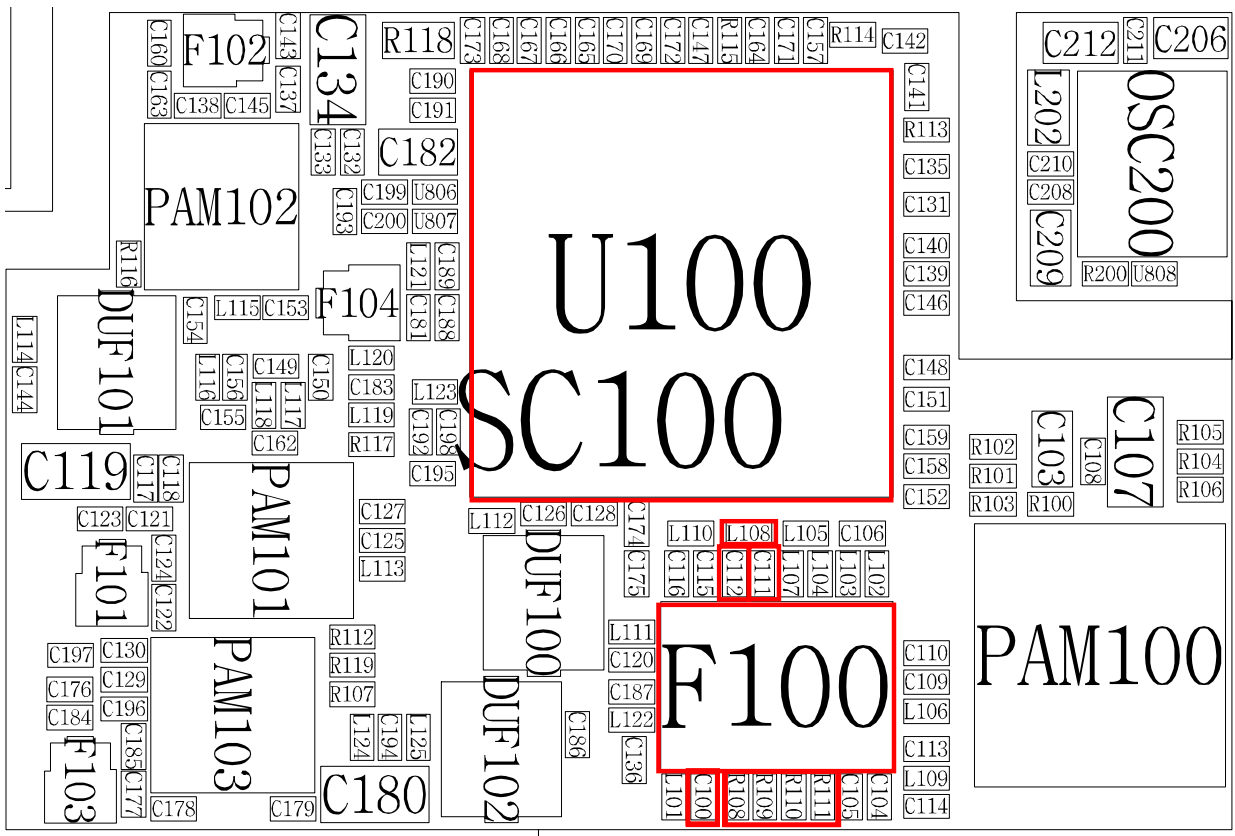
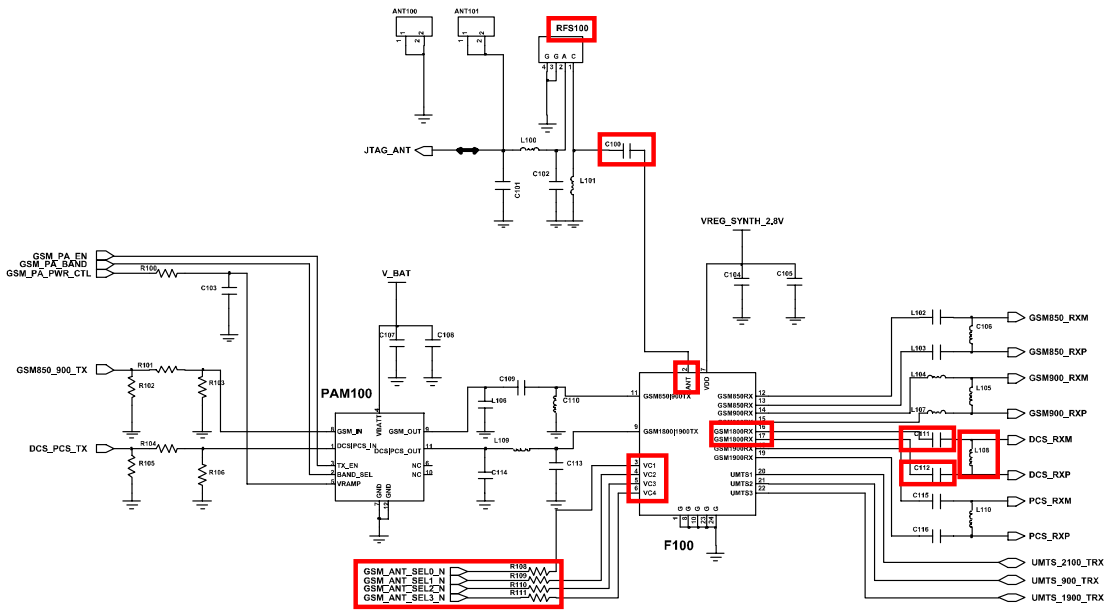
9-14. GSM900 Transmitter



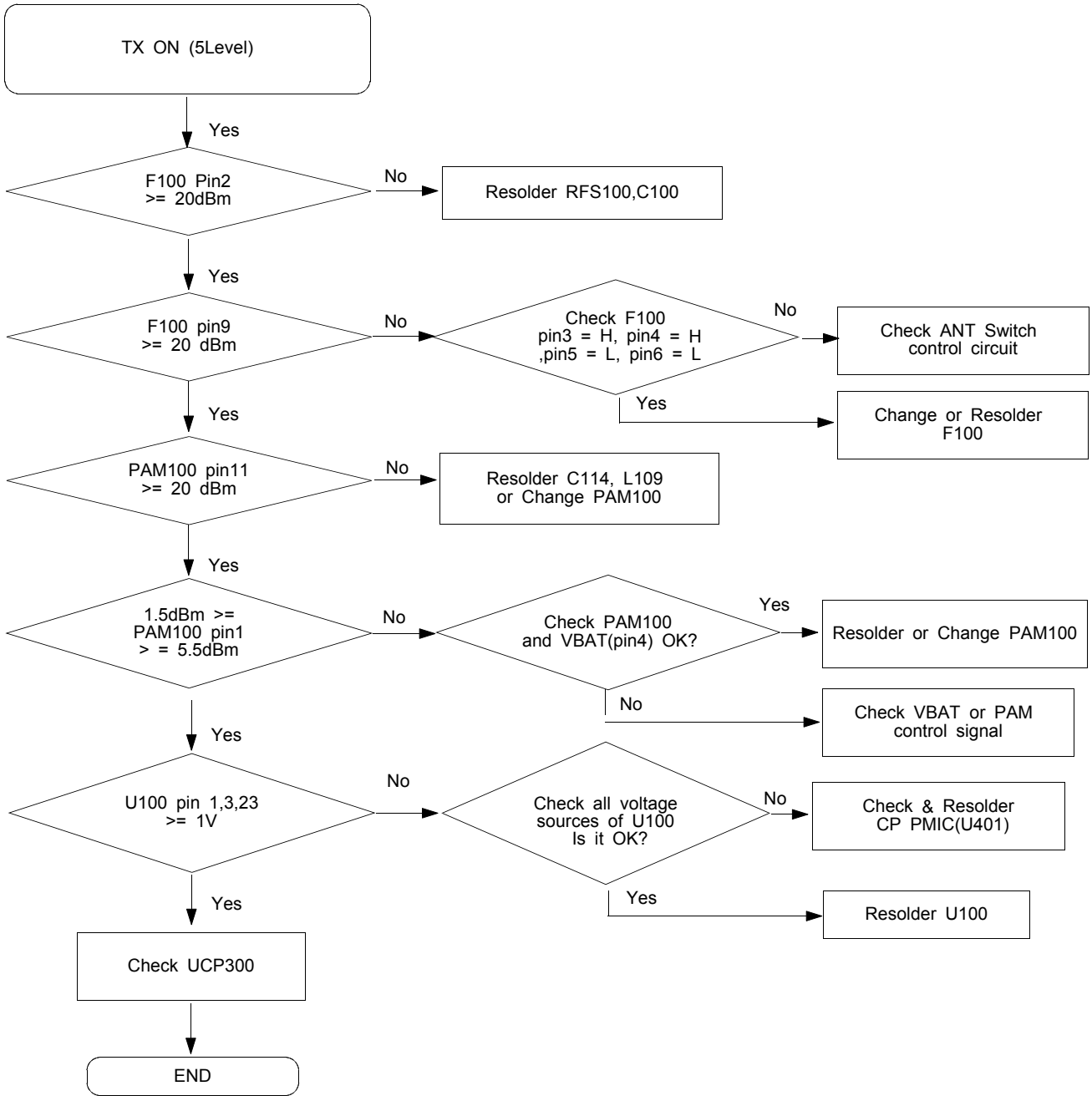


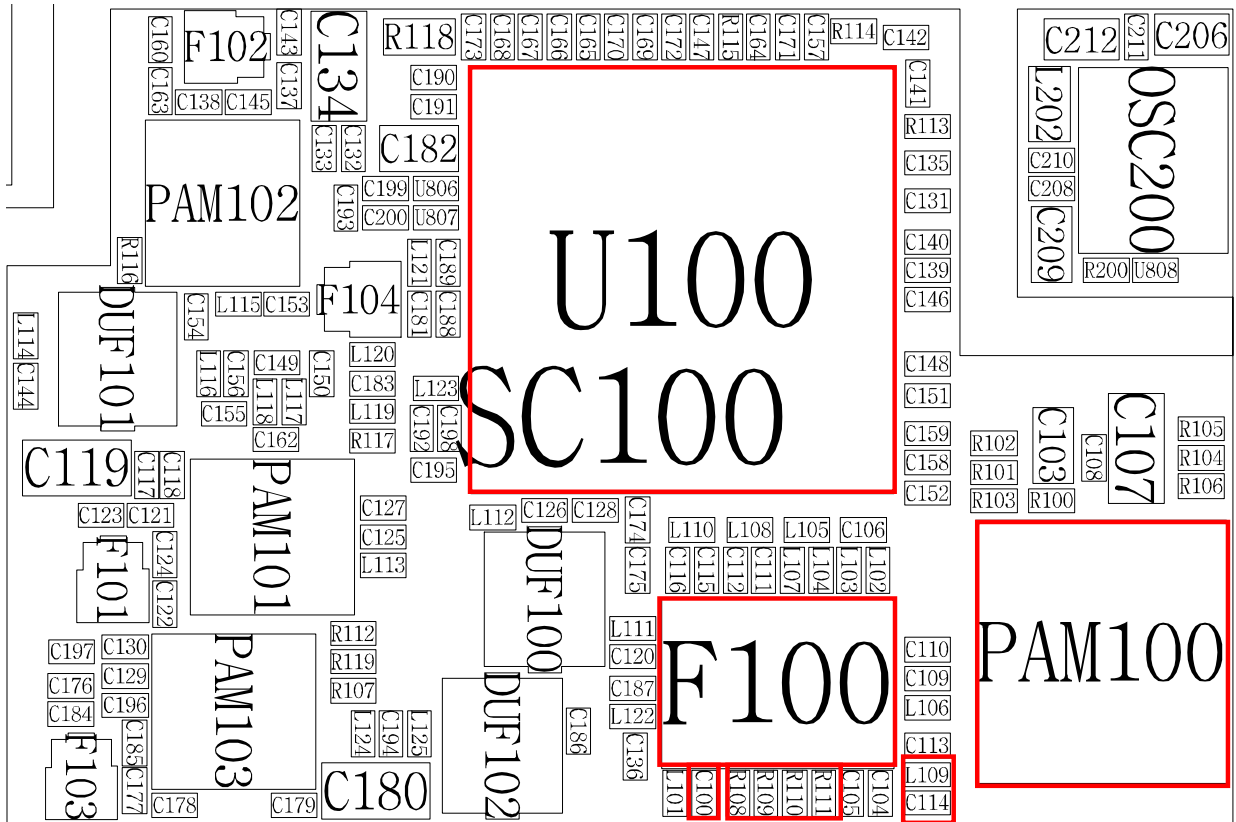
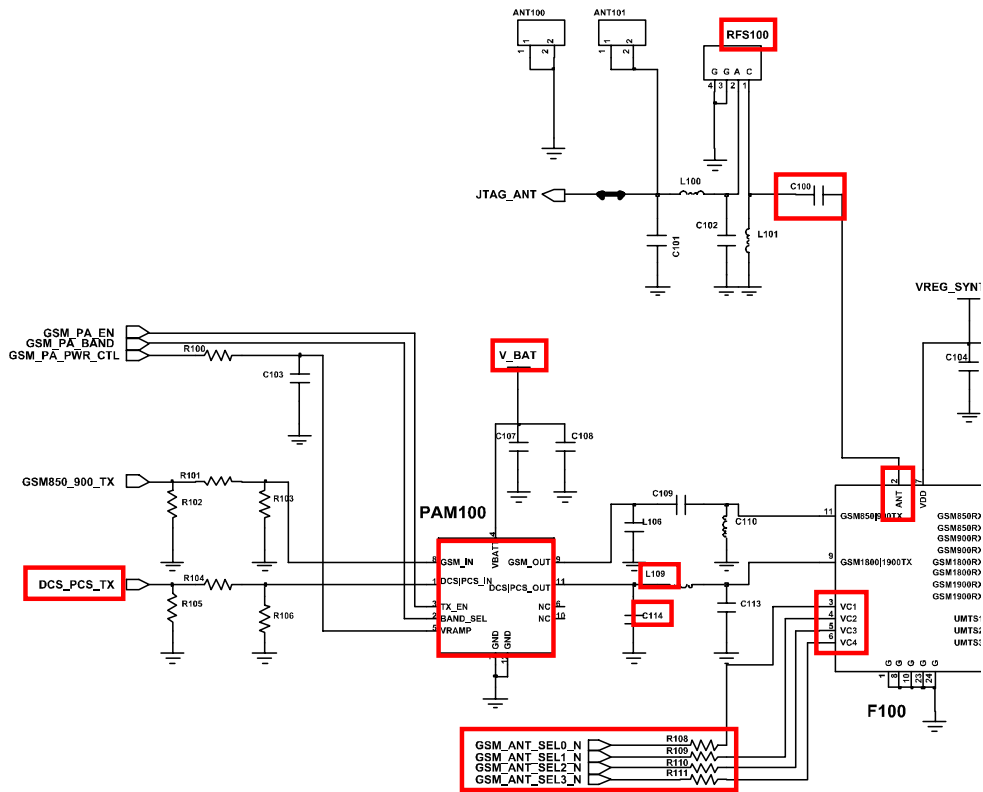
9-15. DCS1800 Receiver



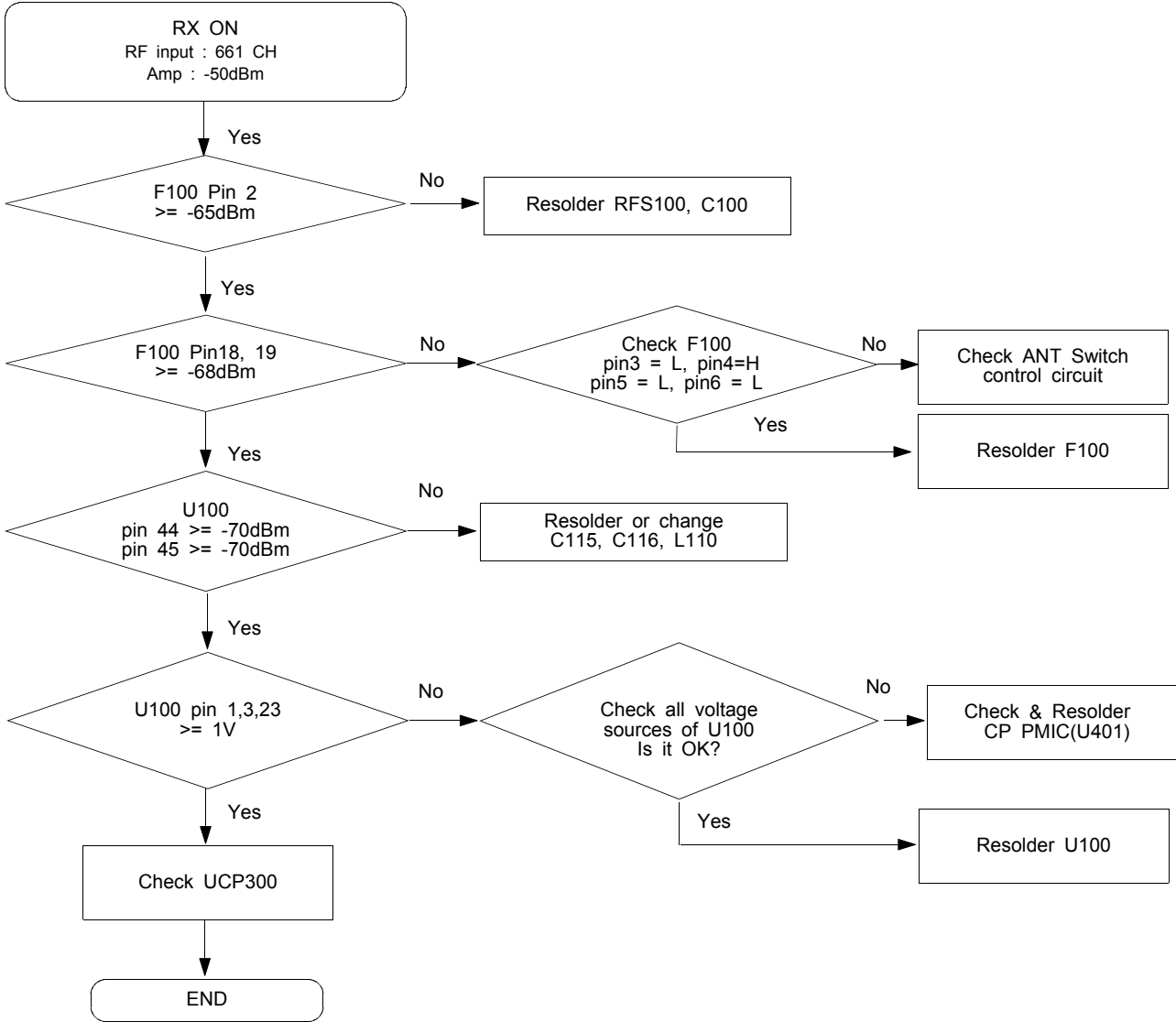


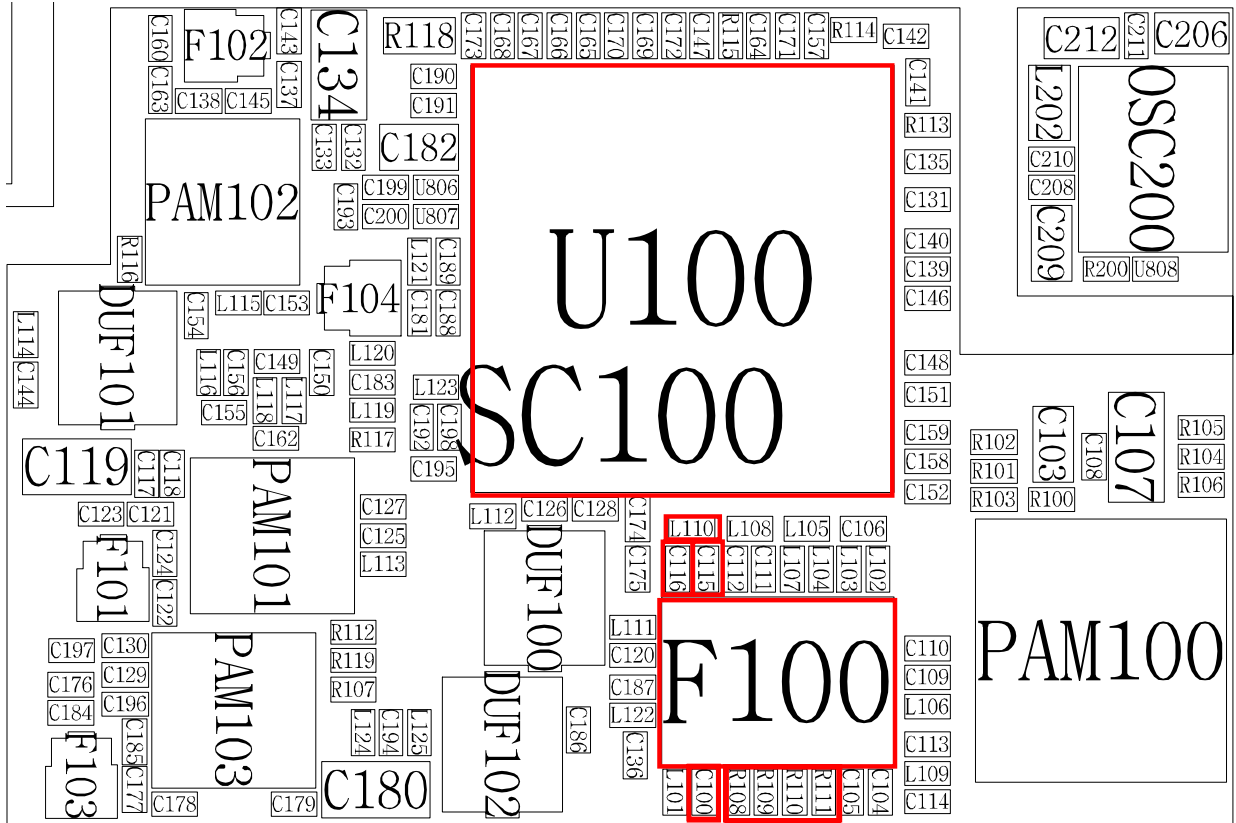
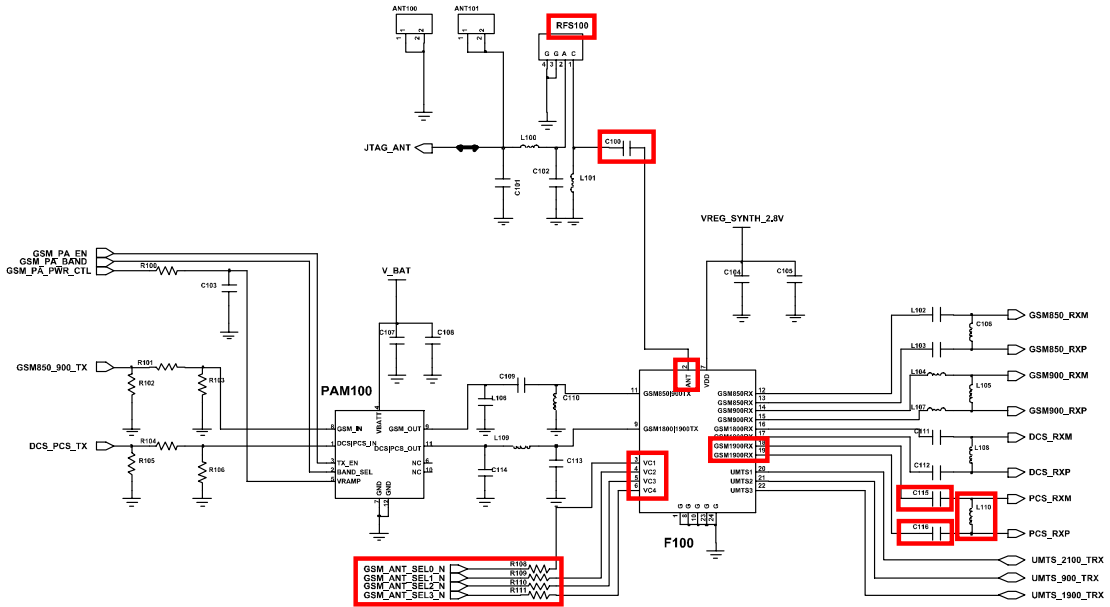
9-16. DCS1800 Transmitter



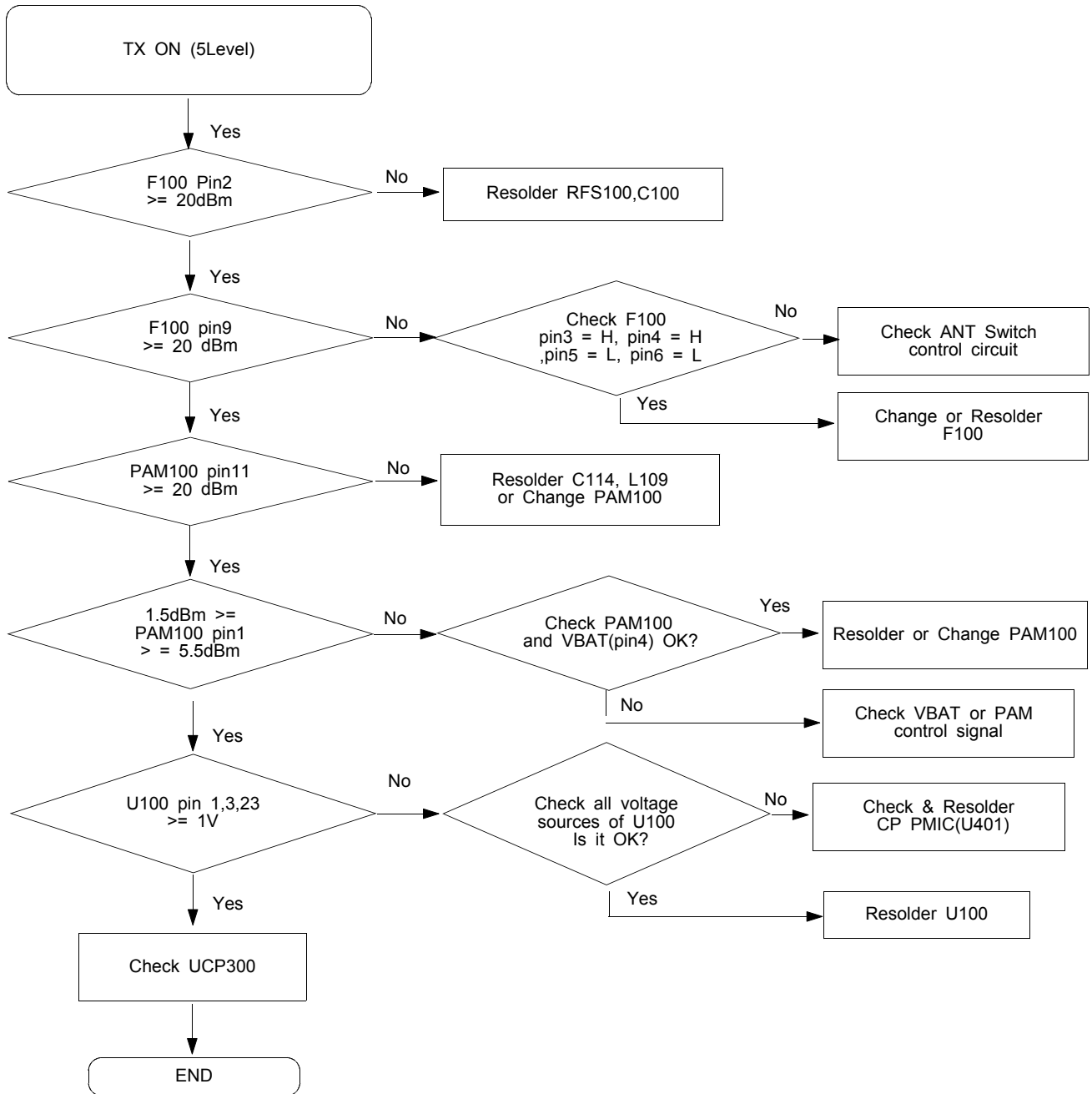


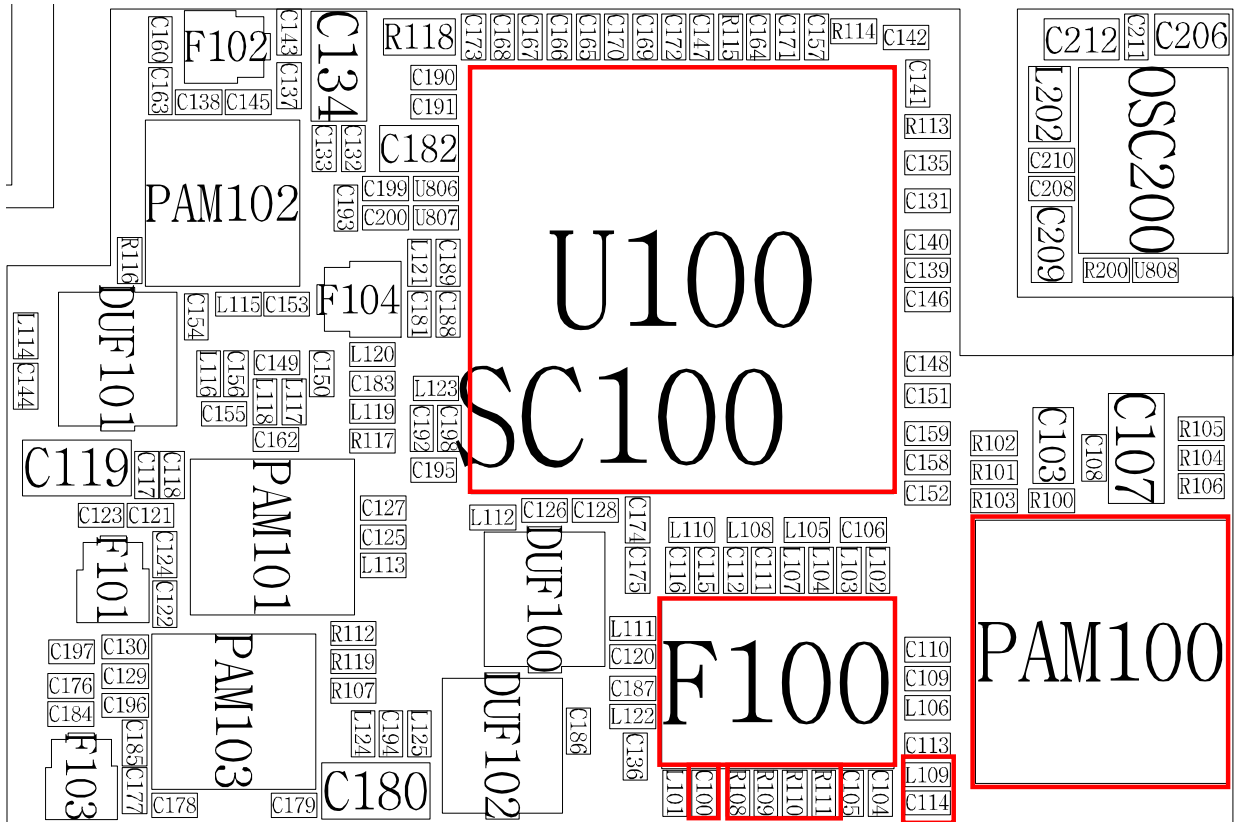
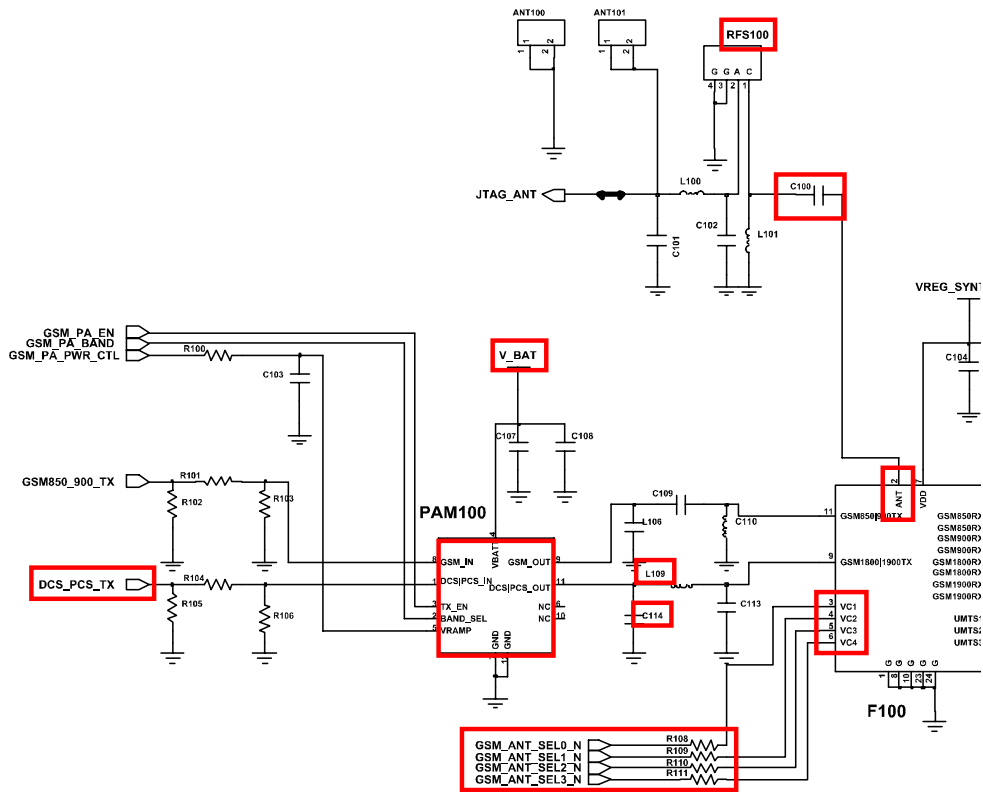
9-17. PCS1900 Receiver





9-18. PCS1900 Transmitter

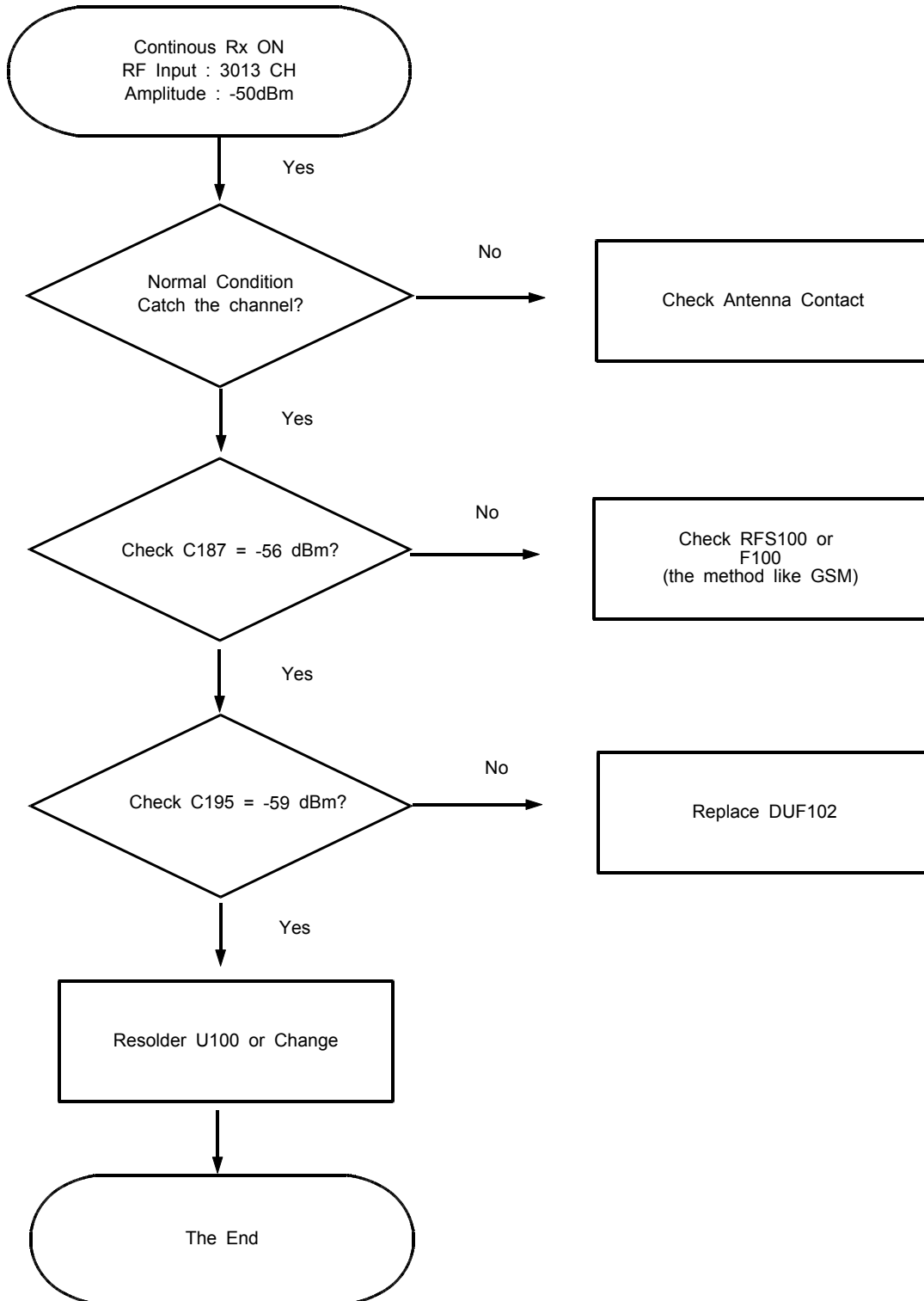


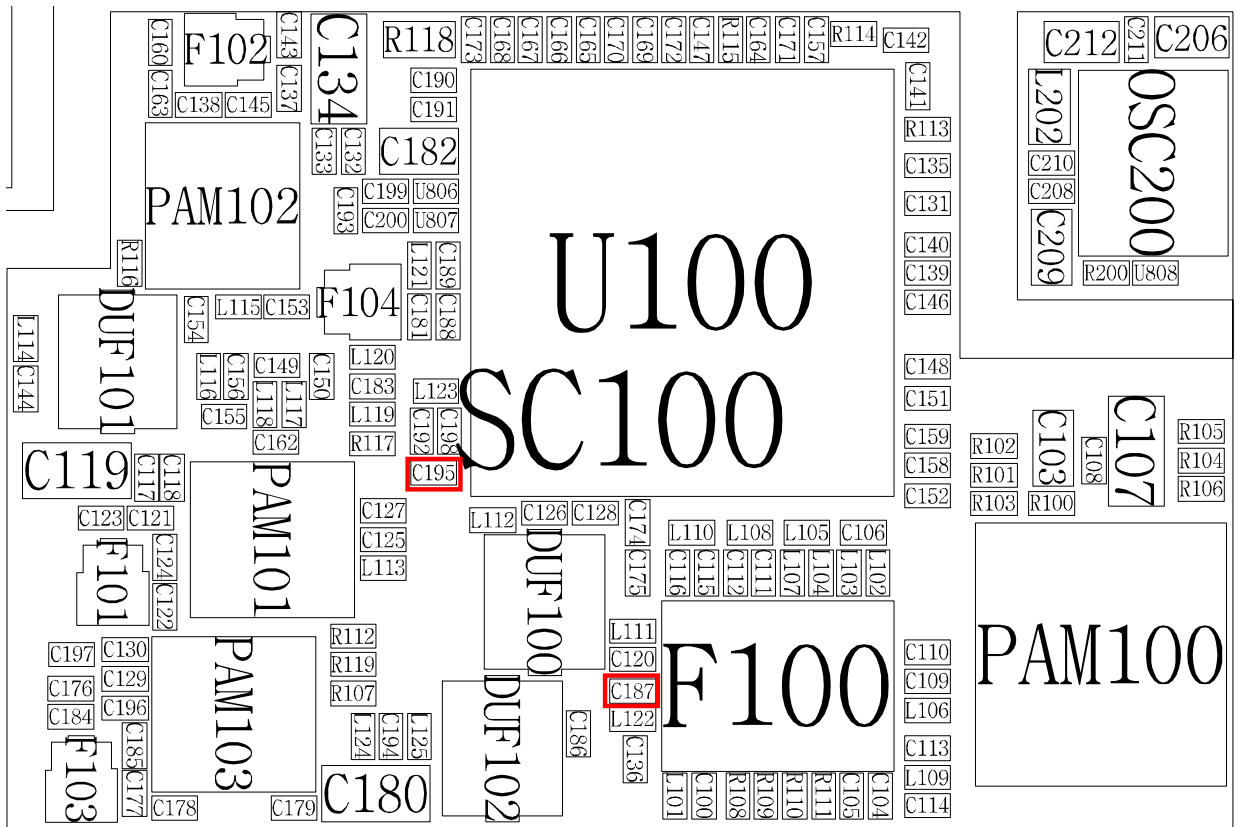
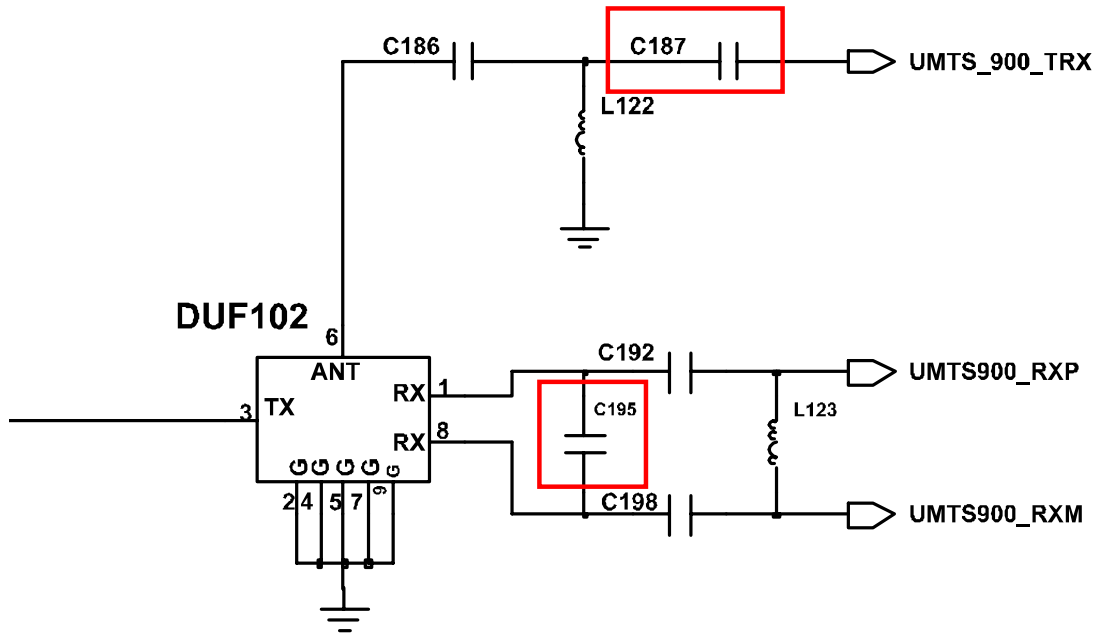


9-19. WCDMA900 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

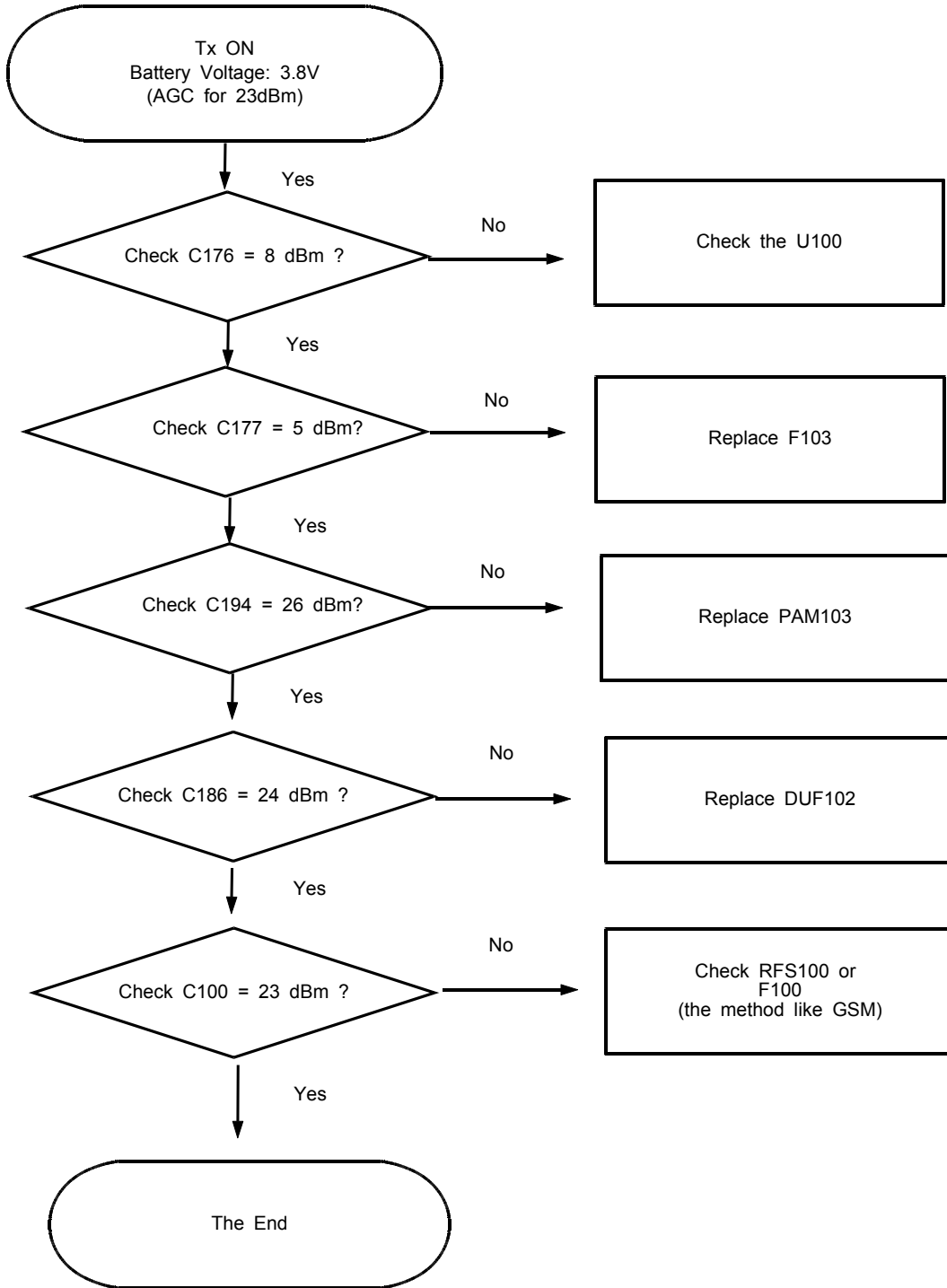


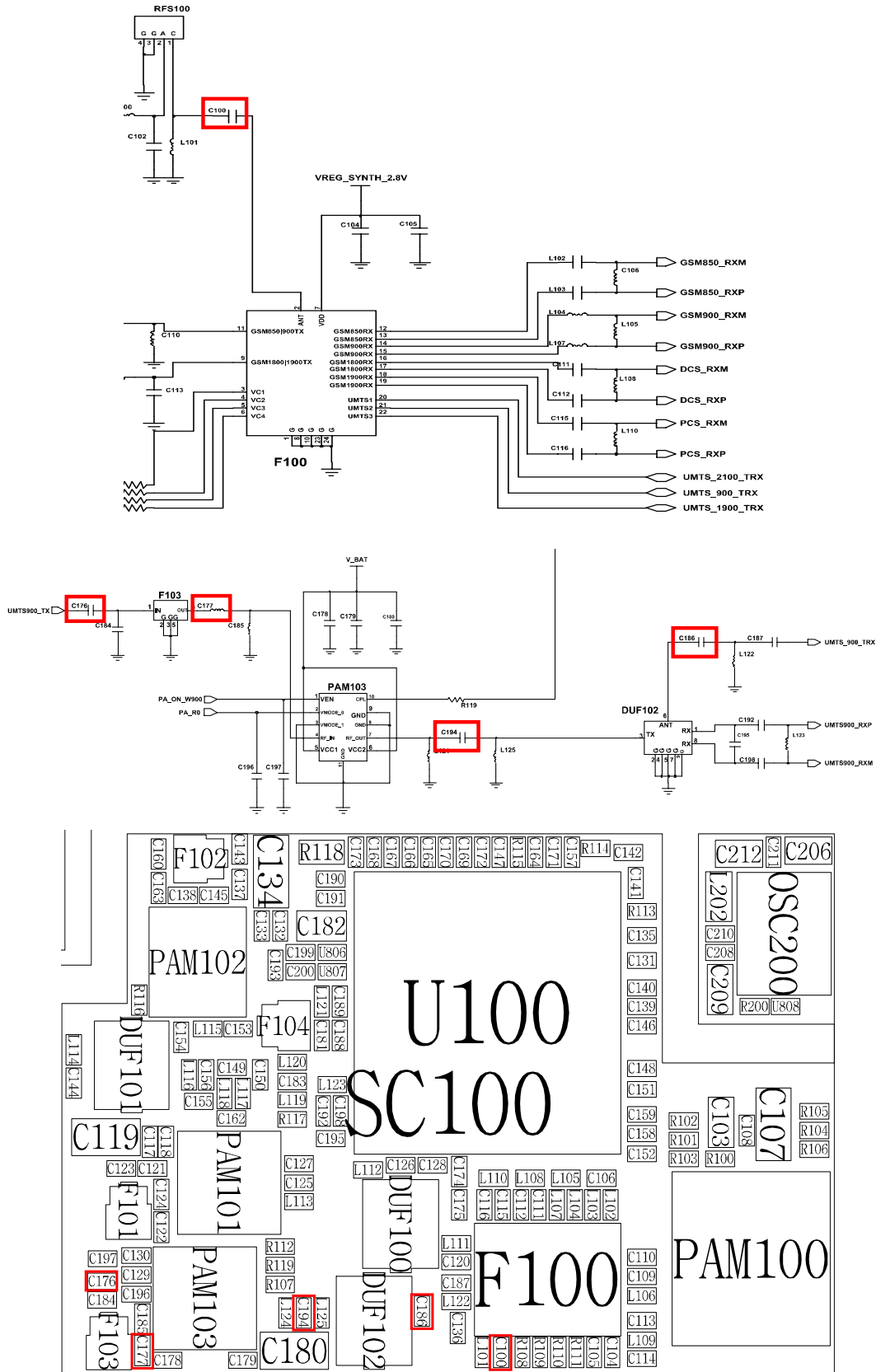


9-20. WCDMA900 Transmitter

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

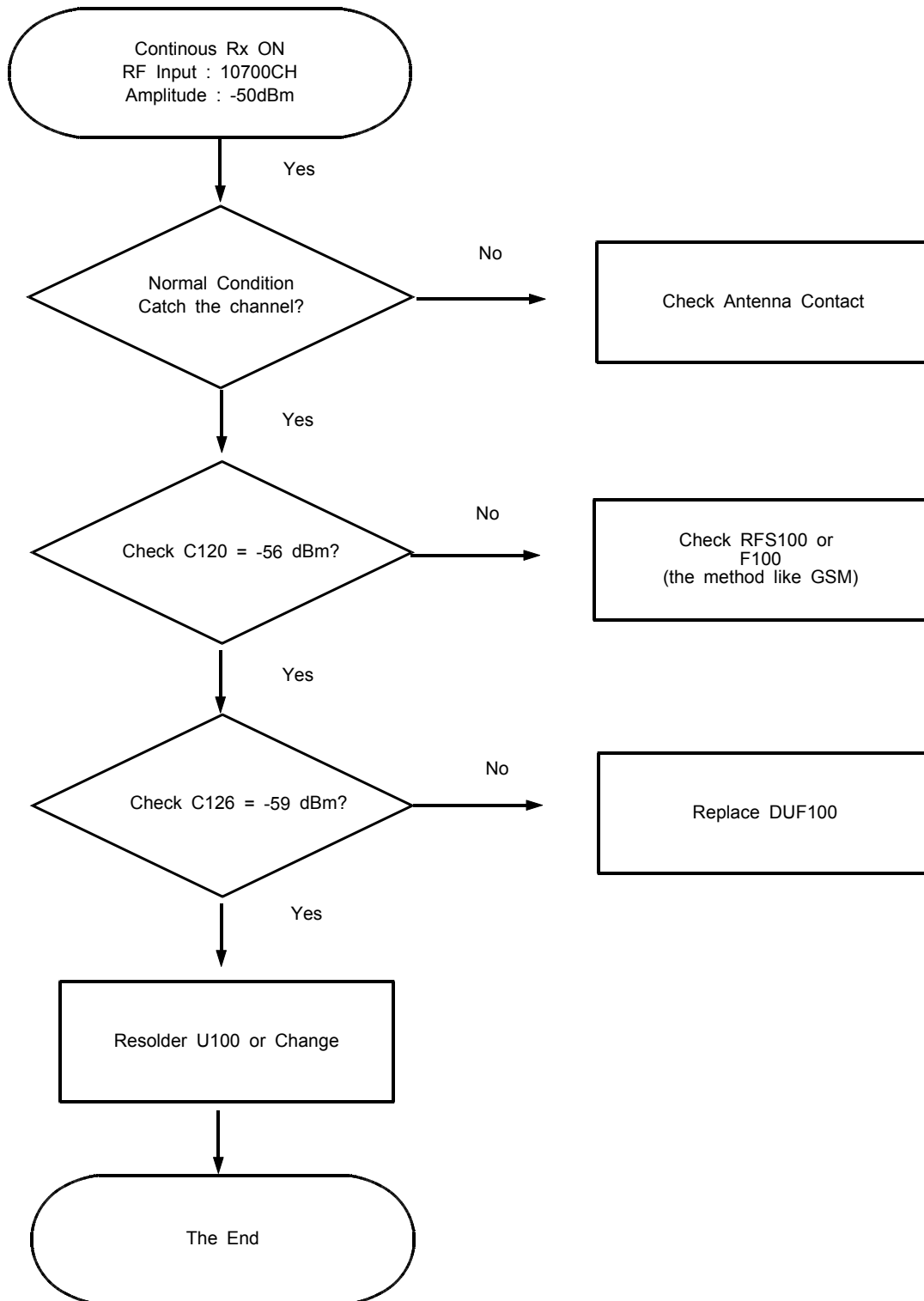


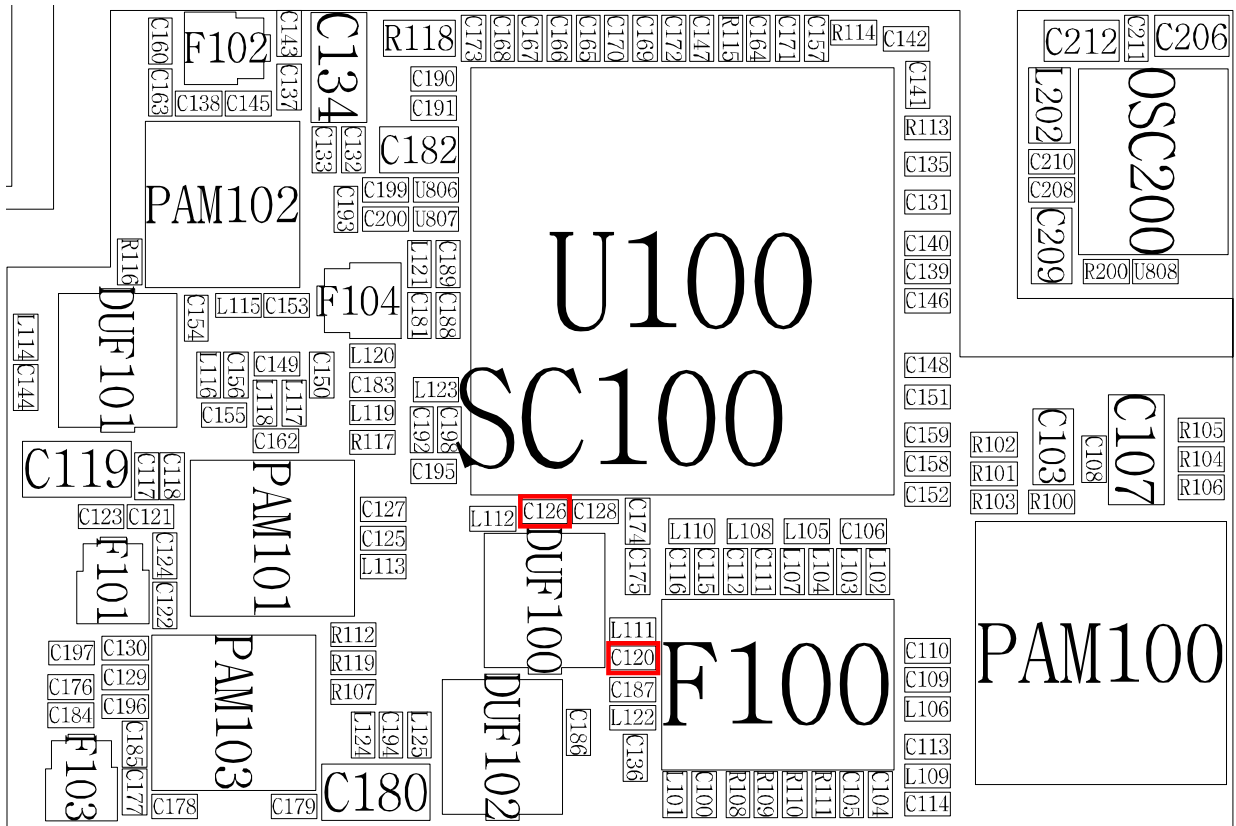
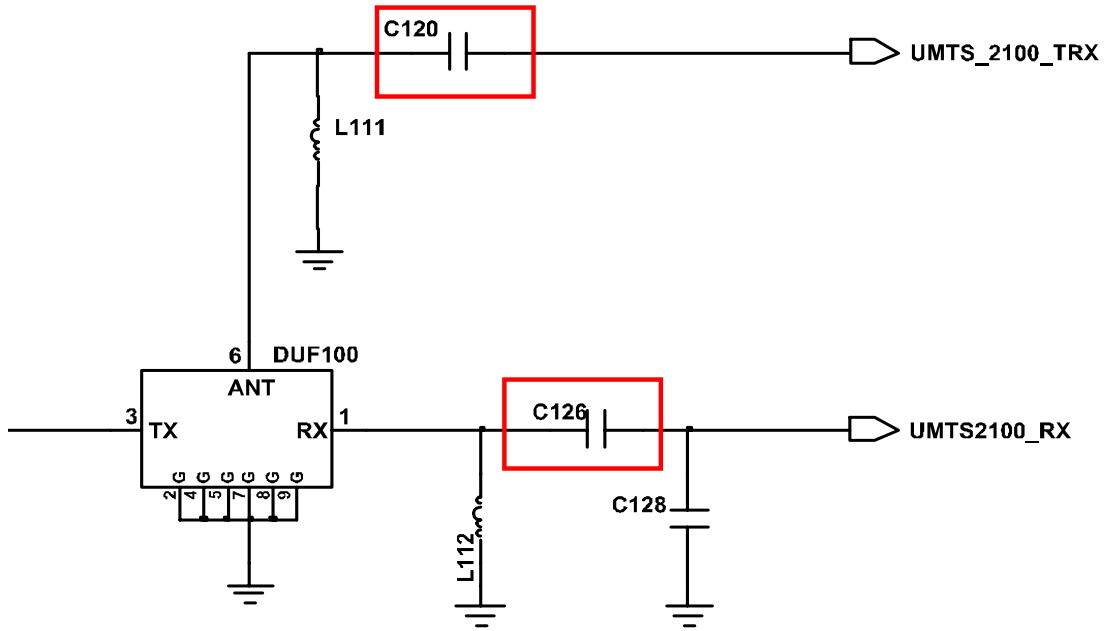


9-21. WCDMA2100 Receiver

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

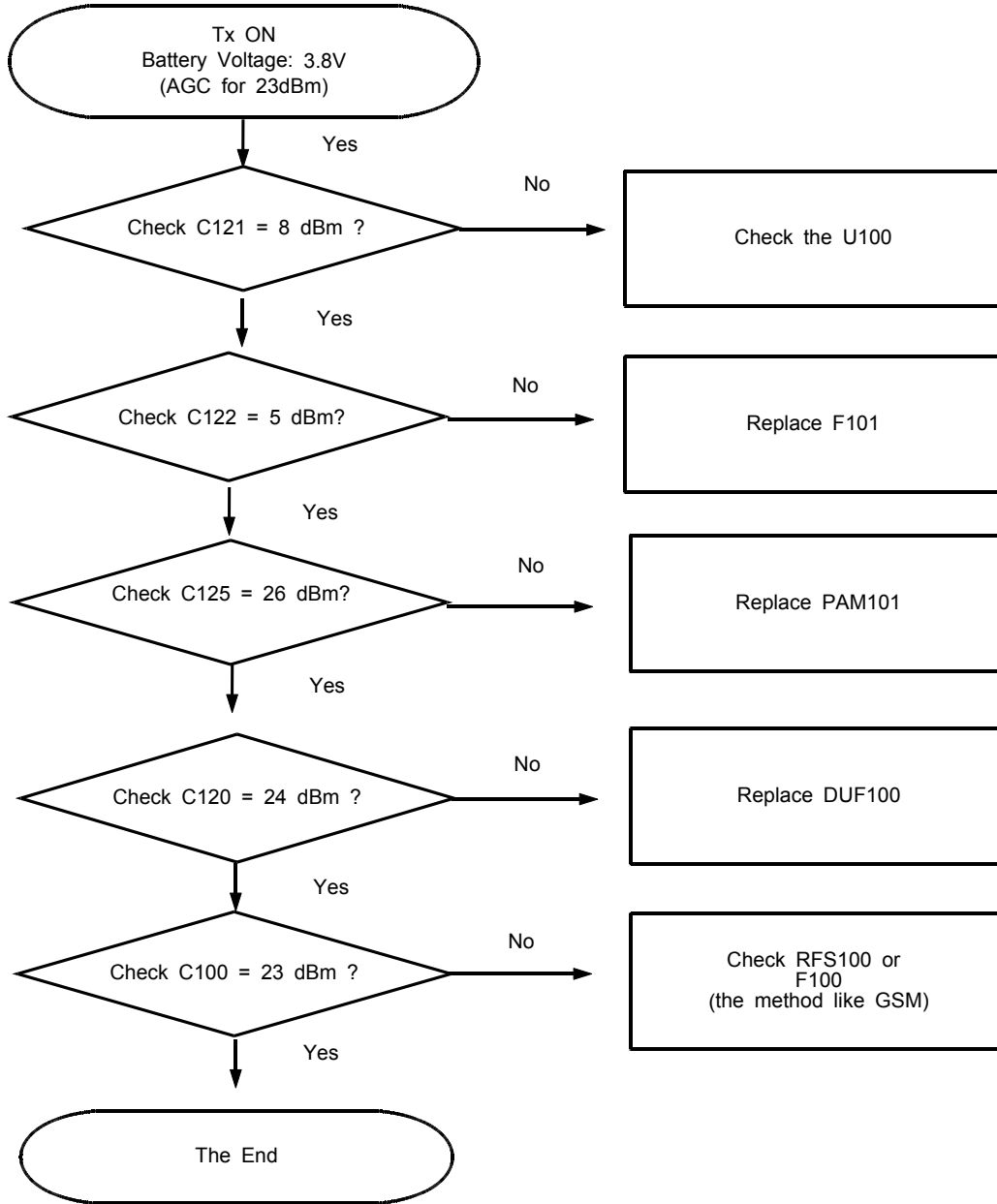


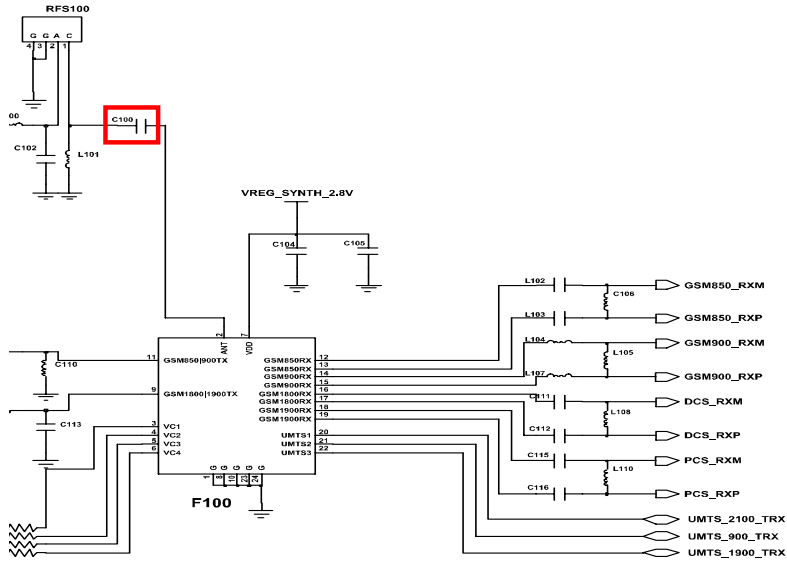


9-22. WCDMA2100 Transmitter

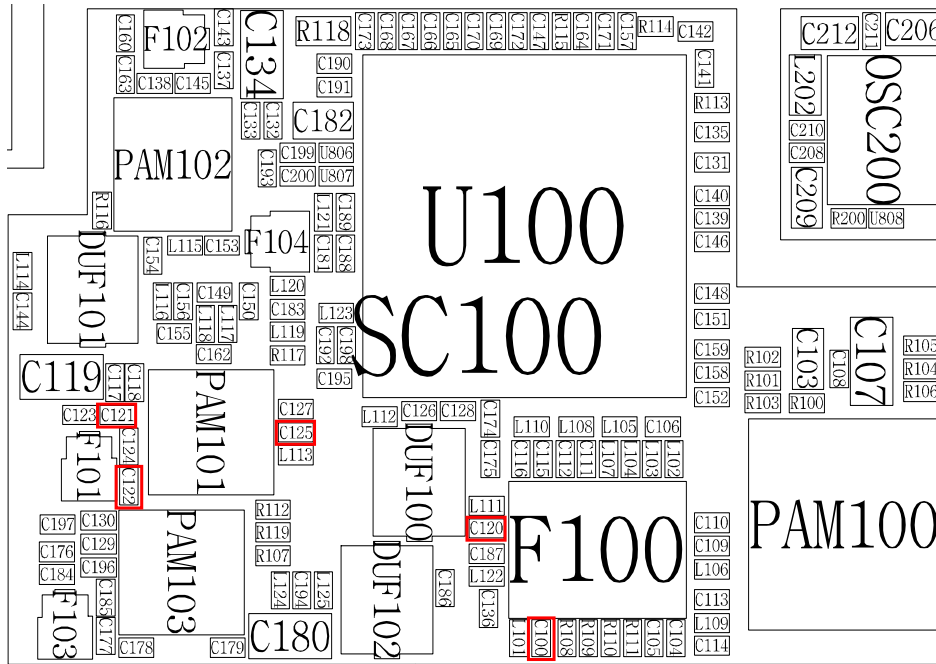
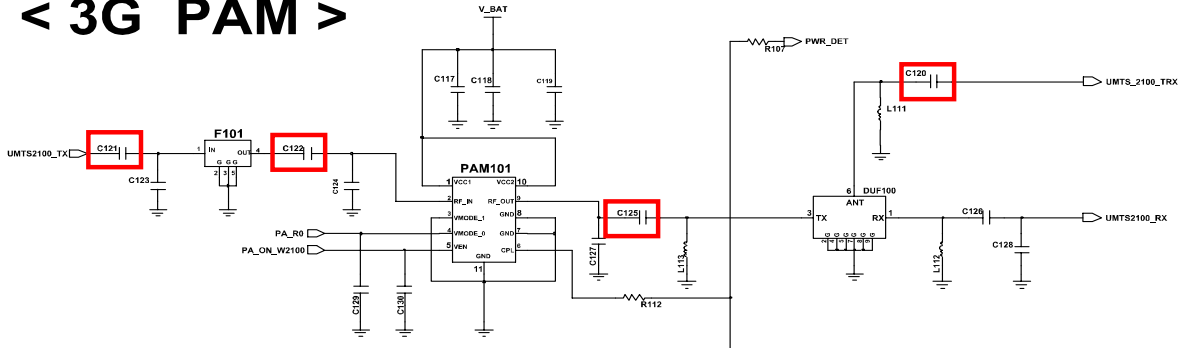
**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.

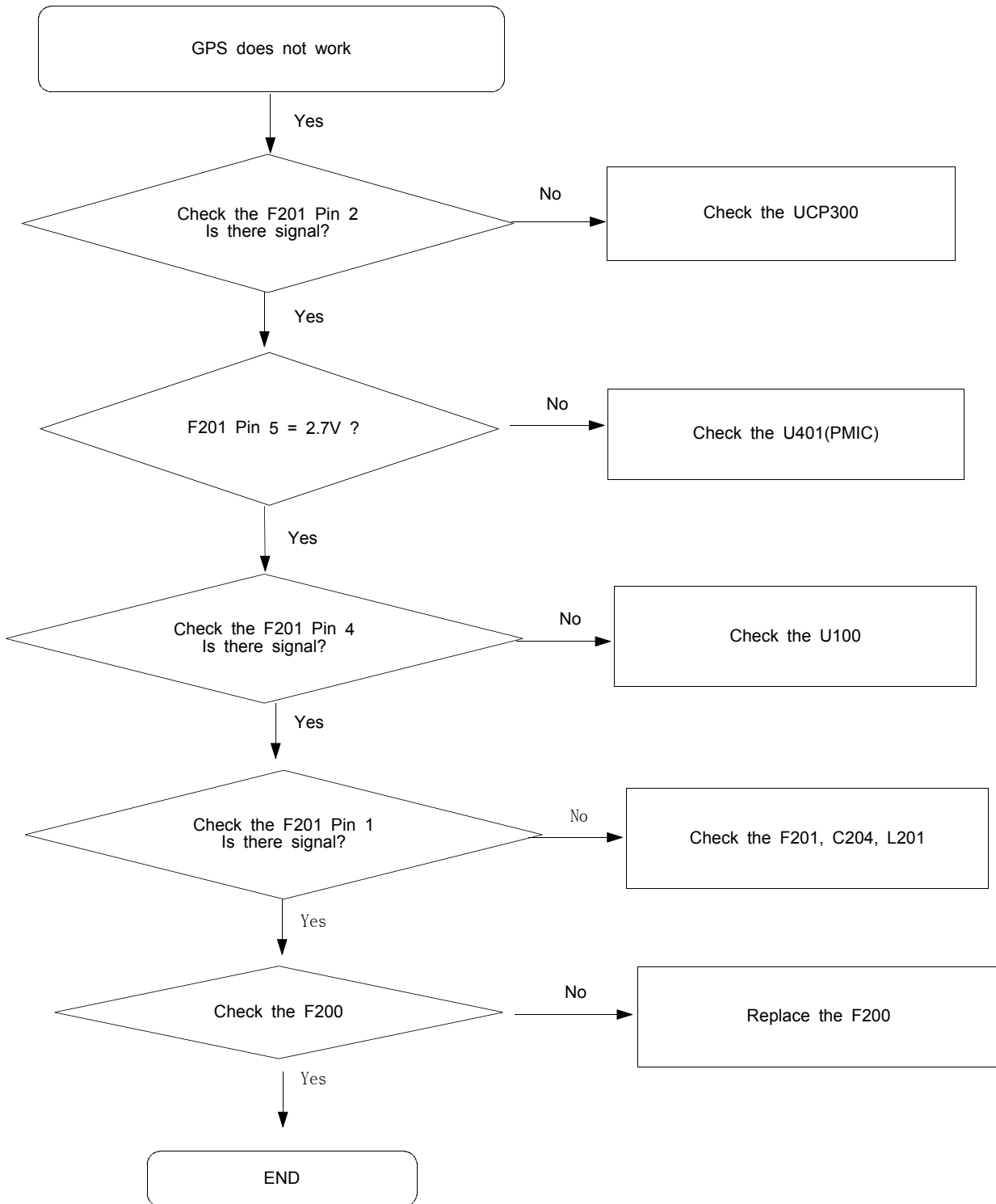




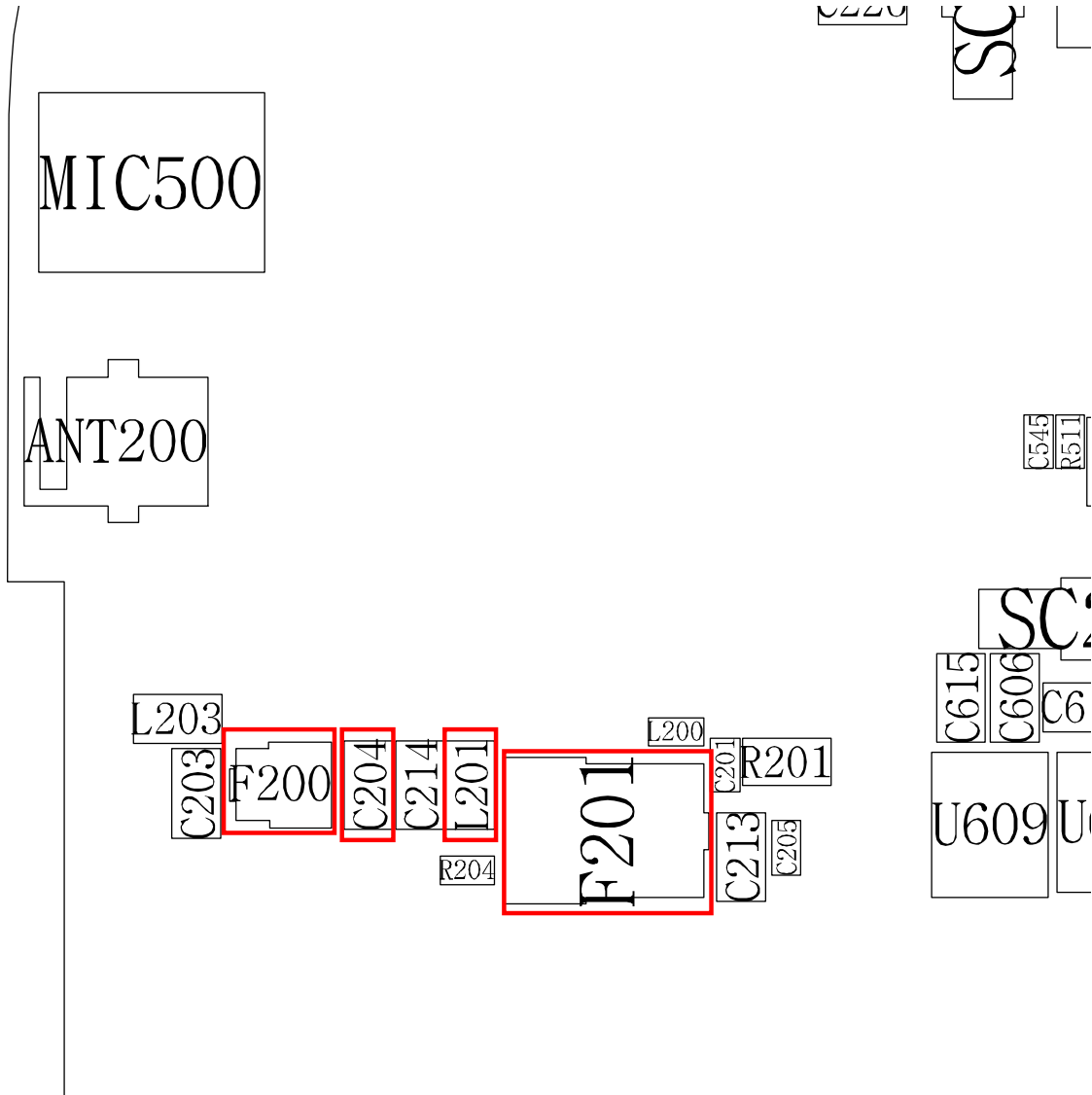
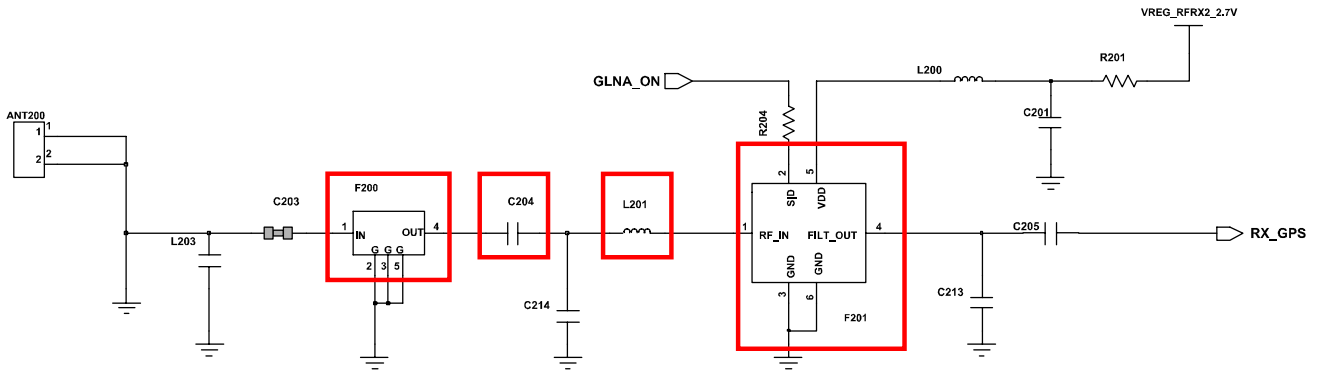
< 3G PAM >



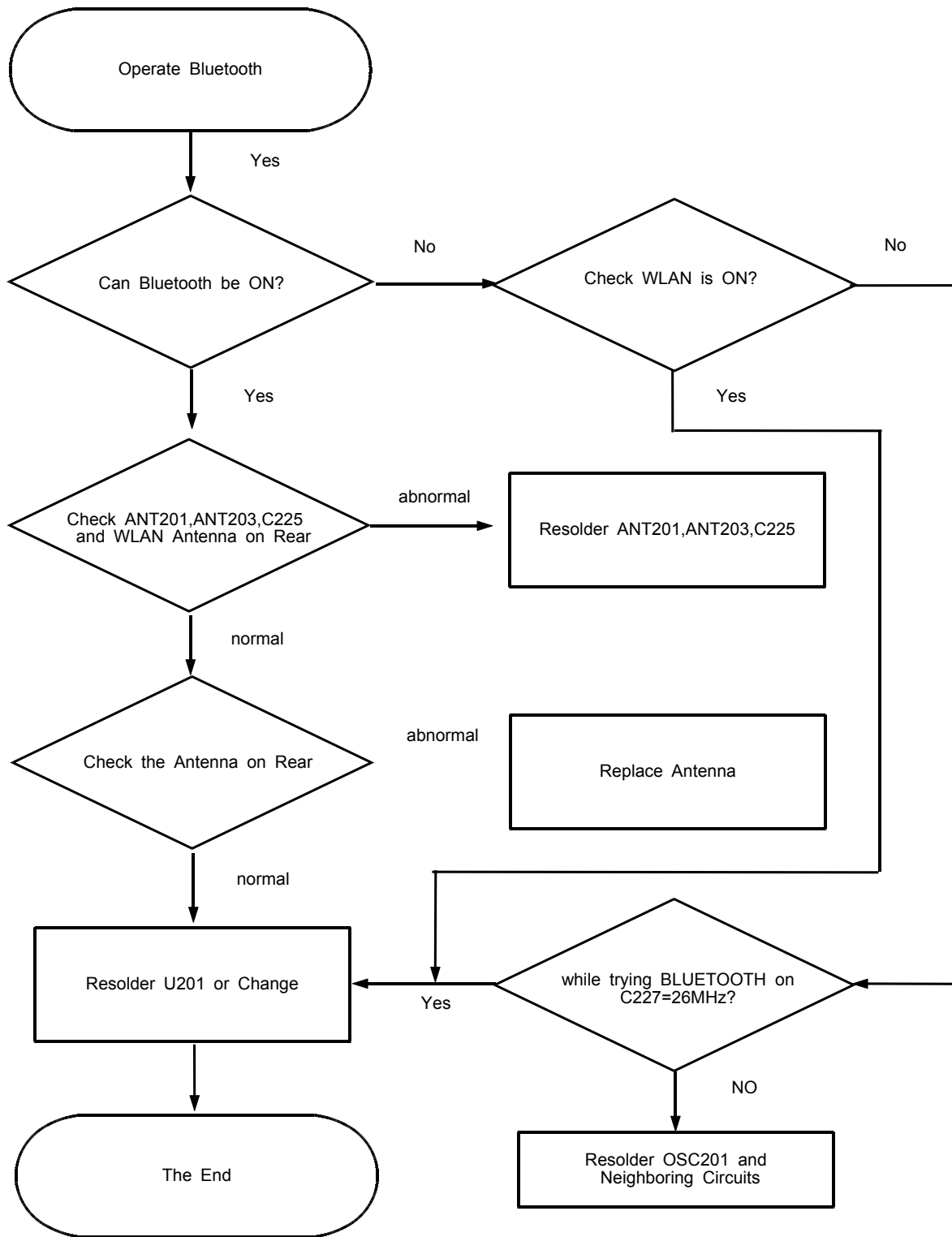
9-24. GPS Part



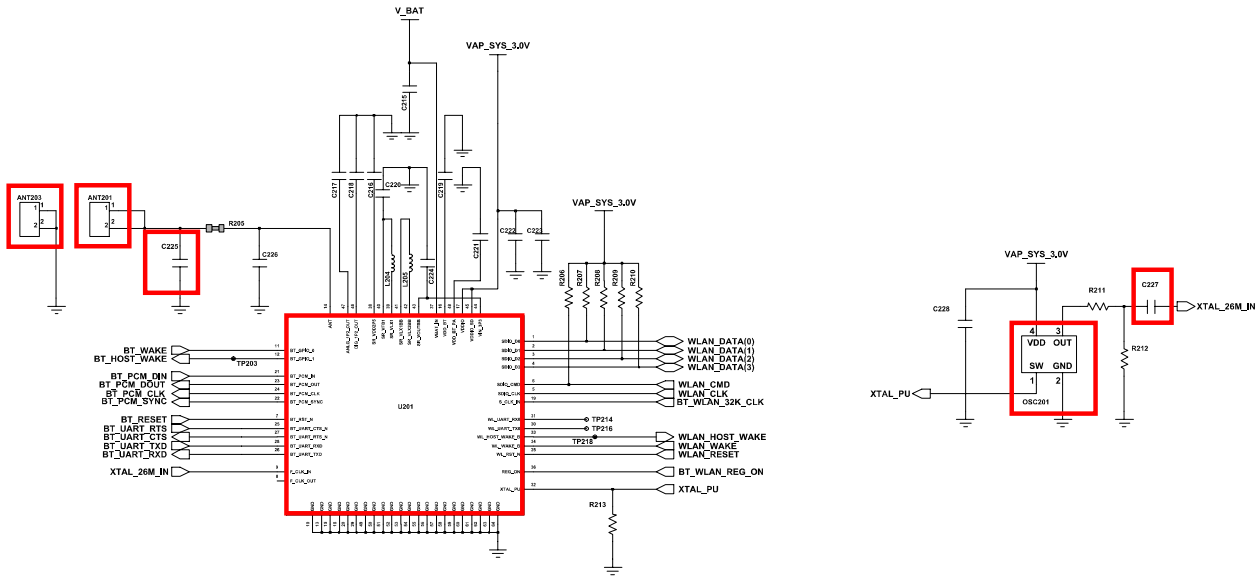
Flow Chart of Troubleshooting

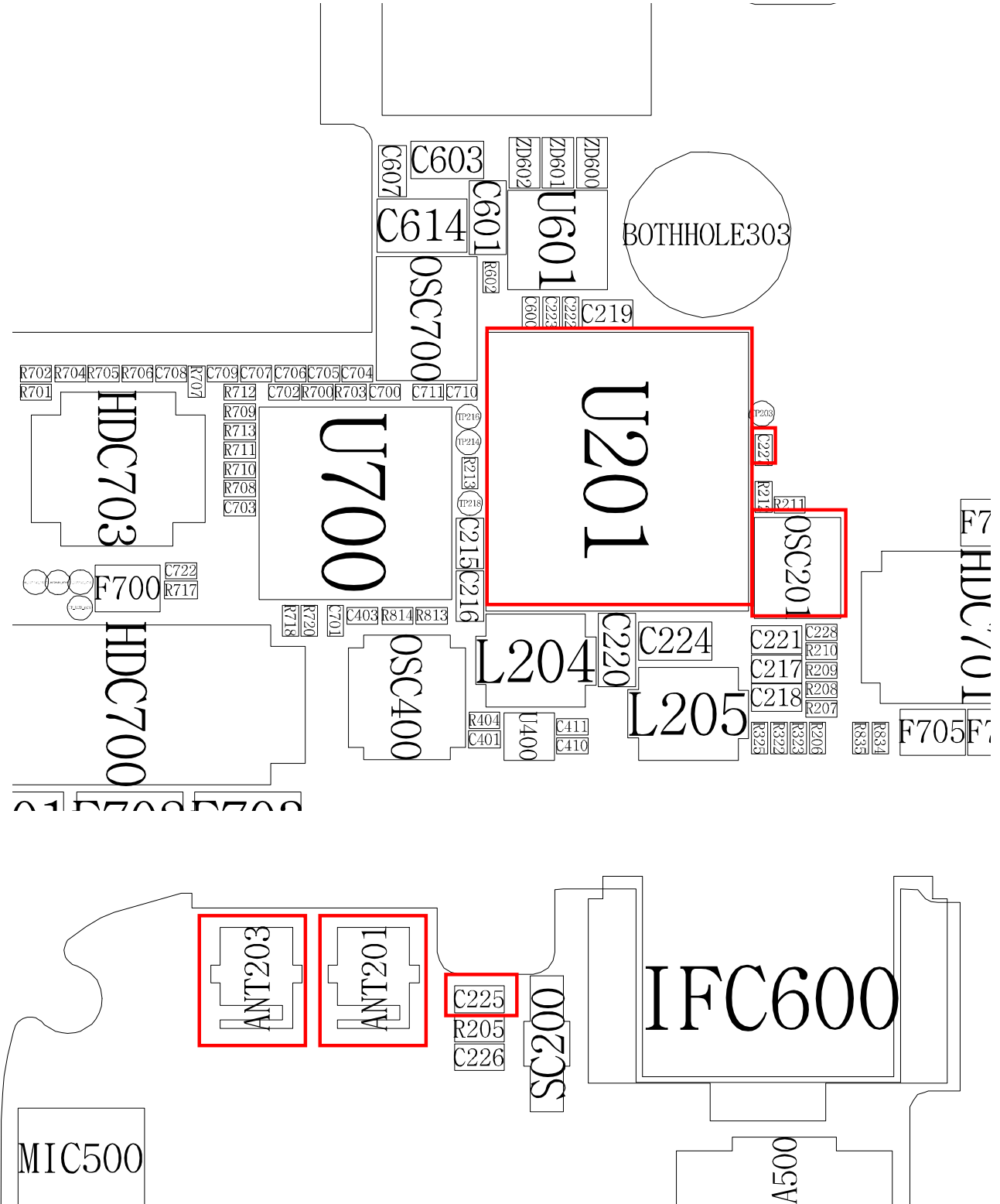


9-25. BLUETOOTH

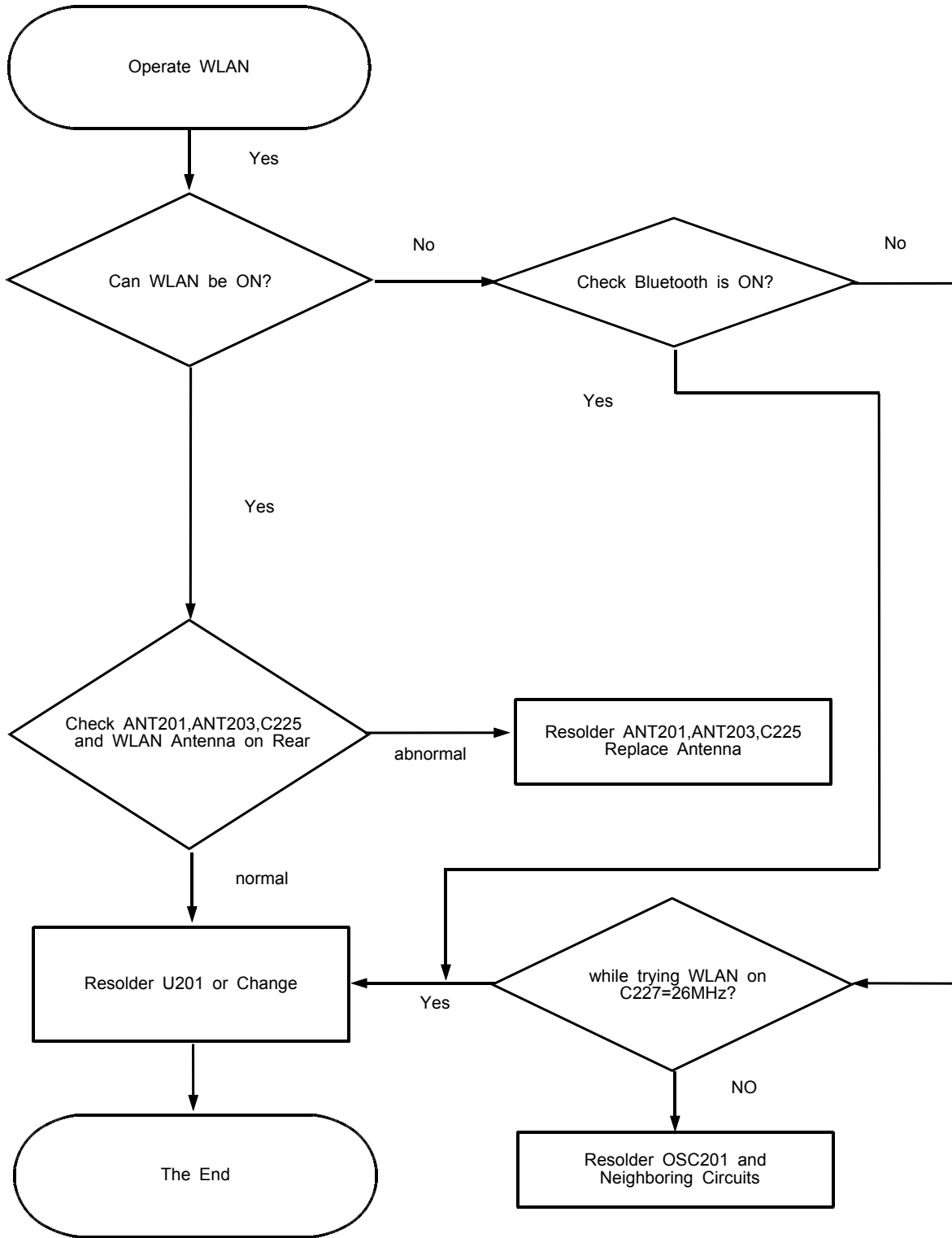


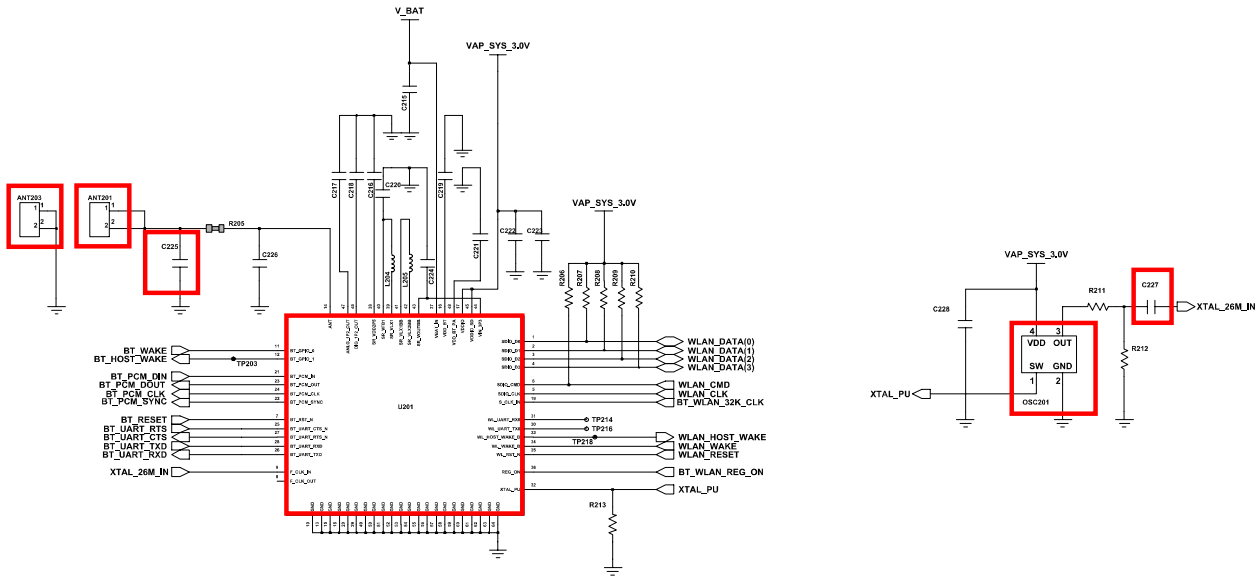
Flow Chart of Troubleshooting

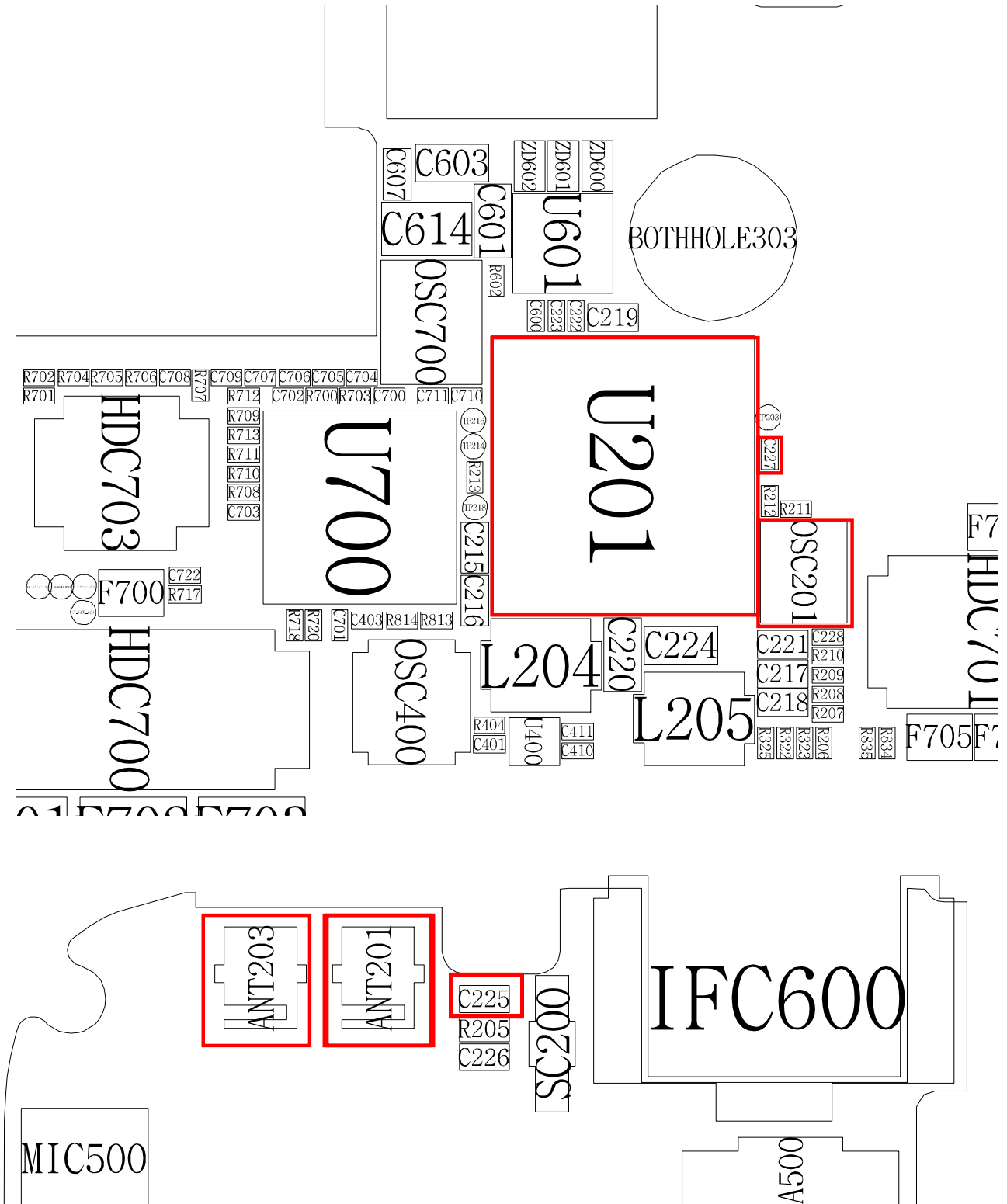




9-26. WLAN







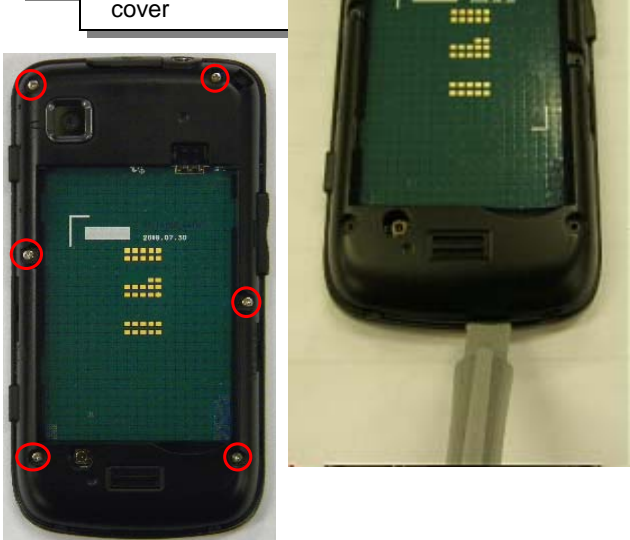
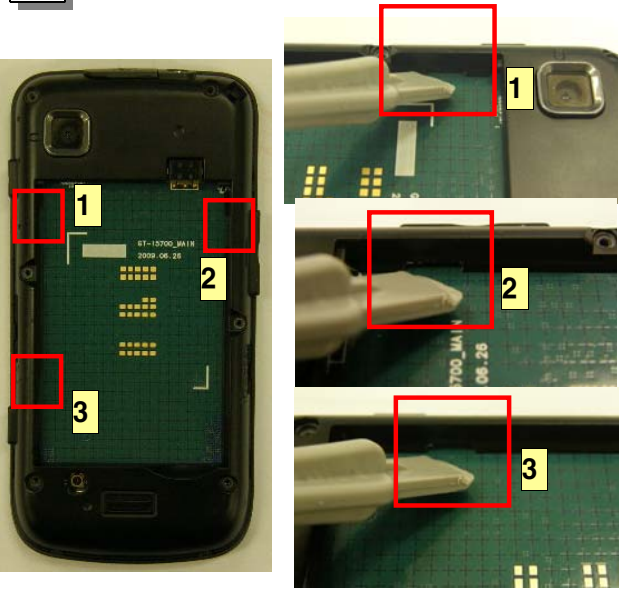
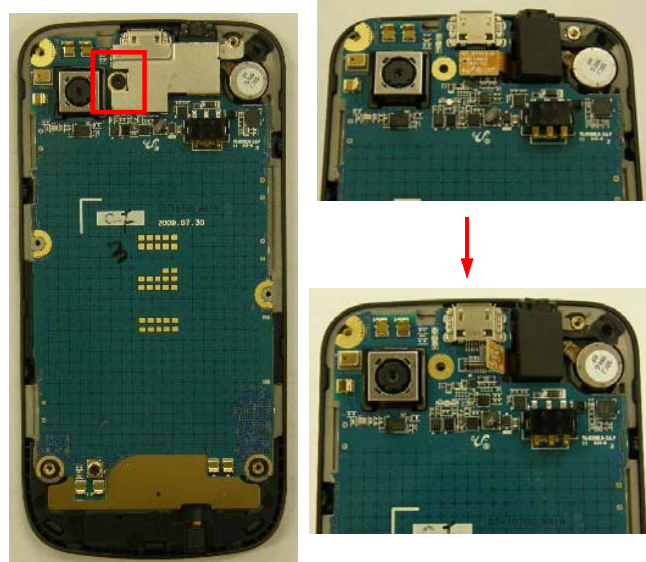
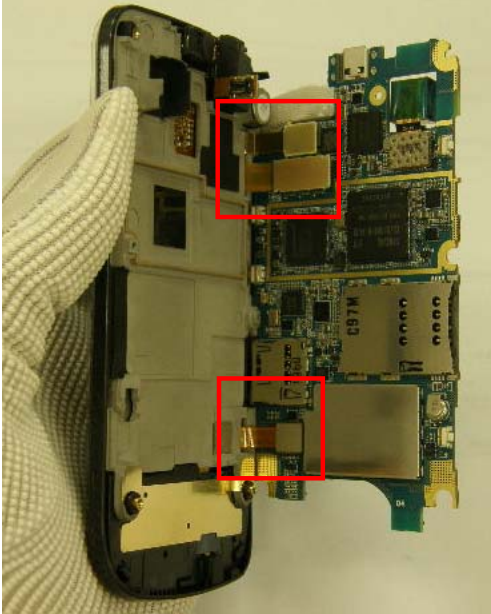
10. Reference data

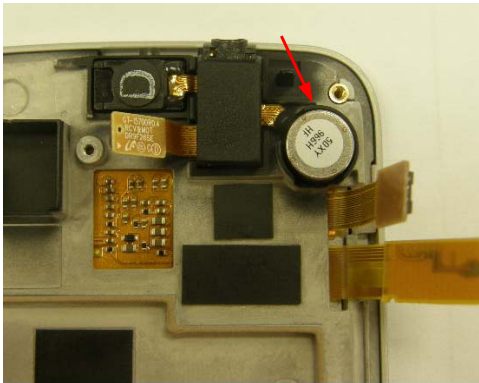
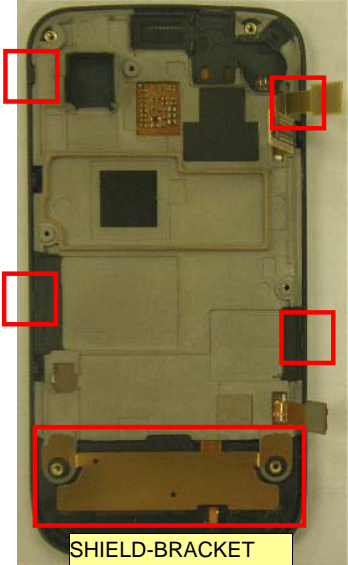
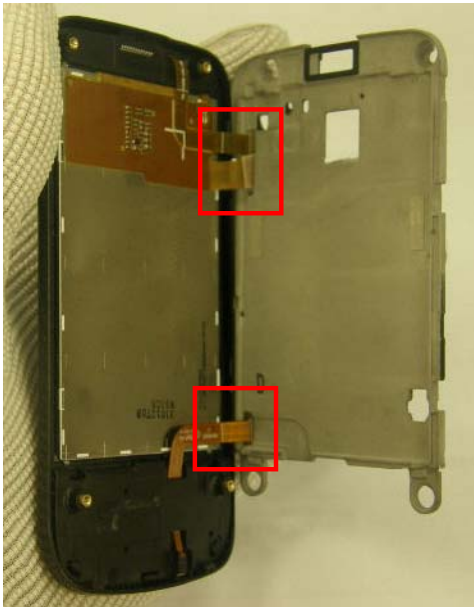
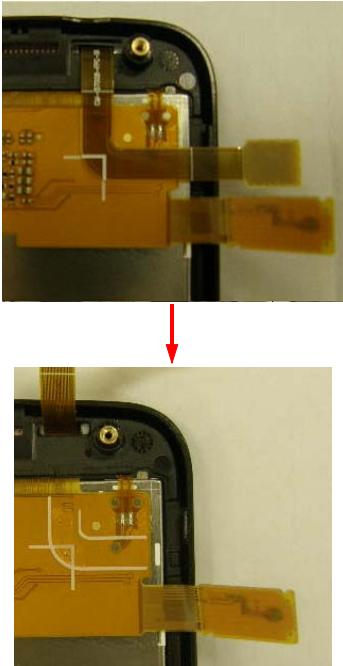
Reference Abbreviate


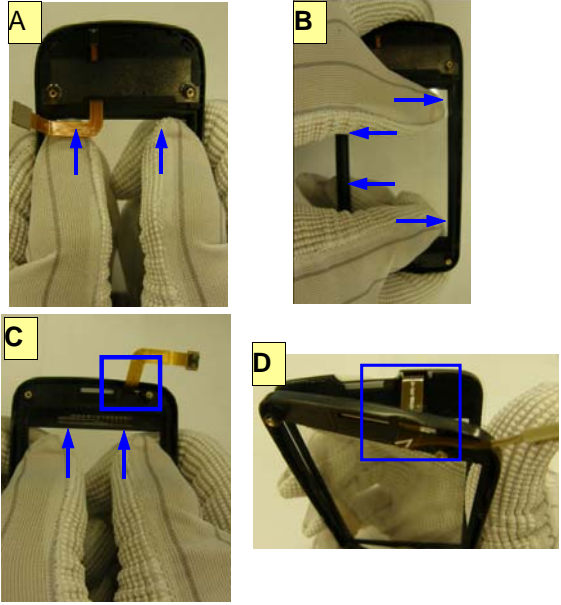
- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

11. Disassembly and Assembly Instructions



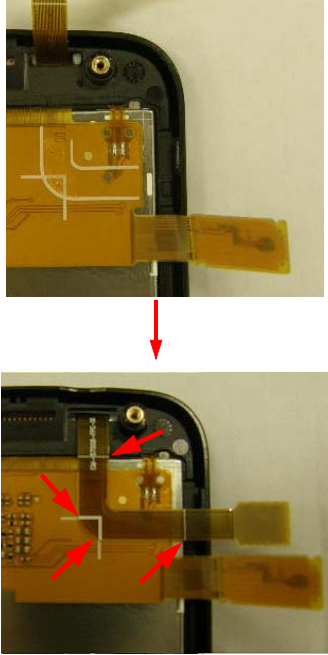
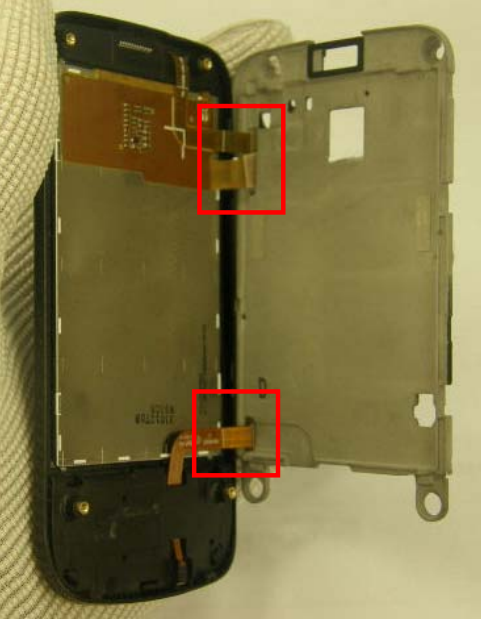
11-1. Disassembly Instructions

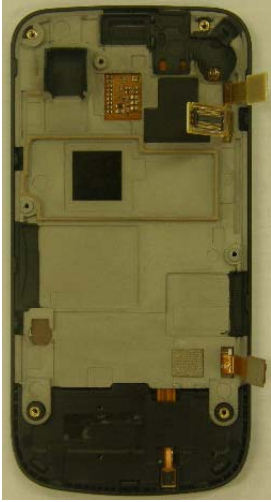
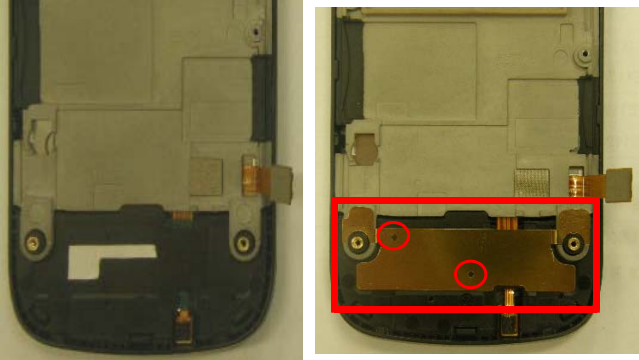
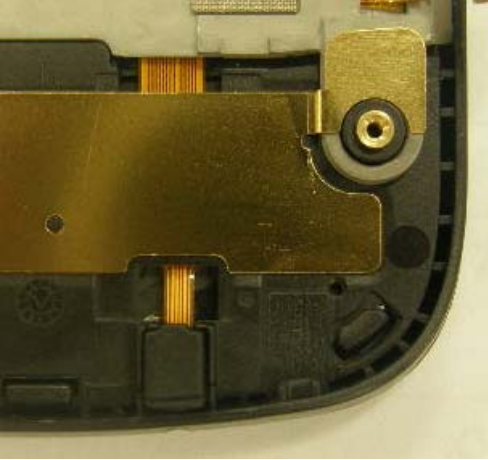

<p>1</p> <p>1) Remove the 'Rear' by unscrewing those 6 points on the picture. detach Rear case. 2) With the disassembly JIG unhook the rear cover</p> 	<p>2</p> <p>1) With disassembly JIG, Use the disassembly hole(3Points)</p> 
<p>1) SCREW Torque: 1.2 ~ 1.4kgf.cm 2) Make sure not to damage the rear and leave scratch on it</p>	<p>1) Make sure not to damage the rear and leave scratch on it</p>
<p>3</p> <p>1) Remove the SUS by unscrewing these 1 points on the below picture. 2) Take off the RCV Ass'y connector from PBA</p> 	<p>4</p> <p>1) Separate the PBA from bracket. 2) Detach 3 connector form PBA.</p> 
<p>1) SCREW Torque: 1.2 ~ 1.4kgf.cm 2) please detach the shield-can vertically, make sure not to damage clip.</p>	<p>1) Make sure not to damage the connectors and FPCB.</p>

<p>5</p> <p>1) Detach RCV Ass'y from the bracket. Use the disassembly hole.</p> 	<p>6</p> <p>1) Detach the shield-bracket. 2) Unhook 4points of the bracket.</p>  <p>SHIELD-BRACKET</p>
<p>1) Be careful not to damage RCV Ass'y.</p>	<p>1) Be careful not to damage front.</p>
<p>7</p> <p>1) detach the bracket from front.</p> 	<p>8</p> <p>1) Detach the TSP FPCB.</p> 
<p>1)Be careful not to damage connector FPCB.</p>	<p>1) Make sure not to damage the connectors and FPCB.</p>

<p>9 1) Detach LCD from front case.</p> 	<p>10 1) Follow below picture. A→B→C→D</p> 
<p>1) Please be careful not to damage LCD.</p>	<p>1) Please be careful not to damage TSP and FPCB.</p>

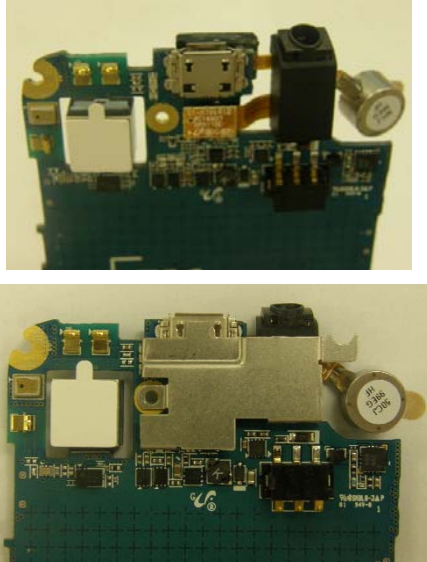
11-2. Disassembly Assembly

<p>1) Input the TSP FPCB in the front hole. 2) Attach the TSP from the top to the bottom.</p> 	<p>1) Detach the LCD to the front.</p> 
<p>1) Attach the TSP up to the front.</p>	<p>1) Be careful not to damage LCD.</p>
<p>1) Attach the TSP FPCB in the silk line.</p> 	<p>1) Attach the bracket to the front.</p> 
<p>1) check the silk line(matching)</p>	<p>1) Be careful not to damage FPCB connector.</p>

<p>5</p> <p>1) Attach the shield-bracket 2) Join the bracket to the front.</p> 	<p>6</p> <p>1) Attach the shield-bracket to the front.</p> 
<p>1) Check the 4 points of hook.</p>	<p>1) Check the 2 point of standard.</p>
<p>7</p> <p>1) Attach the mic rubber on the mic</p> 	<p>8</p> <p>1) Detach antenna from rear.</p> 
<p>1) Check the mic rubber shape. Don't attach upside down.</p>	<p>1) Do not damage to the antenna carrier.</p>

9

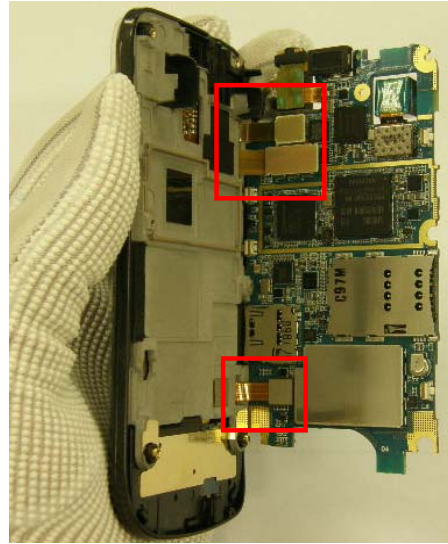
- 1) Joint the RCV Ass'y.
- 2) Joint the shield-can.



- 1) Be careful not to damage clip.

10

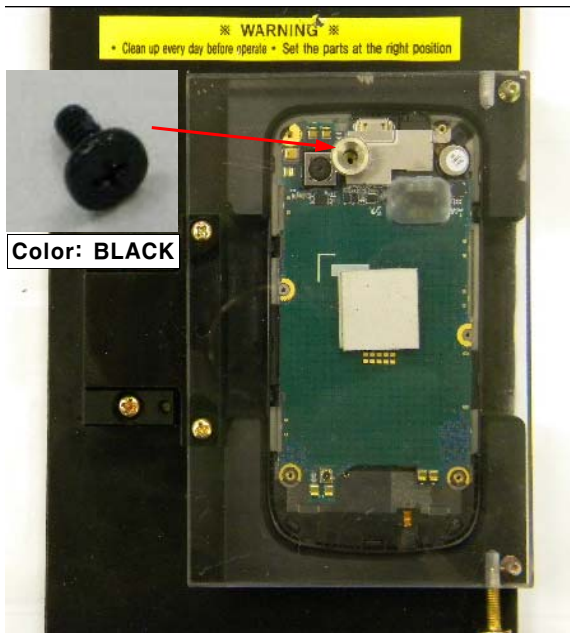
- 1) Attach the FPCB connector.



- 1) Check the 3 points of FPCB connector.

11

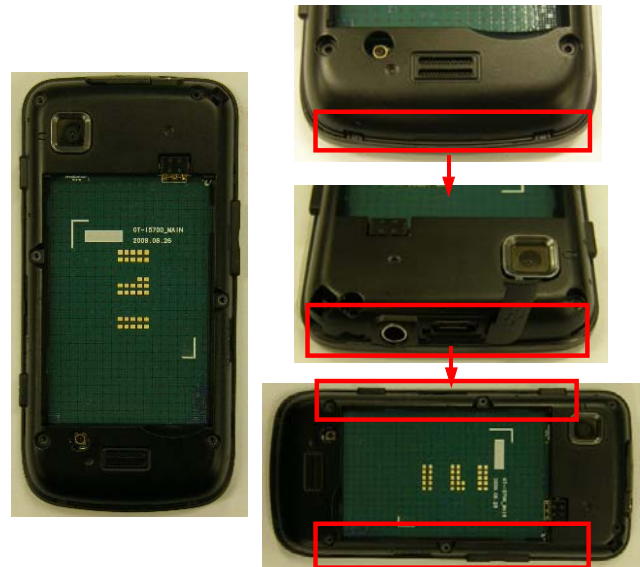
- 1) Screw on the top.



- 1) SCREW Torque: 1.2 ~ 1.4kgf.cm

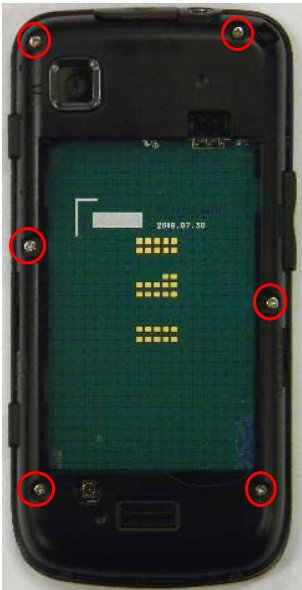
12

- 1) Attach from bottom to top
- 2) Attach the side hook



- 1) Do not scratch to the rear.

13 1) Screw the 6 points.



1) SCREW Torque: 1.2 ~ 1.4kgf.cm

14 1) Assembly the battery and battery cover.



1) End

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