

SAMSUNG

GSM TELEPHONE

GT-i5500B

SERVICE *Manual*

GSM TELEPHONE



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Notice

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**SAMSUNG
ELECTRONICS**



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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 the specification 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 Phase 1	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900	WCDMA 2100	WCDMA850
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1922~1977 2112~2167	824~849 869~894
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL:9612~9888 DL:10562~10838	4357~4458, 1007,1012, 1032,1037, 1062,1087
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	45MHz
Mod. Bit rate/ Bit Period	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 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	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPS K	QPSKHQPS K
MS Power	33dBm~5dB m	33dBm~5dB m	30dBm~0dB m	30dBm~0dB m	24dBm~- 50dBm	24dBm~- 50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl	3(max+24dBm)	3(max+24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM850	TX Power control level	EGSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3dBm	17	9±3dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
				15	0±5 dBm	15	0±5 dBm

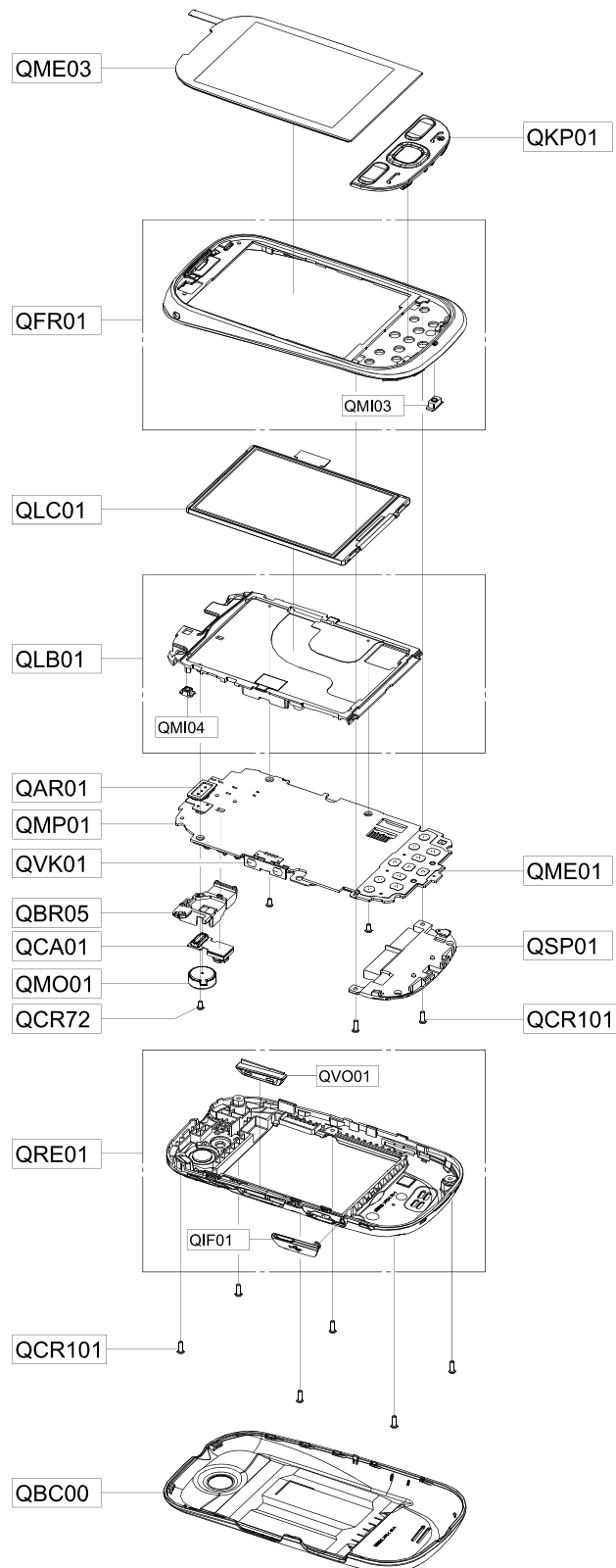
3. Operation Instruction and Installation

Main Function

- GSM(2G EDGE/GPRS) 850/900/1800/1900
- HSDPA 7.2 Mbps
- 2.8" QVGA TFT Full Touch (c-type)
- Music player, Voice Recorder
- A-GPS / BT v2.1 / USB v2.0 / WiFi (802.11 b/n/g)
- 2M Camera
- FM Radio Receiver
- Bluetooth v2.1
- USB 2.0 FS / Wi-Fi 802.11n / GPS
- Sensors: Accelerometer, Compass
- TouchWiz 3.0 Light for Android(Multiple SNS(Facebook, Myspace, Twitter))
- Multiple IM(Parling: AOL, G-talk))
- Touch WIZ 3.0 UI , Application store
- SMS/MMS/Email

4. Exploded View and Parts List

4-1. Cellular phone Exploded View



4-2. Cellular phone Parts list

Design LOC		Discription	SEC CODE
QAR01		AUDIO-RECEIVER	3009-001490
QCR101		SCREW-MACHINE	6001-002005
QCR72		SCREW-MACHINE	6001-002051
QMO01		MOTOR DC-SCHC250	GH31-00323A
QME01		DOME SHEET-GT_I5500	GH59-09450A
QVK01		KEY FPCB-VOL KEY(GTI5500)	GH59-09533A
QME03		TOUCH/PANEL-GTI5500_OPEN	GH59-09820A
QSP01		MODULE-GTI5500L_SPK+ENCLOSURE	GH59-09828A
QMP01		A/S ASSY-PBA MAIN(BRAZ)GT_I5500B	GH82-04999A
QCA01		ASSY CAMERA-MODULE,GT-M3710(2M)	GH96-04289A
QLC01		ASSY LCD-GTI5500_ MODULE	GH96-04665A
QBC00		ASSY COVER-BATTERY	GH98-16920A
QKP01		ASSY KEYPAD-MAIN	GH98-16924A
QBR05		ASSY BRACKET-CAMERA	GH98-17463A
QLB01		ASSY BRACKET-LCD	GH98-16921A
	QMI04	RMO RUBBER-MIC	GH73-13533A
QFR01		ASSY CASE-FRONT	GH98-16925A
	QMI03	RMO RUBBER-MIC	GH73-14059A
QRE01		ASSY CASE-REAR	GH98-16926A
	QVO01	ASSY KEY-VOLUME	GH98-16919A
	QIF01	ASSY COVER-IF	GH98-17391A

5. MAIN Electrical Parts List

Design LOC	Description	SEC CODE
D401	USFZ5.6V-RTK/H	0403-001688
D500	RB520S-30	0404-001172
ZD501,ZD503,ZD505	DF2S5.6FS(TPL3)	0406-001231
ZD506,ZD601,ZD602	DF2S5.6FS(TPL3)	0406-001231
ZD500,ZD504,ZD600	PESD5V0L5UV	0406-001286
D400	DAN222TL	0407-001002
Q500	DTA114EM	0504-001138
Q600	2SK3019	0505-001325
Q400	SI1013X-T1-GE3	0505-002341
U301	NC7SZ00L6X	0801-003200
U300	74AUP1G74GM	0801-003265
U402	STG5123DTR	1001-001488
U500	STG5223QTR	1001-001546
U202	XM2400SN-AL0901	1001-001607
U501	FSA9280AUMX	1001-001645
U502	ISA1000	1003-002047
UME300	K5W4G2GACB-BL50	1108-000348
U200	HFQRX3NFA-033	1201-002971
PAM100	RF3230	1201-003068
PAM101	SKY77701	1201-003091
PAM102	SKY77704	1201-003106
U504	TC75S56FE	1202-001068
U401	MAX8899EWZ-T	1203-006291
U503	KTD259BEHD-TR	1203-006331
U403	FT8010MPX	1203-006346
U101	RTR6285	1205-003297
U201	BCM20780B0KUBG	1205-003839
UCP300	MSM7227-1	1205-004035
U606	AR6003G-AC2B-R	1205-004076
U602	BMA023	1209-001817
U603	MMC3140MS	1209-001989
TH300	NCP15WB473J04RC	1404-001221
R501	RC1005J202CS	2007-000137
R423,R530	RC1005J101CS	2007-000138
R333,R510	RC1005J102CS	2007-000140
R517	RC1005J222CS	2007-000141
R400	RC1005J512CS	2007-000144
R424,R508	RC1005J103CS	2007-000148
R414	RC1005J123CS	2007-000149
R605	RC1005J223CS	2007-000153
R416,R417	RC1005J473CS	2007-000157

Design LOC	Description	SEC CODE
R311,R322,R332,R431	RC1005J104CS	2007-000162
R505,R513,R610	RC1005J104CS	2007-000162
R527,R531,R606	RC1005J204CS	2007-000165
R515,R607	RC1005J474CS	2007-000168
R506	RC1005J105CS	2007-000170
R413,R601	RC1005J100CS	2007-000172
R406,R407	RC1005J300CS	2007-001291
R327	RC1005J510CS	2007-001298
R533	MCR01MZP5J183	2007-001333
R500	MCR01MZP5J511	2007-002796
R525	RK73K1ETP150J	2007-002965
R408	RC1005F1003CS	2007-007107
R201	RC1005F153CS	2007-007132
R305,R306	MCR01MZP5F4702	2007-007139
R114,R115	TSR16GJ5R1V	2007-007193
R111	MCR01MZP5F1202	2007-007309
R403	RC1005F2003CS	2007-007334
R410	RK73H1ETP1213F	2007-007468
R409	RK73H1ETP1303F	2007-007480
R404	RK73H1ETP3303F	2007-007573
R108	MCR006MZPJ680	2007-008044
R100,R101,R109,R110	ERJ1GEJ101C	2007-008045
R320,R324,R502,R504	ERJ1GEJ101C	2007-008045
R323	MCR006YZPJ202	2007-008049
R300,R315,R325	ERJ1GENJ104X	2007-008055
R104	MCR006YZPJ151	2007-008057
R301	RC1005F49R9CS	2007-008298
R102,R103,R105,R106	ERJ1GEJ102C	2007-008419
R113	ERJ1GEJ102C	2007-008419
R328	RMC-1/20-330JPA	2007-008420
R418,R419,R420	RMC1/20473JPA	2007-008483
R304	ERJ1GEJ103C	2007-008516
R203	RC0603J301CS	2007-008582
R107,R302,R303,R307	MCR006YZPJ222	2007-008588
R308,R309,R310	MCR006YZPJ222	2007-008588
R321	ERJ2RKF6041X	2007-008766
R528,R529	ERJ1GEJ2R2C	2007-008774
R112,R402	RC0603J510CS	2007-008806
R405	RC1005F2153CS	2007-008812
R421	MCR006YZPJ184	2007-009170
R202	RK73H1HTTC6191F	2007-009794

Design LOC	Description	SEC CODE
C210	GRP1555C1H101J	2203-000233
C204	GRP155R71C103K	2203-000254
C160,C200,C203,C208	GRP1555C1H100D	2203-000278
C238,C508	GRP1555C1H100D	2203-000278
C459	GRP1555C1H180J	2203-000425
C216	GRP155R71H102K	2203-000438
C435,C436	GRP1555C1H200JZ01E	2203-000550
C125,C168	GRM1555C1H220J	2203-000627
C173,C248,C319	GRP1555C1H2R0C	2203-000696
C525	GRP155R71H392KA01E	2203-000725
C115,C134,C212,C249	GRP1555C1H330J	2203-000812
C250,C455,C503,C504	GRP1555C1H330J	2203-000812
C514,C517,C518,L117	GRP1555C1H330J	2203-000812
C327,C519,C520	GRP1555C1H470J	2203-000995
C251	GRP1555C1H4R0C	2203-001017
C215	GRP1555C1HR50C	2203-001383
C407,C408	04023G223ZAT2A	2203-001405
C103	CL05CR75BBNC	2203-002677
C239	GRP1555C1H1R8CZ01E	2203-005050
C119	GRP1555C1H3R3CZ01E	2203-005052
C135,C507	GRP1555C1H8R2CZ01E	2203-005057
C118	GRP1555C1H1R2CZ01E	2203-005234
C104,C132,C139	GRP1555C1H1R5BZ01E	2203-005281
C157,C161	C1005CG1H4R7BT	2203-005395
C219,C235,C240	GRP1555C1H5R6BZ01E	2203-005450
C102,C131,C133,C141	GRP0335C1E330JD01E	2203-005682
C209,C211,C245,C320	GRP0335C1E330JD01E	2203-005682
C138,C142,C144,C146	GRP0335C1E220JD01E	2203-005725
C147,C149,C150,C153	GRP0335C1E220JD01E	2203-005725
C156,C158,C170	GRP0335C1E220JD01E	2203-005725
C237,C243	CL03C120JA3GNNC	2203-005727
C123,C124	GRP0335C1E680JD01E	2203-005732
C127,C129,C136,C151	GRP0335C1E101JD01E	2203-005736
C154,C159,C162,C164	GRP0335C1E101JD01E	2203-005736
C172,C437	GRP0335C1E101JD01E	2203-005736
C101,C106,C111,C152	GRP033R71C102KD01E	2203-005806
C205,C206,C225,C226	GRM155R71A104K	2203-006048
C233,C234,C300,C301	GRM155R71A104K	2203-006048
C305,C311,C312,C314	GRM155R71A104K	2203-006048
C316,C329,C444,C453	GRM155R71A104K	2203-006048
C500,C502,C505,C509	GRM155R71A104K	2203-006048

Design LOC	Description	SEC CODE
C606	GRM155R71A104K	2203-006048
C430	GRP033R71C221KD01E	2203-006120
C236	GRM33X7R471K16PT	2203-006121
C607	CL05B223KONC	2203-006137
C112,C113,L111,L112	GRM0335C1E3R9B	2203-006187
C105,C109	GRP033R70J103KA01E	2203-006194
C406	GRM155R61A224KE19E	2203-006260
C526	CV105X5R105K25AT	2203-006348
C201,C202,C221,C302	GRM155R60J105KE19D	2203-006399
C304,C307,C315,C317	GRM155R60J105KE19D	2203-006399
C318,C409,C410,C416	GRM155R60J105KE19D	2203-006399
C425,C429,C433,C449	GRM155R60J105KE19D	2203-006399
C450,C456,C458,C521	GRM155R60J105KE19D	2203-006399
C524,C603,C604,C605	GRM155R60J105KE19D	2203-006399
C100,C128,C137,C143	GRM33X5R104K6.3	2203-006423
C145,C155,C163,C165	GRM33X5R104K6.3	2203-006423
C169,C171,C222,C228	GRM33X5R104K6.3	2203-006423
C308,C323	GRM33X5R104K6.3	2203-006423
C321	GRM033R60J333K	2203-006462
C501	GRM21BR60J226ME	2203-006474
C174,C326,C431	GRM0335C1E470JD01D	2203-006556
C325	GRM033R61A222K	2203-006668
C108,C110,C244	GRM0335C1E4R7C	2203-006707
C232	GRM033R61A152K	2203-006712
C400,C401,C402,C403	CV105X5R475K10AT	2203-006824
C404,C420,C440,C441	CV105X5R475K10AT	2203-006824
C442,C443	CV105X5R475K10AT	2203-006824
C303,C306,C310,C313	CL03A104KP3NNNC	2203-006839
C322,C324,C438,C439	CL03A104KP3NNNC	2203-006839
C445,C510,C609,C611	CL03A104KP3NNNC	2203-006839
C207,C220,C224,C227	GRM155R60J225ME15D	2203-006872
C231,C247	GRM155R60J225ME15D	2203-006872
C522	GMK107BJ105KA-T	2203-006978
C148,C167	CL03B103KP3NNNC	2203-006979
C411,C412,C413,C414	CL05A225KP5NSNC	2203-007271
C415,C421,C422,C511	CL05A225KP5NSNC	2203-007271
C512	CL05A225KP5NSNC	2203-007271
C107,C523	CV105X5R106M10AT	2203-007279
C116,C130,C166	CV05X5R475M06AH	2203-007317
C213,C214,C432,C434	CL03A105KQ3CSNH	2203-007369
C452,C608	CL03A105KQ3CSNH	2203-007369

Design LOC	Description	SEC CODE
C309,C328	CL05A106MR5NRNC	2203-007385
C241	GRM0335C1ER80W	2203-007403
C417,C418,C419,C423	CV03X5R105M06AH-SAM	2203-007449
C424,C428	CV03X5R105M06AH-SAM	2203-007449
C610	CL05A106MQ5NUNC	2203-007474
C454	F951C106MPAAQ2	2404-001374
BAT400	SM3R3703-R01	2409-001172
C217	LL1005-FH5N6S	2703-001748
C218,L205	CIH05T2N7SNC	2703-002176
L122	CIH05T18NJNC	2703-002200
L502,L504	CIH05T22NJNC	2703-002204
L104,L118,L125,L127	CIH05T3N9KNC	2703-002205
L206,L212	CIH05T3N9KNC	2703-002205
L115,L116	CIH05T3N3SNC	2703-002207
L113	CIH05T2N2SNC	2703-002208
L126	CIH05T4N7SNC	2703-002267
C120,L121	CIH05T8N2JNC	2703-002268
L507,L602,L604,U605	CIH05T68NJNC	2703-002308
C117,C246,L119,L213	CIH05T1N0SNC	2703-002367
L114	CIH05T1N8SNC	2703-002368
L210	LLV0603-F6N8J	2703-002649
L105,L106	LQP03TN5N6J00D	2703-002793
L124	LLV0603-F2N2S	2703-002842
L108,L109	LLV0603-F27NJ	2703-002900
L120	LLV0603-F8N2J	2703-002907
L211	LQP03TN3N3B00D	2703-002918
L107	CIH03T56NJNC	2703-002958
L110	CIH03T22NJNC	2703-002999
L510	MLG1005SR15J	2703-003121
L400,L401,L402,L403	CIG21L2R2MNE	2703-003686
L508	LPS181210T-100M	2703-003748
OSC200	CX3225YB26000L0FLF22	2801-004821
OSC400	EXS00A-MU00031	2801-004909
OSC100	KT3225P19200ACW28ZN0	2809-001345
F600,F601,F602,F603	AVRC-14S-03Q-030-100R	2901-001424
F604,F605,F606	AVRC-14S-03Q-030-100R	2901-001424
F102	SAFEB1G95KA0F00	2904-001847
F103	SAFEB836MAM0F00	2904-001668
F104	SAFEB2G14FB0F00	2904-001864
F101	B9504	2904-001869
F100	SFRG42PY002	2904-001881

Design LOC	Description	SEC CODE
F200	SAFEA2G45AC0F00	2904-001944
DUF100	SFXG50PD502	2910-000099
DUF101	SFX836UD602	2910-000105
MIC500,MIC501	SPU0410LR5H-QB	3003-001138
L203	BLM15BB750SN1D	3301-001438
L200,L201	BLM15AG601SN1	3301-001659
L102	BLM15HG102SN1D	3301-001756
L214,L215,L500,L503	BLM15HD182SN1D	3301-001885
L505,L506,L509,L511	BLM15HD182SN1D	3301-001885
RFS100	KMS-560-002-BEF	3705-001731
SLC500	04-6298-706-000-883	3708-002015
SIM400	5000-6P-1.5S	3709-001488
CD400	MS110-C10B-C16-H	3709-001580
HDC600	14-5802-044-002-829	3711-006843
HEA601	AXT422164AW1	3711-006943
BTC400	KQ03SB1-3R-BEF	3711-007437
IFC500	HY07-AB0700	3722-002840
EAR500	IJAN4-66	3722-003114
F202	LTU-1005-2G4S1-A3-AT	4709-001905
F201	LTU-1608-2G4H6-A1-AT	4709-001906
SC1	ONBOARD-CLIP-6	GH70-03349A
ANT201	HJ-ICT-02	GH71-08426A
ANT100,ANT101,ANT200	HJ-ICT-05	GH71-08731A
L103,R116,R511	PB-SHORT-1005	GH80-03320A
R425	PB-SHORT-0603	GH80-03321A
R331,R503,R600	P RES-Z1005-SHORT-P	RES-Z1005-SHORT

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

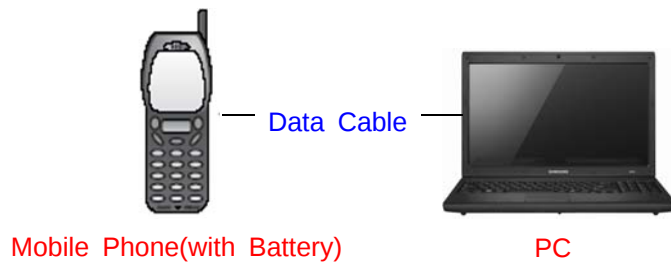
6. Level 1 Repair

6-1. Software Download

6-1-1. Pre-requisite for Download

- Downloader Program ([Odin Multi Downloader v4.19](#))
- GT-I5500B Mobile Phone
- Data Cable
- JIG BOX (GH99-36900A)
- RF Test Cable (GH39-00985A)
- JIG Cable (GH39-01160A)
- Adapter (GH99-38251A)
- Binary files

- Diagram of Connection:

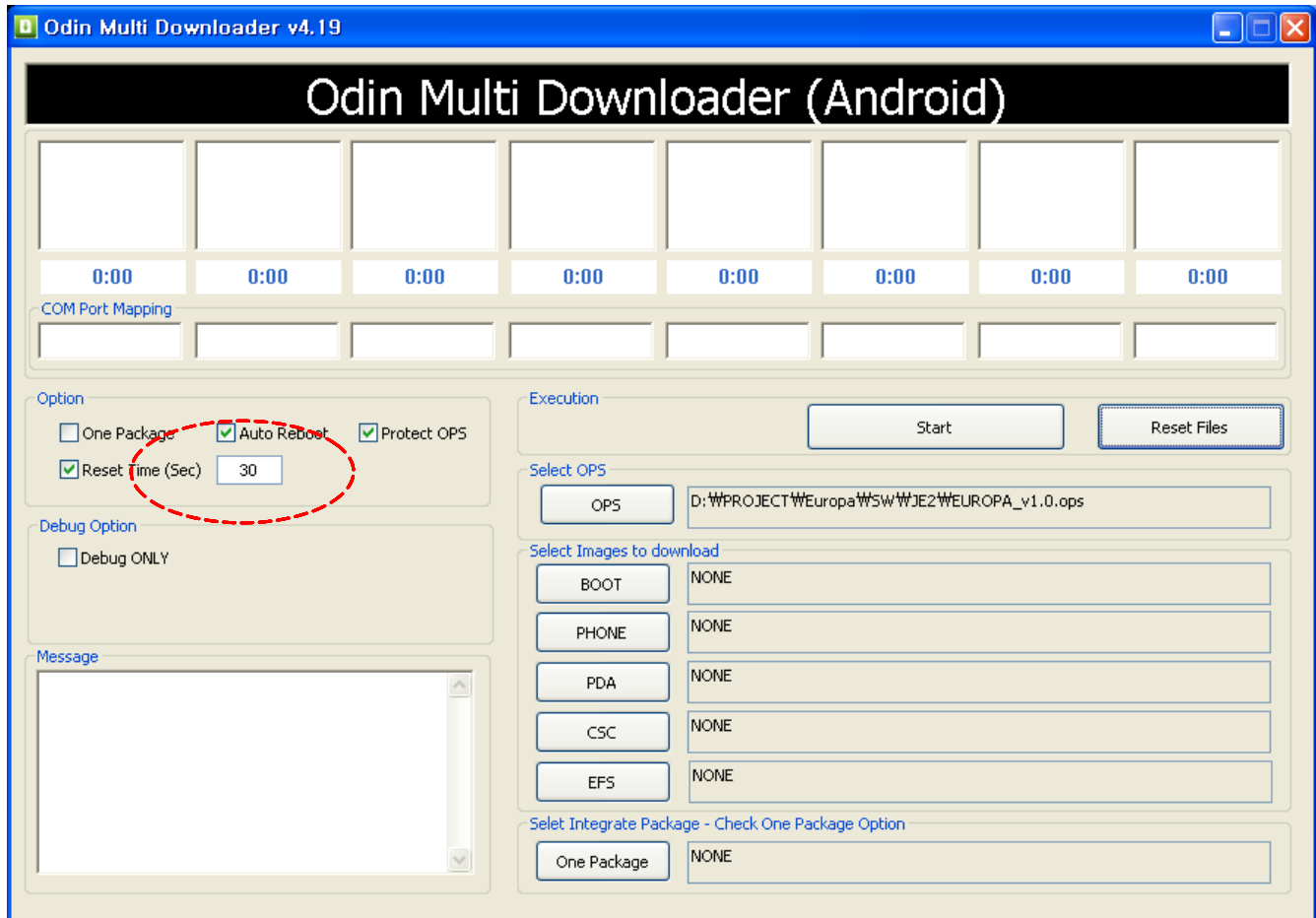


6-1-2. S/W Download Process

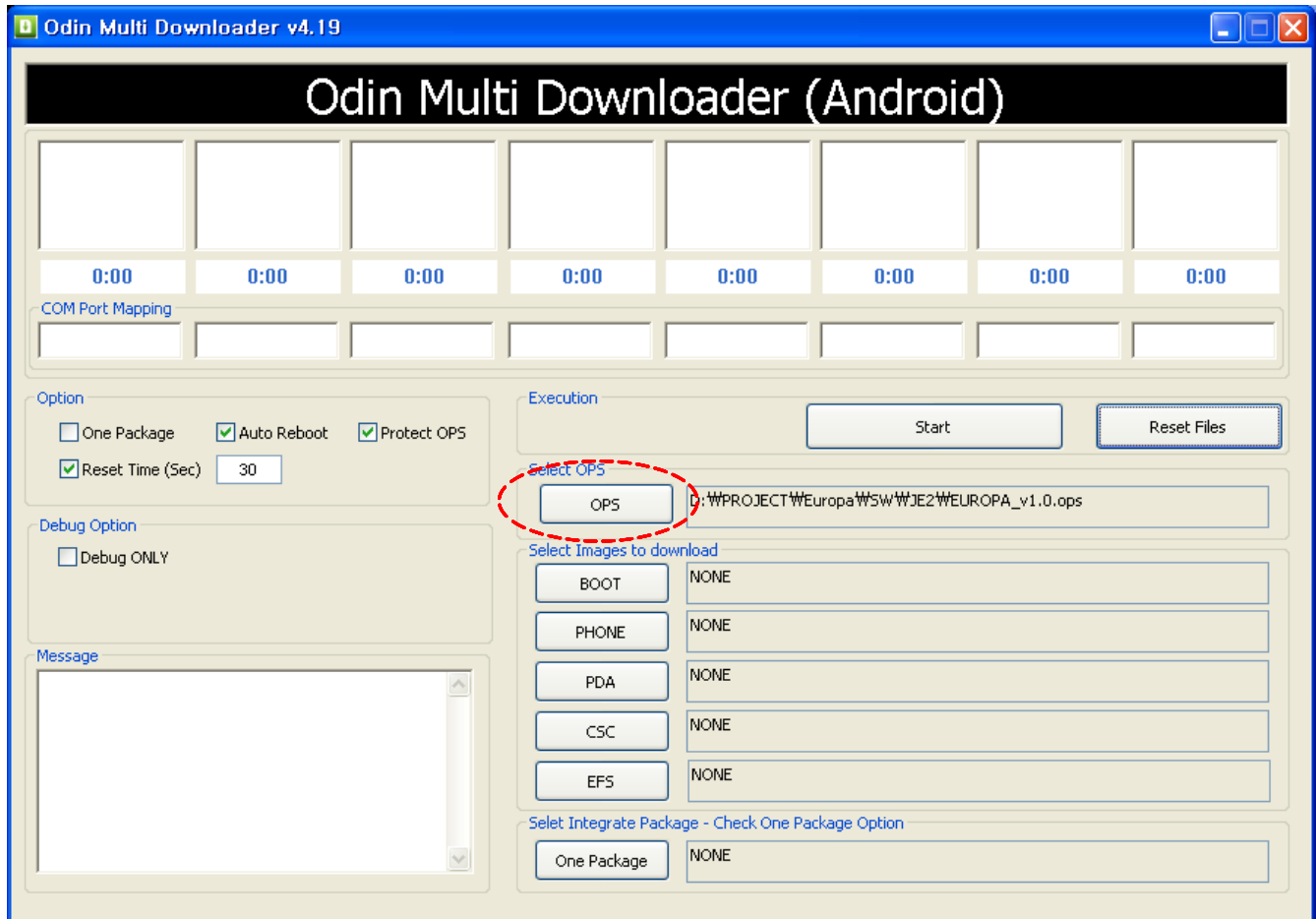
1. Load the binary download program by executing the "**Odin Multi Downloader v4.19**"



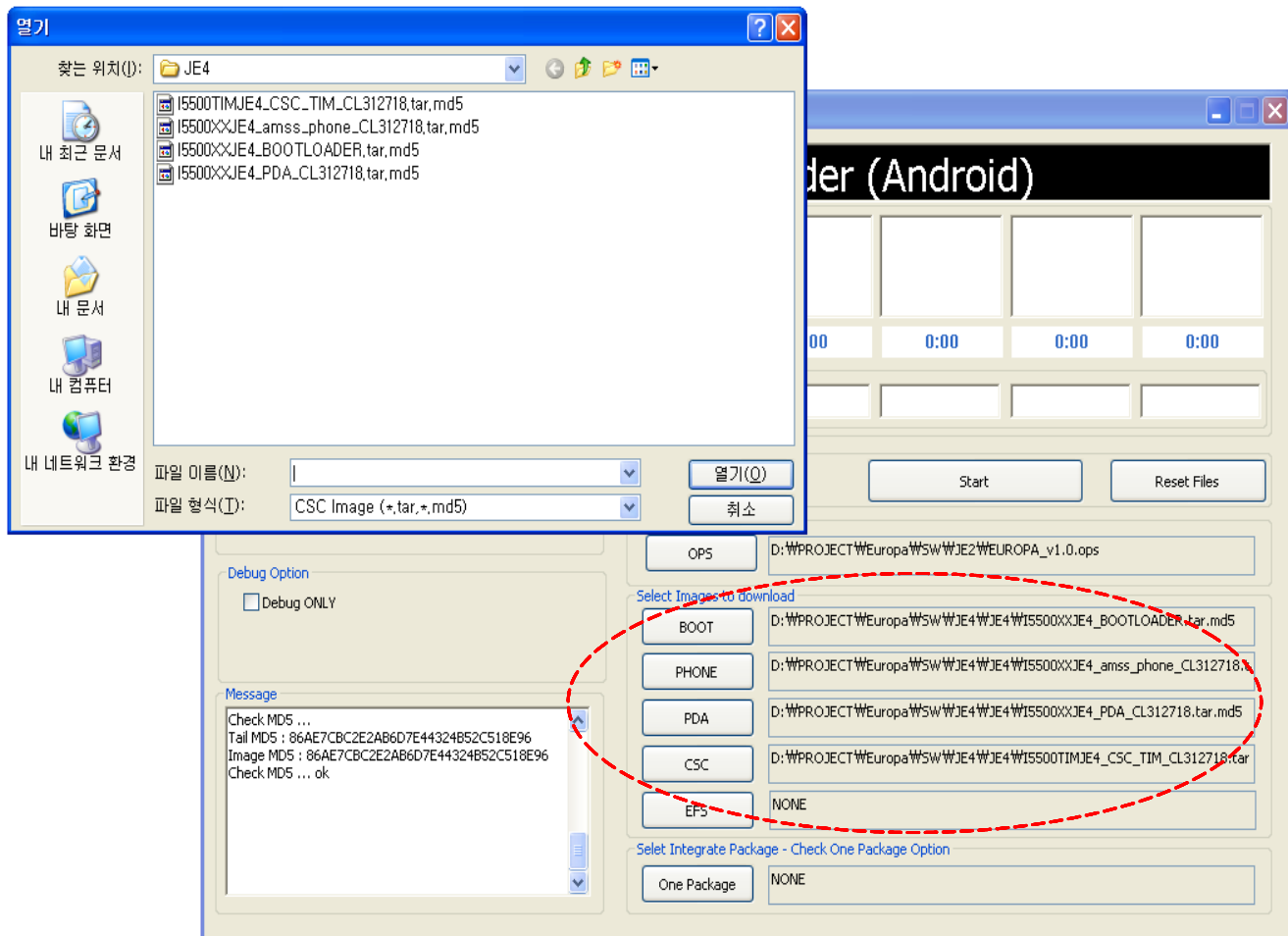
2. Change Reset time to 30



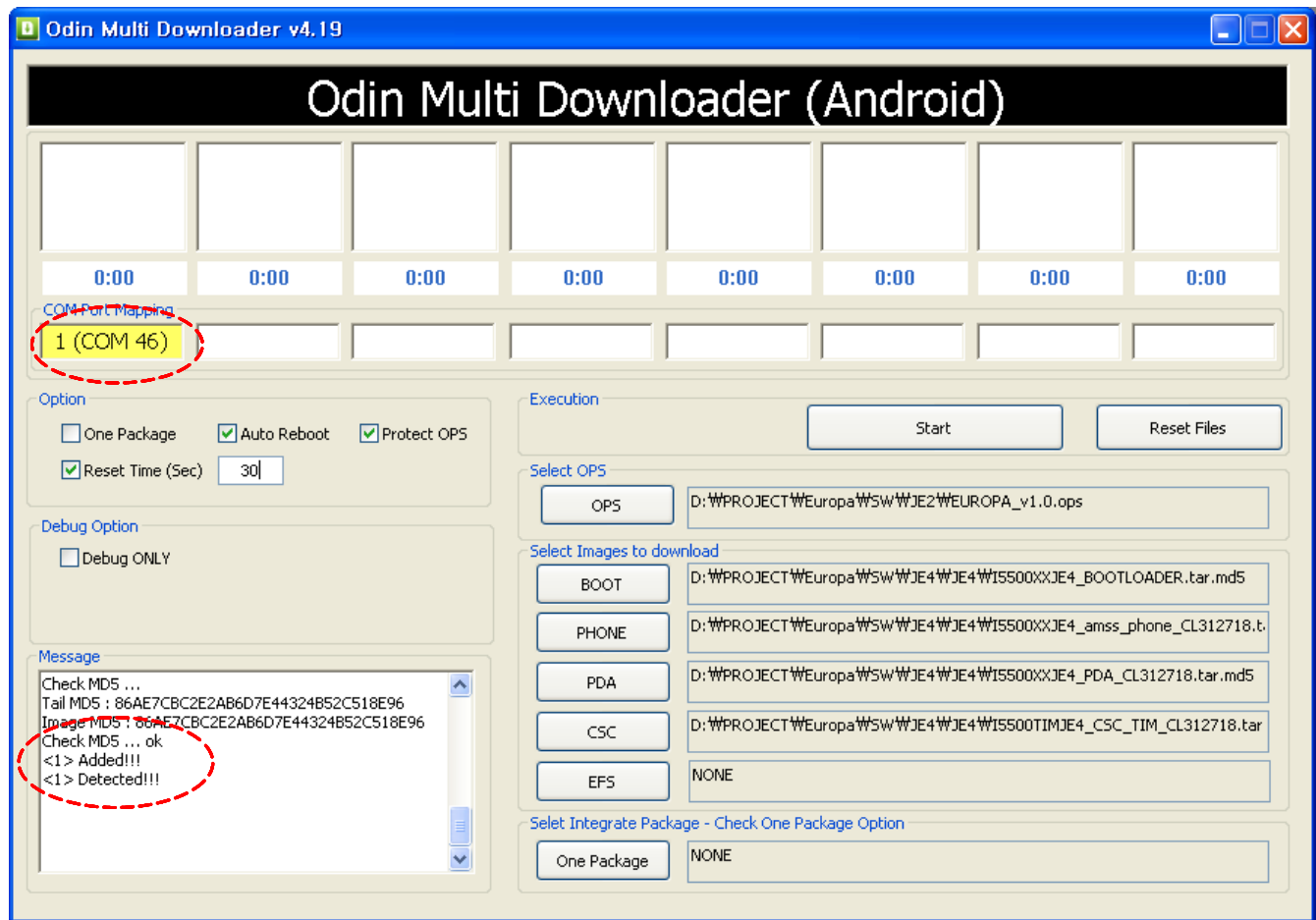
3. Select OPS file (EUROPA_v1.0.ops) from the folder that you saved the binary files.



4. Load the file of Bootloader, Amss, PDA, CSC files from the folder that you saved the binary files.



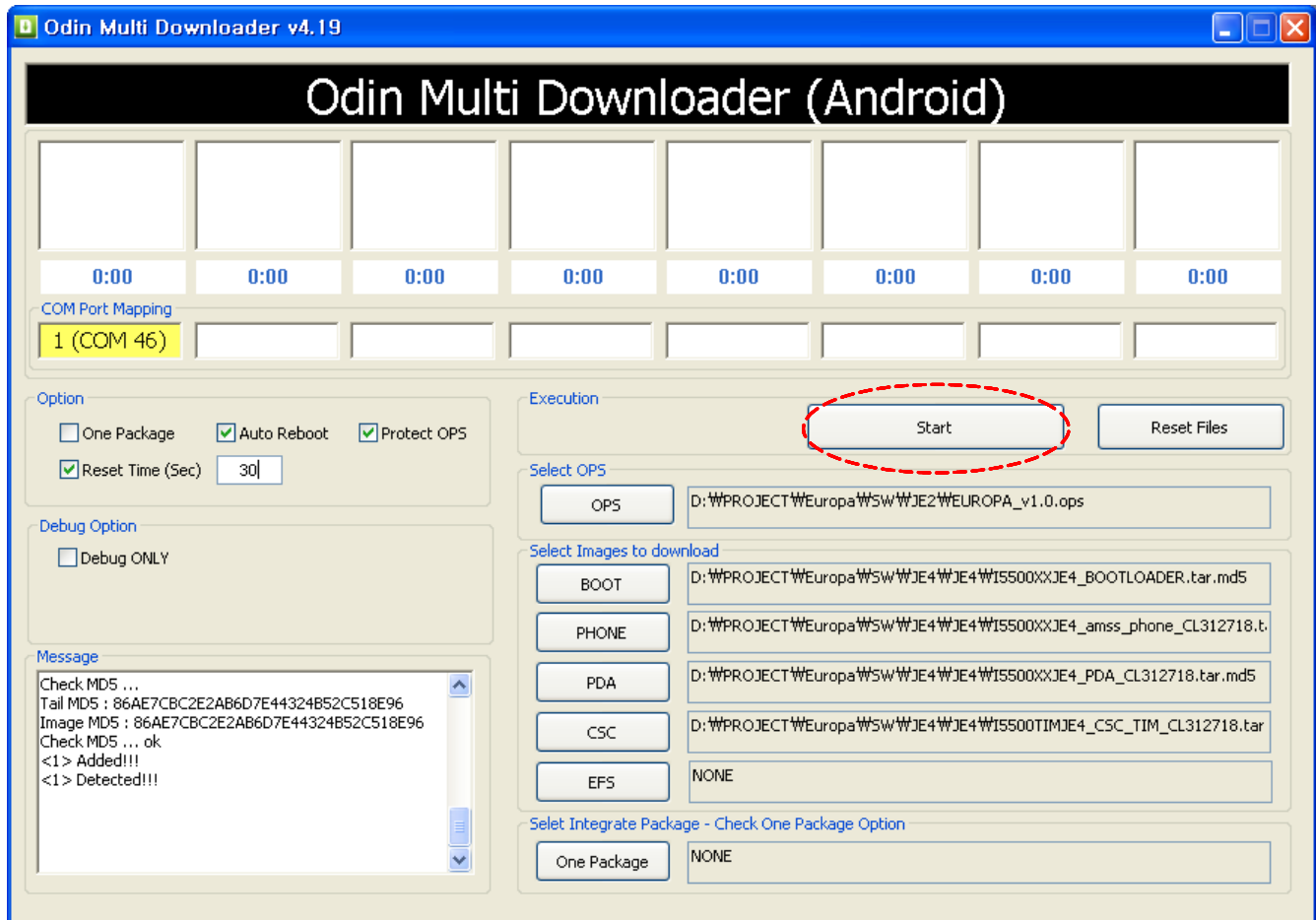
5. COM Port Mapping change to **yellow** colour when the phone with download mode is connected to PC by data cable.



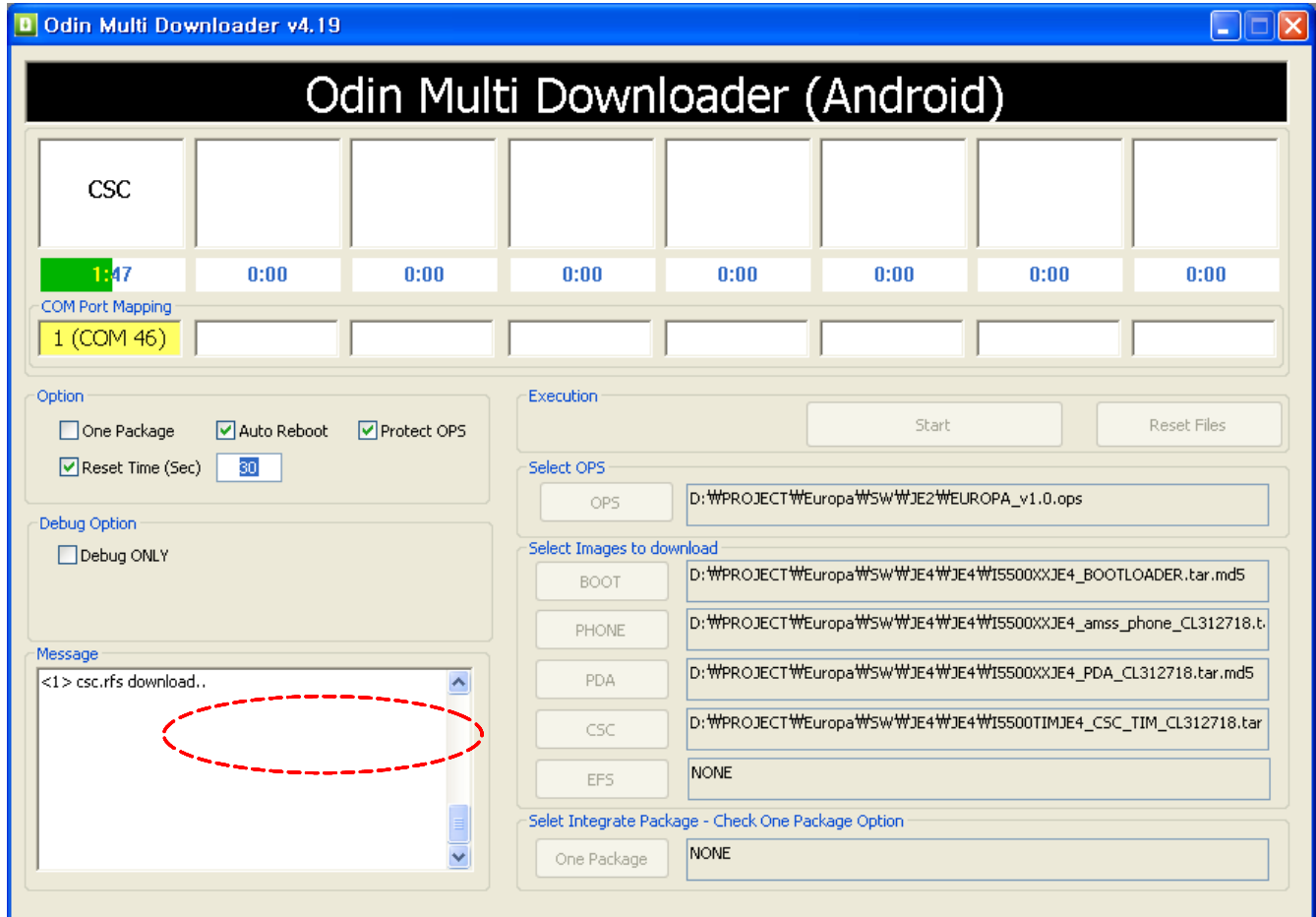
cf. You have to set the phone as a download mode by pressing Volume down + Middle Key(OK Key) + End key simultaneously before connecting to PC .

Then, the port would be searched.

5. Click the **Start** button when the Port searched.



It will start to download.



6. When downloading is finished successfully, there is a "PASS" message.



7. Confirm the downloaded version name and etc. :

***#1234#**

7. Level 2 Repair

7-1. Disassembly and Assembly Instructions

7-1-1. Disassembly

1

1) Unscrew the 6 points.



※ **Caution**

1) Be care of scratch and molding damage.

2

1) Seperate the REAR CASE.



※ **Caution**

1) Be care of scratch and molding damage.
2) Must use the disassembly apparatus.

3

1) Unscrew the 2 points.

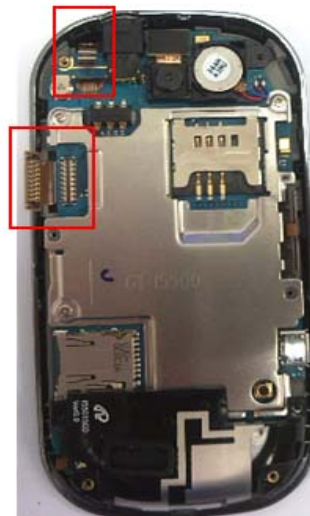


※ **Caution**

1) Be care of damage to INTENNA

4

1) Separate the LCD and TSP CONNECTORS.

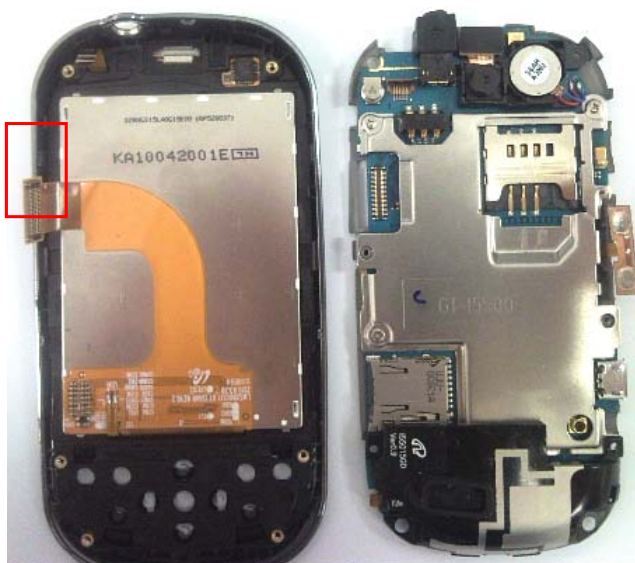


※ **Caution**

1) Be care of scratch and molding damage.

5

1) Separate the PBA ASS'Y from the FRONT ASS'Y.

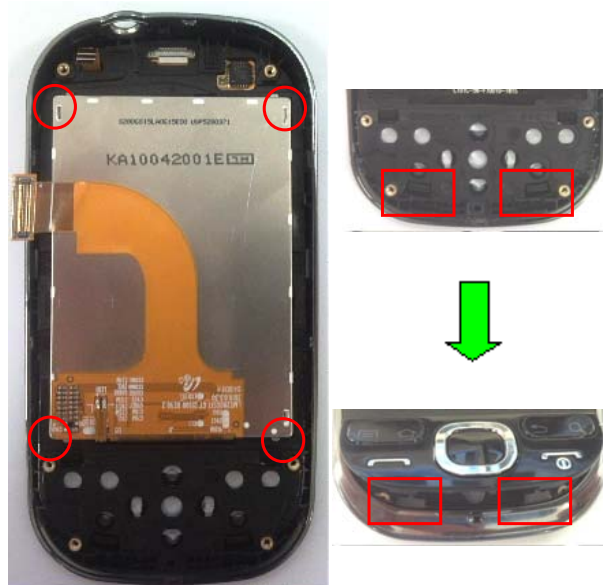


※ Caution

- 1) Be care of scratch and molding damage.
- 2) Be care of the LCD FPCB damage.

6

1) Separate LCD and KEYPAD from the FRONT CASE.

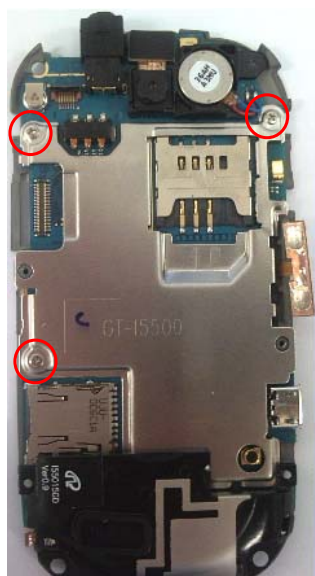


※ Caution

- 1) Be care of scratch and molding damage.
- 2) Be care of damage to the LCD.

7

1) Unscrew the 3 points.

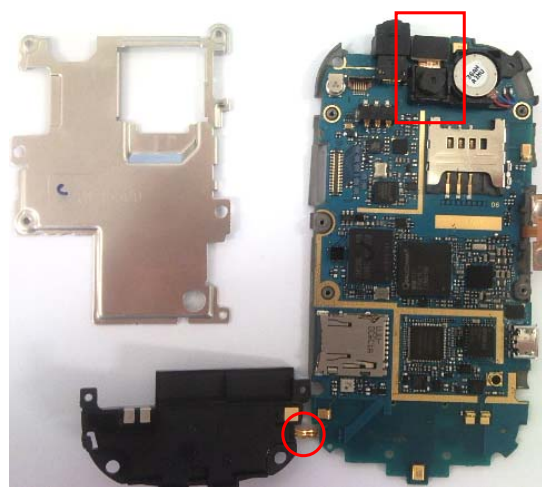


※ Caution

- 1) Be care of scratch and PBA damage.

8

1) Separate the INTENNA, SHIELD CAN and CAMERA CONNECTOR from the PBA ASS'Y.



※ Caution

- 1) Be care of INTENNA wire and PBA damage.

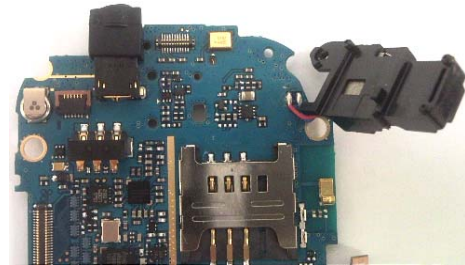
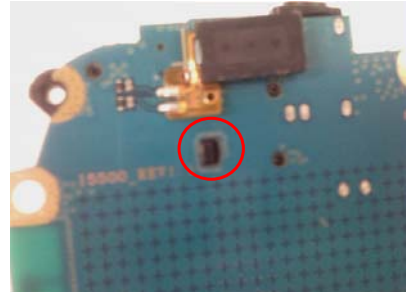
9

- 1) Detach the SIDE KEY from BRACKET.
- 1) Separate the BRACKET from the PBA ASS'Y.



10

- 1) Separate the MOTOR BRACKET from the PBA.



※ Caution

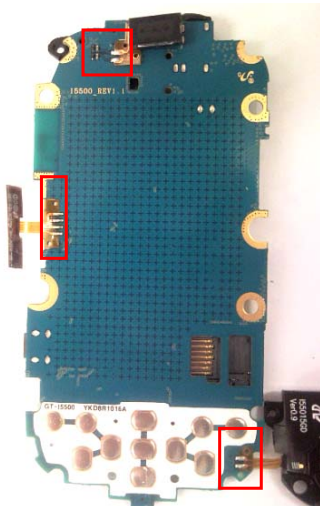
- 1) Be care of the KEY FPCBs damage.

※ Caution

- 1) Be care of MOTOR wire.

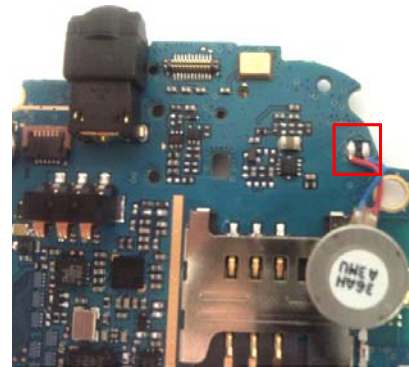
11

- 1) Separate the SIDE KEY FPCB, RECEIVER FPCB and INTENNA from PBA.



12

- 1) Separate the MOTOR from the PBA.



※ Caution

- 1) Be care of the FPCBs and INTENNA wire damage.

※ Caution

- 1) Be care of MOTOR wire.

7-1-2. Assembly

1

1) Solder the SIDE KEY, RECEIVER FPCB and INTENNA wire.

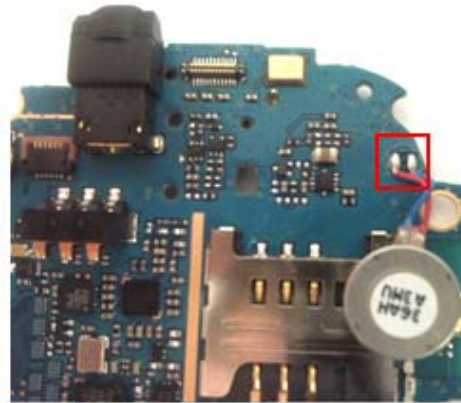


※ Caution

1) Be care of the FPCBs and INTENNA wire damage.

2

1) Solder the MOTOR wire.

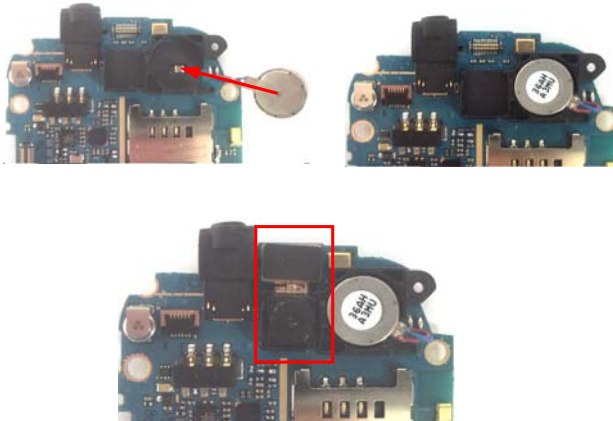


※ Caution

1) Be care of MOTOR wire.

3

1) Assemble the MOTOR BRACKET to PBA.
2) Assemble the CAMERA and connect the CONNECTOR.

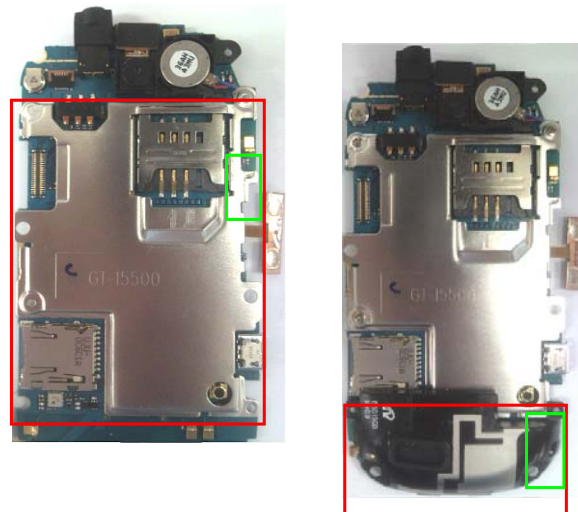


※ Caution

1) Be care of damage to CAMERA CONNECTOR and FPCB.

4

1) Assemble the SHIELD CAN.
2) Assemble the INTENNA.



※ Caution

1) Be care of damage to INTENNA PATTERN and PBA.

5

- 1) Assemble the BRACKET.
- 2) Attach the SIDE KEY FPCB.



※ Caution

- 1) Be care of damage the SIDE KEY/CAMERA KEY FPCB.

6

- 1) Screw 3 points.



※ Caution

- 1) Be care of scratch and PBA damage
- 2) Screw torque : 1.2kgf·cm

7

- 1) Assemble the KEYPAD.
- 2) Assemble the LCD MODULE.

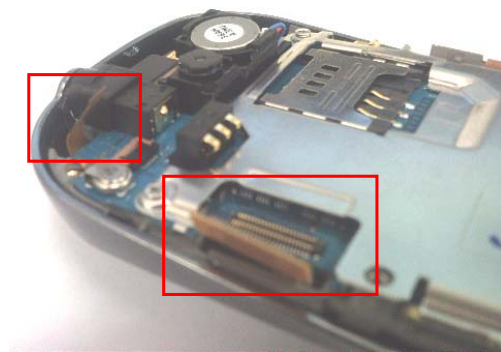


※ Caution

- 1) Be care of damage to LCD.

8

- 1) Assemble PBA ASS'Y to FRONT ASS'Y.



※ Caution

- 1) Be care of damage the LCD and TSP FPCB.

9

- 1) Assemble the FRONT' lockers.
- 2) Assemble the LCD and TSP CONNECTORS.



10

- 1) Screw 2 points.



※ **Caution**

- 1) Be care of damage the LCD and TSP FPCB.

※ **Caution**

- 1) Be care of scratch and molding damage.
- 2) Screw torque : 1.2kgf·cm

11

- 1) Assemble the REAR CASE.



12

- 1) Screw 6 points.



※ **Caution**

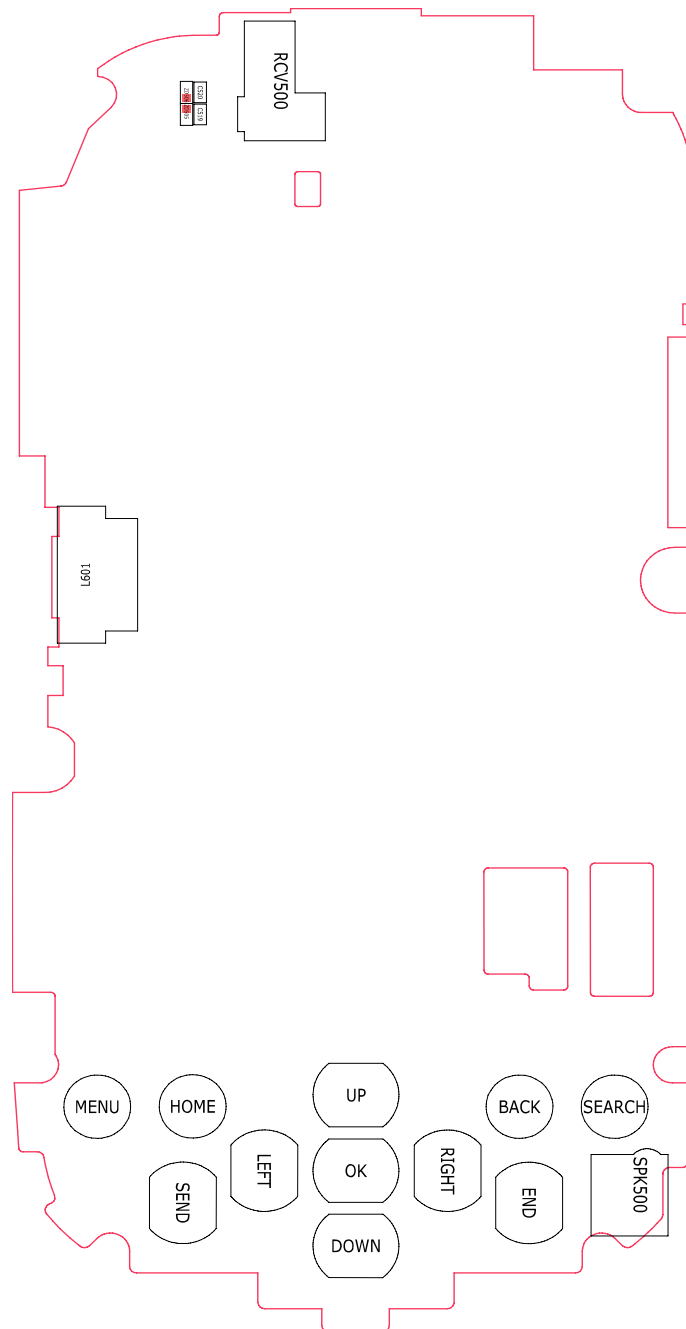
- 1) Be care of scratch and molding damage.

※ **Caution**

- 1) Be care of scratch and molding damage.
- 2) Screw torque : 1.2kgf·cm

8-2. PCB Diagrams

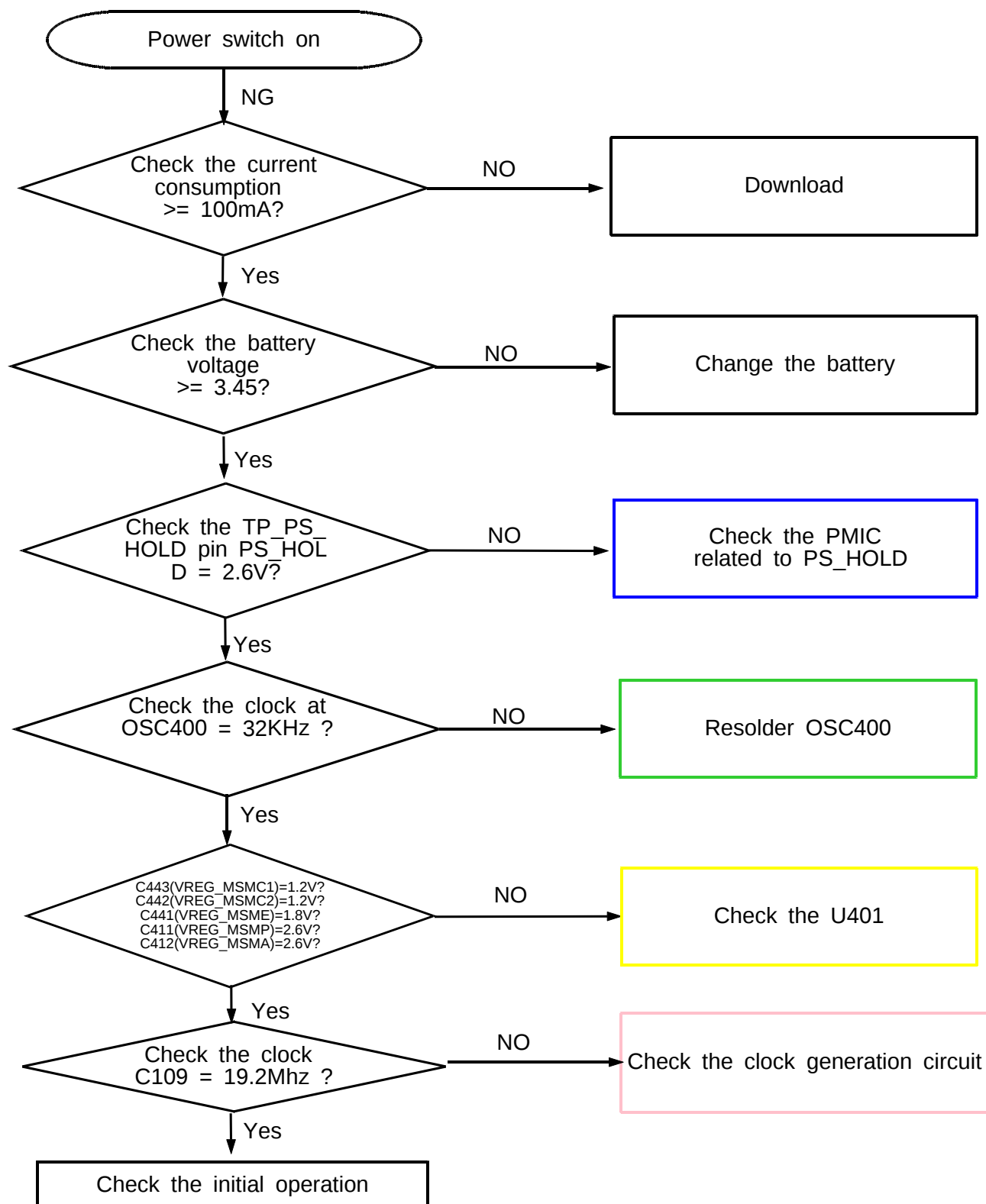
8-2-1. Top

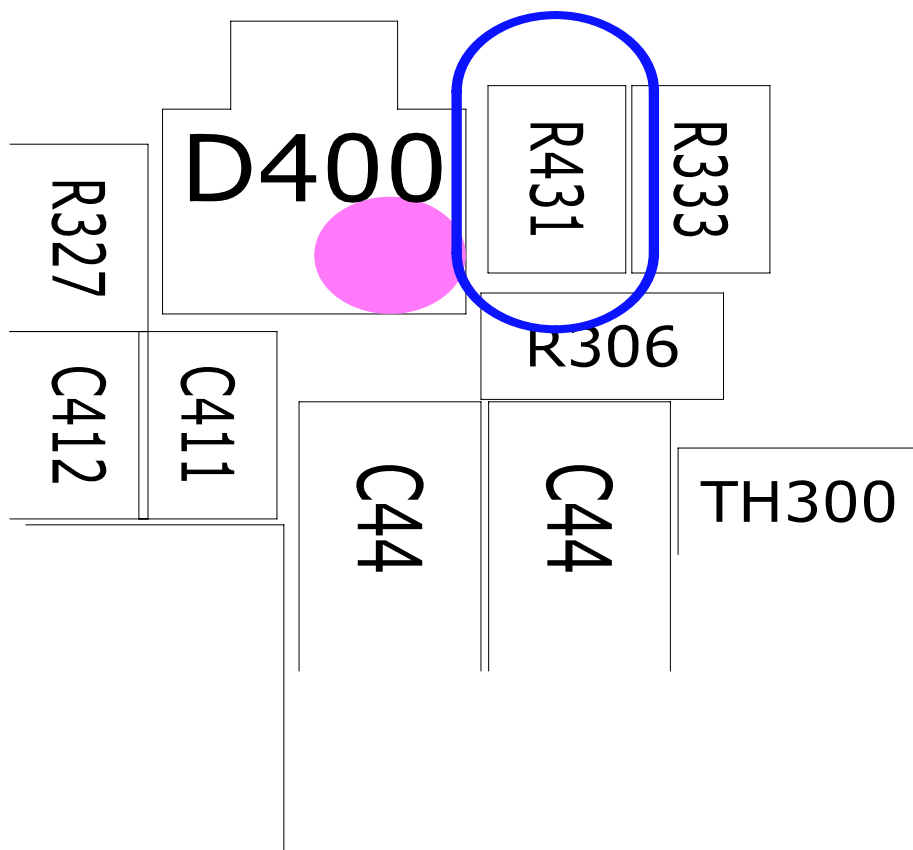
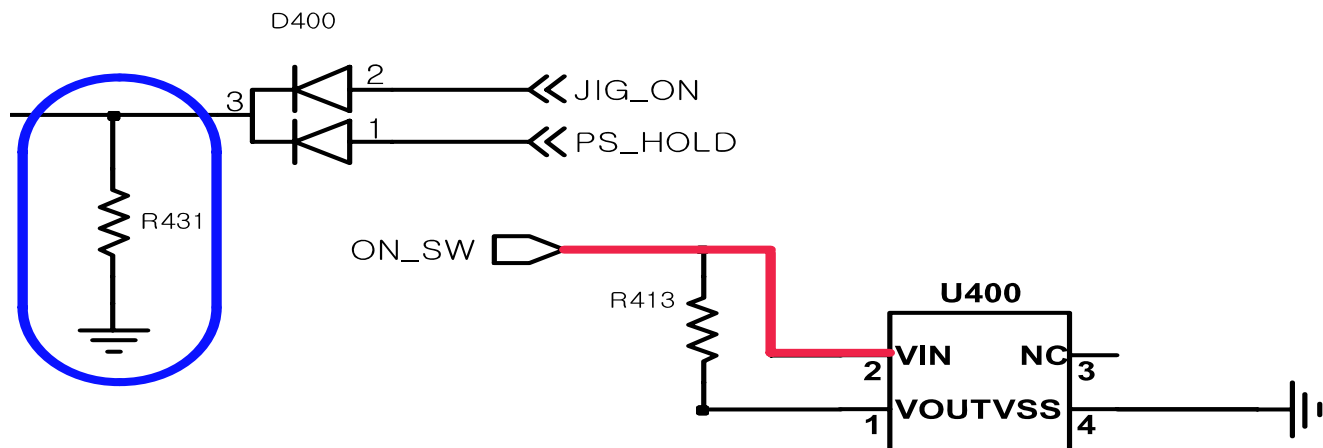


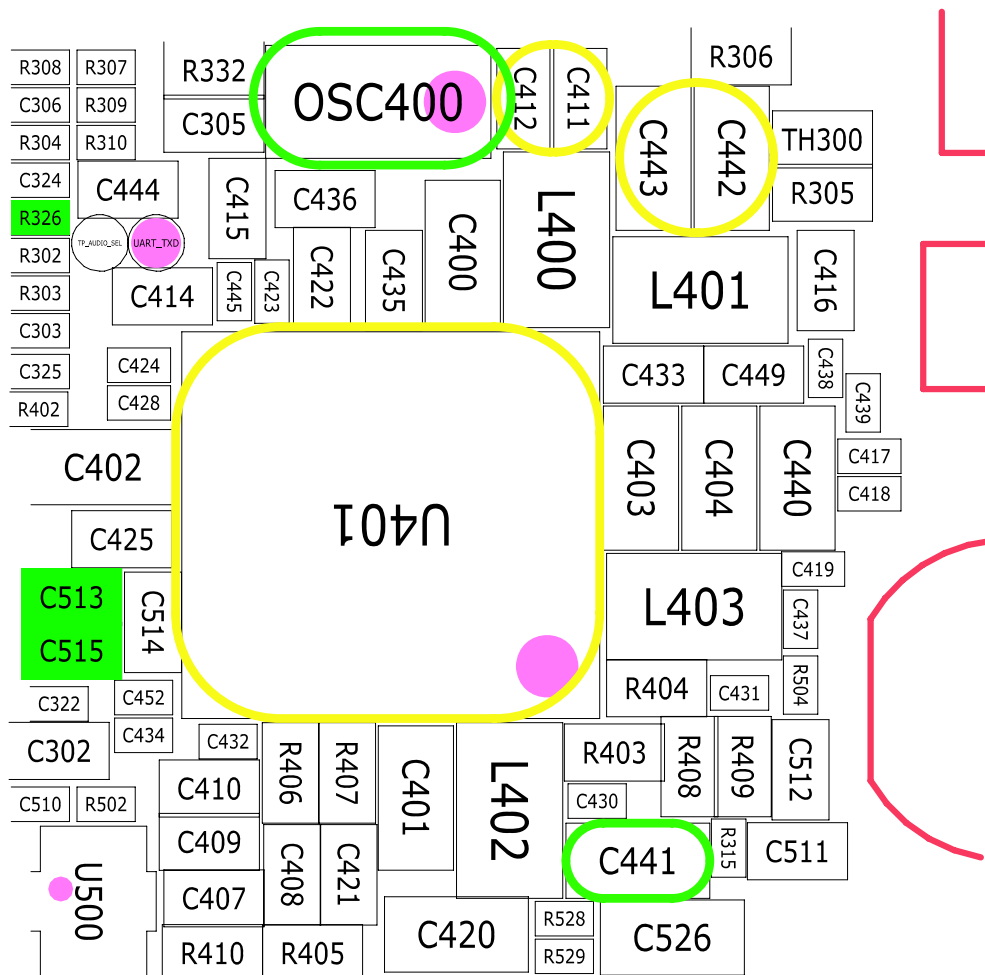
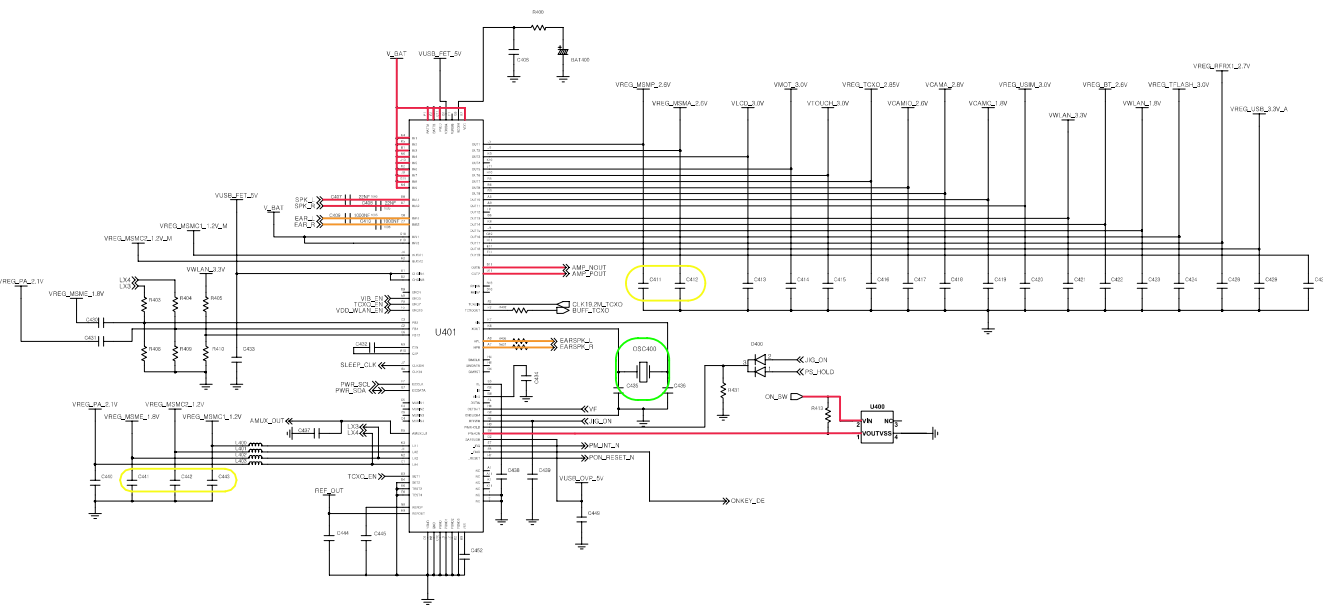


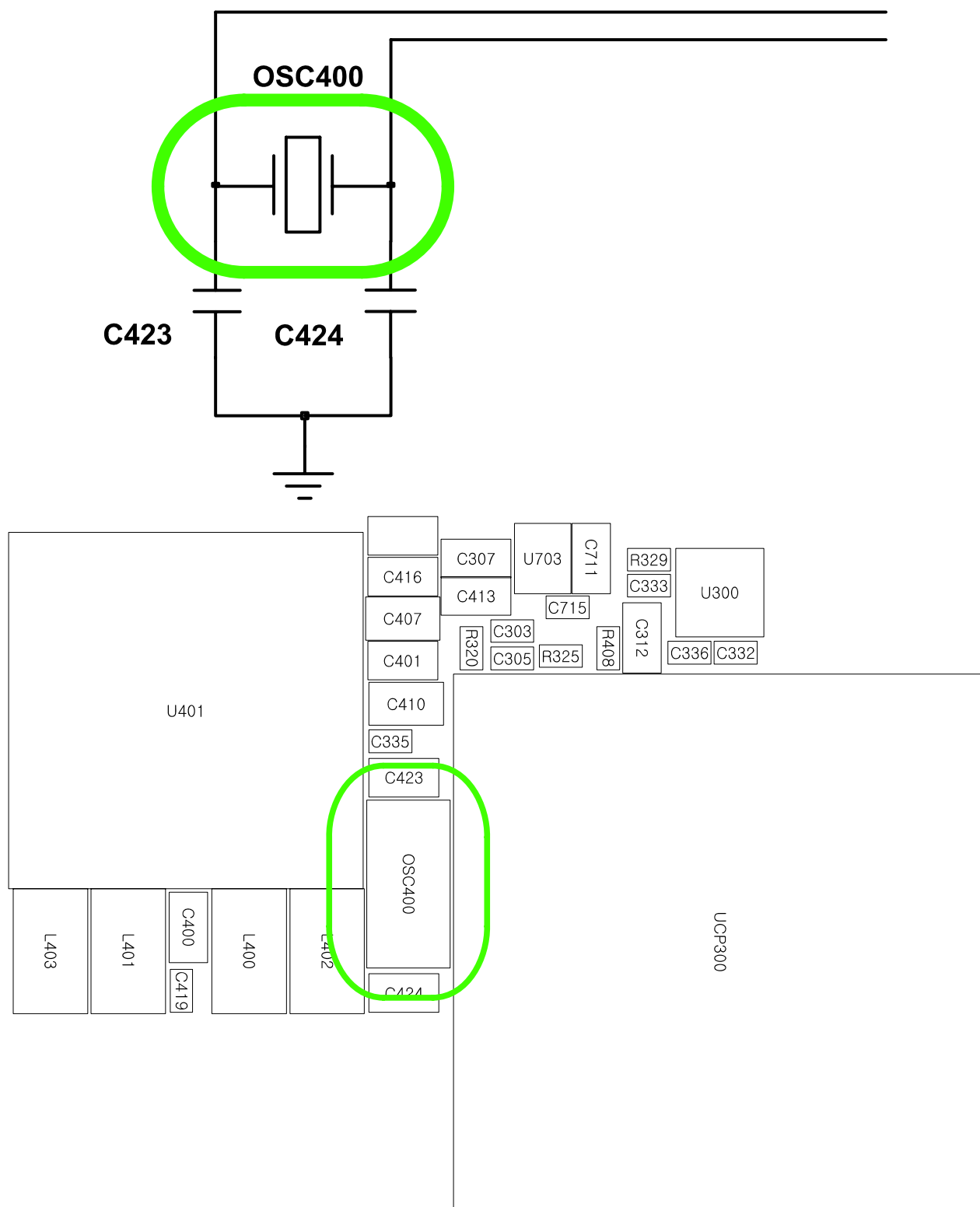
8-3. LOGIC

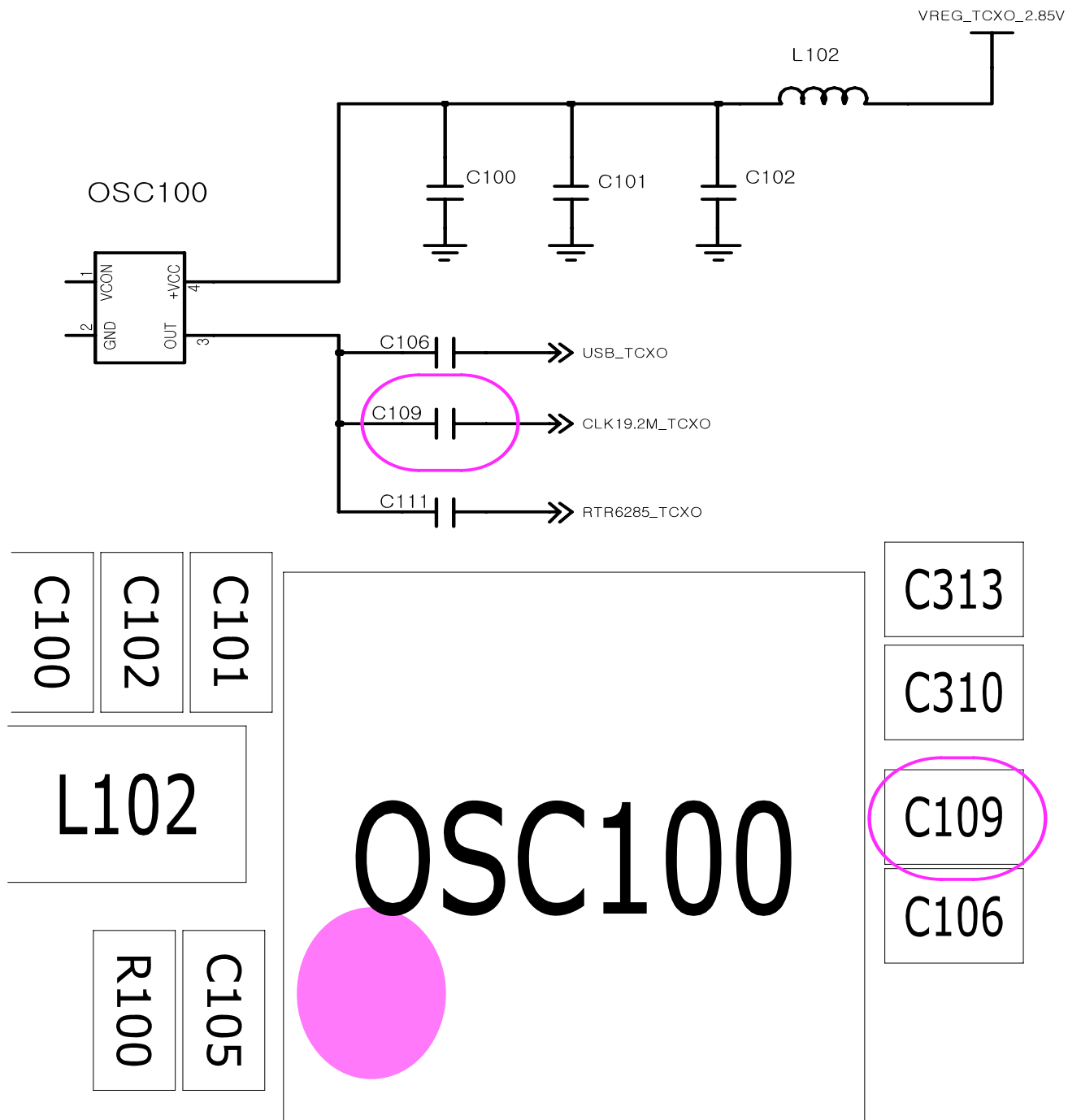
8-3-1. Power On



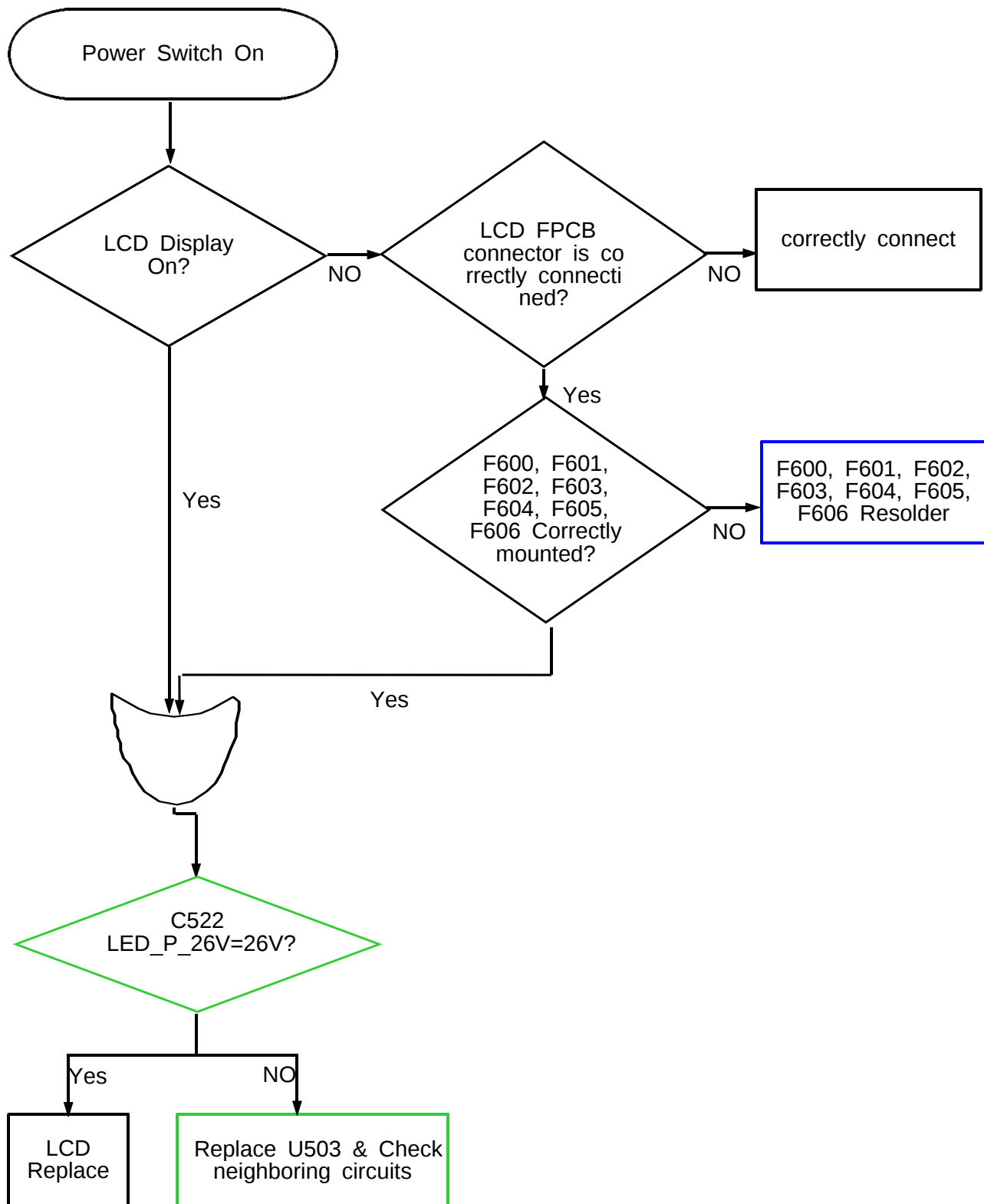


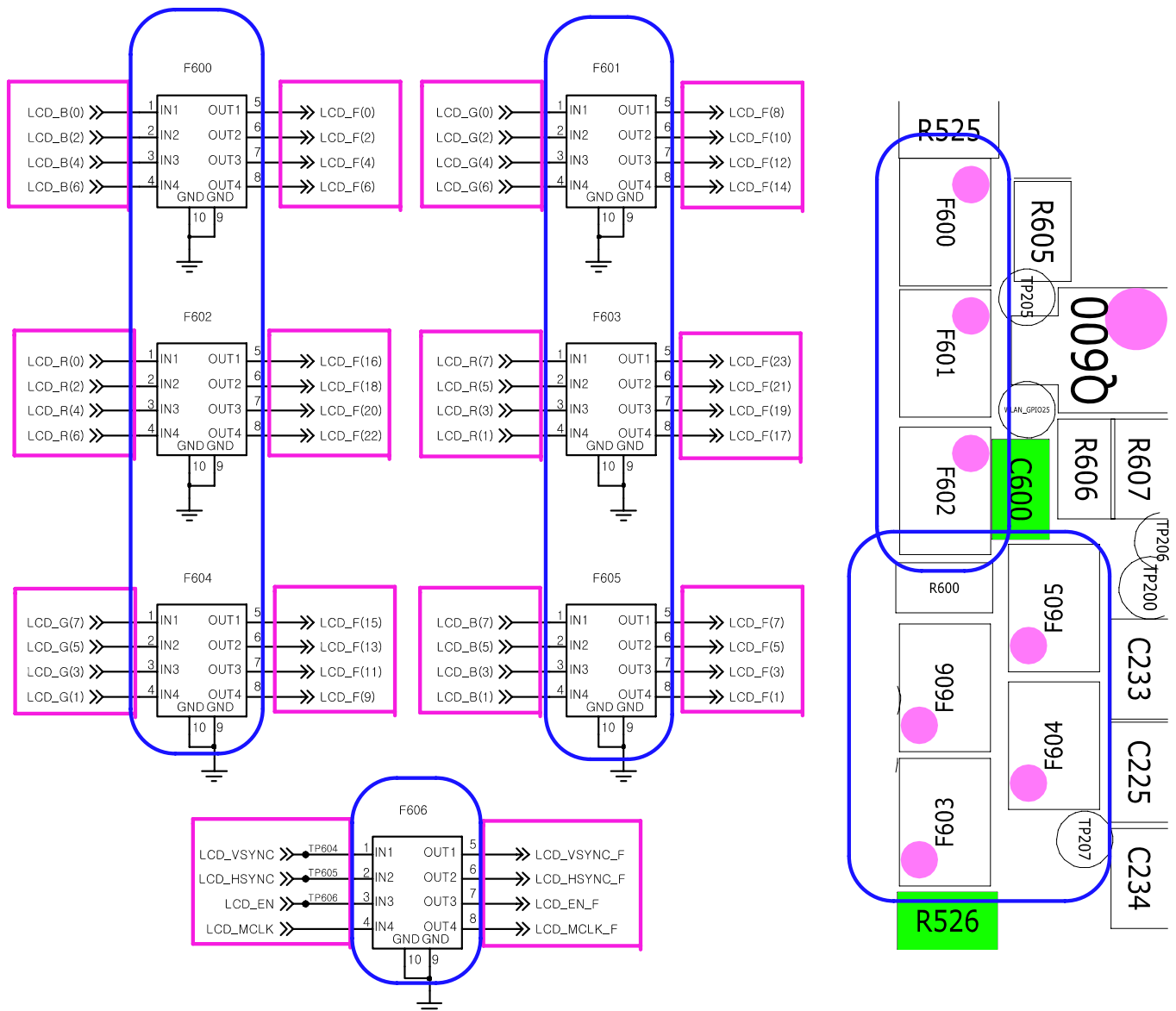


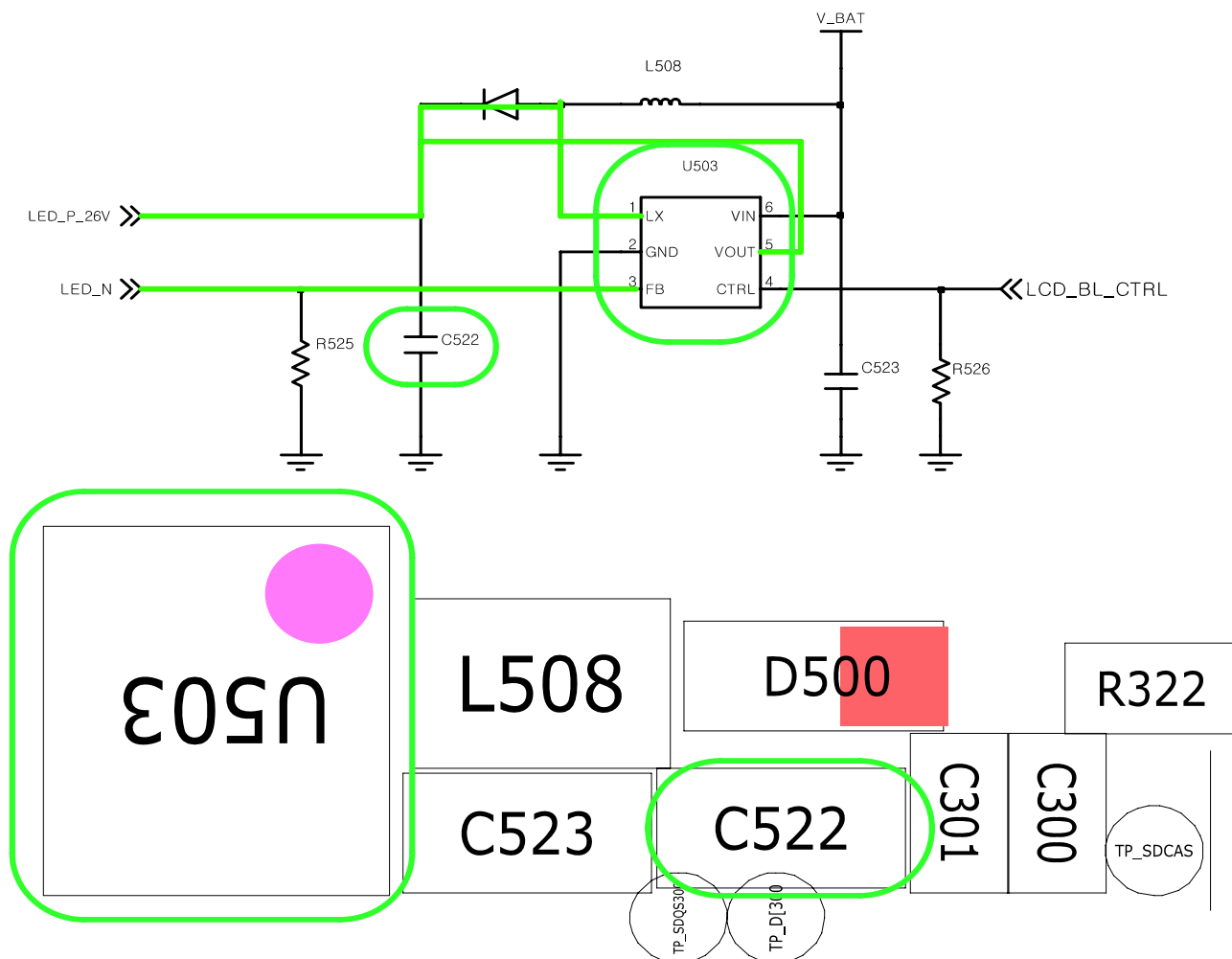




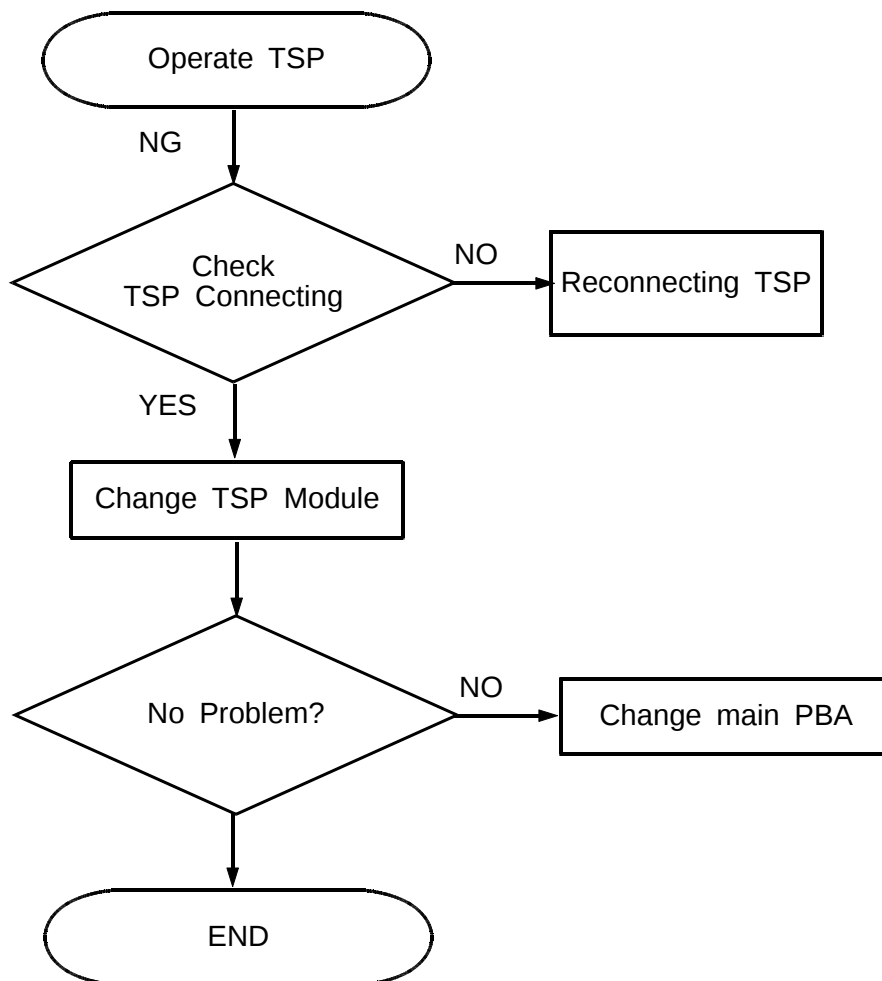
8-3-2. LCD Working





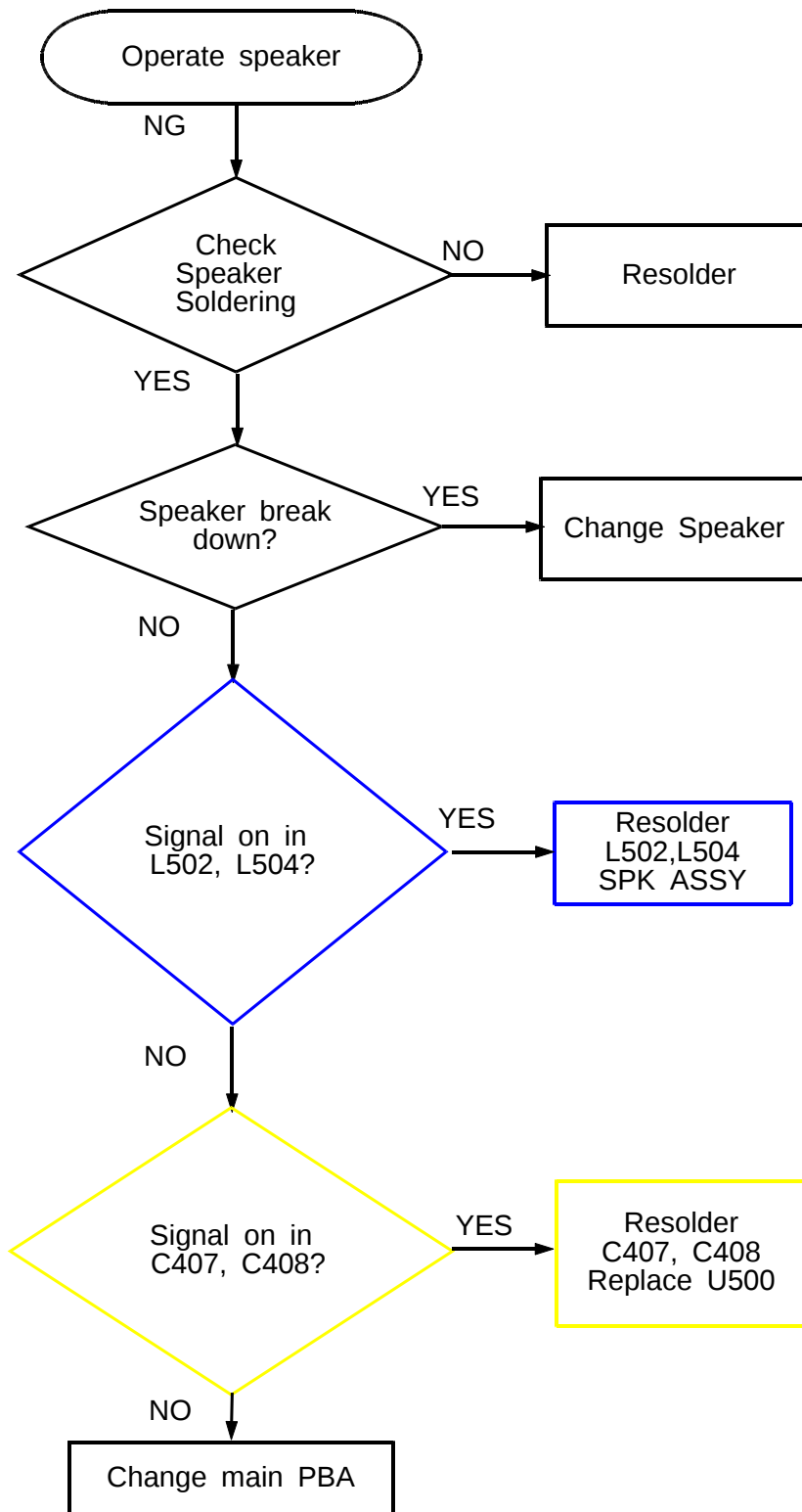


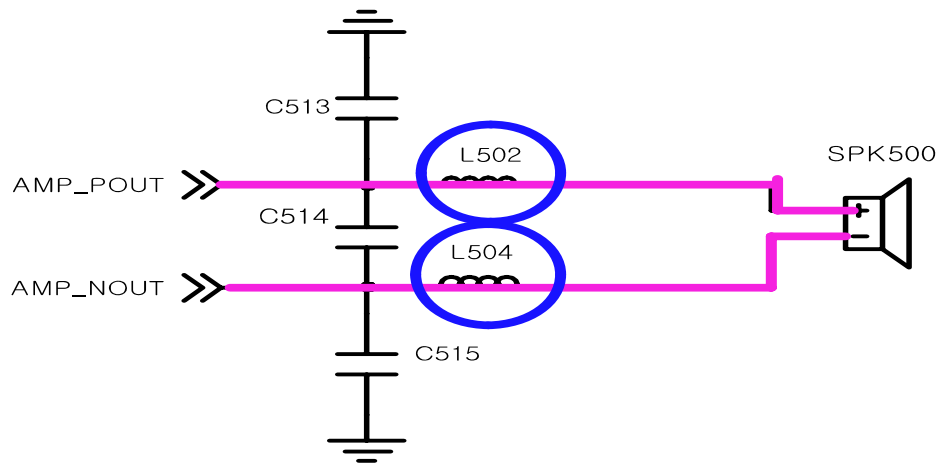
8-3-3. TSP



8-3-3. Audio Working

- Speaker Working





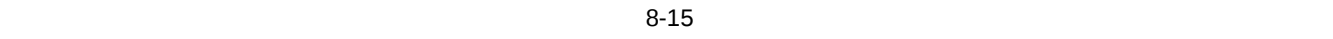
SPK_CON

The diagram shows the ANT200 (Antenna) section. A red line connects the ANT200 section to the SPK_CON section. The text "ANT200" is displayed in a large, bold font, with a pink oval highlighting the "00" part of the label.

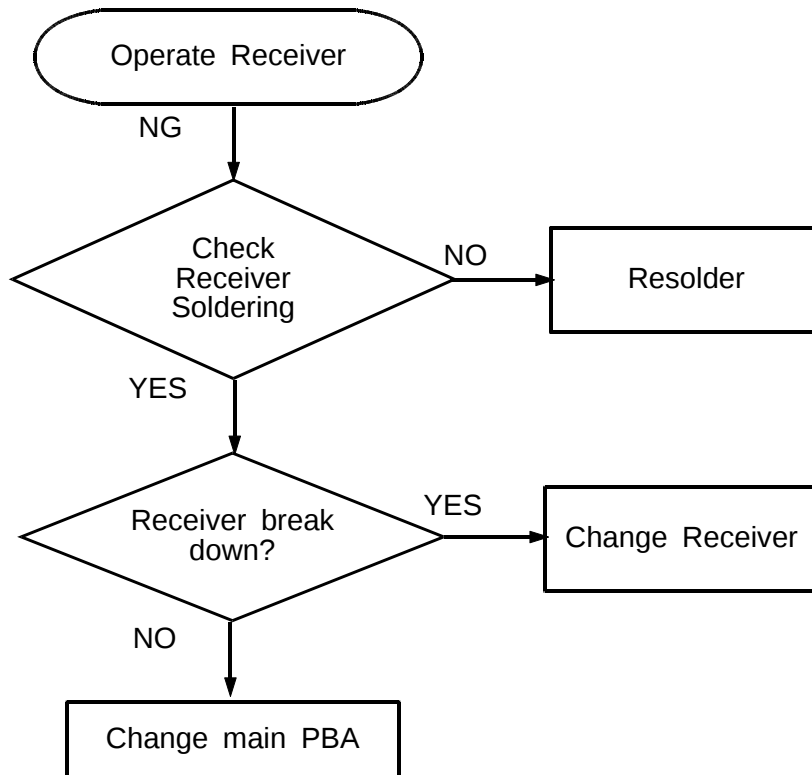
ANT200

L502

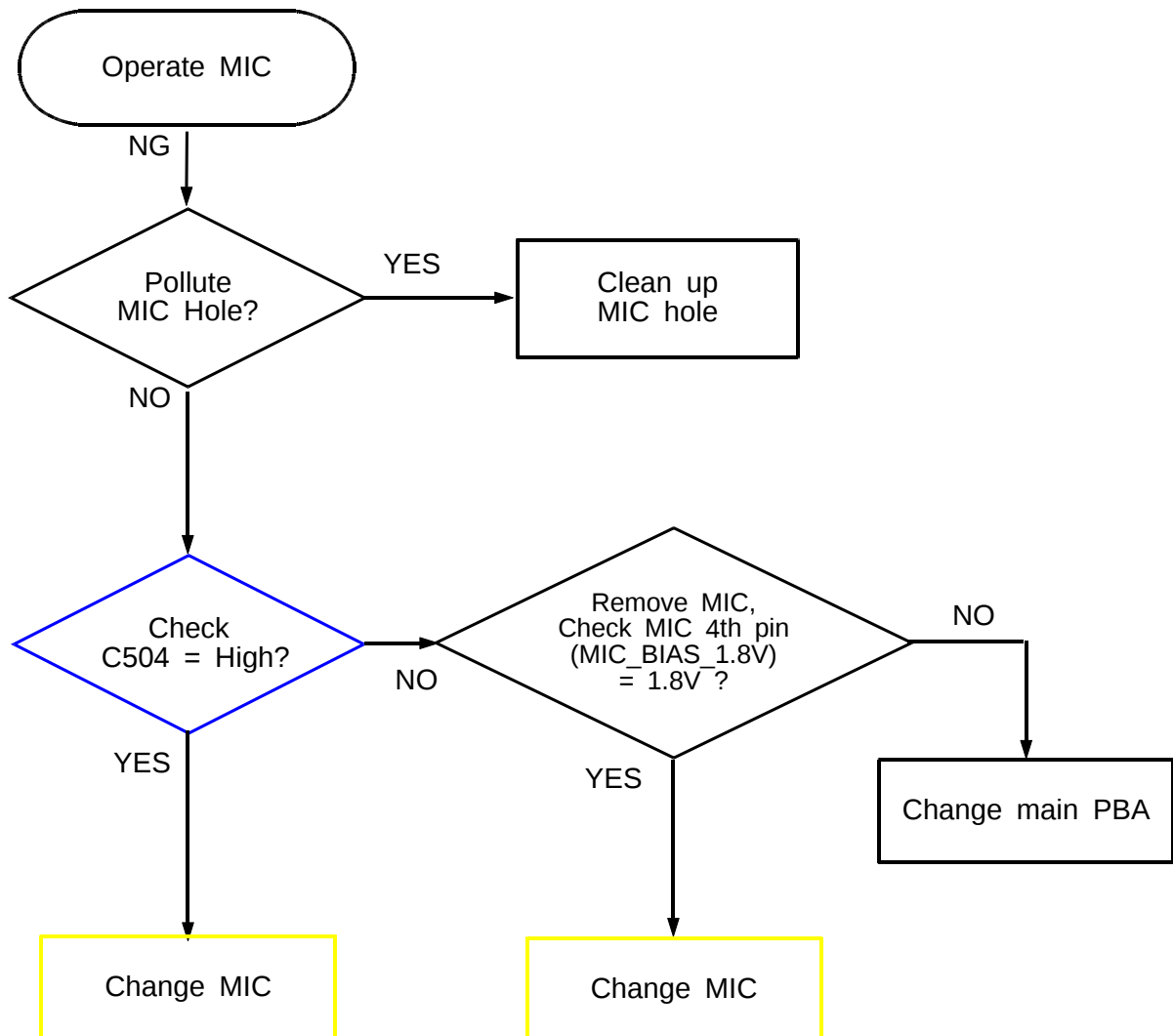
L504

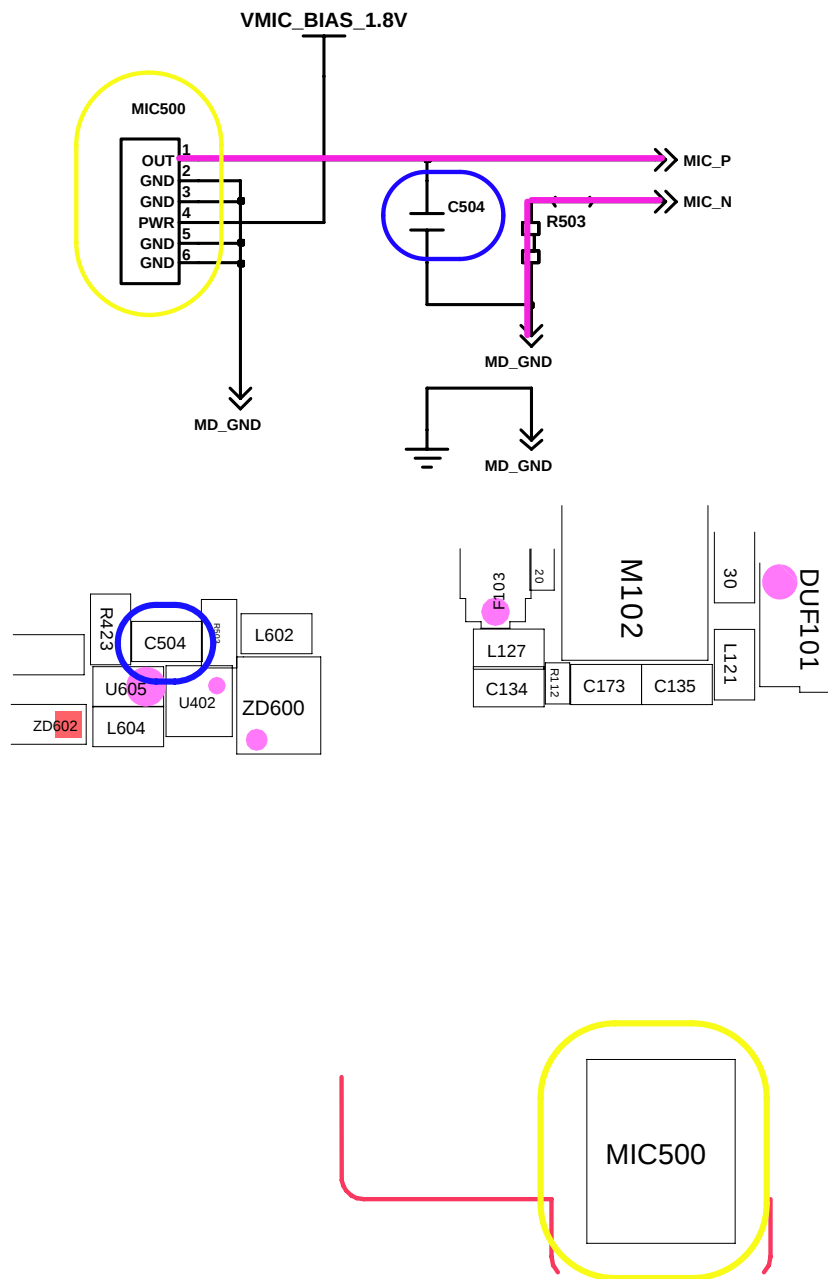


- Receiver Working

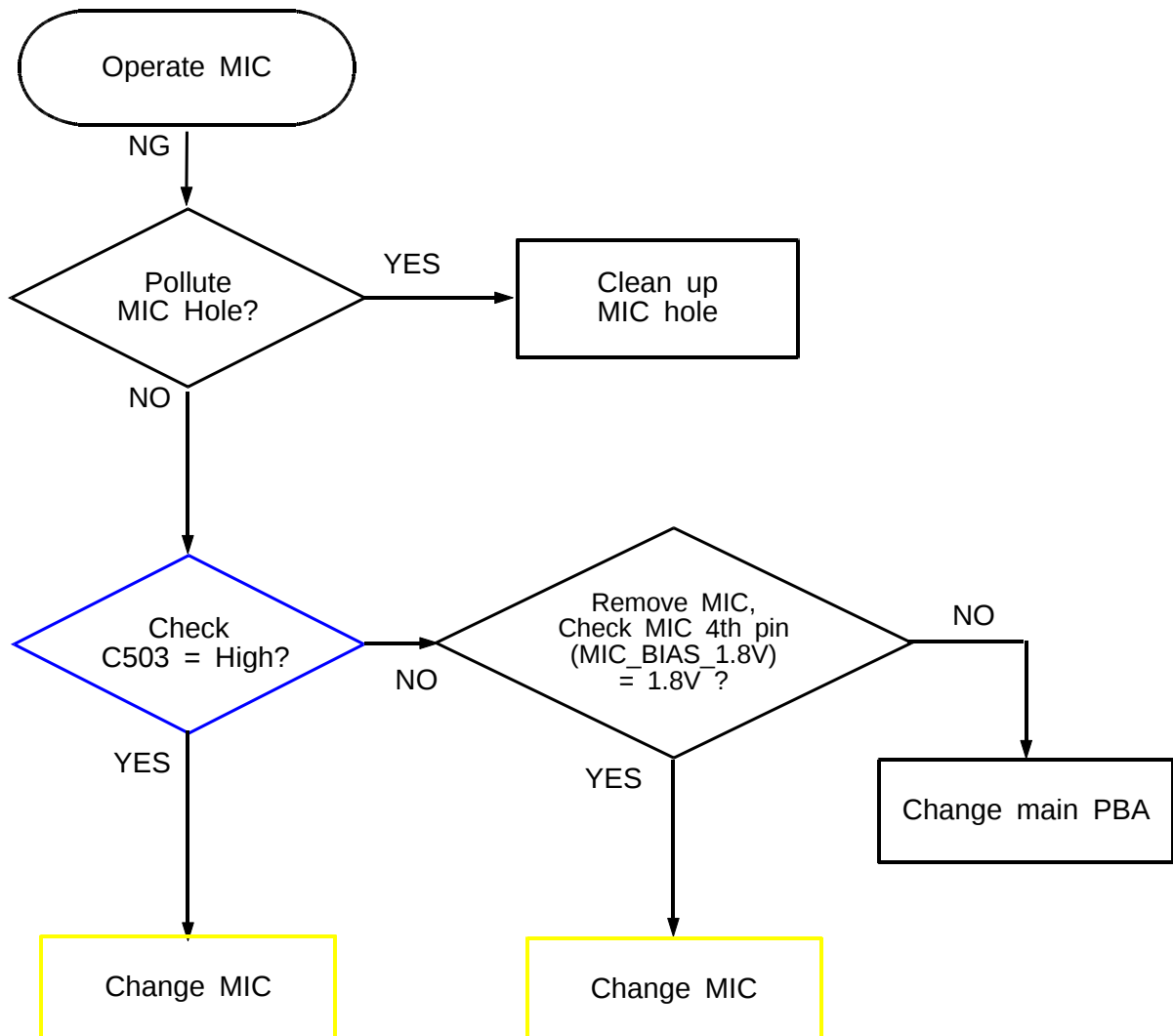


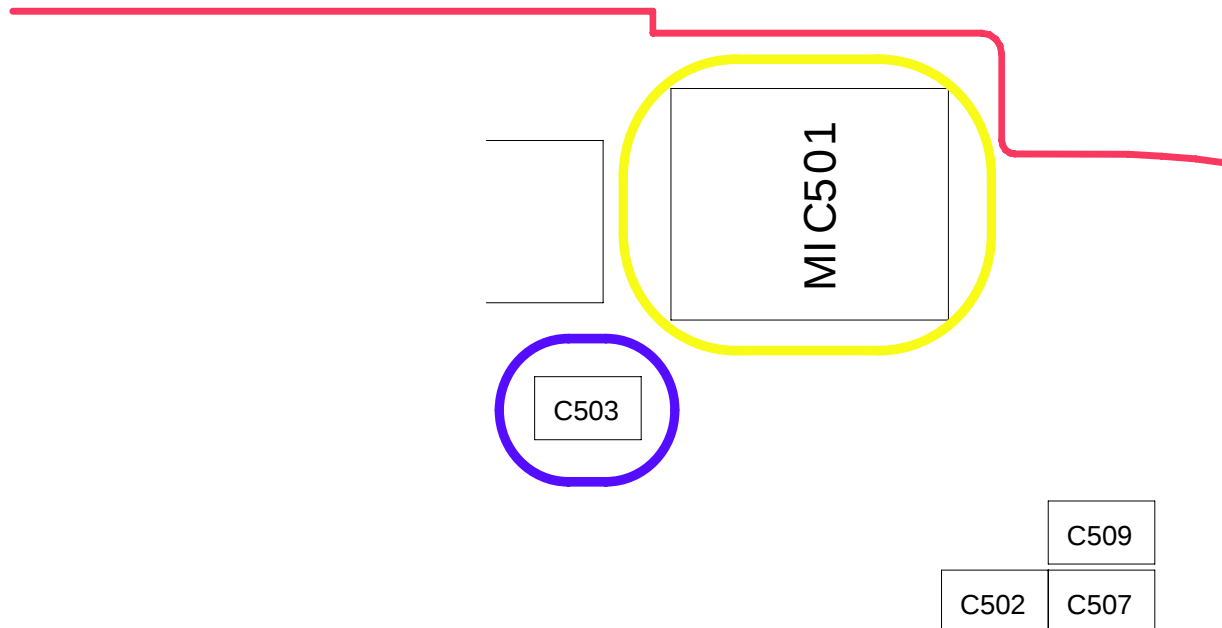
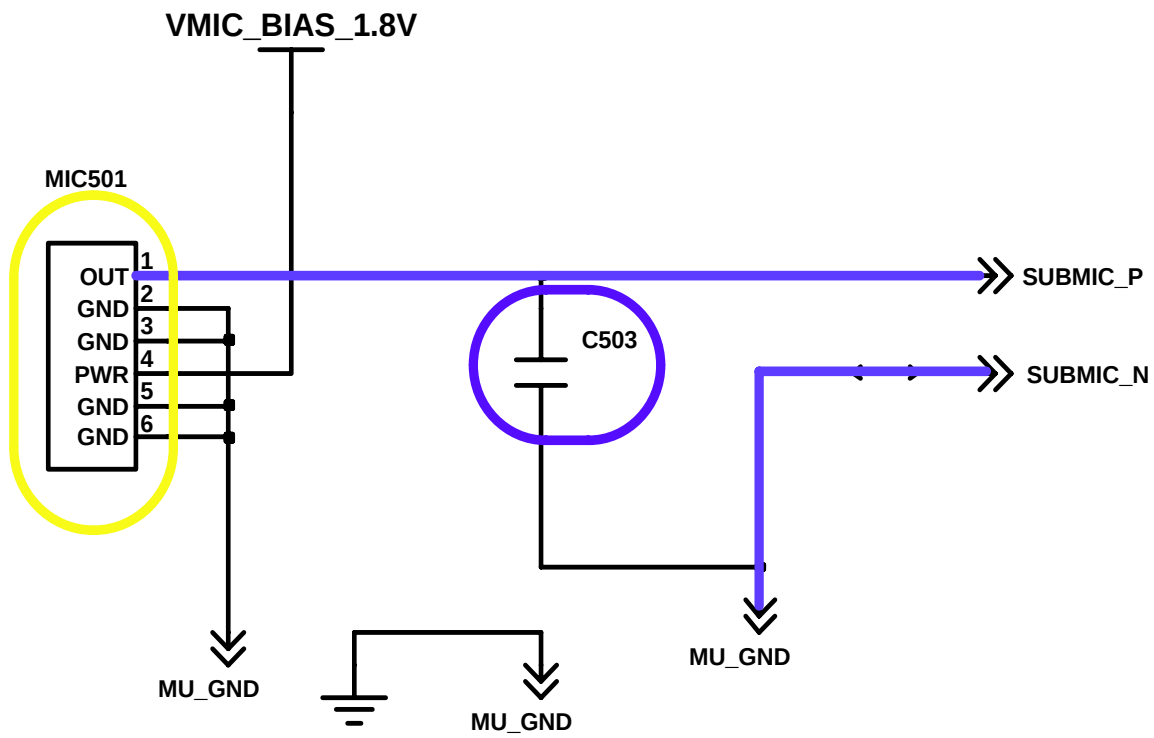
- Main MIC Working



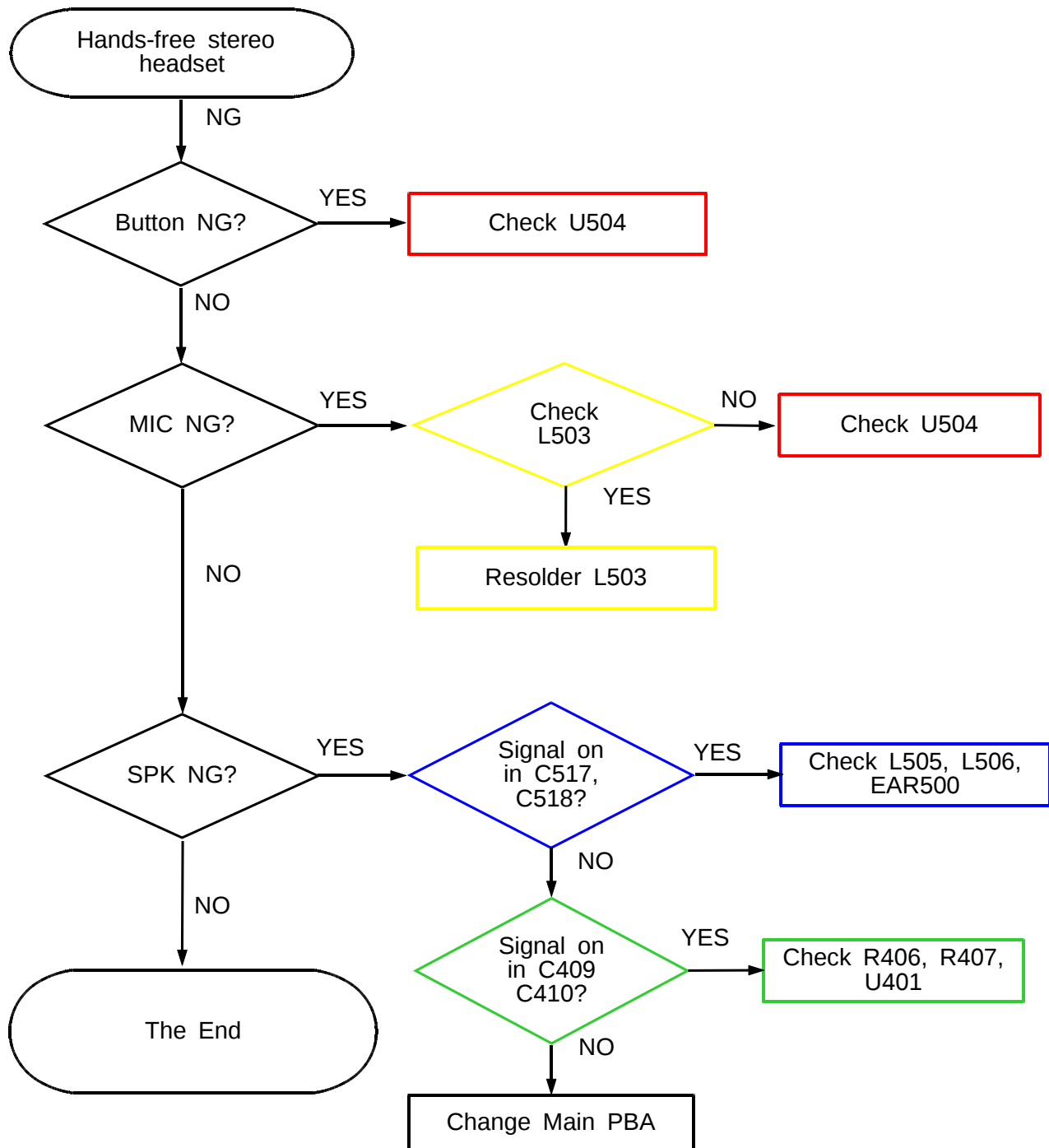


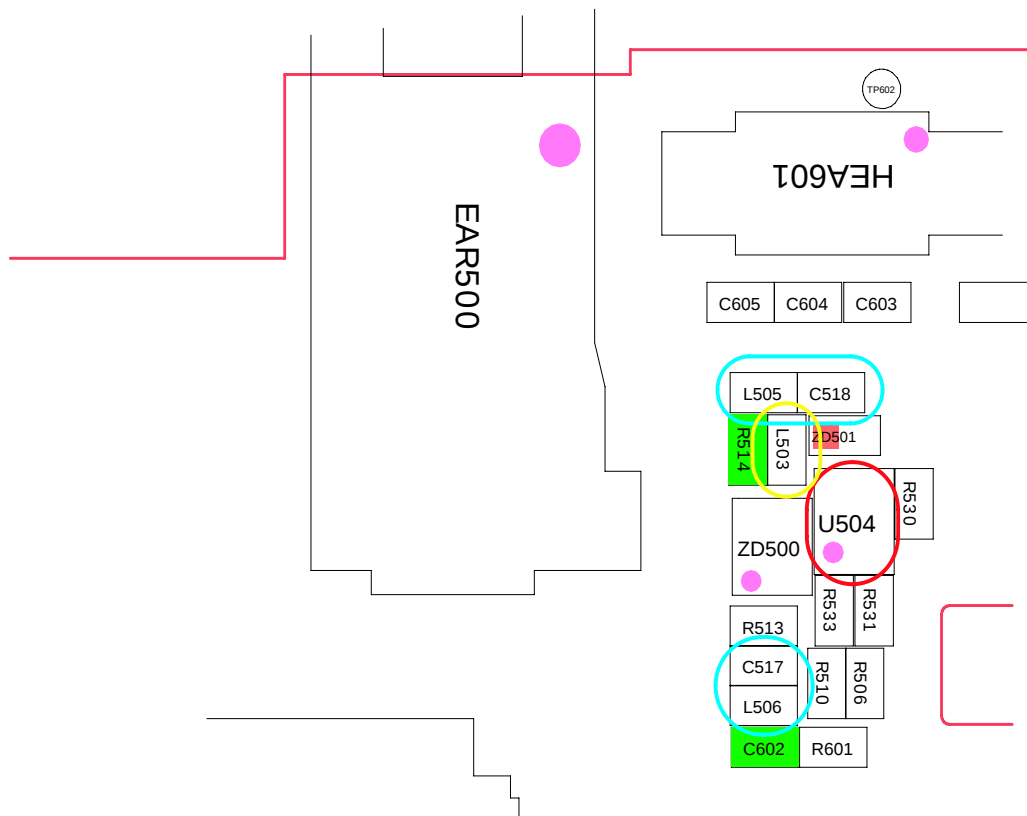
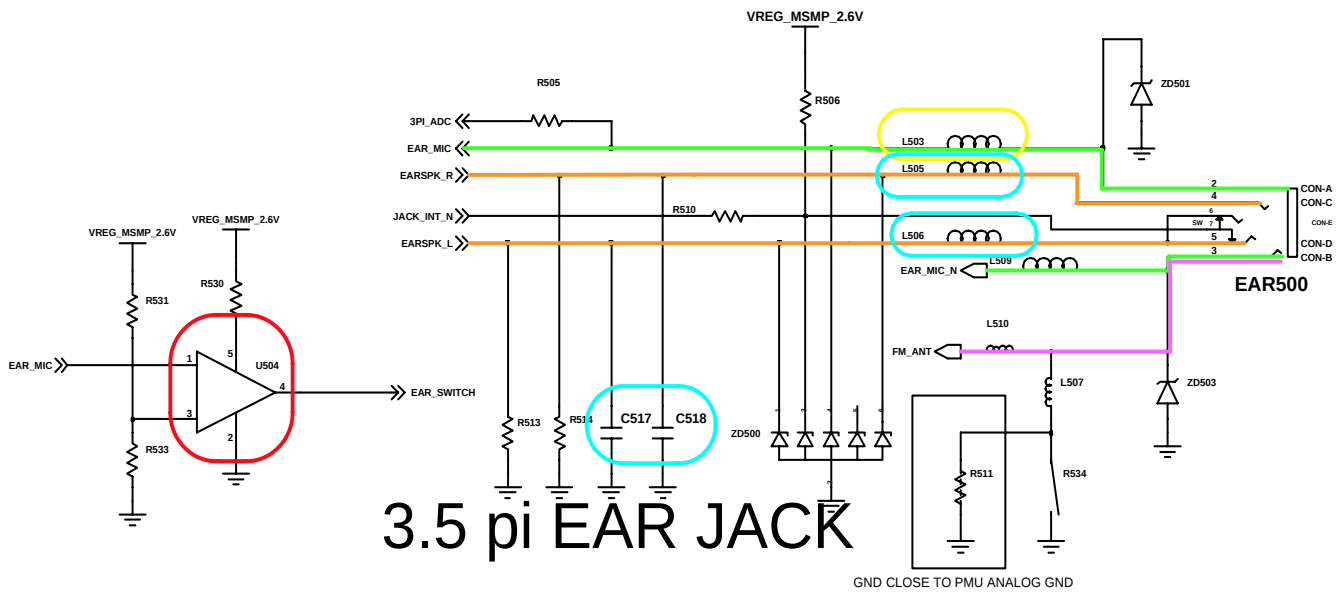
● Sub MIC Working

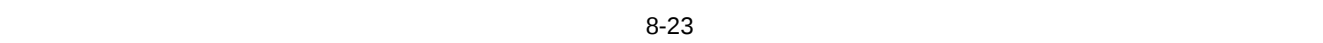




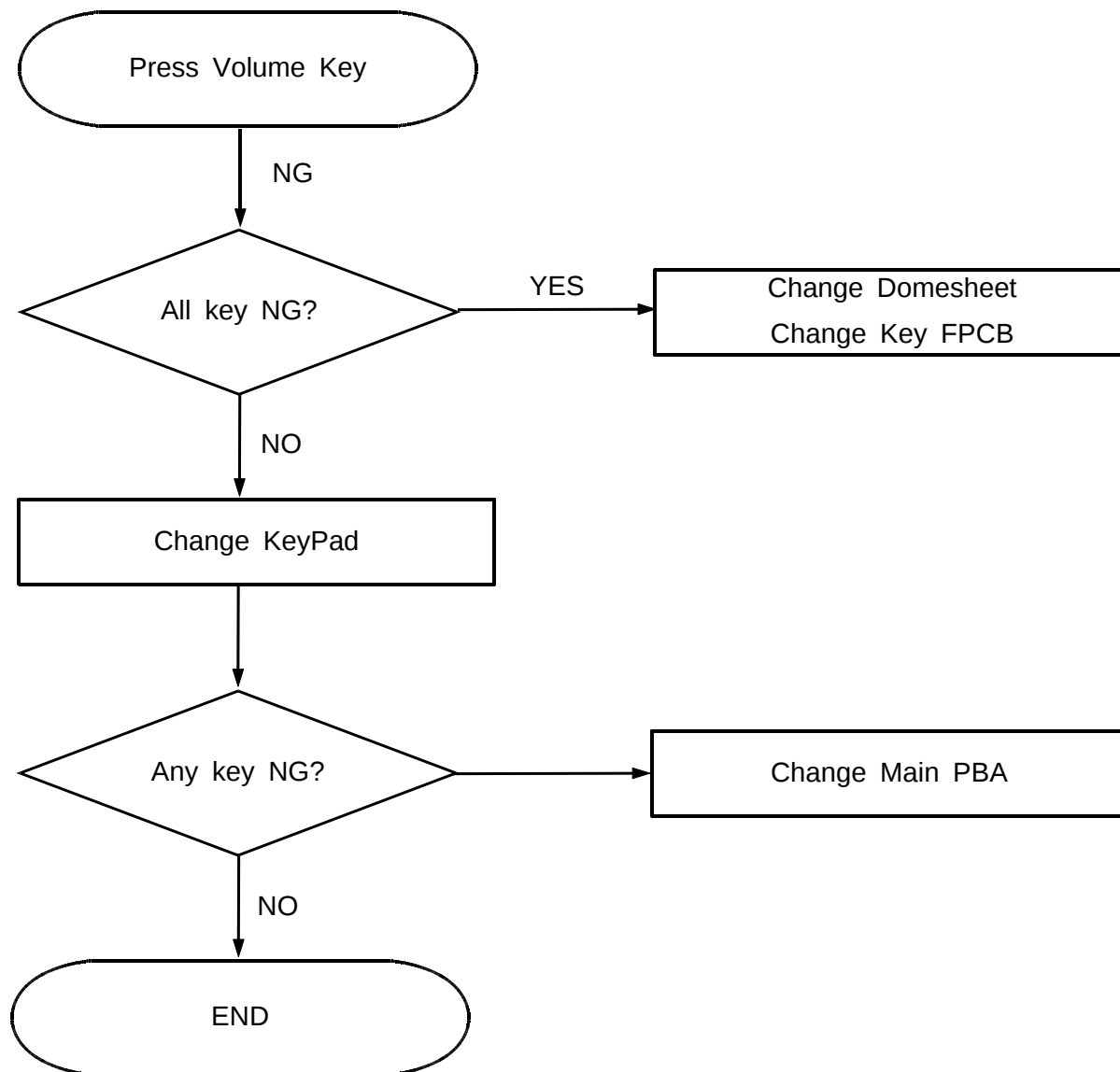
● Stereo Headset Working



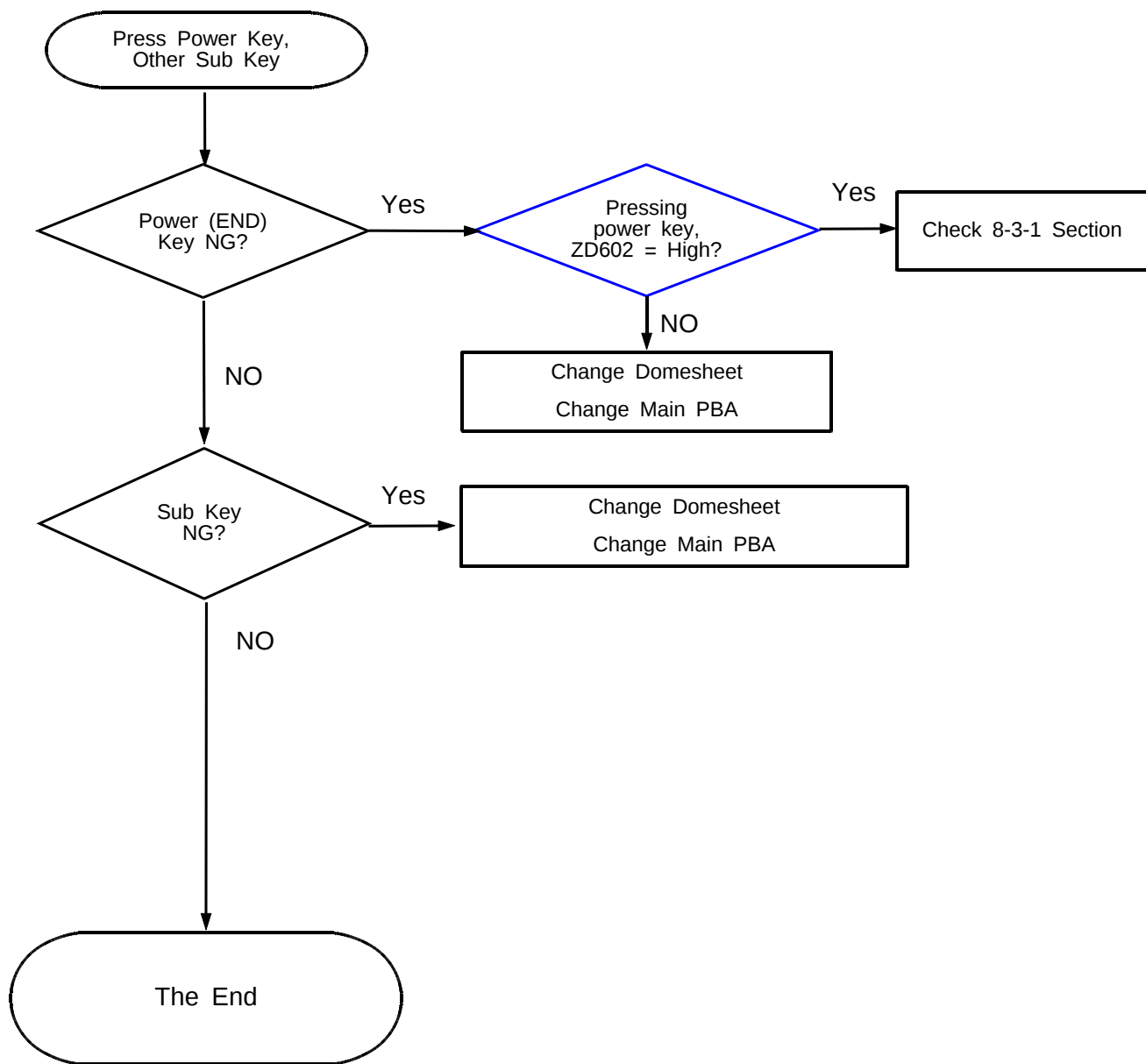


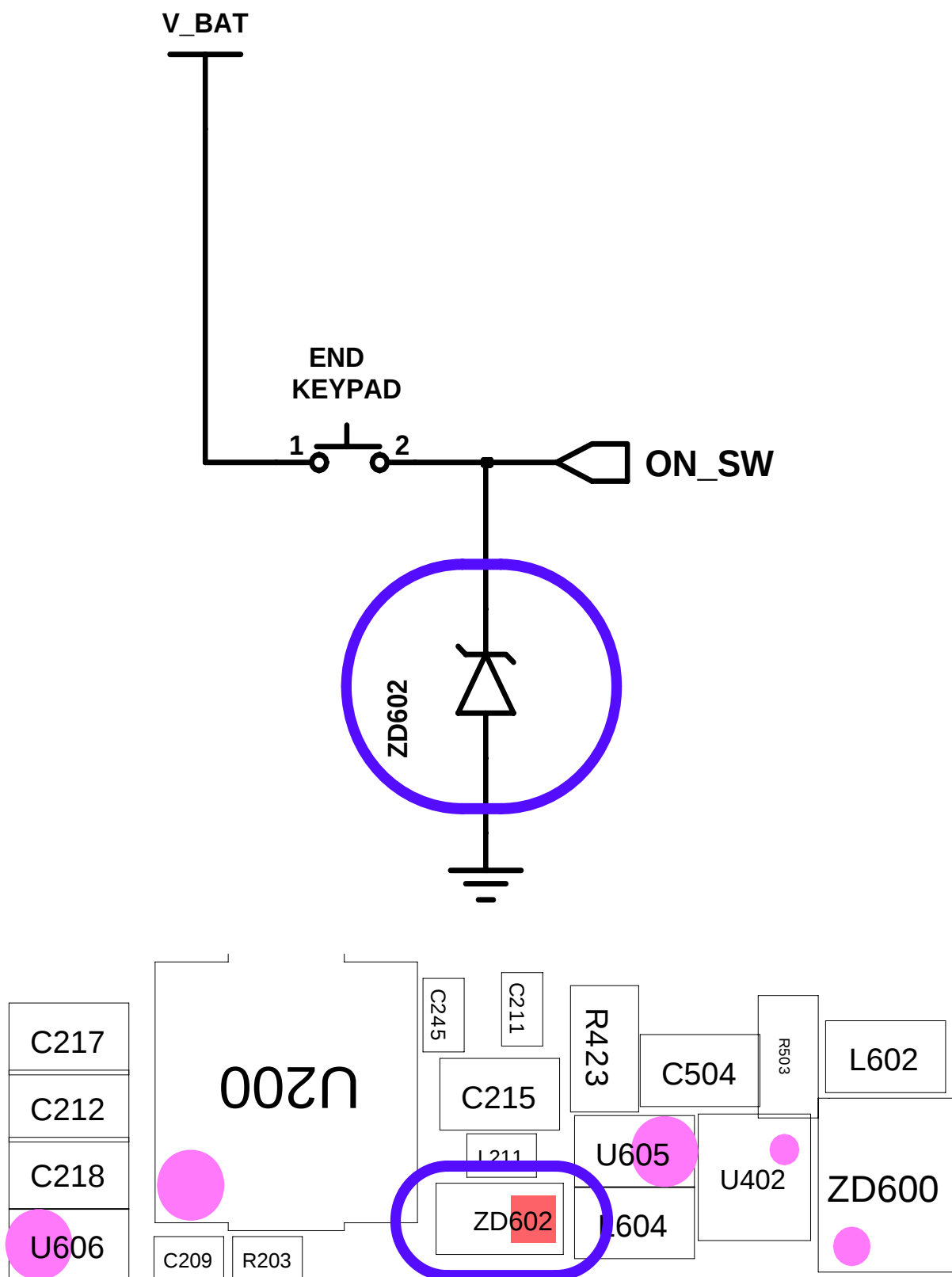


8-3-5. KEY Working

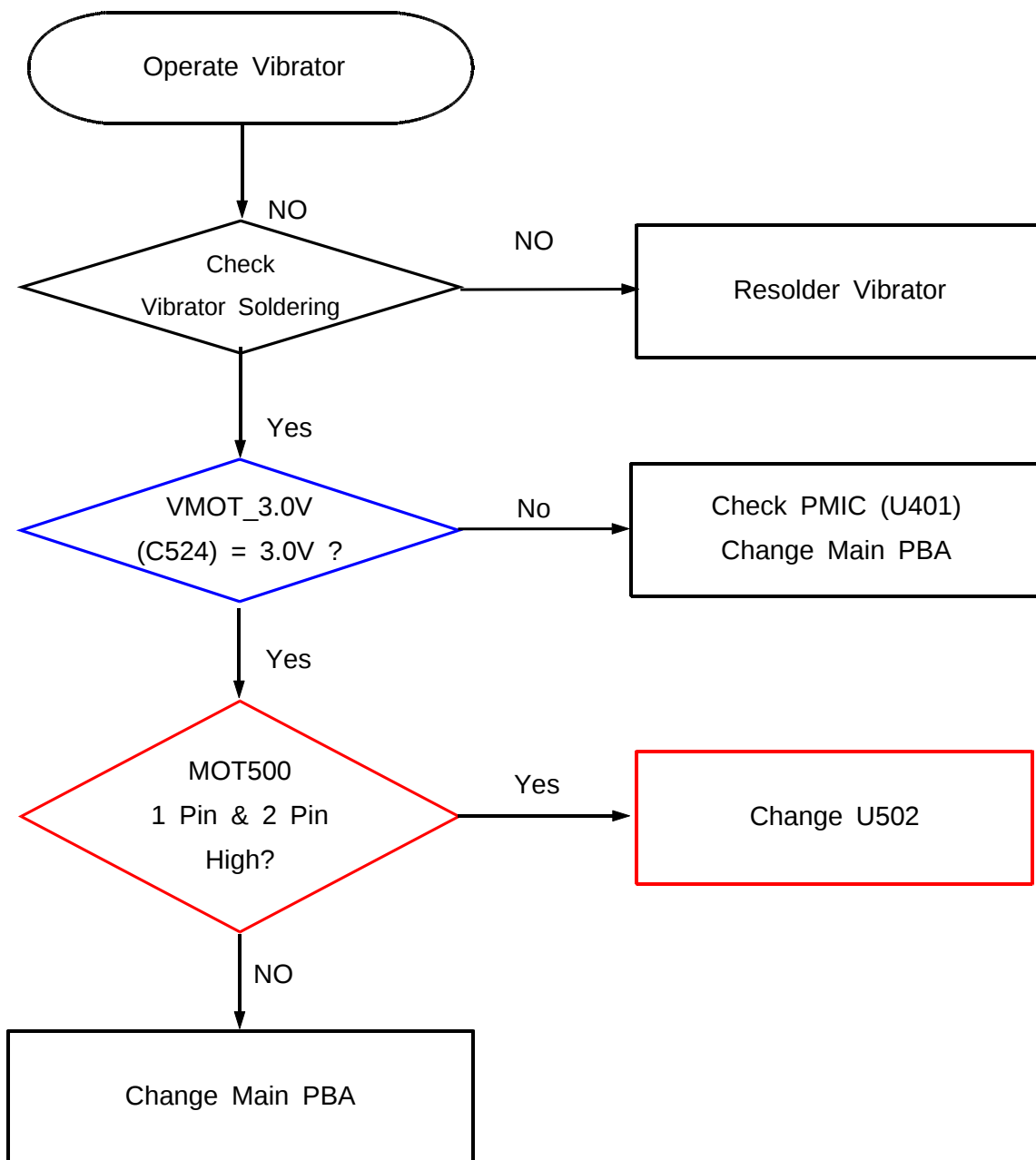
● Volume KEY

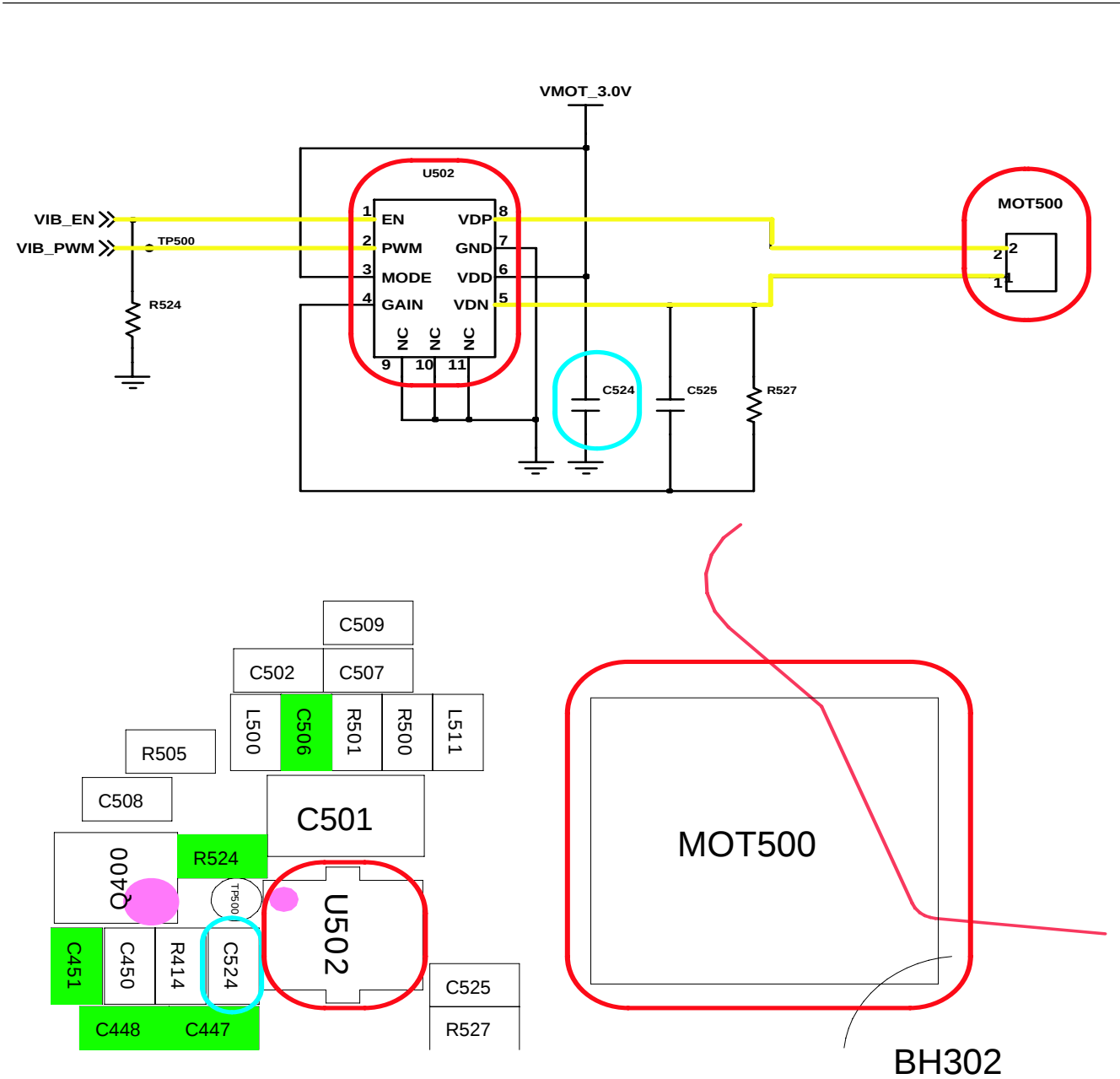
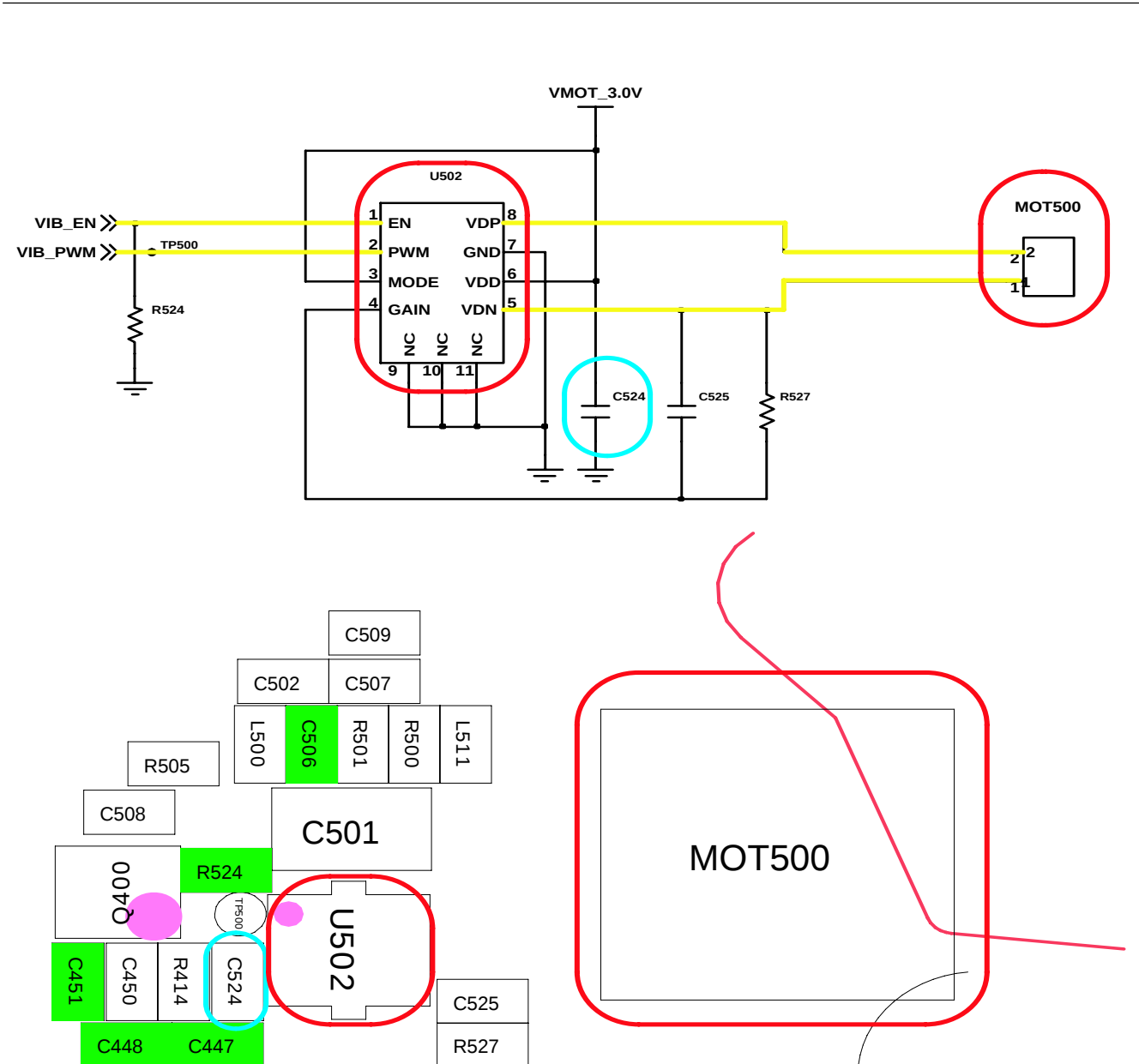
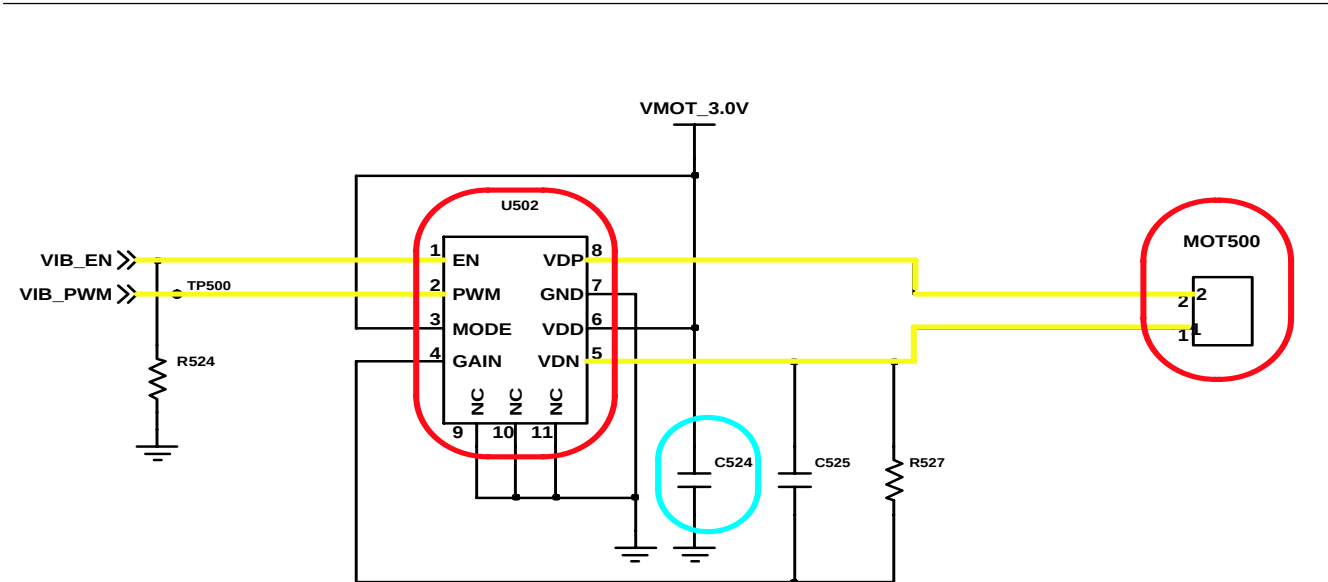
- Sub Key



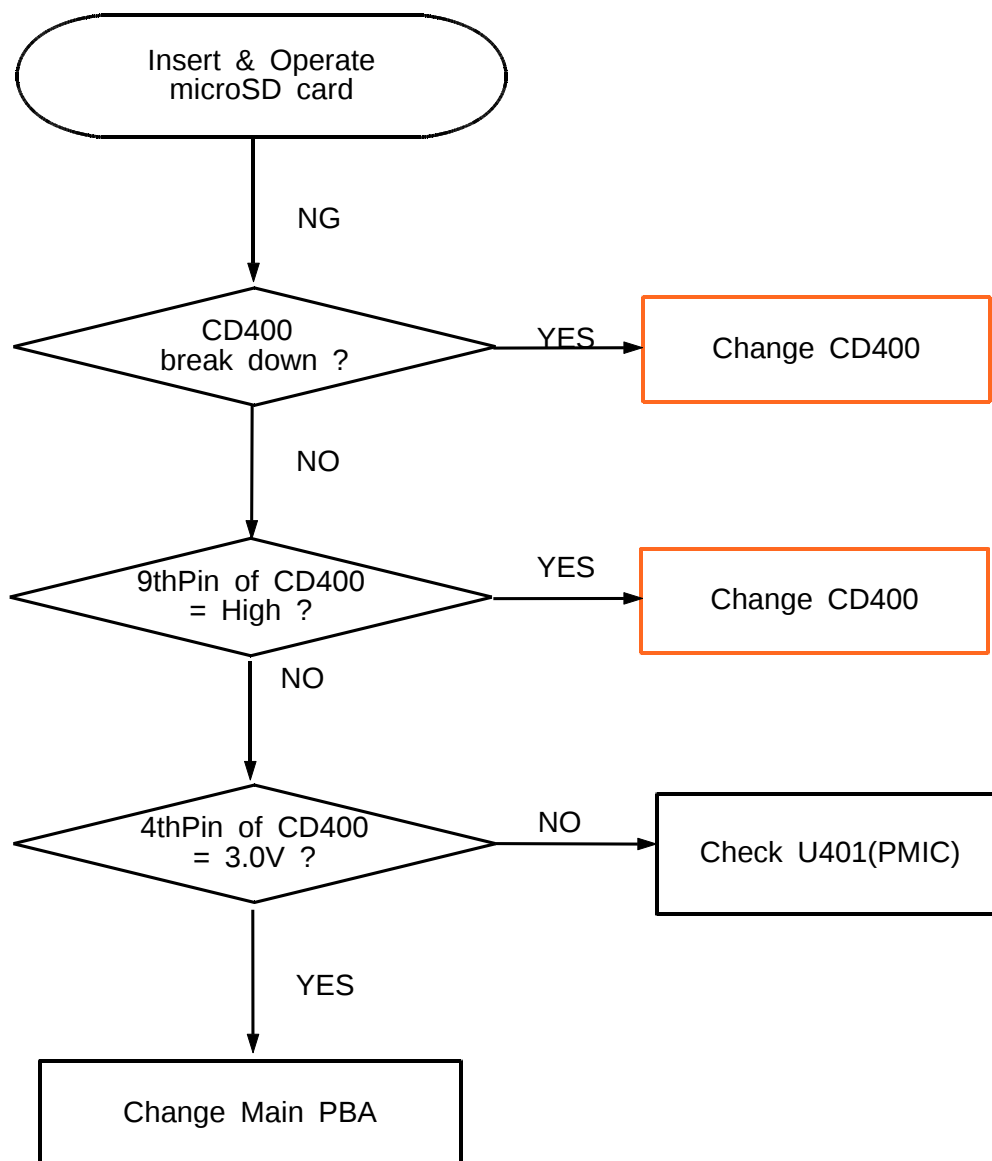


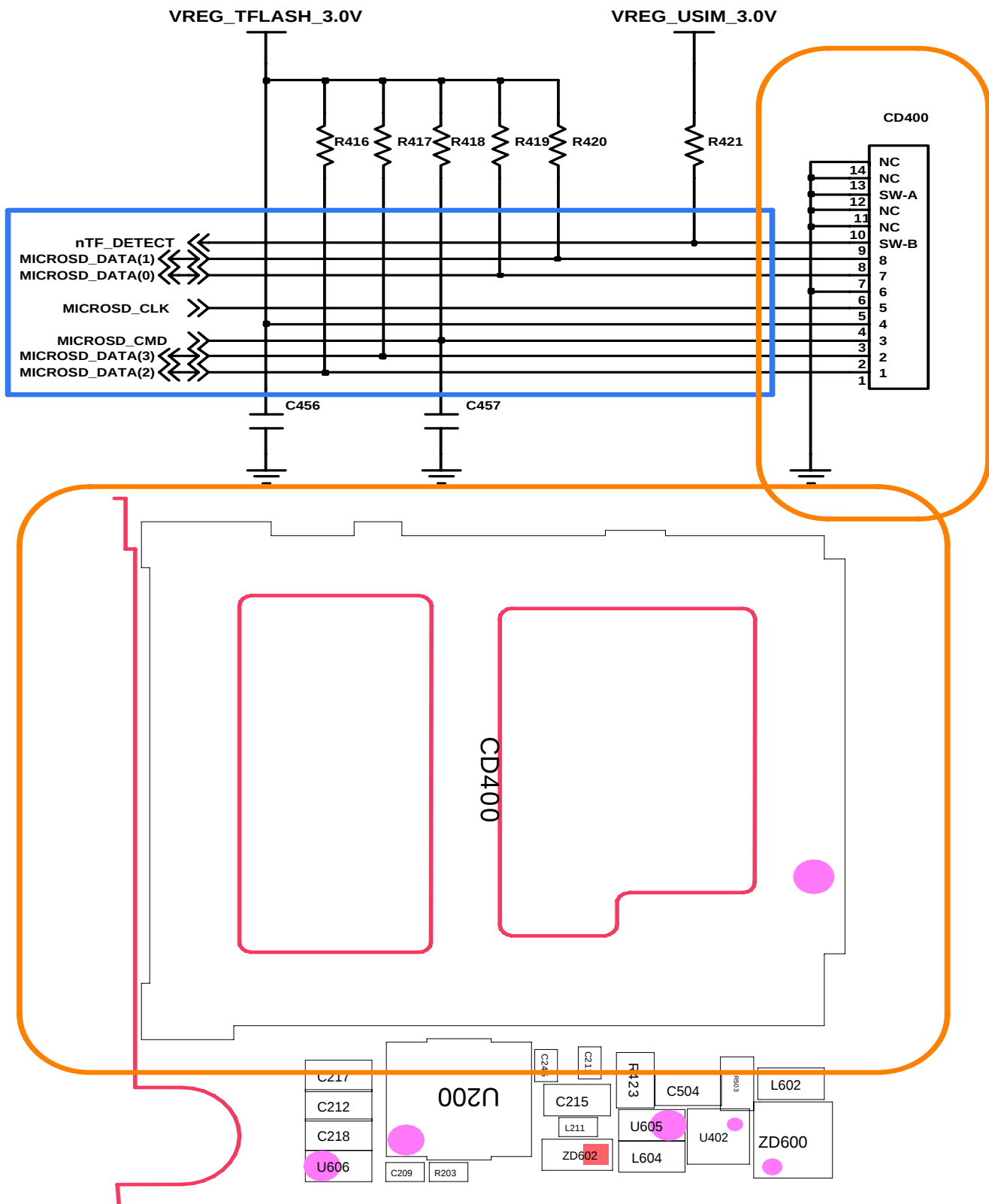
8-3-6. Vibrator Working



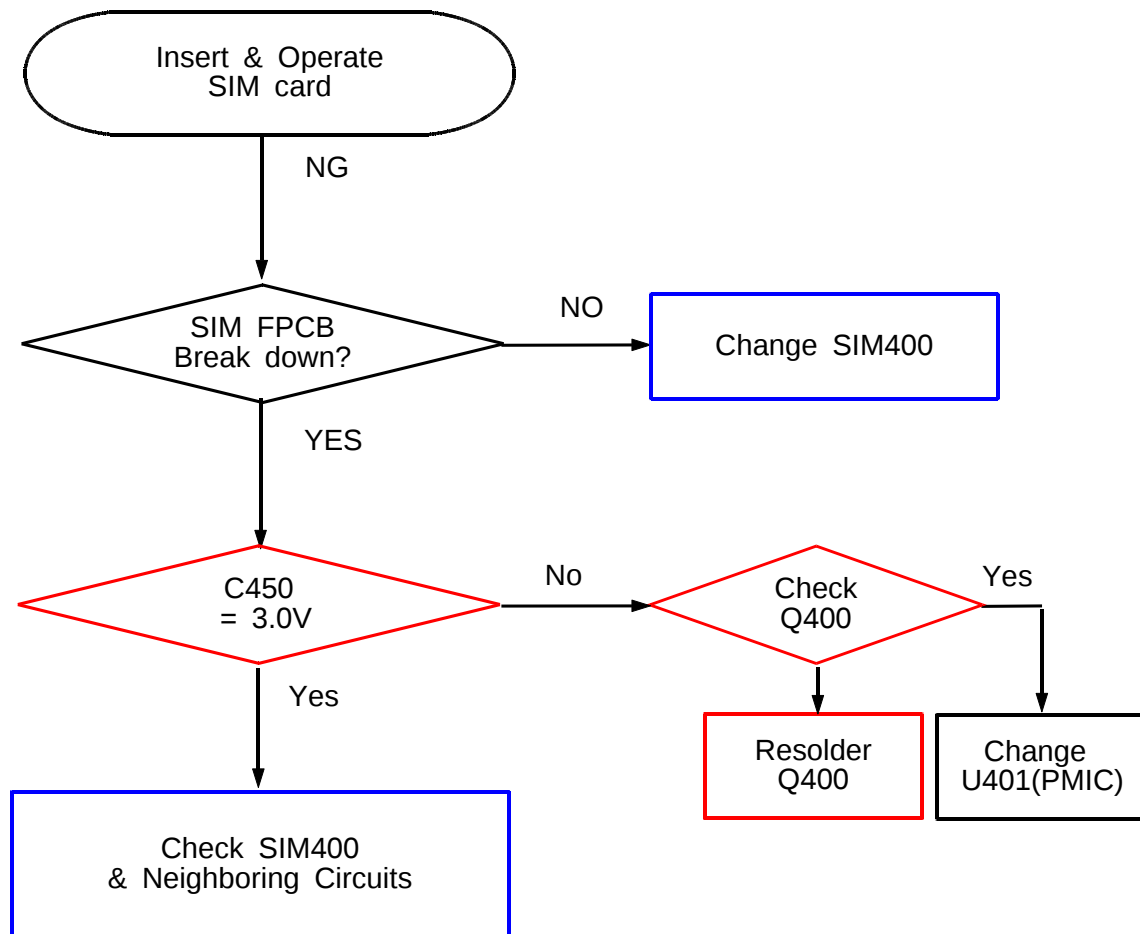


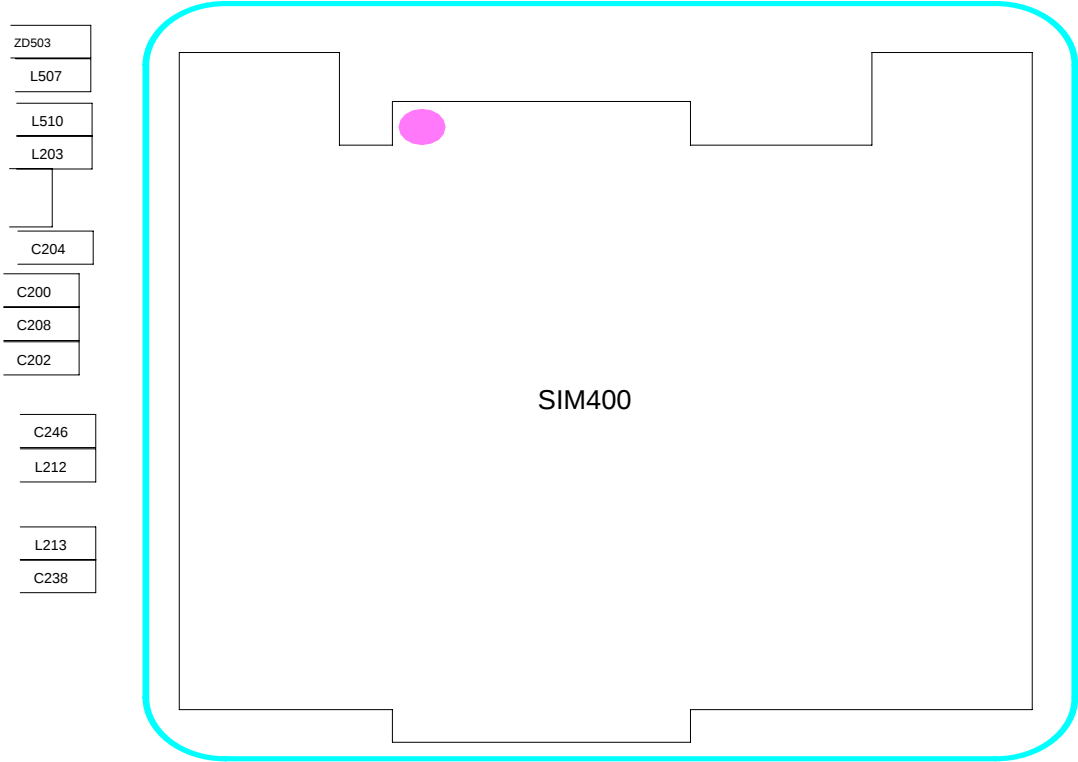
8-3-7. T-Flash Card Working



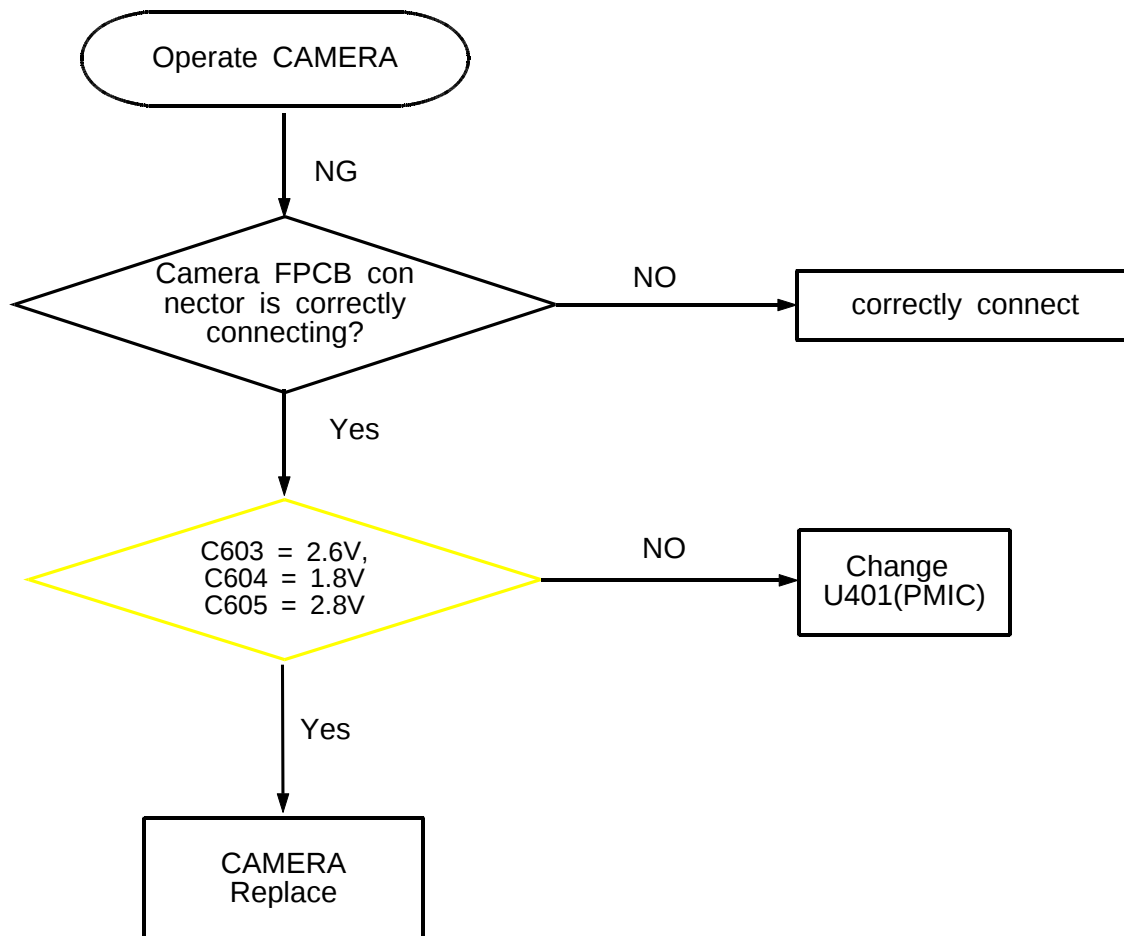


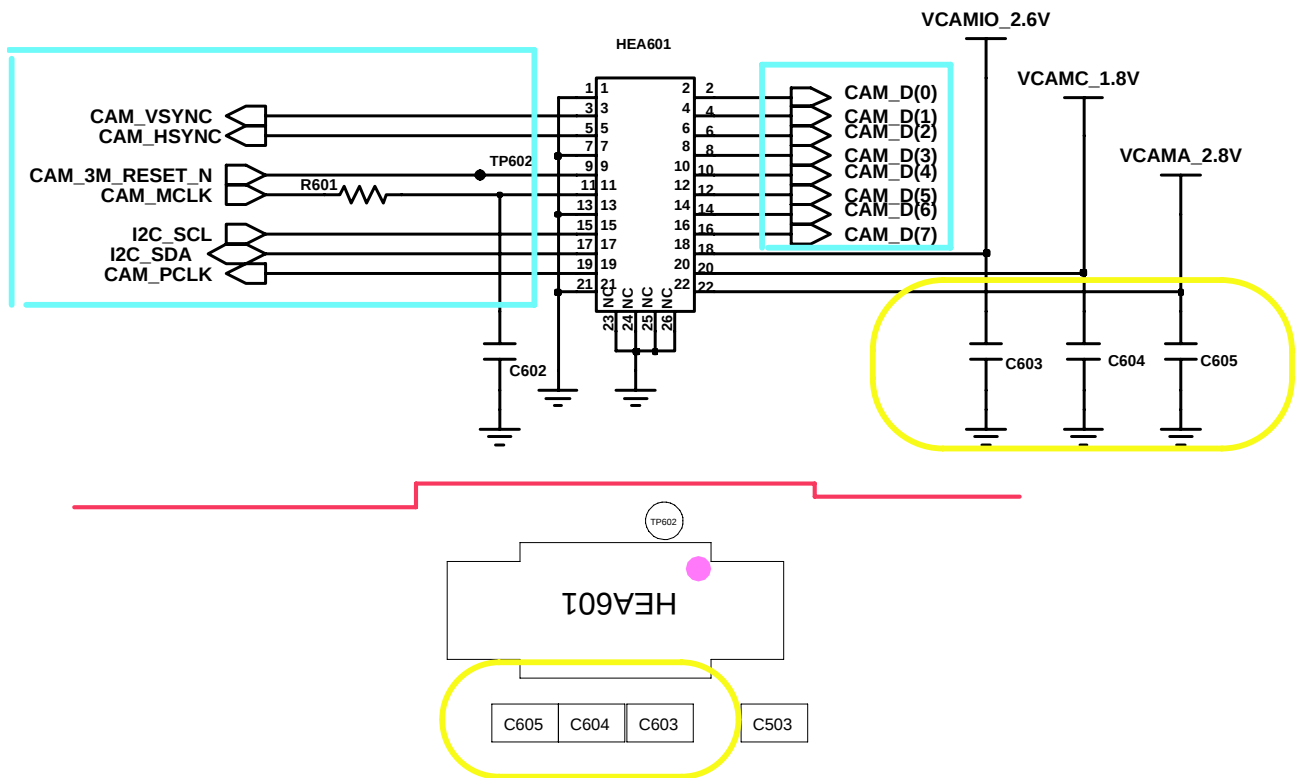
8-3-8. SIM Card Working





8-3-9 CAMERA Working

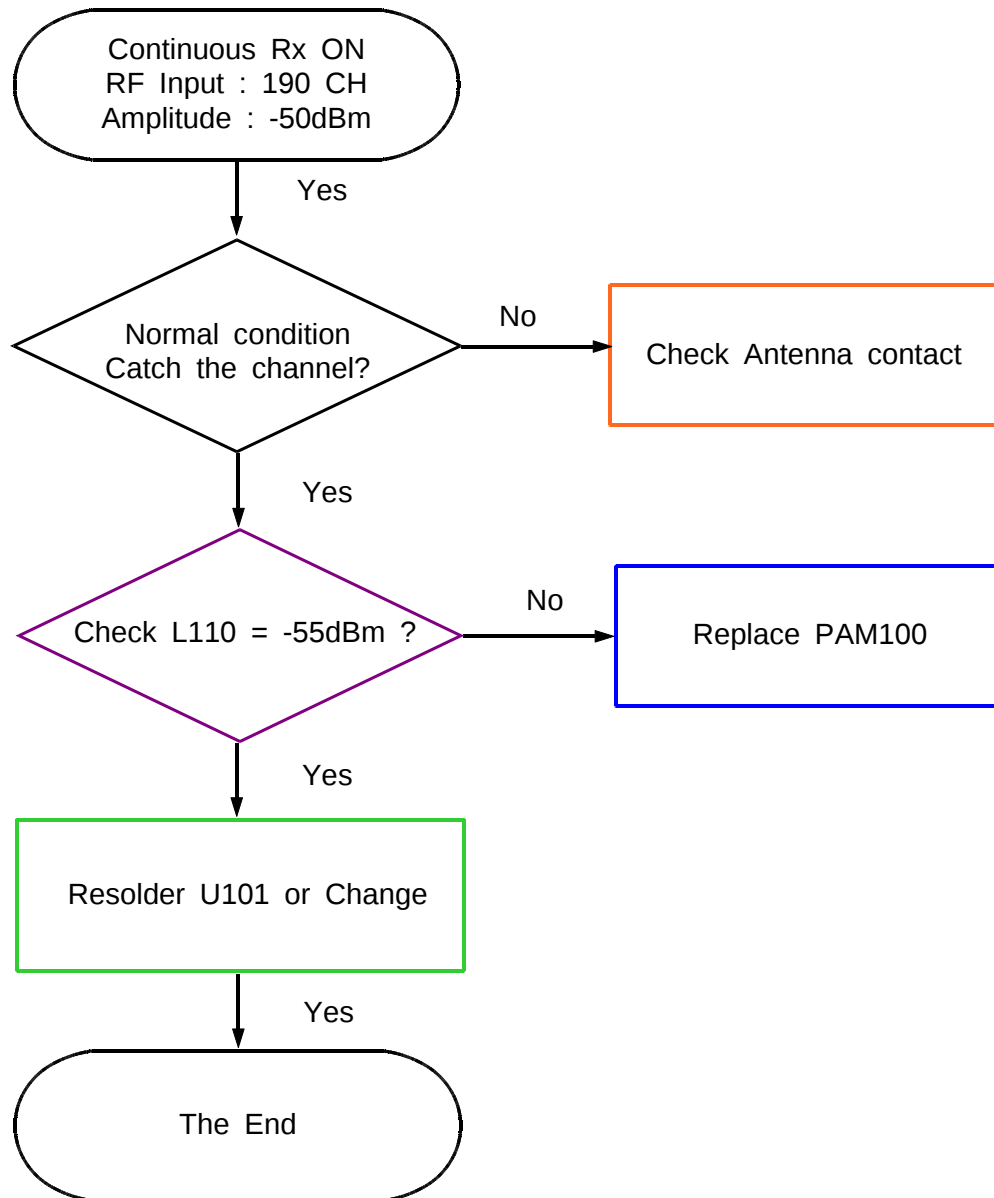




8-4-1. GSM850 RX

**If you check the tx chain,

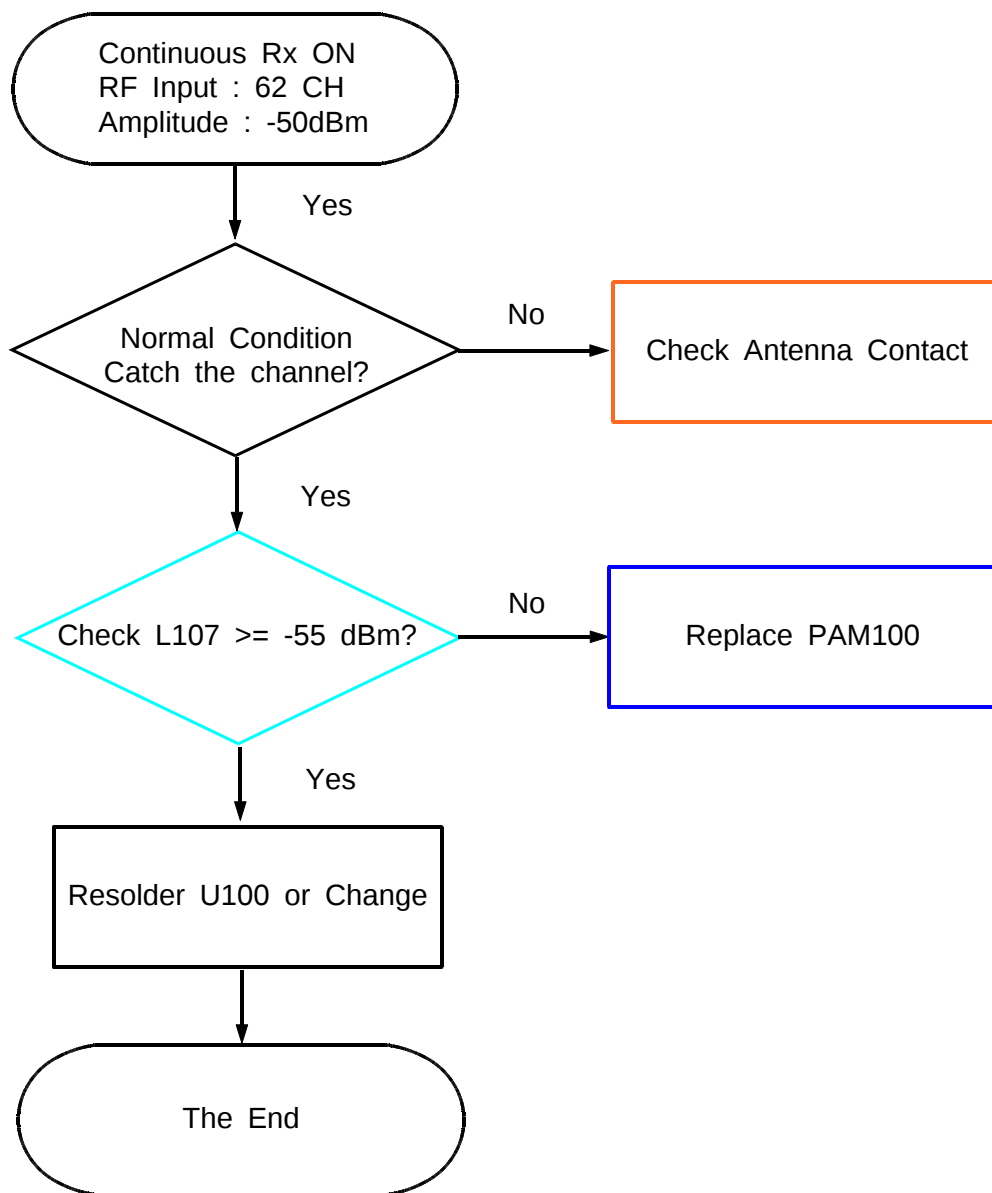
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-2. GSM900 RX

**If you check the tx chain,

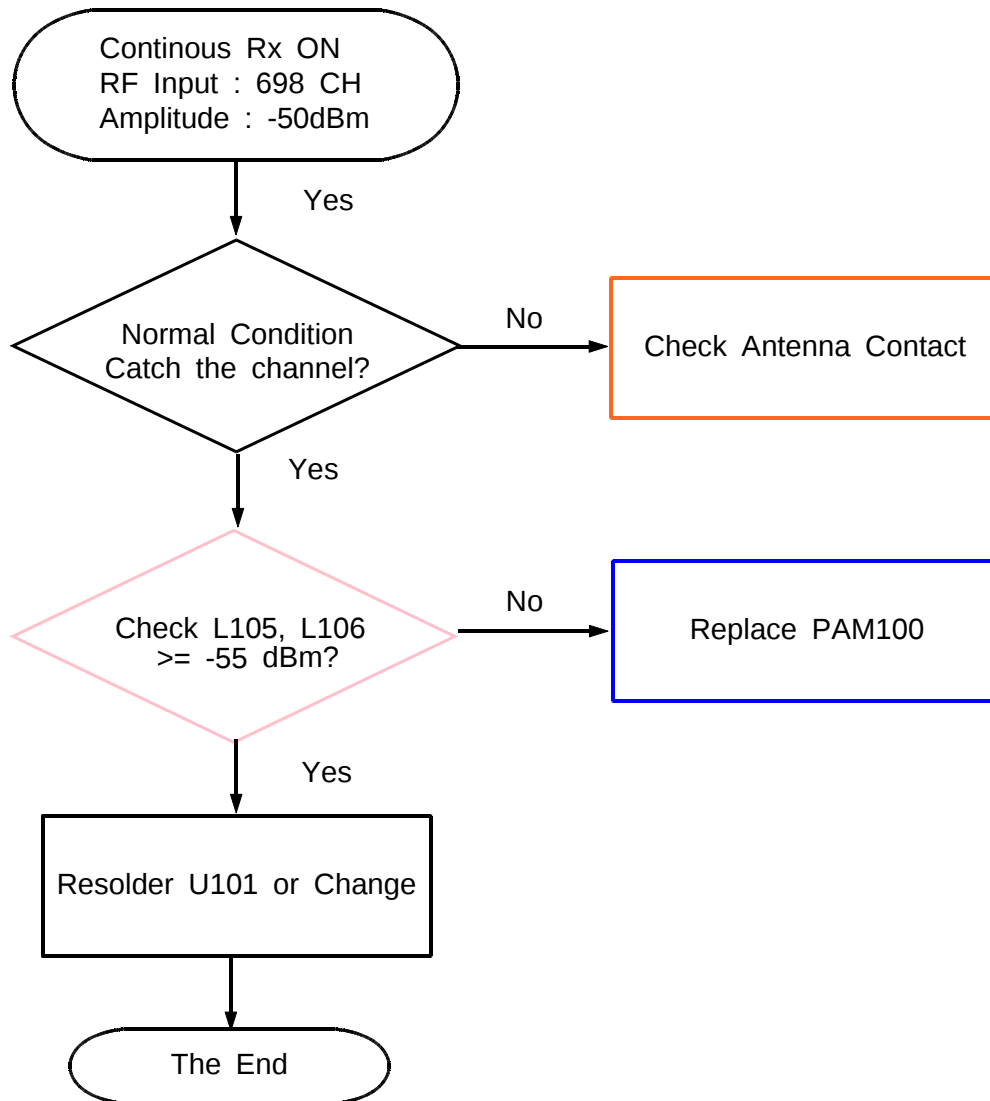
Check the not only RF Device but also resistor, inductor and capacitor.

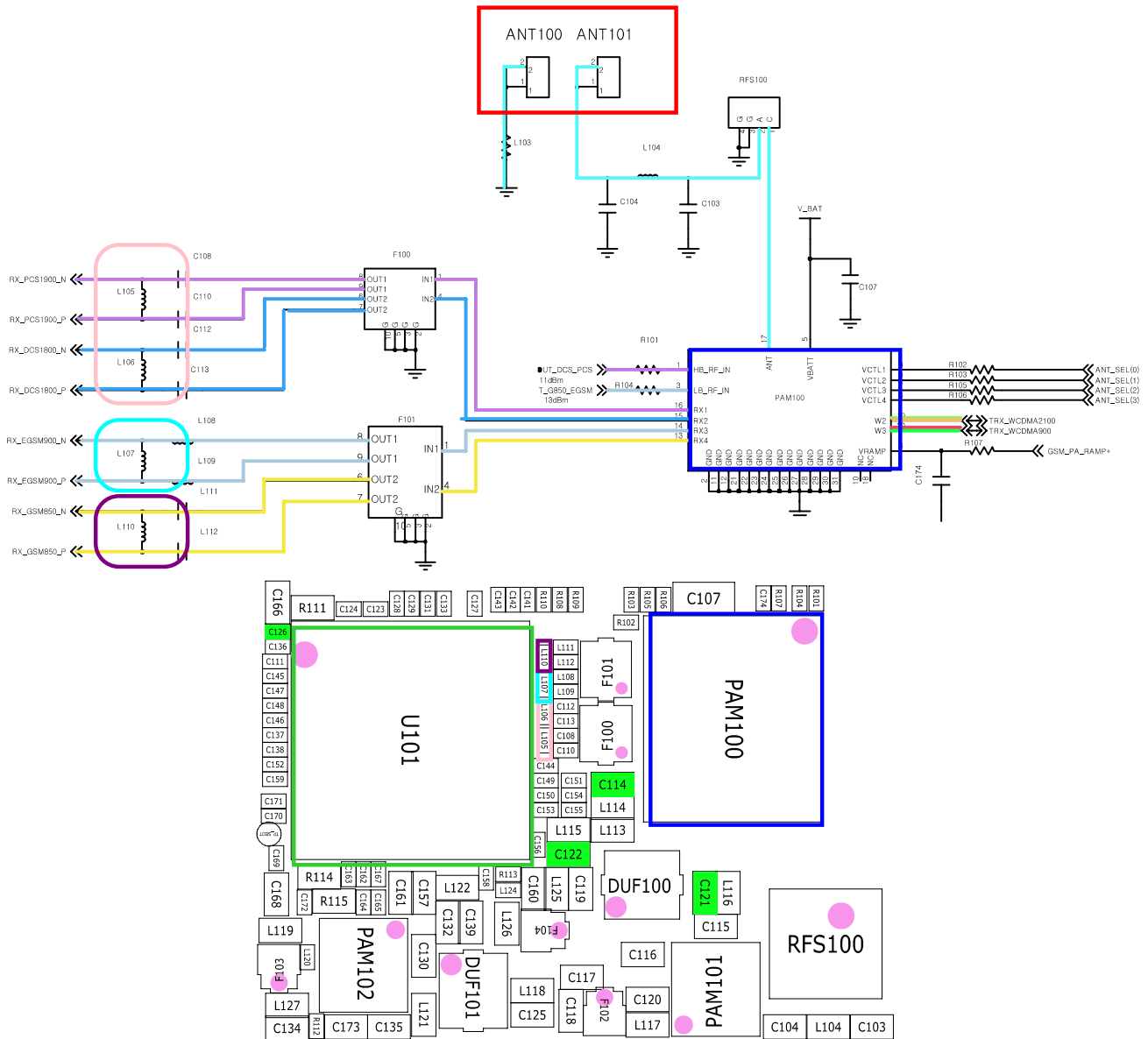


8-4-3. DCS/PCS RX

**If you check the tx chain,

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

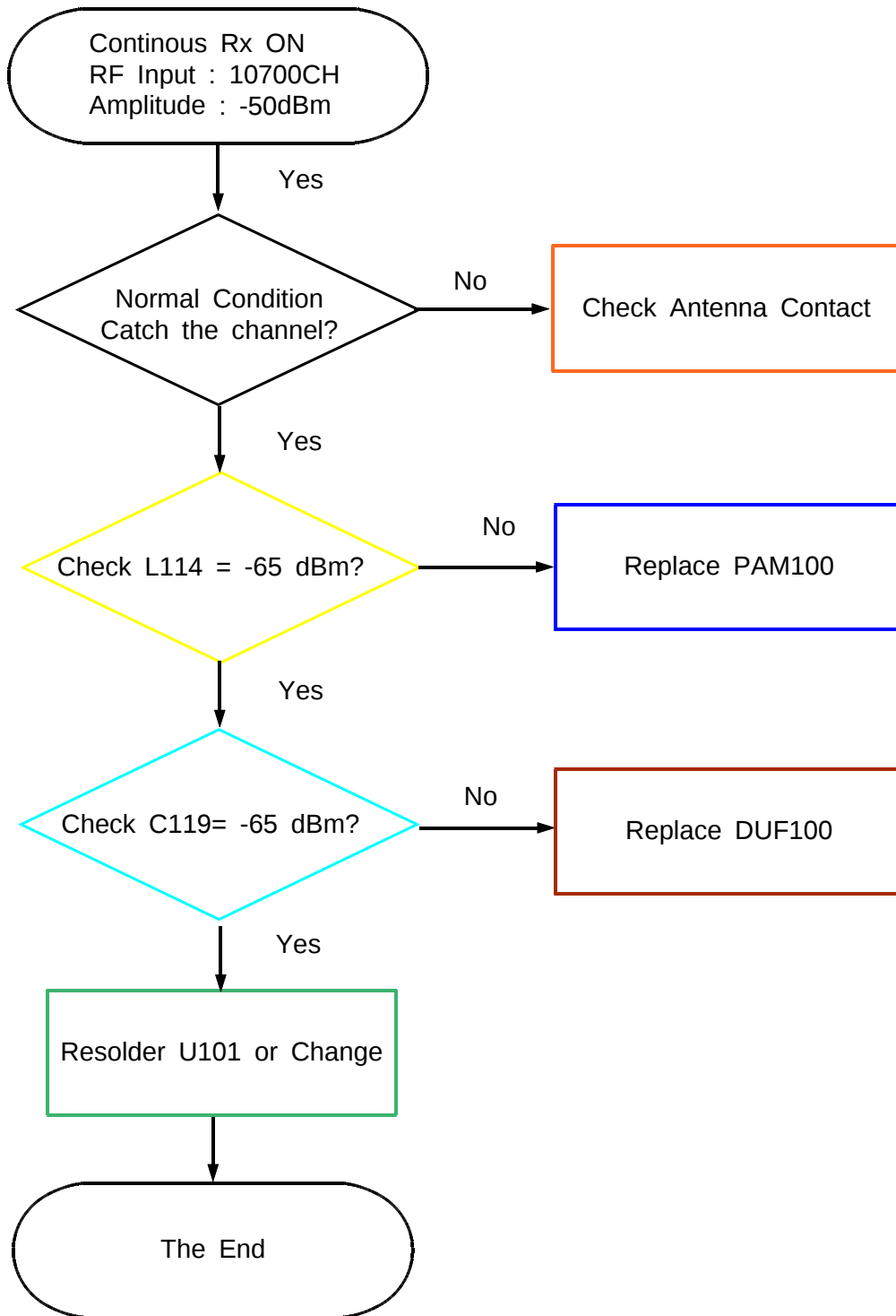




8-4-4. WCDMA Band1 RX

**If you check the tx chain,

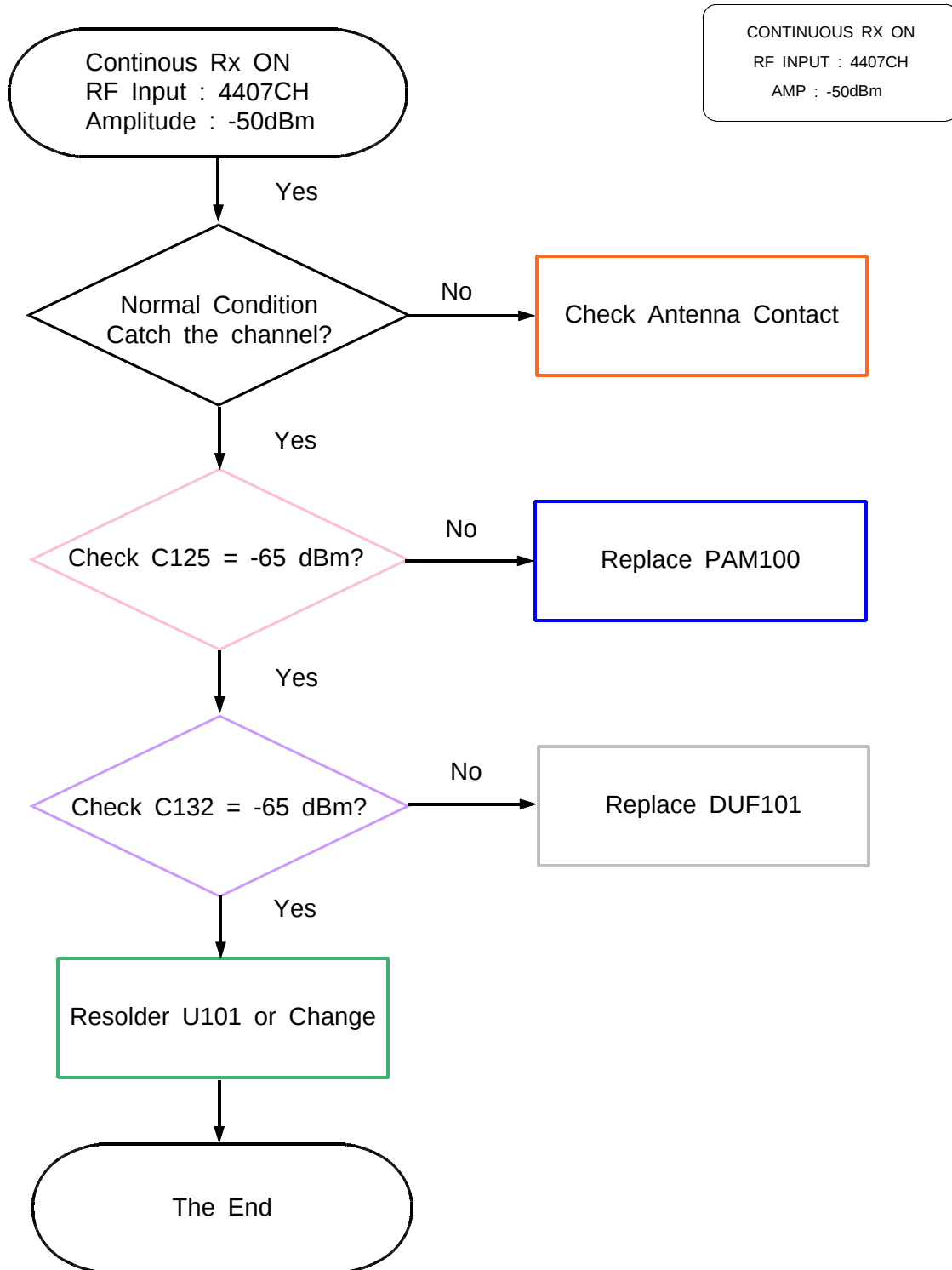
Check the not only RF Device but also resistor, inductor and capacitor.

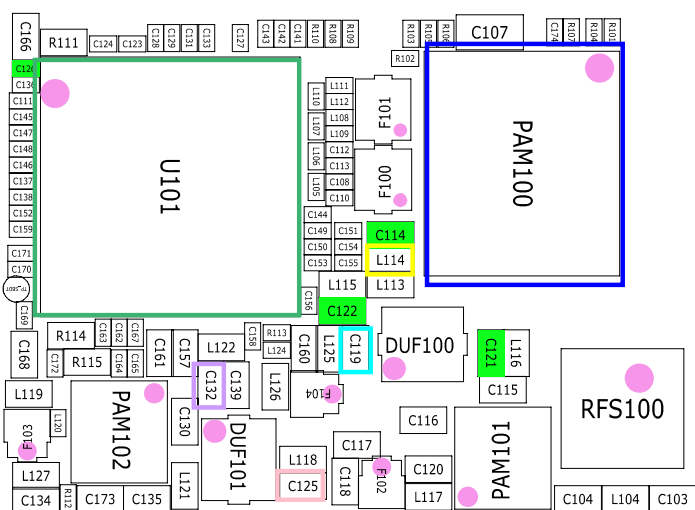
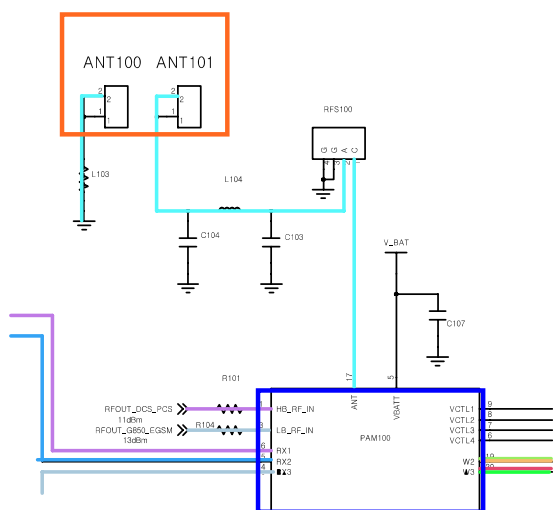
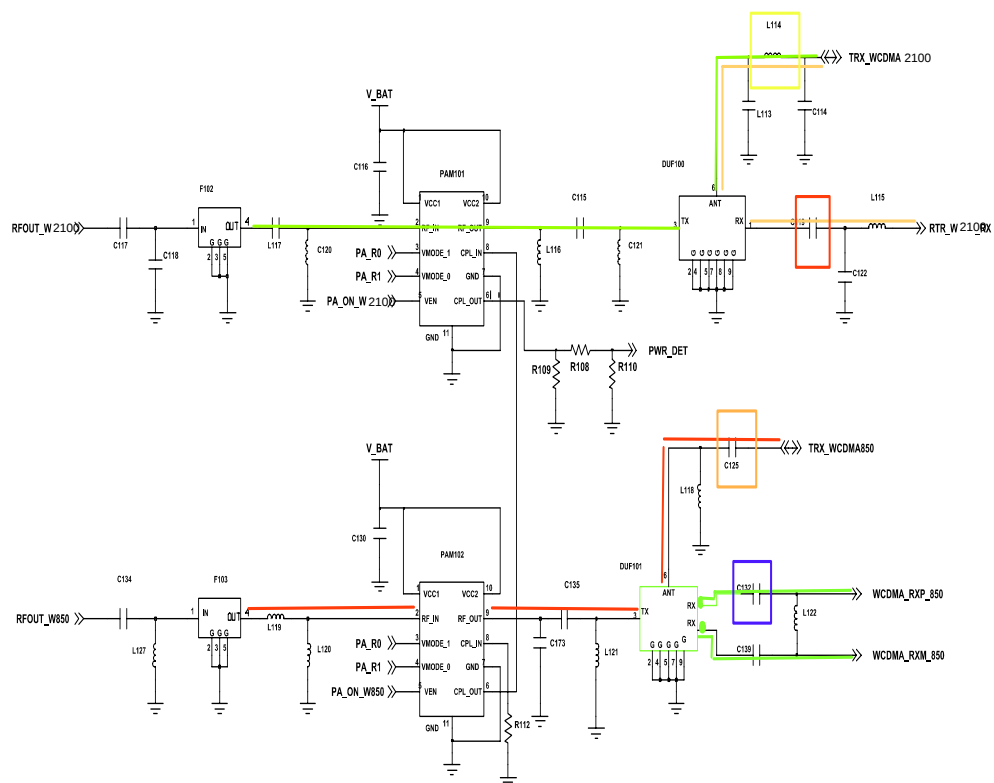


8-4-5. WCDMA Band5 RX

**If you check the tx chain,

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

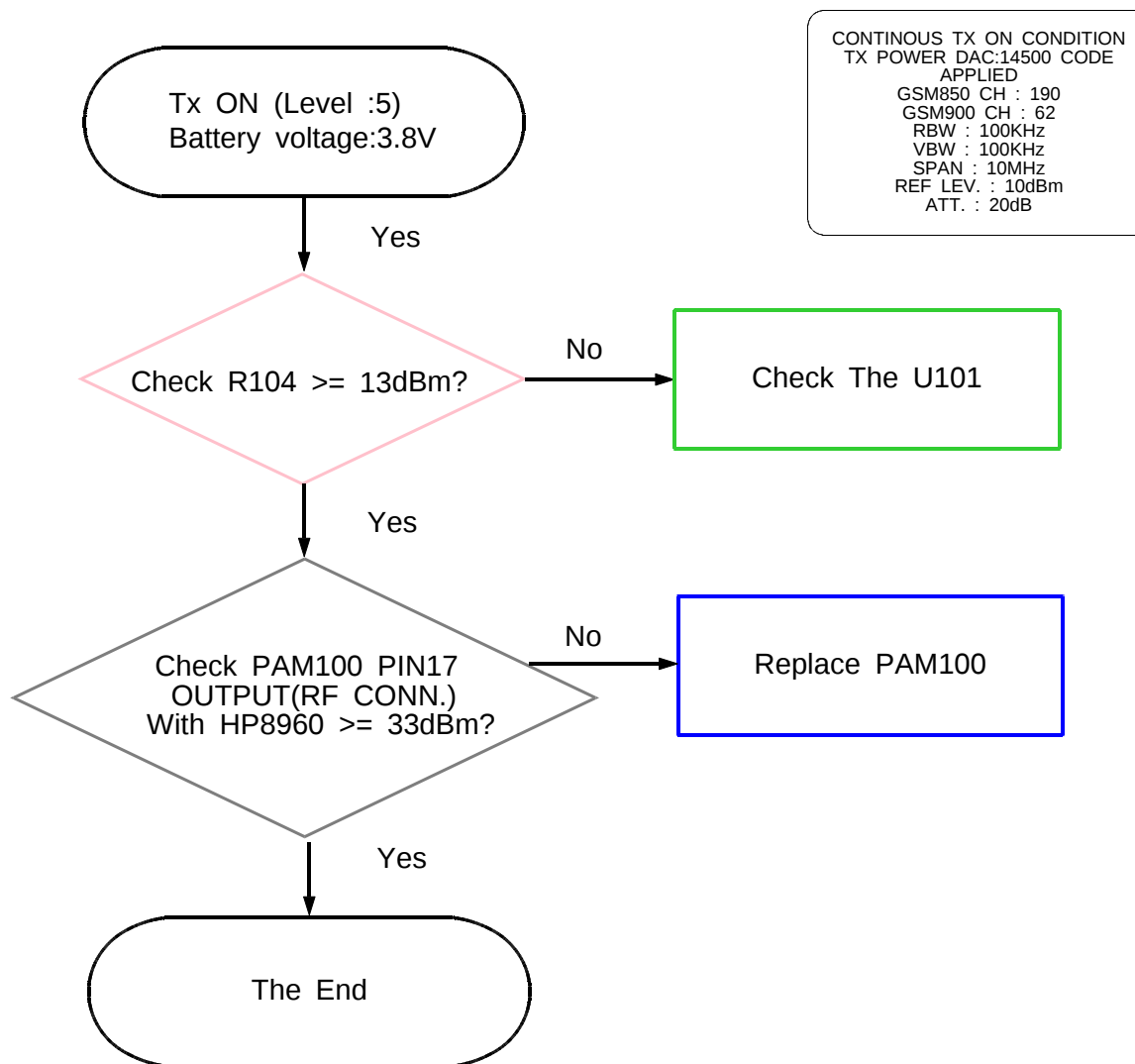




8-4-6. GSM850/900 TX

**If you check the tx chain,

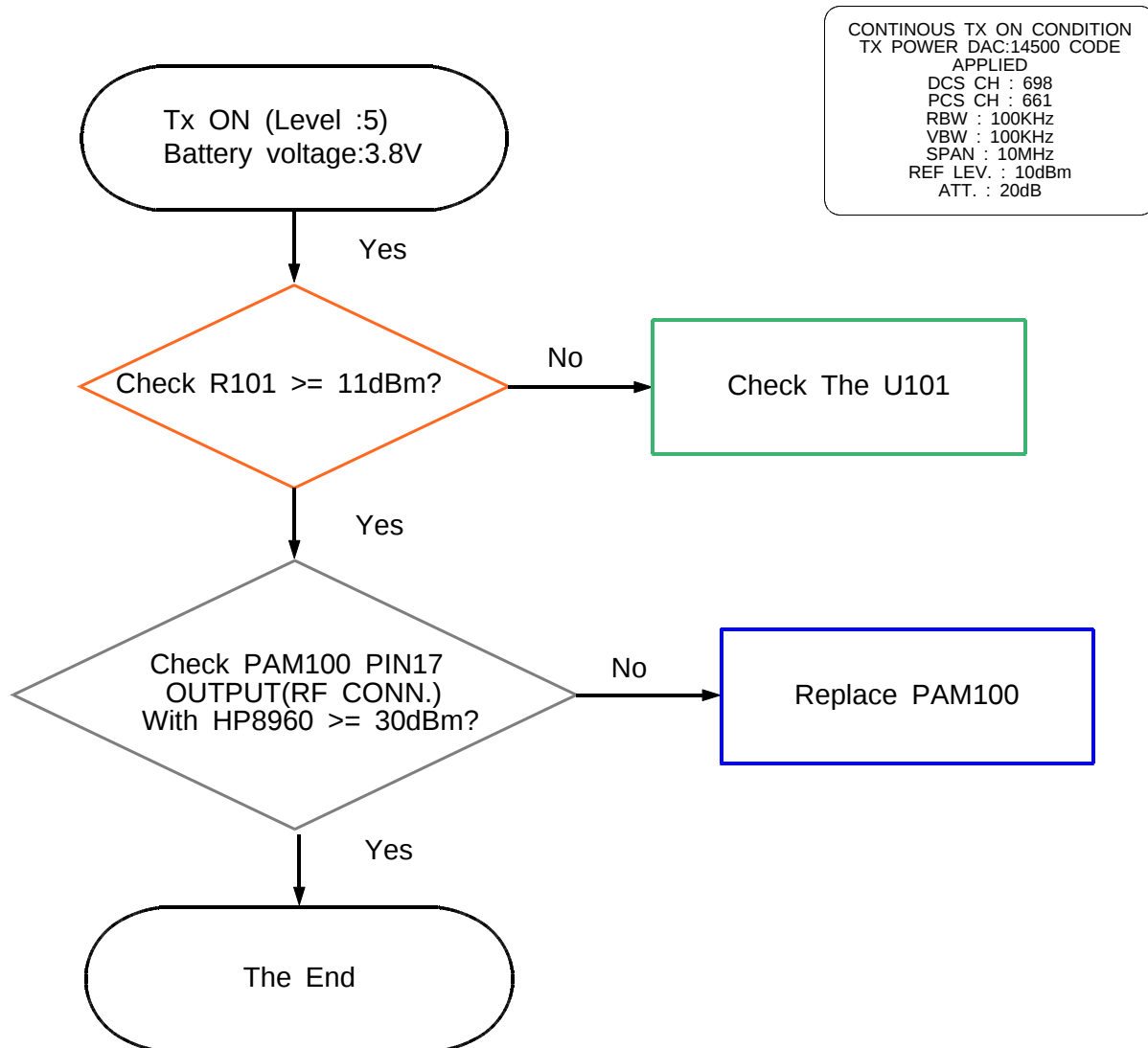
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-7. DCS/PCS TX

**If you check the tx chain,

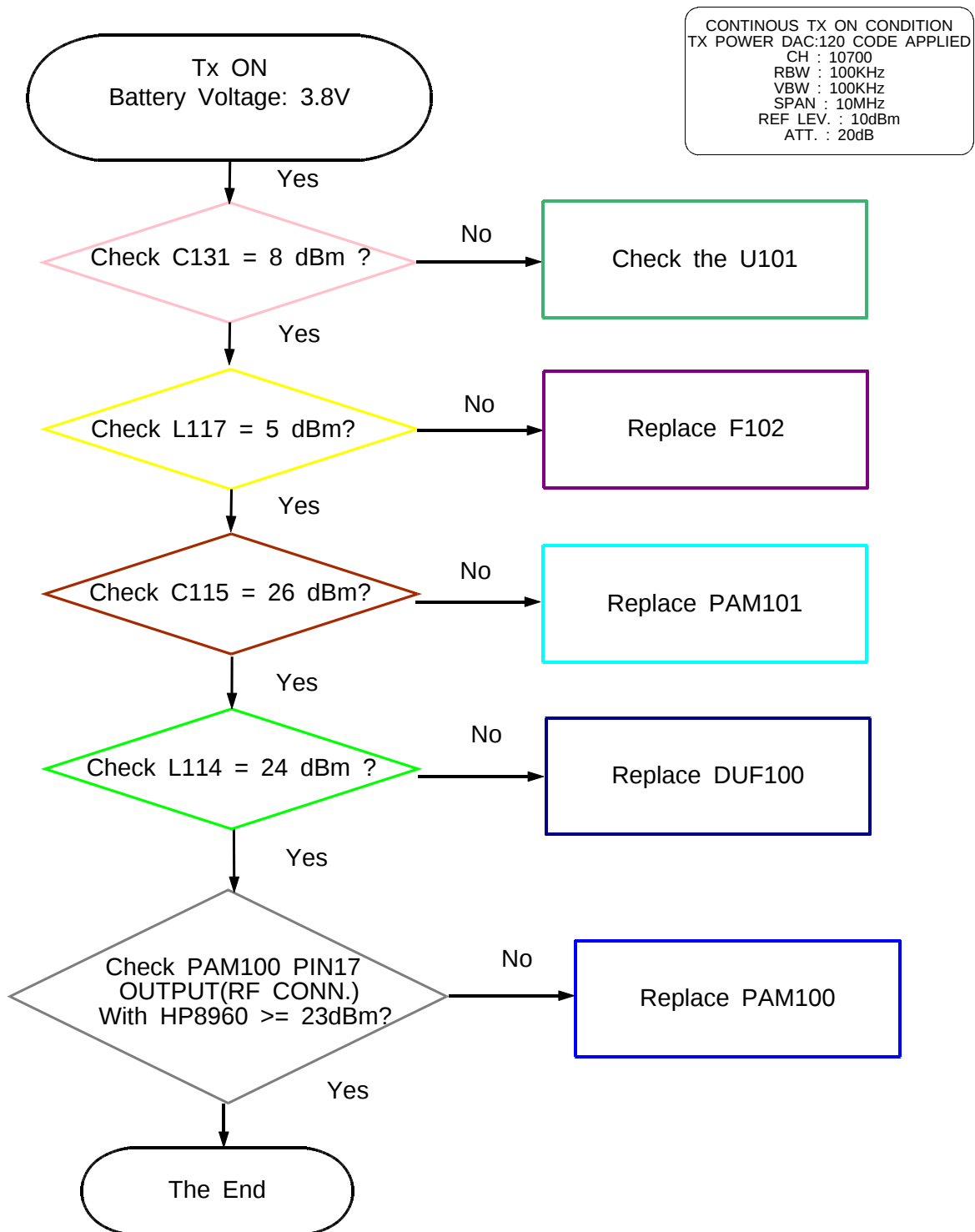
Check the not only RF Device but also resistor, inductor and capacitor.



8-4-8. WCDMA Band1 TX

**If you check the tx chain,

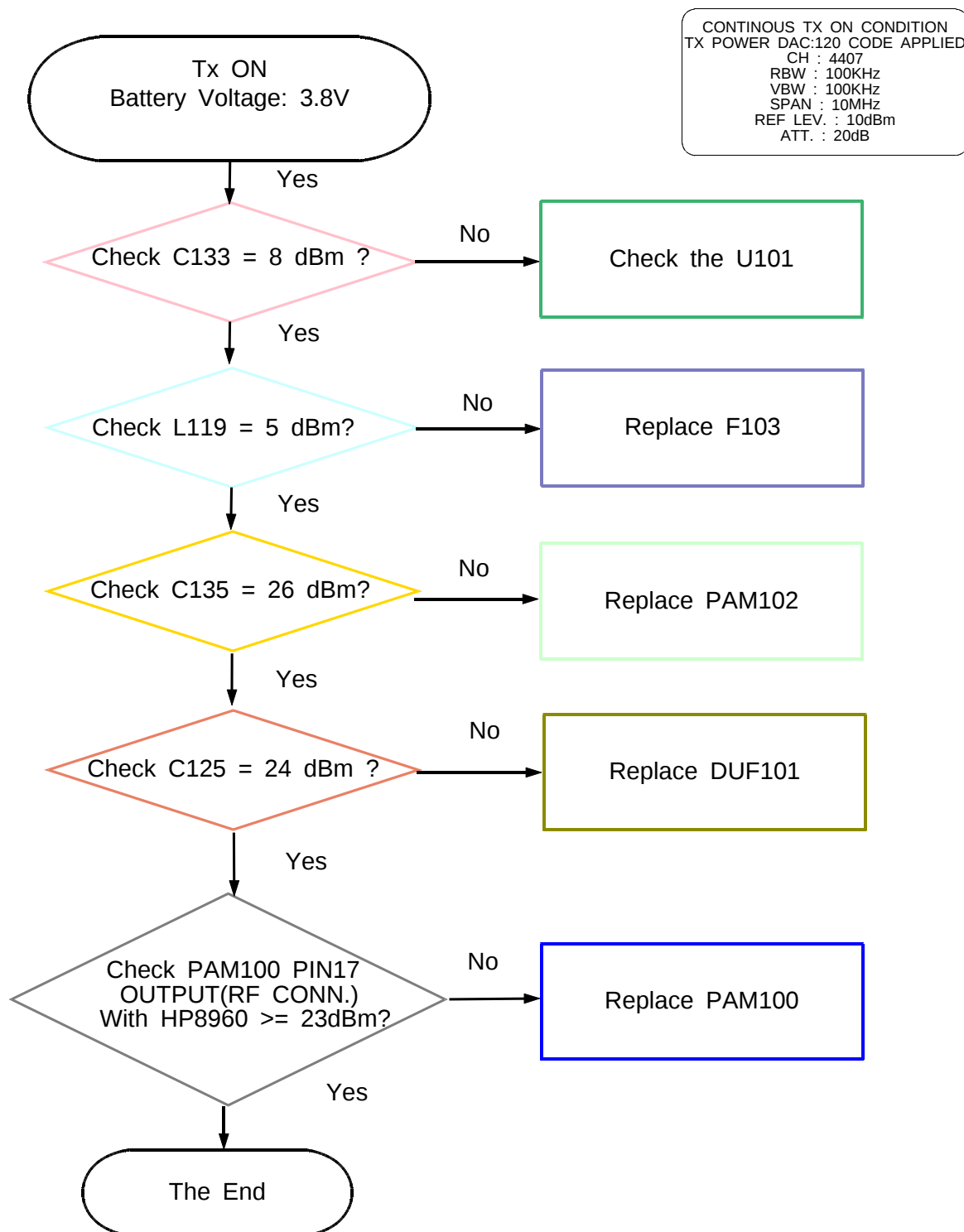
Check the not only RF Device but also resistor, inductor and capacitor.

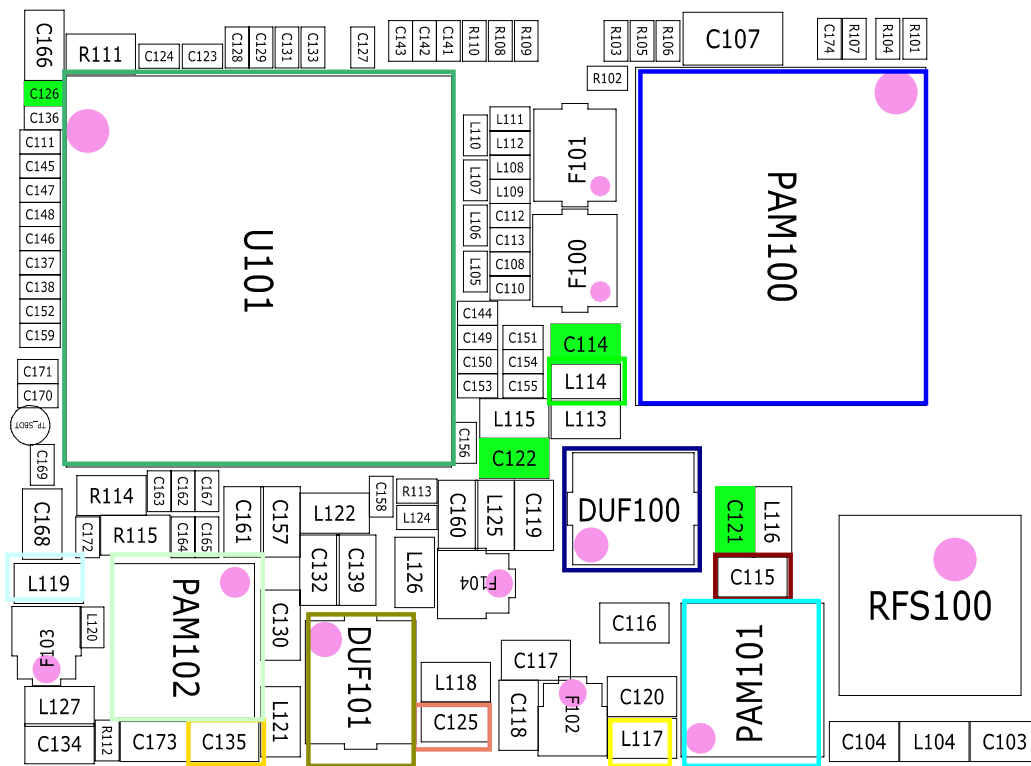


8-4-9. WCDMA Band5 TX

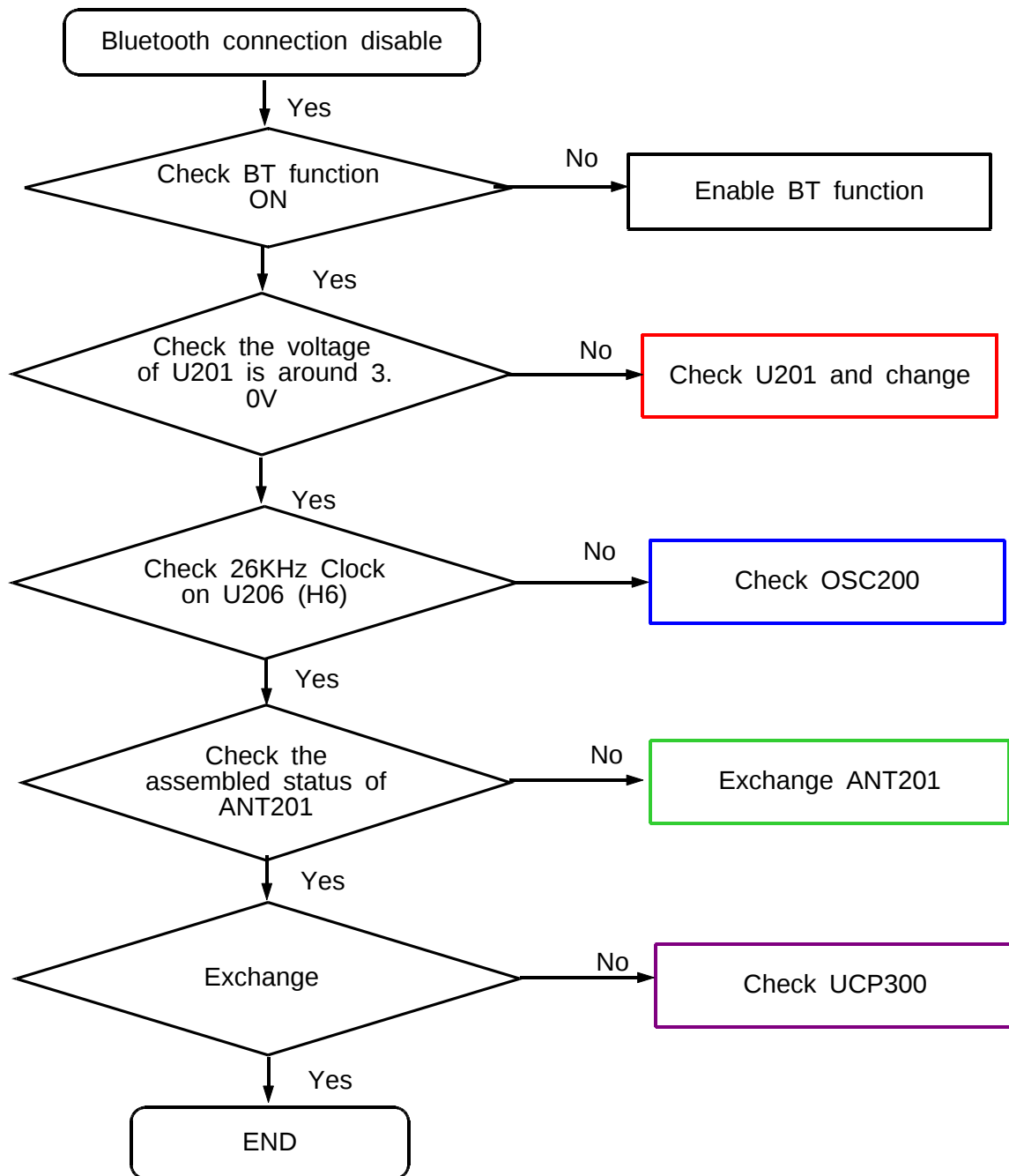
**If you check the tx chain,

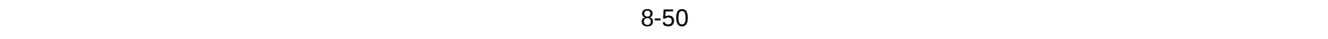
Check the not only RF Device but also resistor, inductor and capacitor.



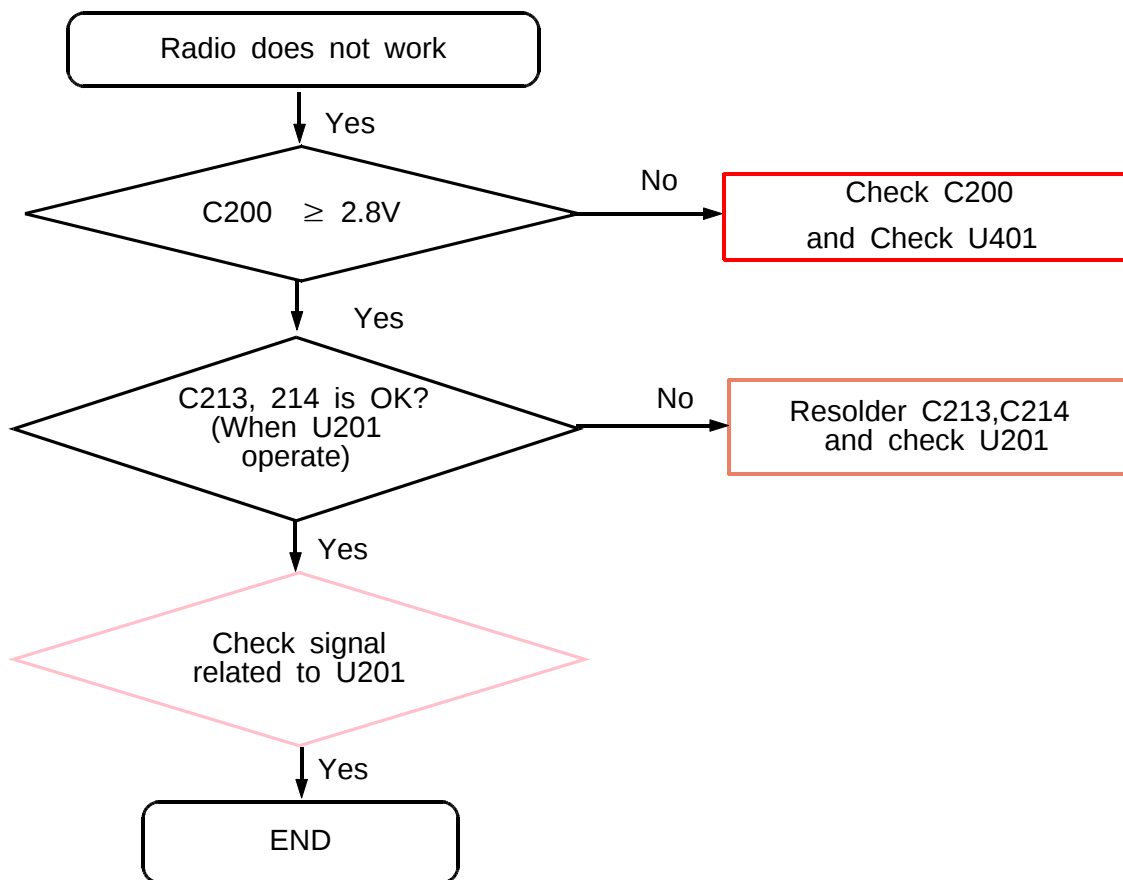


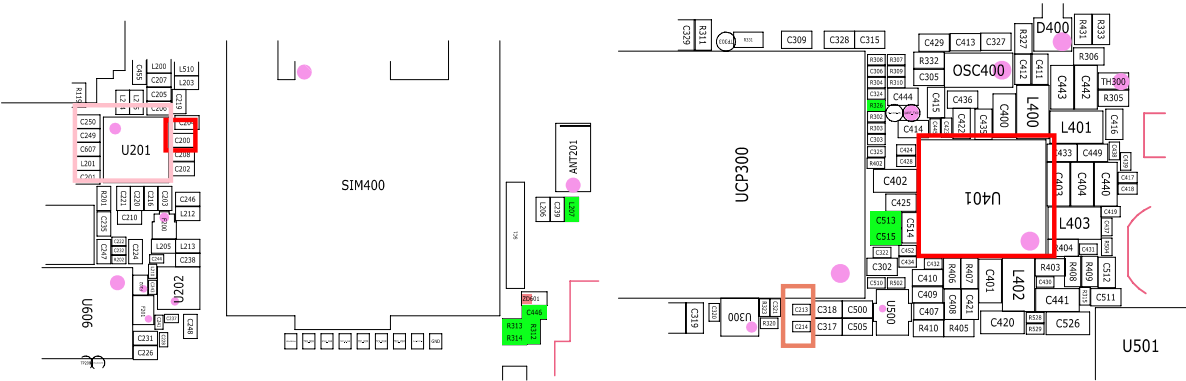
8-4-10. BLUETOOTH



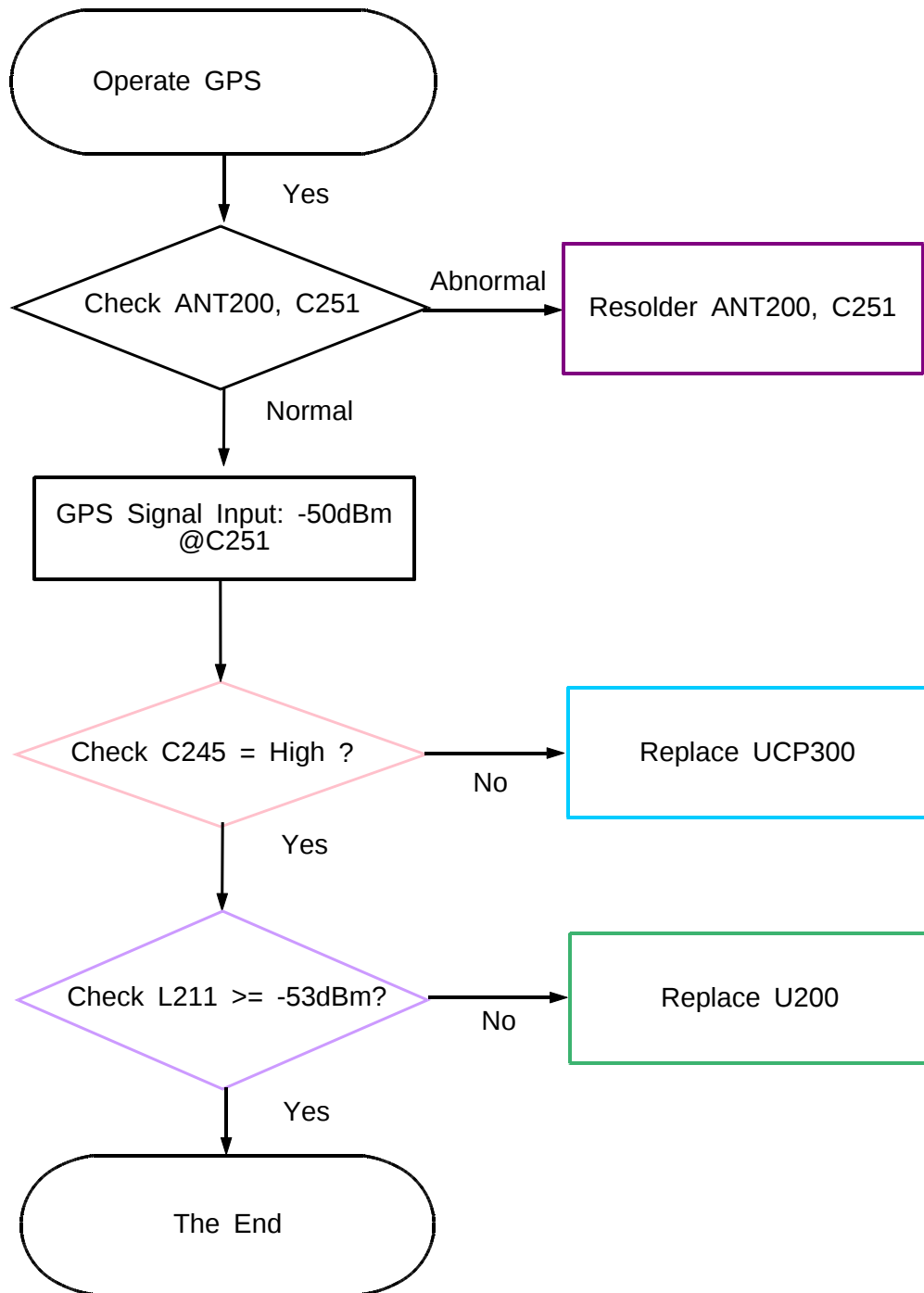


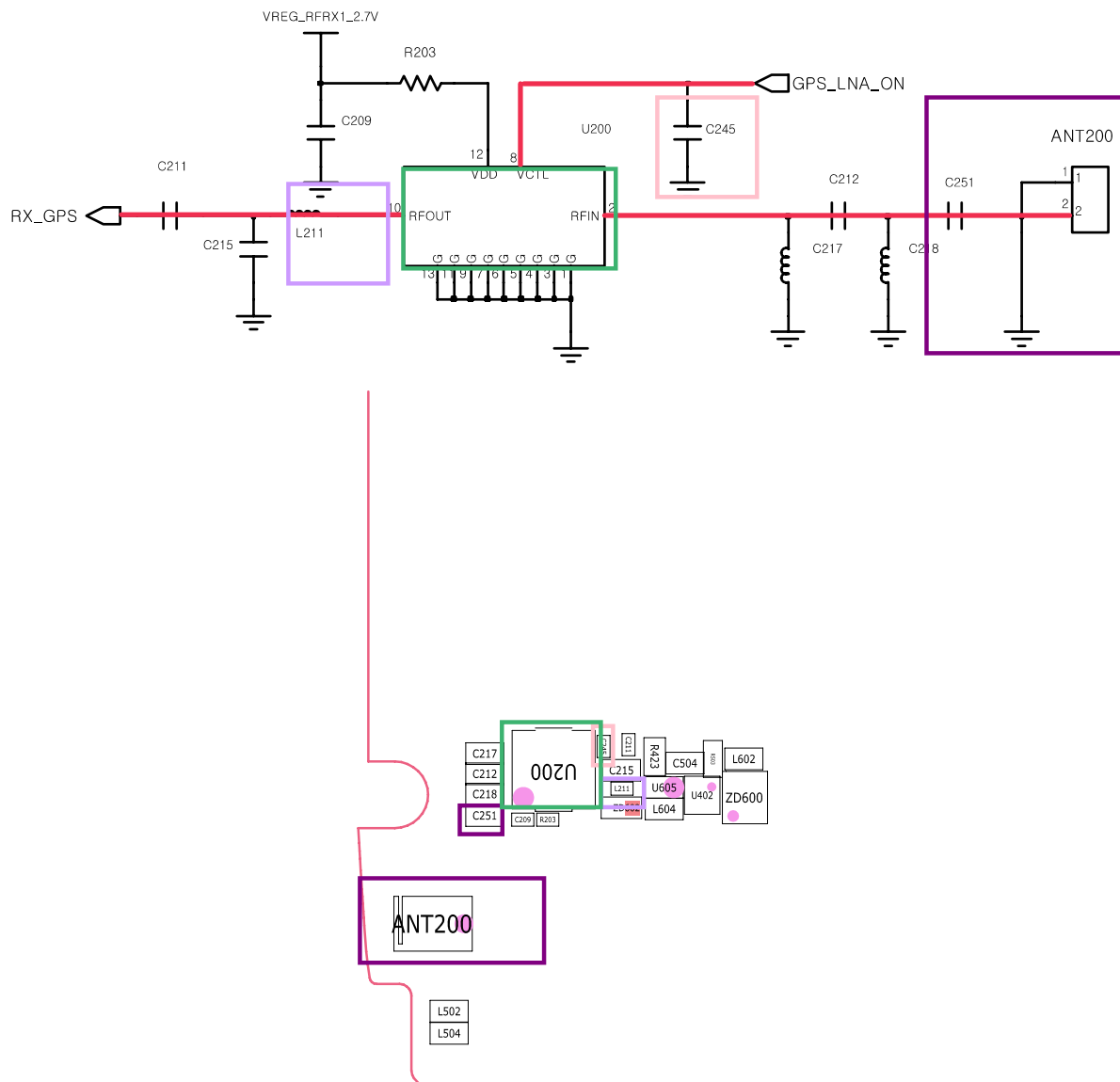
8-4-11. FM RADIO





8-4-12. GPS





8-5. Service Schematics

- NC Point(Top View)

● : NC

UME300

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	○	○	●	○	○	○	○	○	○	○	○	○	○	○
B	○	●	○	○	○	○	●	●	●	○	●	●	○	○
C	○	●	○	○	○	○	○	○	○	●	●	○	○	○
D	○	○	○	○								●	●	○
E	●	○	○		○	●	●	●	●	●		●	○	○
F	○	○	○		●					●		○	○	○
G	○	○	○		○					●		○	○	○
H	○	○	○		●					●		○	○	○
J	○	○	○		●					●		○	●	○
K	○	○	○		●	●	○	○	●	●		○	○	○
L	○	○	○									○	○	○
M	○	○	●	○	○	○	○	○	●	●	●	●	○	○
N	○	○	●	○	○	○	●	○	●	●	●	●	○	○
P	○	○	○	○	○	○	○	○	○	○	○	○	○	○

U401

	1	2	3	4	5	6	7	8	9	10	11
A	●	○	○	○	○	○	○	○	○	○	●
B	○	○	○	○	○	○	○	○	○	○	○
C	○	○	○	○	○	○	○	○	○	○	○
D	○	○	○	○	○	○	○	○	○	○	○
E	○	○	○	○	○	○	○	○	○	○	○
F	○	○	○	○	○	○	○	○	○	○	○
G	○	○	○	○	○	○	○	○	○	○	○
H	○	○	○	○	○	○	○	○	○	○	○
J	○	○	○	○	○	○	○	○	○	○	○
K	●	○	○	○	○	○	○	○	○	○	●

UCP300

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	A
B	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	B
C	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	C
D	●	○	○																						○	○	●	D
E	●	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	●	E
F	●	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	○	●	F
G	●	○	○		○	○																○	○		○	○	●	G
H	●	○	○		○	○		○	○	○	○	○	○	○	○	○	○	○	○	○		○	○		○	○	●	H
J	●	○	○		○	○		○	○	○	○	○	○	○	○	○	○	○	○		○	○		○	○	○	●	J
K	●	○	○		○	○		○	○										○	○		○	○		○	○	●	K
L	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	L
M	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	M
N	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	N
P	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	P
R	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	R
T	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	T
U	●	○	○		○	○		○	○			○	○	○	○	○	○		○	○		○	○		○	○	●	U
V	●	○	○		○	○		○	○										○	○		○	○		○	○	●	V
W	●	○	○		○	○		○	○	○	○	○	○	○	○	○	○	○	○	○		○	○		○	○	●	W
Y	●	○	○		○	○		○	○	○	○	○	○	○	○	○	○	○	○	○		○	○		○	○	●	Y
AA	●	○	○		○	○																○	○		○	○	●	AA
AB	●	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	●	AB
AC	●	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	●	AC
AD	●	○	○																						○	○	●	AD
AE	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	AE
AF	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	AF
AG	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	AG
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	

9. Reference Abbreviate

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
- **CI** : 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