



# **GSM TELEPHONE**

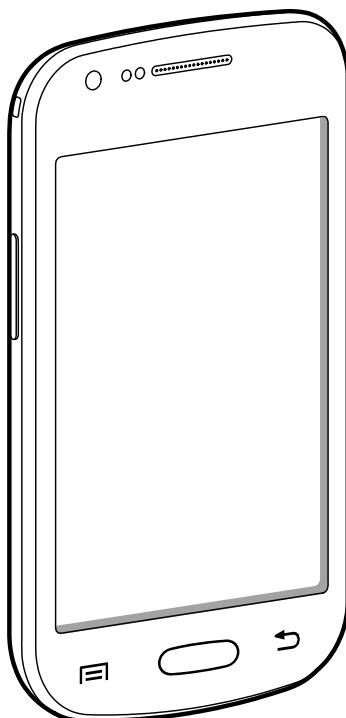
## **GT-S7580/S7582 Common**

# **SERVICE**

## ***Manual***

**GSM TELEPHONE**

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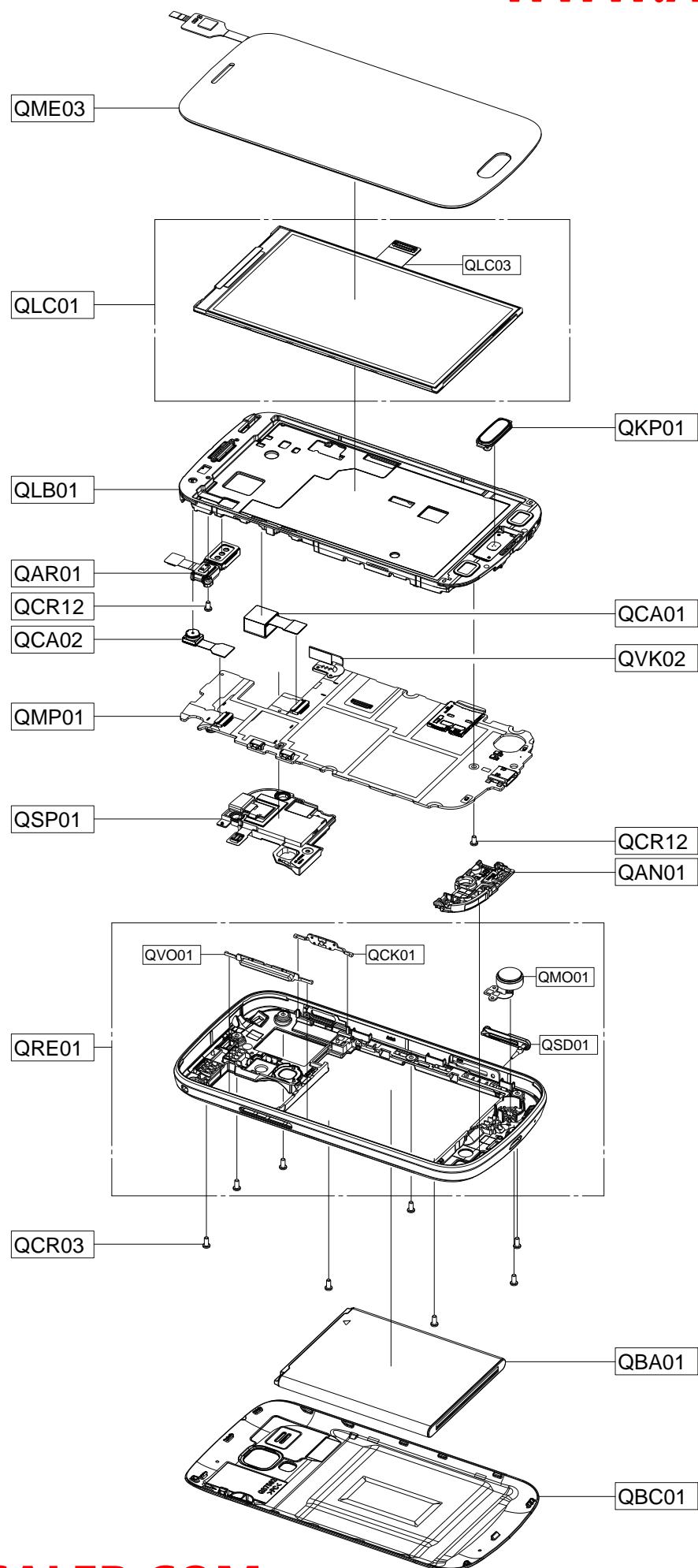
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## 2. Specification

### 2-1. GSM General Specification

(Kyle PRO : GSM850/900/1800/1900, WCDMA 2100/900)

	<b>GSM850</b>	<b>GSM 900</b>	<b>DCS1800</b>	<b>PCS1900</b>	<b>WCDMA 2100</b>	<b>WCDMA 1900</b>	<b>WCDMA 900</b>	<b>WCDMA 850</b>
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	1852~1907 1932~1987	880~915 925~960	824~849 869~894
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL: 9612~9888 DL: 10562~10838	UL: 9262~9538 DL: 9662~9938	UL: 2712~2863 DL: 2937~3088	UL: 4132~4233 DL: 4357~4458
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	80MHz	45MHz	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	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: h: 10ms Slotlength: 0.667ms	FrameLength: h: 10ms Slotlength: 0.667ms	FrameLength: h: 10ms Slotlength: 0.667ms	FrameLength: h: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPS K	QPSKHQPS K	QPSKHQPS K	QPSKHQPS K
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~- 50dBm	24dBm~- 50dBm	24dBm~- 50dBm	24dBm~- 50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl	3(max+24dB m)	3(max+24dB m)	3(max+24dB m)	3(max+24dB m)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km	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**

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#### **Main Function**

- BCM21664 (Dual A9 1.2Ghz)
- 4.0" WVGA TN TFT LCD
- 5MP AF with LED Flash
- C type TSP
- Sensors : Accelerometer, Compass, Proximity
- A-GPS / BT v4.0 USB v2.0 / WiFi (802.11 b/g/n)
- 4GB (eMMC) + 6Gb RAM
- 1500mAh Battery

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## 9. Reference Abbreviate

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### 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

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## 1. Safety Precautions

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### 1-1. Repair Precaution

Before attempting any repair or detailed tuning, shield the device from RF noise or static electricity discharges.

Use only demagnetized tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.

Use only high quality screwdrivers when servicing products. Low quality screwdrivers can easily damage the heads of screws.

Use only conductor wire of the properly gauge and insulation for low resistance, because of the low margin of error of most testing equipment.

We recommend 22-gauge twisted copper wire.

Hand-soldering is not recommended, because printed circuit boards (PCBs) can be easily damaged, even with relatively low heat. Never use a soldering iron with a power rating of more than 100 watts and use only lead-free solder with a melting point below 250°C (482°F).

Prior to disassembling the battery charger for repair, ensure that the AC power is disconnected. Always use the replacement parts that are registered in the SEC system. Third-party replacement parts may not function properly.

## 1-2. ESD(Electrostatically Sensitive Devices) Precaution

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discharge and can be easily damaged by it. We recommend protecting these components with conductive anti-static bags when you store or transport them.

Always use an anti-static strap or wristband and remove electrostatic buildup or dissipate static electricity from your body before repairing ESDs.

Ensure that soldering irons have AC adapter with ground wires and that the ground wires are properly connected.

Use only desoldering tools with plastic tips to prevent static discharge.

Properly shield the work environment from accidental electrostatic discharge before opening packages containing ESDs.

The potential for static electricity discharge may be increased in low humidity environments, such as air-conditioned rooms. Increase the airflow to the working area to decrease the chance of accidental static electricity discharges.

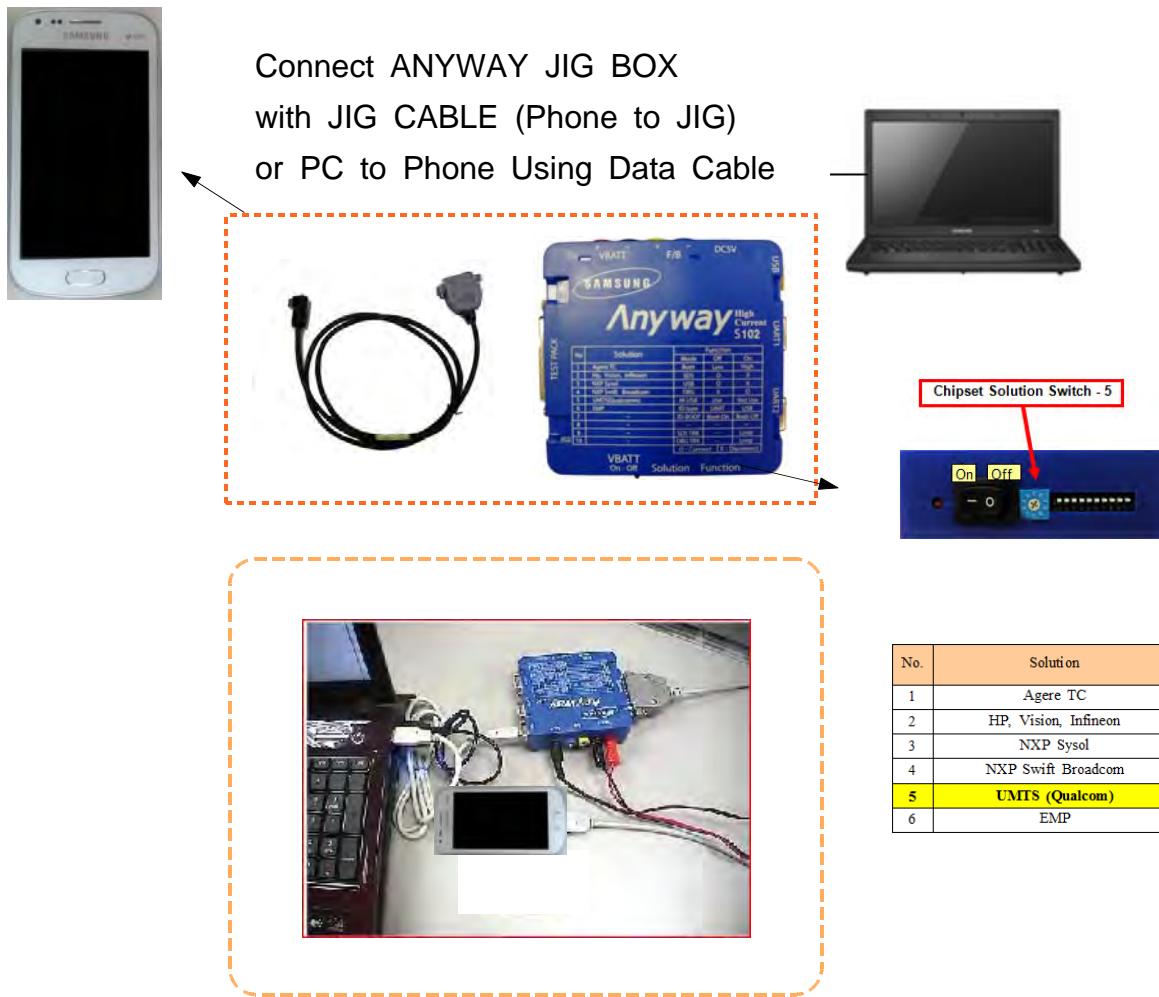
## 6. Level 1 Repair

### 6-1. S/W installation

#### 6-1-1. Required items in order to install S/W

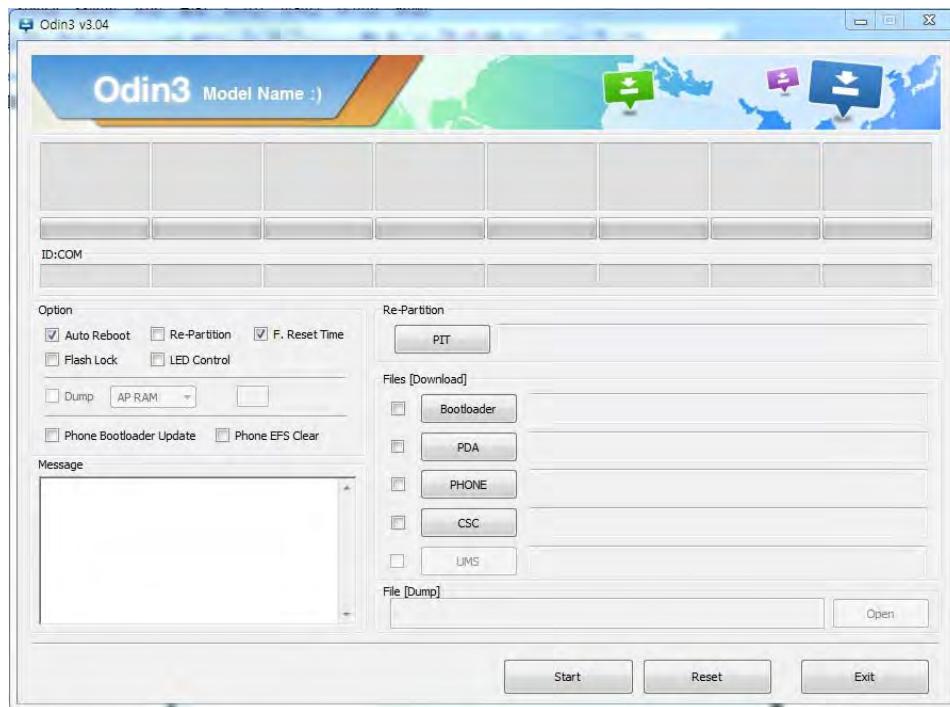
- Installation program: Downloader Program (**Odin3 v3.07.exe**)
- GT-S7580 Mobile Phone
- Data Cable
- JIG BOX (5902-002550)
- JIG Cable (GH39-01291A)
- Adapter (GH99-38251A)
- Serial Cable
- Mobile device specific S/W: Binary files

#### \* Settings



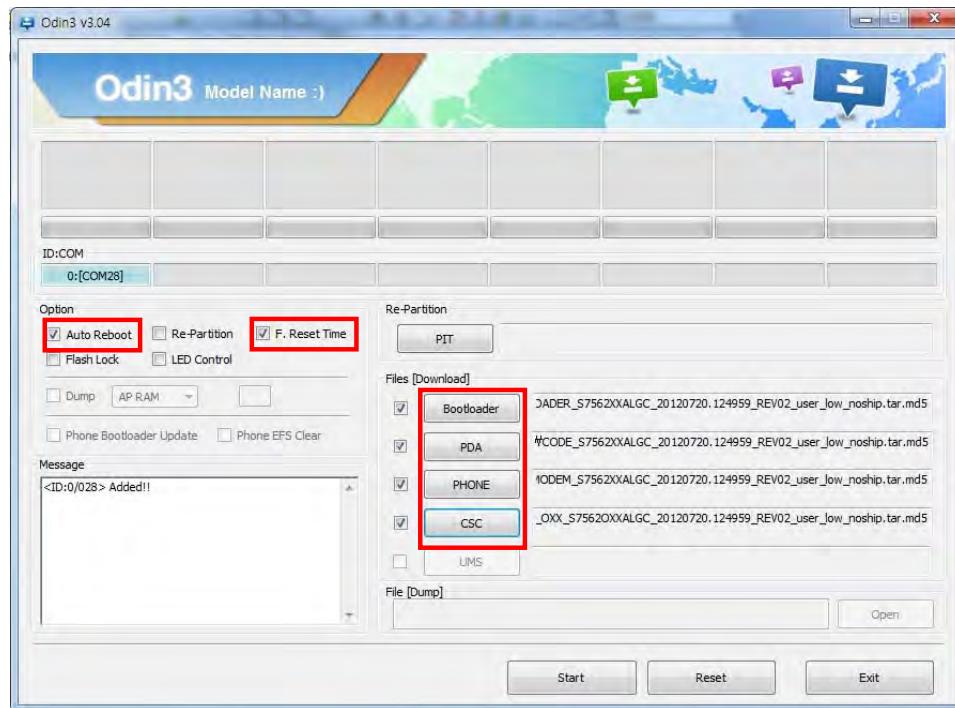
### 6-1-2. S/W Installation Program (Downloader program)

- Open up the S/W Installation Program by executing the "Odin3 v3.07.exe"



1. Enable the check mark by click on the following options,

- Check Auto Reboot, and F. Reset Time
- Check BOOTLOADER, PDA, PHONE, and CSC Files



## 2. Enter into Download Mode

1. Press Volume Down button, OK button, and ON/OFF Button simultaneously.

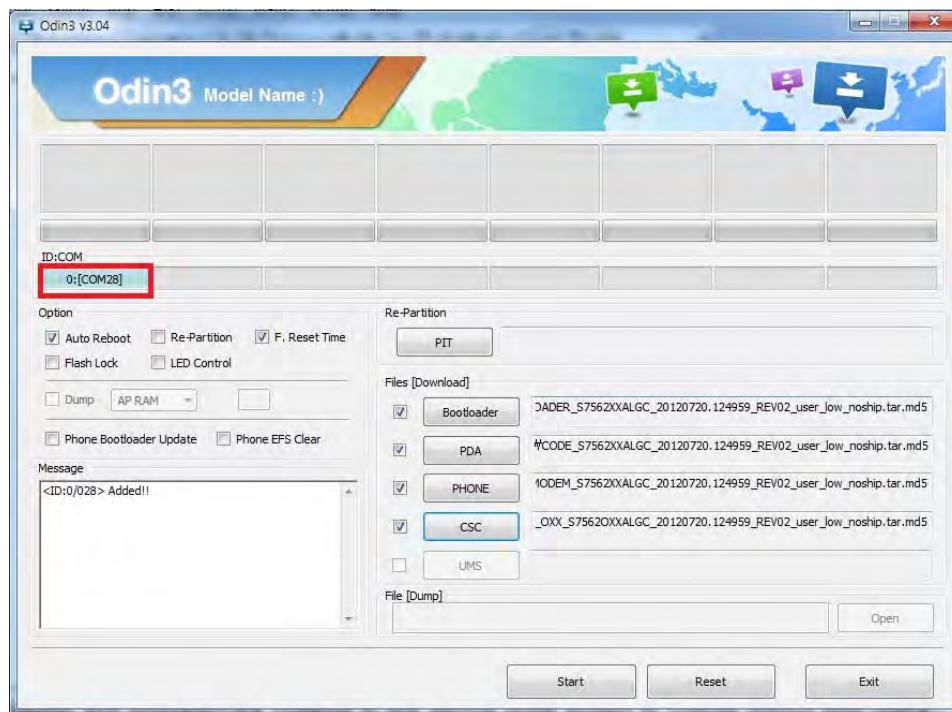


2. After confirm the warning message, Volume UP button press to enter download mode.

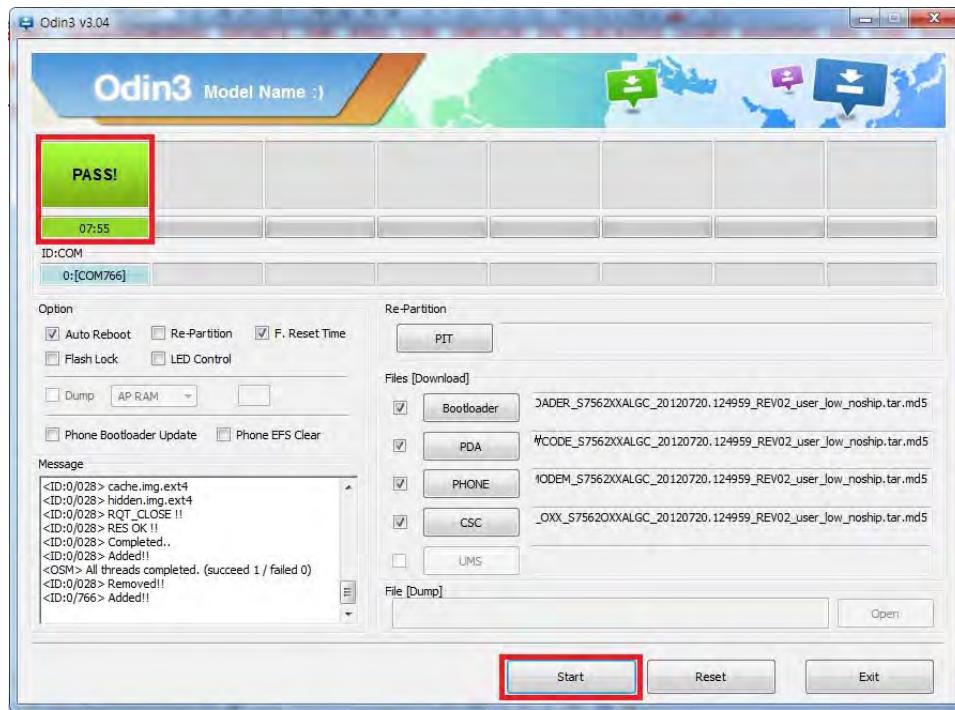


3. Connect the device to PC via Data Cable.

Make sure that the one of communication port [ID:COM] box is pop-up. The device is now connected with the PC and ready to download the binary file into the device.



- Start downloading binary file into the device by clicking Start Button on the screen. the green colored "PASS!" sign will appear on the upper-left box if the binary file has been successfully downloaded into the device.



- Disconnect the device from the Data cable.
- Once the device boots up, you can check the version of the binary file or name by pressing the following code in sequence;

**\*#1234#**

You can perform full reset by pressing the following code in sequence;

**\*2767\*3855#**

## 5. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
401-001110	D700	SDS511Q
0403-001972	ZD707	RDP2031
0406-001361	ZD703	PESD5V0U5BV
0406-001413	ZD705,ZD706	PESD5V0F1BL
0406-001459	VR500,VR501,VR502	RD1301B
0406-001459	VR503,ZD503,ZD505	RD1301B
0406-001459	ZD506,ZD507,ZD510	RD1301B
0406-001459	ZD704	RD1301B
0406-001514	ZD502	RDP1031
0406-001570	ZD701	RDL3021
0505-002388	Q600	RUE003N02
0601-002846	LED700,LED701	19-217UTD/S759/TR8
0601-003355	LED600	A7A4DKDKHP36
1001-001776	U203	RDASW36
1108-000505	UME300	KMK5U000YM-B309
1201-003535	U100	RF7849
1201-003599	U101	RF9831A
1201-003631	U200	MXDLN16S
1202-001128	U501	TC75S201L6X
1203-004776	U1002	RP103K331D-TR
1203-007854	U400	BCM59054
1203-007875	U735	RT8973WSC
1203-007876	U600	TPS61158
1203-008012	U601	SKY81290
1205-004513	U790	SIP32408DNP-T1-GE4
1205-004642	U205	BCM4330LB2KUBG
1205-004649	U202	BCM4752IUB2G
1205-004793	U104	BCM2093A2
1205-004921	UCP300	BCM21664TA0IFDBG
1209-002204	U401	BMC150
1404-001749	R403,V100	NTCG064BF473JT
1405-001346	ZD700	LXES15AAA1-117
2007-000138	R524	RC1005J101CS
2007-000141	R600,R601,R602	RC1005J222CS
2007-000143	R732	RC1005J472CS
2007-000148	R215,R318,R319,R500	RC1005J103CS

## Main Electrical Parts List

2007-000148	R715	RC1005J103CS
2007-000151	R719,R720	RC1005J153CS
2007-000157	R708,R709,R710,R711	RC1005J473CS
2007-000157	R712	RC1005J473CS
2007-000162	R505,R526	RC1005J104CS
2007-000165	R610	RC1005J204CS
2007-000172	R502	RC1005J100CS
2007-000758	R508	RC1005J334CS
2007-001307	R730	RC1005J181CS
2007-001308	R729	RC1005J201CS
2007-001339	R713	RC1005J184CS
2007-003015	R520,R623,R716,R717	MCR01MZP5J2R2
2007-007132	R204	RC1005F153CS
2007-007134	R325	RC1005F393CS
2007-007192	R503,R504	TSR16GJ6R2V
2007-007312	R121	MCR01MZP5F2002
2007-007517	R307	MCR01MZP5F2400
2007-007798	R606	RC1005F0100CS
2007-007875	R400,R402,R407,R629	RK73H1ETP1603F
2007-008055	R509,R510	ERJ1GENJ104X
2007-008483	R791	RMC1/20473JPA
2007-008516	R102,R314,R507,R627	ERJ1GEJ103C
2007-008531	R722,R726	MCR006MZPJ0100
2007-008579	R516	RMC1/20221JPA
2007-008588	R303,R304	MCR006YZPJ222
2007-008774	R792	ERJ1GEJ2R2C
2007-008806	R100,R101	RC0603J510CS
2007-009314	R612	MCR006MZPJ334
2007-009358	R302	RC1005F4751CS
2007-009408	R517,R518,R523	ERJ1GEF222C
2007-010202	R613	RC0603F473CS
2007-010856	R731	RUW2012FR010CS
2203-000233	C103,C107,C213,C356	GRP1555C1H101J
2203-000254	C190,C323,C362,C439	GRP155R71C103K
2203-000386	C525	GRP1555C1H150J
2203-000438	C408,C409	GRP155R71H102K
2203-000714	C318,C325,C326	04025C332KAT2A

2203-000812	C108,C109,C111,C446	GRP1555C1H330J
2203-000812	C500,C532,C533	GRP1555C1H330J
2203-000995	C506,C534,C630	GRP1555C1H470J
2203-001033	C535	GRP155R71E562KD01E
2203-001101	C336	GRP155R71E682KA01E
2203-001153	C526	GRP1555C1H680J
2203-001239	C613,C614	GRP1555C1H820JD01E
2203-002487	C324,C508,C531	CL05B472KA5NNNC
2203-002709	C310,C311,C312,C327	C1005Y5V1C104ZT
2203-002709	C328,C329,C338,C339	C1005Y5V1C104ZT
2203-002709	C340,C711,C712	C1005Y5V1C104ZT
2203-005052	C1000,C1001,C715	GRP1555C1H3R3CZ01E
2203-005056	C116	GRP1555C1H6R8CZ01E
2203-005234	C167	GRP1555C1H1R2CZ01E
2203-005383	C238	CL05C070JBNC
2203-005444	L221	GRP1555C1H3R0B
2203-005450	C101	GRP1555C1H5R6BZ01E
2203-005481	C300,C322	GRP155R71A473KA01E
2203-005552	C1003,C1004	GRP1555C1H2R2BZ01E
2203-005682	C1019,C157,C163,C509	GRP0335C1E330JD01E
2203-005682	C510,C516,C518,C713	GRP0335C1E330JD01E
2203-005717	C624	GRP0335C1E270JD01E
2203-005725	C205,C207	GRP0335C1E220JD01E
2203-005789	C127	ECJZEC1E0R5B
2203-005792	C244	CL03C1R5CA3GNNC
2203-005806	C222	GRP033R71C102KD01E
2203-006048	C231,C301,C346,C348	GRM155R71A104K
2203-006048	C351,C352,C353,C354	GRM155R71A104K
2203-006048	C355,C363,C442,C445	GRM155R71A104K
2203-006048	C507,C726,C727	GRM155R71A104K
2203-006120	C240,C254	GRP033R71C221KD01E
2203-006121	C215	GRM33X7R471K16PT
2203-006137	C321	CL05B223KONC
2203-006208	C416,C417,C418,C420	CM105X5R475M06AT
2203-006208	C421,C430,C431,C602	CM105X5R475M06AT
2203-006257	C341,C342	GRM155R60J474KE19E
2203-006260	C314,C316,C347,C361	GRM155R61A224KE19E

## Main Electrical Parts List

2203-006305	C216,C217,C218,C228	CM03CG100J25AH
2203-006305	C229,C233,C239,C241	CM03CG100J25AH
2203-006305	C243	CM03CG100J25AH
2203-006399	C320,C337,C503,C504	GRM155R60J105KE19D
2203-006399	C522,C530,C636,C637	GRM155R60J105KE19D
2203-006399	C638,C704,C710	GRM155R60J105KE19D
2203-006423	C227,C236,C237,C283	GRM33X5R104K6.3
2203-006423	C305,C607,C609	GRM33X5R104K6.3
2203-006556	C122,C129,C133,C160	GRM0335C1E470JD01D
2203-006556	C166,R608,R609	GRM0335C1E470JD01D
2203-006562	C306,C307,C308,C330	CV05X5R105K10AH
2203-006562	C331,C332,C600,C601	CV05X5R105K10AH
2203-006562	C603,C702,C703	CV05X5R105K10AH
2203-006665	C110	GRM0335C1E2R2CD01D
2203-006668	C502,C505	GRM033R61A222K
2203-006681	C792	GRM155F51E104ZA01D
2203-006815	C791	GRM033R70J682K
2203-006824	C411	CV105X5R475K10AT
2203-006844	C334,C335	CV05X5R474K10AH
2203-006846	C115	ECJZEC1E2R0B
2203-006872	C206,C718	GRM155R60J225ME15D
2203-006890	C317,C319,C425	CV105X5R106M06AT
2203-006896	C123,C124,C271	GRM033R71E121KA01D
2203-006978	C709,C721	GMK107BJ105KA-T
2203-006979	C119,C120,C270	CL03B103KP3NNNC
2203-007210	C519,C527	CV03X5R224K06AH
2203-007269	C413	CL21A226MPCLRNC
2203-007270	C117	CL10A106KP8NNNC
2203-007271	C302,C309,C313,C333	CL05A225KP5NSNC
2203-007271	C343,C344,C345,C350	CL05A225KP5NSNC
2203-007271	C357,C400,C412,C424	CL05A225KP5NSNC
2203-007271	C427,C428,C432,C433	CL05A225KP5NSNC
2203-007271	C435,C436,C437,C447	CL05A225KP5NSNC
2203-007271	C608	CL05A225KP5NSNC
2203-007279	C611,C717	CV105X5R106M10AT
2203-007317	C315	CV05X5R475M06AH
2203-007342	C514,C790	CV05X5R225M10AH

2203-007369	C511	CL03A105KQ3CSNH
2203-007385	C303,C304,C390	CL05A106MR5NRNC
2203-007392	C102,C414,C415,C423	CL05A225KO5NQNC
2203-007392	C440,C441,C443	CL05A225KO5NQNC
2203-007393	C153,C612	CL05A475KP5NRNC
2203-007449	C211,C225,C604,C605	CL03A105MQ3CSNH
2203-007449	C606	CL03A105MQ3CSNH
2203-007634	C615	CL21A105KBCLNNC
2203-007775	C220,C221,C223,C224	CV05X5R475M10AH
2203-007775	C226,C260,C407,C426	CV05X5R475M10AH
2203-007775	C434,C438	CV05X5R475M10AH
2203-007795	C401,C402,C403,C404	CL05A106MP5NUNC
2203-007795	C405,C406	CL05A106MP5NUNC
2203-007796	C145,C146,C147,C148	CL03A105MP3NSNC
2203-007796	C149,C150,C151,C152	CL03A105MP3NSNC
2203-007796	C158,C162,C164,C200	CL03A105MP3NSNC
2203-007796	C201,C202,C203,C204	CL03A105MP3NSNC
2203-007796	C212	CL03A105MP3NSNC
2203-007809	C635	GRM155R71H223KA12
2203-008094	C716	CL03A473KP3NNNC
2203-008095	C219,C358,C359	CL03A224KP3NNNC
2203-008097	C165,C209,C210,C242	CL03A104KA3NNNC
2203-008242	C159,C230	CL03A225MQ3CRNC
2203-008243	C410	CL03A103KA3NNNC
2203-008394	C125,C629,C631,C632	CL03C8R2BA3GNNC
2203-008394	C633,C634	CL03C8R2BA3GNNC
2703-002198	L116	CIH05T10NJNC
2703-002199	L100,L103	CIH05T12NKNC
2703-002200	L114	CIH05T18NJNC
2703-002203	L102	CIH05T15NJNC
2703-002204	C179	CIH05T22NJNC
2703-002205	L111,L119	CIH05T3N9KNC
2703-002206	L223	CIH05T39NJNC
2703-002208	L1006	CIH05T2N2SNC
2703-002267	L1000,L1001	CIH05T4N7SNC
2703-002268	L113,L118	CIH05T8N2JNC
2703-002269	L106	CIH05T56NJNC

## Main Electrical Parts List

2703-002281	L107,L115	CIH05T5N6SNC
2703-002308	L701	CIH05T68NJNC
2703-002369	L109	CIH05T1N5SNC
2703-002858	L101	HK0603-4N7S-T
2703-002903	L112,L222	LLV0603-F10NJ
2703-003485	L602	CIG22L100MNE
2703-003545	L215	LQM2MPN2R2NG0
2703-003716	L505	LQG15HSR18J02D
2703-003878	L508	CIG10WR27MNC
2703-003913	L400	CIG22H2R2MNE
2703-004018	L123	LQP03TN5N6J02D
2703-004032	L213	LQP03TN3N9B02D
2703-004034	L117,L205	LQP03TN1N0B02D
2703-004035	C286	LQP03TN3N3B02D
2703-004185	L401,L402,L403,L404	CIG21LR47MNE
2703-004185	L405	CIG21LR47MNE
2703-004311	L406	CIG22HR47MAE
2703-004366	L201	LQP03TG6N8J02D
2703-004371	L121	LQP03TG10NJ02D
2703-004599	L604	LQM2HPN1R0MGHLS3
2801-005254	OSC400	FC-135(12.5PF)
2801-005262	OSC100	SQ2D02600B2QBG
2805-001106	OSC200	TG-5006CJ-10H
2904-002030	F101	SFWG42MB002
2904-002111	F100	SFH881PA002
2904-002132	F200,F201	SFHG89DA002
2909-001324	F202	TBF-1608-245-R7
2910-000147	DUF101	SAYRF1G95HJ0F0A
2910-000185	DUF100	SFX897UZ102
3003-001138	MIC500	SPU0410LR5H-QB
3301-001438	L225	BLM15BB750SN1D
3301-001534	L600	BLM15AG121SN1D
3301-001659	L210	BLM15AG601SN1
3301-001876	L502,L503,L506,L512	BLM15BD102SN1D
3301-001876	L513,L702	BLM15BD102SN1D
3301-001885	L507,L510,L511,L603	BLM15HD182SN1D
3301-002035	L700	BLM18KG121TN

3301-002063	L601	BLM18HE152SN1D
3301-002078	L128,L500,L501,L605	BLM15AX102SN1D
3301-002078	L606	BLM15AX102SN1D
3301-002238	L200	BLM03AX121SN1D
3301-002248	L206,L207,L208,L209	BLM03AX241SN1D
3404-001152	TACT700,TACT701	LS10N2-T
3705-001731	RFS100	KMS-560-002-BEF
3708-002222	HDC601,HDC602	FH26-21S-0.3SHBW
3709-001685	SIM700	KP09YS-12S-1.27SF
3709-001734	SD700	DM3NS-SF-PEJ
3711-007107	HDC600	AXE630124AW1
3711-007478	HDC500,HDC501	BM10SB-10DP-0.4V
3711-008286	BTC700	KQ03SL4-3R
3712-001375	ANT100,ANT101,ANT200	HJ-ICT-06Y
3712-001375	ANT201,HOME700	HJ-ICT-06Y
3712-001375	HOME701,MOT500	HJ-ICT-06Y
3712-001375	MOT501	HJ-ICT-06Y
3722-003708	IFC700	GU07G-7P-SB-E2000
GH96-06859A	LCD ASSY	TOUCH SCREEN ASSY

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

## 7. Level 2 Repair

### 7-1. Disassembly

1

- 1) Unscrew the 8 points.



2

- 1) Disassemble the REAR CASE like below picture.  
2) Lift the REAR CASE from down-side



※ Caution

- 1) Be care of scratch and molding damage.  
(Torque  $1.1 \pm 0.1$  kgf.cm)

3

- 1) Unscrew the 1 point from the board.



4

- 1) Detach RCV module FPCB Connector from the board.



※ Caution

- 1) Be care of scratch and clips damaged.  
(Torque  $1.1 \pm 0.1$  kgf.cm)

※ Caution

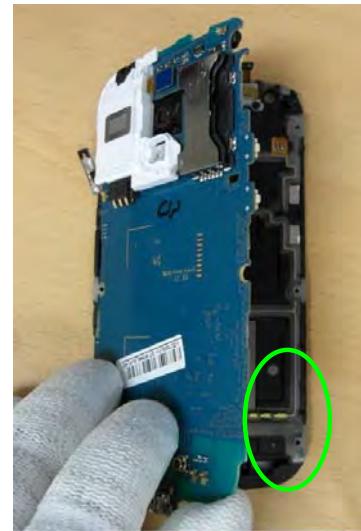
- 1) Be care of scratch and molding damage.  
2) Be care of damage to the FPCB.

**5**

- 1) Detach the Power Key FPCB from the board.

**6**

- 1) Detach the PBA from the board.



**※ Caution**

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

**7**

- 1) Detach the Front Ass'y FPCB Connector from the front.

**8**

- 1) Unscrew the 1 point from the board
- 2) Detach the RCV Module from the board.



**※ Caution**

- 1) Be care of damage to the LCD FPCB.

**※ Caution**

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

## 7-2. Assembly

- 1**
- 1) Attach RCV module to the board.
  - 2) Screw 1 point to the board



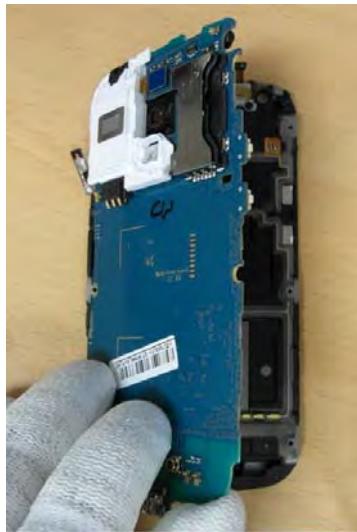
- 2**
- 1) Attach the Front Ass'y FPCB Connector to the PBA.



※ Caution

- 1) Be care of damage to Bracket.

- 3**
- 1) Attach the PBA to the board.



※ Caution

- 1) Be care of damage to LCD FPCB.

- 4**
- 1) Attach the Power Key FPCB to the board.



※ Caution

- 1) Be care of damage to PBA.

※ Caution

- 1) Be care of damage to Powerkey FPCB

**5**

- 1) Attach the RCV module FPCB Connector to the PBA

**6**

- 1) Screw 1 point to the board



**※ Caution**

- 1) Be care of damage to FPCB.

**※ Caution**

- 1) Be care of scratch and clips damaged.  
(Torque 1.1 ± 0.1 kgf.cm)

**7**

- 1) Attach the Rear Case

**8**

- 1) Screw 8 points to the board.



**※ Caution**

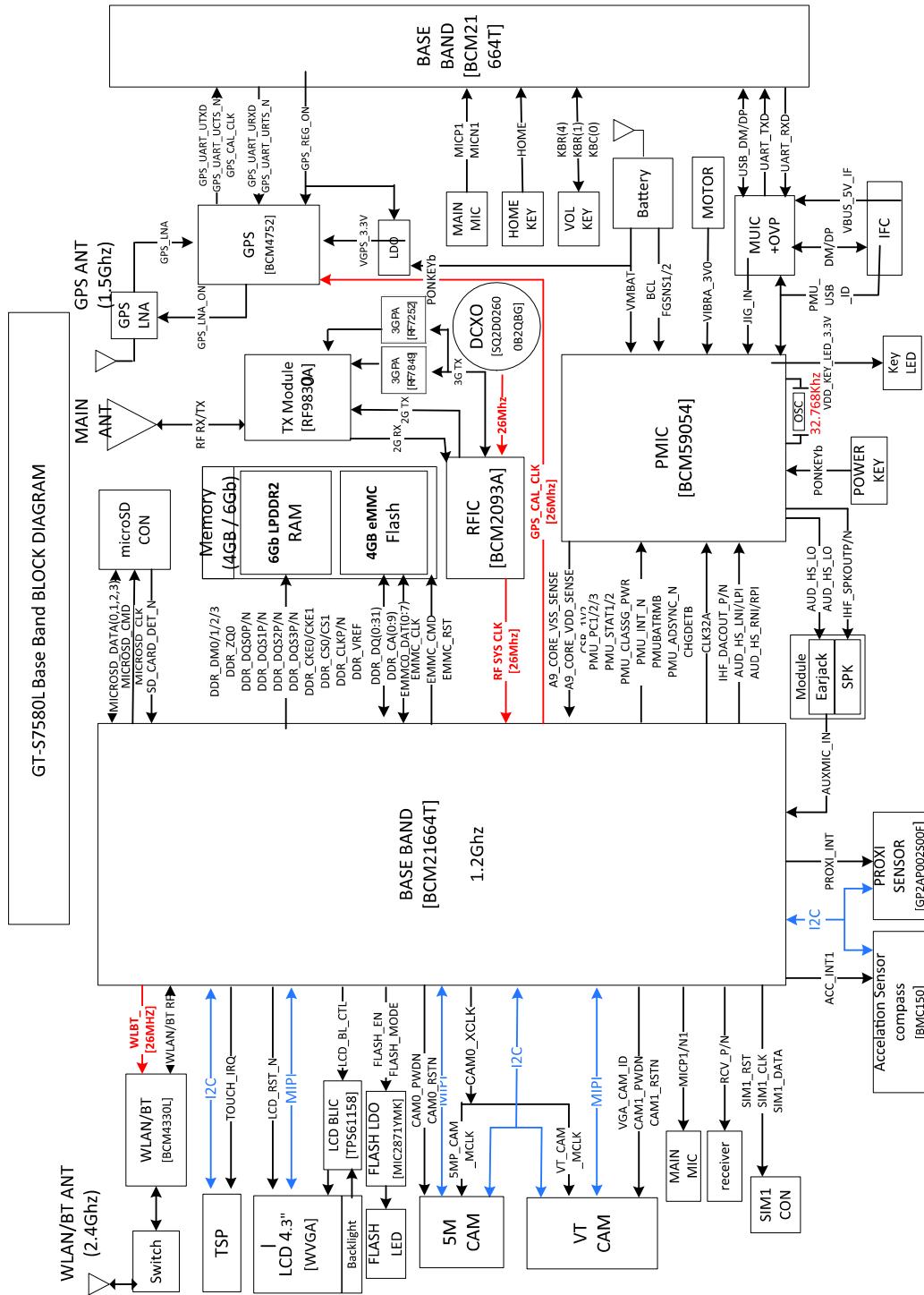
- 1) Be care of scratch and molding damage.  
2) Be care of PBA damage.

**※ Caution**

- 1) Be care of scratch and molding damage.  
(Torque 1.1 ± 0.1 kgf.cm)

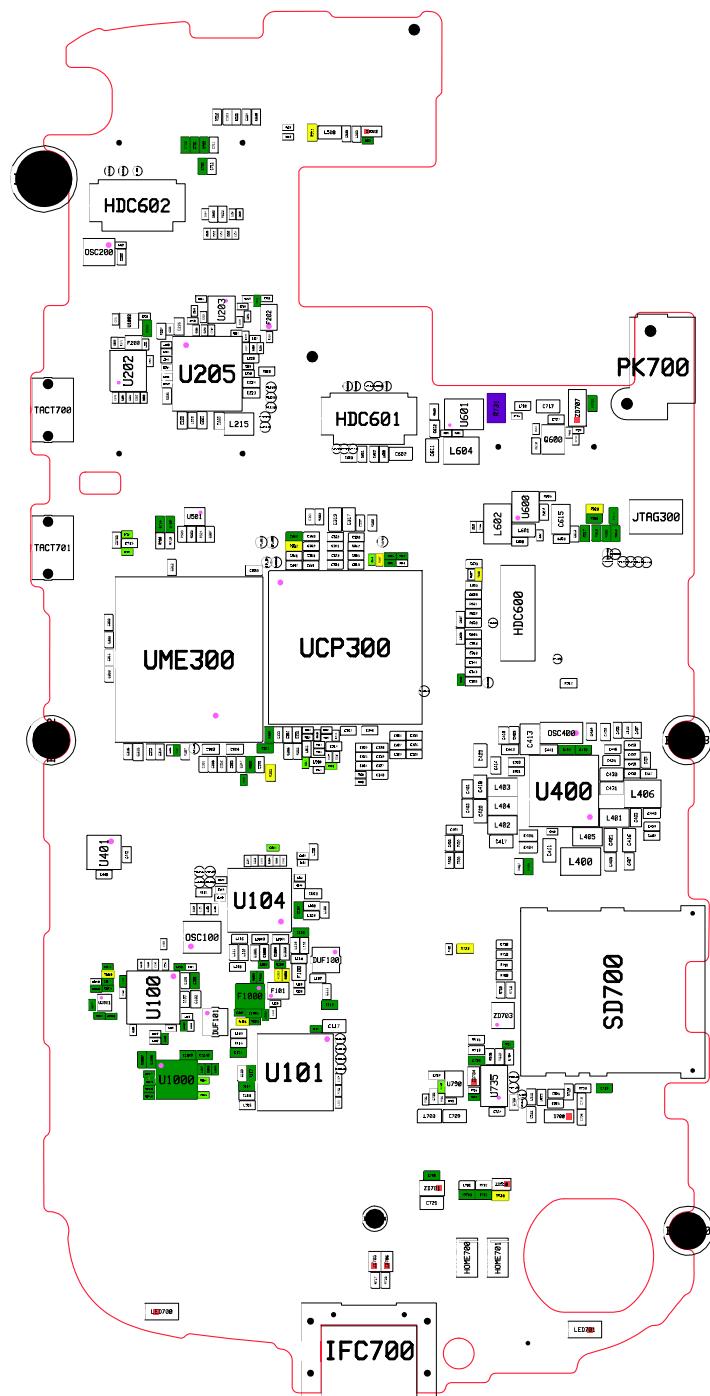
## **8. Level 3 Repair**

## 8-1. Block Diagram

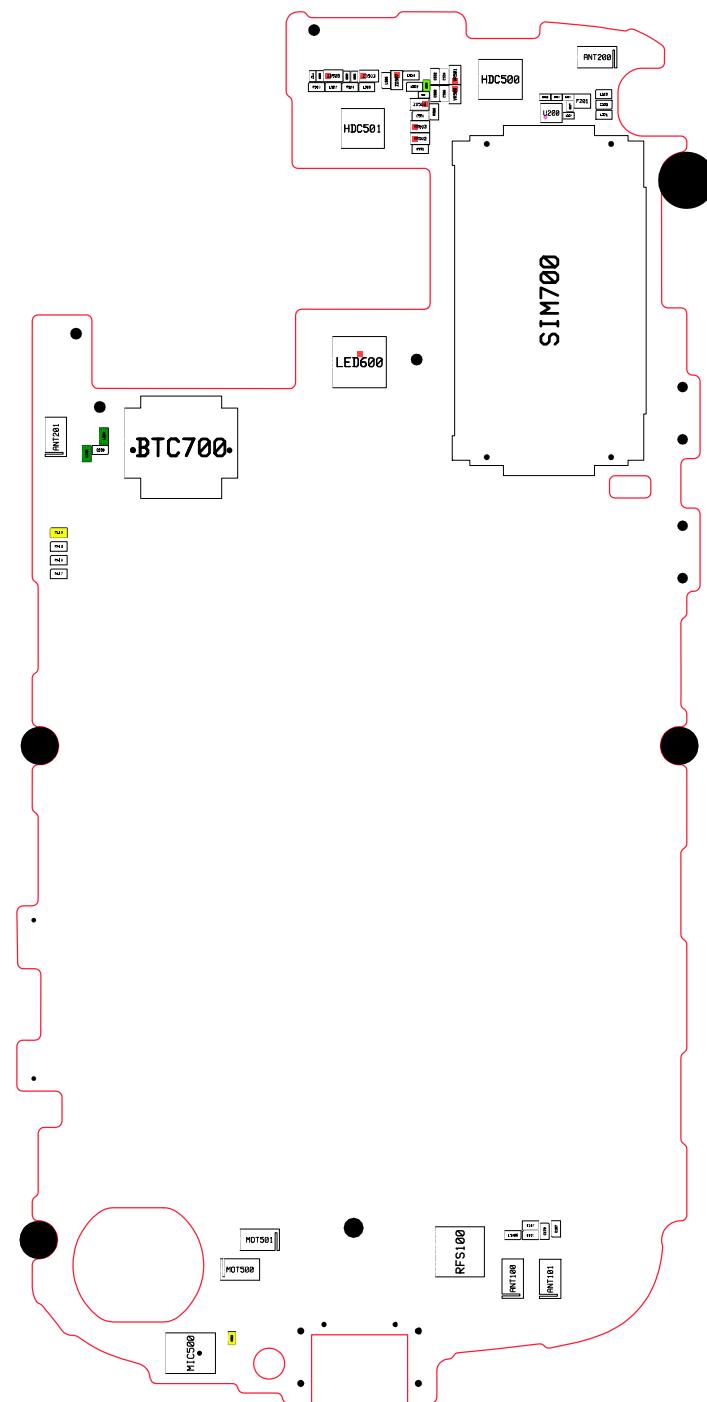


## 8-2. PCB Diagrams

## 8-2-1. Top

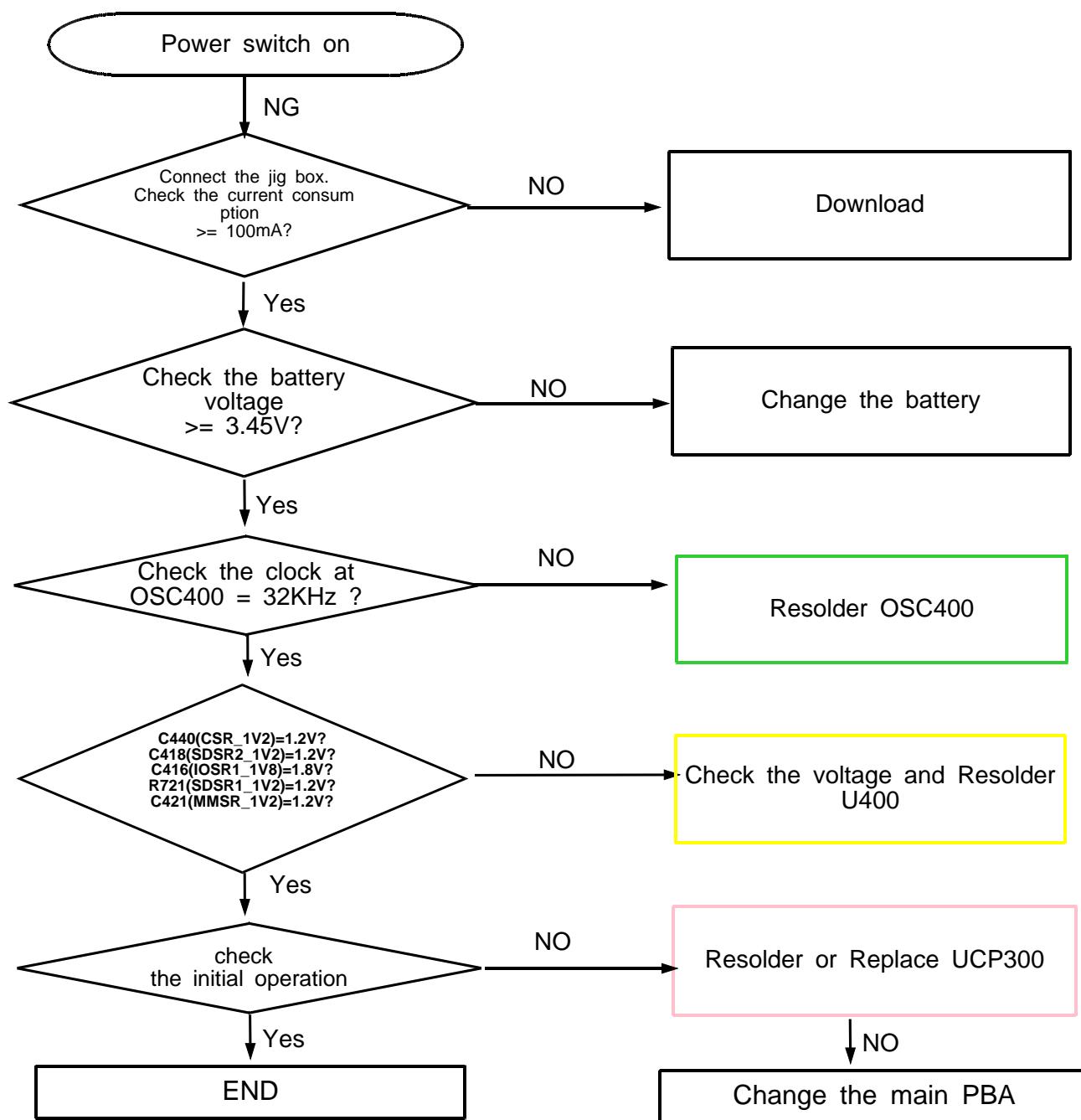


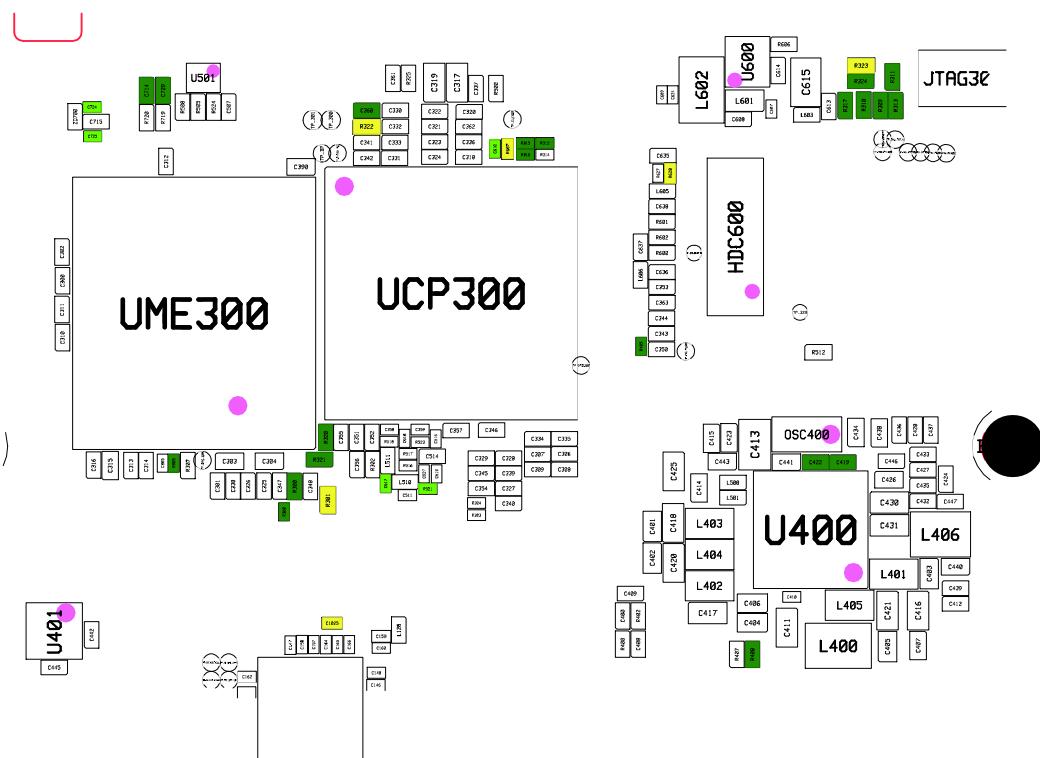
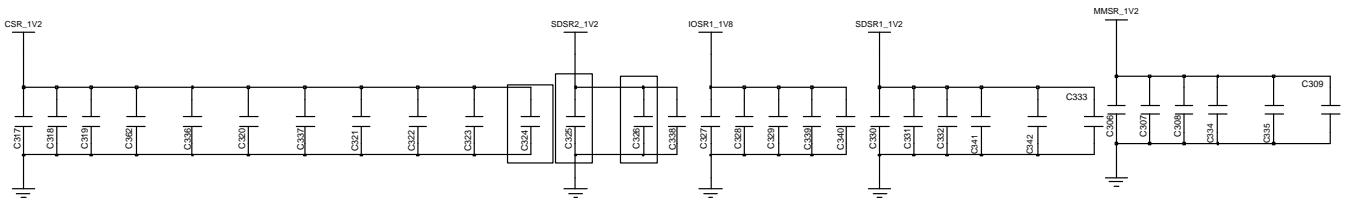
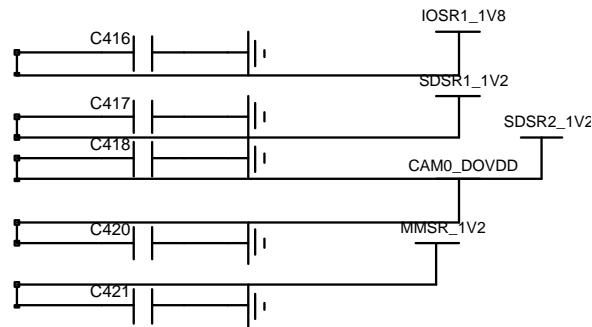
## 8-2-2. Bottom



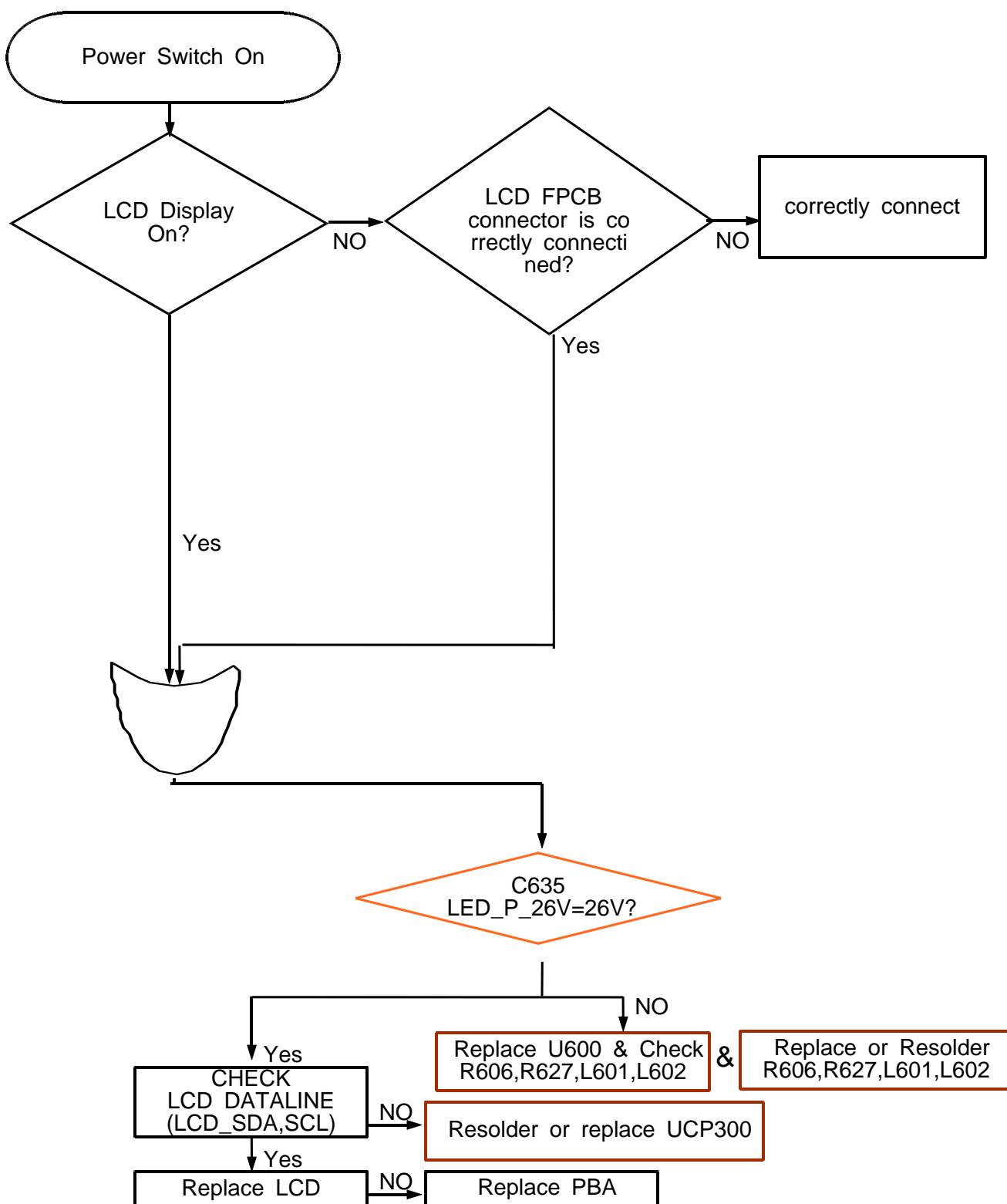
## 8-3. LOGIC

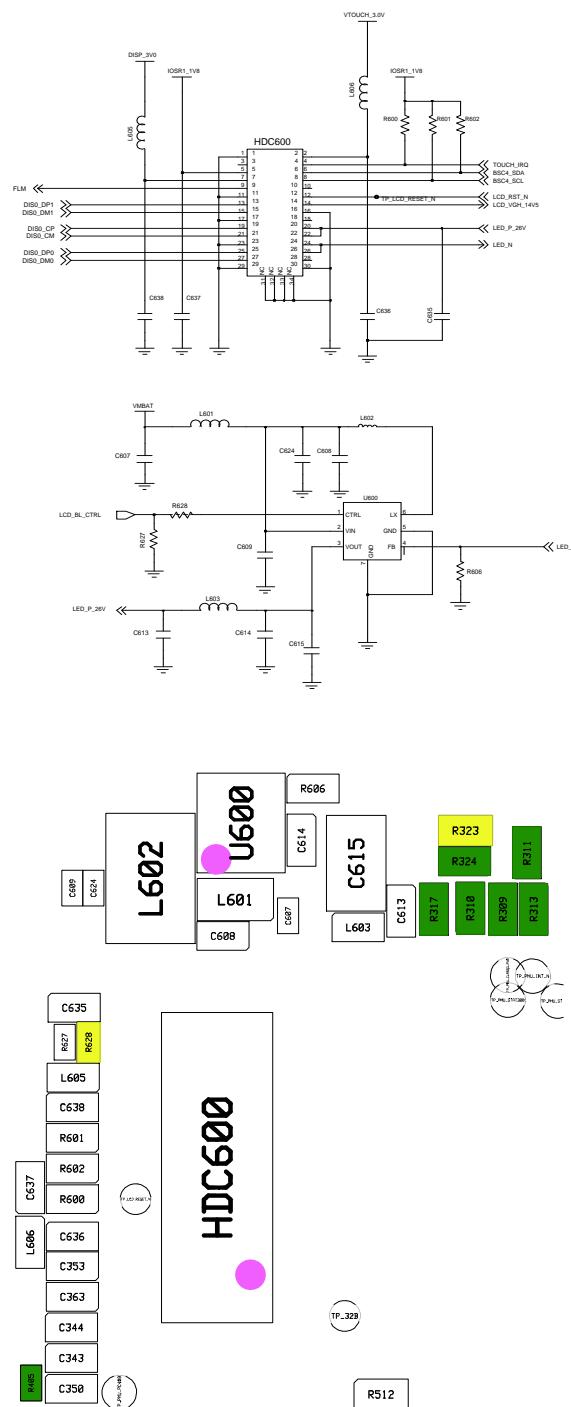
## 8-3-1. Power On



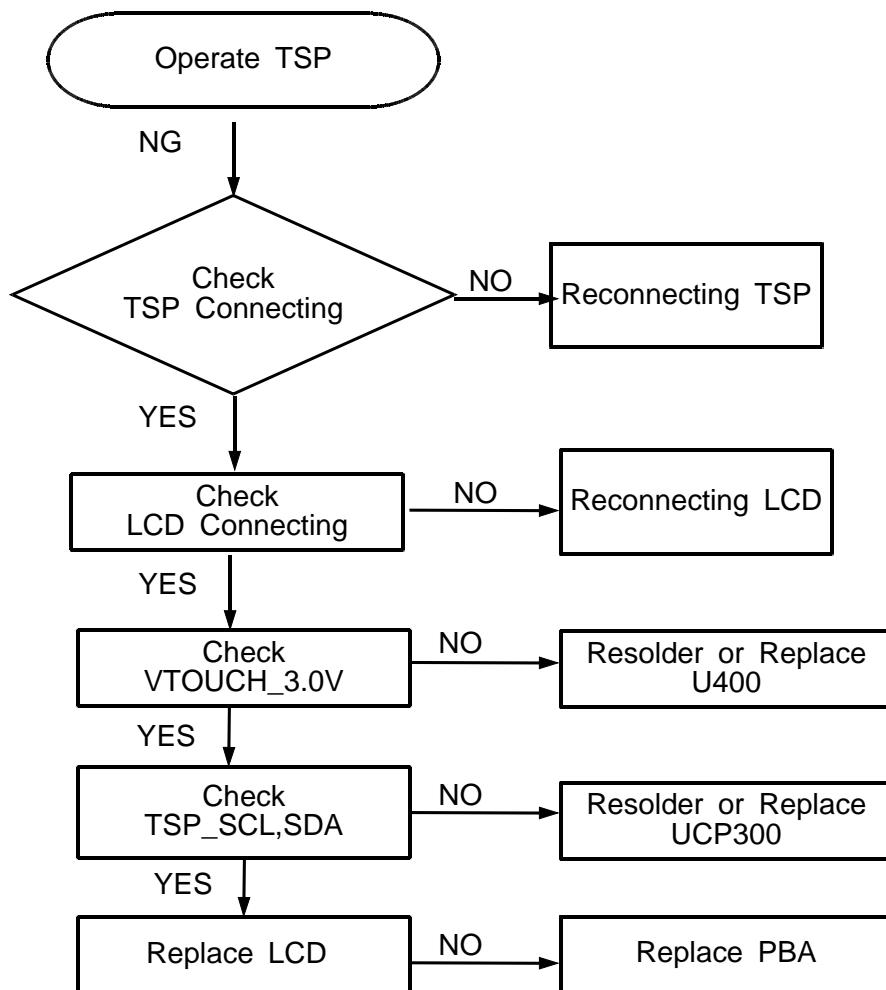


## 8-3-2. LCD Working



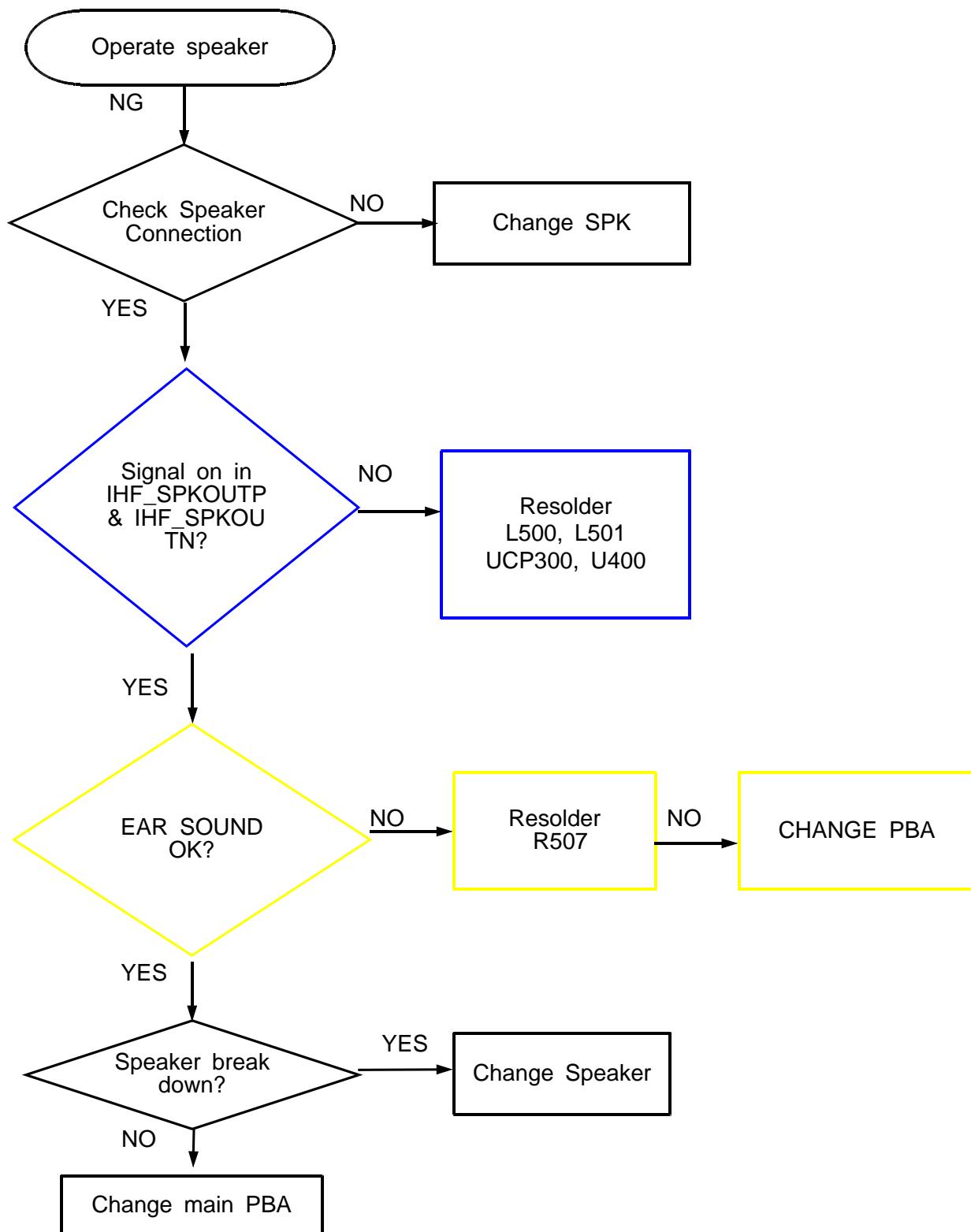


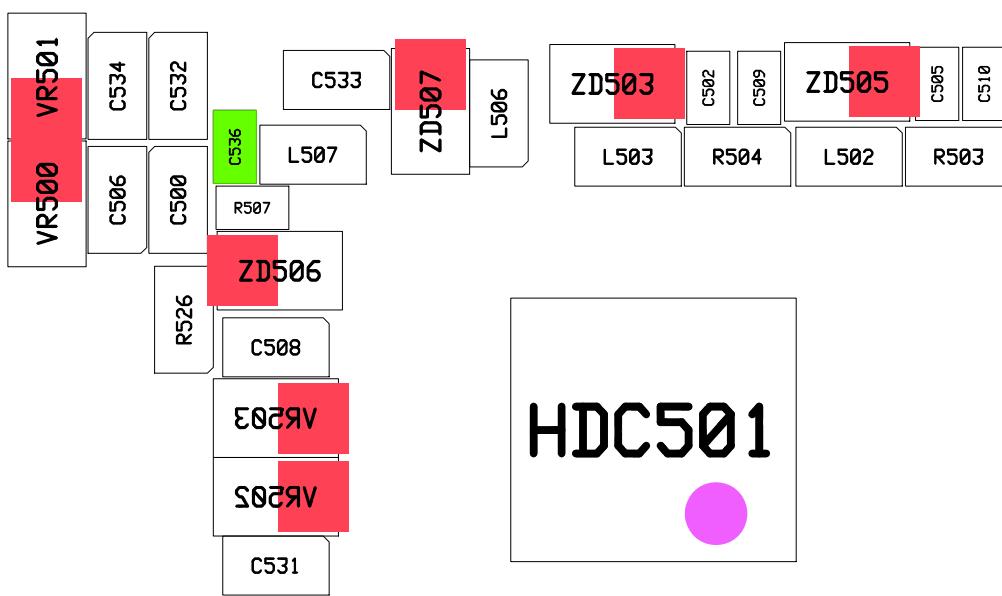
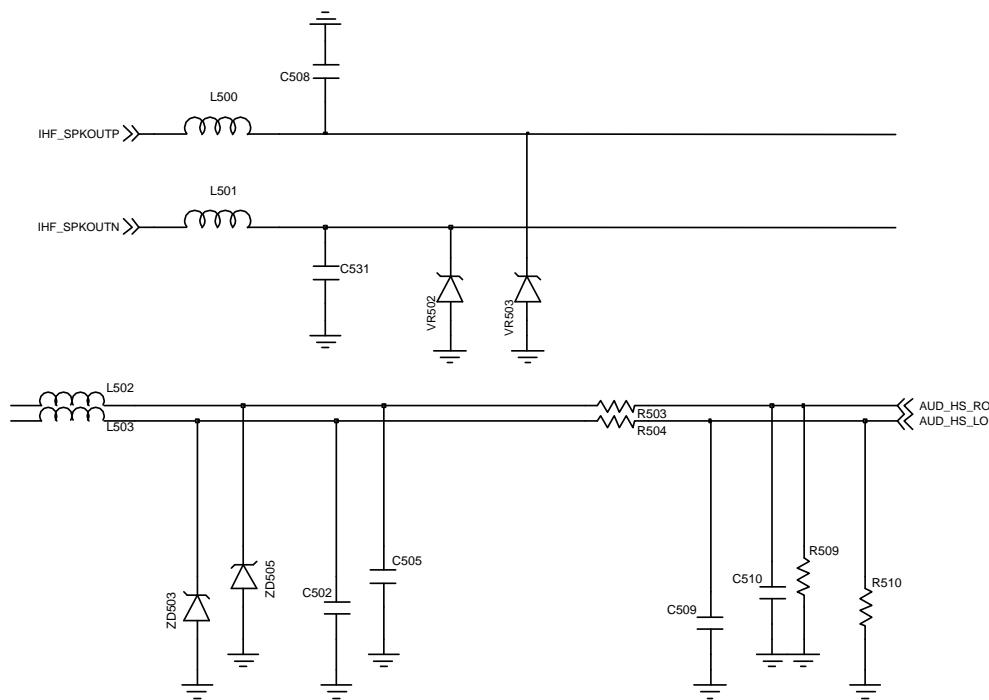
## 8-3-3. TSP



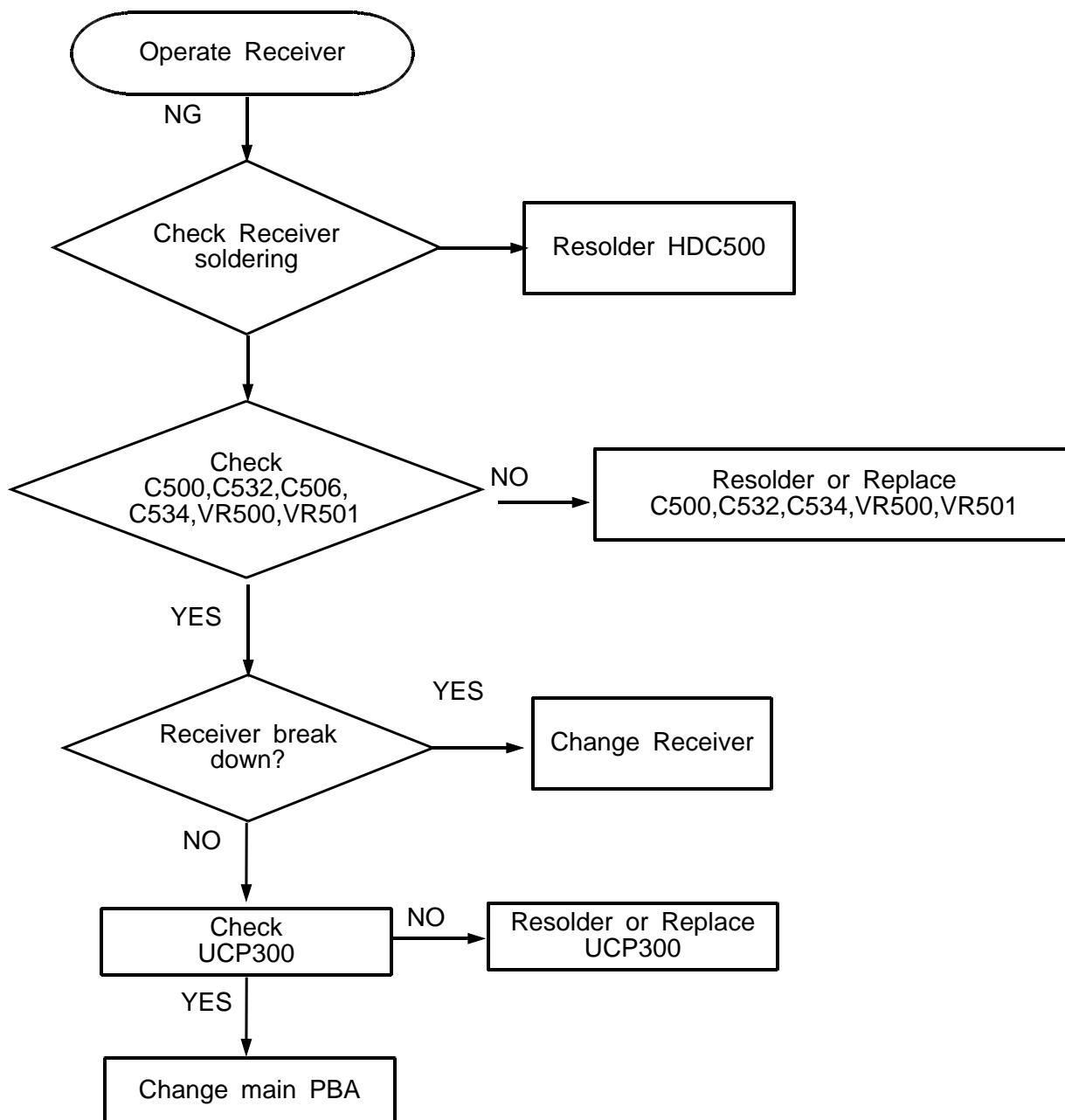
## 8-3-4. Audio Working

- Speaker Working

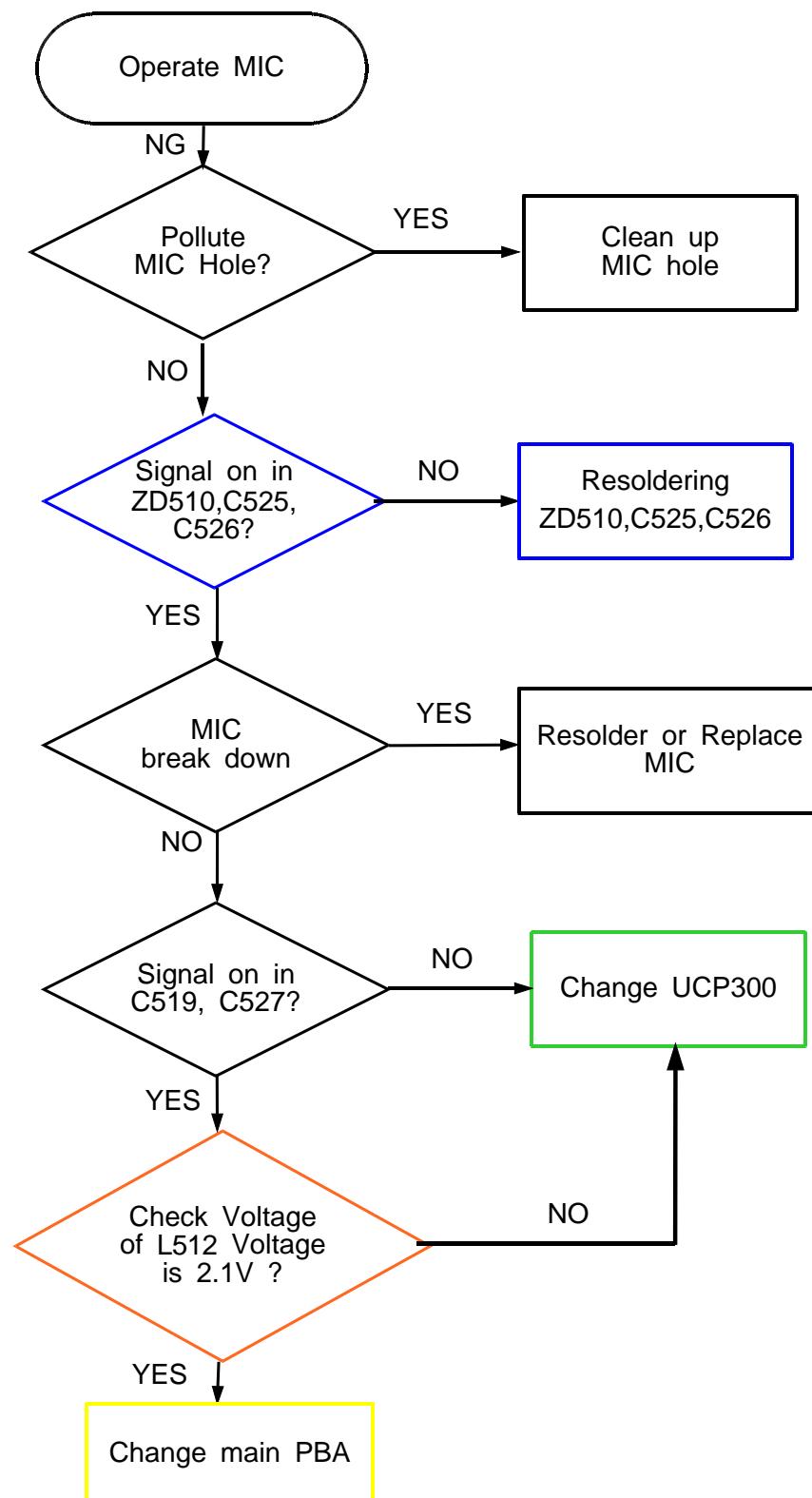


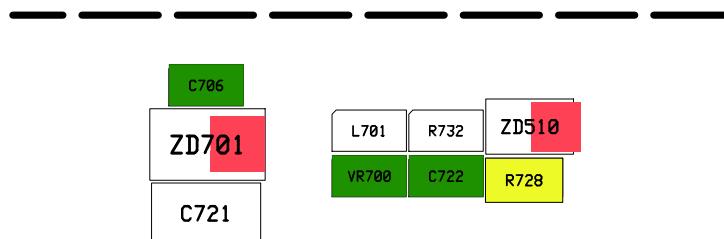
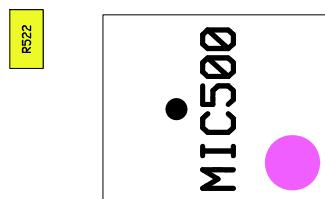
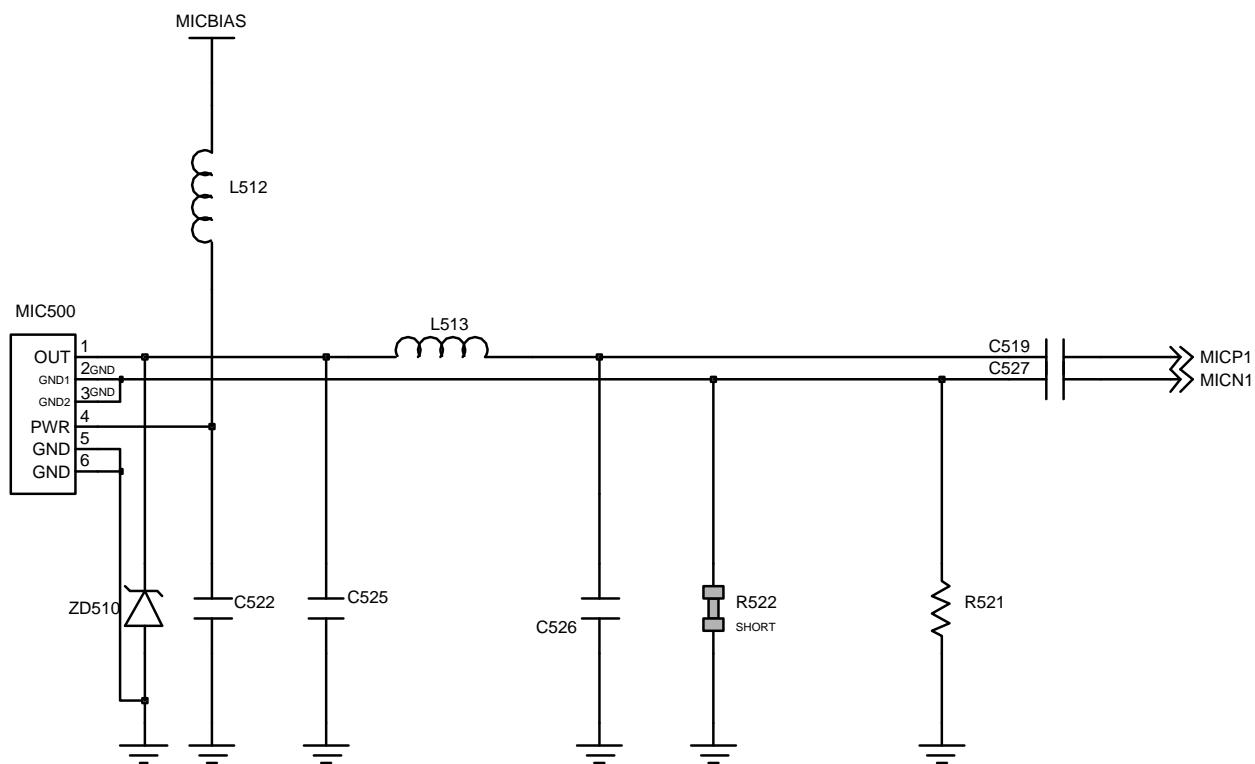


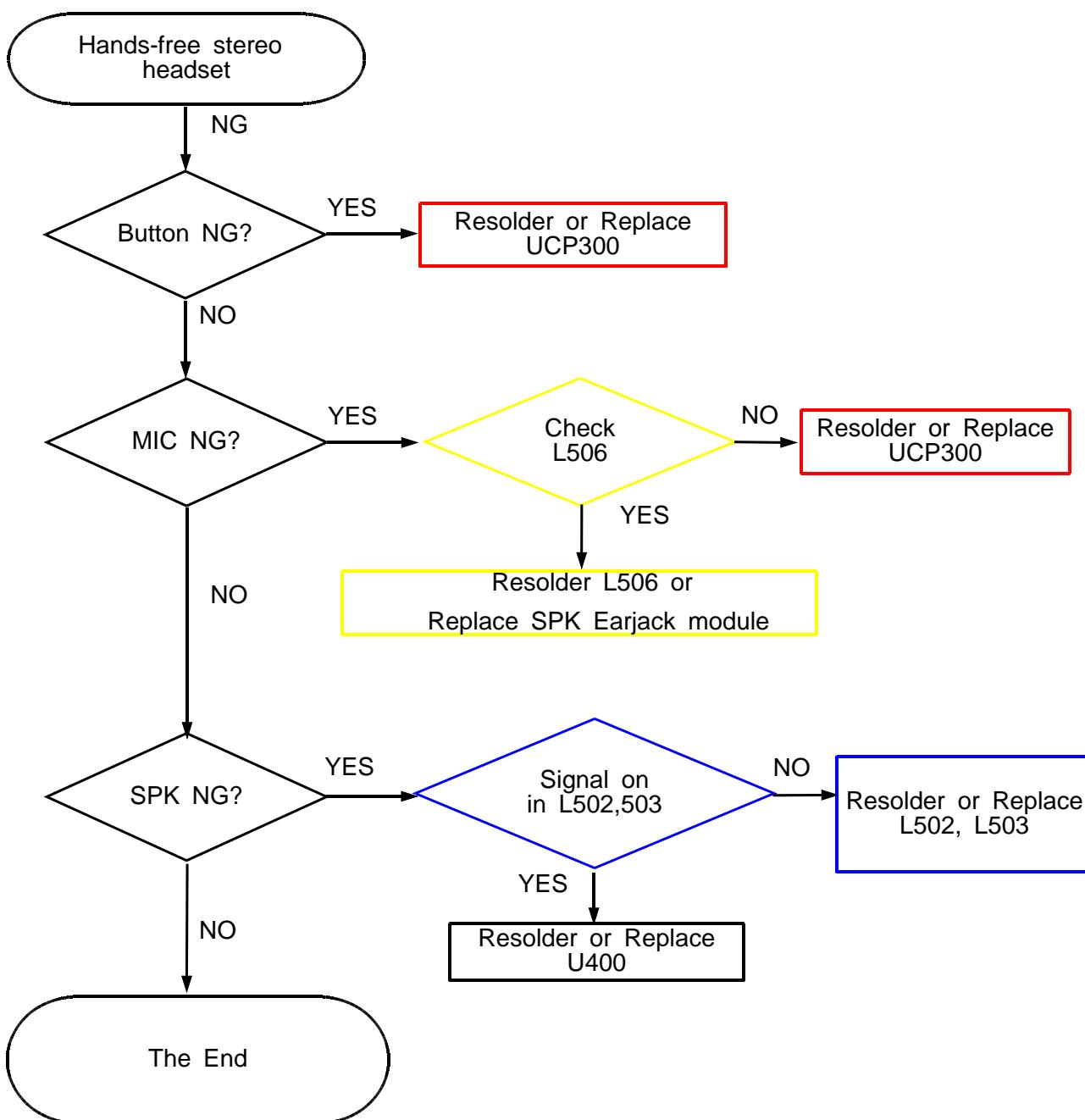
- Receiver Working

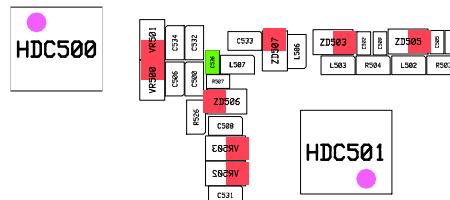
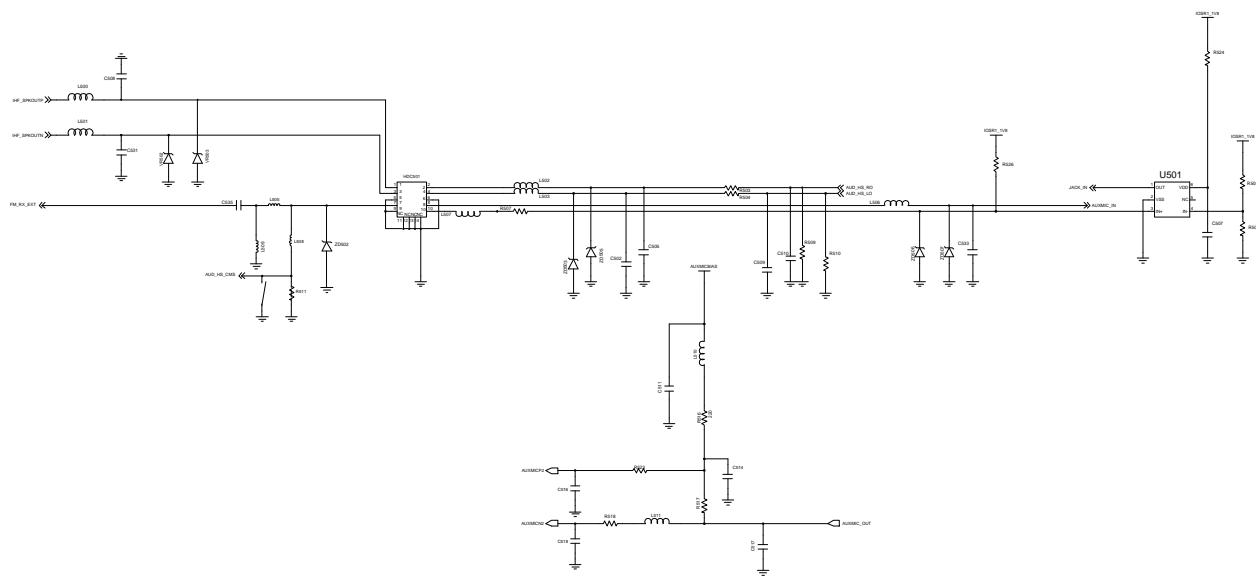


- MIC Working



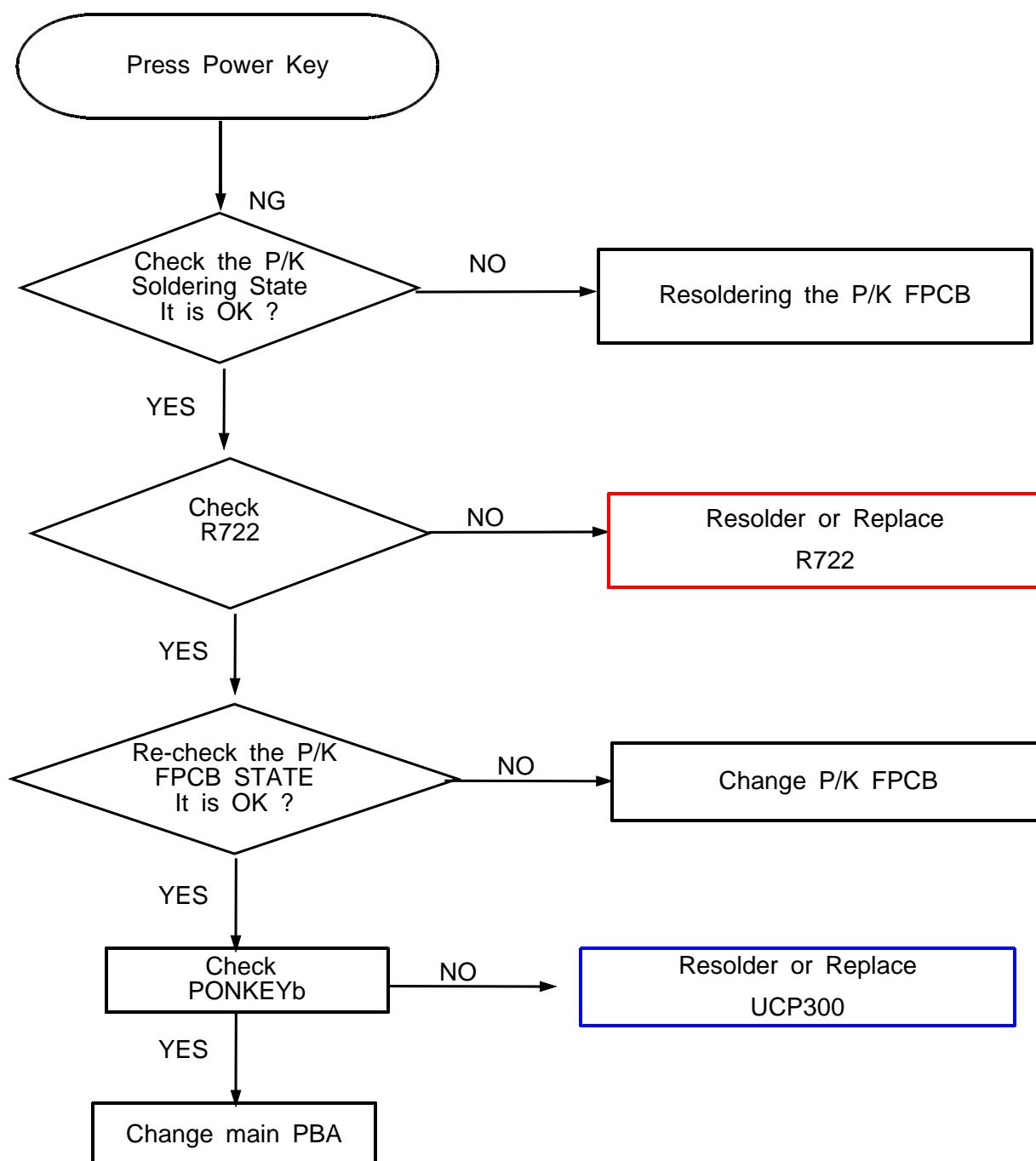


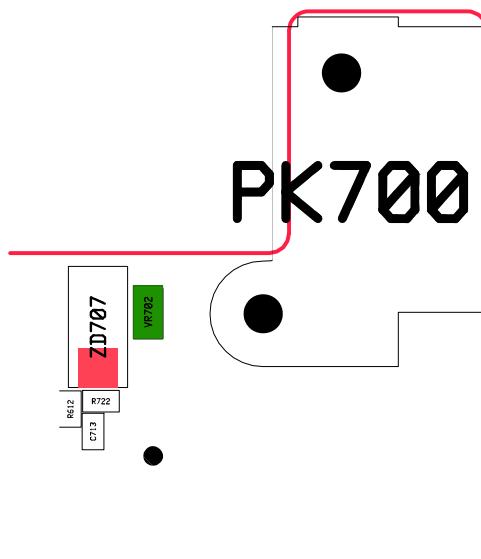
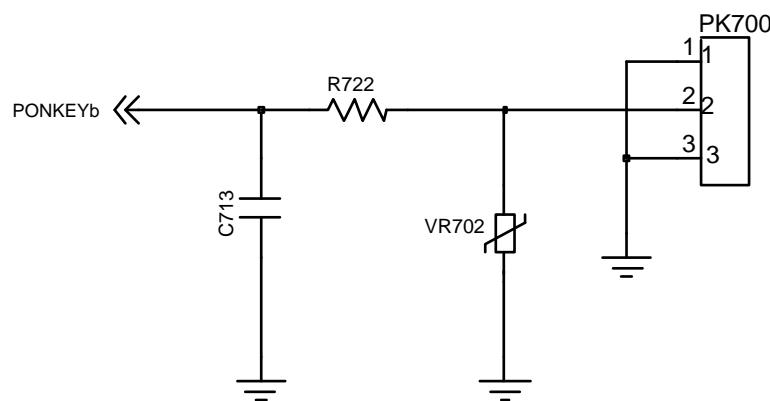
■ Stereo Headset Working



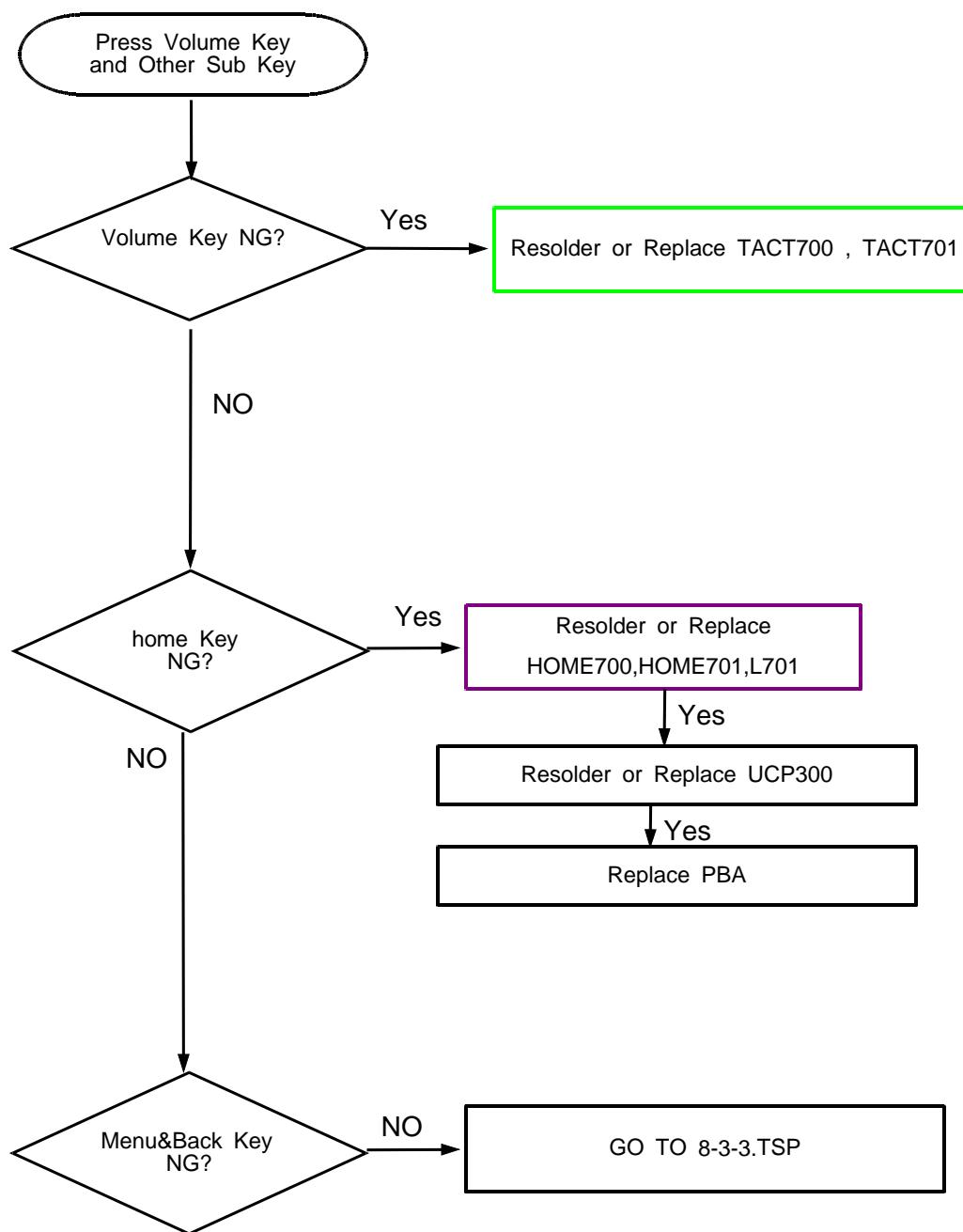
## 8-3-5. KEY Working

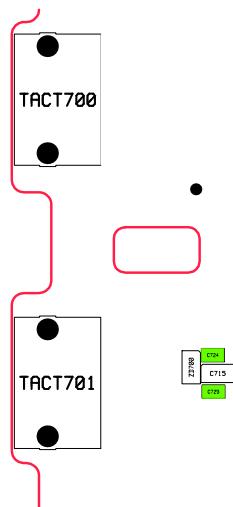
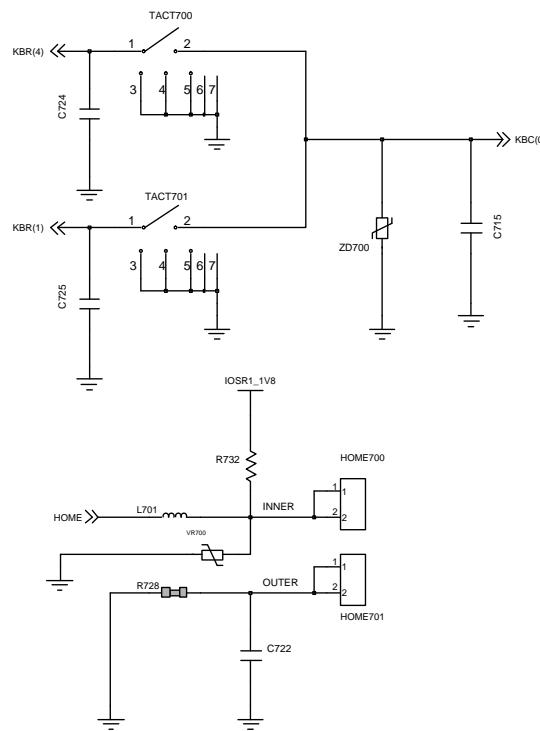
- Power KEY



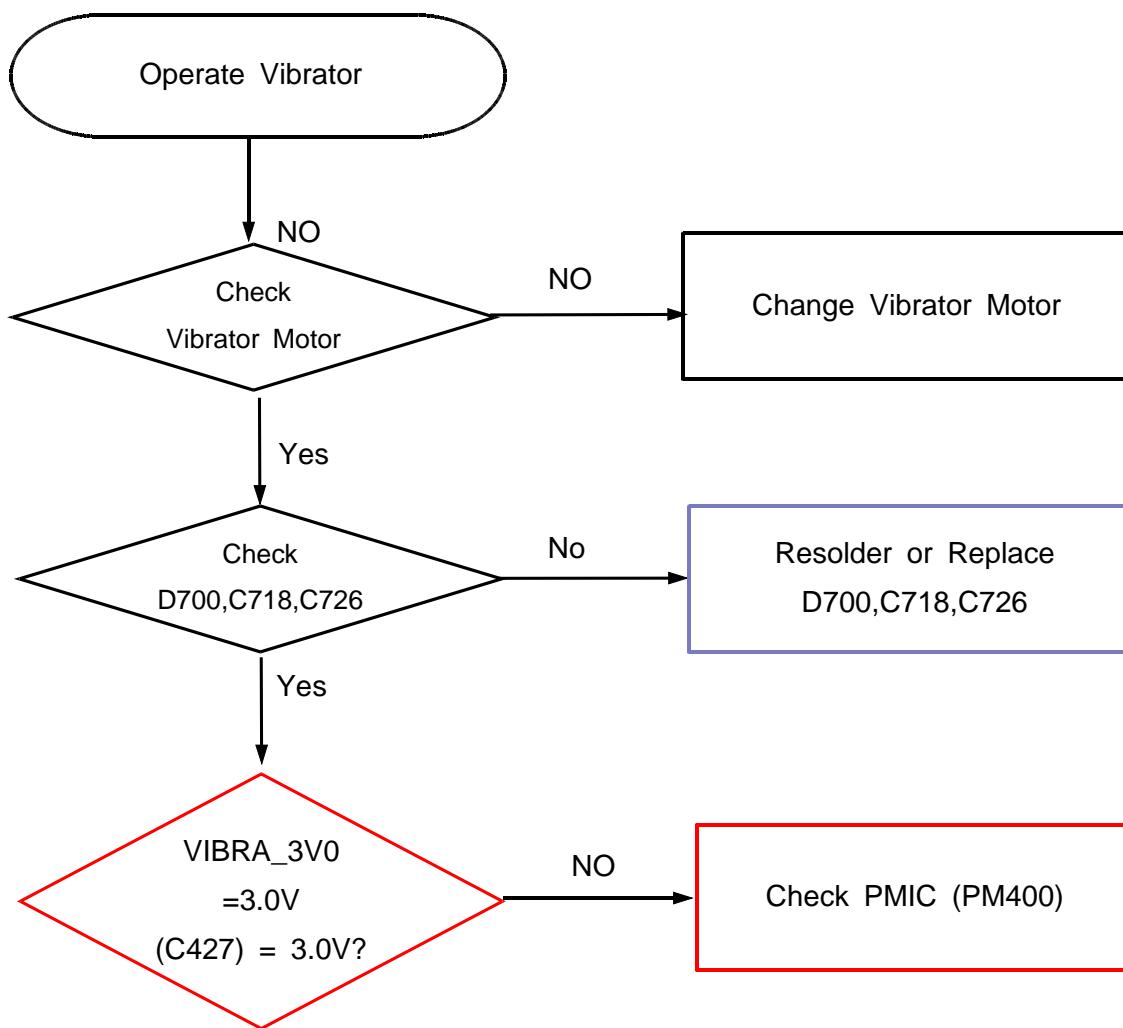


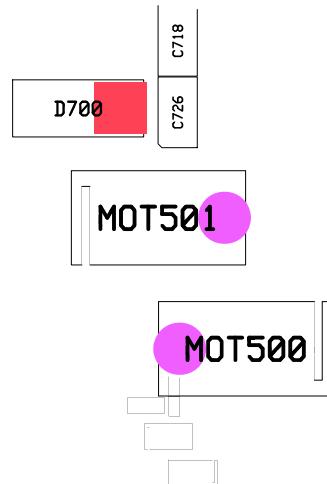
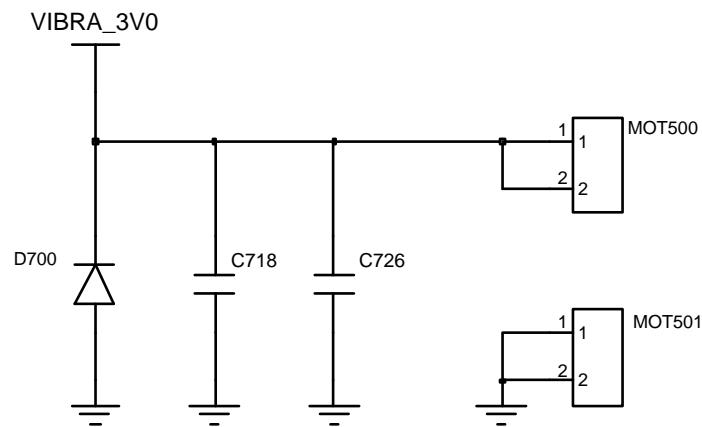
- Volume Key and Other Sub key



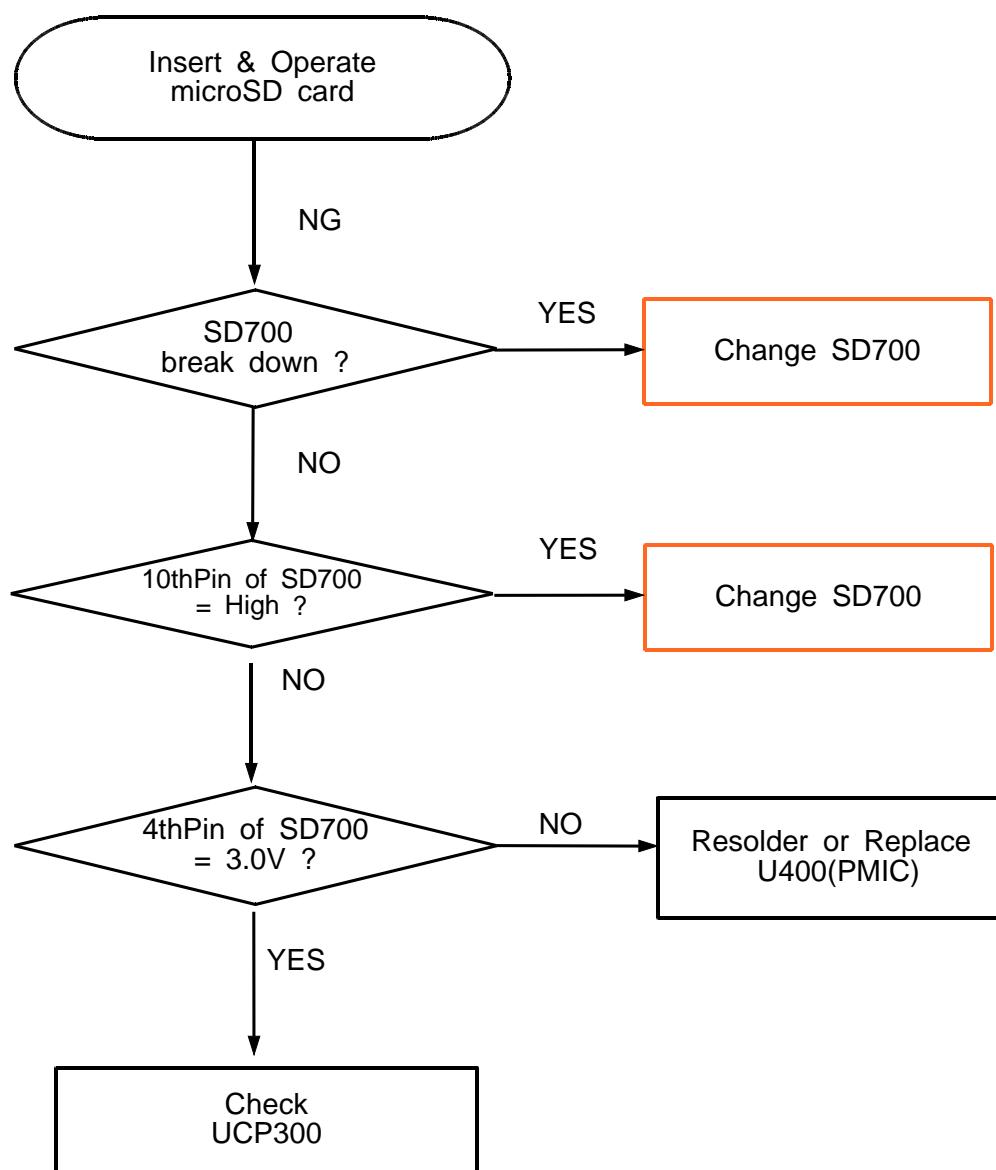


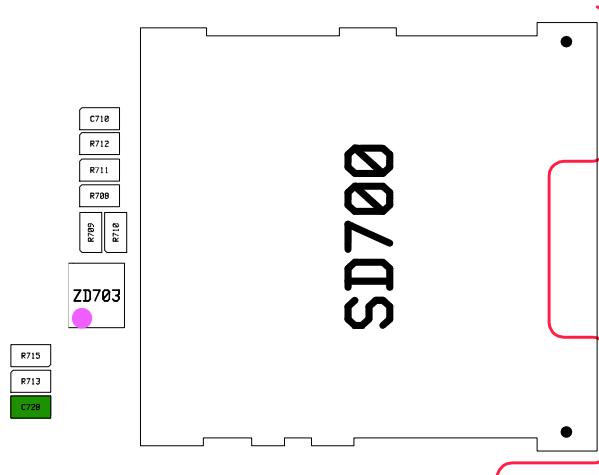
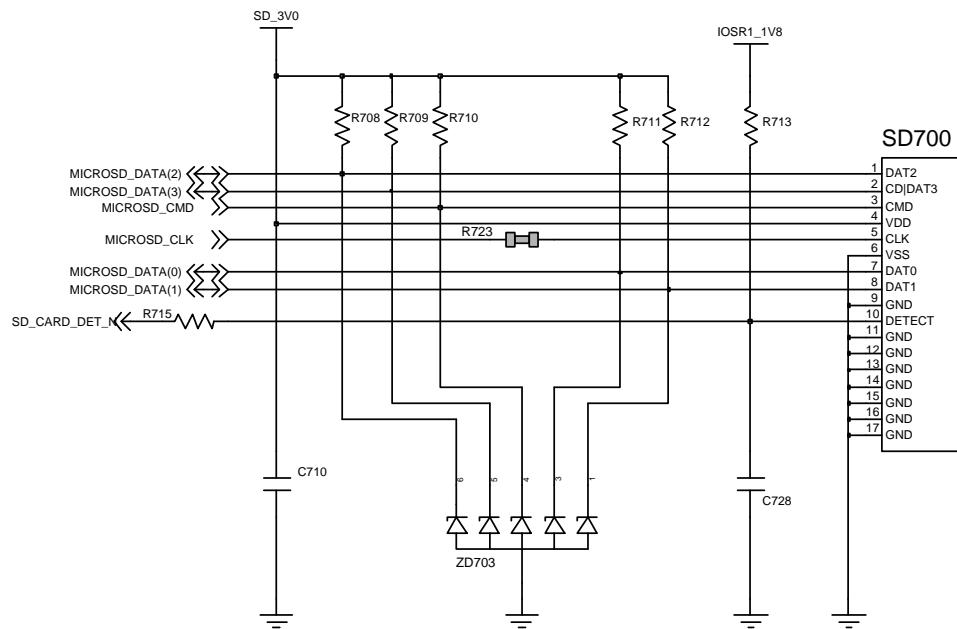
## 8-3-6. Vibrator Working



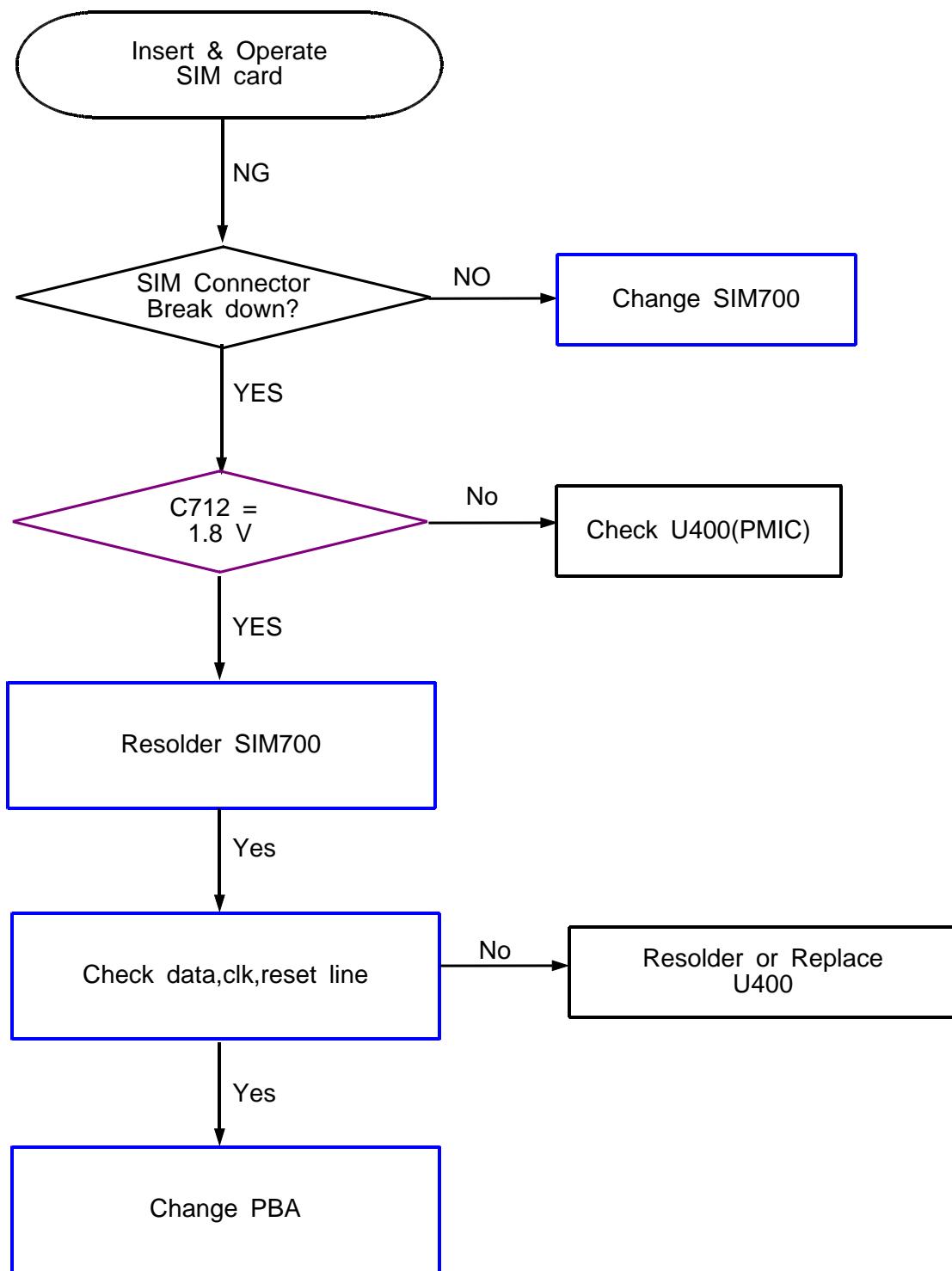


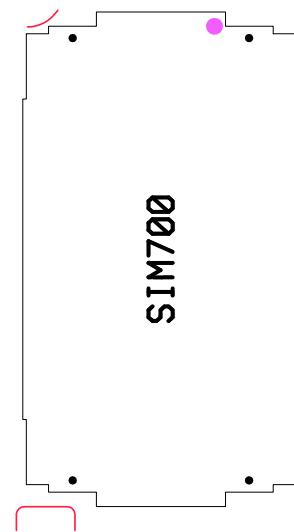
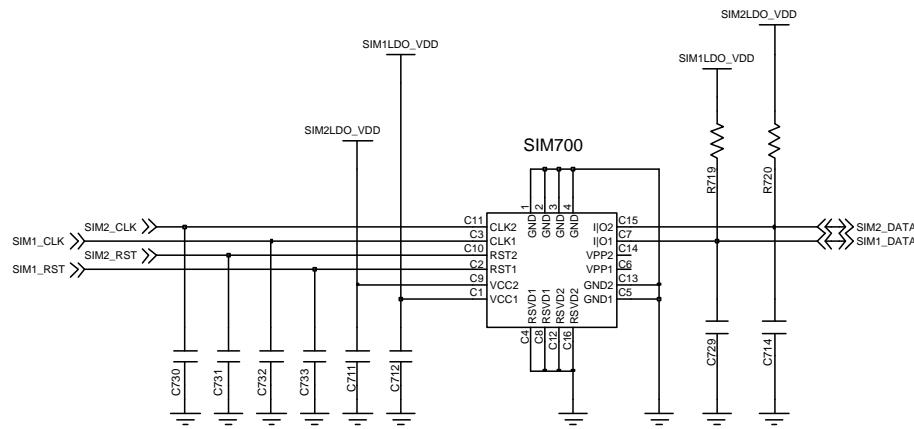
## 8-3-7. T-Flash Card Working



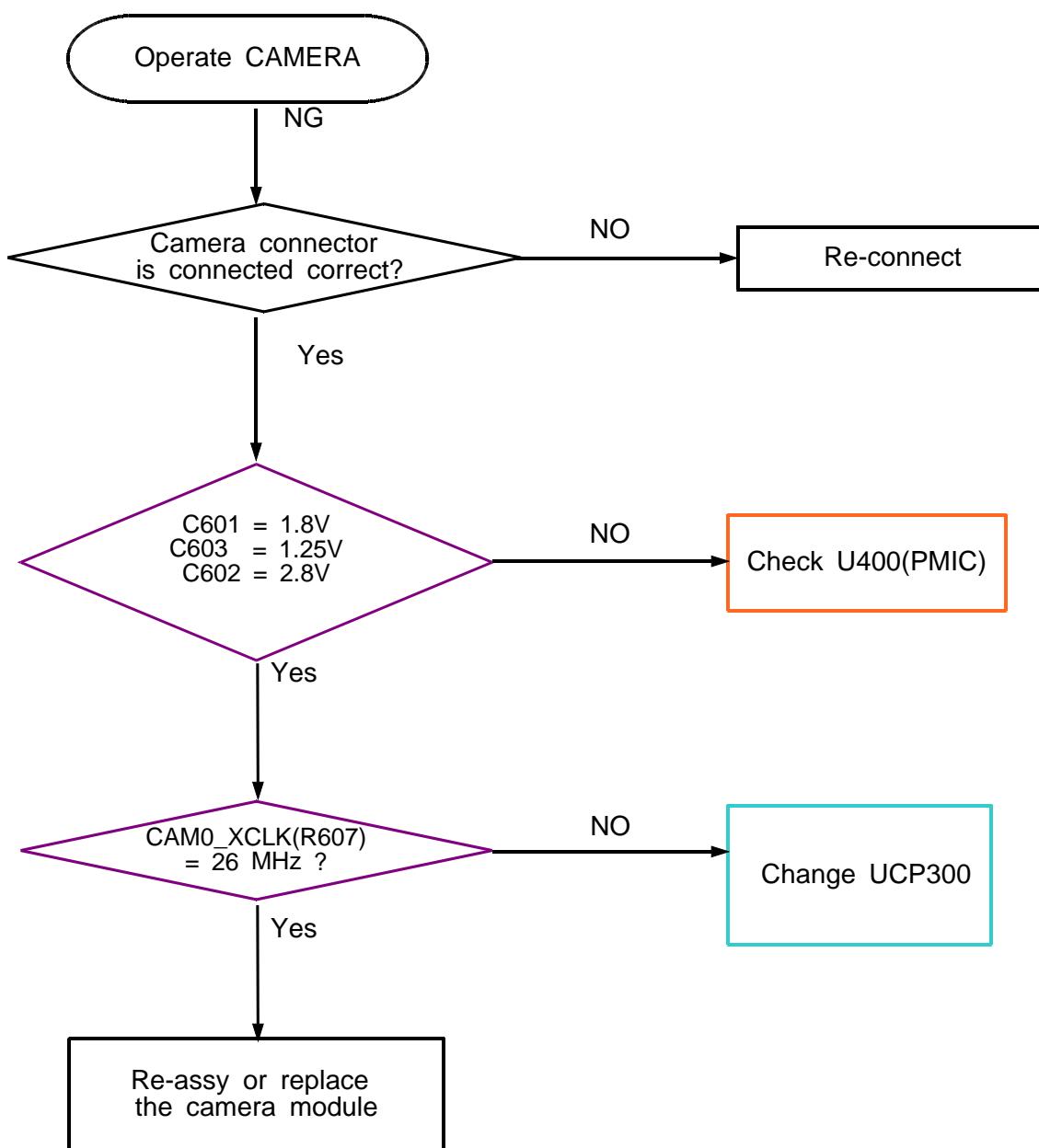


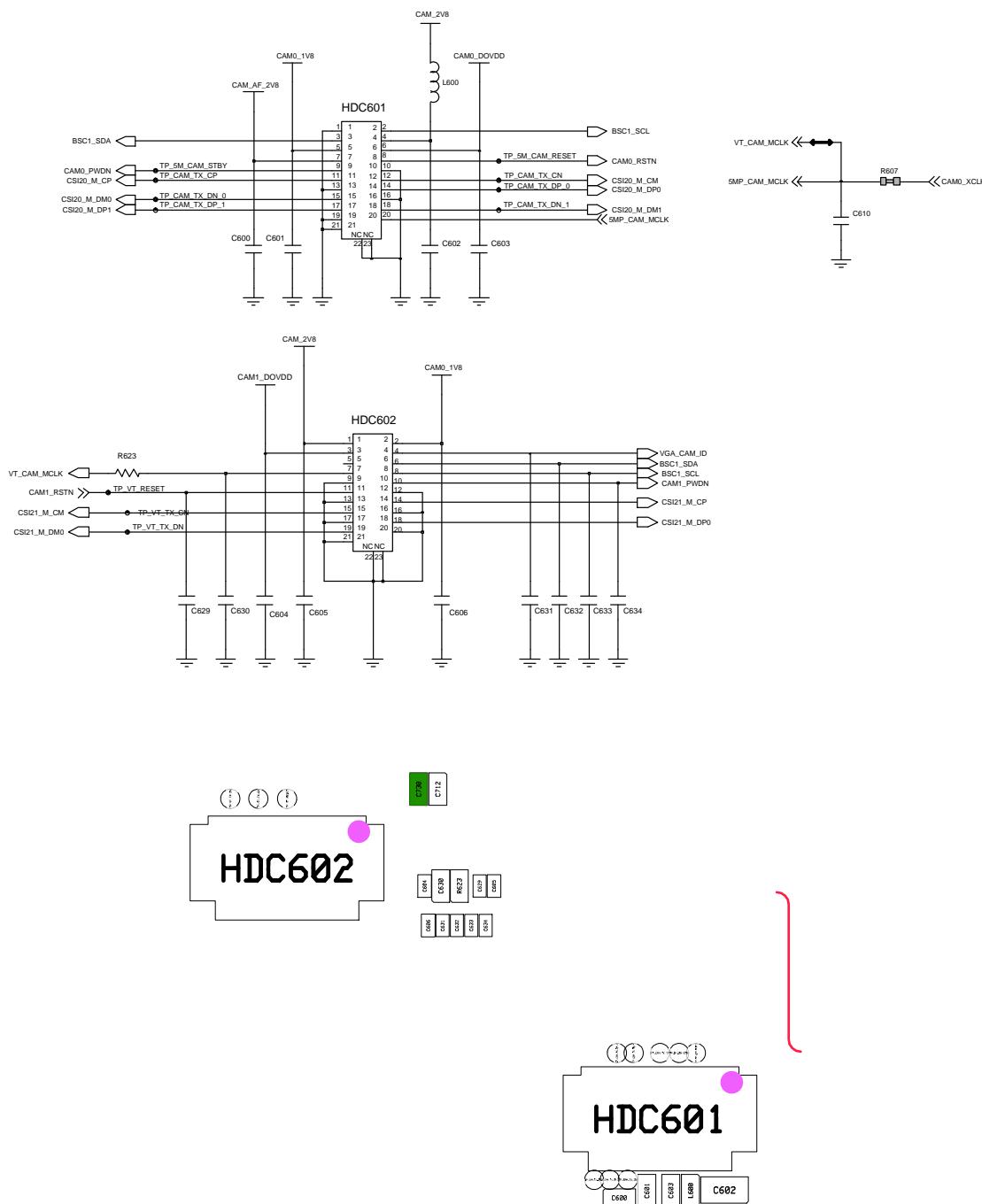
## 8-3-8. SIM Card Working



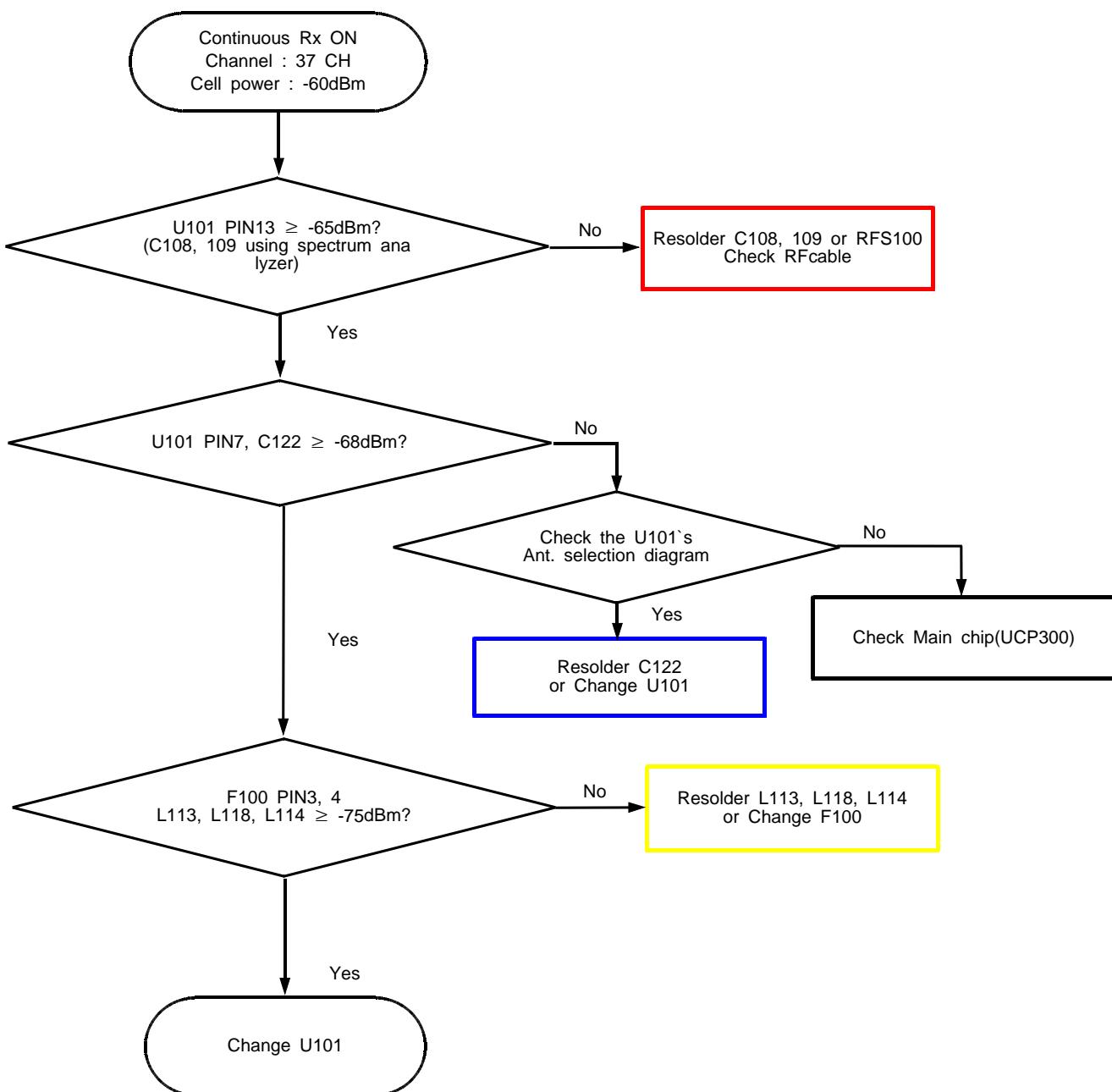


## 8-3-9 CAMERA Working

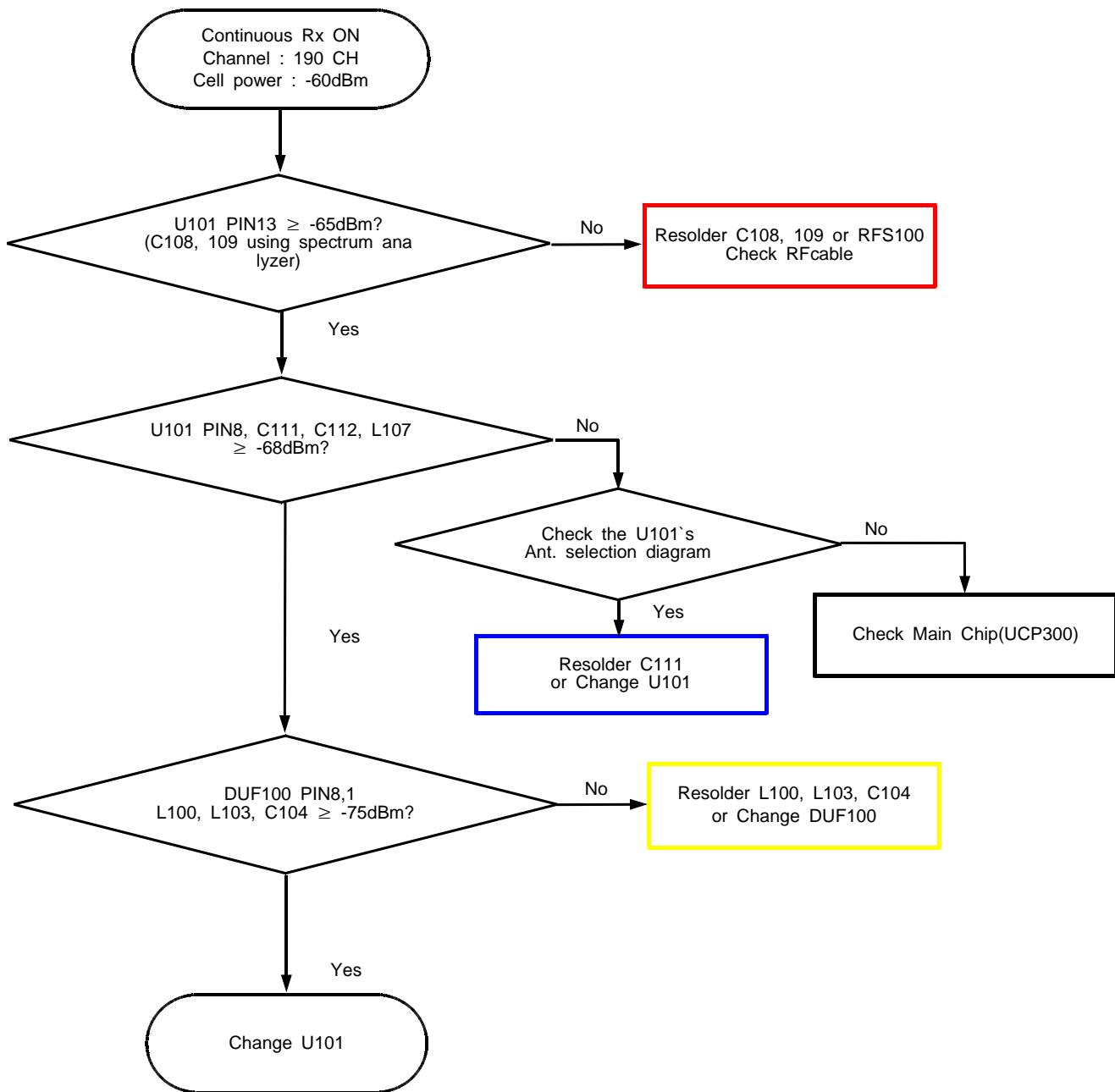




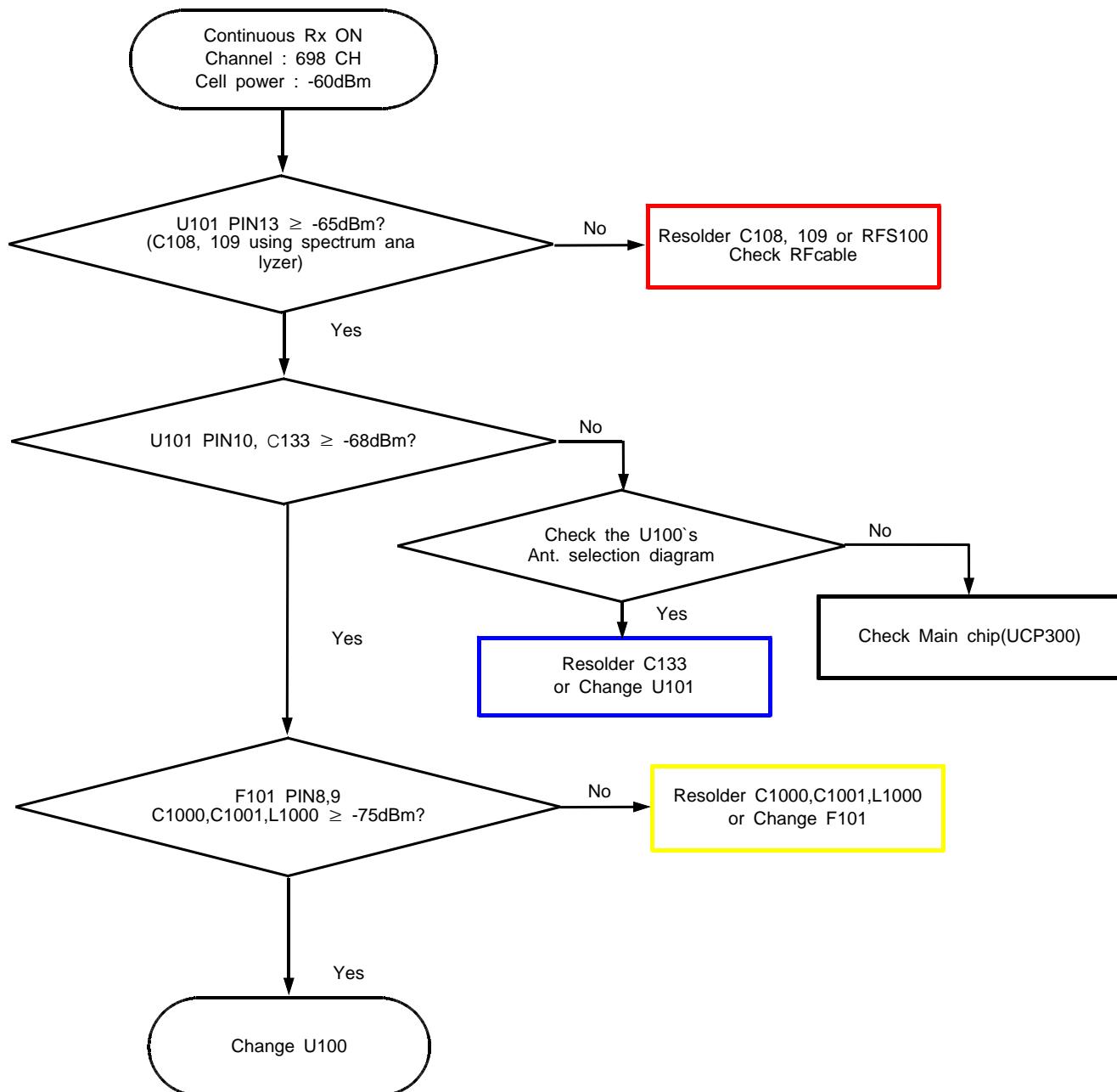
## 8-4-1. GSM850 Rx



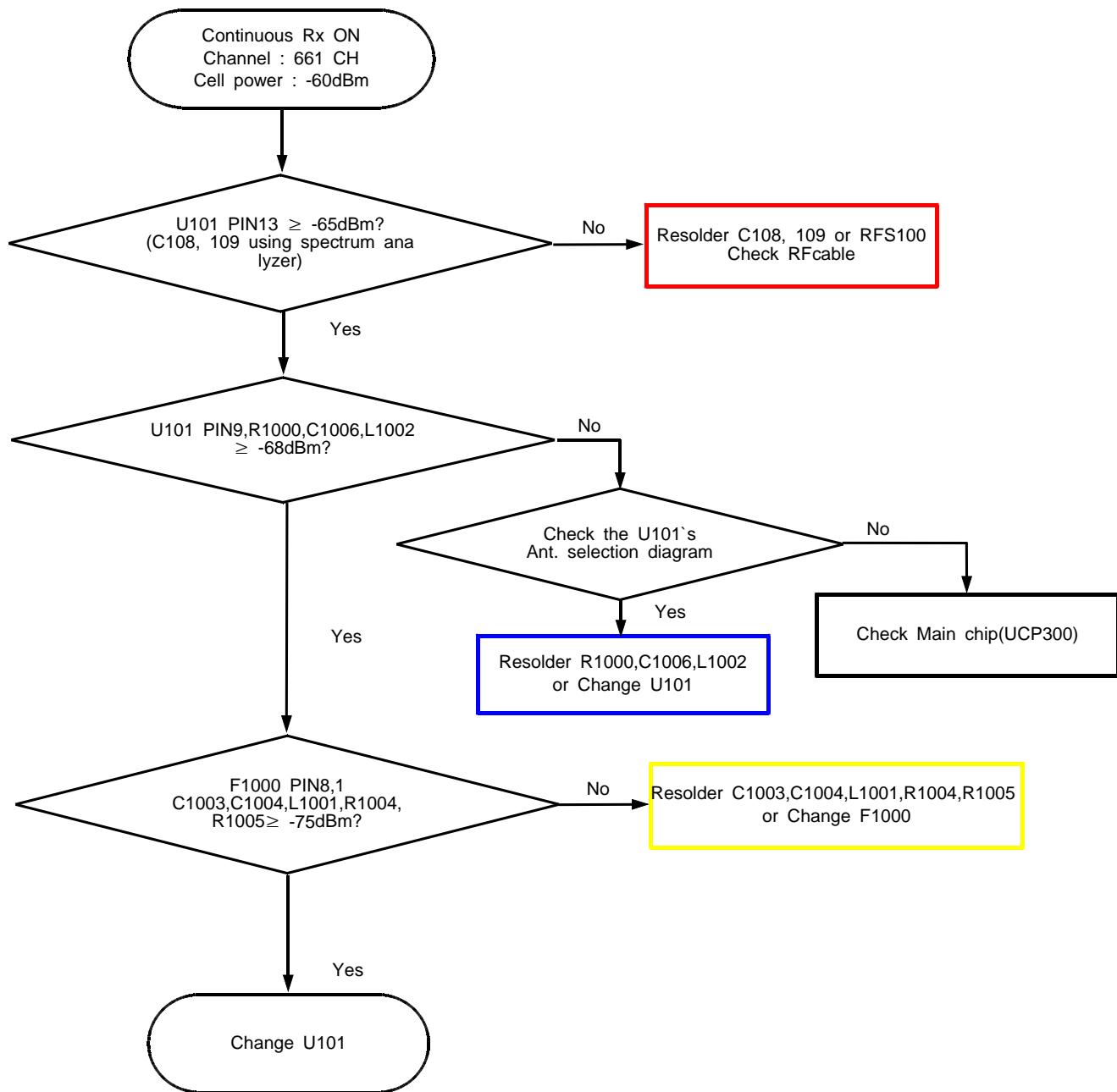
## 8-4-2. GSM900 Rx

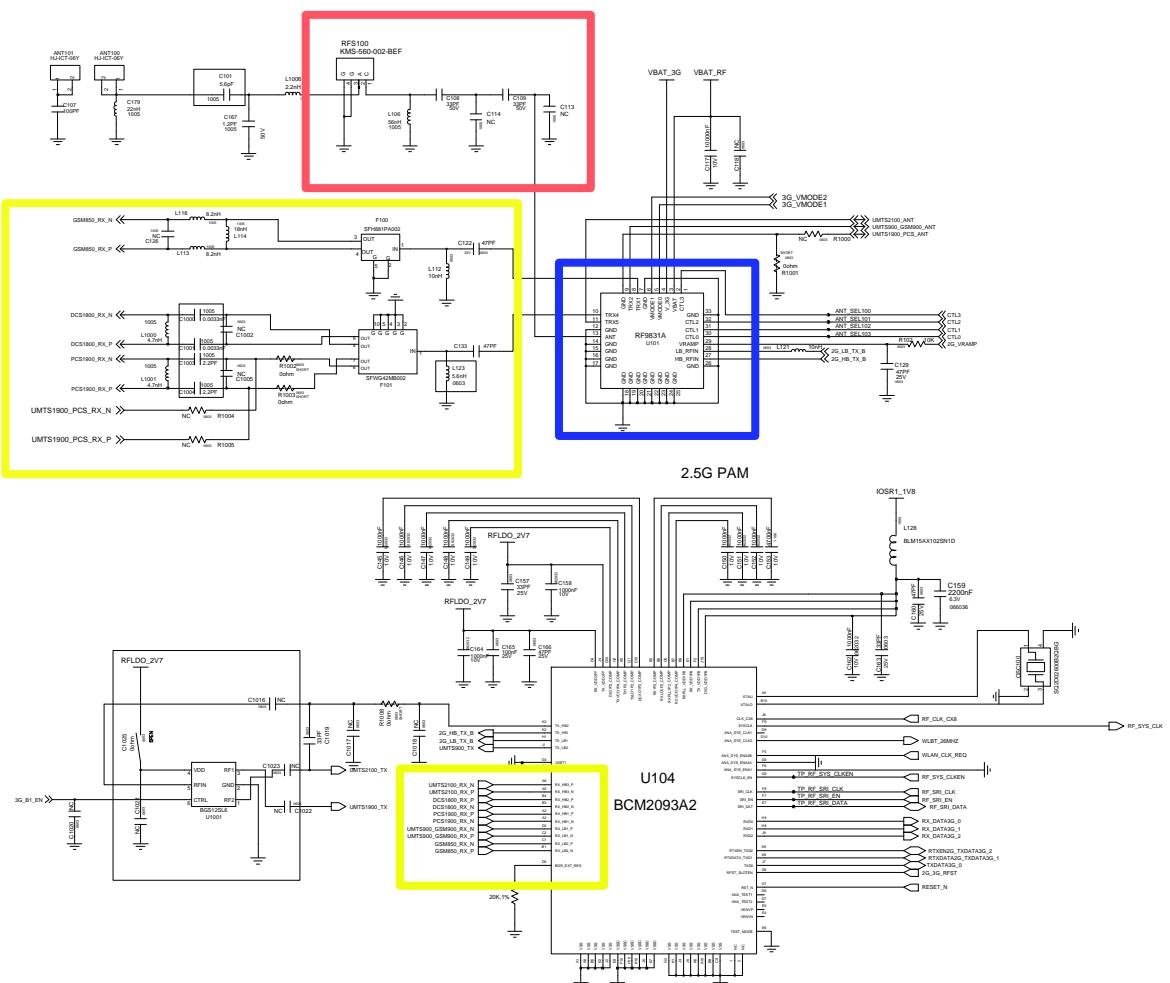


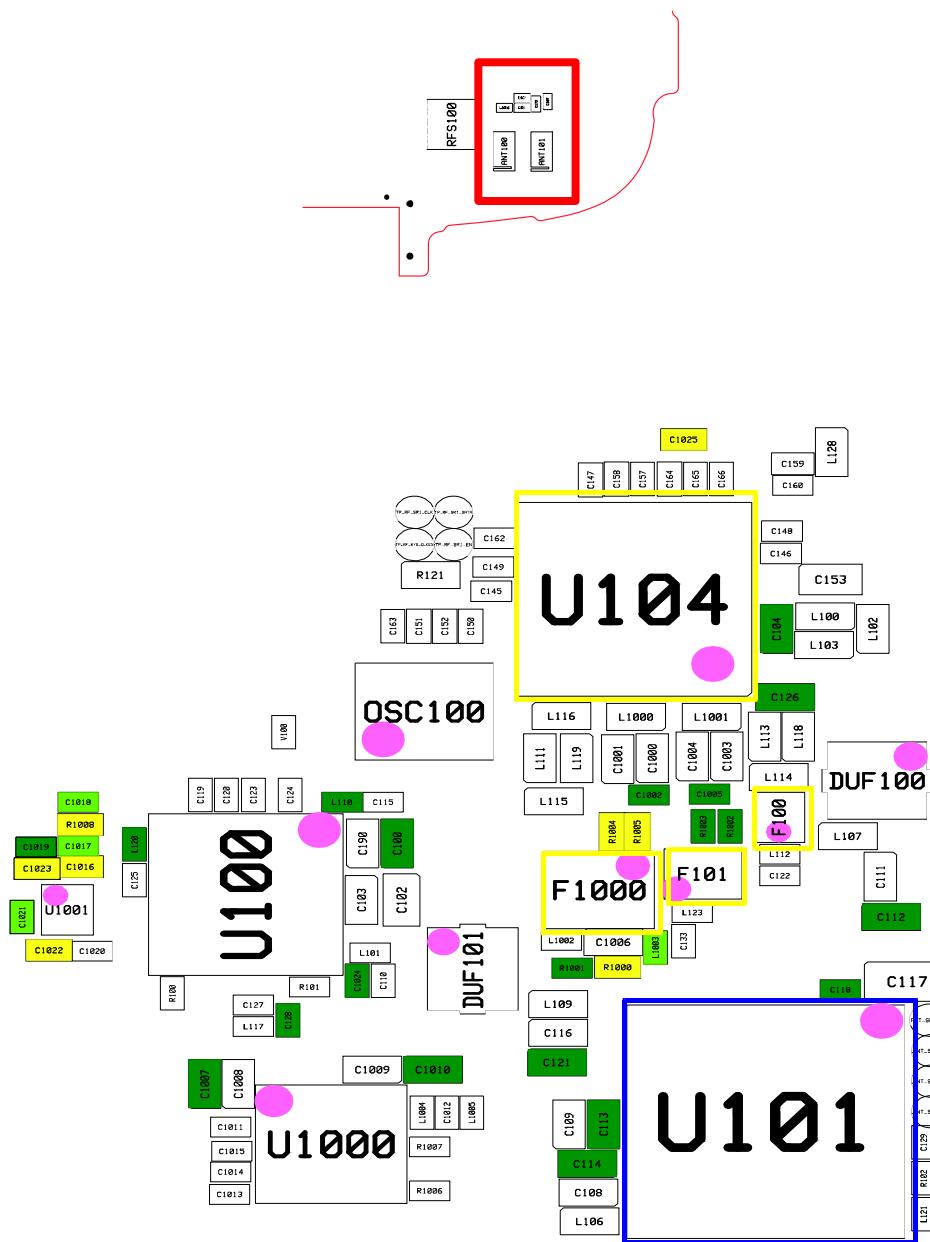
## 8-4-3. DCS Rx

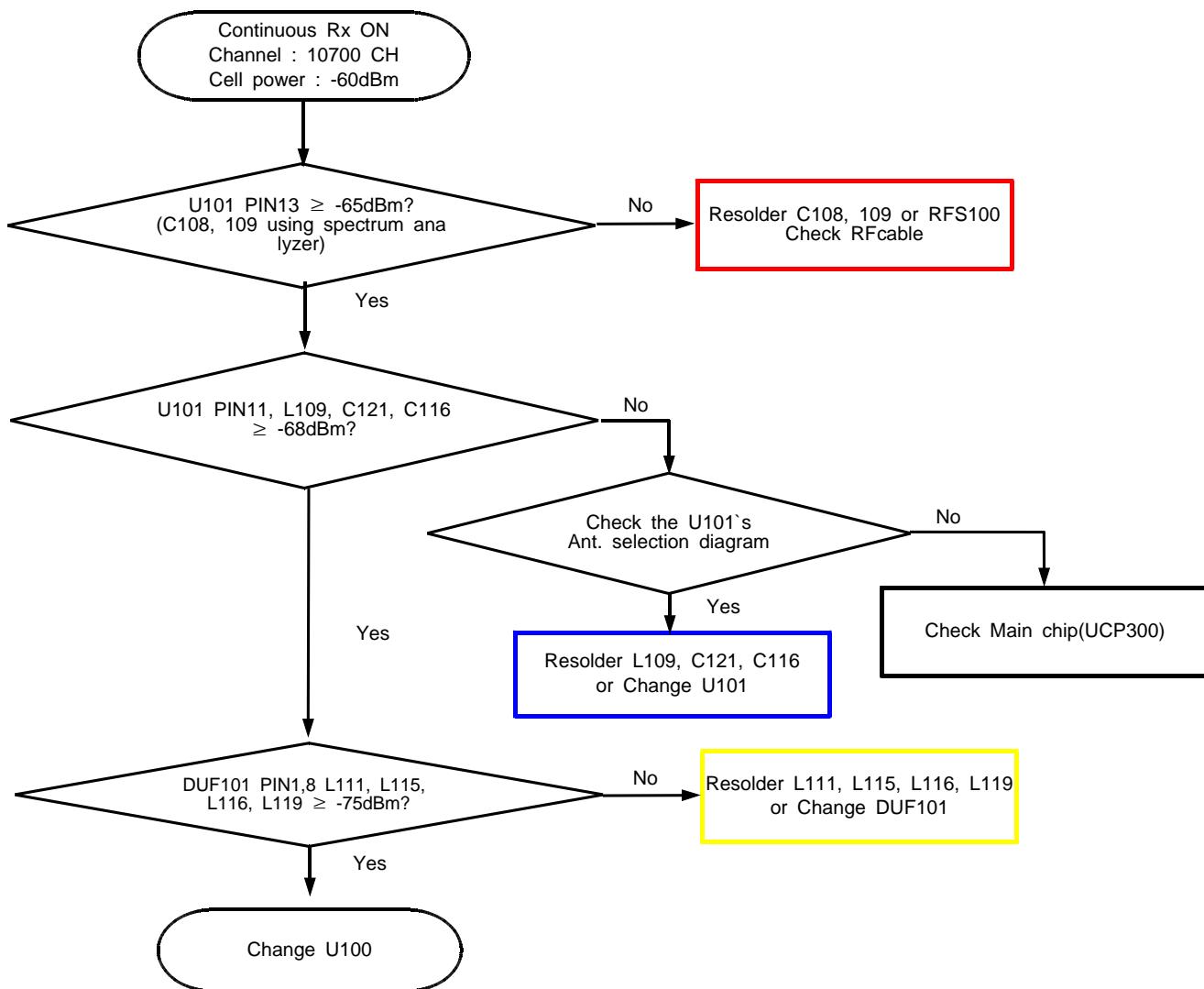


## 8-4-4. PCS Rx

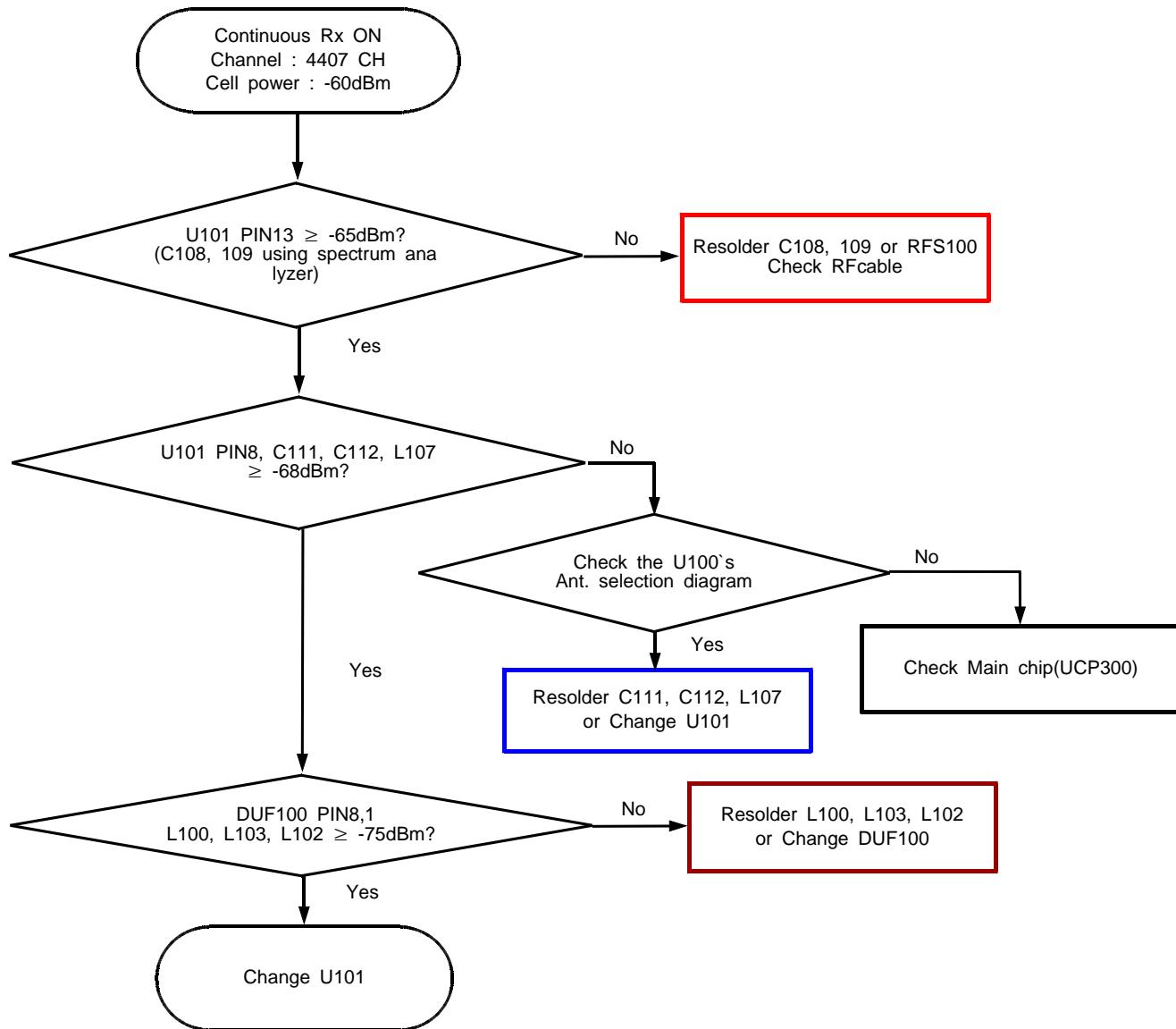


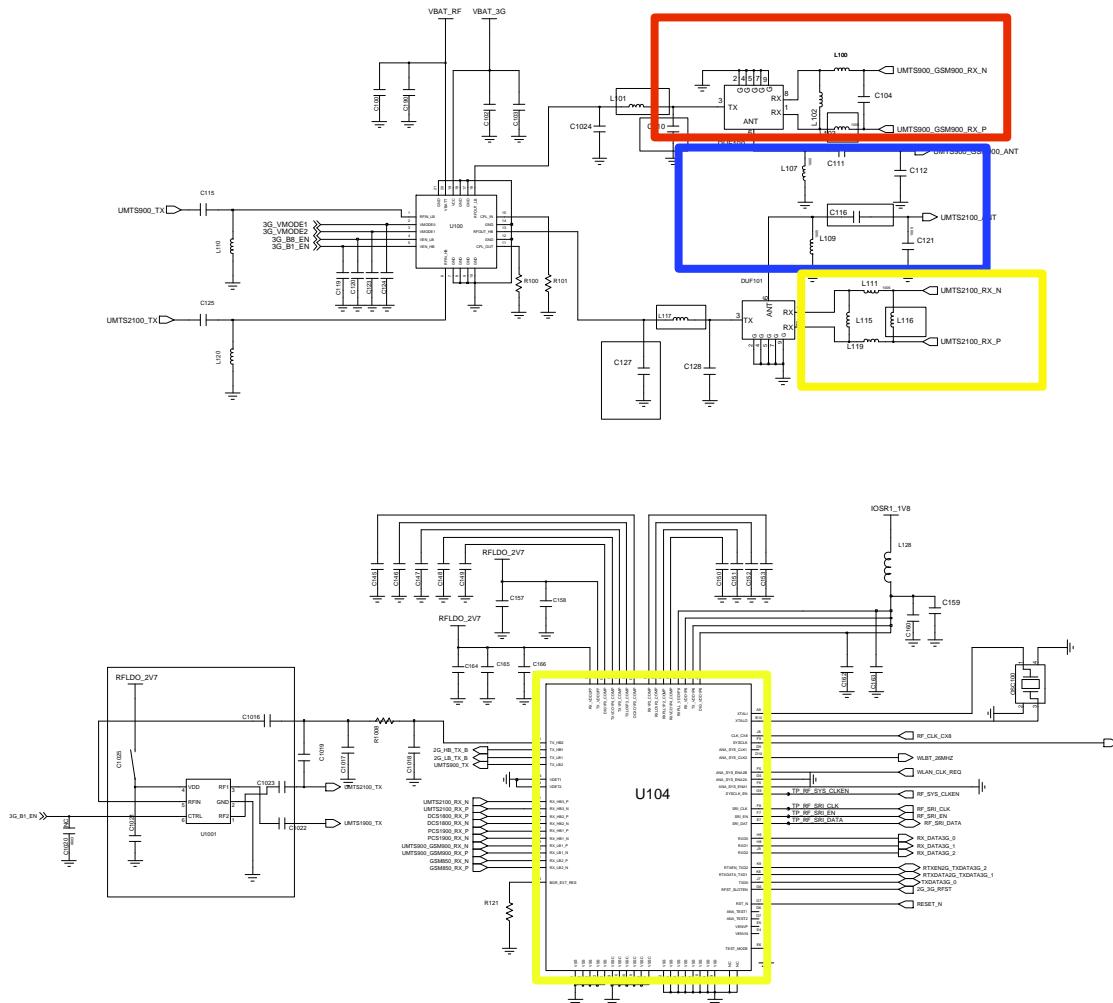


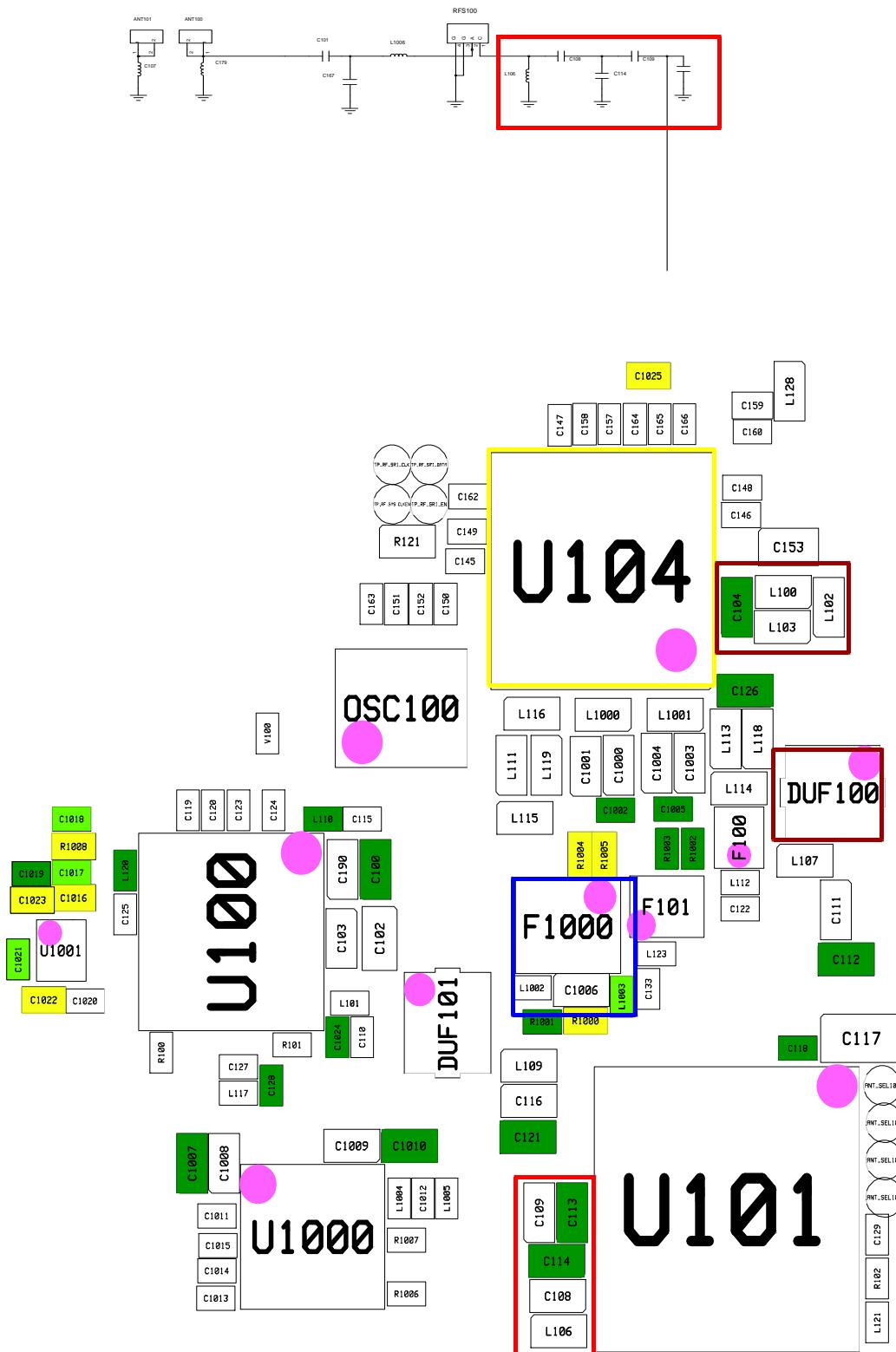


**8-4-5. WCDMA Band1 (2100) Rx**

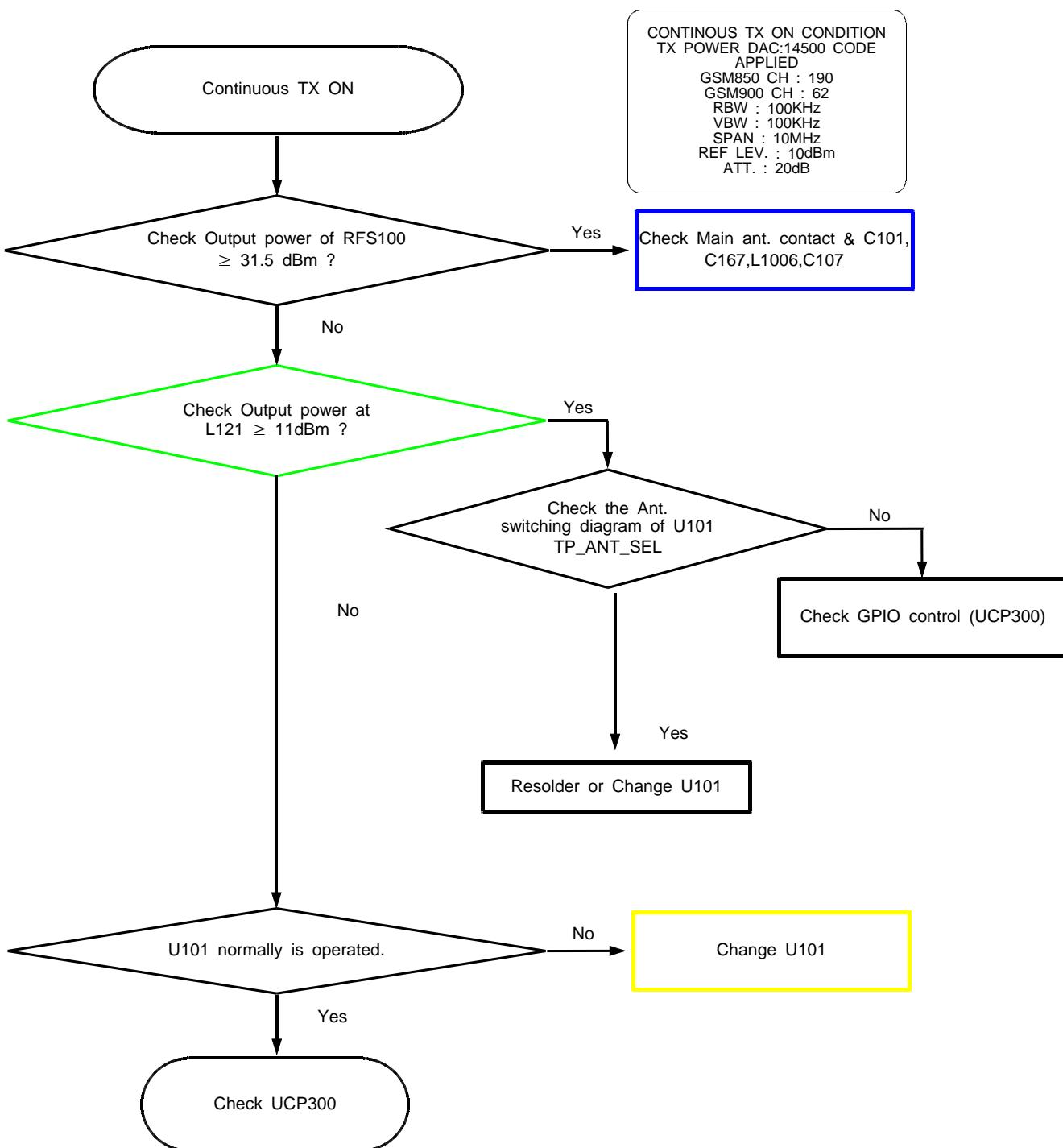
## 8-4-6. WCDMA Band5 (850) Rx



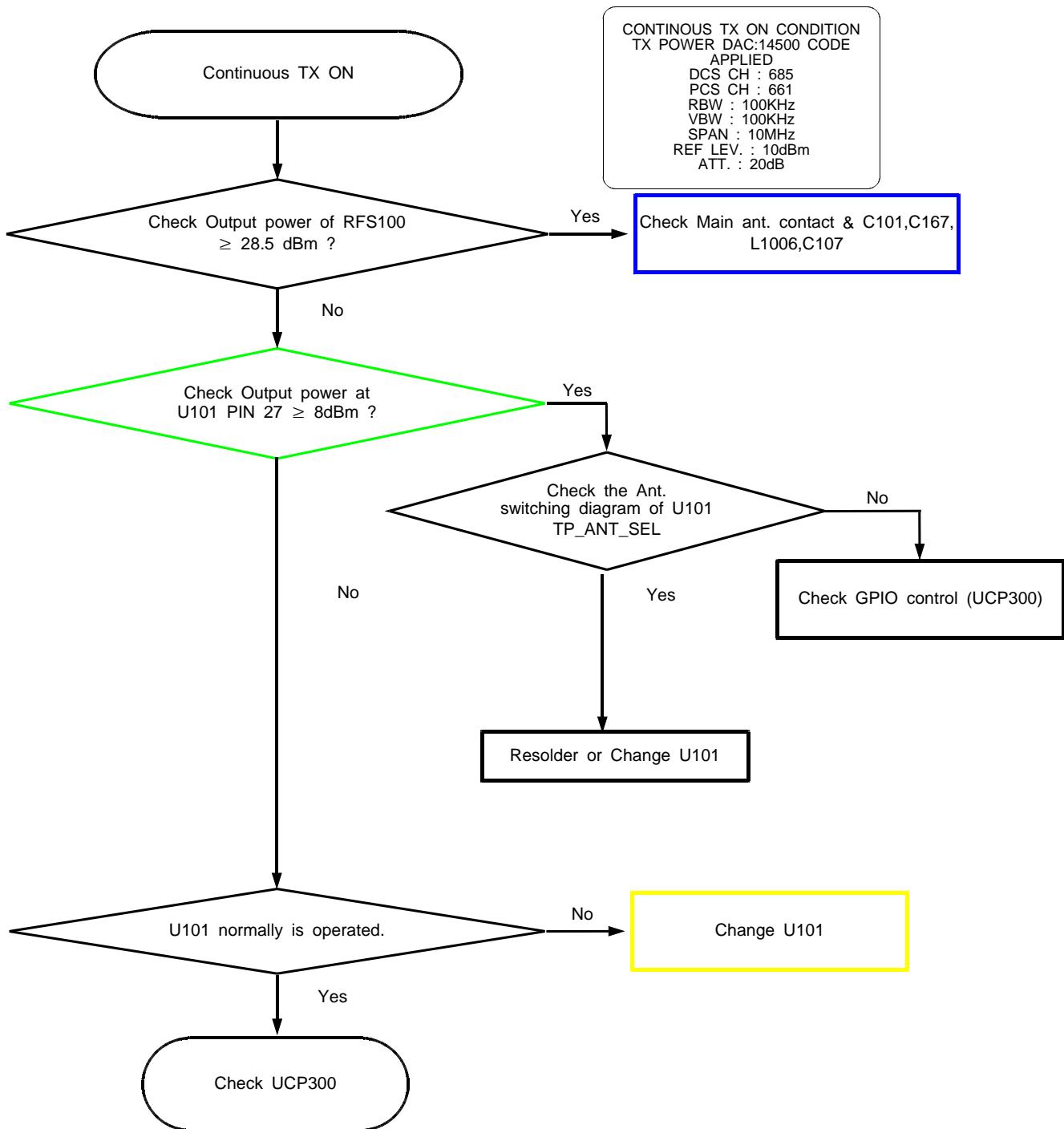


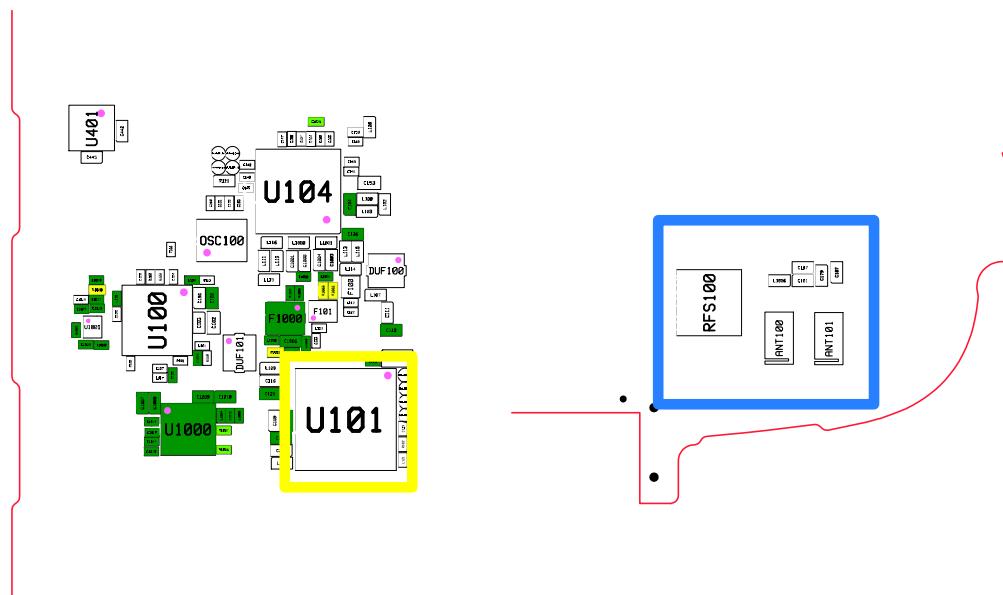
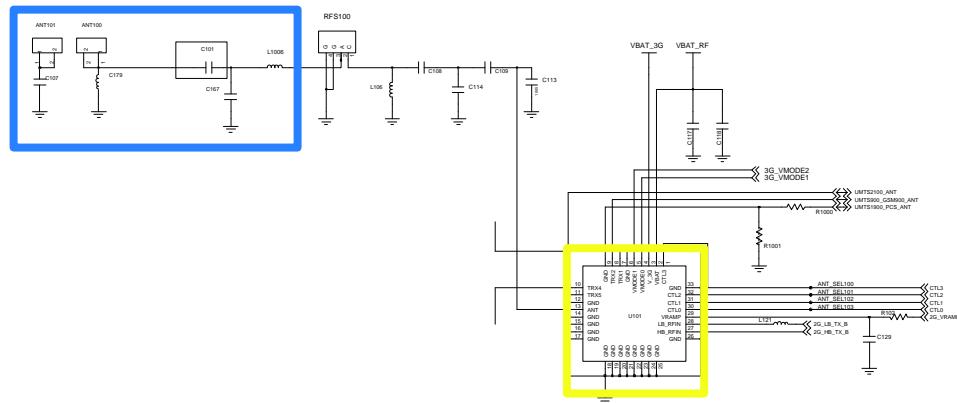


## 8-4-7. GSM850/900 Tx

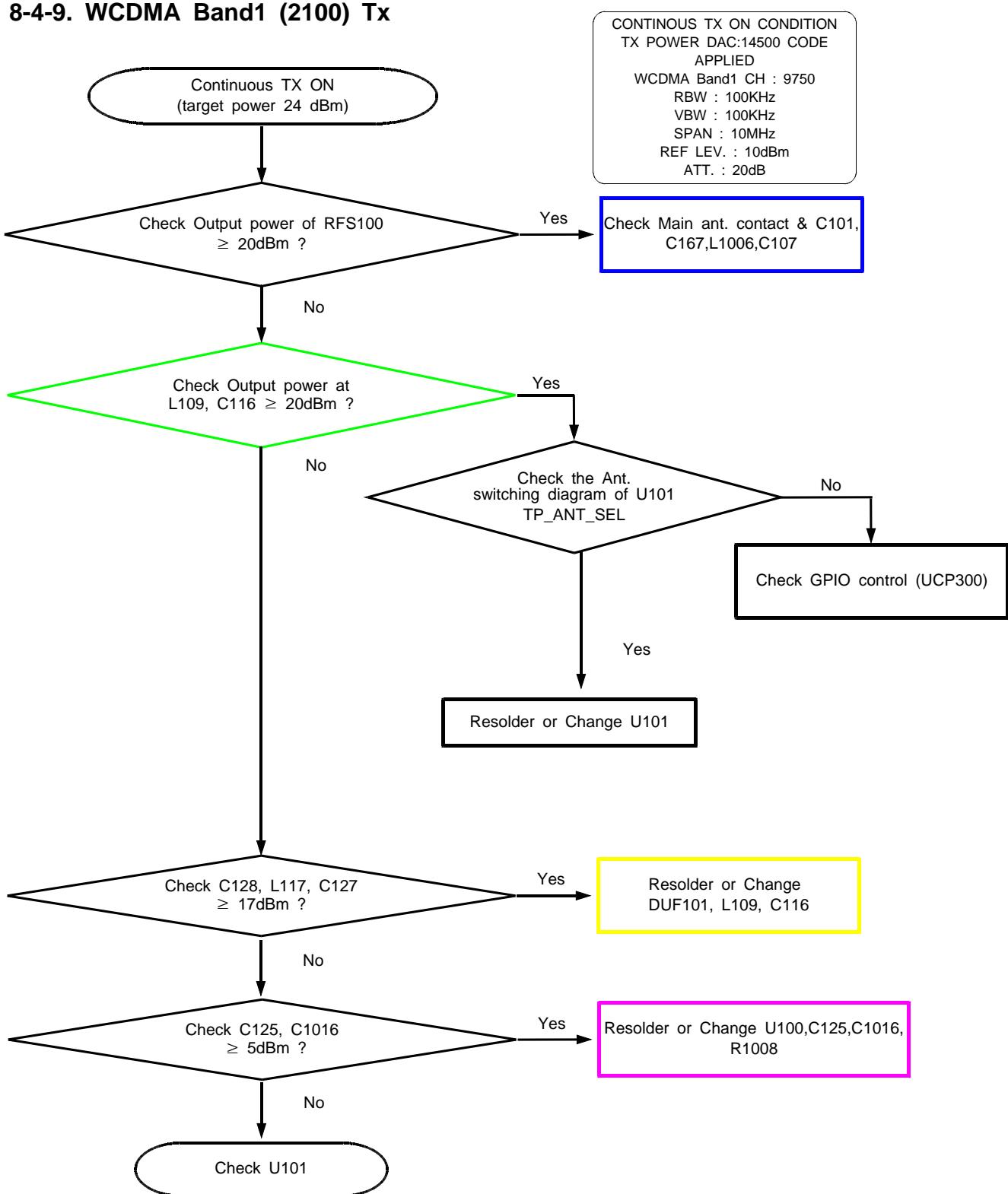


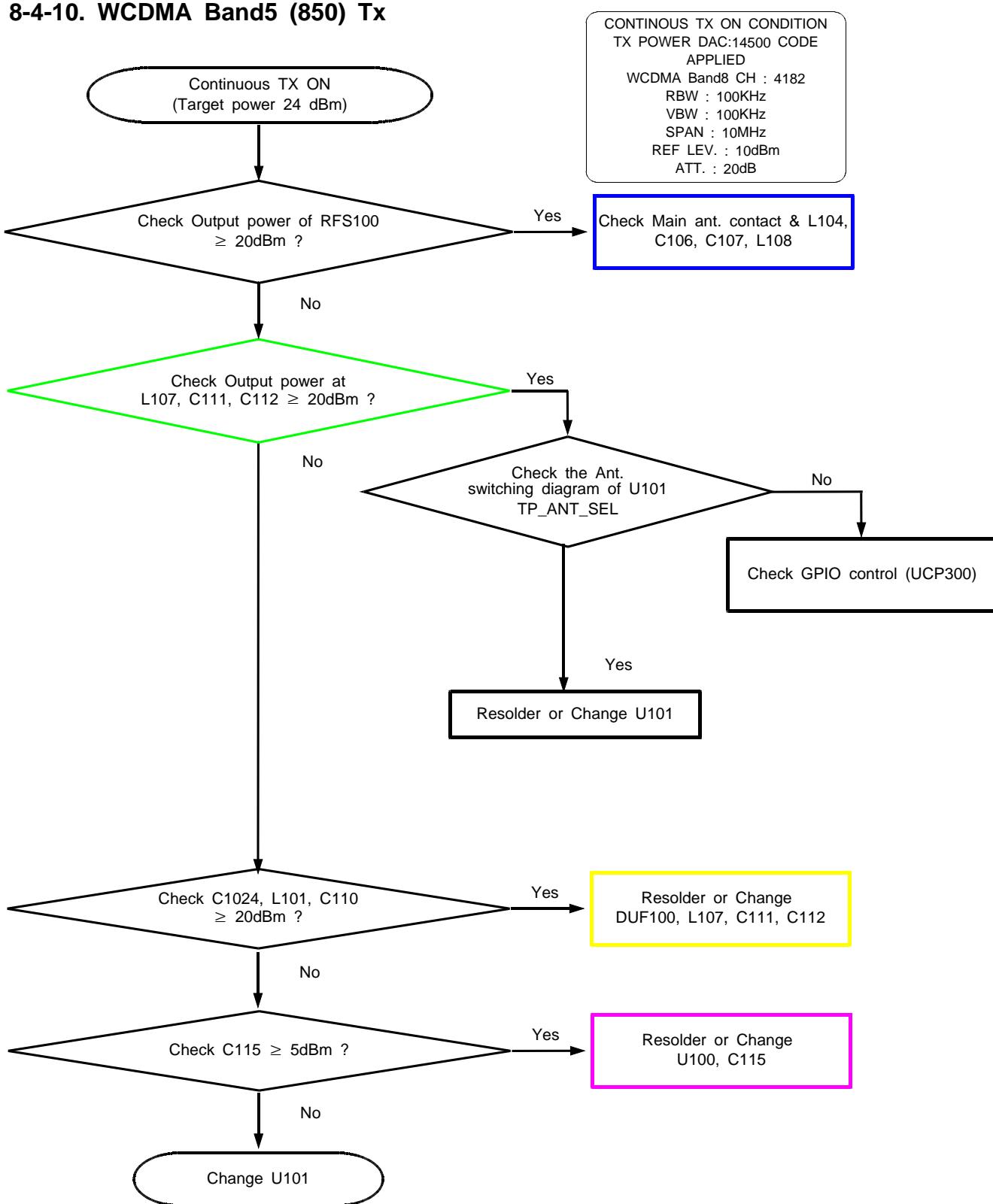
## 8-4-8. DCS/PCS Tx

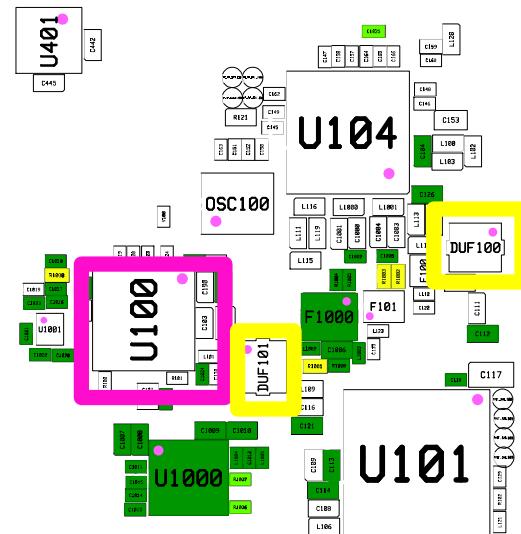
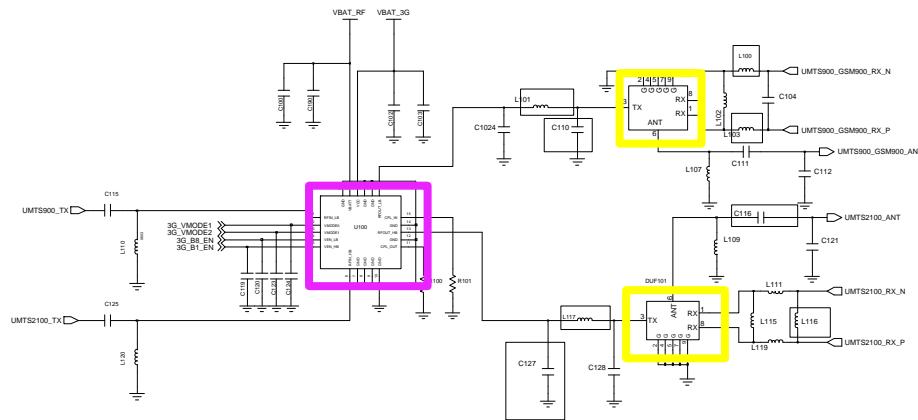




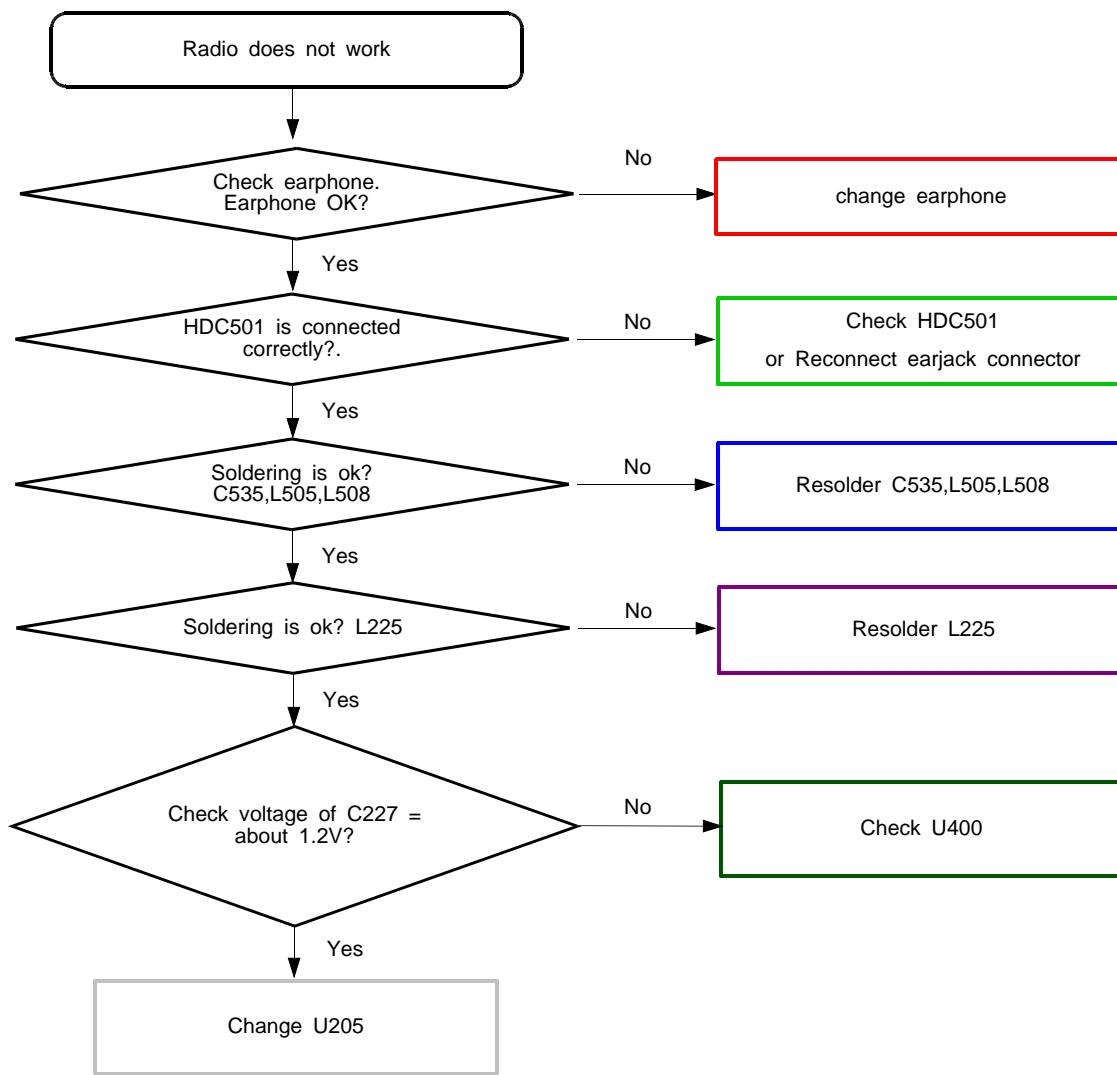
## 8-4-9. WCDMA Band1 (2100) Tx

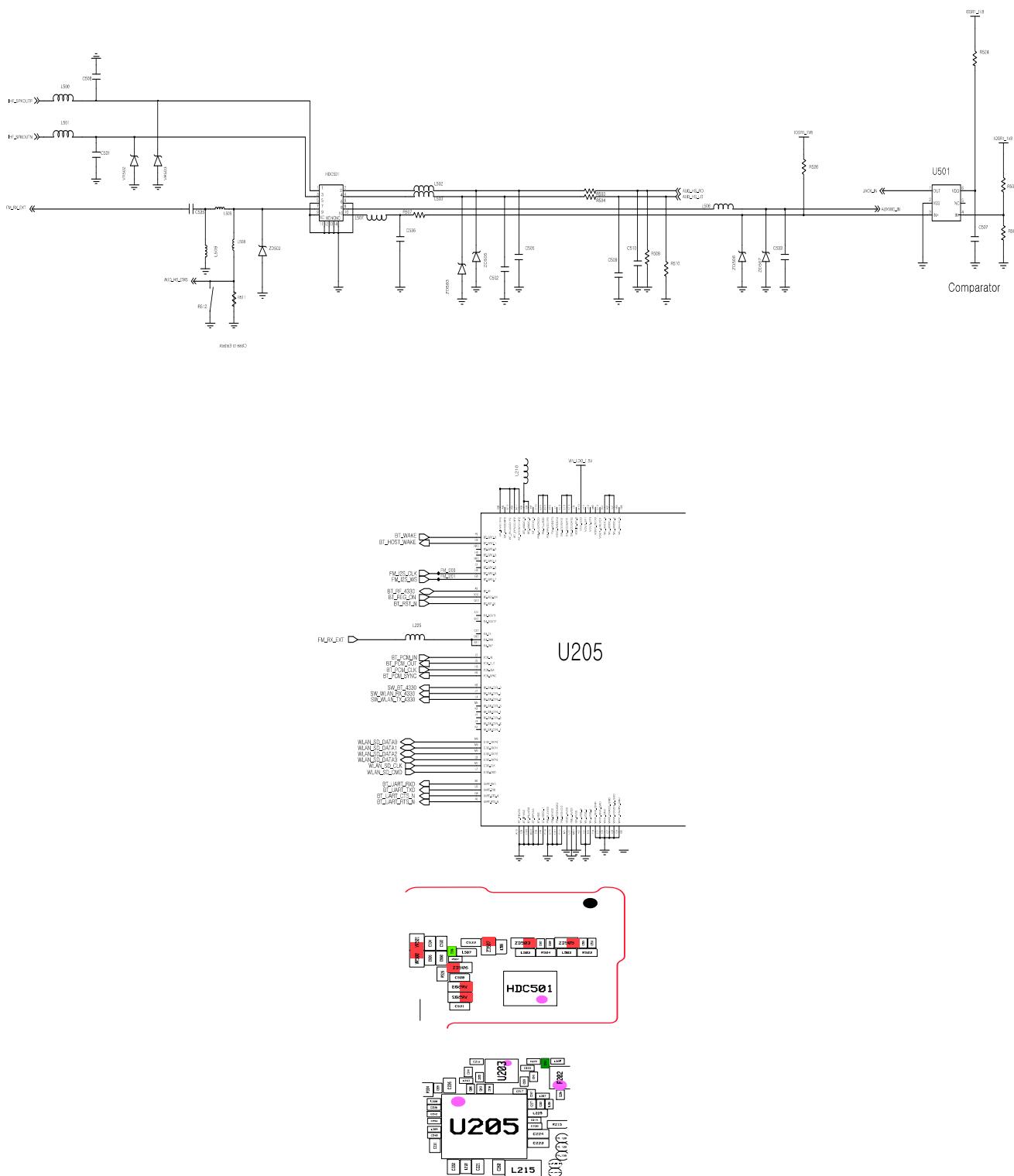


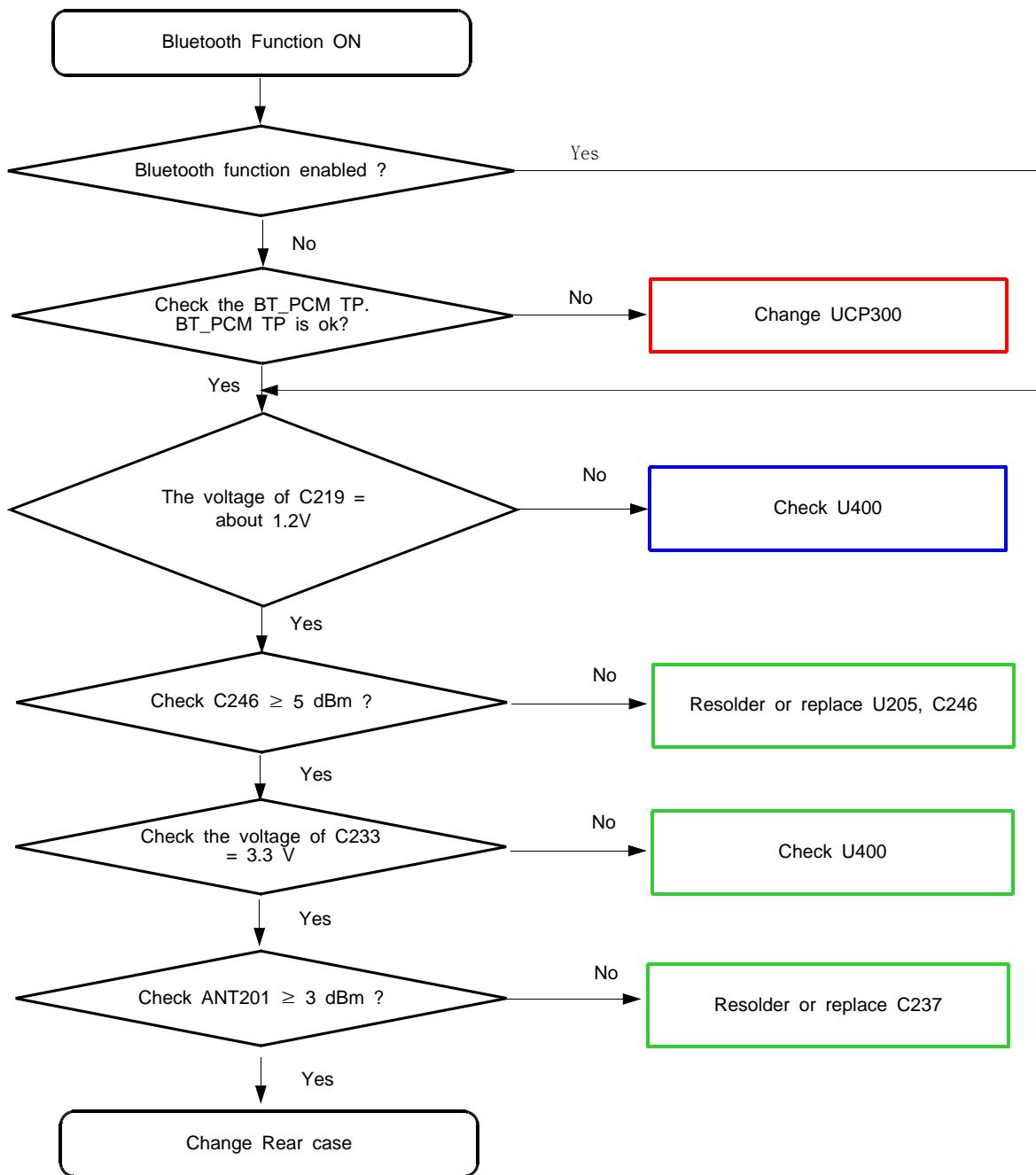
**8-4-10. WCDMA Band5 (850) Tx**

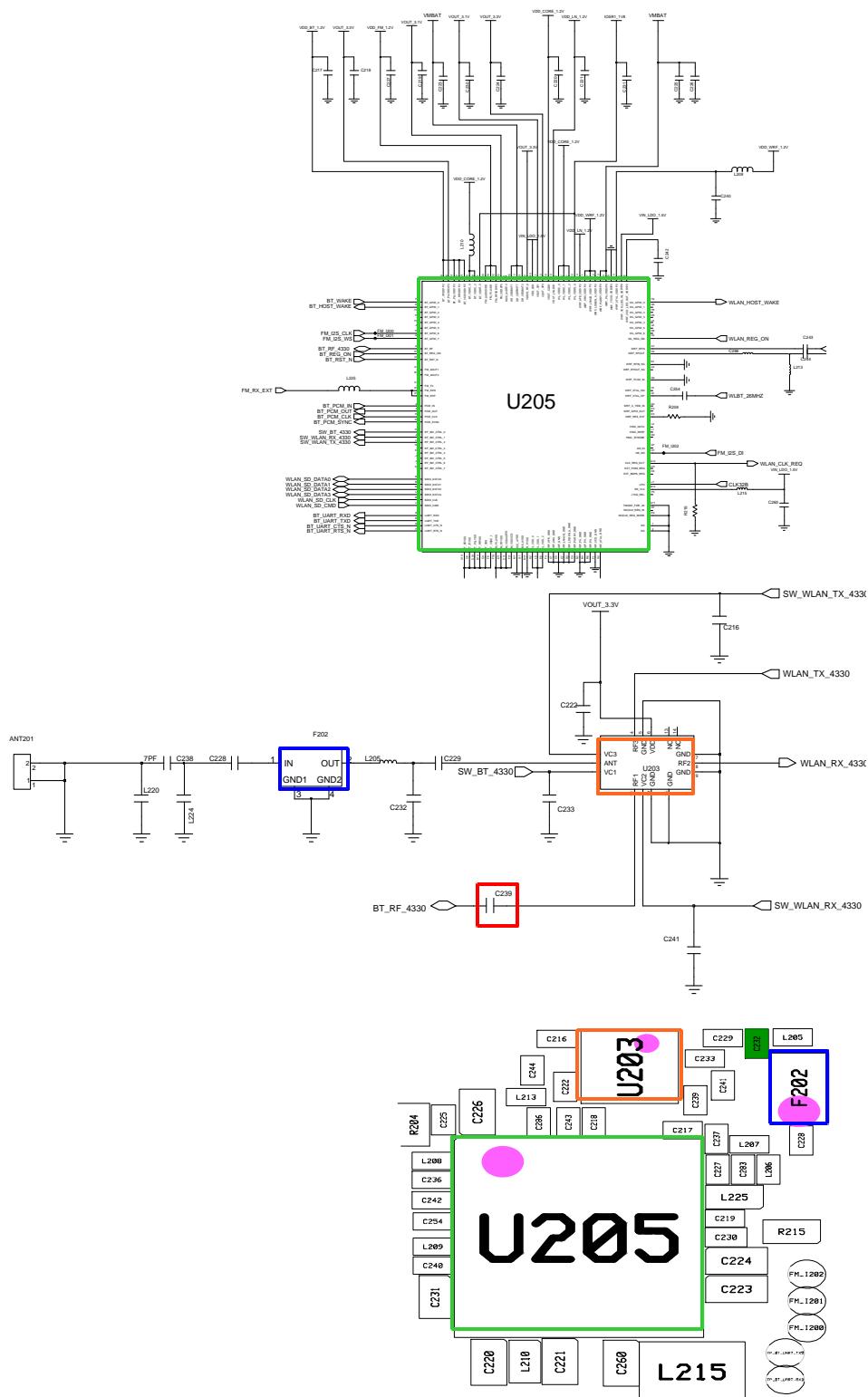


## 8-4-11. FM RADIO

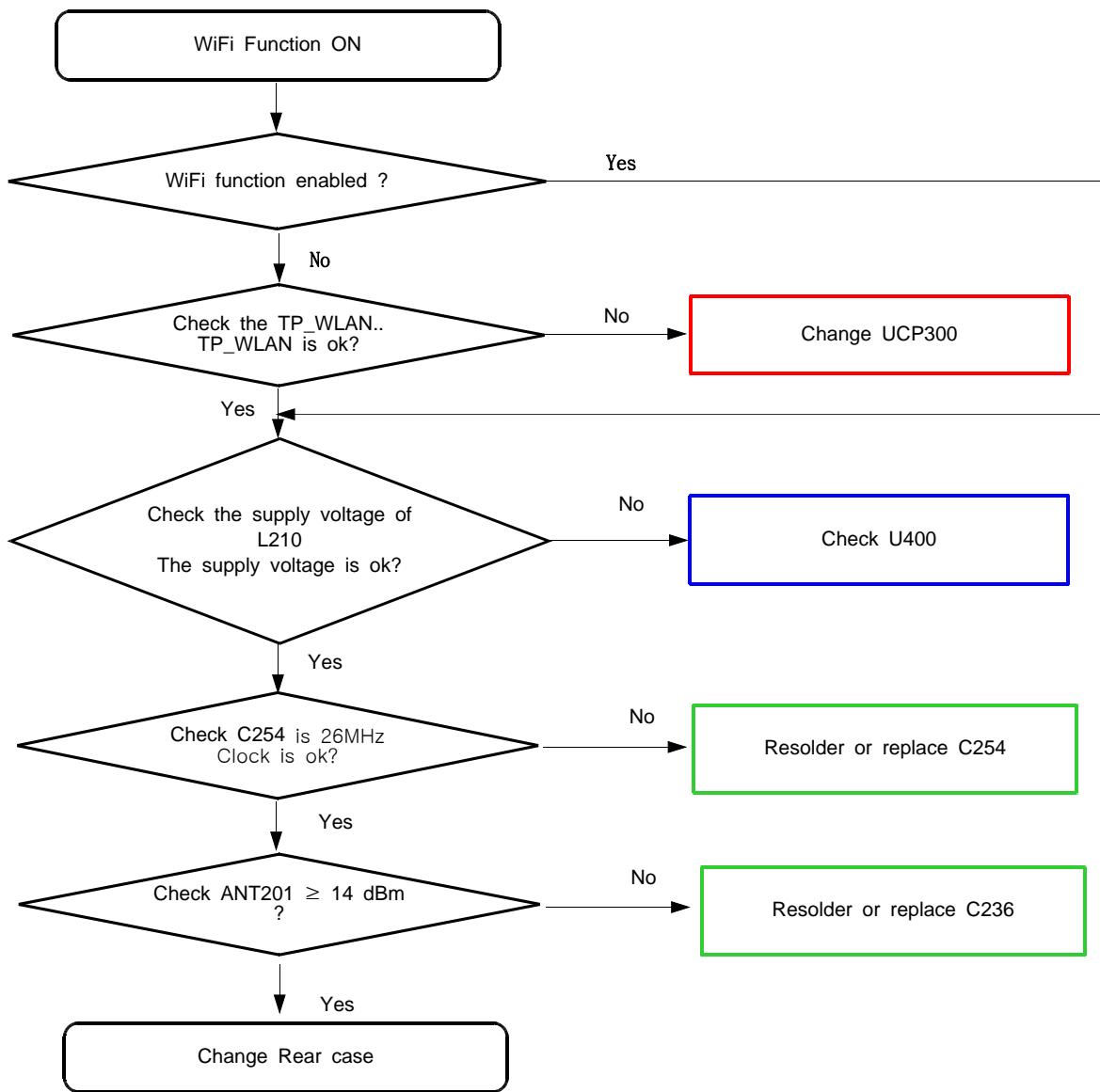


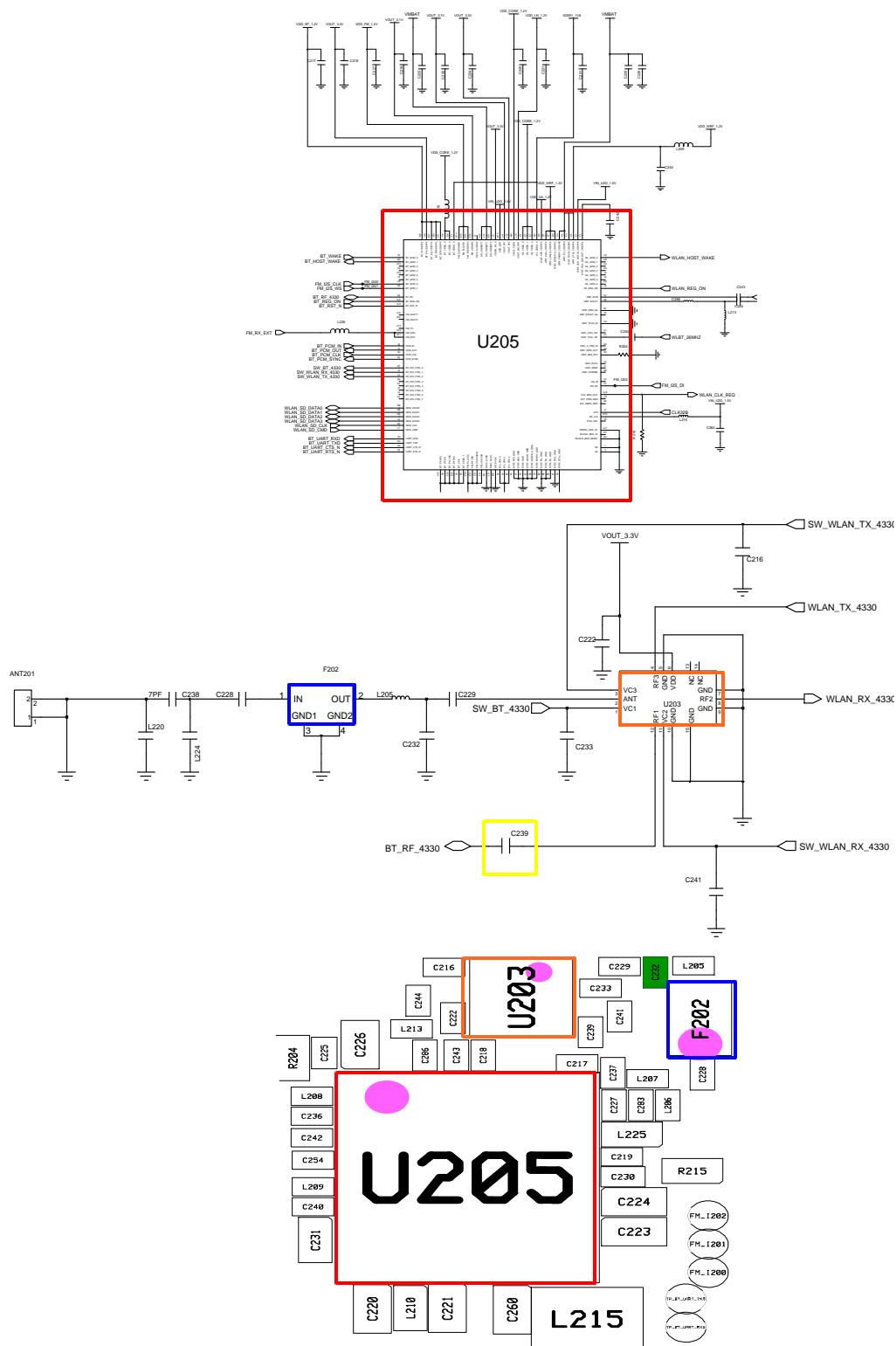


**8-4-12. Bluetooth**

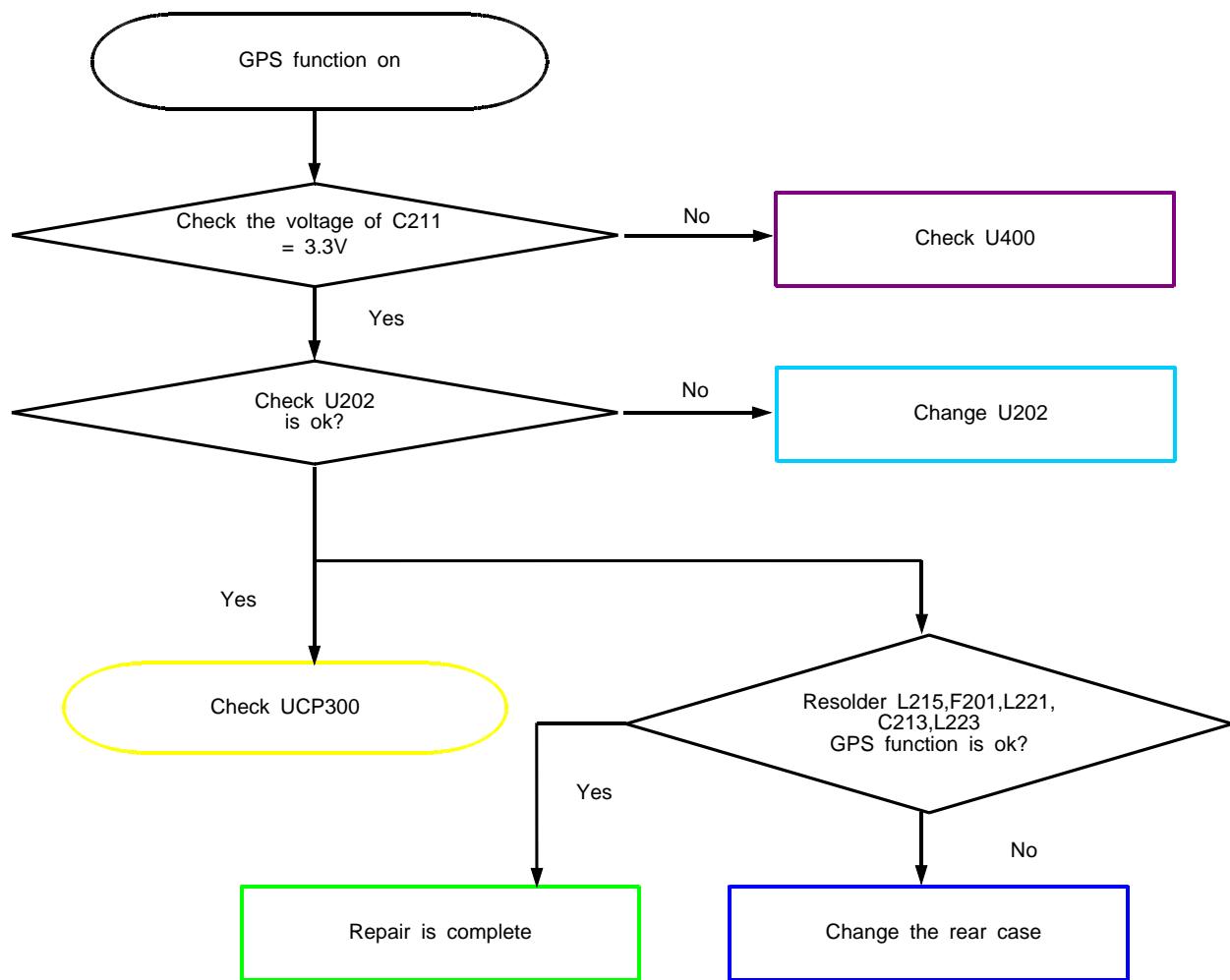


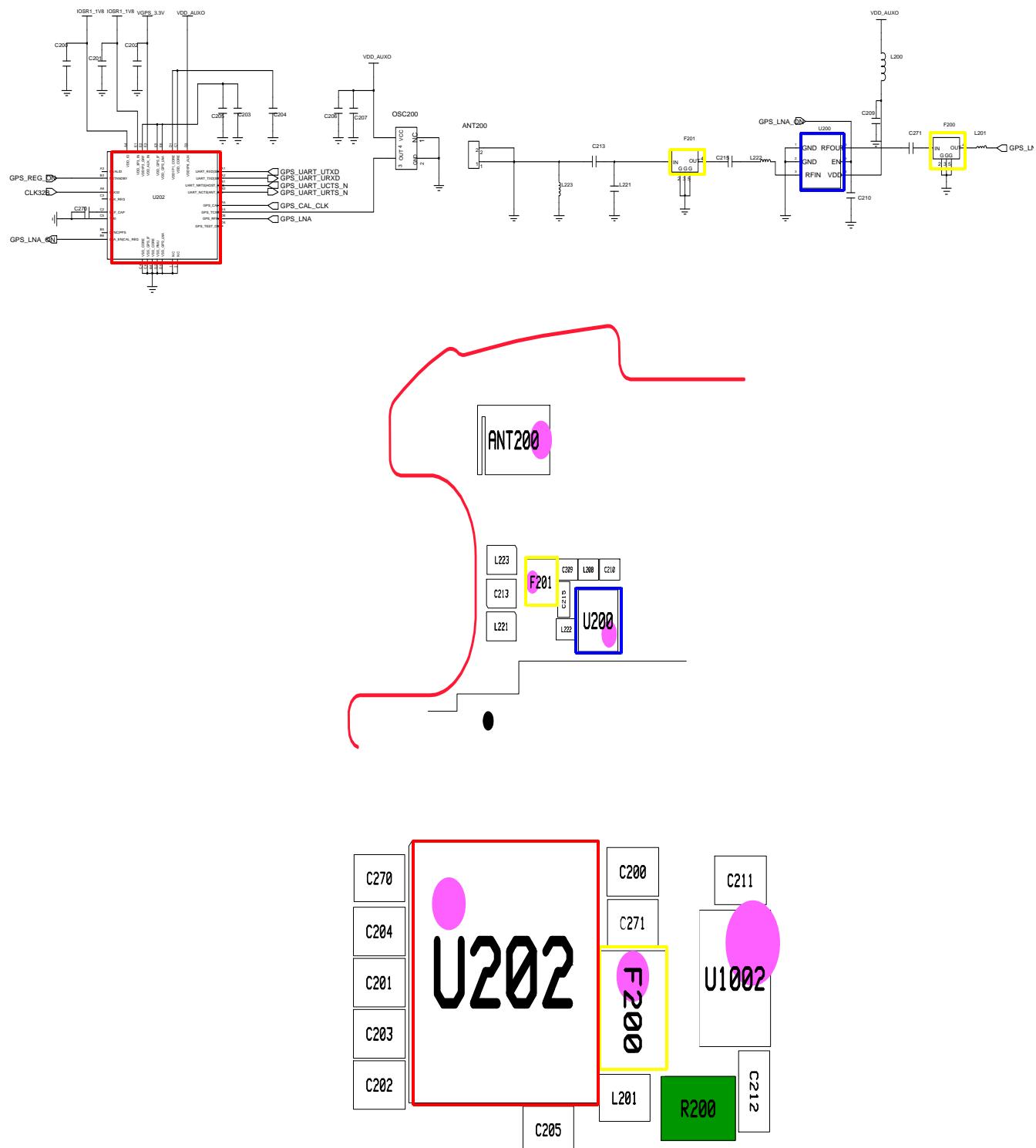
## 8-4-13. WiFi





## 8-4-14. GPS





## 8-5. Service Schematics

**- NC Point(Top View)**

● : NC

UME300

	1	2	3	4	5	6	7	8	9	10
A	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○
C	○	●	○	●	○	●				
D	●	●	●	●	●	●	●			
E	○	●	●		○	○	○	○	○	○
F	○	○	●		○	○	○	○	○	○
G	○	○	○		○	○	○	○	○	○
H	●	○	○		○	○	○	○	○	○
J	●	○	○		○	○	○	○	○	○
K	○	○	○		○	○	○	○	○	○
L	○	○	○		○	○				
M	○	●	○		○	○	○	○	○	○
N	○	●	●		○	○				
P	○	●	●		○	○	○	○	○	○
R	○	○	○		○	○	○	○	○	○
T	●	●	○		○	○	○	○	○	○
U	○	○	○		○	○	○	○	○	○
V	○	○	●		○	○	○	○	○	○
W	○	●	●		○	○	○	○	○	○
Y	○	○						○	○	