

SAMSUNG

UMTS TELEPHONE

SGH-A707

SERVICE *Manual*

UMTS TELEPHONE



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**SAMSUNG
ELECTRONICS**



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10. Reference data

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

	GSM 850	EGSM 900	DCS1800	PCS1900	W-CDMA 850	W-CDMA 1900
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	824~849 869~894	1850~1910 1930~1990
ARFCN range	128~25	0~124 & 975~1023	512~885	512~810	UL:4132~4233 DL:4357~4458	UL:9262~9538 DL:9662~9938
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	45MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 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 +30dBm)	1 (max +30dBm)	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±4 dBm	11	8±4 dBm
17	9±3 dBm	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. Product Function

Main Function

- Bluetooth
- Camera and camcorder
- Instant Messaging capability
- E-mail
- Featured applications provide alarms, calendar, calculator, record audio, converter, timer, stopwatch, and world time.
- File viewer
- Name card
- Multimedia Message Service (MMS)
- Multimedia capability (with included Media player)
- Photo caller ID
- Speakerphone capability
- Web browser

4. Array course control

4-1. Software Adjustments



1. JIG(GH80-03308A): Download, Trace, Calibration, etc
2. RF test cable: RF test
3. Test cable(GH39-00558A): JIG to phone
4. TA (Travel Adaptor)
5. Data Link Cable (PCB200BBE): USB cable
6. Serial cable: PC to JIG

4-2. Software Download

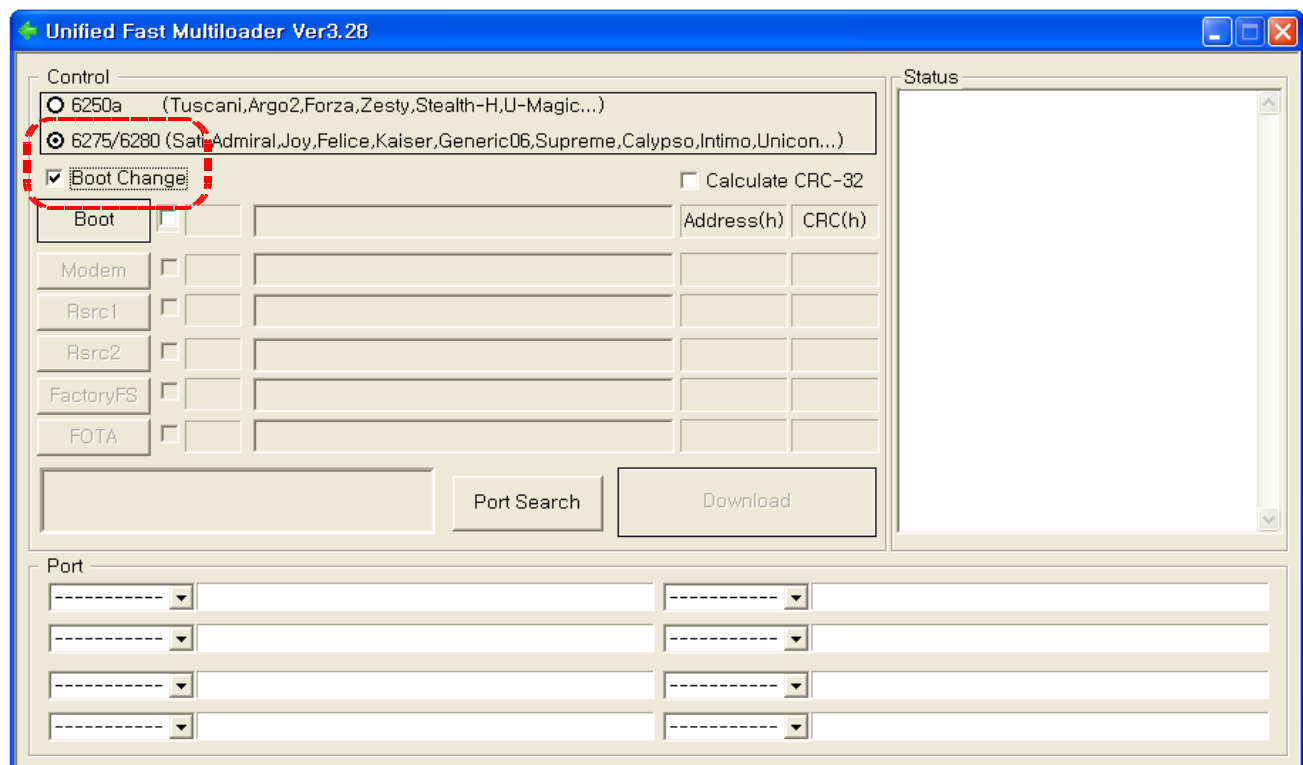
4-2-1. Pre-requisite for Download

- Downloader Program([FastMultiLoader V3.28.exe](#))
- SGH-A707 Mobile Phone
- USB Data Link Cable
- Binary files

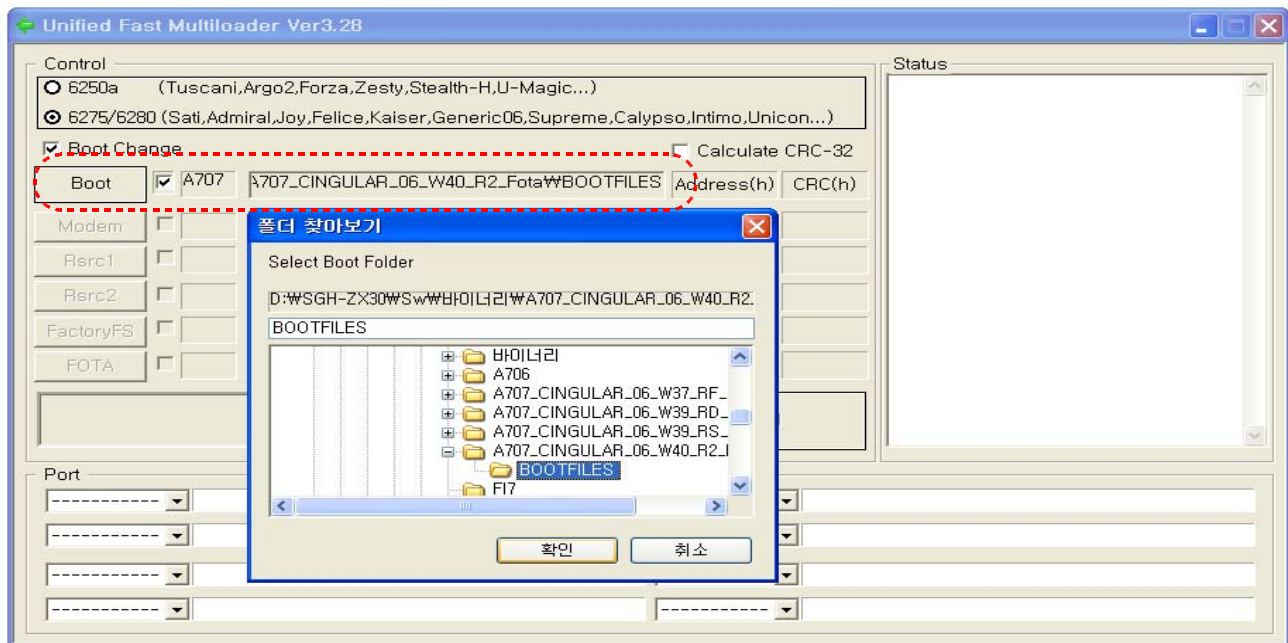
4-2-2. S/W Download Process

- Load the binary download program by executing the ["FastMultiLoader V3.28.exe"](#)

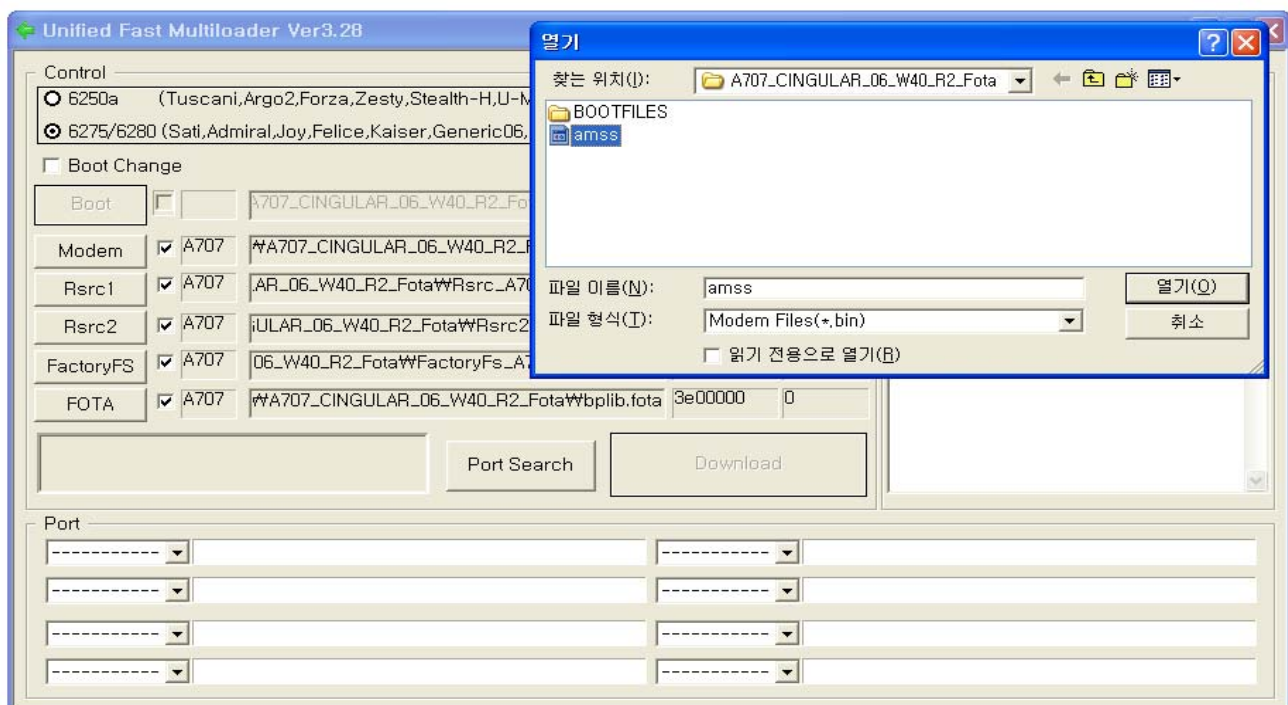
1. First, select the 6275/6280 for 'admiral'. And check 'Boot Change', then the 'Boot' will be activated.



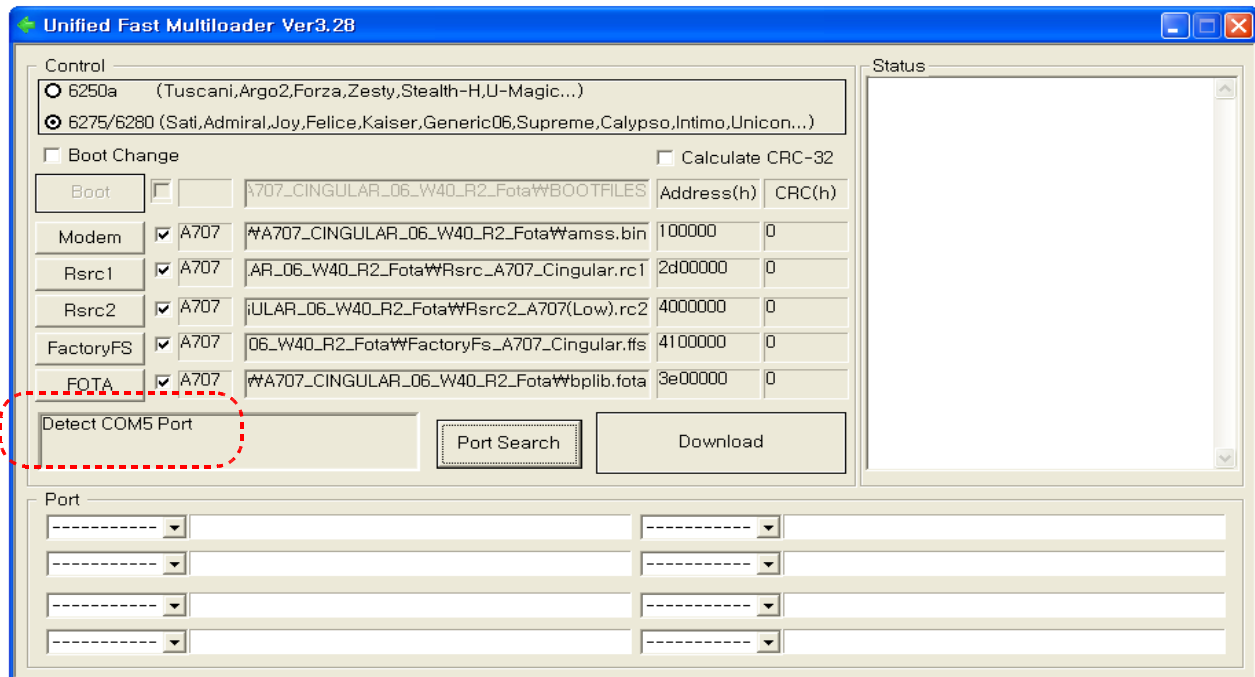
- Click the 'Boot', then the dialogue box is opened, then select the wanted file. And select 'OK'.



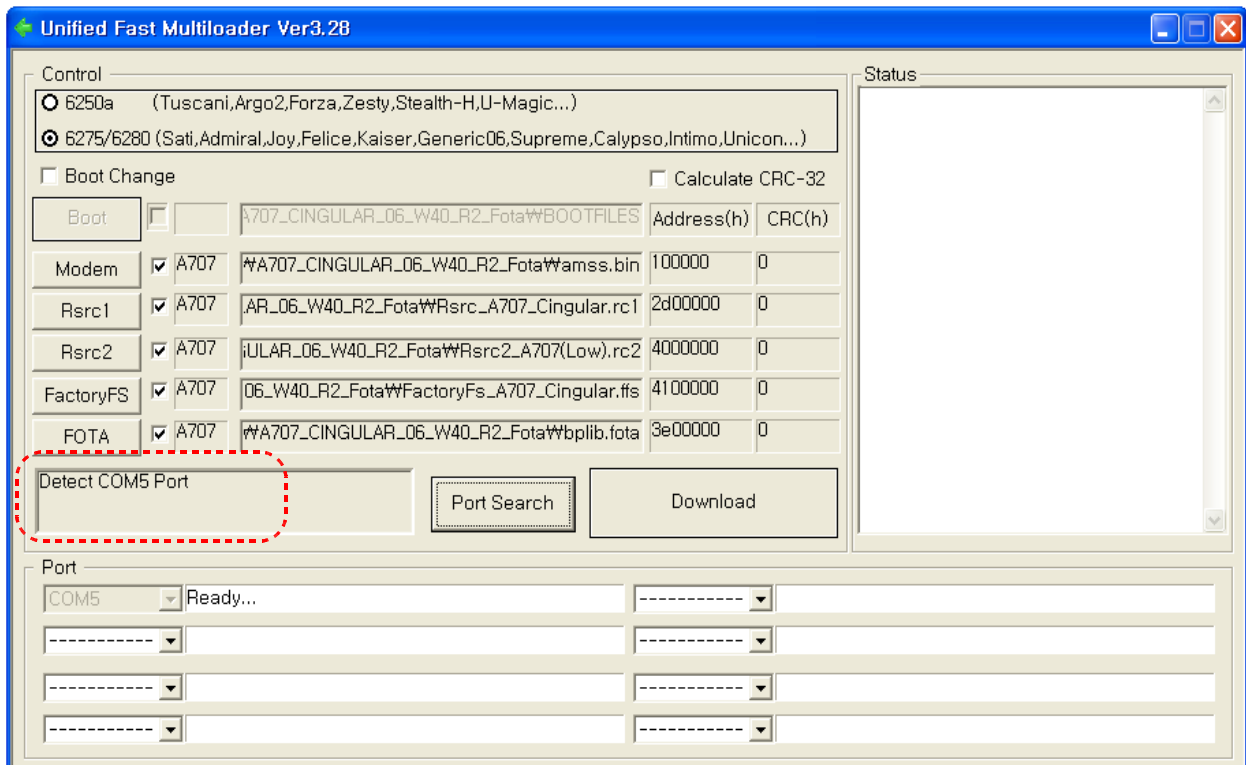
- Select the 'Boot Change' once more, then 'Boot' is inactivated, and the others('modem', 'Rsrc1', 'Rsrc2', 'FactoryFS', and 'Fota') are activated.
 - Click 'modem', 'Rsrc1', 'Rsrc2', 'FactoryFS' and 'FOTA' each, and select wanted files.



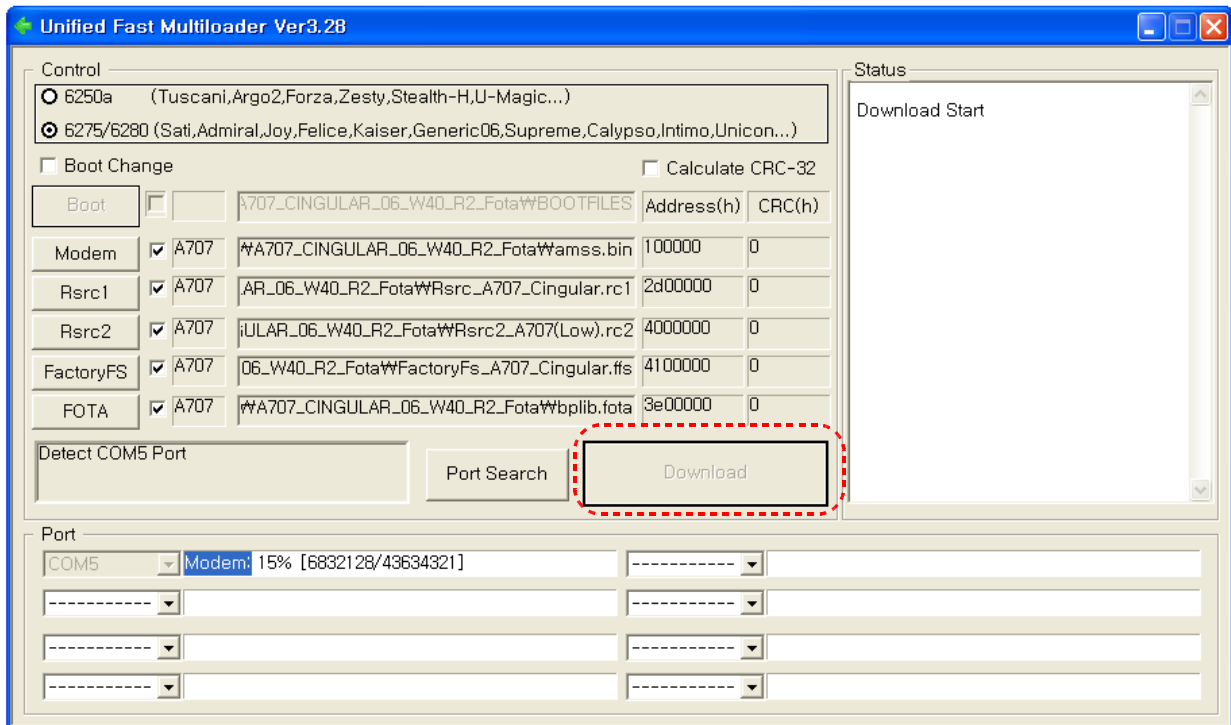
4. Connect phone to cable, the 'Detect Com port' is displayed.



5. Select 'Port Search', then 'Port' is activated.

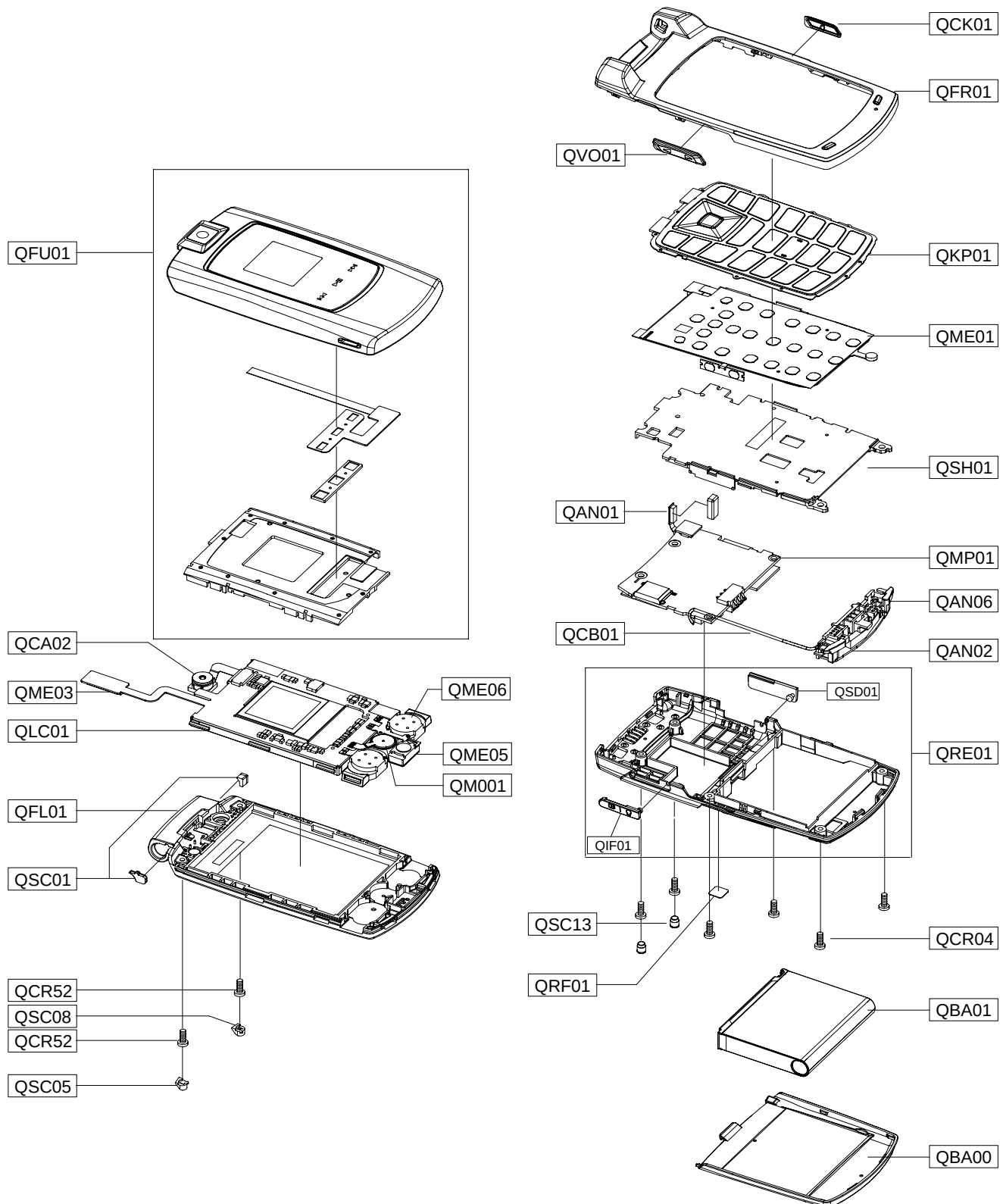


6. Click 'Download', then downloading is executed successively. If the download is completed, S/W downloading is finished.



5. Exploded View/Disassembly&Assembly Instructions

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC		Description	SEC CODE
QAN01		FPCB ANTENNA CHIP	GH42-00794A
QAN02		INTENNA-SGHA707	GH42-01011A
QAN06		ASSY COVER-INTENNA CARRIER	GH98-02961A
QBA00		PMO-CASE BATTERY V2	GH72-33925A
QBA01		INNER BATTERY PACK-1100MAH,BLK	GH43-02651A
QCA02		UNIT-CAMERA	GH59-03706A
QCB01		CBF COAXIAL CABLE-SGHA701	GH39-00693A
QCK01		ASSY KEY-CAMERA	GH98-03118A
QCR04		SCREW-MACHINE	6001-001479
QCR52		SCREW-MACHINE	6001-001300
QFL01		ASSY CASE-FOLDER LOWER	GH98-01631A
QFR01		ASSY CASE-FRONT COVER	GH98-02448A
QFU01		MEA-FOLDER UPPER KIT(DARK_GRAY	GH97-06714A
QKP01		ASSY KEYPAD-(XET/BLK)	GH98-02288A
QLC01		ELA ETC-SGHA707 LCD MODULE SVC	GH96-02265A
QME01		UNIT-LCD CON TO CON FPCB	GH59-03780A
QME01		UNIT-MAIN KEY FPCB	GH59-03719A
QME05		UNIT-RECEIVER SPEAKER FPCB ASS	GH59-03717A
QME06		UNIT-SPEAKER FPCB ASSY	GH59-03718A
QMO01		MOTOR DC-SGHA707	GH31-00279A
QMP01		PBA MAIN-SGHA707	GH92-03216A
QRF01		MPR-TAPE COVER RF	GH74-27477A
QSC01		PMO-DECO FOLDER LOWER L	GH72-33926A
QSC05		RMO-RUBBER COVER LOWER L	GH73-07621A
QSC08		RMO-RUBBER COVER LOWER R	GH73-07622A
QSC13		RMO-RUBBER COVER REAR	GH73-07623A
QSH01		ASSY BRACKET-SHIELD	GH98-01635A
QVO01		PMO-KEY VOL	GH72-30608A
QRE01		ASSY CASE-REAR	GH98-01633A
	QIF01	PMO-COVER IF	GH72-35076A
	QSD01	PMO-COVER SD	GH72-35077A

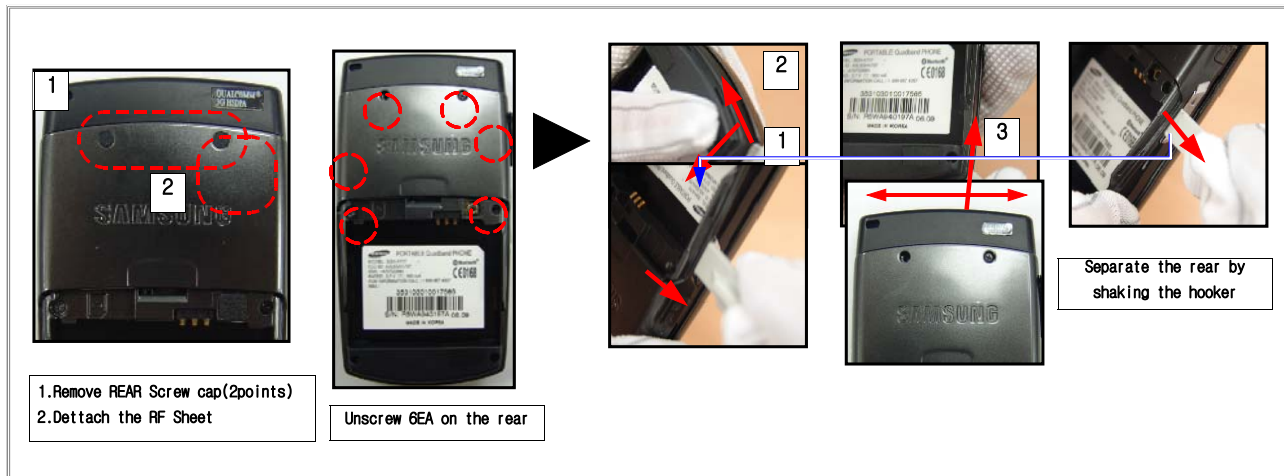
Description	Sec Code
BAG PE	6902-000634
ADAPTOR-SGHE690,BLK,USA	GH44-01363A
LABEL(P)-WATER SOAK	GH68-02026A
LABEL(R)-WATER SOAK T_MOBILE	GH68-05914A
LABEL(P)-UNIT BARCODE CIN	GH68-09418A
MANUAL USERS-CINGULAR SPANISH	GH68-12489A
MANUAL USERS-CINGULAR ENGLISH	GH68-12490A
MANUAL USERS-CINGULAR ENGLISH	GH68-12491A
MANUAL USERS-CINGULAR ENGLISH	GH68-12492A
LABEL(R)-MAIN(CIN)	GH68-12720A
LABEL-QUALCOMM	GH68-12830A
MANUAL USERS-NAPSTER PROMOTION	GH68-12914A
CUSHION-CASE(CIN)	GH69-04506A
BOX-UNIT(CIN)	GH69-04507A
RMO-RUBBER B/T	GH73-07213A
MPR-REMOVE TAPE LCD	GH74-13804A
MPR-BOHO VINYL LCD CONN	GH74-15350A
MPR-TAPE FPCB DOUBLE	GH74-16772A
CONE-TAPE SUB LCD INSUL	GH74-19756A
MPR-TAPE,33X53X0.16,TESA4976	GH74-26578A
MPR-INSU TAPE	GH74-27074A
MPR-INSU TAPE	GH74-27077A
MPR-TAPE	GH74-27078A
MPR-INSU TAPE	GH74-27110A
MPR-INSU TAPE	GH74-27324A
MPR-GASK TAPE	GH74-27325A
MPR-INSU TAPE	GH74-27436A
MPR-GASK TAPE	GH74-27437A
MPR-INSU TAPE	GH74-27751A
MPR-SPONGE SPK 1	GH74-28132A
MPR-VINYL BOHO SUB WINDOW	GH74-28184A
MPR-TAPE J TAG	GH74-28232A
MPR-VINYL BOHO MAIN WIN PRESS	GH74-28233A
MPR-GASK TAPE	GH74-28263A
MPR-SPONGE SIM	GH74-28585A
MPR-SPONGE PCB 1	GH74-28596A
MPR-SPONGE PCB 2	GH74-28597A
MPR-SPONGE LOWER L	GH74-28600A
MPR-SPONGE LOWER R	GH74-28601A

Description	Sec Code
MPR-GASK TAPE SHIELD	GH74-28602A
MPR-TAPE LOWER SCREW	GH74-28625A
MPR-VINYL BOHO WINDOW MAIN LOG	GH74-28660A
MPR-TAPE LABEL INTENNA	GH74-28783A
AS-SGHA701 MIC SVC	GH81-06074A
ASSY COVER-MAIN WINDOW	GH98-02935A

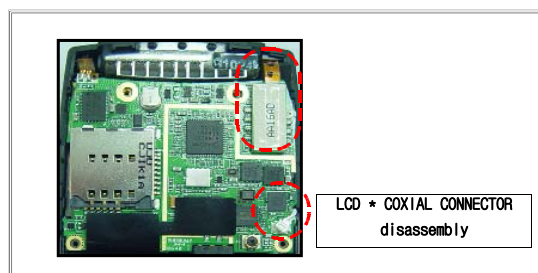
5-3. Disassembly and Assembly Instructions

— Disassembly

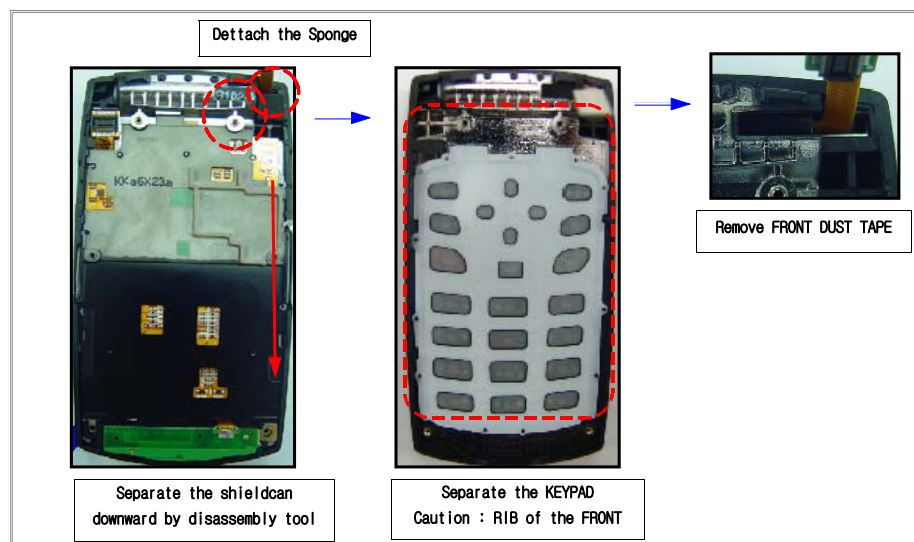
1. REAR



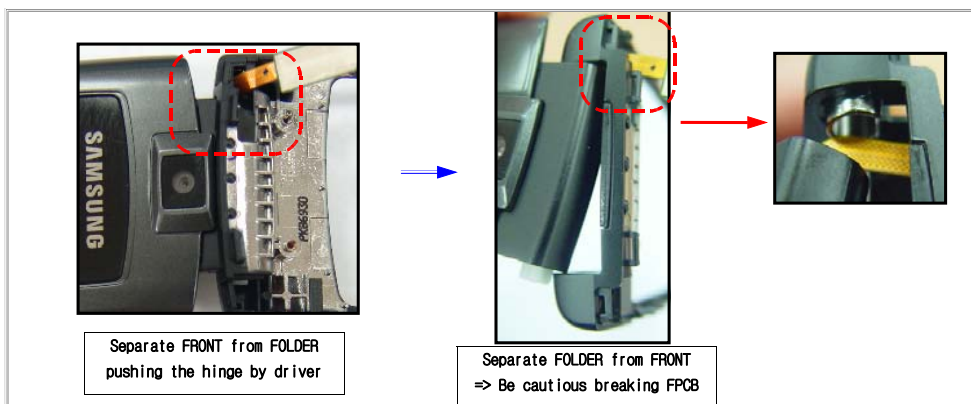
2. PBA



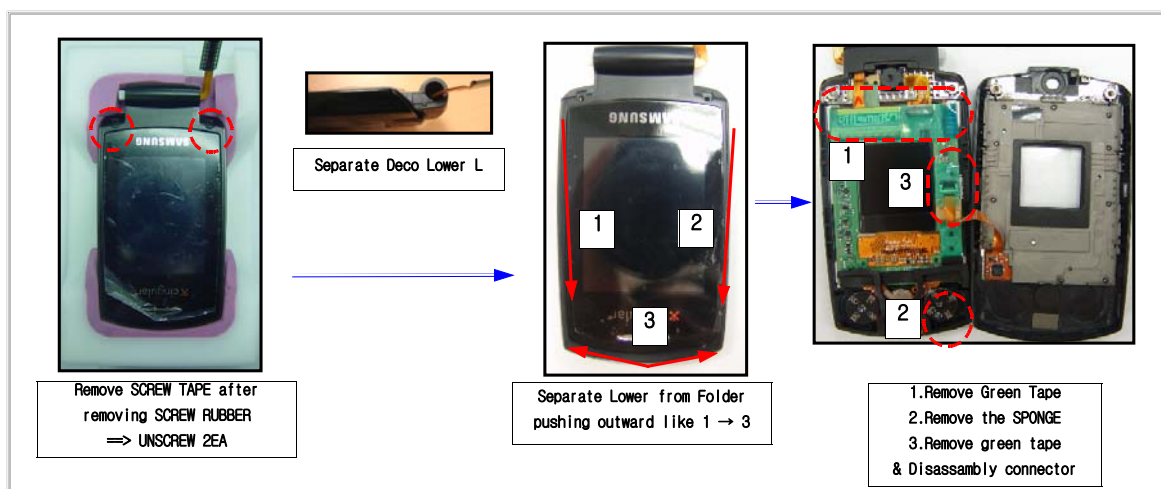
3. SHIELD CAN & KEYPAD



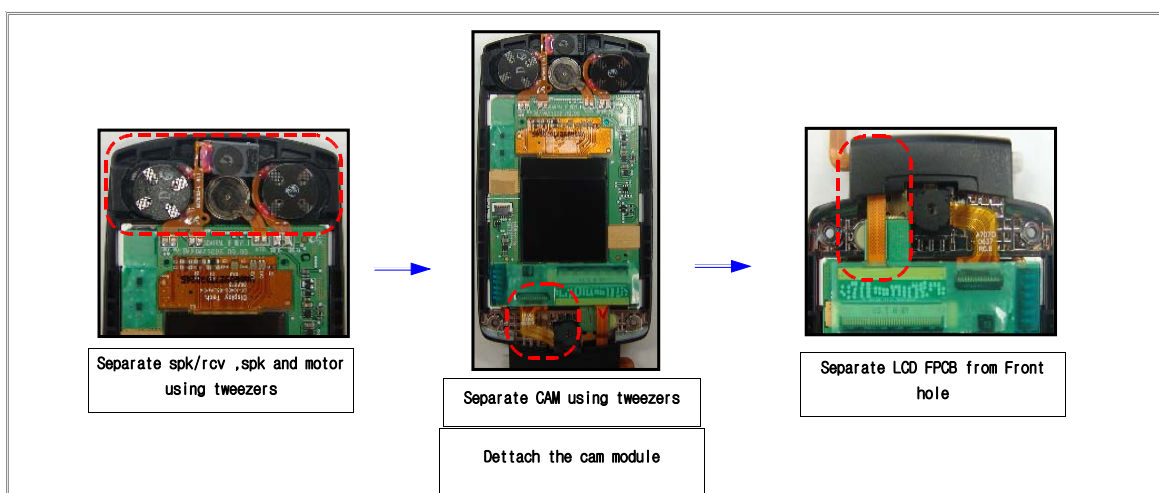
4.FOLDER



5.FOLDER

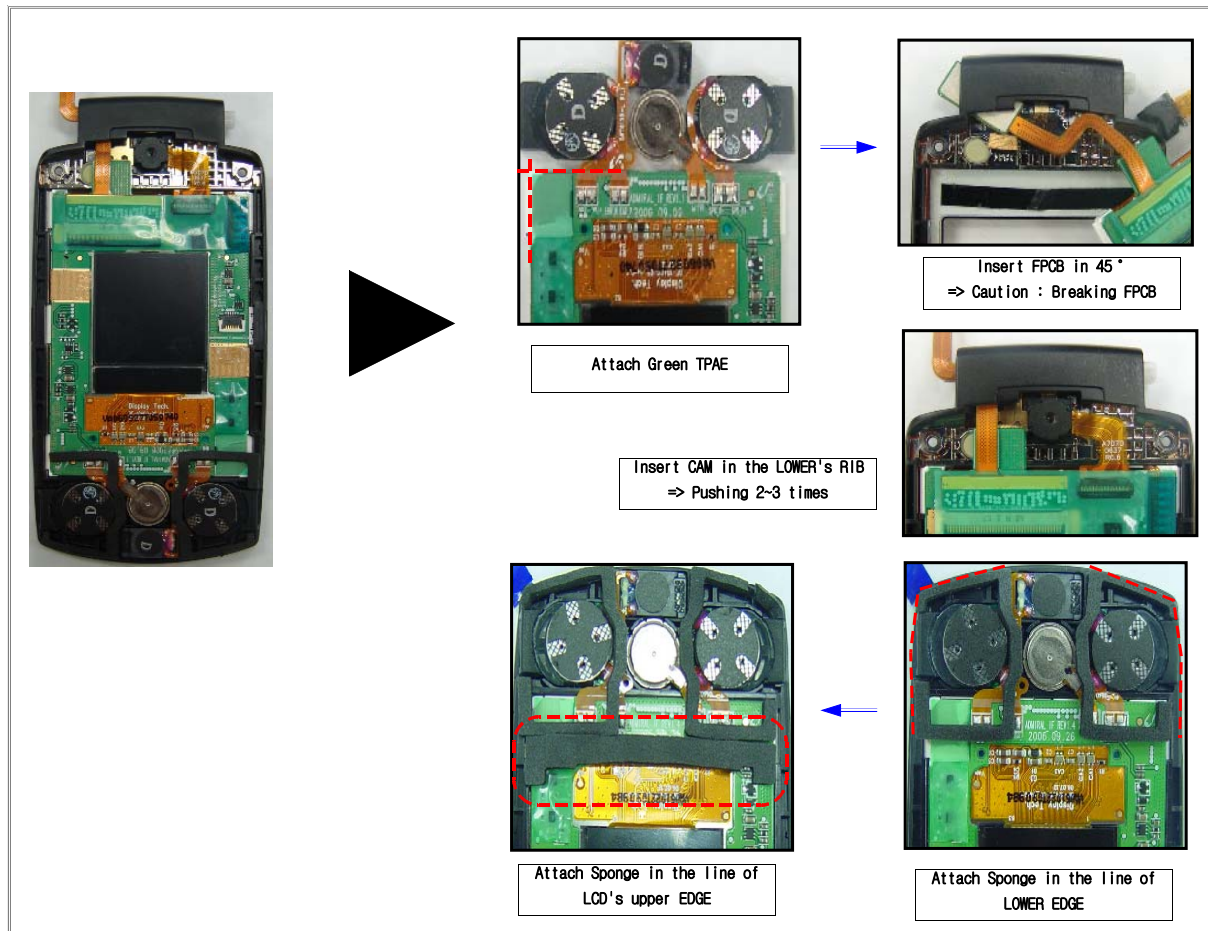


6.LCD

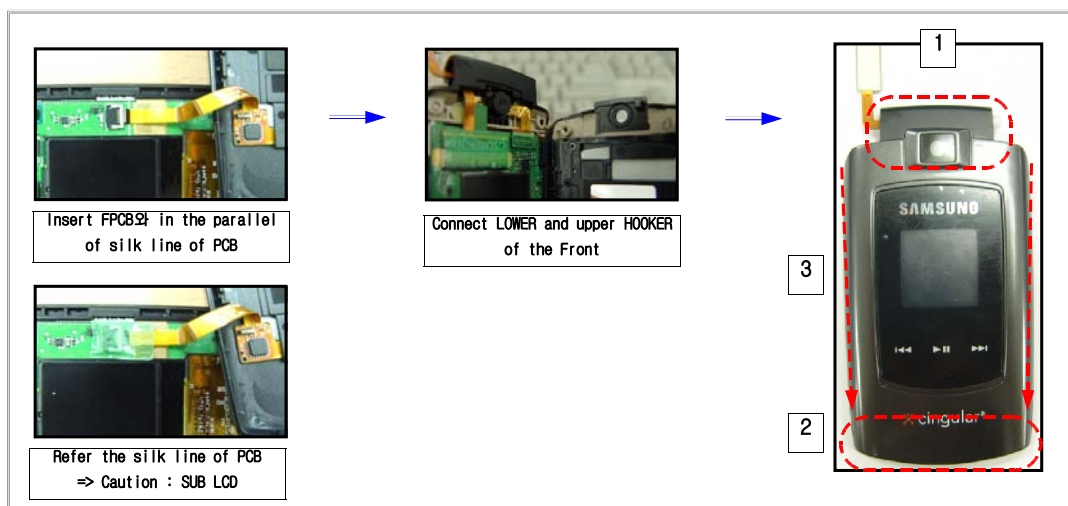


— Assembly

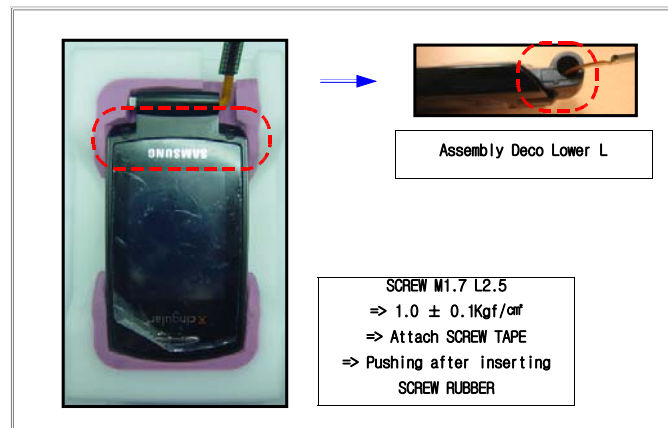
1. LCD



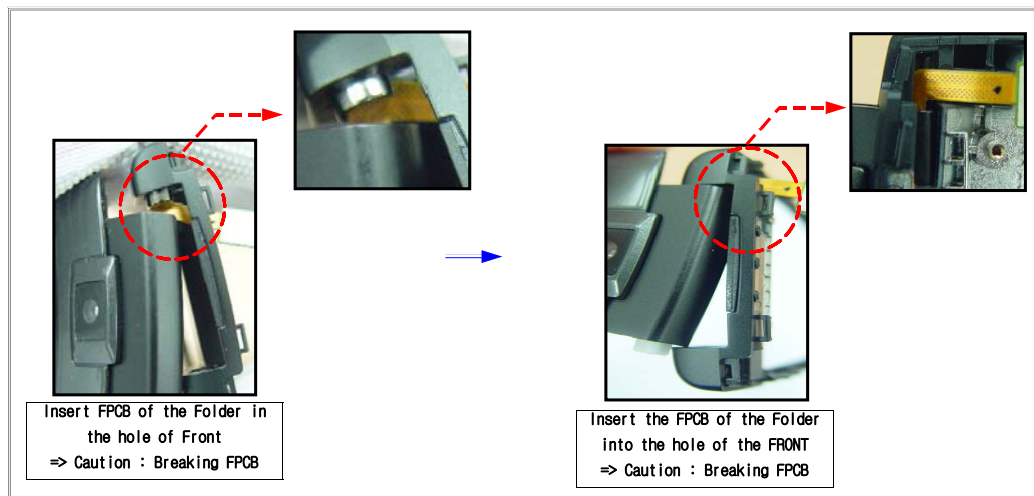
2. FOLDER



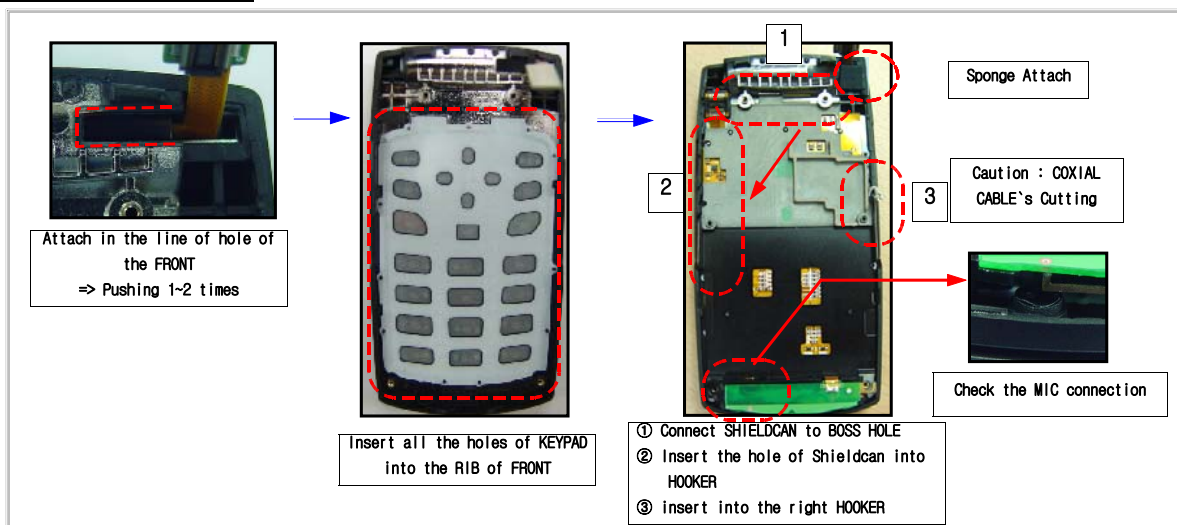
3.SCREW



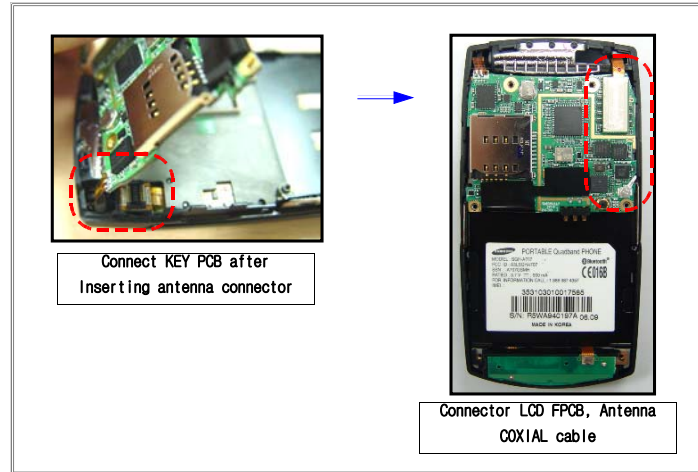
4.FRONT



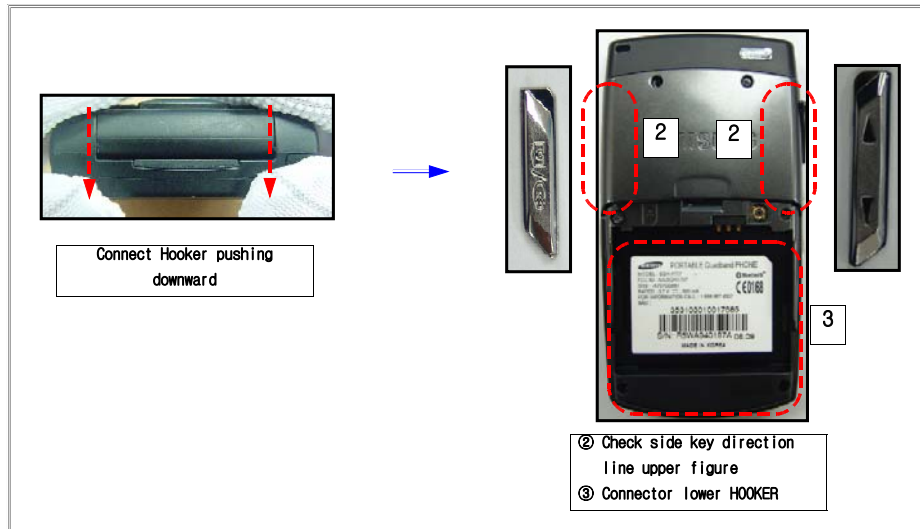
5.SHIELDCAN & KEYPAD



6.PBA



7.REAR



8.SCREW



6. MAIN Electrical Parts List

Design LOC	Description	SEC Code	STATUS
ANT400	CONNECTOR-COAXIAL	3705-001225	SA
BAT200	BATTERY-LI(2ND)	4302-001180	SA
BT200	BLUETOOTH MODULE	4709-001445	SA
BTC300	CONNECTOR-BATTERY	3711-006003	SA
C100	C-CER,CHIP	2203-006423	SA
C101	C-CER,CHIP	2203-006423	SA
C102	C-CER,CHIP	2203-006423	SA
C103	C-CER,CHIP	2203-006423	SA
C104	C-CER,CHIP	2203-006423	SA
C105	C-CER,CHIP	2203-000489	SA
C106	C-CER,CHIP	2203-000628	SA
C107	C-CER,CHIP	2203-006423	SA
C108	C-CER,CHIP	2203-006423	SA
C109	C-CER,CHIP	2203-006423	SA
C110	C-CER,CHIP	2203-000628	SA
C111	C-CER,CHIP	2203-006562	SA
C112	C-CER,CHIP	2203-006423	SA
C113	C-CER,CHIP	2203-005480	SA
C114	C-CER,CHIP	2203-006194	SA
C115	C-CER,CHIP	2203-006423	SA
C116	C-CER,CHIP	2203-006617	SA
C117	C-CER,CHIP	2203-006423	SA
C118	C-CER,CHIP	2203-006423	SA
C119	C-CER,CHIP	2203-006617	SA
C120	C-CER,CHIP	2203-006423	SA
C121	C-CER,CHIP	2203-005393	SA
C122	C-CER,CHIP	2203-006423	SA
C123	C-CER,CHIP	2203-005482	SA
C125	C-CER,CHIP	2203-006423	SA
C126	C-CER,CHIP	2203-005736	SA
C127	C-CER,CHIP	2203-006562	SA
C128	C-CER,CHIP	2203-006423	SA
C129	C-CER,CHIP	2203-006423	SA
C130	C-CER,CHIP	2203-006423	SA
C131	C-CER,CHIP	2203-006423	SA
C132	C-CER,CHIP	2203-006194	SA
C133	C-CER,CHIP	2203-006194	SA
C134	C-CER,CHIP	2203-006194	SA
C135	C-CER,CHIP	2203-006194	SA
C136	C-CER,CHIP	2203-005806	SNA
C137	C-CER,CHIP	2203-005806	SNA
C138	C-CER,CHIP	2203-005806	SNA
C139	C-CER,CHIP	2203-005806	SNA
C140	C-CER,CHIP	2203-006208	SA
C141	C-CER,CHIP	2203-006399	SA
C142	C-CER,CHIP	2203-005806	SNA
C143	C-CER,CHIP	2203-005806	SNA
C144	C-CER,CHIP	2203-005806	SNA
C145	C-CER,CHIP	2203-006194	SA
C146	C-CER,CHIP	2203-006194	SA
C147	C-CER,CHIP	2203-006194	SA
C148	C-CER,CHIP	2203-006423	SA
C149	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
C150	C-CER,CHIP	2203-006423	SA
C151	C-CER,CHIP	2203-006423	SA
C152	C-CER,CHIP	2203-006194	SA
C153	C-CER,CHIP	2203-006423	SA
C154	C-CER,CHIP	2203-006194	SA
C155	C-CER,CHIP	2203-006423	SA
C156	C-CER,CHIP	2203-006194	SA
C157	C-CER,CHIP	2203-006423	SA
C158	C-CER,CHIP	2203-006194	SA
C159	C-CER,CHIP	2203-006423	SA
C160	C-CER,CHIP	2203-006194	SA
C161	C-CER,CHIP	2203-006194	SA
C162	C-CER,CHIP	2203-005806	SNA
C163	C-CER,CHIP	2203-006194	SA
C164	C-CER,CHIP	2203-005806	SNA
C165	C-CER,CHIP	2203-006562	SA
C166	C-CER,CHIP	2203-006423	SA
C167	C-CER,CHIP	2203-006423	SA
C168	C-CER,CHIP	2203-006423	SA
C169	C-CER,CHIP	2203-006423	SA
C170	C-CER,CHIP	2203-006423	SA
C171	C-CER,CHIP	2203-006208	SA
C172	C-CER,CHIP	2203-006556	SA
C173	C-CER,CHIP	2203-006423	SA
C200	C-CER,CHIP	2203-006324	SA
C201	C-CER,CHIP	2203-006423	SA
C202	C-CER,CHIP	2203-006208	SA
C203	C-CER,CHIP	2203-006208	SA
C204	C-CER,CHIP	2203-006423	SA
C205	C-CER,CHIP	2203-006423	SA
C206	C-CER,CHIP	2203-006562	SA
C207	C-CER,CHIP	2203-006562	SA
C208	C-TA,CHIP	2404-001448	SA
C209	C-CER,CHIP	2203-006708	SA
C210	C-TA,CHIP	2404-001448	SA
C211	C-CER,CHIP	2203-006399	SA
C212	C-CER,CHIP	2203-005736	SA
C213	C-CER,CHIP	2203-006423	SA
C214	C-CER,CHIP	2203-005993	SA
C215	C-CER,CHIP	2203-006423	SA
C216	C-CER,CHIP	2203-006423	SA
C217	C-CER,CHIP	2203-005729	SA
C218	C-CER,CHIP	2203-005729	SA
C219	C-CER,CHIP	2203-006896	SA
C220	C-CER,CHIP	2203-006423	SA
C221	C-CER,CHIP	2203-006562	SA
C222	C-CER,CHIP	2203-006305	SA
C223	C-CER,CHIP	2203-006305	SA
C224	C-CER,CHIP	2203-006208	SA
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Design LOC	Description	SEC Code	STATUS
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C236	C-CER,CHIP	2203-006562	SA
C237	C-CER,CHIP	2203-006208	SA
C238	C-CER,CHIP	2203-005806	SNA
C239	C-CER,CHIP	2203-006208	SA
C240	C-CER,CHIP	2203-005806	SNA
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C242	C-CER,CHIP	2203-002709	SA
C243	C-TA,CHIP	2404-001381	SA
C244	C-CER,CHIP	2203-005736	SA
C245	C-CER,CHIP	2203-005993	SA
C246	C-CER,CHIP	2203-006668	SA
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C279	C-CER,CHIP	2203-006562	SA
C280	C-CER,CHIP	2203-006824	SA
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C301	C-TA,CHIP	2404-001381	SA
C302	C-CER,CHIP	2203-002709	SA
C303	C-CER,CHIP	2203-002709	SA
C304	C-TA,CHIP	2404-001381	SA
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C320	C-CER,CHIP	2203-005682	SA
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C326	C-TA,CHIP	2404-001474	SA
C327	C-CER,CHIP	2203-000812	SA
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C335	C-CER,CHIP	2203-005482	SA
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C351	C-CER,CHIP	2203-005395	SA
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C402	C-CER,CHIP	2203-005806	SNA
C403	C-CER,CHIP	2203-006194	SA
C405	INDUCTOR-SMD	2703-002200	SA
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C415	C-CER,CHIP	2203-006379	SA
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C417	C-CER,CHIP	2203-006423	SA
C418	C-CER,CHIP	2203-005806	SNA
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C452	C-CER,CHIP	2203-001153	SA
C454	C-CER,CHIP	2203-000386	SA

Design LOC	Description	SEC Code	STATUS
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C503	C-CER,CHIP	2203-005682	SA
C504	C-CER,CHIP	2203-001239	SA
C506	C-CER,CHIP	2203-005736	SA
C507	C-CER,CHIP	2203-006423	SA
C508	INDUCTOR-SMD	2703-002204	SA
C510	C-CER,CHIP	2203-000386	SA
C511	C-CER,CHIP	2203-001239	SA
C512	C-CER,CHIP	2203-005736	SA
C513	C-CER,CHIP	2203-006423	SA
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C518	C-CER,CHIP	2203-005736	SA
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C548	C-CER,CHIP	2203-005806	SNA
C549	C-CER,CHIP	2203-006423	SA
C551	C-CER,CHIP	2203-006194	SA
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C561	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
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C565	C-CER,CHIP	2203-006194	SA
C566	C-CER,CHIP	2203-006824	SA
C567	C-CER,CHIP	2203-006423	SA
C568	C-CER,CHIP	2203-005725	SA
C569	C-CER,CHIP	2203-006194	SA
CN301	HEADER-BOARD TO BOARD	3711-005367	SA
CN302	HEADER-BOARD TO BOARD	3711-005456	SA
D200	DIODE-ARRAY	0407-001002	SA
D300	DIODE-TVS	0406-001190	SA
D301	DIODE-TVS	0406-001190	SA
D305	DIODE-TVS	0406-001208	SA
F200	FILTER-SAW	2904-001621	SA
F203	FILTER-SAW	2904-001625	SA
F300	FILTER-EMI/ESD	2901-001320	SA
F301	FILTER-EMI/ESD	2901-001320	SA
F302	FILTER-EMI/ESD	2901-001320	SA
F303	FILTER-EMI/ESD	2901-001320	SA
F304	FILTER-EMI/ESD	2901-001353	SA
F305	FILTER-EMI/ESD	2901-001320	SA
F306	FILTER-EMI/ESD	2901-001353	SA
F400	DUPLEXER-FEM	2911-000063	SA
F500	FILTER-SAW	2904-001668	SA
F501	DUPLEXER-SAW	2910-000014	SA
F503	DUPLEXER-FBAR	2910-000009	SA
F504	FILTER-SAW	2904-001531	SNA
IFC300	SOCKET-INTERFACE	3710-002306	SA
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L414	INDUCTOR-SMD	2703-002918	SA
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L417	INDUCTOR-SMD	2703-002907	SNA
L418	INDUCTOR-SMD	2703-002870	SA
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Design LOC	Description	SEC Code	STATUS
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L424	INDUCTOR-SMD	2703-002870	SA
L425	C-CER,CHIP	2203-002677	SA
L426	C-CER,CHIP	2203-002668	SA
L427	INDUCTOR-SMD	2703-001750	SA
L428	INDUCTOR-SMD	2703-001751	SA
L500	INDUCTOR-SMD	2703-002870	SA
L501	INDUCTOR-SMD	2703-002308	SA
L502	INDUCTOR-SMD	2703-002903	SA
L503	INDUCTOR-SMD	2703-002858	SA
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OSC200	CRYSTAL-SMD	2801-004466	SA
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OSC500	OSCILLATOR-VCO	2806-001372	SA
OSC501	OSCILLATOR-VCTCXO	2809-001280	SA
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Q501	TR-DIGITAL	0504-001151	SA
Q502	TR-DIGITAL	0504-001113	SA
Q503	FET-SILICON	0505-001464	SA
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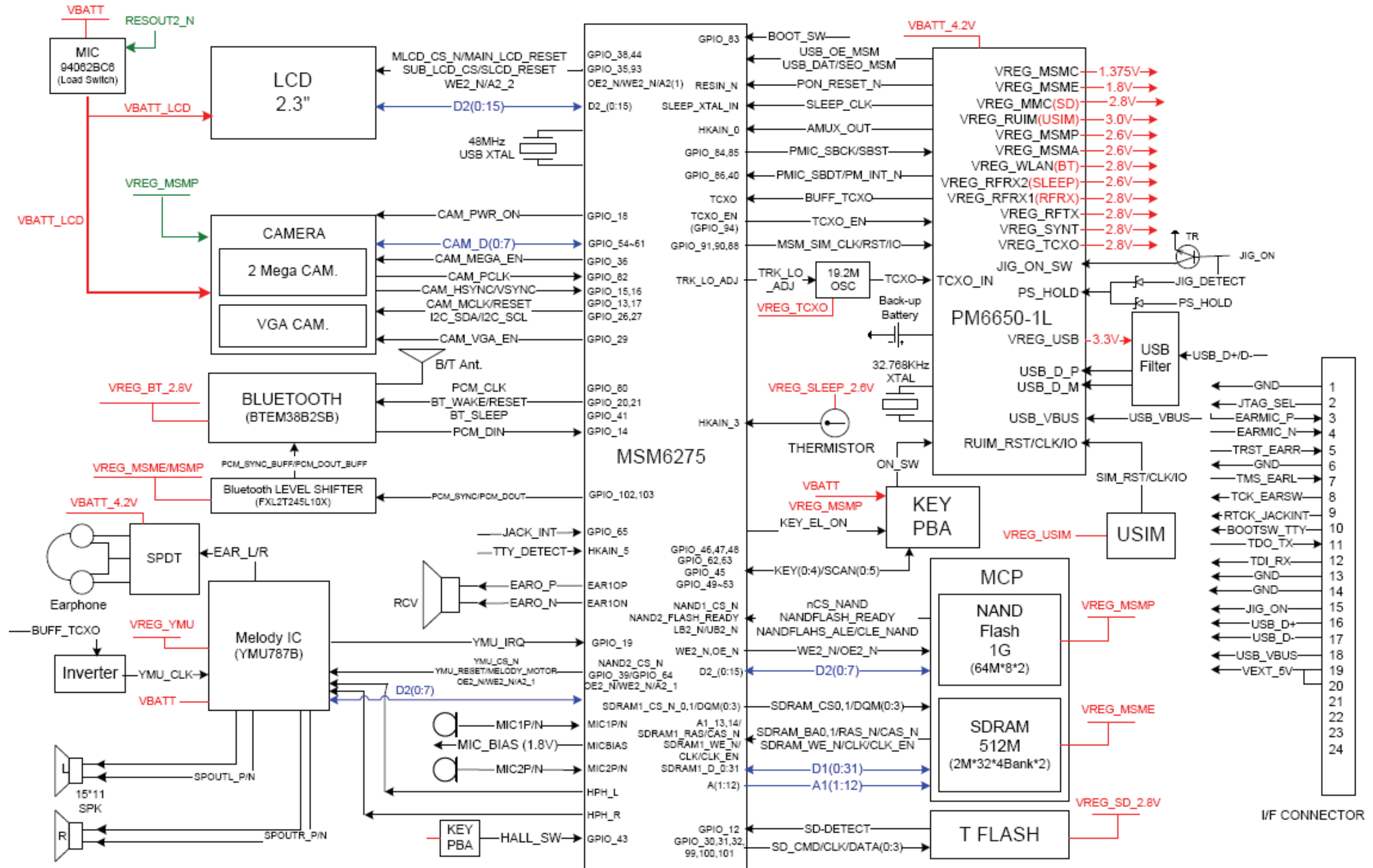
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R421	R-CHIP	2007-008588	SA
R422	R-CHIP	2007-008045	SA
R423	R-CHIP	2007-008806	SA
R424	R-CHIP	2007-008045	SA
R425	C-CER,CHIP	2203-005446	SA
R500	R-CHIP	2007-009111	SA
R501	R-CHIP	2007-007314	SA
R502	R-CHIP	2007-009111	SA
R503	R-CHIP	2007-008045	SA
R504	R-CHIP	2007-007314	SA
R505	R-CHIP	2007-007491	SA
R506	R-CHIP	2007-007314	SA
R509	R-CHIP	2007-008806	SA
R511	R-CHIP	2007-009315	SA
R512	R-CHIP	2007-008483	SA
R514	R-CHIP	2007-008045	SA
R515	R-CHIP	2007-009208	SA

Design LOC	Description	SEC Code	STATUS
R516	R-CHIP	2007-008549	SA
R517	R-CHIP	2007-008419	SA
R518	R-CHIP	2007-008051	SA
R519	R-CHIP	2007-008542	SA
R520	R-CHIP	2007-009155	SNA
R804	R-CHIP	2007-008542	SA
R805	R-CHIP	2007-001305	SA
R806	R-CHIP	2007-007009	SA
R807	R-CHIP	2007-007009	SA
R808	R-CHIP	2007-008806	SA
RFS400	CONNECTOR-COAXIAL	3705-001358	SA
T/SIM200	CONNECTOR-CARD EDGE	3709-001465	SA
TH100	THERMISTOR-NTC	1404-001224	SA
U102	IC-ANALOG SWITCH	1001-001408	SA
U103	IC-ANALOG SWITCH	1001-001408	SA
U104	IC-CMOS LOGIC	0801-003076	SA
U200	IC-VOL. DETECTOR	1203-004045	SA
U201	IC-MELODY	1204-002587	SA
U202	IC-POWER SUPERVISOR	1203-004102	SA
U203	IC-POSI.FIXED REG.	1203-003523	SA
U204	IC-CMOS LOGIC	0801-003031	SA
U205	COUPLER-DIRECTION	4709-001405	SA
U206	IC-ANALOG SWITCH	1001-001359	SA
U207	IC-ANALOG SWITCH	1001-001336	SA
U208	DIODE-ARRAY	0407-001038	SA
U210	IC-BATTERY	1203-003823	SA
U300	IC-POSI.FIXED REG.	1203-003208	SA
U301	IC-SWITCH	1205-002686	SA
U400	IC-TRANSCEIVER	1205-002645	SA
U401	IC-POWER AMP	1201-002288	SA
U500	IC-POWER AMP	1201-002452	SA
U501	IC-RF AMP	1201-002297	SA
U502	IC-POWER AMP	1201-002450	SA
U503	IC-DETECTOR	1209-001577	SA
U504	IC-RECEIVER	1205-002798	SA
U568	R-CHIP	2007-008045	SA
U570	C-CER,CHIP	2203-006423	SA
U571	C-CER,CHIP	2203-005682	SA
U572	C-CER,CHIP	2203-006194	SA
U573	C-CER,CHIP	2203-005806	SNA
U575	COUPLER-DIRECTION	4709-001399	SA
UCP101	IC-MODEM	1205-002790	SA
UME100	IC-MCP	1108-000071	SA
V300	VARISTOR	1405-001177	SA
V301	VARISTOR	1405-001177	SA
V302	VARISTOR	1405-001177	SA
V303	VARISTOR	1405-001177	SA
V304	VARISTOR	1405-001177	SA
V305	VARISTOR	1405-001177	SA
V306	VARISTOR	1405-001177	SA
V307	VARISTOR	1405-001177	SA
ZD200	DIODE-SCHOTTKY	0404-001089	SA
ZD300	DIODE-TVS	0406-001201	SA

Design LOC	Description	SEC Code	STATUS
ZD302	DIODE-ZENER	0403-001427	SA
ZD306	DIODE-ZENER	0403-001547	SA

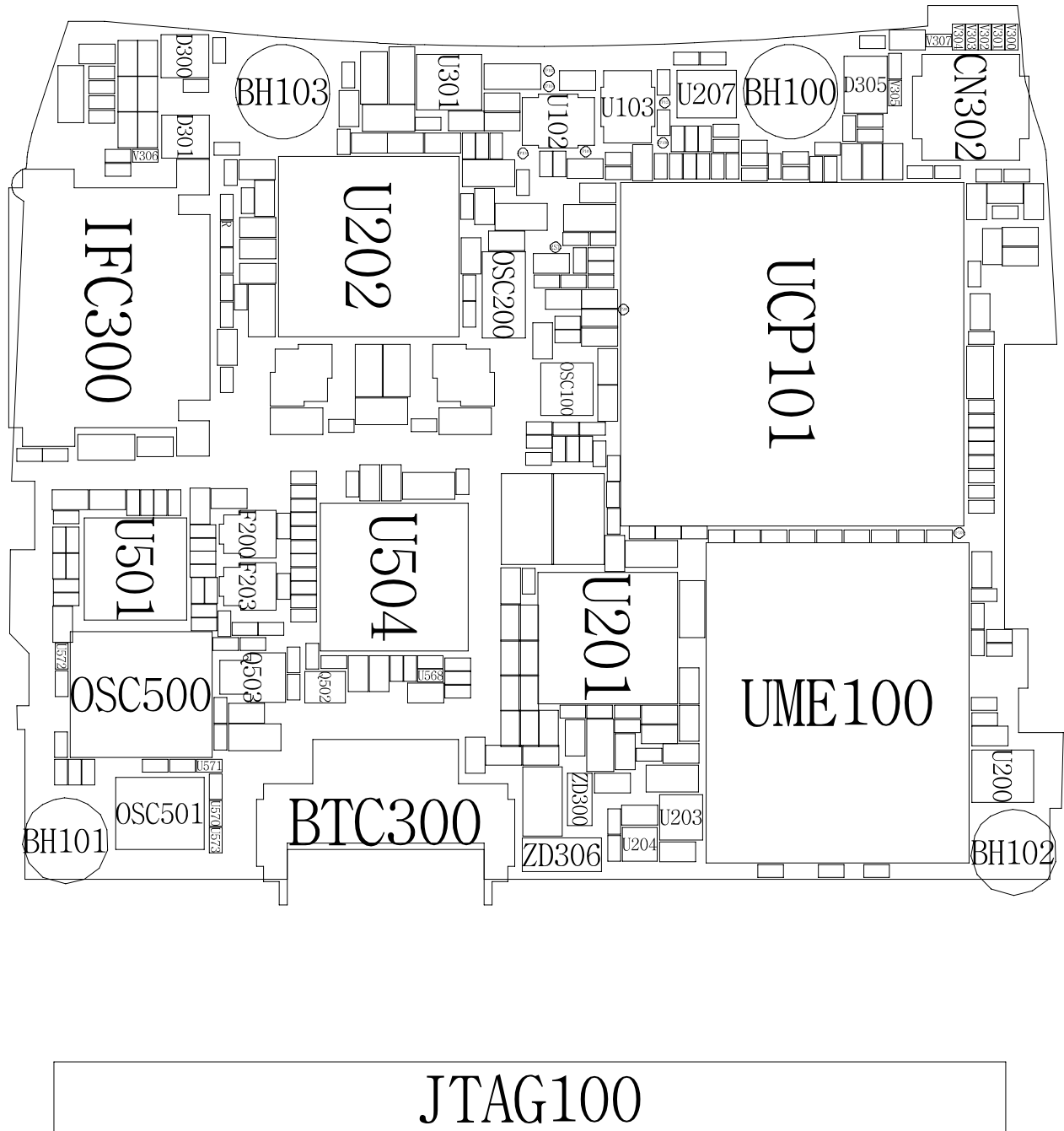
7. Block Diagrams

7-1. Base Band Block Diagram

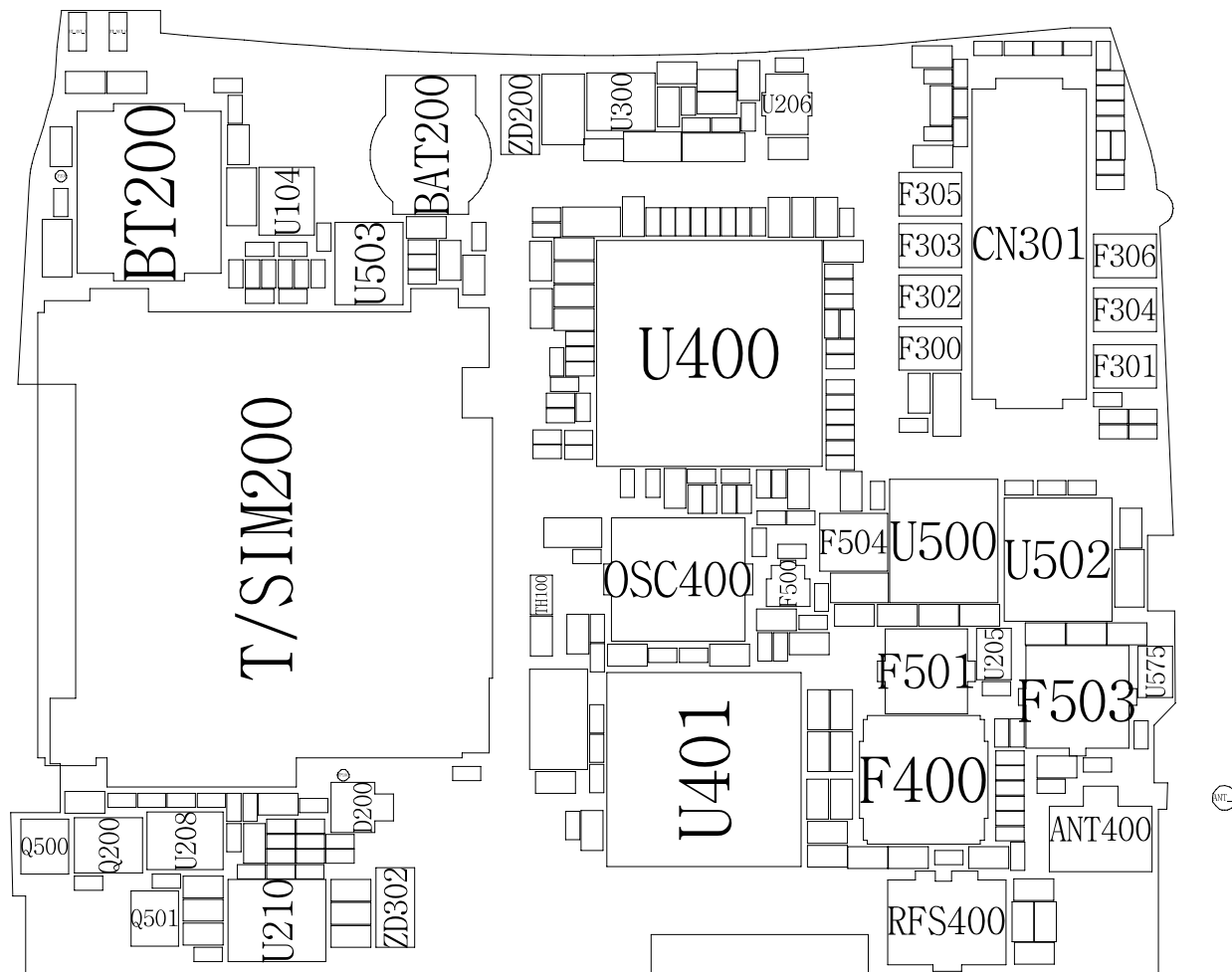




Top

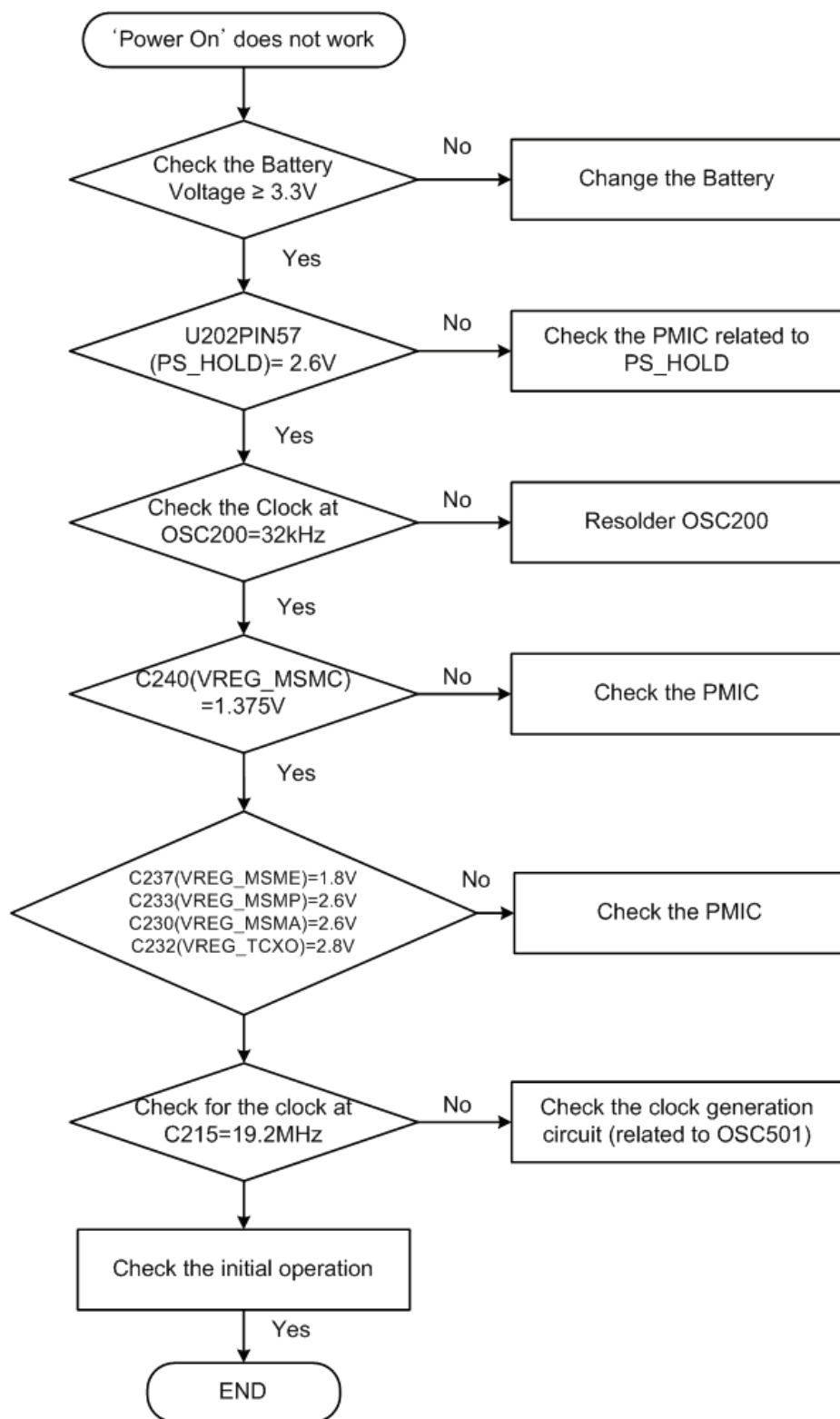


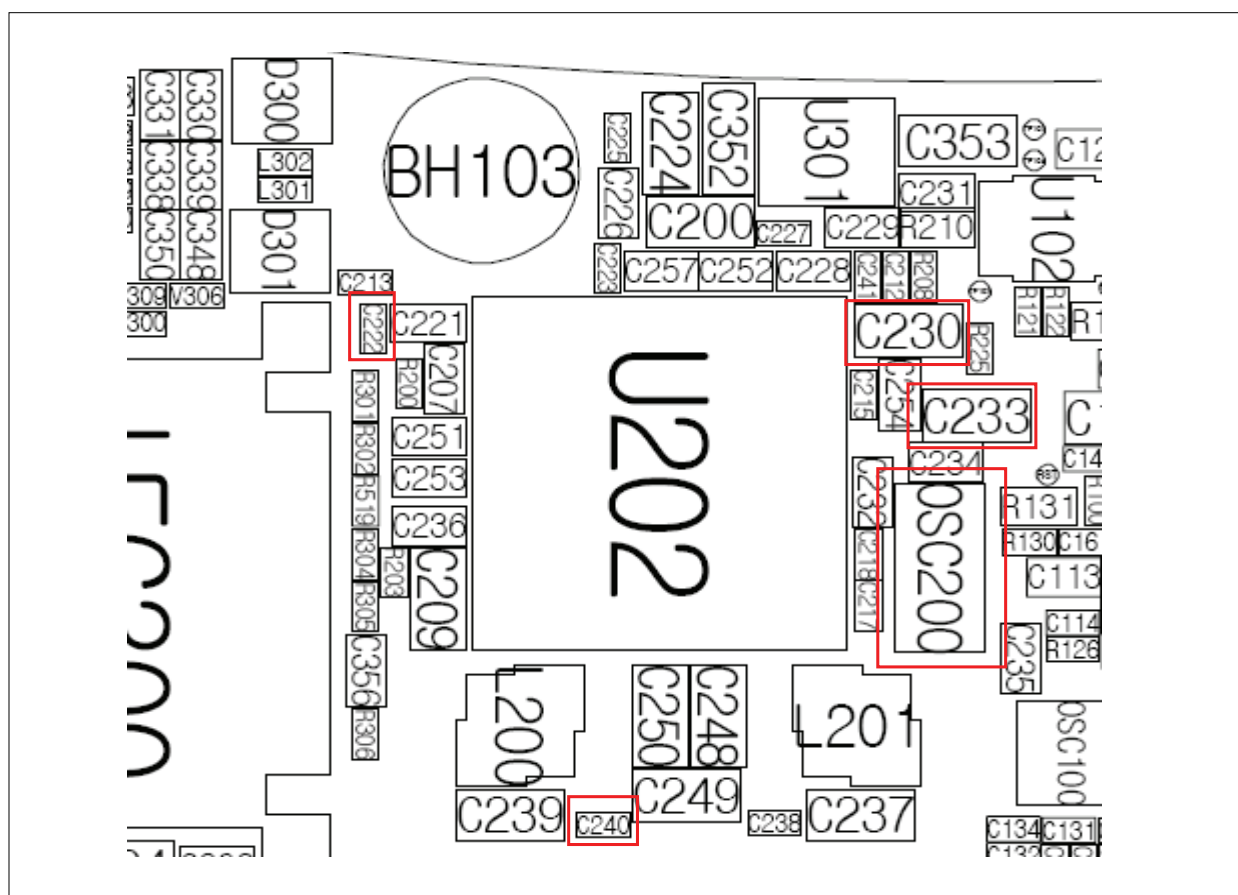
Bottom



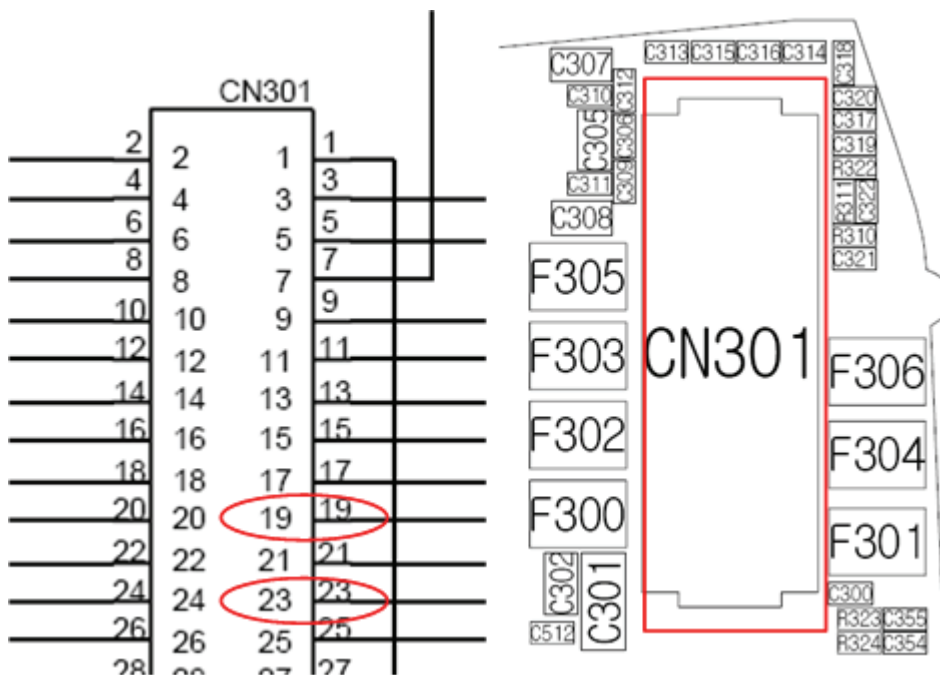
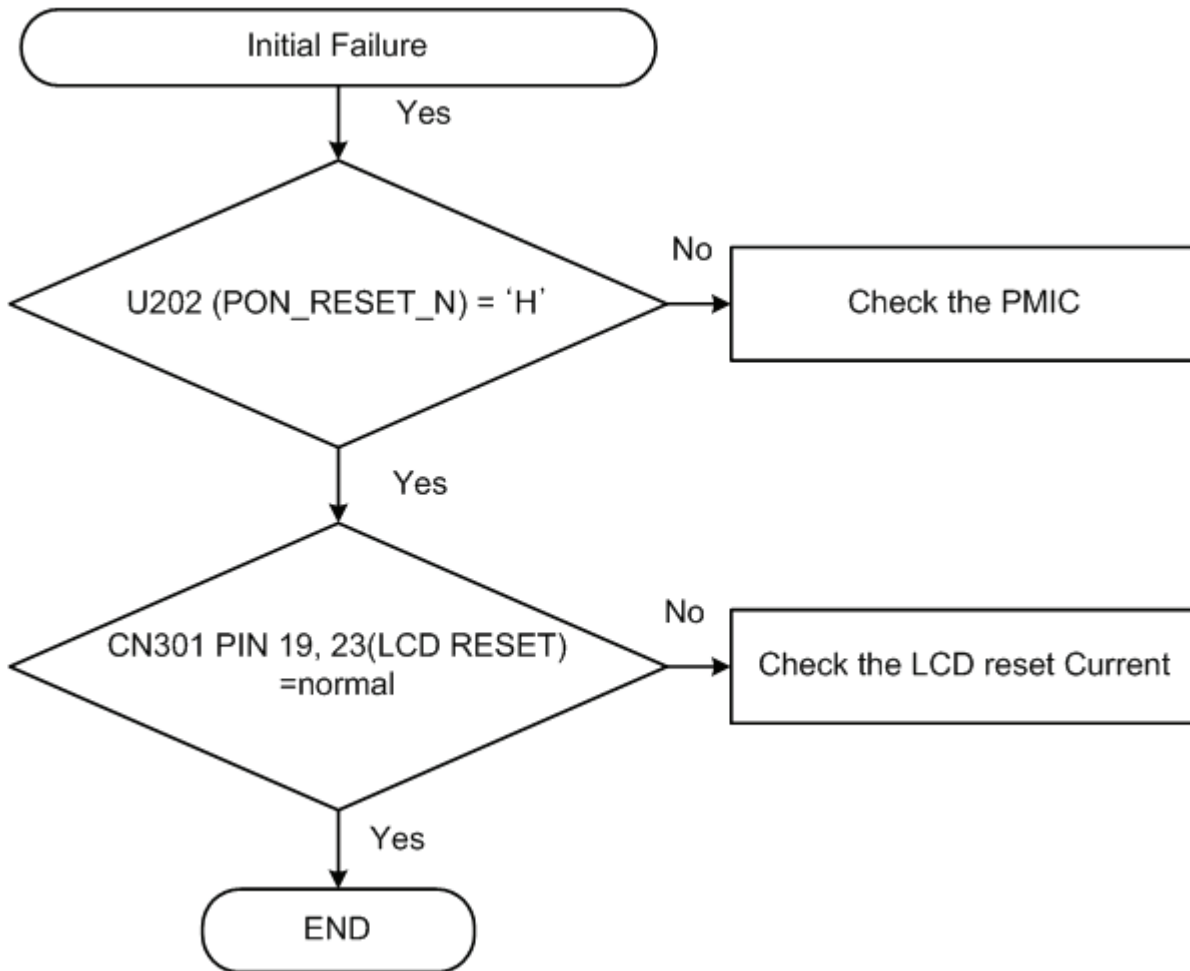
9. Flow Chart of Troubleshooting

9-1. Power On

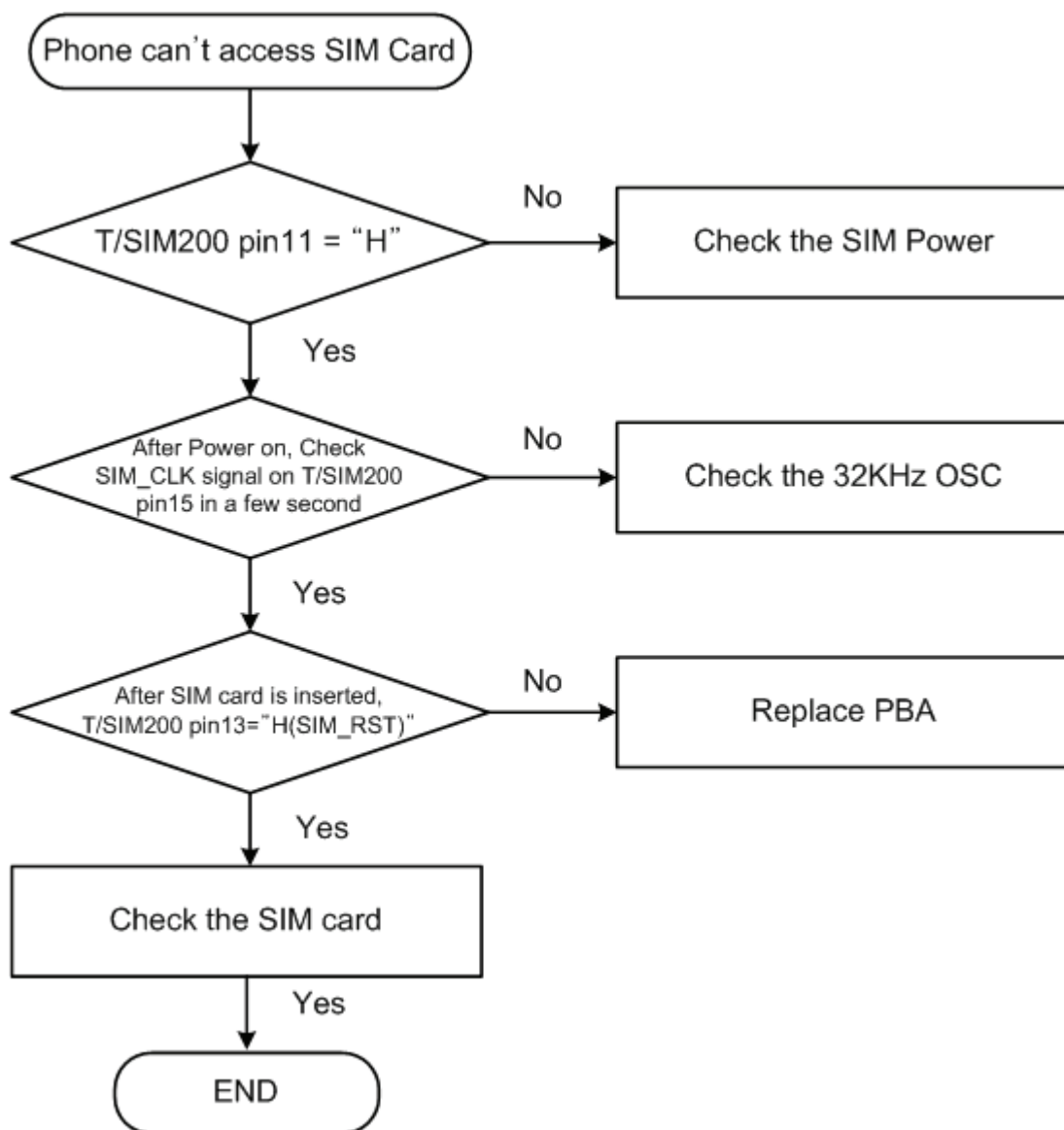


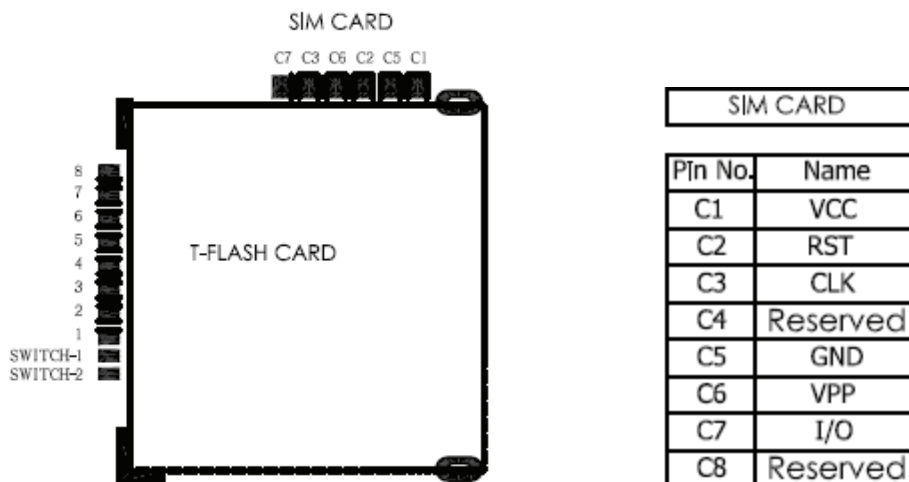


9-2. Initial



9-3. Sim Part

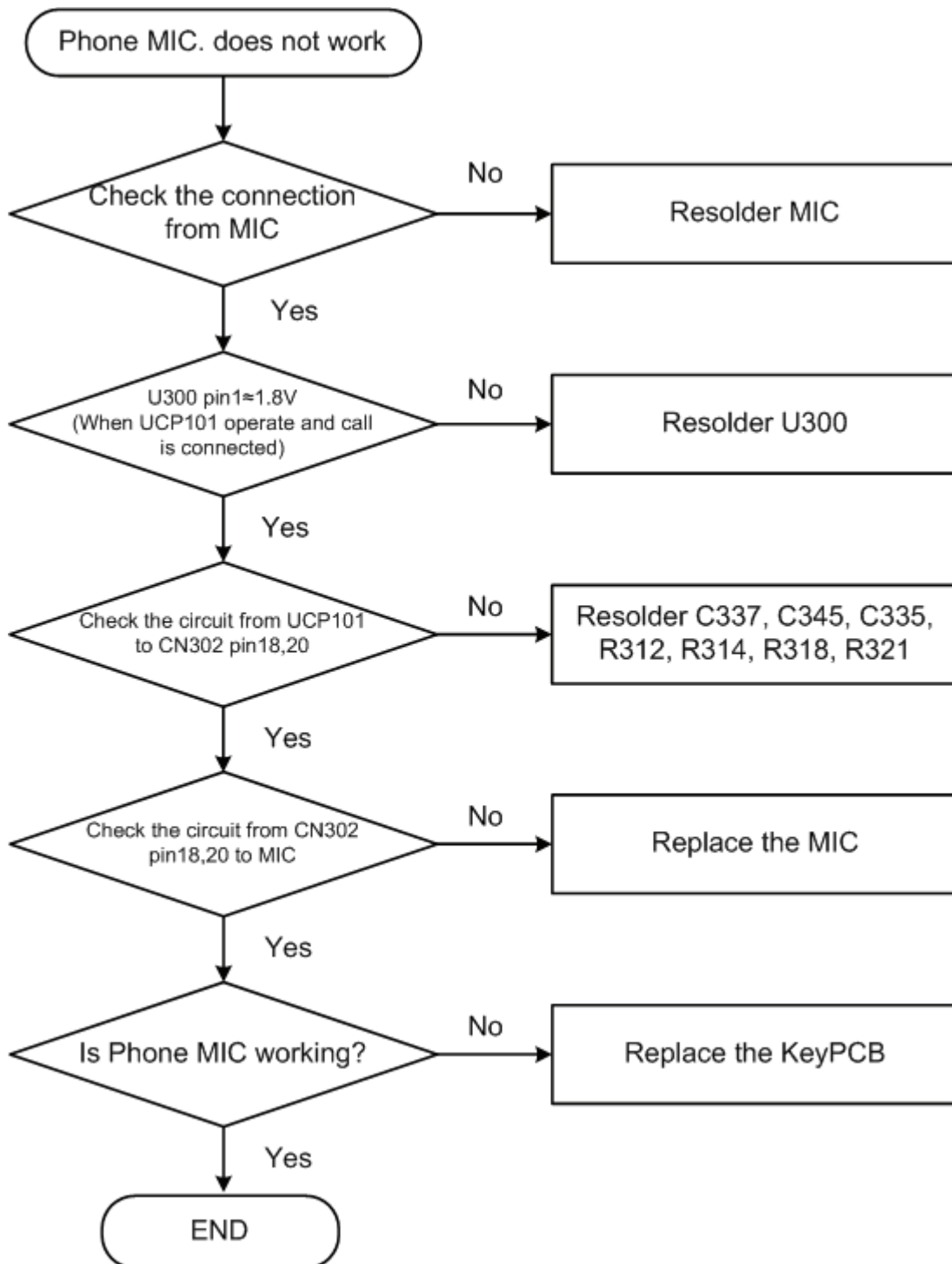


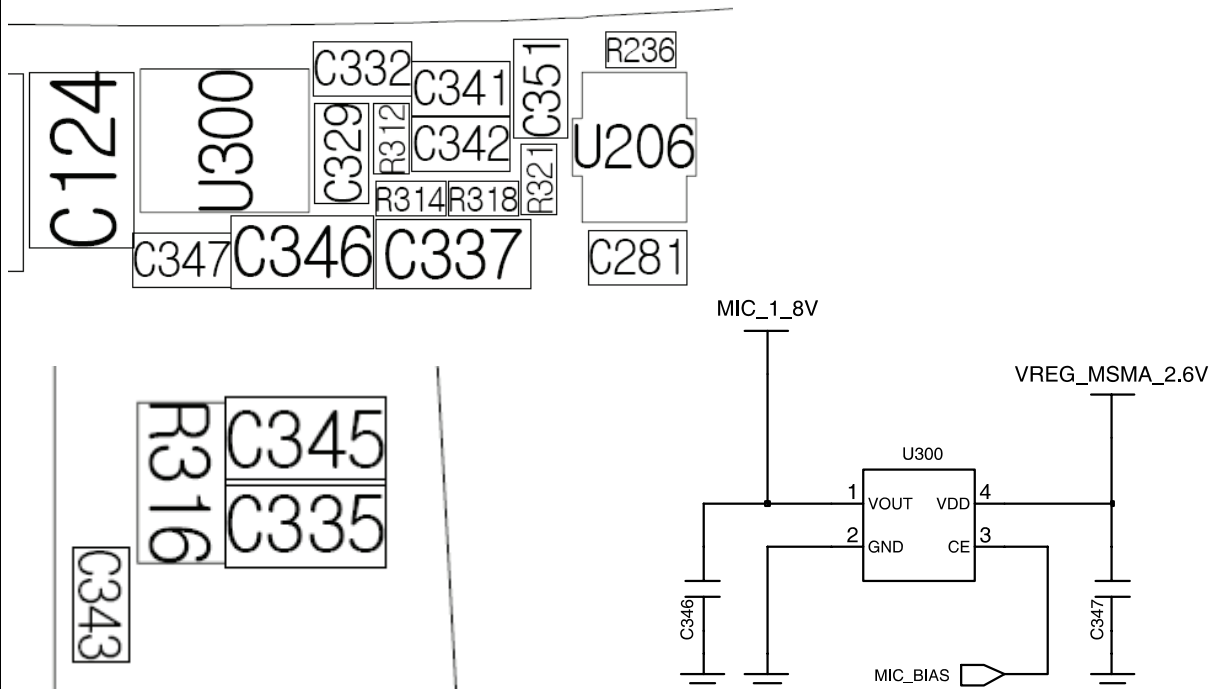
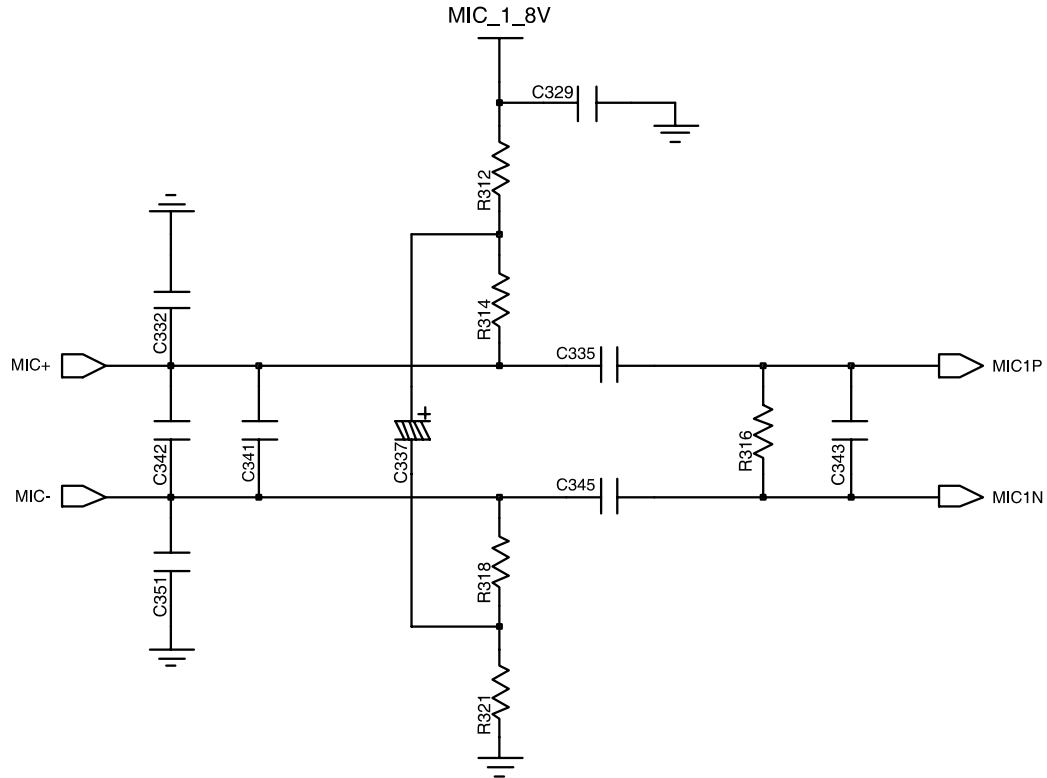


- Pin map (Circuit & SIM SOKET componet)

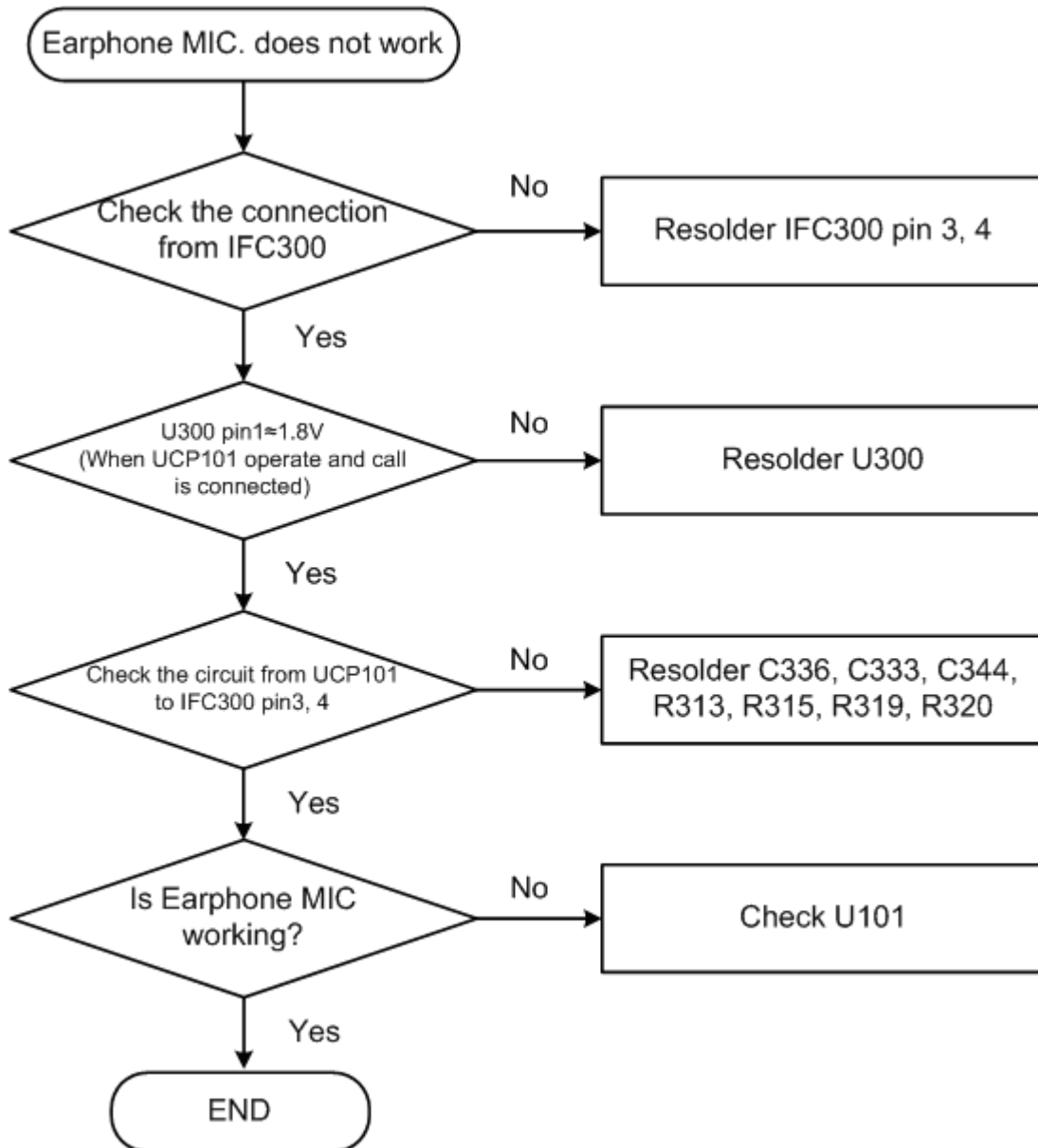
	Pin No.		Name	TYPE	Description
	LMS	SPEC			
T-Flash	1	SW-B	-	-	-
	2	SW-A	DETECT	I	-
	3	1	DATA(2)	I/O/PP	DATA Line [bit2]
	4	2	DATA(3)	I/O/PP	DATA Line [bit3]
	5	3	CMD	PP	Cammand Response
	6	4	VDD	S	Supply Voltage
	7	5	CLK	I	Clock
	8	6	GND	S	Ground
	9	7	DATA(0)	I/O/PP	DATA Line [bit0]
	10	8	DATA(1)	I/O/PP	DATA Line [bit1]
SIM	11	C1	VCC	S	
	12	C5	GND	S	
	13	C2	RST	I	
	14	C6	VPP	S	
	15	C3	CLK	I	
	16	C7	I/O	I/O	
	NC	C4,C8	Reserved		

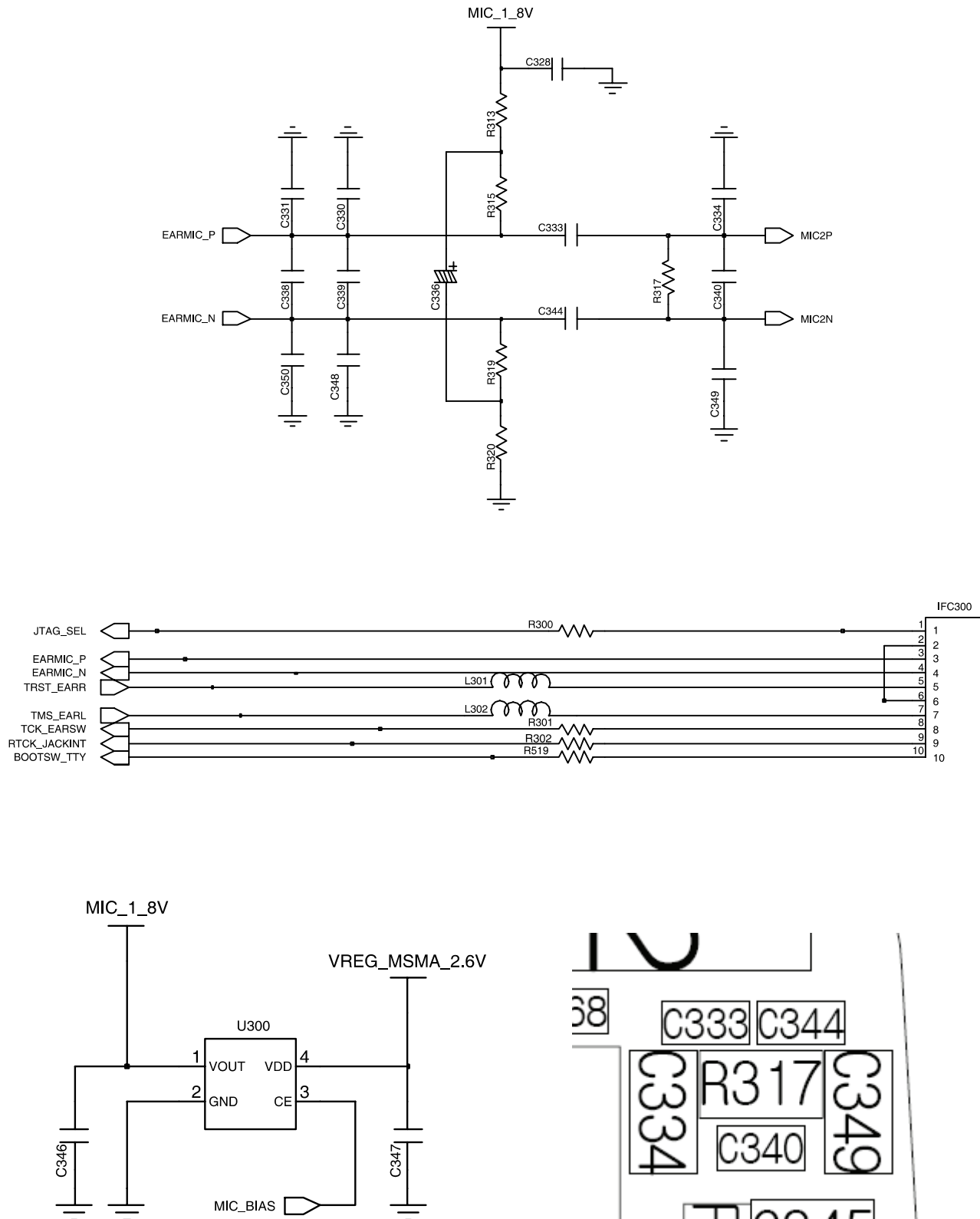
9-4. Microphone Part - Phone MIC



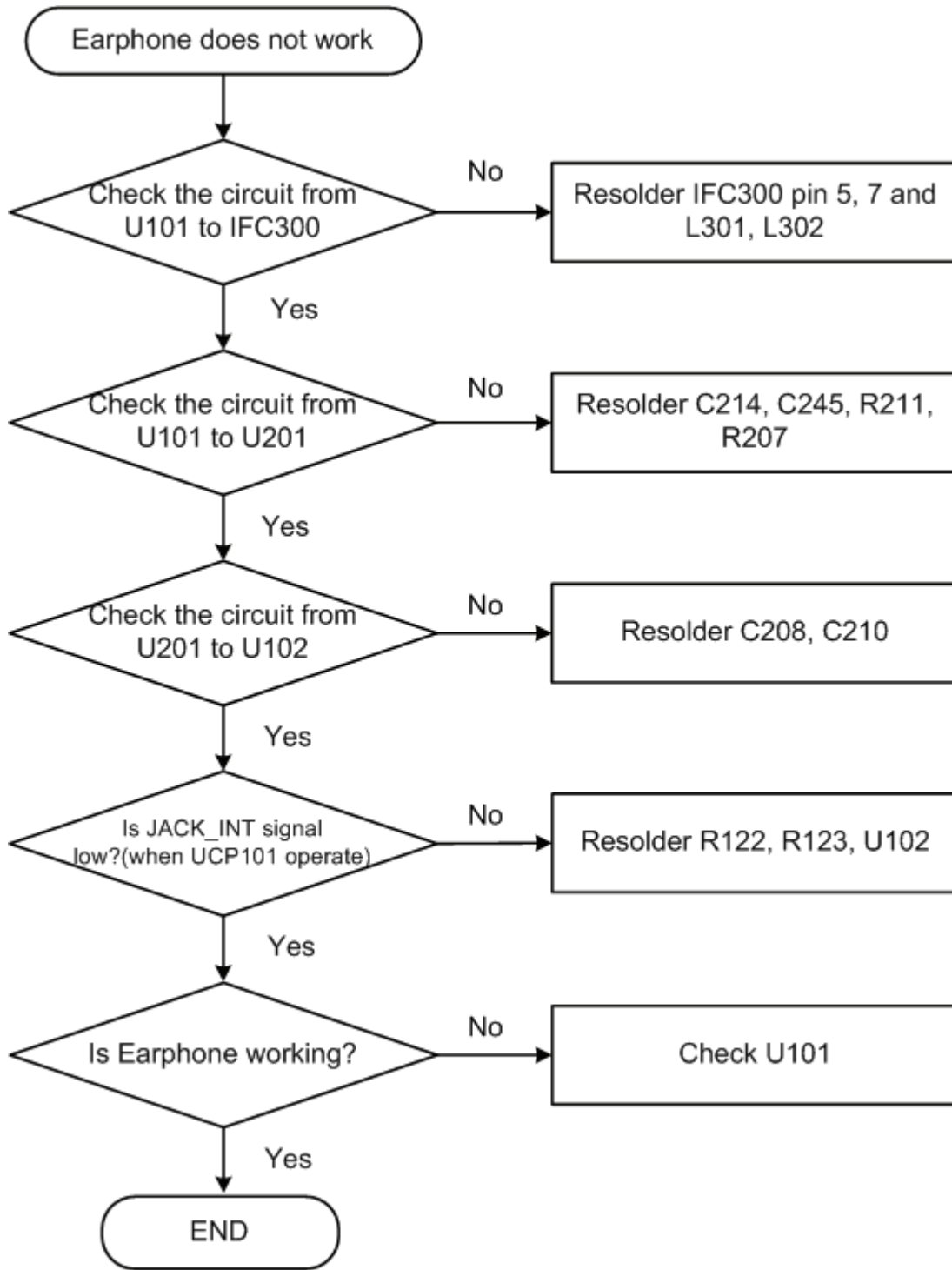


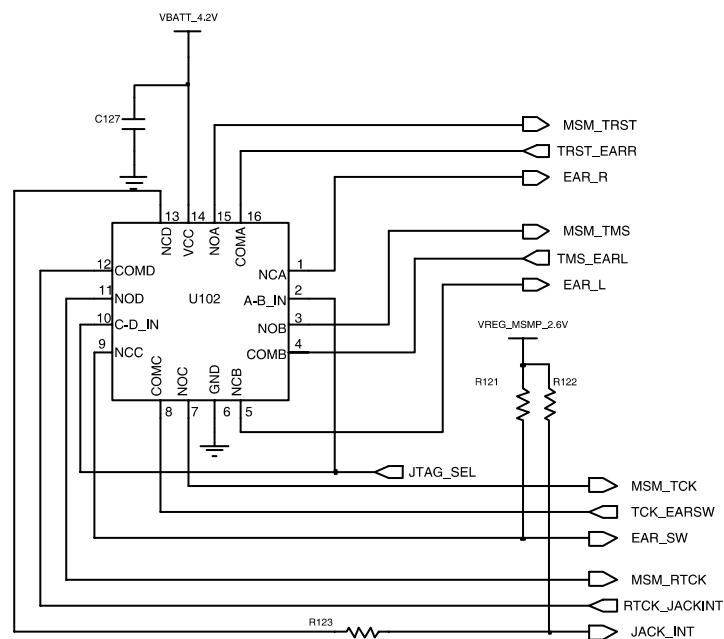
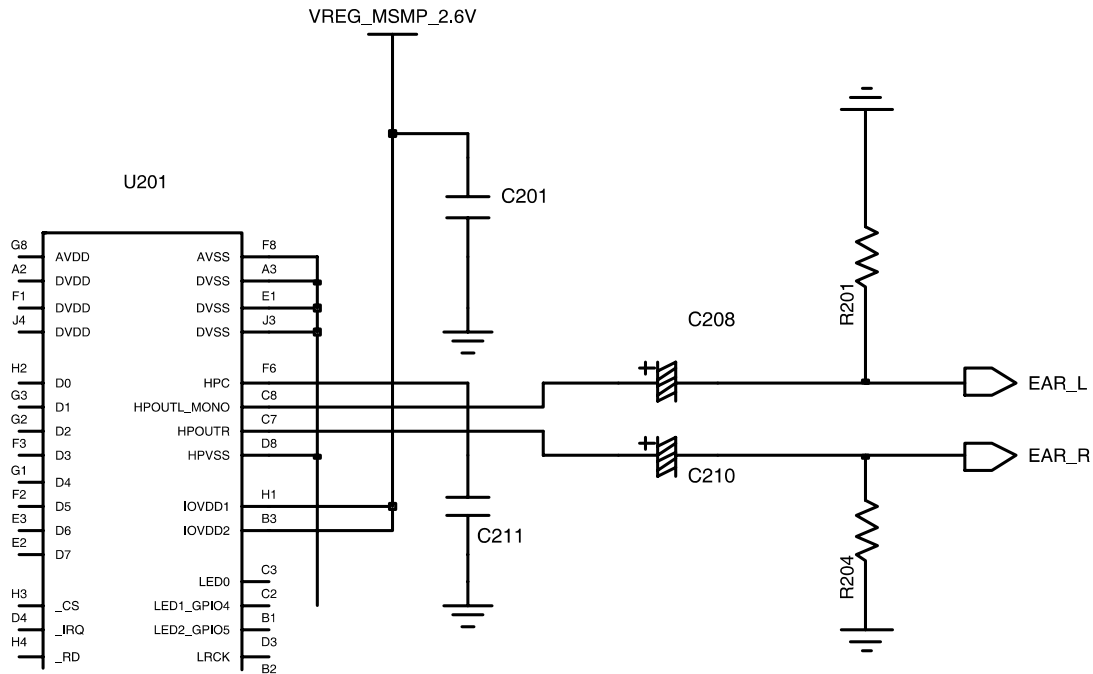
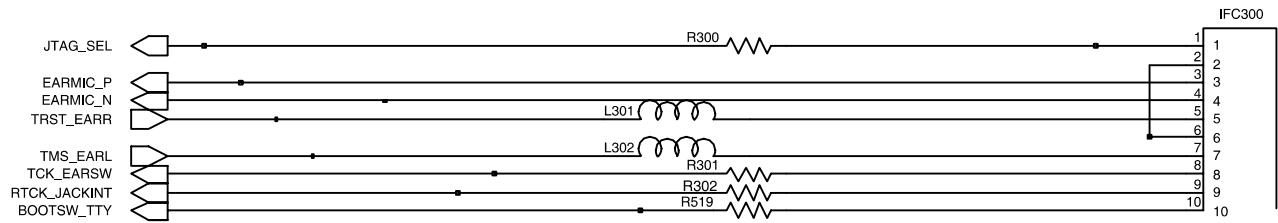
9-5. Microphone Part - Earphone MIC



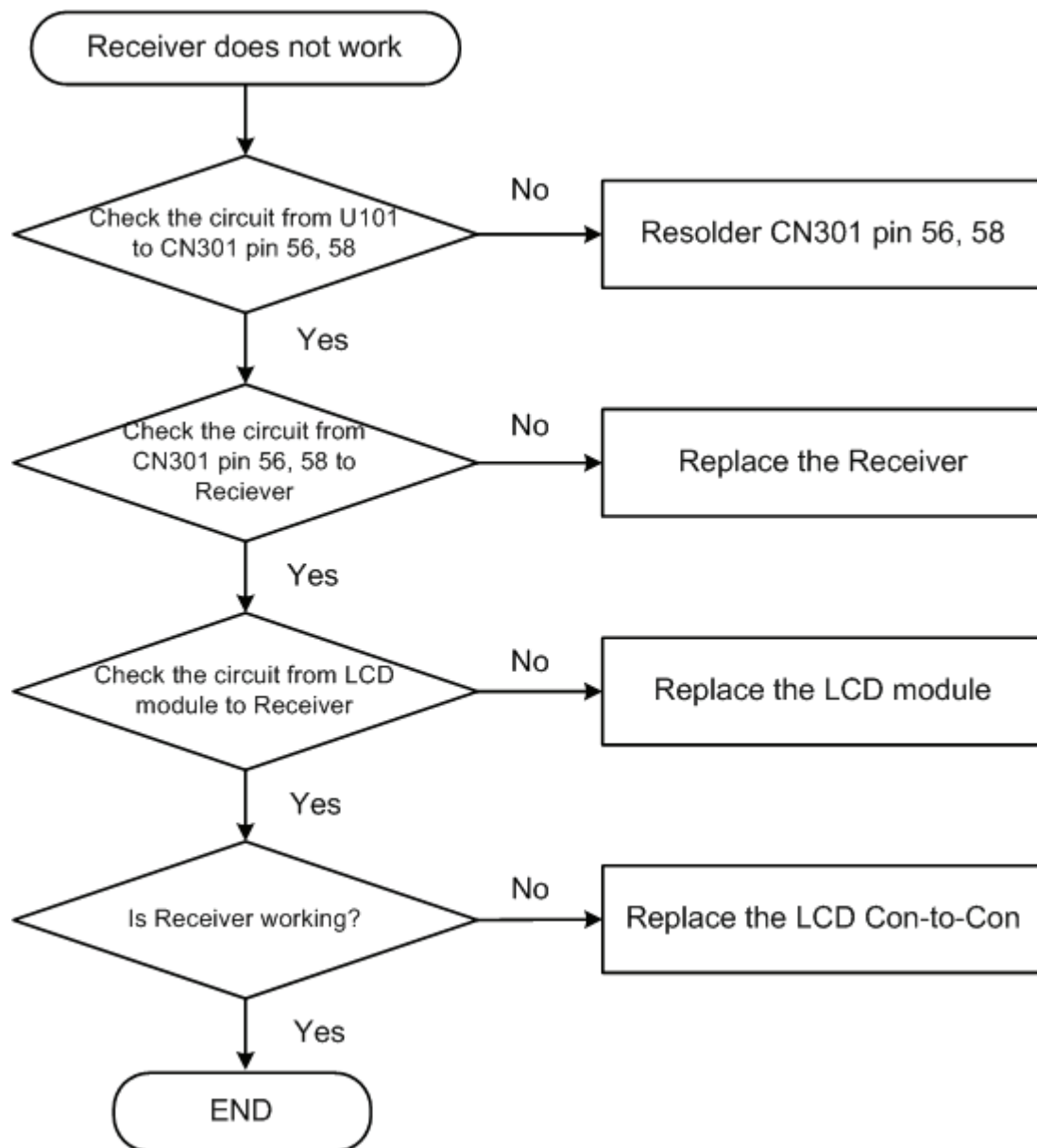


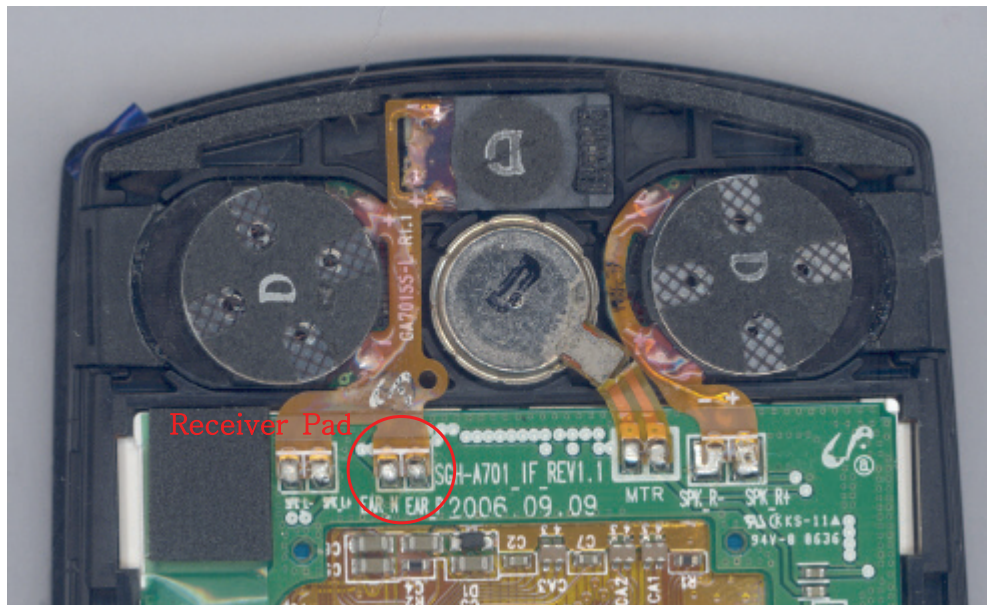
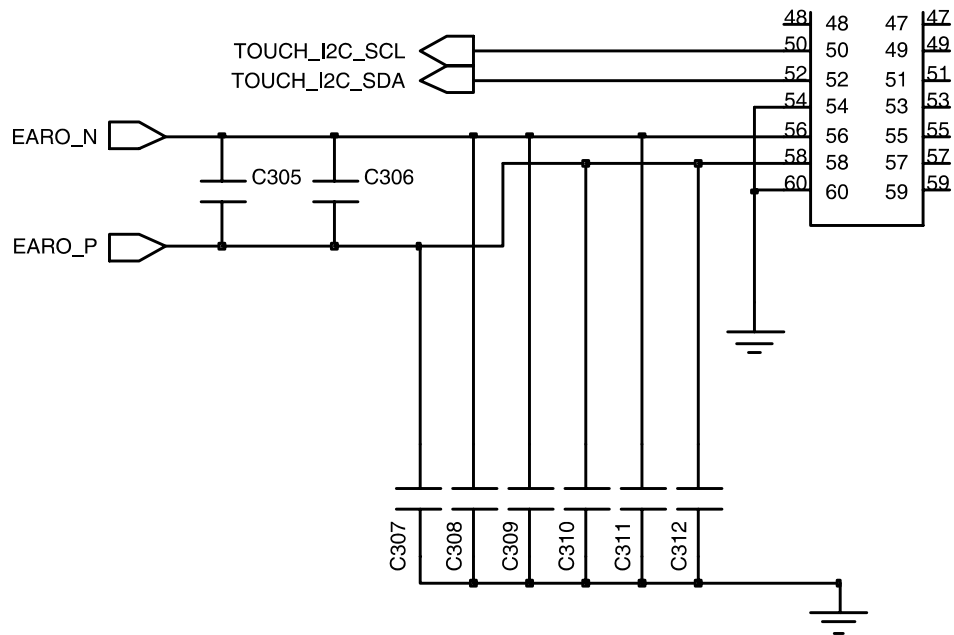
9-6. Earphone Part





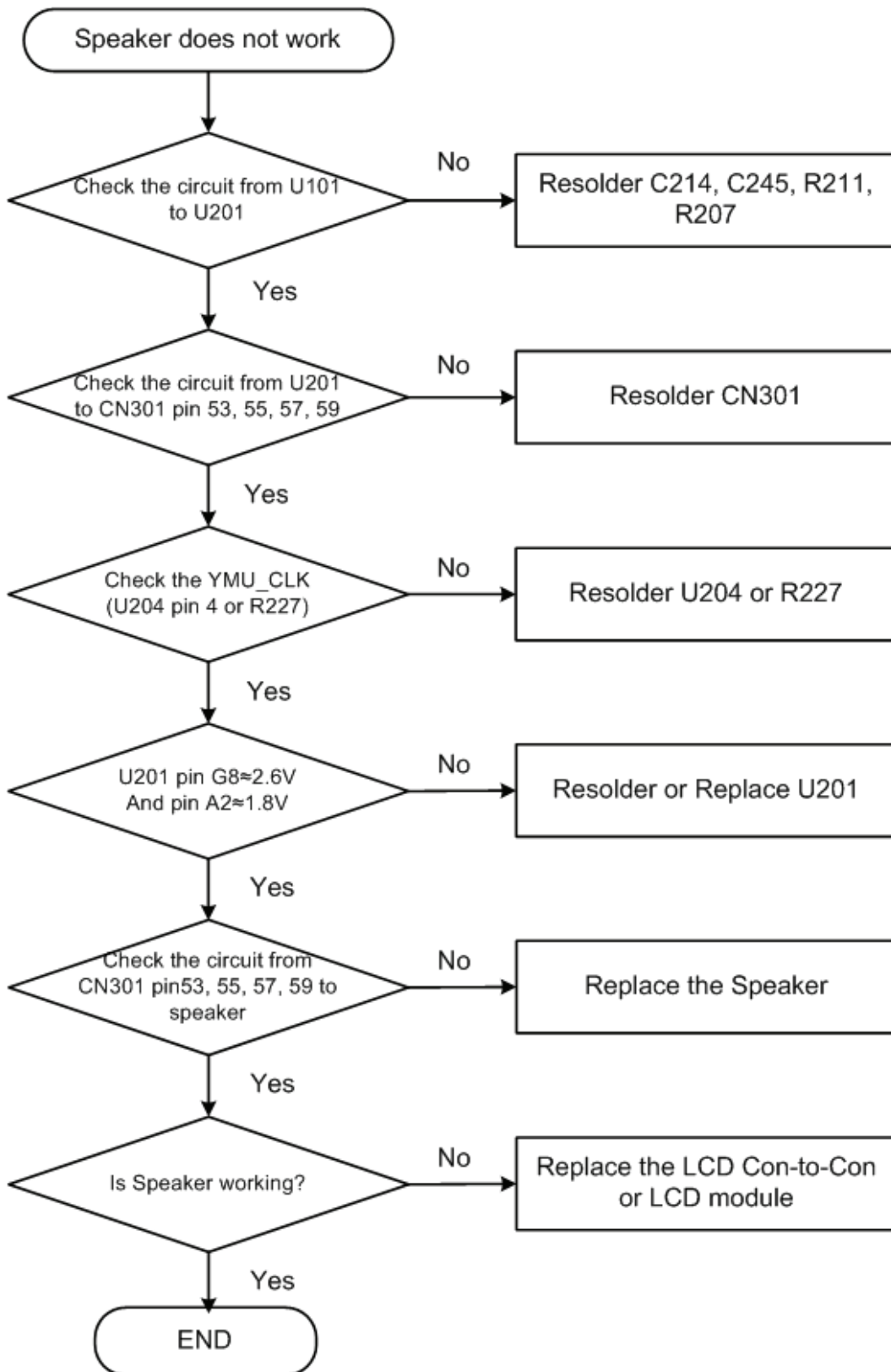
9-7. Receiver Part

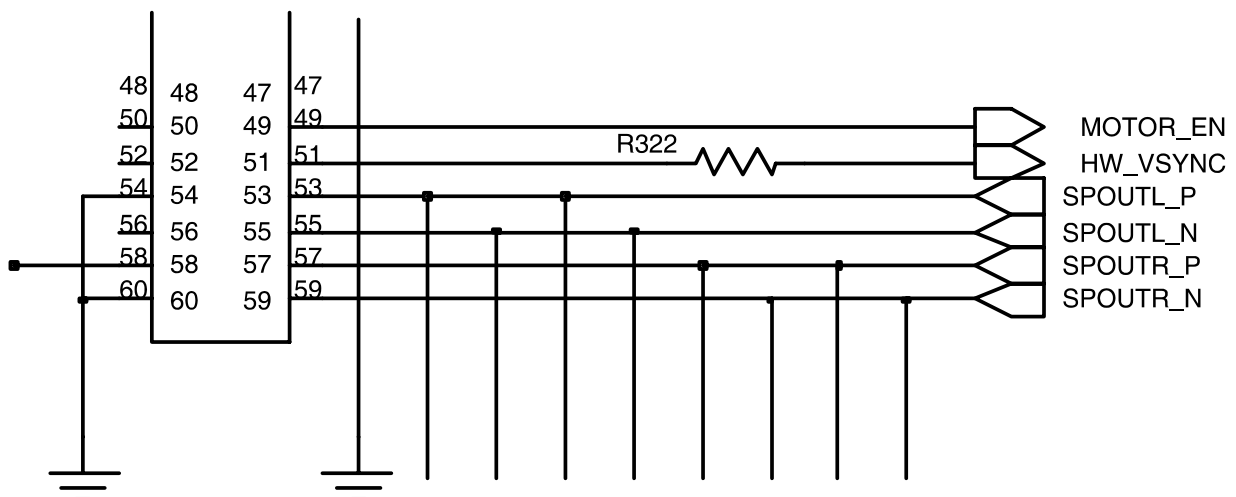
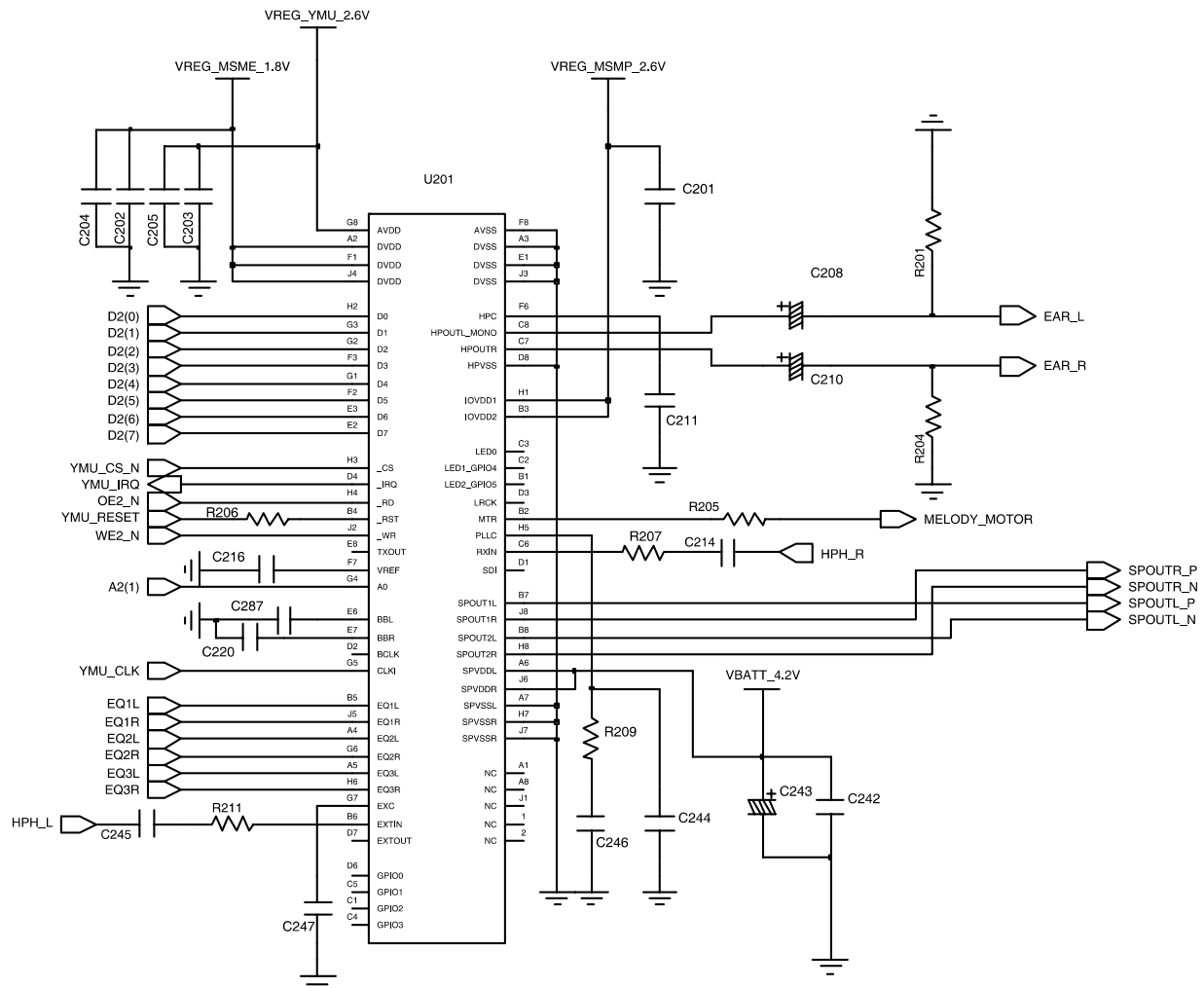


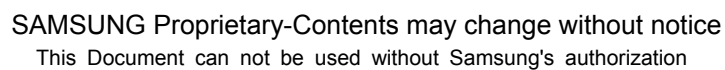
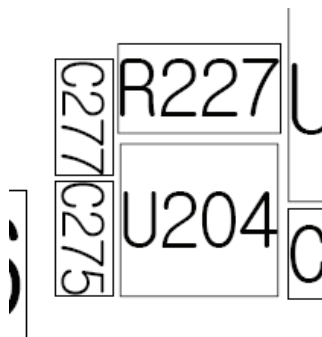


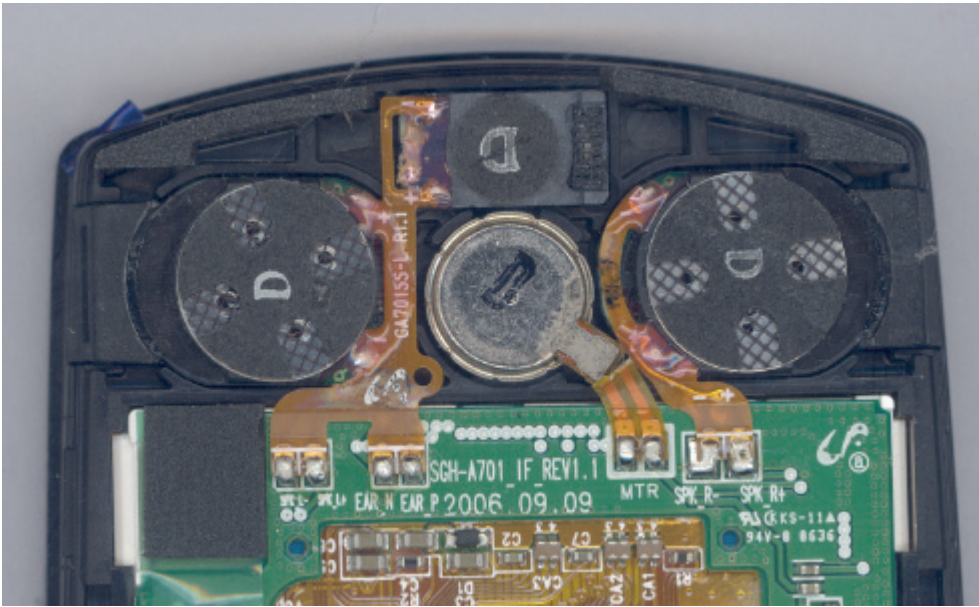
< SGH-A707 Speaker & Receiver Module >

9-8. Speaker Part



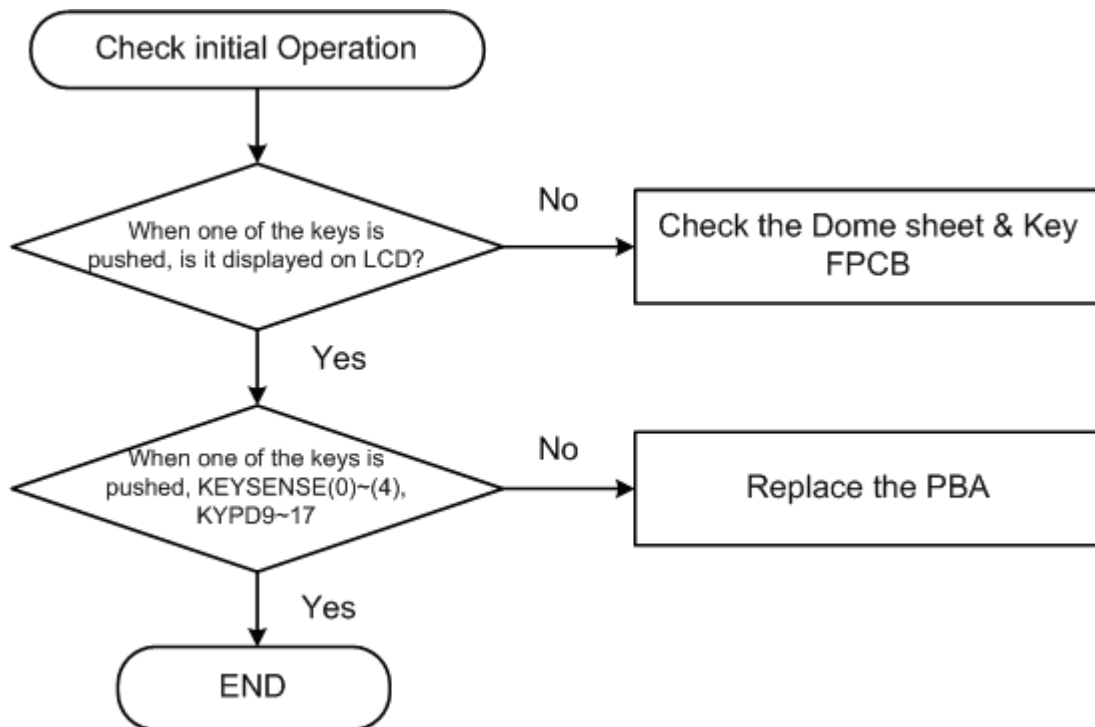




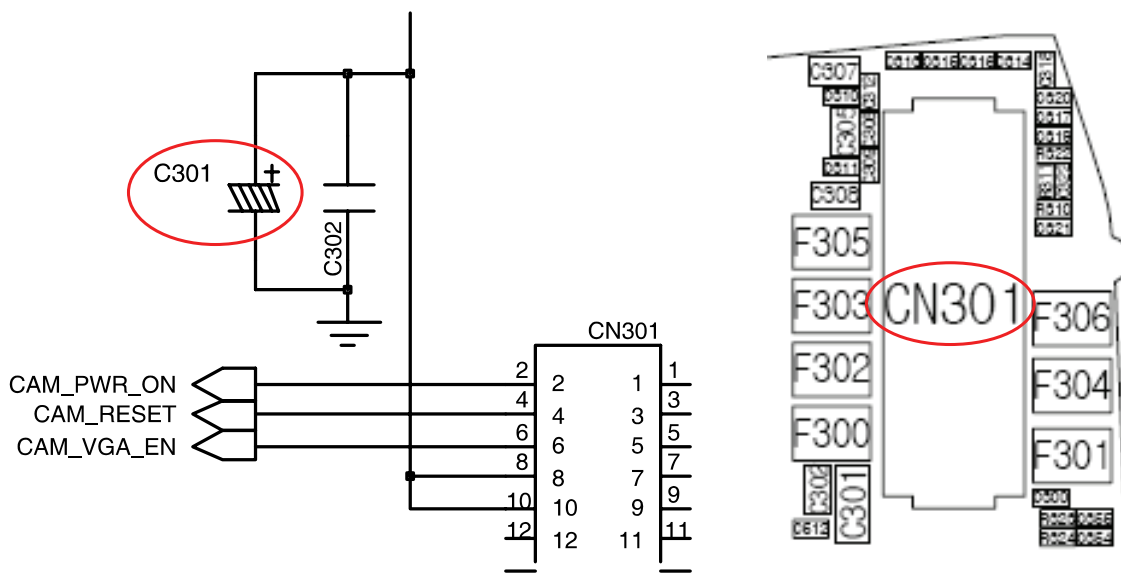
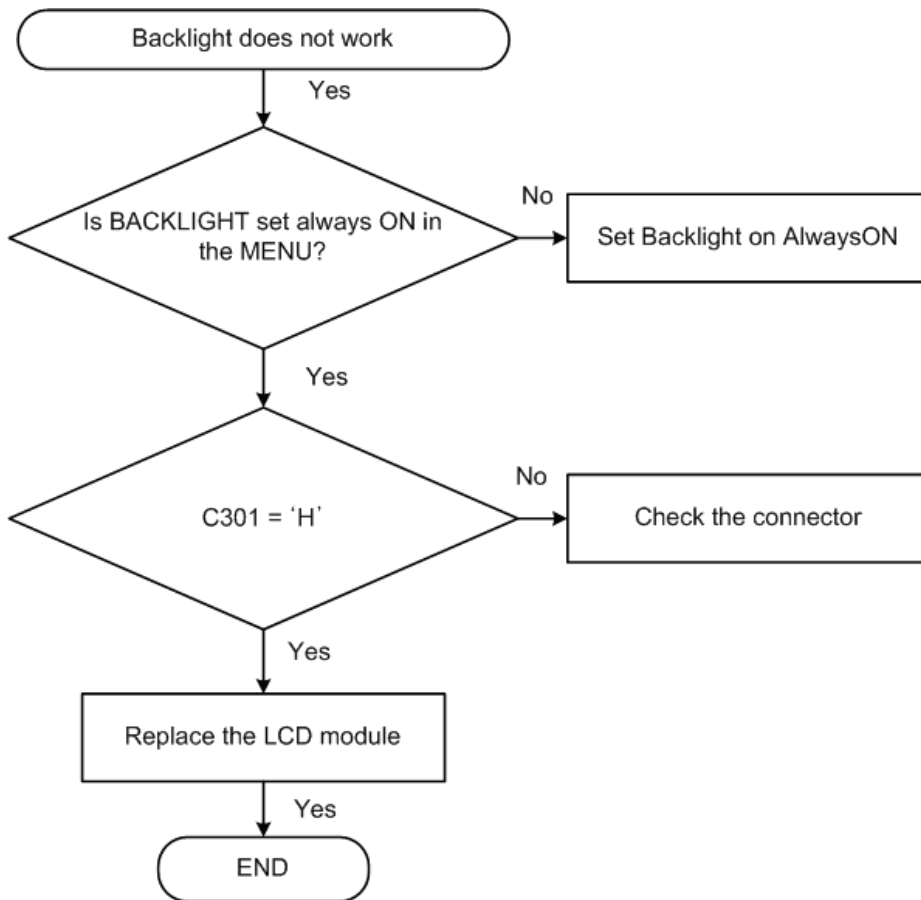


< SGH-A707 Speaker & Receiver Module >

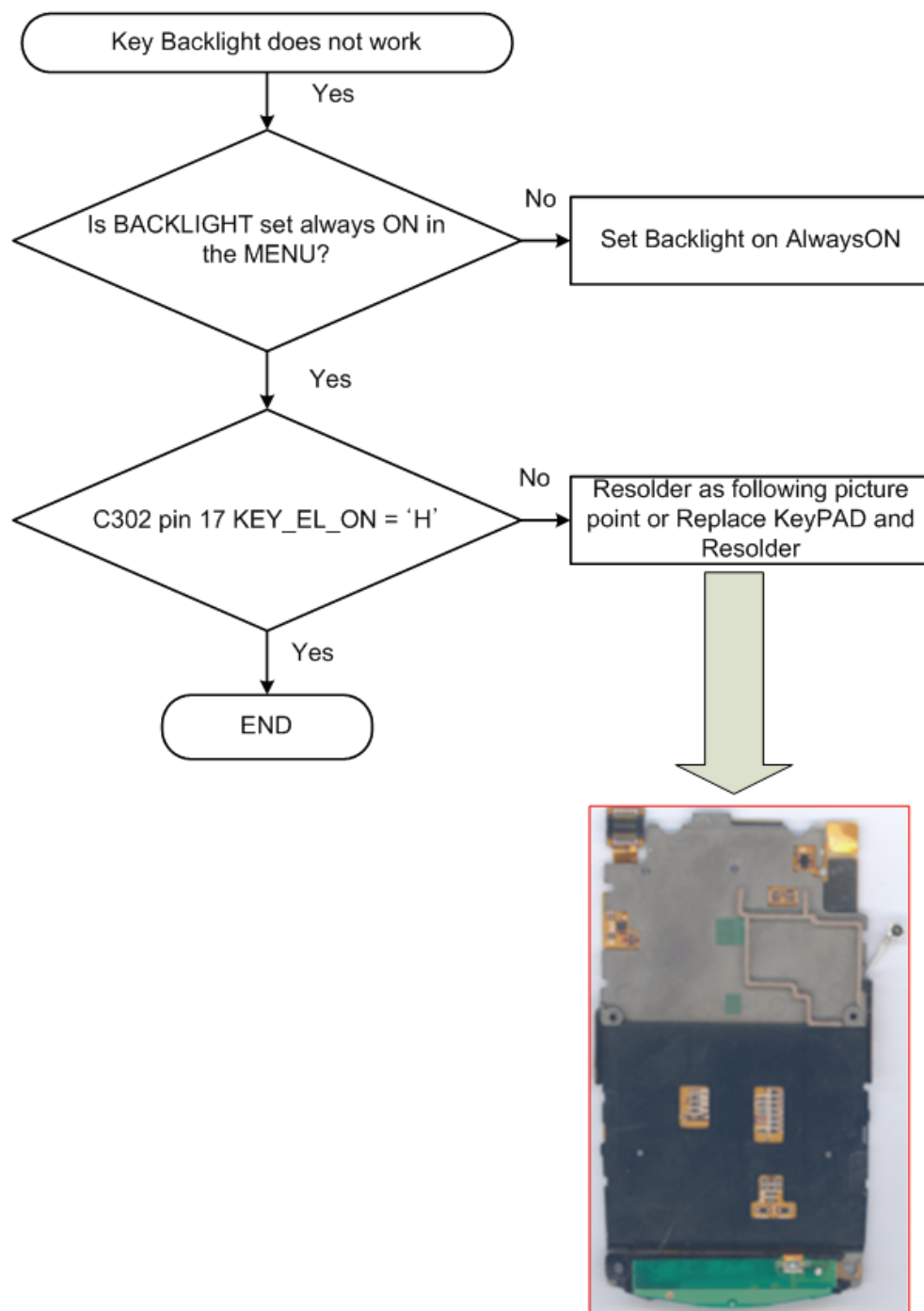
9-9. Key Data Input



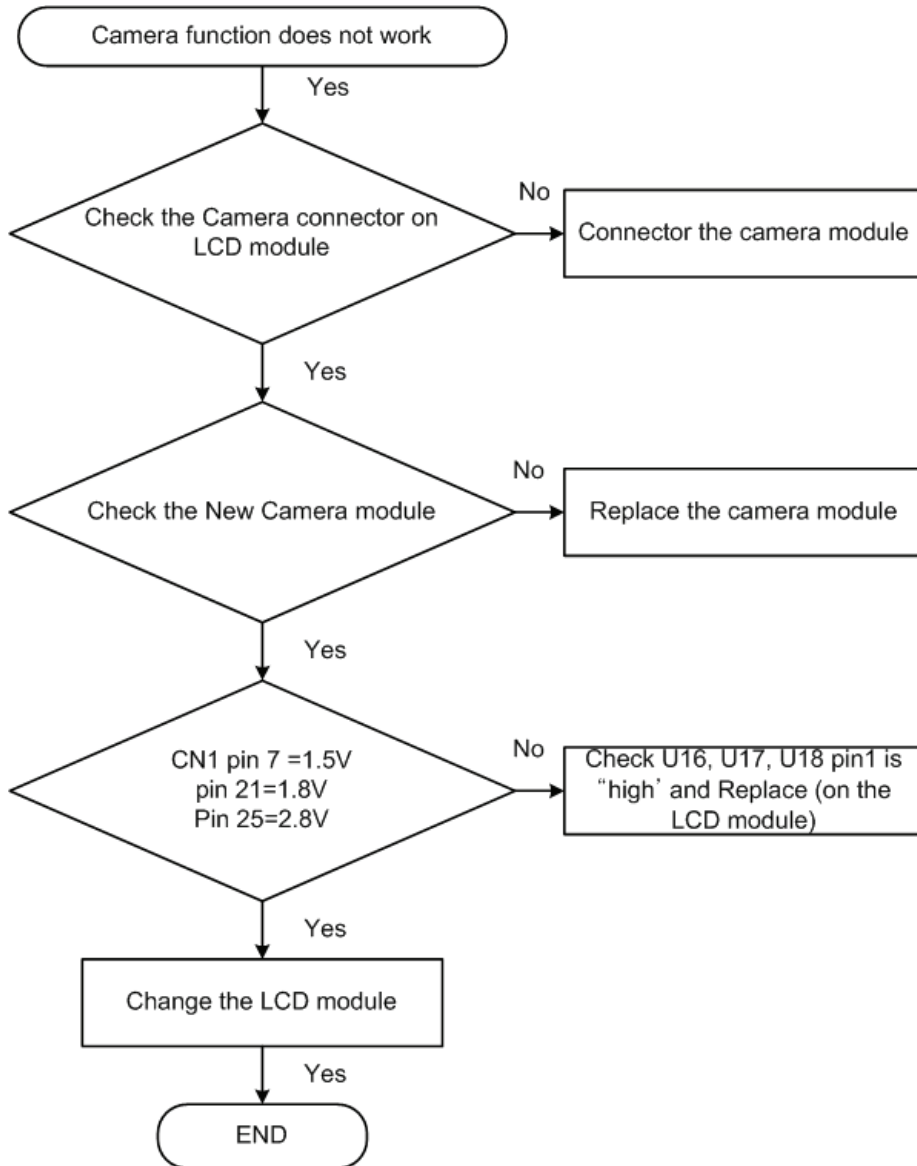
9-10. Back Light (for Color Main LCD)



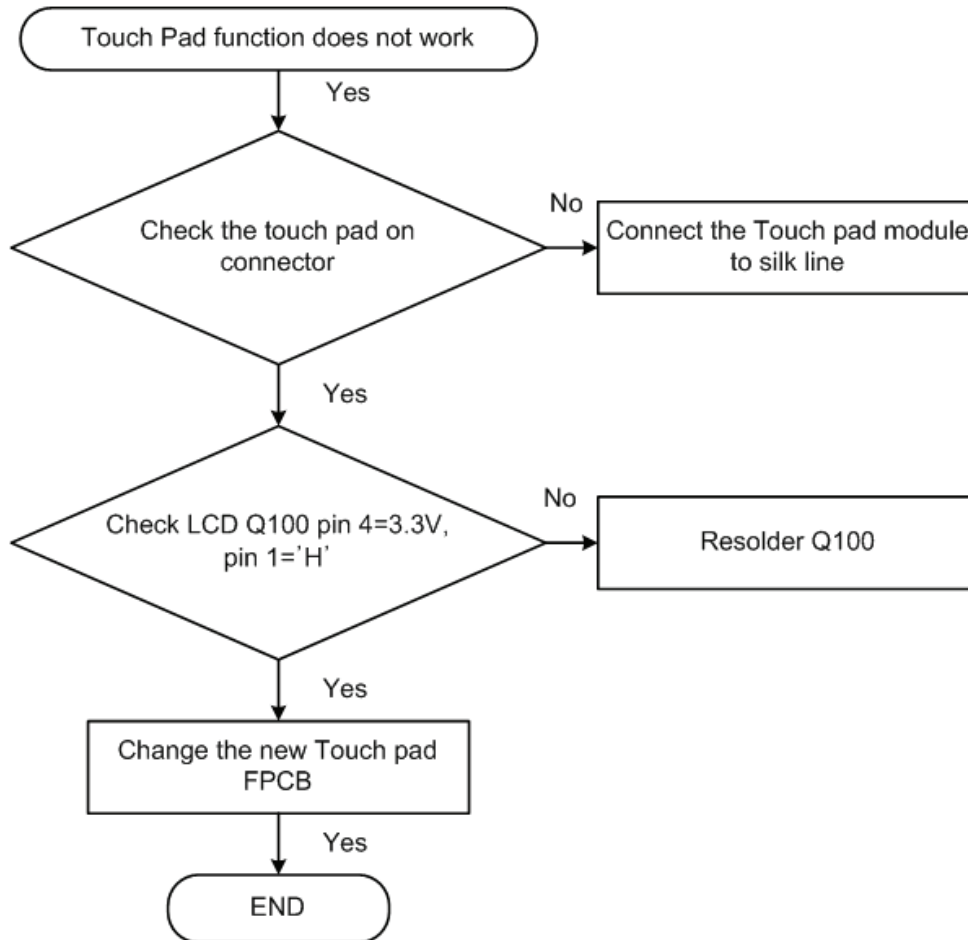
9-11. Key Back Light

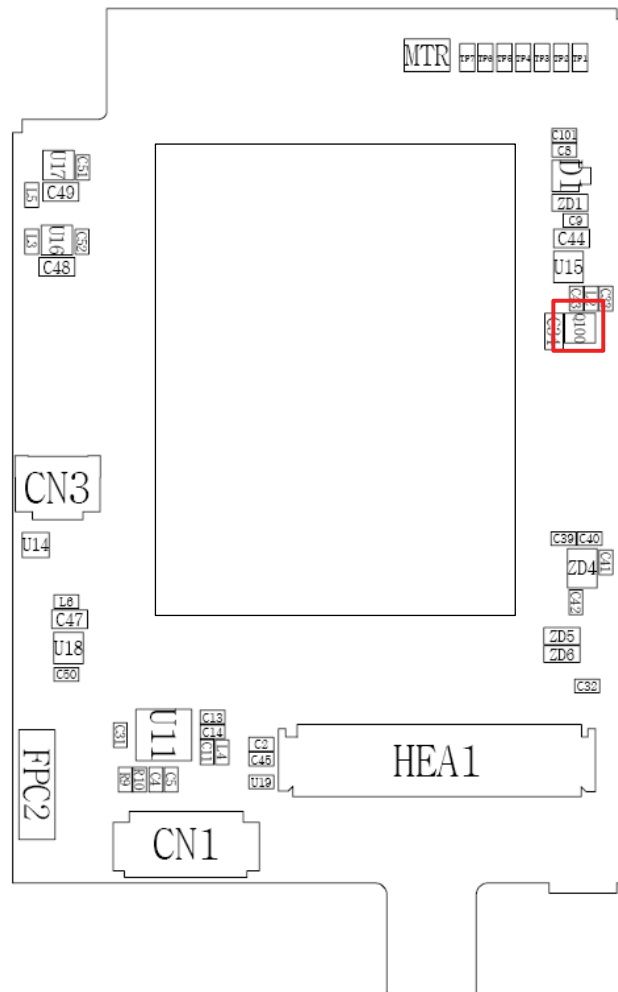
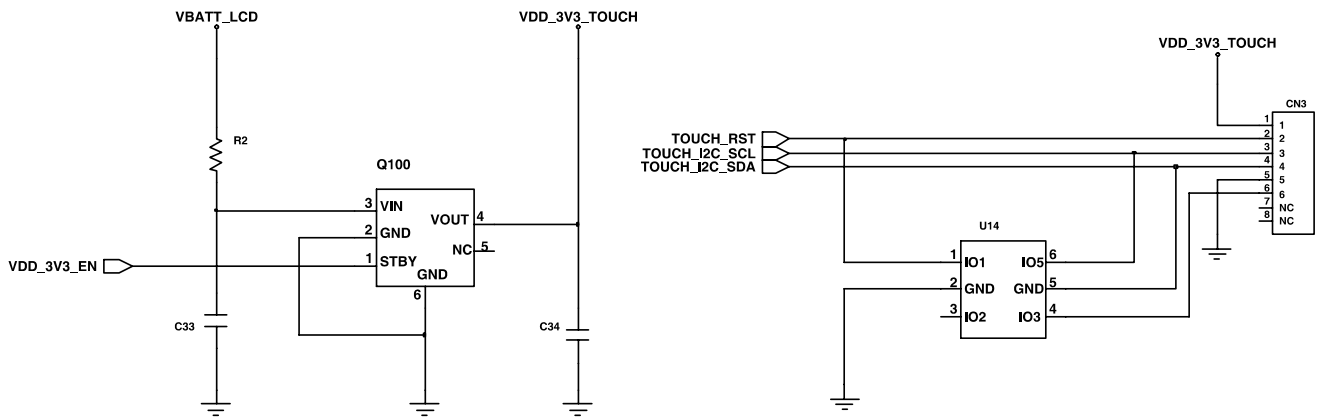


9-12. Camera part

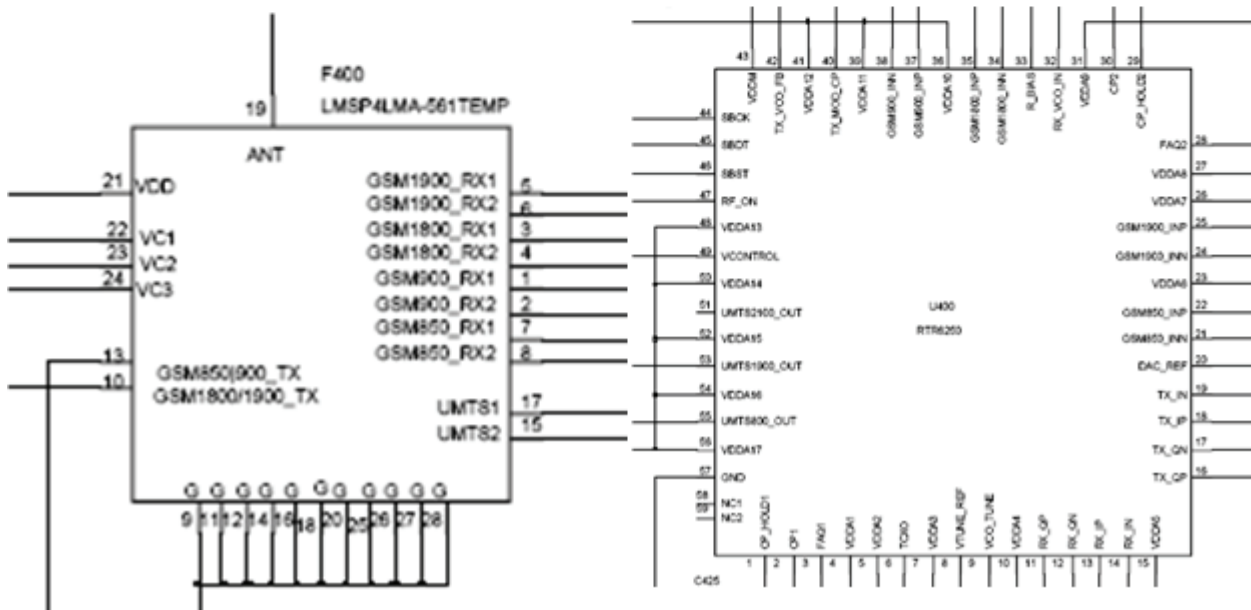
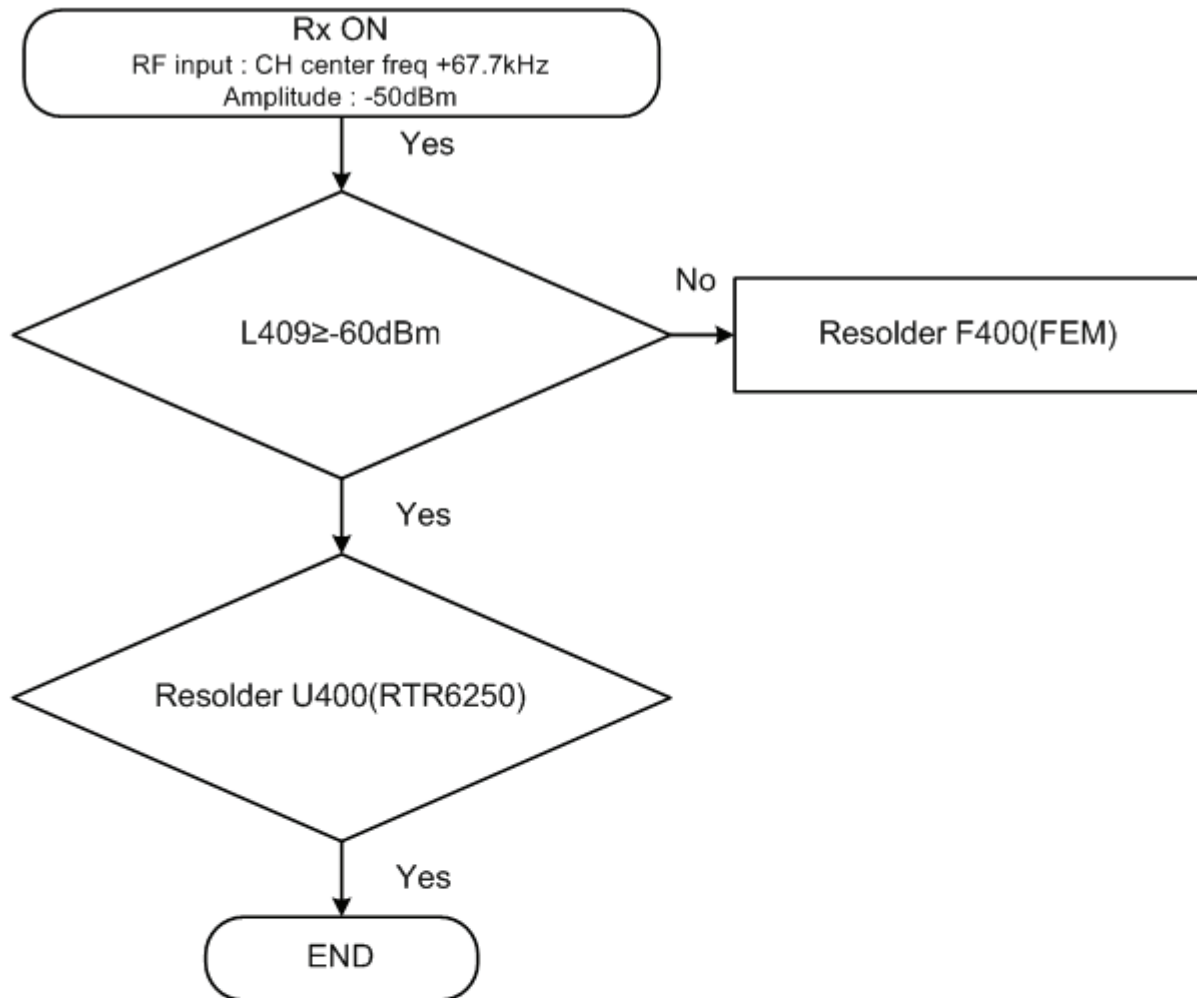


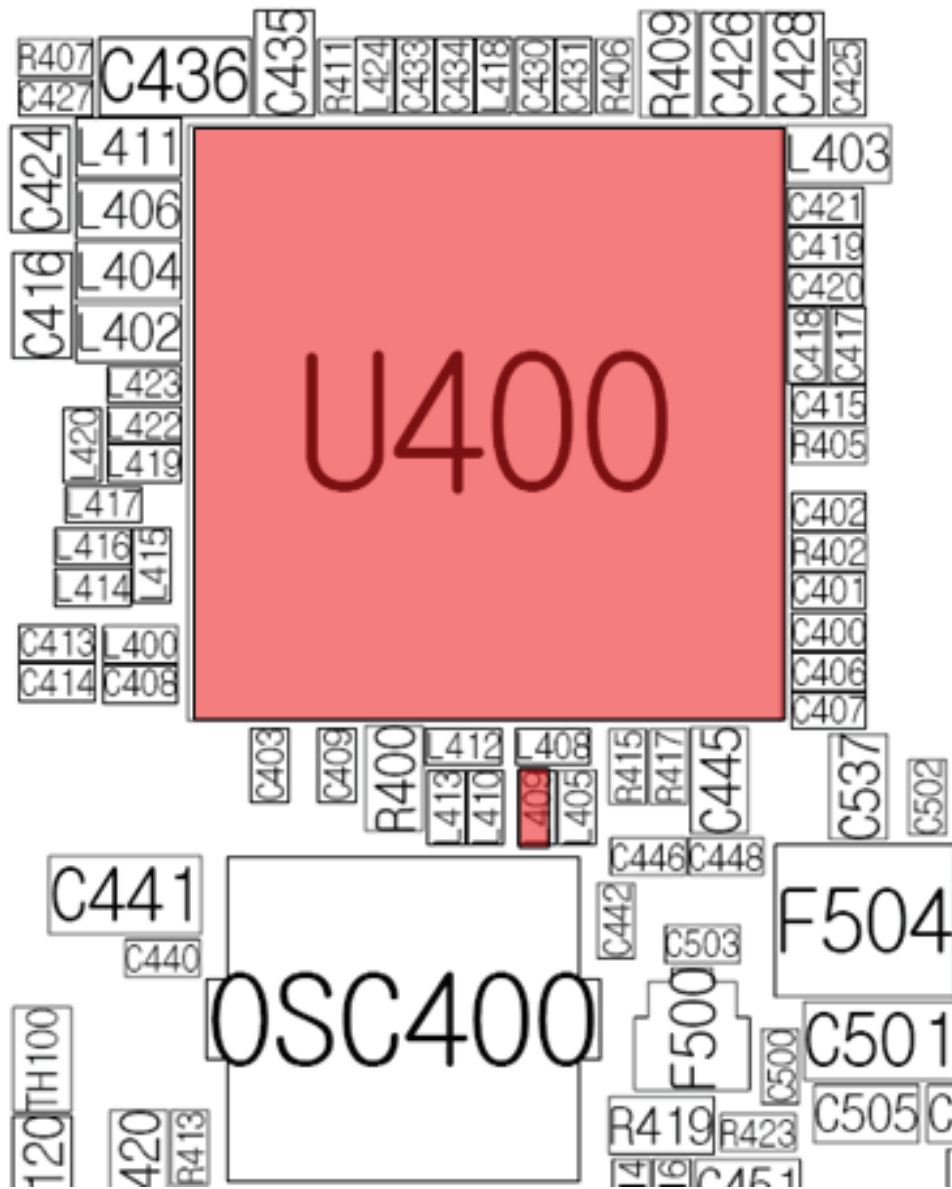
9-13. Touch PAD



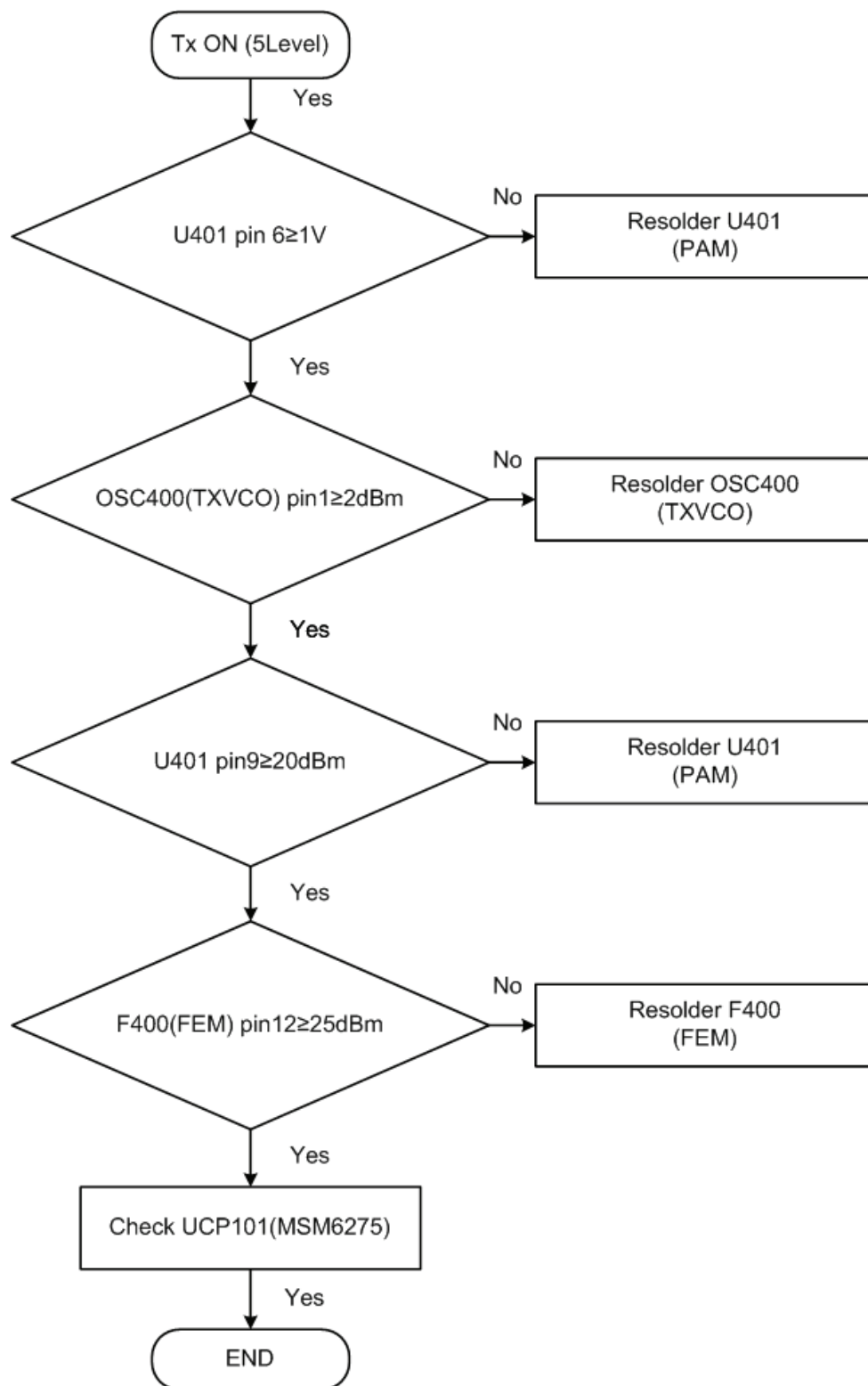


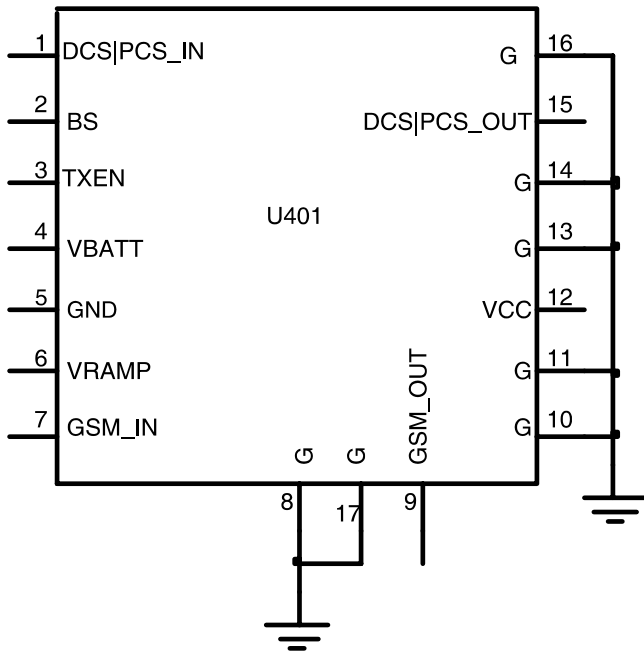
9-14. GSM Receiver



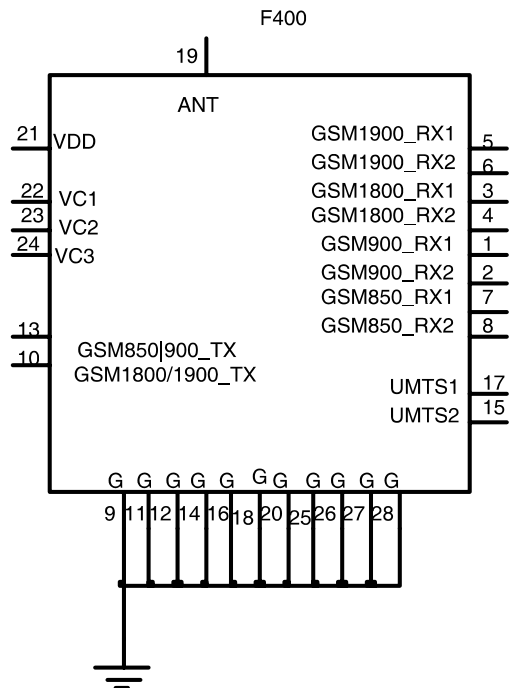
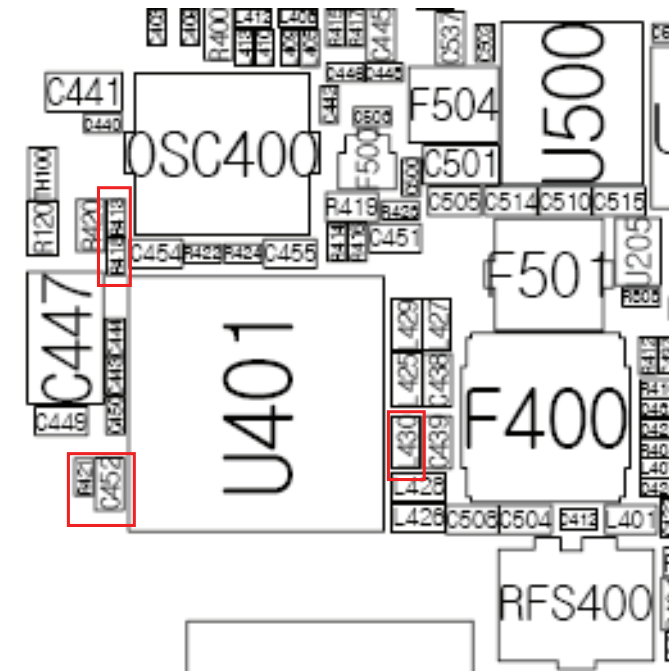
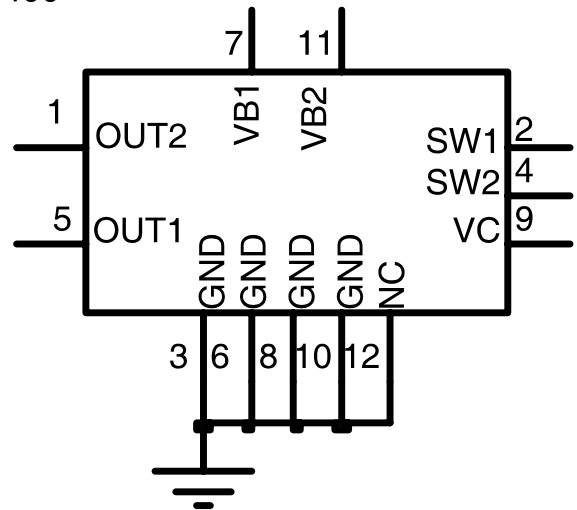


9-15. GSM Transmitter

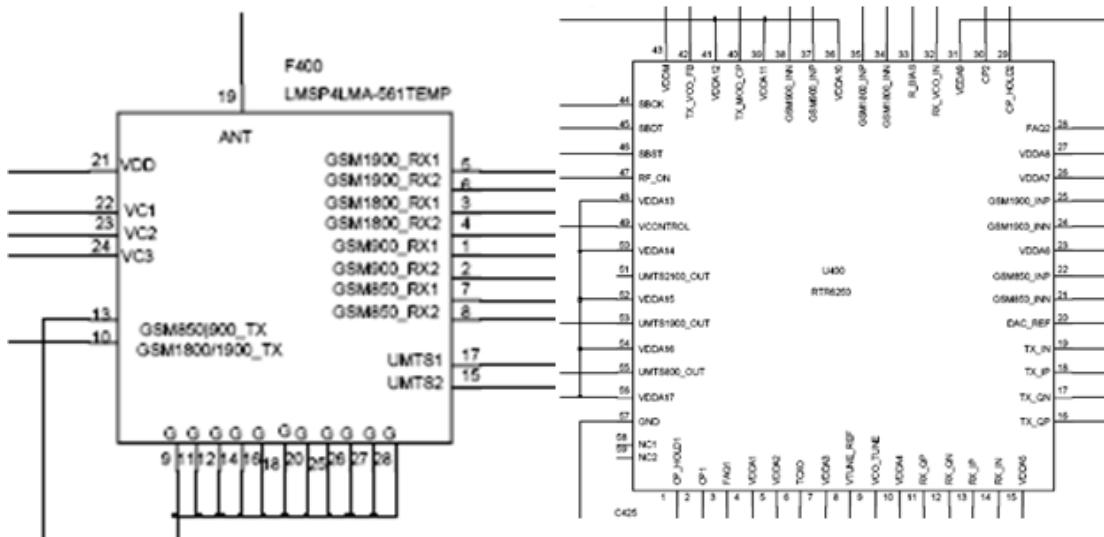
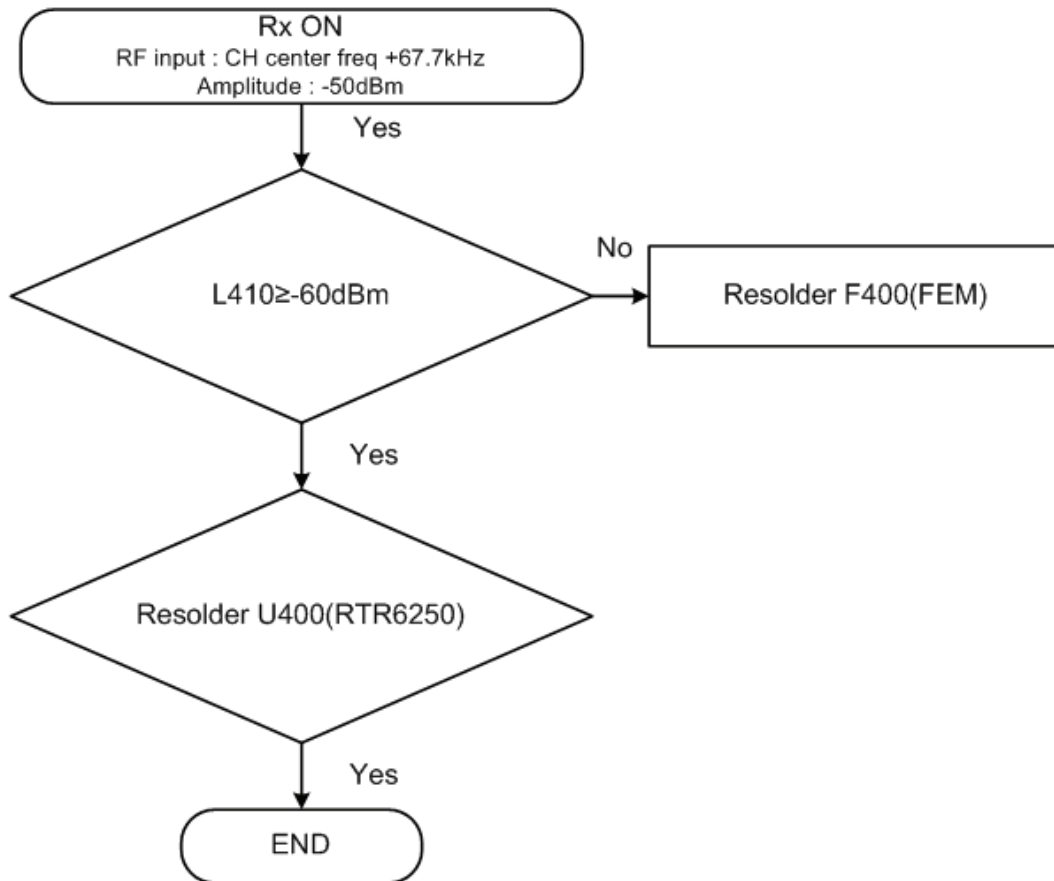




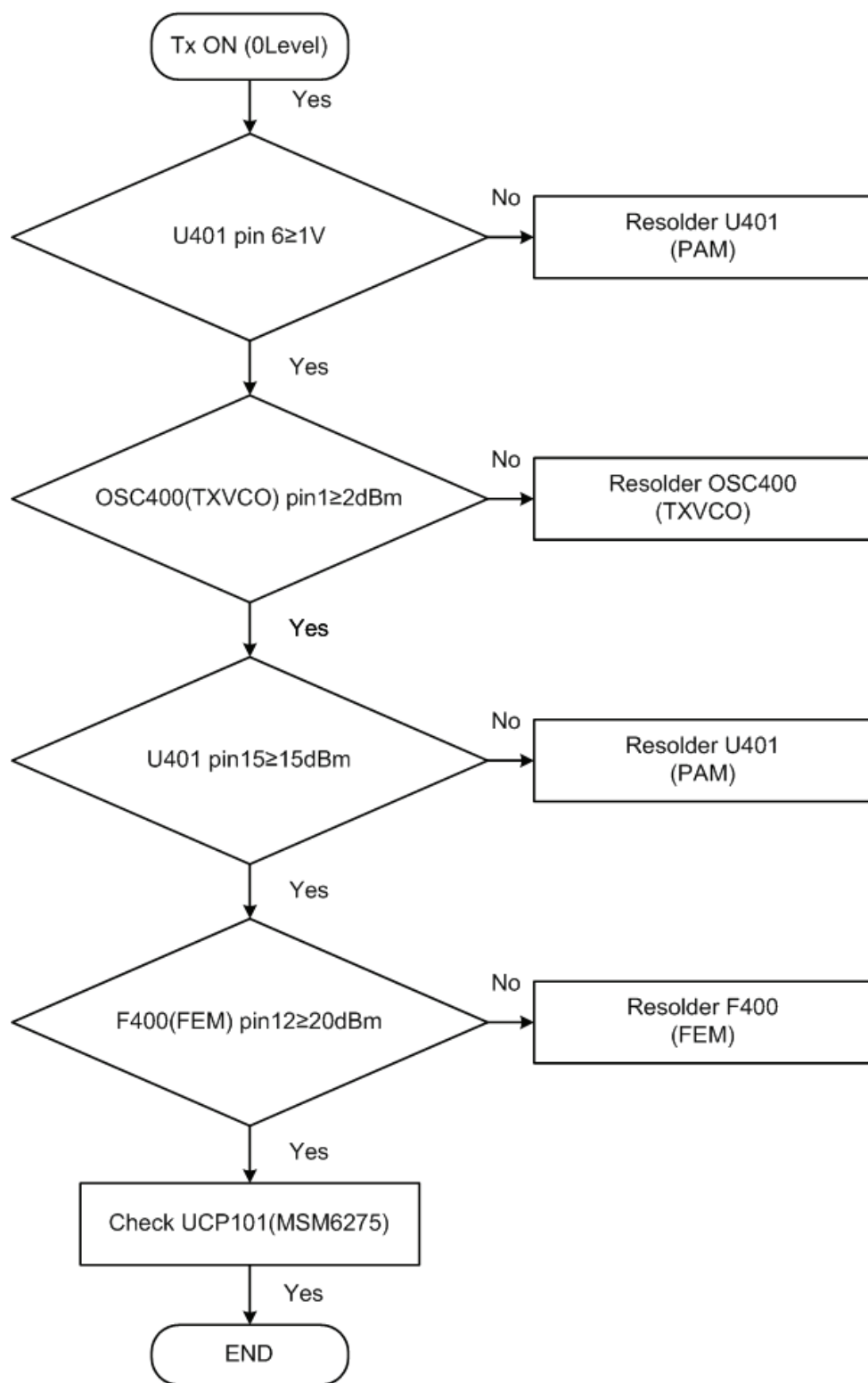
OSC400

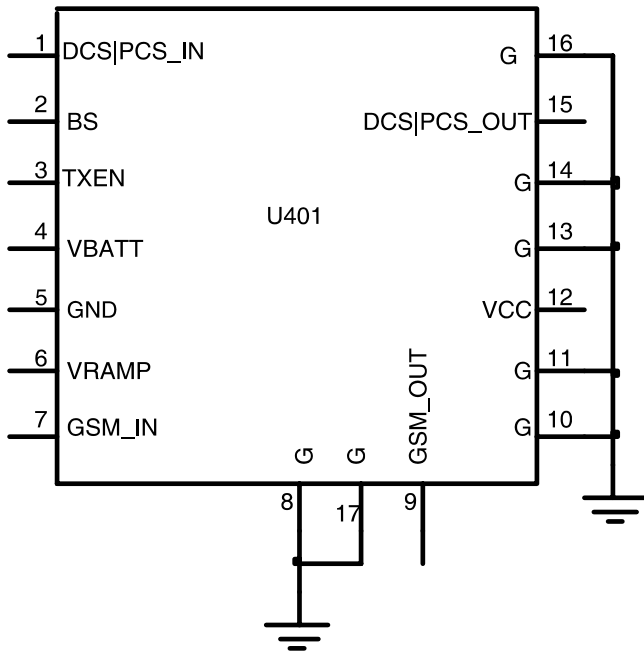


9-16. DCS Receiver

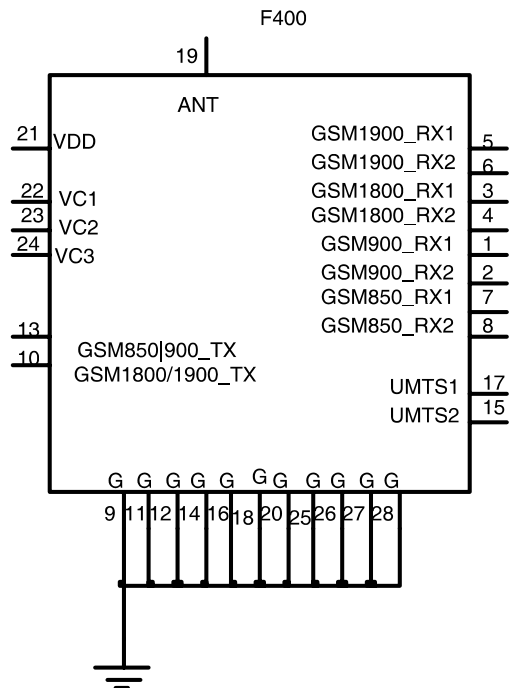
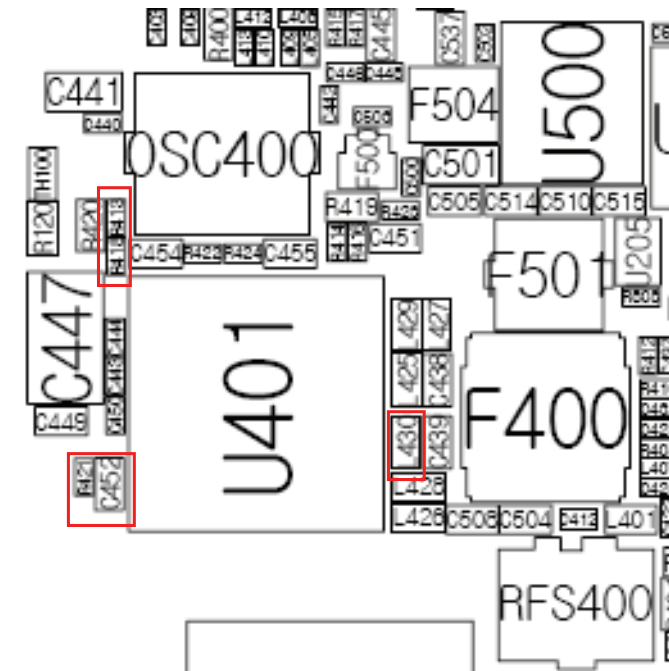
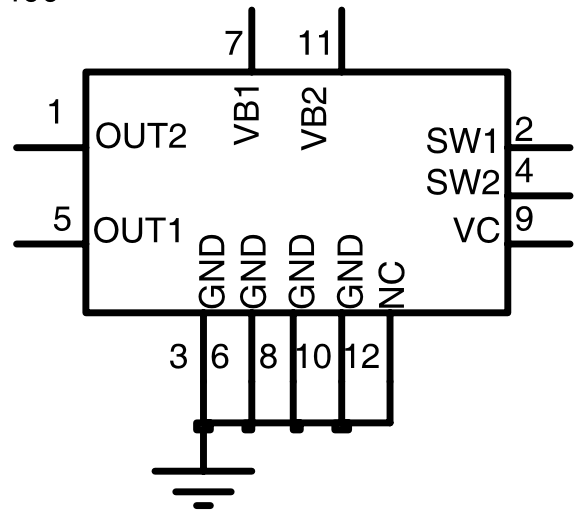


9-17. DCS Transmitter

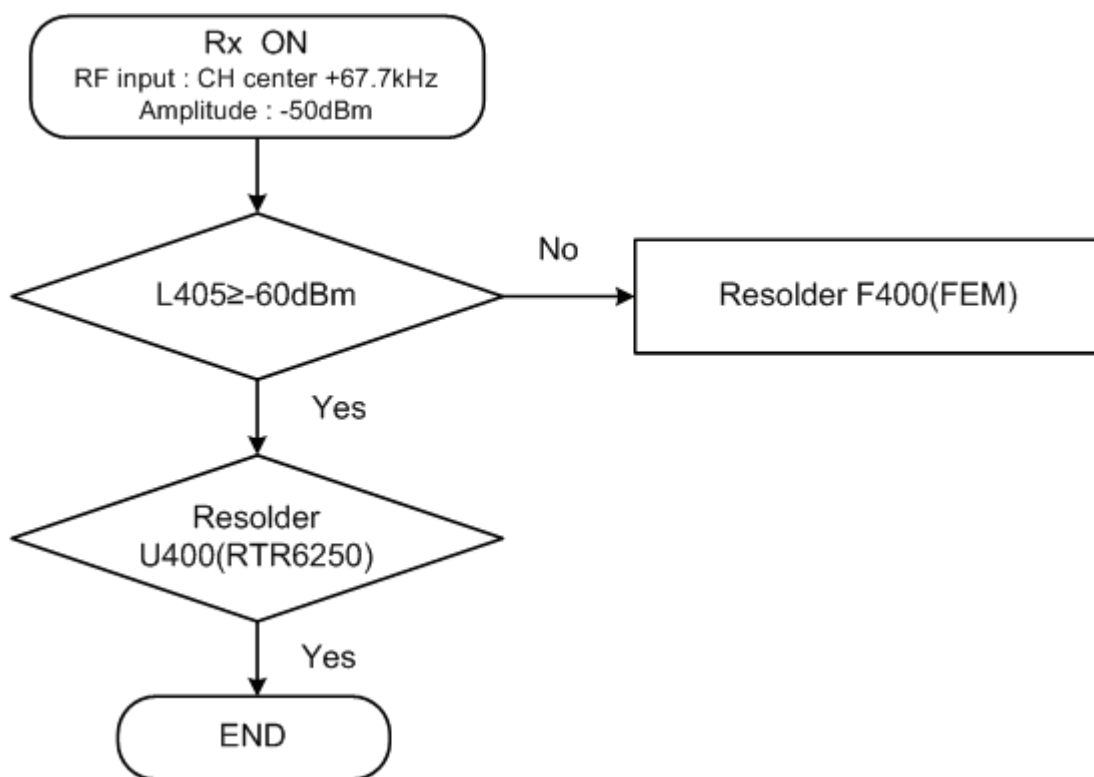


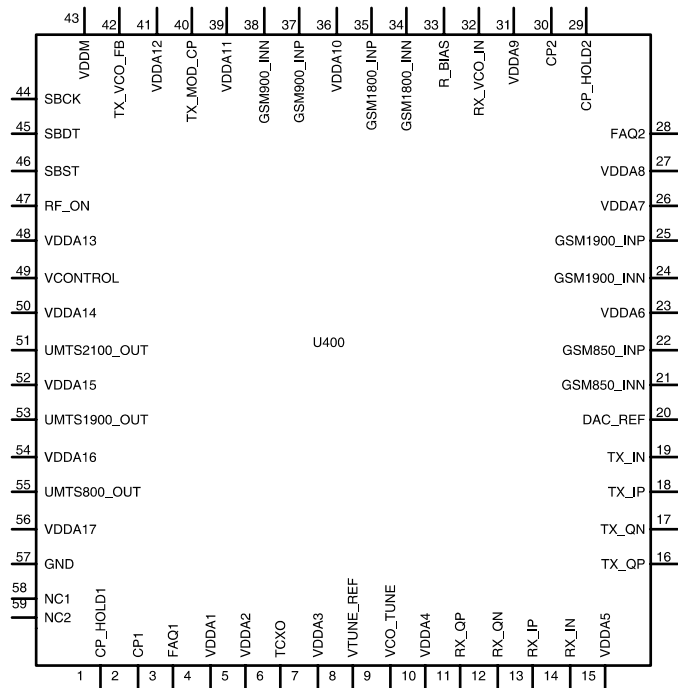
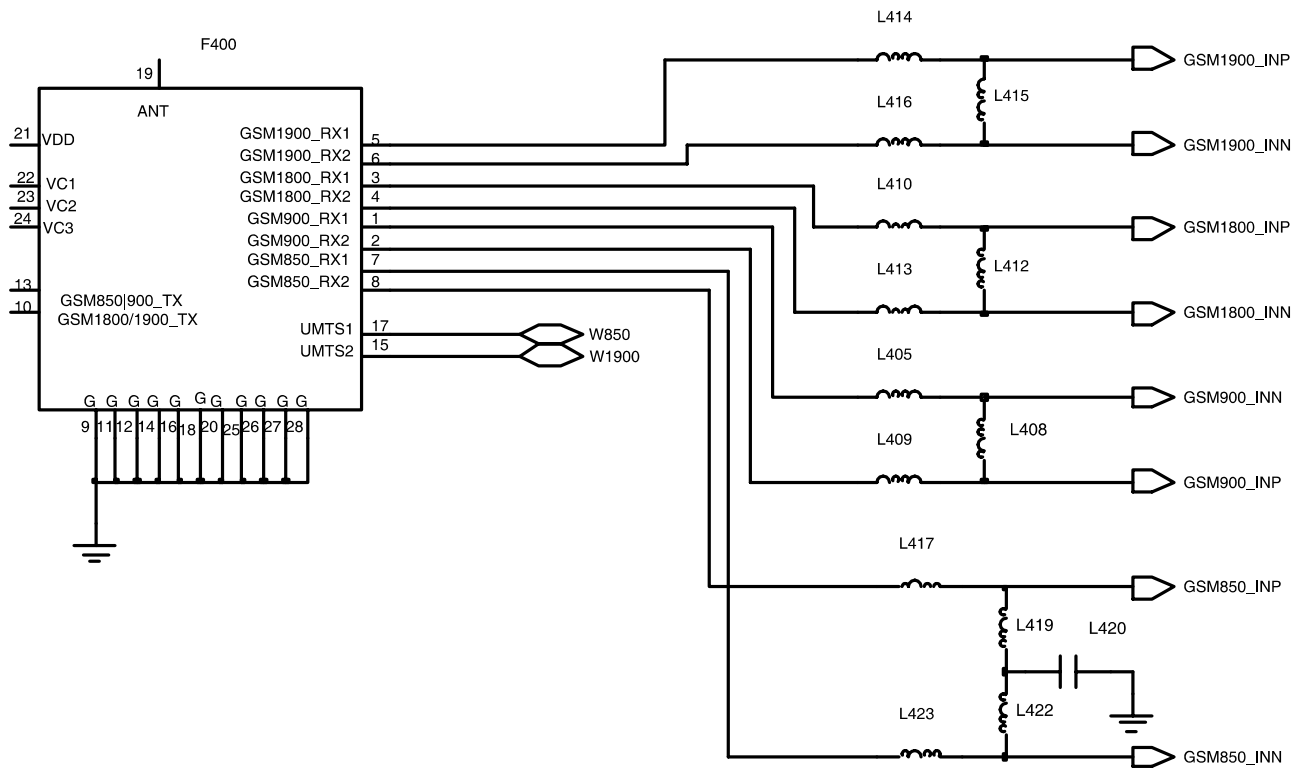


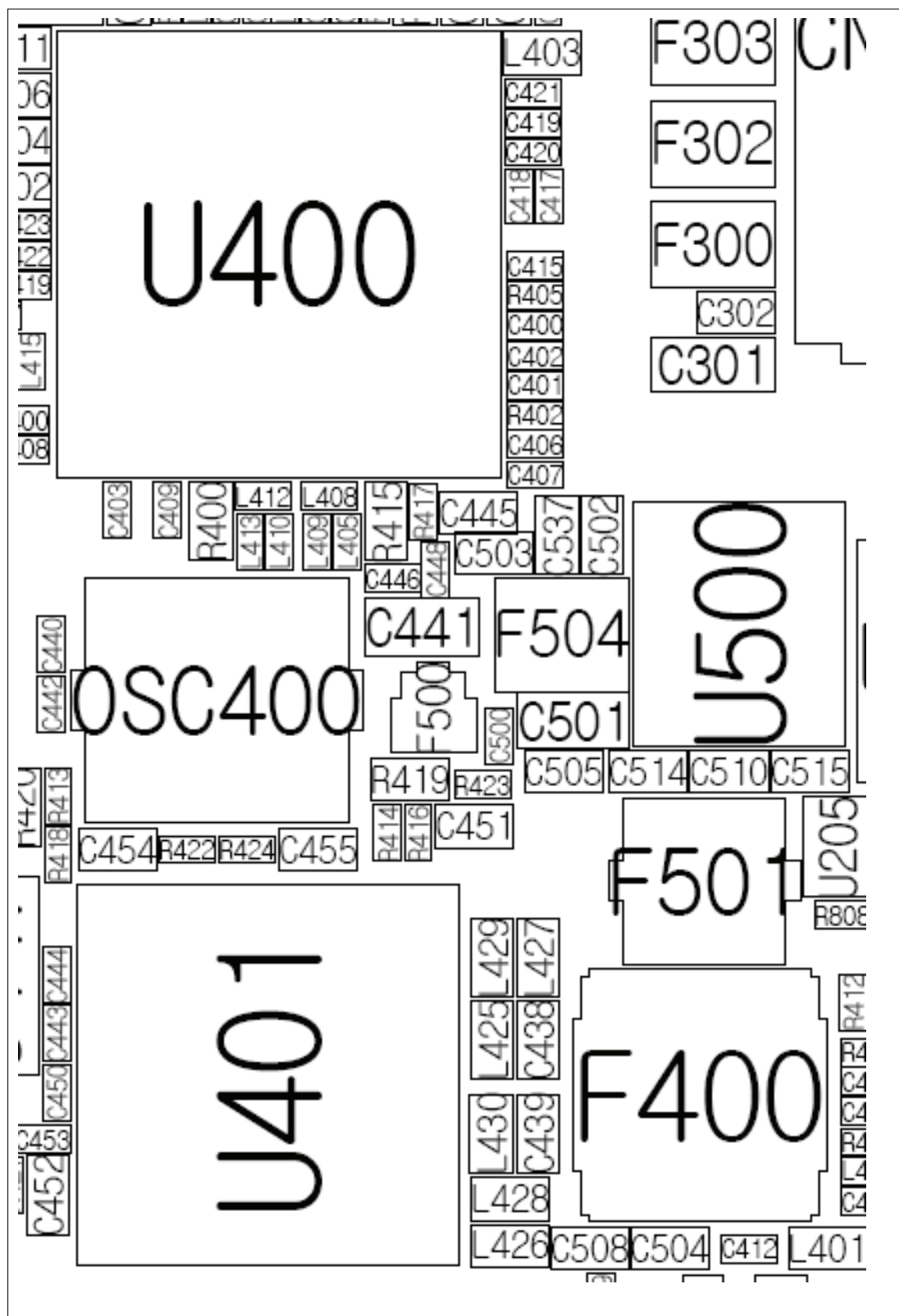
OSC400



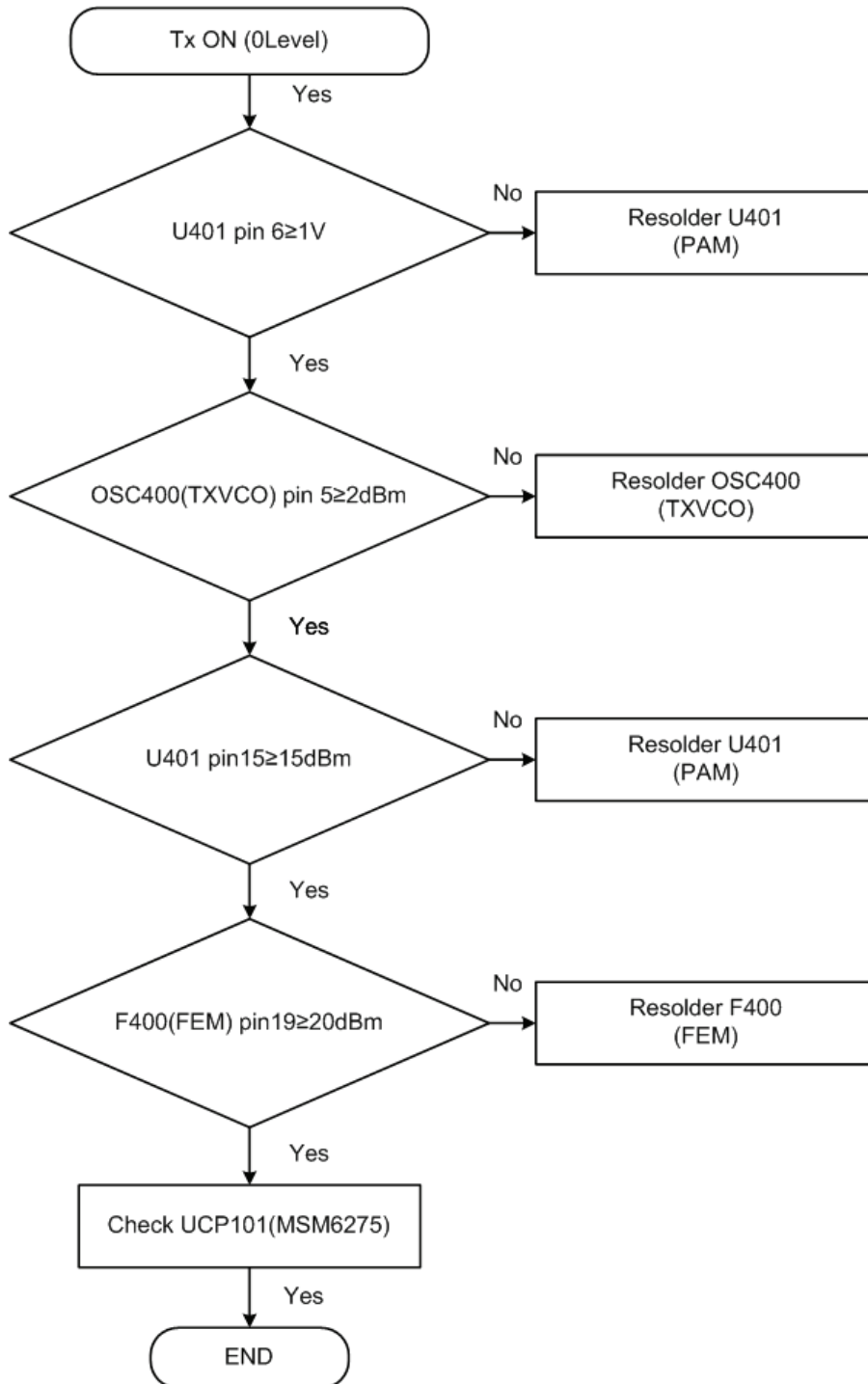
9-18. PCS Receiver

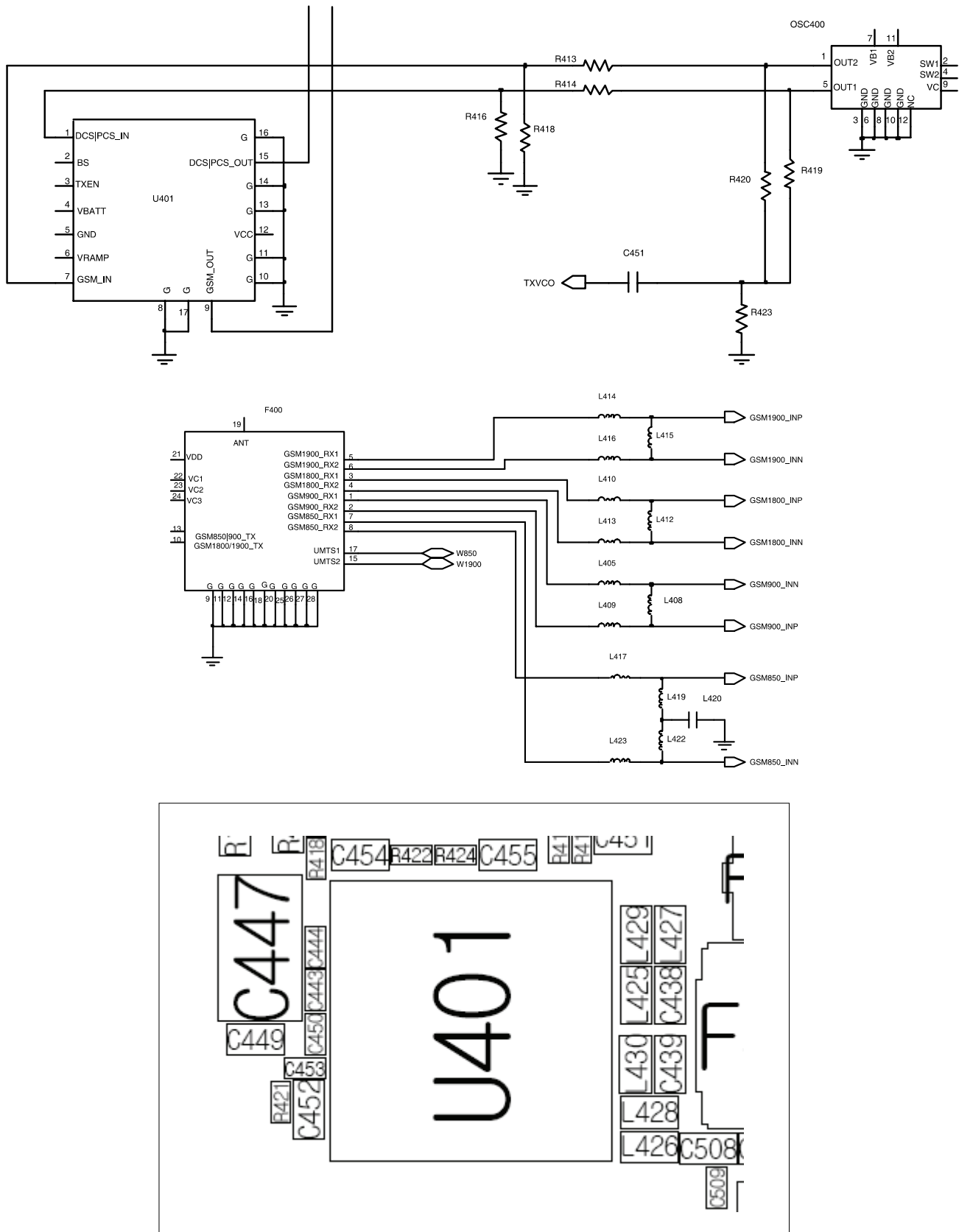




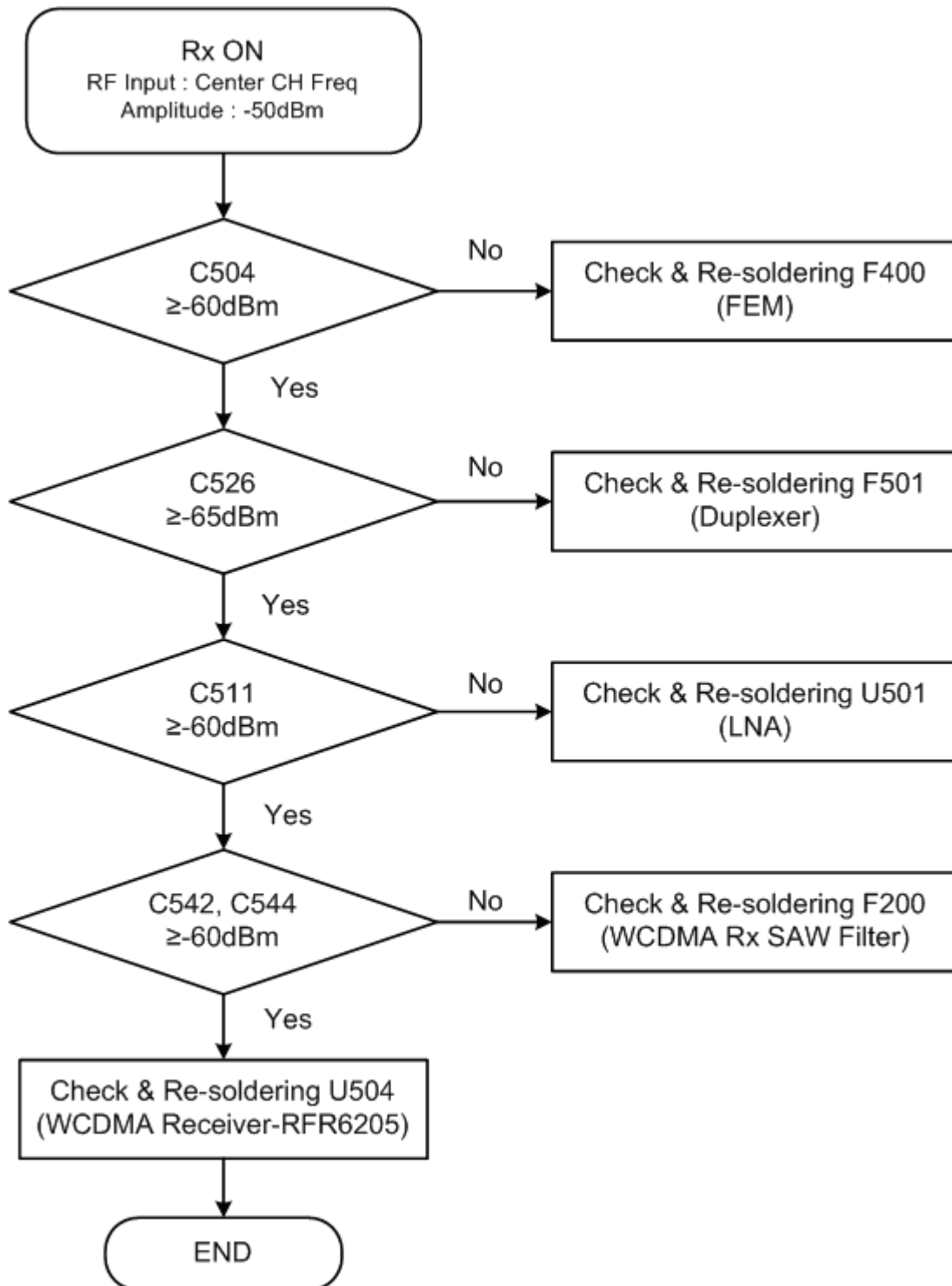


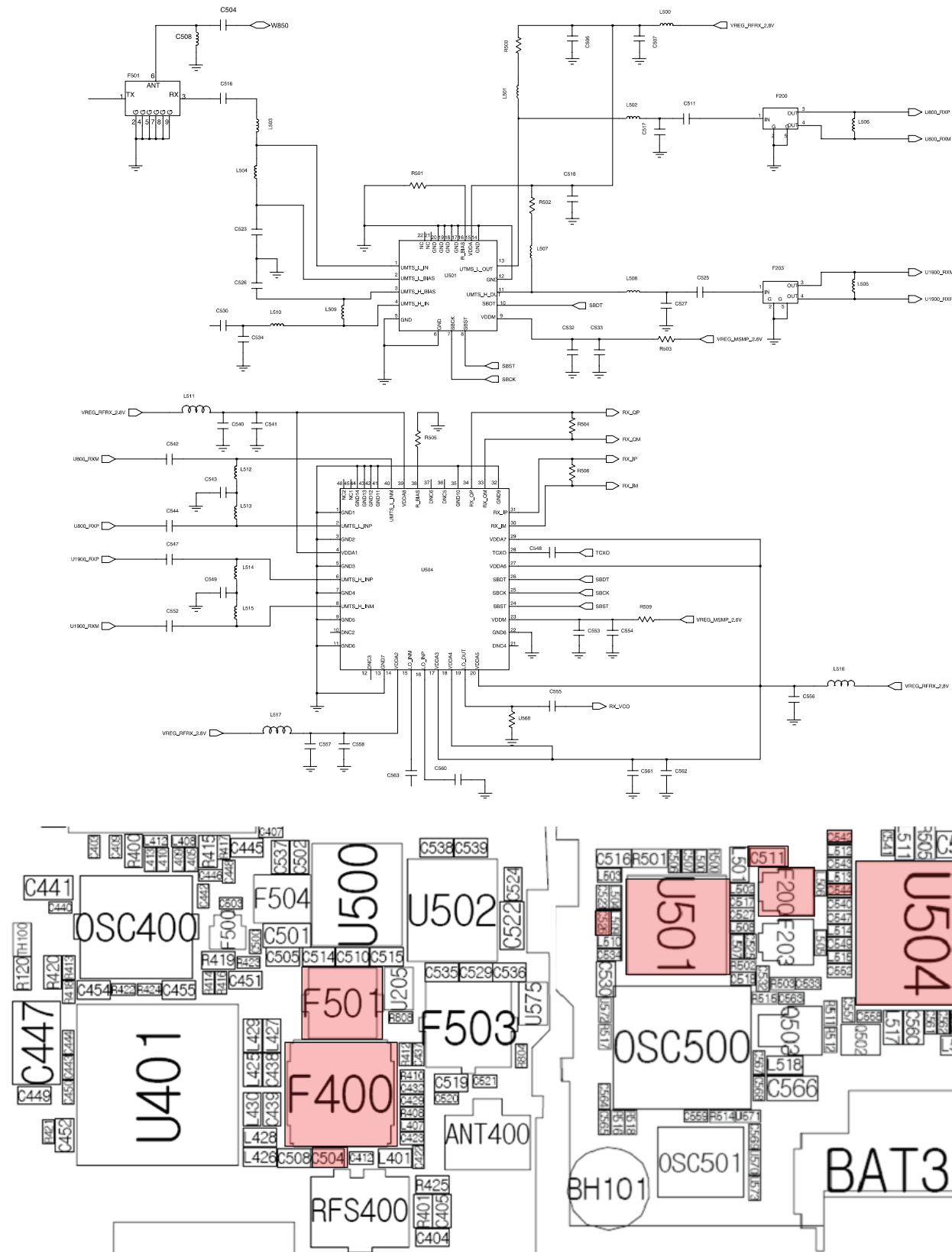
9-19. PCS Transmitter



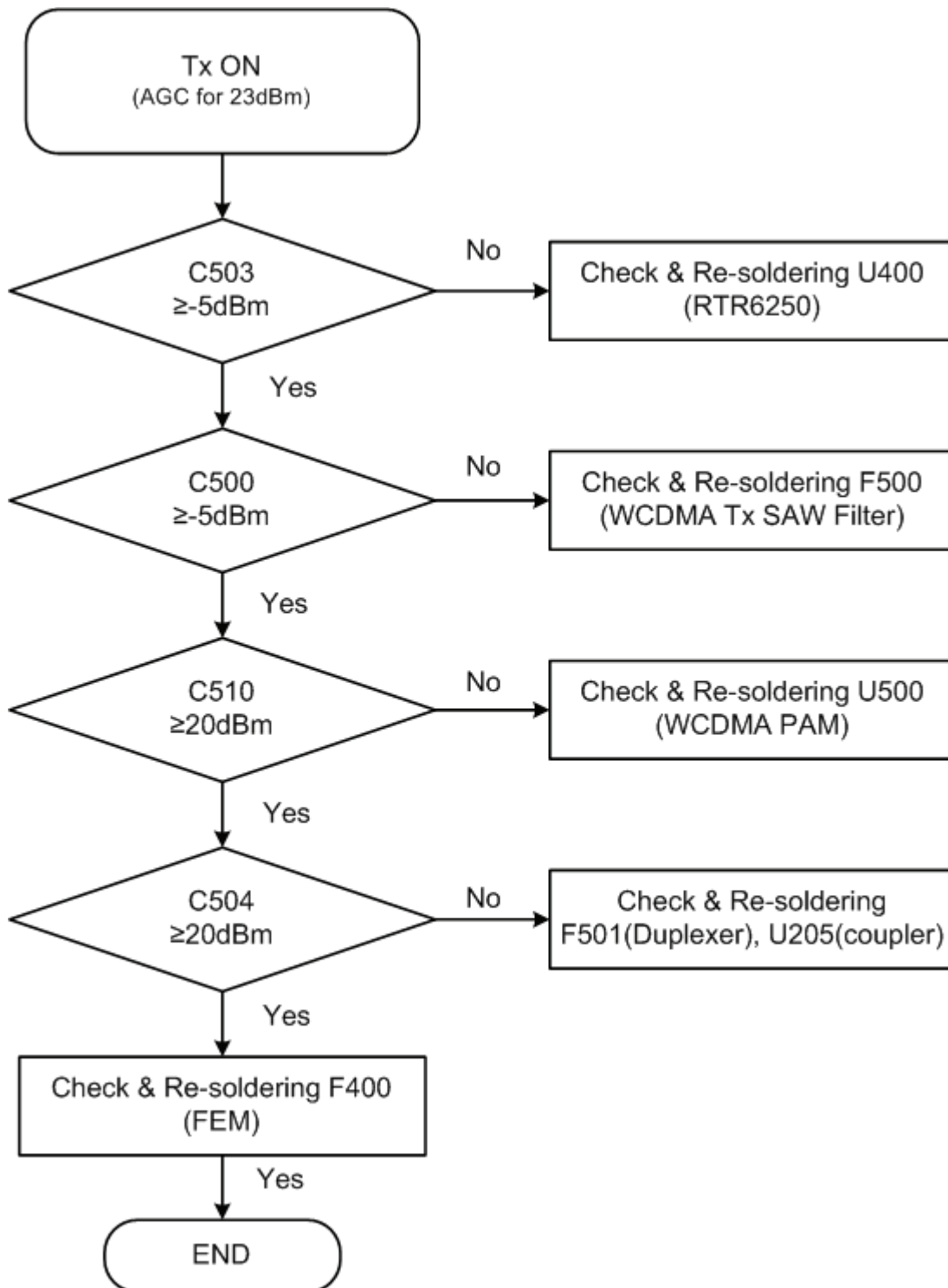


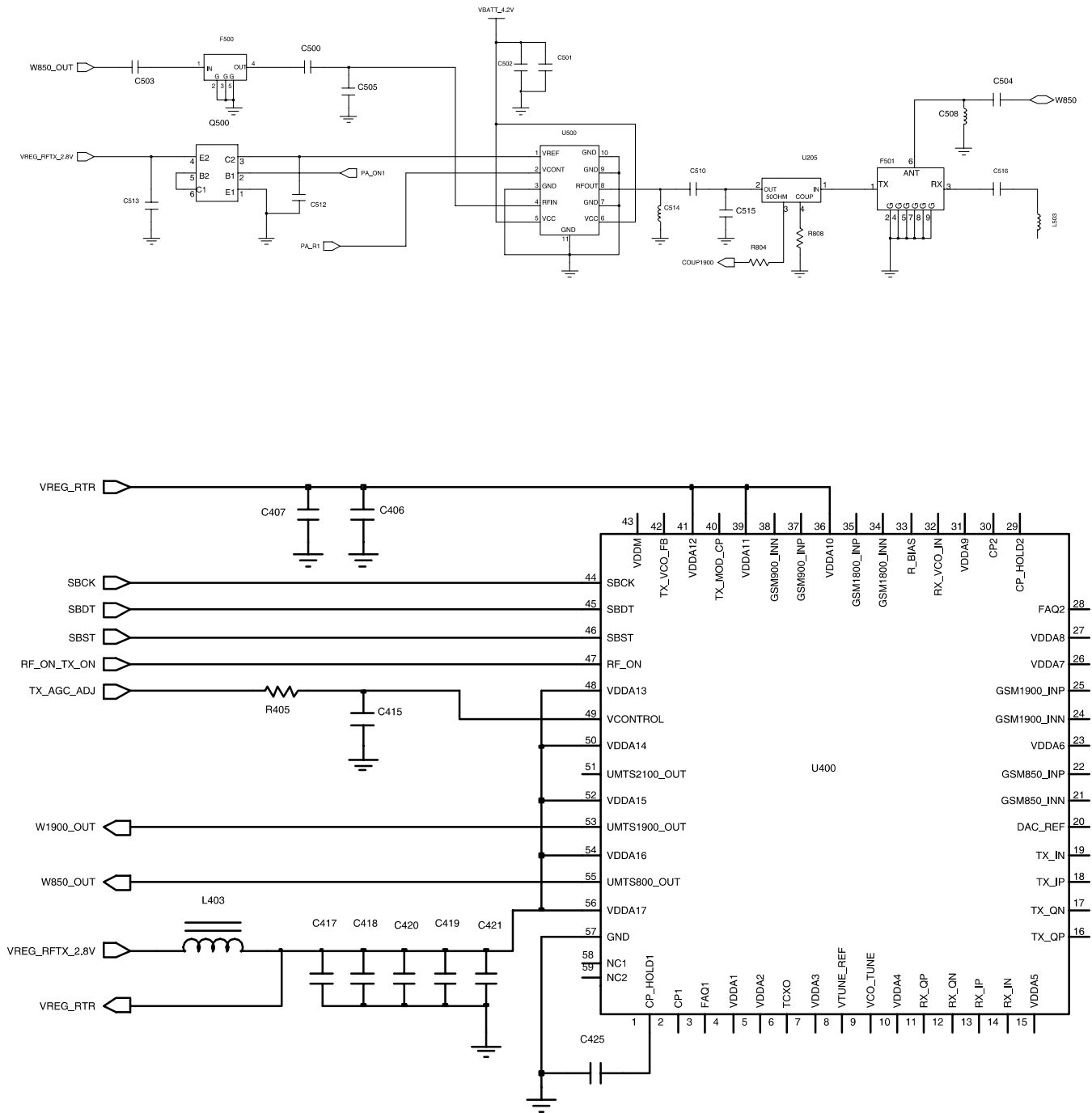
9-20. WCDMA850 Receiver

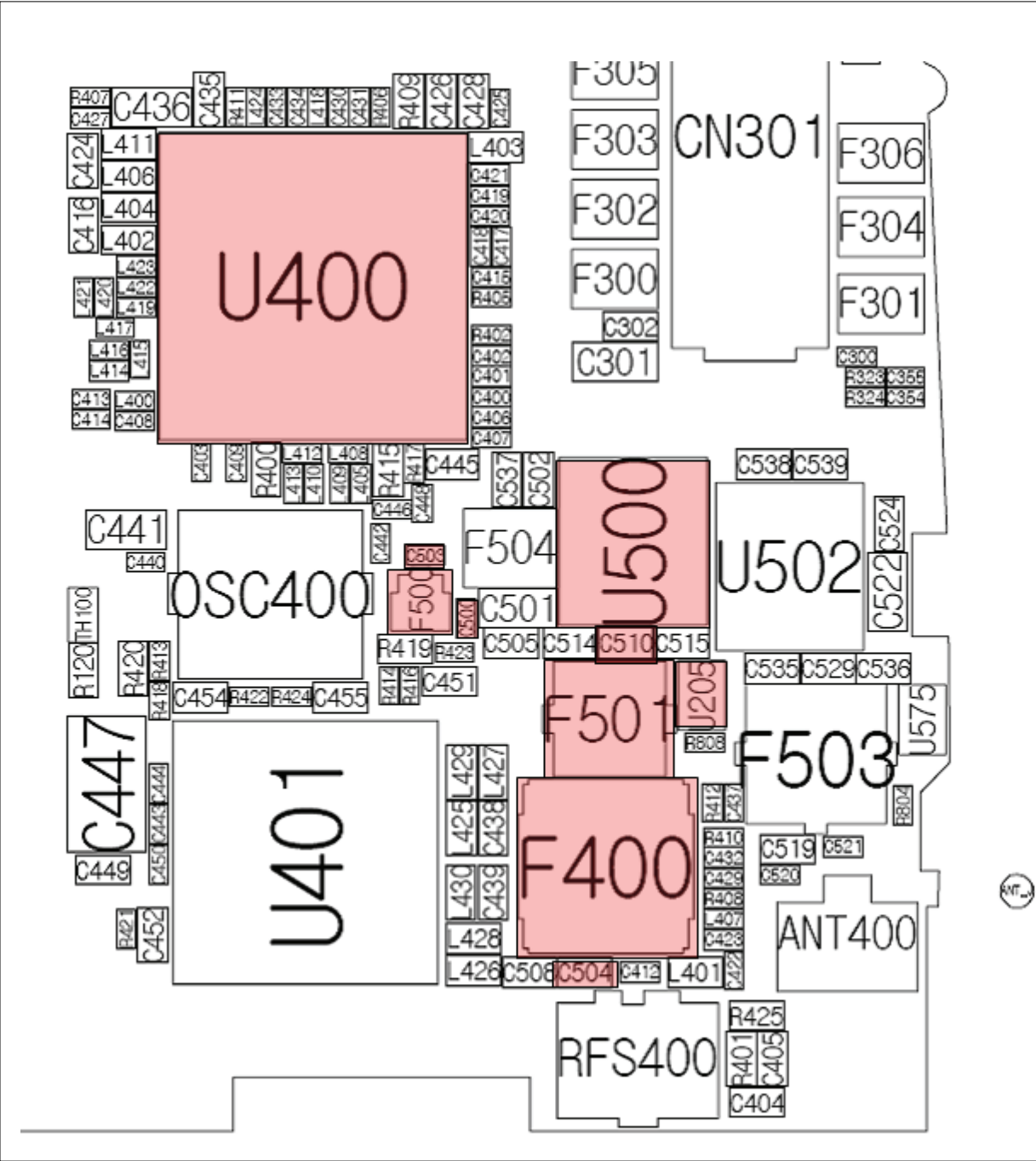




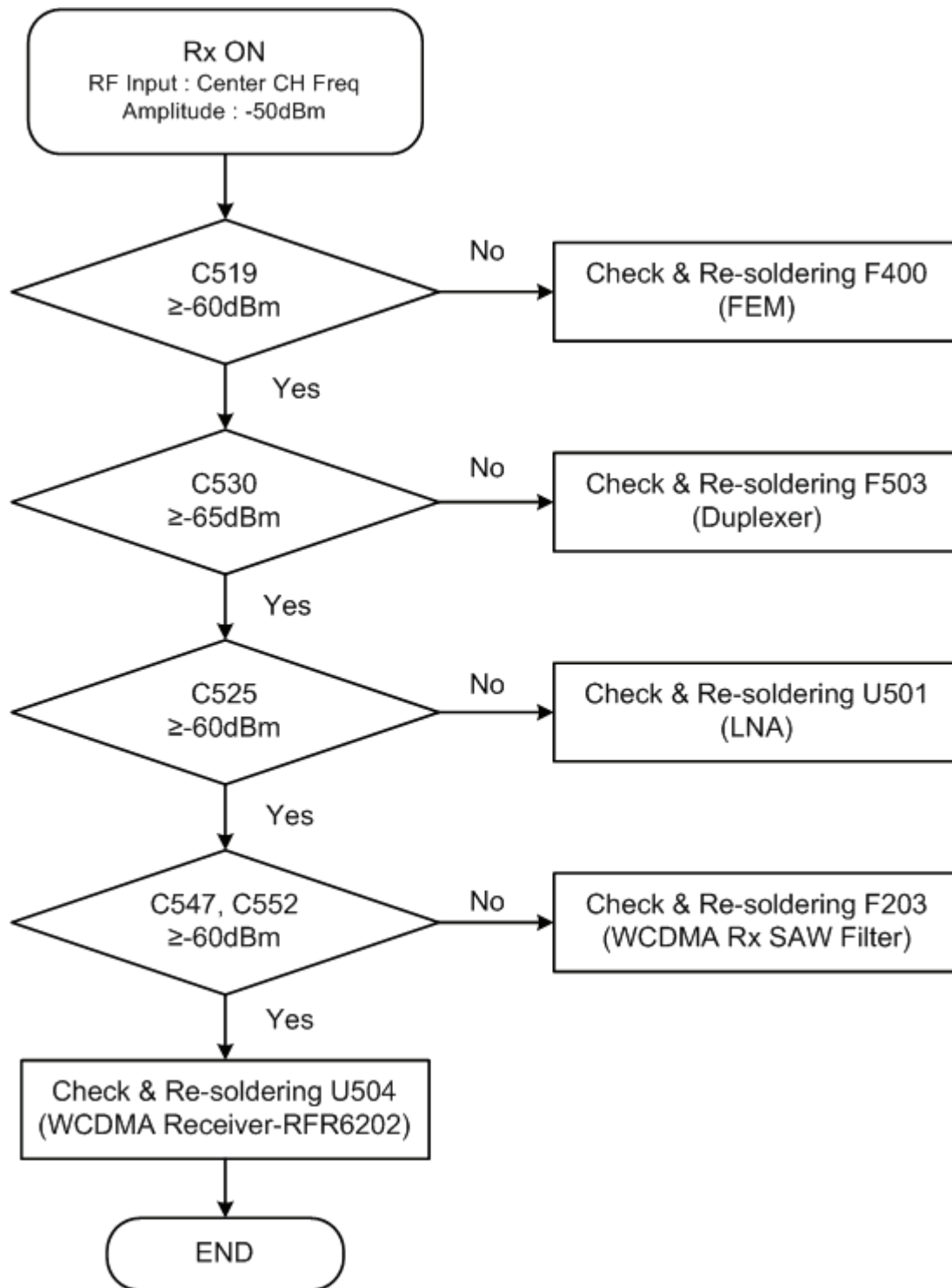
9-21. WCDMA850 Transmitter

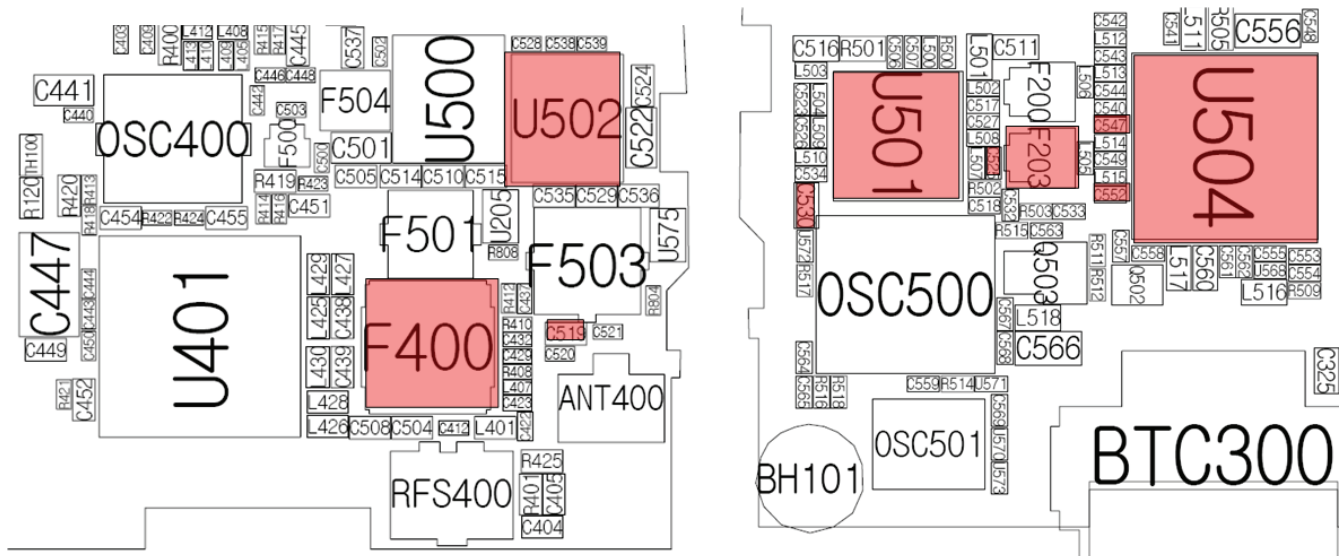
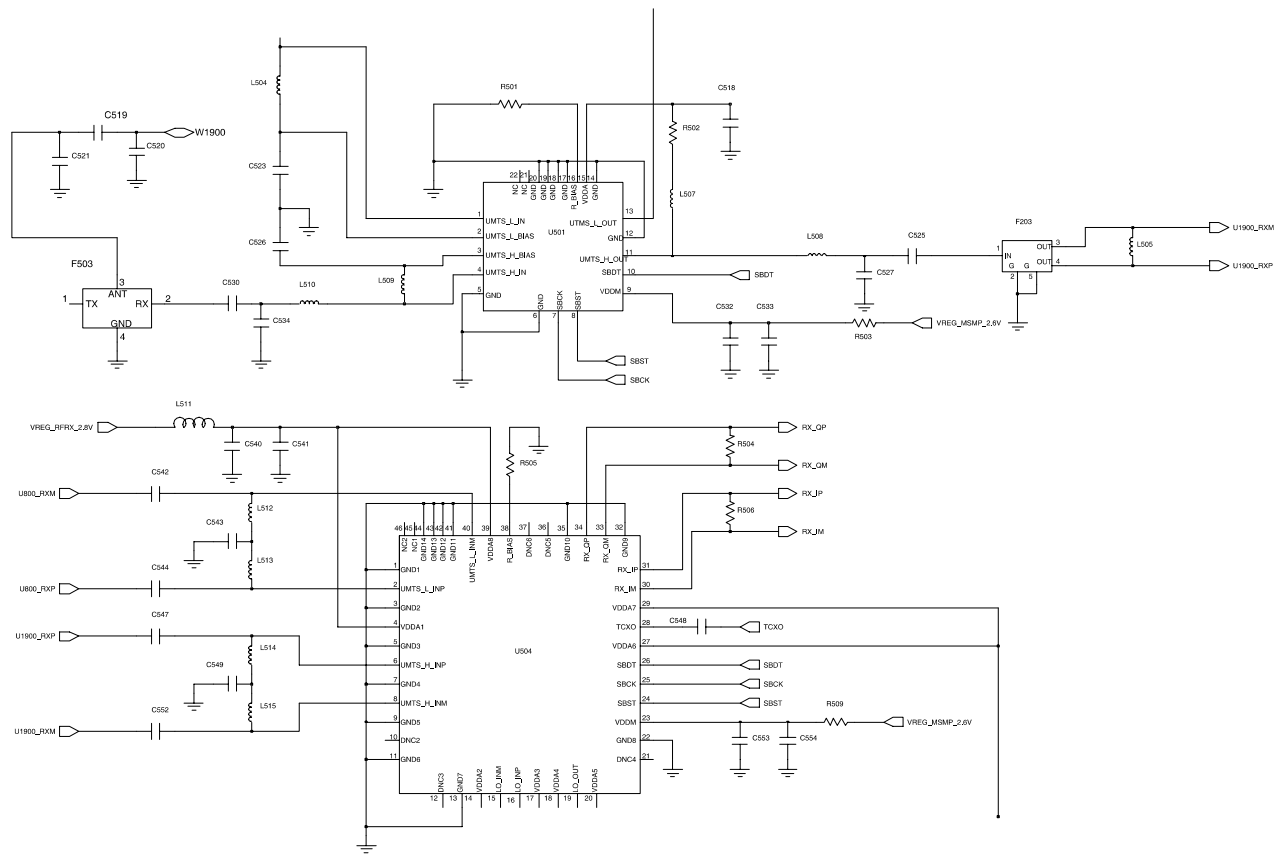




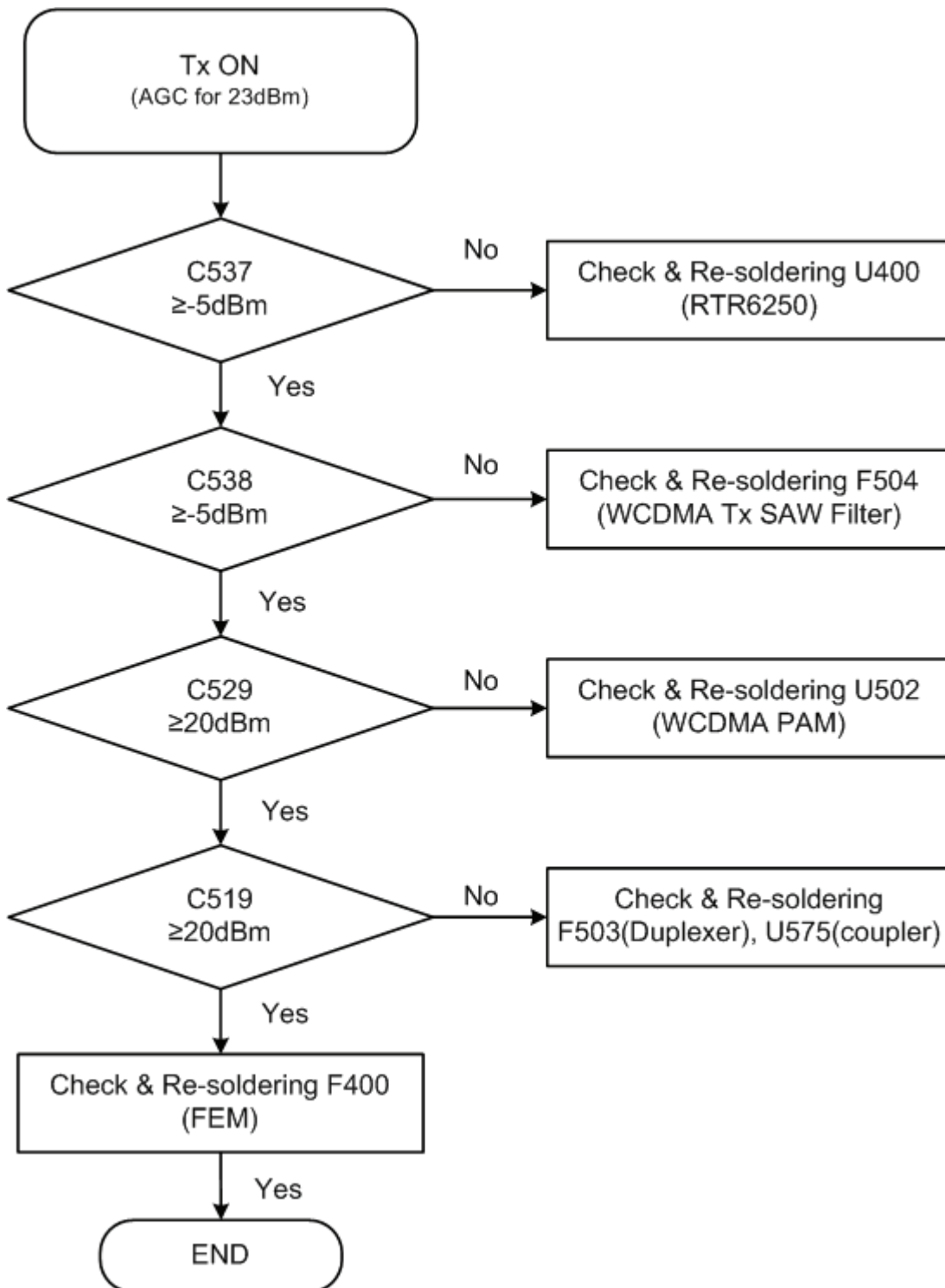


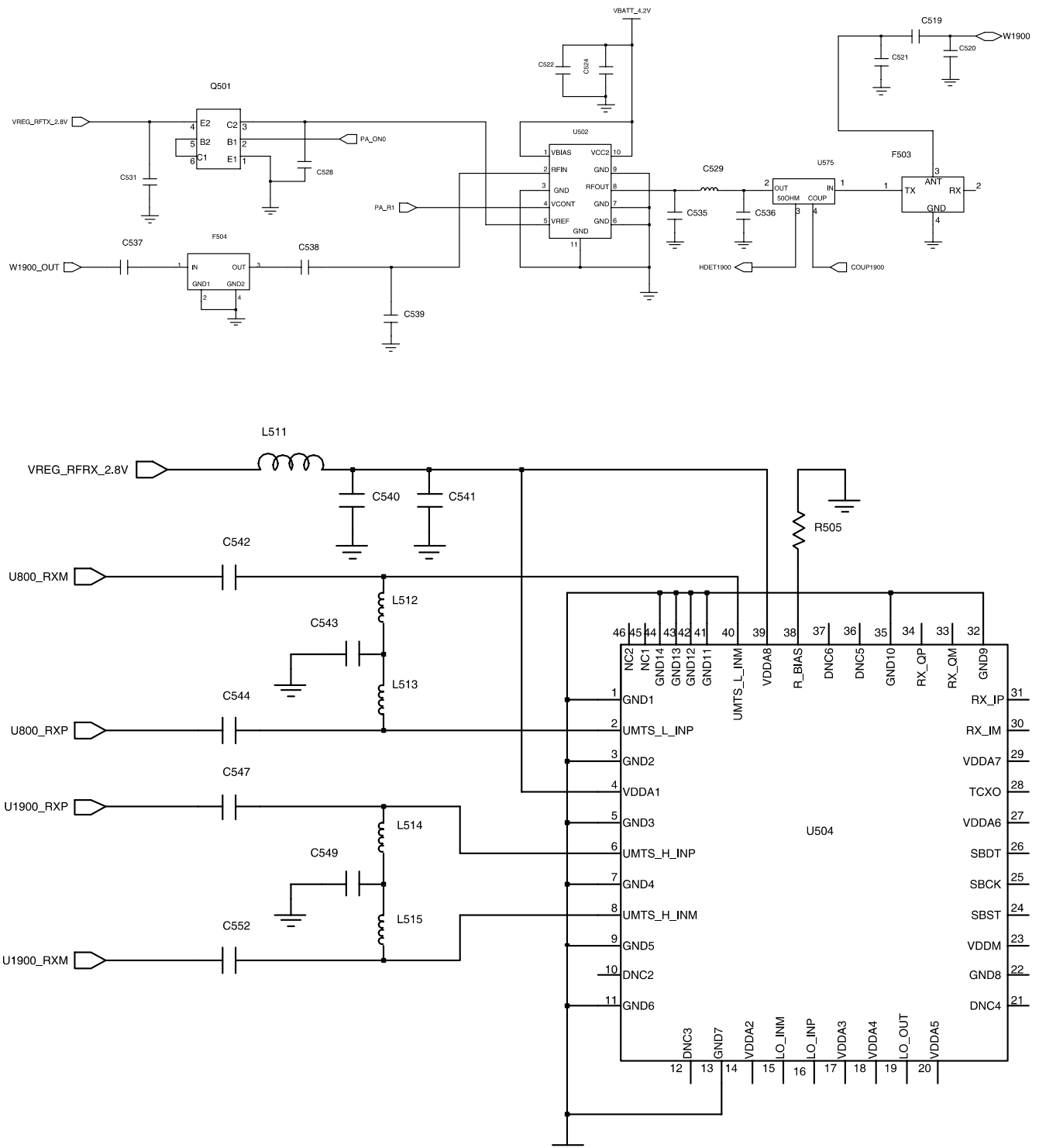
9-22. WCDMA1900 Receiver

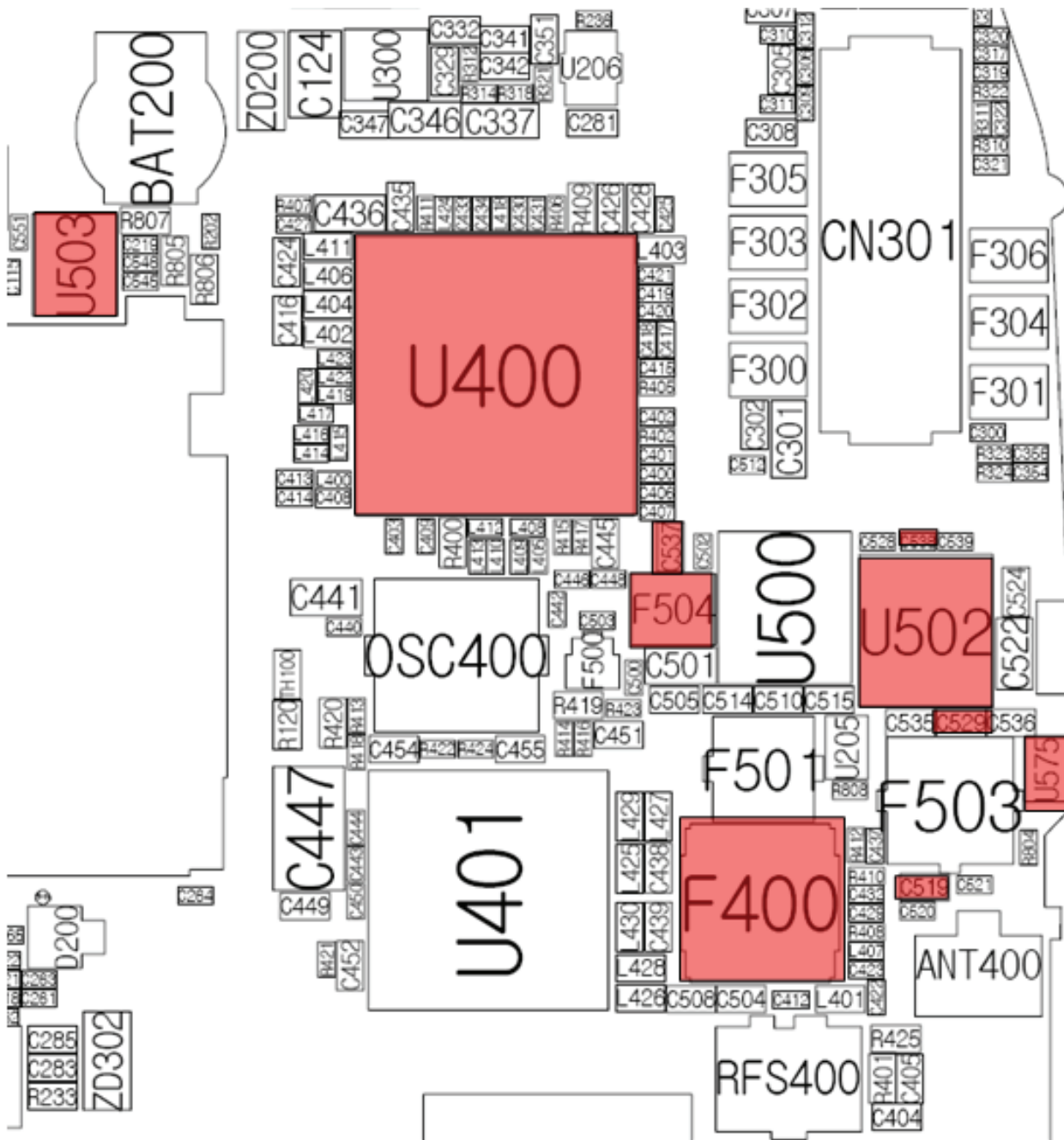




9-23. WCDMA1900 Transmitter







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

