

SAMSUNG

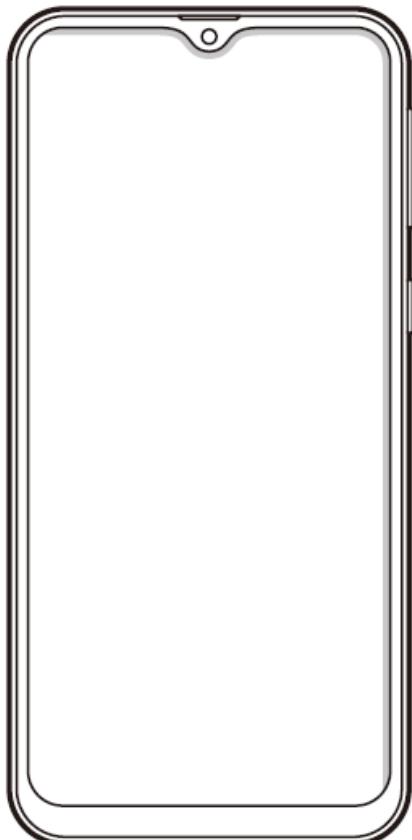
**Mobile Device
SM-M105F/G/M/Y
Common**

SERVICE

Manual

Mobile Device

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Notice: All functionality, features, specifications, and other product information provided in this document, including but not limited to, benefits, design, pricing, components, performance, availability, and capabilities of the product are subject to change without notice. Samsung reserves the right to alter this document or the product described herein at anytime, without obligation to provide notification of such changes.

1. Safety Precautions

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. Safety Precautions

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.

2. Specification

2-1-1. GSM General Specification [SM-M105F/G/Y]

Item		GSM 850	EGSM 900	DCS1800
Freq. Band[MHz] Uplink/Downlink		824~849 869~894	880~915 925~960	1710~1785 1805~1880
ARFCN range		128~251	0~124 & 975~1023	512~885
Tx/Rx spacing		45MHz	45MHz	95MHz
Mod. Bit rate/ Bit Period		270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
Time Slot Period/ Frame Period		576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	GSM/ EGPRS	GMSK/ 8PSK	GMSK/ 8PSK	GMSK/ 8PSK
MS Power		33dBm~5dBm	33dBm~5dBm	30dBm~0dBm
Power Class		4(GMSK) E2(8PSK)	4(GMSK) E2(8PSK)	1(GMSK) E2(8PSK)
Sensitivity		-102dBm	-102dBm	-100dBm
TDMA Mux		8	8	8

2. Specification

2-1-2. GSM General Specification [SM-M105M]

Item		GSM 850	EGSM 900	DCS1800	PCS1900
Freq. Band[MHz] Uplink/Downlink		824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFCN range		128~251	0~124 & 975~1023	512~885	512~810
Tx/Rx spacing		45MHz	45MHz	95MHz	80MHz
Mod. Bit rate/ Bit Period		270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
Time Slot Period/ Frame Period		576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	GSM/ EGPRS	GMSK/ 8PSK	GMSK/ 8PSK	GMSK/ 8PSK	GMSK/ 8PSK
MS Power		33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm
Power Class		4(GMSK) E2(8PSK)	4(GMSK) E2(8PSK)	1(GMSK) E2(8PSK)	1(GMSK) E2(8PSK)
Sensitivity		-102dBm	-102dBm	-100dBm	-100dBm
TDMA Mux		8	8	8	8

2. Specification

2-2-1. GSM Tx Power Class [SM-M105F/G/Y]

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

2. Specification

2-2-2. GSM Tx Power Class [SM-M105M]

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±3 dBm	17	9±3 dBm	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

2. Specification

2-3-1. WCDMA General Specification [SM-M105F/G]

Item	WCDMA2100(B1)	WCDMA850(B5)	WCDMA900(B8)
Freq. Band[MHz] Uplink/Downlink	1920~1980 2110~2170	824~849 869~894	880~915 925~960
ARFCN range	UL: 9612~9888 DL: 10562~10838	UL: 4132~4233 DL: 4357~4458	UL: 2712~2868 DL: 2937~3088
Tx/Rx spacing	190MHz	45MHz	45MHz
Mod. Bit rate/ Bit Period	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)
Time Slot Period/ Frame Period	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms
Modulation	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM
MS Power (dBm)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)
Power Class	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-106dBm	-104dBm	-103dBm

2. Specification

2-3-2. WCDMA General Specification [SM-M105M]

Item	WCDMA2100(B1)	WCDMA1900(B2)	WCDMA AWS(B4)	WCDMA850(B5)	WCDMA900(B8)
Freq. Band[MHz] Uplink/Downlink	1920~1980 2110~2170	1850~1910 1930~1990	1710~1755 2110~2155	824~849 869~894	880~915 925~960
ARFCN range	UL: 9612~9888 DL: 10562~10838	UL: 9262~9538 DL: 9662~9938	UL: 1312~1513 DL: 1537~1738	UL: 4132~4233 DL: 4357~4458	UL: 2712~2868 DL: 2937~3088
Tx/Rx spacing	190MHz	80MHz	400MHz	45MHz	45MHz
Mod. Bit rate/ Bit Period	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)
Time Slot Period/ Frame Period	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms
Modulation	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM
MS Power (dBm)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)
Power Class	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-106dBm	-104dBm	-106dBm	-104dBm	-103dBm

2. Specification

2-3-3. WCDMA General Specification [SM-M105Y]

Item	WCDMA2100(B1)	WCDMA1900(B2)	WCDMA850(B5)	WCDMA900(B8)
Freq. Band[MHz] Uplink/Downlink	1920~1980 2110~2170	1850~1910 1930~1990	824~849 869~894	880~915 925~960
ARFCN range	UL: 9612~9888 DL: 10562~10838	UL: 9262~9538 DL: 9662~9938	UL: 4132~4233 DL: 4357~4458	UL: 2712~2868 DL: 2937~3088
Tx/Rx spacing	190MHz	80MHz	45MHz	45MHz
Mod. Bit rate/ Bit Period	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)	42.2Mbps(DL) 5.42Mbps(UL)
Time Slot Period/ Frame Period	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms	WCDMA 10ms/0.667ms HSPA 2ms/0.667ms
Modulation	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM	QPSK 16QAM 64QAM
MS Power (dBm)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)	25.7 ~ -49(↓)
Power Class	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-106dBm	-104dBm	-104dBm	-103dBm

2. Specification

2-4. LTE General Specification

Item	LTE Band1	LTE Band3	LTE Band5	LTE Band8
Freq. Band[MHz] Uplink/Downlink	1920~1980 2110~2170	1710~1785 1805~1880	824~849 869~894	880~915 925~960
ARFCN range	UL:18000~18599 DL:0~599	UL:19200~19949 DL:1200~1949	UL:20400~20649 DL:2400~2649	UL:21450~21799 DL:3450~3799
Tx/Rx spacing (MHz)	190	95	45	45
Channel Bandwidth (MHz)	5/10/15/20	1.4/3/5/10/15/20	1.4/3/5/10	1.4/3/5/10
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm)	-96.3	-93.3	-94.3	-93.3

[SM-M105F]

Item	LTE Band20	LTE Band38	LTE Band40	LTE Band41
Freq. Band[MHz] Uplink/Downlink	832~862 791~821	2570~2620	2300~2400	2496~2690
ARFCN range	UL:24150~24449 DL:6150~6449	UL/DL:37750 ~ 38249	UL/DL:38650 ~ 39649	UL/DL:39650 ~ 41589
Tx/Rx spacing (MHz)	-41	0	0	0
Channel Bandwidth (MHz)	5/10/15/20	5/10/15/20	5/10/15/20	5/10/15/20
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm))	-93.3	-96.3	-96.3	-94.3

2. Specification

[SM-M105G]

Item	LTE Band7	LTE Band20	LTE Band38	LTE Band40	LTE Band41
Freq. Band[MHz] Uplink/Downlink	2500~2570 2620~2690	832~862 791~821	2570~2620	2300~2400	2496~2690
ARFCN range	UL:20750~21449 DL:2750~3449	UL:24150~24449 DL:6150~6449	UL/DL:37750 ~ 38249	UL/DL:38650 ~ 39649	UL/DL:39650 ~ 41589
Tx/Rx spacing (MHz)	120	-41	0	0	0
Channel Bandwidth (MHz)	5/10/15/20	5/10/15/20	5/10/15/20	5/10/15/20	5/10/15/20
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm))	-94.3	-93.3	-96.3	-96.3	-94.3

2. Specification

[SM-M105M]

Item	LTE Band2	LTE Band4	LTE Band7
Freq. Band[MHz] Uplink/Downlink	1850~1910 1930~1990	1710~1755 2110~2155	2500~2570 2620~2690
ARFCN range	UL:18600~19199 DL:600~1199	UL:19950~20399 DL:1950~2399	UL:20750~21449 DL:2750~3449
Tx/Rx spacing (MHz)	80	400	120
Channel Bandwidth (MHz)	1.4/3/5/10/15/20	1.4/3/5/10/15/20	5/10/15/20
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM 256QAM(DL only)
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm)	-94.3	-96.3	-94.3

Item	LTE Band12	LTE Band17	LTE Band28
Freq. Band[MHz] Uplink/Downlink	699~716 729~746	704~716 734~746	703~748 758~803
ARFCN range	UL:23010~23179 DL:5010~5179	UL:23730~23849 DL:5730~5849	UL:27210~27659 DL:9210~9659
Tx/Rx spacing (MHz)	30	30	55
Channel Bandwidth (MHz)	1.4/3/5/10	5/10	3/5/10/15/20
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm))	-93.3	-93.3	-94.8

2. Specification

[SM-M105Y]

Item	LTE Band7	LTE Band28	LTE Band38	LTE Band40	LTE Band41
Freq. Band[MHz] Uplink/Downlink	2500~2570 2620~2690	703~748 758~803	2570~2620	2300~2400	2496~2690
ARFCN range	UL:20750~21449 DL:2750~3449	UL:27210~27659 DL:9210~9659	UL/DL:37750 ~ 38249	UL/DL:38650 ~ 39649	UL/DL:39650 ~ 41589
Tx/Rx spacing (MHz)	120	55	0	0	0
Channel Bandwidth (MHz)	5/10/15/20	3/5/10/15/20	5/10/15/20	5/10/15/20	5/10/15/20
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM
MS Power (dBm)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)	25.7~-39(↓)
Sensitivity (QPSK, BW 10MHz) (dBm))	-94.3	-94.8	-96.3	-96.3	-94.3

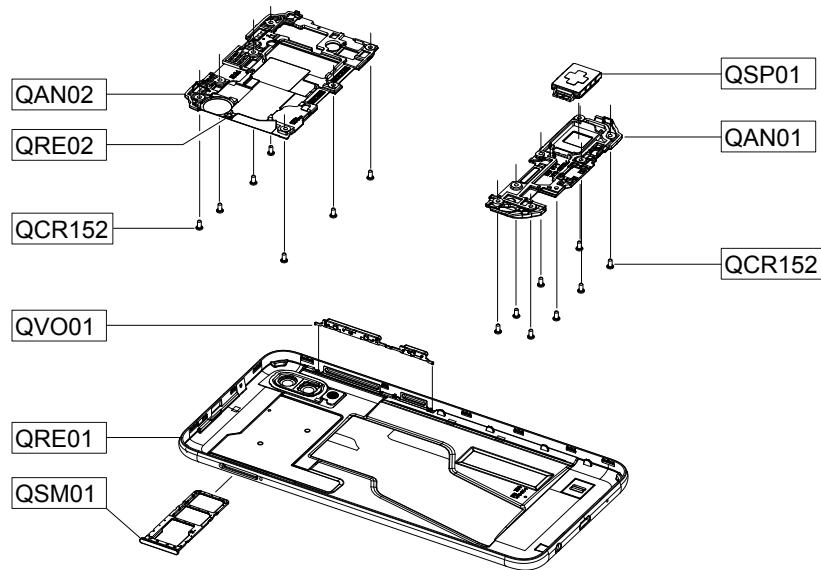
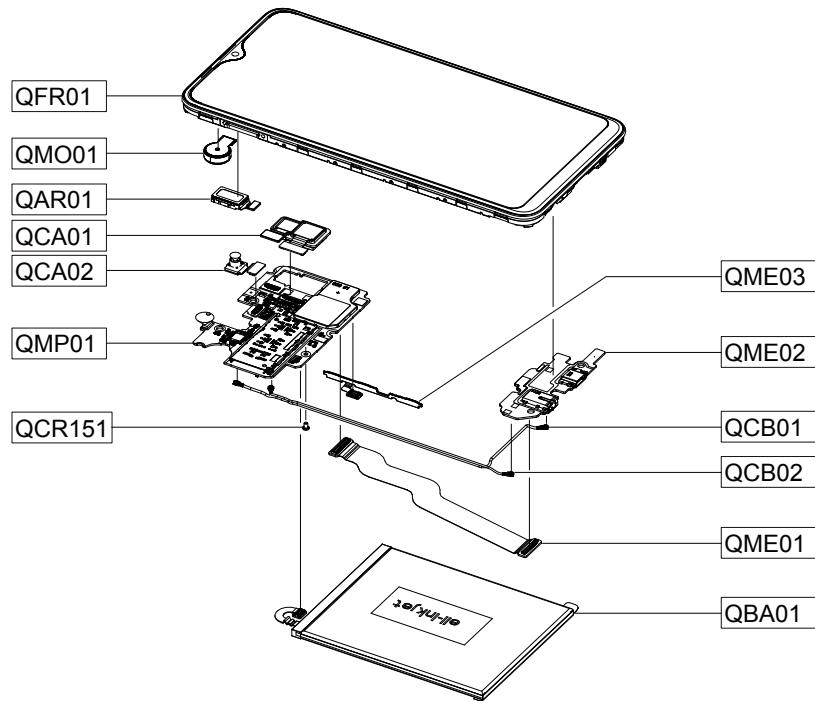
3. Product Function

Main Function

Item	Description
OS	Android V8.1
SM-M105F RF	GSM850 / GSM900 / DCS1800 WCDMA: B1/ B5/ B8 LTE: B1/ B3/ B5/ B8/ B20 / B38/ B40/ B41
SM-M105G RF	GSM850 / GSM900 / DCS1800 WCDMA: B1/ B5/ B8 LTE: B1/ B3/ B5/ B7/ B8/ B20 / B38/ B40/ B41
SM-M105M RF	GSM850 / GSM900 / DCS1800 / PCS1900 WCDMA: B1/ B2 / B4 / B5/ B8 LTE: B1/ B2 / B3/ B4 / B5/ B7/ B8/ B12 / B17 / B28
SM-M105Y RF	GSM850 / GSM900 / DCS1800 WCDMA: B1/ B2 / B5/ B8 LTE: B1/ B3/ B5/ B7/ B8/ B28 / B38/ B40/ B41
Battery	3400mAh
Base Band	1.6GHz Octa
Other RF	A-GPS (GPS, Glonass, Beidou, Qzss), BT4.2, USB 2.0, WIFI 802.11 b/g/n 2.4Ghz
Camera	Dual Camera (13M : A/F, F1.9, Wide angle), (5M : F2.2, Ultra Wide angle) with LED Flash, VT Camera (5MP,FF,F2.0)
LCD	6.22", HD+, 720x1520
RAM	3GB/2GB
ROM	3GB+32GB / 2GB+16GB
Sensor	Accelerometer, Proximity Sensor
Accessory	Charger: 5V/1A Data cable: 3.0pi, 0.8m(Type B/ USB-A)

4. Exploded View and Parts List

4-1. Cellular phone Exploded View



※ SVC REPAIR TAPE
QRT01

5. MAIN Electrical Parts List

[SM-M105F]

Parts Code	Design LOC	Description
0401-001110	D5002	DIODE-SWITCHING
0404-001646	D7005	DIODE-SCHOTTKY
0404-001972	D5003	DIODE-SCHOTTKY
0406-001506	ZD1002	DIODE-TVS
0406-001561	U7093,ZD6002,ZD6003	DIODE-TVS
0406-001561	ZD6004	DIODE-TVS
0406-001592	ZD6016	DIODE-TVS
0406-001781	ZD6014,ZD6019	DIODE-TVS
0406-001797	ZD6001,ZD6011	DIODE-TVS
0406-001807	ZD5000	DIODE-TVS
0406-001808	D5000	DIODE-TVS
0505-003618	Q5001	FET-SILICON
0601-003768	LED5000	LED
1001-001911	U2003	IC
1001-001970	U2004,U2005	IC
1001-001974	U1001	IC
1201-003869	U3002	IC
1201-004099	U6000	IC
1201-004100	PAM2000	IC
1201-004106	PAM2001	IC
1203-008322	U7002,U7007	IC
1203-008468	U5004	IC
1203-008575	U6009	IC
1203-008693	U1004	IC
1203-008767	U5001	IC
1203-008859	U7004	IC
1203-008865	U7003	IC
1203-008870	U7005,U7008	IC
1203-008951	U5005	IC
1203-008989	U7000	IC
1203-008995	U5002	IC
1205-005536	U3006	IC
1205-005561	U2013	IC
1205-005565	UCP400	IC
1209-002552	U7009	IC
1209-002621	U7001	IC
1404-001664	TH4000	THERMISTOR

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5. MAIN Electrical Parts List

1404-001724	TH1000	THERMISTOR
1405-001404	VR6001	VARISTOR
2007-002796	R6017,R6020	R-CHIP
2007-003015	R6024,R6034	R-CHIP
2007-007107	R5004	R-CHIP
2007-007136	R7020	R-CHIP
2007-007142	R4038	R-CHIP
2007-007190	R6014,R6015	R-CHIP
2007-007489	R6025	R-CHIP
2007-007741	R4000,R4003,R4005	R-CHIP
2007-007741	R4007,R4023,R5000	R-CHIP
2007-007741	R5020,R5022,R5023	R-CHIP
2007-007741	R7004,R7011	R-CHIP
2007-007798	R6027	R-CHIP
2007-007942	R5007	R-CHIP
2007-007946	R5011	R-CHIP
2007-008043	R1004	R-CHIP
2007-008056	R1002,R1003	R-CHIP
2007-008210	R6006	R-CHIP
2007-008516	R3003	R-CHIP
2007-008531	R3004,R7003,R7005	R-CHIP
2007-008531	R7013	R-CHIP
2007-008579	R3001	R-CHIP
2007-008736	R6036	R-CHIP
2007-008785	R1001	R-CHIP
2007-008800	R4010,R4011,R4039	R-CHIP
2007-008800	R4040,R6019	R-CHIP
2007-008816	R6023	R-CHIP
2007-009111	R3002,R5002,R7000	R-CHIP
2007-009157	C5131,R1014,R4001	R-CHIP
2007-009157	R4027,R4033,R6032	R-CHIP
2007-009158	R5005	R-CHIP
2007-009171	R4024,R5001,R7015	R-CHIP
2007-009201	R6007,R6035	R-CHIP
2007-009212	R5008,R5010,R5021	R-CHIP
2007-009212	R7007	R-CHIP
2007-009315	R5013,R5014,R5016	R-CHIP
2007-009315	R5017,R5024,R7026	R-CHIP
2007-009361	R1010,R1011	R-CHIP

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5. MAIN Electrical Parts List

2007-009408	R4014,R4015,R4016	R-CHIP
2007-009408	R4017,R4018,R4019	R-CHIP
2007-009408	R4020,R4021,R4028	R-CHIP
2007-009408	R4029,R4030,R4031	R-CHIP
2007-009408	R4032,R4035,R4041	R-CHIP
2007-009408	R4042,R4048,R4049	R-CHIP
2007-009408	R6013,R6031	R-CHIP
2007-009793	R6022	R-CHIP
2007-009801	R5054	R-CHIP
2007-009805	R1000,R1005,R1006	R-CHIP
2007-009805	R1007,R1008,R1009	R-CHIP
2007-009805	R2001	R-CHIP
2007-009866	R6016	R-CHIP
2007-009920	R4008,R4009,R4012	R-CHIP
2007-010202	R5018,R5019	R-CHIP
2007-010685	U7084	R-CHIP
2007-011043	R4013	R-CHIP
2007-012068	R5003	R-CHIP
2203-000425	C7041	C-CERAMIC,CHIP
2203-000489	C7023	C-CERAMIC,CHIP
2203-001153	C5148	C-CERAMIC,CHIP
2203-001239	C7040	C-CERAMIC,CHIP
2203-002677	C2019	C-CERAMIC,CHIP
2203-005682	C1010,C1012,C1020	C-CERAMIC,CHIP
2203-005682	C2012,C2013,C2044	C-CERAMIC,CHIP
2203-005682	C2045,C3035,C5093	C-CERAMIC,CHIP
2203-005682	C5094,C5095,C5096	C-CERAMIC,CHIP
2203-005682	C5107,C5108,C5125	C-CERAMIC,CHIP
2203-005682	C5126,C5129	C-CERAMIC,CHIP
2203-005719	C2051,C2056,C2059	C-CERAMIC,CHIP
2203-005719	C2064	C-CERAMIC,CHIP
2203-005725	C2098,C3069	C-CERAMIC,CHIP
2203-005727	C2010,C5103	C-CERAMIC,CHIP
2203-005729	C6005,C7025,C7096	C-CERAMIC,CHIP
2203-005729	C7182	C-CERAMIC,CHIP
2203-005731	C1004,C3012,C3013	C-CERAMIC,CHIP
2203-005732	C5051,C6001,L2002	C-CERAMIC,CHIP
2203-005734	C2039	C-CERAMIC,CHIP
2203-005736	C1007,C1015,C1016	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-005736	C1022,C1024,C1102	C-CERAMIC,CHIP
2203-005736	C1186,C2023,C2035	C-CERAMIC,CHIP
2203-005736	C2047,C2049,C2057	C-CERAMIC,CHIP
2203-005736	C2078,C2108,C2114	C-CERAMIC,CHIP
2203-005736	C2124,C3002,C3041	C-CERAMIC,CHIP
2203-005736	C3052,C3062,C3063	C-CERAMIC,CHIP
2203-005736	C7046,L2001,L2075	C-CERAMIC,CHIP
2203-005736	L3023	C-CERAMIC,CHIP
2203-005777	C2036,C2074,C2076	C-CERAMIC,CHIP
2203-005777	C5003,C5102	C-CERAMIC,CHIP
2203-005789	C2002,C2015,C2024	C-CERAMIC,CHIP
2203-005789	C2025,C2062,C2069	C-CERAMIC,CHIP
2203-005789	C2077,C2079,C2173	C-CERAMIC,CHIP
2203-005789	L2044	C-CERAMIC,CHIP
2203-005792	C2075,C2111,C6023	C-CERAMIC,CHIP
2203-005792	L2021,L3012	C-CERAMIC,CHIP
2203-005806	C2018,C2110	C-CERAMIC,CHIP
2203-006121	C6002,C6003	C-CERAMIC,CHIP
2203-006194	C1005,C2081,C2083	C-CERAMIC,CHIP
2203-006194	C2087,C2088,C2090	C-CERAMIC,CHIP
2203-006194	C2092,C2094,C2097	C-CERAMIC,CHIP
2203-006194	C6036,C6037,C7161	C-CERAMIC,CHIP
2203-006305	C3003,C3005,C3021	C-CERAMIC,CHIP
2203-006305	U7078	C-CERAMIC,CHIP
2203-006318	C2017,C2050,C2072	C-CERAMIC,CHIP
2203-006318	C7187,L2010	C-CERAMIC,CHIP
2203-006400	C2116,C3011,C4027	C-CERAMIC,CHIP
2203-006400	C4070,C6009,C6013	C-CERAMIC,CHIP
2203-006400	C7175,U7091	C-CERAMIC,CHIP
2203-006410	C1185,C2016,C2073	C-CERAMIC,CHIP
2203-006423	C1019,C2054,C2085	C-CERAMIC,CHIP
2203-006423	C4068,C5068,C5069	C-CERAMIC,CHIP
2203-006423	C5076,C5100,C5104	C-CERAMIC,CHIP
2203-006423	C5158,C6000,C6011	C-CERAMIC,CHIP
2203-006423	C6012,C6022,C6032	C-CERAMIC,CHIP
2203-006423	C7050	C-CERAMIC,CHIP
2203-006556	C3051,C5046,C5154	C-CERAMIC,CHIP
2203-006556	C5155,C6025,C6035	C-CERAMIC,CHIP
2203-006556	L1008	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-006642	C2121	C-CERAMIC,CHIP
2203-006648	C6024	C-CERAMIC,CHIP
2203-006665	C3017	C-CERAMIC,CHIP
2203-006668	C1030,C4032,C7173	C-CERAMIC,CHIP
2203-006707	C2009	C-CERAMIC,CHIP
2203-006712	C5097,C5098	C-CERAMIC,CHIP
2203-006839	C1033,C2055,C2109	C-CERAMIC,CHIP
2203-006839	C3026,C3037,C5071	C-CERAMIC,CHIP
2203-006839	C7037	C-CERAMIC,CHIP
2203-006872	C3027,C3028	C-CERAMIC,CHIP
2203-007210	C3018,C5141,C5142	C-CERAMIC,CHIP
2203-007240	C5080,C5084,C5086	C-CERAMIC,CHIP
2203-007240	C5087,C5151,C5153	C-CERAMIC,CHIP
2203-007271	C2046,C2061,C5109	C-CERAMIC,CHIP
2203-007295	C2020	C-CERAMIC,CHIP
2203-007317	C4014,C4018,C4020	C-CERAMIC,CHIP
2203-007317	C4030,C5011,C5024	C-CERAMIC,CHIP
2203-007317	C5025,C5152,C7027	C-CERAMIC,CHIP
2203-007317	C7029,C7031,C7166	C-CERAMIC,CHIP
2203-007317	C7183	C-CERAMIC,CHIP
2203-007391	C2084,C7008,C7012	C-CERAMIC,CHIP
2203-007391	C7013,C7015,C7021	C-CERAMIC,CHIP
2203-007393	C1100,C3010,C3025	C-CERAMIC,CHIP
2203-007393	C3029,C5000,C5001	C-CERAMIC,CHIP
2203-007393	C5023,C5053,C5059	C-CERAMIC,CHIP
2203-007393	C5062,C5063,C5064	C-CERAMIC,CHIP
2203-007393	C5065,C5070,C5081	C-CERAMIC,CHIP
2203-007393	C5082,C5150	C-CERAMIC,CHIP
2203-007474	C2082,C2089,C2093	C-CERAMIC,CHIP
2203-007474	C2096,C4036,C4042	C-CERAMIC,CHIP
2203-007474	C4055,C7053	C-CERAMIC,CHIP
2203-007781	C5111	C-CERAMIC,CHIP
2203-007796	C1099,C2080,C2086	C-CERAMIC,CHIP
2203-007796	C2091,C2095,C3009	C-CERAMIC,CHIP
2203-007796	C3014,C3019,C3020	C-CERAMIC,CHIP
2203-007796	C3022,C4000,C4001	C-CERAMIC,CHIP
2203-007796	C4002,C4003,C4005	C-CERAMIC,CHIP
2203-007796	C4006,C4007,C4008	C-CERAMIC,CHIP
2203-007796	C4009,C4011,C4012	C-CERAMIC,CHIP

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2203-007796	C4013,C4015,C4016	C-CERAMIC,CHIP
2203-007796	C4017,C4019,C4021	C-CERAMIC,CHIP
2203-007796	C4022,C4023,C4024	C-CERAMIC,CHIP
2203-007796	C4025,C4026,C4029	C-CERAMIC,CHIP
2203-007796	C4031,C4034,C4035	C-CERAMIC,CHIP
2203-007796	C4037,C4038,C4040	C-CERAMIC,CHIP
2203-007796	C4043,C4046,C4047	C-CERAMIC,CHIP
2203-007796	C4048,C4049,C4050	C-CERAMIC,CHIP
2203-007796	C4051,C4052,C4053	C-CERAMIC,CHIP
2203-007796	C4057,C4060,C4061	C-CERAMIC,CHIP
2203-007796	C4062,C4063,C4064	C-CERAMIC,CHIP
2203-007796	C4065,C4071,C5006	C-CERAMIC,CHIP
2203-007796	C5007,C5008,C5009	C-CERAMIC,CHIP
2203-007796	C5010,C5016,C5029	C-CERAMIC,CHIP
2203-007796	C5030,C5034,C5035	C-CERAMIC,CHIP
2203-007796	C5036,C5037,C5038	C-CERAMIC,CHIP
2203-007796	C5040,C5073,C5079	C-CERAMIC,CHIP
2203-007796	C5085,C5088,C5089	C-CERAMIC,CHIP
2203-007796	C5090,C5091,C5105	C-CERAMIC,CHIP
2203-007796	C5118,C5144,C7001	C-CERAMIC,CHIP
2203-007796	C7003,C7007,C7014	C-CERAMIC,CHIP
2203-007796	C7017,C7018,C7024	C-CERAMIC,CHIP
2203-007796	C7026,C7033,C7036	C-CERAMIC,CHIP
2203-007796	C7052,C7164	C-CERAMIC,CHIP
2203-008095	C5146	C-CERAMIC,CHIP
2203-008097	C6006	C-CERAMIC,CHIP
2203-008177	C5074	C-CERAMIC,CHIP
2203-008242	C3068,C4010,C4028	C-CERAMIC,CHIP
2203-008242	C4041,C4044,C4056	C-CERAMIC,CHIP
2203-008242	C4059,C5012,C5039	C-CERAMIC,CHIP
2203-008242	C5143	C-CERAMIC,CHIP
2203-008243	C6029	C-CERAMIC,CHIP
2203-008394	L2043	C-CERAMIC,CHIP
2203-008572	C5054,C5136,C6031	C-CERAMIC,CHIP
2203-008654	C5149	C-CERAMIC,CHIP
2203-008749	C7039	C-CERAMIC,CHIP
2203-008860	C2043,C5042,C5043	C-CERAMIC,CHIP
2203-008860	C5083,C5110,C5121	C-CERAMIC,CHIP
2203-008860	C5134,C7009,C7010	C-CERAMIC,CHIP

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2203-008860	C7016,C7020,C7022	C-CERAMIC,CHIP
2203-008860	C7032,C7034	C-CERAMIC,CHIP
2203-008876	C5013,C5092,C5099	C-CERAMIC,CHIP
2203-008876	C5106,C5117	C-CERAMIC,CHIP
2203-009618	C6004	C-CERAMIC,CHIP
2203-009733	C1098,C2066,C5041	C-CERAMIC,CHIP
2203-009733	C5066,C6008,C6034	C-CERAMIC,CHIP
2203-009733	C7004,C7038,C7042	C-CERAMIC,CHIP
2203-009733	C7043,C7044,C7045	C-CERAMIC,CHIP
2703-002649	L1023,L2059	INDUCTOR-SMD
2703-002900	L6018	INDUCTOR-SMD
2703-002903	L1093	INDUCTOR-SMD
2703-002907	L1003,L2049,L3016	INDUCTOR-SMD
2703-002951	L2020,L2036,L3006	INDUCTOR-SMD
2703-002953	L2032,L6019	INDUCTOR-SMD
2703-003970	L2060	INDUCTOR-SMD
2703-004000	L2054	INDUCTOR-SMD
2703-004013	L1005,L1017,L2023	INDUCTOR-SMD
2703-004013	L2025,L2027	INDUCTOR-SMD
2703-004014	L2029,L3001	INDUCTOR-SMD
2703-004018	C1001	INDUCTOR-SMD
2703-004034	C1003,C2003,L2016	INDUCTOR-SMD
2703-004034	L2028	INDUCTOR-SMD
2703-004036	L2061	INDUCTOR-SMD
2703-004038	L2026,L2041	INDUCTOR-SMD
2703-004171	C2001,L2068	INDUCTOR-SMD
2703-004286	C1021,C1036,L1015	INDUCTOR-SMD
2703-004286	L2008,L2047	INDUCTOR-SMD
2703-004287	C2004,L2011	INDUCTOR-SMD
2703-004288	L2030,L2050	INDUCTOR-SMD
2703-004289	C2007,C2058,C3004	INDUCTOR-SMD
2703-004289	L2024,L2033,L2052	INDUCTOR-SMD
2703-004298	L1002,L2031	INDUCTOR-SMD
2703-004301	C1014	INDUCTOR-SMD
2703-004317	C1008,C2005	INDUCTOR-SMD
2703-004328	C2011,C2032,C2048	INDUCTOR-SMD
2703-004328	L1006,L2034,L2045	INDUCTOR-SMD
2703-004328	L2053,L2057,L3000	INDUCTOR-SMD
2703-004368	L1022,L3014	INDUCTOR-SMD

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2703-004763	L3002	INDUCTOR-SMD
2703-004853	L1004,L1010	INDUCTOR-SMD
2703-004901	L5002,L5003,L5004	INDUCTOR-SMD
2703-004901	L5005,L5006	INDUCTOR-SMD
2703-004914	L3003	INDUCTOR-SMD
2703-004947	L6015	INDUCTOR-SMD
2703-005058	L2035,L2065	INDUCTOR-SMD
2703-005066	L1033	INDUCTOR-SMD
2703-005085	L3015	INDUCTOR-SMD
2703-005109	U7020	INDUCTOR-SMD
2703-005116	L7007	INDUCTOR-SMD
2703-005118	L7004	INDUCTOR-SMD
2801-005167	OSC3004	CRYSTAL-UNIT
2801-005264	OSC5000	CRYSTAL-UNIT
2805-001106	OSC3003	OSCILLATOR
2809-001419	TCX1000	OSCILLATOR-VCTCXO
2904-002198	F2002	FILTER-SAW
2904-002350	F2005	FILTER-SAW
2904-002355	F3000	FILTER-SAW
2904-002356	F3001	FILTER-SAW
2904-002381	F3002	FILTER-SAW
2904-002397	F2001	FILTER-SAW
2911-000381	U1003	FILTER
2911-000424	U2002	FILTER
3003-001237	MIC6000	MIC-CONDENSOR
3301-001438	L3018	CORE-FERRITE BEAD
3301-001895	L3017,L3019	CORE-FERRITE BEAD
3301-001901	L7003	CORE-FERRITE BEAD
3301-002078	L6003,L6005,L6006	CORE-FERRITE BEAD
3301-002078	R6018	CORE-FERRITE BEAD
3301-002085	L7008	CORE-FERRITE BEAD
3301-002122	L1031,L1230	CORE-FERRITE BEAD
3301-002223	L7000,L7001,L7002	CORE-FERRITE BEAD
3301-002235	L6000,L6001,L6002	CORE-FERRITE BEAD
3301-002236	L2074	CORE-FERRITE BEAD
3301-002237	L1000,L1018,L2046	CORE-FERRITE BEAD
3301-002237	L3033,U7016,U7017	CORE-FERRITE BEAD
3301-002238	L1001,L2039,L2042	CORE-FERRITE BEAD
3301-002238	L2064,L2067	CORE-FERRITE BEAD

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3301-002243	L7005,L7006	CORE-FERRITE BEAD
3301-002244	L6004	CORE-FERRITE BEAD
3301-002254	L5000	CORE-FERRITE BEAD
3301-002309	L3025	CORE-FERRITE BEAD
3301-002312	L2037,L2040,L2063	CORE-FERRITE BEAD
3301-002312	L2066,L4000	CORE-FERRITE BEAD
3301-002335	L6011	CORE-FERRITE BEAD
3705-001937	RFS1000,RFS1001	CONNECTOR-COAXIAL
3709-001932	SIM5002	CONNECTOR-CARD EDGE
3709-001933	SIM5003	CONNECTOR-CARD EDGE
3709-001934	SIM5000,SIM5001	CONNECTOR-CARD EDGE
3711-007295	HDC7000,HDC7003	CONNECTOR-HEADER
3711-008511	HDC7001,HDC7002	CONNECTOR-HEADER
3711-008593	HDC6000	CONNECTOR-HEADER
3711-008847	BTC5000,HEA5000	CONNECTOR-HEADER
3712-001626	ANT5000,ANT5001	CONNECTOR
3712-001666	ANT1000,ANT1001	CONNECTOR
3712-001666	ANT1002,ANT2000	CONNECTOR
3712-001666	ANT2001,ANT2002	CONNECTOR
3712-001666	ANT3000,ANT3003	CONNECTOR
3712-001666	ANT6000,ANT6001	CONNECTOR
4709-002351	F3003	RF-MODULE
4709-002412	F1006,F1007	RF-MODULE
GH62-00043A	SMR7000	PAD GAP-SMD GASKET
GH63-16856A	SC7000	SHIELD-CAN AP
GH63-16857A	SC7003	SHIELD-CAN WIFI
GH63-16859A	SC7001	SHIELD-CAN PMIC
GH98-43858A	SC7002	SHIELD-CAN RF
1107-002552	UME5000	IC-FLASH MEMORY
1105-002929	UCP400UP	IC-DDR3 SDRAM
GH02-17900A	SC7000SP	TAPE-AP
GH02-17901A	SC7001SP	TAPE-PMIC

5. MAIN Electrical Parts List

[SM-M105G]

Parts Code	Design LOC	Description
0401-001110	D5002	DIODE-SWITCHING
0404-001646	D7005	DIODE-SCHOTTKY
0404-001972	D5003	DIODE-SCHOTTKY
0406-001506	ZD1002	DIODE-TVS
0406-001561	U7093,ZD6002,ZD6003	DIODE-TVS
0406-001561	ZD6004	DIODE-TVS
0406-001592	ZD6016	DIODE-TVS
0406-001781	ZD6014,ZD6019	DIODE-TVS
0406-001797	ZD6001,ZD6011	DIODE-TVS
0406-001807	ZD5000	DIODE-TVS
0406-001808	D5000	DIODE-TVS
0505-003618	Q5001	FET-SILICON
0601-003768	LED5000	LED
1001-001911	U2003	IC
1001-001970	U2004,U2005	IC
1001-001974	U1001	IC
1201-003869	U3002	IC
1201-004099	U6000	IC
1201-004100	PAM2000	IC
1201-004106	PAM2001	IC
1201-004219	U2000	IC
1203-008322	U7002,U7007	IC
1203-008468	U5004	IC
1203-008575	U6009	IC
1203-008693	U1004	IC
1203-008767	U5001	IC
1203-008859	U7004	IC
1203-008865	U7003	IC
1203-008870	U7005,U7008	IC
1203-008951	U5005	IC
1203-008989	U7000	IC
1203-008995	U5002	IC
1205-005536	U3006	IC
1205-006103	U2013	IC
1205-006104	UCP400	IC
1209-002552	U7009	IC
1209-002621	U7001	IC
1404-001664	TH4000	THERMISTOR

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1404-001724	TH1000	THERMISTOR
1405-001404	VR6001	VARISTOR
2007-002796	R6017,R6020	R-CHIP
2007-003015	R6024,R6034	R-CHIP
2007-007107	R5004	R-CHIP
2007-007136	R7020	R-CHIP
2007-007142	R4038	R-CHIP
2007-007190	R6014,R6015	R-CHIP
2007-007489	R6025	R-CHIP
2007-007741	R4000,R4003,R4004	R-CHIP
2007-007741	R4005,R4023,R5000	R-CHIP
2007-007741	R5020,R5022,R5023	R-CHIP
2007-007741	R7004,R7011	R-CHIP
2007-007798	R6027	R-CHIP
2007-007942	R5007	R-CHIP
2007-007946	R5011	R-CHIP
2007-008043	R1004	R-CHIP
2007-008056	R1002,R1003	R-CHIP
2007-008210	R6006	R-CHIP
2007-008516	R3003	R-CHIP
2007-008531	R3004,R7003,R7005	R-CHIP
2007-008531	R7013	R-CHIP
2007-008579	R3001	R-CHIP
2007-008736	R6036	R-CHIP
2007-008785	R1001	R-CHIP
2007-008800	R4010,R4011,R4039	R-CHIP
2007-008800	R4040,R6019	R-CHIP
2007-008816	R6023	R-CHIP
2007-009111	R3002,R5002,R7000	R-CHIP
2007-009157	C5131,R1014,R4001	R-CHIP
2007-009157	R4027,R4033,R6032	R-CHIP
2007-009158	R5005	R-CHIP
2007-009171	R4024,R5001,R7015	R-CHIP
2007-009201	R6007,R6035	R-CHIP
2007-009212	R5008,R5010,R5021	R-CHIP
2007-009212	R7007	R-CHIP
2007-009315	R5013,R5014,R5016	R-CHIP
2007-009315	R5017,R5024,R7026	R-CHIP
2007-009361	R1010,R1011	R-CHIP
2007-009408	R4014,R4015,R4016	R-CHIP

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5. MAIN Electrical Parts List

2007-009408	R4017,R4018,R4019	R-CHIP
2007-009408	R4020,R4021,R4028	R-CHIP
2007-009408	R4029,R4030,R4031	R-CHIP
2007-009408	R4032,R4035,R4041	R-CHIP
2007-009408	R4042,R4048,R4049	R-CHIP
2007-009408	R6013,R6031	R-CHIP
2007-009793	R6022	R-CHIP
2007-009801	R5054	R-CHIP
2007-009805	R1000,R1005,R1006	R-CHIP
2007-009805	R1007,R1008,R1009	R-CHIP
2007-009805	R2001	R-CHIP
2007-009866	R6016	R-CHIP
2007-009920	R4008,R4009,R4012	R-CHIP
2007-010202	R5018,R5019	R-CHIP
2007-010685	U7084	R-CHIP
2007-011043	R4013	R-CHIP
2007-012068	R5003	R-CHIP
2203-000425	C7041	C-CERAMIC,CHIP
2203-000489	C7023	C-CERAMIC,CHIP
2203-001153	C5148	C-CERAMIC,CHIP
2203-001239	C7040	C-CERAMIC,CHIP
2203-002677	C2019	C-CERAMIC,CHIP
2203-005682	C1010,C1012,C1020	C-CERAMIC,CHIP
2203-005682	C2012,C2013,C2044	C-CERAMIC,CHIP
2203-005682	C2045,C3035,C5093	C-CERAMIC,CHIP
2203-005682	C5094,C5095,C5096	C-CERAMIC,CHIP
2203-005682	C5107,C5108,C5125	C-CERAMIC,CHIP
2203-005682	C5126,C5129	C-CERAMIC,CHIP
2203-005719	C2051,C2056,C2059	C-CERAMIC,CHIP
2203-005719	C2064	C-CERAMIC,CHIP
2203-005725	C2098,C3069	C-CERAMIC,CHIP
2203-005727	C2010,C5103	C-CERAMIC,CHIP
2203-005729	C6005,C7025,C7096	C-CERAMIC,CHIP
2203-005729	C7182	C-CERAMIC,CHIP
2203-005731	C1004,C3012,C3013	C-CERAMIC,CHIP
2203-005732	C5051,C6001,L2002	C-CERAMIC,CHIP
2203-005734	C2039	C-CERAMIC,CHIP
2203-005736	C1007,C1015,C1016	C-CERAMIC,CHIP
2203-005736	C1022,C1024,C1102	C-CERAMIC,CHIP
2203-005736	C1186,C2014,C2023	C-CERAMIC,CHIP

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2203-005736	C2027,C2035,C2047	C-CERAMIC,CHIP
2203-005736	C2049,C2057,C2078	C-CERAMIC,CHIP
2203-005736	C2108,C2114,C2124	C-CERAMIC,CHIP
2203-005736	C3002,C3041,C3052	C-CERAMIC,CHIP
2203-005736	C3062,C3063,C7046	C-CERAMIC,CHIP
2203-005736	L2001,L2075,L3023	C-CERAMIC,CHIP
2203-005777	C2036,C2074,C2076	C-CERAMIC,CHIP
2203-005777	C5003,C5102	C-CERAMIC,CHIP
2203-005789	C2002,C2015,C2024	C-CERAMIC,CHIP
2203-005789	C2025,C2030,C2062	C-CERAMIC,CHIP
2203-005789	C2069,C2077,C2079	C-CERAMIC,CHIP
2203-005789	C2173,L2044	C-CERAMIC,CHIP
2203-005792	C2075,C2111,C6023	C-CERAMIC,CHIP
2203-005792	L2021,L3012	C-CERAMIC,CHIP
2203-005806	C2018,C2110	C-CERAMIC,CHIP
2203-006121	C6002,C6003	C-CERAMIC,CHIP
2203-006194	C1005,C2081,C2083	C-CERAMIC,CHIP
2203-006194	C2087,C2088,C2090	C-CERAMIC,CHIP
2203-006194	C2092,C2094,C2097	C-CERAMIC,CHIP
2203-006194	C6036,C6037,C7161	C-CERAMIC,CHIP
2203-006305	C3003,C3005,C3021	C-CERAMIC,CHIP
2203-006305	U7078	C-CERAMIC,CHIP
2203-006318	C2017,C2050,C2072	C-CERAMIC,CHIP
2203-006318	C7187,L2010	C-CERAMIC,CHIP
2203-006400	C2116,C3011,C4027	C-CERAMIC,CHIP
2203-006400	C4070,C6009,C6013	C-CERAMIC,CHIP
2203-006400	C7175,U7091	C-CERAMIC,CHIP
2203-006410	C1185,C2016,C2073	C-CERAMIC,CHIP
2203-006423	C1019,C2054,C2085	C-CERAMIC,CHIP
2203-006423	C4068,C5068,C5069	C-CERAMIC,CHIP
2203-006423	C5076,C5100,C5104	C-CERAMIC,CHIP
2203-006423	C5158,C6000,C6011	C-CERAMIC,CHIP
2203-006423	C6012,C6022,C6032	C-CERAMIC,CHIP
2203-006423	C7050	C-CERAMIC,CHIP
2203-006556	C3051,C5046,C5154	C-CERAMIC,CHIP
2203-006556	C5155,C6025,C6035	C-CERAMIC,CHIP
2203-006556	L1008	C-CERAMIC,CHIP
2203-006642	C2121	C-CERAMIC,CHIP
2203-006648	C6024	C-CERAMIC,CHIP
2203-006665	C3017	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-006668	C1030,C4032,C7173	C-CERAMIC,CHIP
2203-006707	C2009	C-CERAMIC,CHIP
2203-006712	C5097,C5098	C-CERAMIC,CHIP
2203-006839	C1033,C2028,C2055	C-CERAMIC,CHIP
2203-006839	C2109,C3026,C3037	C-CERAMIC,CHIP
2203-006839	C5071,C7037	C-CERAMIC,CHIP
2203-006872	C3027,C3028	C-CERAMIC,CHIP
2203-007210	C3018,C5141,C5142	C-CERAMIC,CHIP
2203-007240	C5080,C5084,C5086	C-CERAMIC,CHIP
2203-007240	C5087,C5151,C5153	C-CERAMIC,CHIP
2203-007271	C2046,C2061,C5109	C-CERAMIC,CHIP
2203-007295	C2020	C-CERAMIC,CHIP
2203-007317	C4014,C4018,C4020	C-CERAMIC,CHIP
2203-007317	C4030,C5011,C5024	C-CERAMIC,CHIP
2203-007317	C5025,C5152,C7027	C-CERAMIC,CHIP
2203-007317	C7029,C7031,C7166	C-CERAMIC,CHIP
2203-007317	C7183	C-CERAMIC,CHIP
2203-007391	C2084,C7008,C7012	C-CERAMIC,CHIP
2203-007391	C7013,C7015,C7021	C-CERAMIC,CHIP
2203-007393	C1100,C3010,C3025	C-CERAMIC,CHIP
2203-007393	C3029,C5000,C5001	C-CERAMIC,CHIP
2203-007393	C5023,C5053,C5059	C-CERAMIC,CHIP
2203-007393	C5062,C5063,C5064	C-CERAMIC,CHIP
2203-007393	C5065,C5070,C5081	C-CERAMIC,CHIP
2203-007393	C5082,C5150	C-CERAMIC,CHIP
2203-007474	C2082,C2089,C2093	C-CERAMIC,CHIP
2203-007474	C2096,C4036,C4042	C-CERAMIC,CHIP
2203-007474	C4055,C7053	C-CERAMIC,CHIP
2203-007781	C5111	C-CERAMIC,CHIP
2203-007796	C1099,C2080,C2086	C-CERAMIC,CHIP
2203-007796	C2091,C2095,C3009	C-CERAMIC,CHIP
2203-007796	C3014,C3019,C3020	C-CERAMIC,CHIP
2203-007796	C3022,C4000,C4001	C-CERAMIC,CHIP
2203-007796	C4002,C4003,C4005	C-CERAMIC,CHIP
2203-007796	C4006,C4007,C4008	C-CERAMIC,CHIP
2203-007796	C4009,C4011,C4012	C-CERAMIC,CHIP
2203-007796	C4013,C4015,C4016	C-CERAMIC,CHIP
2203-007796	C4017,C4019,C4021	C-CERAMIC,CHIP
2203-007796	C4022,C4023,C4024	C-CERAMIC,CHIP
2203-007796	C4025,C4026,C4029	C-CERAMIC,CHIP

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2203-007796	C4031,C4034,C4035	C-CERAMIC,CHIP
2203-007796	C4037,C4038,C4040	C-CERAMIC,CHIP
2203-007796	C4043,C4046,C4047	C-CERAMIC,CHIP
2203-007796	C4048,C4049,C4050	C-CERAMIC,CHIP
2203-007796	C4051,C4052,C4053	C-CERAMIC,CHIP
2203-007796	C4057,C4060,C4061	C-CERAMIC,CHIP
2203-007796	C4062,C4063,C4064	C-CERAMIC,CHIP
2203-007796	C4065,C4071,C5006	C-CERAMIC,CHIP
2203-007796	C5007,C5008,C5009	C-CERAMIC,CHIP
2203-007796	C5010,C5016,C5020	C-CERAMIC,CHIP
2203-007796	C5029,C5030,C5034	C-CERAMIC,CHIP
2203-007796	C5035,C5036,C5037	C-CERAMIC,CHIP
2203-007796	C5038,C5040,C5073	C-CERAMIC,CHIP
2203-007796	C5079,C5085,C5088	C-CERAMIC,CHIP
2203-007796	C5089,C5090,C5091	C-CERAMIC,CHIP
2203-007796	C5105,C5118,C5144	C-CERAMIC,CHIP
2203-007796	C7001,C7003,C7007	C-CERAMIC,CHIP
2203-007796	C7014,C7017,C7018	C-CERAMIC,CHIP
2203-007796	C7024,C7026,C7033	C-CERAMIC,CHIP
2203-007796	C7036,C7052,C7164	C-CERAMIC,CHIP
2203-008095	C5146	C-CERAMIC,CHIP
2203-008097	C6006	C-CERAMIC,CHIP
2203-008177	C5074	C-CERAMIC,CHIP
2203-008242	C3068,C4010,C4028	C-CERAMIC,CHIP
2203-008242	C4041,C4044,C4056	C-CERAMIC,CHIP
2203-008242	C4059,C5012,C5039	C-CERAMIC,CHIP
2203-008242	C5143	C-CERAMIC,CHIP
2203-008243	C6029	C-CERAMIC,CHIP
2203-008394	L2043	C-CERAMIC,CHIP
2203-008572	C5054,C5136,C6031	C-CERAMIC,CHIP
2203-008654	C5149	C-CERAMIC,CHIP
2203-008749	C7039	C-CERAMIC,CHIP
2203-008860	C2043,C5042,C5043	C-CERAMIC,CHIP
2203-008860	C5083,C5110,C5121	C-CERAMIC,CHIP
2203-008860	C5134,C7009,C7010	C-CERAMIC,CHIP
2203-008860	C7016,C7020,C7022	C-CERAMIC,CHIP
2203-008860	C7032,C7034	C-CERAMIC,CHIP
2203-008876	C5013,C5092,C5099	C-CERAMIC,CHIP
2203-008876	C5106,C5117	C-CERAMIC,CHIP
2203-009618	C6004	C-CERAMIC,CHIP

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2203-009733	C1098,C2066,C5041	C-CERAMIC,CHIP
2203-009733	C5066,C6008,C6034	C-CERAMIC,CHIP
2203-009733	C7004,C7038,C7042	C-CERAMIC,CHIP
2203-009733	C7043,C7044,C7045	C-CERAMIC,CHIP
2703-002649	L1023,L2059	INDUCTOR-SMD
2703-002900	L6018	INDUCTOR-SMD
2703-002903	L1093	INDUCTOR-SMD
2703-002907	L1003,L2049,L3016	INDUCTOR-SMD
2703-002951	L2020,L2036,L3006	INDUCTOR-SMD
2703-002953	L2032,L6019	INDUCTOR-SMD
2703-002958	L2013	INDUCTOR-SMD
2703-003970	L2060	INDUCTOR-SMD
2703-004000	L2054	INDUCTOR-SMD
2703-004012	L2004	INDUCTOR-SMD
2703-004013	L1005,L1017,L2023	INDUCTOR-SMD
2703-004013	L2025,L2027	INDUCTOR-SMD
2703-004014	L2029,L3001	INDUCTOR-SMD
2703-004018	C1001	INDUCTOR-SMD
2703-004034	C1003,C2003,L2016	INDUCTOR-SMD
2703-004034	L2028	INDUCTOR-SMD
2703-004036	L2061	INDUCTOR-SMD
2703-004038	L2006,L2026,L2041	INDUCTOR-SMD
2703-004171	C2001,L2068	INDUCTOR-SMD
2703-004286	C1021,C1036,L1015	INDUCTOR-SMD
2703-004286	L2005,L2008,L2009	INDUCTOR-SMD
2703-004286	L2015,L2047	INDUCTOR-SMD
2703-004287	C2004,L2011	INDUCTOR-SMD
2703-004288	L2030,L2050	INDUCTOR-SMD
2703-004289	C2007,C2058,C3004	INDUCTOR-SMD
2703-004289	L2024,L2033,L2052	INDUCTOR-SMD
2703-004298	L1002,L2031	INDUCTOR-SMD
2703-004300	L2014,L2018	INDUCTOR-SMD
2703-004301	C1014	INDUCTOR-SMD
2703-004317	C1008,C2005	INDUCTOR-SMD
2703-004328	C2011,C2032,C2048	INDUCTOR-SMD
2703-004328	L1006,L2034,L2045	INDUCTOR-SMD
2703-004328	L2053,L2057,L3000	INDUCTOR-SMD
2703-004368	L1022,L3014	INDUCTOR-SMD
2703-004763	L3002	INDUCTOR-SMD
2703-004853	L1004,L1010	INDUCTOR-SMD

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2703-004901	L5002,L5003,L5004	INDUCTOR-SMD
2703-004901	L5005,L5006	INDUCTOR-SMD
2703-004914	L3003	INDUCTOR-SMD
2703-004947	L6015	INDUCTOR-SMD
2703-005058	L2035,L2065	INDUCTOR-SMD
2703-005066	L1033	INDUCTOR-SMD
2703-005085	L3015	INDUCTOR-SMD
2703-005109	U7020	INDUCTOR-SMD
2703-005116	L7007	INDUCTOR-SMD
2703-005118	L7004	INDUCTOR-SMD
2703-005296	L2017	INDUCTOR-SMD
2801-005167	OSC3004	CRYSTAL-UNIT
2801-005264	OSC5000	CRYSTAL-UNIT
2805-001106	OSC3003	OSCILLATOR
2809-001419	TCX1000	OSCILLATOR-VCTCXO
2904-002143	F2003	FILTER-SAW
2904-002198	F2002	FILTER-SAW
2904-002350	F2005	FILTER-SAW
2904-002355	F3000	FILTER-SAW
2904-002356	F3001	FILTER-SAW
2904-002381	F3002	FILTER-SAW
2904-002397	F2001	FILTER-SAW
2910-000390	F2004	FILTER
2911-000381	U1003	FILTER
2911-000424	U2002	FILTER
3003-001237	MIC6000	MIC-CONDENSOR
3301-001438	L3018	CORE-FERRITE BEAD
3301-001895	L3017,L3019	CORE-FERRITE BEAD
3301-001901	L7003	CORE-FERRITE BEAD
3301-002078	L6003,L6005,L6006	CORE-FERRITE BEAD
3301-002078	R6018	CORE-FERRITE BEAD
3301-002085	L7008	CORE-FERRITE BEAD
3301-002122	L1031,L1230	CORE-FERRITE BEAD
3301-002223	L7000,L7001,L7002	CORE-FERRITE BEAD
3301-002235	L6000,L6001,L6002	CORE-FERRITE BEAD
3301-002236	L2074	CORE-FERRITE BEAD
3301-002237	L1000,L1018,L2046	CORE-FERRITE BEAD
3301-002237	L3033,U7016,U7017	CORE-FERRITE BEAD
3301-002238	L1001,L2039,L2042	CORE-FERRITE BEAD
3301-002238	L2064,L2067	CORE-FERRITE BEAD

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3301-002243	L7005,L7006	CORE-FERRITE BEAD
3301-002244	L6004	CORE-FERRITE BEAD
3301-002254	L5000	CORE-FERRITE BEAD
3301-002309	L3025	CORE-FERRITE BEAD
3301-002312	L2037,L2040,L2063	CORE-FERRITE BEAD
3301-002312	L2066,L4000	CORE-FERRITE BEAD
3301-002335	L6011	CORE-FERRITE BEAD
3705-001937	RFS1000,RFS1001	CONNECTOR-COAXIAL
3709-001932	SIM5002	CONNECTOR-CARD EDGE
3709-001933	SIM5003	CONNECTOR-CARD EDGE
3709-001934	SIM5000,SIM5001	CONNECTOR-CARD EDGE
3711-007295	HDC7000,HDC7003	CONNECTOR-HEADER
3711-008511	HDC7001,HDC7002	CONNECTOR-HEADER
3711-008593	HDC6000	CONNECTOR-HEADER
3711-008847	BTC5000,HEA5000	CONNECTOR-HEADER
3712-001626	ANT5000,ANT5001	CONNECTOR
3712-001666	ANT1000,ANT1001	CONNECTOR
3712-001666	ANT1002,ANT2000	CONNECTOR
3712-001666	ANT2001,ANT2002	CONNECTOR
3712-001666	ANT3000,ANT3003	CONNECTOR
3712-001666	ANT6000,ANT6001	CONNECTOR
4709-002351	F3003	RF-MODULE
4709-002412	F1006,F1007	RF-MODULE
GH62-00043A	SMR7000	JSM-TSL-2-1.8-1.5BK
GH63-16856A	SC7000	SC-G100F-AP
GH63-16857A	SC7003	SC-G100F-WIFI
GH63-16859A	SC7001	SC-G100F-PMIC
GH98-43858A	SC7002	SC-G100F-RF
1107-002548	UME5000	IC-FLASH MEMORY
1105-002928	UCP400UP	IC-DDR3 SDRAM
GH02-17900A	SC7000SP	TAPE-AP
GH02-17901A	SC7001SP	TAPE-PMIC

5. MAIN Electrical Parts List

[SM-M105M/Y]

Parts Code	Design LOC	Description
0401-001110	D5002	DIODE-SWITCHING
0404-001646	D7005	DIODE-SCHOTTKY
0404-001972	D5003	DIODE-SCHOTTKY
0406-001506	ZD1002	DIODE-TVS
0406-001561	U7093,ZD6002,ZD6003	DIODE-TVS
0406-001561	ZD6004	DIODE-TVS
0406-001592	ZD6016	DIODE-TVS
0406-001781	ZD6014,ZD6019	DIODE-TVS
0406-001797	ZD6001,ZD6011	DIODE-TVS
0406-001807	ZD5000	DIODE-TVS
0406-001808	D5000	DIODE-TVS
0505-003618	Q5001	FET-SILICON
0601-003768	LED5000	LED
1001-001911	U2003	IC
1001-001970	U2004,U2005,U2006	IC
1001-001970	U2009	IC
1001-001974	U1001	IC
1201-003869	U3002	IC
1201-004099	U6000	IC
1201-004100	PAM2000	IC
1201-004106	PAM2001	IC
1201-004219	U2000	IC
1203-008322	U7002,U7007	IC
1203-008468	U5004	IC
1203-008575	U6009	IC
1203-008693	U1004	IC
1203-008767	U5001	IC
1203-008859	U7004	IC
1203-008865	U7003	IC
1203-008870	U7005,U7008	IC
1203-008951	U5005	IC
1203-008989	U7000	IC
1203-008995	U5002	IC
1205-005536	U3006	IC
1205-006103	U2013	IC
1205-006104	UCP400	IC
1209-002552	U7009	IC

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1209-002621	U7001	IC
1404-001664	TH4000	THERMISTOR
1404-001724	TH1000	THERMISTOR
1405-001404	VR6001	VARISTOR
2007-002796	R6017,R6020	R-CHIP
2007-003015	R6024,R6034	R-CHIP
2007-007107	R5004	R-CHIP
2007-007136	R7020	R-CHIP
2007-007142	R4038	R-CHIP
2007-007190	R6014,R6015	R-CHIP
2007-007489	R6025	R-CHIP
2007-007741	R4000,R4003,R4004	R-CHIP
2007-007741	R4005,R4023,R5000	R-CHIP
2007-007741	R5020,R5022,R5023	R-CHIP
2007-007741	R7004,R7011	R-CHIP
2007-007798	R6027	R-CHIP
2007-007942	R5007	R-CHIP
2007-007946	R5011	R-CHIP
2007-008043	R1004	R-CHIP
2007-008056	R1002,R1003	R-CHIP
2007-008210	R6006	R-CHIP
2007-008516	R3003	R-CHIP
2007-008531	R3004,R7003,R7005	R-CHIP
2007-008531	R7013	R-CHIP
2007-008579	R3001	R-CHIP
2007-008736	R6036	R-CHIP
2007-008785	R1001	R-CHIP
2007-008800	R4010,R4011,R4039	R-CHIP
2007-008800	R4040,R6019	R-CHIP
2007-008816	R6023	R-CHIP
2007-009111	R3002,R5002,R7000	R-CHIP
2007-009157	C5131,R1014,R4001	R-CHIP
2007-009157	R4027,R4033,R6032	R-CHIP
2007-009158	R5005	R-CHIP
2007-009171	R4024,R5001,R7015	R-CHIP
2007-009201	R6007,R6035	R-CHIP
2007-009212	R5008,R5010,R5021	R-CHIP
2007-009212	R7027	R-CHIP
2007-009315	R5013,R5014,R5016	R-CHIP

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5. MAIN Electrical Parts List

2007-009315	R5017,R5024,R7026	R-CHIP
2007-009361	R1010,R1011	R-CHIP
2007-009408	R4014,R4015,R4016	R-CHIP
2007-009408	R4017,R4018,R4019	R-CHIP
2007-009408	R4020,R4021,R4028	R-CHIP
2007-009408	R4029,R4030,R4031	R-CHIP
2007-009408	R4032,R4035,R4041	R-CHIP
2007-009408	R4042,R4048,R4049	R-CHIP
2007-009408	R6013,R6031	R-CHIP
2007-009793	R6022	R-CHIP
2007-009801	R5054	R-CHIP
2007-009805	R1000,R1005,R1006	R-CHIP
2007-009805	R1007,R2001	R-CHIP
2007-009866	R6016	R-CHIP
2007-009920	R4008,R4009,R4012	R-CHIP
2007-010202	R5018,R5019	R-CHIP
2007-010685	U7084	R-CHIP
2007-011043	R4013	R-CHIP
2007-012068	R5003	R-CHIP
2203-000425	C7041	C-CERAMIC,CHIP
2203-000489	C7023	C-CERAMIC,CHIP
2203-001153	C5148	C-CERAMIC,CHIP
2203-001239	C7040	C-CERAMIC,CHIP
2203-002677	C2019	C-CERAMIC,CHIP
2203-005682	C1010,C1012,C1020	C-CERAMIC,CHIP
2203-005682	C1094,C2012,C2013	C-CERAMIC,CHIP
2203-005682	C2044,C2045,C3035	C-CERAMIC,CHIP
2203-005682	C5093,C5094,C5095	C-CERAMIC,CHIP
2203-005682	C5096,C5107,C5108	C-CERAMIC,CHIP
2203-005682	C5125,C5126,C5129	C-CERAMIC,CHIP
2203-005719	C2051,C2056,C2059	C-CERAMIC,CHIP
2203-005719	C2064	C-CERAMIC,CHIP
2203-005725	C2098,C3069	C-CERAMIC,CHIP
2203-005727	C5103	C-CERAMIC,CHIP
2203-005729	C6005,C7025,C7096	C-CERAMIC,CHIP
2203-005729	C7182	C-CERAMIC,CHIP
2203-005731	C1004,C3012,C3013	C-CERAMIC,CHIP
2203-005732	C5051,C6001,L2002	C-CERAMIC,CHIP
2203-005734	C2039,C2100,C2102	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-005734	C2105	C-CERAMIC,CHIP
2203-005736	C1015,C1022,C1024	C-CERAMIC,CHIP
2203-005736	C1102,C2014,C2023	C-CERAMIC,CHIP
2203-005736	C2027,C2035,C2047	C-CERAMIC,CHIP
2203-005736	C2049,C2057,C2058	C-CERAMIC,CHIP
2203-005736	C2078,C2108,C2113	C-CERAMIC,CHIP
2203-005736	C2114,C2124,C3002	C-CERAMIC,CHIP
2203-005736	C3041,C3052,C3062	C-CERAMIC,CHIP
2203-005736	C3063,C7046,L1015	C-CERAMIC,CHIP
2203-005736	L2001,L2070,L3023	C-CERAMIC,CHIP
2203-005777	C2053,C2072,C5003	C-CERAMIC,CHIP
2203-005777	C5102,L2048	C-CERAMIC,CHIP
2203-005789	C2002,C2015,C2024	C-CERAMIC,CHIP
2203-005789	C2025,C2030,C2069	C-CERAMIC,CHIP
2203-005789	C2079,C2115,L2007	C-CERAMIC,CHIP
2203-005789	L2044	C-CERAMIC,CHIP
2203-005792	C2075,C2111,C6023	C-CERAMIC,CHIP
2203-005792	L2021,L3012	C-CERAMIC,CHIP
2203-005806	C2018,C2110	C-CERAMIC,CHIP
2203-006121	C6002,C6003	C-CERAMIC,CHIP
2203-006194	C1005,C2081,C2083	C-CERAMIC,CHIP
2203-006194	C2087,C2088,C2090	C-CERAMIC,CHIP
2203-006194	C2092,C2094,C2097	C-CERAMIC,CHIP
2203-006194	C6036,C6037,C7161	C-CERAMIC,CHIP
2203-006305	C3003,C3005,C3021	C-CERAMIC,CHIP
2203-006305	U7078	C-CERAMIC,CHIP
2203-006318	C2017,C2036,C2050	C-CERAMIC,CHIP
2203-006318	C2073,C2076,C7187	C-CERAMIC,CHIP
2203-006318	L2010	C-CERAMIC,CHIP
2203-006400	C2116,C3011,C4027	C-CERAMIC,CHIP
2203-006400	C4070,C6009,C6013	C-CERAMIC,CHIP
2203-006400	C7175,U7091	C-CERAMIC,CHIP
2203-006410	C2016,C2104	C-CERAMIC,CHIP
2203-006423	C1019,C2054,C2085	C-CERAMIC,CHIP
2203-006423	C4068,C5068,C5069	C-CERAMIC,CHIP
2203-006423	C5076,C5100,C5104	C-CERAMIC,CHIP
2203-006423	C5158,C6000,C6011	C-CERAMIC,CHIP
2203-006423	C6012,C6022,C6032	C-CERAMIC,CHIP
2203-006423	C7050	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-006556	C3051,C5046,C5154	C-CERAMIC,CHIP
2203-006556	C5155,C6025,C6035	C-CERAMIC,CHIP
2203-006556	L1008	C-CERAMIC,CHIP
2203-006611	C1011,C2101	C-CERAMIC,CHIP
2203-006642	C2121	C-CERAMIC,CHIP
2203-006648	C6024	C-CERAMIC,CHIP
2203-006665	C3017	C-CERAMIC,CHIP
2203-006668	C1030,C4032,C7173	C-CERAMIC,CHIP
2203-006712	C5097,C5098	C-CERAMIC,CHIP
2203-006839	C1033,C1092,C2028	C-CERAMIC,CHIP
2203-006839	C2055,C2109,C3026	C-CERAMIC,CHIP
2203-006839	C3037,C5071,C7037	C-CERAMIC,CHIP
2203-006872	C3027,C3028	C-CERAMIC,CHIP
2203-006968	C2008,C2071	C-CERAMIC,CHIP
2203-007210	C3018,C5141,C5142	C-CERAMIC,CHIP
2203-007240	C5080,C5084,C5086	C-CERAMIC,CHIP
2203-007240	C5087,C5151,C5153	C-CERAMIC,CHIP
2203-007271	C2046,C2061,C5109	C-CERAMIC,CHIP
2203-007295	C2020	C-CERAMIC,CHIP
2203-007317	C4014,C4018,C4020	C-CERAMIC,CHIP
2203-007317	C4030,C5011,C5024	C-CERAMIC,CHIP
2203-007317	C5025,C5152,C7027	C-CERAMIC,CHIP
2203-007317	C7029,C7031,C7166	C-CERAMIC,CHIP
2203-007317	C7183	C-CERAMIC,CHIP
2203-007391	C2084,C7008,C7012	C-CERAMIC,CHIP
2203-007391	C7013,C7015,C7021	C-CERAMIC,CHIP
2203-007393	C1100,C3010,C3025	C-CERAMIC,CHIP
2203-007393	C3029,C5000,C5001	C-CERAMIC,CHIP
2203-007393	C5023,C5053,C5059	C-CERAMIC,CHIP
2203-007393	C5062,C5063,C5064	C-CERAMIC,CHIP
2203-007393	C5065,C5070,C5081	C-CERAMIC,CHIP
2203-007393	C5082,C5150	C-CERAMIC,CHIP
2203-007474	C2082,C2089,C2093	C-CERAMIC,CHIP
2203-007474	C2096,C4036,C4042	C-CERAMIC,CHIP
2203-007474	C4055,C7053	C-CERAMIC,CHIP
2203-007781	C5111	C-CERAMIC,CHIP
2203-007796	C1099,C2080,C2086	C-CERAMIC,CHIP
2203-007796	C2091,C2095,C3009	C-CERAMIC,CHIP
2203-007796	C3014,C3019,C3020	C-CERAMIC,CHIP

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5. MAIN Electrical Parts List

2203-007796	C3022,C4000,C4001	C-CERAMIC,CHIP
2203-007796	C4002,C4003,C4005	C-CERAMIC,CHIP
2203-007796	C4006,C4007,C4008	C-CERAMIC,CHIP
2203-007796	C4009,C4011,C4012	C-CERAMIC,CHIP
2203-007796	C4013,C4015,C4016	C-CERAMIC,CHIP
2203-007796	C4017,C4019,C4021	C-CERAMIC,CHIP
2203-007796	C4022,C4023,C4024	C-CERAMIC,CHIP
2203-007796	C4025,C4026,C4029	C-CERAMIC,CHIP
2203-007796	C4031,C4034,C4035	C-CERAMIC,CHIP
2203-007796	C4037,C4038,C4040	C-CERAMIC,CHIP
2203-007796	C4043,C4046,C4047	C-CERAMIC,CHIP
2203-007796	C4048,C4049,C4050	C-CERAMIC,CHIP
2203-007796	C4051,C4052,C4053	C-CERAMIC,CHIP
2203-007796	C4057,C4060,C4061	C-CERAMIC,CHIP
2203-007796	C4062,C4063,C4064	C-CERAMIC,CHIP
2203-007796	C4065,C4071,C5006	C-CERAMIC,CHIP
2203-007796	C5007,C5008,C5009	C-CERAMIC,CHIP
2203-007796	C5010,C5016,C5020	C-CERAMIC,CHIP
2203-007796	C5029,C5030,C5034	C-CERAMIC,CHIP
2203-007796	C5035,C5036,C5037	C-CERAMIC,CHIP
2203-007796	C5038,C5040,C5073	C-CERAMIC,CHIP
2203-007796	C5079,C5085,C5088	C-CERAMIC,CHIP
2203-007796	C5089,C5090,C5091	C-CERAMIC,CHIP
2203-007796	C5105,C5118,C5144	C-CERAMIC,CHIP
2203-007796	C7001,C7003,C7007	C-CERAMIC,CHIP
2203-007796	C7014,C7017,C7018	C-CERAMIC,CHIP
2203-007796	C7024,C7026,C7033	C-CERAMIC,CHIP
2203-007796	C7036,C7052,C7164	C-CERAMIC,CHIP
2203-008095	C5146	C-CERAMIC,CHIP
2203-008097	C6006	C-CERAMIC,CHIP
2203-008177	C5074	C-CERAMIC,CHIP
2203-008242	C3068,C4010,C4028	C-CERAMIC,CHIP
2203-008242	C4041,C4044,C4056	C-CERAMIC,CHIP
2203-008242	C4059,C5012,C5039	C-CERAMIC,CHIP
2203-008242	C5143	C-CERAMIC,CHIP
2203-008243	C6029	C-CERAMIC,CHIP
2203-008394	L2043	C-CERAMIC,CHIP
2203-008572	C5054,C5136,C6031	C-CERAMIC,CHIP
2203-008654	C5149	C-CERAMIC,CHIP

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2203-008749	C7039	C-CERAMIC,CHIP
2203-008860	C2043,C5042,C5043	C-CERAMIC,CHIP
2203-008860	C5083,C5110,C5121	C-CERAMIC,CHIP
2203-008860	C5134,C7009,C7010	C-CERAMIC,CHIP
2203-008860	C7016,C7020,C7022	C-CERAMIC,CHIP
2203-008860	C7032,C7034	C-CERAMIC,CHIP
2203-008876	C5013,C5092,C5099	C-CERAMIC,CHIP
2203-008876	C5106,C5117	C-CERAMIC,CHIP
2203-009618	C6004	C-CERAMIC,CHIP
2203-009733	C1098,C2066,C5041	C-CERAMIC,CHIP
2203-009733	C5066,C6008,C6034	C-CERAMIC,CHIP
2203-009733	C7004,C7038,C7042	C-CERAMIC,CHIP
2203-009733	C7043,C7044,C7045	C-CERAMIC,CHIP
2703-002649	C1016,C1185,L1012	INDUCTOR-SMD
2703-002900	C2009,L1074,L6018	INDUCTOR-SMD
2703-002903	L1014,L2075	INDUCTOR-SMD
2703-002907	L1003,L2049,L2065	INDUCTOR-SMD
2703-002907	L3016	INDUCTOR-SMD
2703-002951	L2020,L2036,L2072	INDUCTOR-SMD
2703-002951	L3006	INDUCTOR-SMD
2703-002953	L1068,L2032,L6019	INDUCTOR-SMD
2703-002958	L2013	INDUCTOR-SMD
2703-003970	L2060,L2073	INDUCTOR-SMD
2703-004000	L2054	INDUCTOR-SMD
2703-004012	L2004	INDUCTOR-SMD
2703-004013	L1017,L2023,L2025	INDUCTOR-SMD
2703-004013	L2027	INDUCTOR-SMD
2703-004014	L2029,L3001	INDUCTOR-SMD
2703-004018	C1001,L1079	INDUCTOR-SMD
2703-004034	C1003,C2003,L1006	INDUCTOR-SMD
2703-004034	L2028	INDUCTOR-SMD
2703-004036	L2061	INDUCTOR-SMD
2703-004038	L2006,L2026,L2041	INDUCTOR-SMD
2703-004171	L2068	INDUCTOR-SMD
2703-004286	C1021,C1036,L2005	INDUCTOR-SMD
2703-004286	L2009,L2015,L2055	INDUCTOR-SMD
2703-004286	L2057	INDUCTOR-SMD
2703-004287	C2004,L2011	INDUCTOR-SMD
2703-004288	C2000,L2030,L2050	INDUCTOR-SMD

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5. MAIN Electrical Parts List

2703-004289	C2007,C3004,L2000	INDUCTOR-SMD
2703-004289	L2008,L2024,L2033	INDUCTOR-SMD
2703-004289	L2078	INDUCTOR-SMD
2703-004298	L1002,L2031	INDUCTOR-SMD
2703-004300	L2014,L2018	INDUCTOR-SMD
2703-004301	C1014,L2052	INDUCTOR-SMD
2703-004317	C1008,C2005	INDUCTOR-SMD
2703-004328	C2011,C2032,C2048	INDUCTOR-SMD
2703-004328	L2034,L2045,L2047	INDUCTOR-SMD
2703-004328	L2053,L2059,L3000	INDUCTOR-SMD
2703-004363	C2001	INDUCTOR-SMD
2703-004368	L1022,L3014	INDUCTOR-SMD
2703-004763	L3002	INDUCTOR-SMD
2703-004853	L1004,L1010	INDUCTOR-SMD
2703-004901	L5002,L5003,L5004	INDUCTOR-SMD
2703-004901	L5005,L5006	INDUCTOR-SMD
2703-004914	L3003	INDUCTOR-SMD
2703-004947	L6015	INDUCTOR-SMD
2703-005058	L2035	INDUCTOR-SMD
2703-005066	L1033	INDUCTOR-SMD
2703-005085	L3015	INDUCTOR-SMD
2703-005087	L1005,L2016	INDUCTOR-SMD
2703-005089	C2010	INDUCTOR-SMD
2703-005109	U7020	INDUCTOR-SMD
2703-005116	L7007	INDUCTOR-SMD
2703-005118	L7004	INDUCTOR-SMD
2703-005296	L2017,L2069	INDUCTOR-SMD
2801-005167	OSC3004	CRYSTAL-UNIT
2801-005264	OSC5000	CRYSTAL-UNIT
2805-001106	OSC3003	OSCILLATOR
2809-001419	TCX1000	OSCILLATOR-VCTCXO
2904-002139	F2000	FILTER-SAW
2904-002143	F2003	FILTER-SAW
2904-002198	F2002	FILTER-SAW
2904-002304	F2006	FILTER-SAW
2904-002326	F2007	FILTER-SAW
2904-002350	F2005	FILTER-SAW
2904-002355	F3000	FILTER-SAW
2904-002356	F3001	FILTER-SAW

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5. MAIN Electrical Parts List

2904-002381	F3002	FILTER-SAW
2904-002397	F2001	FILTER-SAW
2910-000390	F2004	FILTER
2910-000402	F1004	FILTER
2911-000382	U1003	FILTER
2911-000424	U2002	FILTER
3003-001237	MIC6000	MIC-CONDENSOR
3301-001438	L3018	CORE-FERRITE BEAD
3301-001895	L3017,L3019	CORE-FERRITE BEAD
3301-001901	L7003	CORE-FERRITE BEAD
3301-002078	L6003,L6005,L6006	CORE-FERRITE BEAD
3301-002078	R6018	CORE-FERRITEBEAD
3301-002085	L7008	CORE-FERRITE BEAD
3301-002122	L1031,L1230	CORE-FERRITE BEAD
3301-002223	L7000,L7001,L7002	CORE-FERRITE BEAD
3301-002235	L6000,L6001,L6002	CORE-FERRITE BEAD
3301-002236	L2074	CORE-FERRITE BEAD
3301-002237	L1000,L1018,L2046	CORE-FERRITE BEAD
3301-002237	L3033,U7016,U7017	CORE-FERRITE BEAD
3301-002238	L1001,L2039,L2042	CORE-FERRITE BEAD
3301-002238	L2064,L2067	CORE-FERRITE BEAD
3301-002243	L7005,L7006	CORE-FERRITE BEAD
3301-002244	L6004	CORE-FERRITE BEAD
3301-002254	L5000	CORE-FERRITE BEAD
3301-002309	L3025	CORE-FERRITE BEAD
3301-002312	L2037,L2040,L2063	CORE-FERRITE BEAD
3301-002312	L2066,L4000	CORE-FERRITE BEAD
3301-002335	L6011	CORE-FERRITE BEAD
3705-001937	RFS1000,RFS1001	CONNECTOR-COAXIAL
3709-001932	SIM5002	CONNECTOR-CARD EDGE
3709-001933	SIM5003	CONNECTOR-CARD EDGE
3709-001934	SIM5000,SIM5001	CONNECTOR-CARD EDGE
3711-007295	HDC7000,HDC7003	CONNECTOR-HEADER
3711-008511	HDC7001,HDC7002	CONNECTOR-HEADER
3711-008593	HDC6000	CONNECTOR-HEADER
3711-008847	BTC5000,HEA5000	CONNECTOR-HEADER
3712-001626	ANT5000,ANT5001	CONNECTOR
3712-001666	ANT1000,ANT1001	CONNECTOR
3712-001666	ANT1002,ANT2000	CONNECTOR

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5. MAIN Electrical Parts List

3712-001666	ANT2001,ANT2002	CONNECTOR
3712-001666	ANT3000,ANT3003	CONNECTOR
3712-001666	ANT6000,ANT6001	CONNECTOR
4709-002351	F3003	RF-MODULE
4709-002412	F1006,F1007	RF-MODULE
GH62-00043A	SMR7000	JSM-TSL-2-1.8-1.5BK
GH63-16856A	SC7000	SC-G100F-AP
GH63-16857A	SC7003	SC-G100F-WIFI
GH63-16859A	SC7001	SC-G100F-PMIC
GH98-43858A	SC7002	SC-G100F-RF
1107-002548	UME5000	IC-FLASH MEMORY
1105-002928	UCP400UP	IC-DDR3 SDRAM
GH02-17900A	SC7000SP	TAPE-AP
GH02-17901A	SC7001SP	TAPE-PMIC

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

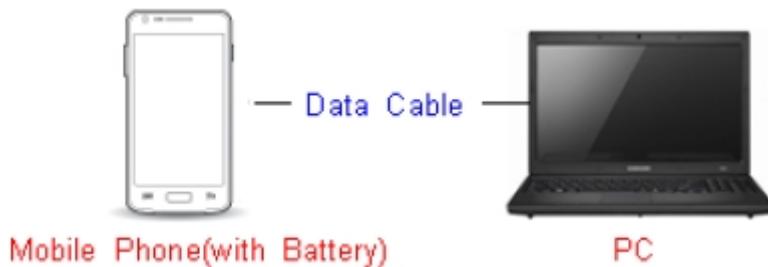
6. Level 1 Repair

6-1. S/W Update

6-1-1. Preparation

- S/W Update program : **Fenrir 5.17.xxxx**
- Mobile Phone
- Data Cable

* Settings

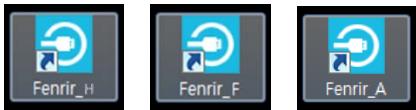


Data Cable : **GH39-01710D**

6. Level 1 Repair

6-1-2. How to use 'Fenrir' S/W update program.

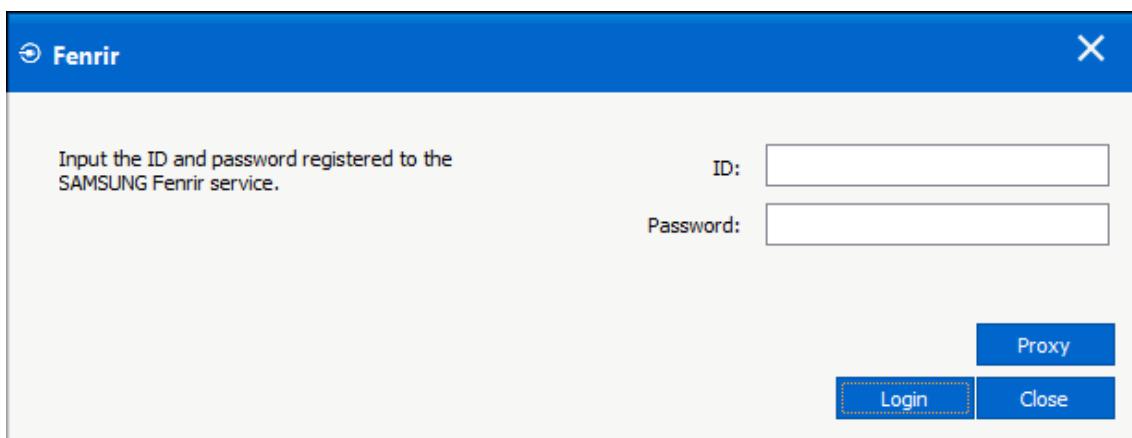
1) Launch Fenrir by clicking on the icon on the desktop



- SVH (Fenrir_Home) : It uses Home binary which does not have user data area in the memory when flashed to a device. (Keep user data)
- SVC (Fenrir_Factory) : It uses Factory binary which erases all user data in the memory when flashed to a device. (Clear user data)
- SVA (Fenrir_All) : It uses Factory and Home binaries. you can download Home and Factory binary in a PC(but requires double HDD storage and NW traffic)

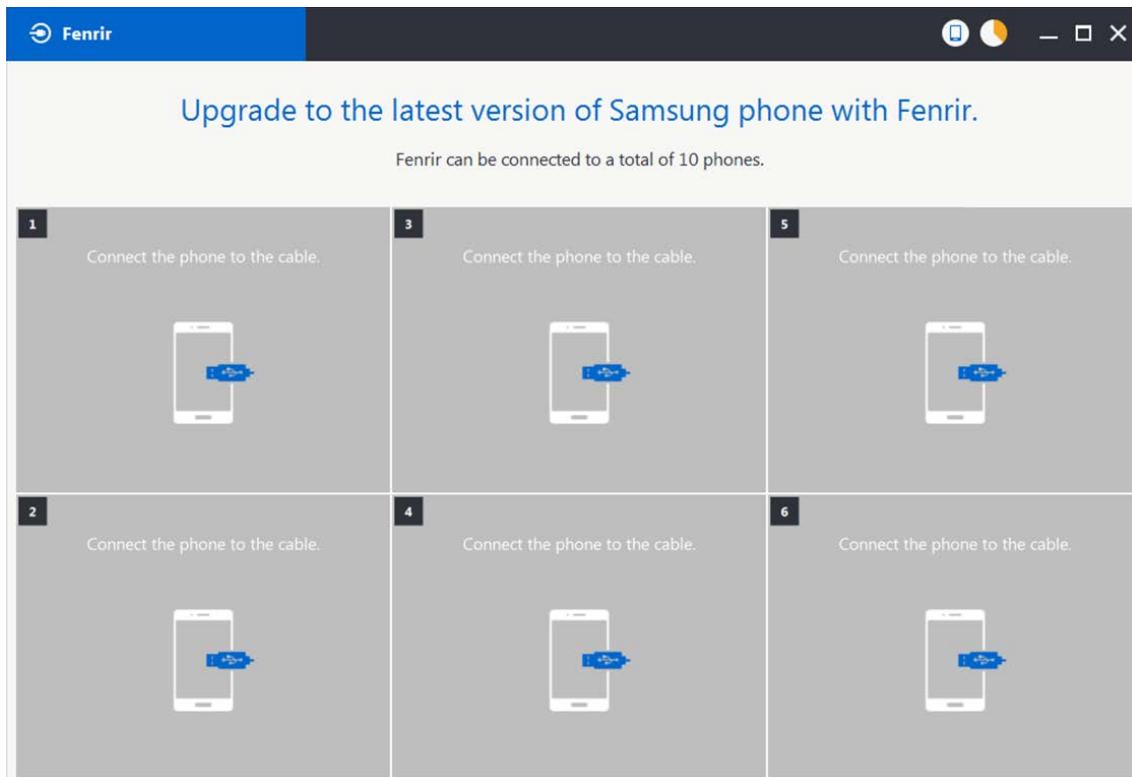
2) Input ID & password

※ You need to reset the ID information in case of PC change and format and repair, hard disk change



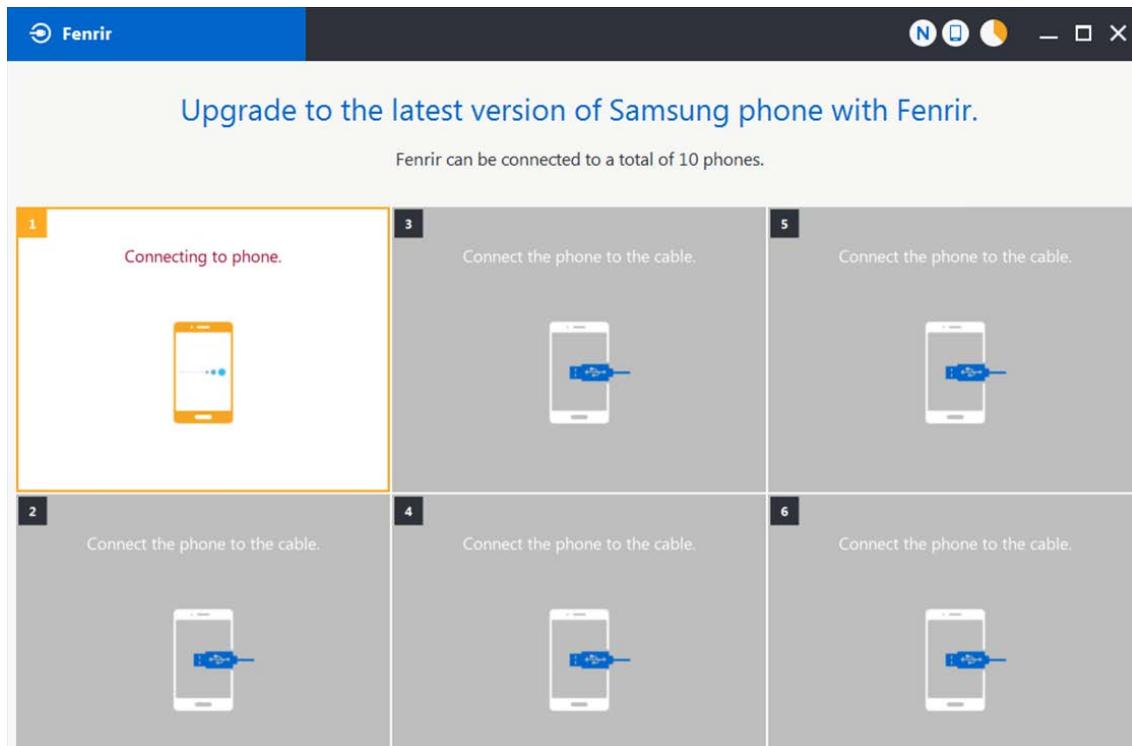
6. Level 1 Repair

- 3) Ensure device has sufficient charge (at least 20%) to start firmware update.



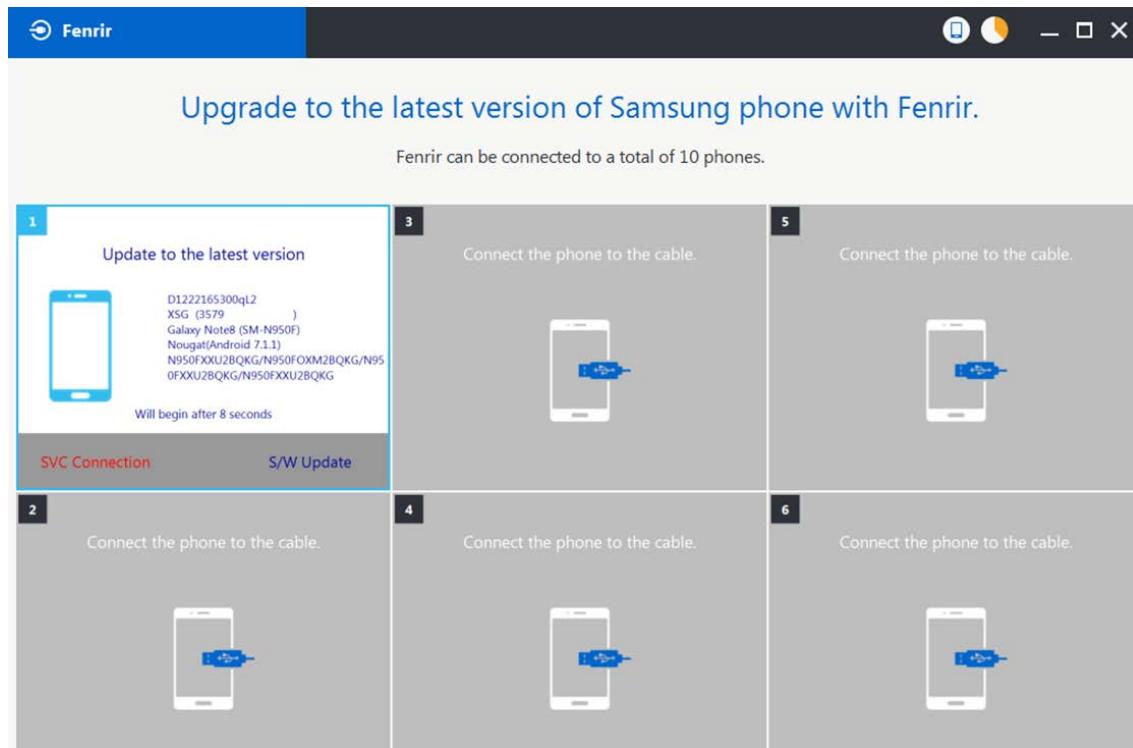
- 4) Connect the device to PC via data cable.

- 5) Upon USB connection, you will be presented with below screen.

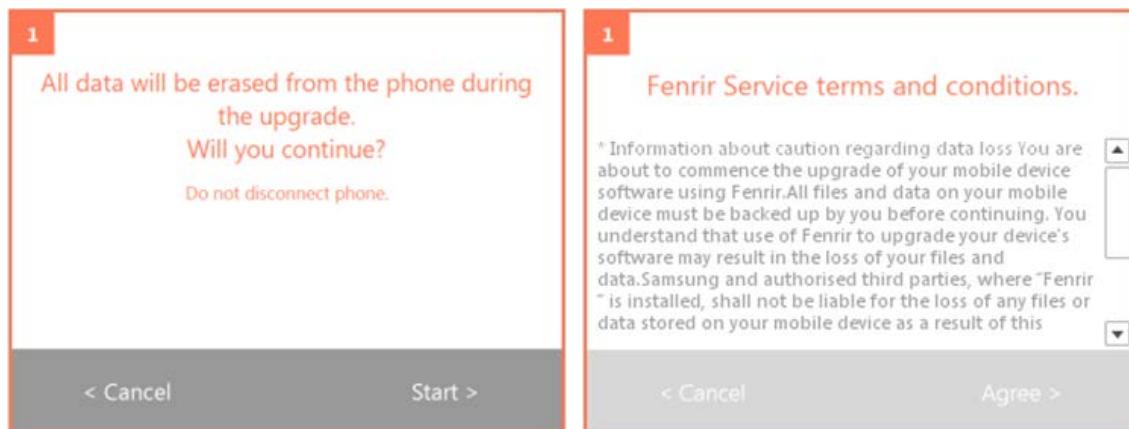


6. Level 1 Repair

6) Once device is detected, you will be presented with below screen. To update S/W, select “S/W Update” or to exit select “SVC Connection”. If you select “SVC Connection”, only Fenrir connection history (record) will be stored in the FUS server to support warranty validation. (This is known as “Service Connection” history)

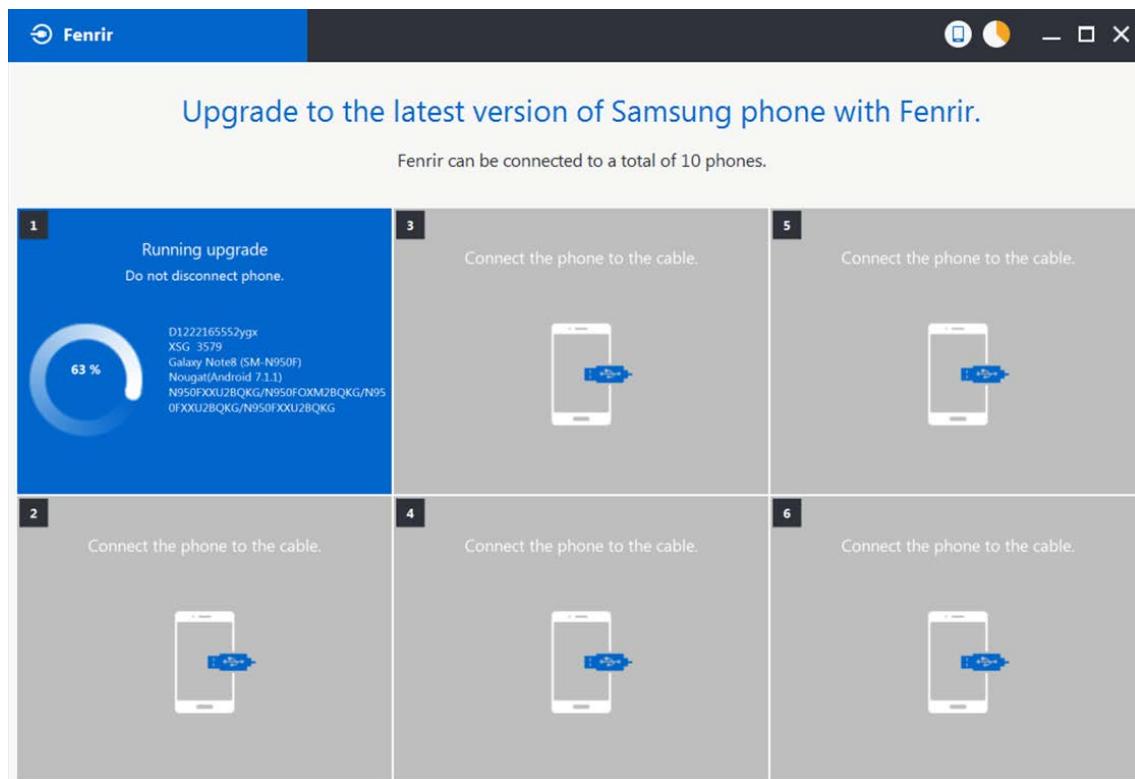


7) Once Fenrir starts, application will display the below screen. And select the Start button & Agree button.

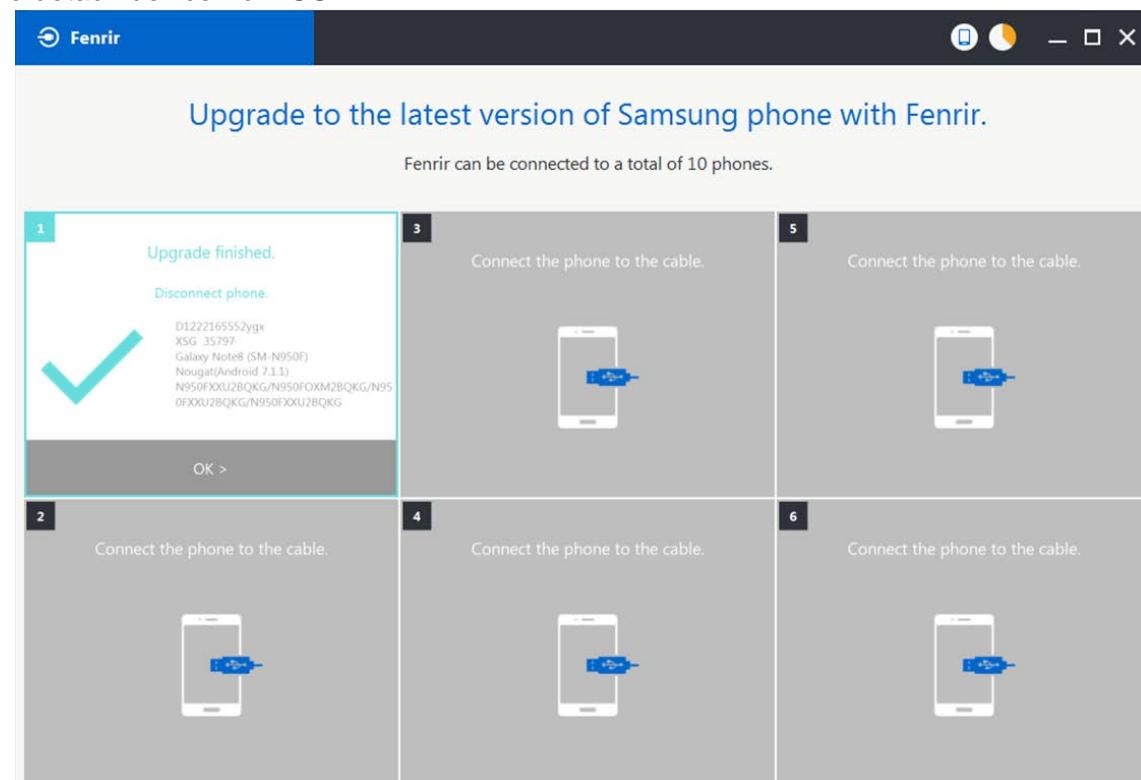


6. Level 1 Repair

- 8) The status circle increases as the update installs. The update process takes approximately 5-10 minutes to complete. Do not disconnect the device from USB during processing.



- 9) Once complete, application will present the below screen indicating update complete. Click Ok and detach device from USB.



6. Level 1 Repair

6-2. How to use 'Odin' program

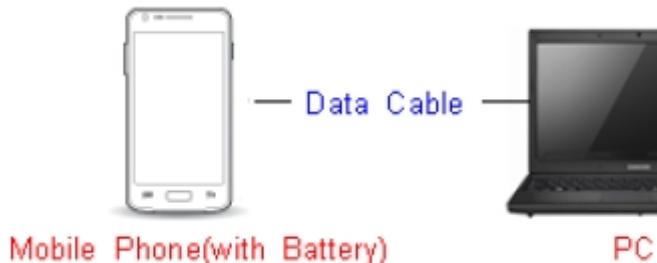
※ S/W Update via Fenrir is mandatory.

Below is the method to use 'Odin' program in any specific case.

6-2-1. Preparation

- Installation program : [Odin3 v3.13.2.exe or above](#)
- Mobile Phone
- Data Cable
- S/W Binary files (downloaded from GSPN)

※ Settings

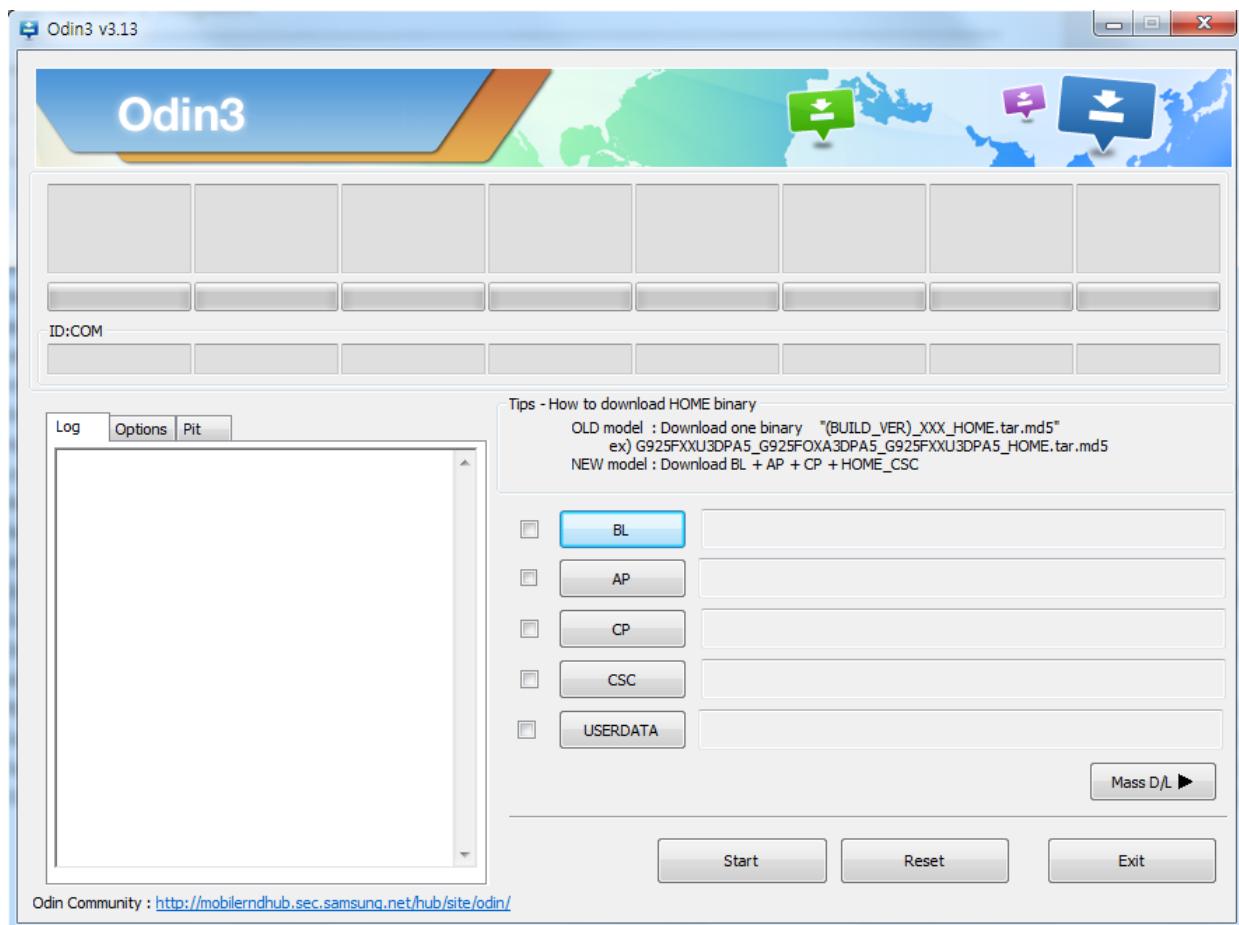


Data Cable : [GH39-01710D](#)

6. Level 1 Repair

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

Open up the S/W Installation Program by executing the "[Odin3 v3.13.2.exe](#)"



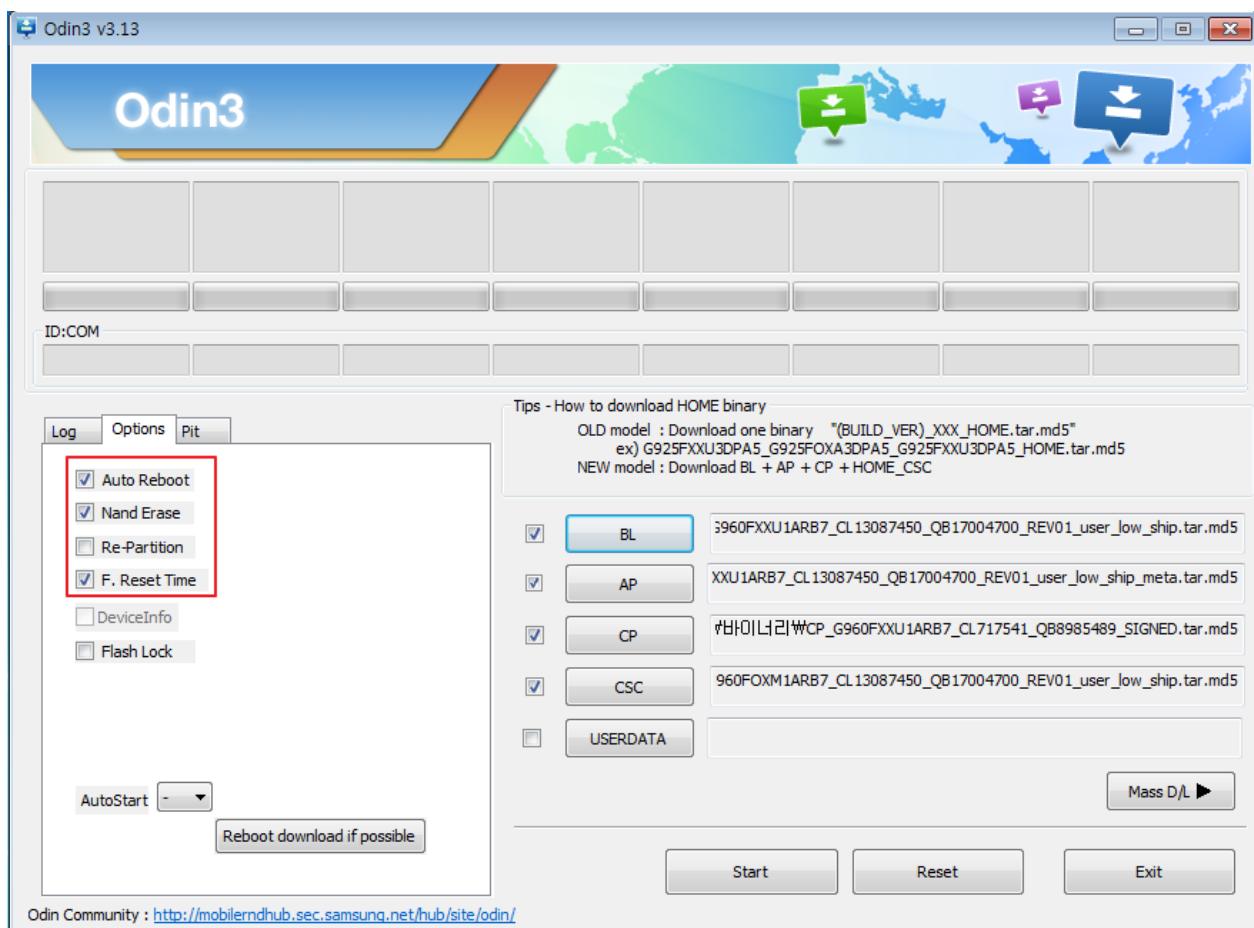
6. Level 1 Repair

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

- Check Auto Reboot, F. Reset Time, Nand Erase

- Check BL, AP, CP, CSC Files

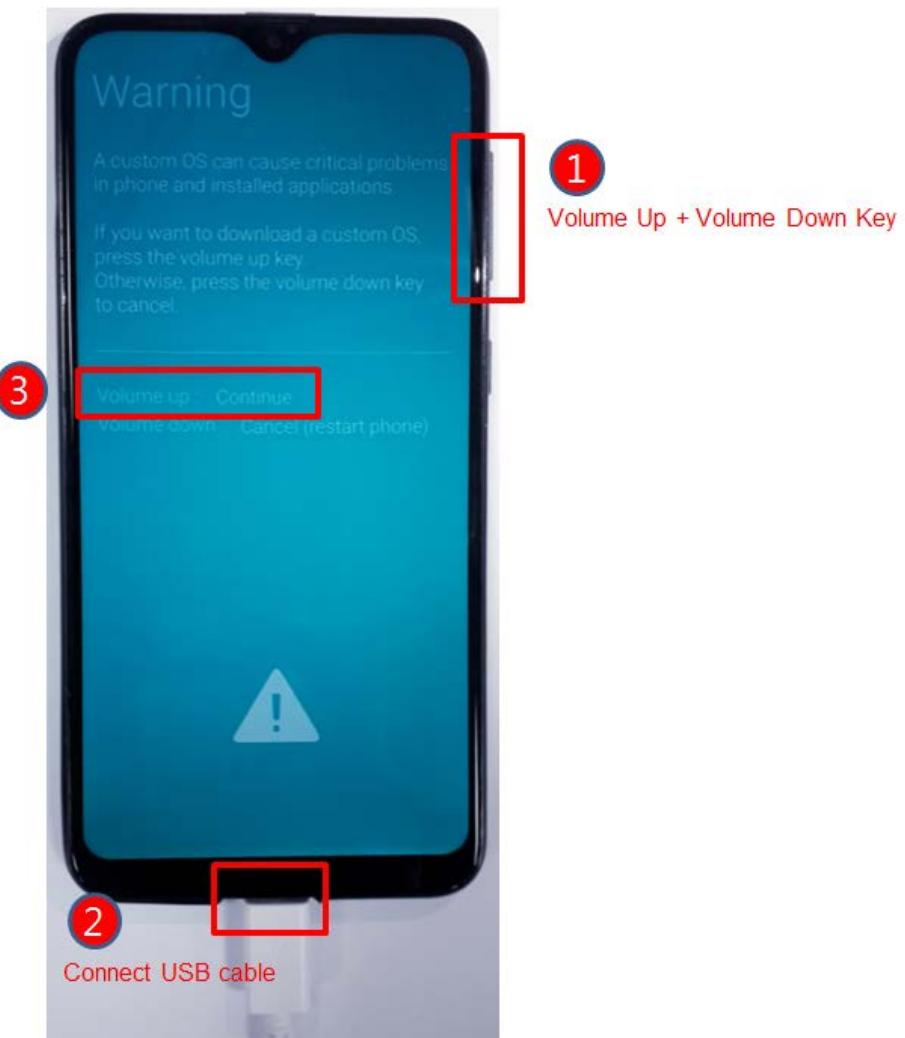
* Note : "Odin v3.13.2 or above" checks MD5 checksum just after file selection.



6. Level 1 Repair

2. Enter into Download Mode

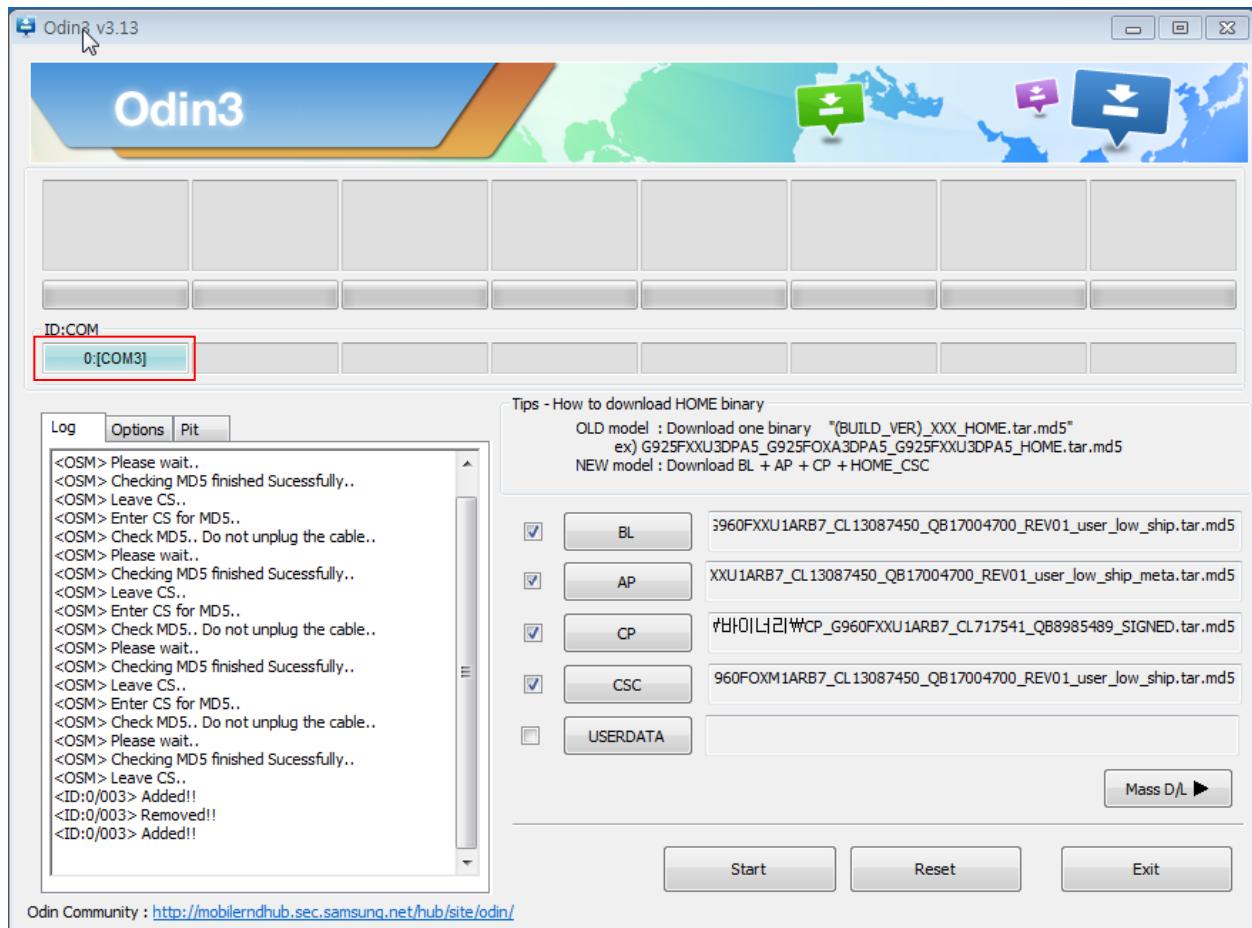
- Press Volume Down button and Volume Up button simultaneously.
- Please connect USB cable.
- Finally, Press Volume up button to Enter into Download mode.



6. Level 1 Repair

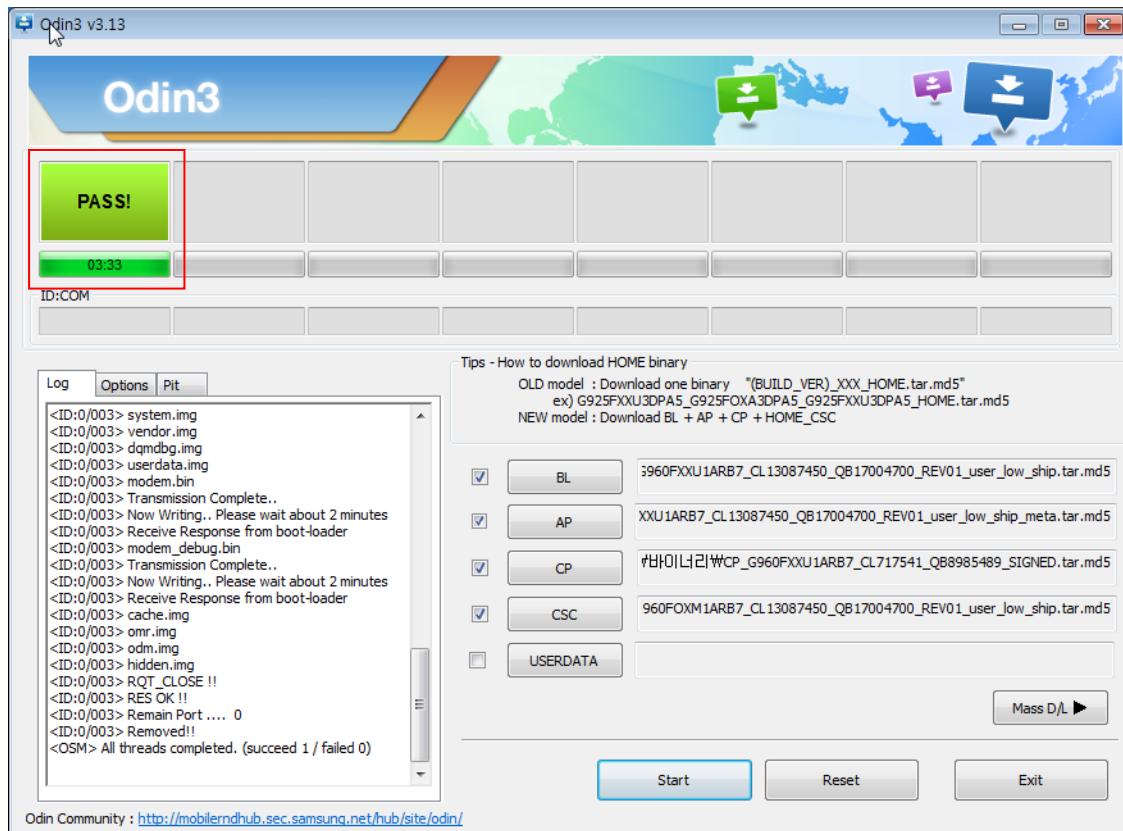
3. Connect the device to PC via Data Cable.

Make sure that the one of communication ports [ID:COM] box is highlighted in sky blue.
The device is now connected with the PC and ready to download the binary files in it.



6. Level 1 Repair

4. Start downloading the binary files 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 files have been successfully downloaded into the device.



5. Disconnect the device from the Data cable.

6. 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 Factory data Reset by Settings → General Management → Reset

*** Caution. Never disconnect during the S/W downloading.**

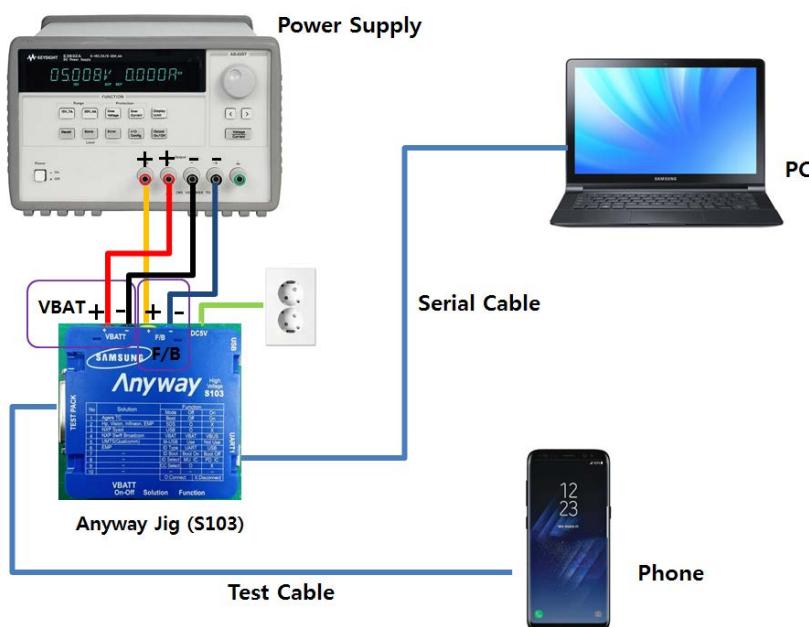
6. Level 1 Repair

6-3. IMEI writing

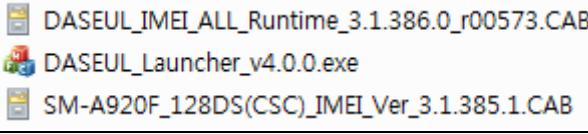
6-3-1. Preparation

- New IMEI writing Program has been released.
- Supported Model : Models which CAB files are uploaded on HHPsvc INI File category, instead of ini file.
- Refer to below IMEI writing procedure.

- H/W



- S/W

① Library Install	To use Daseul, library files should be installed. Refer to SVC Bulletin “(11-82) Daseul (New IMEI writing Program) Library Install guide_rev1.0”
② Launcher	DASEUL_Launcher_v4.0.0 or higher -Uploaded on HHPsvc Notice
③ Runtime File	1. DASEUL_IMEI_ALL_Runtime_3.1.386.0_r00573.CAB or higher -Uploaded on HHPsvc Notice 2. Make ‘modelName’ folder at the same position with launcher & Runtime file.  DASEUL_IMEI_ALL_Runtime_3.1.386.0_r00573.CAB DASEUL_Launcher_v4.0.0.exe SM-A920F_128DS(CSC)_IMEI_Ver_3.1.385.1.CAB
④ Model File	Copy Model File under the ‘SM-G8870’ folder

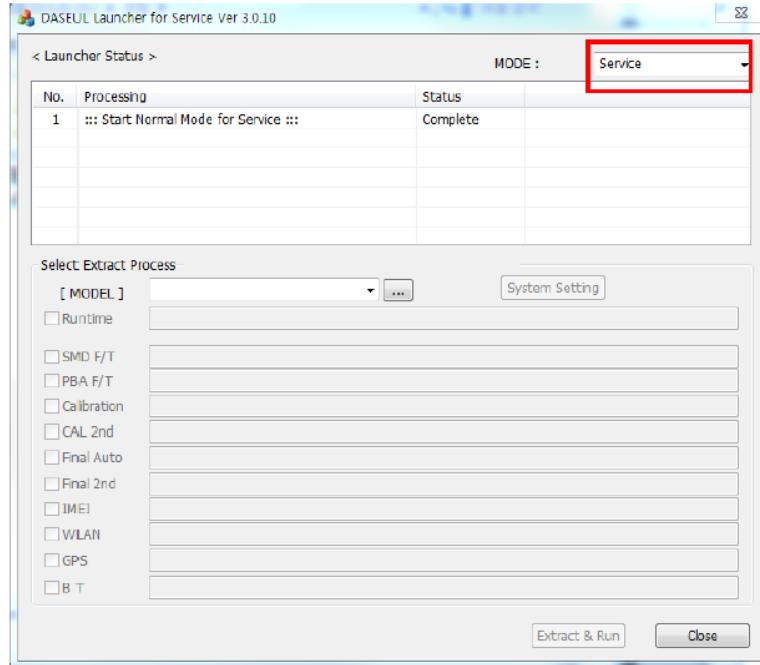
6. Level 1 Repair

6-3-2. IMEI writing Process

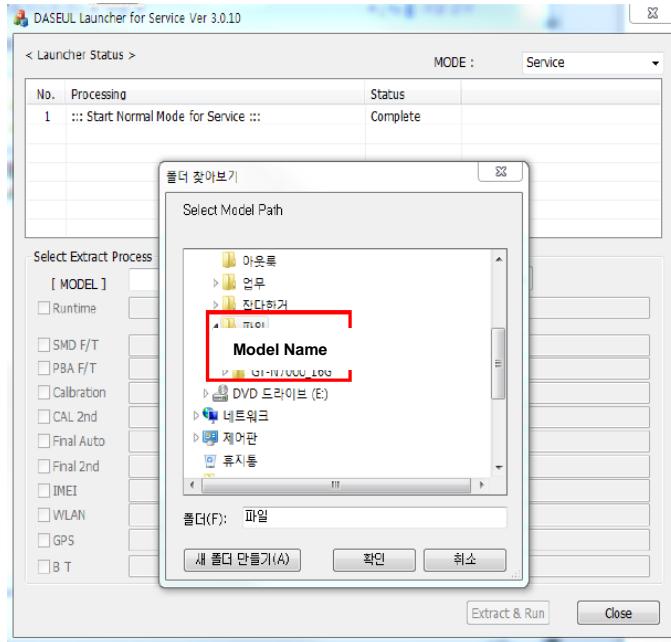
1. Run DASEUL_Launcher_v4.0.0

 DASEUL_Launcher_v4.0.0.exe

2. Select Service Mode

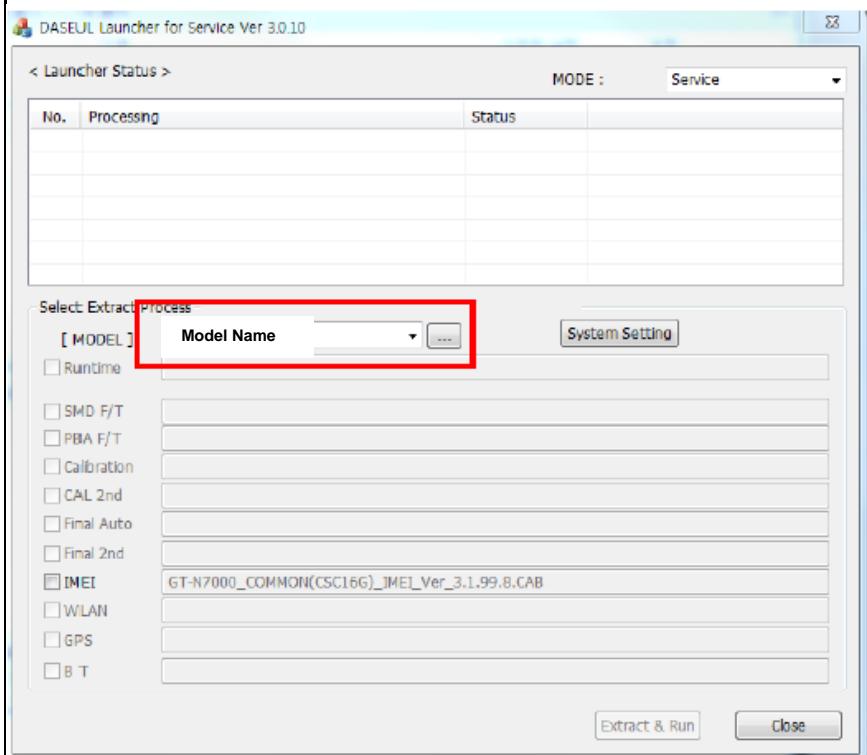


3. Click and Select folder where the Launcher exists



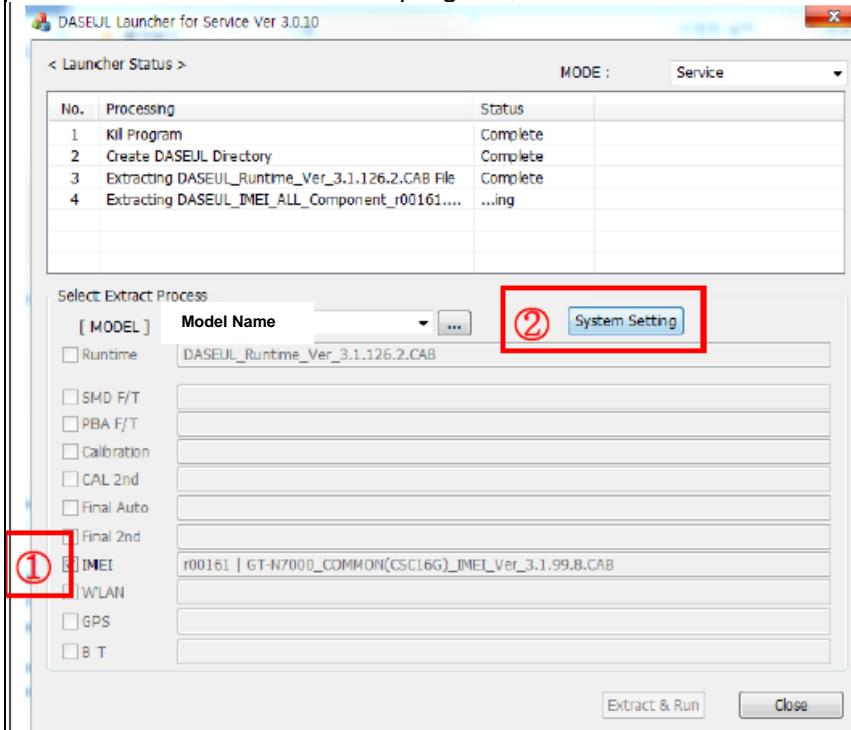
6. Level 1 Repair

4. Select Model



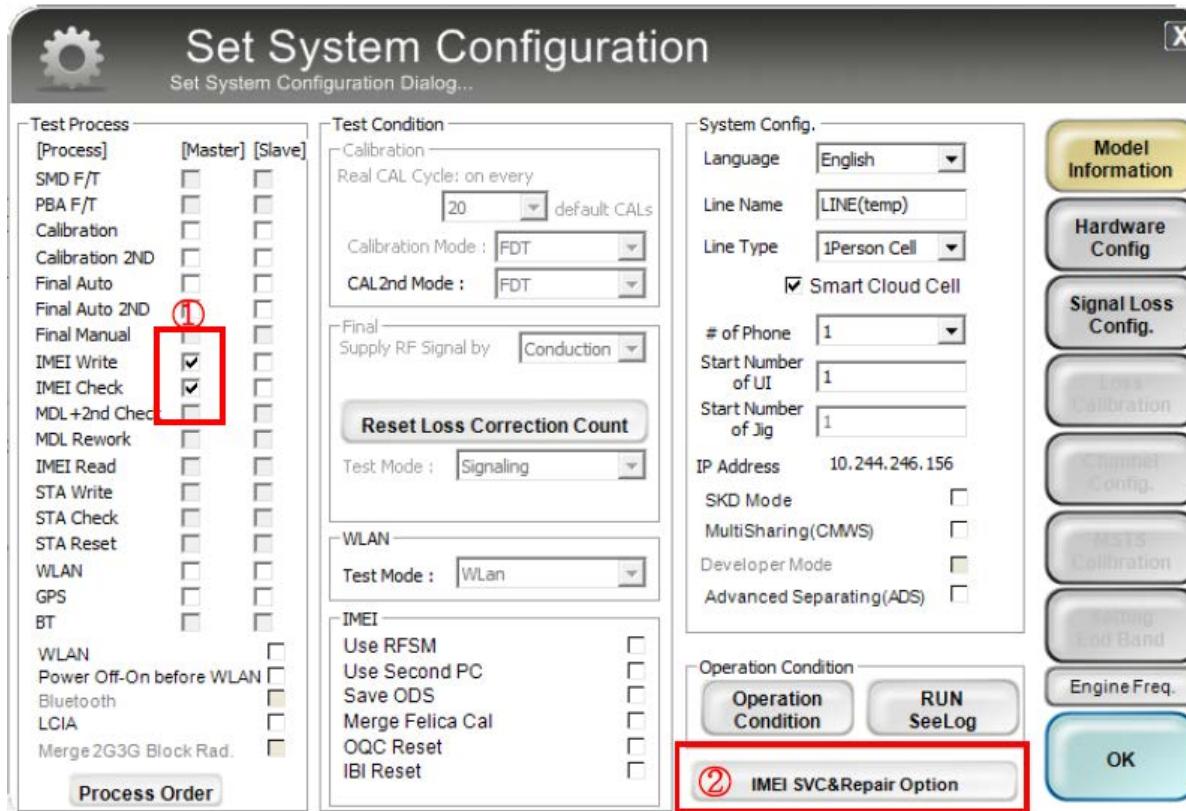
5. Check IMEI and click System Setting

*Once you setup the setting, you don't have to do it again, unless there is change.
From second run of the IMEI program, check IMEI and click Extract & Run.

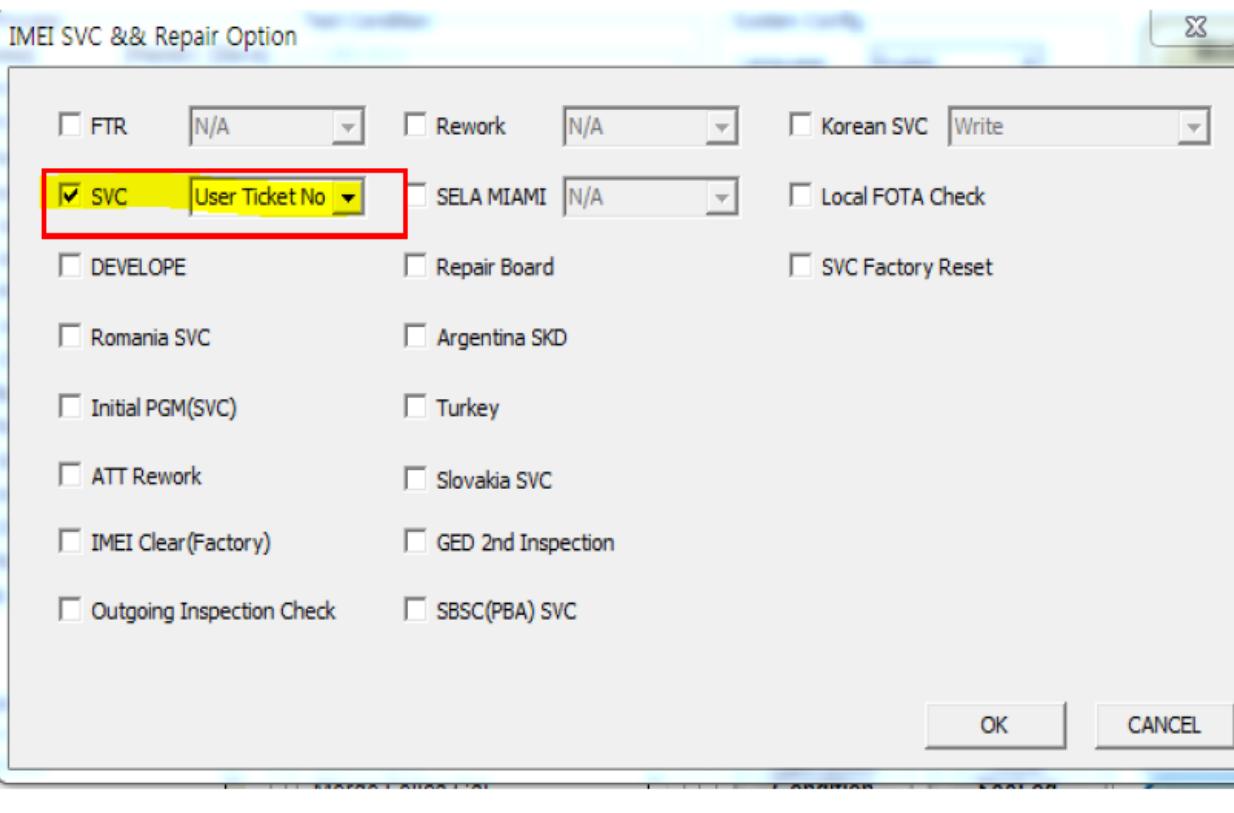


6. Level 1 Repair

6. Check IMEI Write / IMEI Check and click IMEI SVC & Repair Option.

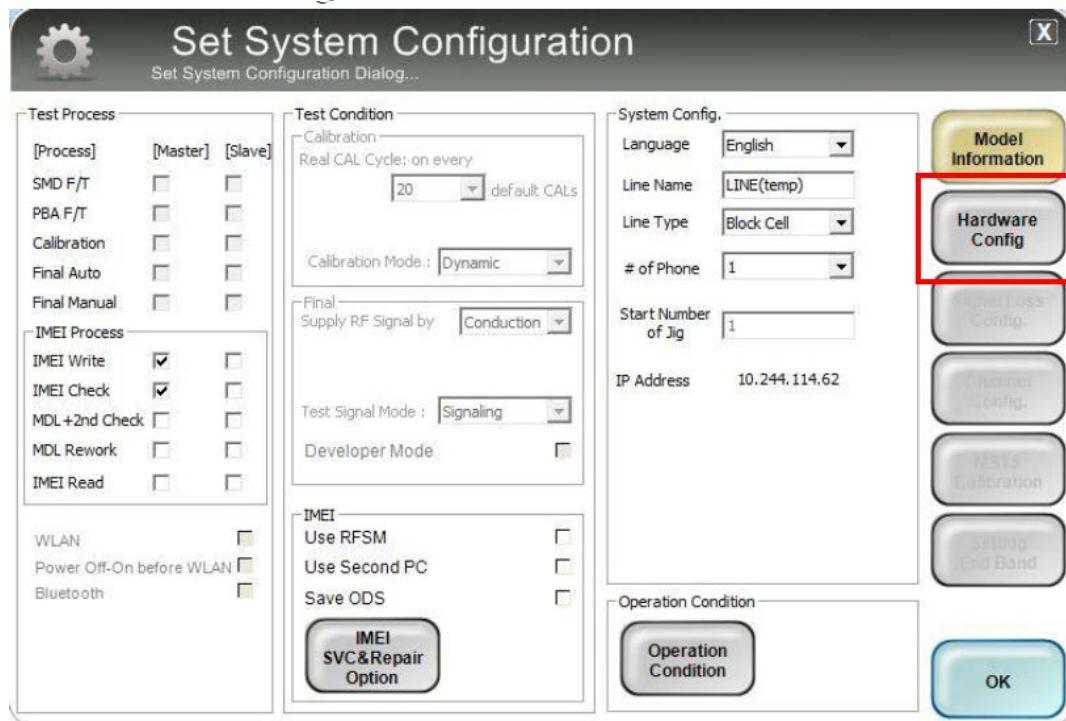


7. Check 'SVC , User Ticket No' and click OK

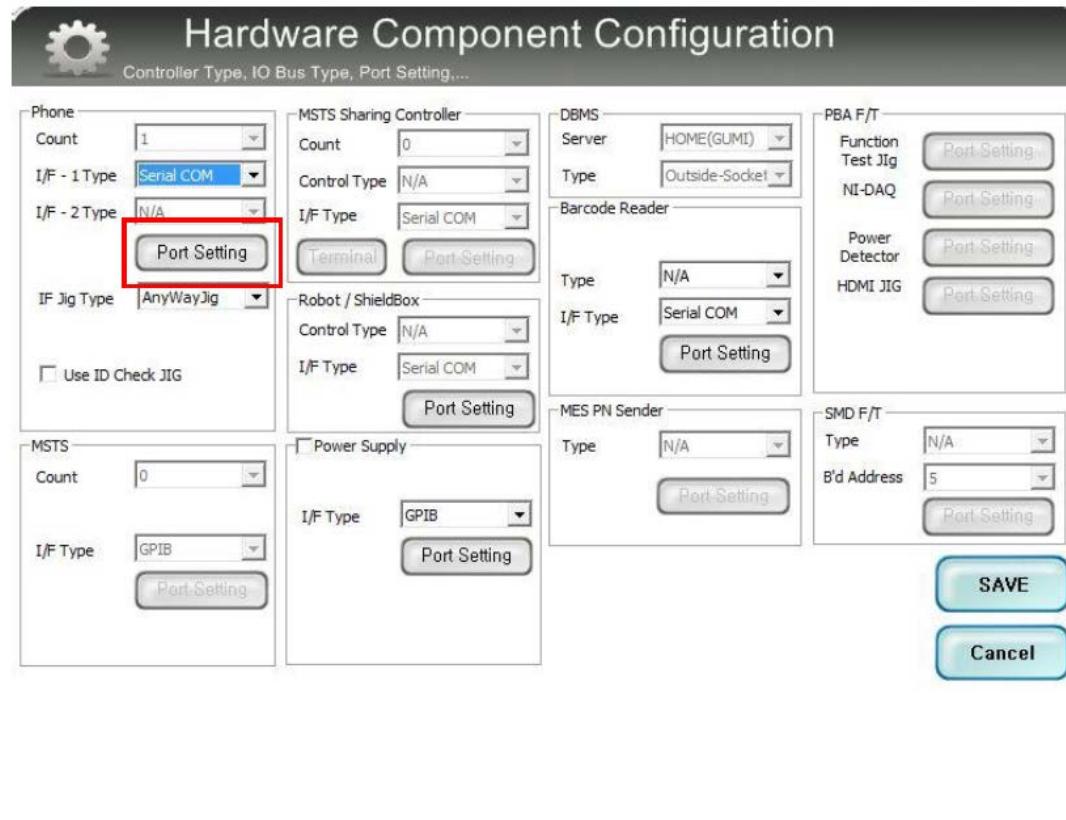


6. Level 1 Repair

8. Click 'Hardware Config'



9. Click 'Port Setting'



6. Level 1 Repair

10. Select Port Number and SAVE

Set IO BUS Configuration

Phone IO Bus Setting

Common

BaudRate	115200
Data Bit	8
Parity	No
Stop Bit	1

Port #1

No.	1
1	1

SAVE **Cancel**

11. Click OK to proceed

Set System Configuration

Set System Configuration Dialog...

Test Process

[Process]	[Master]	[Slave]
SMD F/T	<input type="checkbox"/>	<input type="checkbox"/>
PBA F/T	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Calibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Final Auto	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Final Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IMEI Process

IMEI Write	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IMEI Check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MDL+2nd Check	<input type="checkbox"/>	<input type="checkbox"/>
MDL Rework	<input type="checkbox"/>	<input type="checkbox"/>
IMEI Read	<input type="checkbox"/>	<input type="checkbox"/>

WLAN

Power Off-On before WLAN

Bluetooth

Test Condition

Calibration

Real CAL Cycle: on every 20 default CALs

Calibration Mode: Dynamic

Final

Supply RF Signal by Conduction

Test Signal Mode: Signaling

Developer Mode

IMEI

Use RFM

Use Second PC

Save ODS

IMEI SVC&Repair Option

System Config.

Language: English

Line Name: LINE(temp)

Line Type: Block Cell

of Phone: 1

Start Number of Jig: 1

IP Address: 10.244.114.62

Model Information

Hardware Config

Serial Link Config

Serial Line Config

Serial Port Calibration

Setting Edit Hand

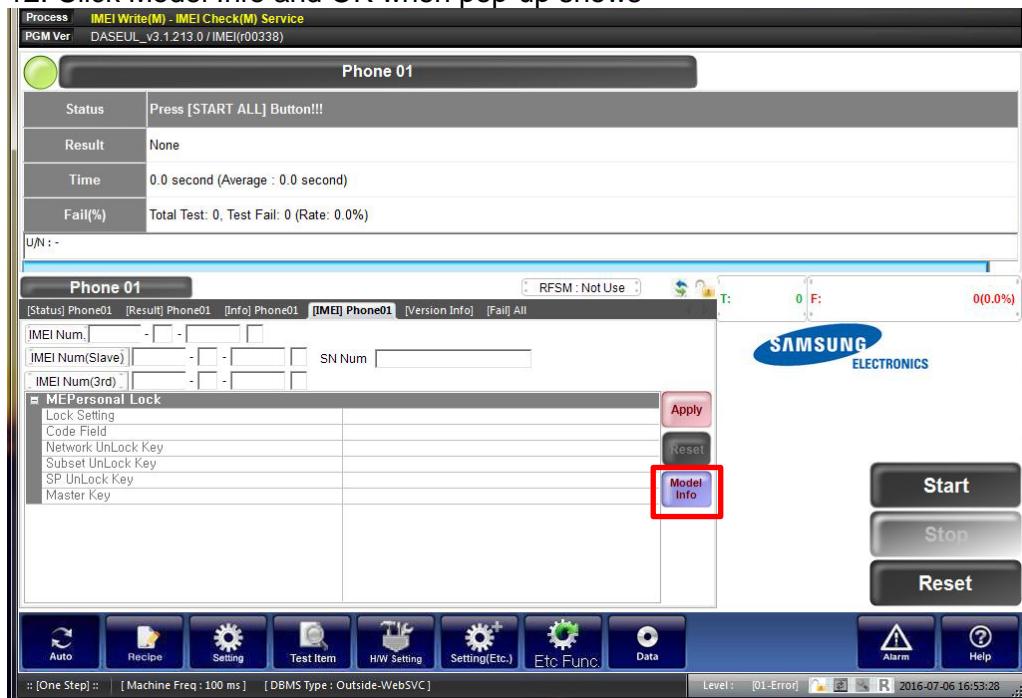
Operation Condition

Operation Condition

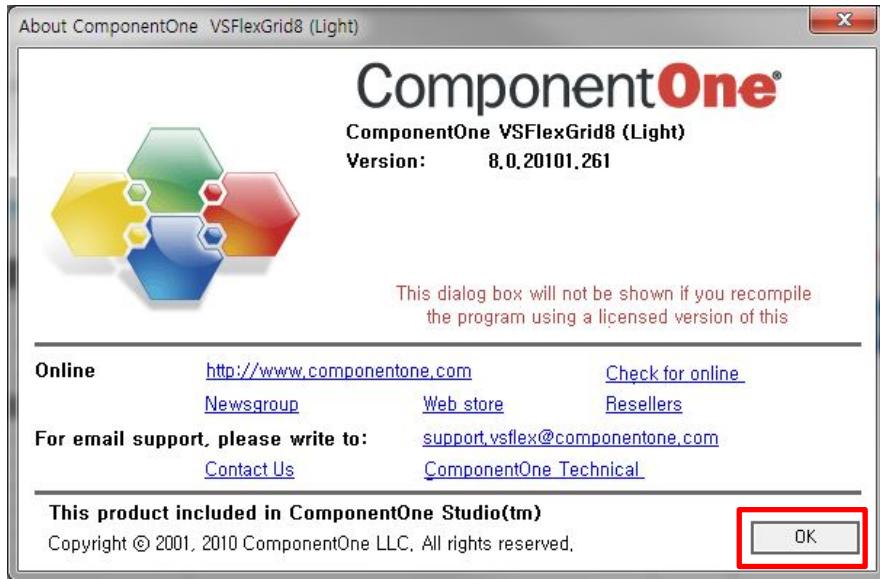
OK

6. Level 1 Repair

12. Click Model Info and OK when pop-up shows



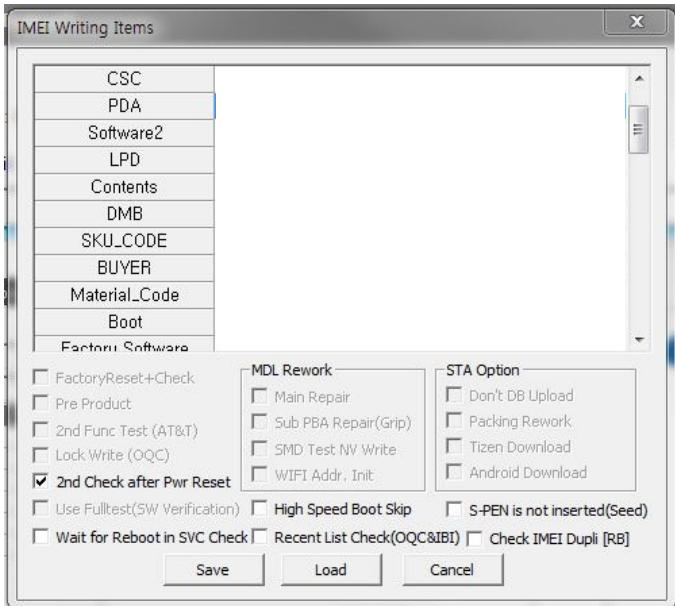
13. Click OK



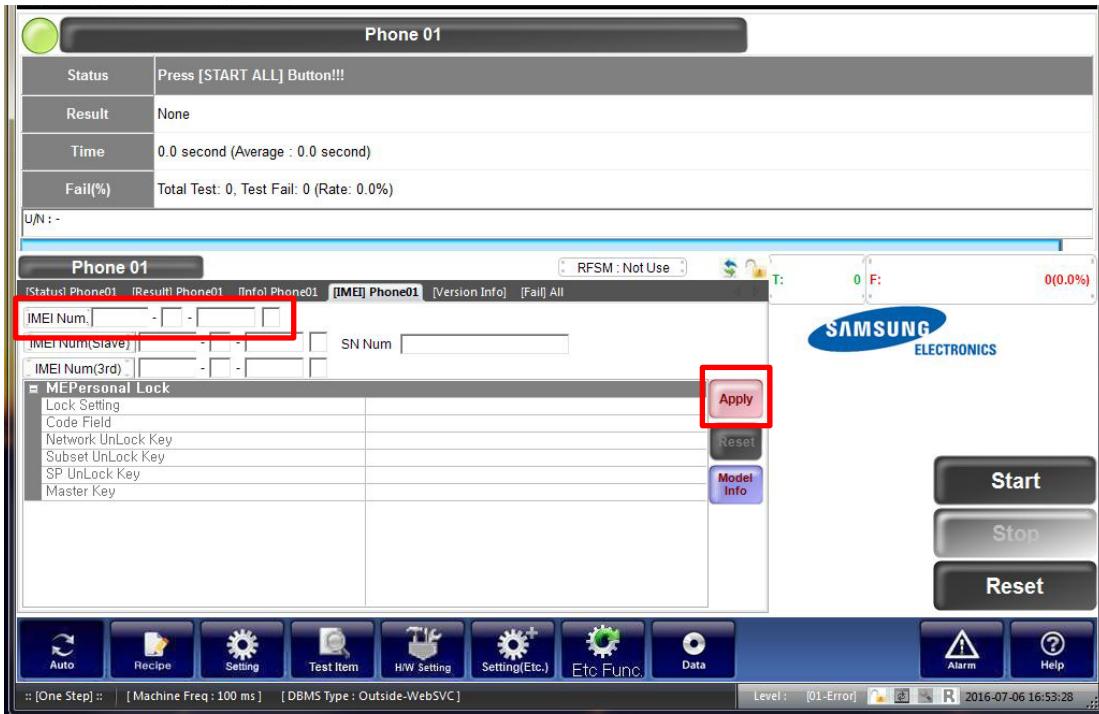
6. Level 1 Repair

14. Input SKU_CODE and BUYER, then click Save button.

※ Refer to HHPsvc→IMEI Review to check SKU Code and buyer

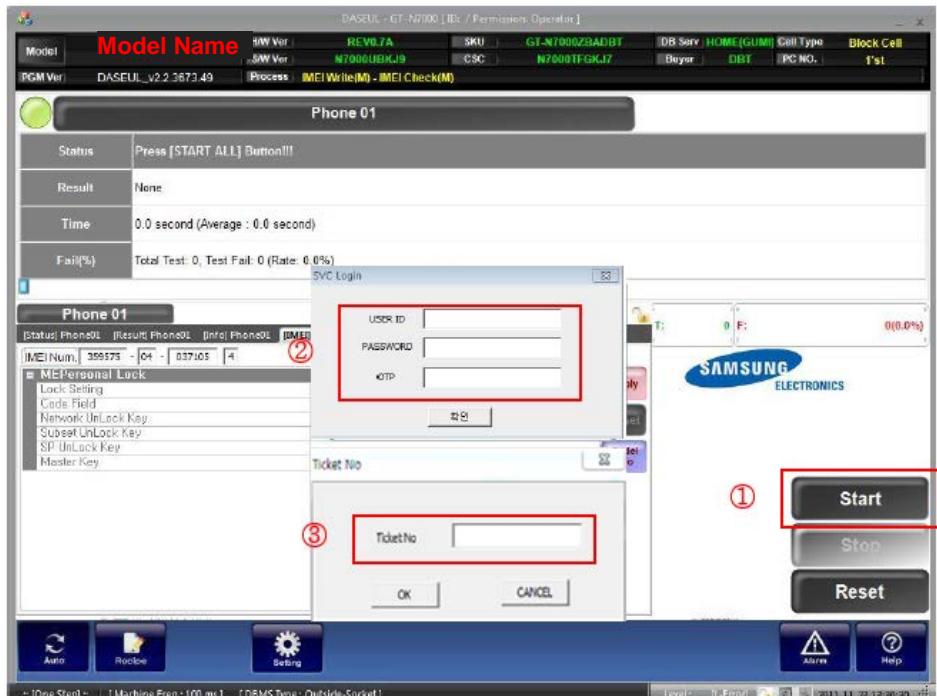


15. Input IMEI Number and click Apply



6. Level 1 Repair

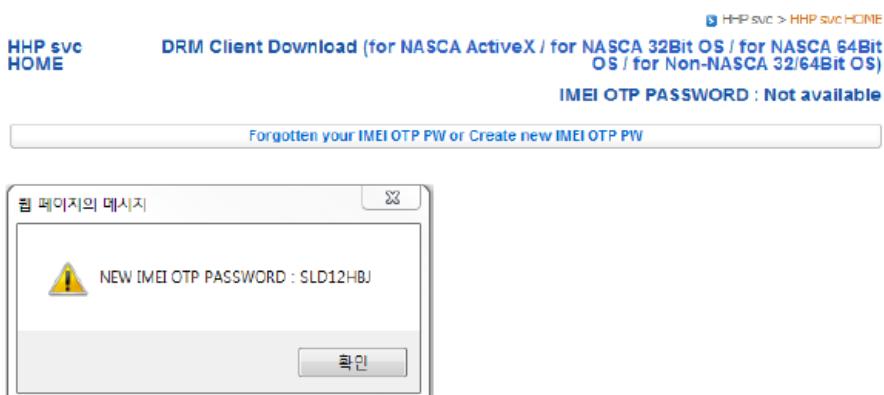
16. ① Click Start → ②Input IMEI writing ID and Password & OTP → ③Input Ticket No



※ OTP(One time Password) : OTP is valid for 6 hours.

After that, you can get new OTP by click the “Forgotten your IMEI OTP PW or Create new IMEI OTP PW” button.

☞ OTP Location : GSPN → Knowledge → HHP svc → Home

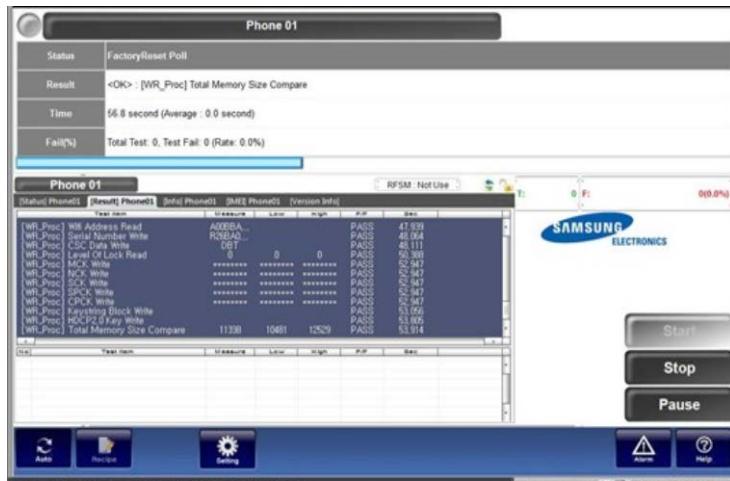


6. Level 1 Repair

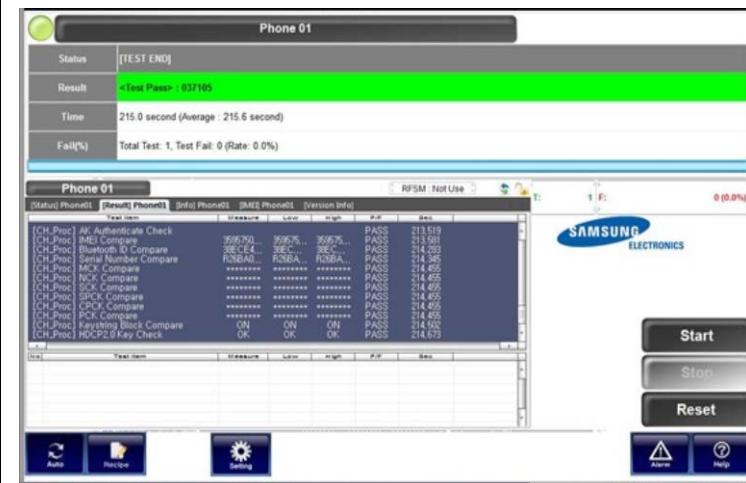
17. Connect the phone to Anyway JIG

- * When you connect the phone, the phone should be turned off.
After connecting the phone, the phone will be booted automatically.

18. IMEI Writing Proceeding



19. IMEI Writing Success



6. Level 1 Repair

6-4. RF Calibration

6-4-1. Required items in order to calibrate RF

- Installation program: RF Calibration Program
 - Daseul_Launcher_vx.x.xx.exe
 - Daseul_CAL_ALL_Runtime_x.x.xxx.x.CAB
 - Model File
- : **SM-xxxx_OPEN_CALIBRATION_Ver_x.x.xxx.x.CAB**

* It is required to use the latest program.

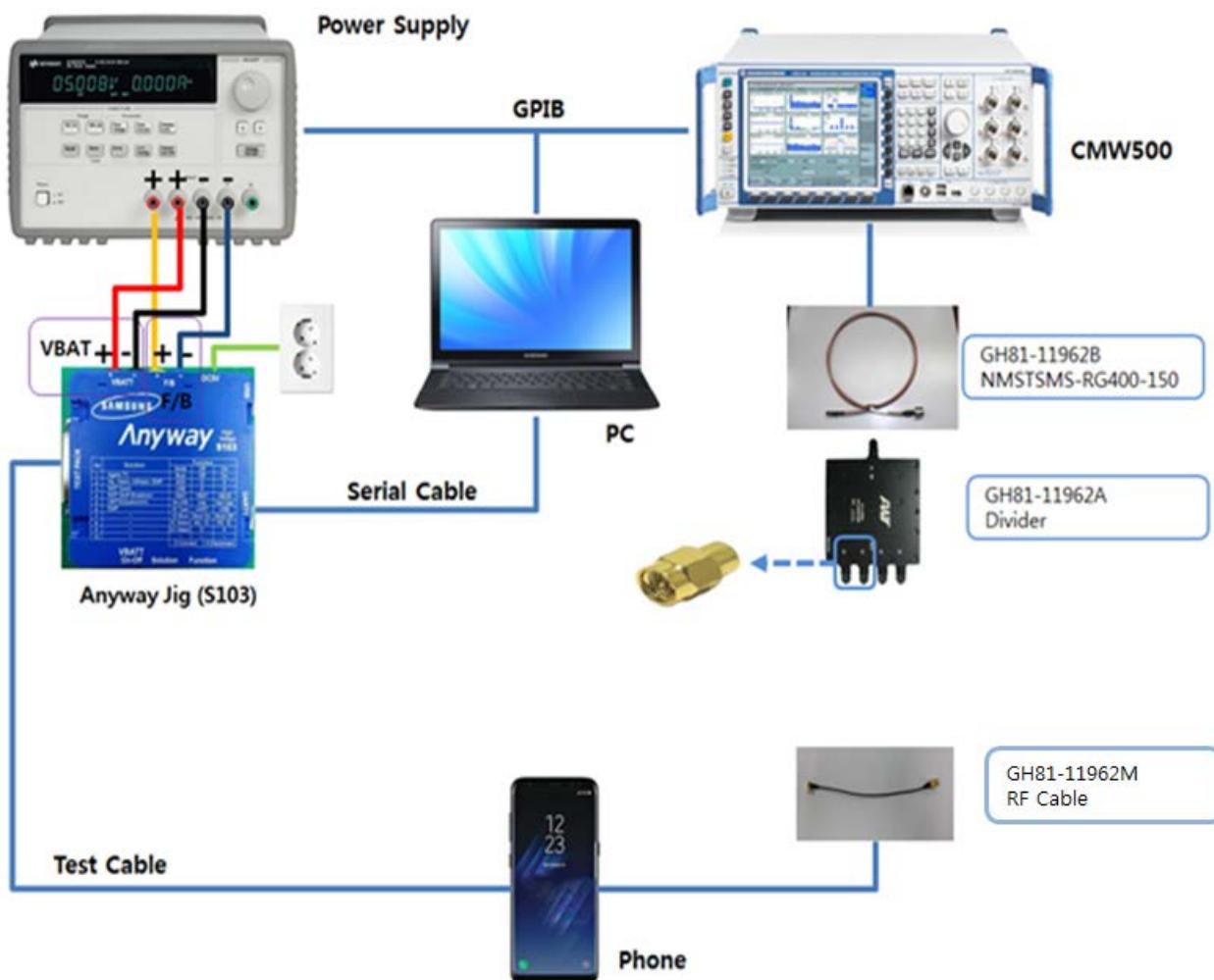
- Mobile Phone
- R&S CMW500
- E3632A Power Supply
- GPIB Cable (2ea)
- JIG BOX (S103)
- Adapter
- UART Serial Cable
- IF Cable (GH81-11962T)

❖ Table of test cables

RF Cable (Manual)	GH81-11962M (2ea)		
	1.2T, 200mm 		
4 Port Divider	GH81-11962A 	GH81-11962B 	GH81-11962E 

6. Level 1 Repair

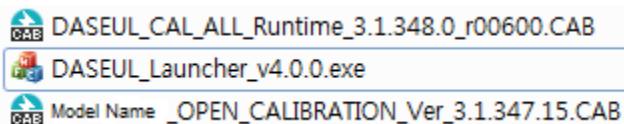
❖ Setting



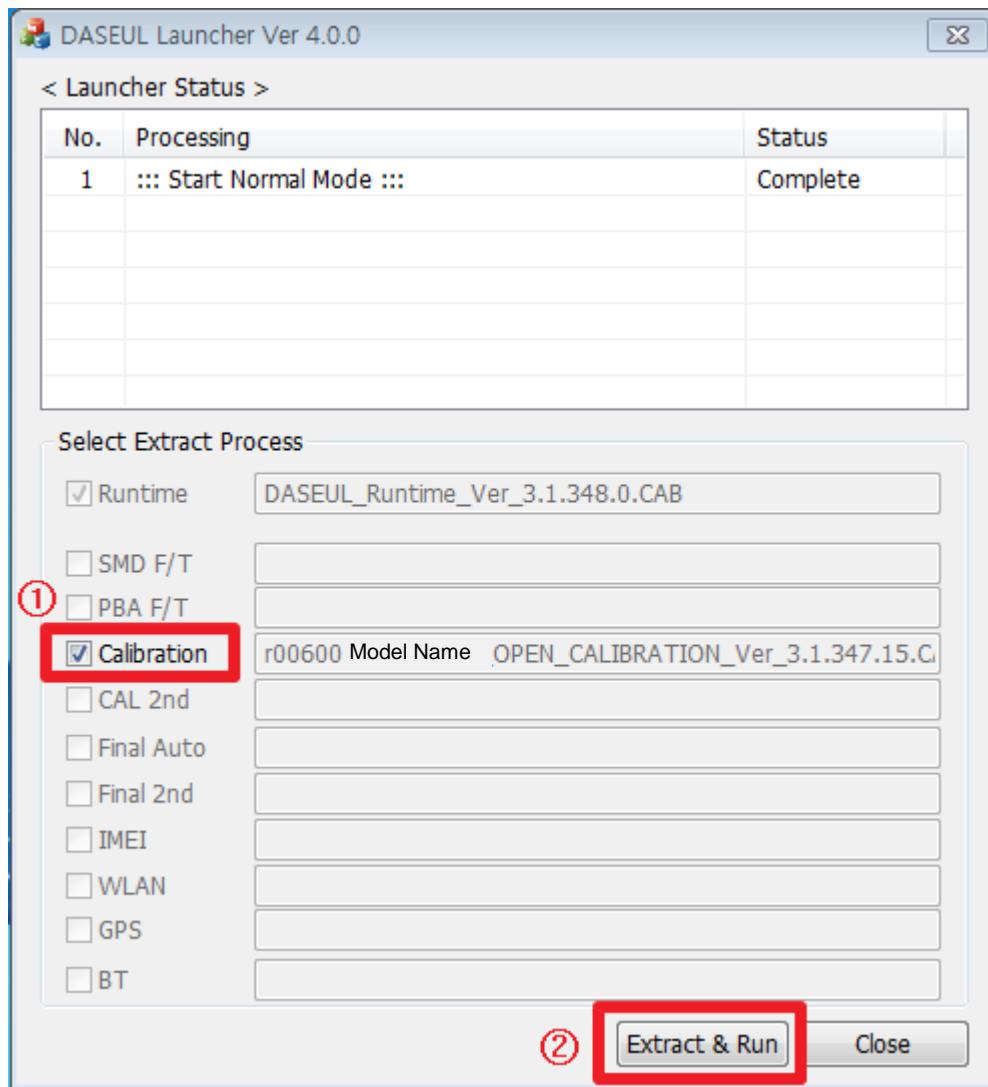
6. Level 1 Repair

6-4-2. RF Calibration Program

1. Run the RF Calibration Program Launcher, 'DASEUL_Launcher_vx.x.xx.exe'.

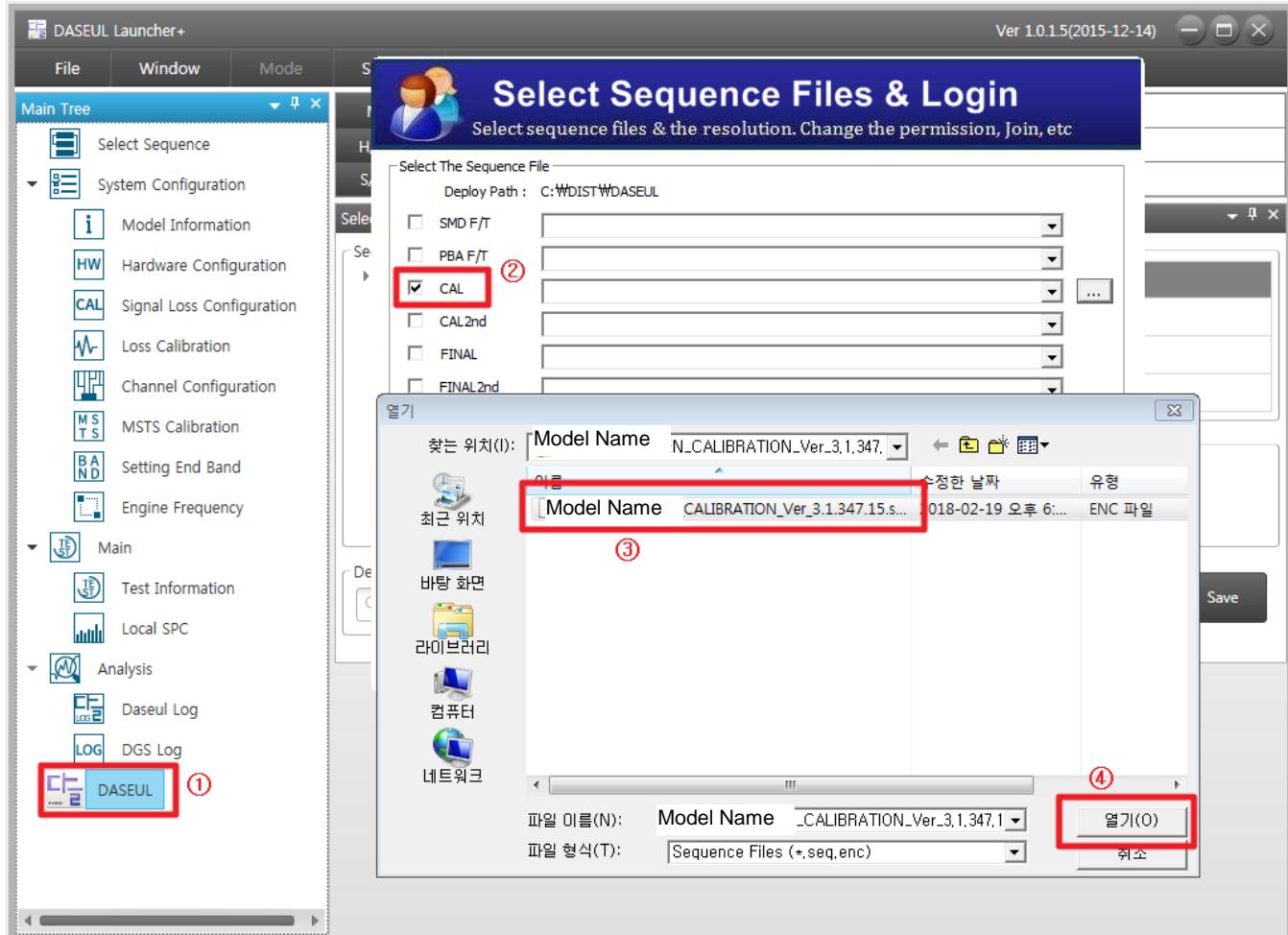


2. Check the 'Calibration' option and Click 'Extract & Run'.



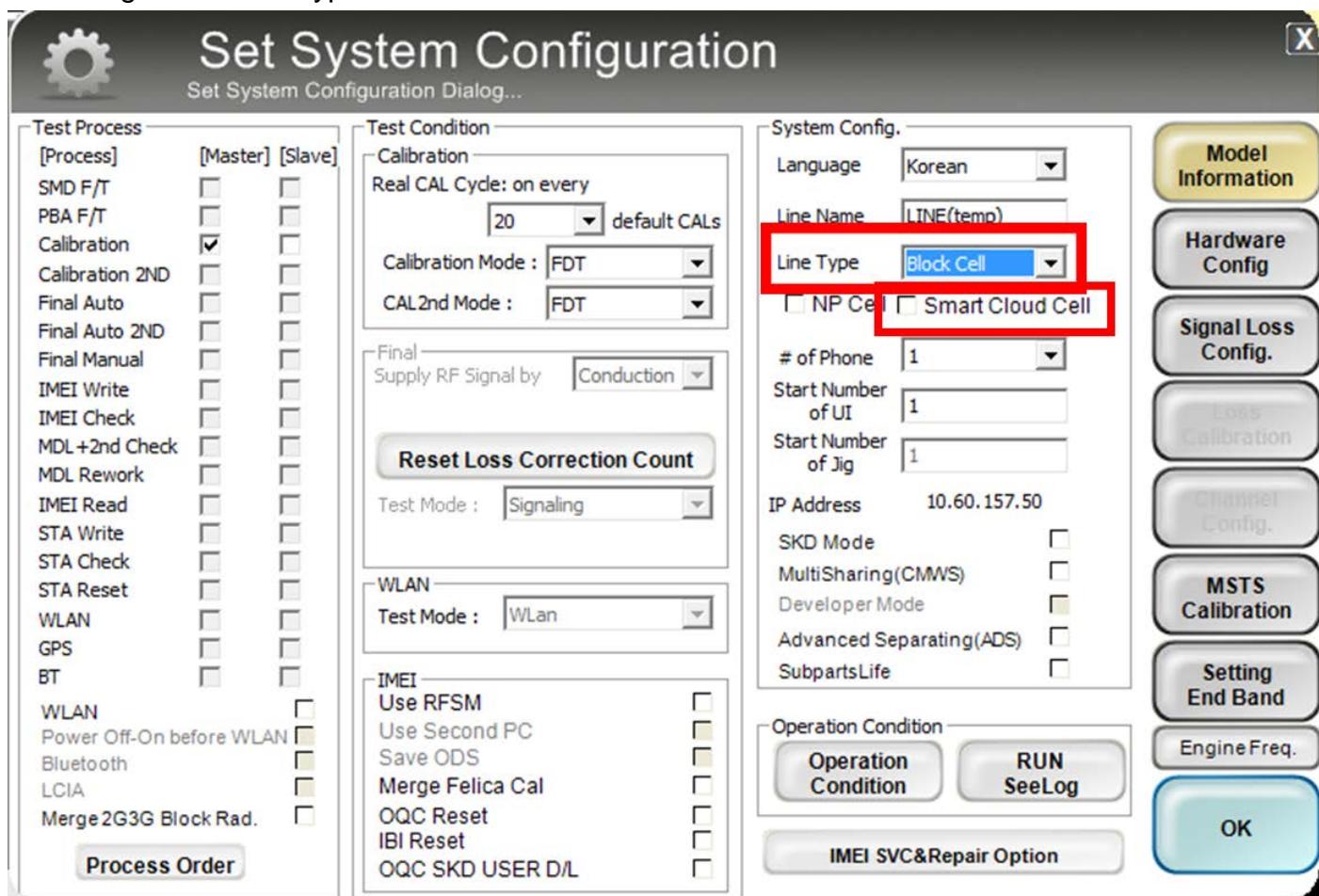
6. Level 1 Repair

3. Check the 'CAL' and open the model file, then select 'Start' button.



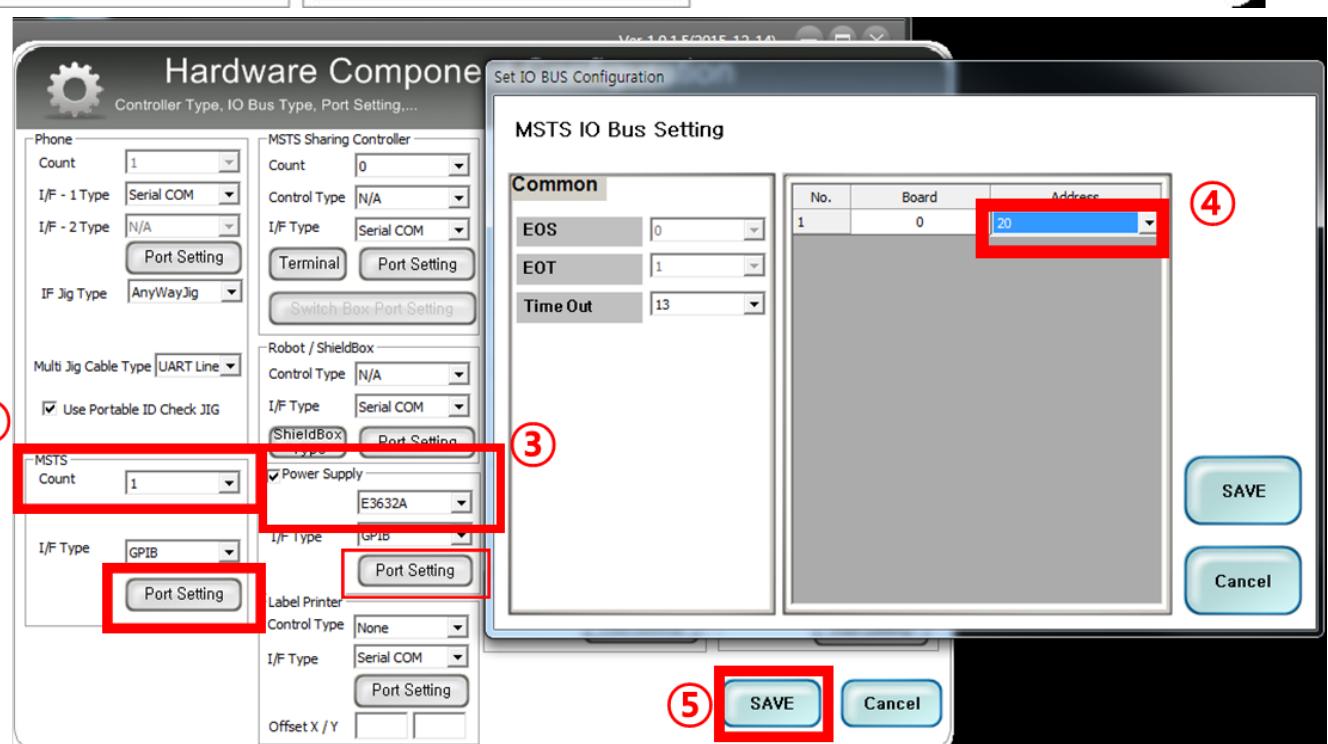
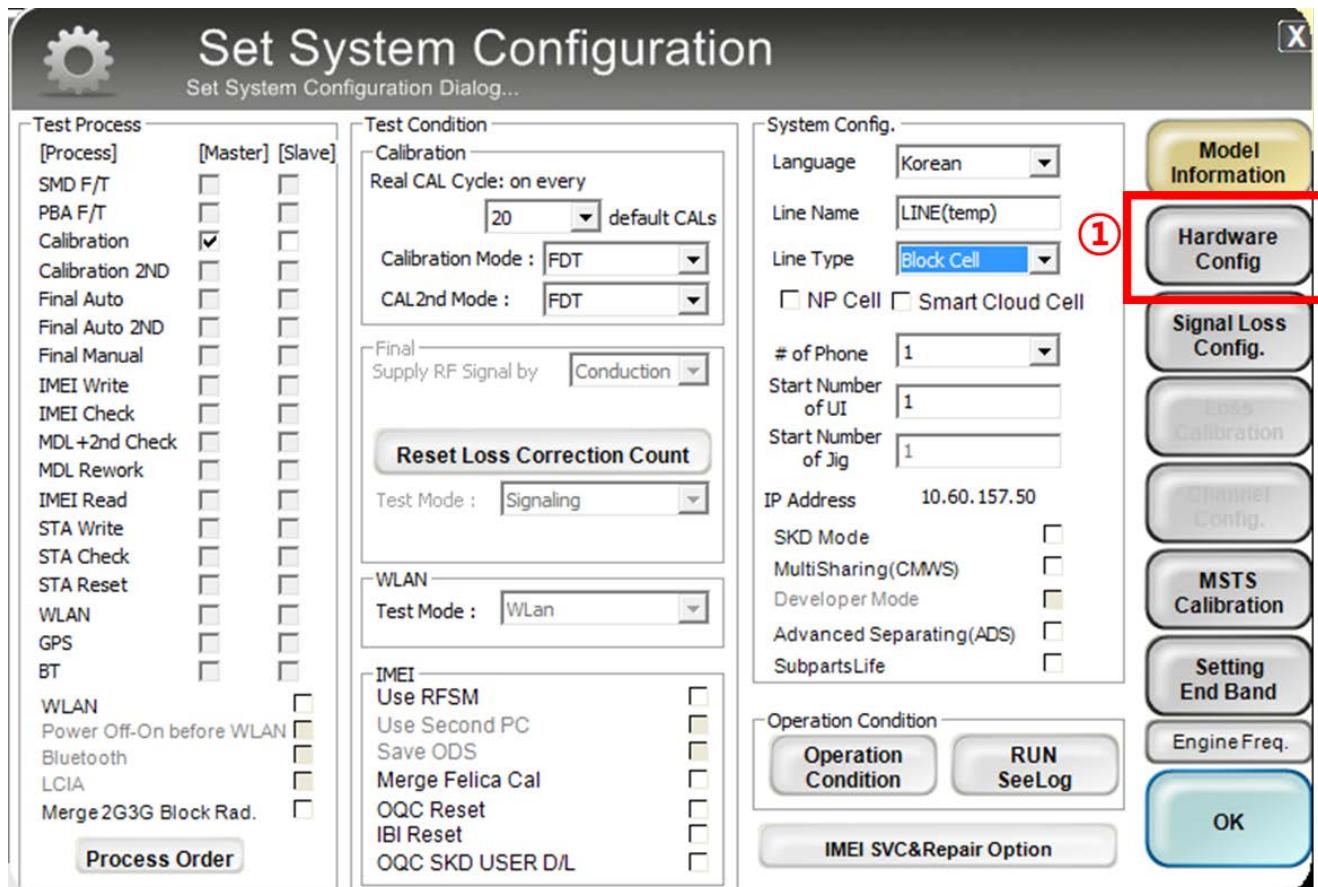
6. Level 1 Repair

4. Change the Line Type to 'Block Cell' and disable 'Smart Cloud Cell'.



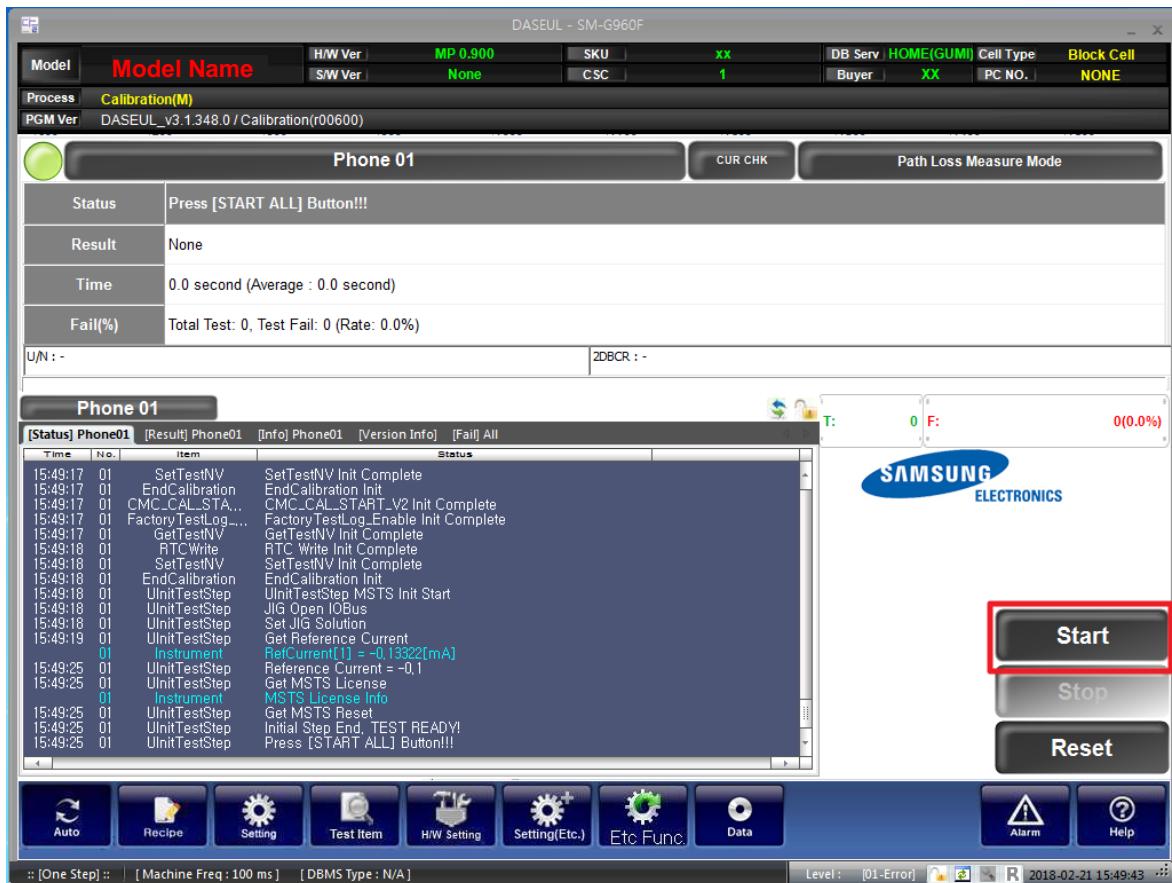
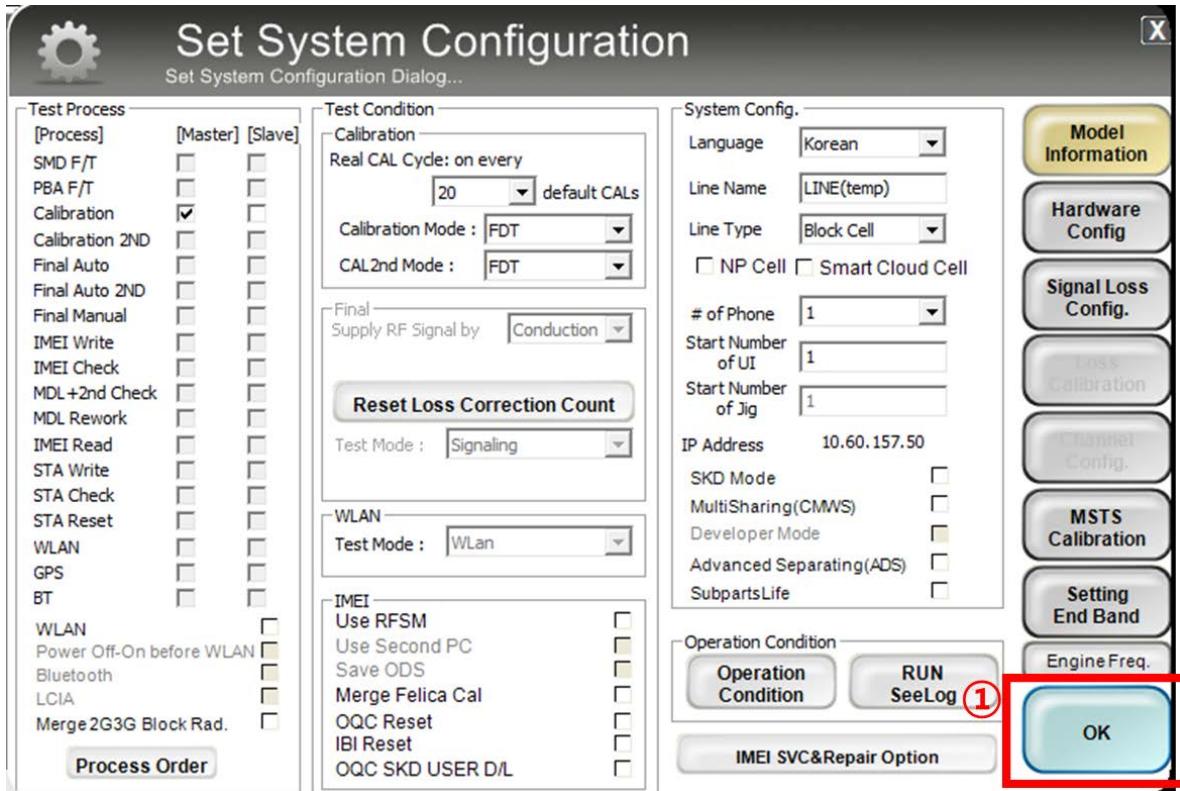
6. Level 1 Repair

5. Set the GPIB address of MSTS(CMW500) and Power Supply(E3632A) to enter 'Hardware Config' and 'Save'. (Check the GPIB address of equipments in advance)



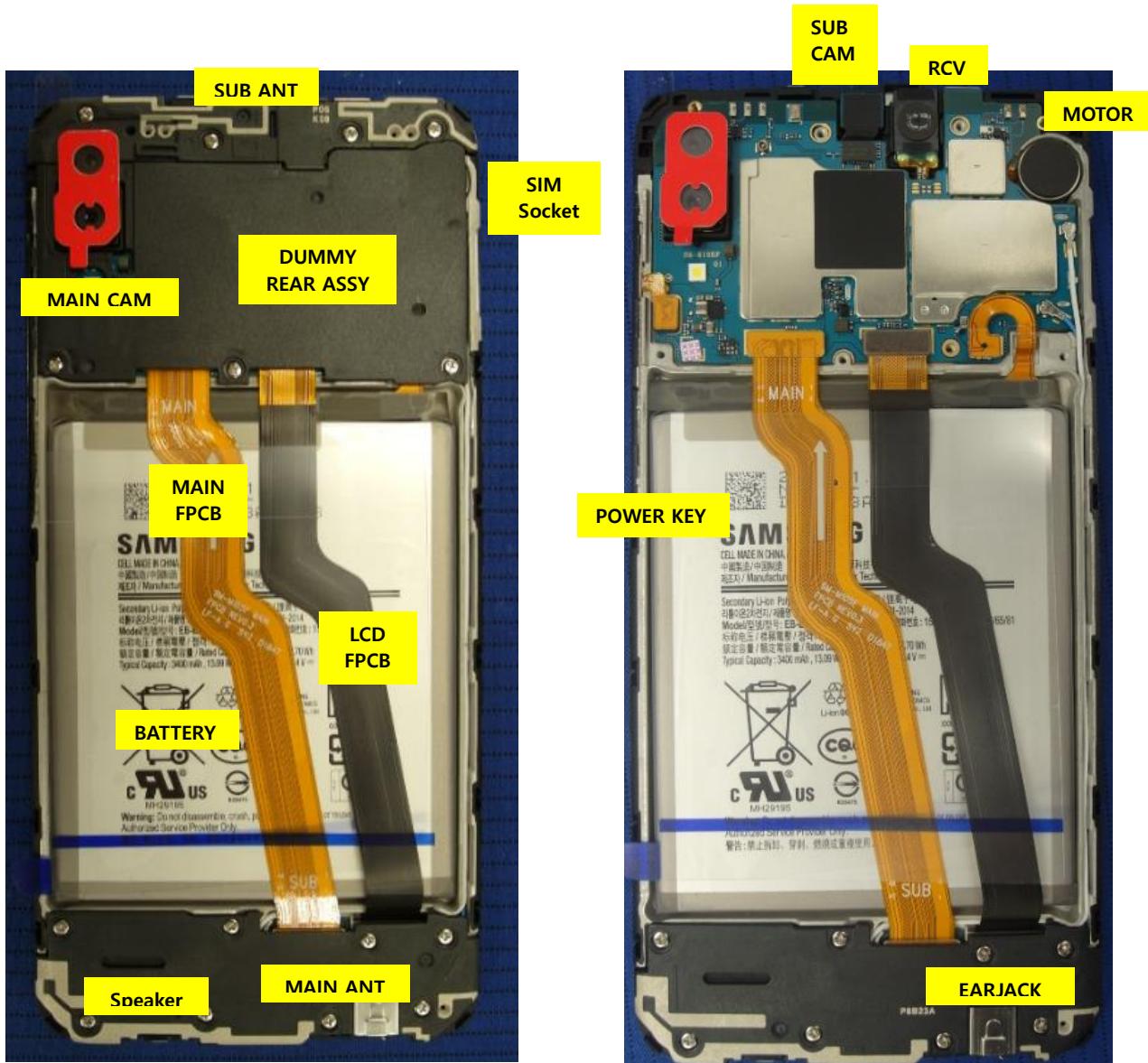
6. Level 1 Repair

6. Press 'OK' to start RF Calibration after completing all settings.



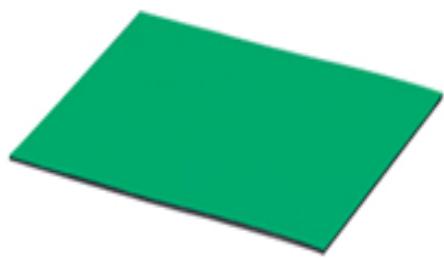
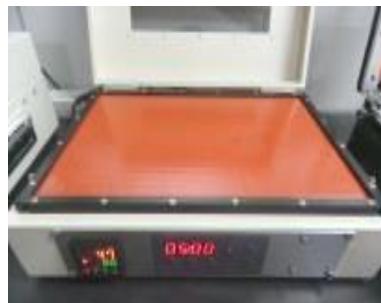
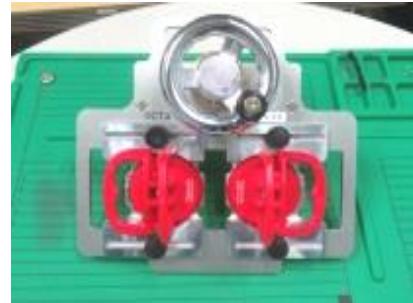
7. Level 2 Repair

7-1. Components on the Rear Case



7. Level 2 Repair

7-2. Pre-requisite

	
Tweezers / Disass'y Stick / Screw Driver	Anti-static Gloves
	
Anti-static Mat	Hot Plate
	
A OCTA Disassembly Holder	OCTA Disassembly Upper
	
Ethyl Alcohol	Cotton Swab

7. Level 2 Repair

7-3. Parts which must be changed after repair

BOM description & part code	Image	Remarks
A/S-SVC SUB PBA TAPE [GH81-16626A]		
A/S-SVC TAPE MAIN CAM FLANGE [GH81-16640A]		Replace for MAIN PBA SUB PBA

7. Level 2 Repair

7-4. Disassembly

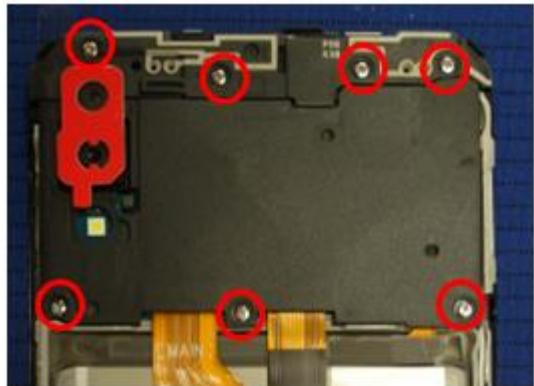
1

- 1) Disassemble the SIM tray.
- 2) Detach the Rear disassembling hook.
(sequence: right → left → top → bottom)



2

- 1) Unscrew 7 Point.
- 2) Disassemble SUB ANT
- 3) Disassemble dummy Rear.

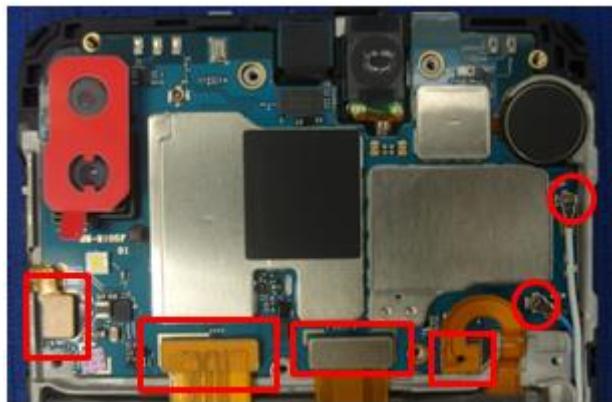


* Caution

Be care of scratch

3

- Disassemble 4 Point connector and 2 Point coaxial cable connector of PBA.



* Caution

Be care of scratch

4

- 1) Unscrew 1 Point.
- 2) Detach the PBA.



* Caution

Be care of connector damage

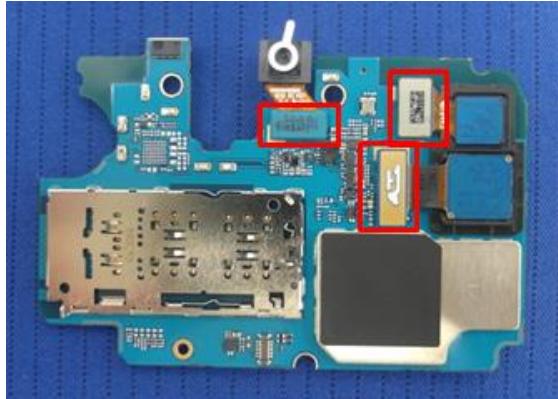
* Caution

Be care of scratch

7. Level 2 Repair

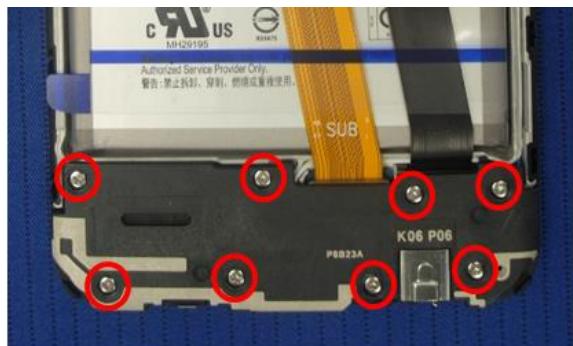
5

Disassemble the MAIN CAM(2 connector) and SUB CAM.



6

1) Unscrew PBA 8 points.
2) Detach MAIN ANT.



※ Caution

- 1) Be care of scratch
- 2) Be care of connector damage
- 3) Be careful not to damage the PBA

※ Caution

Be care of scratch

7

1) Disassemble 1 connector 2 coaxial cable connector.
2) Detach the SUB PBA.



※ Caution

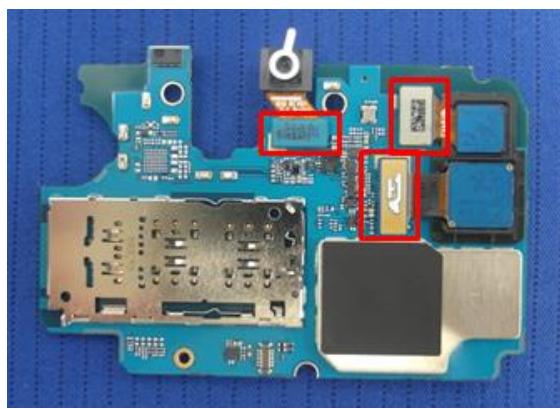
- 1) Be care of scratch
- 2) Be care of connector/cable damage
- 3) Be care of damage of PBA.

7. Level 2 Repair

7-5. Assembly

1

- 1) Assemble the MAIN CAM.
- 2) Assemble the SUB CAM.



2

- 1) Attach SUB PBA on Front.
- 2) Assemble the MAIN FPCB and 2 coaxial cable.
- 3) Line coaxial cable up following the Front.



※ Caution

Be care of PBA damage.

3

- Screw 8 point in SUB PBA.
* Torque Value : 1.1kgfcm
* Size : M1.4 * L3.0 (6001-003226)

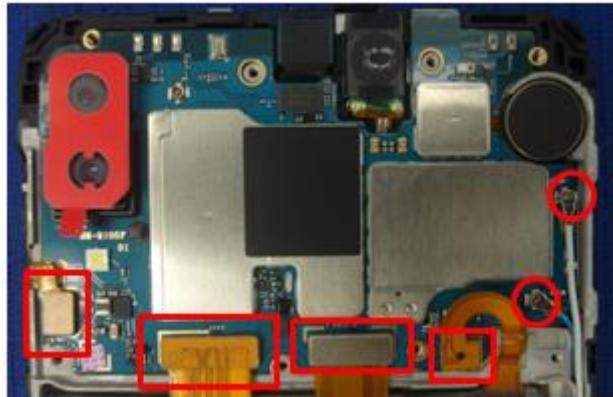


※ Caution

Be care of SUB PBA damage

4

- 1) Attach the PBA
- 2) Assemble 4 point connector and 2 point coaxial cable connector.



※ Caution

- 1) Be care of FPCB damage and tilt
- 2) Be care of press power/time

※ Caution

Be care of PBA damage

7. Level 2 Repair

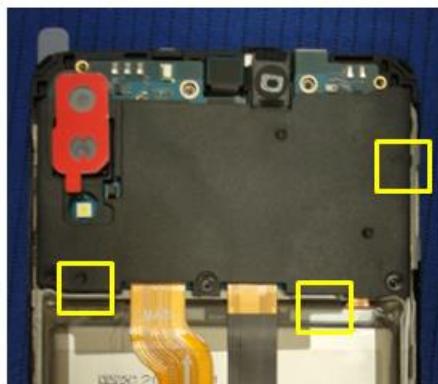
5

Screw insertion 1 Point.
* Torque Value : 0.95 ± 0.06 kgfcm
* Size : M1.4 * L2.0 (6001-001695)



6

Assemble the dummy REAR in sequence.
(3 point Hook)



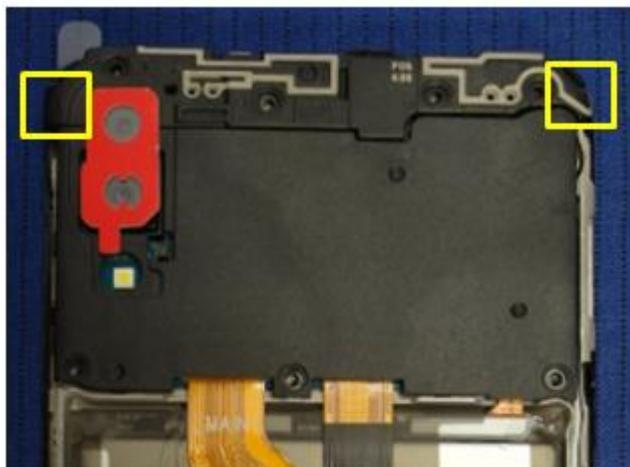
DUMMY REAR HOOK

※ Caution

- 1) Be care of chip damage nearby screw point
- 2) Be care of press power/time

7

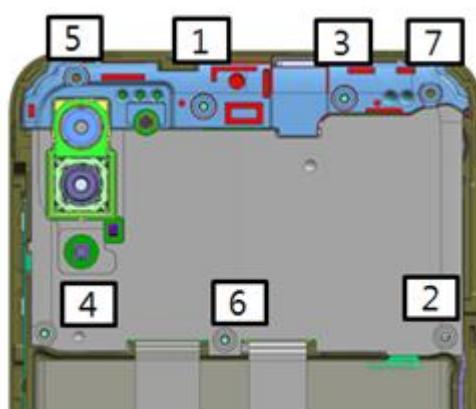
Assemble SUB ANT in sequence.
(2 point Hook)



SUB ANTENNA HOOK

8

Screw insertion 7 Point.
* Torque Value : 1.1 ± 0.1 kgfcm
* Size : M1.4 * L3.0 (6001-003226, silver)



※ Caution

- Be care of scratch SUB ANT damage

※ Caution

- 1) Be care of dummy Rear and SUB ANT damage
- 2) Be care of press power/time

7. Level 2 Repair

9

- 1) Assemble the REAR.
* Bottom → Left upside → Top → right upside .
- 2) Check the volume key and power key.

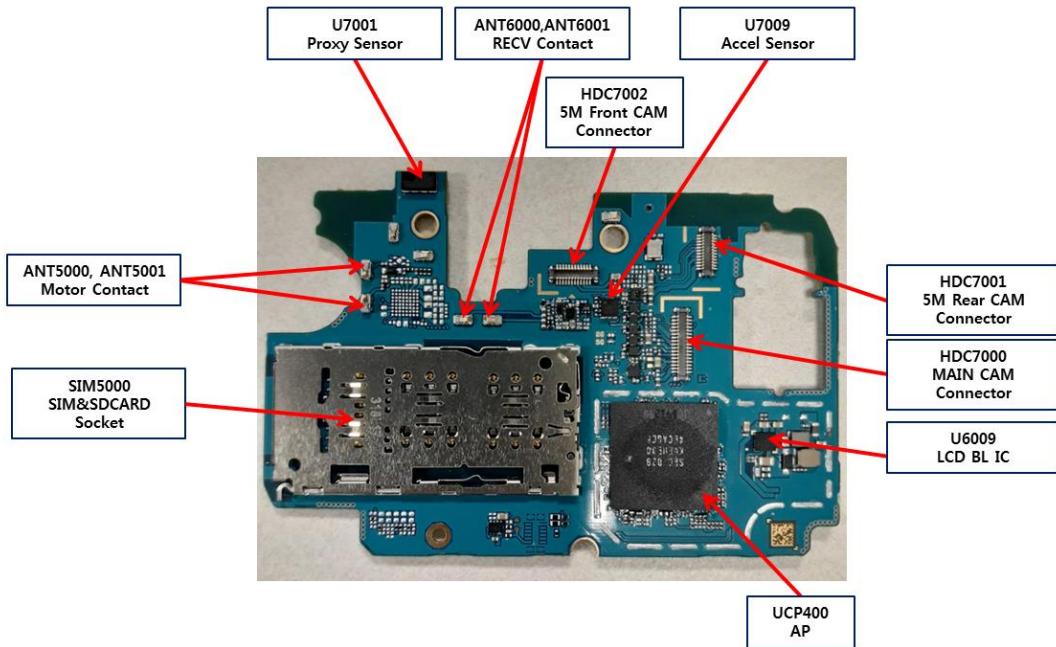


※ Caution

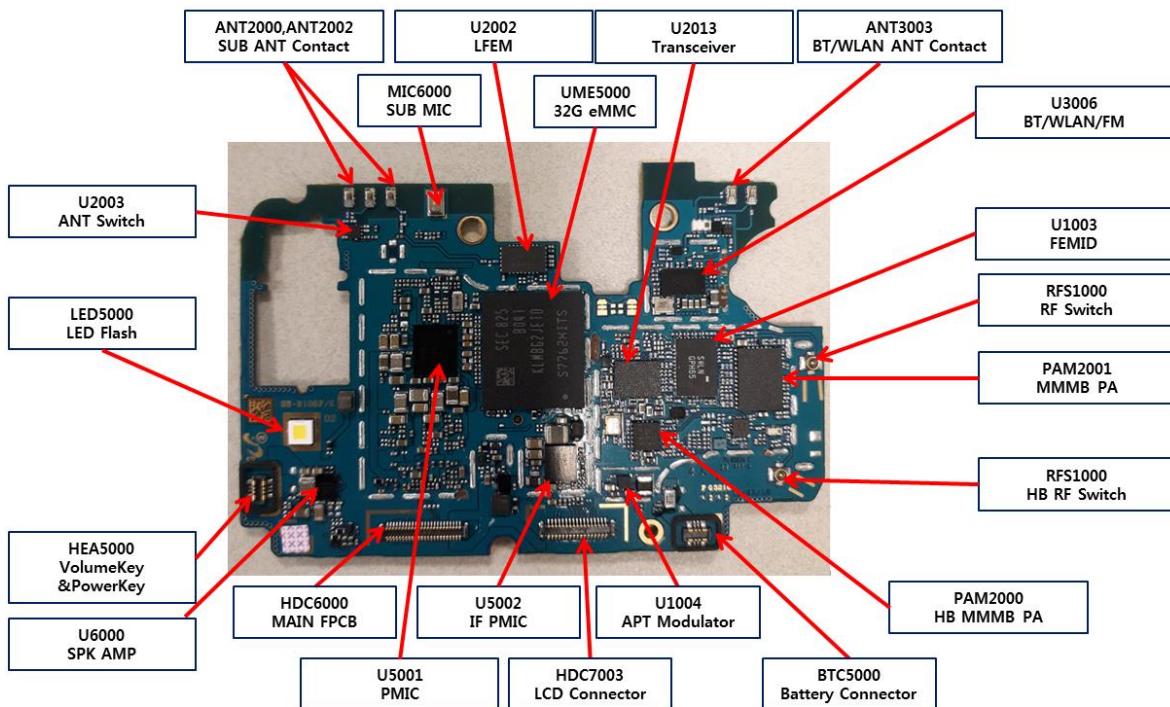
Do not press a S-Pen cover over 5 seconds to prevent display damage.

8. Level 3 Repair

8-1. Components Layout

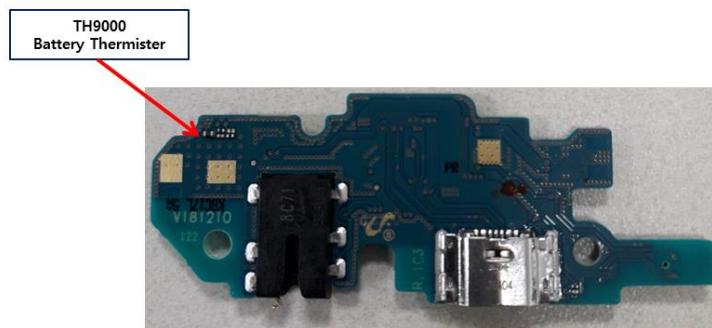
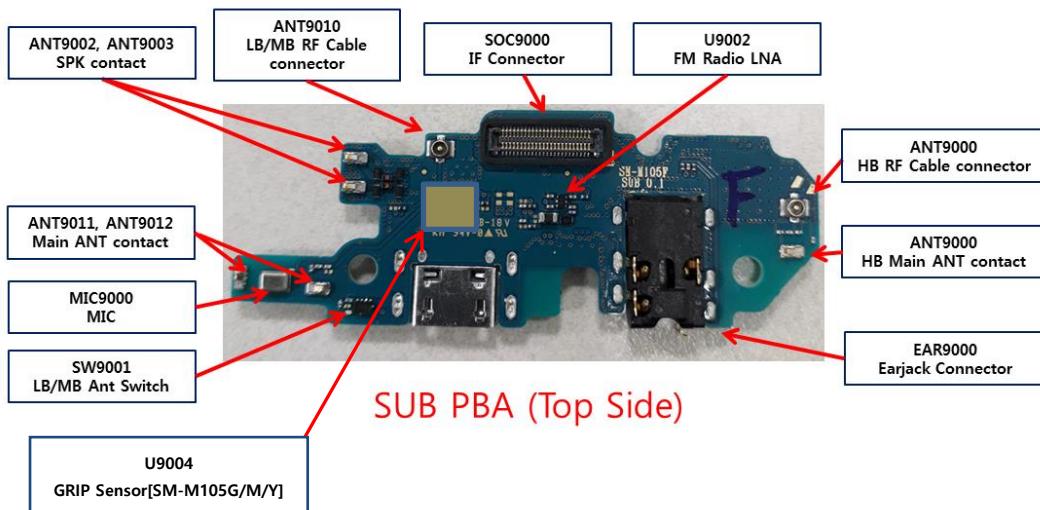


PBA (Top Side)



PBA (Bottom Side)

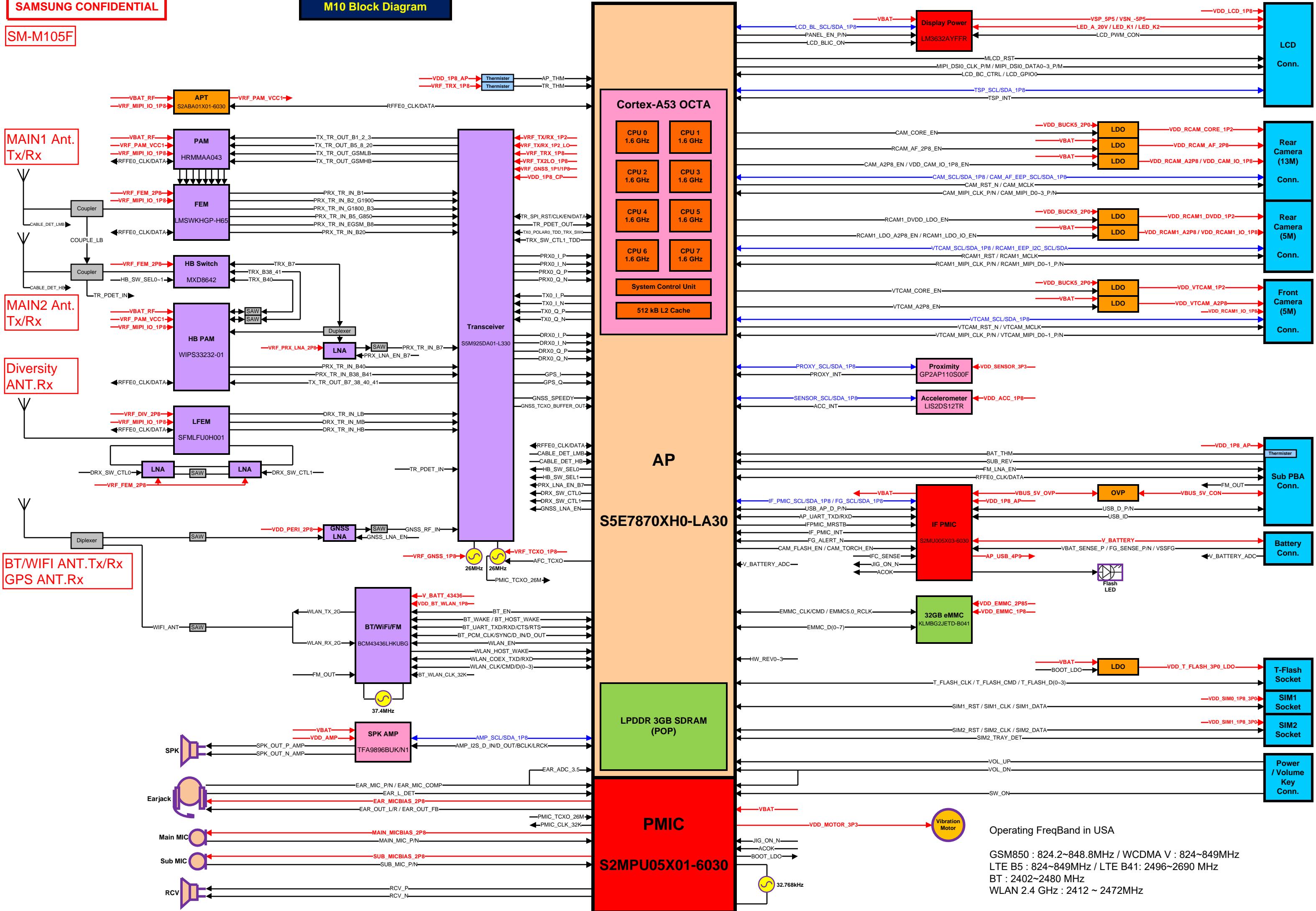
8. Level 3 Repair

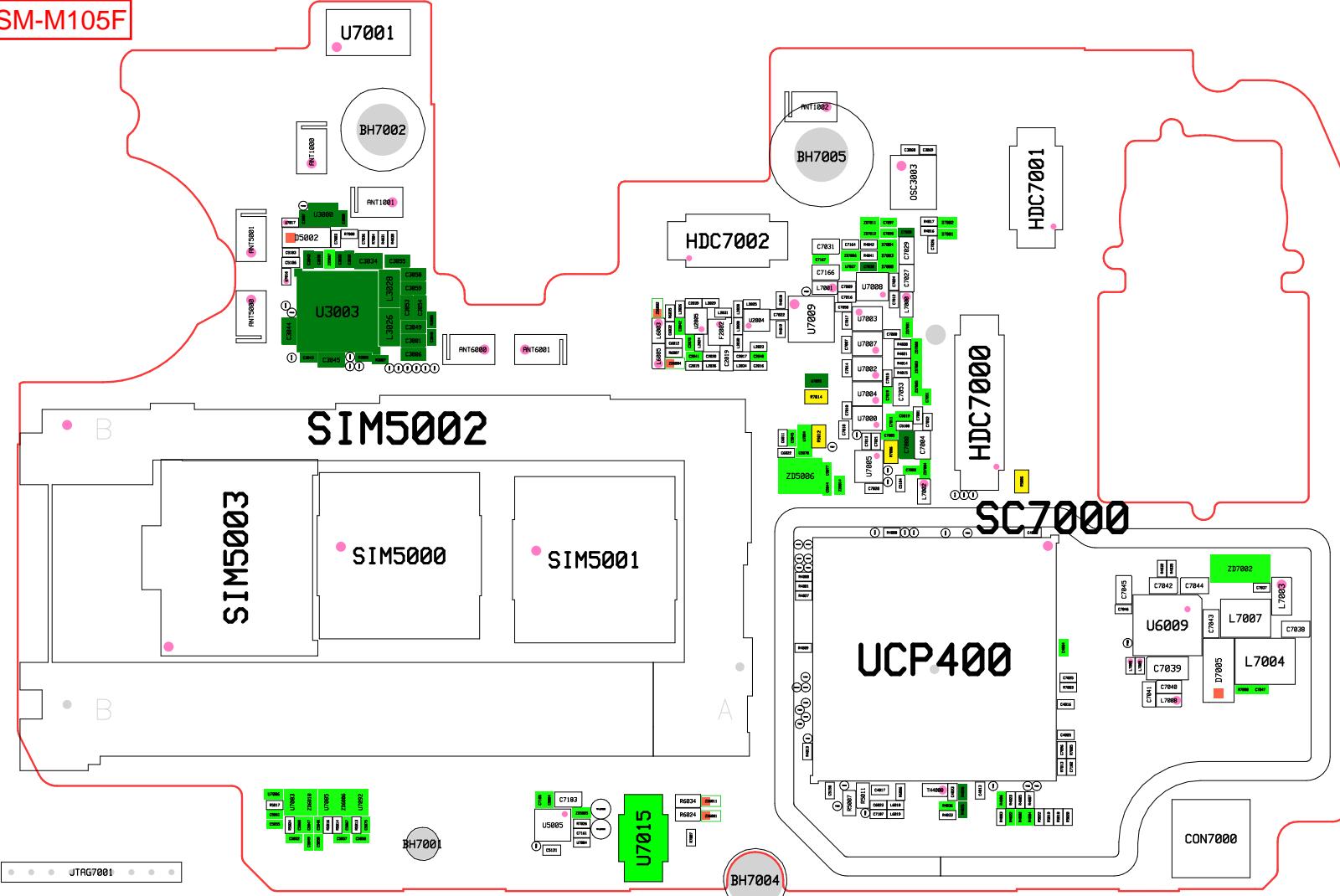


SUB PBA (Bottom Side)

M10 Block Diagram

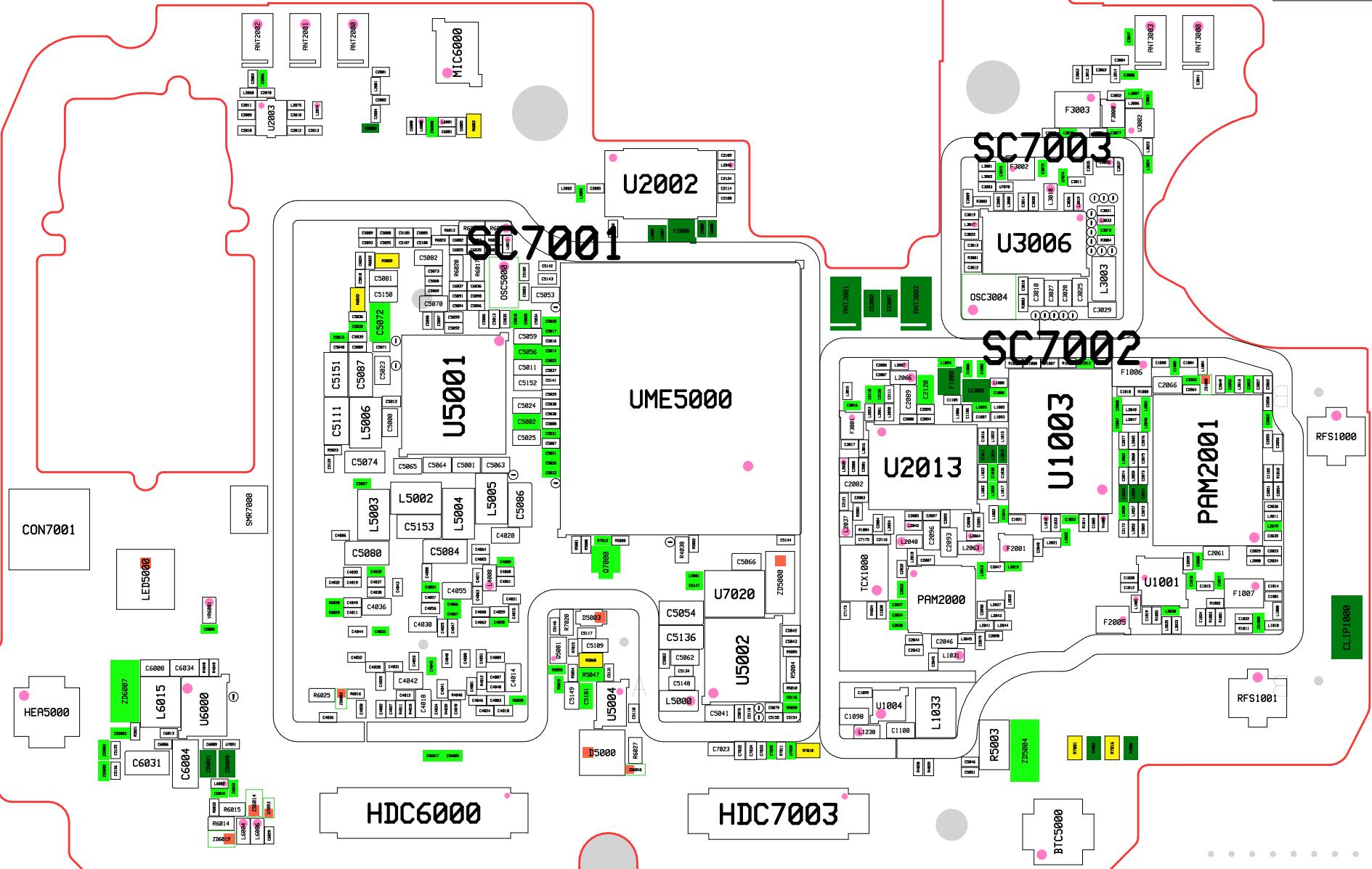
SM-M105F

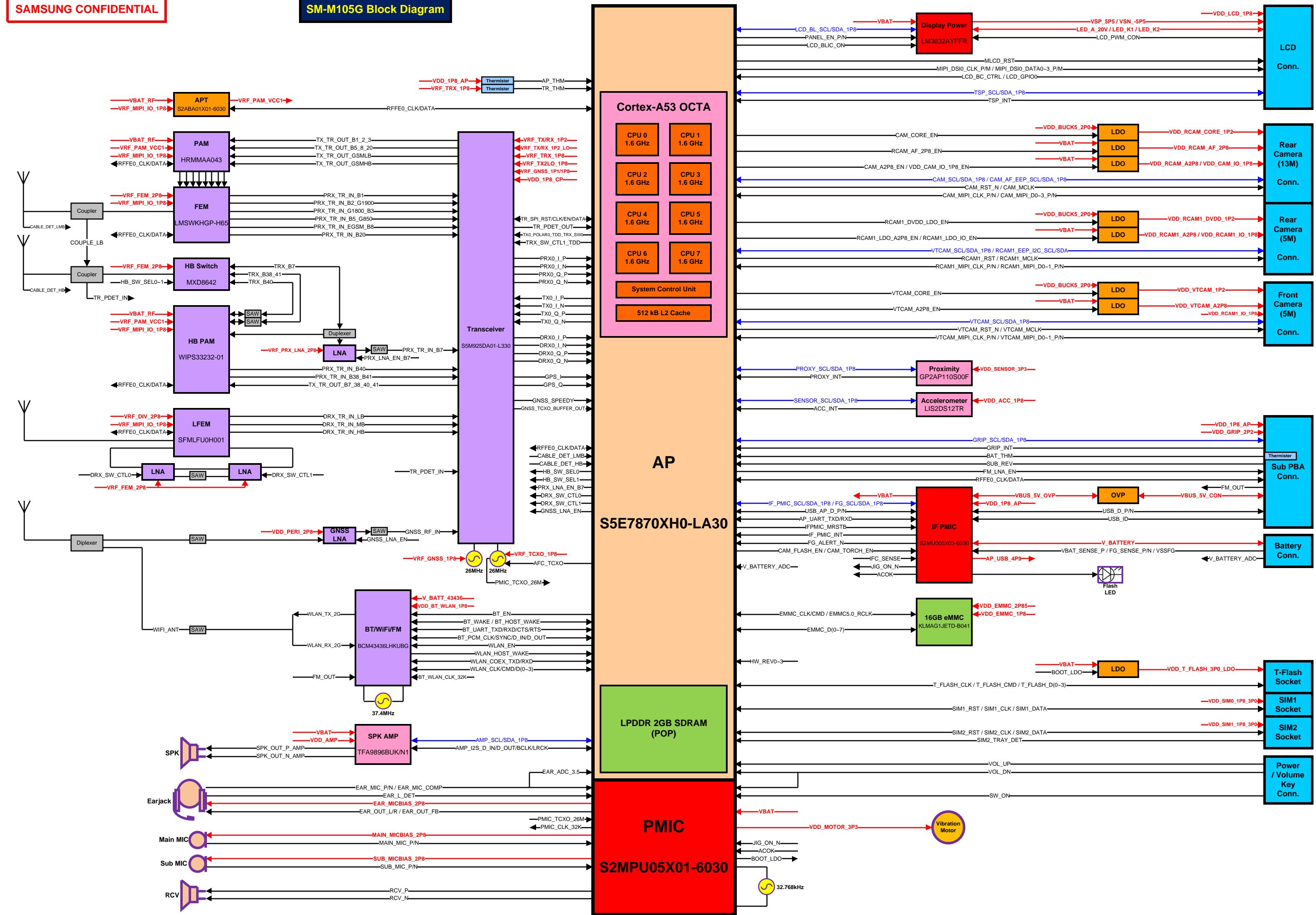


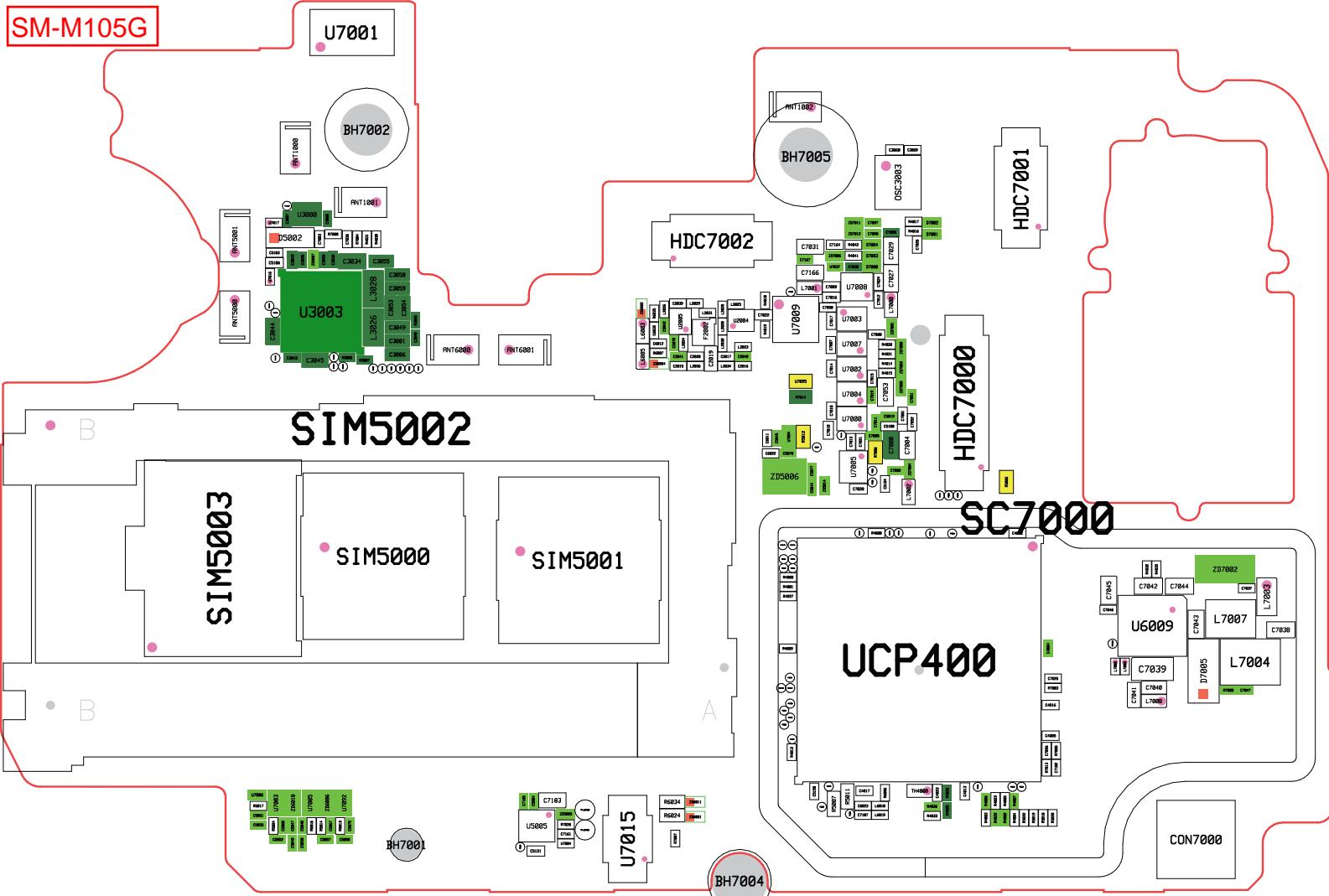


SM-M105F

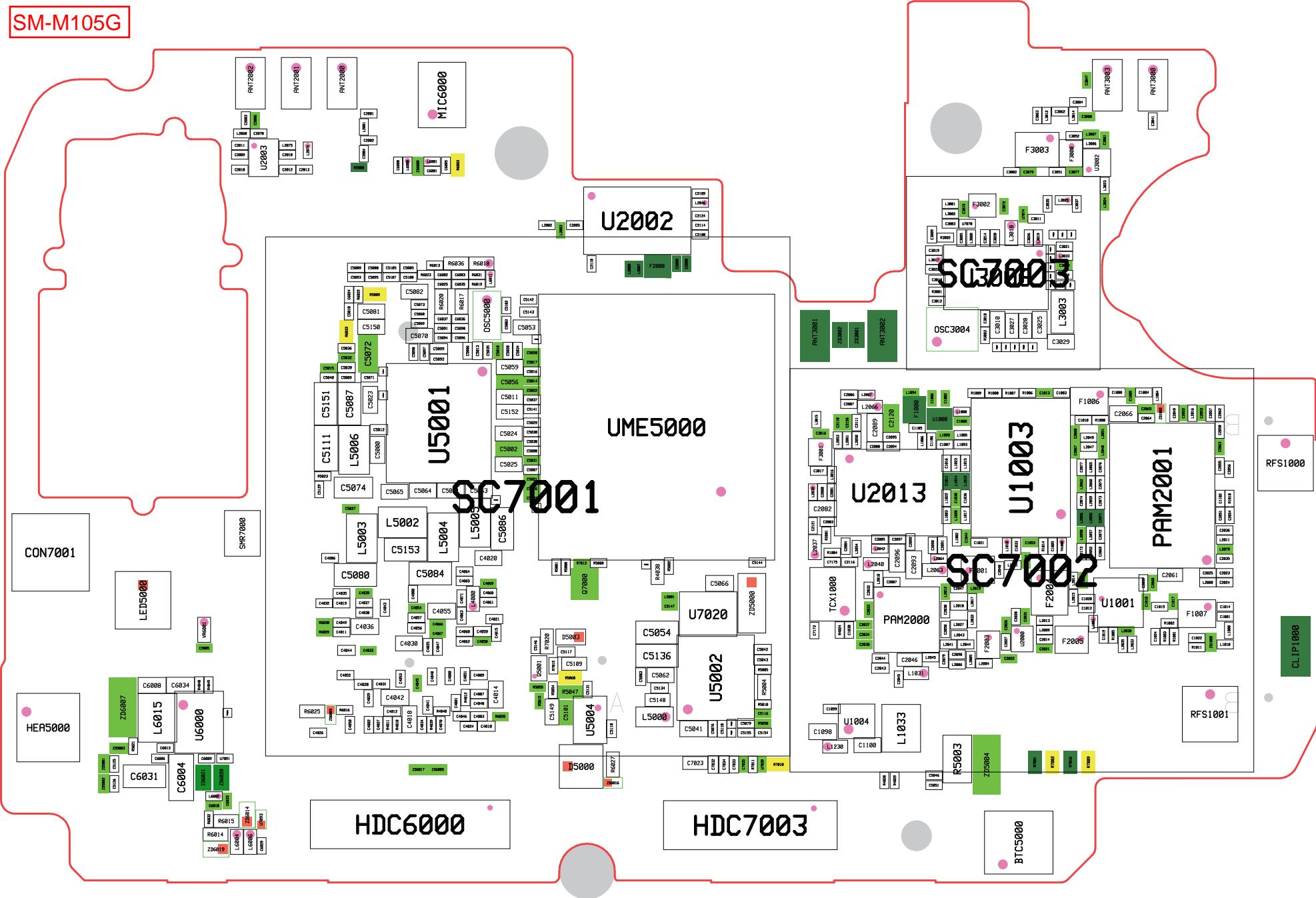
Routing :
Resin :



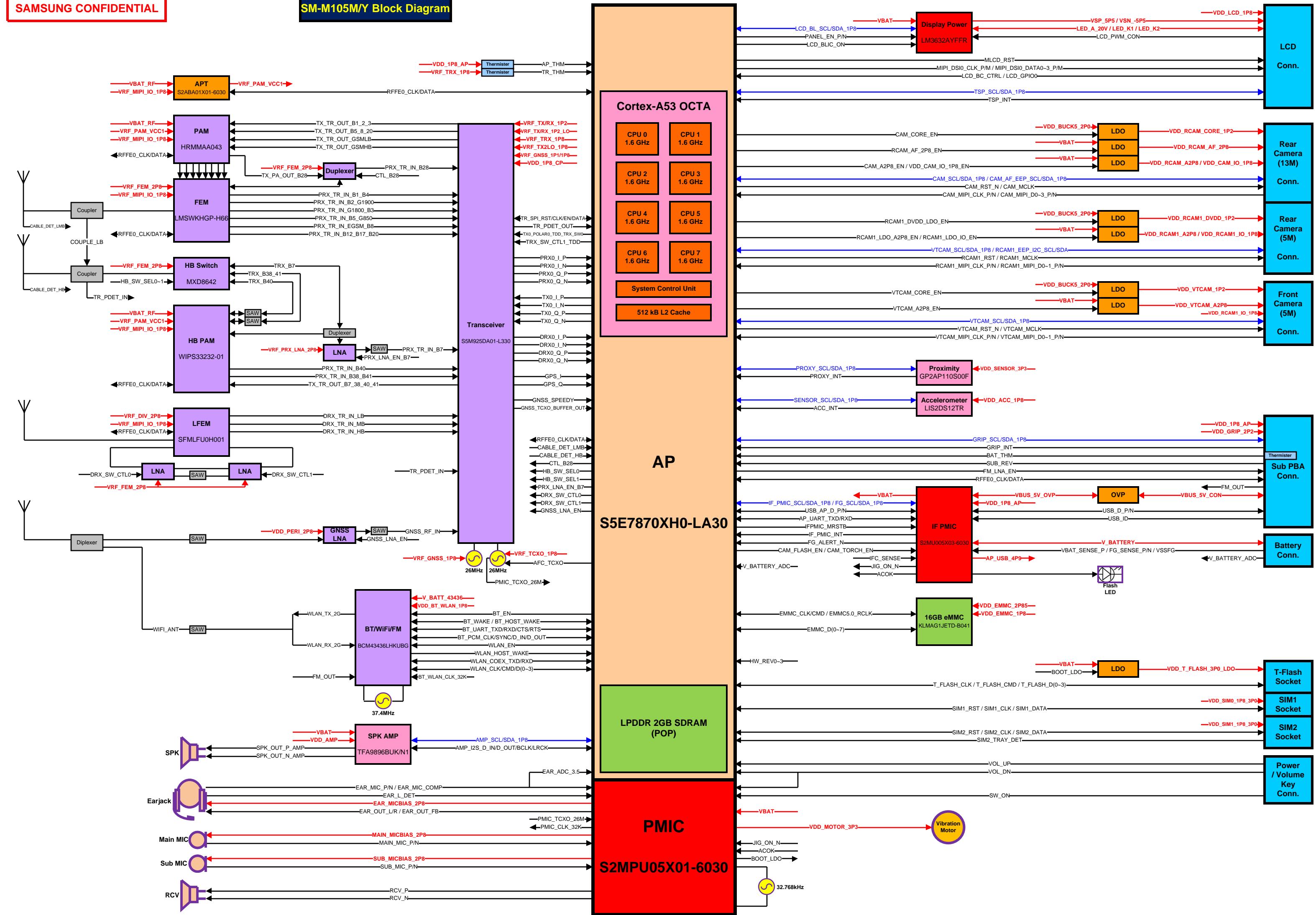


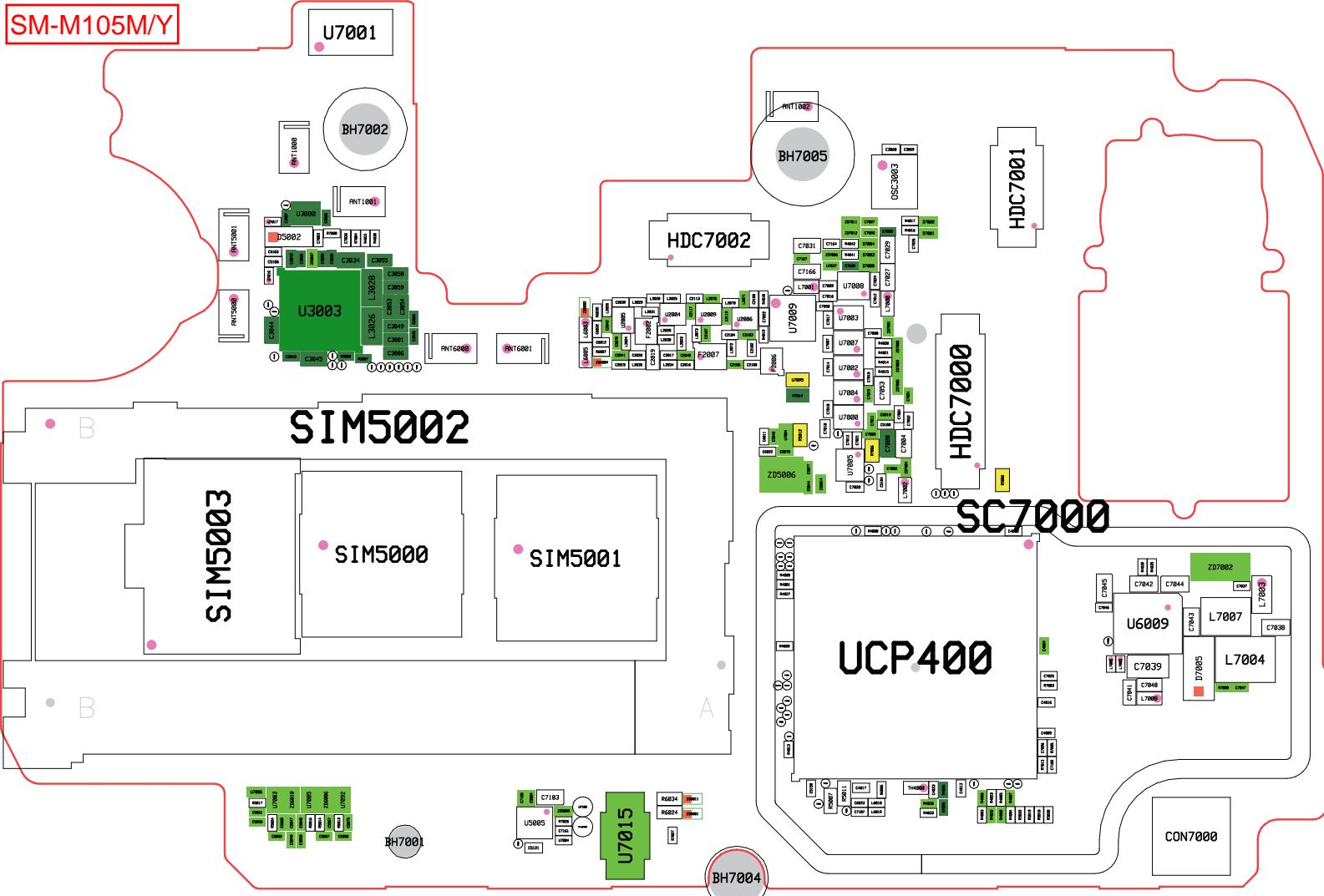


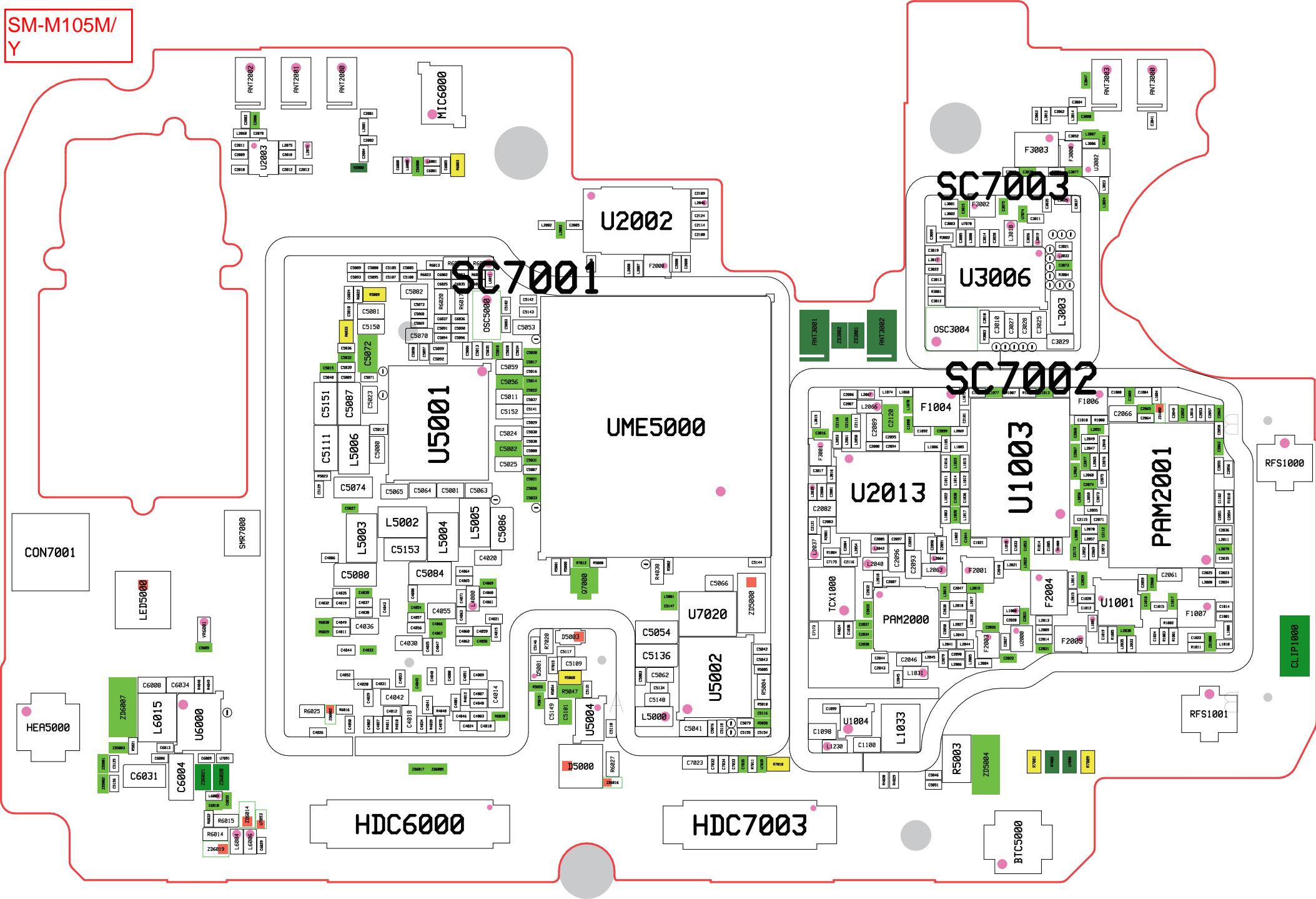
SM-M105G



SM-M105M/Y Block Diagram

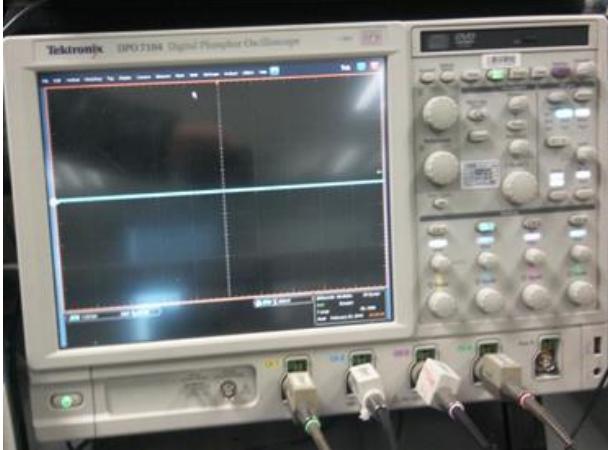
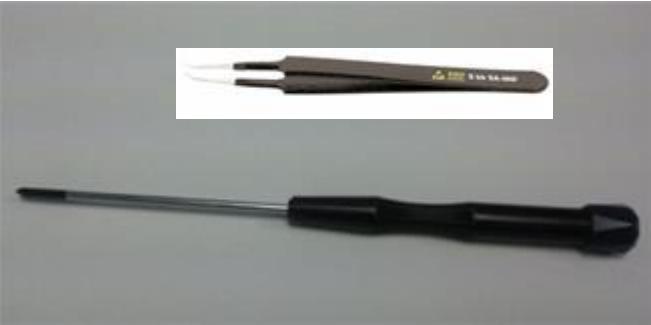
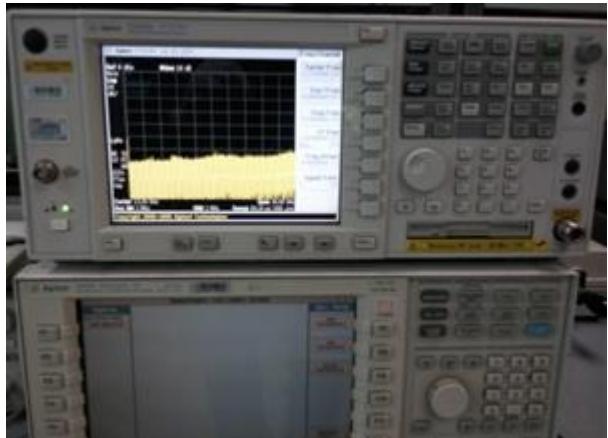






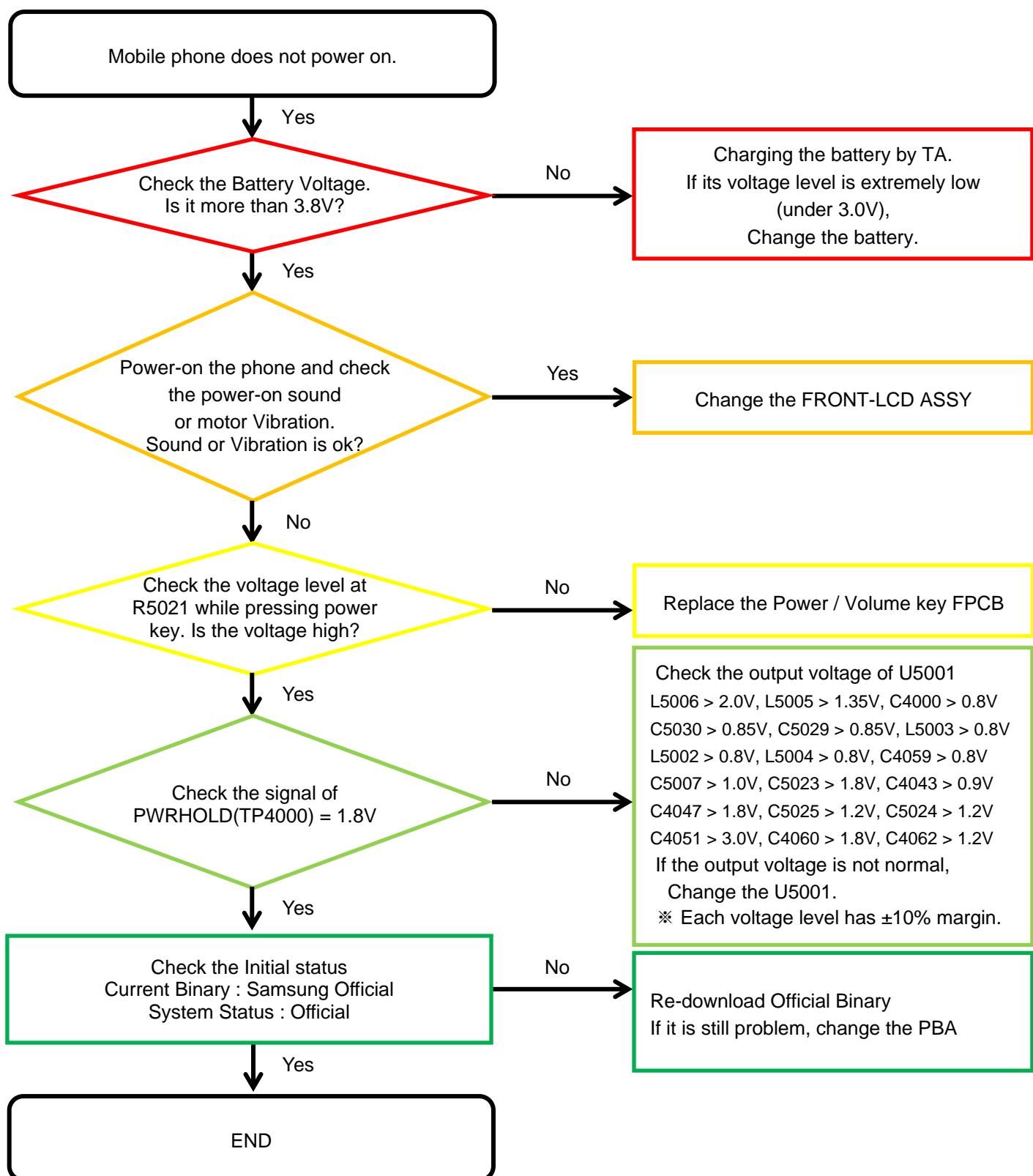
8. Level 3 Repair

8-3. Flow chart of Troubleshooting.

	
Oscilloscope	Digital Multimeter
	
Power Supply	+ driver, ESD Safe Tweezer
	
8960 & Spectrum Analyzer	Soldering iron

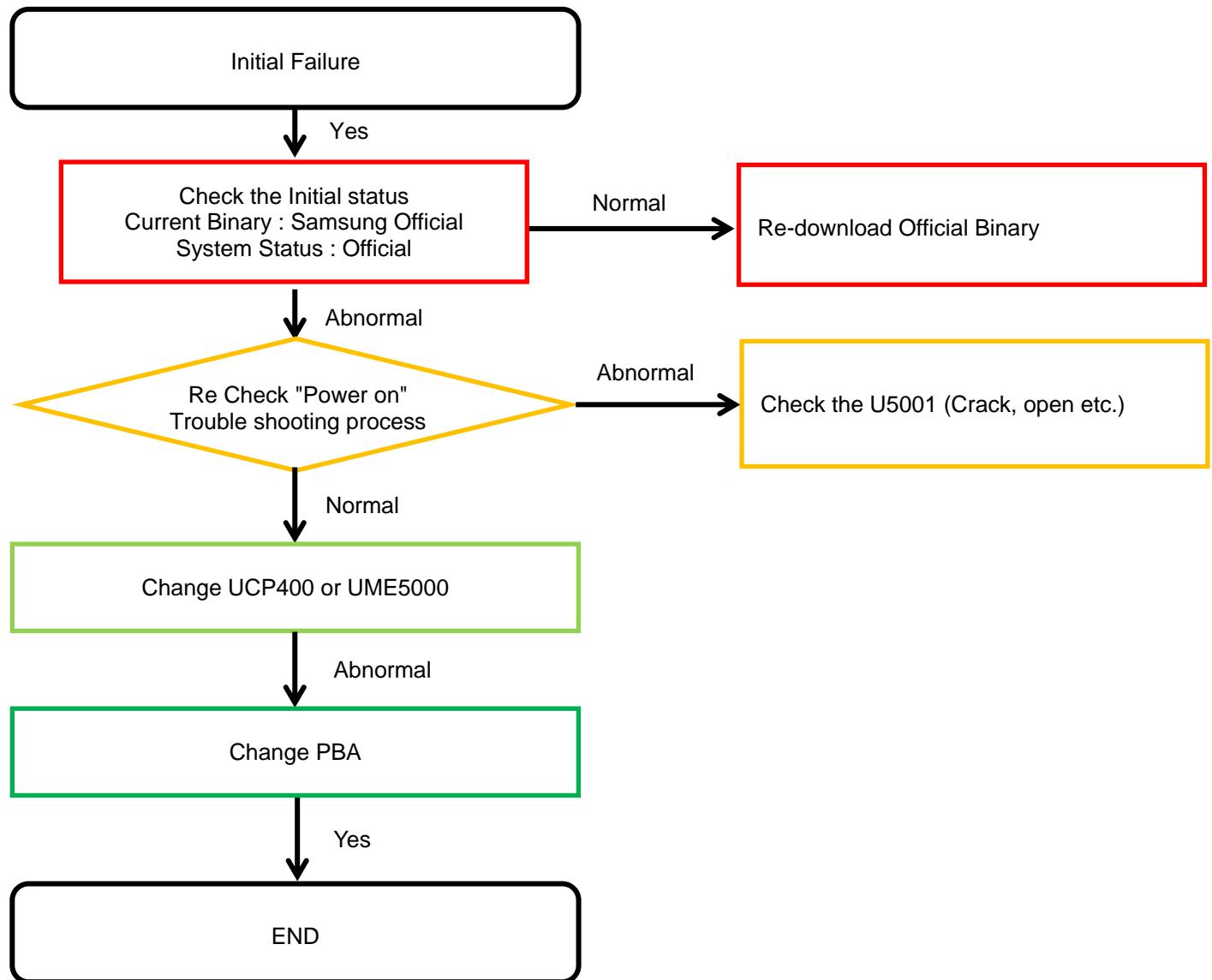
8. Level 3 Repair

8-4-1. Power On



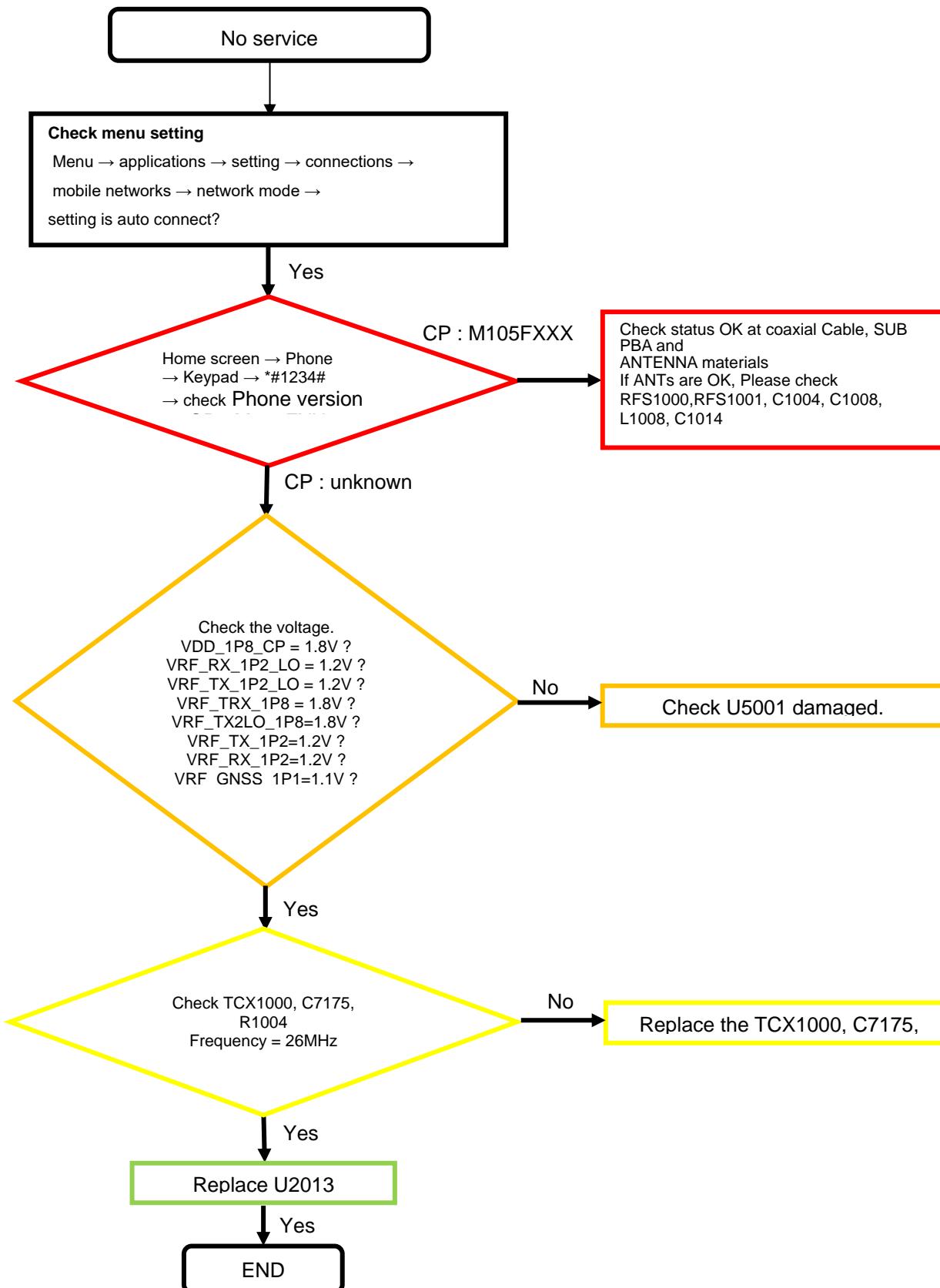
8. Level 3 Repair

8-4-2. Initial



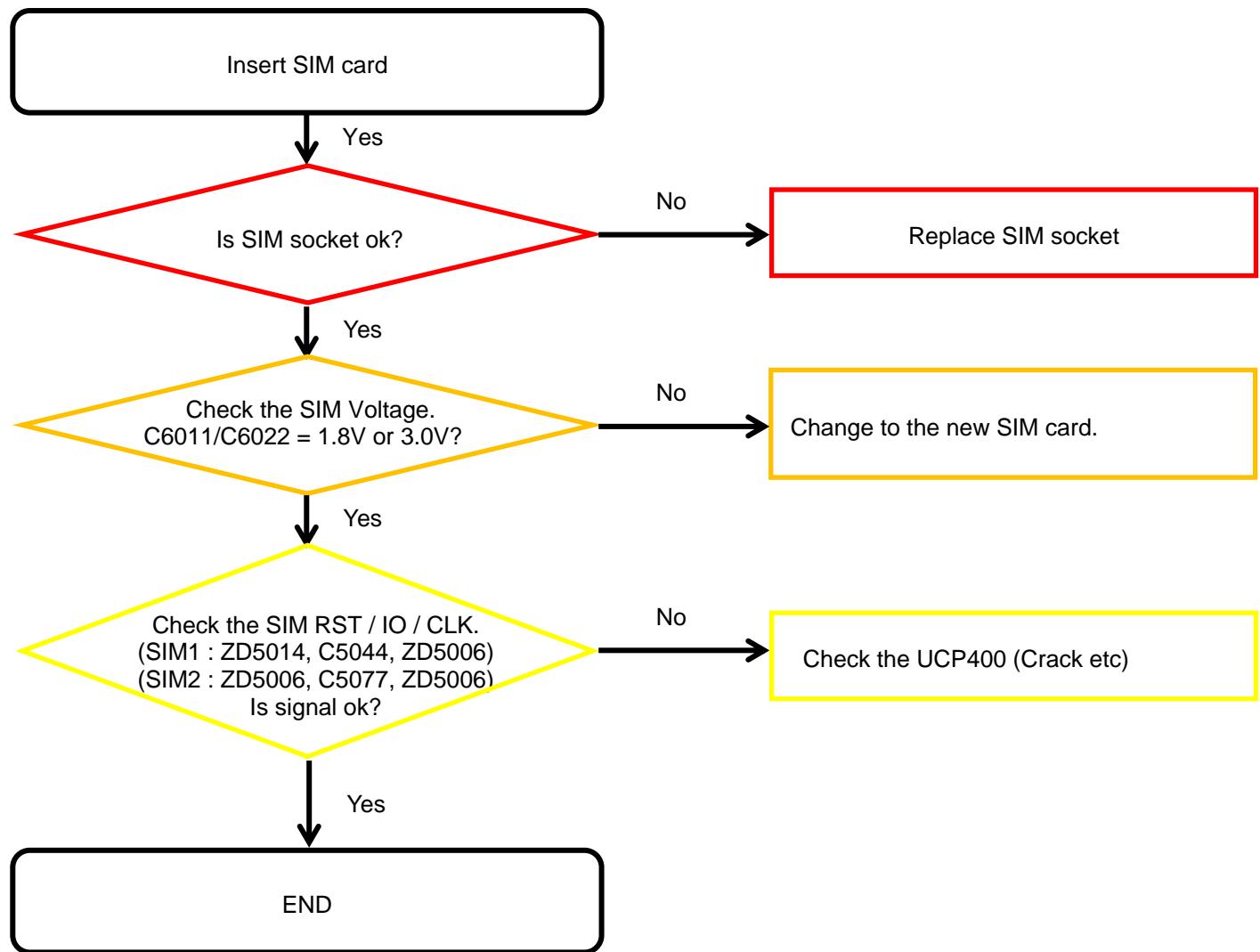
8. Level 3 Repair

8-4-3. No Service



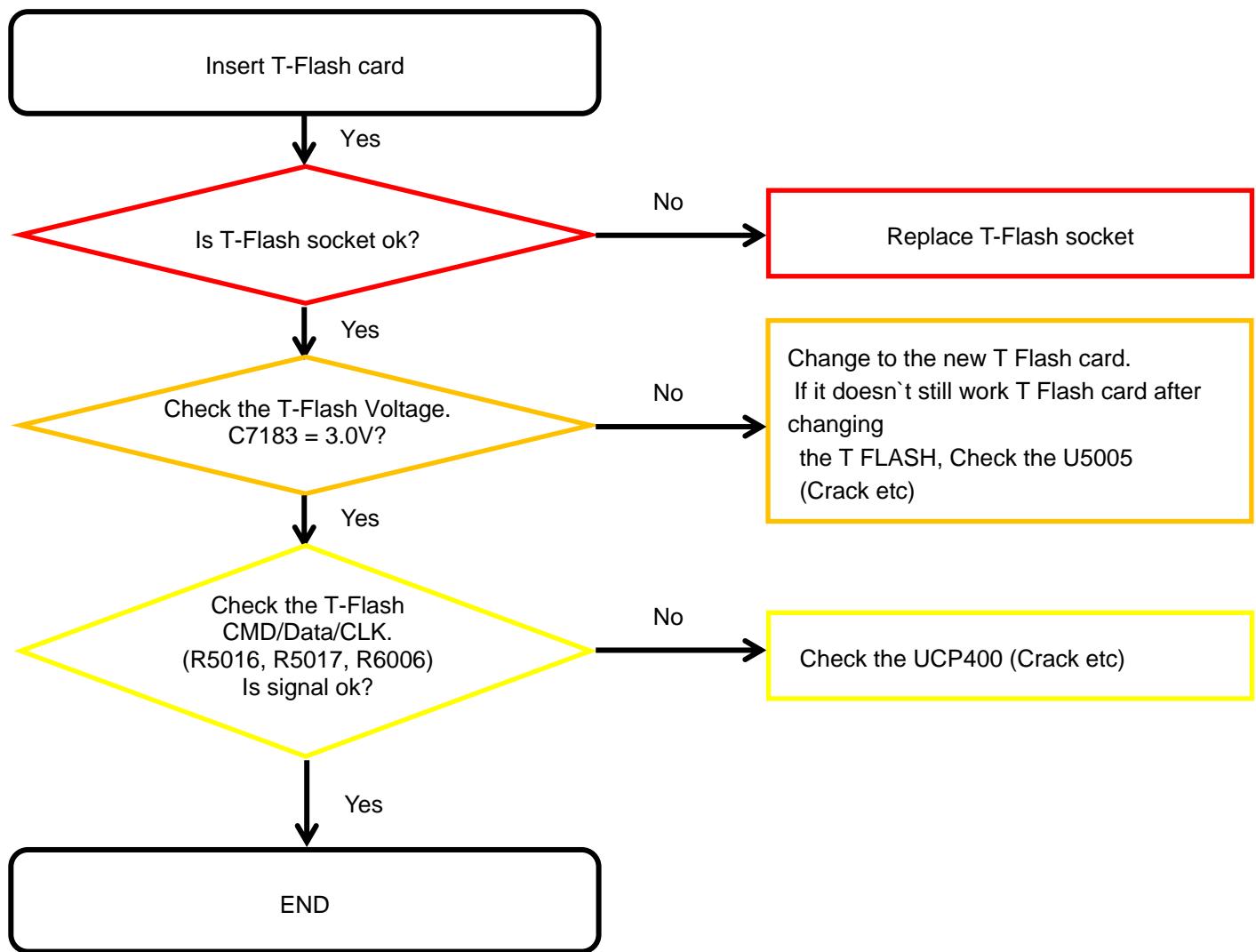
8. Level 3 Repair

8-4-4. SIM Part



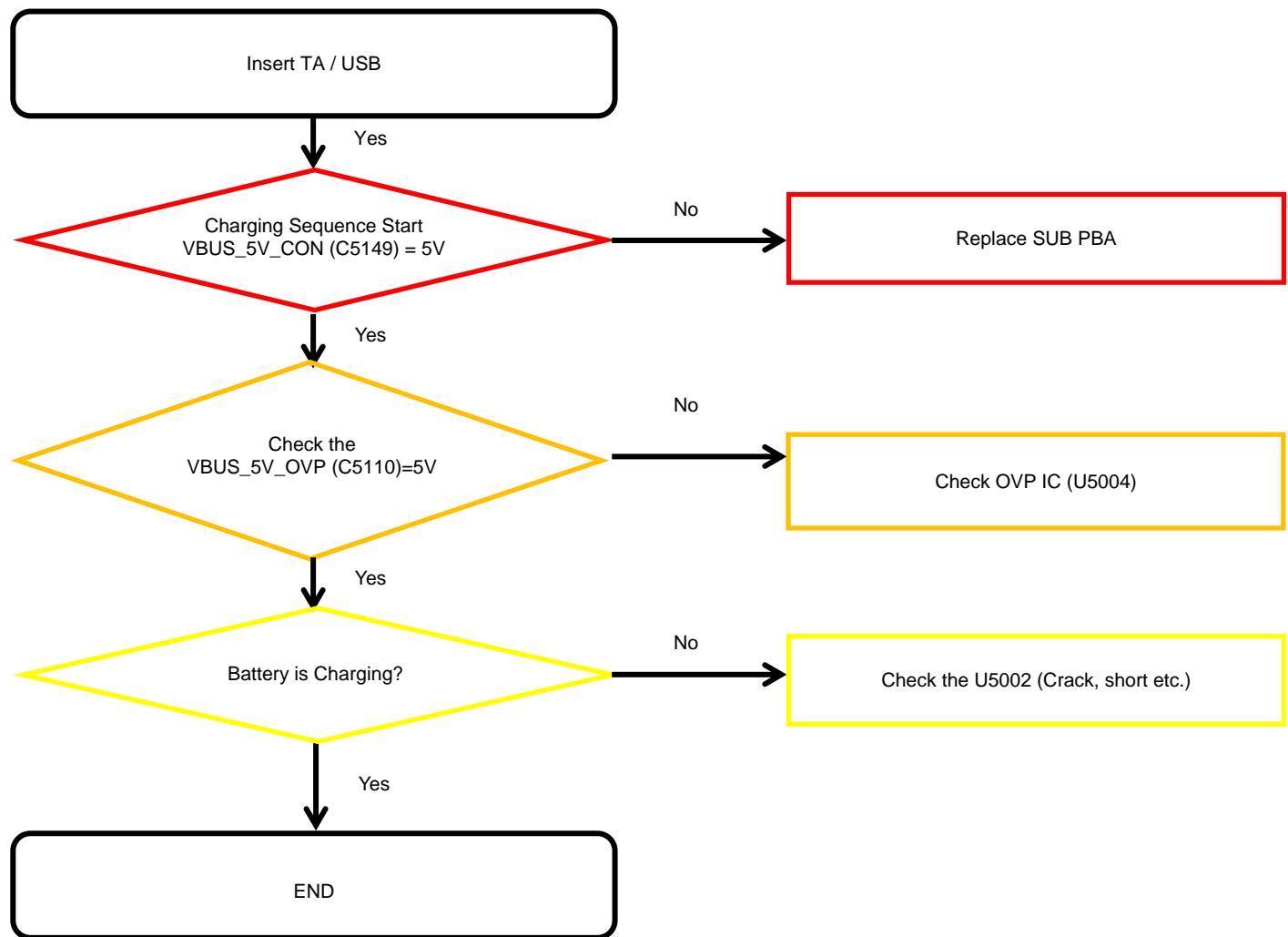
8. Level 3 Repair

8-4-5. T-Flash Part



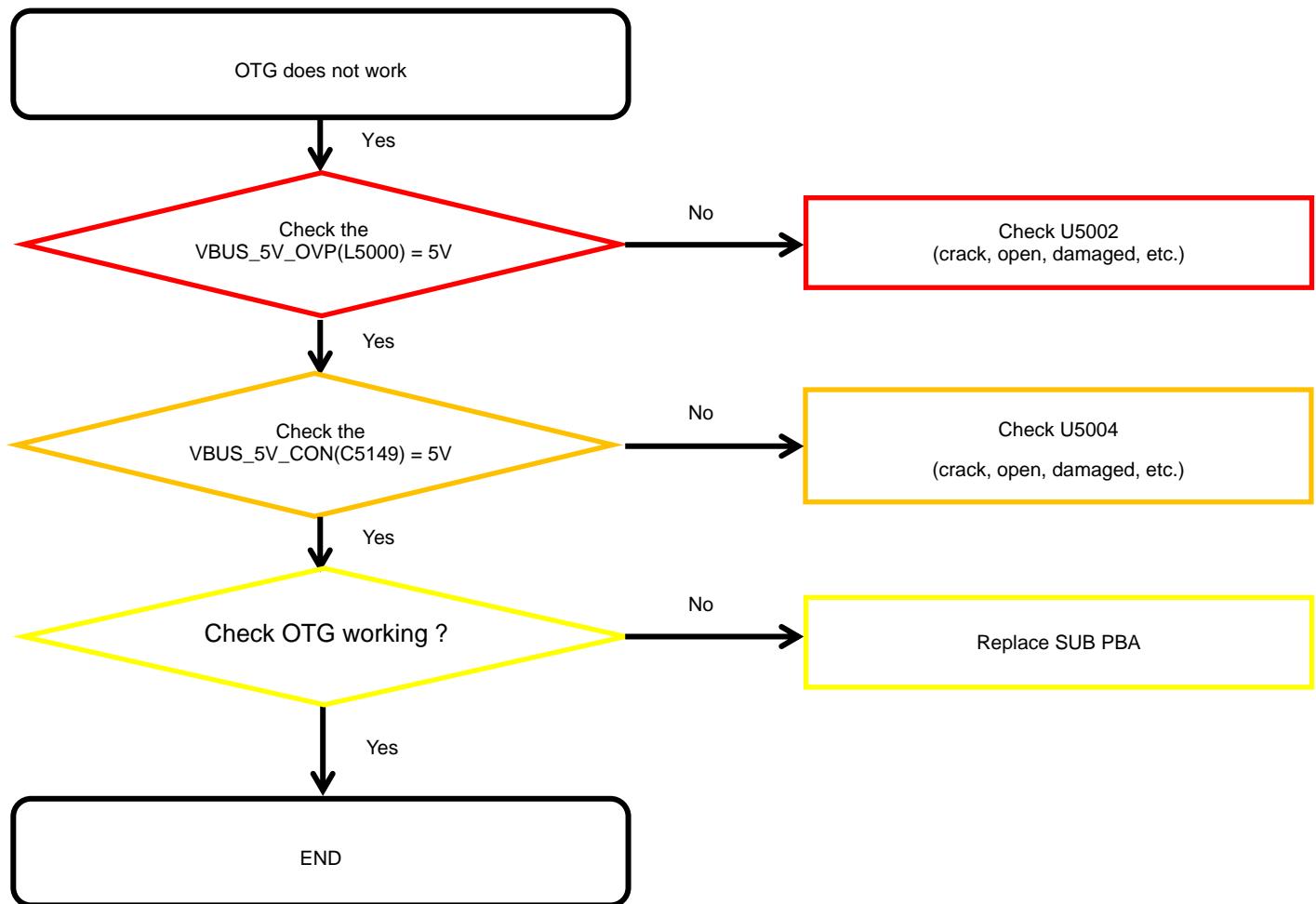
8. Level 3 Repair

8-4-6. Charging Part



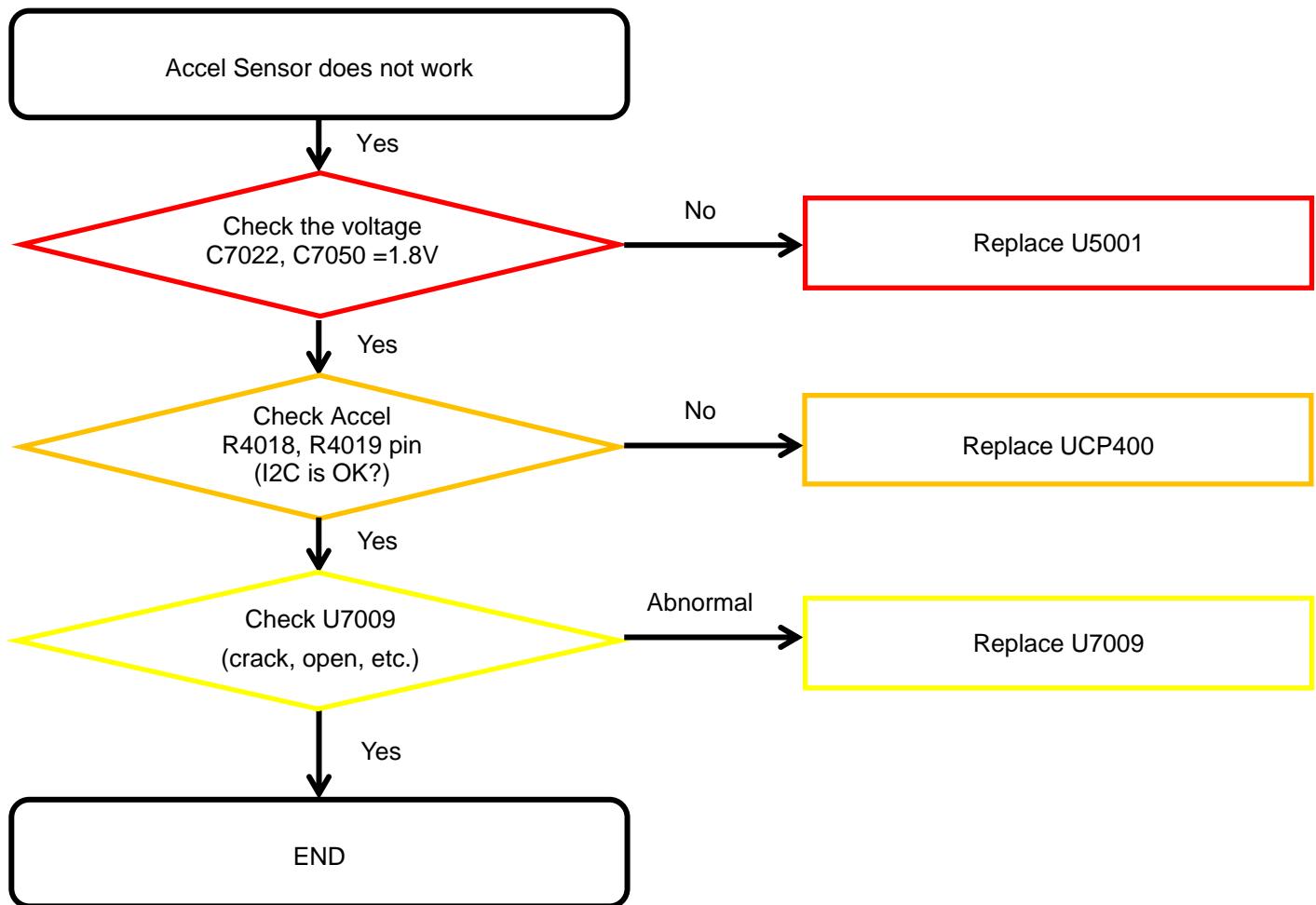
8. Level 3 Repair

8-4-7. OTG



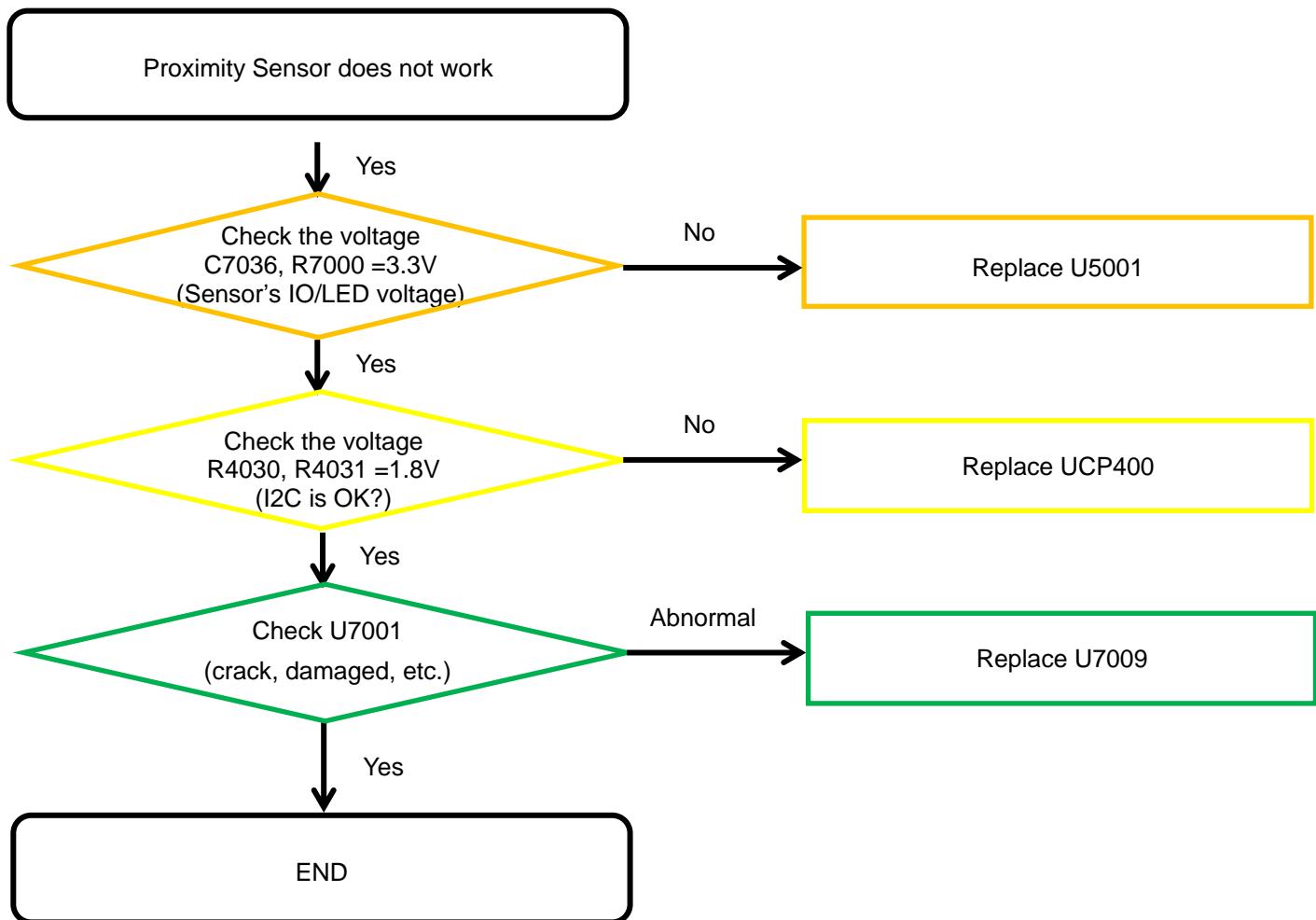
8. Level 3 Repair

8-4-8-1. Accel Sensor



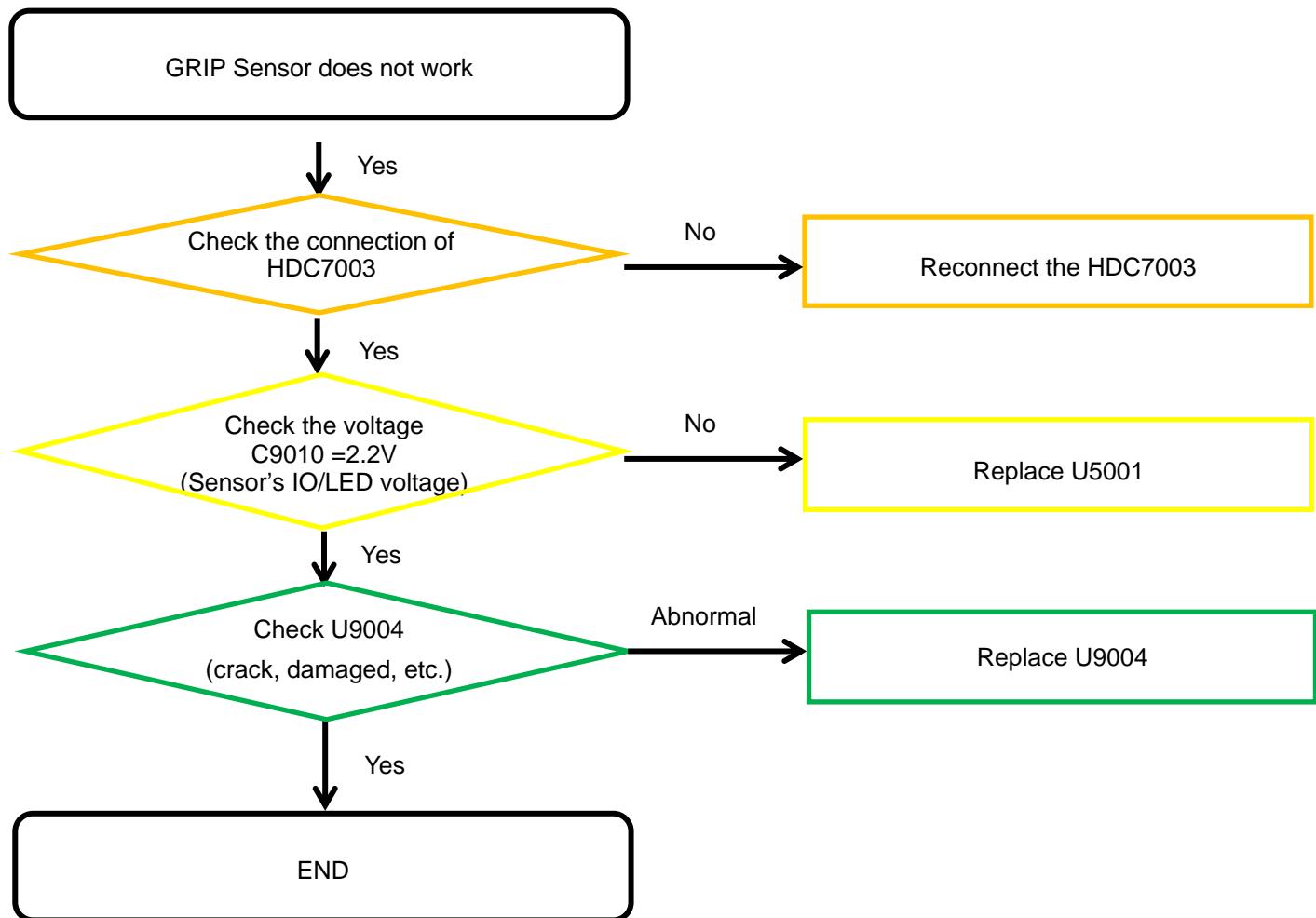
8. Level 3 Repair

8-4-8-2. Proximity Sensor



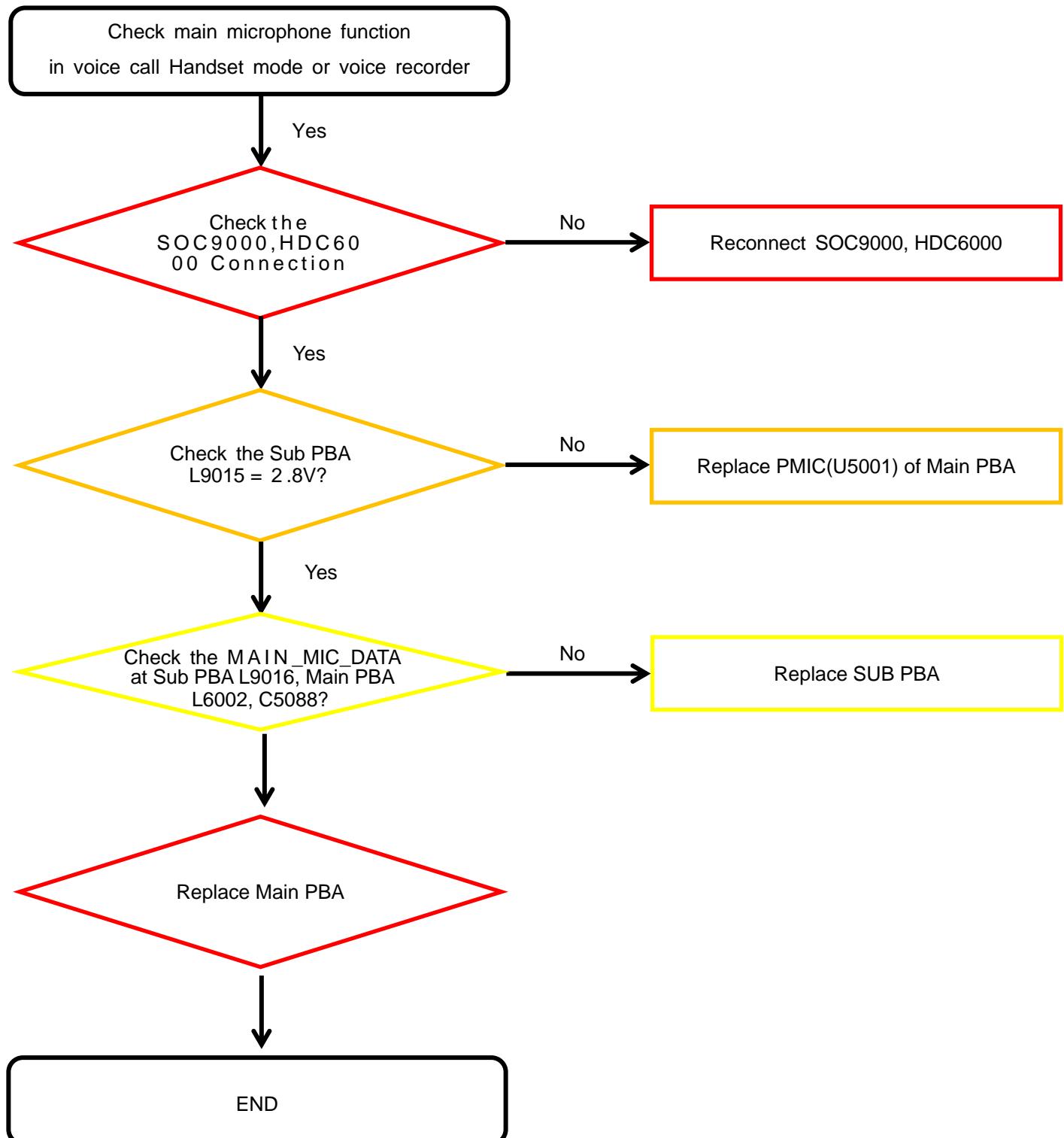
8. Level 3 Repair

8-4-8-3. GRIP Sensor [SM-M105G/M/Y]



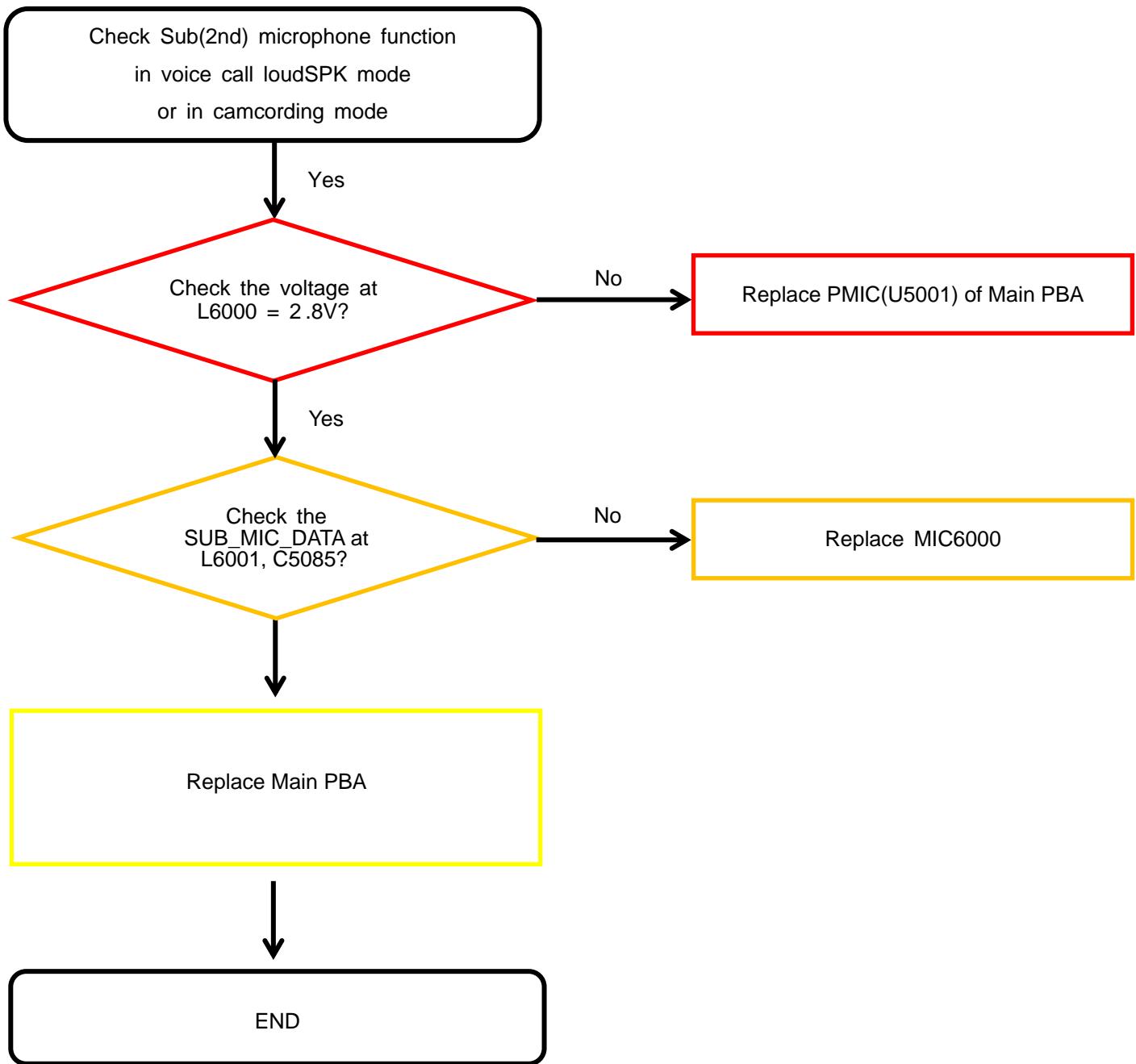
8. Level 3 Repair

8-4-9-1. Microphone Part - Main MIC



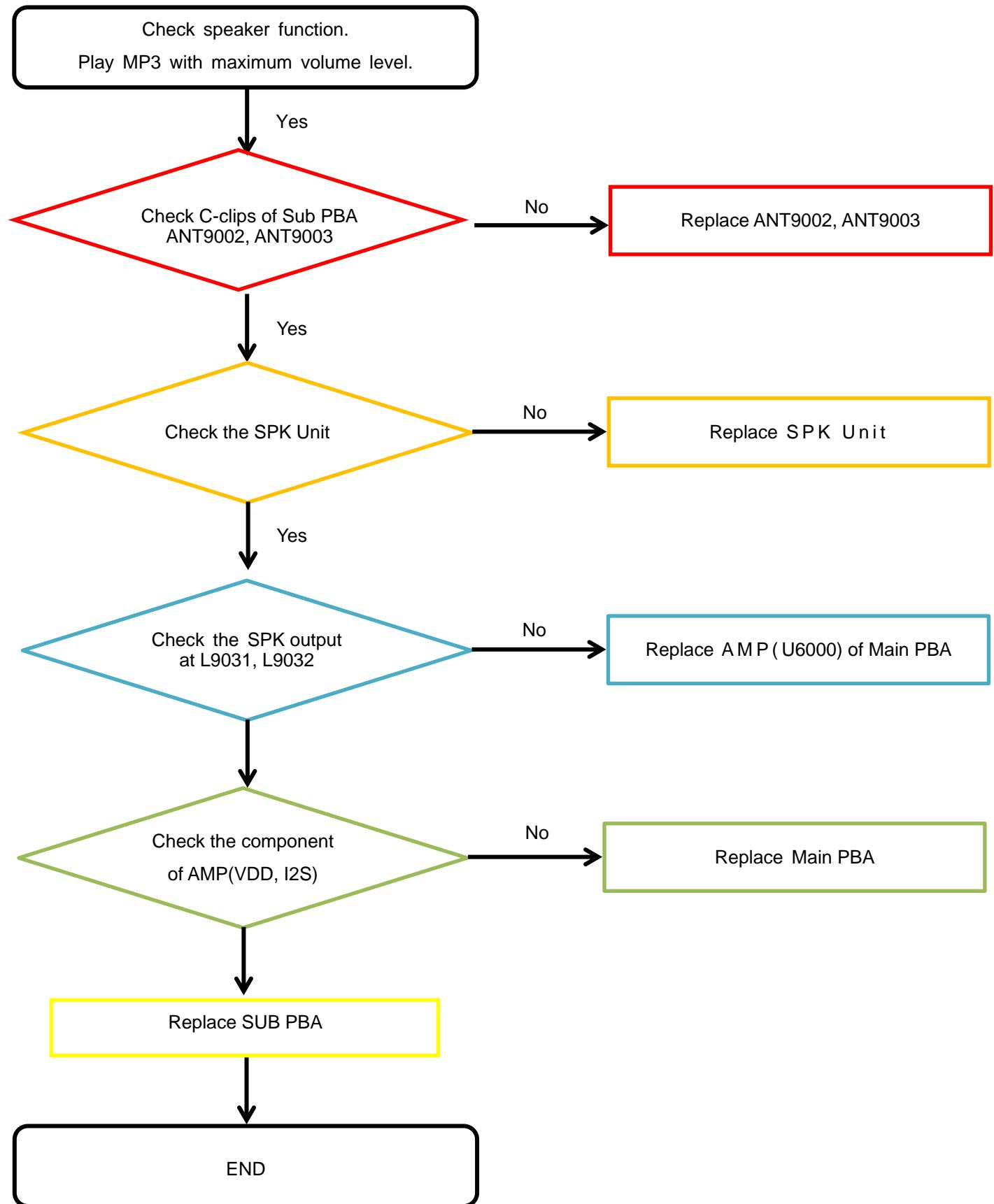
8. Level 3 Repair

8-4-9-2. Microphone Part - Sub(2nd) MIC



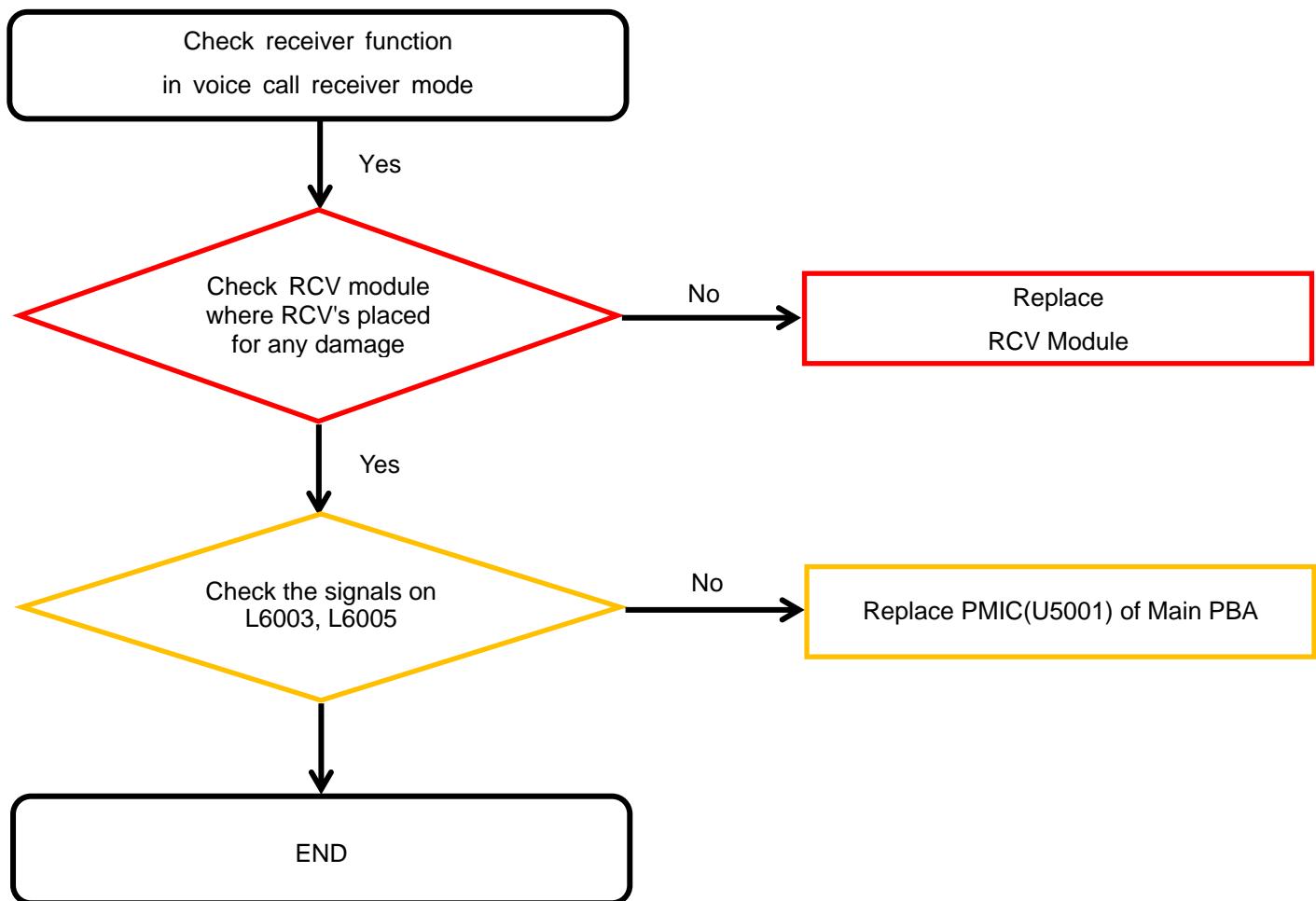
8. Level 3 Repair

8-4-10. Speaker Part



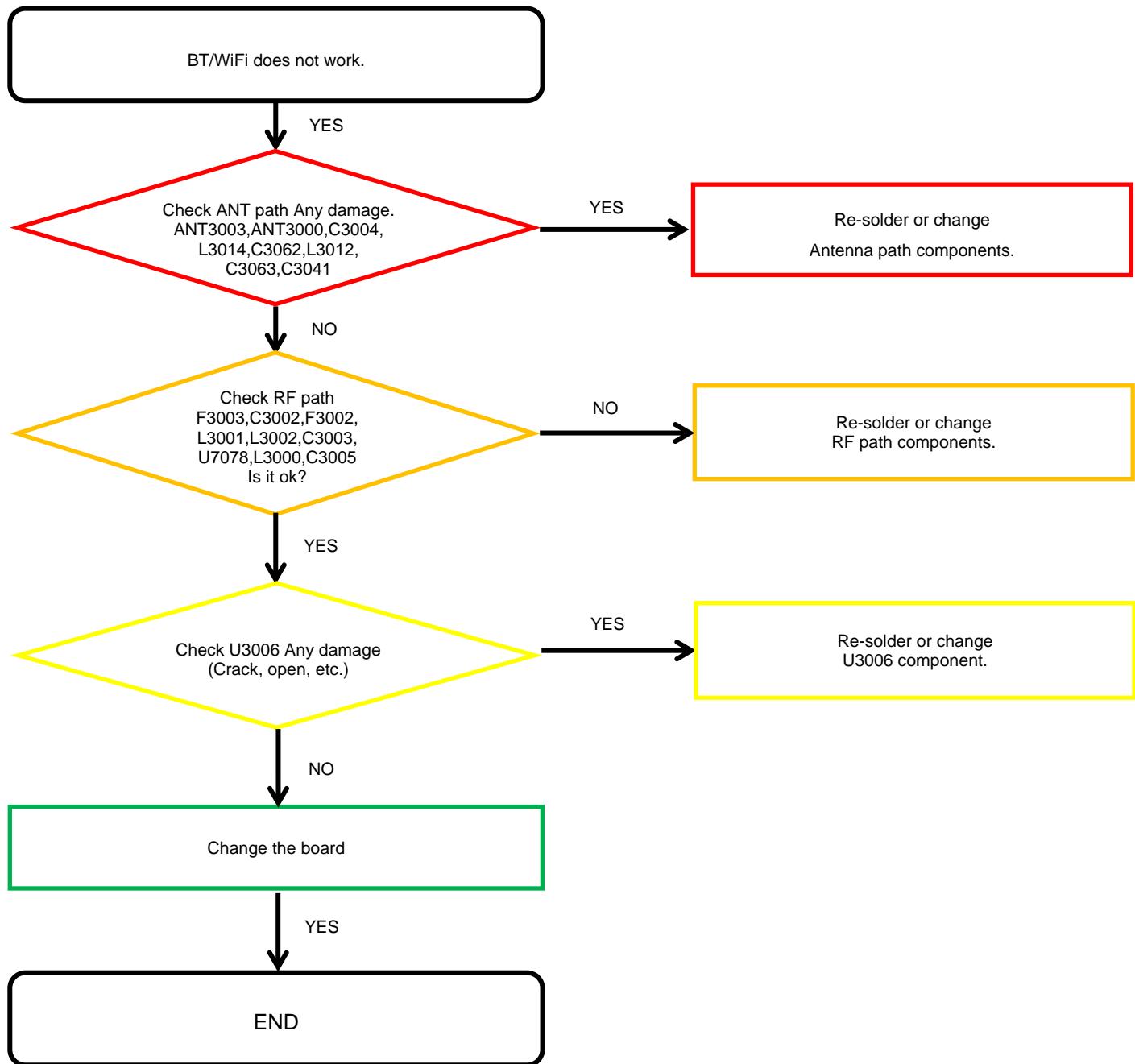
8. Level 3 Repair

8-4-11. Receiver Part



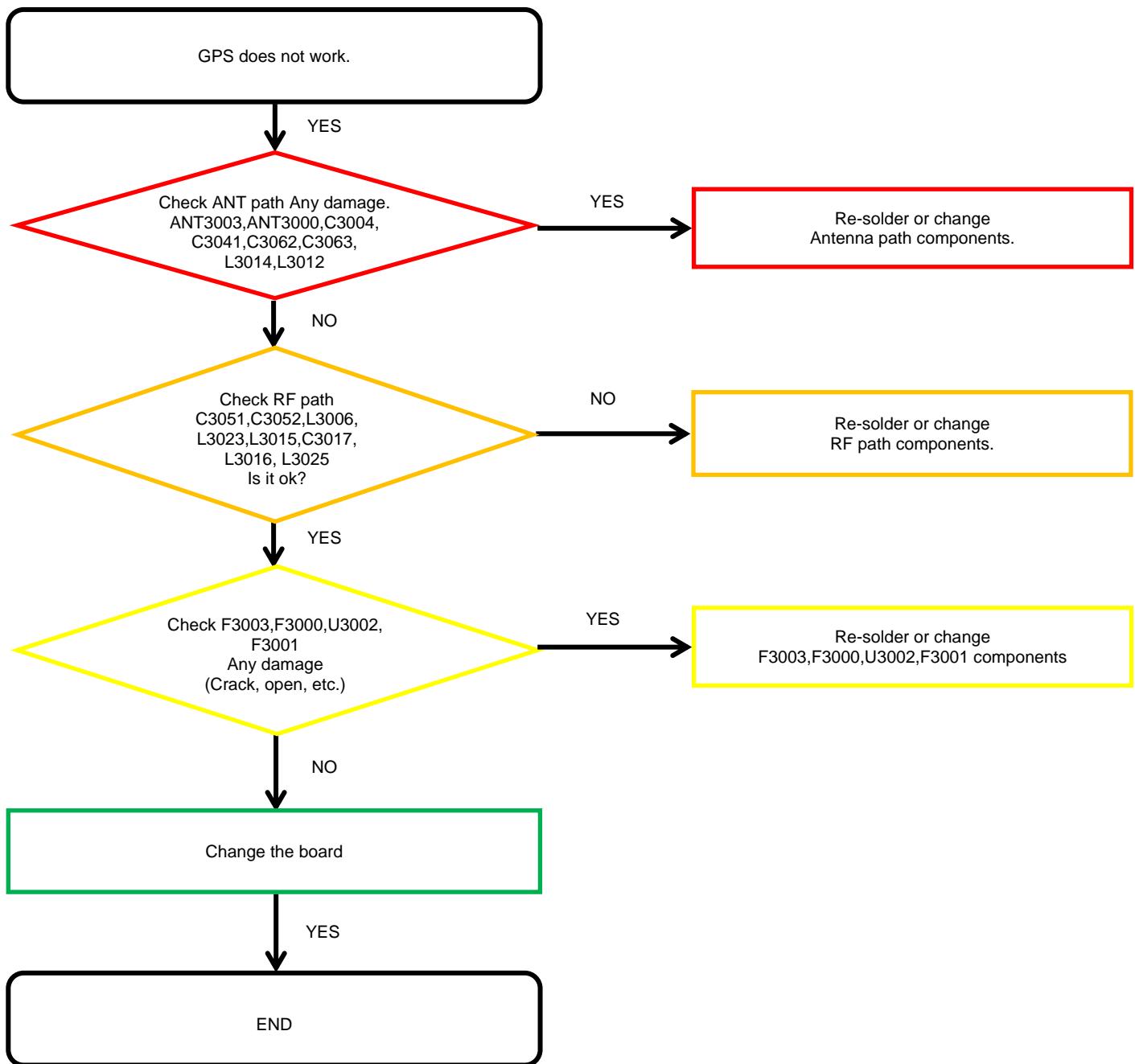
8. Level 3 Repair

8-4-12. BT/WLAN



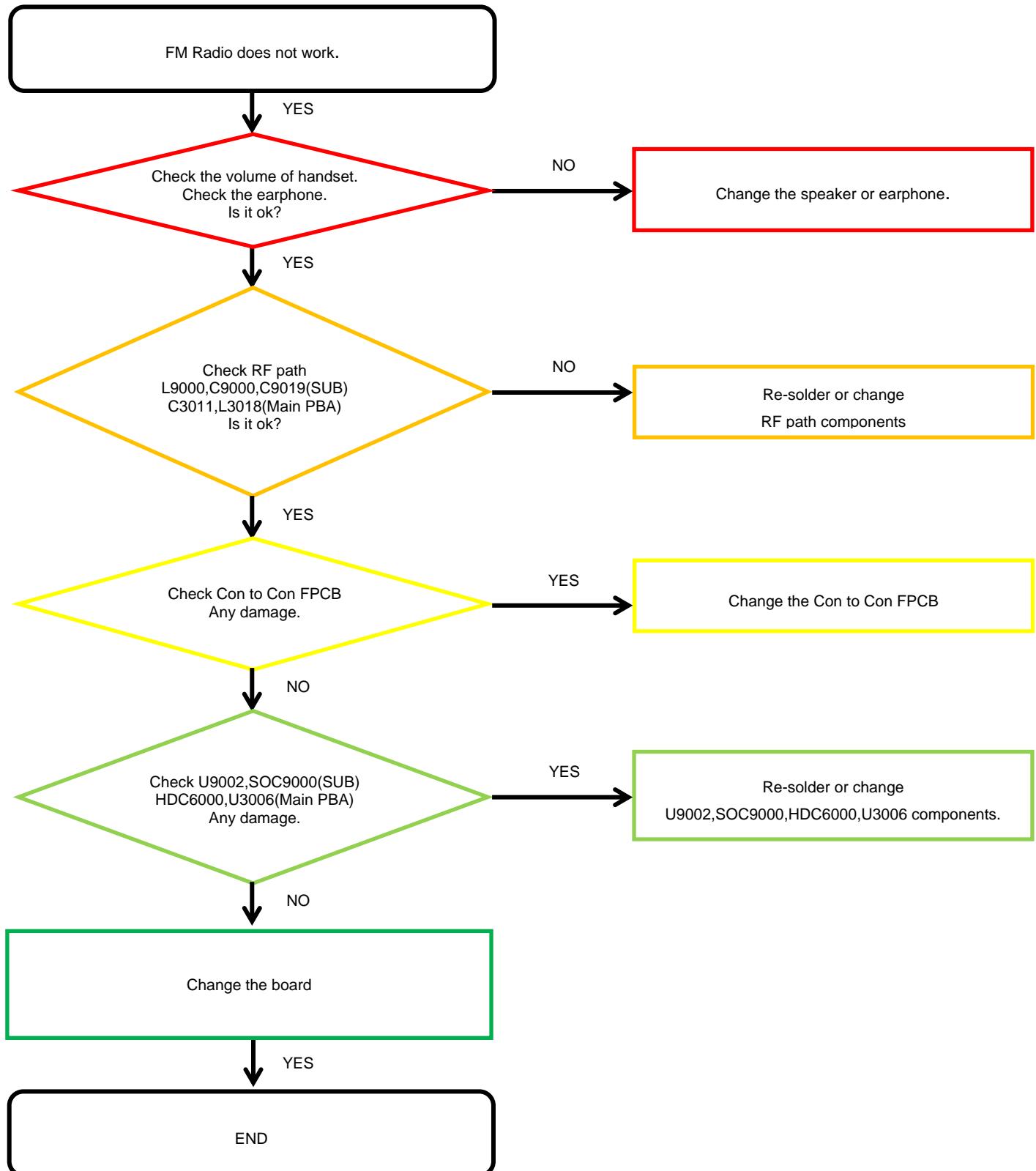
8. Level 3 Repair

8-4-13. GPS



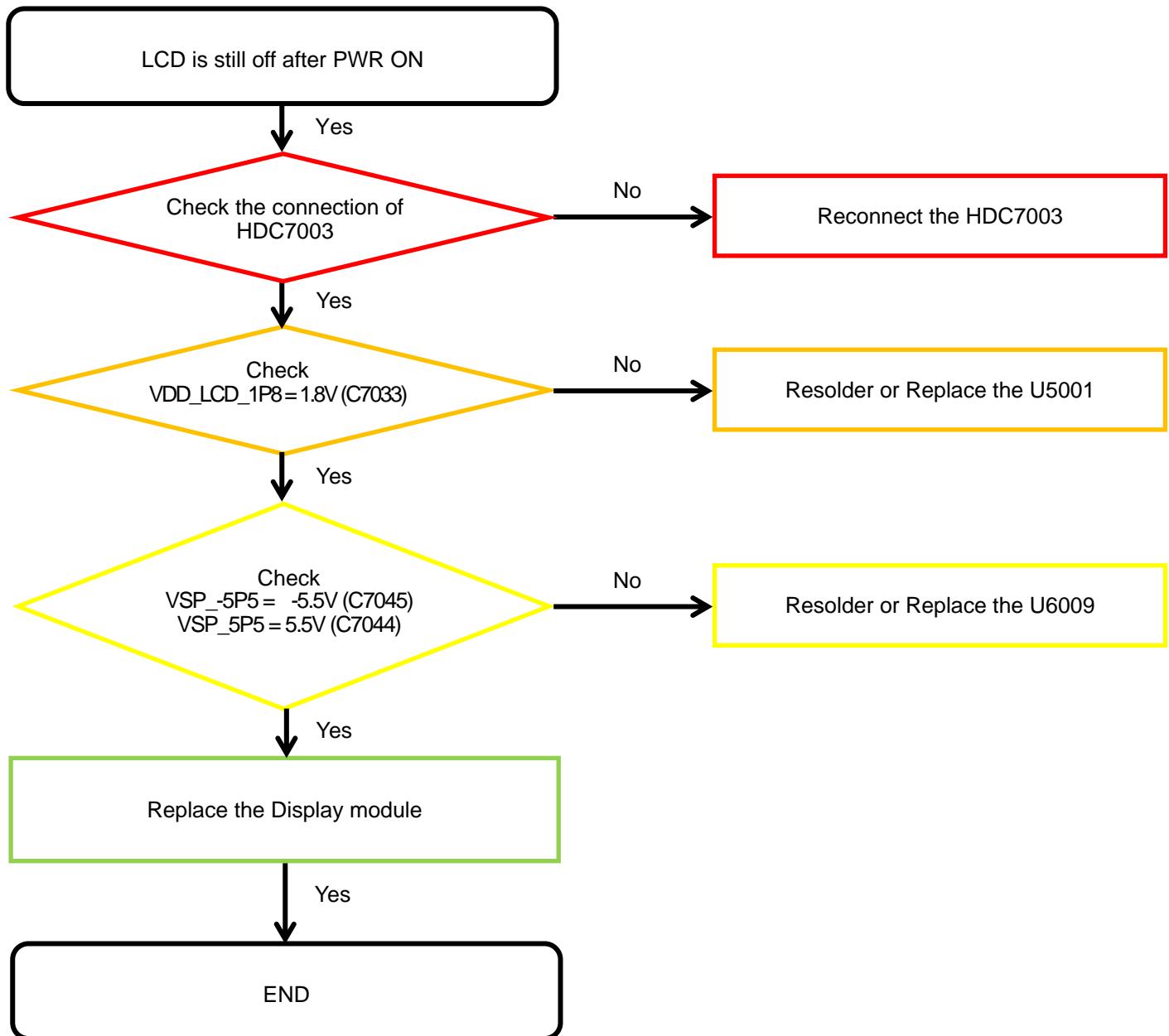
8. Level 3 Repair

8-4-14. FM Radio



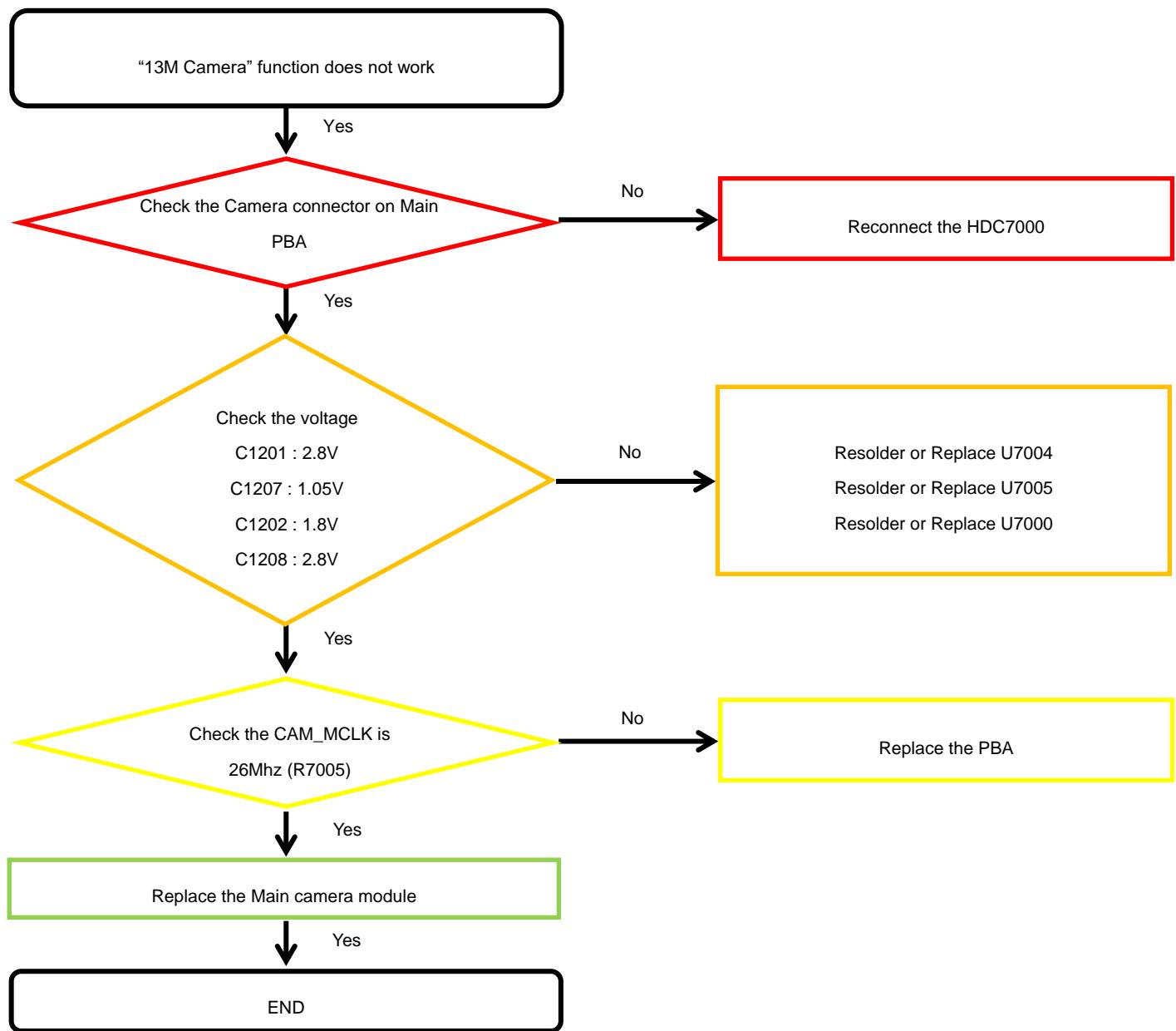
8. Level 3 Repair

8-4-15. Display



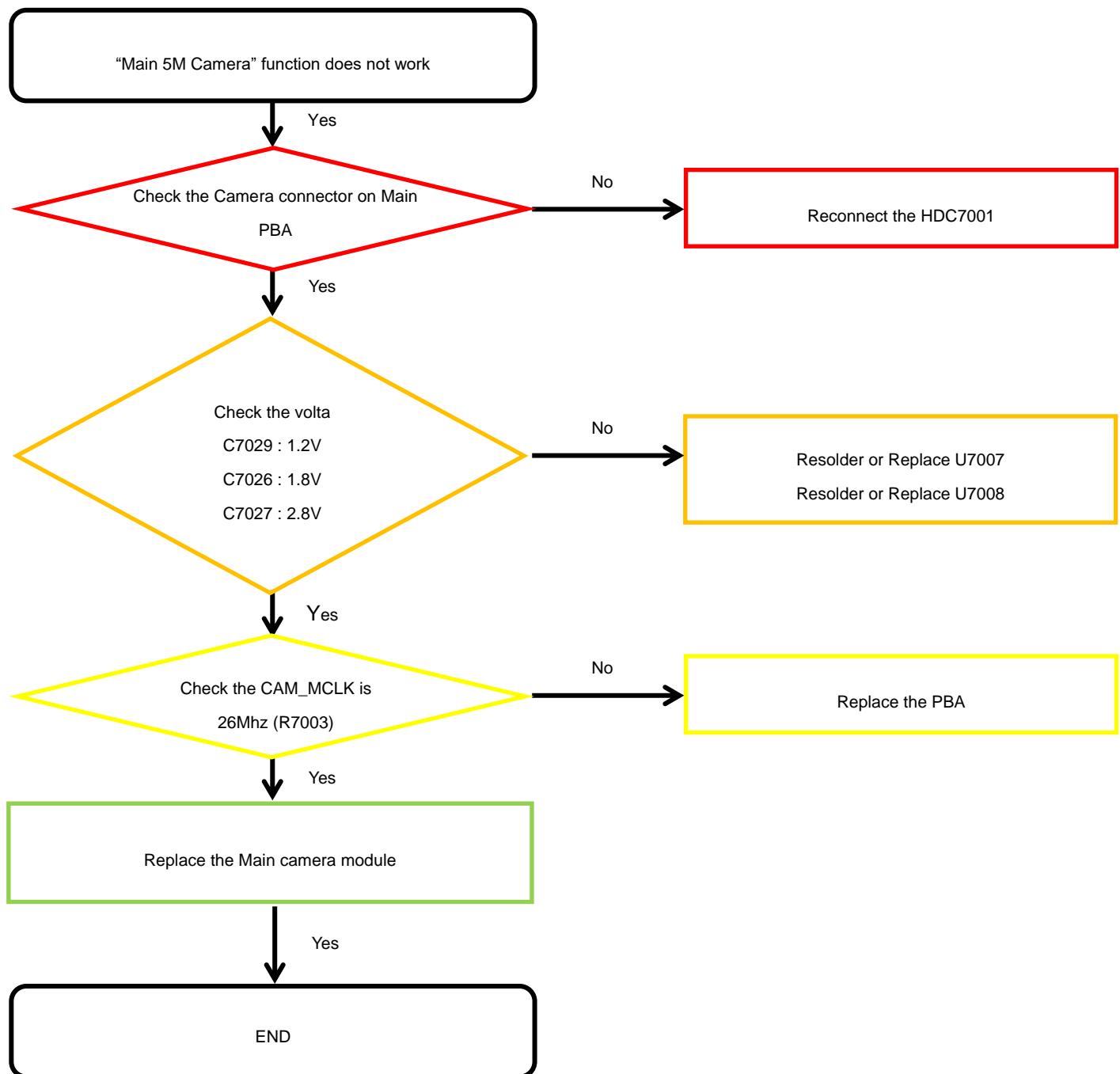
8. Level 3 Repair

8-4-16. MAIN 13M CAMERA



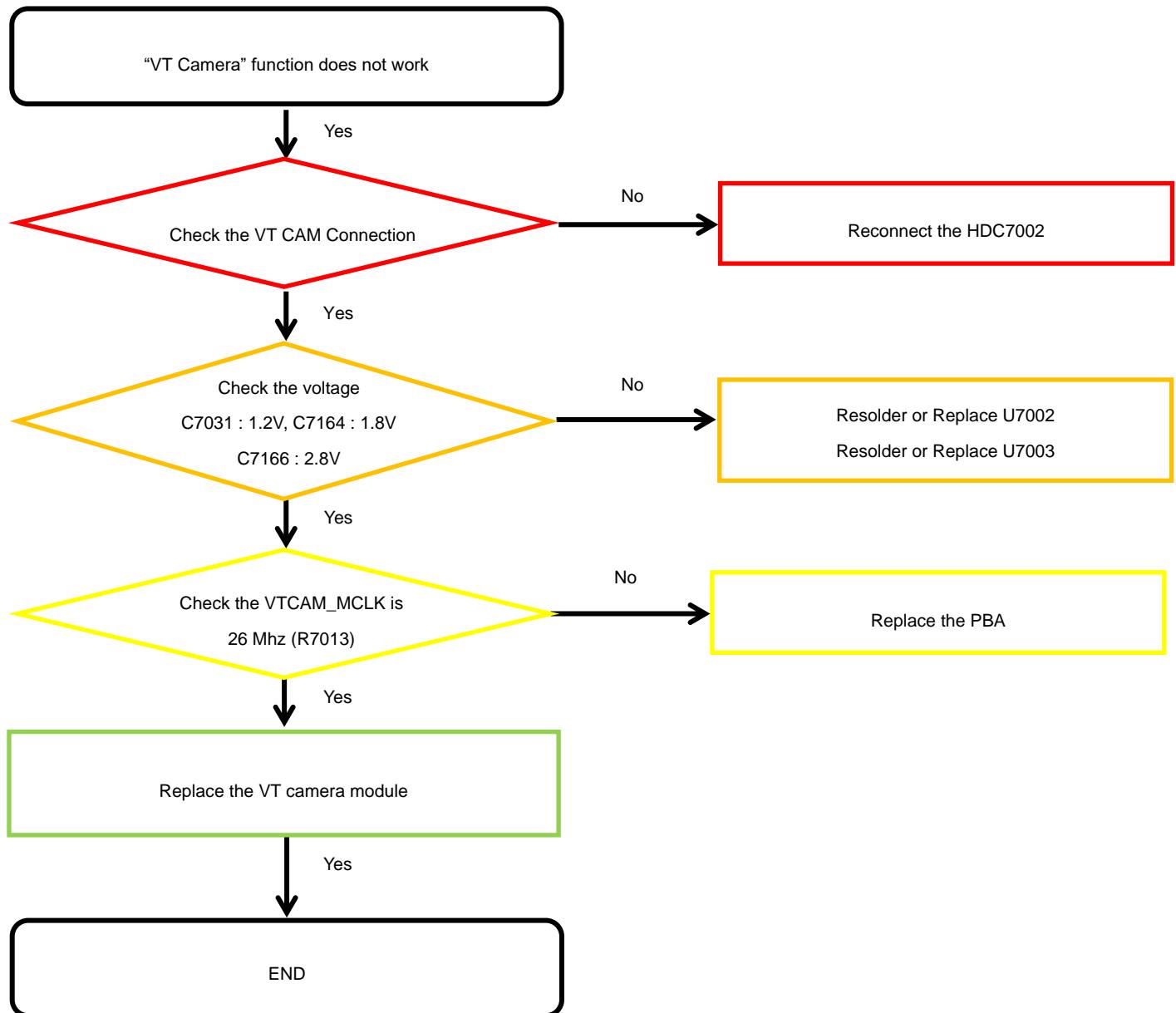
8. Level 3 Repair

8-4-17. MAIN 5M CAMERA



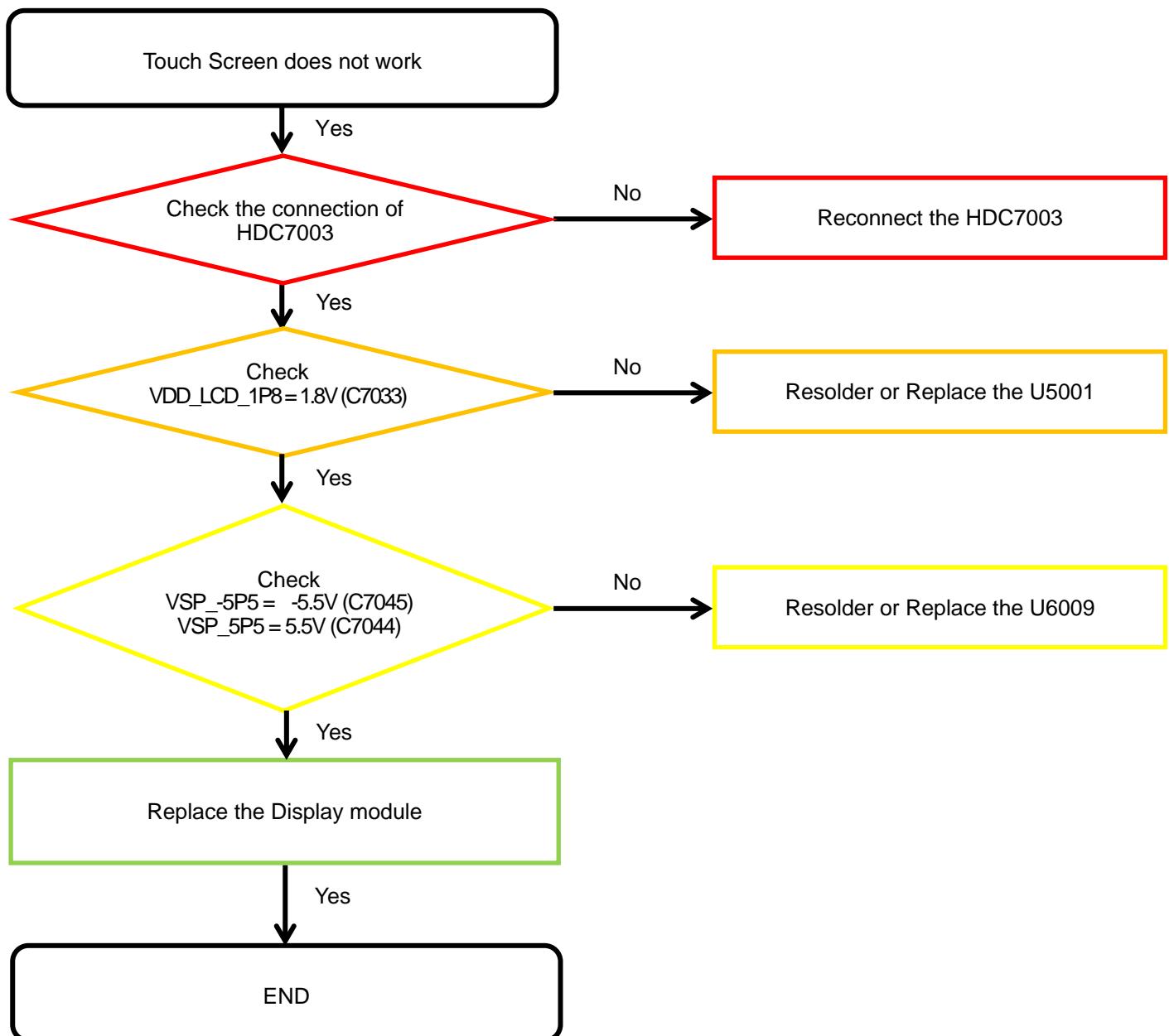
8. Level 3 Repair

8-4-18. VT 5M CAM



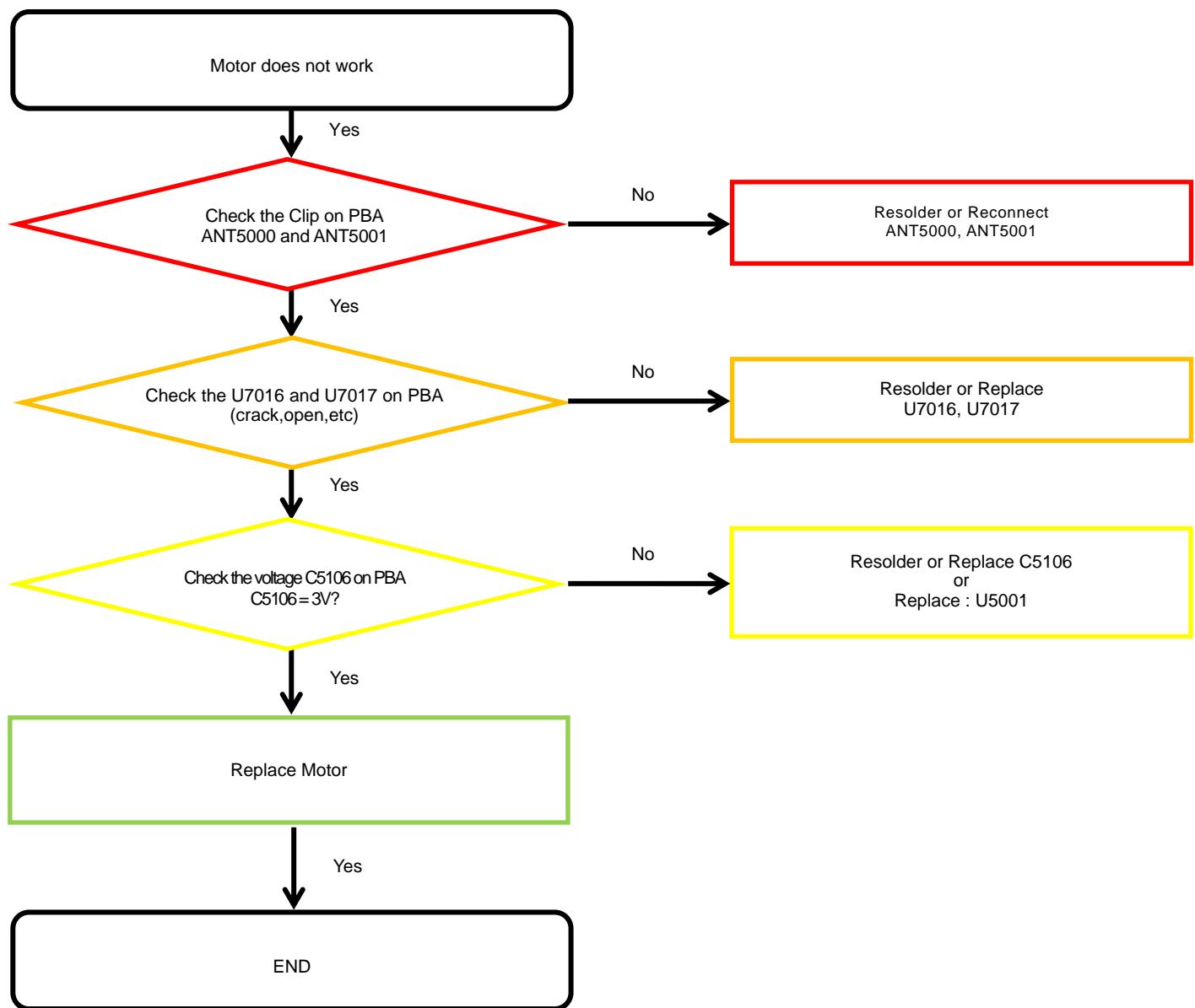
8. Level 3 Repair

8-4-19. TSP



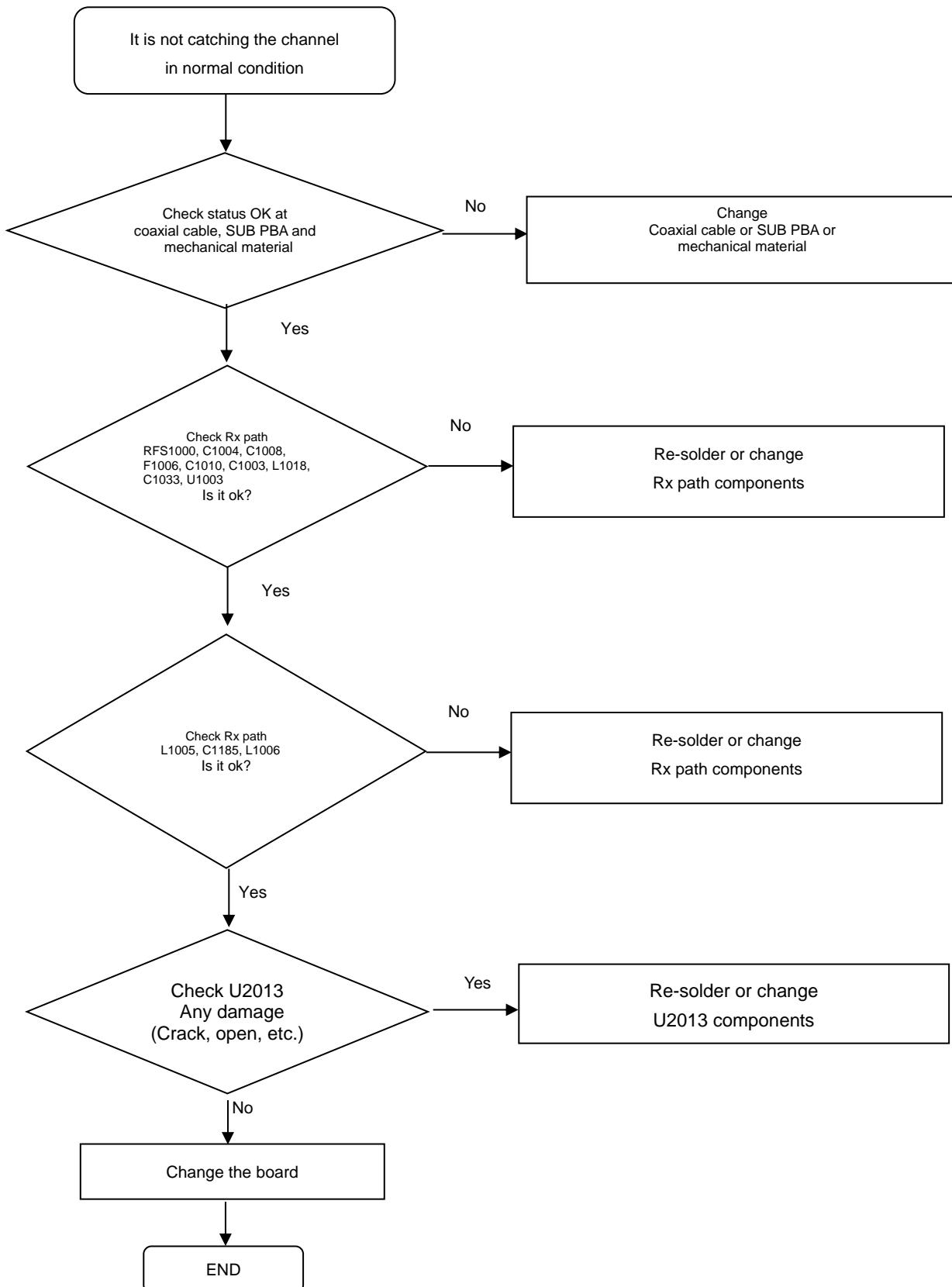
8. Level 3 Repair

8-4-20. Motor



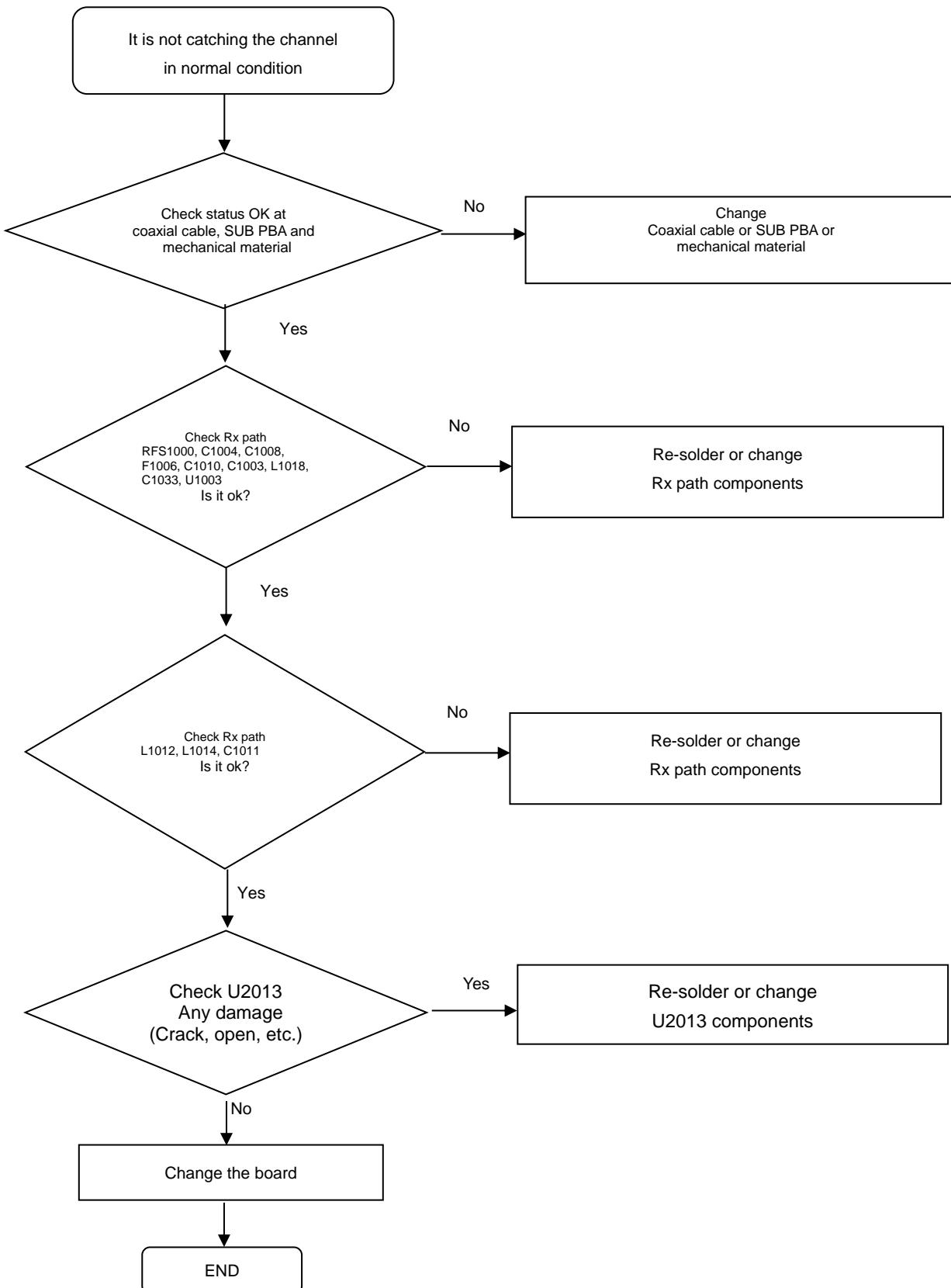
8. Level 3 Repair

8-4-21. WCDMA B1, LTE B1/ WCDMA B4, LTE B4 [SM-M105M] RX



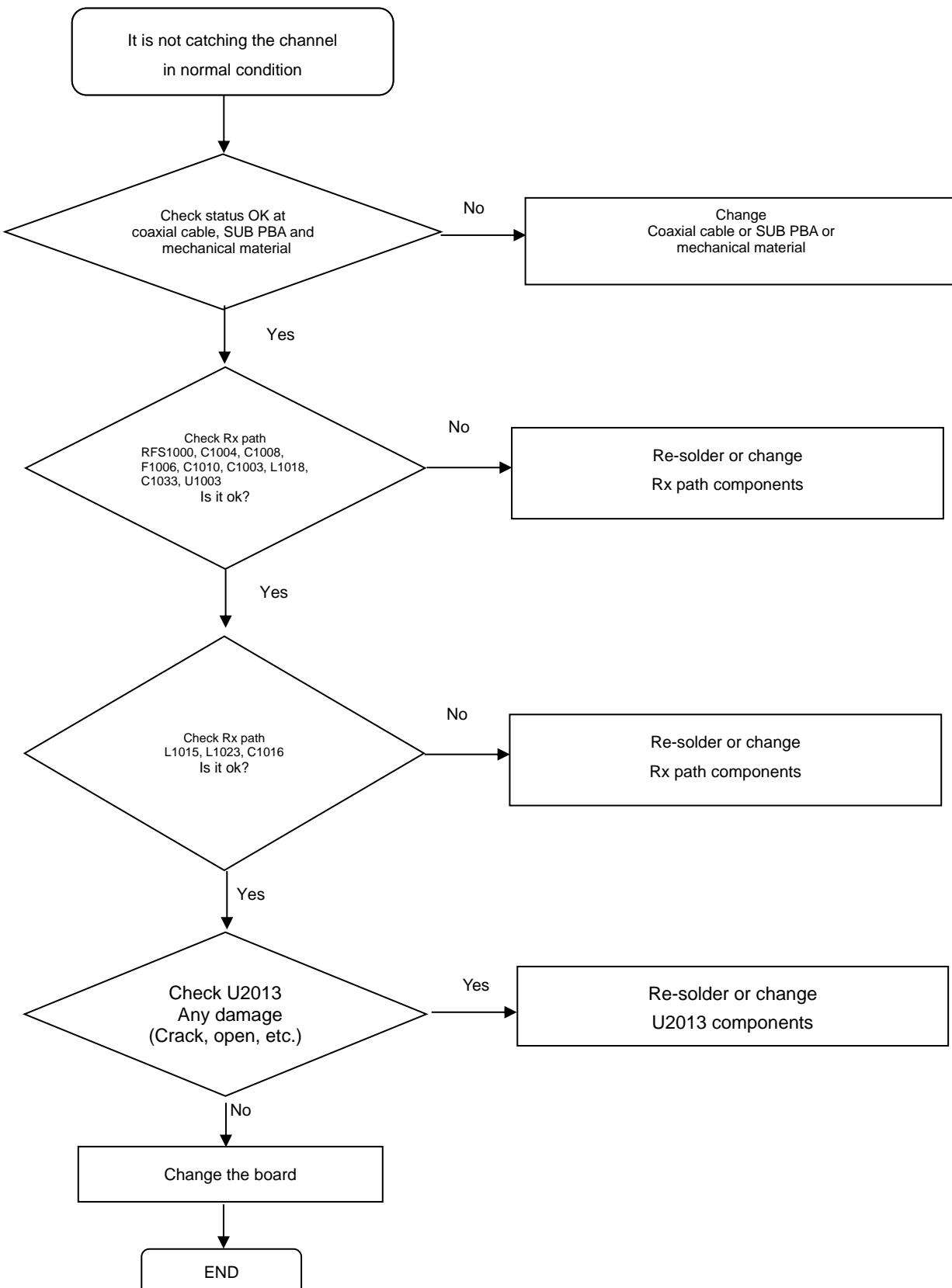
8. Level 3 Repair

8-4-22. WCDMA B2 [SM-M105M/Y]/ LTE B2, GSM1900 RX[SM-M105M]



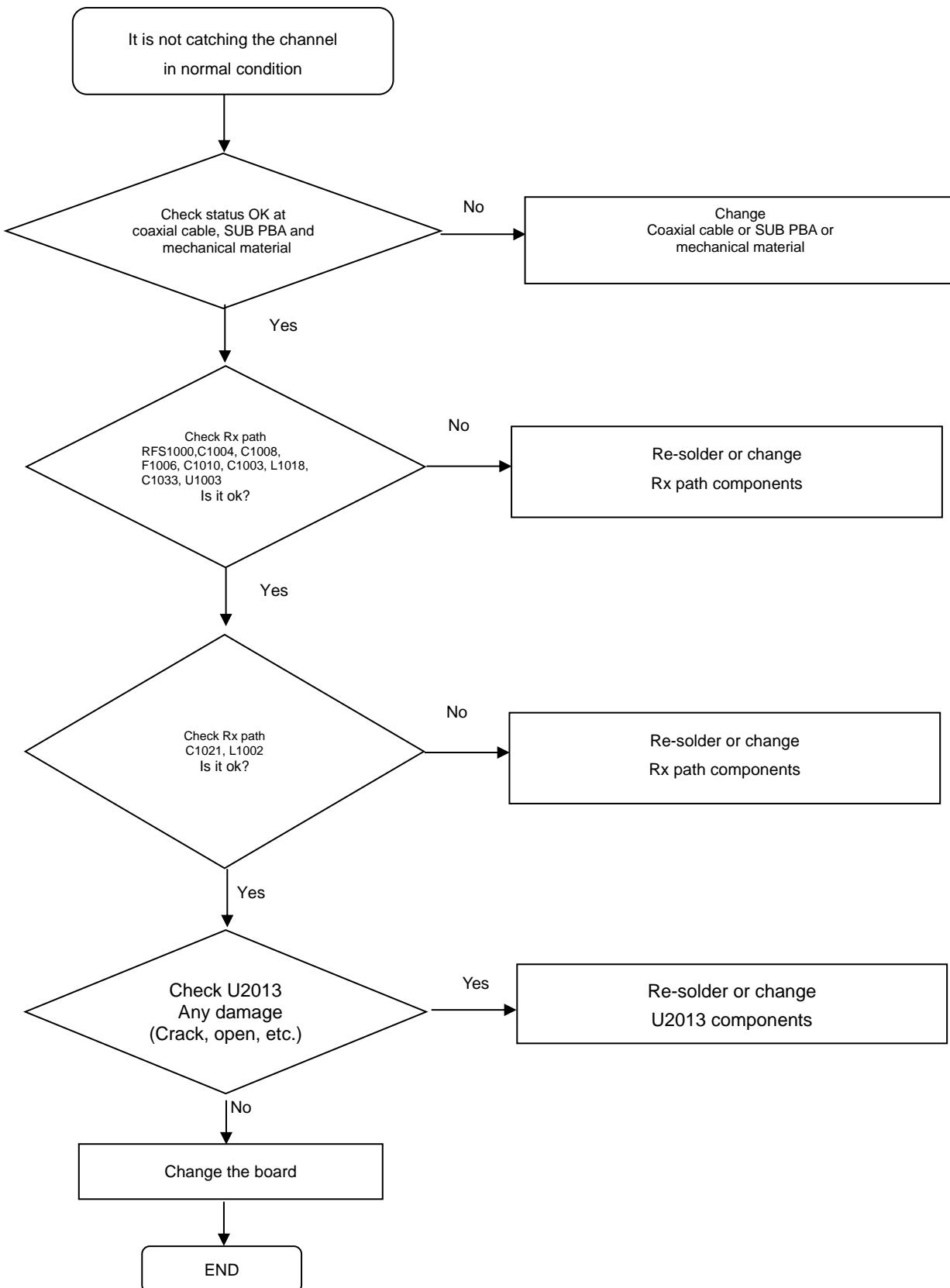
8. Level 3 Repair

8-4-23. LTE B3, GSM 1800 RX



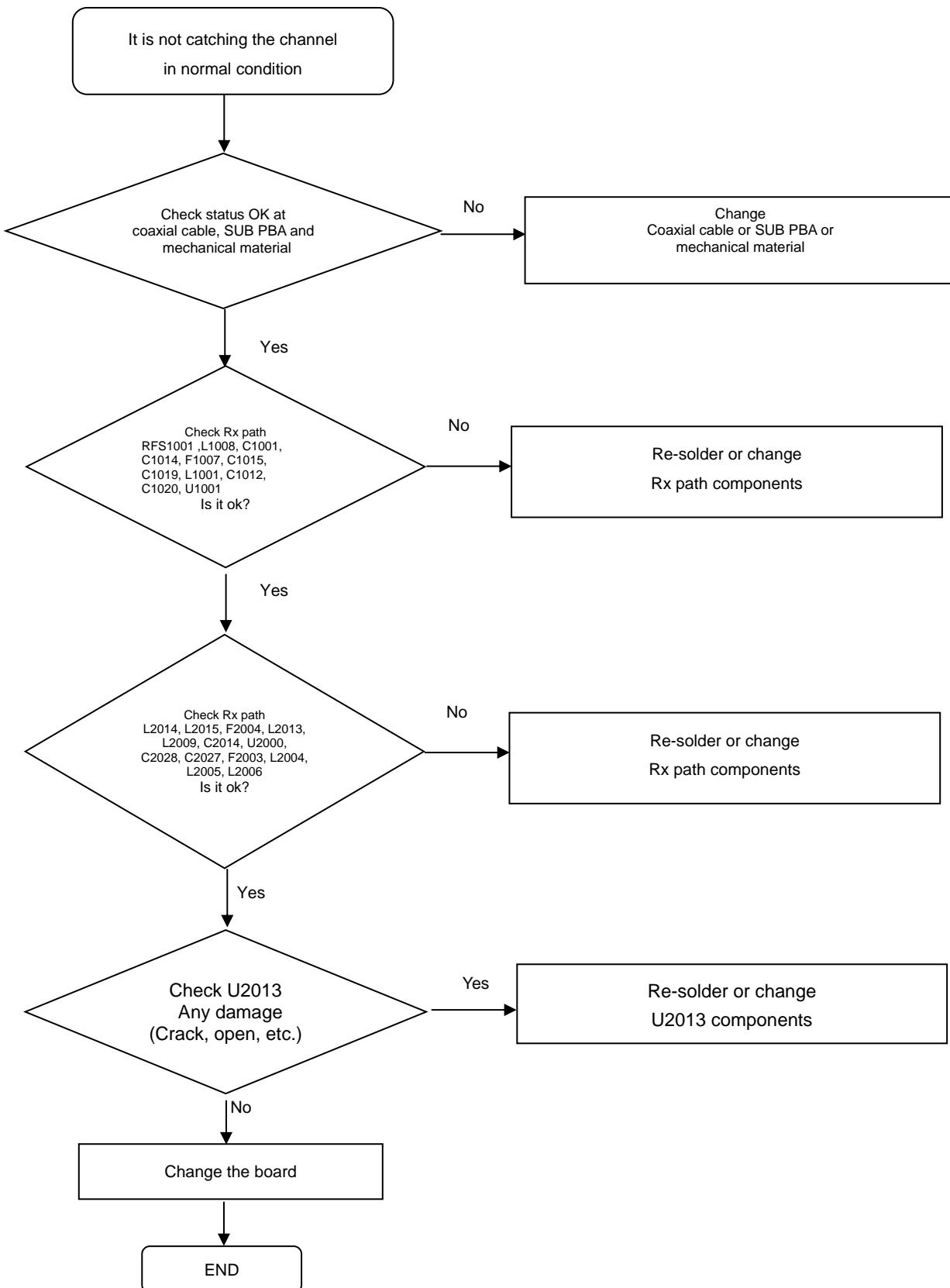
8. Level 3 Repair

8-4-24. LTE B5, WCDMA B5, GSM850 RX



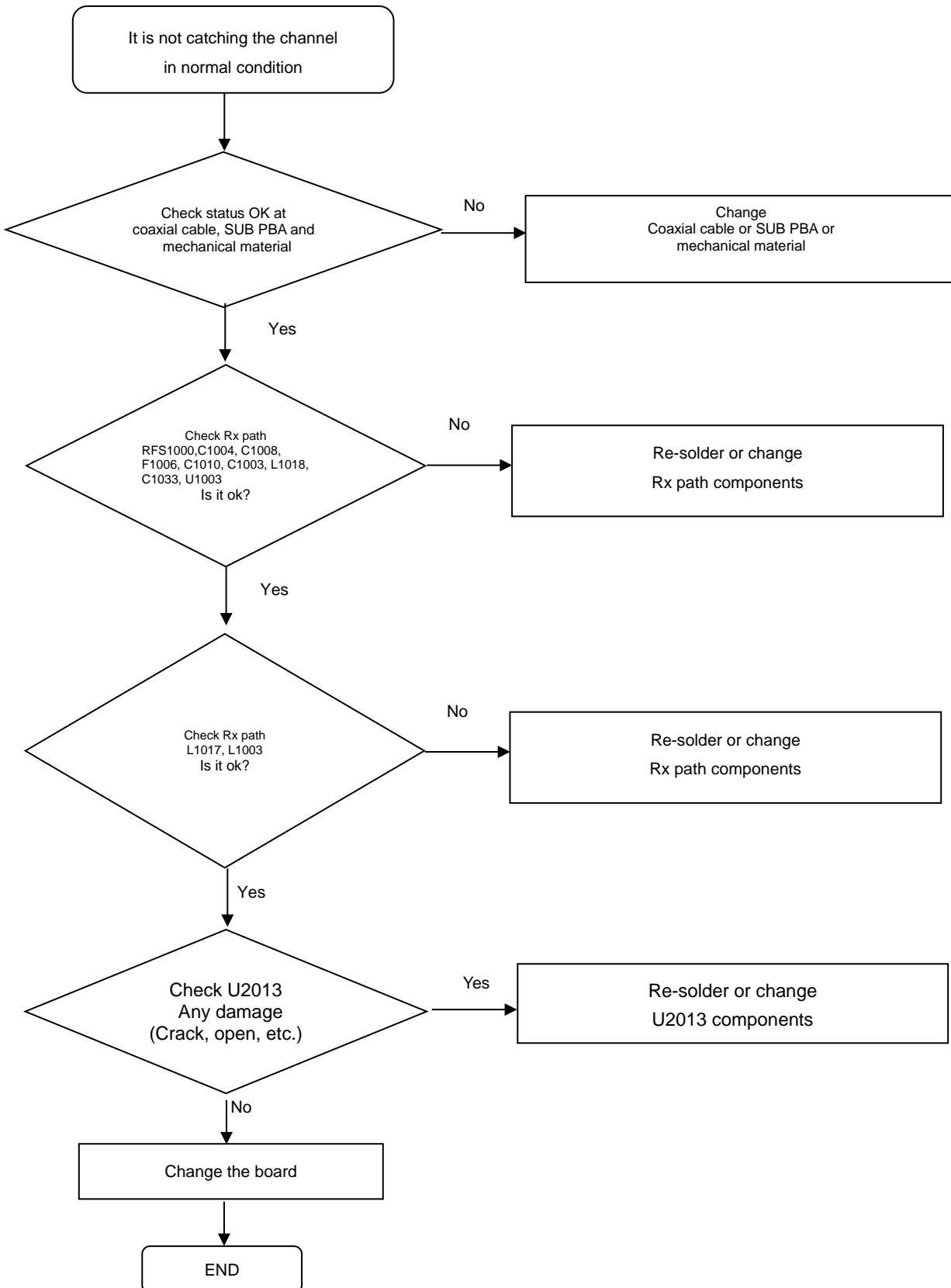
8. Level 3 Repair

8-4-25. LTE B7 RX [SM-M105G/M/Y]



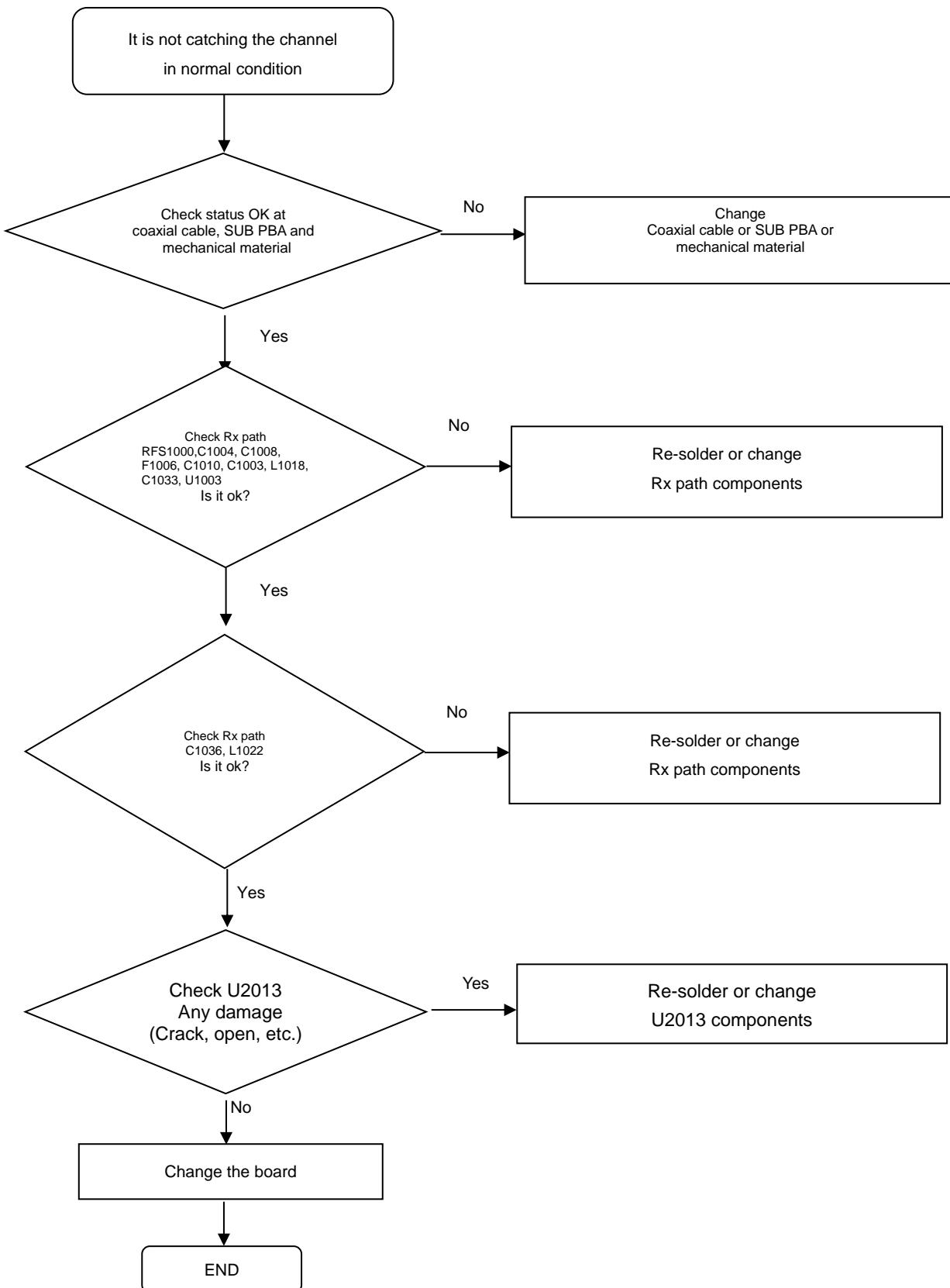
8. Level 3 Repair

8-4-26. LTE B8, WCDMA B8, GSM900 RX



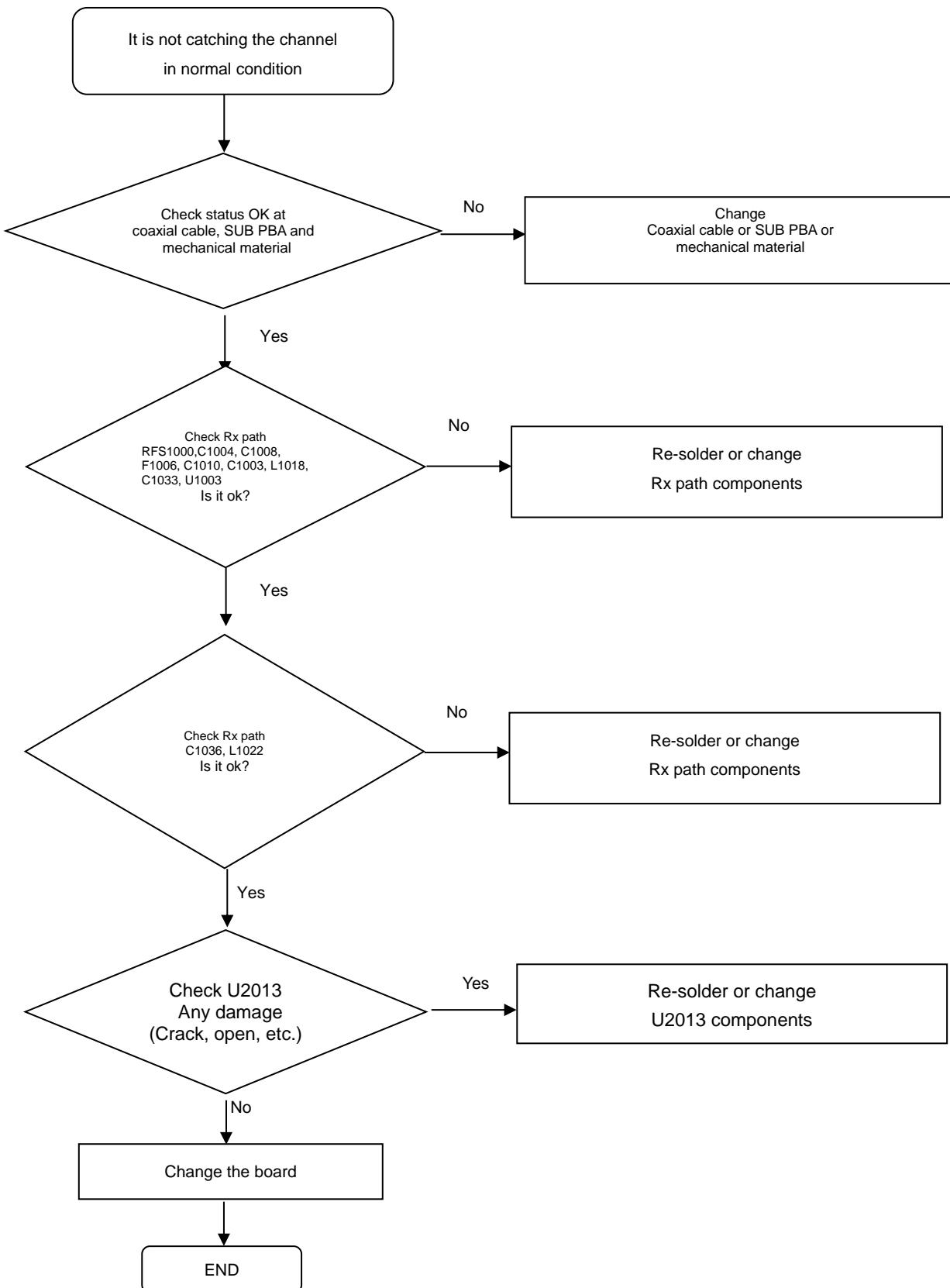
8. Level 3 Repair

8-4-27. LTE B12, B17 RX [SM-M105M]



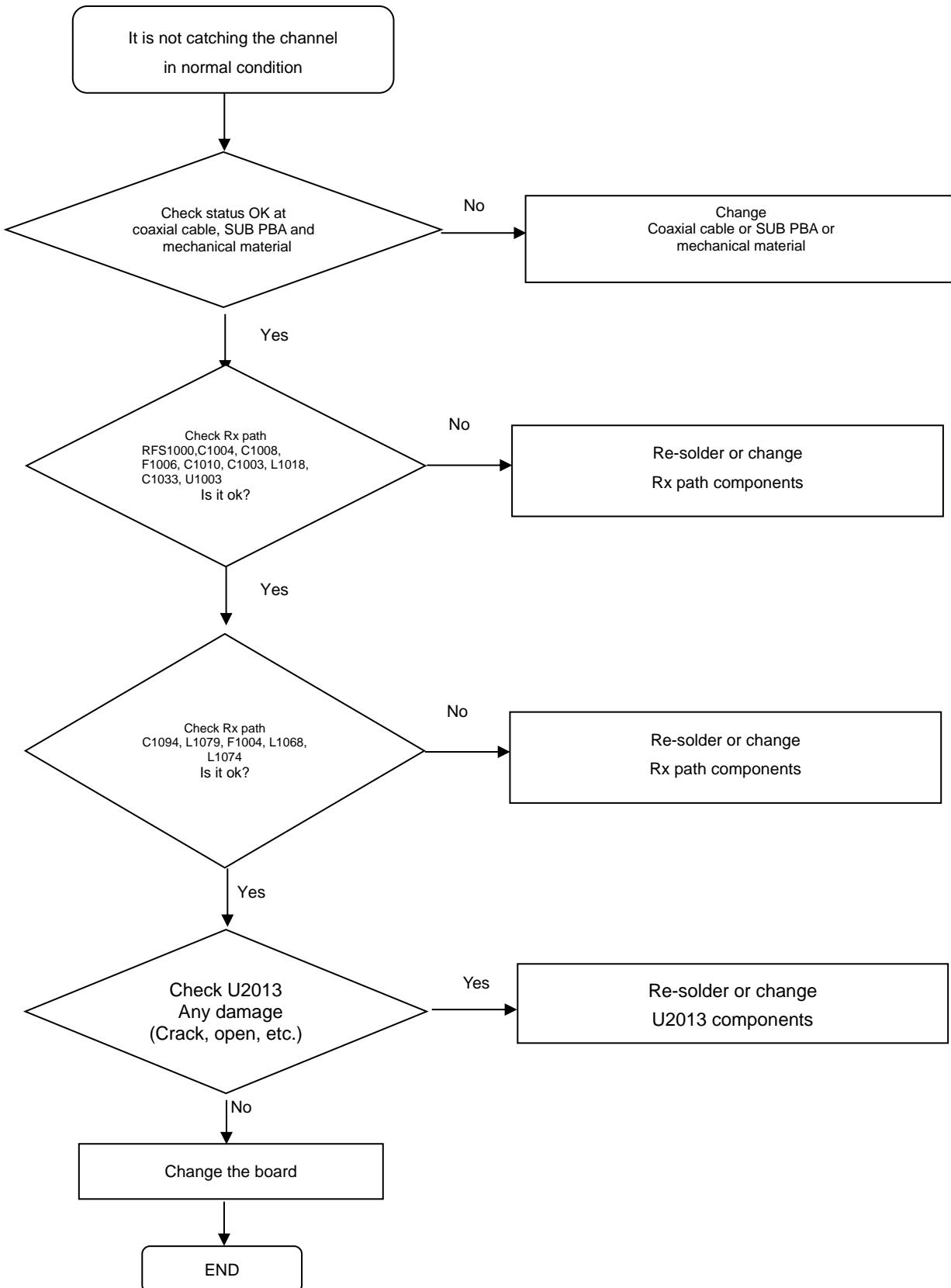
8. Level 3 Repair

8-4-28. LTE B20 RX



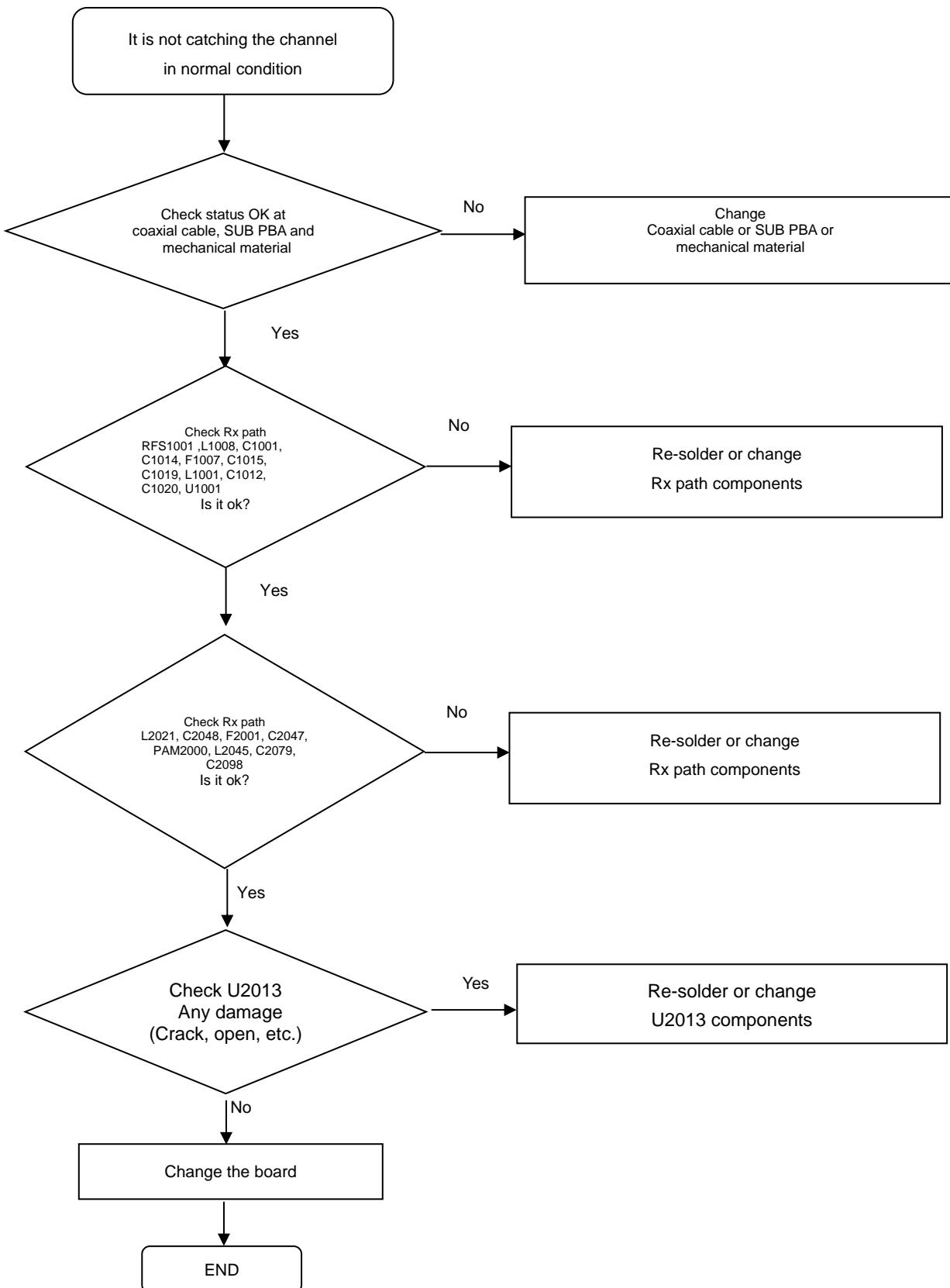
8. Level 3 Repair

8-4-28. LTE B28 RX [SM-M105M/Y]



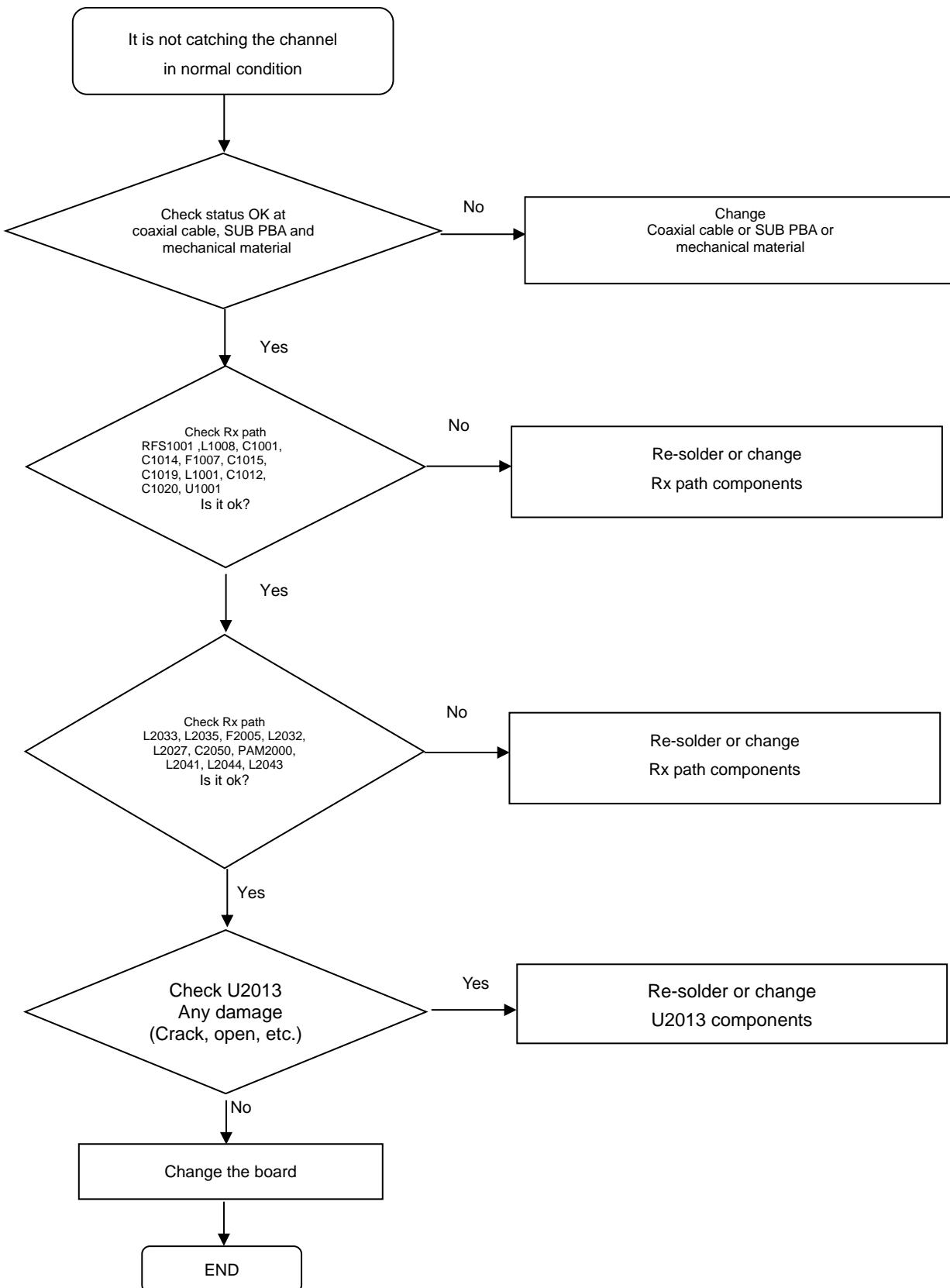
8. Level 3 Repair

8-4-29. LTE B38, B41 RX



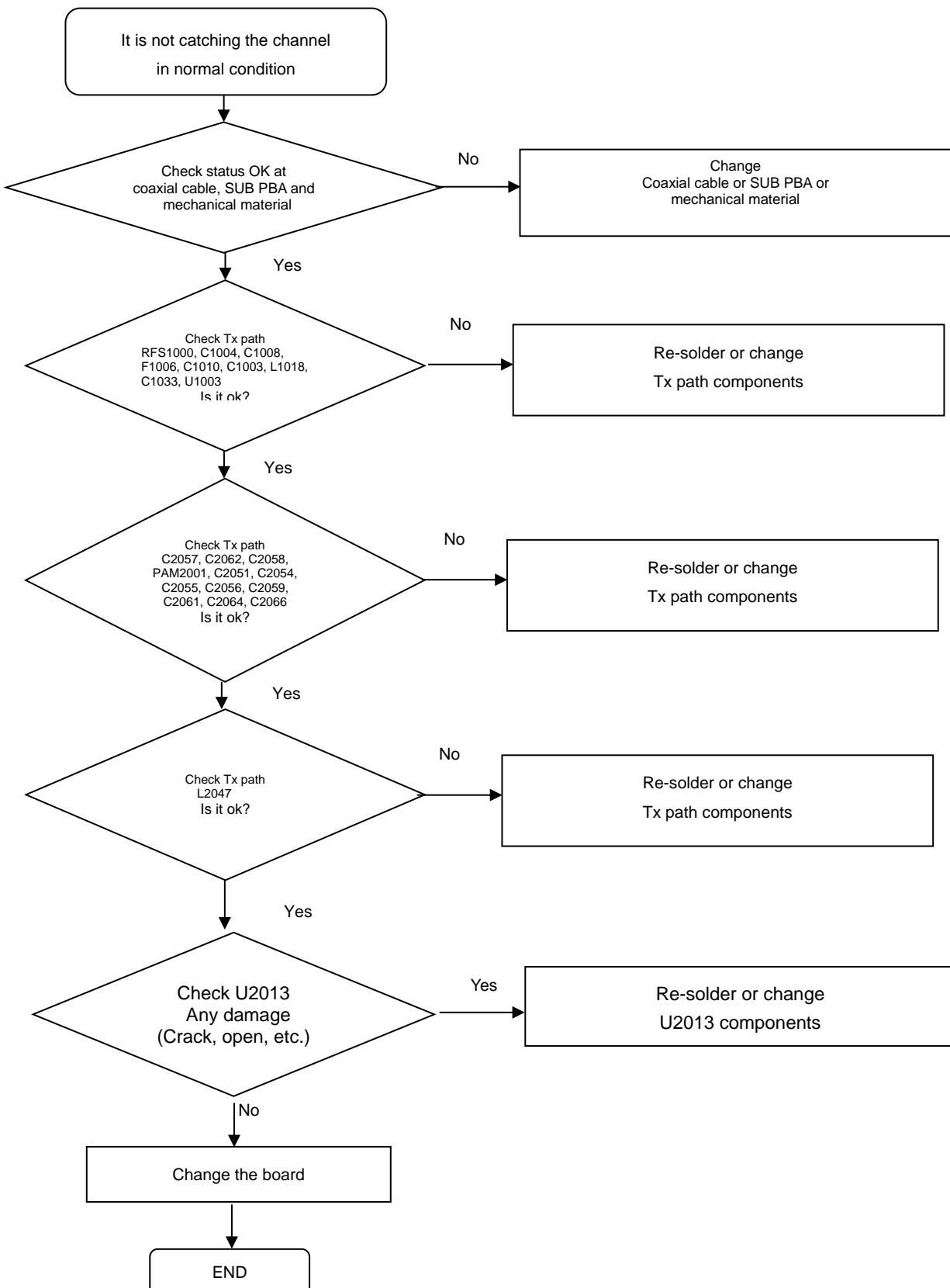
8. Level 3 Repair

8-4-30. LTE B40 RX



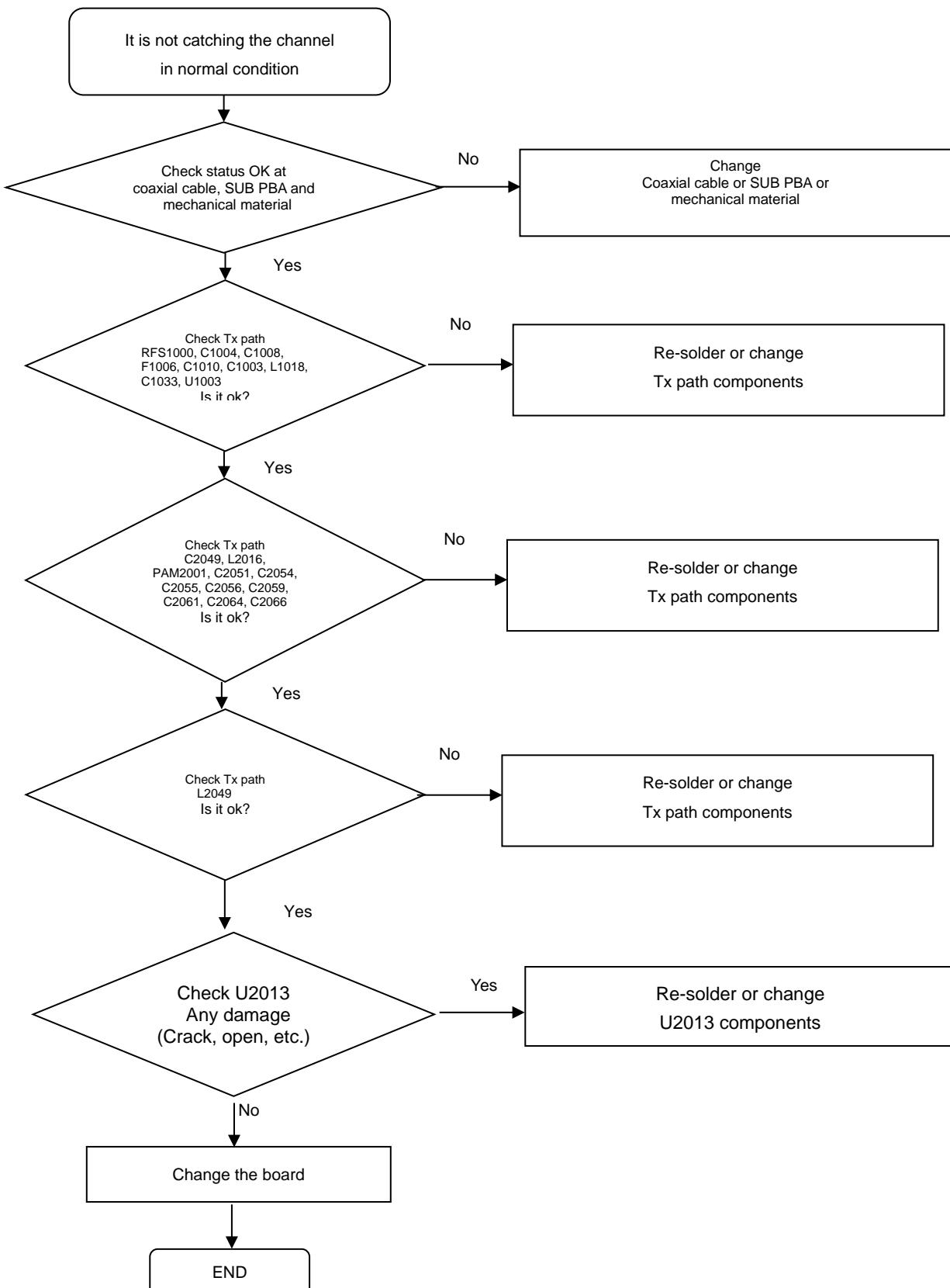
8. Level 3 Repair

8-4-31. GSM1800 / GSM1900[SM-M105M] TX



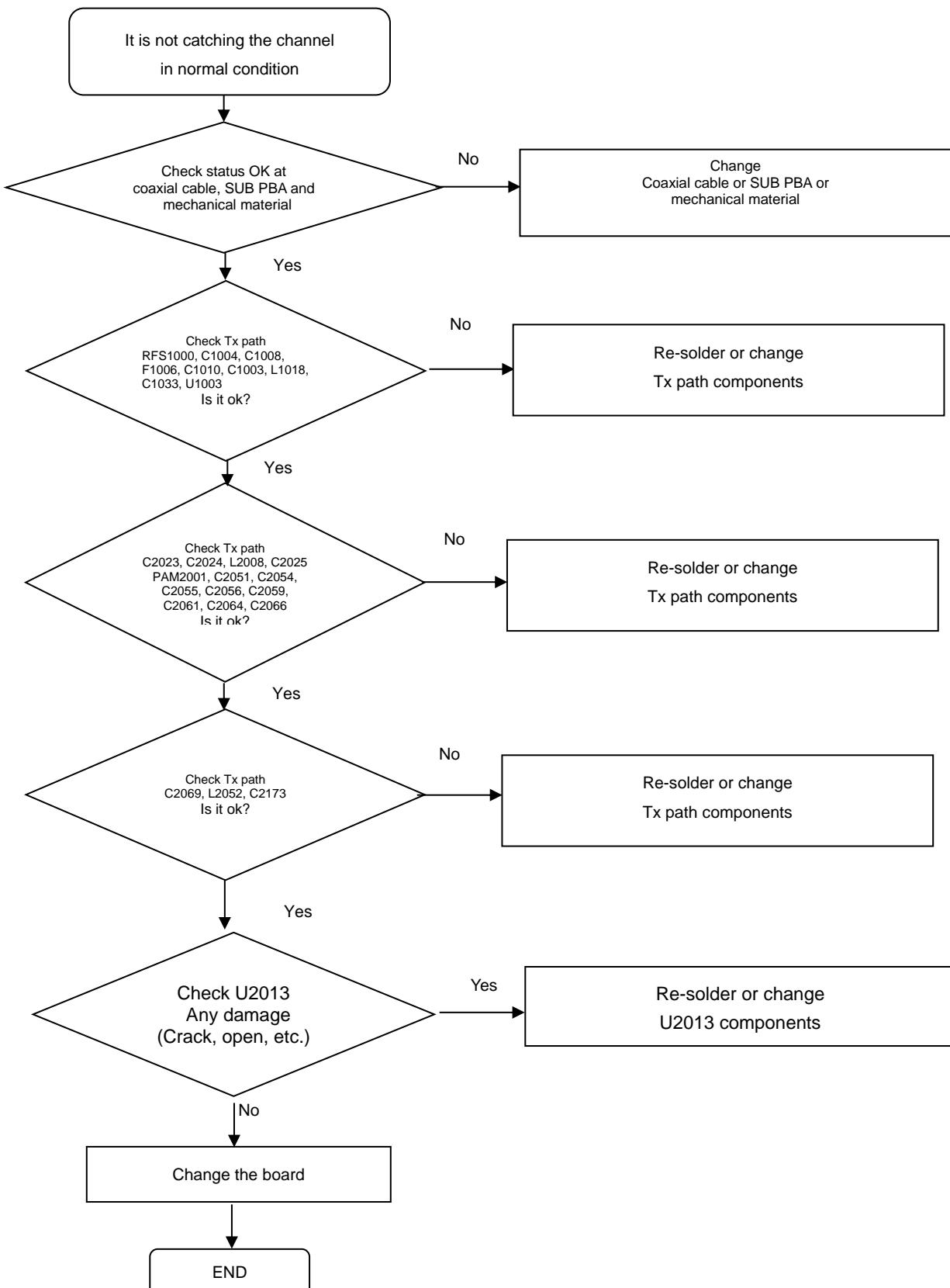
8. Level 3 Repair

8-4-32. GSM850, GSM900 TX



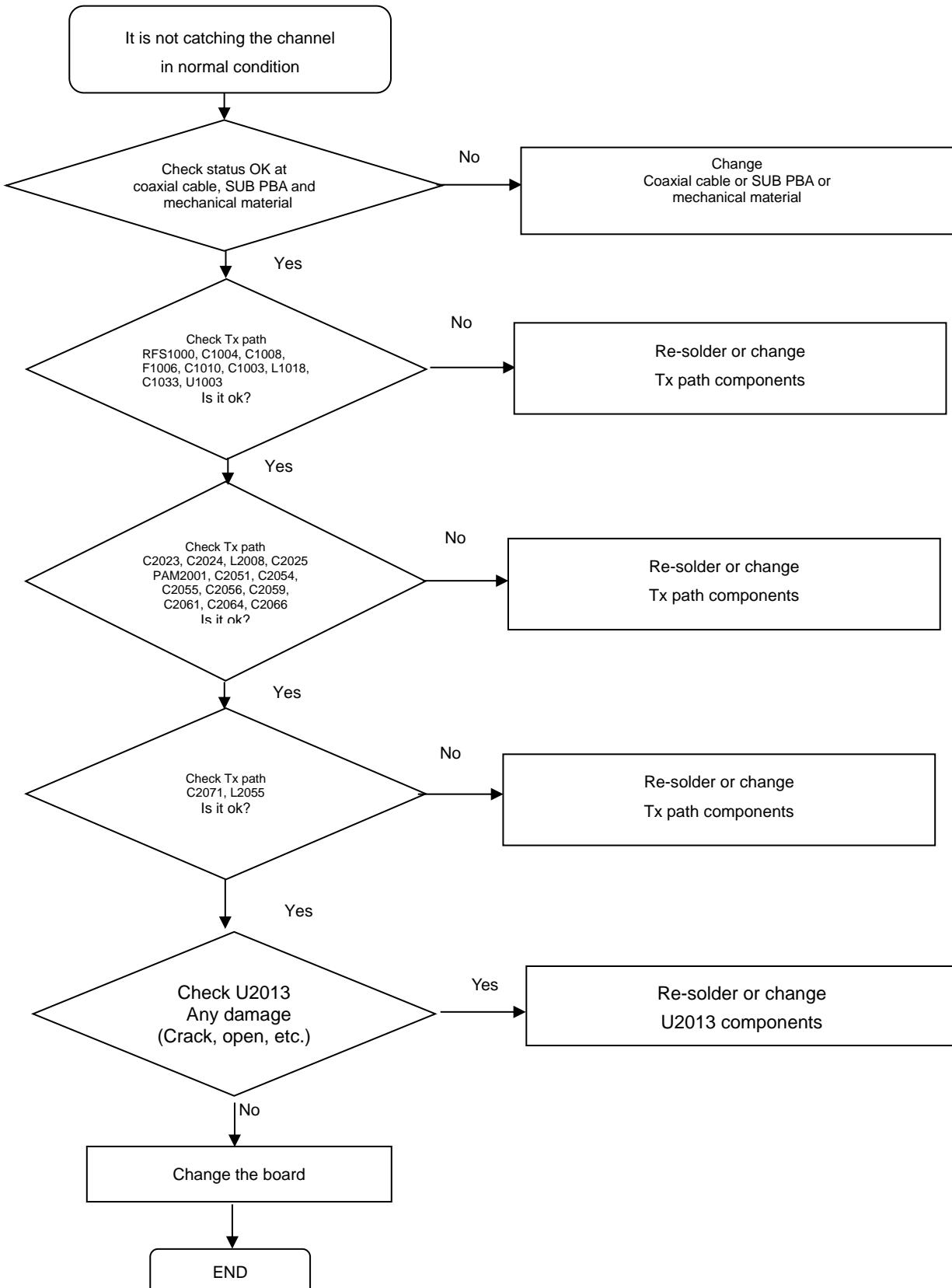
8. Level 3 Repair

8-4-33. LTE B1, WCDMA B1 TX



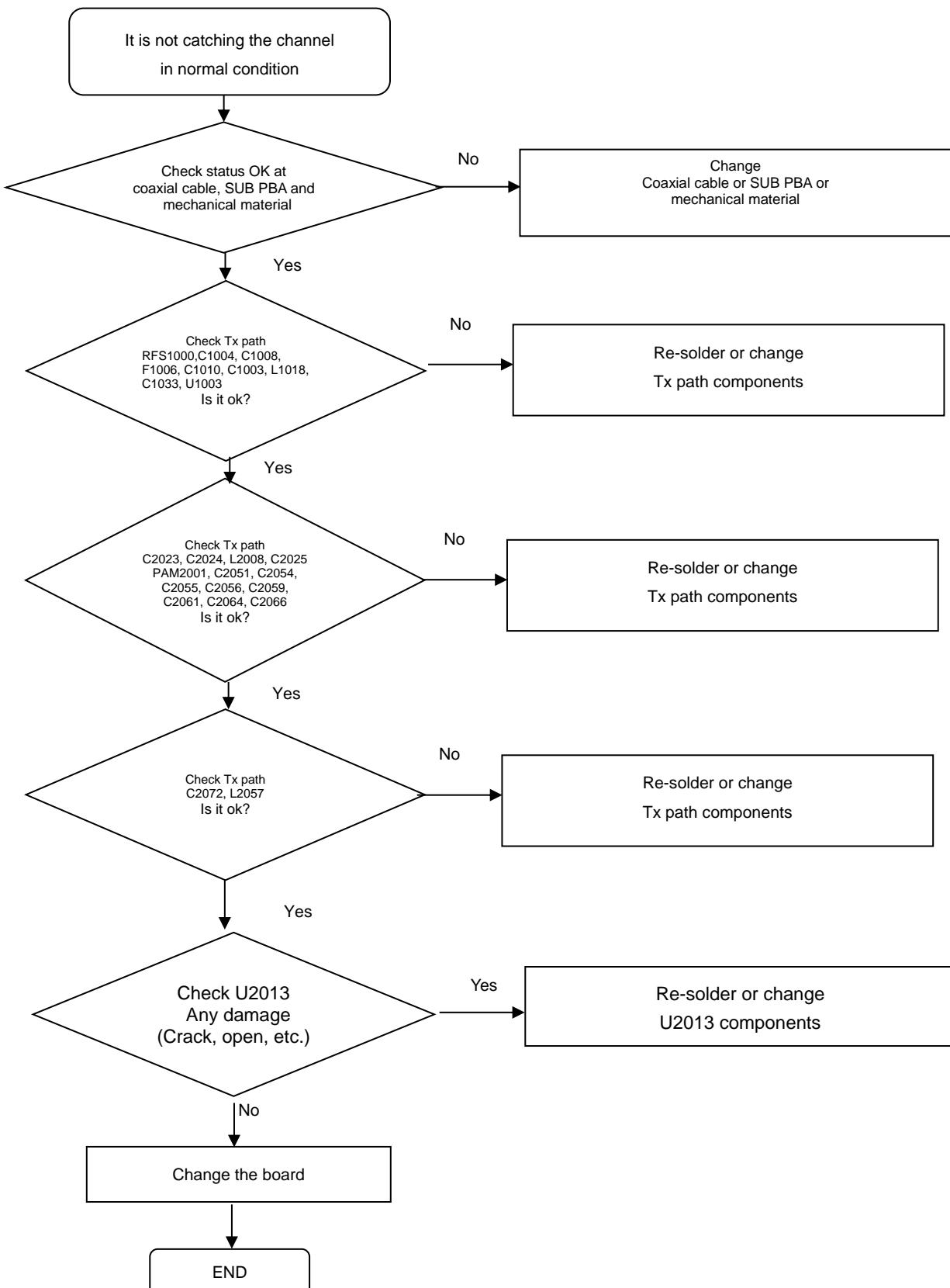
8. Level 3 Repair

8-4-34. LTE B2 / WCDMA B2 TX [SM-M105M]



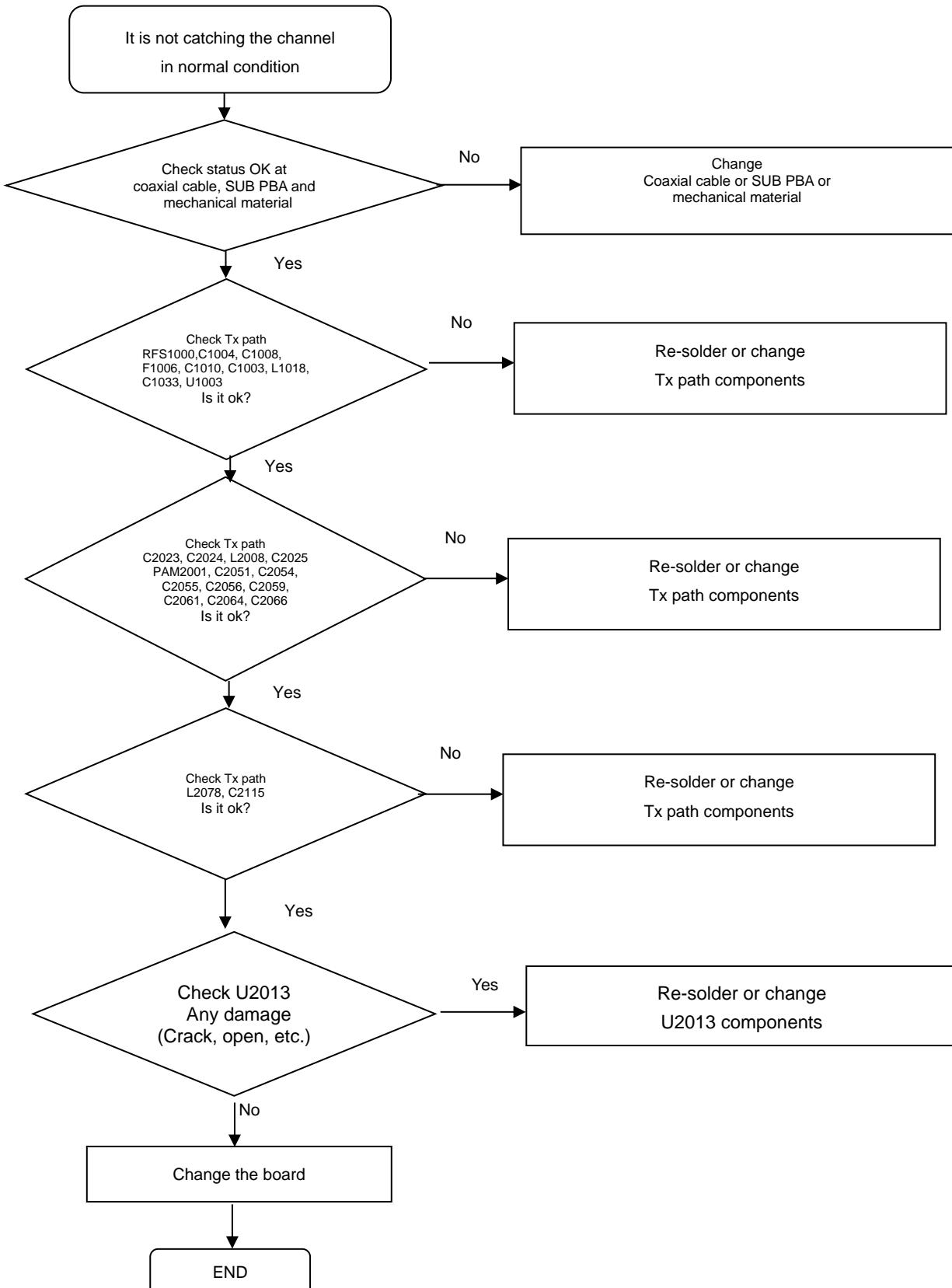
8. Level 3 Repair

8-4-35. LTE B3 TX



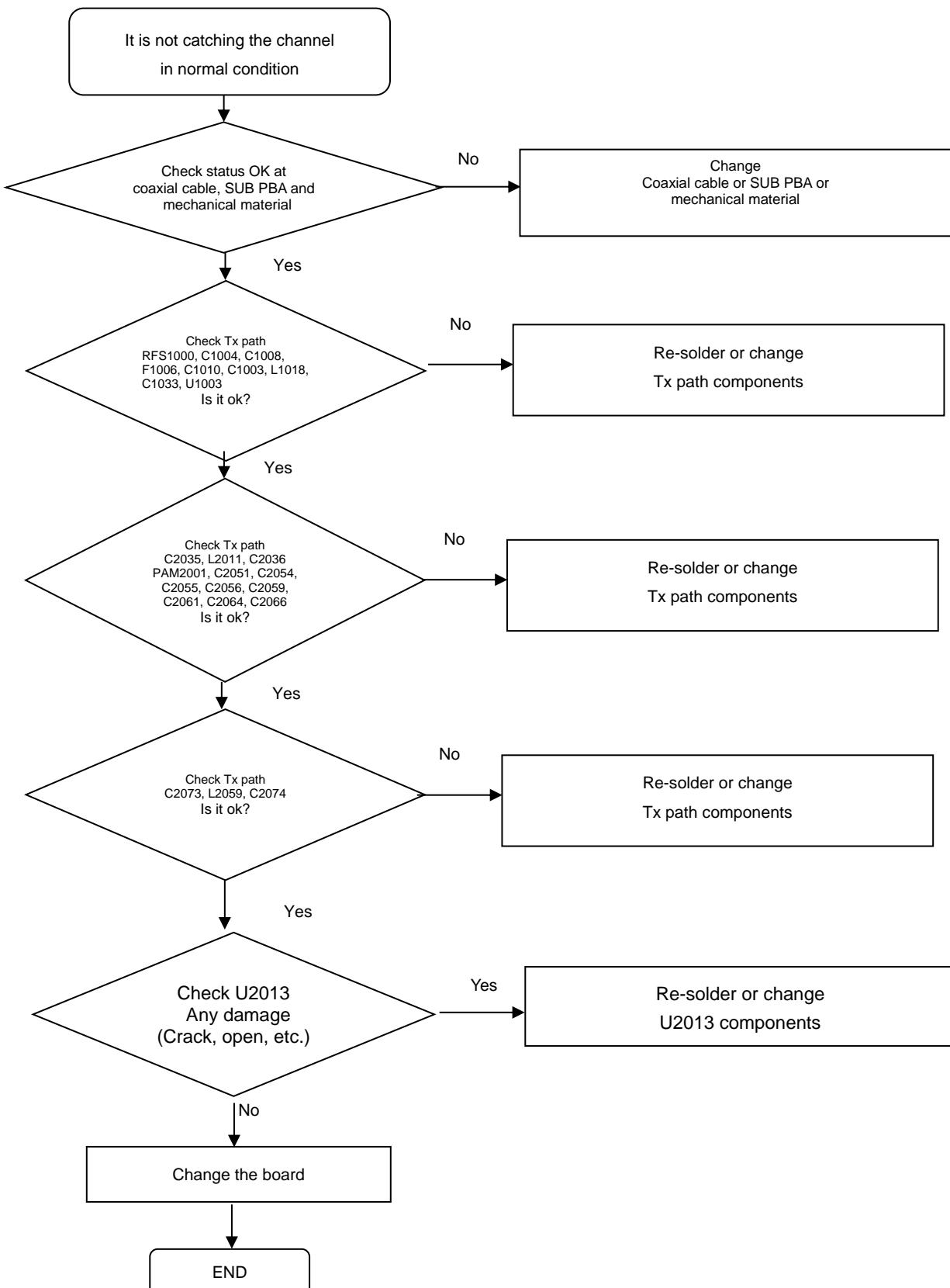
8. Level 3 Repair

8-4-36. LTE B4 / WCDMA B4 TX [SM-M105M]



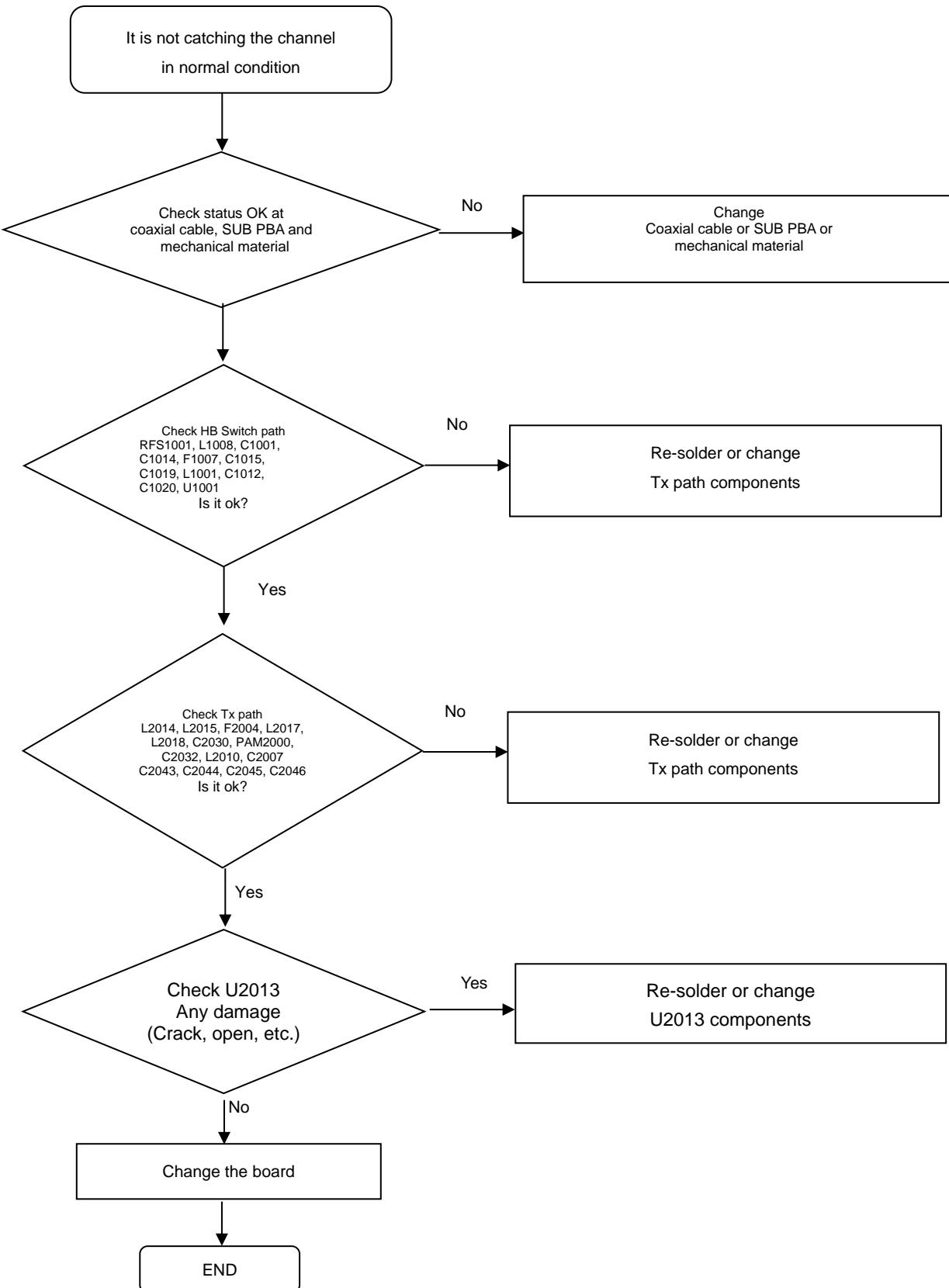
8. Level 3 Repair

8-4-37. LTE B5, WCDMA B5 TX



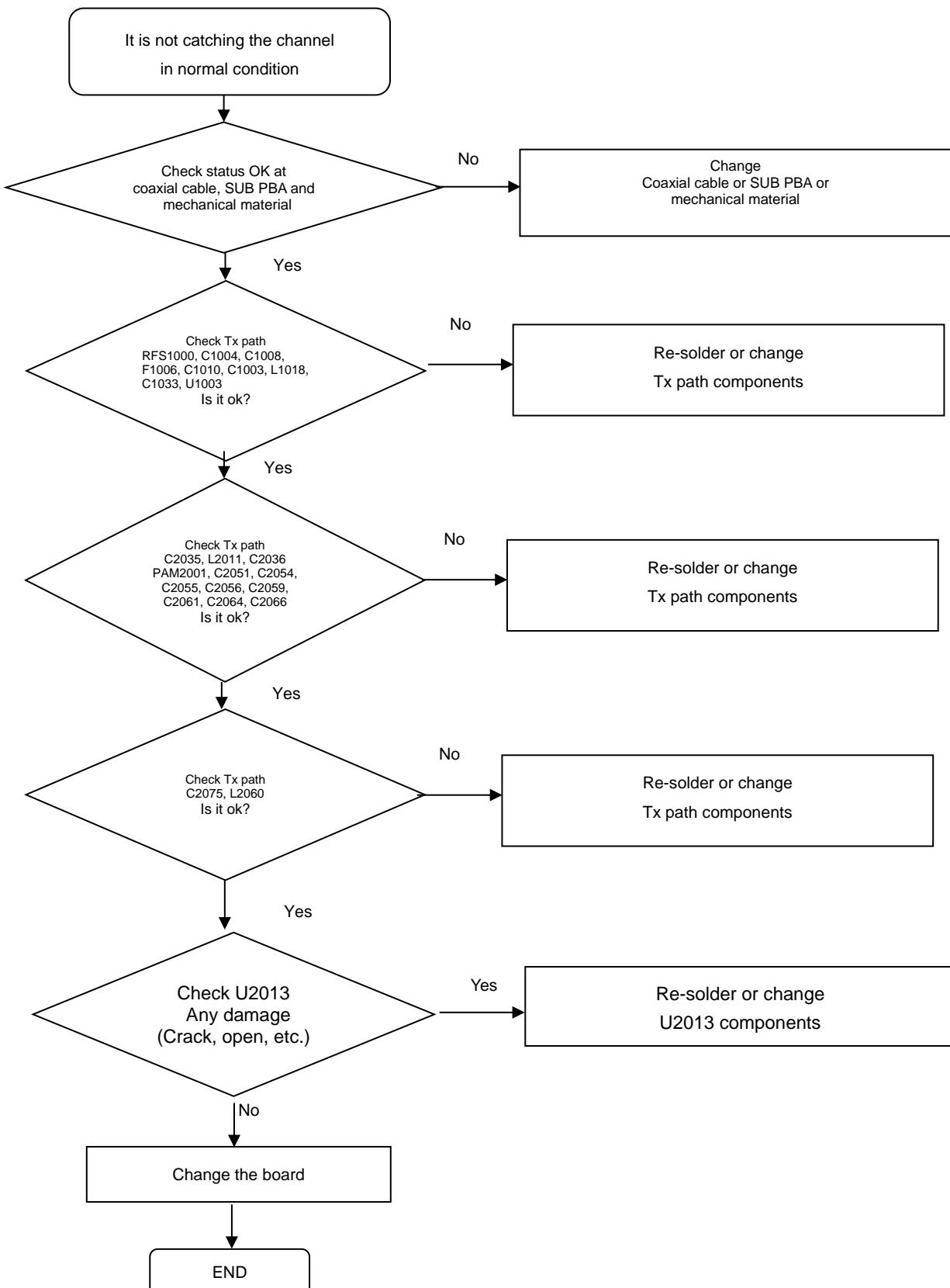
8. Level 3 Repair

8-4-38. LTE B7 TX [SM-M105G/M/Y]



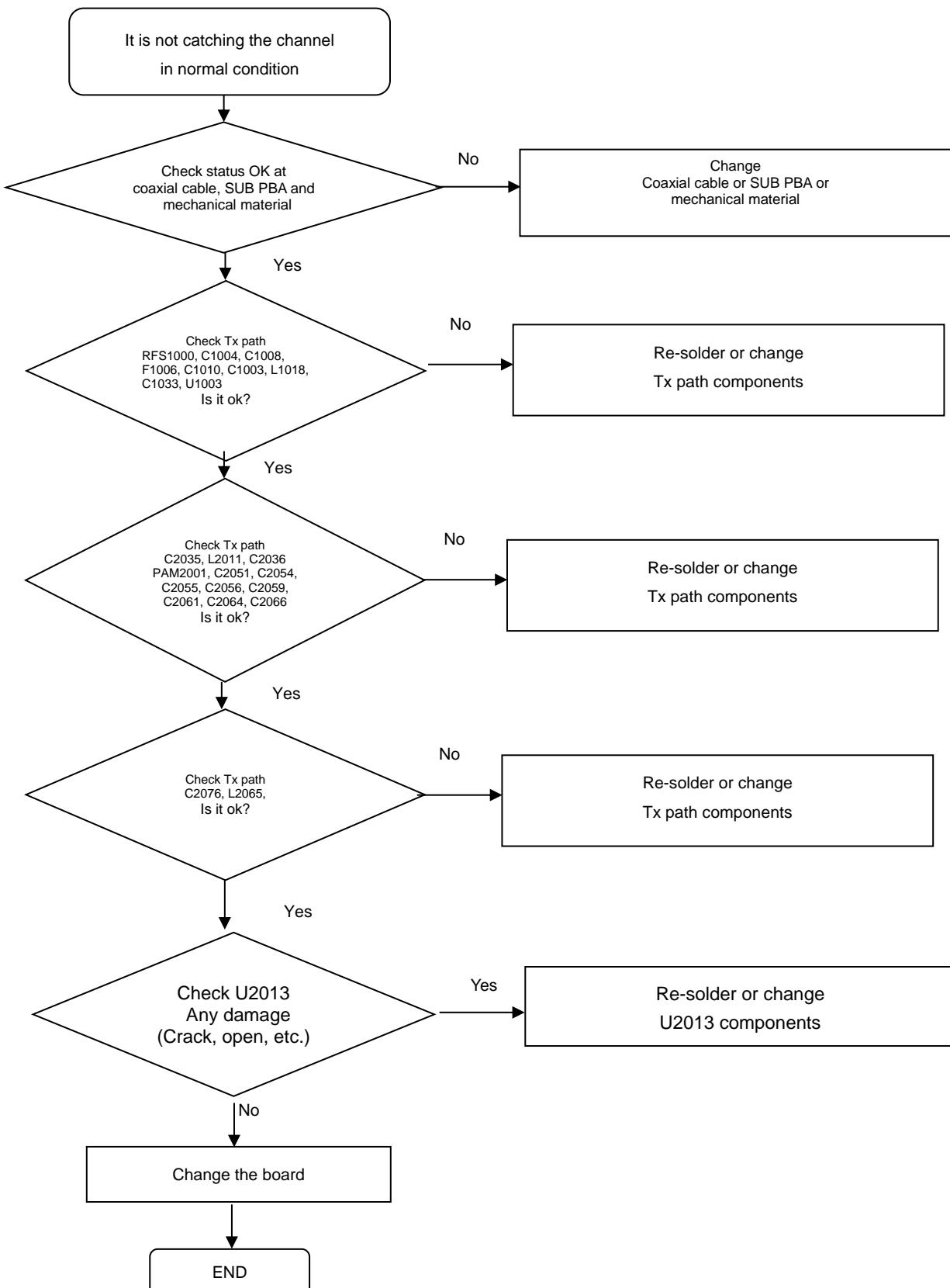
8. Level 3 Repair

8-4-39. LTE B8, WCDMA B8 TX



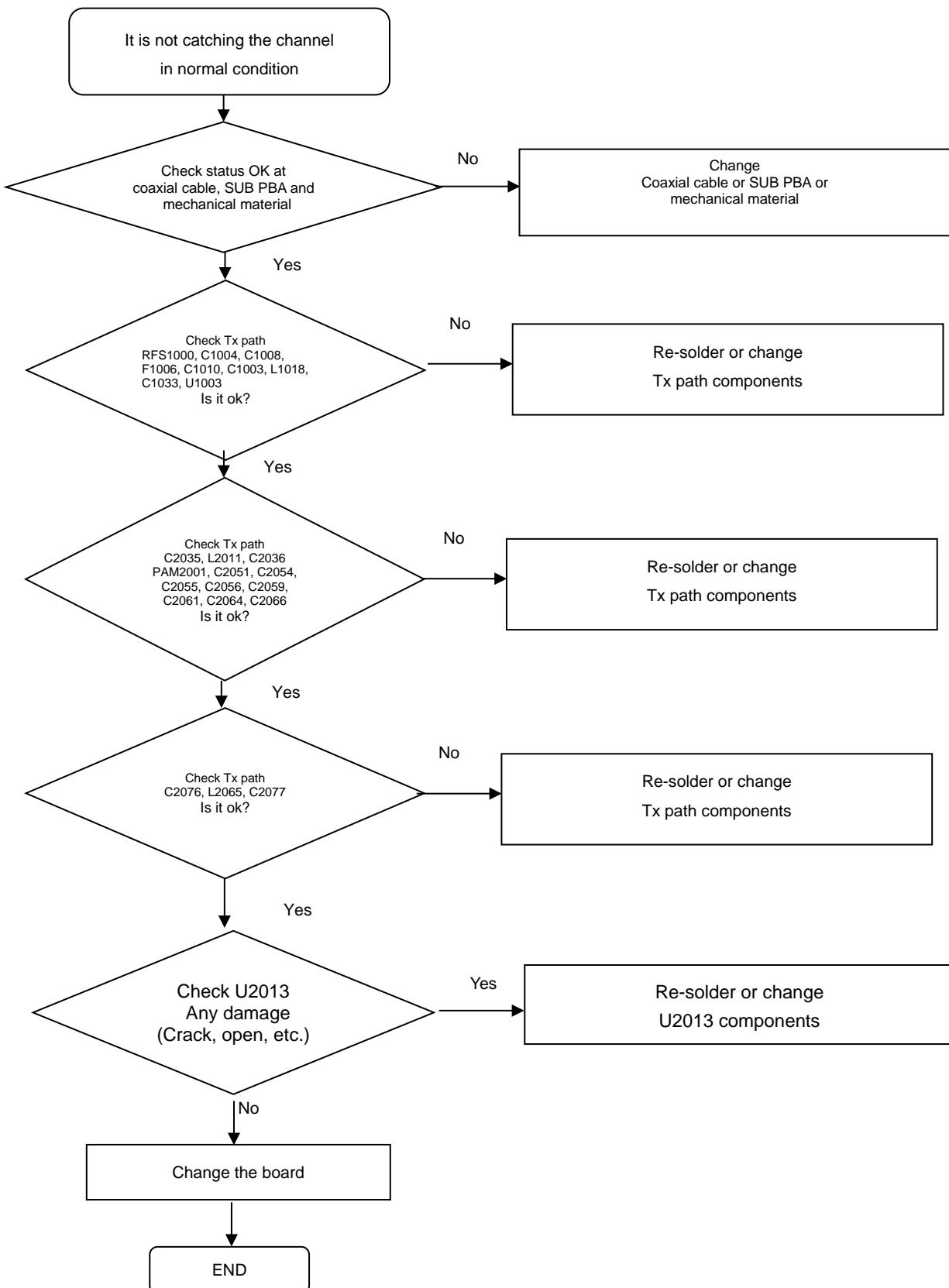
8. Level 3 Repair

8-4-40. LTE B12, B17 TX [SM-M105M]



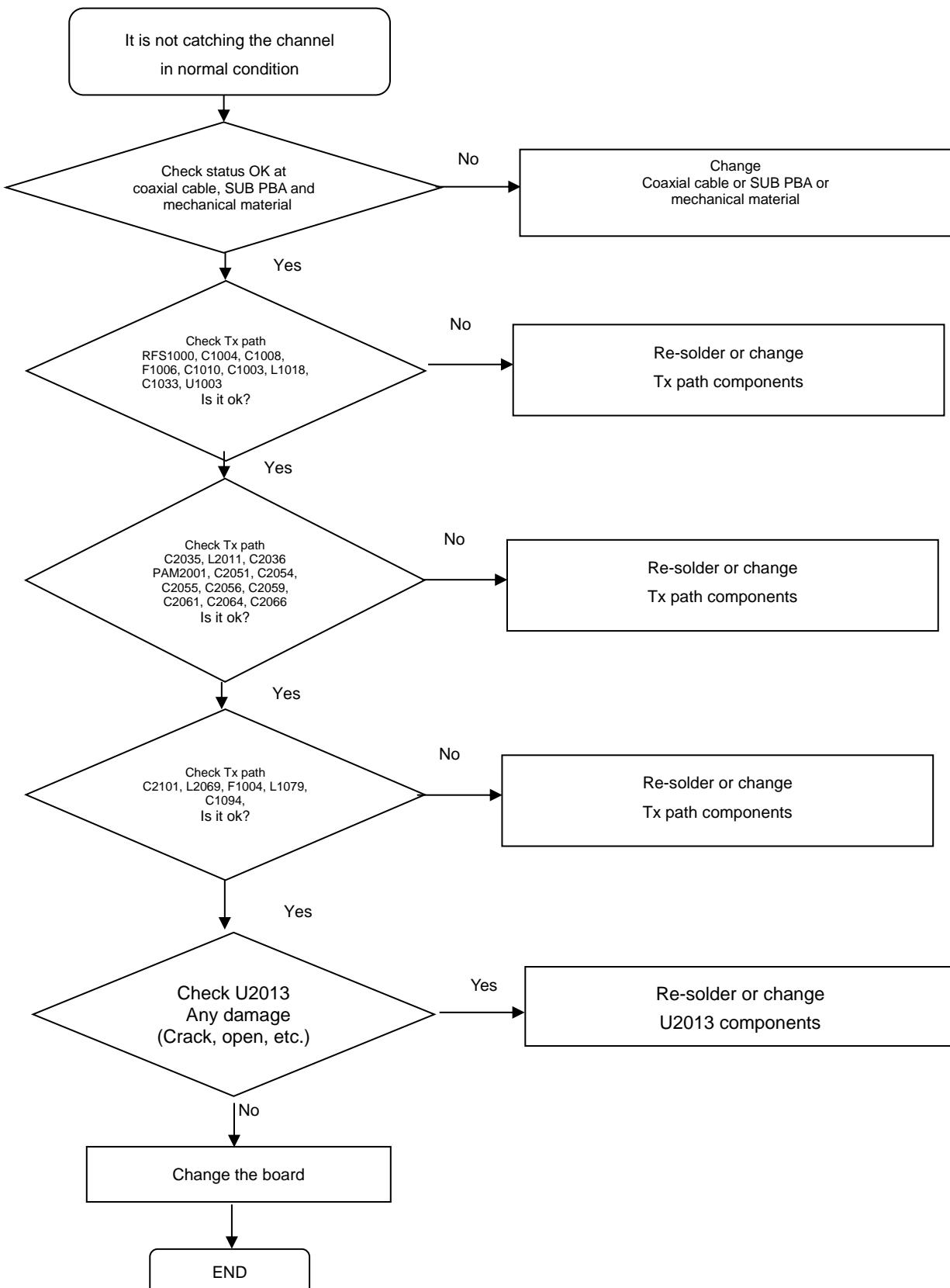
8. Level 3 Repair

8-4-41. LTE B20 TX



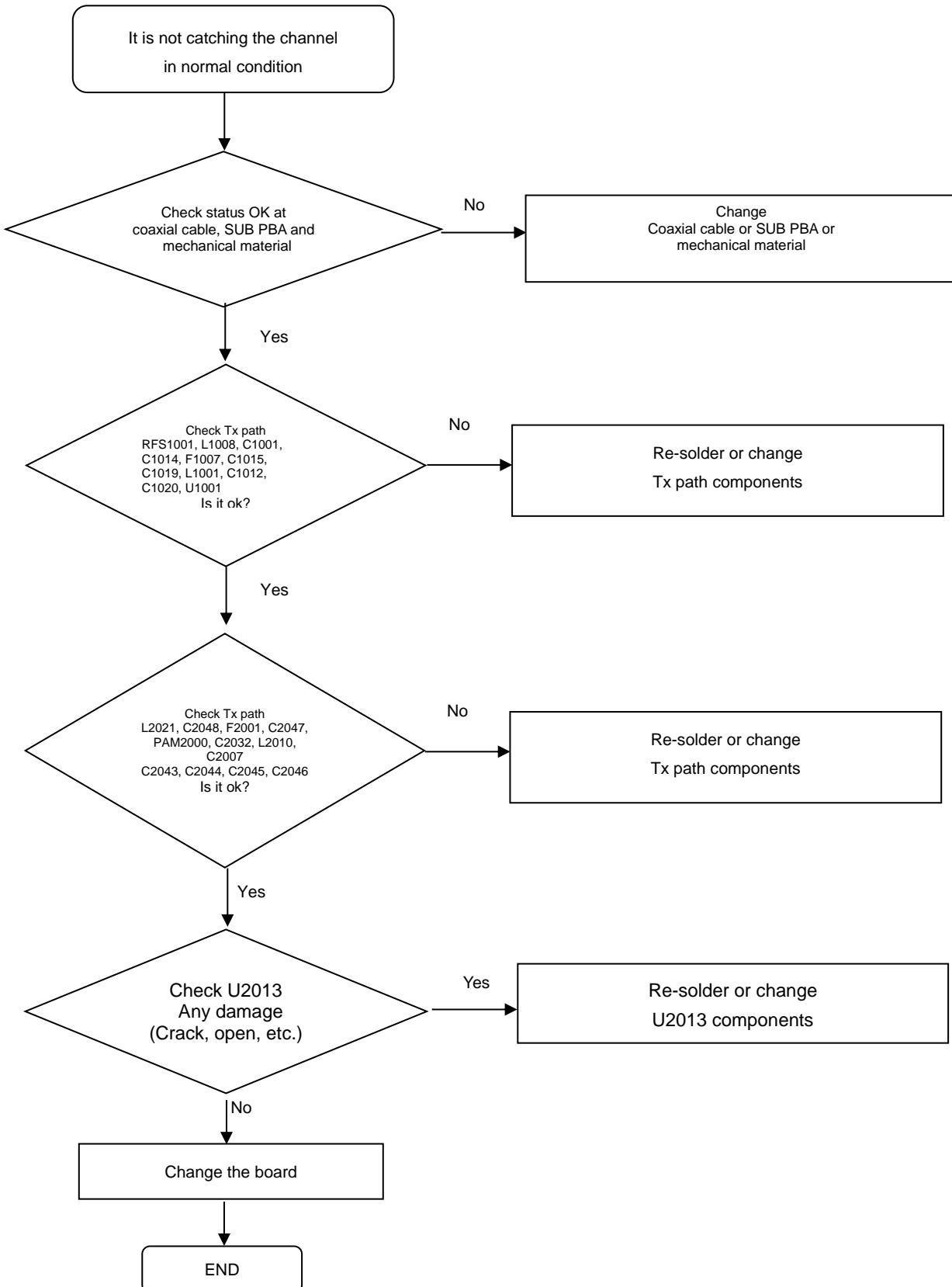
8. Level 3 Repair

8-4-42. LTE B28 TX [SM-M105M/Y]



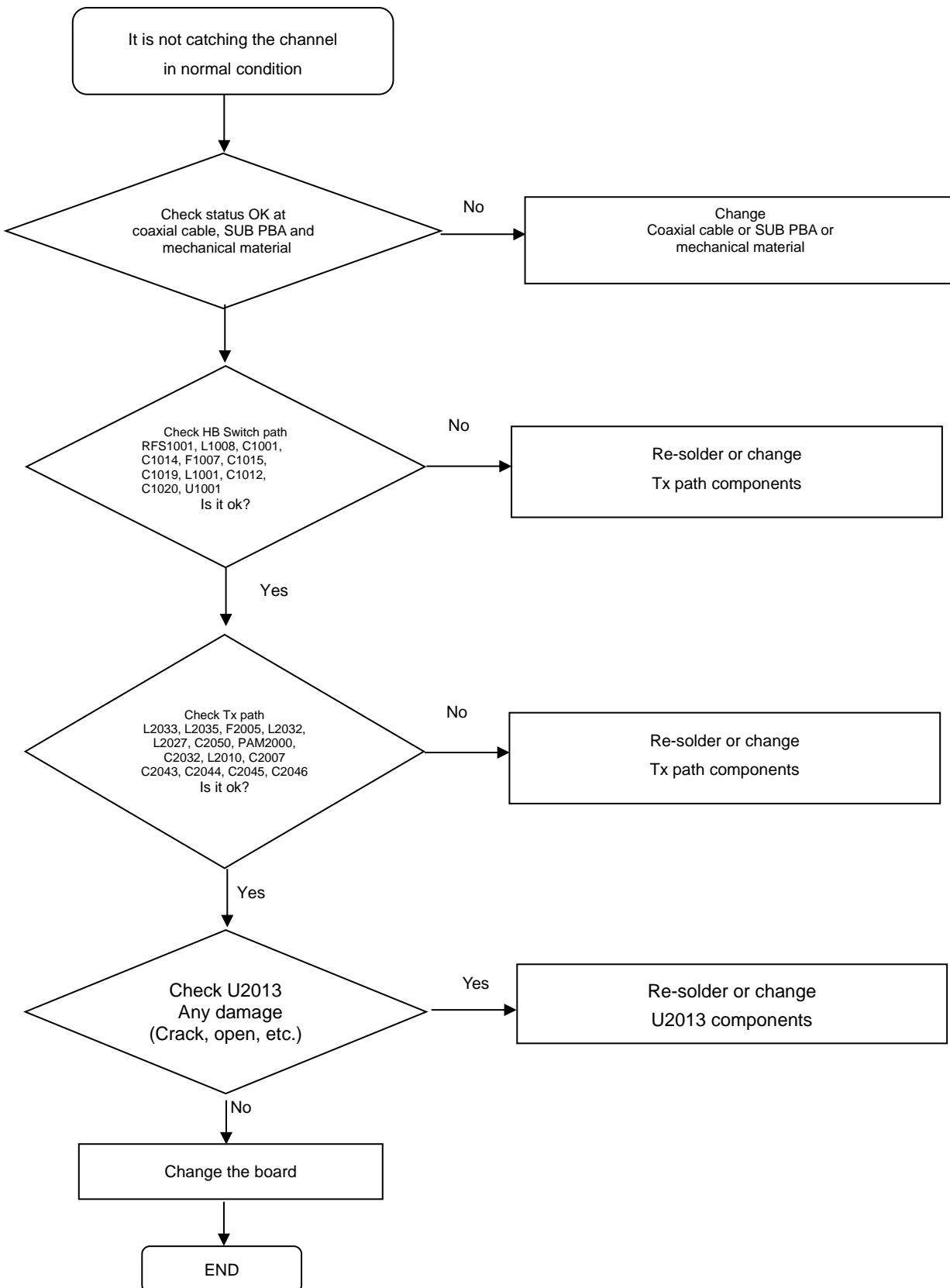
8. Level 3 Repair

8-4-43. LTE B38/B41 TX



8. Level 3 Repair

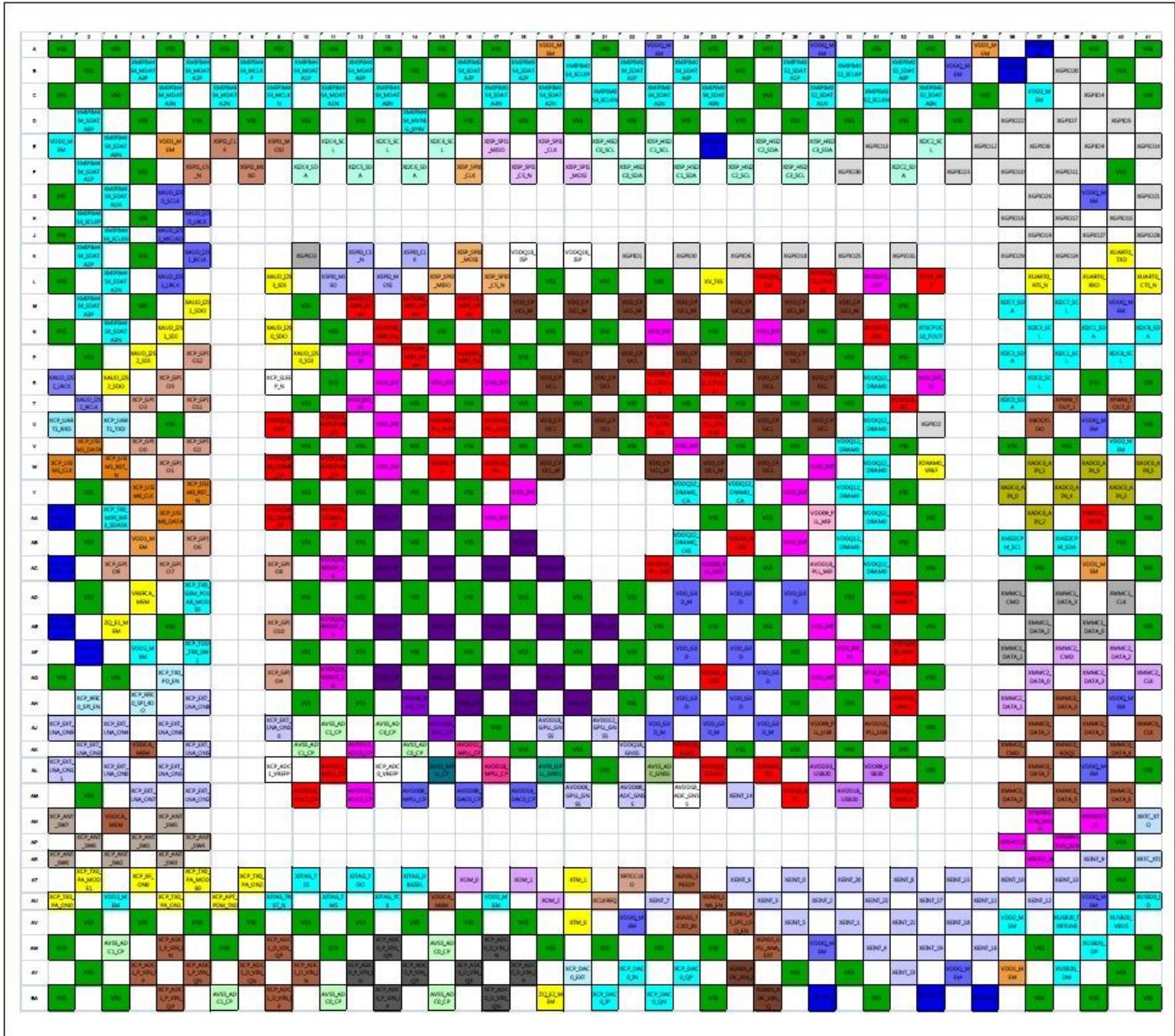
8-4-44. LTE B40 TX



8. Level 3 Repair

8-5. Service Schematics

- NC Point(Top View)



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9. Reference Abbreviation

Reference Abbreviation

- **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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