

SAMSUNG

GSM TELEPHONE

GT-i8910

***SERVICE* Manual**

GSM TELEPHONE



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1. Safety Precautions

1-1. Repair Precaution

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

1-2. ESD(Electrostatically Sensitive Devices) Precaution

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

You can prevent from ESD damage by static electricity.

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

2. Specification

2-1. GSM General Specification

	EGSM 900	DCS 1800	PCS 1900	WCDMA 900	WCDMA 2100	W1900
Freq. Band[MHz] Uplink/Downlink	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	824~849 869~894	1920~1980 2110~2170	1850~1910 1930~1990
ARFCN range	0~124 & 975~1023	512~885	512~810	UL:4132~4233 DL:4357~4458	UL:9612~9888 DL:10562~10838	UL9262~9538: DL:9662~9938
Tx/Rx spacing	10MHz	20MHz	20MHz	45MH	190MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps (chip rate)	3.84Mcps (chip rate)	3.84Mcps (chip rate)
Time Slot Period/ Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length : 10ms Slot length : 0.667ms	Frame length : 10ms Slot length : 0.667ms	Frame length : 10ms Slot length : 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HPSK	QPSK HPSK	QPSK HPSK
MS Power	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~-50dBm	24dBm~-50dBm	24dBm~-50dBm
Power Class	4 (max +33dBm)	1 (max +30dBm)	1 (max +30dBm)	3 (max +24dBm)	3 (max +24dBm)	3 (max +24dBm)
Sensitivity	-102dBm	-100dBm	-100dBm	-104.7dBm	-106.7dBm	-103.7dBm
TDMA Mux	8	8	8	-	-	-
Cell Radius	35Km	2Km	2Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM850 GSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3 dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

3. Product Function

Main Function

- HSUPA 5.76Mbps / HSDPA 7.2Mbps / Quad(850/900/1800/1900) , UMTS (900/1900/2100)
- Bluetooth v2.0 + EDR
- Wi-Fi (802.11 b/g)
- USB v2.0 HS compatible
- 8M CMOS (AF, Power LED) + CIF
 - Face Detection, Smile Detection, Eye Blink Detection, Panorama Shot, Mosaic Shot, OCR/BCR
- FM Radio Receiver
- A-GPS, S-GPS, GPS+, Navigation
- DivX Codec
- Accelerometer / Compass
- Instant Messaging capability
- E-mail
- Featured applications provide alarms, calendar, calculator, record audio, converter, timer, stopwatch, and world time.
- File viewer (MS office, PDF)
- Multimedia Message Service (MMS)
- Multimedia capability (with included Media player)
- Photo caller ID
- Speakerphone capability
- WEB/WAP browser (HTMS, xHTML, WML)
- VT H.263 + ARM NB
- Movinand 8GB/16GB +microSD card
- 3.7" AMOLED

4. Array course control

4-1. Software Adjustments



Test Jig (GH99-36900A)



Test Cable (GH39-01160A)



RF Test Cable (GH39-00985A)

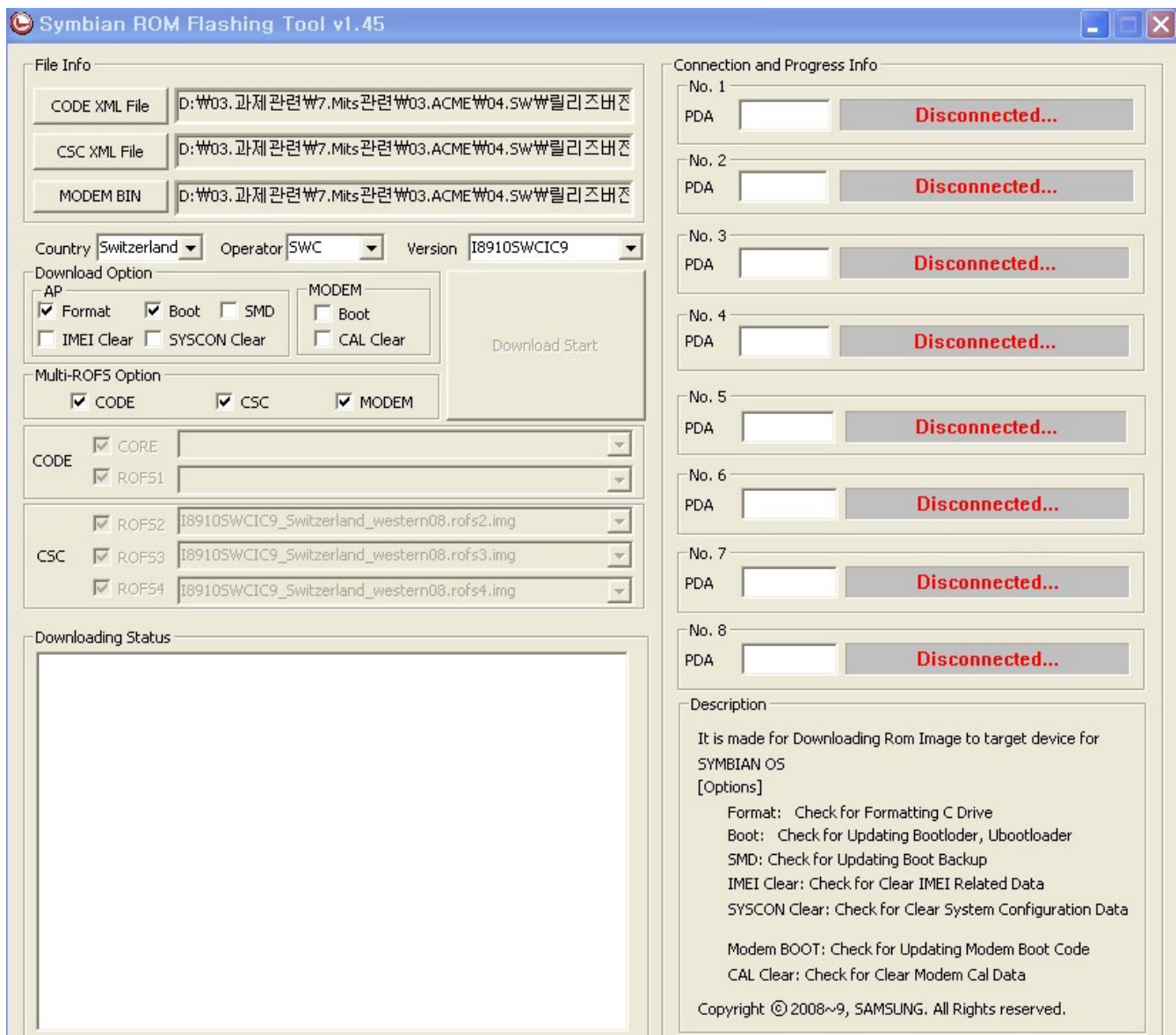


Adapter (GH99-38251A)

4-2. Software Download

4-2-1. Pre-requisite for Download

- i. Symbian ROM Flashing Tool v.1.45 (Or the upper version)
- ii. ACME USB Driver
 - ① PDA : SSDN_V1.1.808.7165_SETUP_whql.exe
 - ② MODEM(BASEBAND) : SAMSUNG Mobile USB DRIVER(4.40.7.0) v1.6.zip
- iii. MS xml parser : Msxml.msi
- iv. USB Cable
- v. I8910 phone with almost fully charged battery(more than 3 battery bars)



4-2-2. Concepts & cautions.

- i. Binary is divided for 2 images, PDA and Modem. PDA image consists of CODE and CSC.
- ii. Do Not power off the phone or disconnect the usb connection during download.
- iii. Use right version of Downloader tool written in Release Note.
- iv. Version of CODE, CSC and Modem(BaseBand) should be matched correctly according to 'Release Note' when you download. If the combination is wrong, phone may not work well.
- v. When you download Modem(BaseBand) binary, after 'Binary Downloading 100%' is displayed in Progress Info box, 'CP Flashing...' message will be displayed. After this message is flashing, 'Download Complete!' message will be shown up.



Detach the phone after this complete message.

4-2-3. USB Driver installation

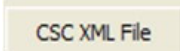
Execute SSDN_V1.1.808.7165_SETUP_whql.exe to setup PDA Driver

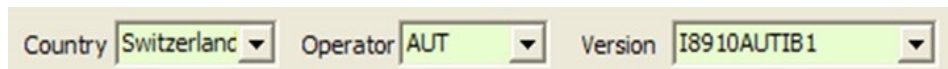
Unzip SAMSUNG Mobile USB DRIVER(4.40.7.0) v1.6.zip, setup Mdem Driver with setup.exe

4-2-4 How to Downlaod

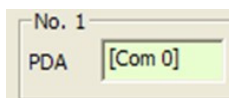
!!! Make sue CODE, CSC, MODEM(BASEBAND) mapping in 'Release Note', and then download with the correct version. After download, press *#1234#and check CODE, CSC and MODEM version. This is very important. !!!

i. CODE + CSC + MODEM(BASEBAND) Download(Full Release)

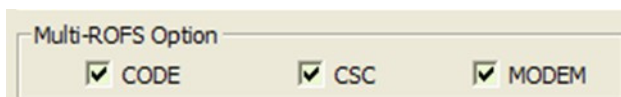
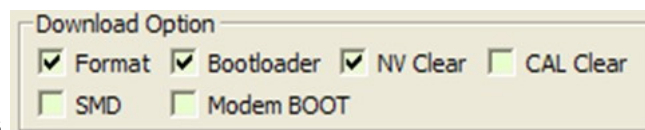
1. In myProject, download CODE, CSC and MODEM(BaseBand) binary.
2. Launch 'Symbian Rom Flashing Tool', press  button to select MODEM(BASEBAND) binary.
3. Press  button to select CODE xml. (ex:CODE_I8910XXIB5.xml)
4. Press  button to select CSC xml. (ex: CSC_I8910AUTIB5.xml)
5. Confirm CODE and CUSTOM version



6. Power on the phone with **Hold + Side Volume Up Key** pressed (PDA DOWNLOAD mode)
7. When you connect phone to PC with USB, PDA is attached



8. Select the type of binary which you want to download in Multi-ROFS Option box.

9. Set the download option like this.



10. Press  button to start download.

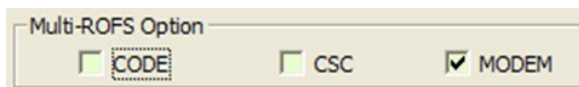
11. After finishing downloading PDA, Modem is downloaded.

See  in Progress Info box.

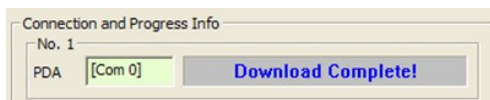
Do Not disconnect a USB cable before 'Download Complete!' message!!

ii. MODEM(BASEBAND) Download Only

1. Proceed from step 'i.-1 to i-2'.
2. Turn on the device with **Hold + Side Up Key pressed** (PDA Download Mode)
3. Do step 'i.-7'.
4. Check only MODEM box.

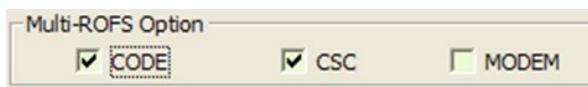


5. Press  button to start download.
6. Wait until this message is displayed!!

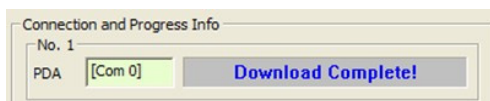


iii. CODE + CSC Download Only

1. Unzip CODE and CSC binary.
2. Do step 'i.3~i.7'.
3. Select the type of binary which you want to download in Multi-ROFS Option box.



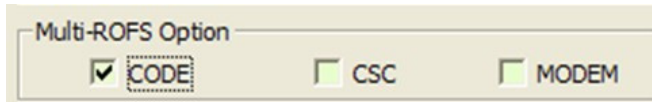
4. Press  button to start download.
5. Wait until this message is displayed!!



iv. CODE Download Only

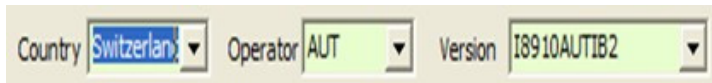
1. Unzip CODE Release.

2. Do step'i.-3, i.-6, i.-7'.
3. Select the type of binary which you want to download in Multi-ROFS Option box.



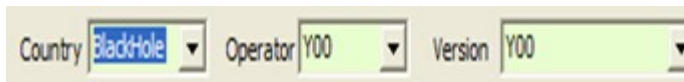
A dialog box titled "Multi-ROFS Option" with three checkboxes: "CODE" (checked), "CSC" (unchecked), and "MODEM" (unchecked).

4. Select any Country without Blackhole.(Example of selecting Country)

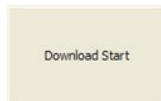


A dialog box showing three dropdown menus: "Country" (Switzerland), "Operator" (AUT), and "Version" (I8910AUTIB2).

Wrong example of Country(BlackHole))



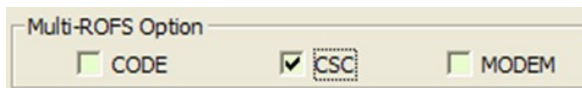
A dialog box showing three dropdown menus: "Country" (BlackHole), "Operator" (Y00), and "Version" (Y00).



5. Press button to start download.

v. CSC Download Only

1. Unzip CSC release.
2. Do step 'i.4~i.7'.
3. Select the type of binary which you want to download in Multi-ROFS Option box.



A dialog box titled "Multi-ROFS Option" with three checkboxes: "CODE" (unchecked), "CSC" (checked), and "MODEM" (unchecked).



4. Press button to start download.

4-2-5. Troubleshooting

A. If the device is not attached after the Driver installation,

- i. Change USB cable and phone.
- ii. Try with another PC.

B. Download stops in the middle

- i. Close and launch Symbian Rom Flashing Tool again then try again.
- ii. Check the phone is charged enough.

C. Download doesn't start

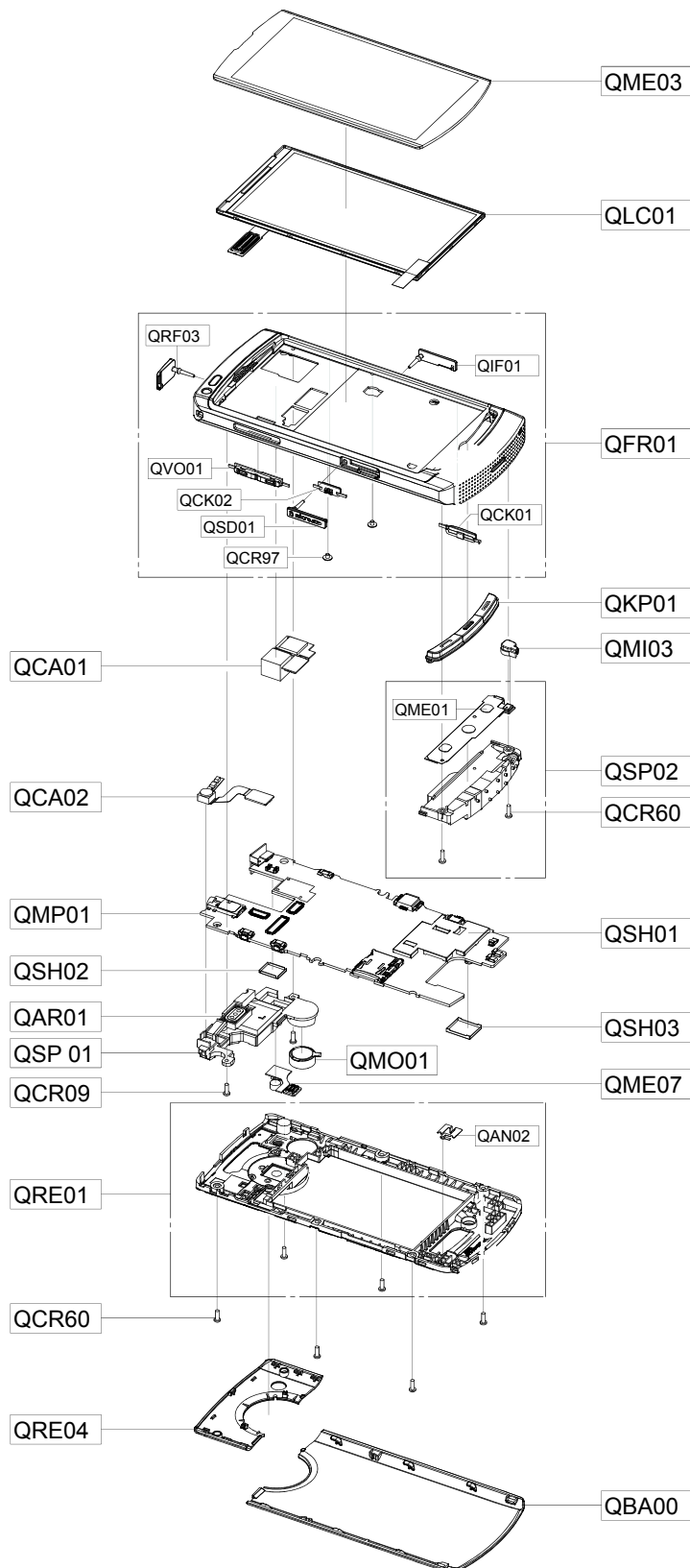
- i. Check the connection between Symbian Rom Flashing Tool and a phone.
- ii. Select an image again.
- iii. Check mapping of CODE, CSC and Modem is right. (See Mapping Table)
- iv. Check Symbian Rom Flashing Tool version matches with the image.
- v. Check Bootloader version displayed on the phone screen. Start right steps according to the version.

D. Phone doesn't boot up after downloading

- i. Check CODE, CSC and Modem version.

5. Exploded View and Parts List

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC		Design LOC	SEC CODE
QAR01		AUDIO-RECEIVER	3009-001357
QBA00		ASSY COVER-BATT	GH98-13202A
QCA01		CAMERA MODULE-GT-I8910 8M	GH59-06979A
QCA02		ASSY CAMERA-GT-I8910 CIF	GH96-03632A
QCR09		SCREW-MACHINE	6001-001670
QCR60		SCREW-MACHINE	6001-002005
QCR60		SCREW-MACHINE	6001-002005
QKP01		ASSY KEYPAD-(EU/SILVER)	GH98-11648A
QLC01		ASSY LCD-MODULE ASSY(GT-I8910)	GH96-03638A
QME03		TOUCH/PANEL-GT-I8910(EU)	GH59-07251A
QME07		MODULE-FLASH LED MODULE (MIC)	GH59-07043A
QMI03		RMO RUBBER-HOLDER MIC	GH73-12919A
QMO01		MOTOR LINEAR VIBRATION-GT-I8910	GH31-00472A
QMP01		A/S ASSY-PBA MAIN GT-I8910 SVC(SWC)	GH82-03619A
QRE04		ASSY DECO-REAR	GH98-13068A
QSH01		ICT SHIELD-CAN A	GH70-04831A
QSH02		ICT SHIELD-CAN B	GH70-04832A
QSH03		ICT SHIELD-CAN C	GH70-04833A
QSP01		MODULE-UPPER SPK ASSY(DSL)	GH59-07097A
QSP02		MODULE-LOW SPK ASSY(DSL)	GH59-07096A
	QME01	KEY FPCB-3-DOME KEY FPCB(MIC)	GH59-06995A
QRE01		ASSY CASE-REAR	GH98-11647A
	QAN02	INTENNA-GT_I8910(BT,WIFI)	GH42-01919A
QFR01		ASSY CASE-FRONT	GH98-11645A
	QCR97	SCREW-MACHINE	6001-002262
	QIF01	PMO COVER-IF	GH72-52115A
	QCK02	PMO KEY-HOLD	GH72-52120A
	QSD01	PMO COVER-MICRO_SD	GH72-53778A
	QRF03	PMO COVER-EAR V2	GH72-53779A
	QVO01	ASSY KEY-VOLUME	GH98-13022A
	QCK01	ASSY KEY-CAMERA	GH98-13023A

6. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
0202-001602	R403	Short Pad
0202-001602	R527	Short Pad
0202-001602	R718	Short Pad
0202-001602	R991	Short Pad
0202-001602	R994	Short Pad
0403-001749	D402	Diode
0406-001223	ZD512	Diode
0406-001223	ZD513	Diode
0406-001254	ZD700	Diode
0406-001254	ZD701	Diode
0406-001254	ZD702	Diode
0406-001254	ZD703	Diode
0406-001254	ZD705	Diode
0406-001254	ZD706	Diode
0406-001254	ZD707	Diode
0406-001256	ZD301	Diode
0406-001256	ZD401	Diode
0406-001256	ZD402	Diode
0406-001329	ZD200	Diode
0406-001329	ZD201	Diode
0406-001329	ZD500	Diode
0406-001329	ZD501	Diode
0406-001329	ZD503	Diode
0406-001329	ZD504	Diode
0406-001329	ZD505	Diode
0406-001329	ZD506	Diode
0406-001329	ZD509	Diode
0406-001329	ZD510	Diode
0406-001329	ZD600	Diode
0406-001329	ZD602	Diode
0406-001329	ZD603	Diode
0406-001329	ZD604	Diode
0406-001329	C521	Diode
0406-001329	C595	Diode
0407-001002	D400	Diode
0407-001002	D401	Diode
0407-001007	U408	Diode

SEC CODE	Design LOC	Description
0504-001113	TR400	Transistor
0504-001113	TR401	Transistor
0504-001113	TR403	Transistor
0504-001113	TR404	Transistor
0505-001165	TR402	Transistor
0801-002321	U808	Logic IC
0801-003013	U302	Logic IC
0801-003016	U301	Logic IC
0801-003016	U405	Logic IC
0801-003016	U901	Logic IC
0801-003016	U903	Logic IC
0801-003052	U300	Logic IC
0801-003052	U902	Logic IC
0801-003079	U404	Logic IC
0801-003129	U407	Logic IC
0801-003200	U305	Logic IC
0902-002434	UCP900	Digital Signal Processor IC
1001-001336	U603	Logic IC
1001-001461	U607	Logic IC
1001-001476	U612	Logic IC
1001-001481	U609	Logic IC
1001-001483	U806	Logic IC
1001-001488	U617	Logic IC
1003-002047	U601	Logic IC
1003-002132	U807	Logic IC
1003-002216	U709	Analog Switch
1003-002216	U710	Analog Switch
1003-002216	U810	Analog Switch
1107-001827	UME900	Memory IC
1108-000248	UCP900UP	MCP Memory
1108-000260	SIP300	MCP Memory
1201-002577	PAM102	Amplifier
1201-002581	LNA200	Amplifier
1201-002671	PAM100	Amplifier
1201-002733	U501	Amplifier
1201-002733	U502	Amplifier
1201-002781	PAM101	Amplifier

SEC CODE	Design LOC	Description
1202-001079	U613	Comparator
1202-001079	U614	Comparator
1203-003643	U705	Power Supply Circuit
1203-003643	U801	Power Supply Circuit
1203-003924	U403	Power Supply Circuit
1203-004607	U604	Power Supply Circuit
1203-004621	U503	Power Supply Circuit
1203-004776	U600	Power Supply Circuit
1203-004818	U800	Power Supply Circuit
1203-004978	U803	Power Supply Circuit
1203-005097	U401	Power Supply Circuit
1203-005250	U802	Power Supply Circuit
1203-005362	U805	Power Supply Circuit
1203-005373	U615	Power Supply Circuit
1203-005396	U906	Power Supply Circuit
1203-005443	U402	Power Supply Circuit
1203-005478	U804	Power Supply Circuit
1203-005485	U704	Power Supply Circuit
1203-005485	U750	Power Supply Circuit
1203-005503	U605	Power Supply Circuit
1204-002924	U200	IF/FM/AM Circuit IC
1205-003297	RFT100	Telecommunication Circuit
1205-003467	U304	Telecommunication Circuit
1205-003582	UCP300	Telecommunication Circuit
1209-001823	U608	Accelerator IC
1209-001872	U602	Compass IC
1404-001221	TH300	Thermistor
2007-000137	R306	R-CHIP
2007-000138	R330	R-CHIP
2007-000138	R331	R-CHIP
2007-000138	R332	R-CHIP
2007-000138	R335	R-CHIP
2007-000138	R415	R-CHIP
2007-000138	R450	R-CHIP
2007-000138	R626	R-CHIP
2007-000138	R628	R-CHIP
2007-000138	R630	R-CHIP

SEC CODE	Design LOC	Description
2007-000138	R631	R-CHIP
2007-000138	R633	R-CHIP
2007-000138	R801	R-CHIP
2007-000138	R906	R-CHIP
2007-000138	R908	R-CHIP
2007-000138	R909	R-CHIP
2007-000140	R610	R-CHIP
2007-000148	R205	R-CHIP
2007-000148	R301	R-CHIP
2007-000148	R303	R-CHIP
2007-000148	R304	R-CHIP
2007-000148	R305	R-CHIP
2007-000162	R319	R-CHIP
2007-000162	R401	R-CHIP
2007-000162	R416	R-CHIP
2007-000162	R603	R-CHIP
2007-000162	R608	R-CHIP
2007-000162	R609	R-CHIP
2007-000162	R613	R-CHIP
2007-000162	R701	R-CHIP
2007-000162	R714	R-CHIP
2007-000162	R750	R-CHIP
2007-000162	R809	R-CHIP
2007-000165	R400	R-CHIP
2007-000169	R621	R-CHIP
2007-000170	R312	R-CHIP
2007-000170	R433	R-CHIP
2007-000170	R602	R-CHIP
2007-000170	R612	R-CHIP
2007-000173	R618	R-CHIP
2007-000173	R619	R-CHIP
2007-000173	R931	R-CHIP
2007-000173	R992	R-CHIP
2007-001119	R414	R-CHIP
2007-001290	R325	R-CHIP
2007-001292	R300	R-CHIP
2007-001292	R320	R-CHIP

SEC CODE	Design LOC	Description
2007-001292	R931	R-CHIP
2007-001292	R992	R-CHIP
2007-001298	R118	R-CHIP
2007-001298	R321	R-CHIP
2007-001303	R107	R-CHIP
2007-001303	R108	R-CHIP
2007-001313	R204	R-CHIP
2007-001339	R703	R-CHIP
2007-002970	R106	R-CHIP
2007-002970	R112	R-CHIP
2007-007014	R404	R-CHIP
2007-007014	R406	R-CHIP
2007-007014	R926	R-CHIP
2007-007107	R311	R-CHIP
2007-007107	R313	R-CHIP
2007-007137	R502	R-CHIP
2007-007137	R503	R-CHIP
2007-007137	R504	R-CHIP
2007-007137	R505	R-CHIP
2007-007137	R202	R-CHIP
2007-007137	R607	R-CHIP
2007-007193	R110	R-CHIP
2007-007193	R111	R-CHIP
2007-007306	R307	R-CHIP
2007-007306	R802	R-CHIP
2007-007306	R803	R-CHIP
2007-007309	R434	R-CHIP
2007-007310	R411	R-CHIP
2007-007316	R317	R-CHIP
2007-007317	R412	R-CHIP
2007-007317	R525	R-CHIP
2007-007317	R526	R-CHIP
2007-007317	R900	R-CHIP
2007-007317	R901	R-CHIP
2007-007317	R929	R-CHIP
2007-007317	R930	R-CHIP
2007-007468	R402	R-CHIP

SEC CODE	Design LOC	Description
2007-007698	R407	R-CHIP
2007-007766	R721	R-CHIP
2007-007766	R722	R-CHIP
2007-007875	R600	R-CHIP
2007-007875	R604	R-CHIP
2007-007942	R620	R-CHIP
2007-008015	R950	R-CHIP
2007-008044	R103	R-CHIP
2007-008045	R104	R-CHIP
2007-008045	R105	R-CHIP
2007-008045	R114	R-CHIP
2007-008045	R115	R-CHIP
2007-008045	R116	R-CHIP
2007-008045	R431	R-CHIP
2007-008052	R521	R-CHIP
2007-008052	R902	R-CHIP
2007-008052	R903	R-CHIP
2007-008052	R907	R-CHIP
2007-008055	R315	R-CHIP
2007-008055	R316	R-CHIP
2007-008055	R408	R-CHIP
2007-008055	R409	R-CHIP
2007-008055	R512	R-CHIP
2007-008055	R514	R-CHIP
2007-008055	R605	R-CHIP
2007-008055	R606	R-CHIP
2007-008055	R614	R-CHIP
2007-008055	R800	R-CHIP
2007-008419	R113	R-CHIP
2007-008419	R322	R-CHIP
2007-008419	R323	R-CHIP
2007-008419	R324	R-CHIP
2007-008483	R442	R-CHIP
2007-008483	R443	R-CHIP
2007-008483	R445	R-CHIP
2007-008483	R446	R-CHIP
2007-008516	R200	R-CHIP

SEC CODE	Design LOC	Description
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2007-008544	R506	R-CHIP
2007-008544	R510	R-CHIP
2007-008588	R432	R-CHIP
2007-008616	R928	R-CHIP
2007-008739	R413	R-CHIP
2007-008766	R318	R-CHIP
2007-008806	R405	R-CHIP
2007-009111	R451	R-CHIP
2007-009111	R452	R-CHIP
2007-009168	R611	R-CHIP
2007-009171	R918	R-CHIP
2007-009171	R919	R-CHIP
2007-009171	R920	R-CHIP
2007-009171	R921	R-CHIP
2007-009171	R922	R-CHIP
2007-009171	R923	R-CHIP
2007-009171	R924	R-CHIP
2007-009171	R925	R-CHIP
2007-009402	R501	R-CHIP
2007-009402	R507	R-CHIP
2007-009402	R508	R-CHIP
2007-009410	R109	R-CHIP
2007-009805	R509	R-CHIP
2203-000233	C108	C-CER, CHIP
2203-000233	C207	C-CER, CHIP
2203-000233	L211	C-CER, CHIP
2203-000233	C418	C-CER, CHIP
2203-000233	C419	C-CER, CHIP
2203-000233	C426	C-CER, CHIP
2203-000254	C166	C-CER, CHIP
2203-000278	C554	C-CER, CHIP
2203-000330	C410	C-CER, CHIP
2203-000330	C553	C-CER, CHIP
2203-000386	C415	C-CER, CHIP
2203-000386	C550	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-000438	C616	C-CER, CHIP
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2203-000466	C142	C-CER, CHIP
2203-000489	C332	C-CER, CHIP
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2203-000679	C596	C-CER, CHIP
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2203-000812	C135	C-CER, CHIP
2203-000812	C148	C-CER, CHIP
2203-000812	C152	C-CER, CHIP
2203-000812	C167	C-CER, CHIP
2203-000812	C179	C-CER, CHIP
2203-000812	C180	C-CER, CHIP
2203-000812	C181	C-CER, CHIP
2203-000812	C194	C-CER, CHIP
2203-000812	C199	C-CER, CHIP
2203-000812	C430	C-CER, CHIP
2203-000812	C501	C-CER, CHIP

SEC CODE	Design LOC	Description
2203-000812	C502	C-CER, CHIP
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2203-000812	C529	C-CER, CHIP
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2203-000812	C594	C-CER, CHIP
2203-000812	L128	C-CER, CHIP
2203-000812	L136	C-CER, CHIP
2203-000995	C344	C-CER, CHIP
2203-000995	C505	C-CER, CHIP
2203-001124	C212	C-CER, CHIP
2203-001153	C103	C-CER, CHIP
2203-001153	C105	C-CER, CHIP
2203-001383	C176	C-CER, CHIP
2203-001405	C618	C-CER, CHIP
2203-001437	C151	C-CER, CHIP
2203-002668	L212	C-CER, CHIP
2203-002668	C208	C-CER, CHIP
2203-002668	L102	C-CER, CHIP
2203-002709	C409	C-CER, CHIP
2203-002709	C421	C-CER, CHIP
2203-002709	C423	C-CER, CHIP
2203-002709	C431	C-CER, CHIP
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2203-005050	C114	C-CER, CHIP
2203-005050	C117	C-CER, CHIP
2203-005050	C121	C-CER, CHIP
2203-005053	C109	C-CER, CHIP
2203-005053	C110	C-CER, CHIP
2203-005056	C150	C-CER, CHIP
2203-005056	C159	C-CER, CHIP
2203-005057	L140	C-CER, CHIP
2203-005061	C943	C-CER, CHIP
2203-005344	C516	C-CER, CHIP

SEC CODE	Design LOC	Description
2203-005344	C519	C-CER, CHIP
2203-005395	C107	C-CER, CHIP
2203-005395	C705	C-CER, CHIP
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2203-005480	C334	C-CER, CHIP
2203-005480	C724	C-CER, CHIP
2203-005482	C211	C-CER, CHIP
2203-005482	C214	C-CER, CHIP
2203-005482	C333	C-CER, CHIP
2203-005482	C336	C-CER, CHIP
2203-005482	C341	C-CER, CHIP
2203-005482	C342	C-CER, CHIP
2203-005483	C609	C-CER, CHIP
2203-005682	C111	C-CER, CHIP
2203-005682	C120	C-CER, CHIP
2203-005682	C125	C-CER, CHIP
2203-005682	C126	C-CER, CHIP
2203-005682	C132	C-CER, CHIP
2203-005682	C134	C-CER, CHIP
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2203-005682	C141	C-CER, CHIP
2203-005682	C146	C-CER, CHIP
2203-005682	C155	C-CER, CHIP
2203-005682	C163	C-CER, CHIP
2203-005682	C164	C-CER, CHIP
2203-005682	C165	C-CER, CHIP
2203-005682	C168	C-CER, CHIP
2203-005682	C169	C-CER, CHIP
2203-005682	C170	C-CER, CHIP
2203-005682	C172	C-CER, CHIP
2203-005682	C174	C-CER, CHIP
2203-005682	C192	C-CER, CHIP
2203-005682	C195	C-CER, CHIP
2203-005682	C197	C-CER, CHIP
2203-005682	C821	C-CER, CHIP
2203-005682	C823	C-CER, CHIP
2203-005682	C825	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-005682	C829	C-CER, CHIP
2203-005725	C113	C-CER, CHIP
2203-005725	C115	C-CER, CHIP
2203-005725	C122	C-CER, CHIP
2203-005806	C143	C-CER, CHIP
2203-005806	C188	C-CER, CHIP
2203-006048	C945	C-CER, CHIP
2203-006048	U904	C-CER, CHIP
2203-006137	C504	C-CER, CHIP
2203-006137	C543	C-CER, CHIP
2203-006137	C544	C-CER, CHIP
2203-006137	C546	C-CER, CHIP
2203-006137	C547	C-CER, CHIP
2203-006190	C548	C-CER, CHIP
2203-006190	C549	C-CER, CHIP
2203-006190	C918	C-CER, CHIP
2203-006190	C919	C-CER, CHIP
2203-006190	C923	C-CER, CHIP
2203-006190	C924	C-CER, CHIP
2203-006194	C185	C-CER, CHIP
2203-006194	C189	C-CER, CHIP
2203-006194	C193	C-CER, CHIP
2203-006194	C304	C-CER, CHIP
2203-006194	C306	C-CER, CHIP
2203-006194	C309	C-CER, CHIP
2203-006194	C320	C-CER, CHIP
2203-006194	C340	C-CER, CHIP
2203-006208	C413	C-CER, CHIP
2203-006208	C422	C-CER, CHIP
2203-006208	C425	C-CER, CHIP
2203-006208	C832	C-CER, CHIP
2203-006324	C400	C-CER, CHIP
2203-006324	C403	C-CER, CHIP
2203-006324	C561	C-CER, CHIP
2203-006324	C610	C-CER, CHIP
2203-006324	C611	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-006399	C219	C-CER, CHIP
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2203-006399	C311	C-CER, CHIP
2203-006399	C312	C-CER, CHIP
2203-006399	C313	C-CER, CHIP
2203-006399	C314	C-CER, CHIP
2203-006399	C323	C-CER, CHIP
2203-006399	C324	C-CER, CHIP
2203-006399	C328	C-CER, CHIP
2203-006399	C338	C-CER, CHIP
2203-006399	C343	C-CER, CHIP
2203-006399	C414	C-CER, CHIP
2203-006399	C417	C-CER, CHIP
2203-006399	C433	C-CER, CHIP
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2203-006399	C567	C-CER, CHIP
2203-006399	C570	C-CER, CHIP
2203-006399	C803	C-CER, CHIP
2203-006399	C804	C-CER, CHIP
2203-006423	C112	C-CER, CHIP
2203-006423	C124	C-CER, CHIP
2203-006423	C128	C-CER, CHIP
2203-006423	C133	C-CER, CHIP
2203-006423	C136	C-CER, CHIP
2203-006423	C140	C-CER, CHIP
2203-006423	C149	C-CER, CHIP
2203-006423	C154	C-CER, CHIP
2203-006423	C175	C-CER, CHIP
2203-006423	C191	C-CER, CHIP

SEC CODE	Design LOC	Description
2203-006423	C200	C-CER, CHIP
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2203-006423	C302	C-CER, CHIP
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2203-006423	C310	C-CER, CHIP
2203-006423	C317	C-CER, CHIP
2203-006423	C318	C-CER, CHIP
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2203-006423	C822	C-CER, CHIP
2203-006423	C824	C-CER, CHIP
2203-006423	C826	C-CER, CHIP
2203-006423	C828	C-CER, CHIP
2203-006423	C830	C-CER, CHIP
2203-006423	C901	C-CER, CHIP
2203-006423	C903	C-CER, CHIP
2203-006423	C906	C-CER, CHIP
2203-006423	C907	C-CER, CHIP
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2203-006423	C910	C-CER, CHIP
2203-006423	C911	C-CER, CHIP
2203-006423	C912	C-CER, CHIP
2203-006423	C913	C-CER, CHIP
2203-006423	C914	C-CER, CHIP
2203-006423	C915	C-CER, CHIP
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2203-006423	C921	C-CER, CHIP
2203-006423	C922	C-CER, CHIP
2203-006423	C925	C-CER, CHIP
2203-006423	C926	C-CER, CHIP
2203-006423	C929	C-CER, CHIP
2203-006423	C932	C-CER, CHIP
2203-006423	C933	C-CER, CHIP
2203-006423	C940	C-CER, CHIP
2203-006423	C948	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-006474	C412	C-CER, CHIP
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2203-006562	C337	C-CER, CHIP
2203-006562	C524	C-CER, CHIP
2203-006562	C534	C-CER, CHIP
2203-006562	C535	C-CER, CHIP
2203-006562	C536	C-CER, CHIP
2203-006562	C541	C-CER, CHIP
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2203-006562	C545	C-CER, CHIP
2203-006562	C559	C-CER, CHIP
2203-006562	C560	C-CER, CHIP
2203-006562	C562	C-CER, CHIP
2203-006562	C564	C-CER, CHIP
2203-006562	C568	C-CER, CHIP
2203-006562	C569	C-CER, CHIP
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2203-006562	C572	C-CER, CHIP
2203-006562	C577	C-CER, CHIP
2203-006562	C604	C-CER, CHIP
2203-006562	C716	C-CER, CHIP
2203-006562	C814	C-CER, CHIP
2203-006562	C815	C-CER, CHIP
2203-006562	C817	C-CER, CHIP
2203-006562	C818	C-CER, CHIP
2203-006562	C835	C-CER, CHIP
2203-006562	C936	C-CER, CHIP
2203-006562	C937	C-CER, CHIP
2203-006562	C938	C-CER, CHIP
2203-006562	C941	C-CER, CHIP
2203-006562	C942	C-CER, CHIP
2203-006562	C944	C-CER, CHIP
2203-006585	C586	C-CER, CHIP
2203-006585	C587	C-CER, CHIP
2203-006642	C582	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-006681	C946	C-CER, CHIP
2203-006681	C947	C-CER, CHIP
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2203-006824	C161	C-CER, CHIP
2203-006824	C162	C-CER, CHIP
2203-006824	C401	C-CER, CHIP
2203-006824	C402	C-CER, CHIP
2203-006824	C513	C-CER, CHIP
2203-006824	C566	C-CER, CHIP
2203-006824	C575	C-CER, CHIP
2203-006824	C578	C-CER, CHIP
2203-006824	C607	C-CER, CHIP
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2203-006825	C576	C-CER, CHIP
2203-006825	C579	C-CER, CHIP
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2203-006839	C329	C-CER, CHIP
2203-006841	C147	C-CER, CHIP
2203-006841	C218	C-CER, CHIP
2203-006841	C346	C-CER, CHIP
2203-006841	C427	C-CER, CHIP
2203-006841	C531	C-CER, CHIP
2203-006841	C537	C-CER, CHIP
2203-006841	C719	C-CER, CHIP
2203-006872	C220	C-CER, CHIP
2203-006872	C136	C-CER, CHIP
2203-006872	C416	C-CER, CHIP
2203-006872	C420	C-CER, CHIP
2203-006872	C424	C-CER, CHIP

SEC CODE	Design LOC	Description
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2203-006872	C533	C-CER, CHIP
2203-006872	C700	C-CER, CHIP
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2203-006872	C801	C-CER, CHIP
2203-006872	C931	C-CER, CHIP
2203-006979	C138	C-CER, CHIP
2203-007230	C217	C-CER, CHIP
2203-007271	C206	C-CER, CHIP
2203-007271	C703	C-CER, CHIP
2203-007271	C729	C-CER, CHIP
2203-007271	C802	C-CER, CHIP
2203-007317	C588	C-CER, CHIP
2404-001381	TA101	C-TA, CHIP
2404-001381	TA102	C-TA, CHIP
2404-001381	TA401	C-TA, CHIP
2404-001381	TA402	C-TA, CHIP
2404-001415	TA600	C-TA, CHIP
2404-001497	TA500	C-TA, CHIP
2404-001497	TA501	C-TA, CHIP
2404-001506	TA100	C-TA, CHIP
2703-001259	L604	INDUCTOR-SMD
2703-001726	L501	INDUCTOR-SMD
2703-001726	L510	INDUCTOR-SMD
2703-001729	C153	INDUCTOR-SMD
2703-002176	L117	INDUCTOR-SMD
2703-002198	L129	INDUCTOR-SMD
2703-002199	L113	INDUCTOR-SMD
2703-002200	C145	INDUCTOR-SMD
2703-002203	L124	INDUCTOR-SMD
2703-002205	L120	INDUCTOR-SMD
2703-002205	L123	INDUCTOR-SMD
2703-002206	L106	INDUCTOR-SMD
2703-002207	C100	INDUCTOR-SMD
2703-002207	L203	INDUCTOR-SMD
2703-002208	L115	INDUCTOR-SMD
2703-002267	L131	INDUCTOR-SMD

SEC CODE	Design LOC	Description
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2703-002268	C118	INDUCTOR-SMD
2703-002268	L205	INDUCTOR-SMD
2703-002281	L144	INDUCTOR-SMD
2703-002309	L600	INDUCTOR-SMD
2703-002309	L601	INDUCTOR-SMD
2703-002314	L101	INDUCTOR-SMD
2703-002314	L103	INDUCTOR-SMD
2703-002314	L202	INDUCTOR-SMD
2703-002367	L119	INDUCTOR-SMD
2703-002367	L122	INDUCTOR-SMD
2703-002544	L137	INDUCTOR-SMD
2703-002558	L100	INDUCTOR-SMD
2703-002558	L104	INDUCTOR-SMD
2703-002558	L105	INDUCTOR-SMD
2703-002558	L107	INDUCTOR-SMD
2703-002608	L138	INDUCTOR-SMD
2703-002700	L108	INDUCTOR-SMD
2703-002700	L109	INDUCTOR-SMD
2703-002917	L118	INDUCTOR-SMD
2703-003127	L200	INDUCTOR-SMD
2703-003258	L400	INDUCTOR-SMD
2703-003258	L401	INDUCTOR-SMD
2703-003258	L402	INDUCTOR-SMD
2703-003285	L602	INDUCTOR-SMD
2703-003297	L210	INDUCTOR-SMD
2703-003412	L507	INDUCTOR-SMD
2703-003412	L508	INDUCTOR-SMD
2703-003412	L509	INDUCTOR-SMD
2703-003502	L802	INDUCTOR-SMD
2801-004466	OSC400	Crystal Unit
2801-004466	OSC501	Crystal Unit
2804-001762	OSC200	Clock Oscillator
2804-001762	OSC500	Clock Oscillator
2809-001341	TCX100	Clock Oscillator
2901-001337	F703	Filter-EMI
2901-001389	F700	Filter-EMI

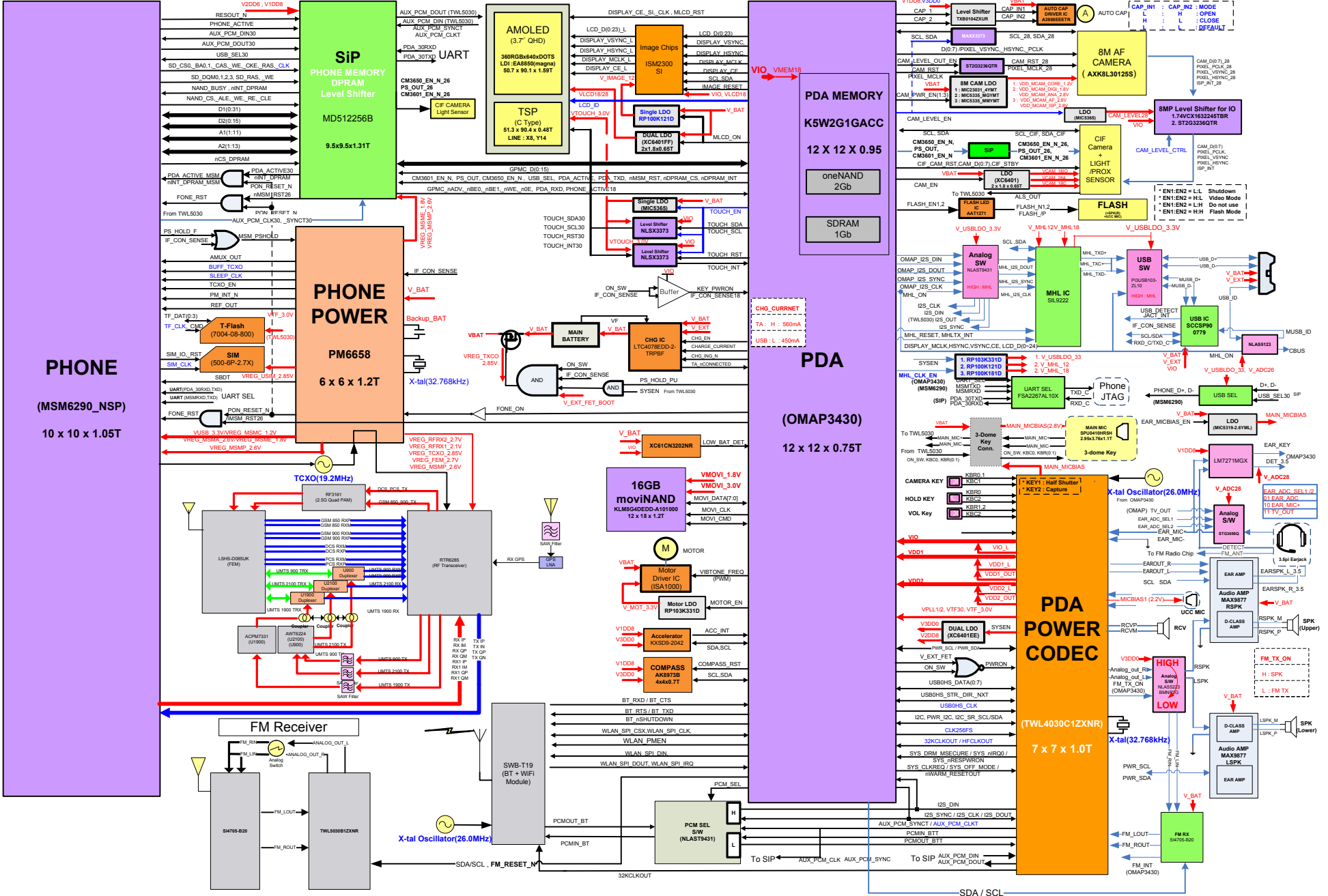
SEC CODE	Design LOC	Description
2901-001389	F701	Filter-EMI
2901-001389	F702	Filter-EMI
2901-001389	F704	Filter-EMI
2901-001389	F705	Filter-EMI
2904-001658	F104	Filter-SAW
2904-001702	F102	Filter-SAW
2904-001703	F103	Filter-SAW
2904-001743	F200	Filter-SAW
2904-001770	F101	Filter-SAW
2910-000024	DUF102	Filter-Duplexer
2910-000058	DUF101	Filter-Duplexer
2910-000071	DUF100	Filter-Duplexer
2911-000096	F100	Filter-ASM
3301-001534	L503	Core-Ferrite Bead
3301-001534	L504	Core-Ferrite Bead
3301-001534	L505	Core-Ferrite Bead
3301-001534	L506	Core-Ferrite Bead
3301-001756	L201	Core-Ferrite Bead
3301-001756	L511	Core-Ferrite Bead
3301-001756	L512	Core-Ferrite Bead
3301-001885	L502	Core-Ferrite Bead
3301-001885	L603	Core-Ferrite Bead
3301-001885	L605	Core-Ferrite Bead
3301-001885	L606	Core-Ferrite Bead
3404-001320	TAC_CAM	Switch-Tact
3404-001369	SW701	Switch-Tact
3404-001369	SW702	Switch-Tact
3404-001369	SW703	Switch-Tact
3705-001358	RFS100	Connector-Coaxial
3709-001464	CN401	Connector-Card Edge
3709-001474	SIM400	Connector-Card Edge
3710-002467	SPK500	Common User Socket
3710-002467	SPK501	Common User Socket
3711-005728	HDC800	CONNECTOR-HEADER
3711-005728	SOC800	CONNECTOR-HEADER
3711-005873	HEA700	CONNECTOR-HEADER
3711-006615	HEA502	CONNECTOR-HEADER

SEC CODE	Design LOC	Description
3711-006615	SOC701	CONNECTOR-HEADER
3711-006803	BTC400	CONNECTOR-HEADER
3711-006863	RCV500	Common User Socket
3722-002658	EAR600	Connector-Earjack
3722-002867	IFC600	Common User Socket
4302-001181	BAT400	Battery-ETC
4709-001399	CPL100	COUPLER-DIRECTION
4709-001399	CPL102	COUPLER-DIRECTION
4709-001405	CPL101	COUPLER-DIRECTION
4709-001718	MOD200	W-LAN MODULE

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

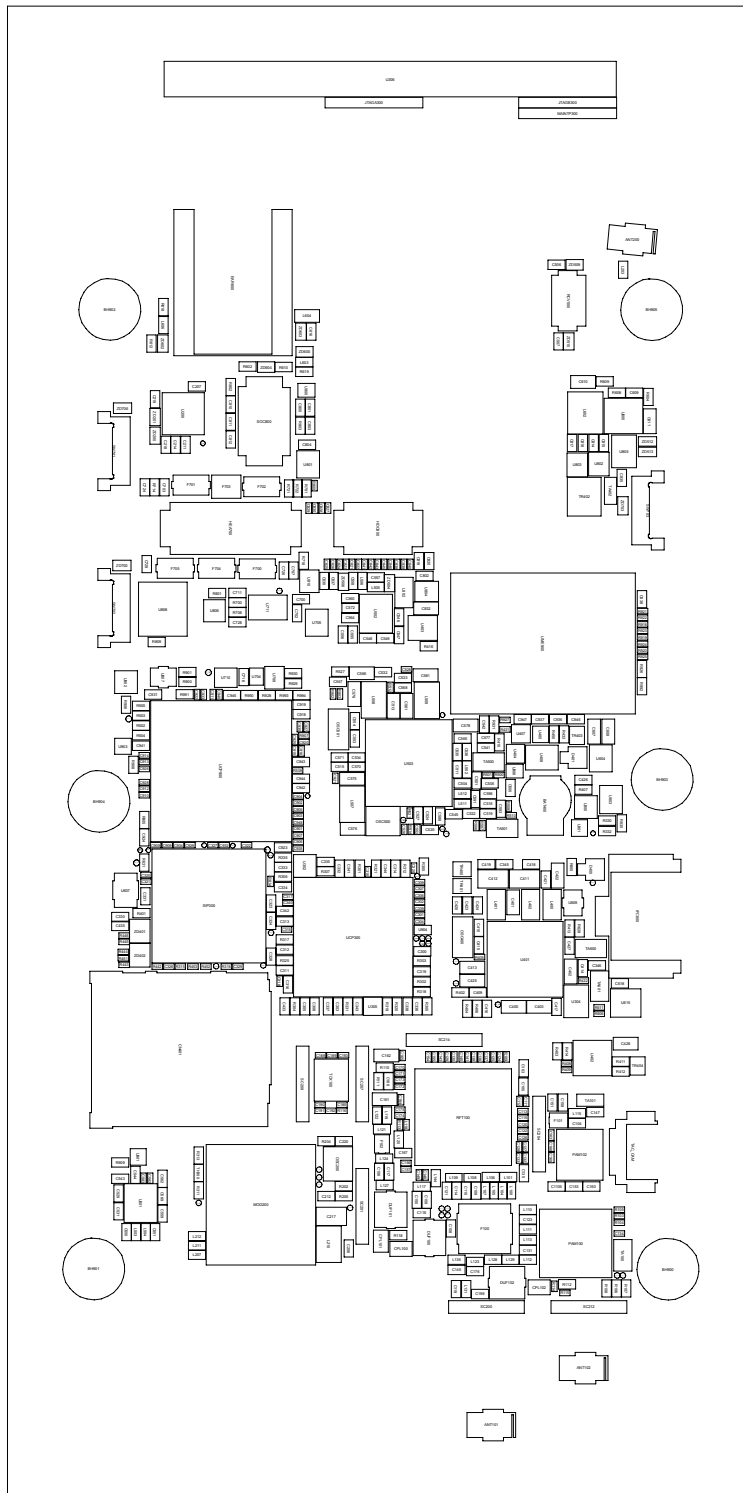
7. Block Diagrams

7-1. Block Diagram

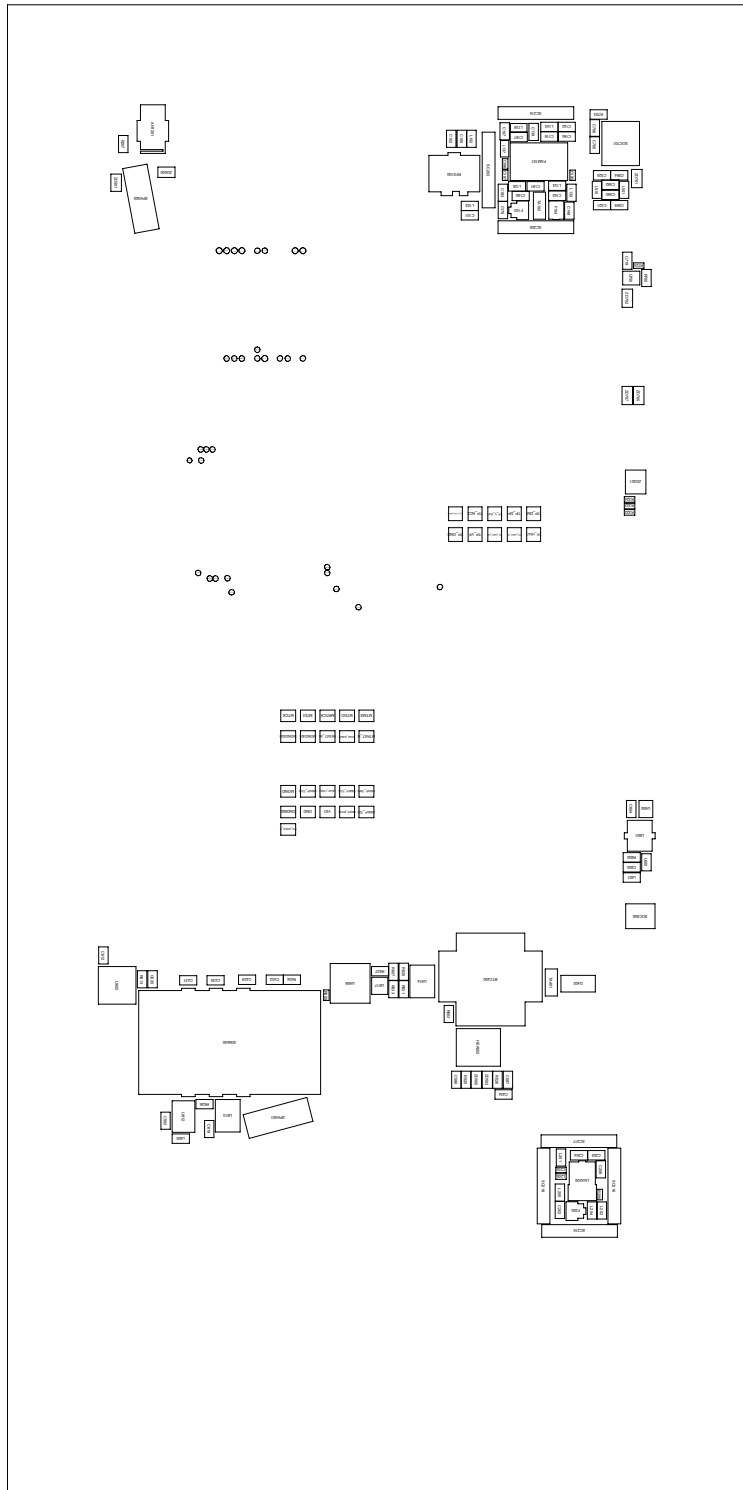


8. PCB Diagrams

Top



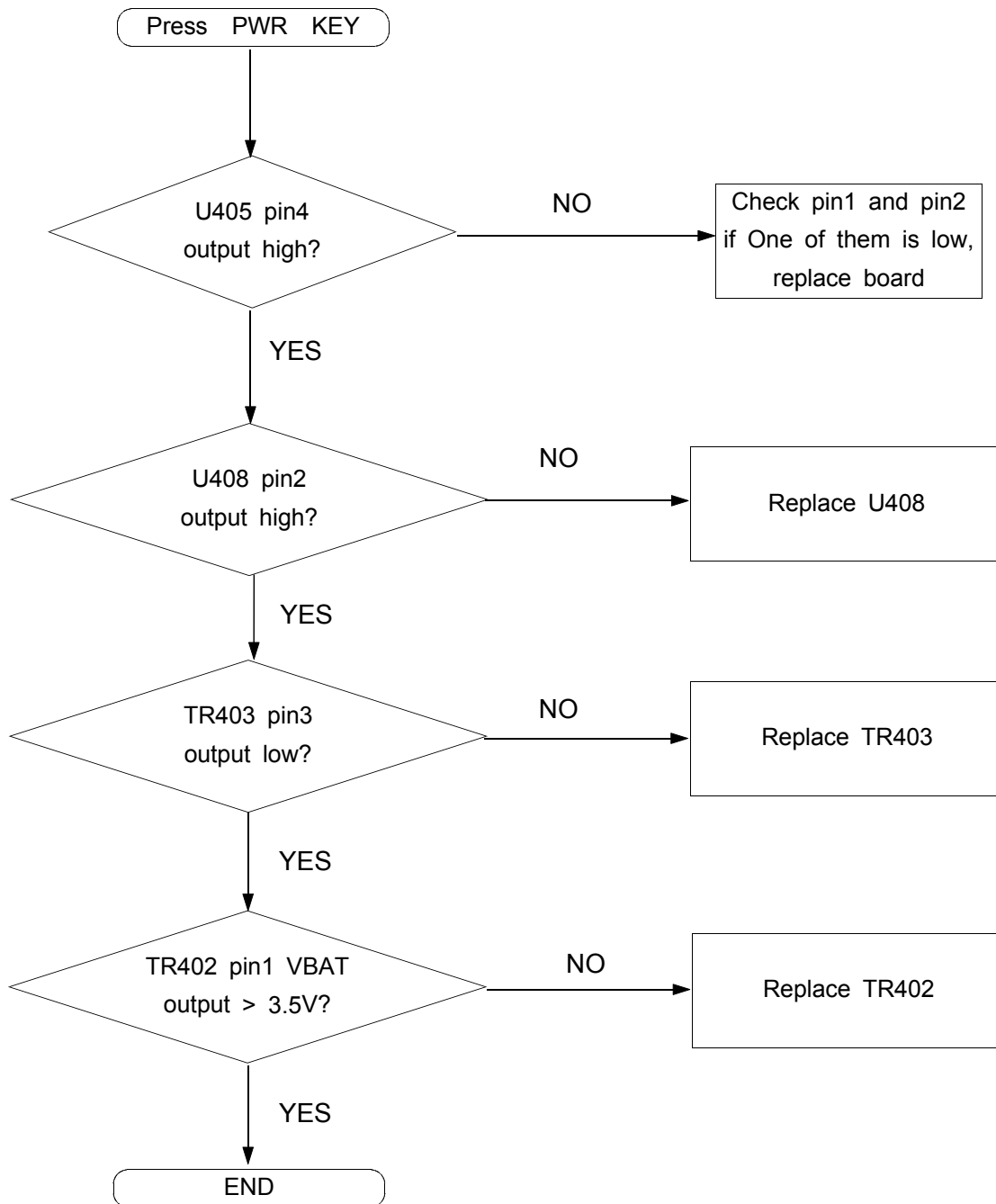
Bottom

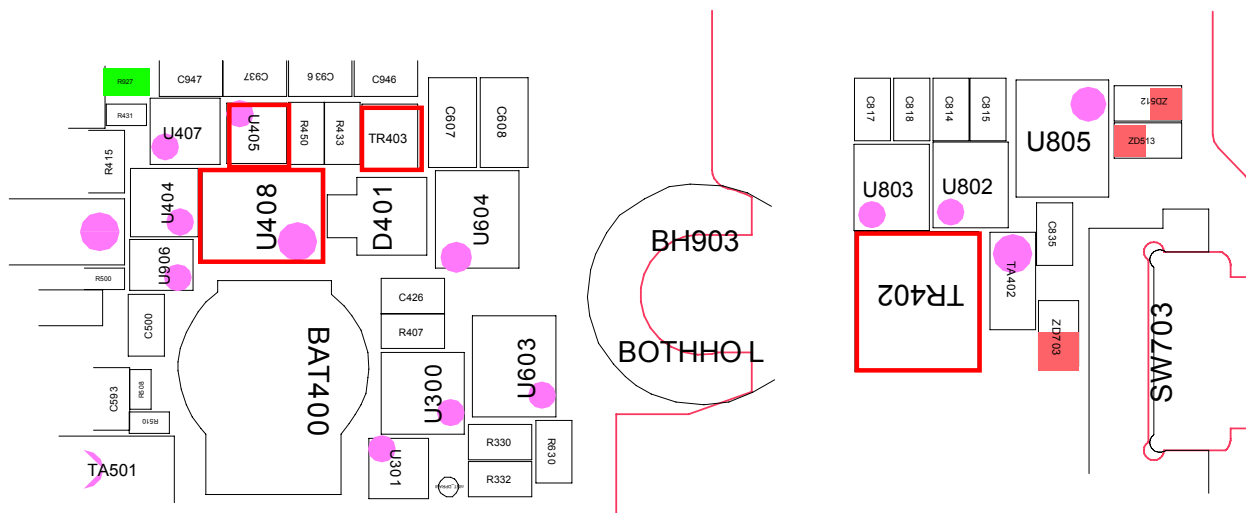
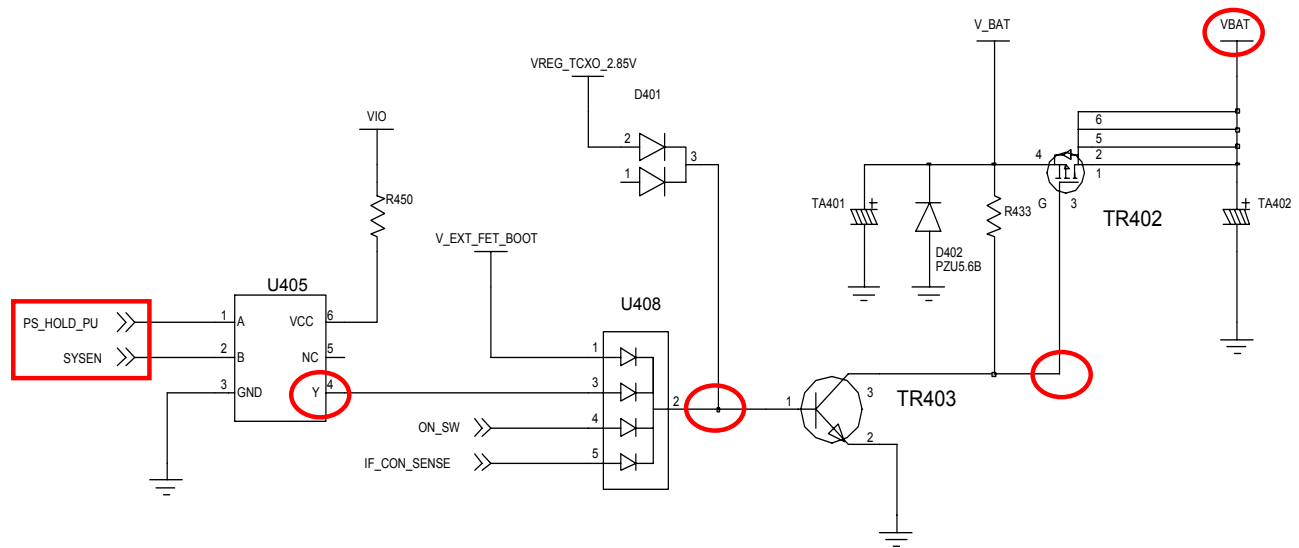


9. Flow Chart of TroubleShooting

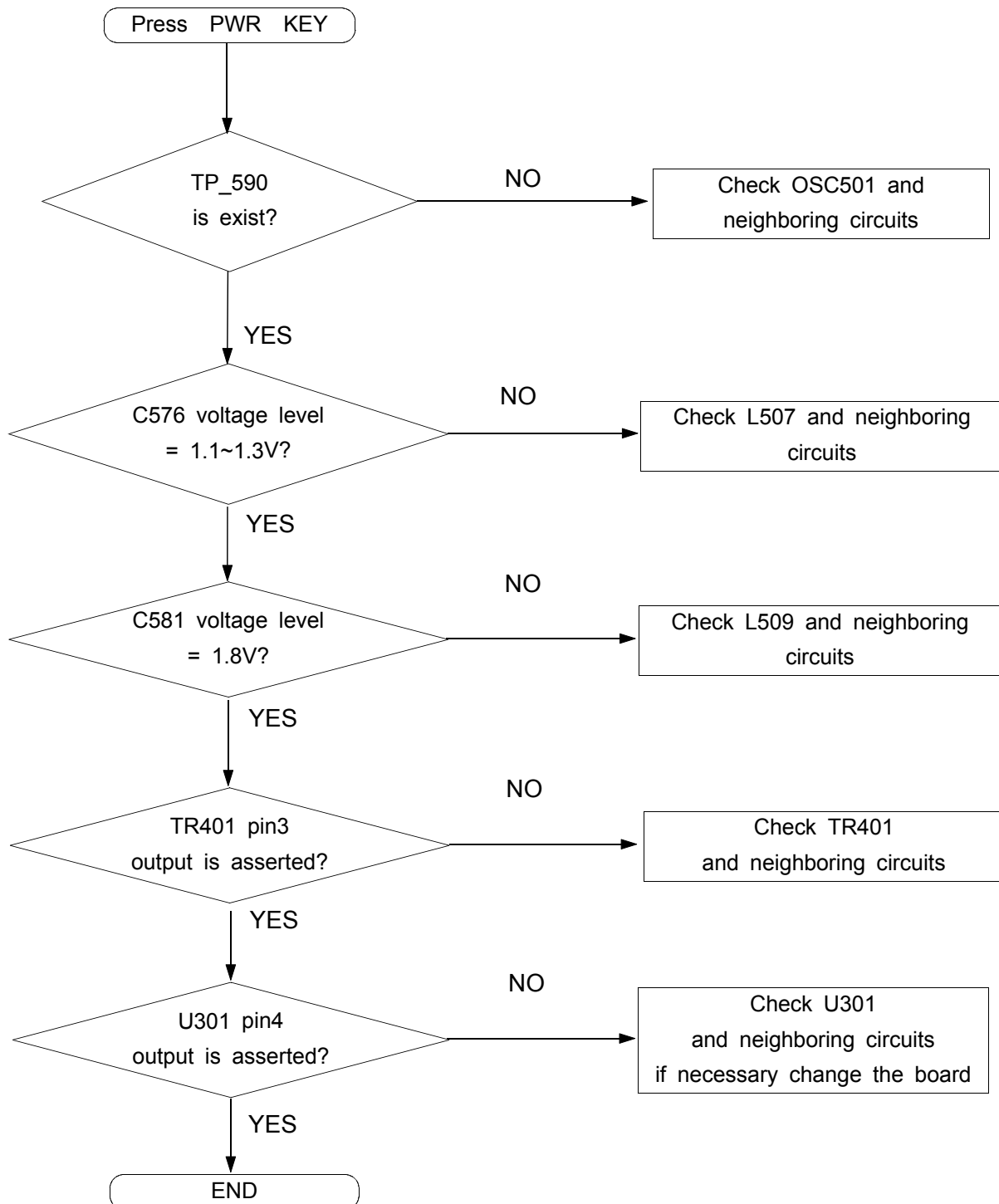
9-1. Logic Section

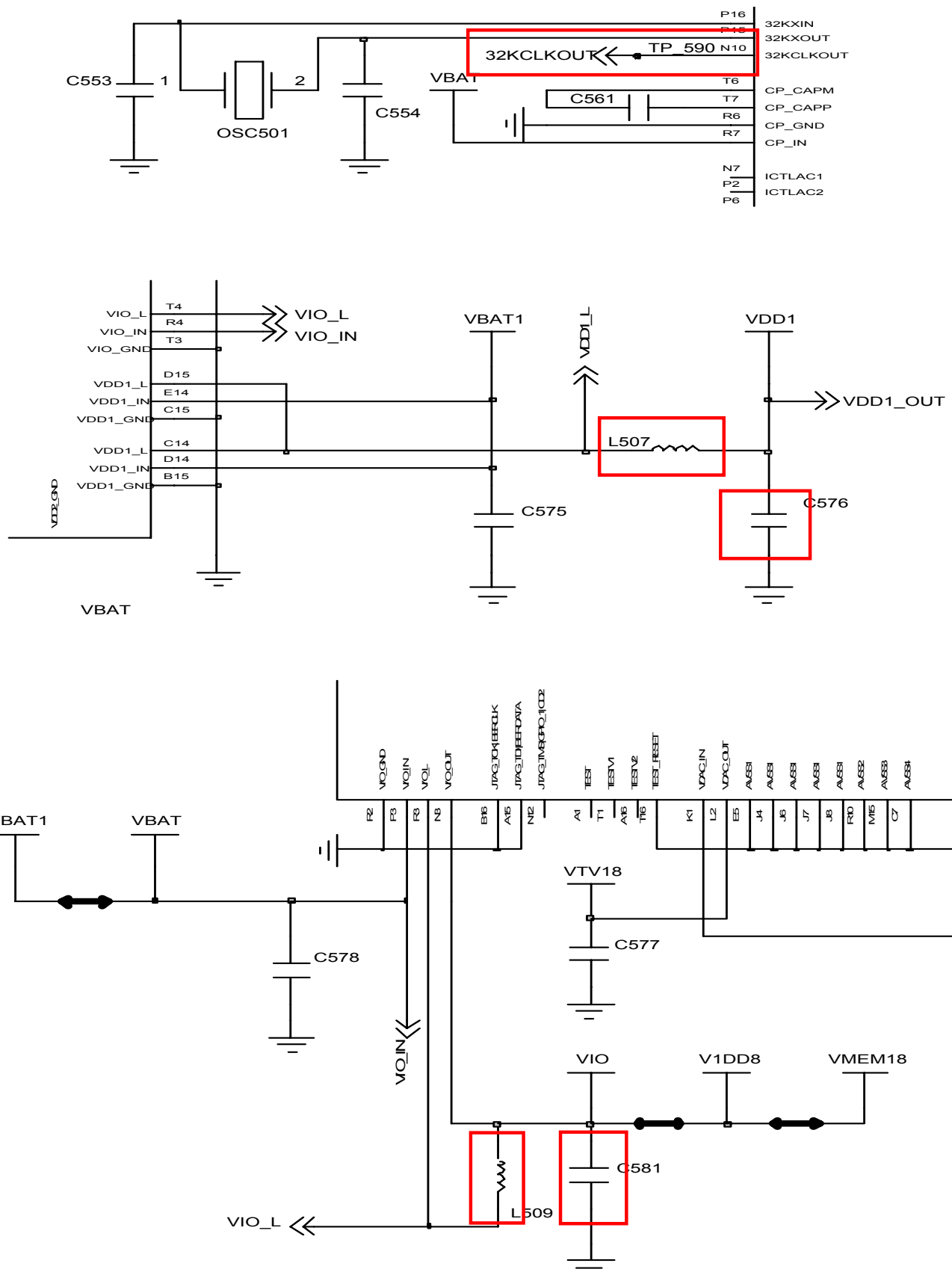
9-1-1 : No Power

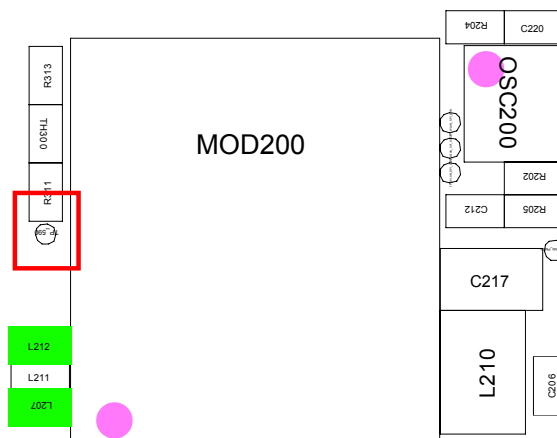
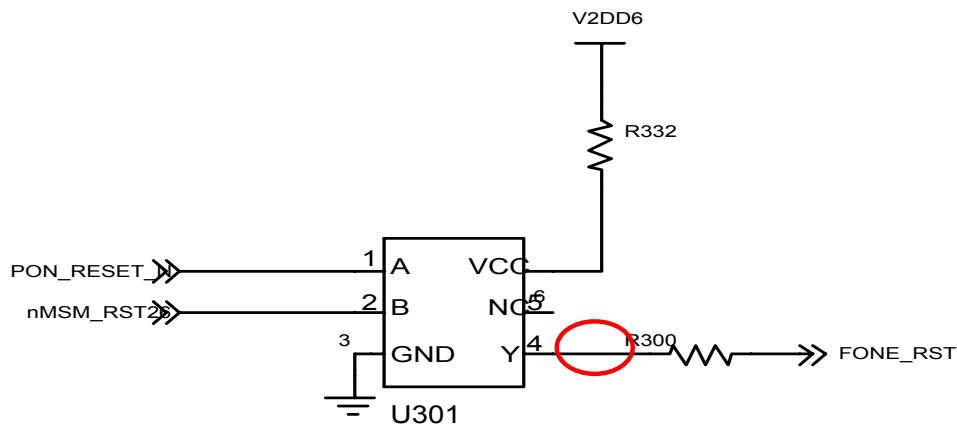
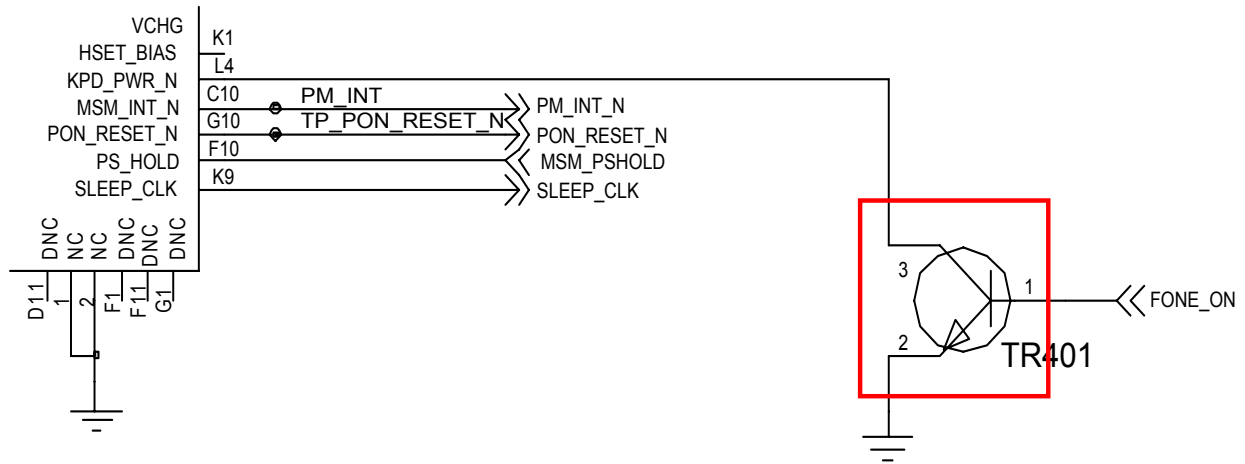


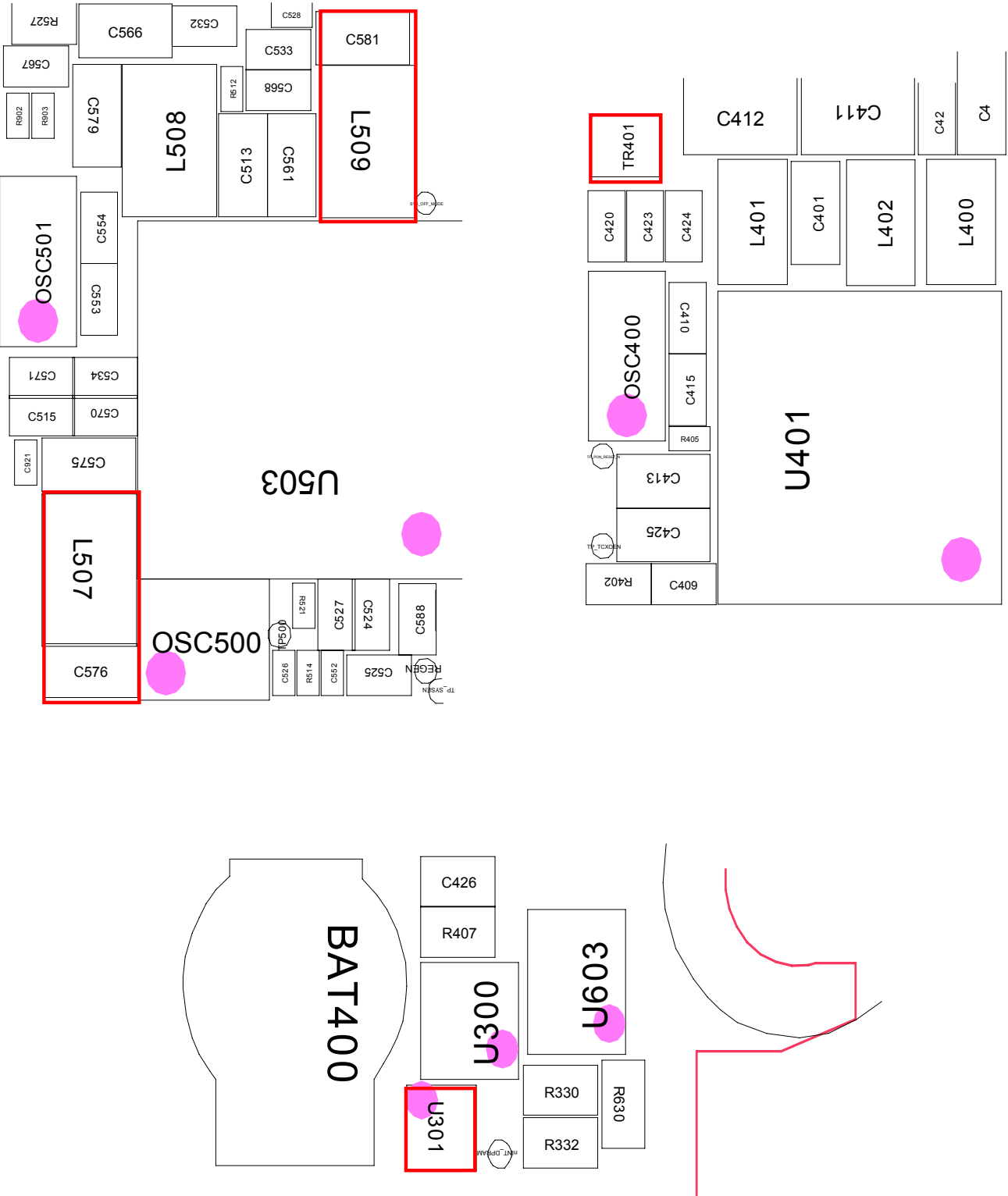


9-1-2 : Abnormal initial operation (Normal +4.0V voltage source)

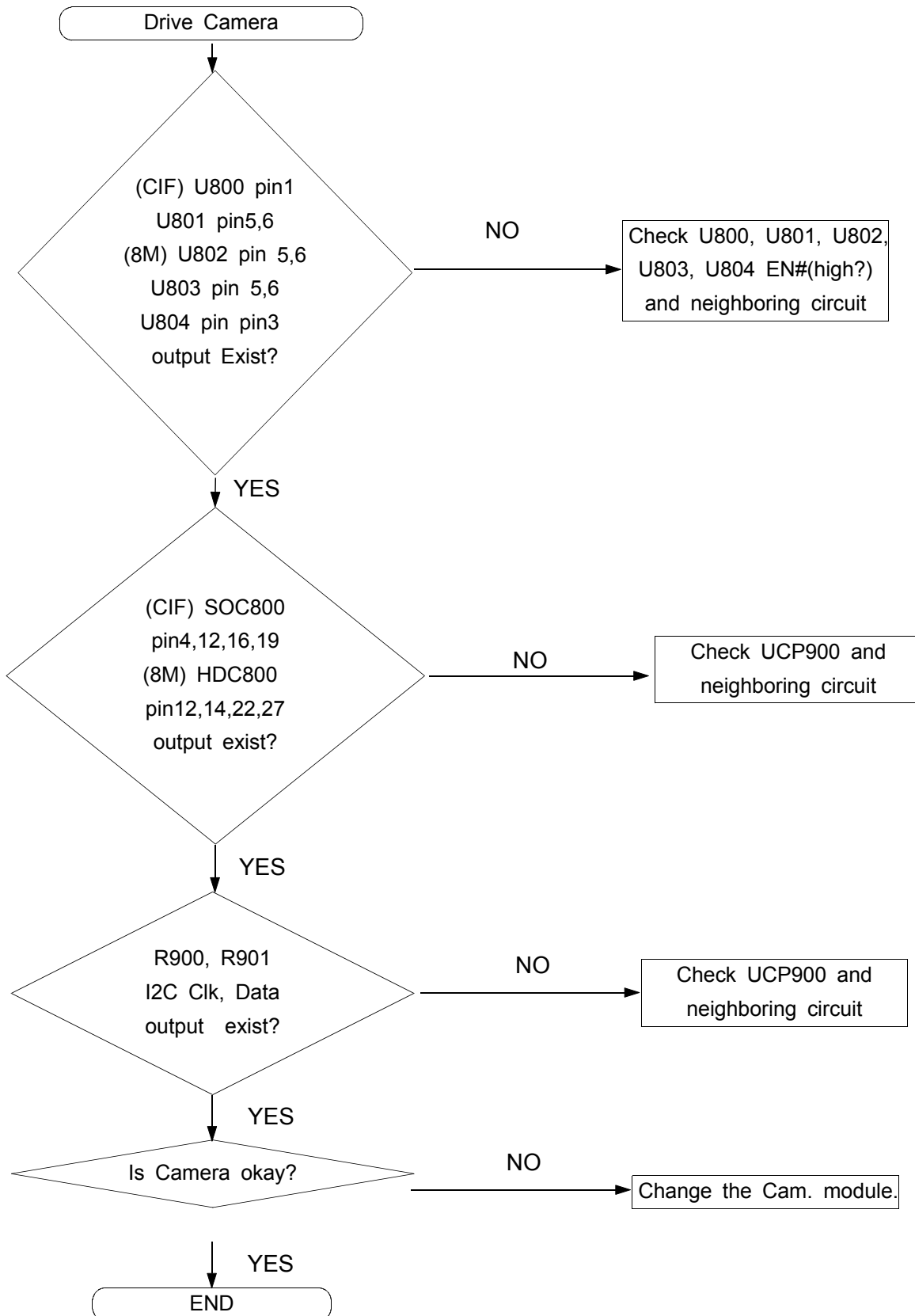


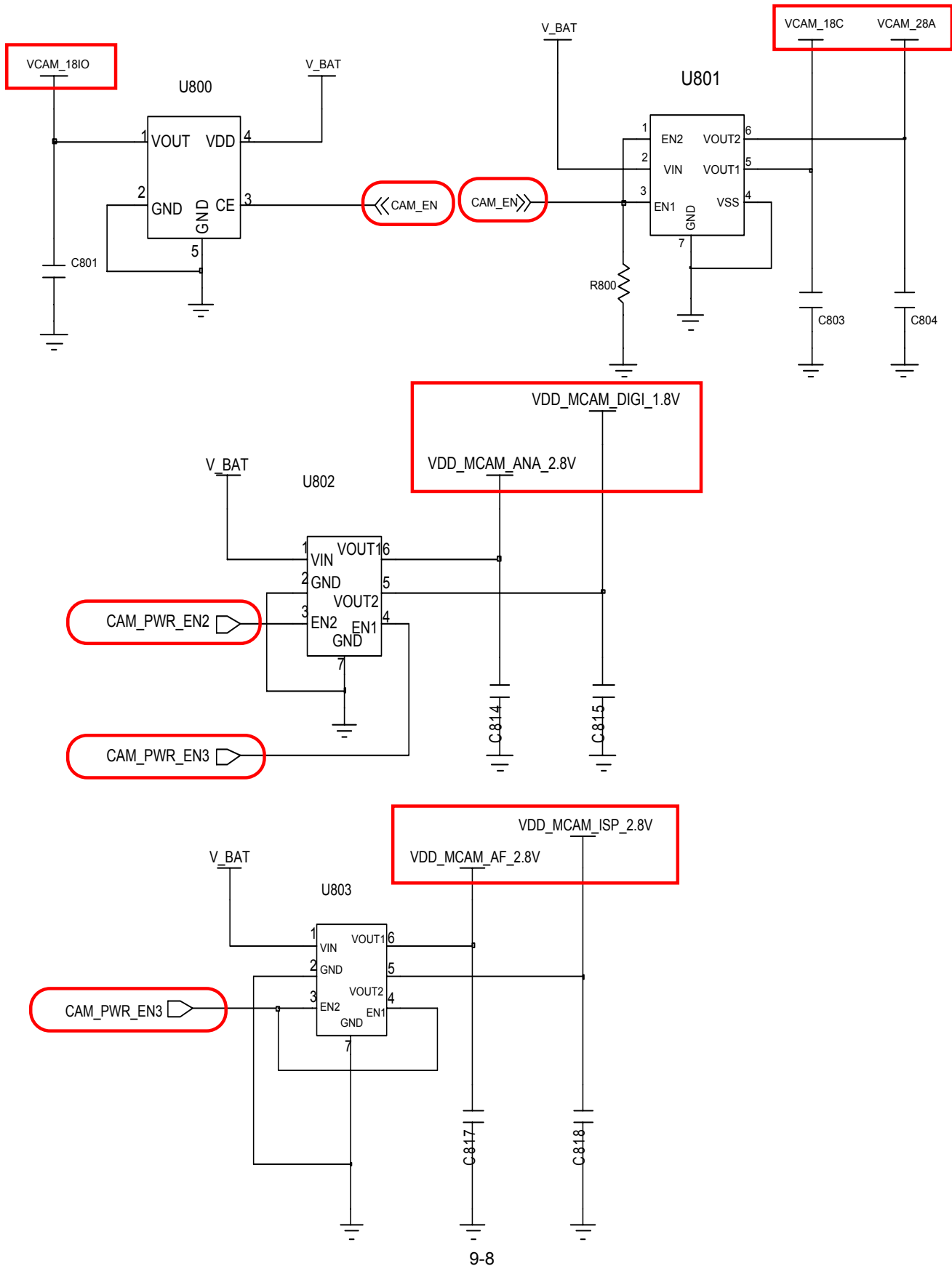


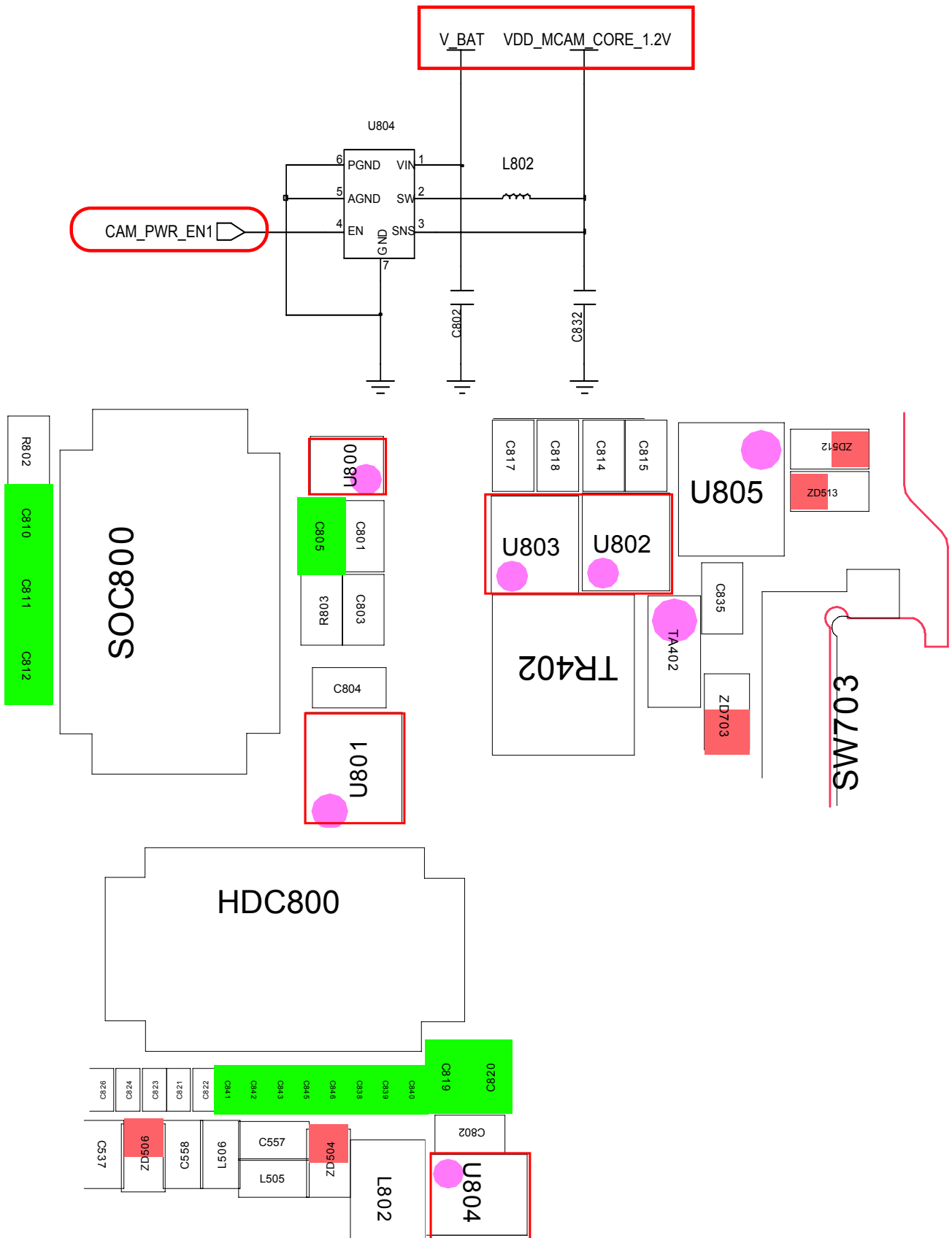


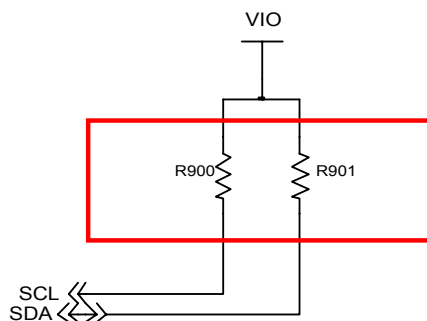
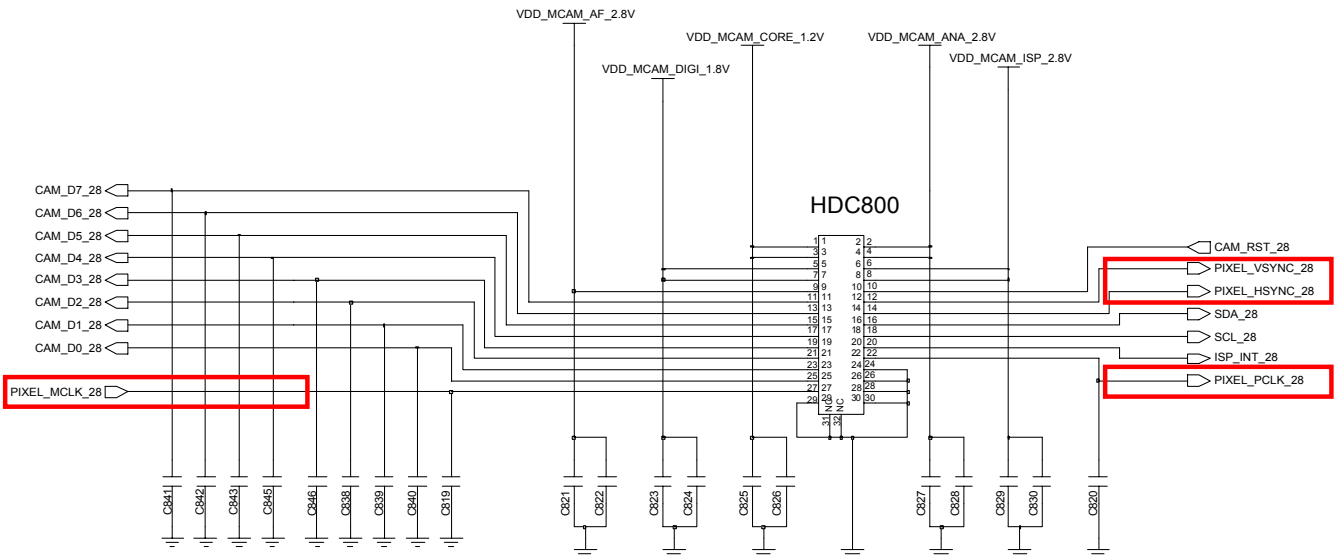
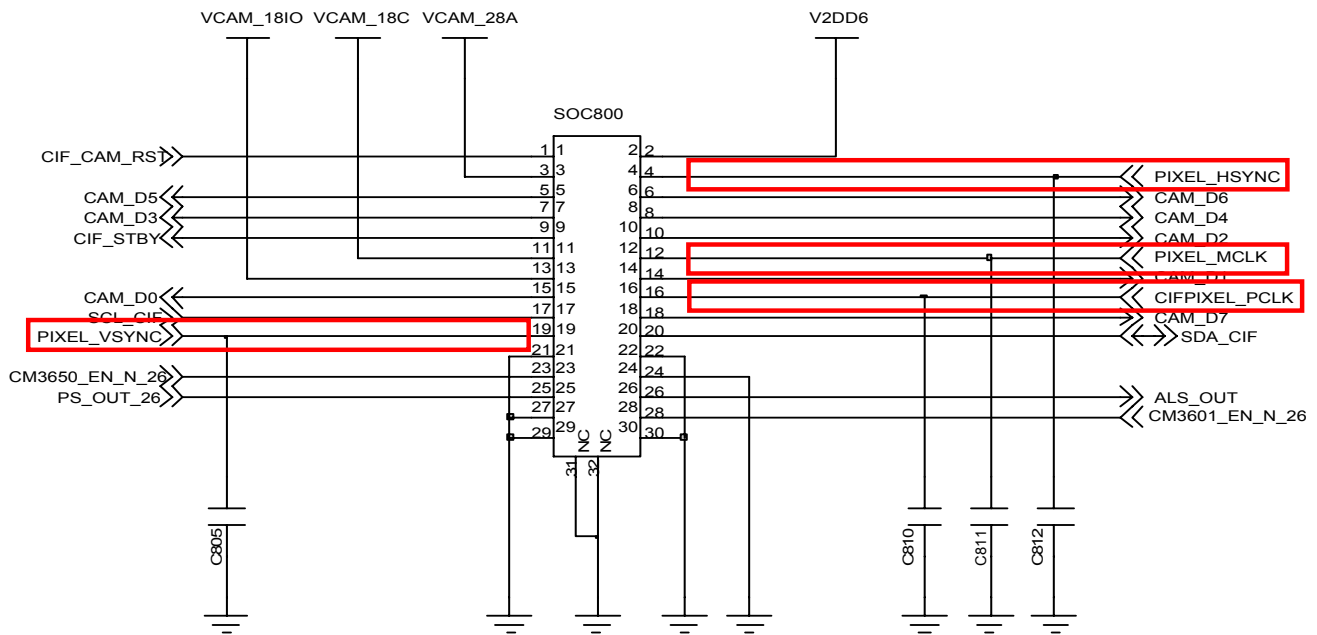


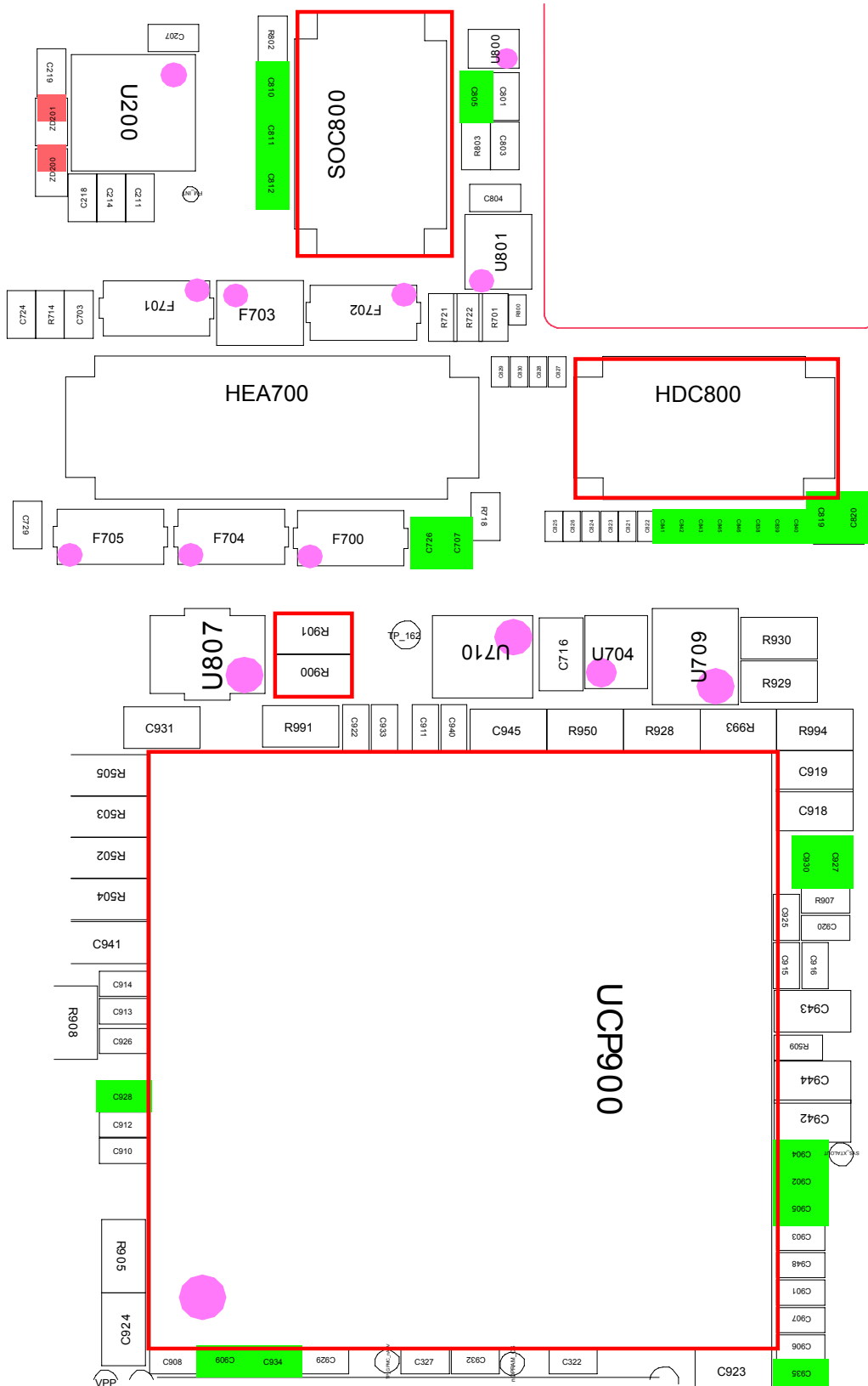
9-1-3 : Abnormal 8M,CIF Camera operation



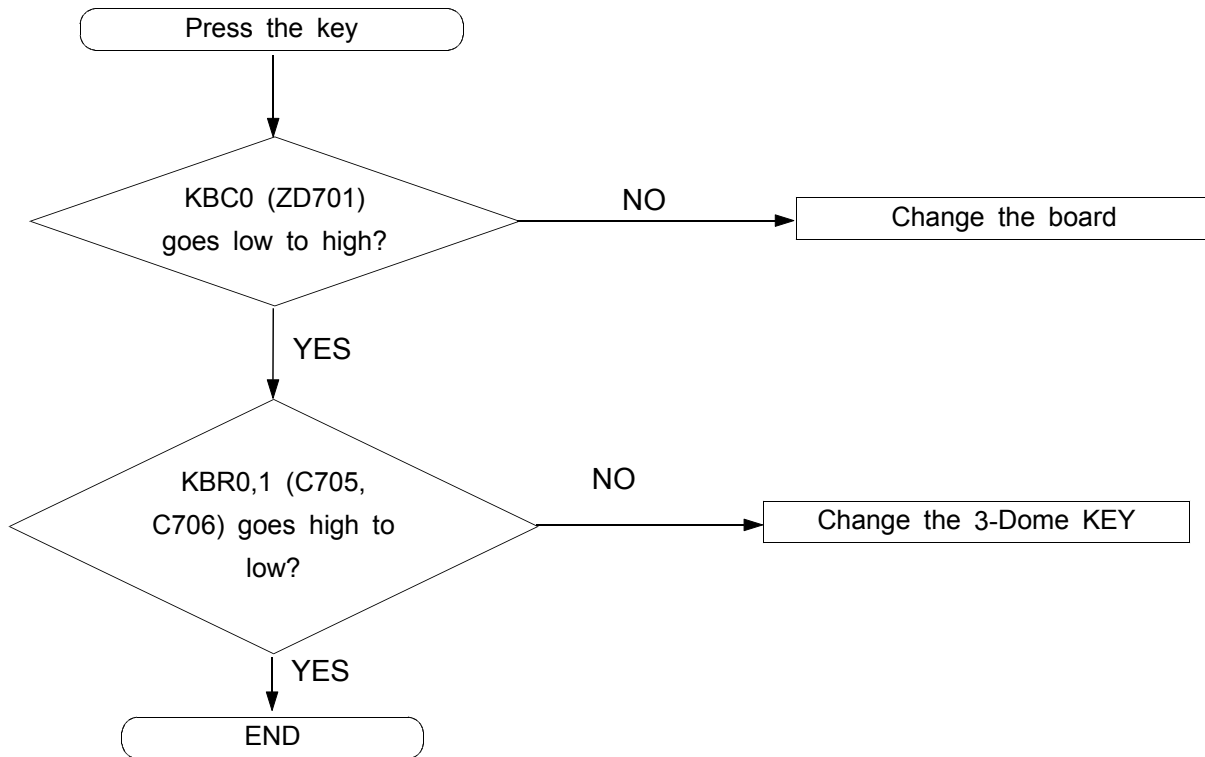


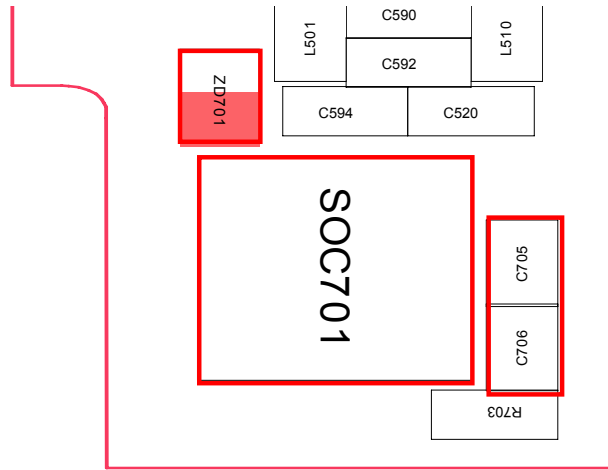
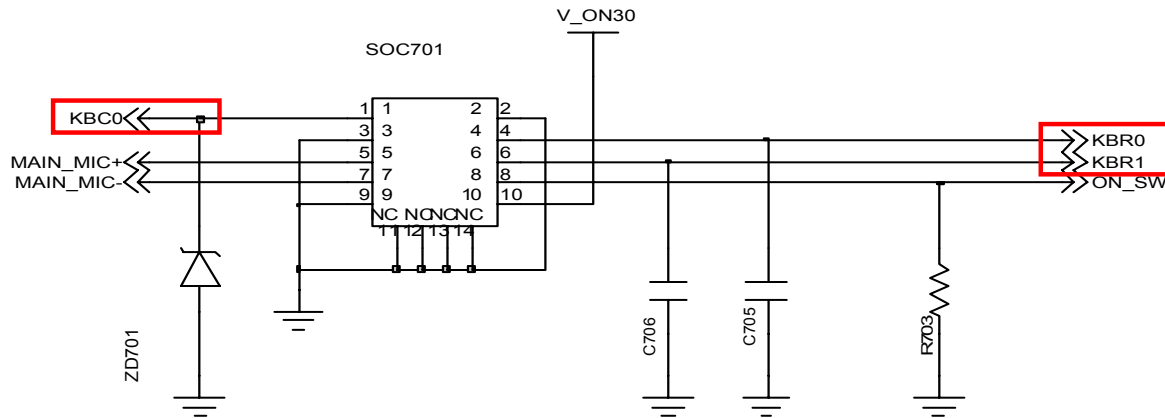




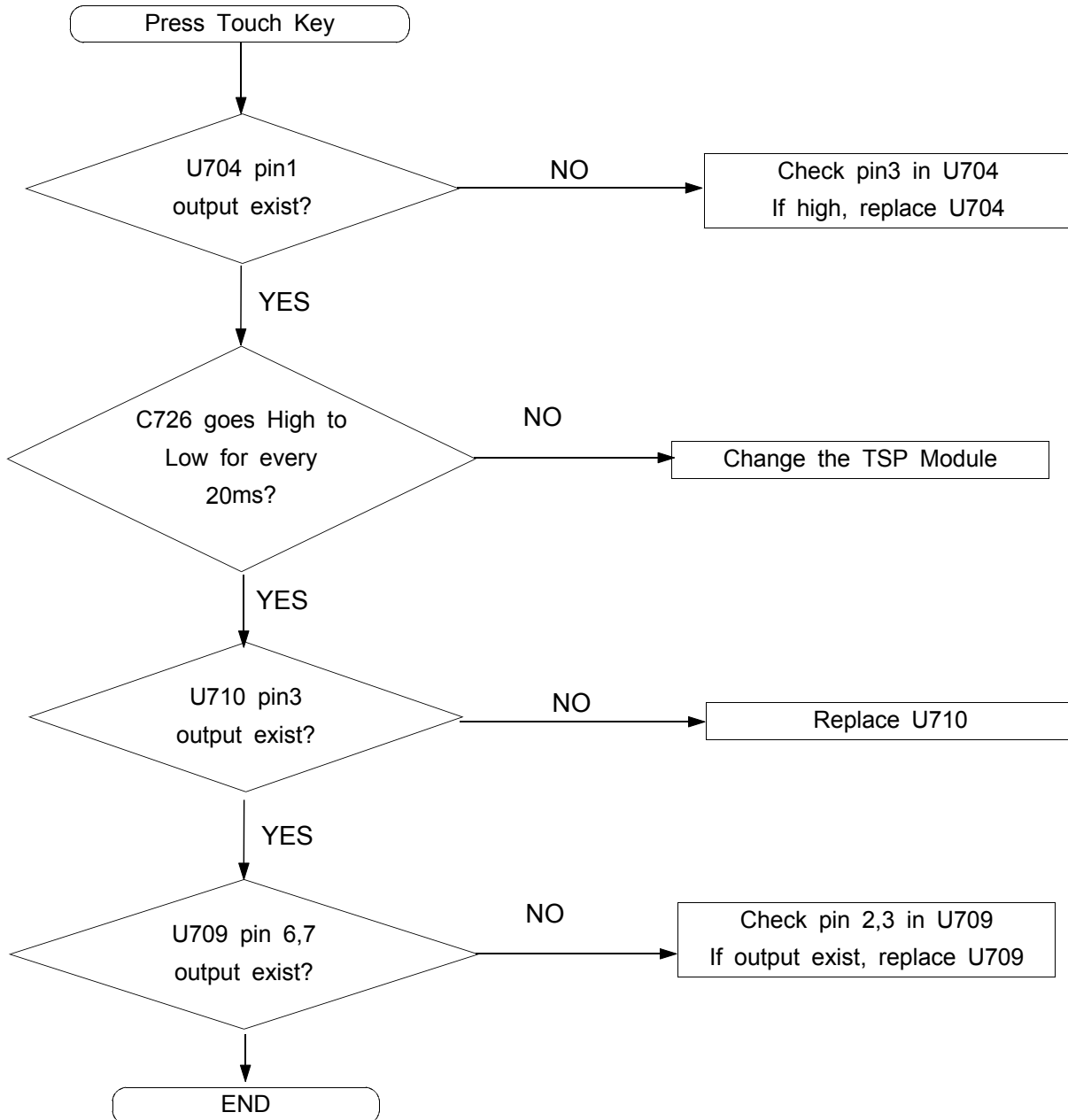


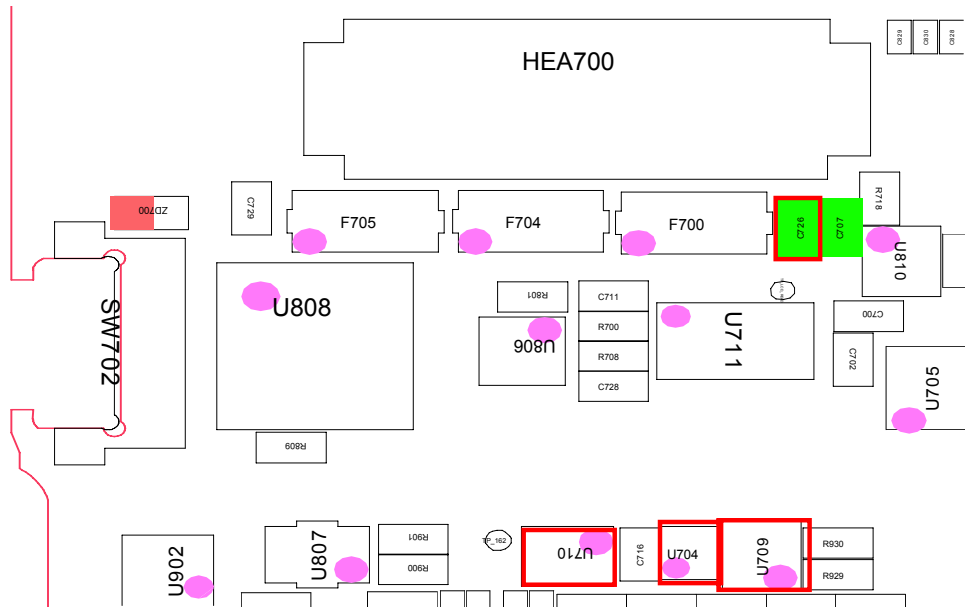
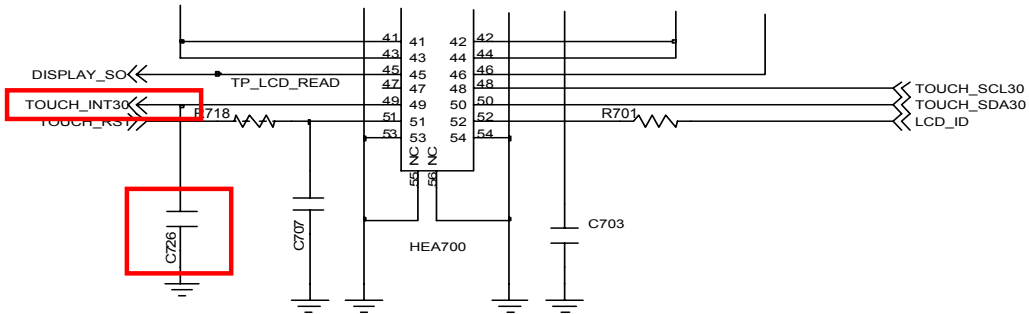
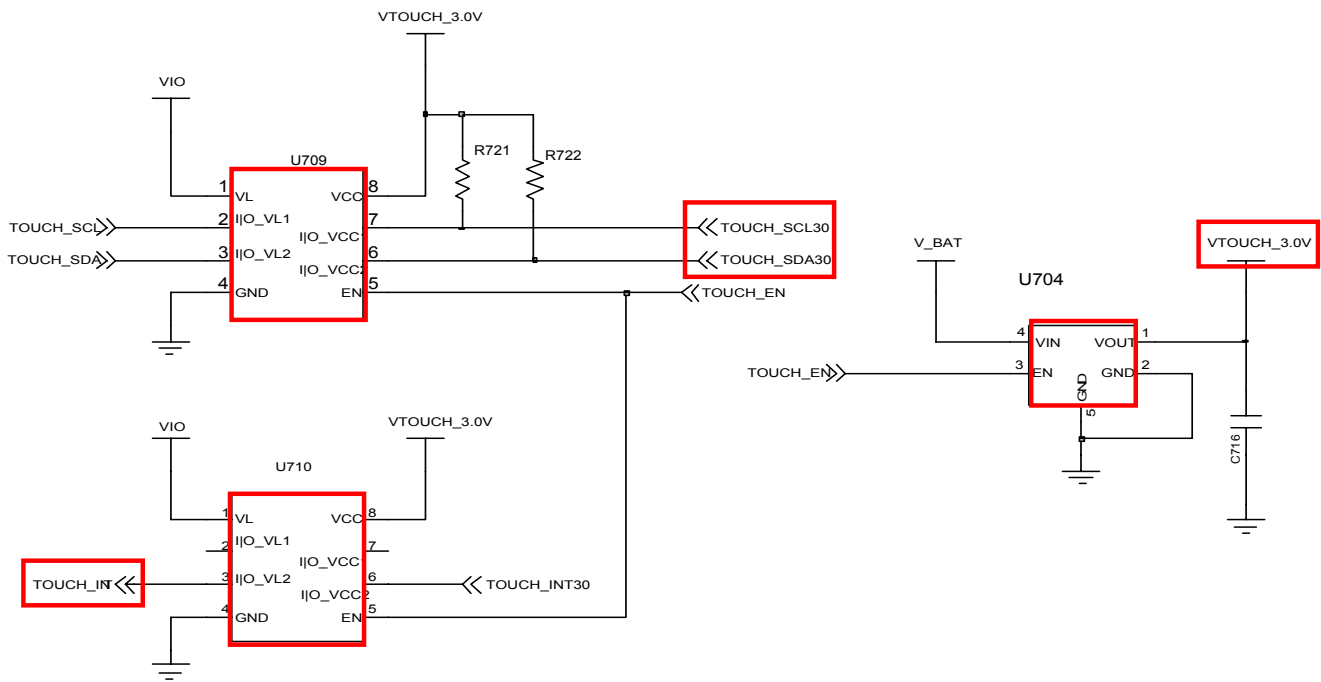
9-1-4 : Abnormal 3-Dome KEY operation



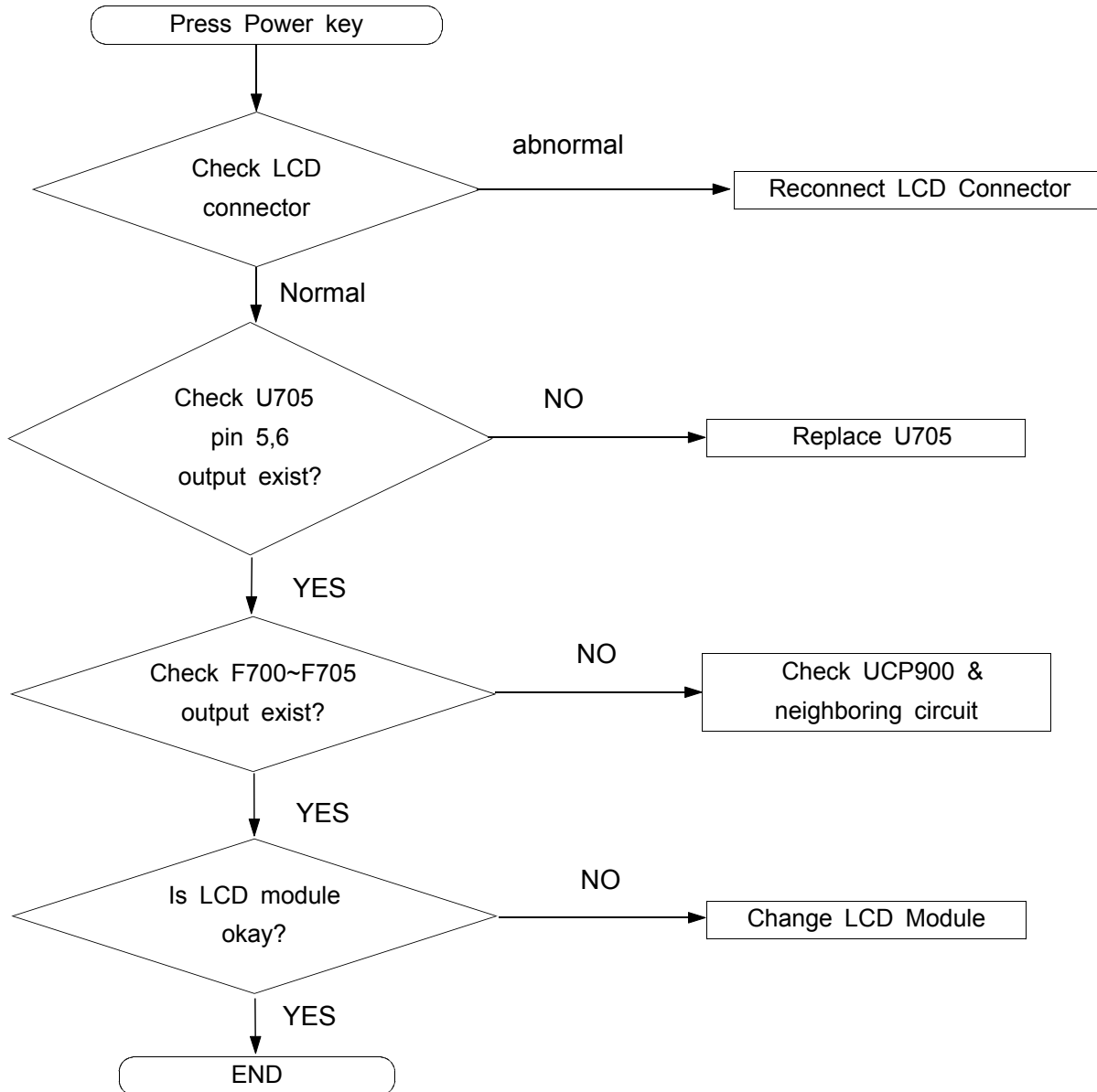


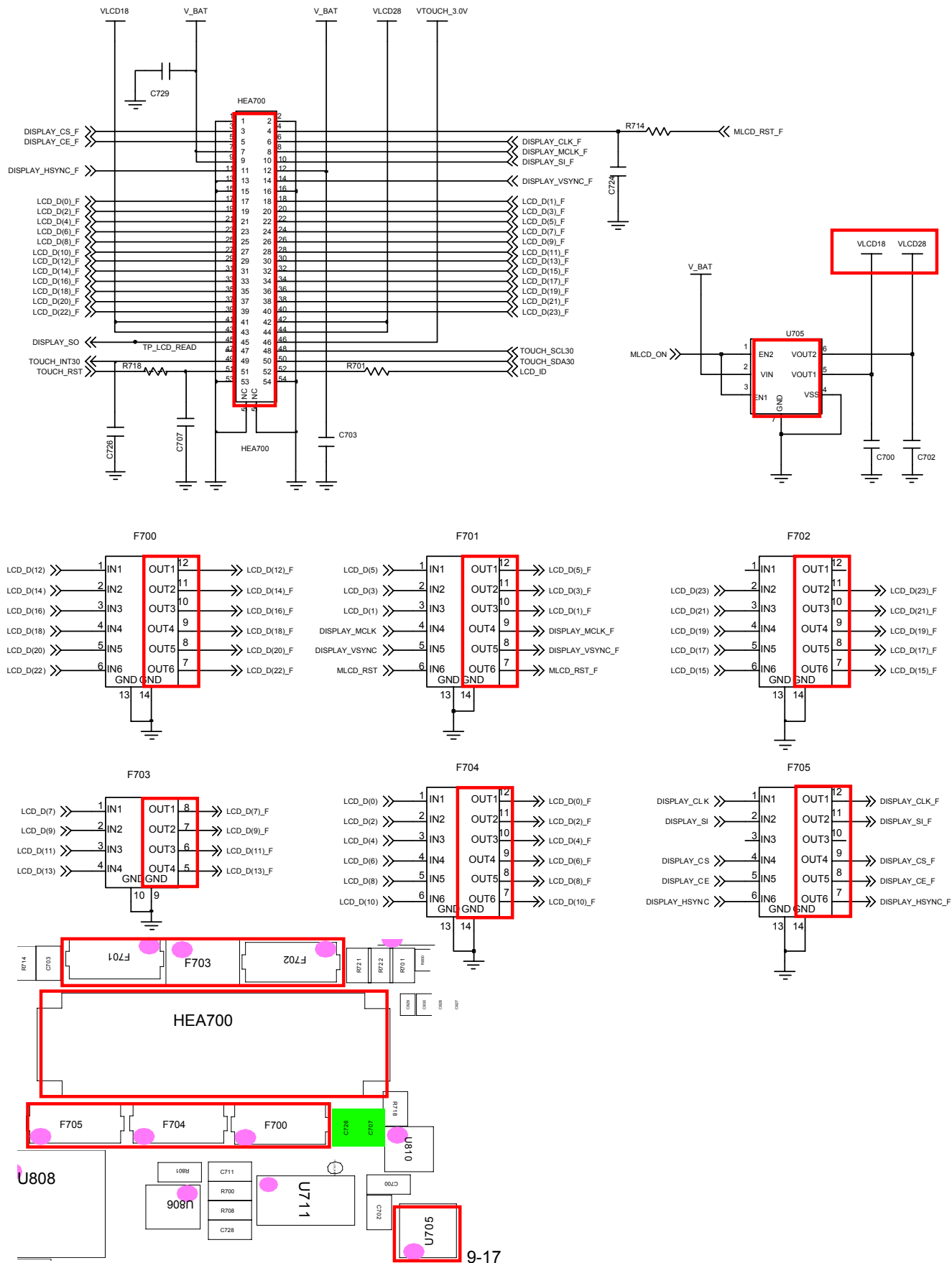
9-1-5 : Abnormal TOUCH KEY operation



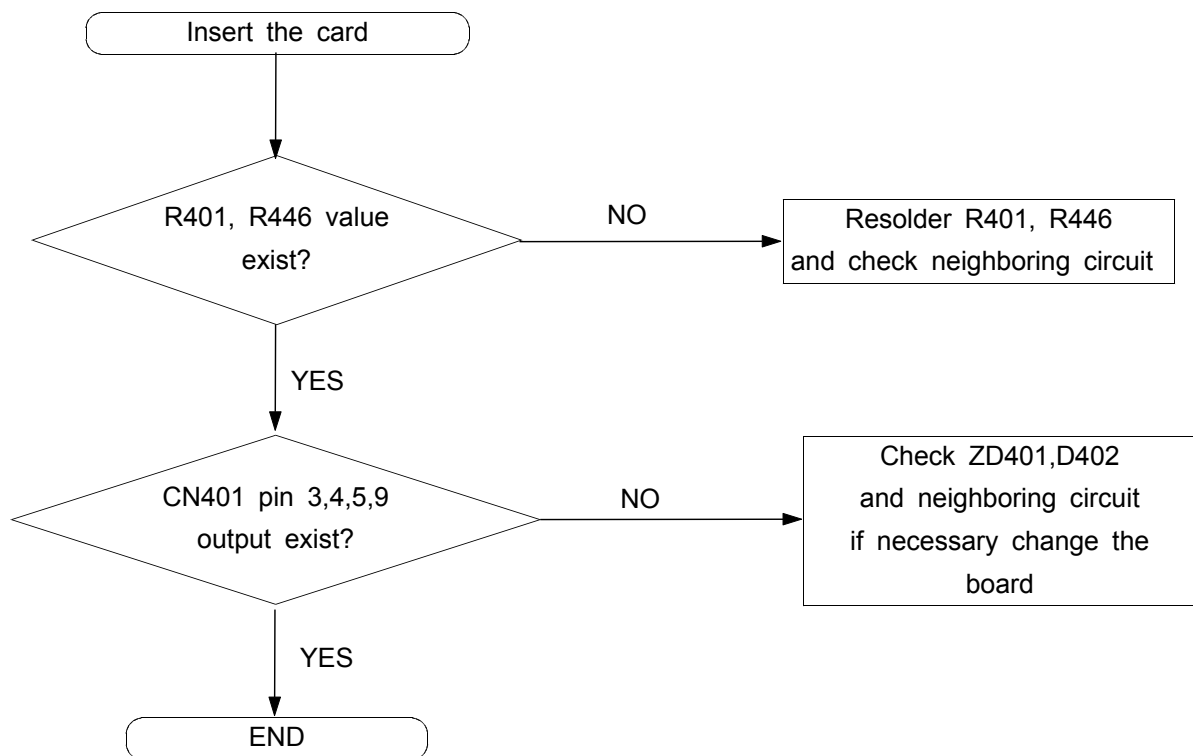


9-1-6 : Abnormal LCD operation

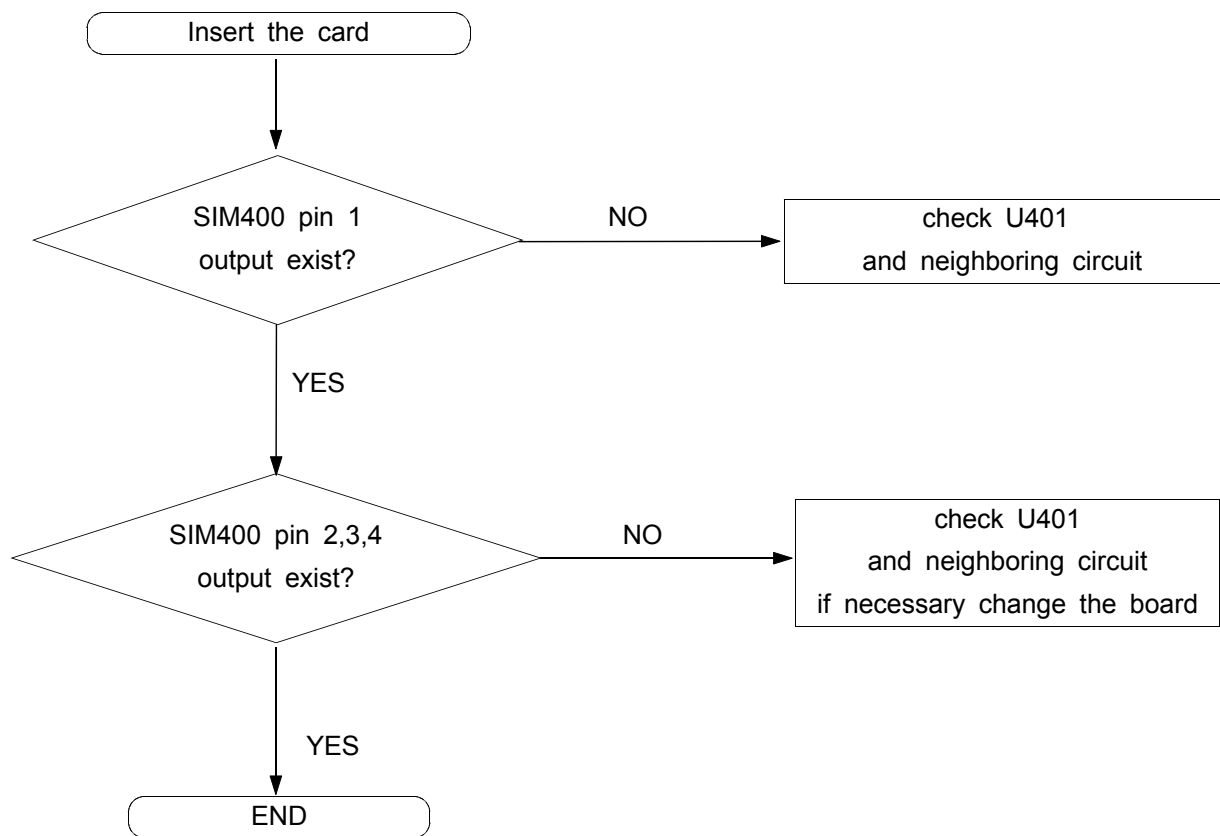


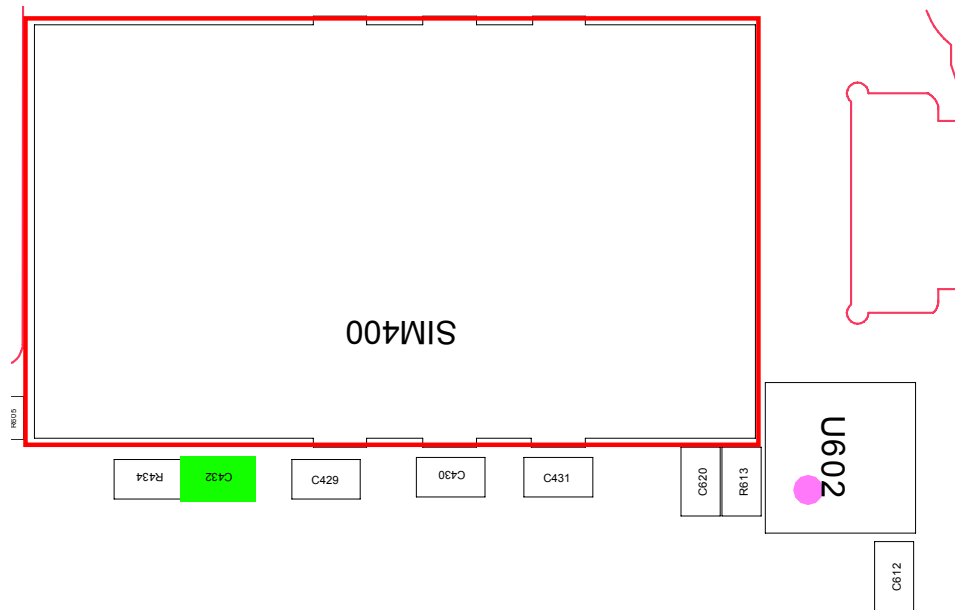
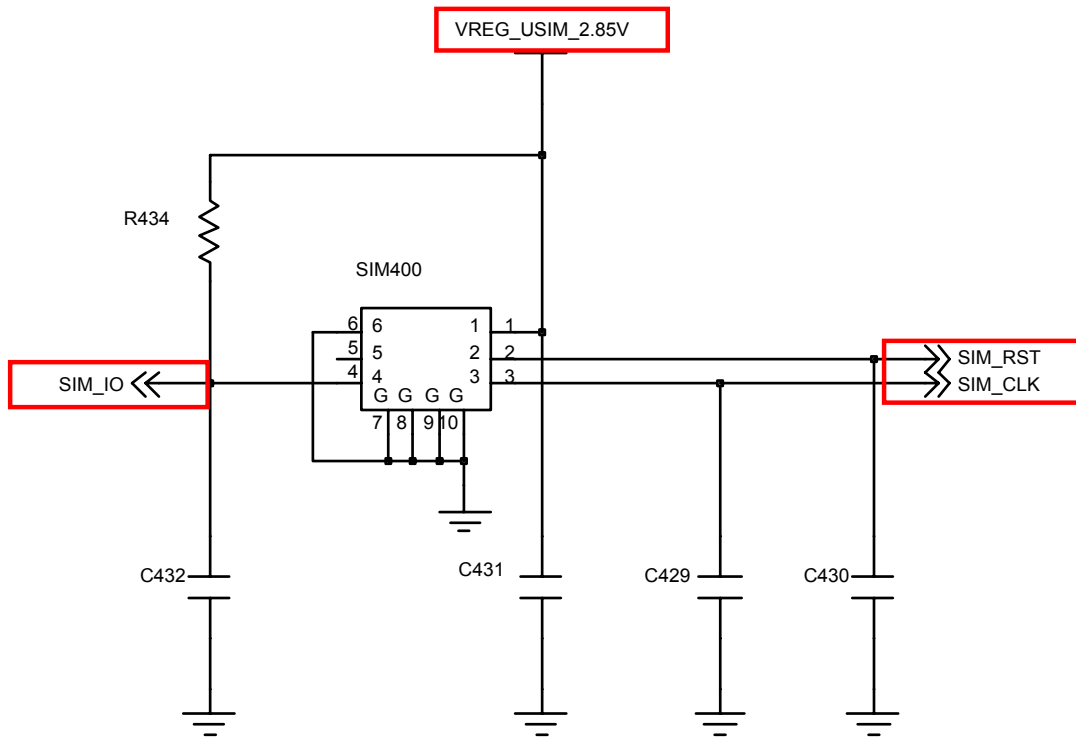


9-1-7 : Abnormal T-Flash operation

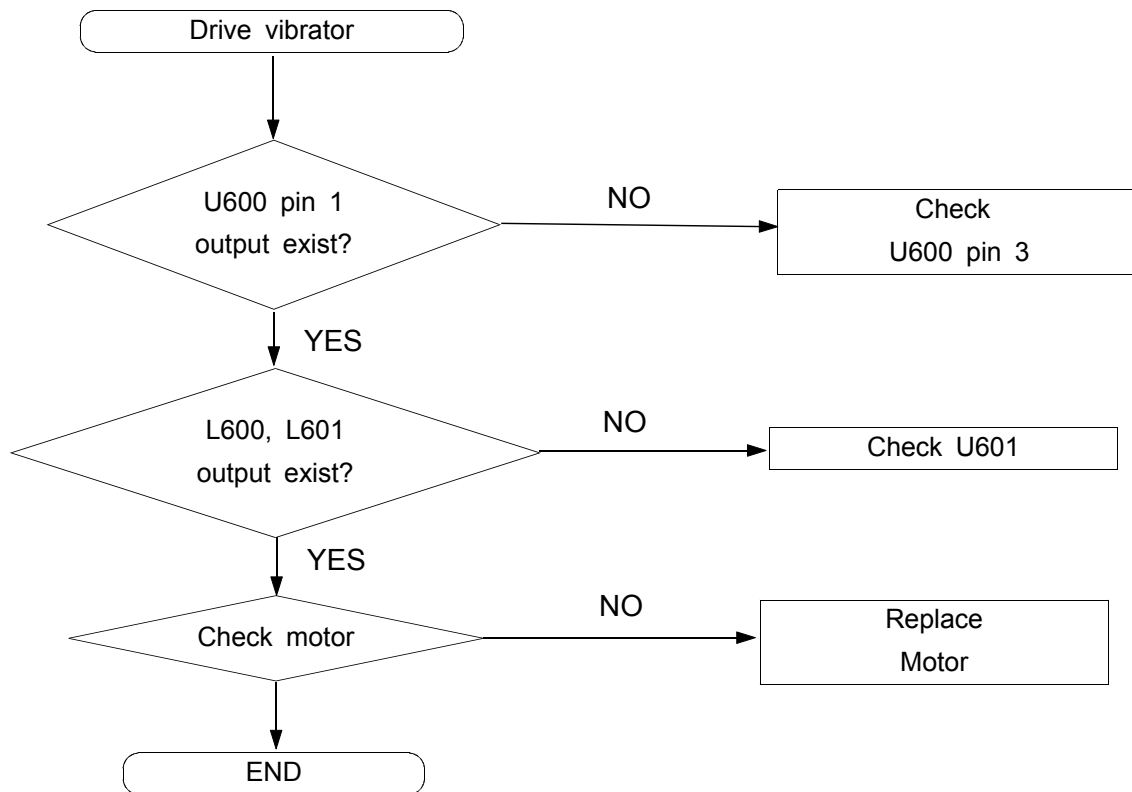


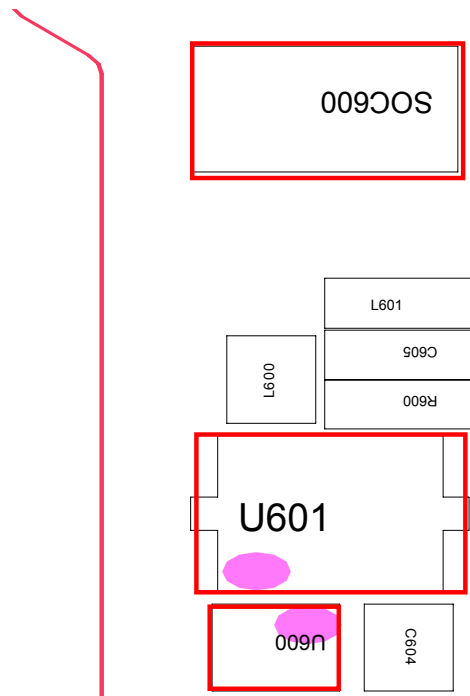
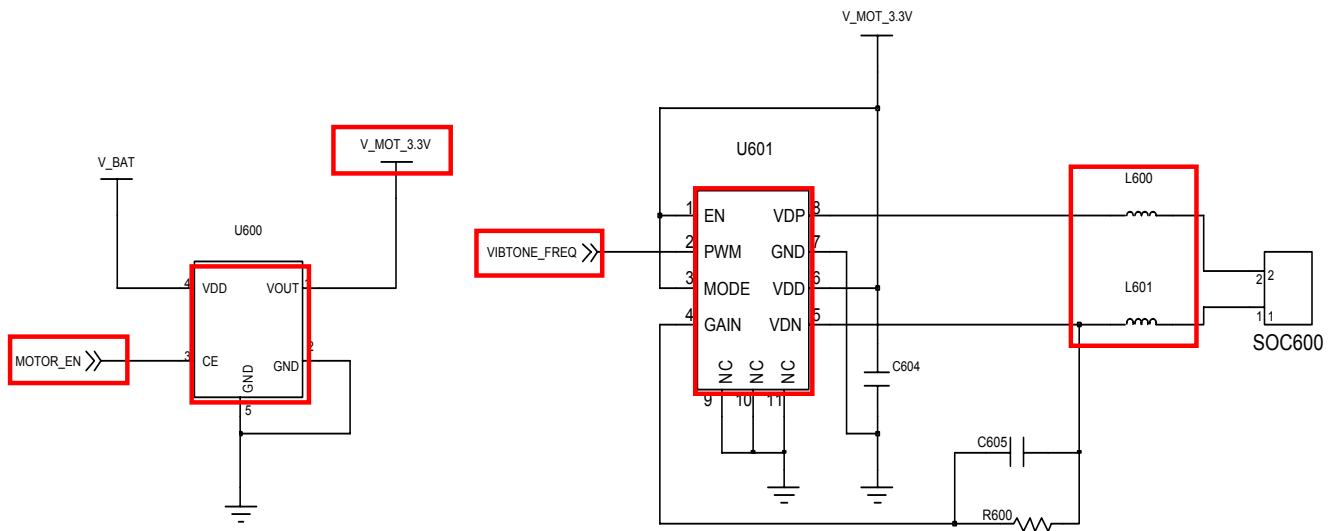
9-1-8 : Abnormal SIM Card operation



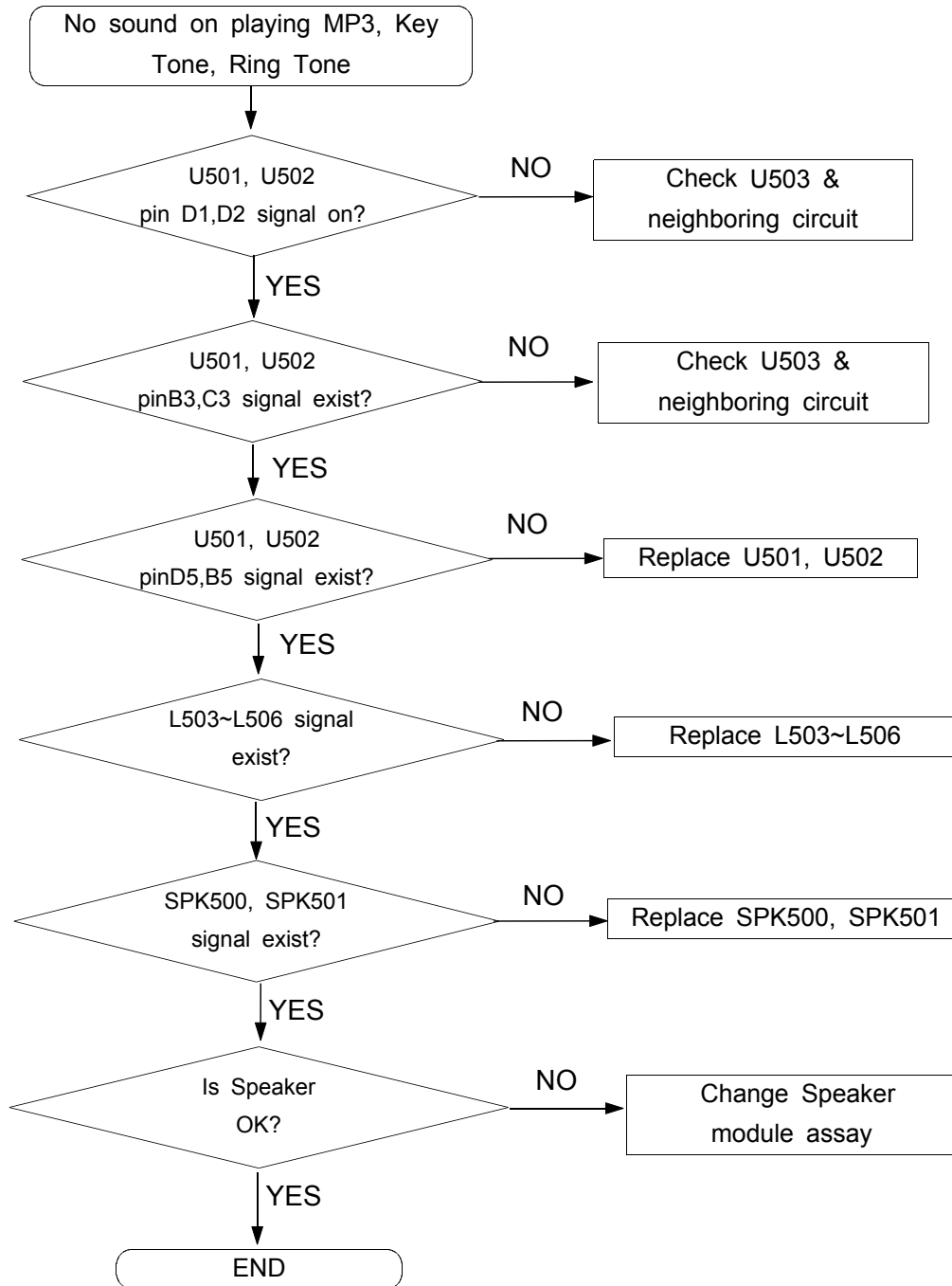


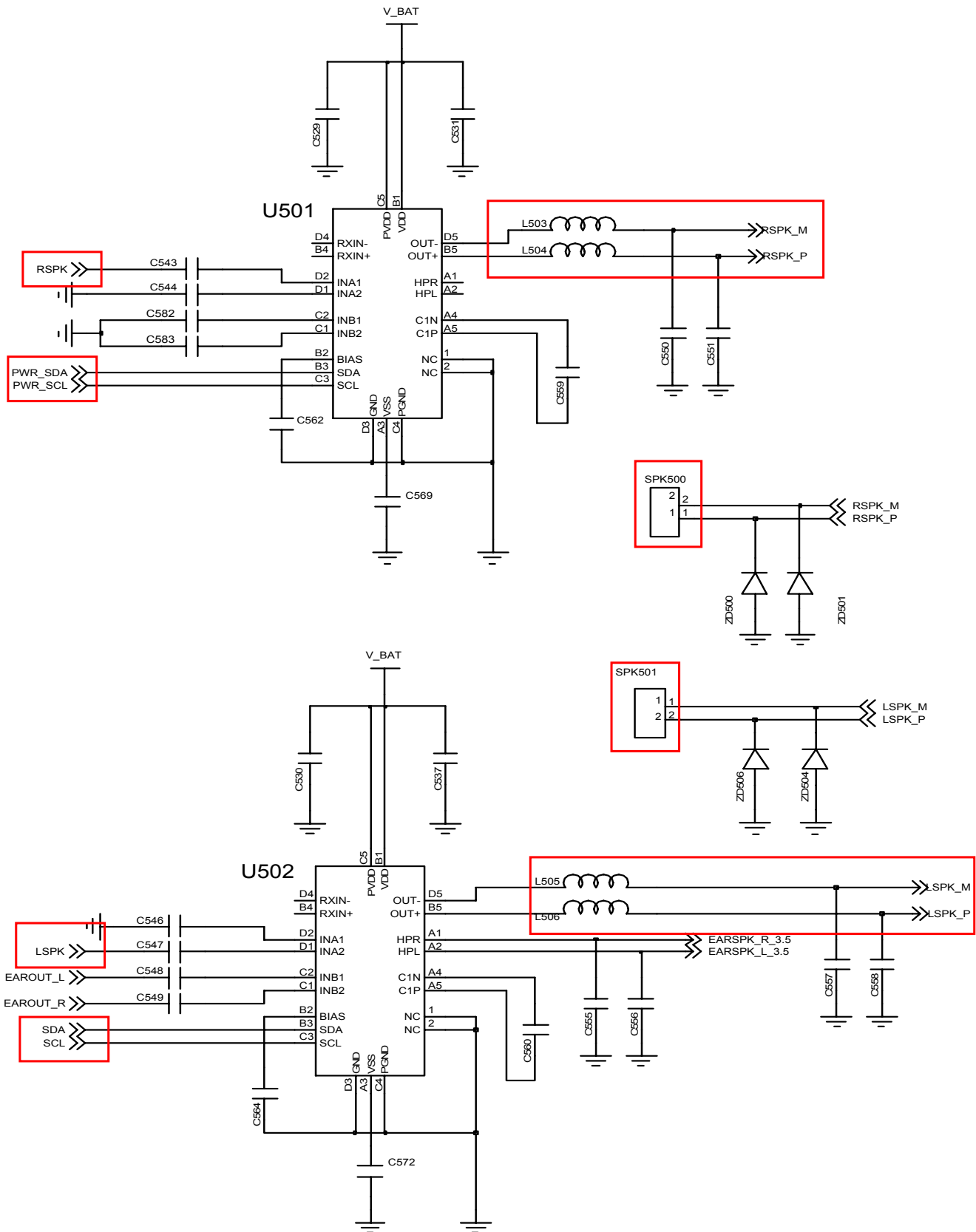
9-1-9 : Abnormal Vibrator operation

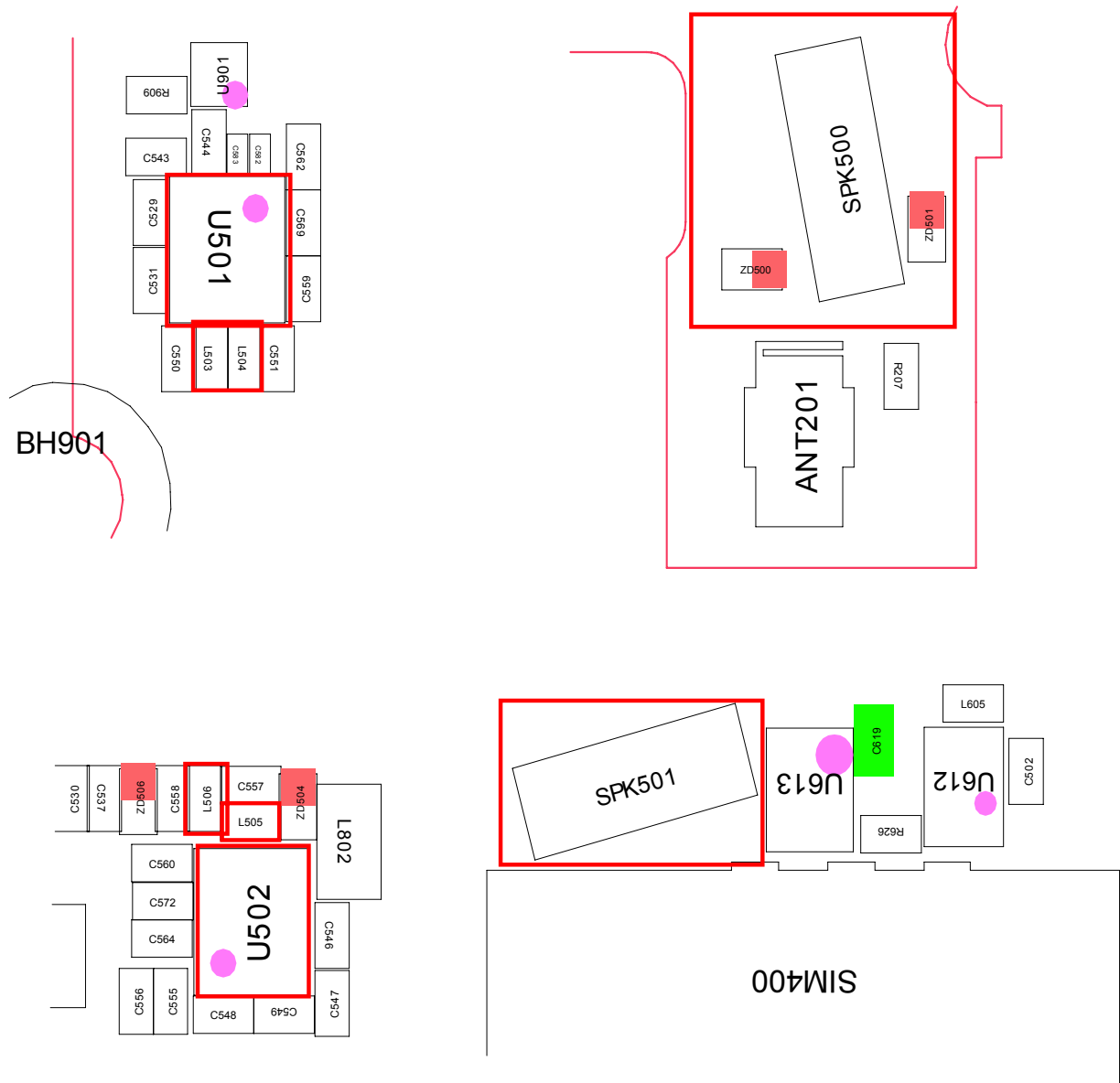




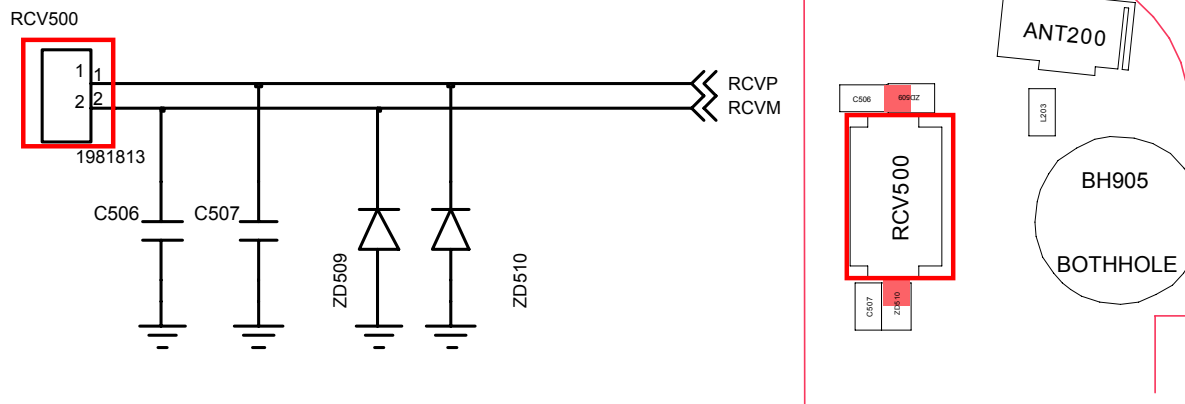
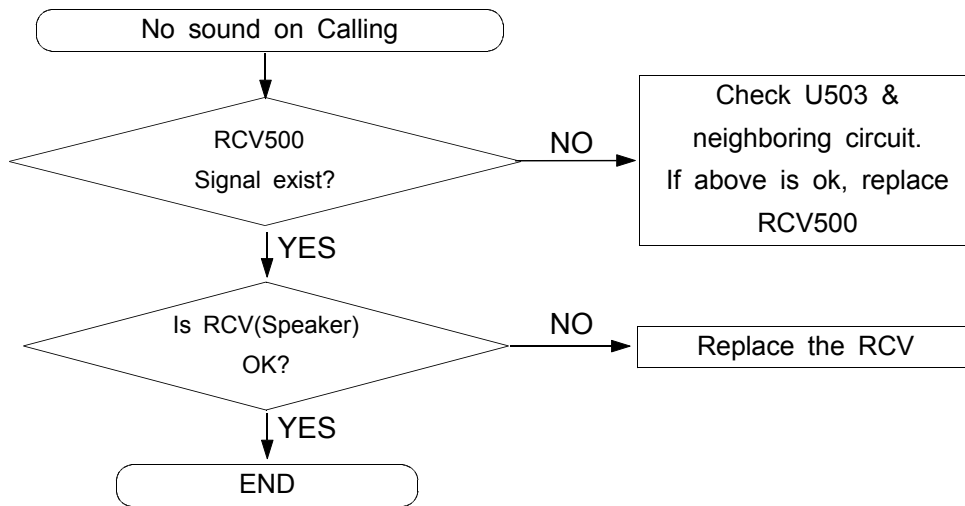
9-1-10 Abnormal Speaker operation



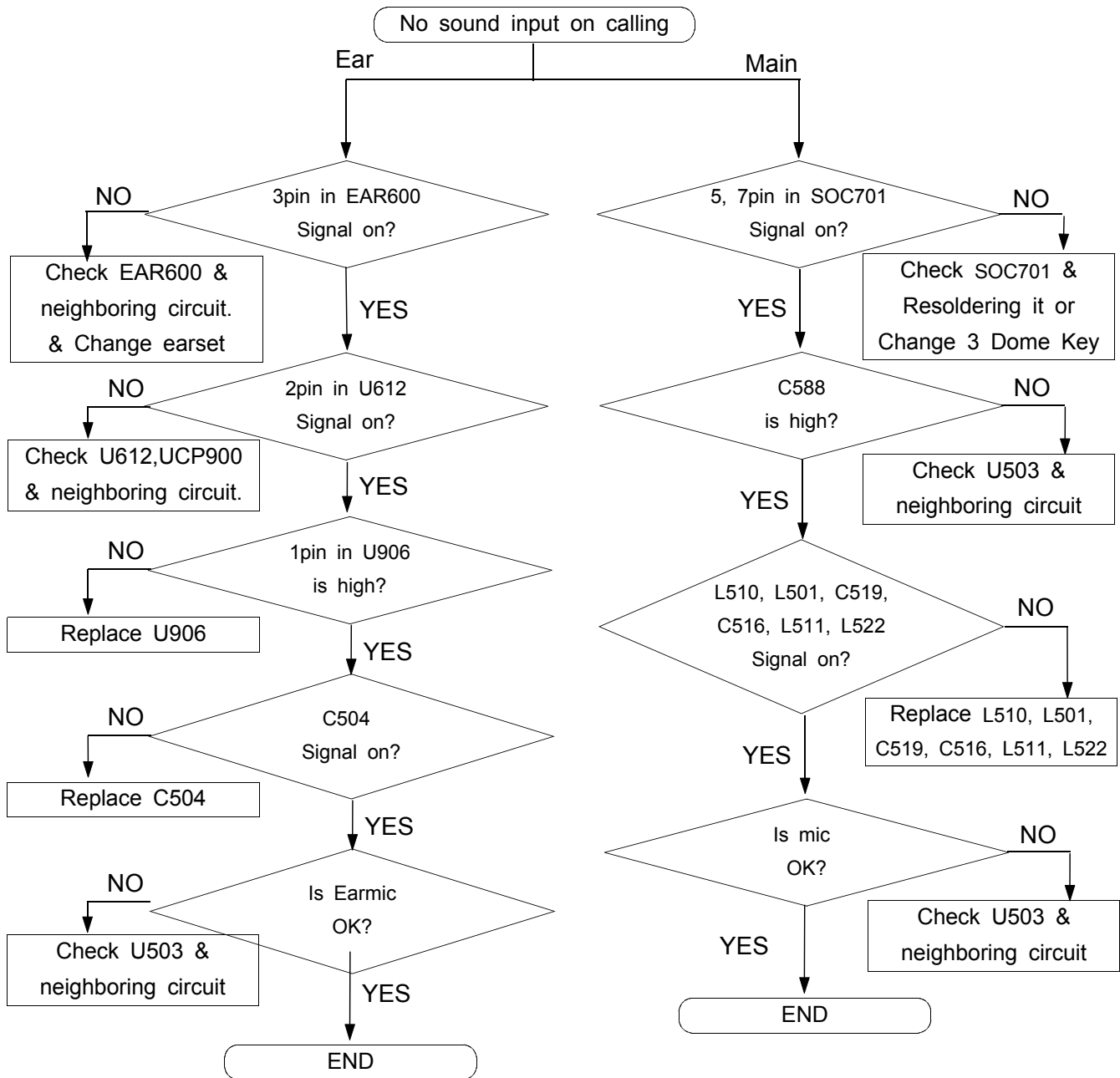


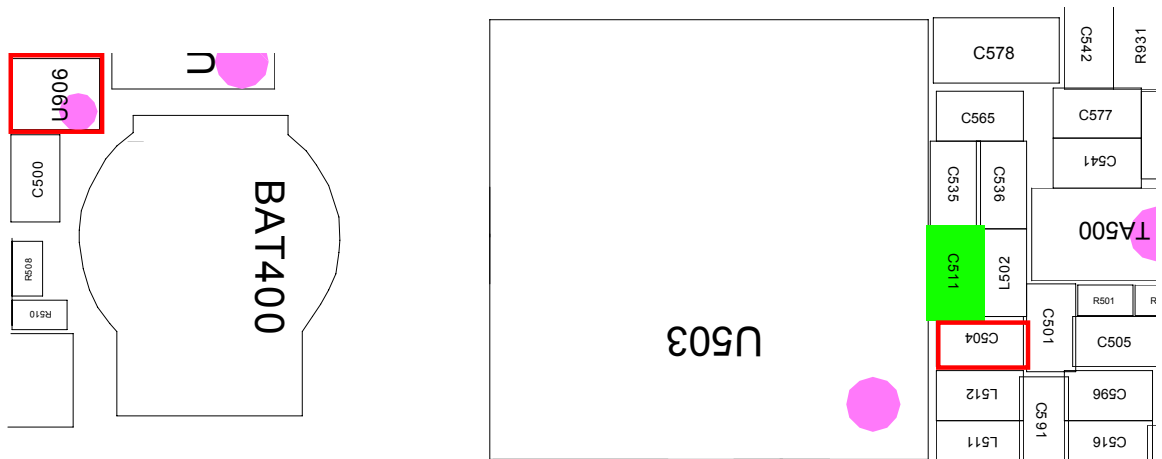
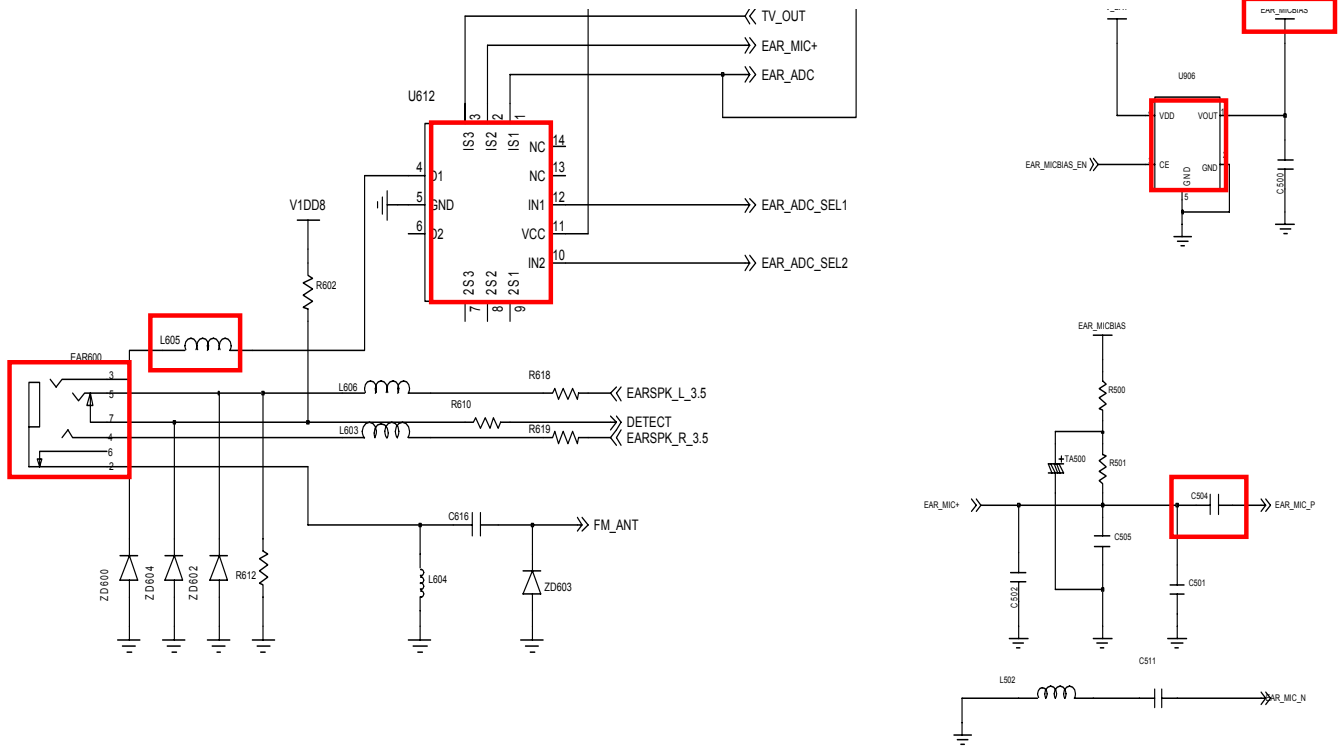


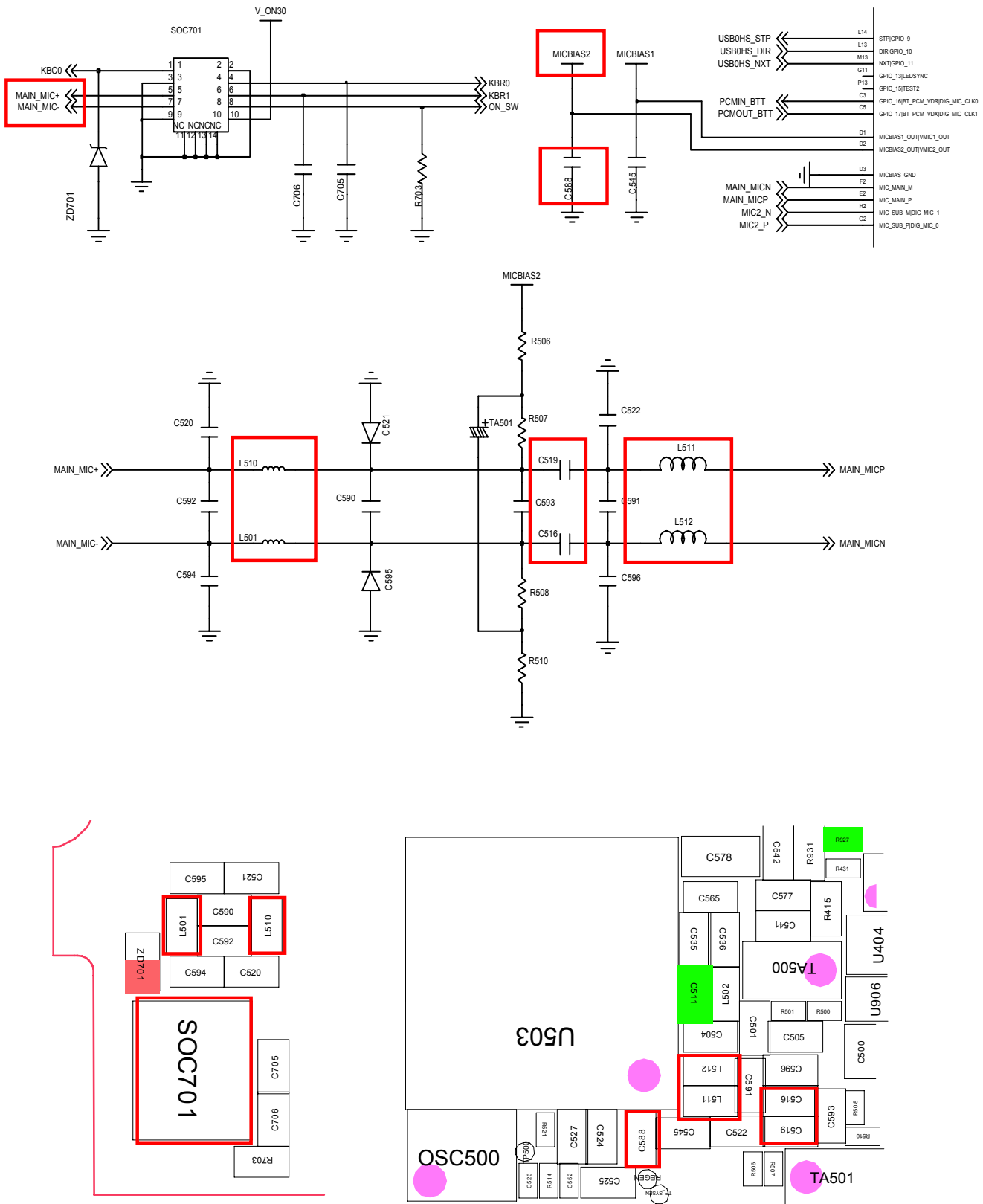
9-1-11 : Abnormal Receiver operation



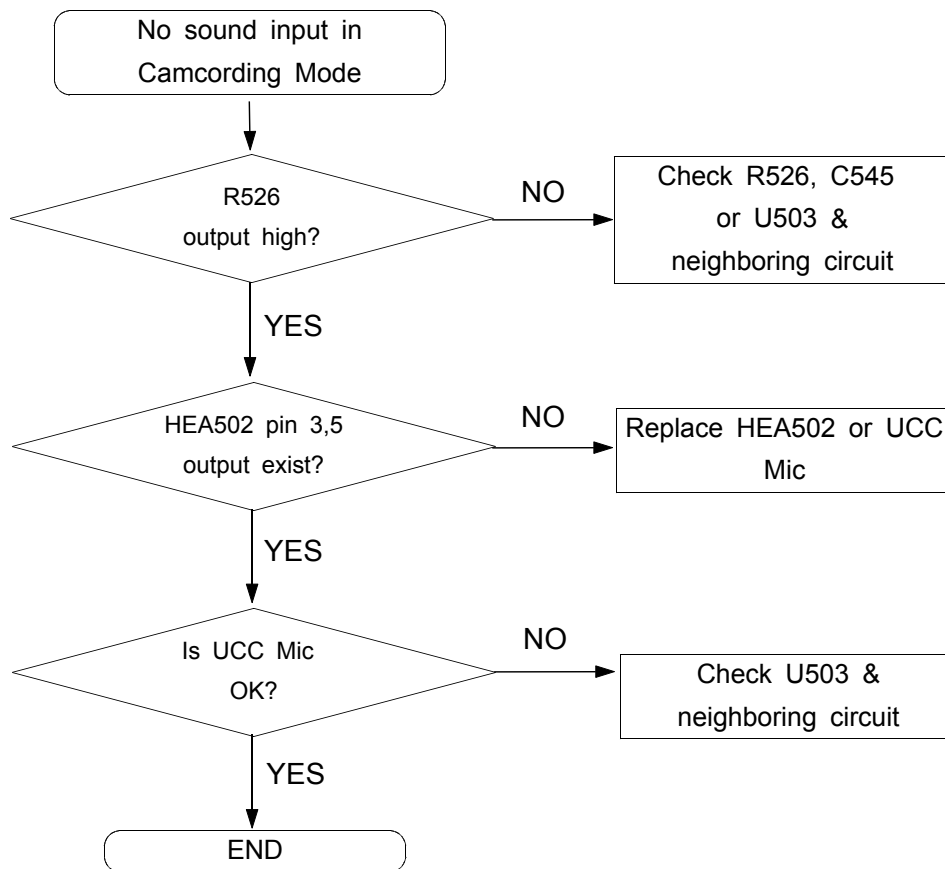
9-1-12 : Abnormal Main & Ear Mic operation

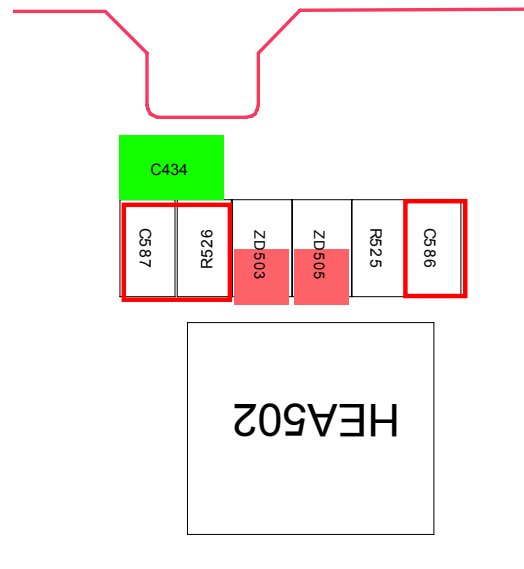
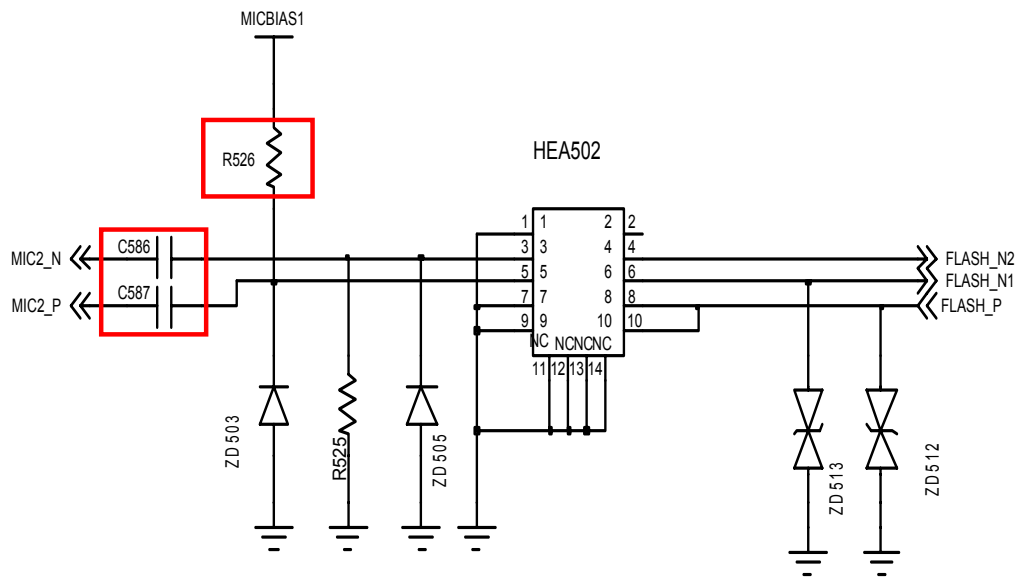




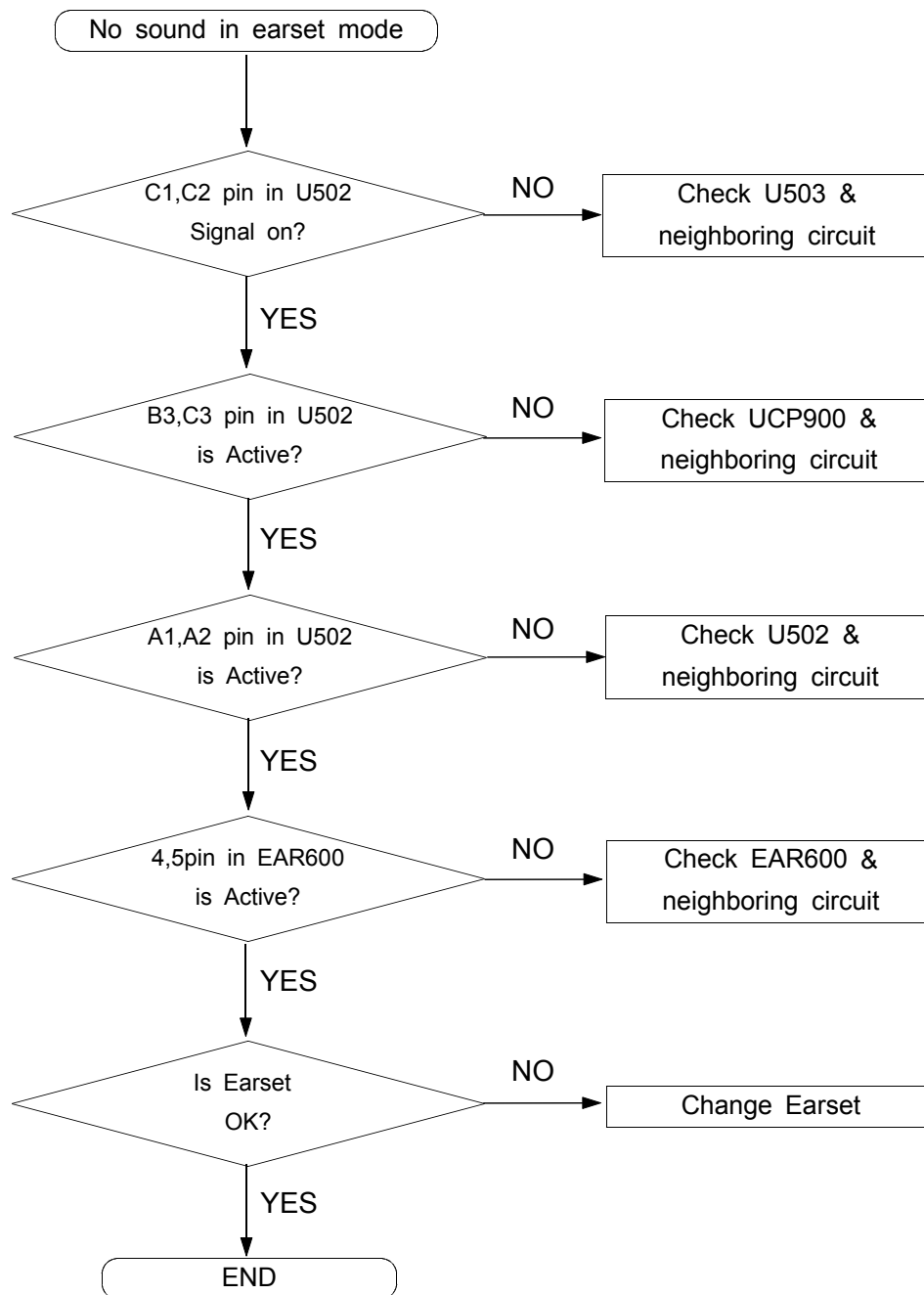


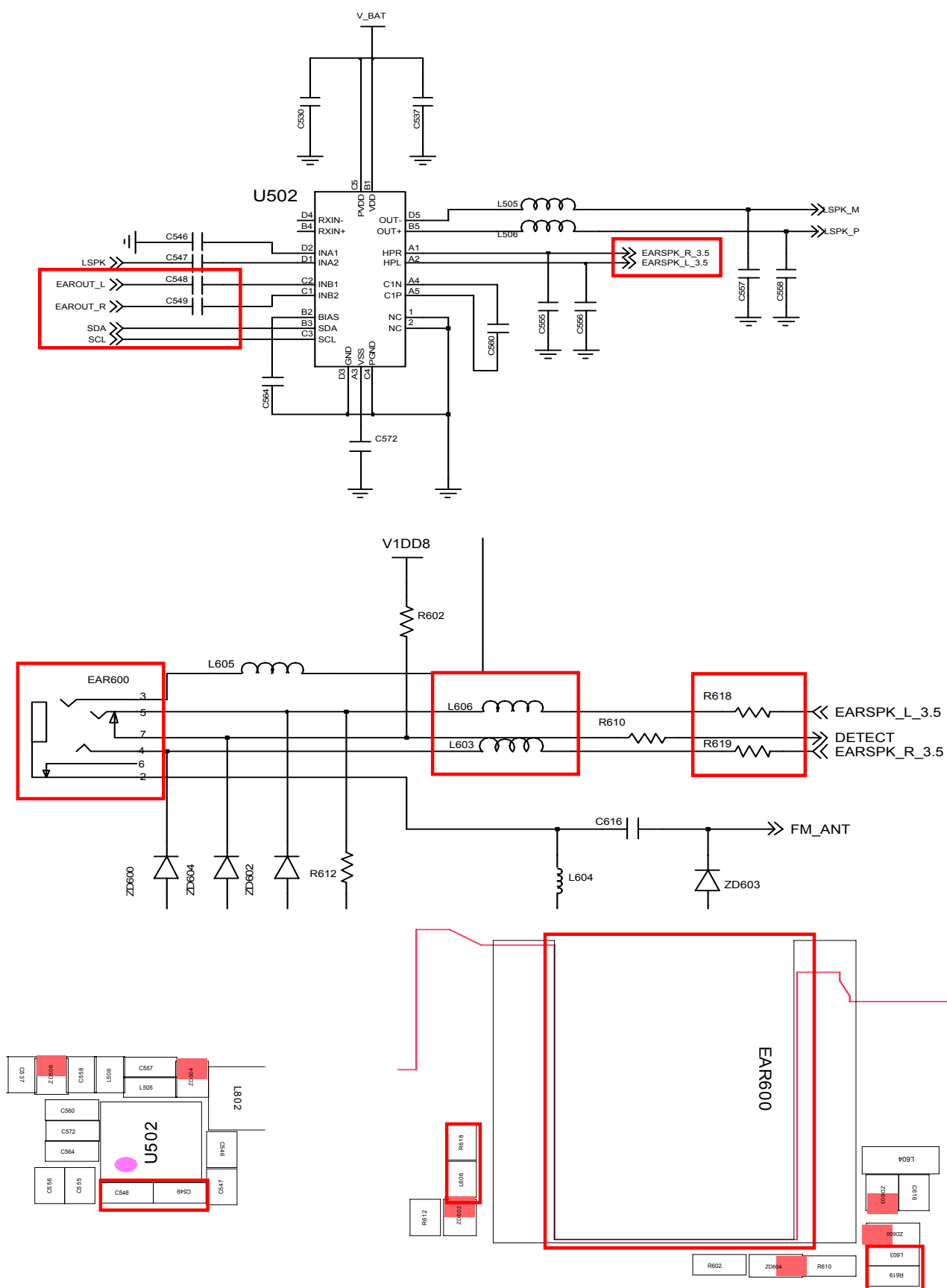
9-1-13 : Abnormal UCC Mic operation





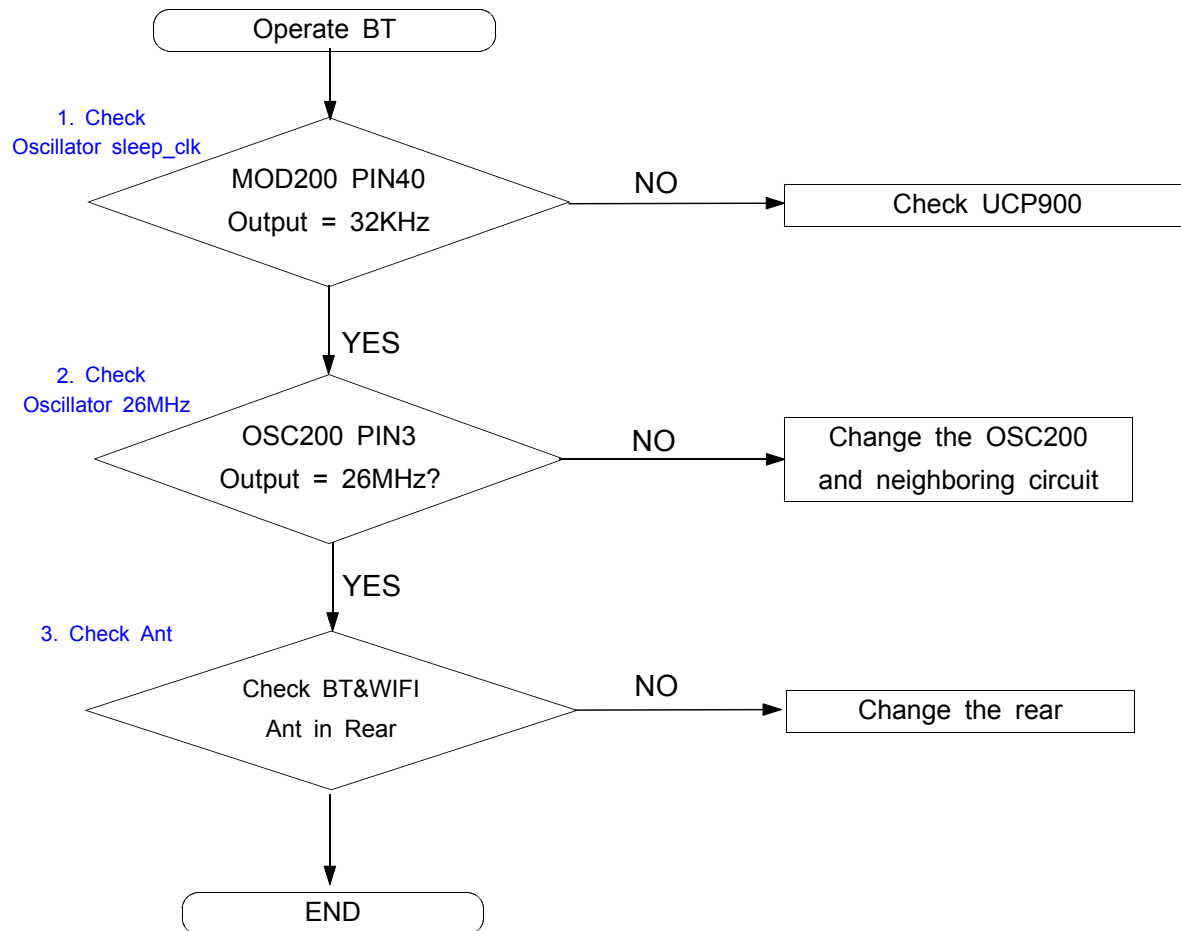
9-1-14 : Abnormal Earset output

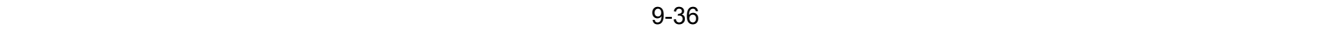


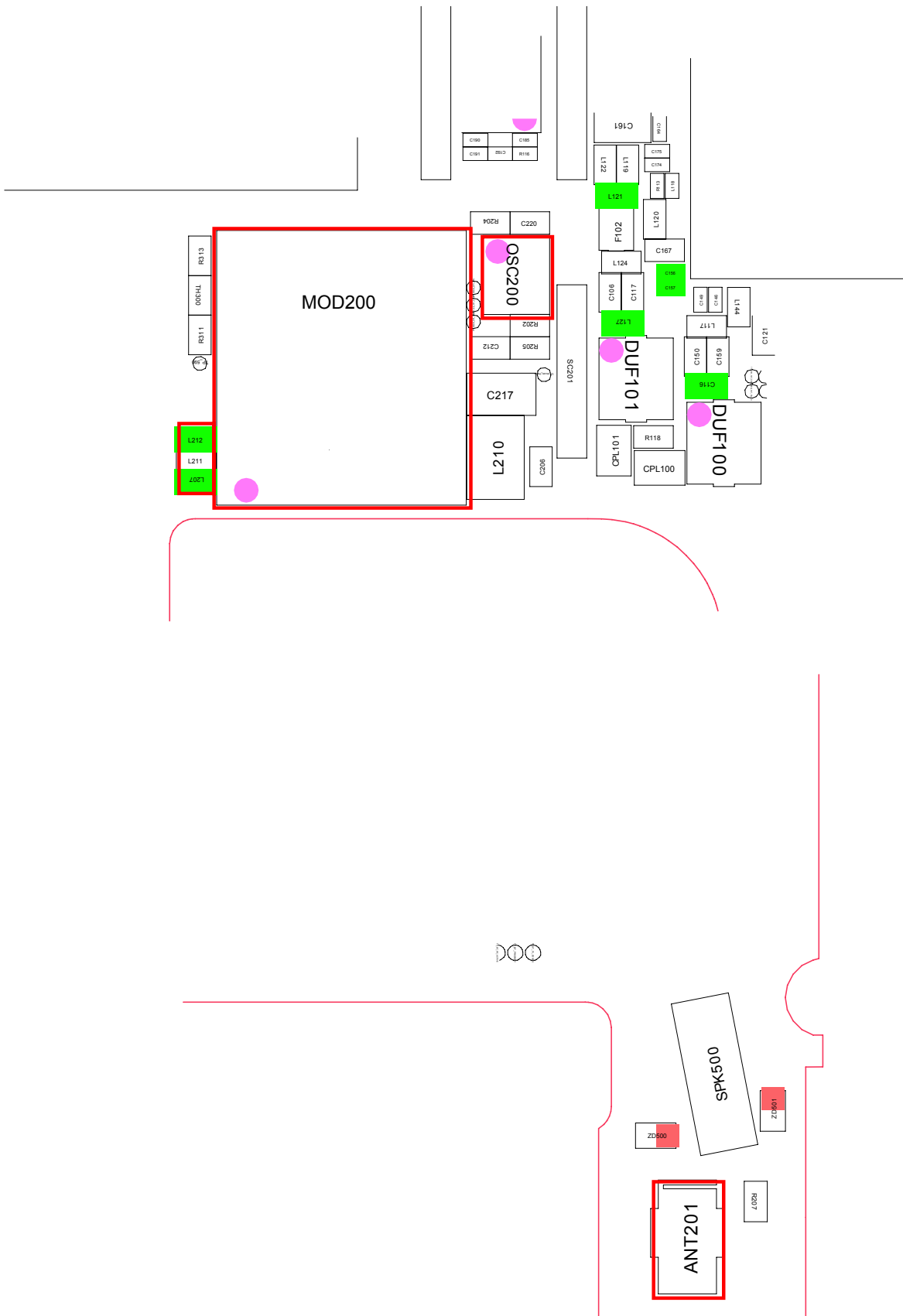


9-2. RF Section

9-2-1. Abnormal Bluetooth Operation

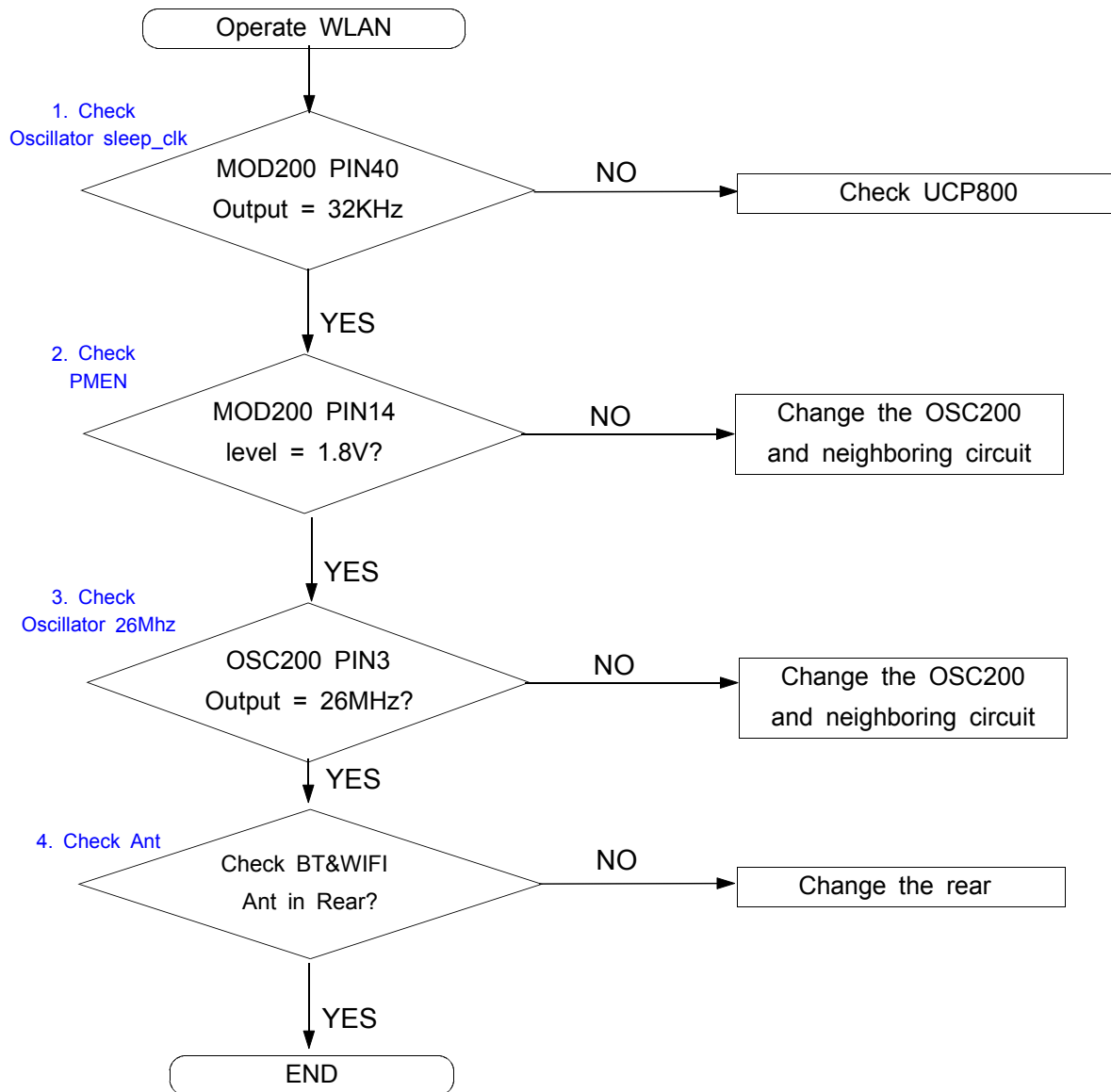


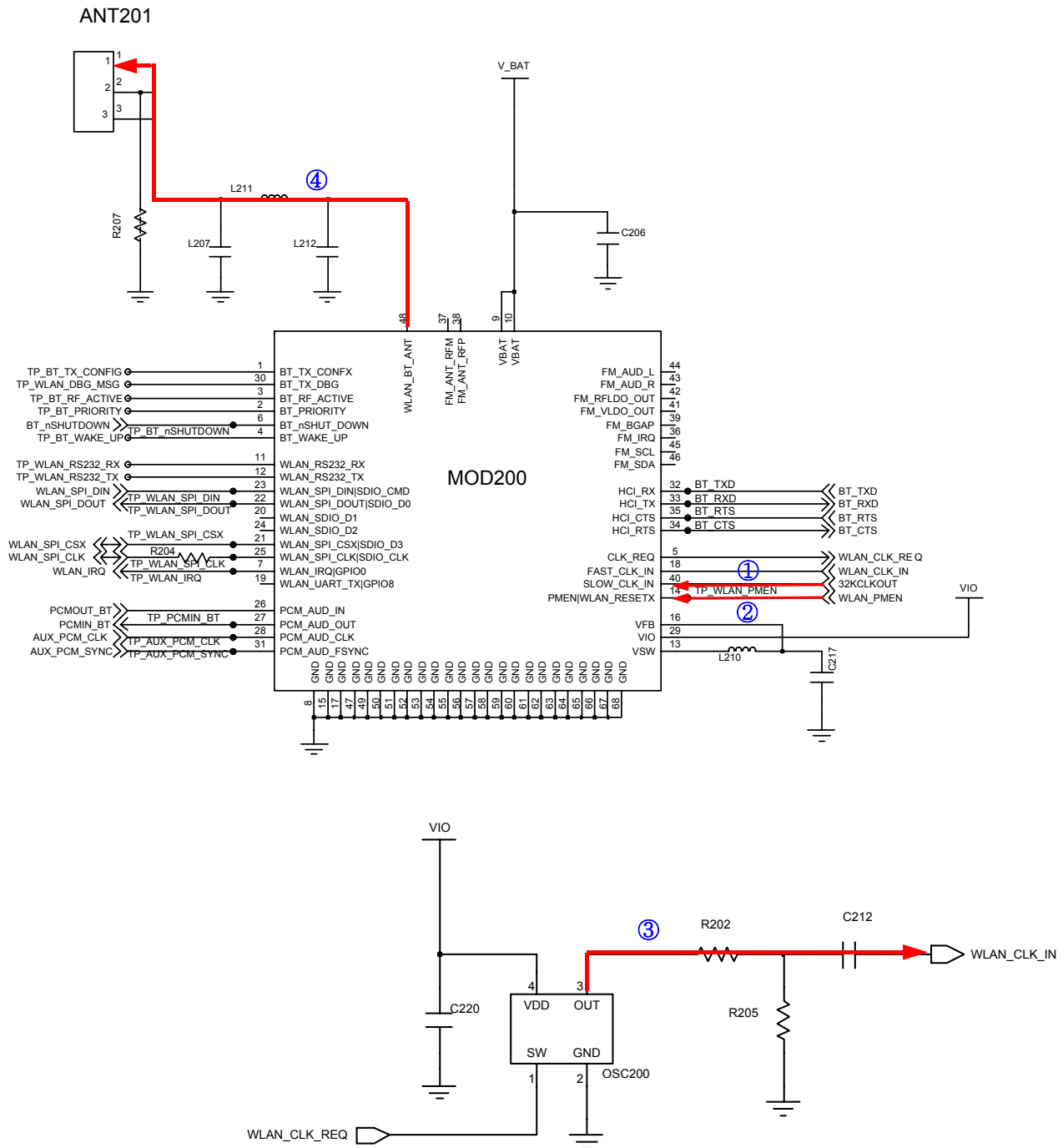


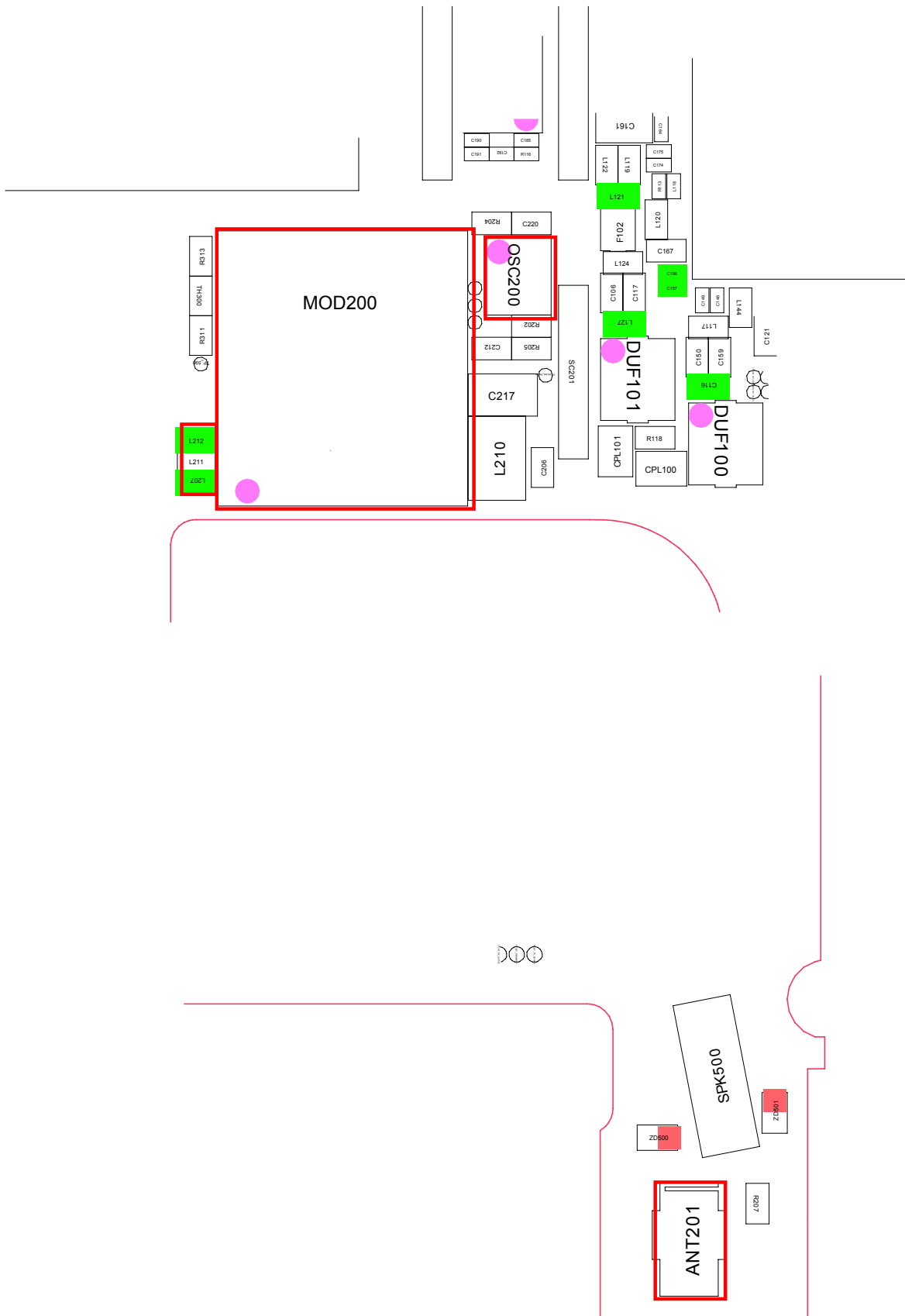


9-2. RF Section

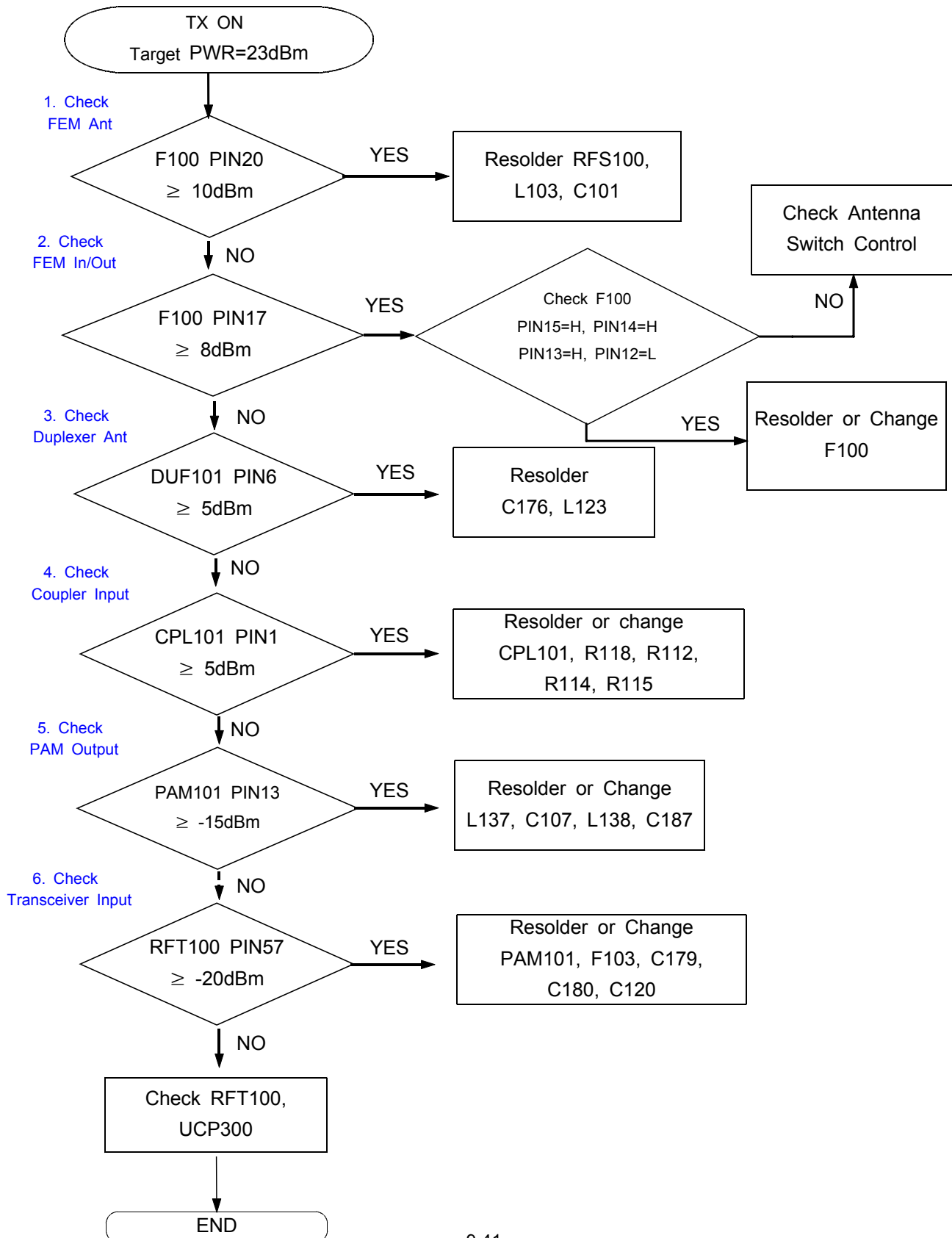
9-2-2. Abnormal WLAN Operation

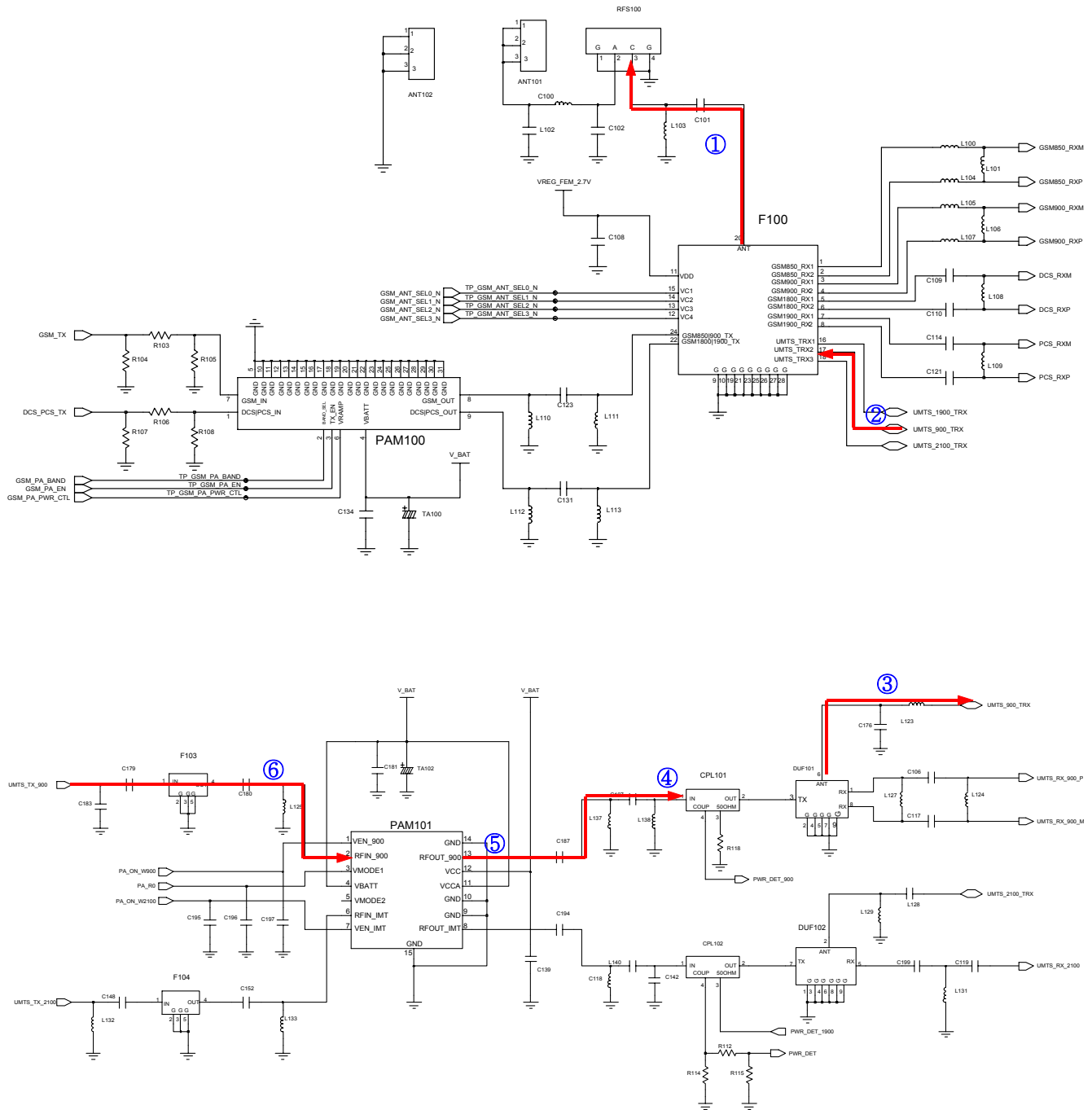


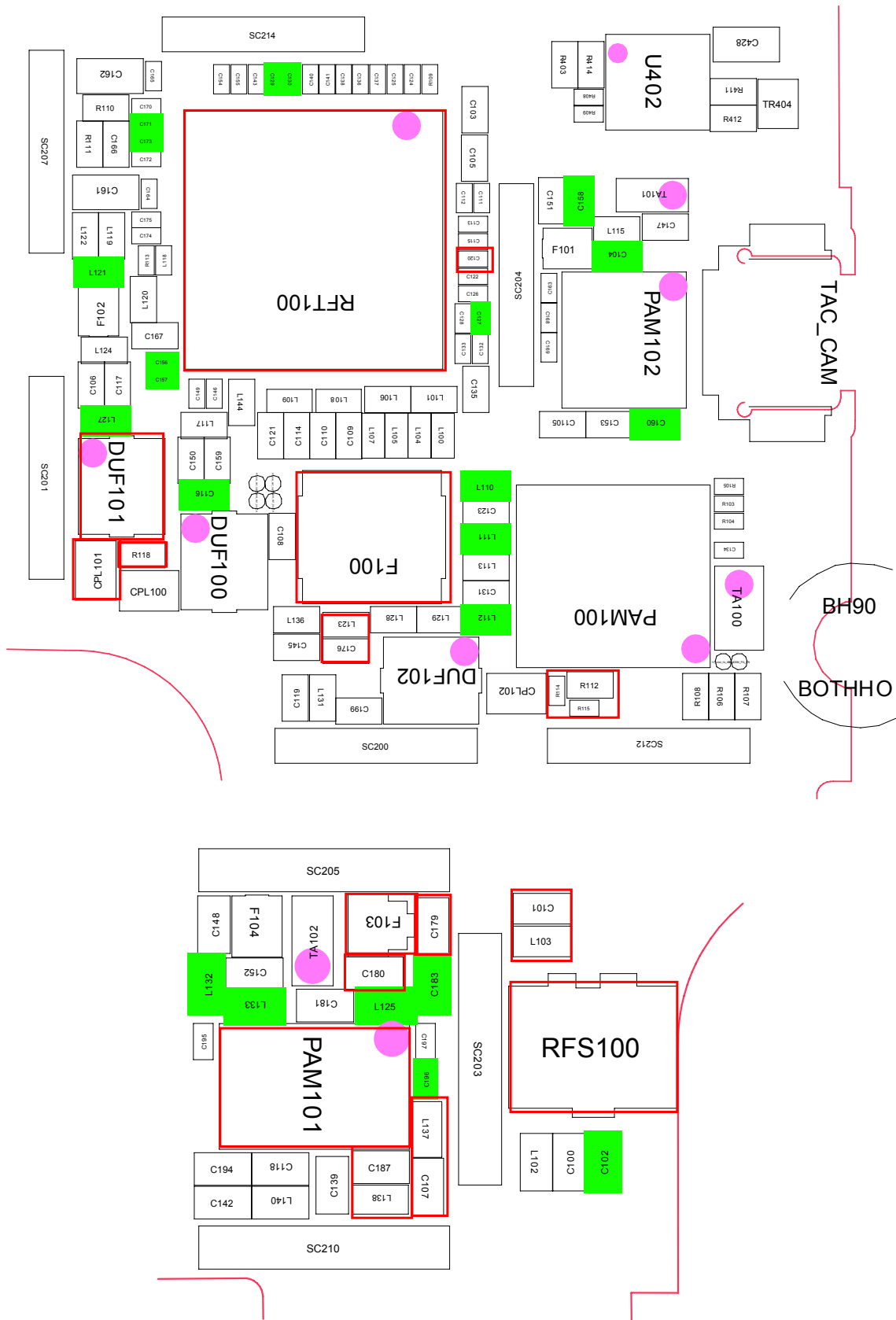




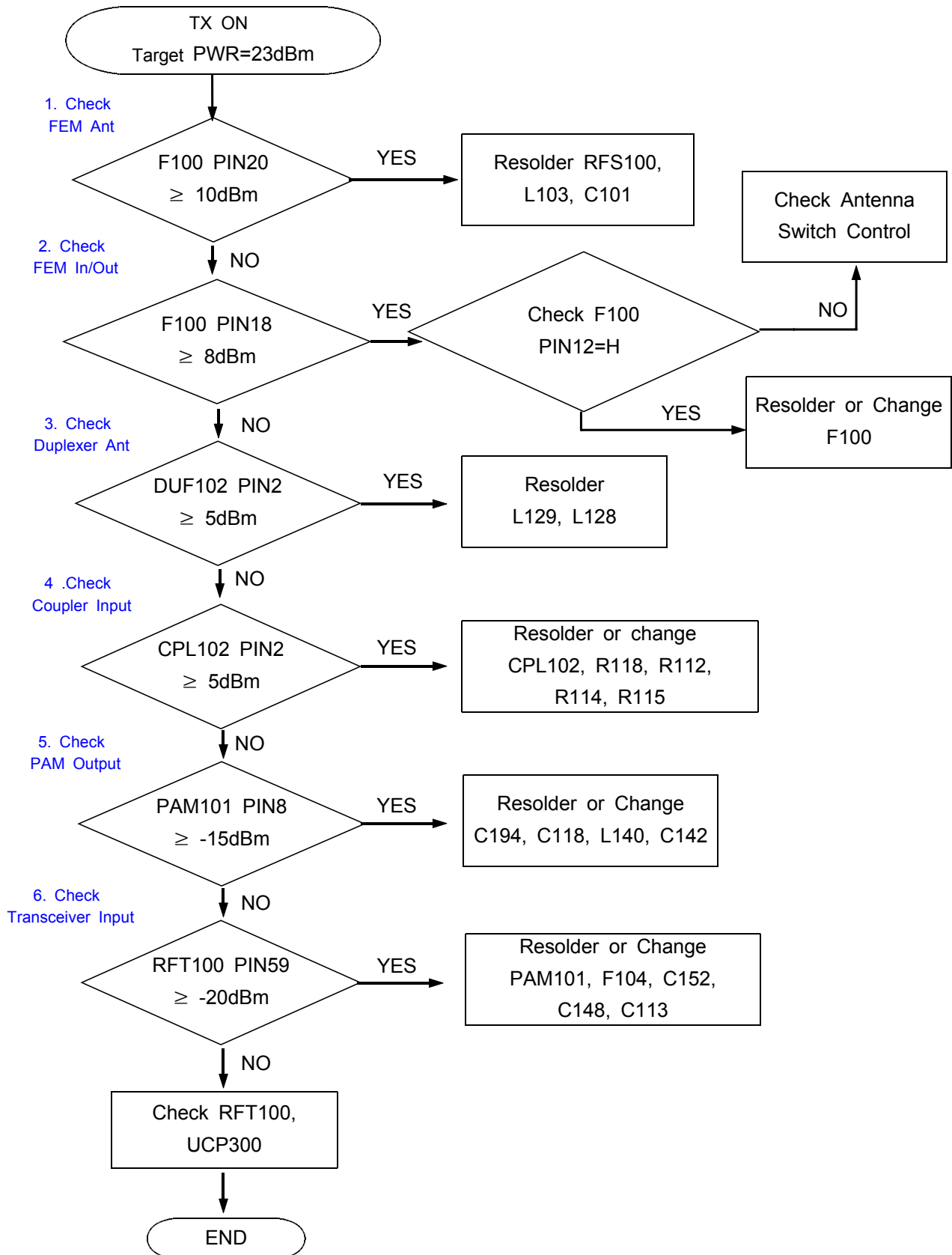
9-2-3. Abnormal WCDMA900 Tx Operation

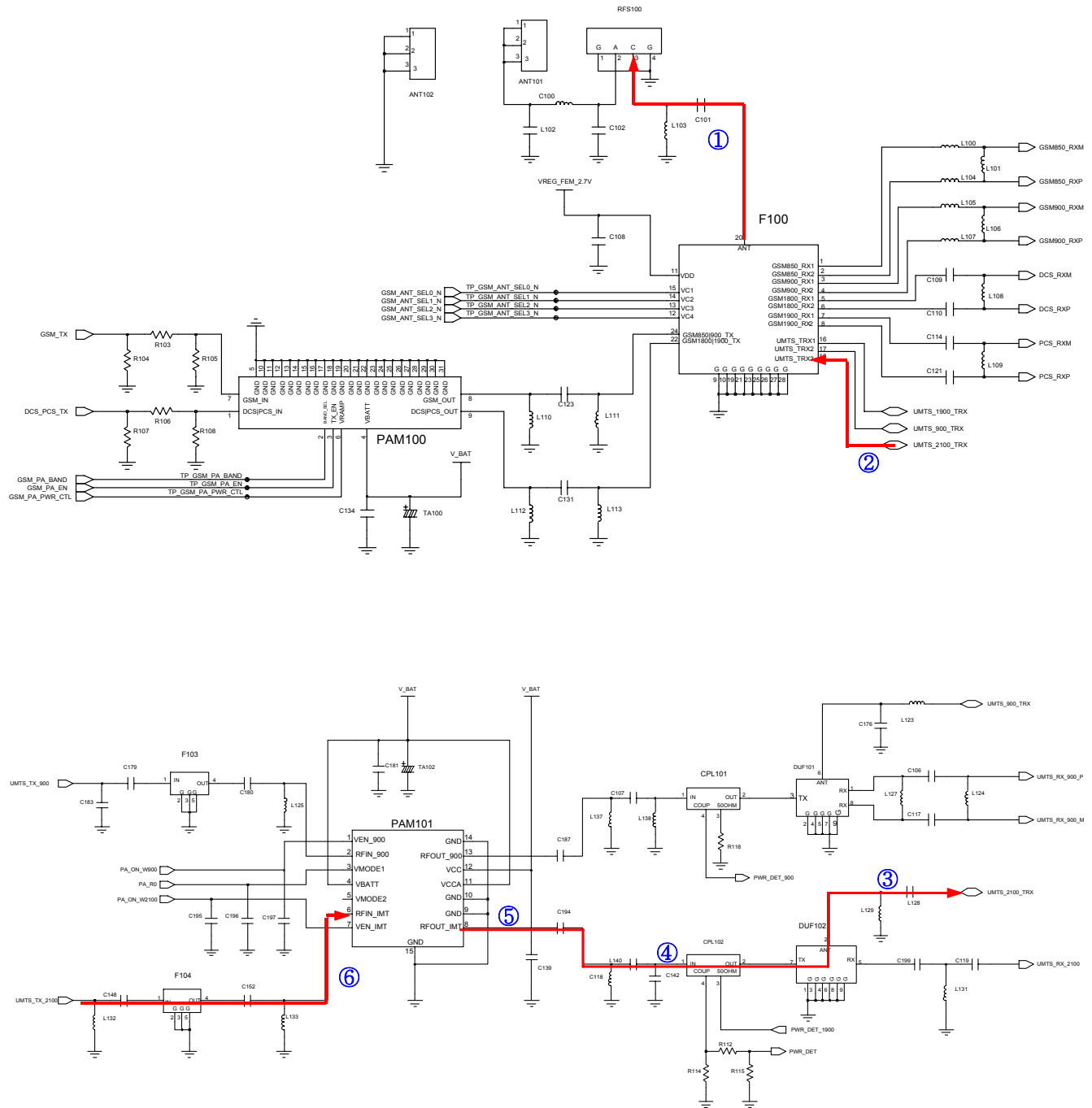


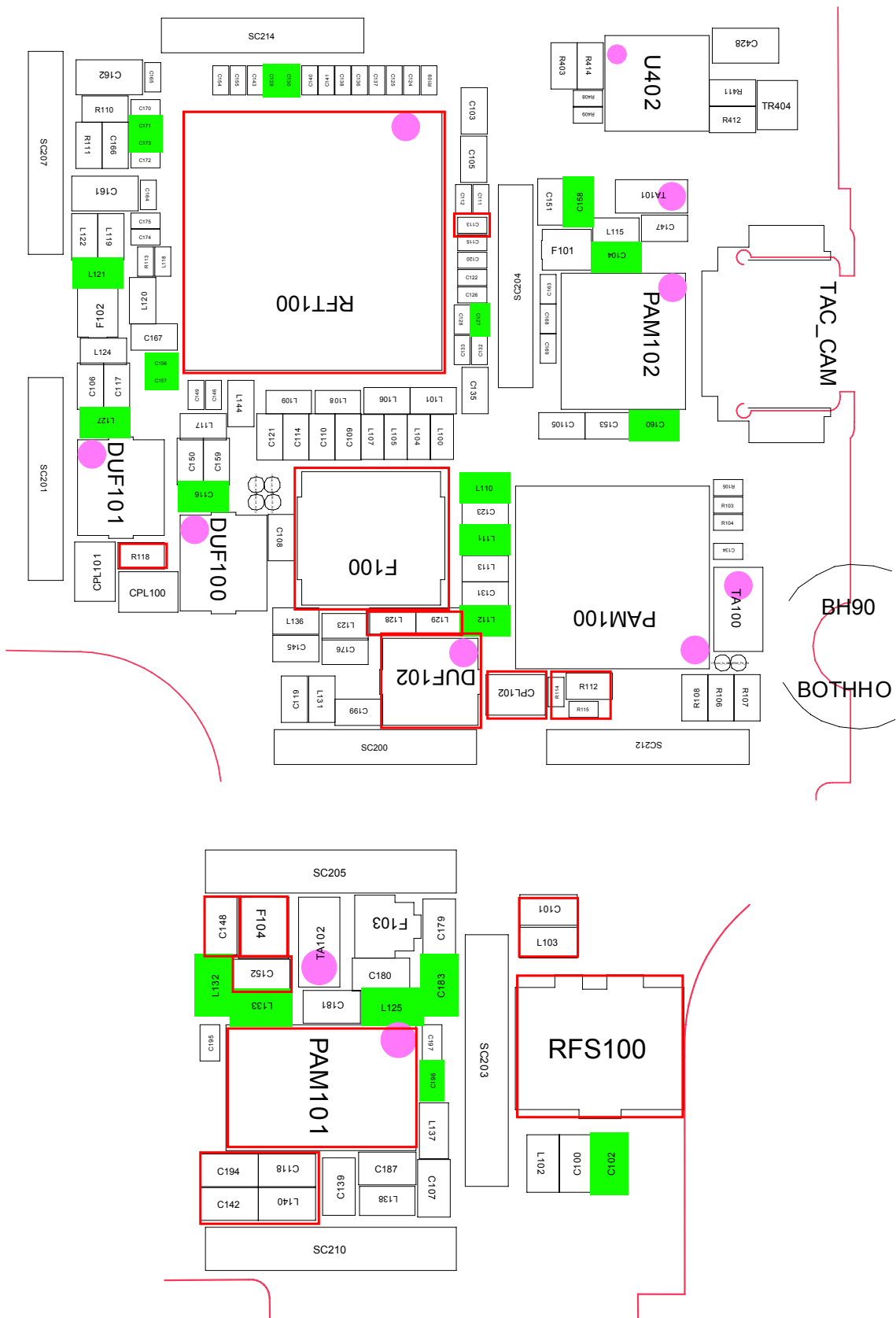




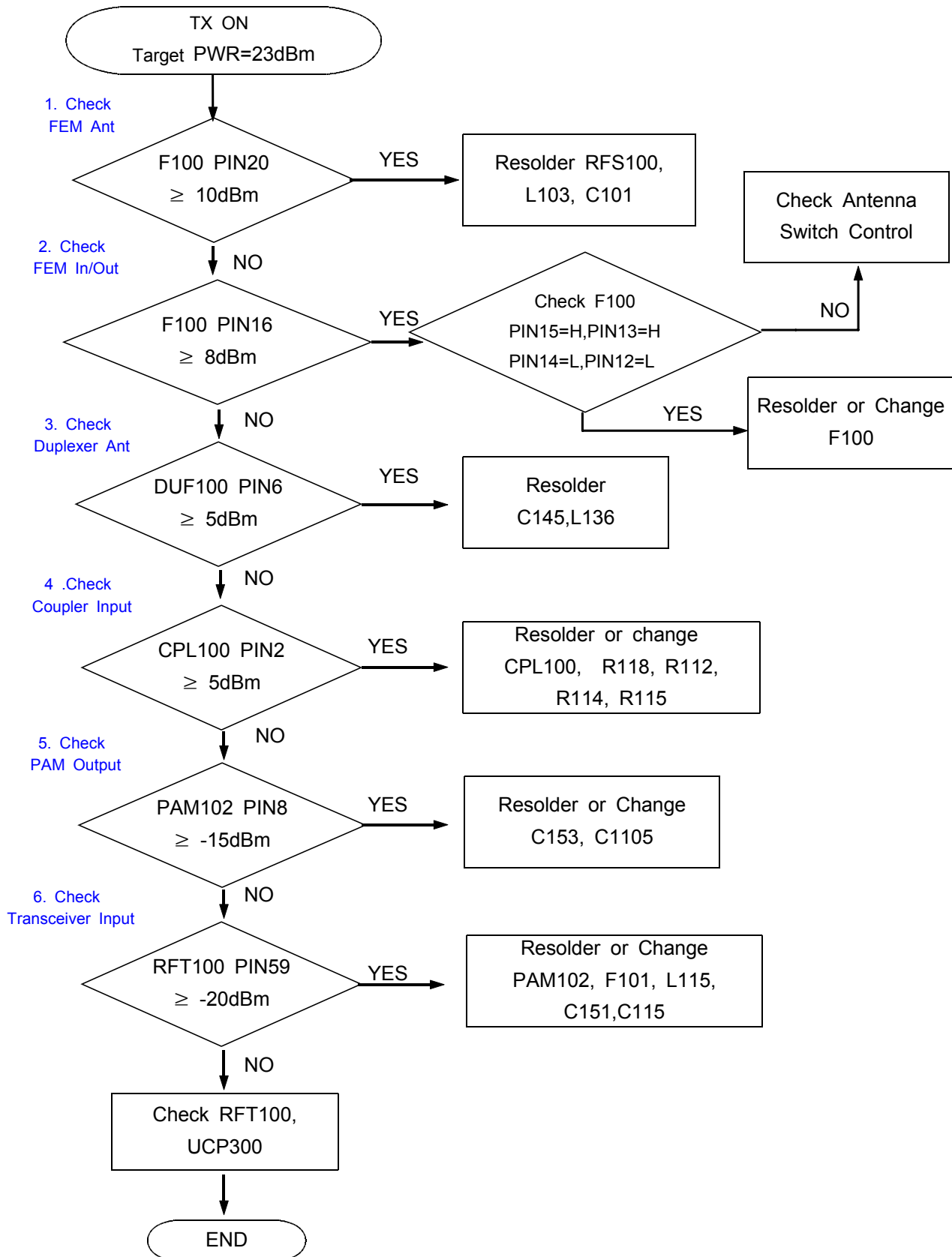
9-2-4. Abnormal WCDMA2100 Tx Operation

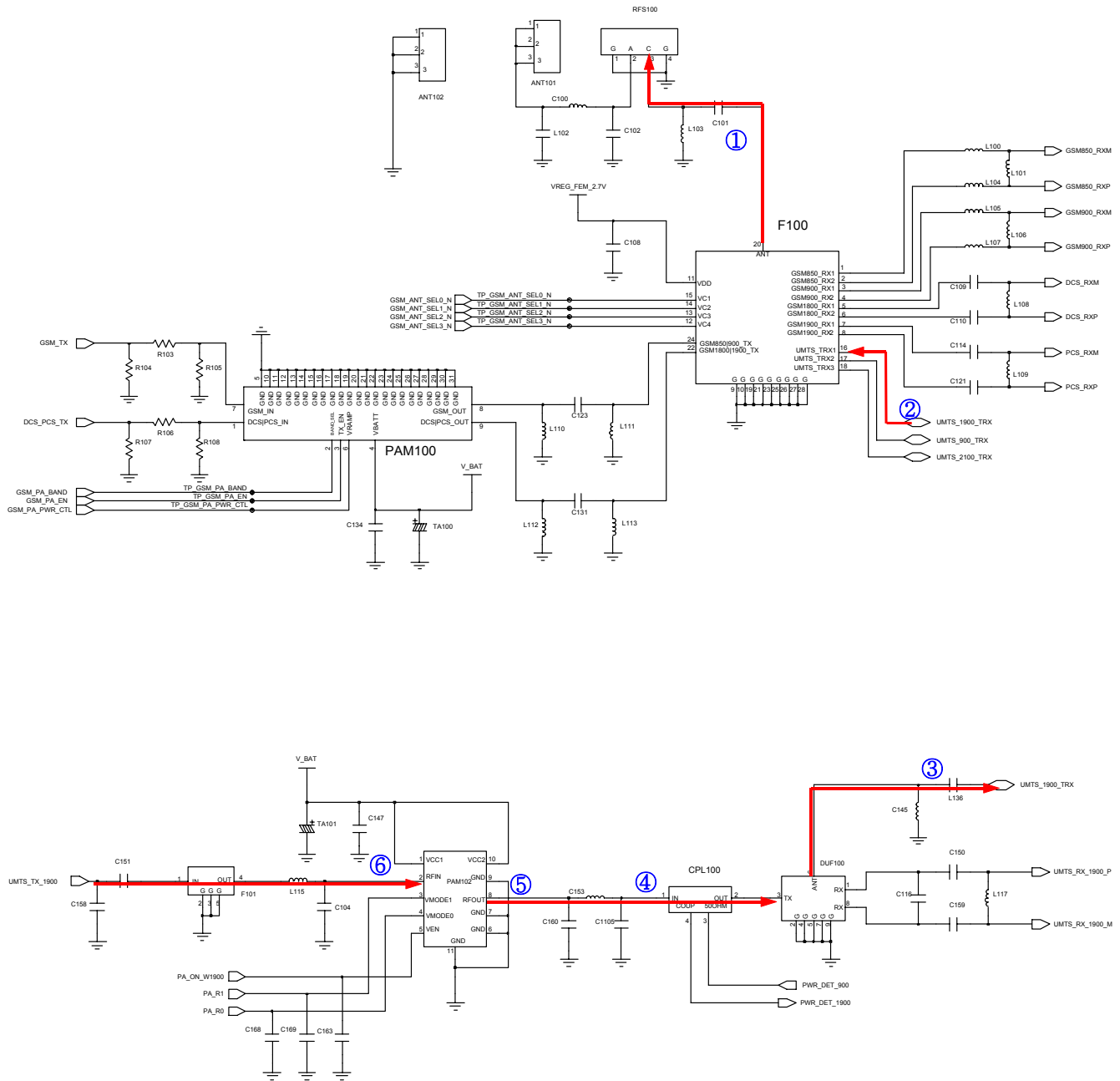


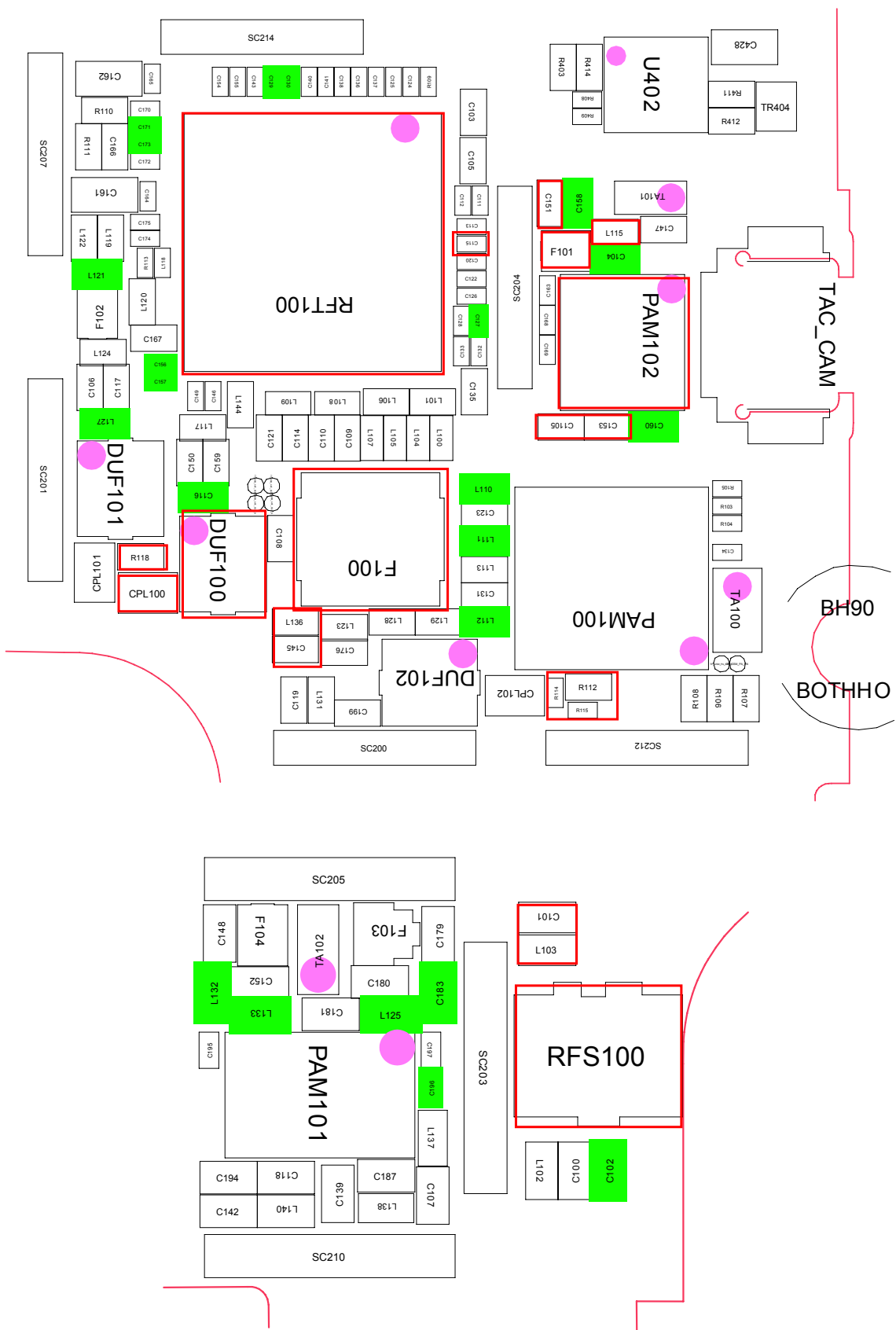




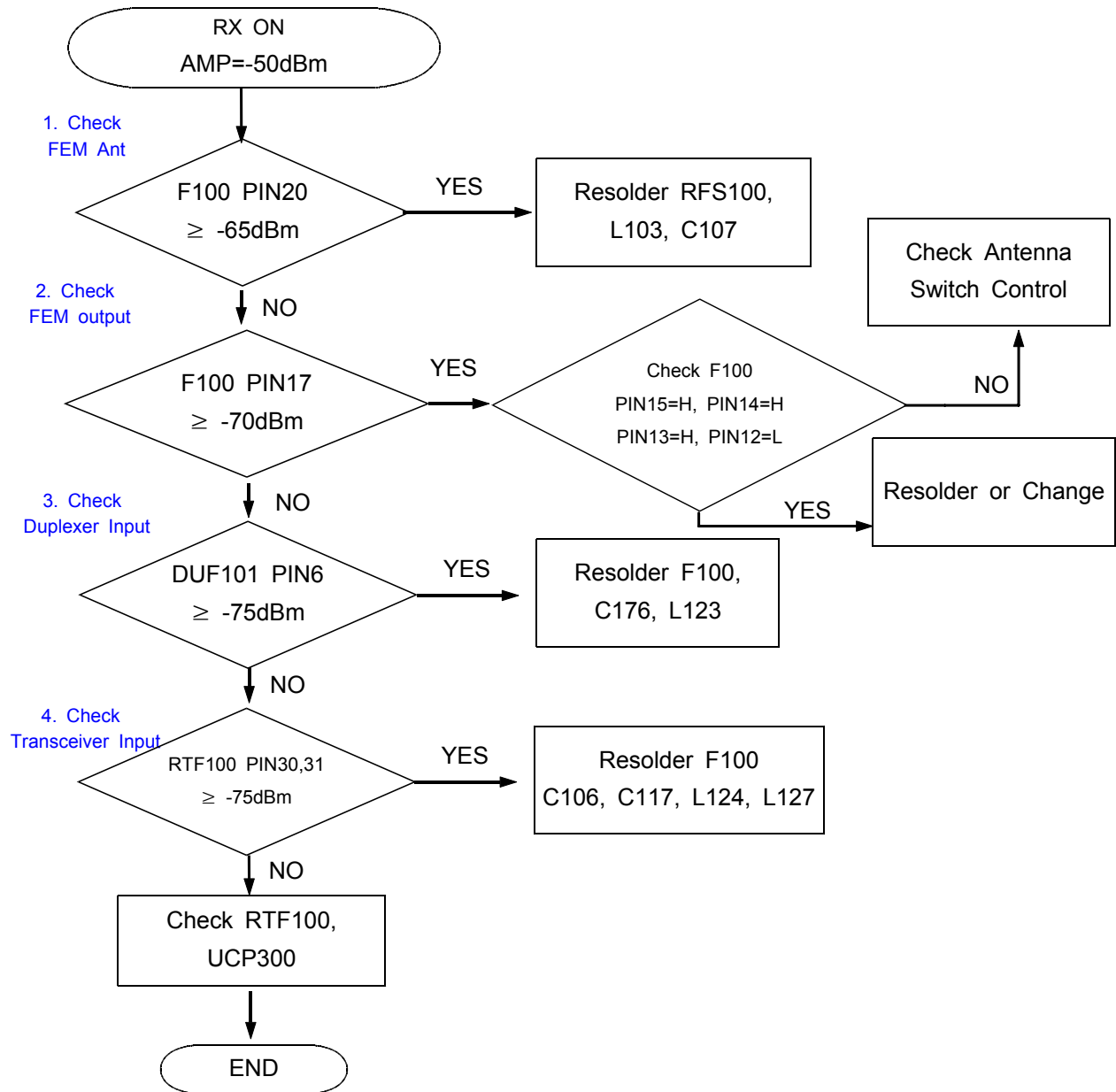
9-2-5. Abnormal WCDMA1900 Tx Operation

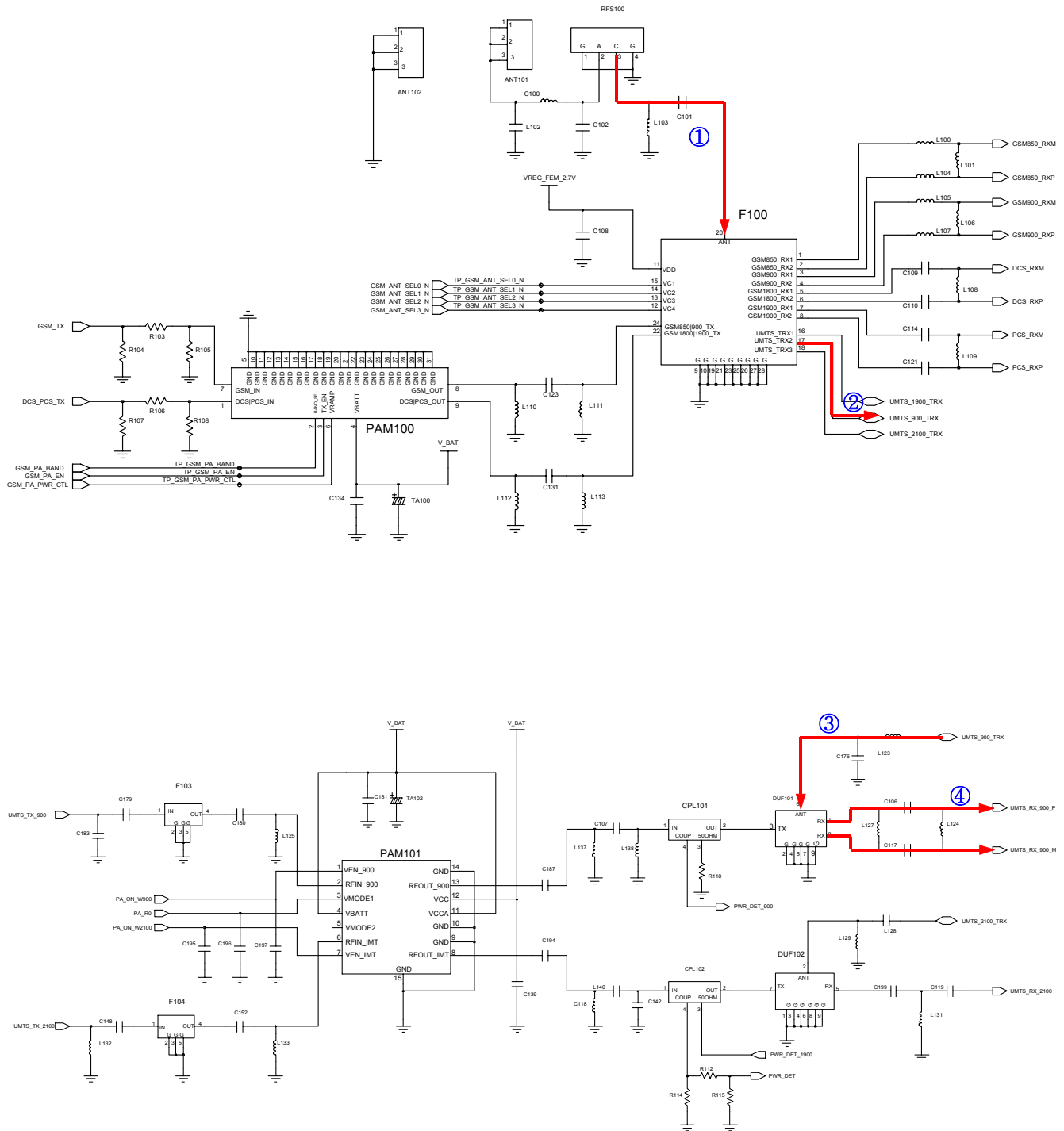


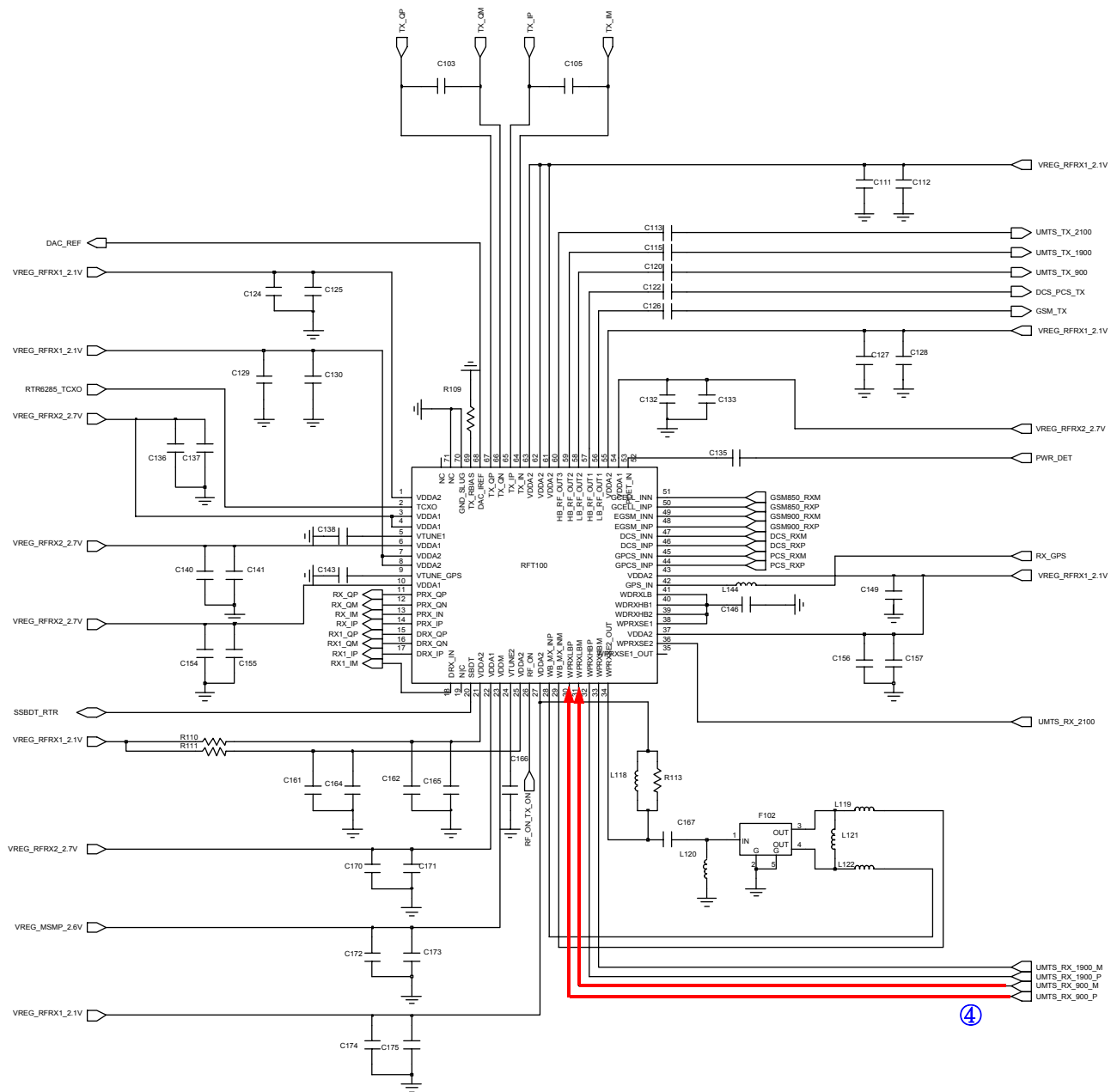




9-2-6. Abnormal WCDMA900 Rx Operation

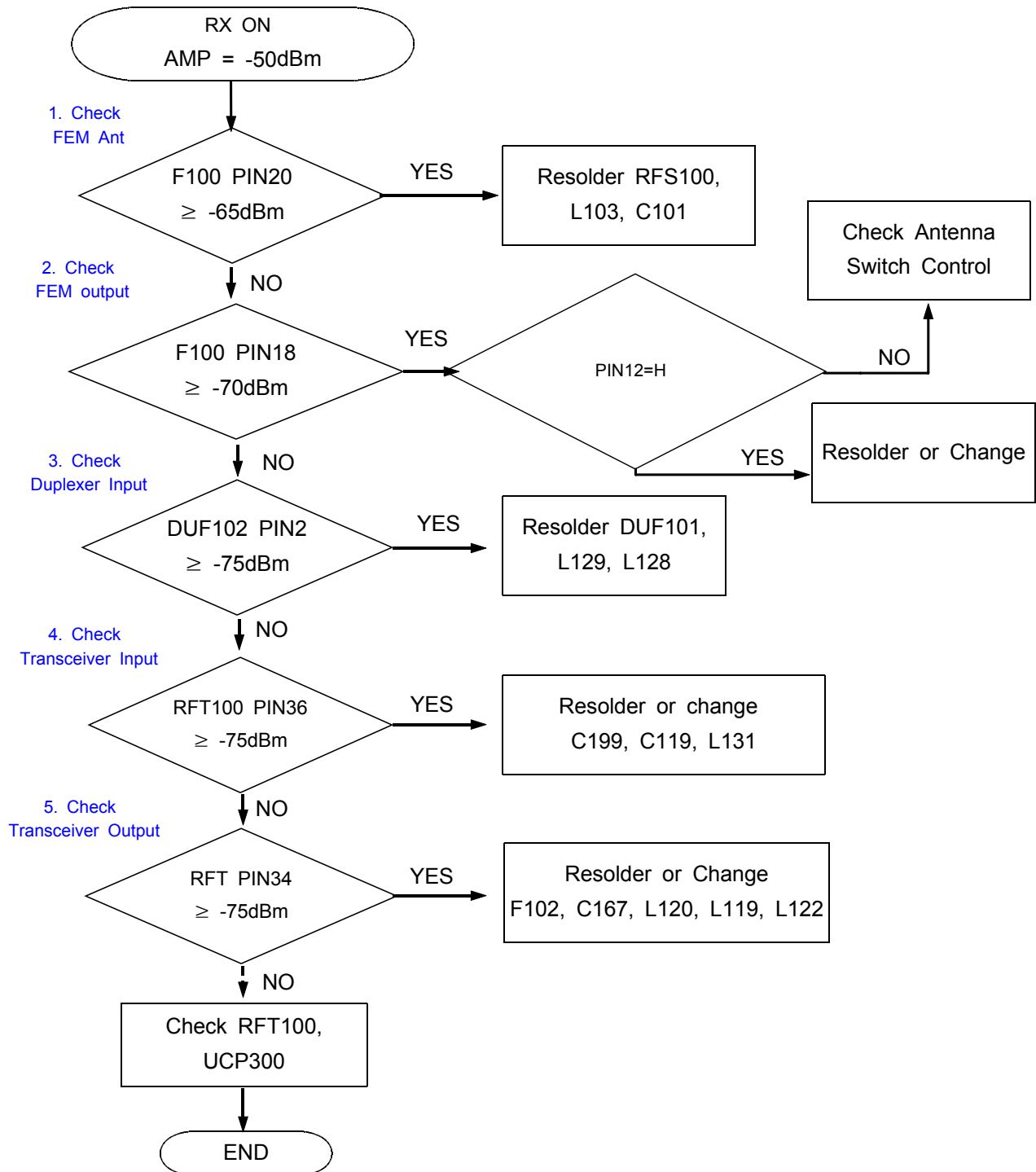


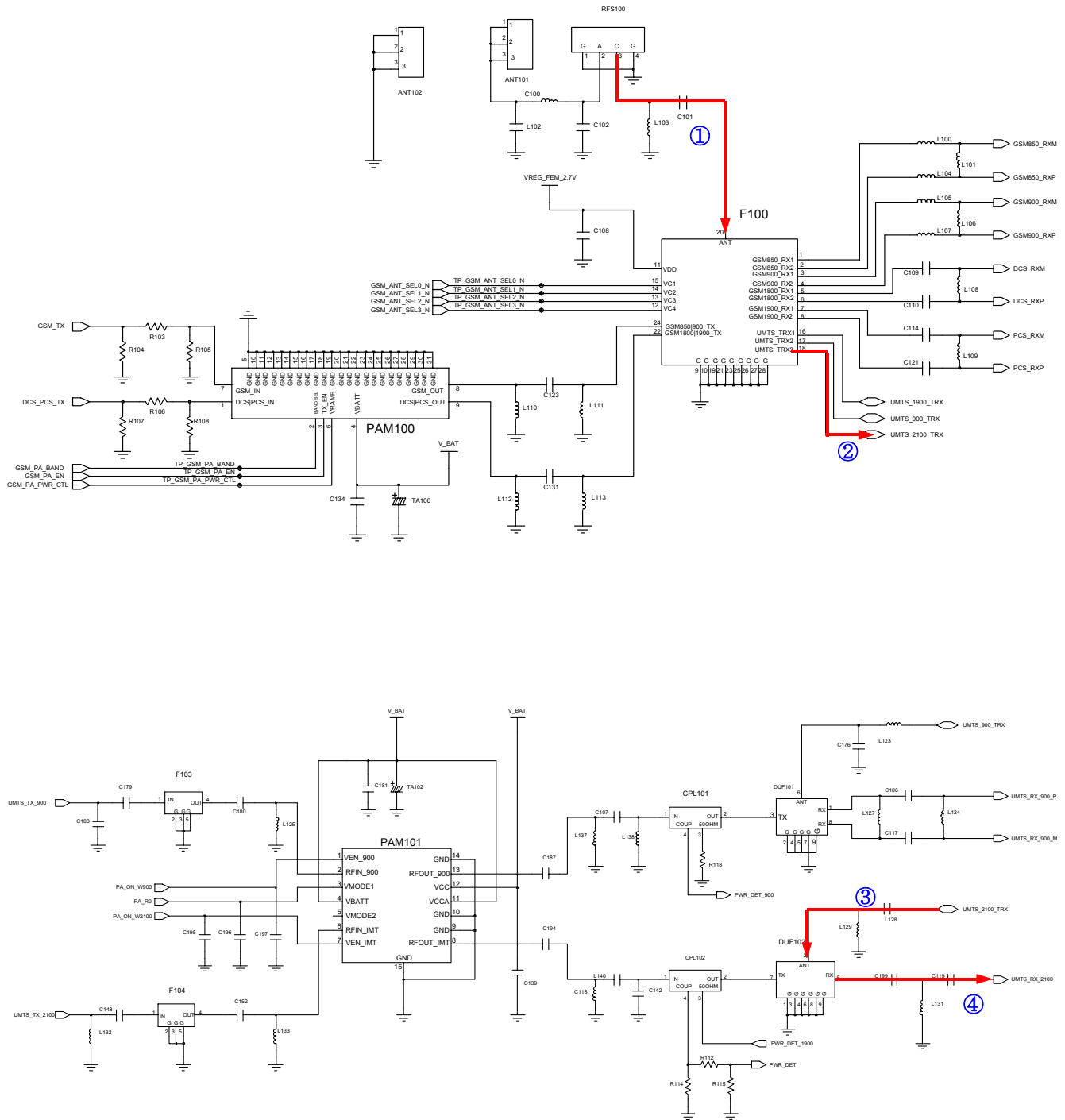


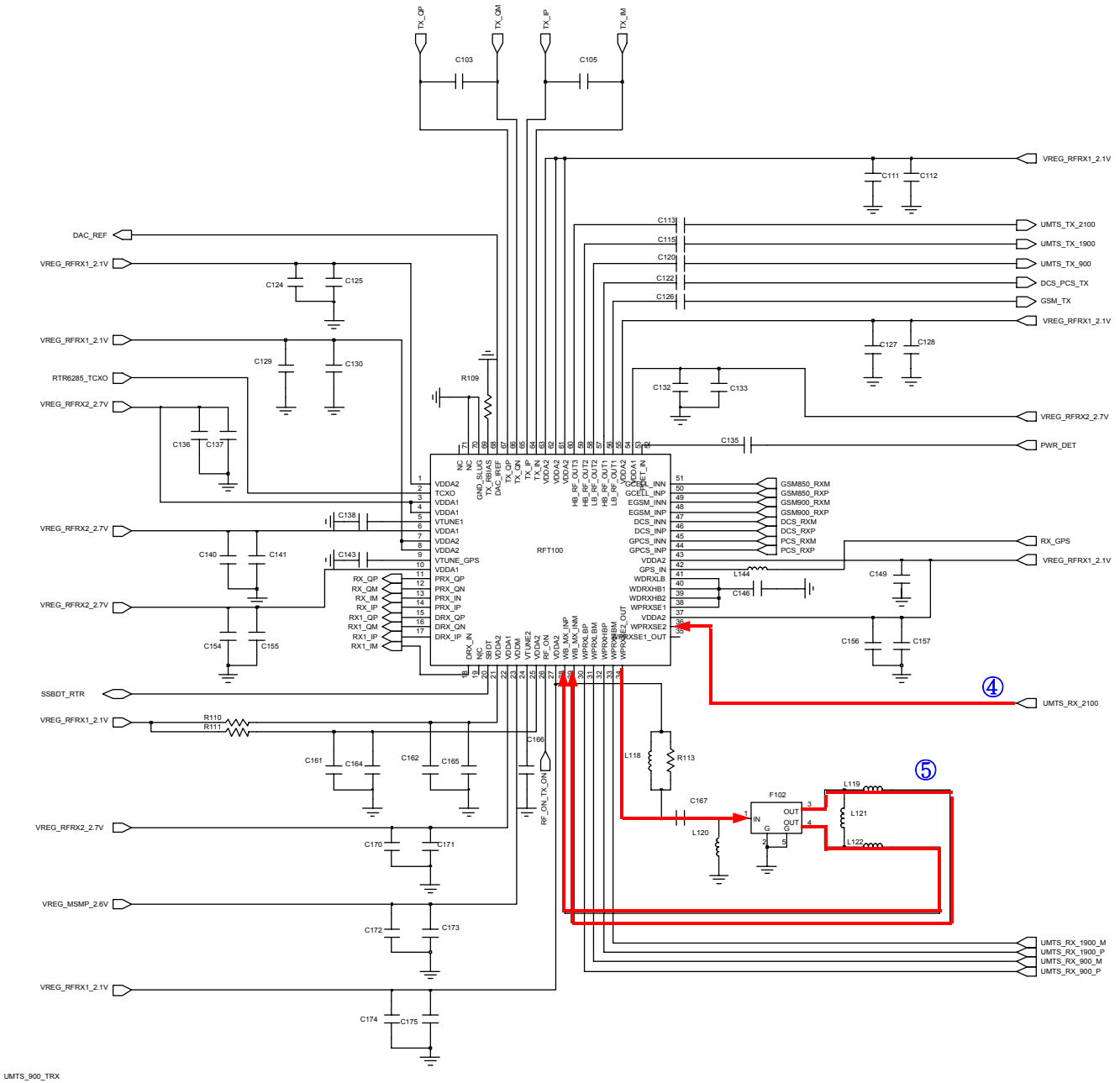


UMTS_900_TRX

9-2-7. Abnormal WCDMA2100 Rx Operation

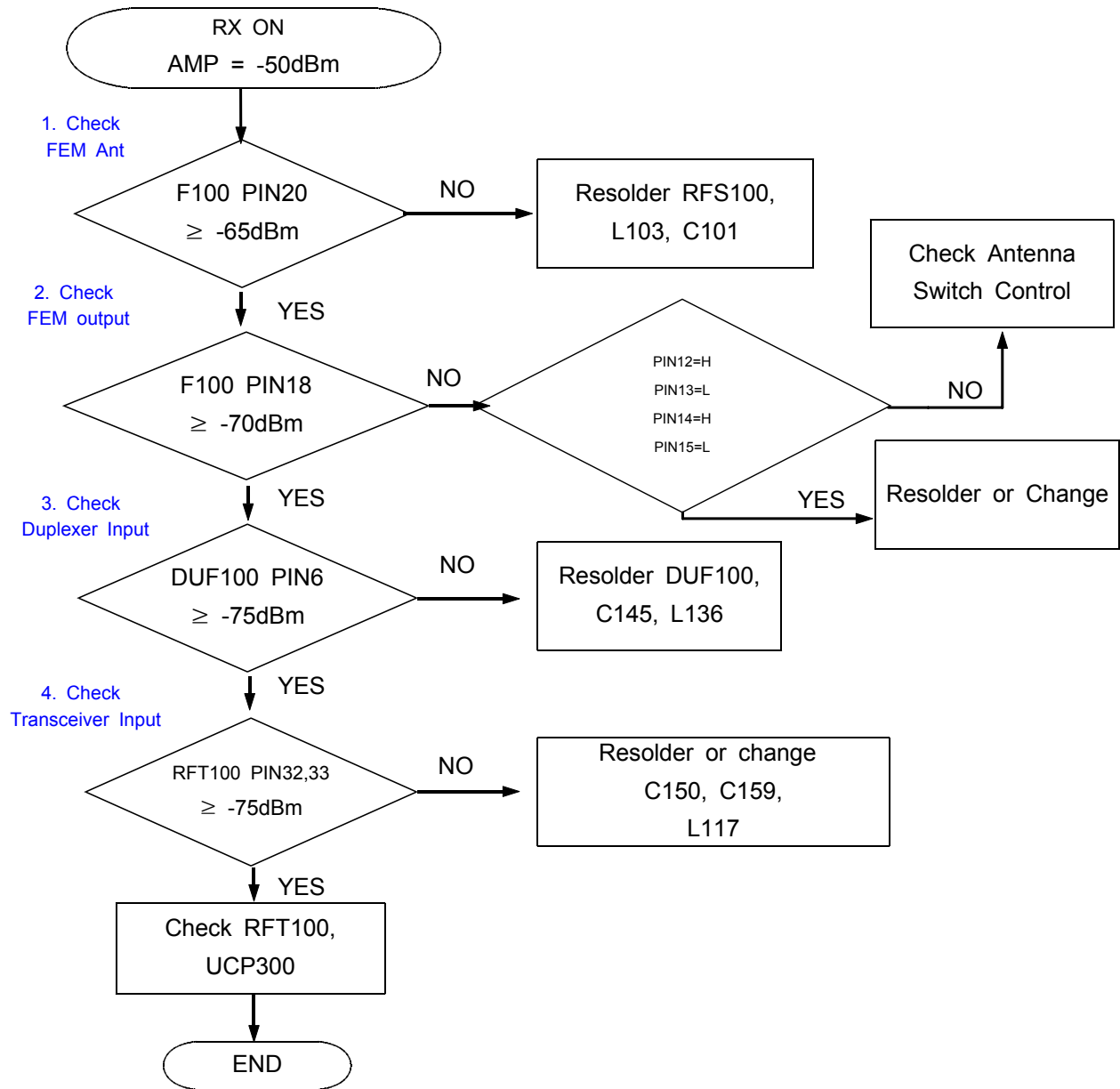


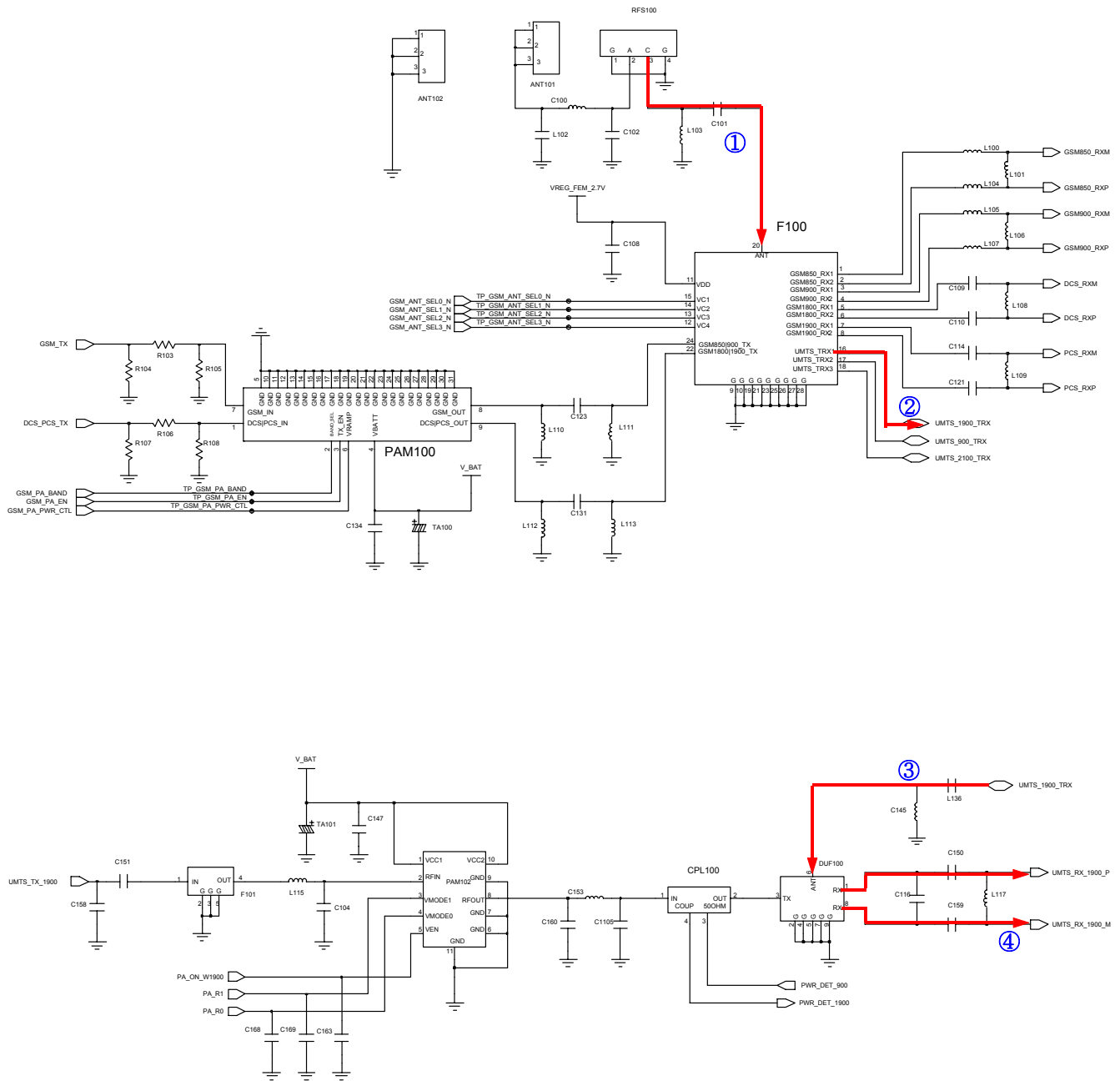


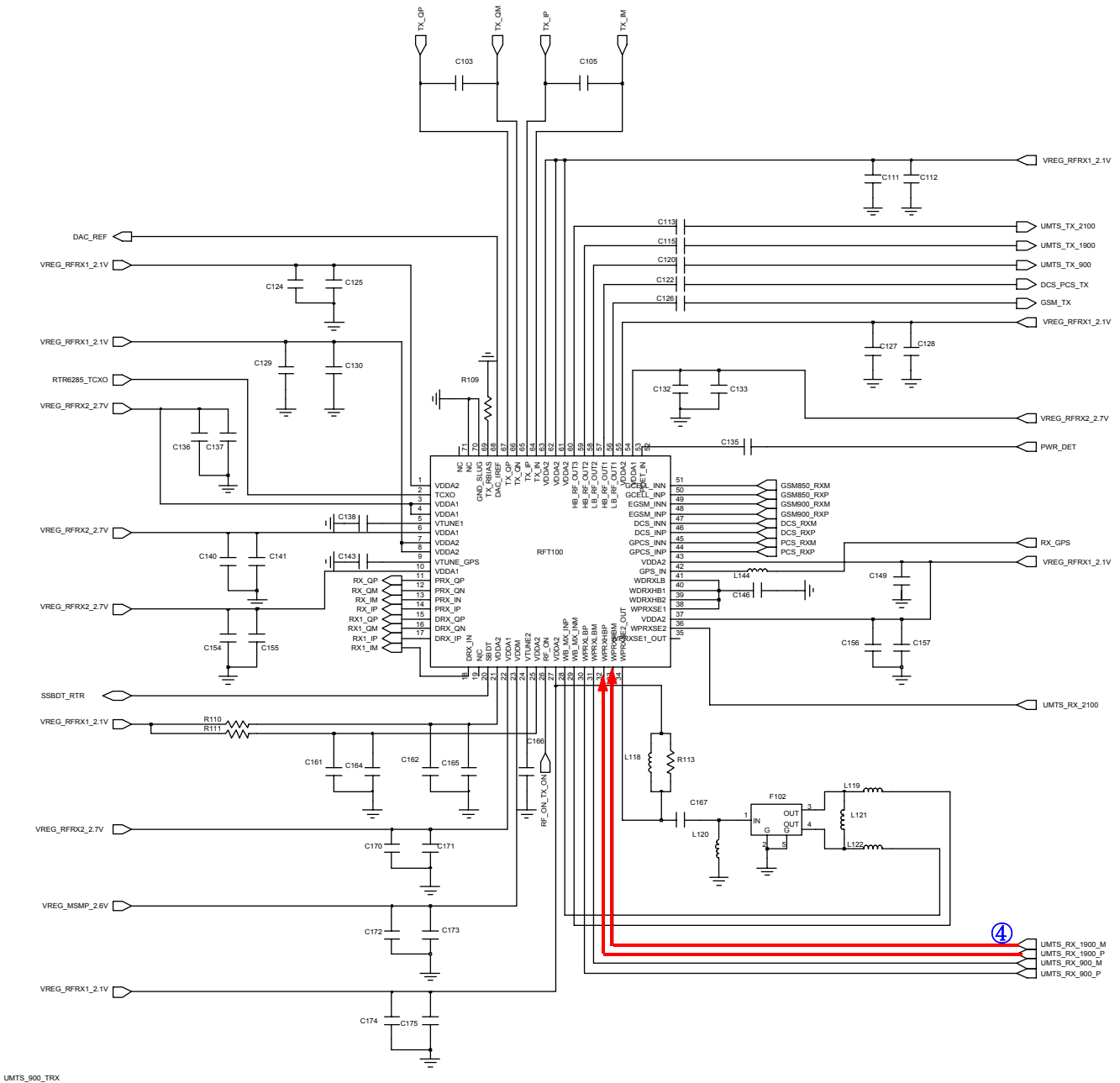




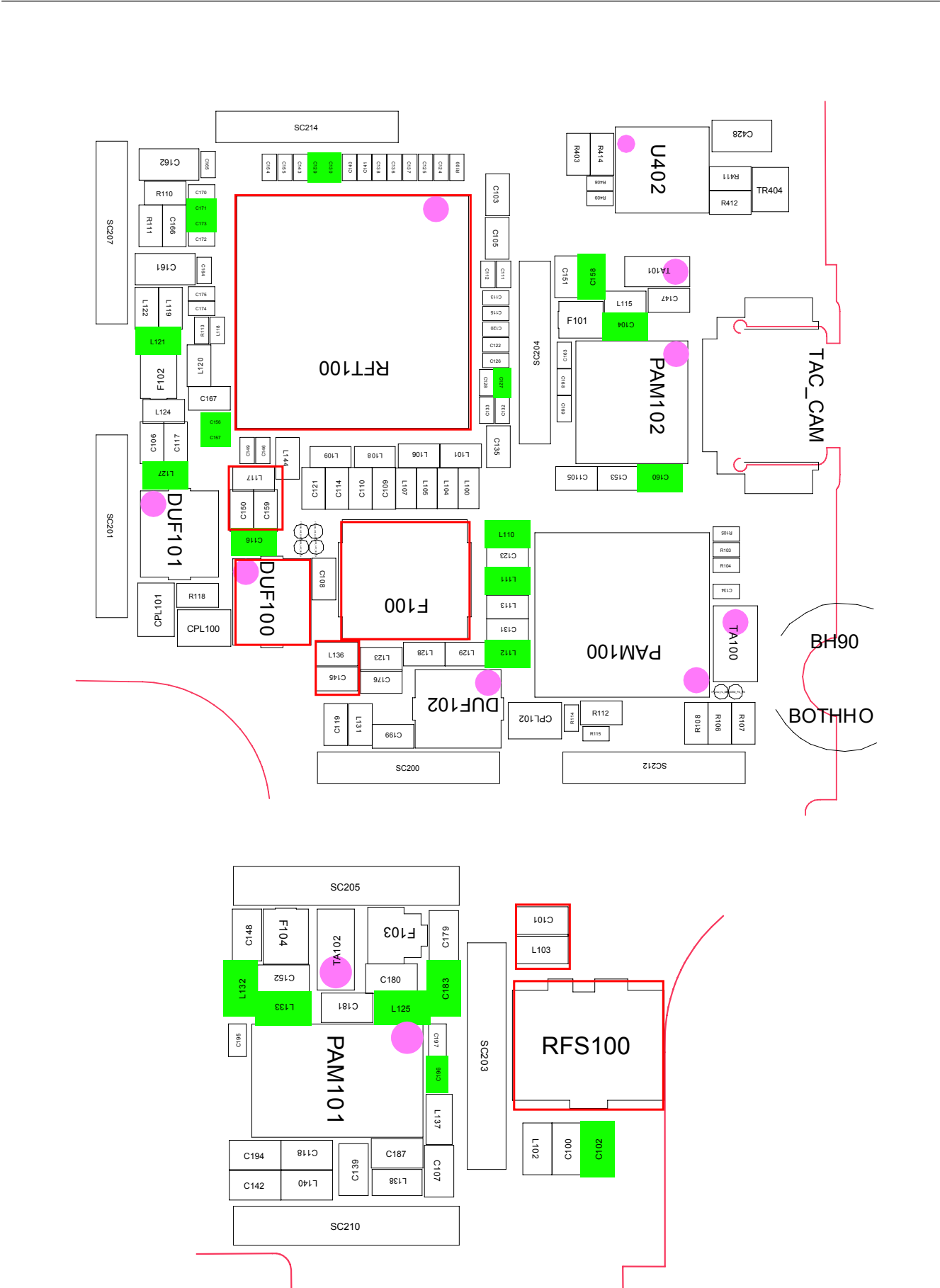
9-2-8. Abnormal WCDMA1900 Rx Operation



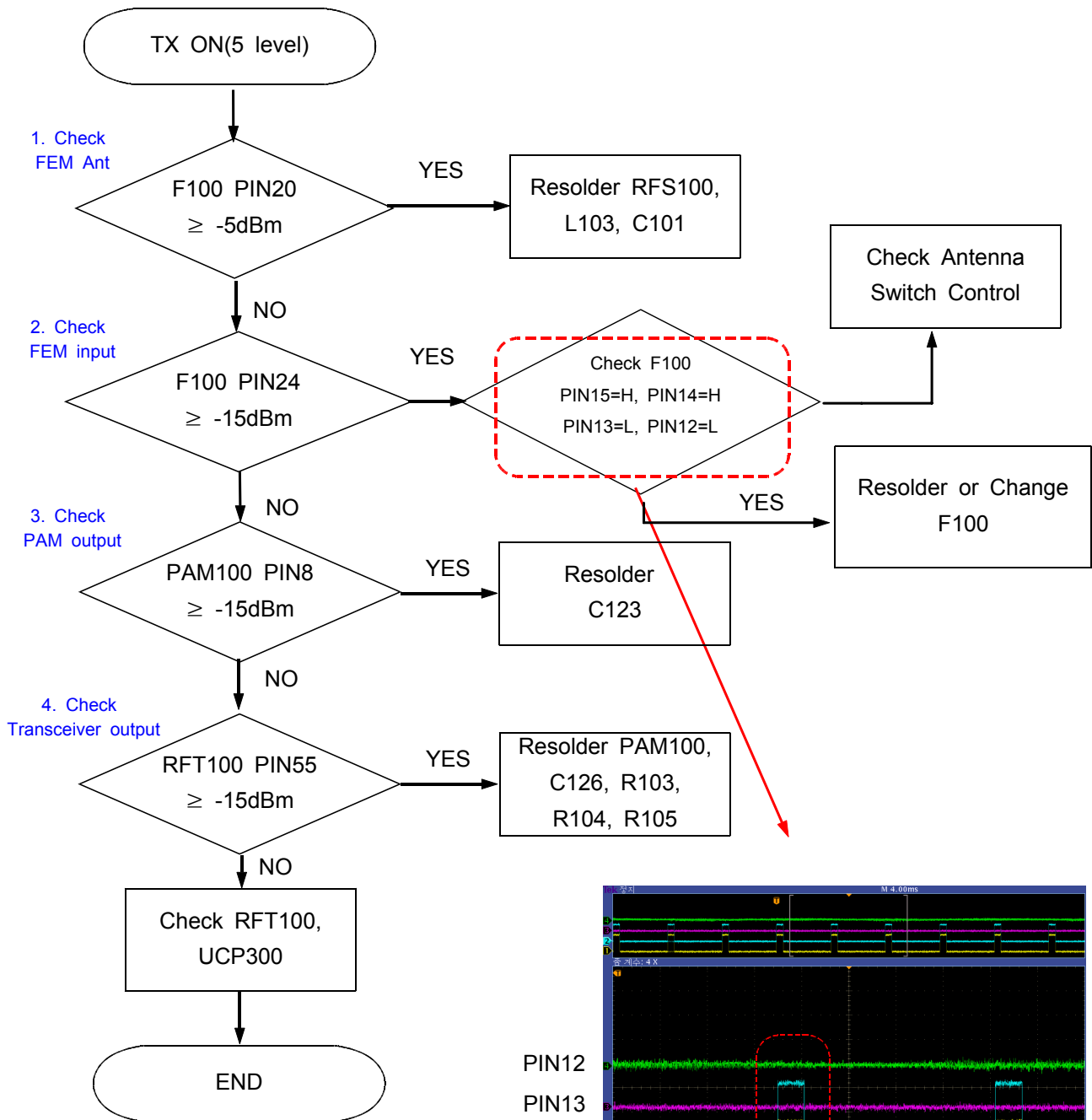




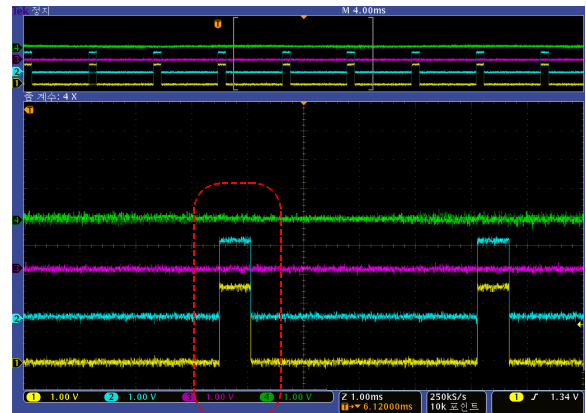
UMTS_900_TRX

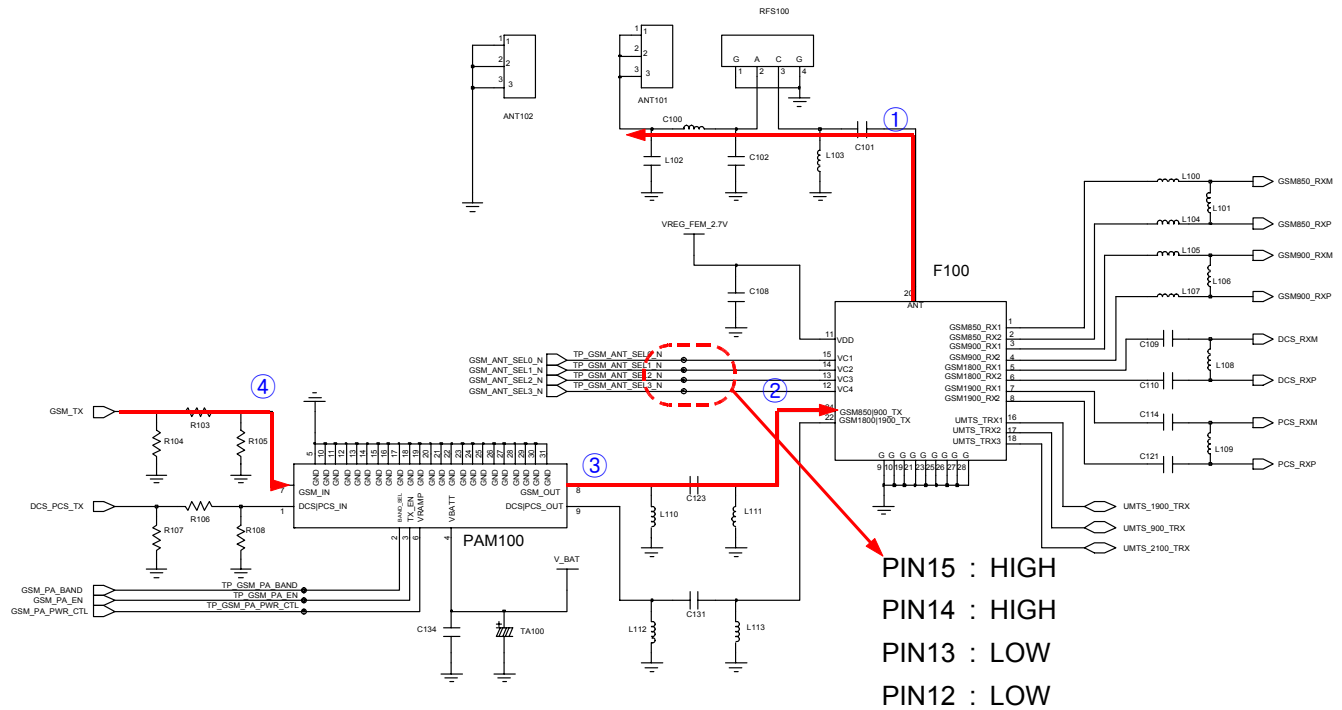


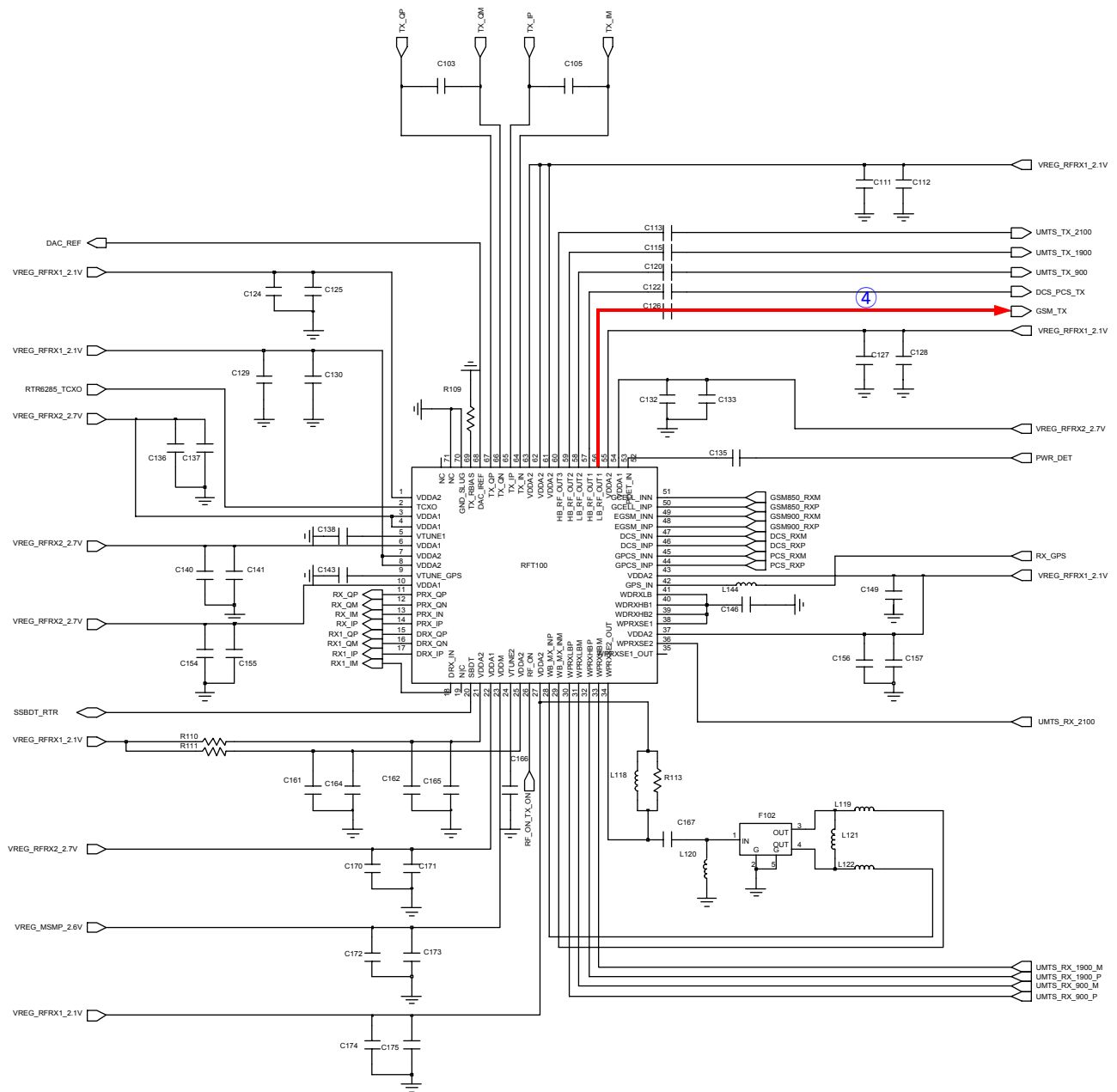
9-2-9. Abnormal GSM850/EGSM Tx Operation



PIN12
PIN13
PIN14
PIN15

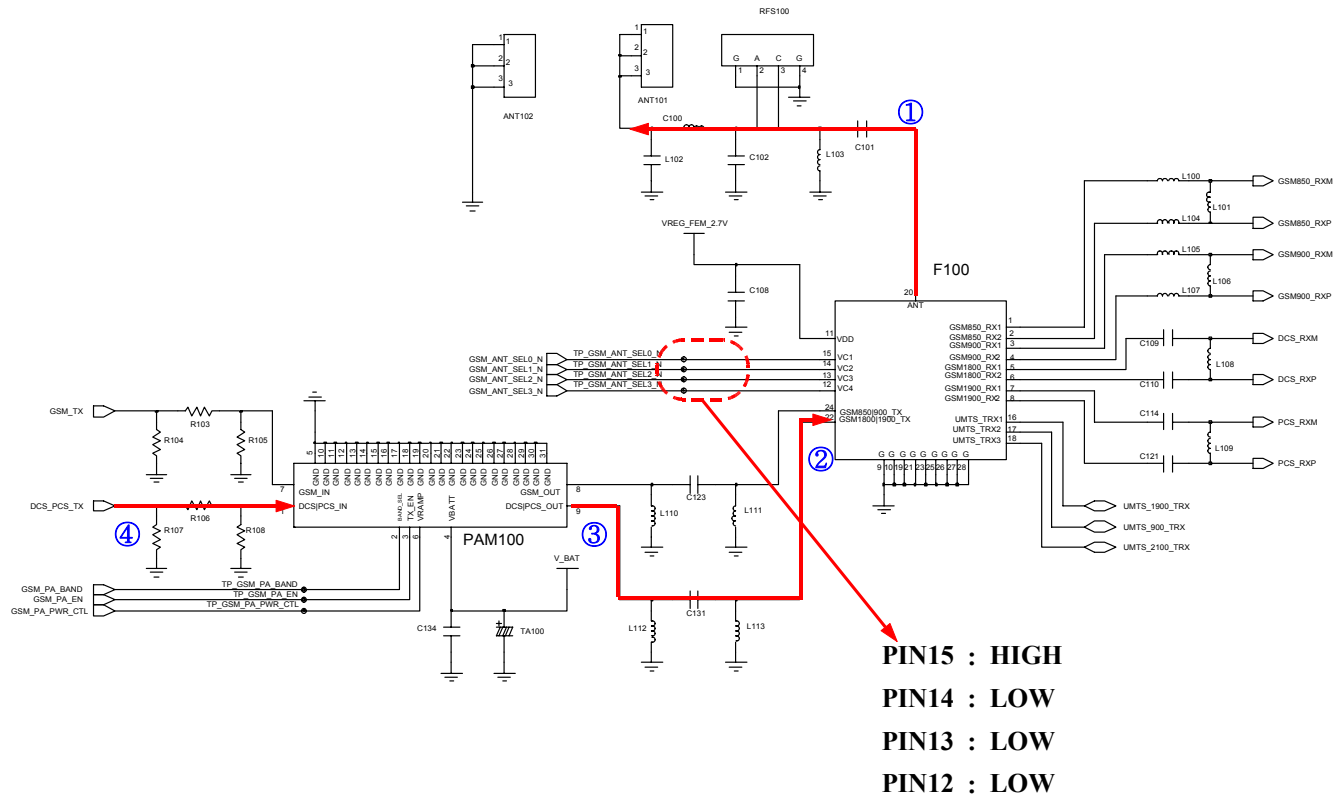


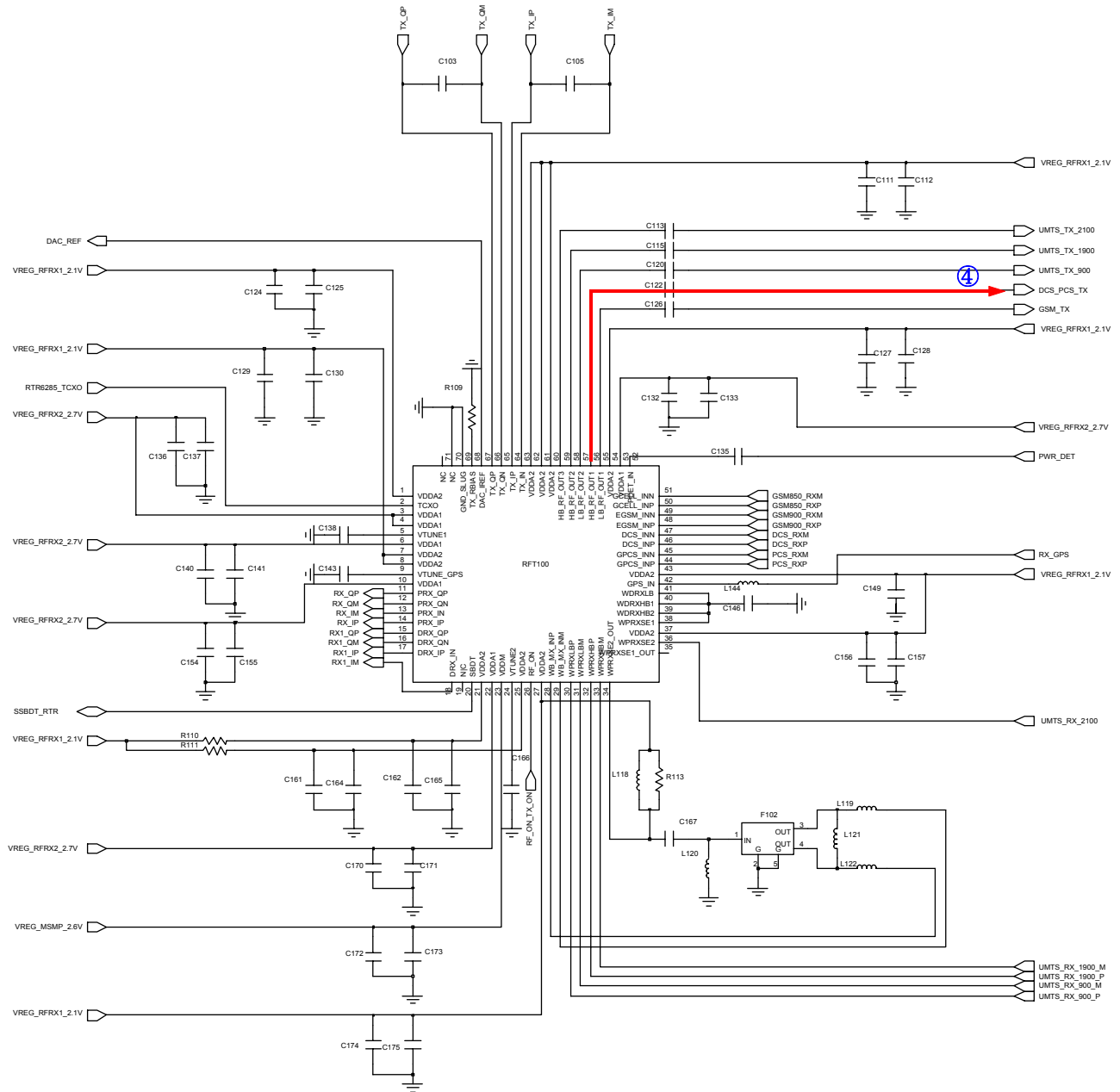




UMTS_900_TRX

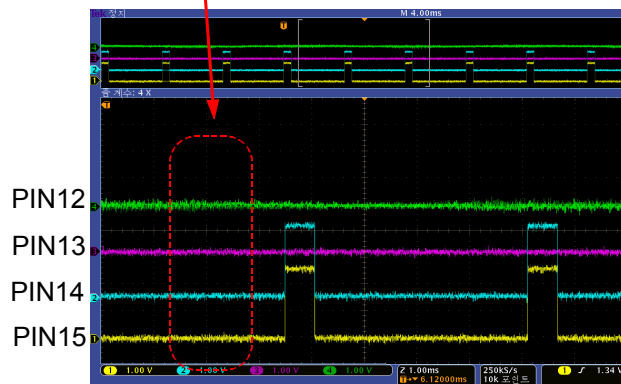
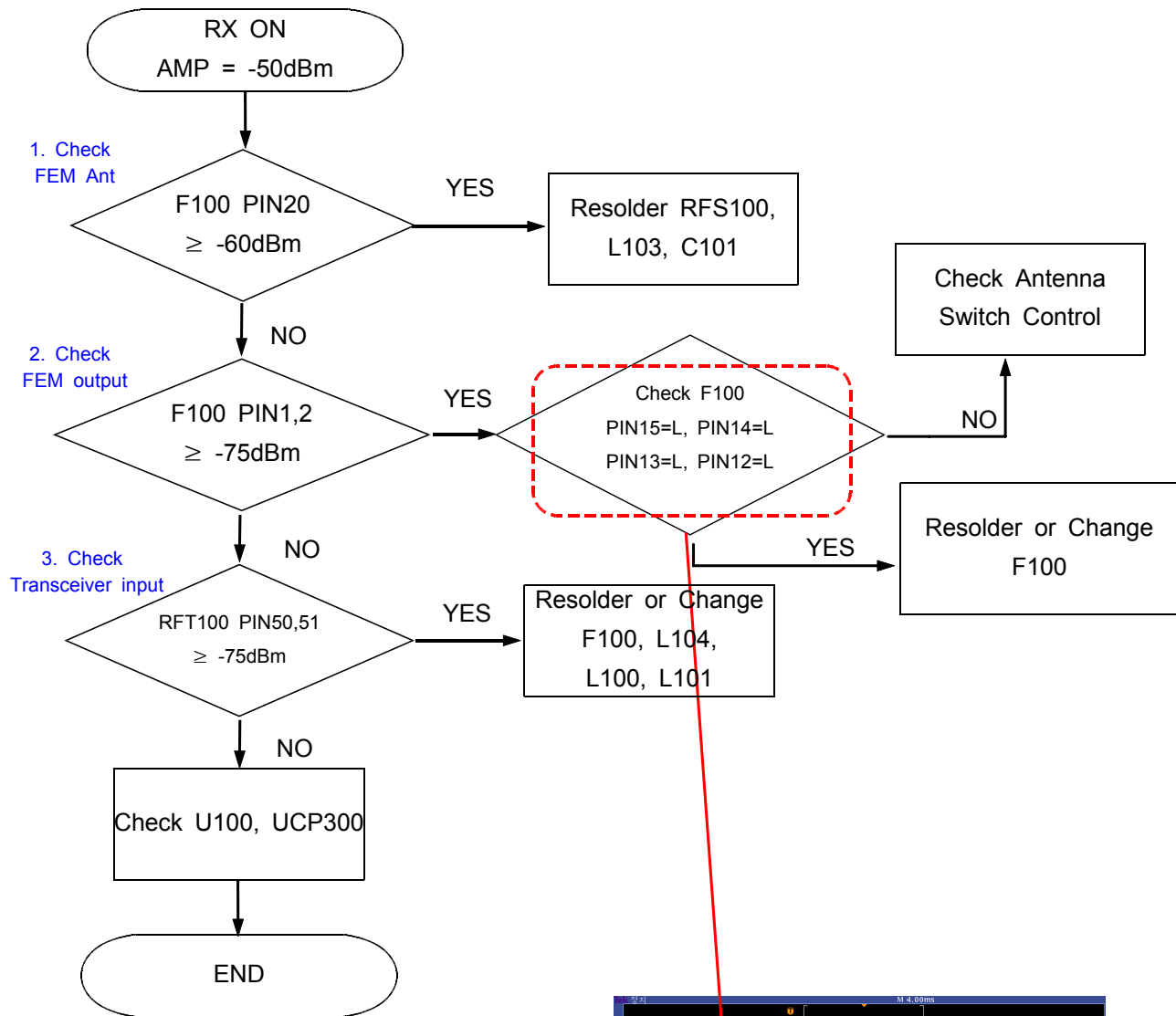


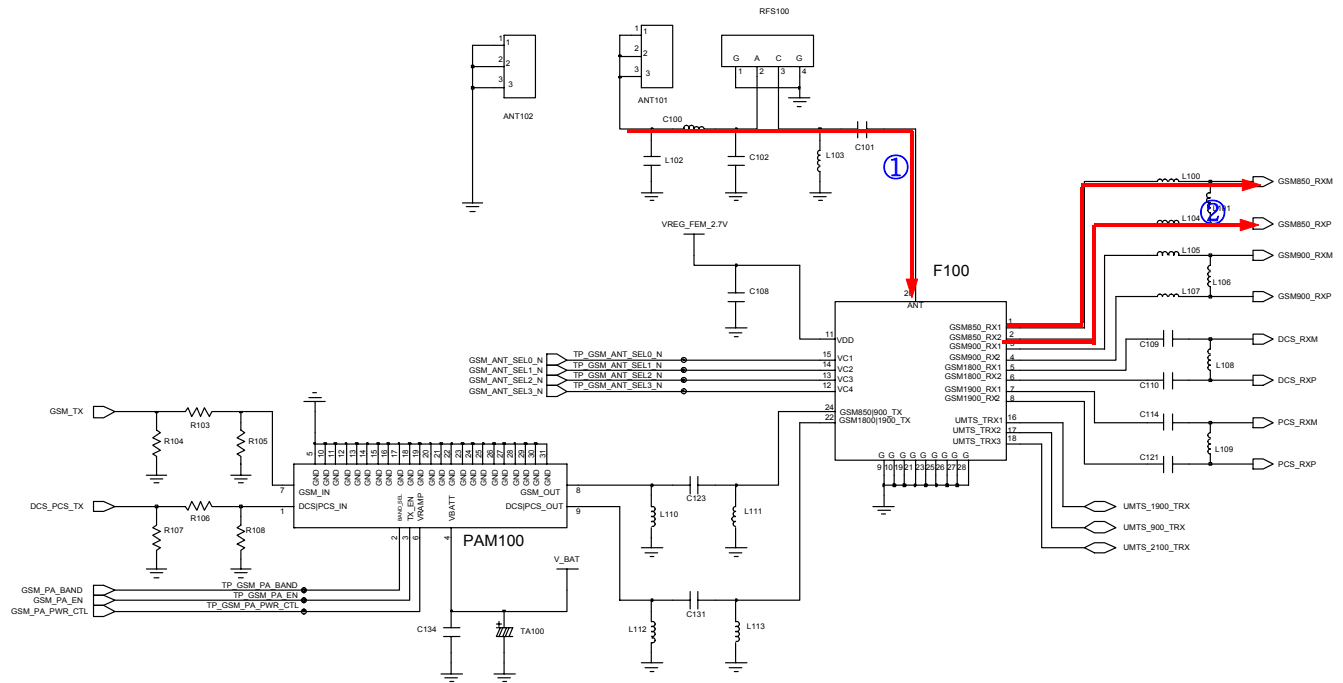




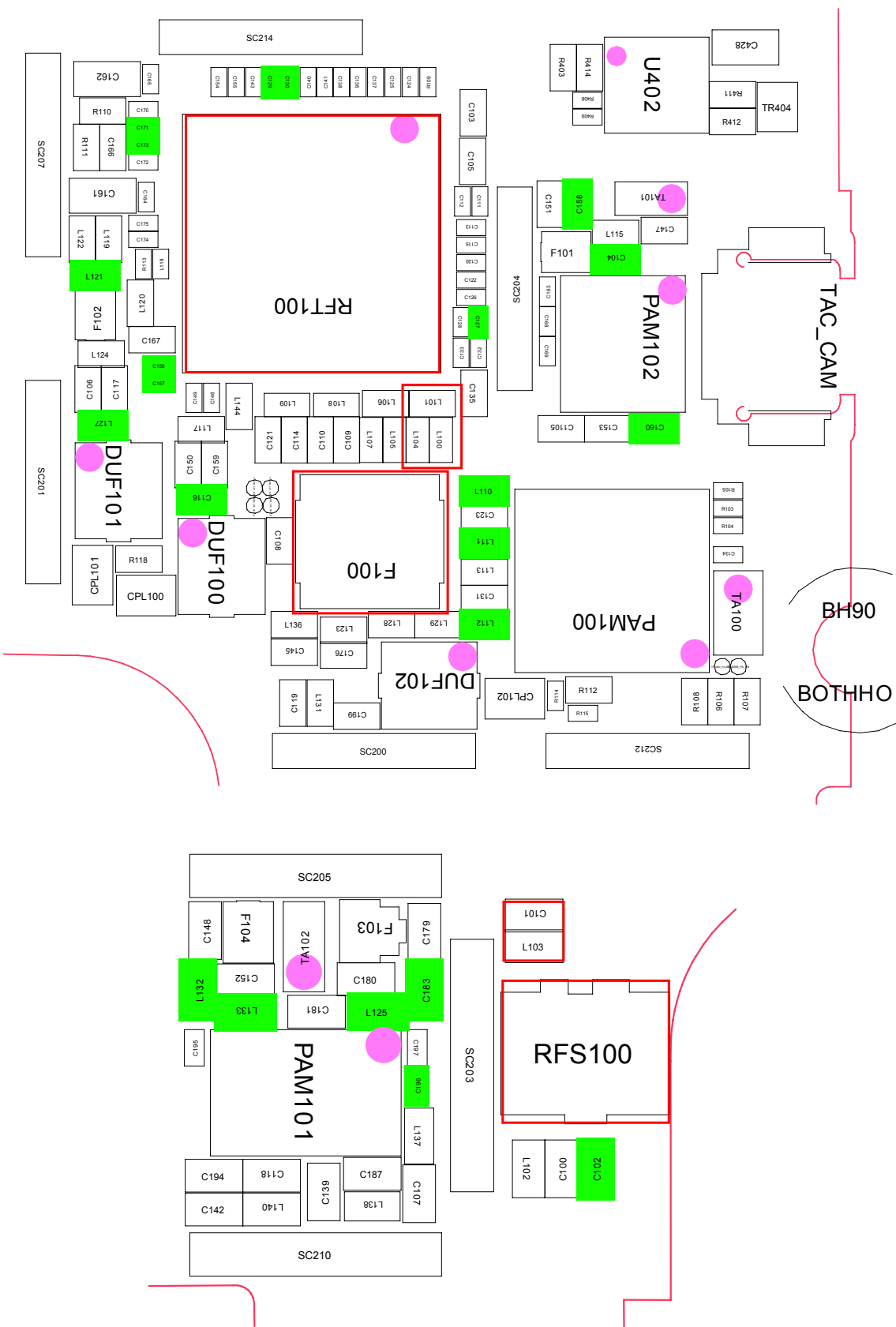
UMTS_900_TRX

9-2-10. Abnormal GSM850 Rx Operation

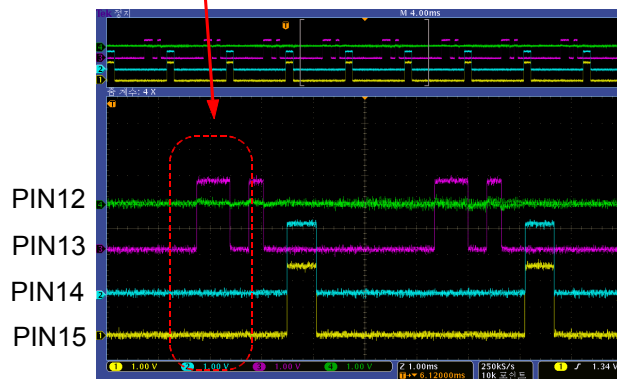
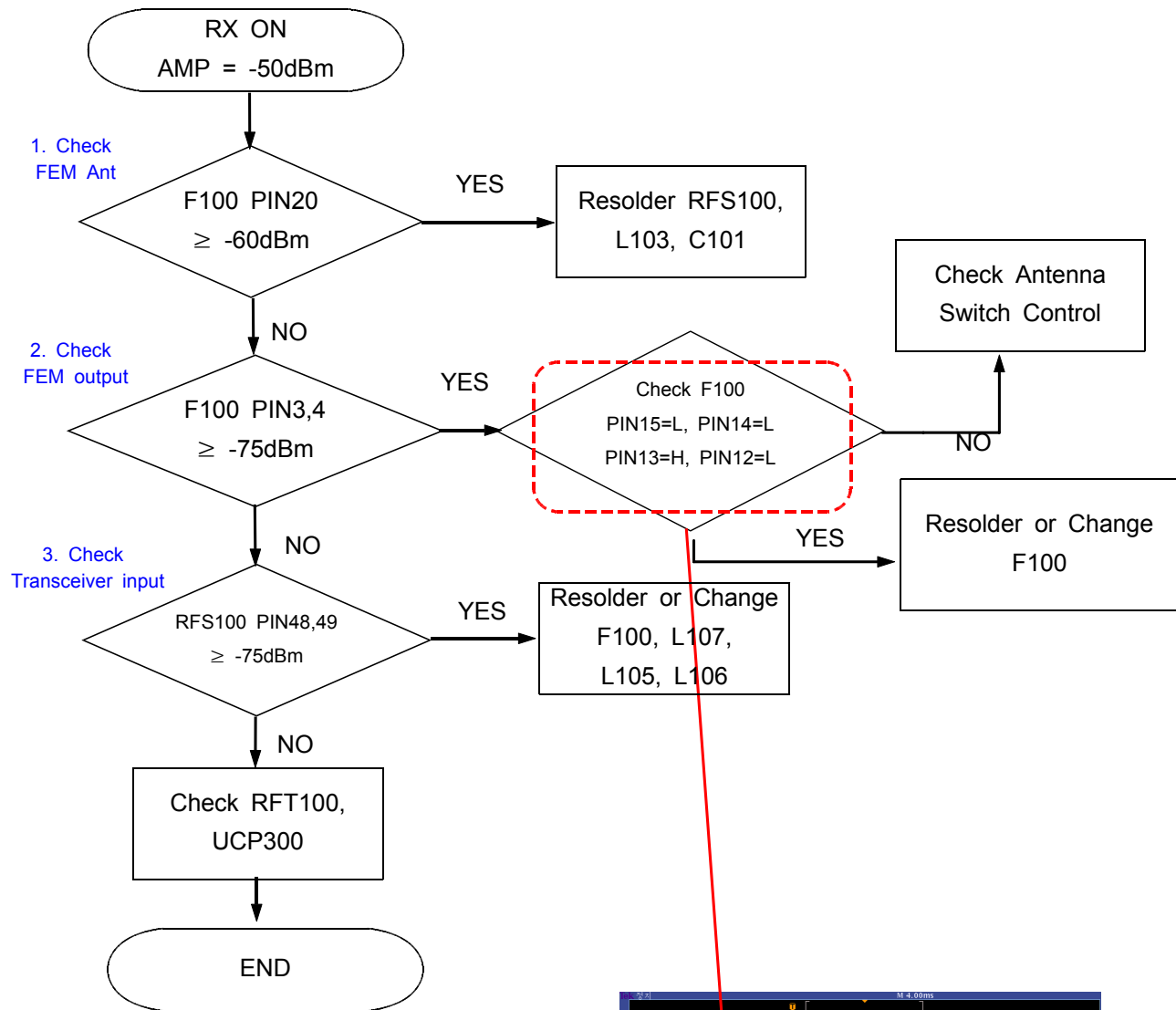


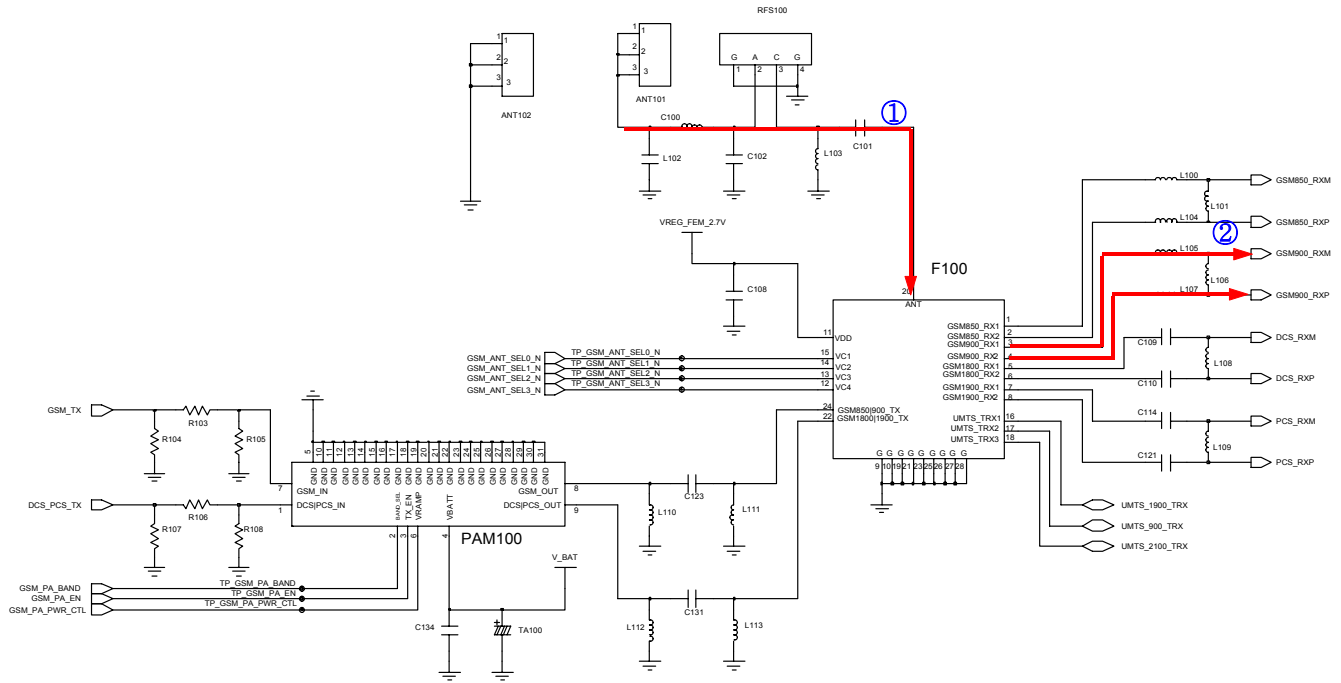




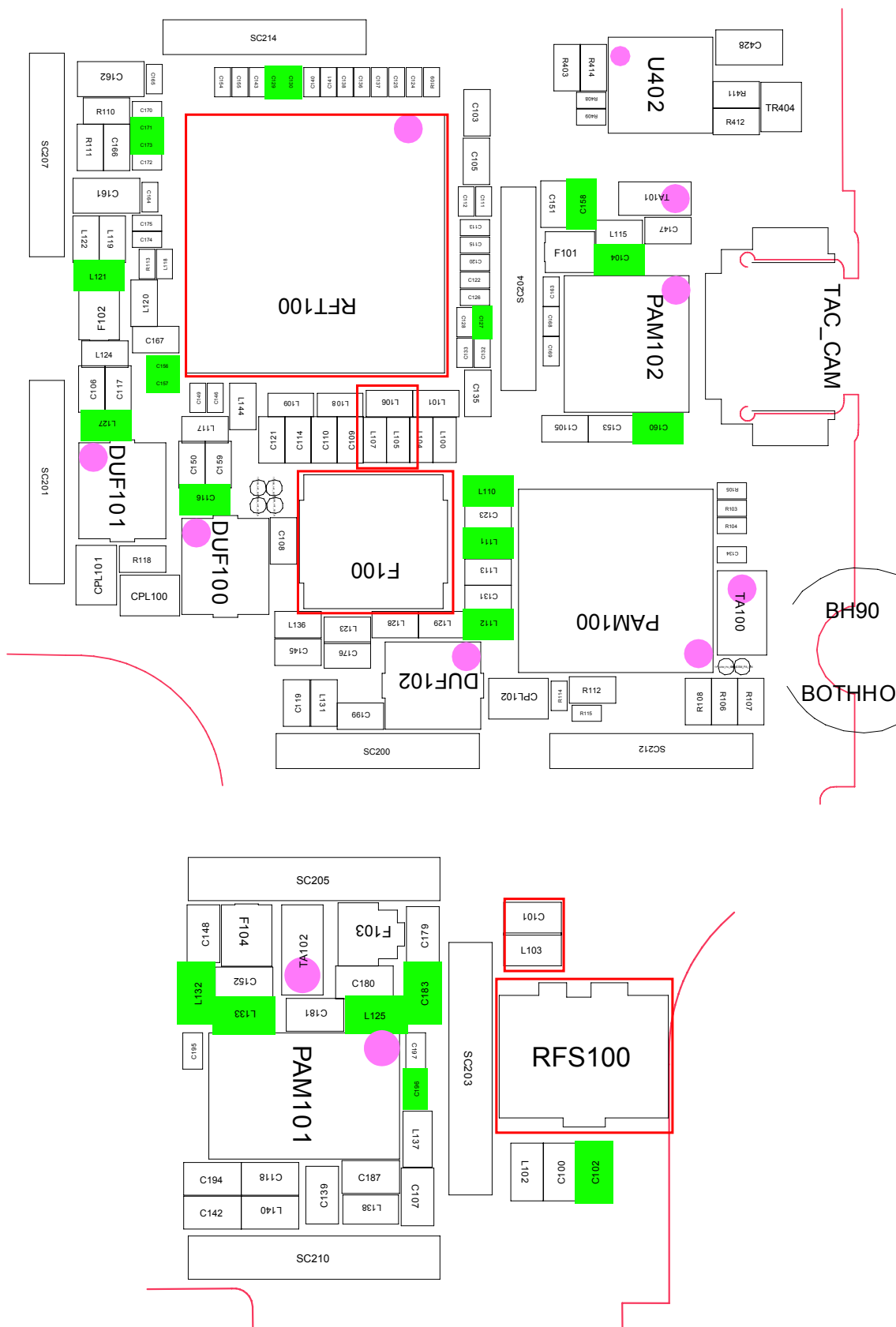


9-2-11. Abnormal EGSM Rx Operation

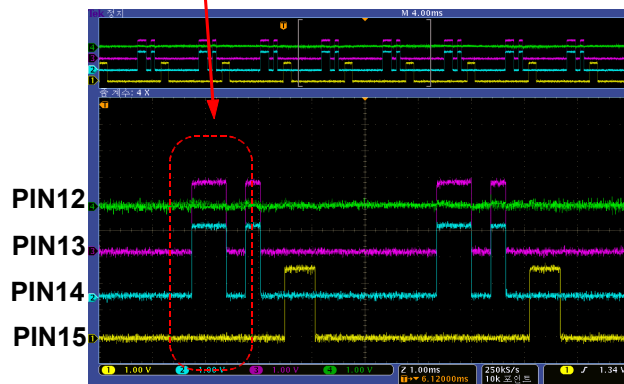
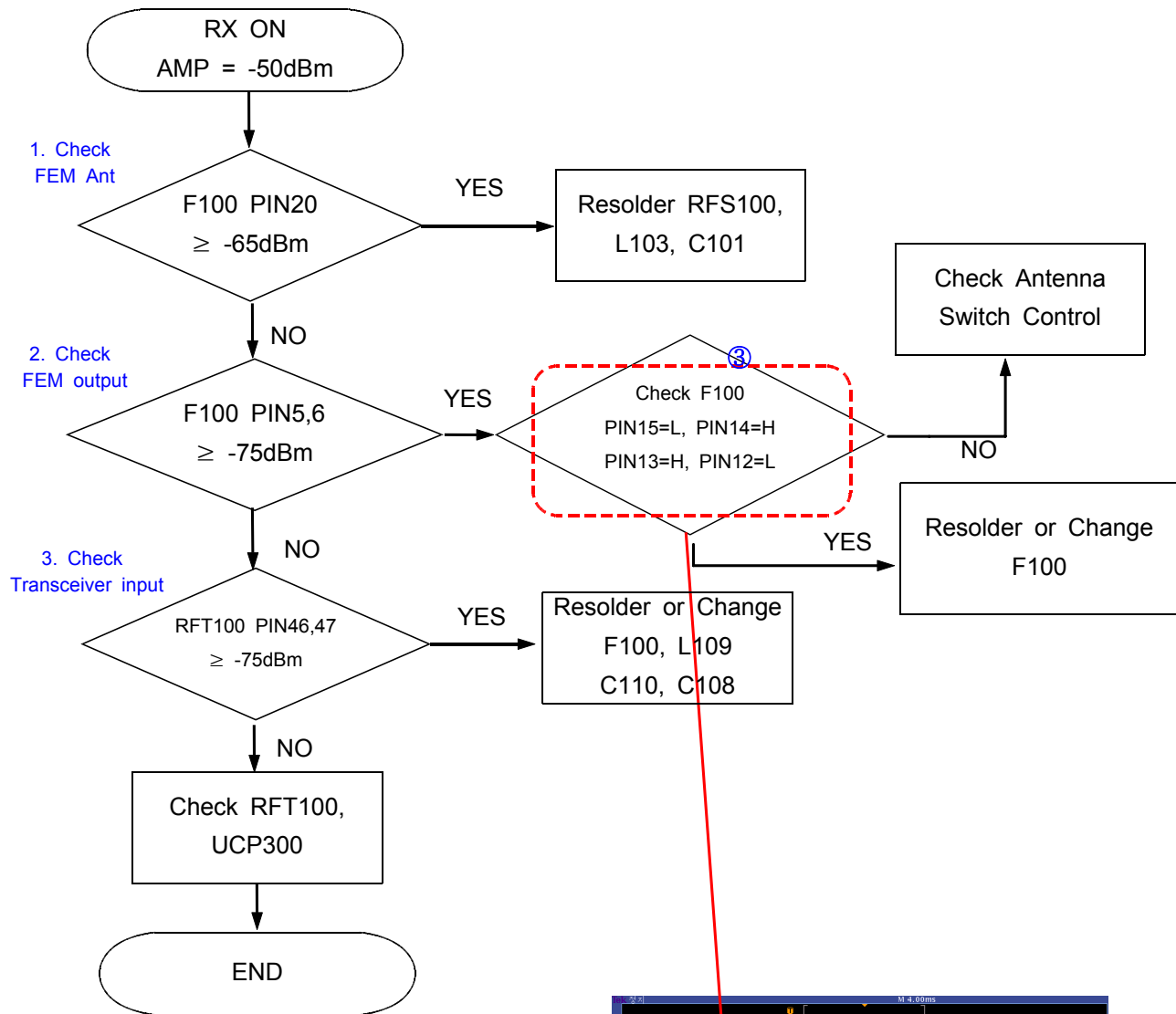


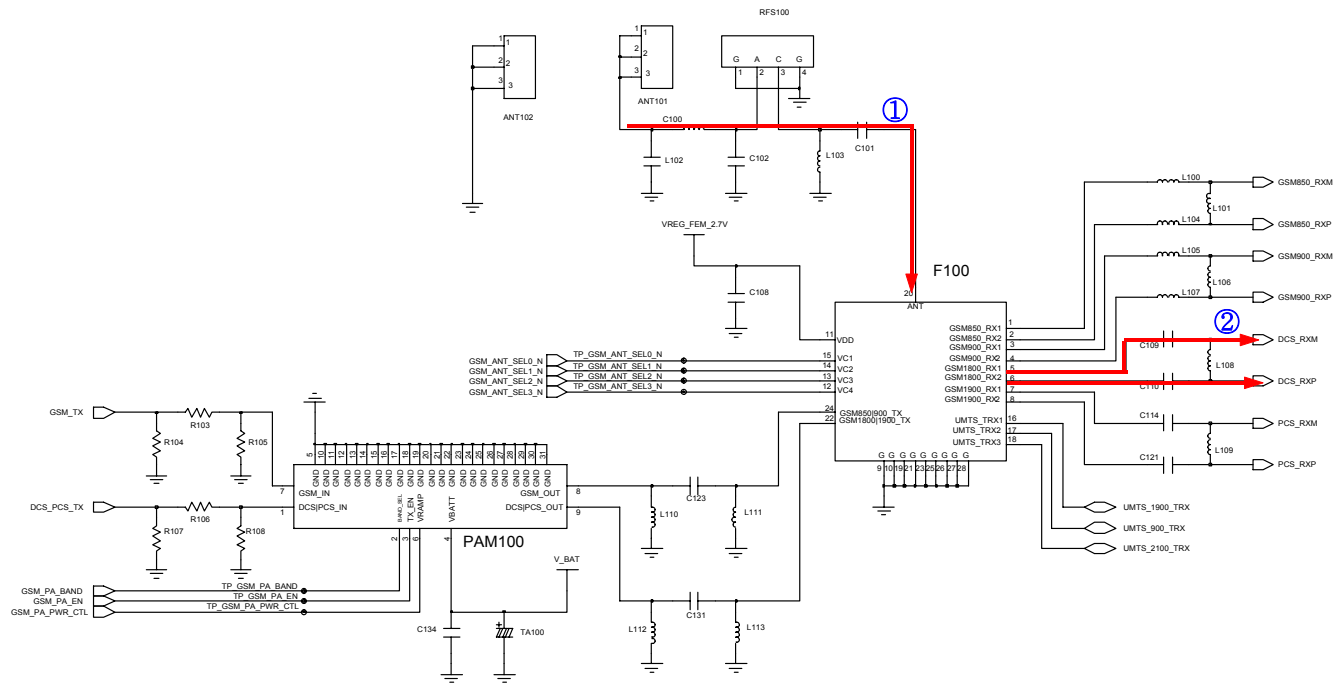






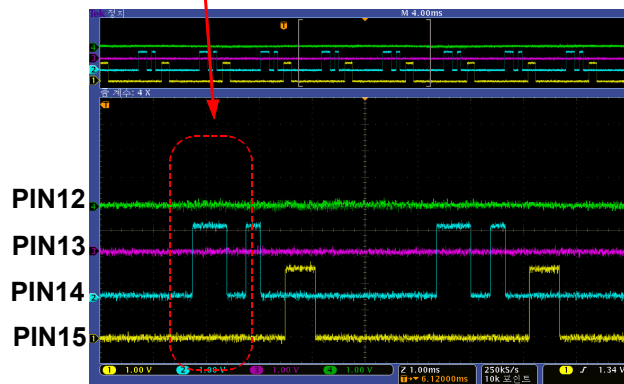
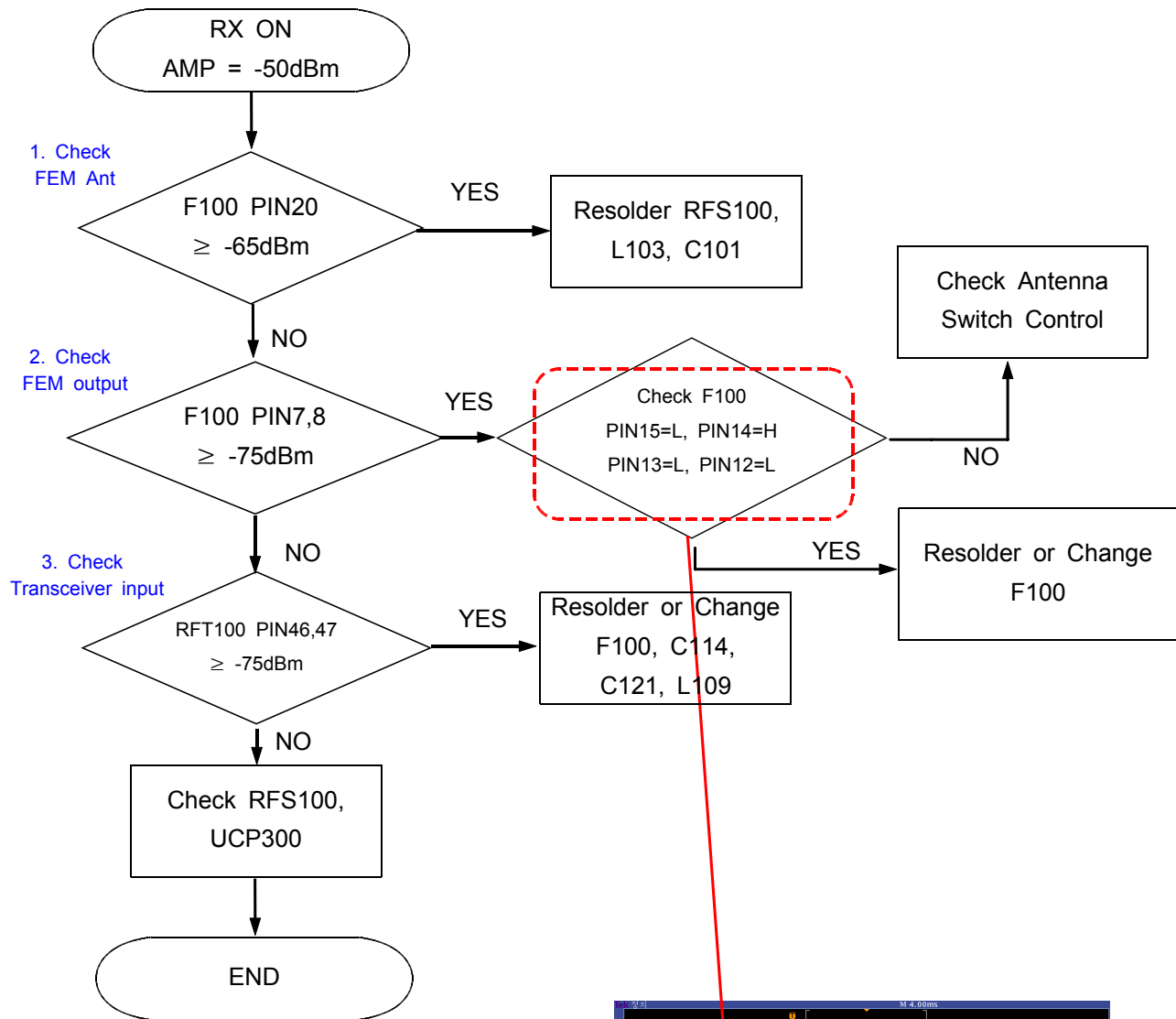
9-2-12. Abnormal DCS Rx Operation

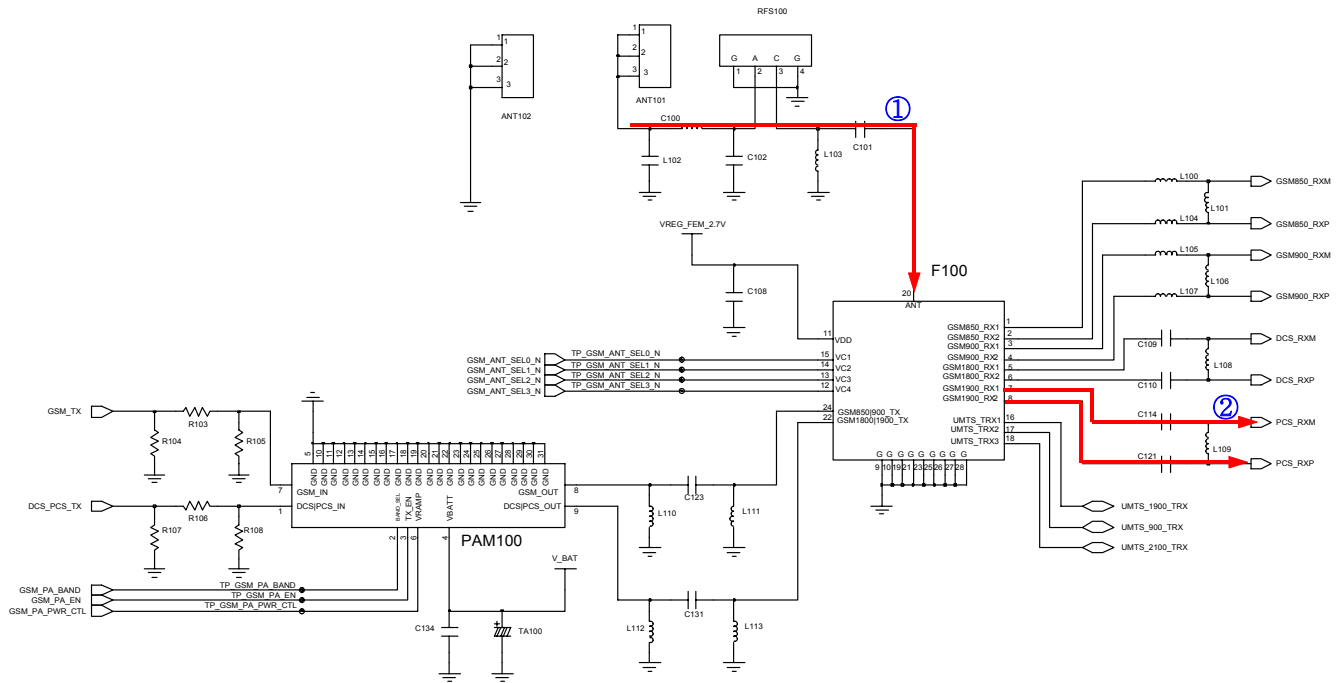




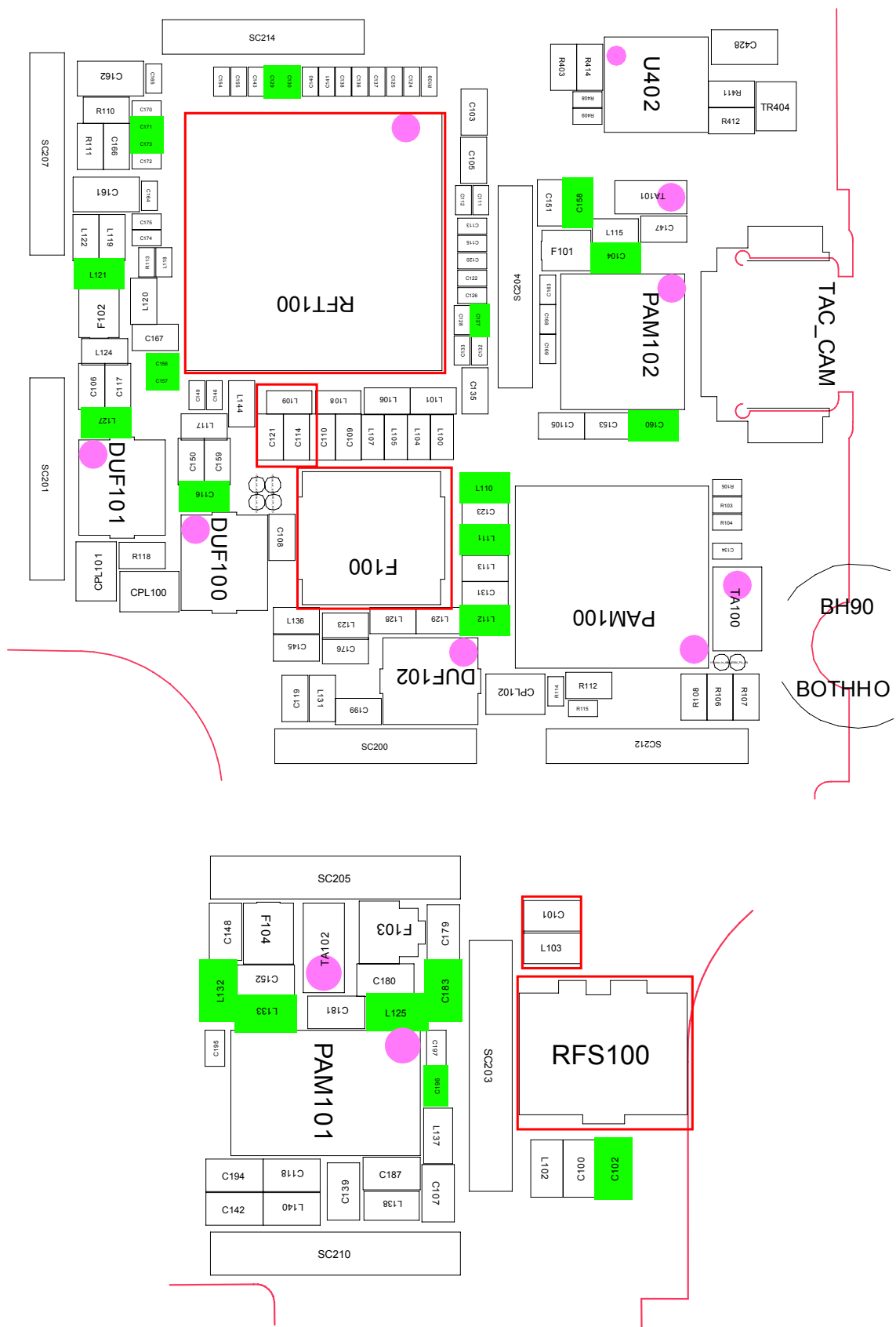


9-2-13. Abnormal PCS Rx Operation

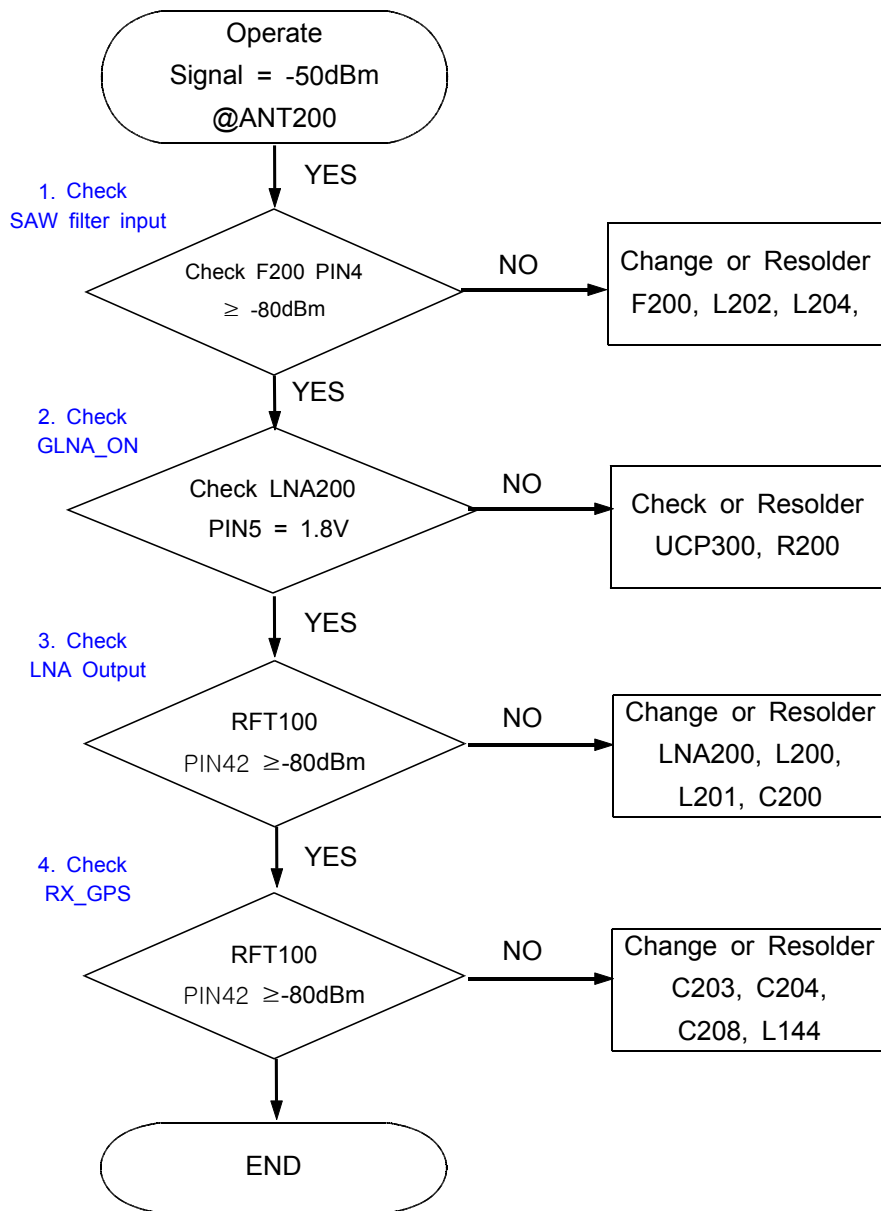


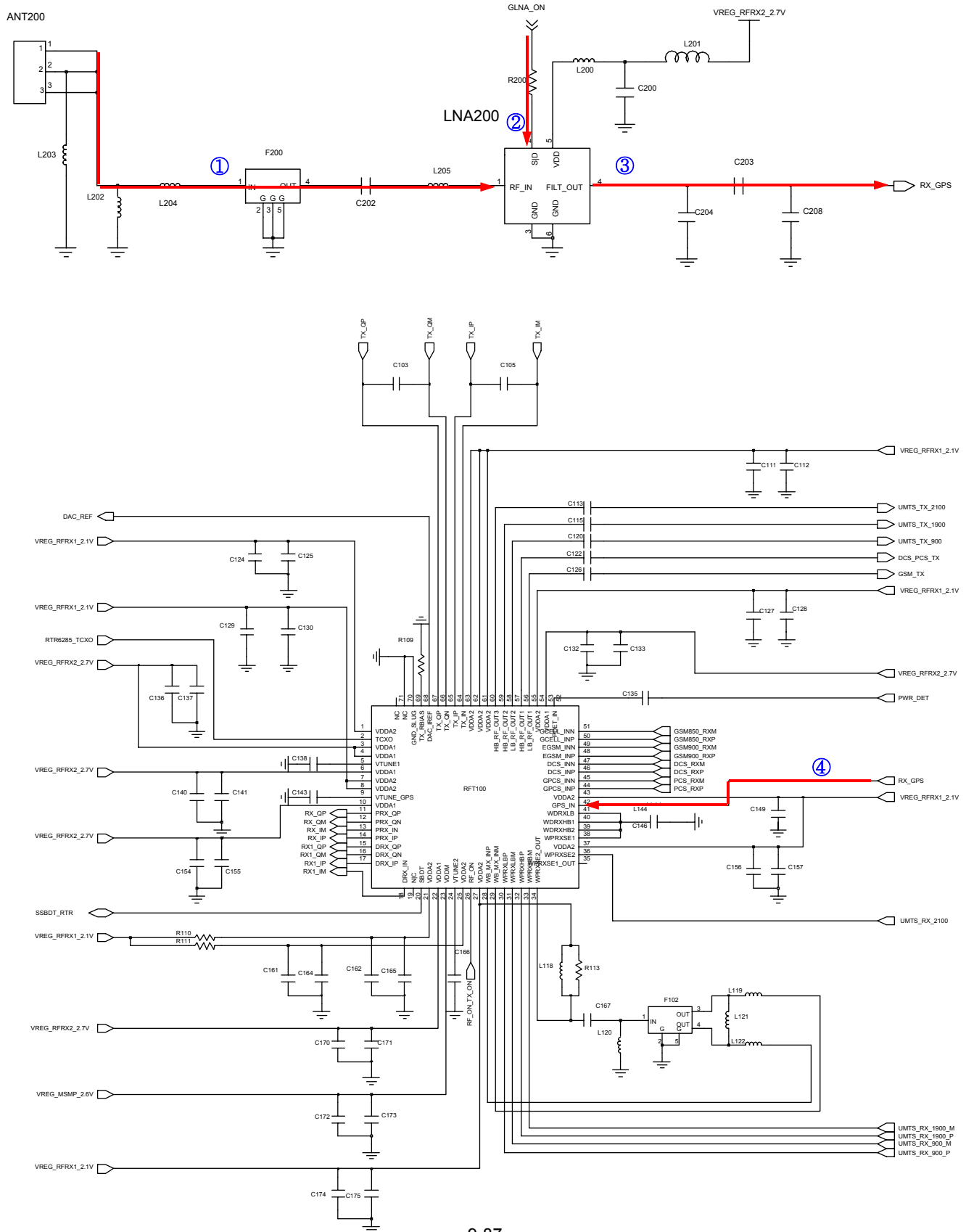






9-2-14. Abnormal GPS Rx Operation







10. Reference data

Reference Abbreviate

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

11. Disassembly and Assembly Instructions

11-1. Disassembly Instructions

1

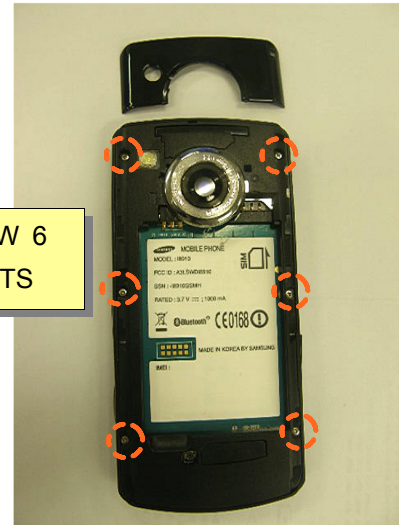


Remove the Rear cover

- Use a decomposition tool to **Rear cover** part and make gap between Rear cover and Rear.
- Using a decomposition tool, locker is disintegrated easily.

2

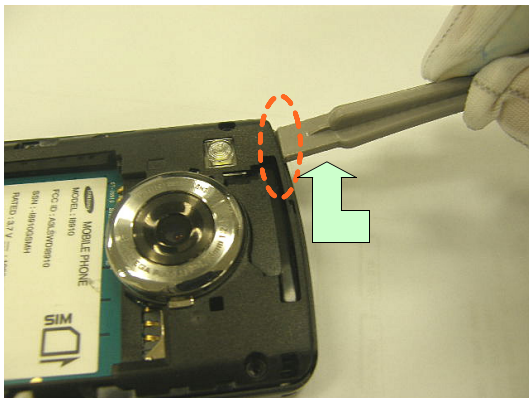
SCREW 6
POINTS



Remove Screws

- Remove 6 Screws.

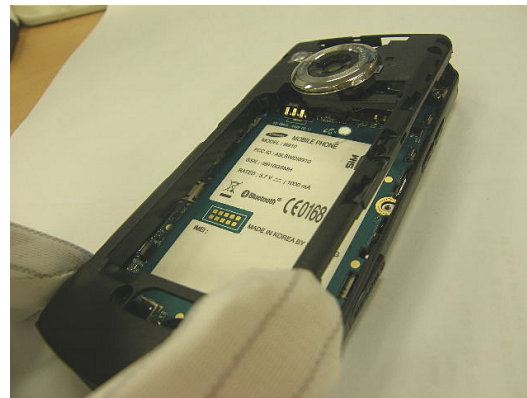
3



Separate the Rear

- Separate upper part corner using a decomposition tool.

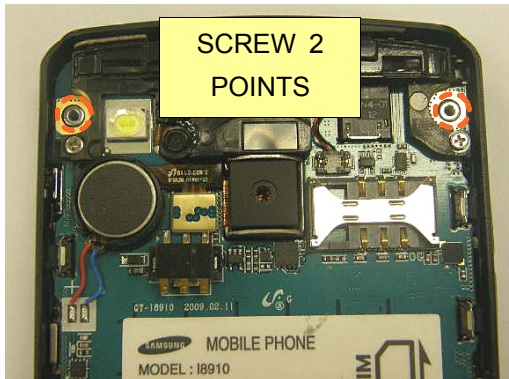
4



Separate the Rear

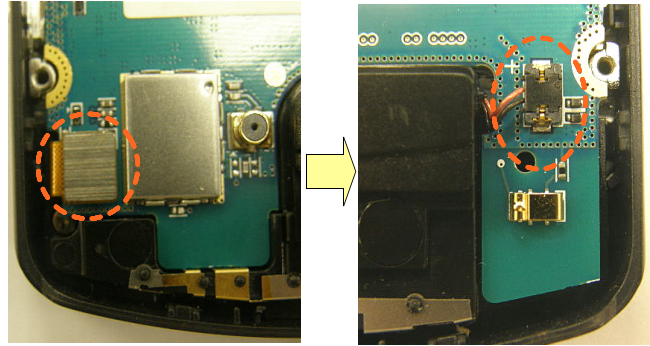
- Separate all corners using a decomposition tool.
- Lift the rear from the front with care.

5



Remove Screws
- Remove 2 Screws.

6



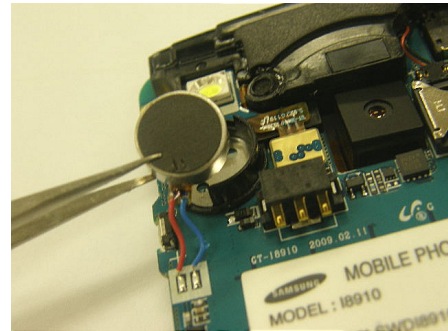
Separate the KEY & SPK connector .
- Separate KEY & SPK Connector from the PBA Connector with care.

7



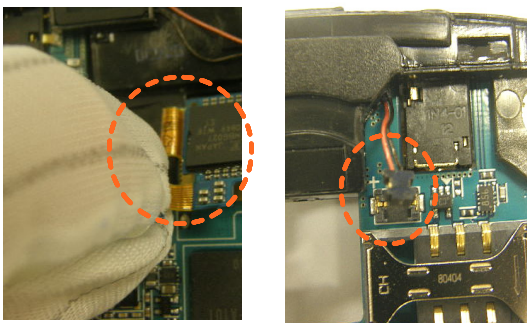
Separate the PBA from FRONT Ass'y.
- Separate the PBA from the FRONT Ass'y with care.

8



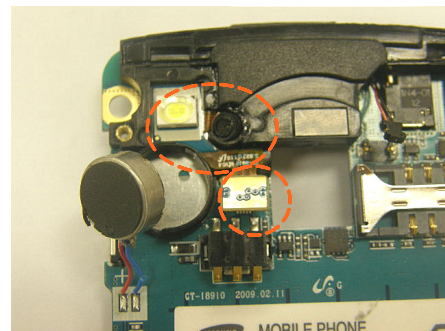
Separate the MOTOR from PBA.
- Separate motor carefully so that motor wire does not cut from PBA.

9



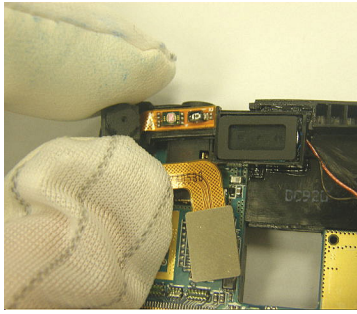
Separate the 8M CAM & SPEAKER connector.
- Separate 8M CAM & SPEAKER connector from the PBA connector with great care. (Be careful not to cut wire.)

10



Separate the FLASH FPCB connector.
- Separate FLASH FPCB connector from the PBA connector with great care. (Be careful not to tear FPCB.)

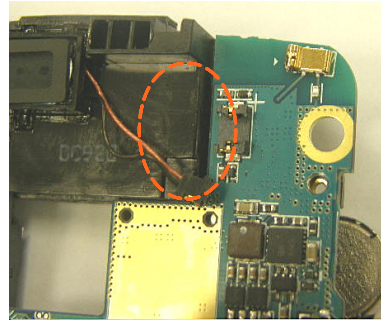
11



Separate the CIF CAM connector with sensors from PBA.

- Separate CIF CAM connector from the PBA connector with great care. (Be careful not to damage SENSORS.)

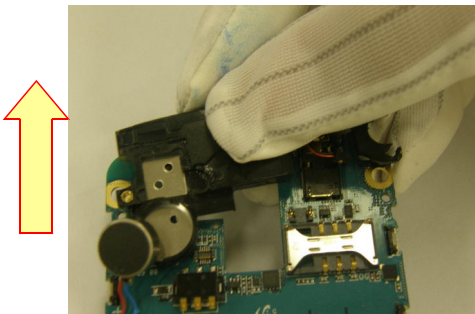
12



Separate the RECEIVER connector.

- Separate RECEIVER connector from the PBA connector with great care. (Be careful not to cut wire.)

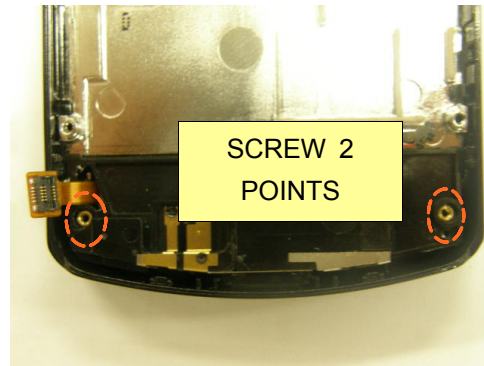
13



Separate the Speaker Module from PBA.

- Separate speaker module from the PBA connector with great care. (Pull to arrow direction and take out as parts does not get damage.)

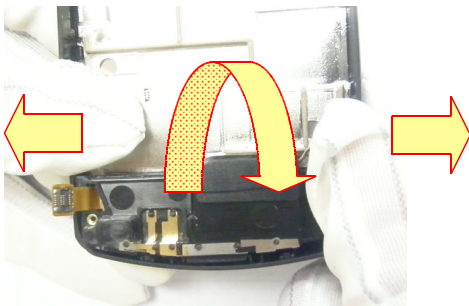
14



Remove Screws

- Remove 2 Screws.

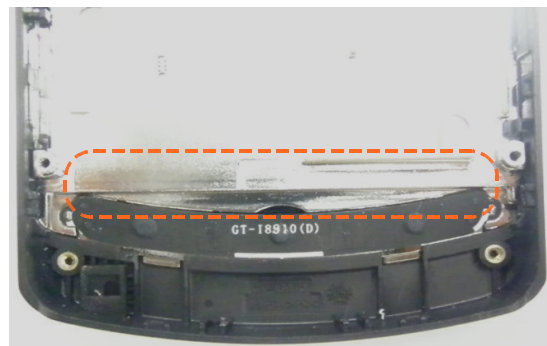
15



Separate the Lower SPK Module from Front ass'y.

- Pull mold to left/right interactive and press key pad of opposite with hand and separate lower speaker module

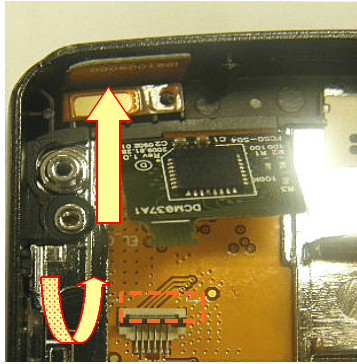
16



Separate the Keypad.

- Separate the Keypad.

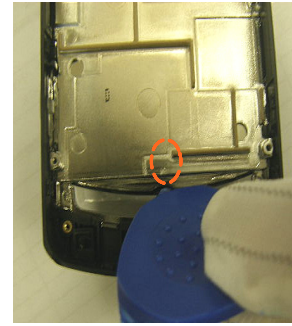
17



Separate the TSP from Front ass'y(1).

- Separate TSP FPCB to Open lever of ZIP TYPE connector.

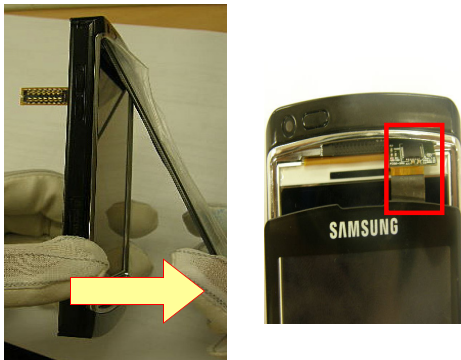
18



Separate the TSP from Front ass'y(2).

- ※ Disjoint maximum carefully as TSP unit is danger to be damaged when disassembling strongly because TSP unit makes of tempered glass.

19

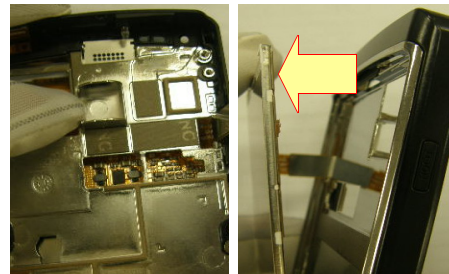


Separate the TSP from Front ass'y(3)

- Lift to take care TSP

- ※ Take care as IC on connector is not damaged by hole.

20



Separate the OLED from Front ass'y

- Take out to arrow direction lest connector should be damaged after pushing OLED through OLED decomposition hole carefully.

21



THE END.

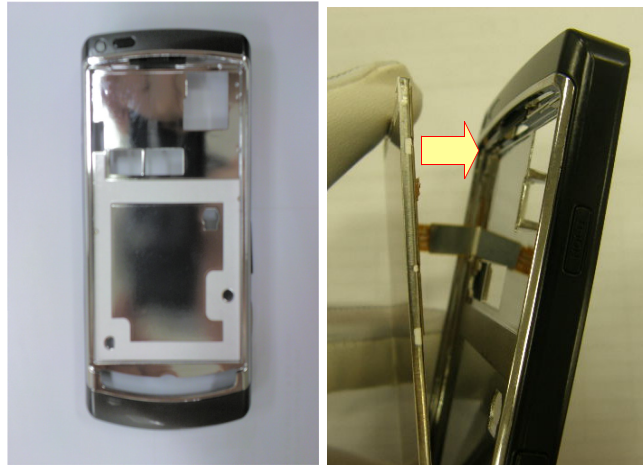
11-2. Disassembly Assembly

1



Ready

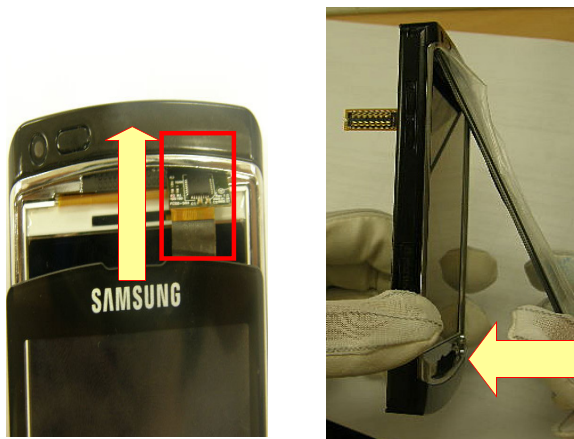
2



Insert the OLED to Front ass'y

- Place stiffener of OLED passing hole carefully after removing double-sided tape a release paper of OLED bracket.

3



Assemble the TSP from Front ass'y(1).

- Insert the TSP FPCB to passing hole.

※ Take care as IC on connector is not damaged by hole.

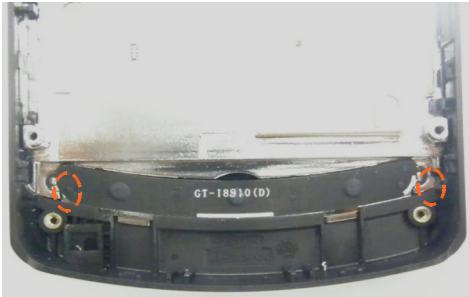
4



Assemble the TSP from Front ass'y(2).

- Lock lever after inserting TSP FPCB in ZIP connector.

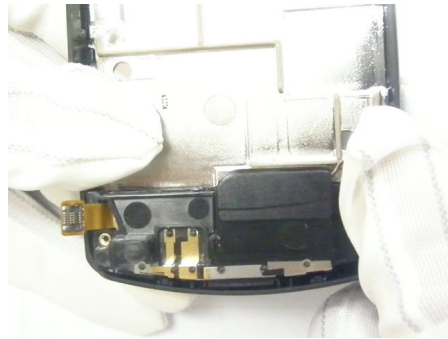
5



Place the KEY PAD.

- Keep in mind to guide hole and assemble key pad.

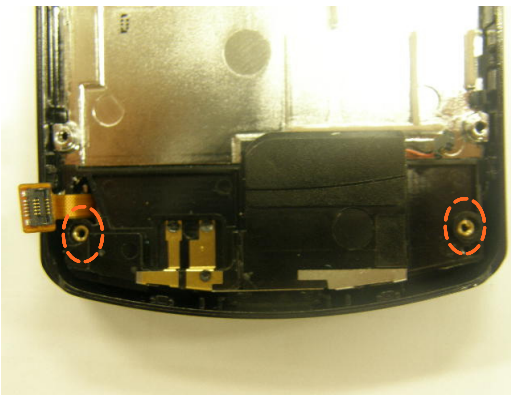
6



Assemble the Lower SPK Module to Front ass'y.

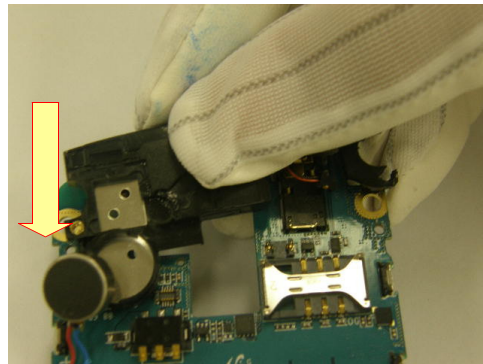
- Insert lower speaker module so that locker is assembled.

7



Tighten screws at 2 points.

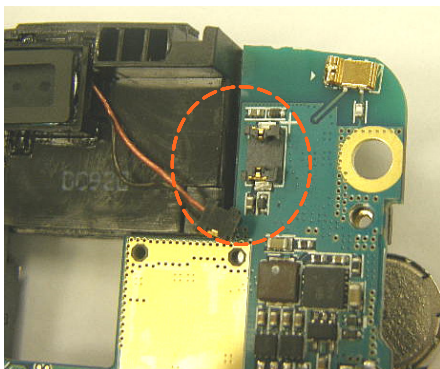
8



Assemble the UPPER SPK MODULE.(1)

- Insert in PBA to lower direction carefully over as EARJACK is not damaged upper speaker module.

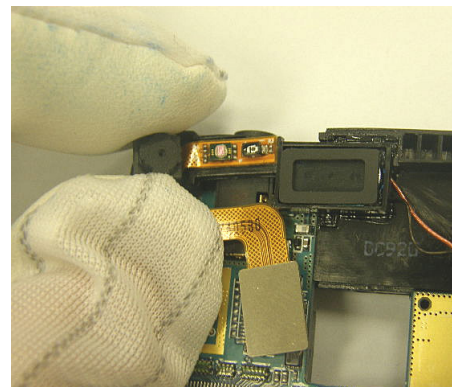
9



Assemble the UPPER SPK MODULE.(2)

- Assemble RECEIVER connector .

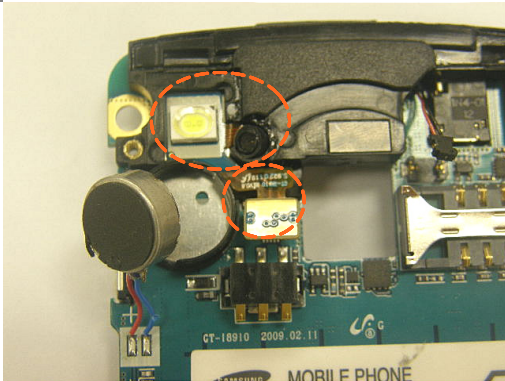
10



Assemble the UPPER SPK MODULE.(3)

- Assemble the CIF CAM+SENSOR MODULE to the PBA connector with great care..

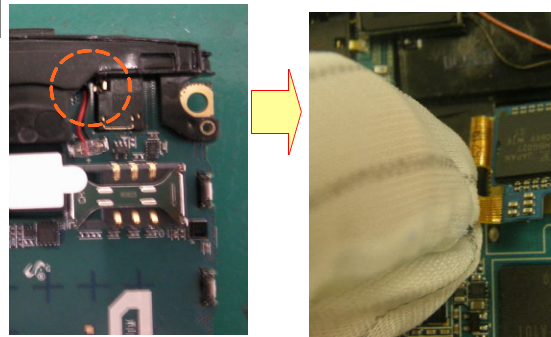
11



Assemble the UPPER SPK MODULE.(4)

- Assemble FLASH LED+MIC MODULE connector.

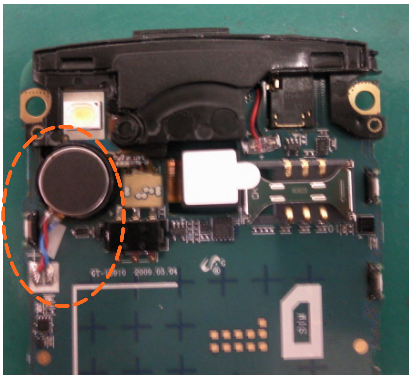
12



Assemble the 8M CAMERA.

- Assemble 8M CAMERA connector after assembling **twisting** upper speaker module wire **two rounds**.

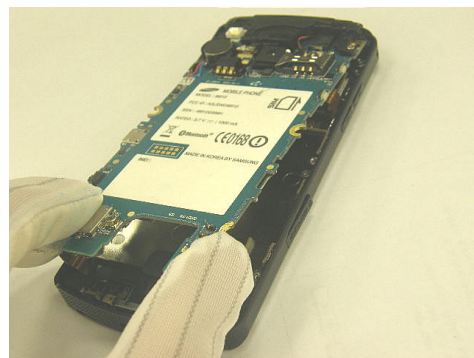
13



Insert the MOTOR.

- Place motor wire to (Be careful of is expired) bracket **twisting** round.

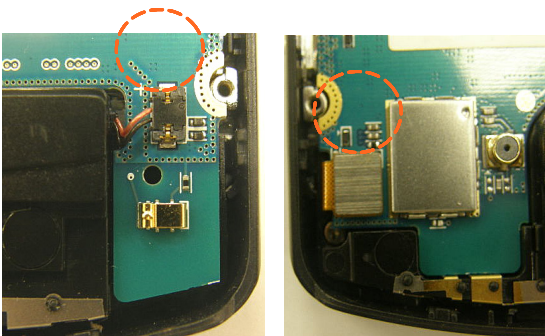
14



Assemble the PBA to FRONT Ass'y.

- Place PBA carefully on hook.

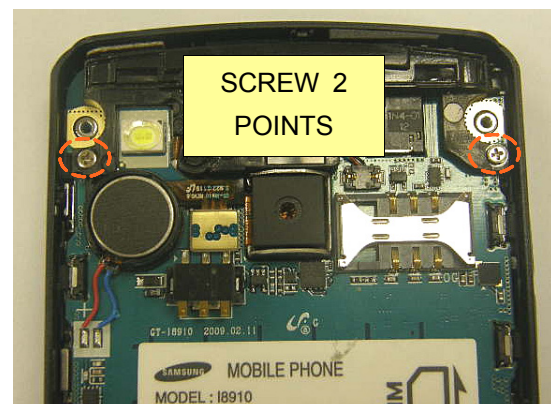
15



Assemble the KEY & SPK connector .

- Assemble KEY & SPK Connectors to the PBA Connector with care.

16



Tighten screws at 2 points.

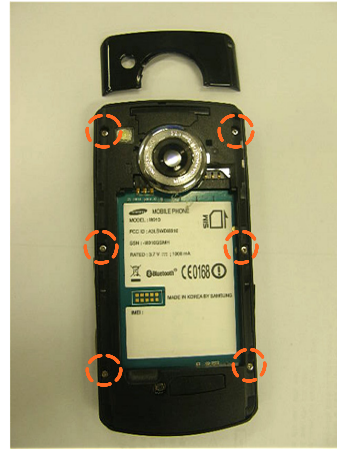
17



Assemble the Rear

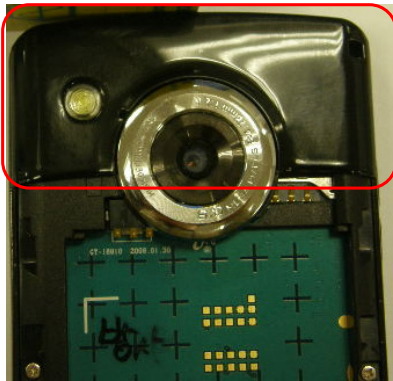
- Assemble the Rear carefully on hook.

18



Tighten screws at 6 points.

19



Assemble the Deco.

- Assemble the Deco carefully on hook.

20



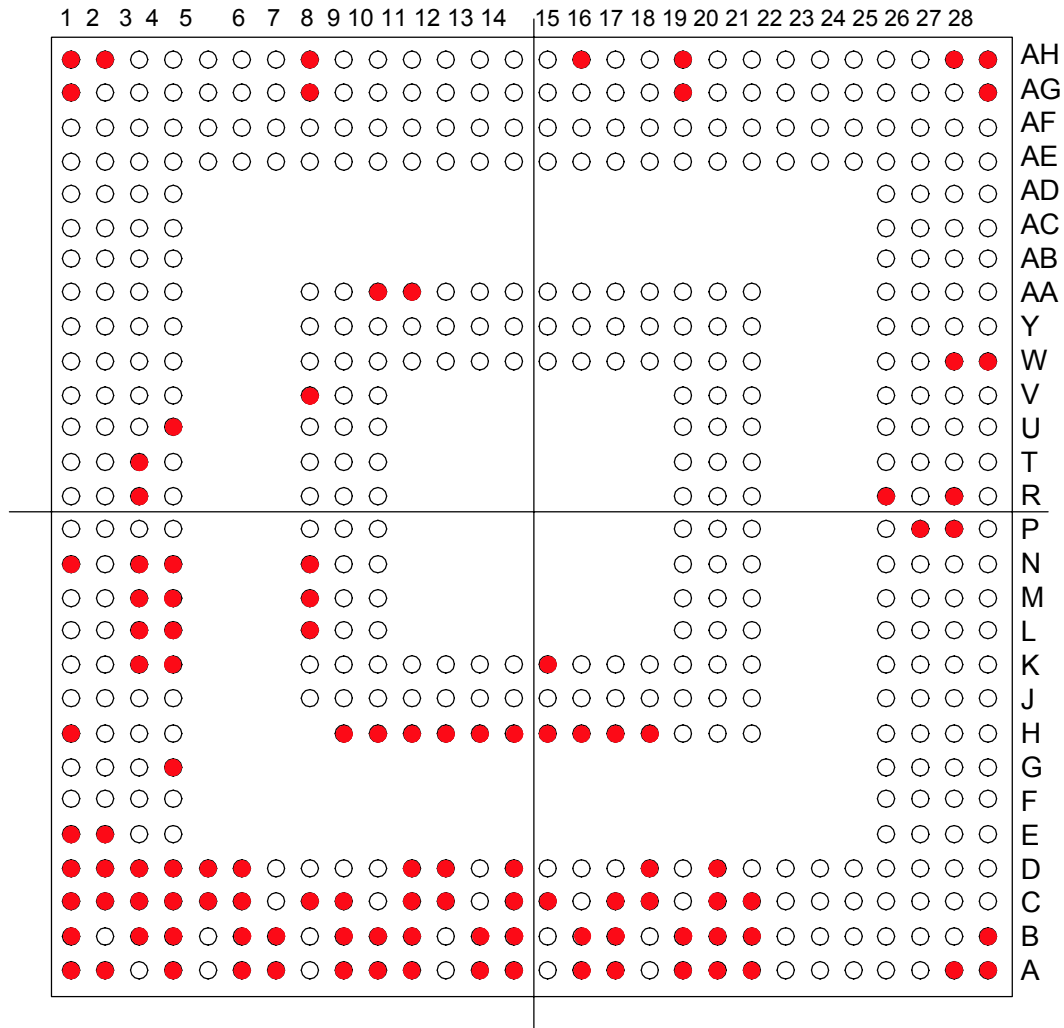
THE END

12. Schematic Diagram

(Bottom View : Red dot is NC pins.)

OMAP3430

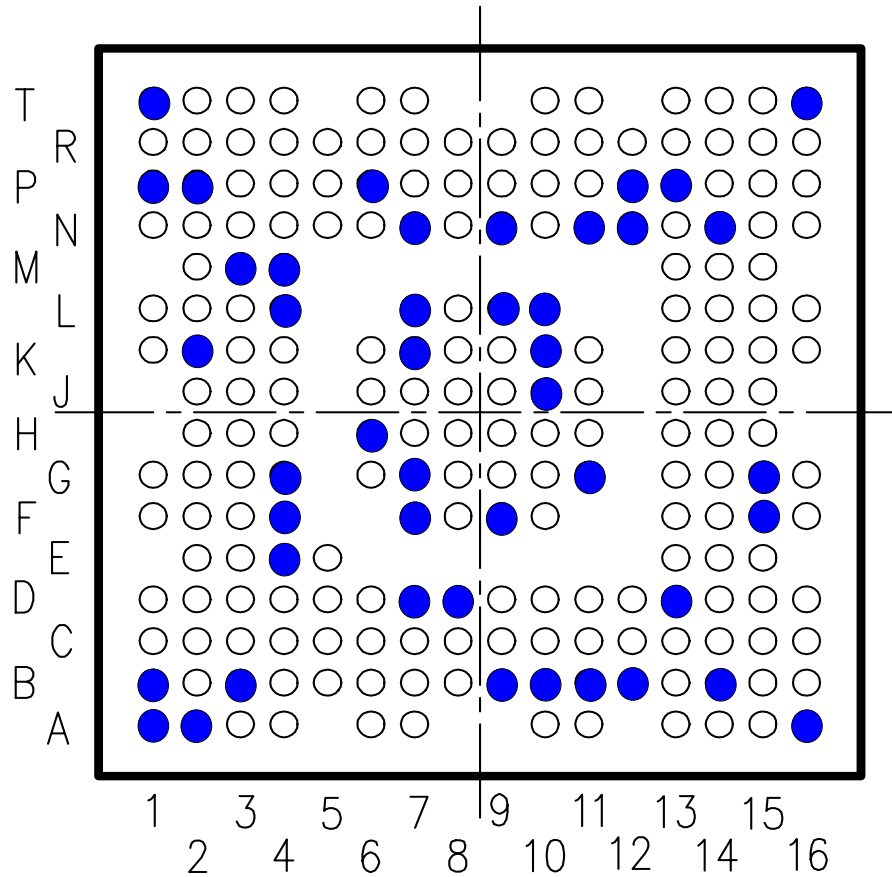
● NC



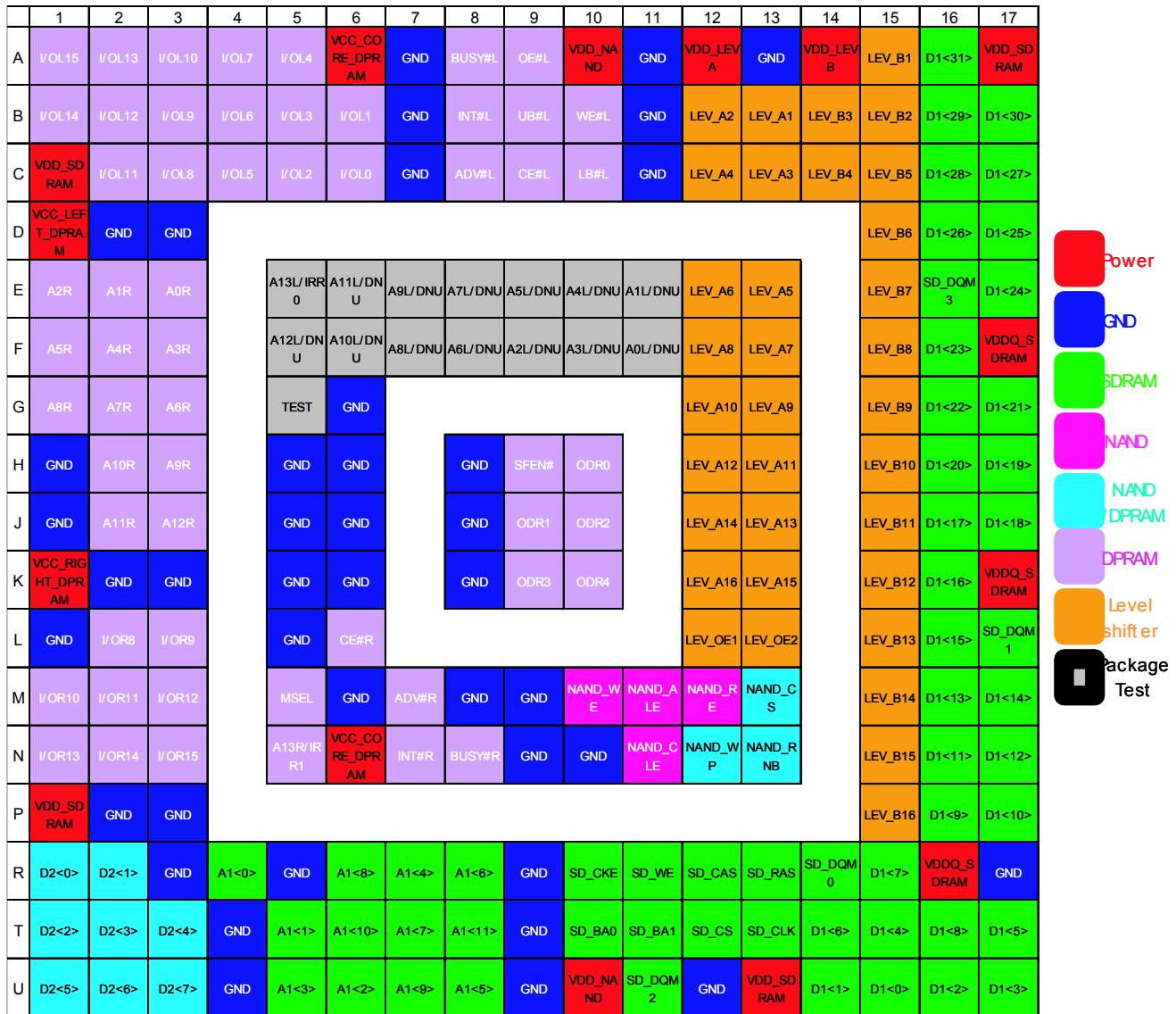
(Bottom View : Blue dot is NC pins.)

TWL4030

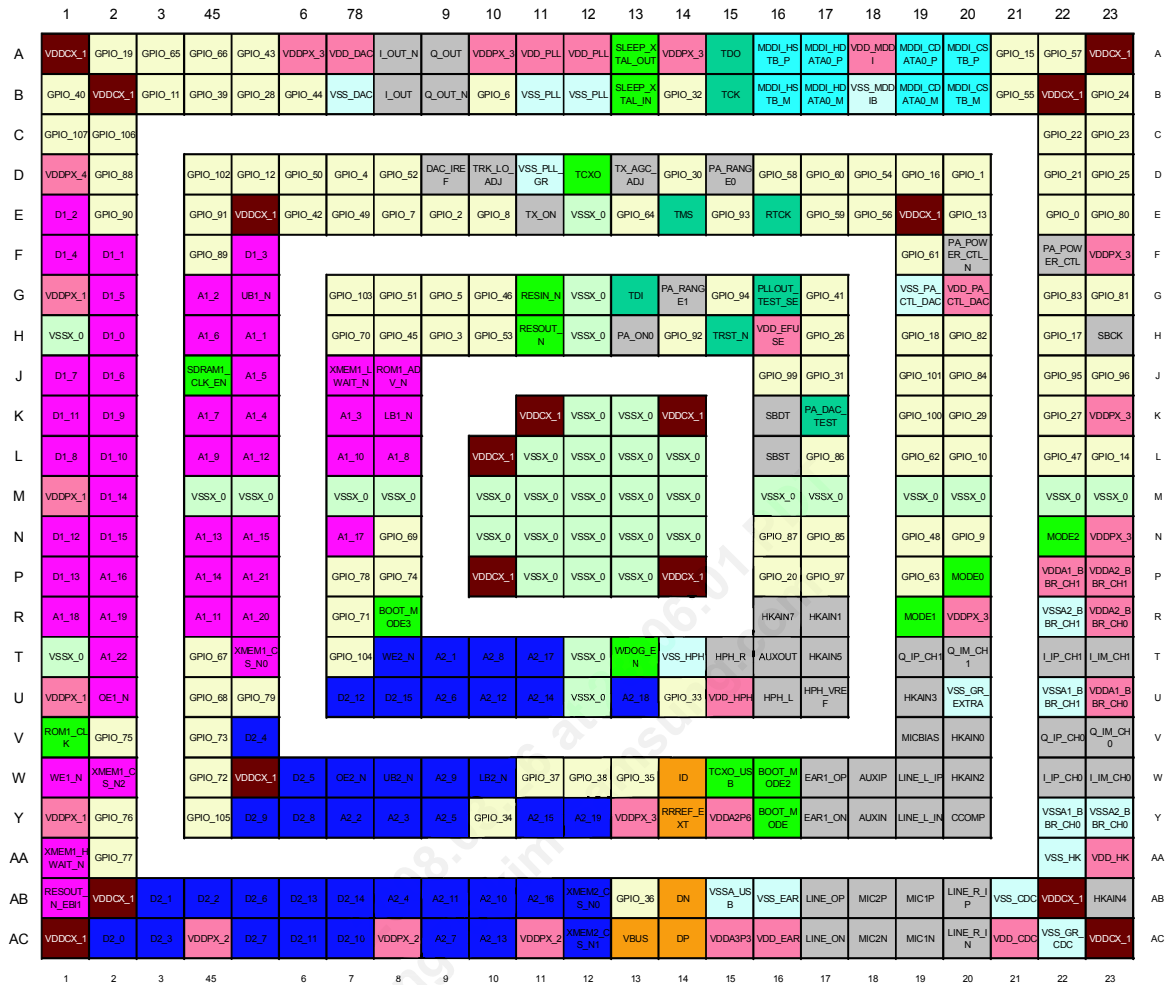
● NC



MD512256B



MSM6290



LEGEND

Color	Net Group	Color	Net Group
	EBI1		VDDPX_*
	EBI2		VDDCX_1
	MDDI*		GPIO*
	VDD*		Clock/Osc./Mode/Reset/Wdog
	VSS*		USB PHY
			TEST INTERFACE

<RF PART>

GSM850/EGSM/DCS/PCS

Rx



Tx



WCDMA 1900

Rx



Tx



WCDMA 2100

Rx



Tx



WCDMA 900

Rx



Tx



BLUETOOTH



GPS



WiFi



<Baseband Part>

Power On



Camera



LCD



Charger



SIM



Flash LED



TOUCH



Internal Memory



<Audio Part>

Speaker(UP)



Speaker(DOWN)



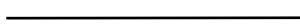
Receiver



UCC MIC



Main MIC



Ear MIC



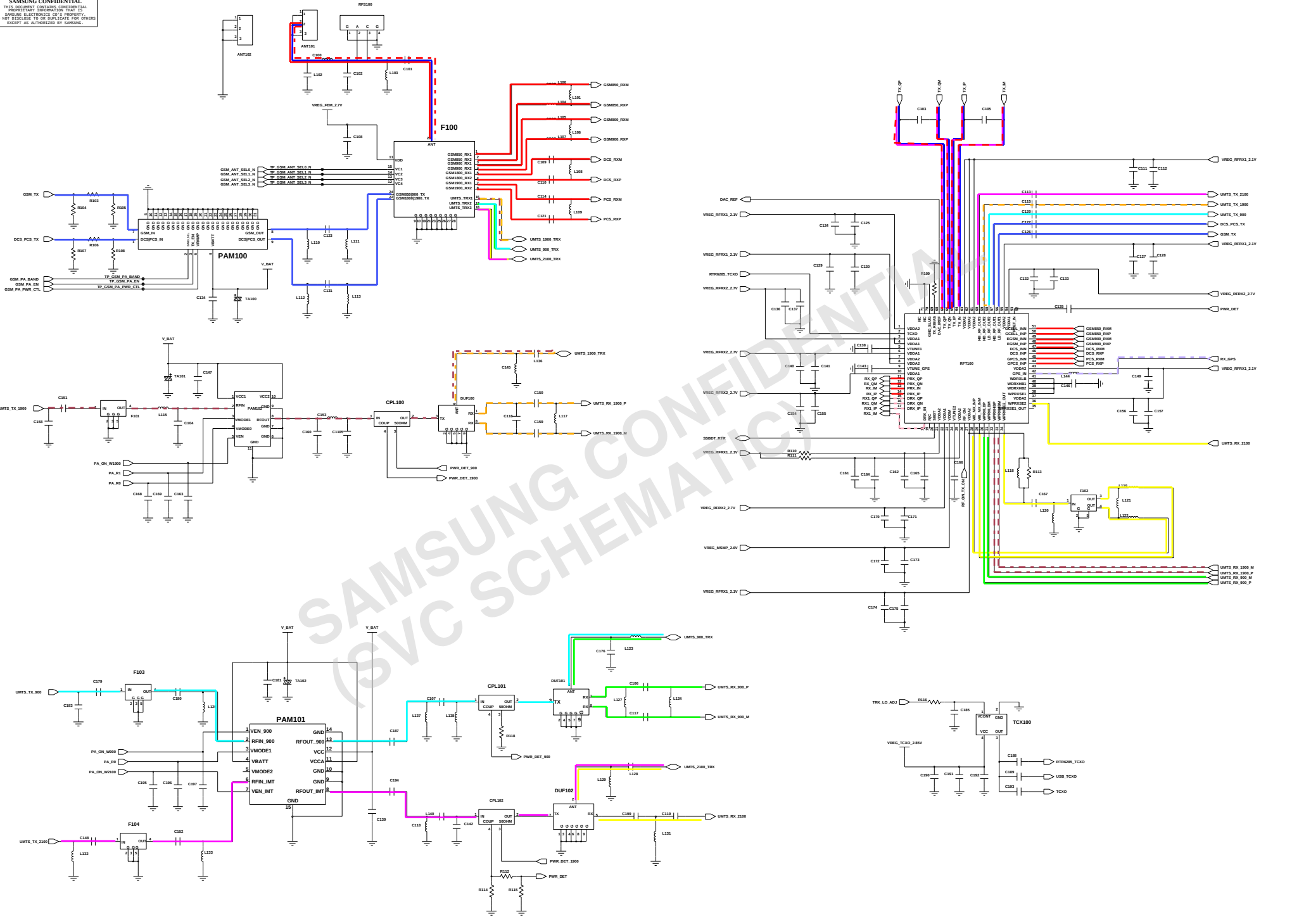
FM Radio

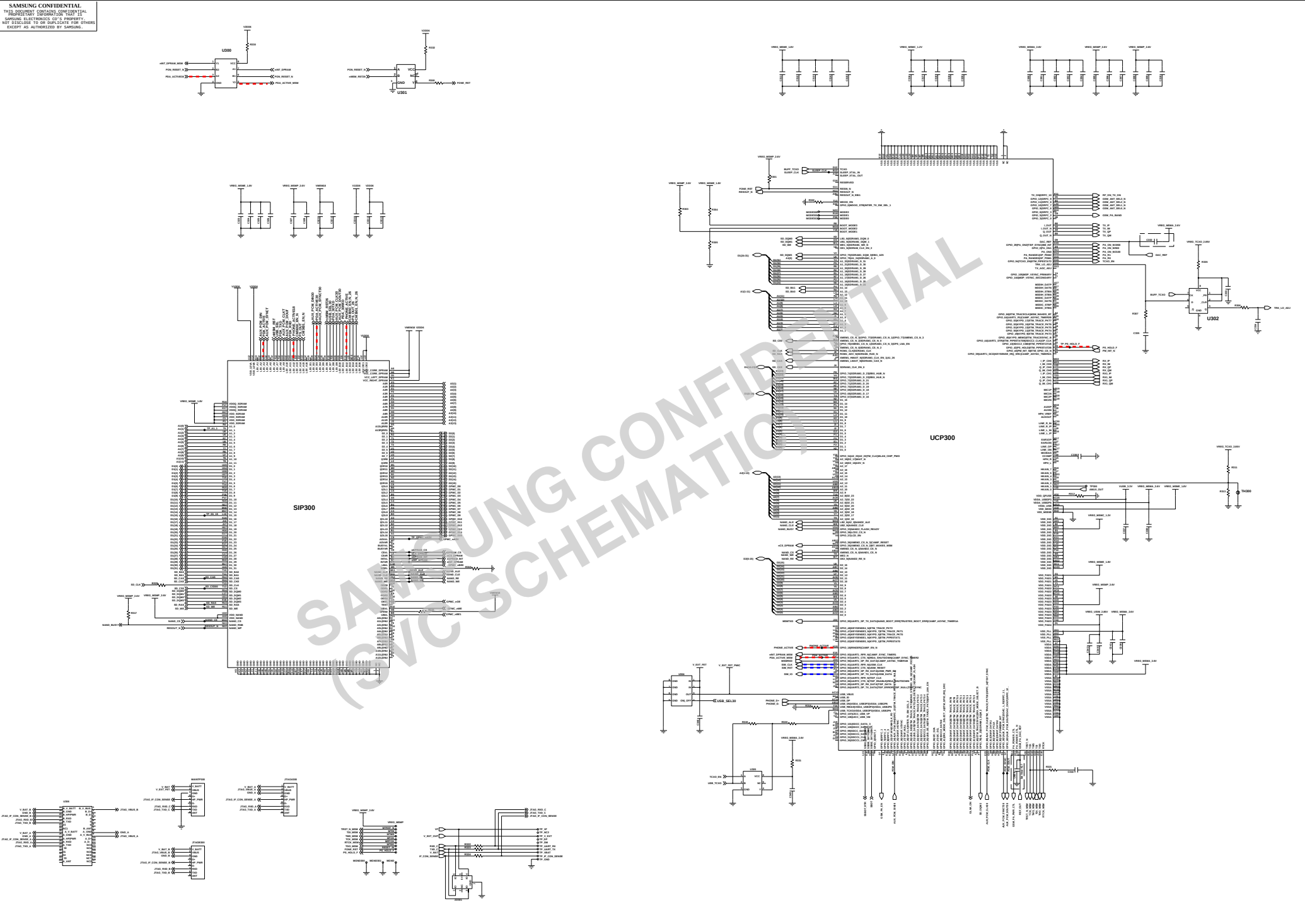


Earjack

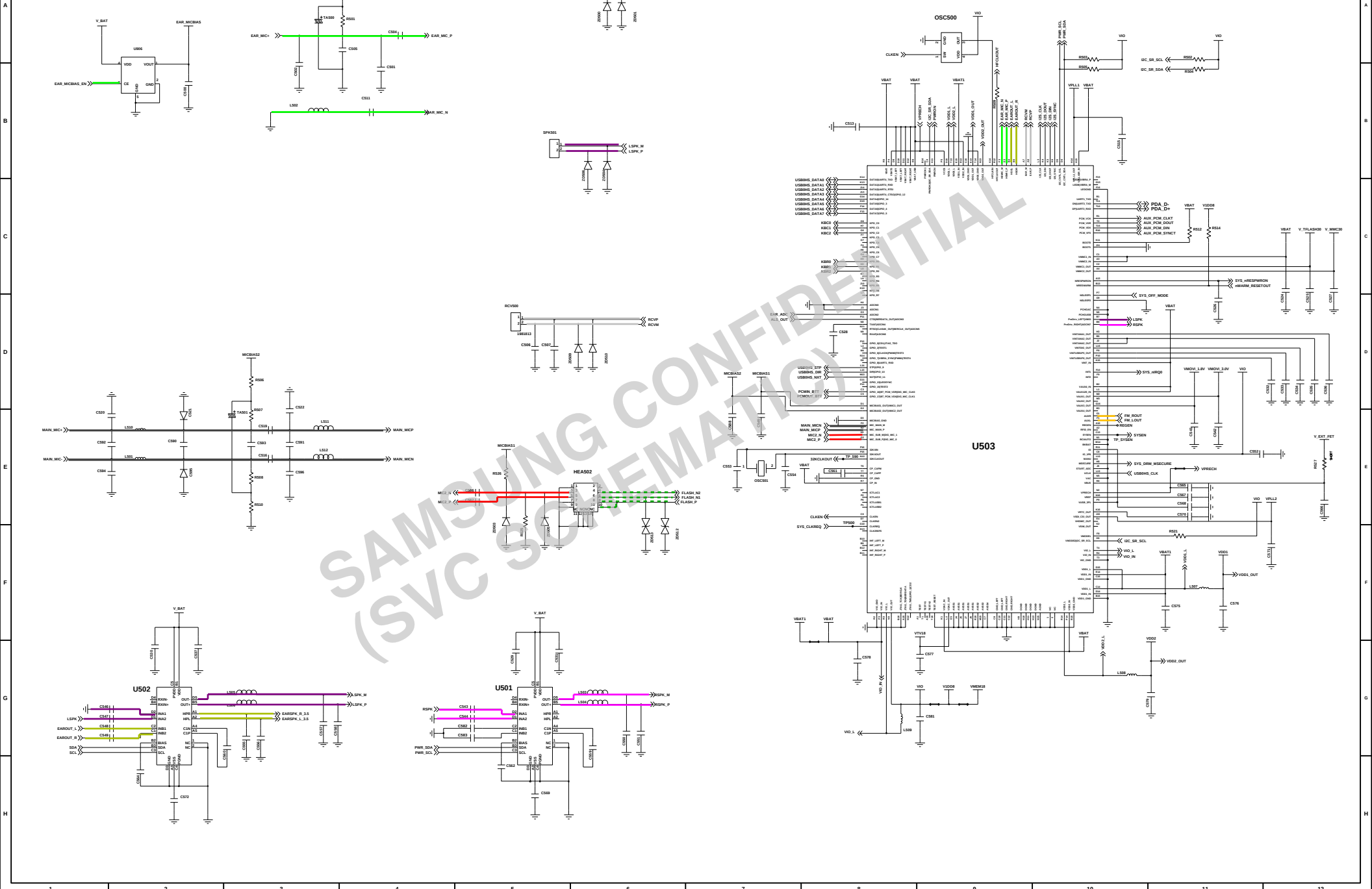


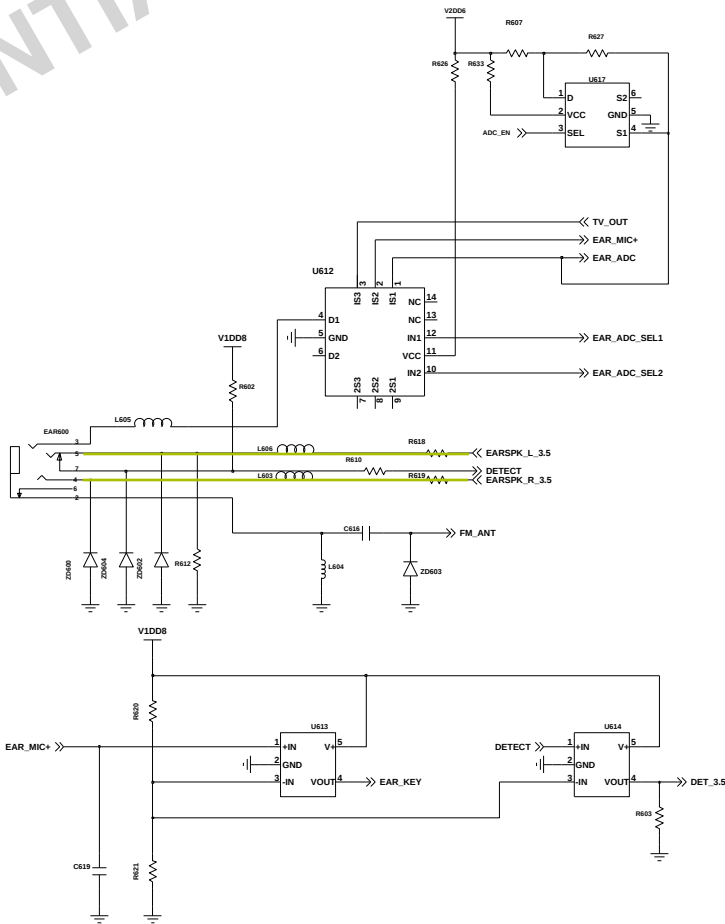
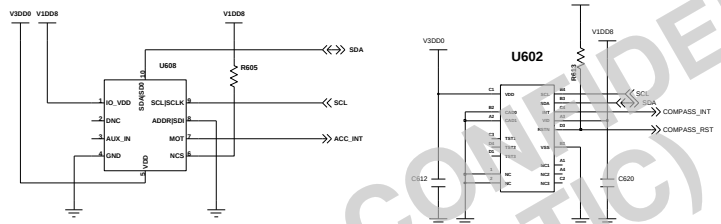
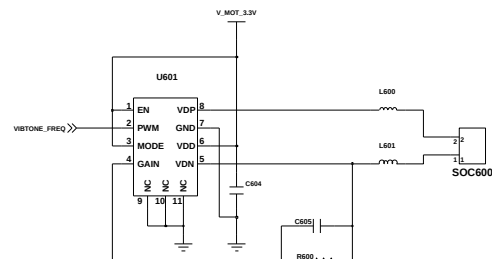
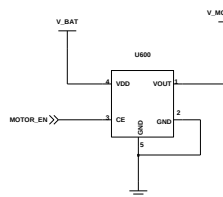
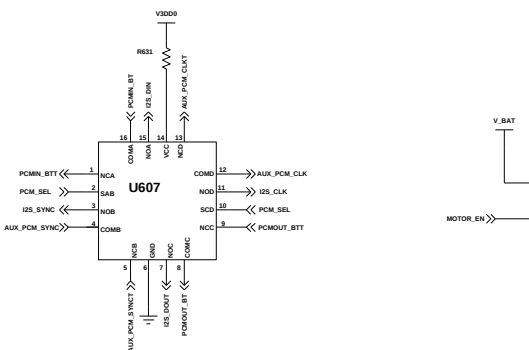
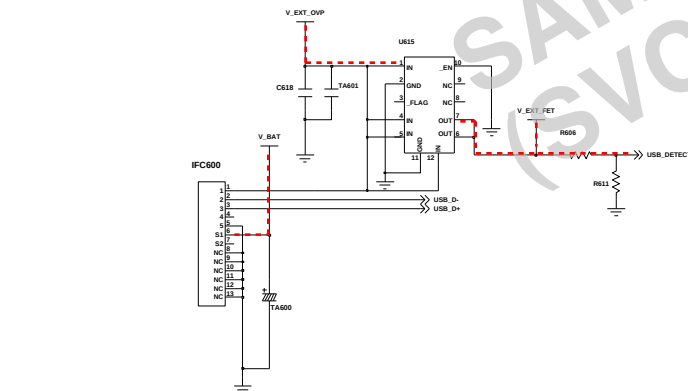
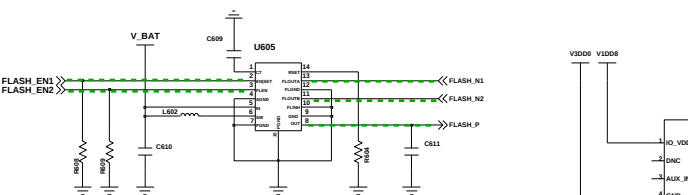
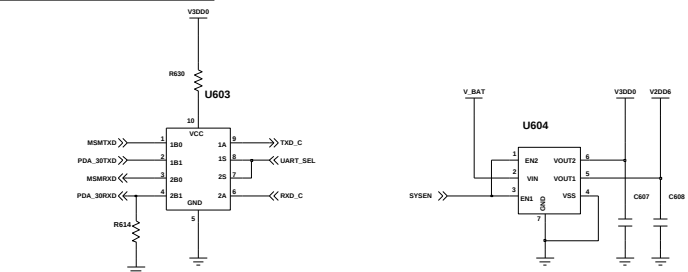
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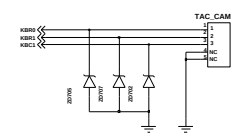
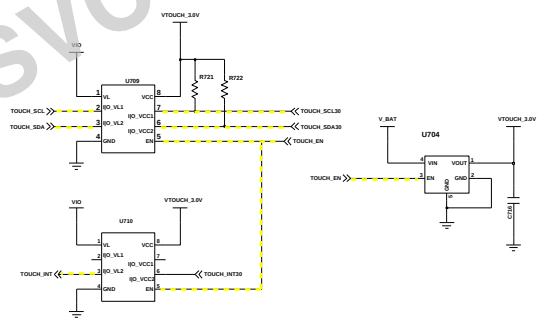
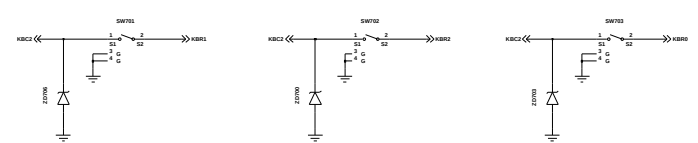
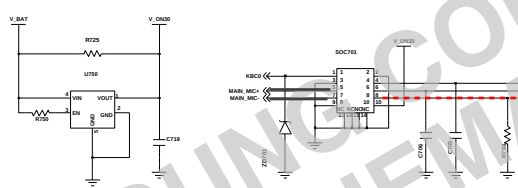
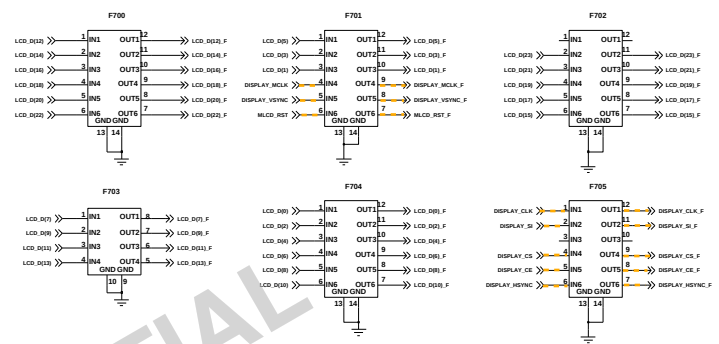
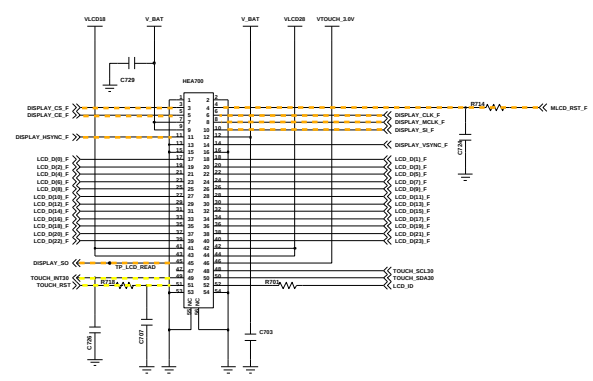
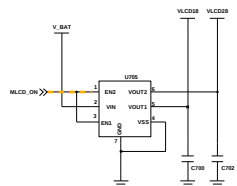


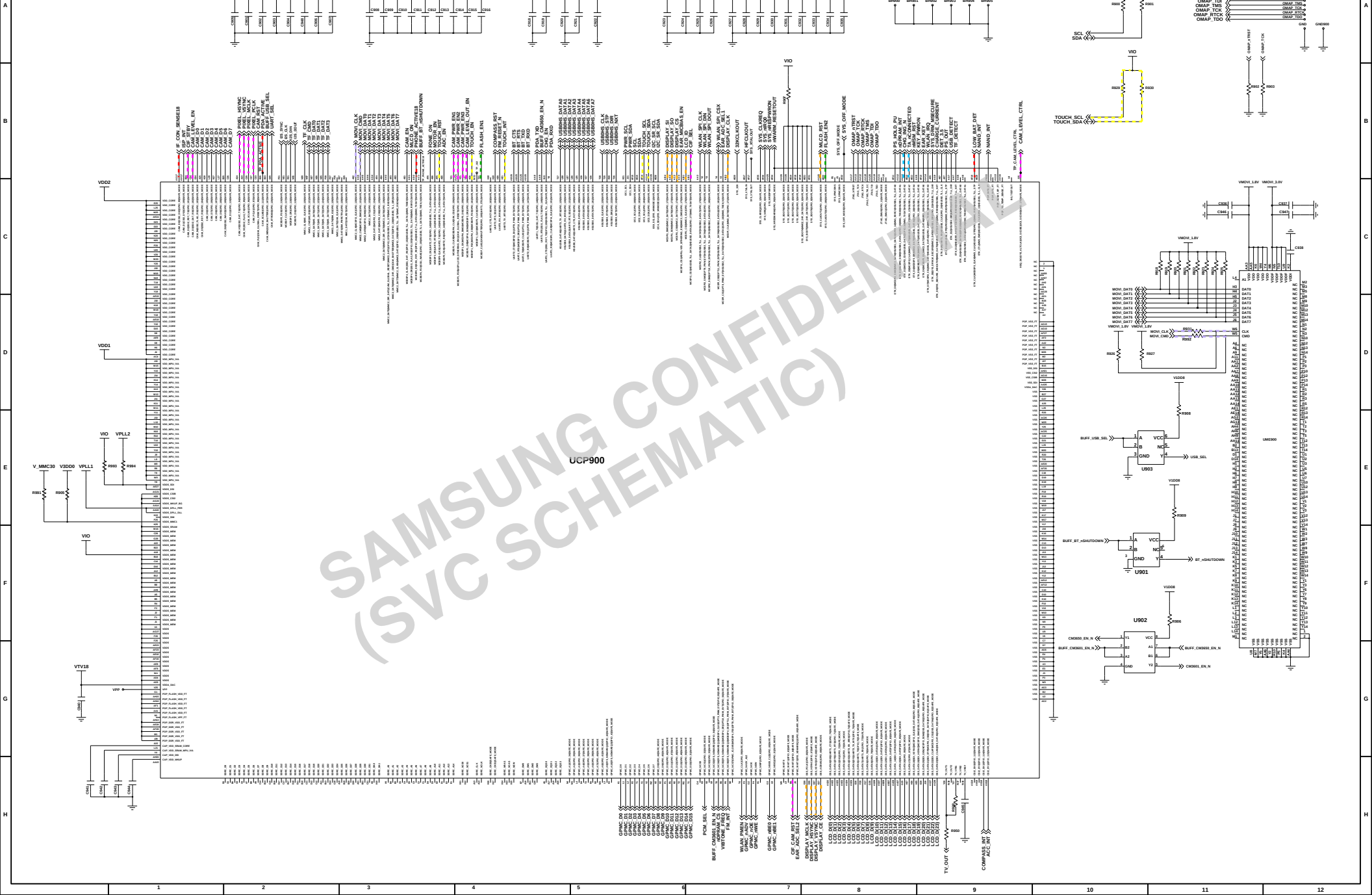


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