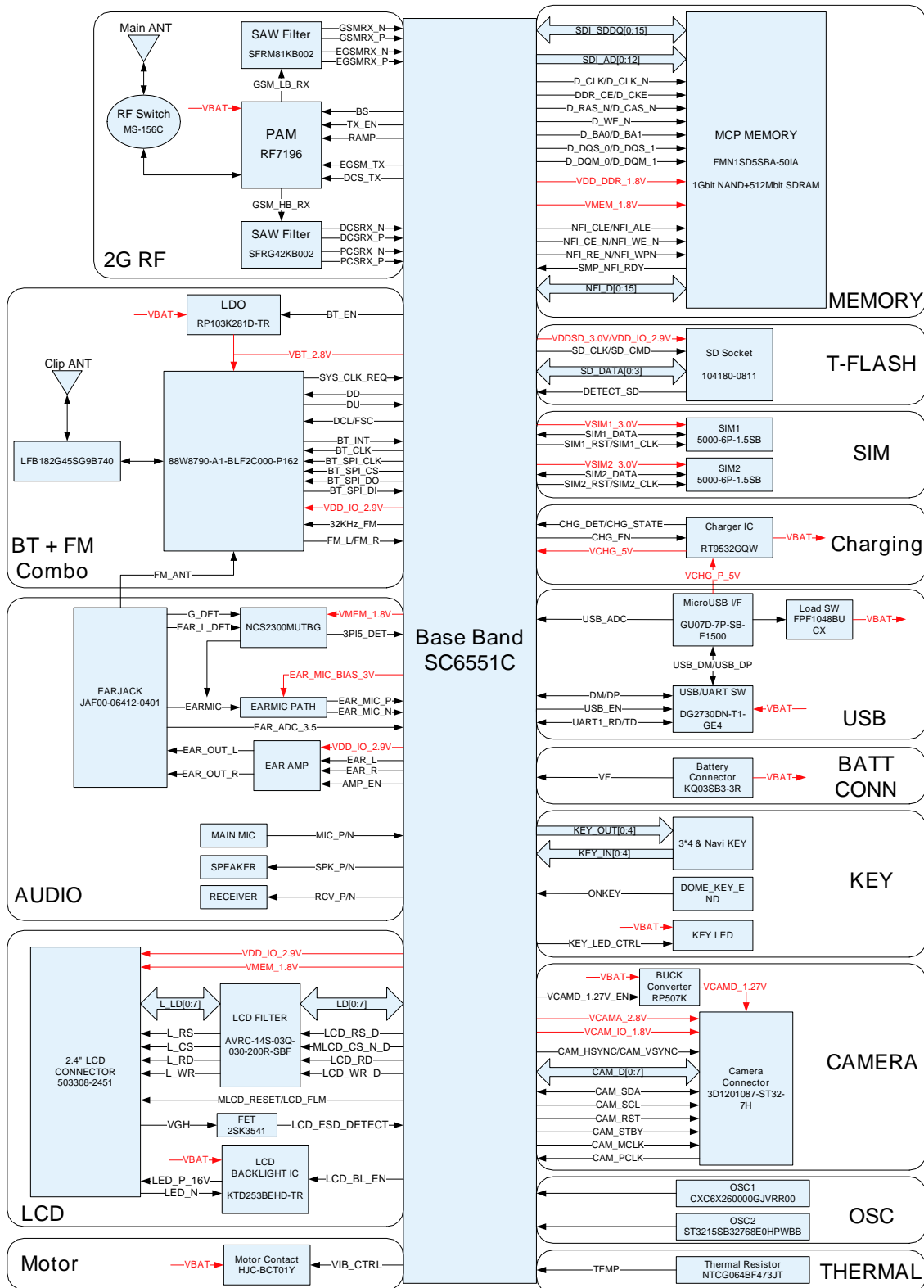


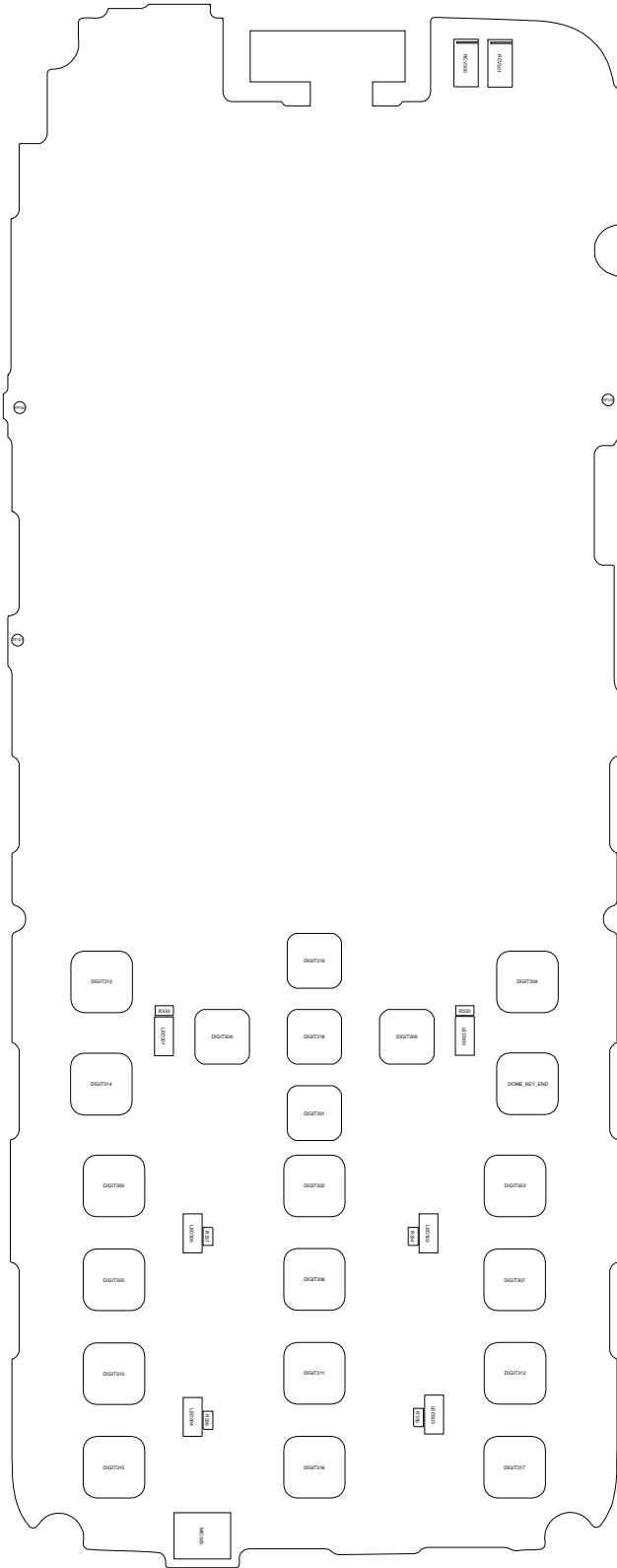
# 8. Level 3 Repair

## 8-1. Block Diagram

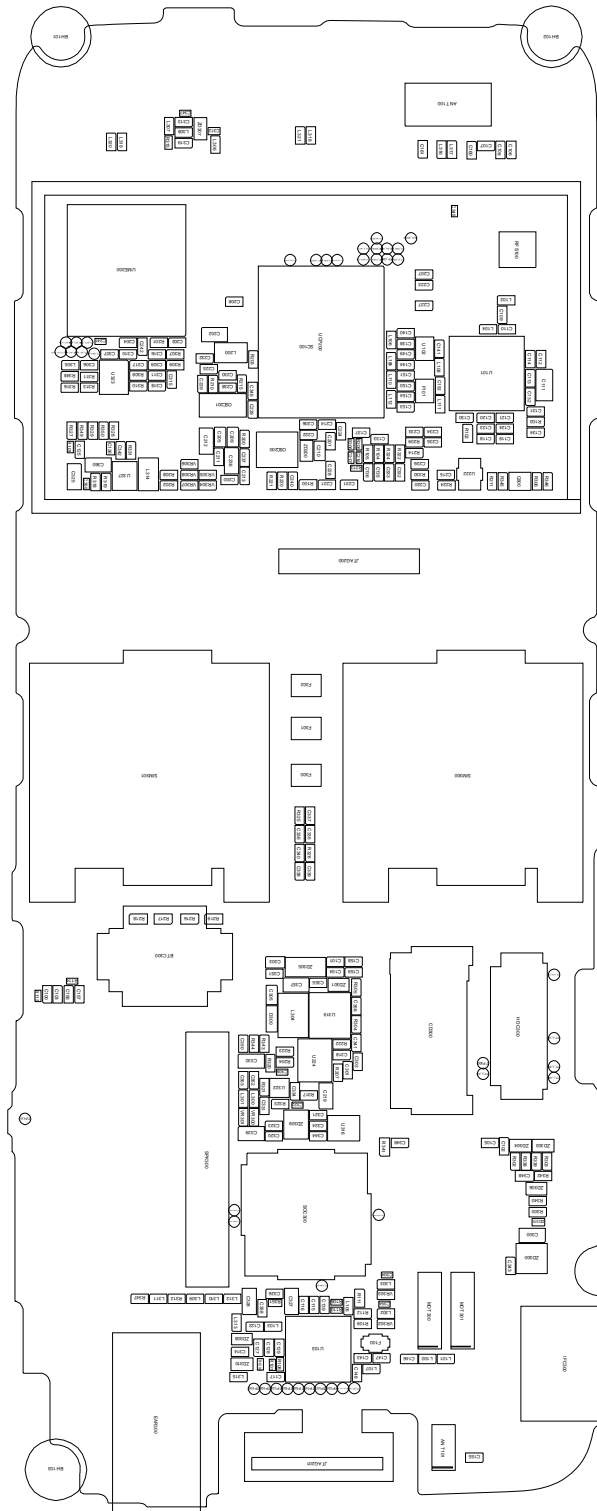


8-2. PCB Diagrams

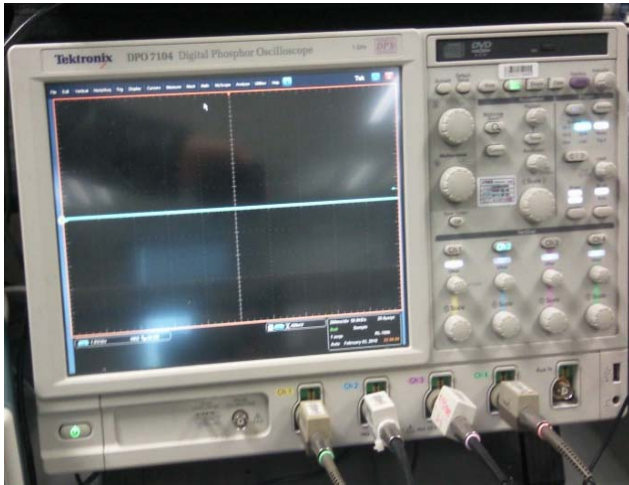
8-2-1. Top



8-2-2. Bottom



### 8-3. Troubleshooting Equipments



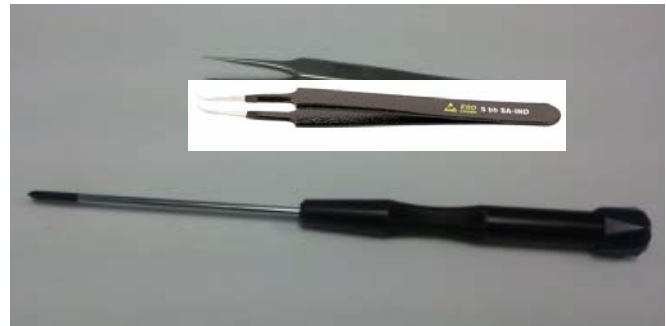
↑ Oscilloscope



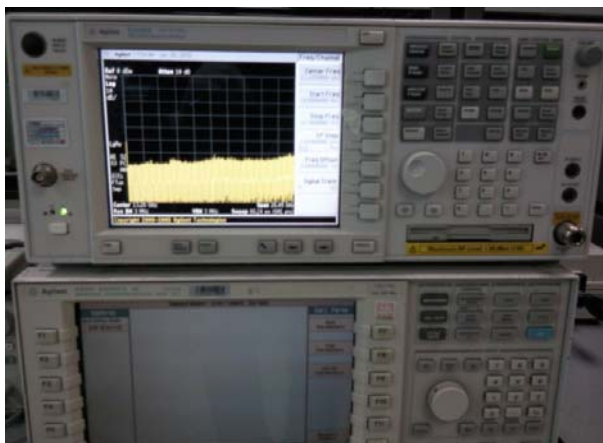
↑ Digital Multimeter



↑ Power Supply



↑ + driver, ESD Safe Tweezer

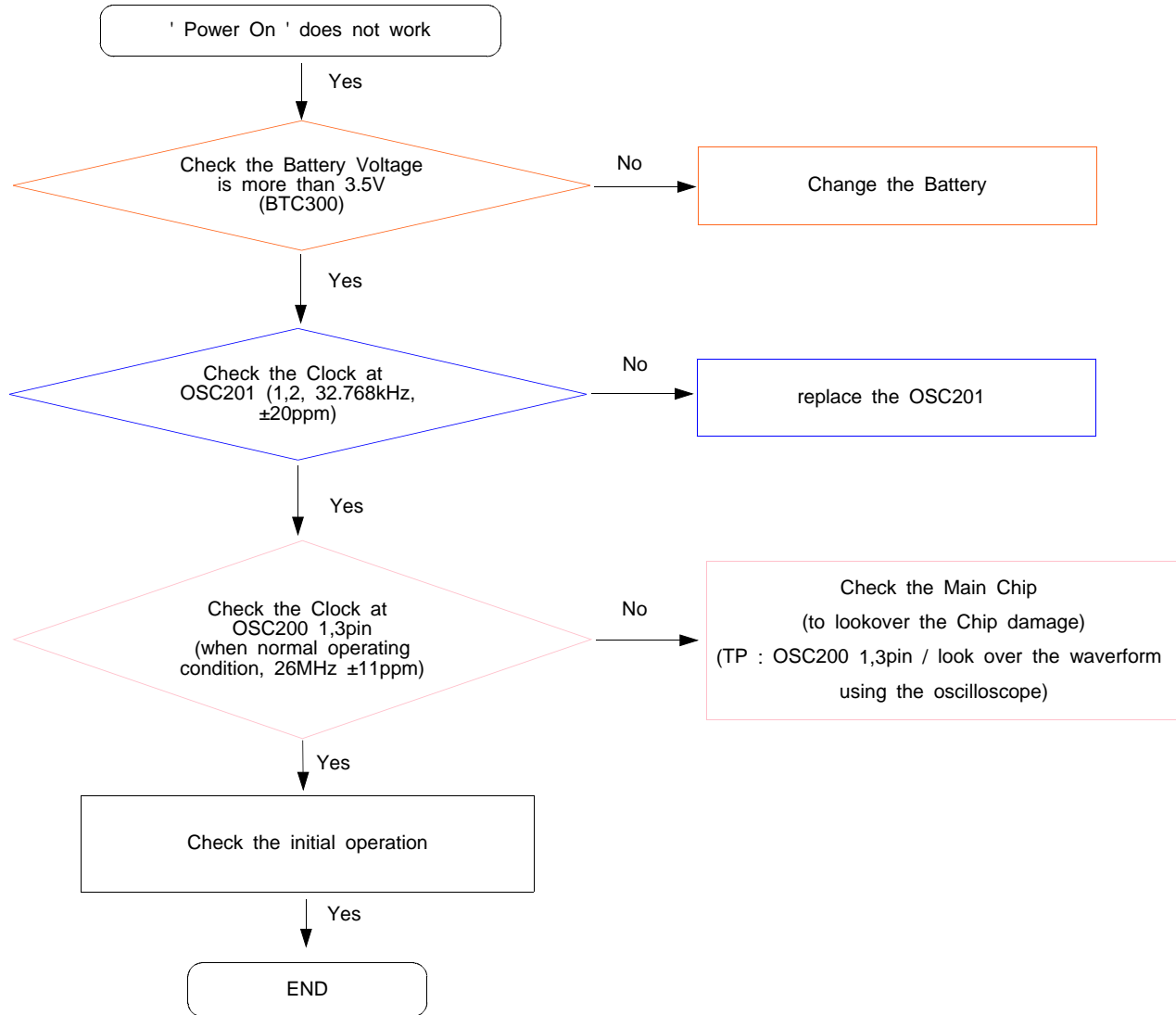


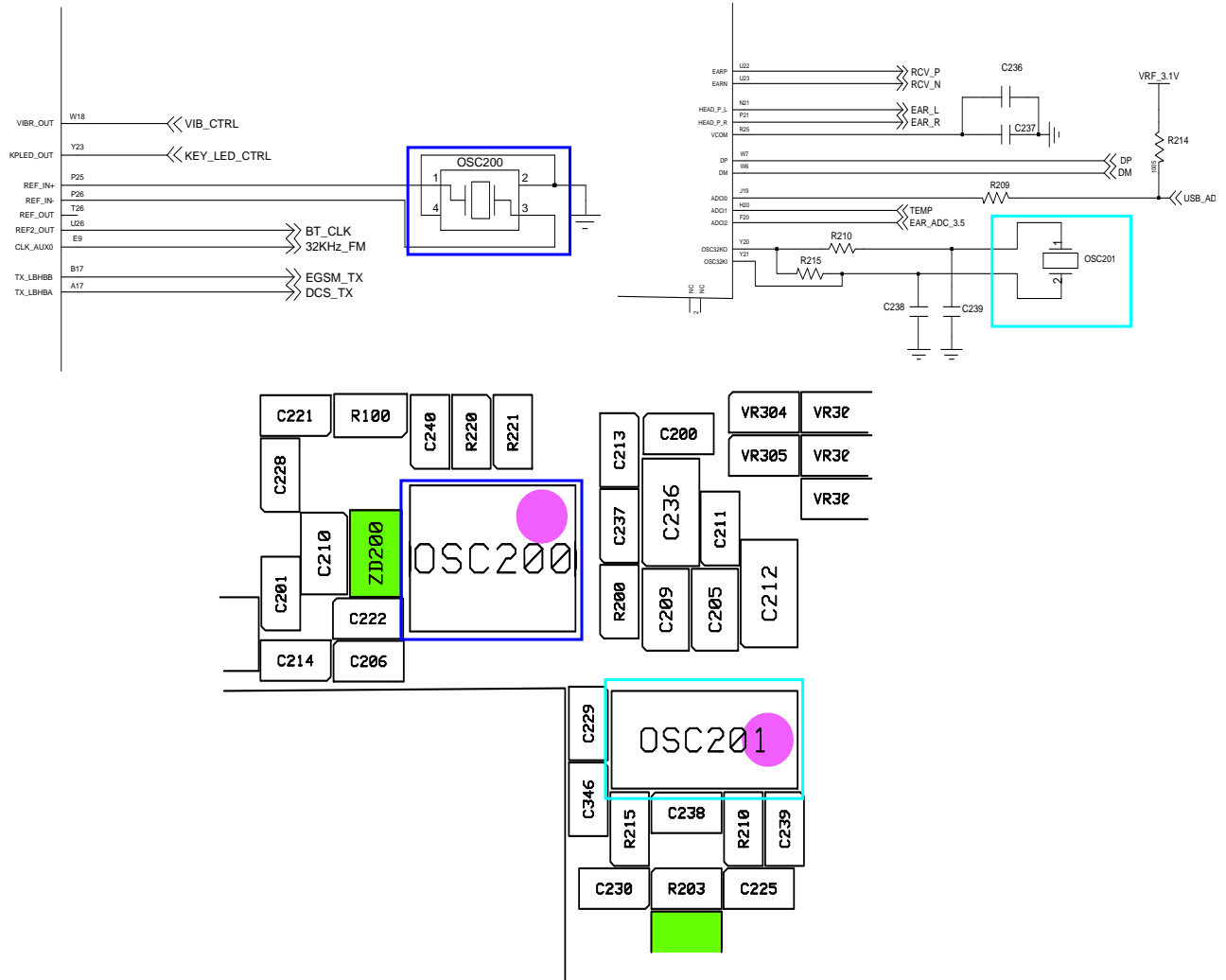
↑ 8960 & Spectrum Analyzer



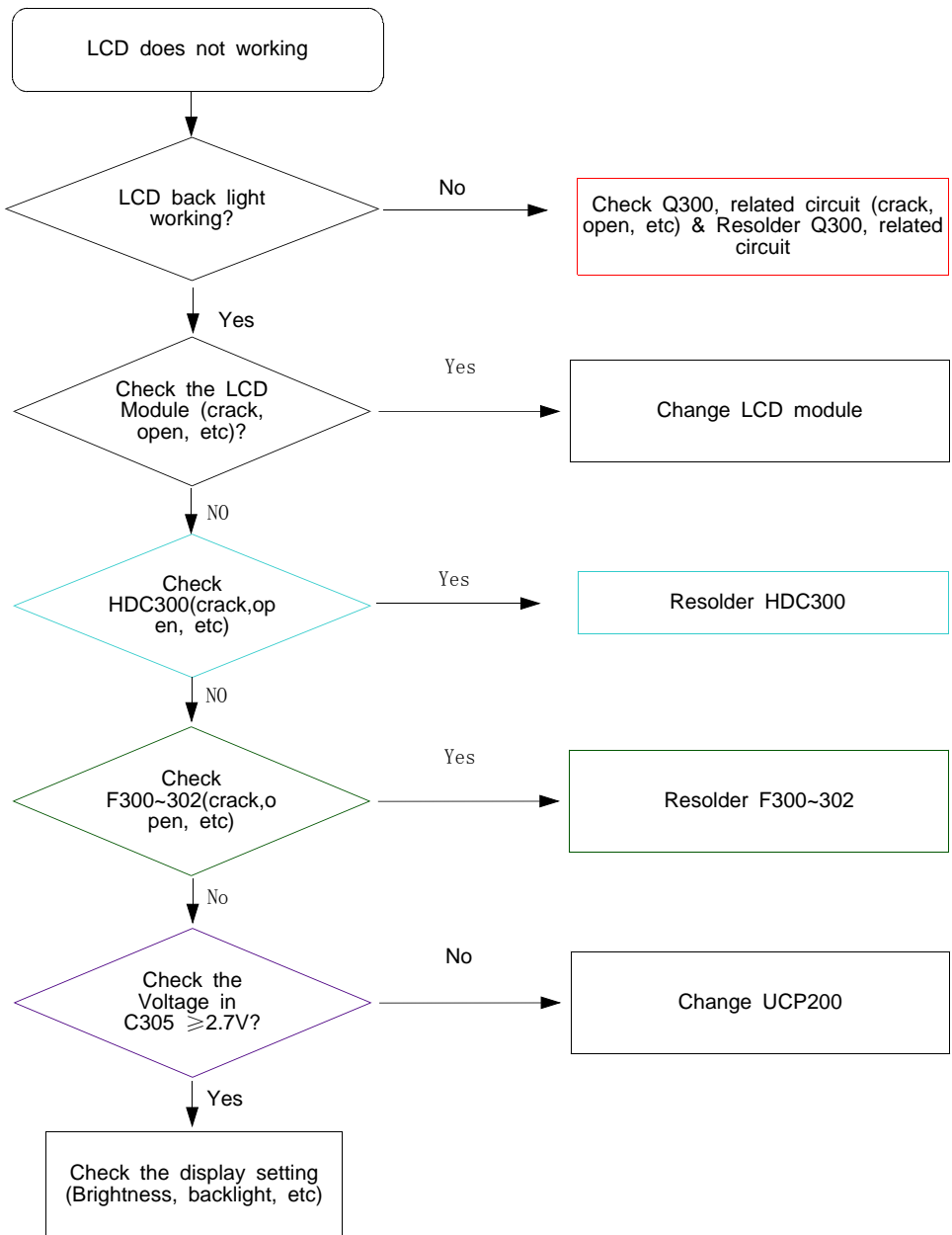
↑ Soldering iron

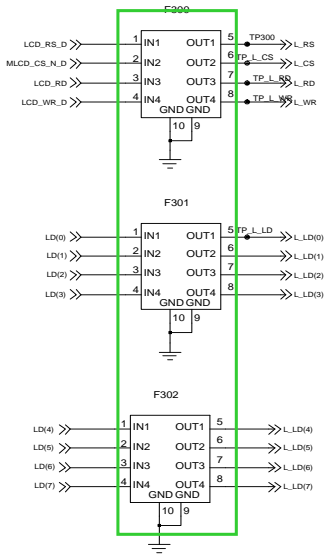
**8-3-1. LOGIC part**  
**8-3-1-1. POWER ON**



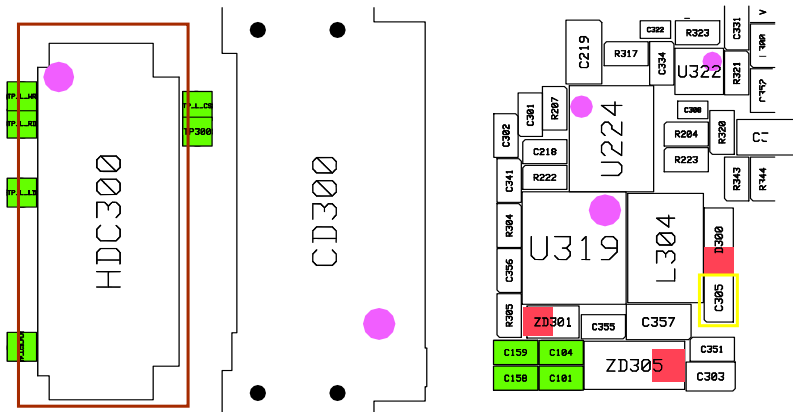
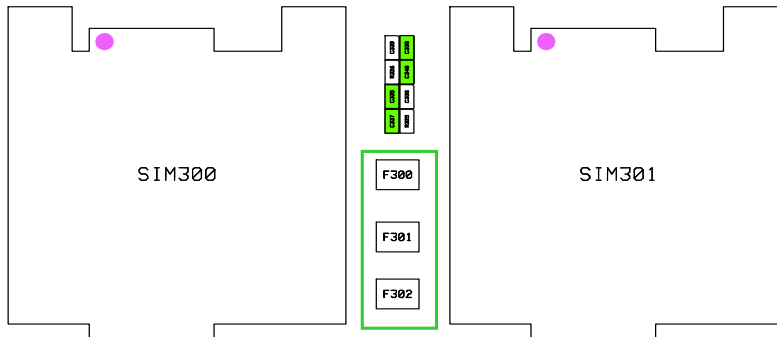
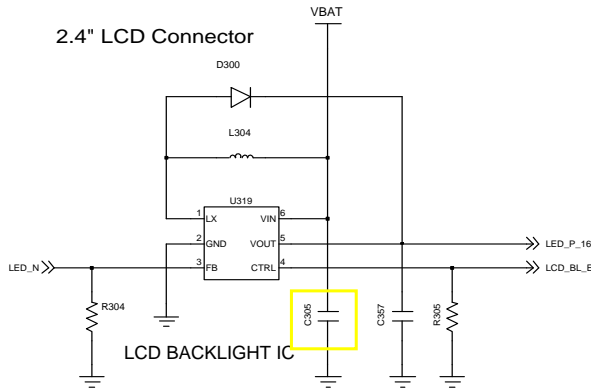
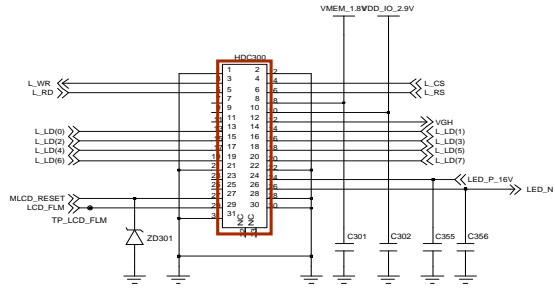


### 8-3-1-2. LCD Part



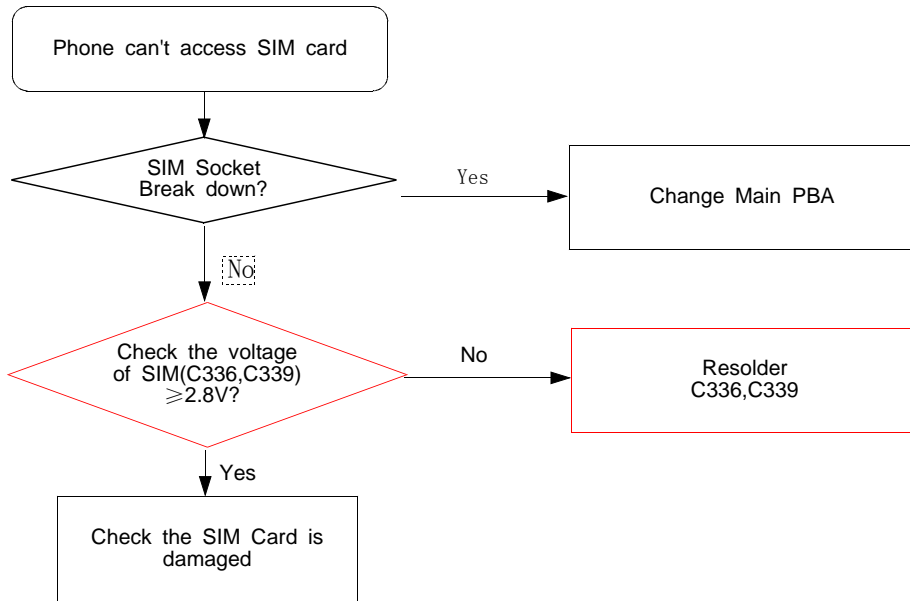


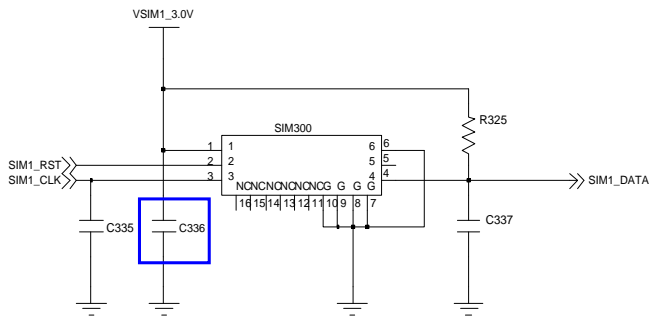
### LCD I/F



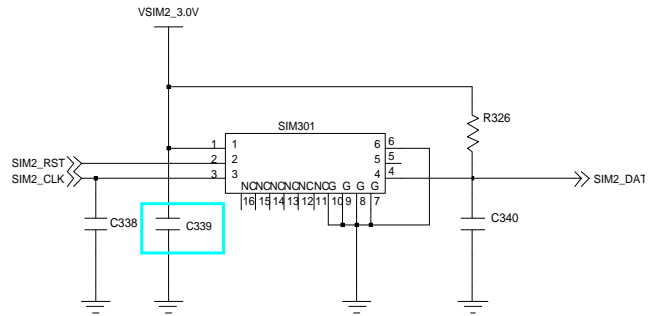


### 8-3-1-3. SIM Part

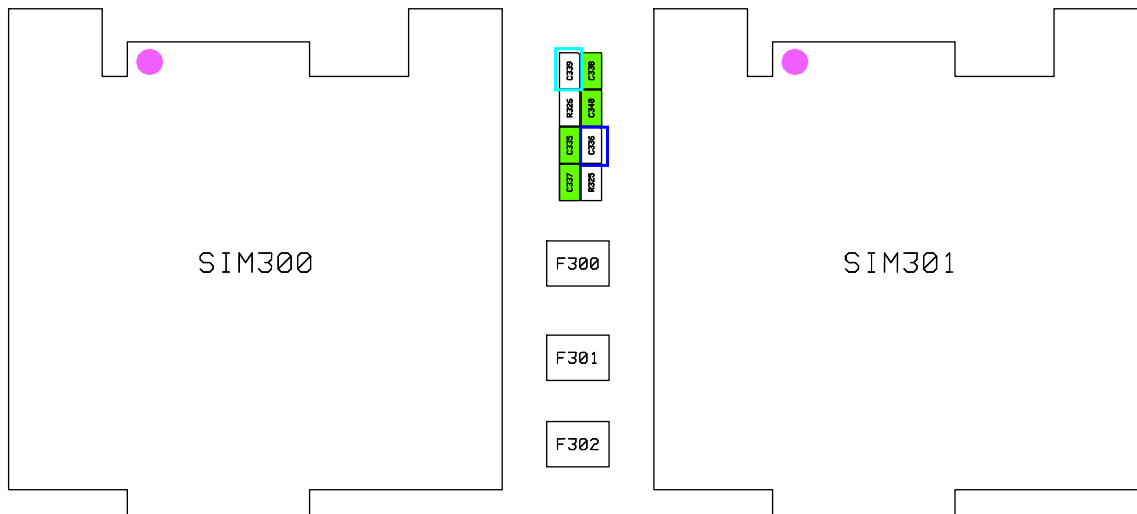




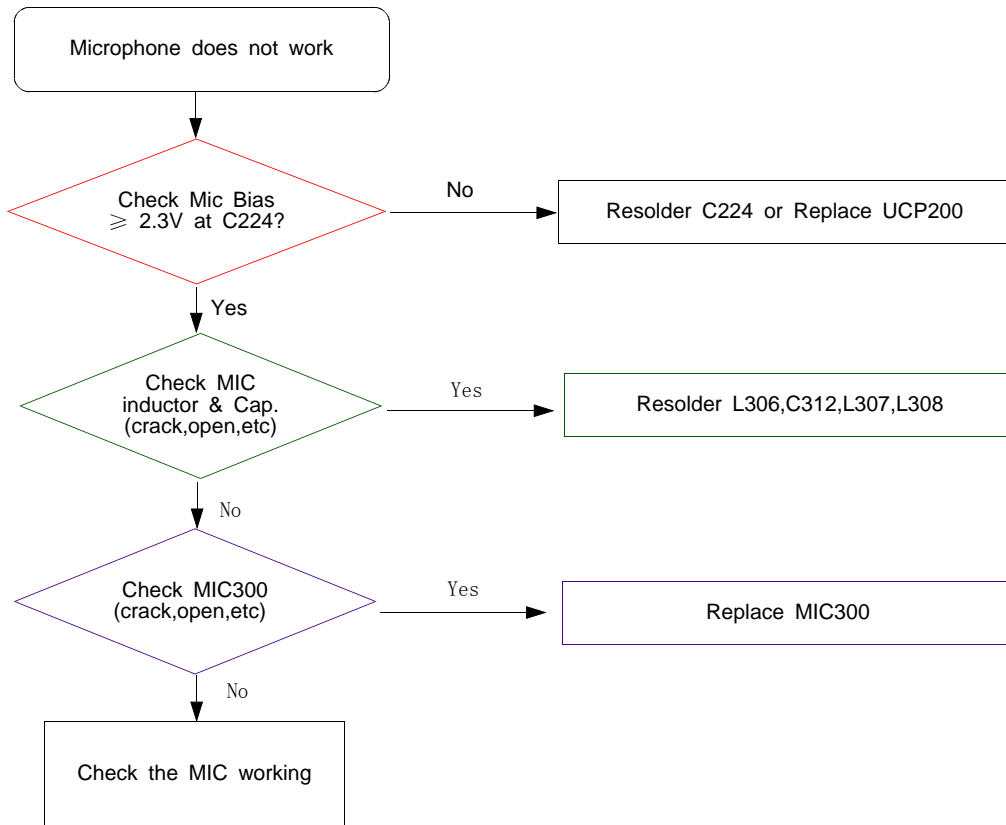
SIM1

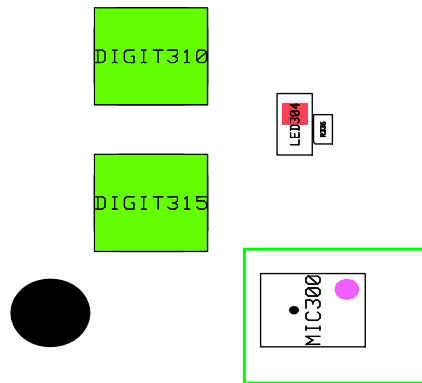
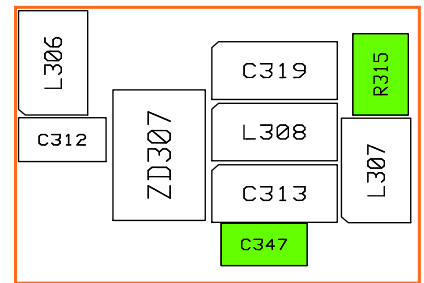
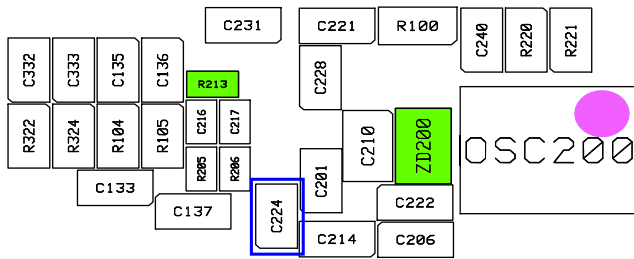
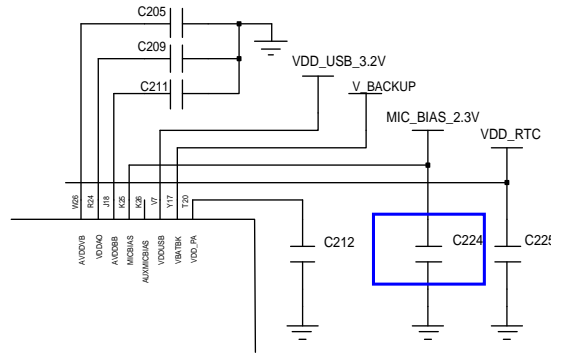
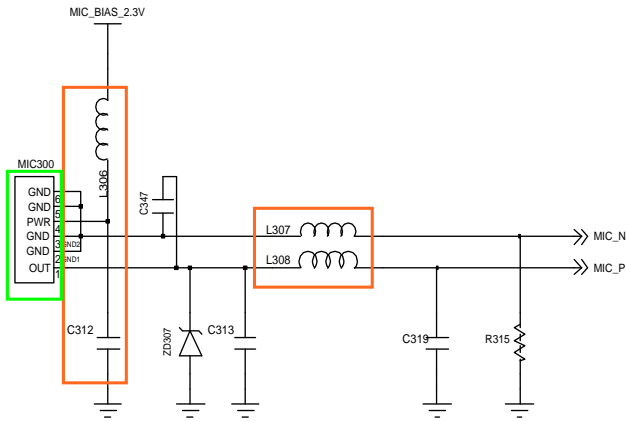


SIM2

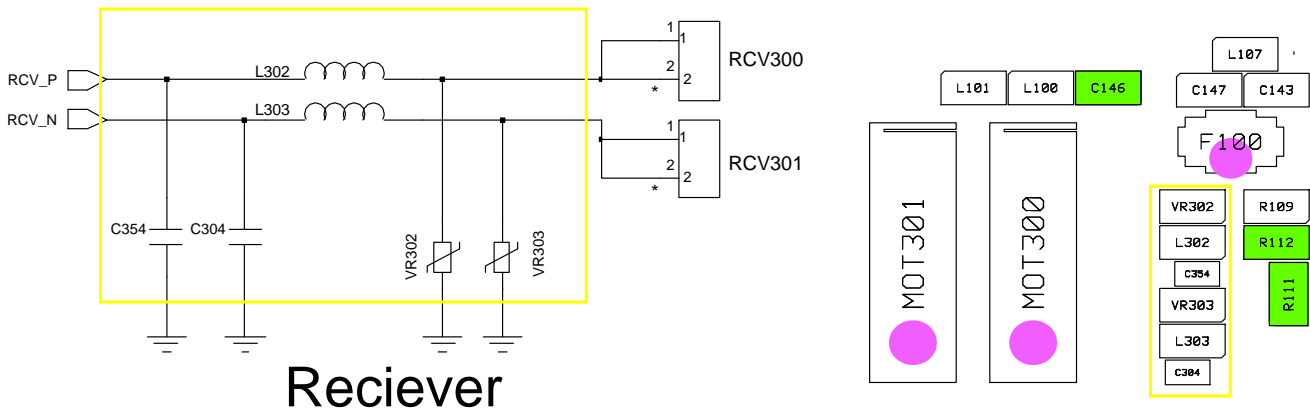
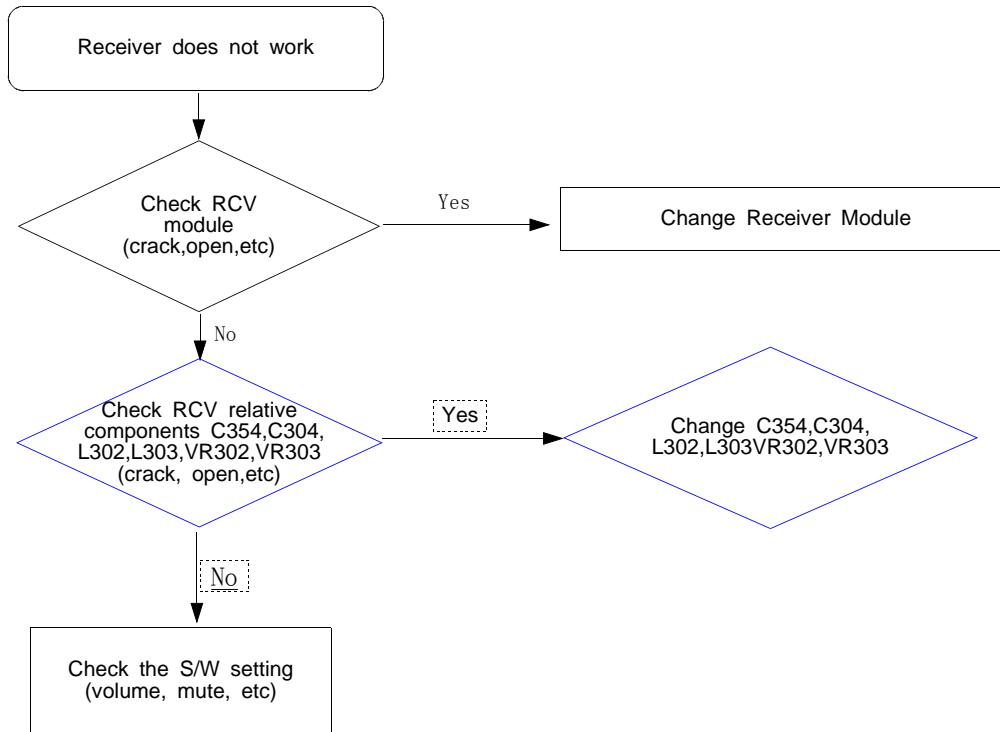


### 8-3-1-4. Microphone Part

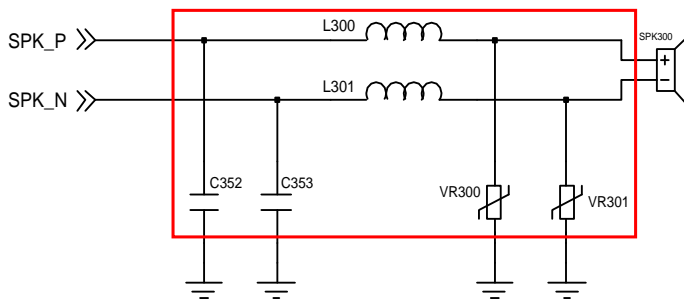
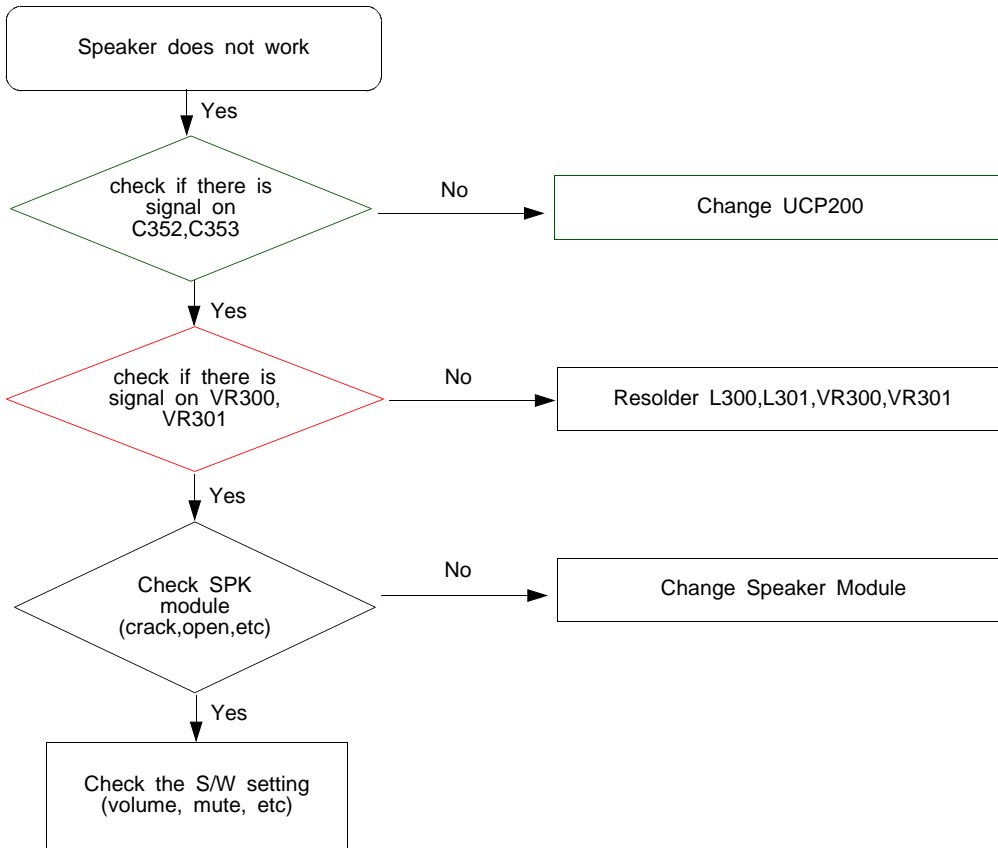




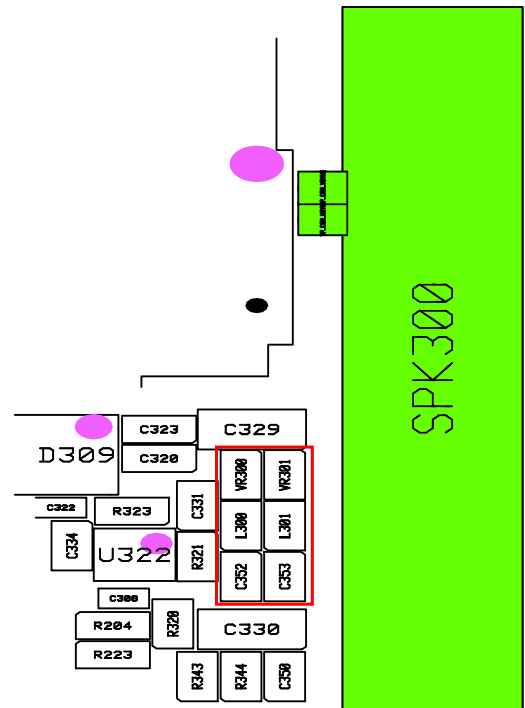
### 8-3-1-5. Receiver Part



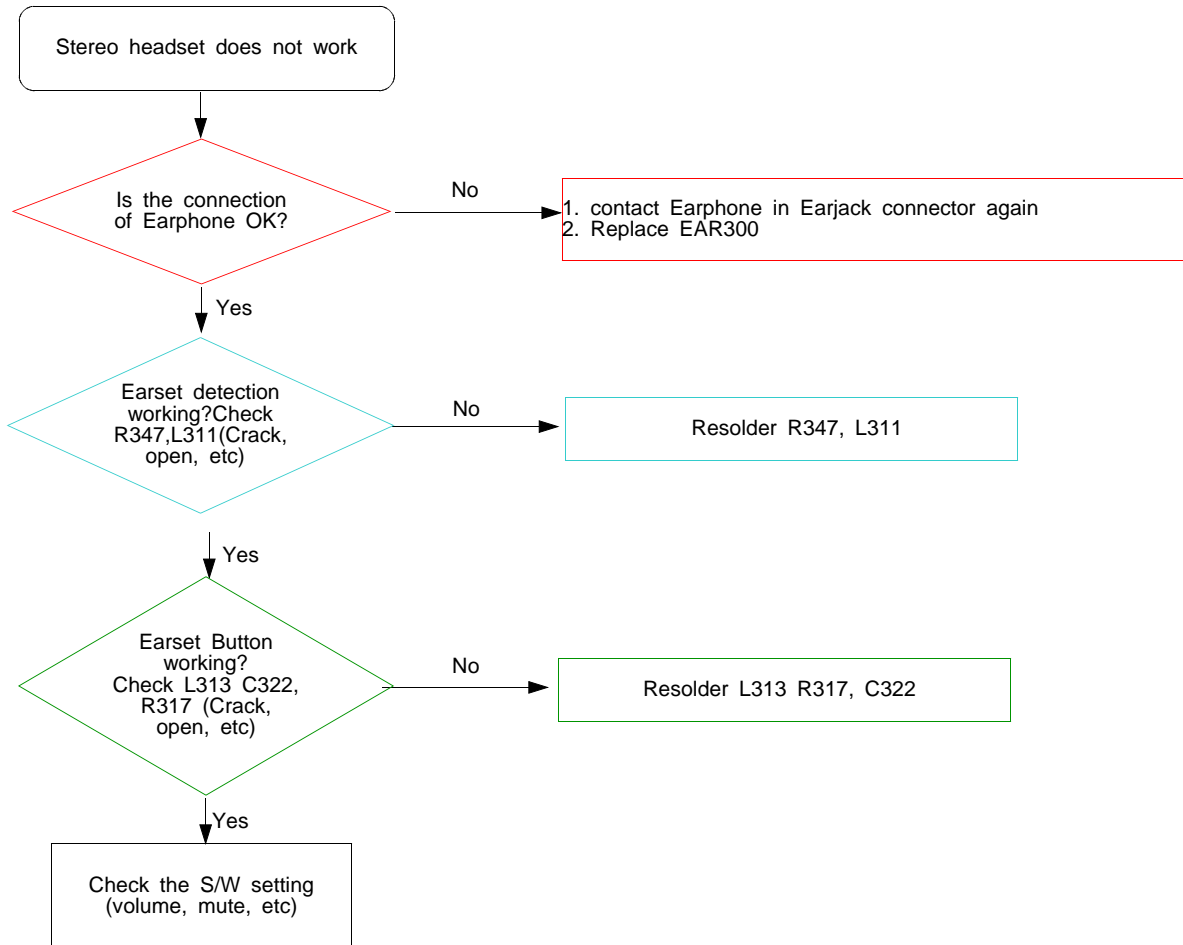
### 8-3-1-6. Speaker Part

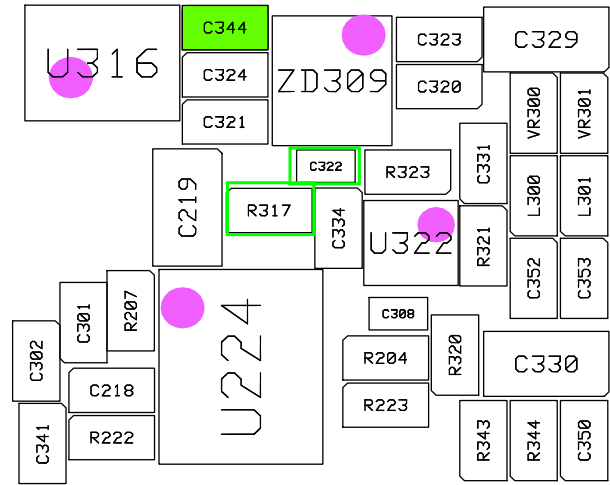
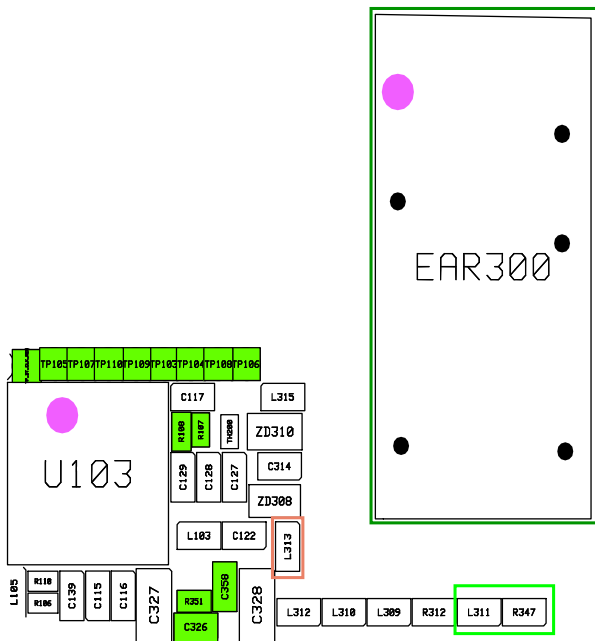
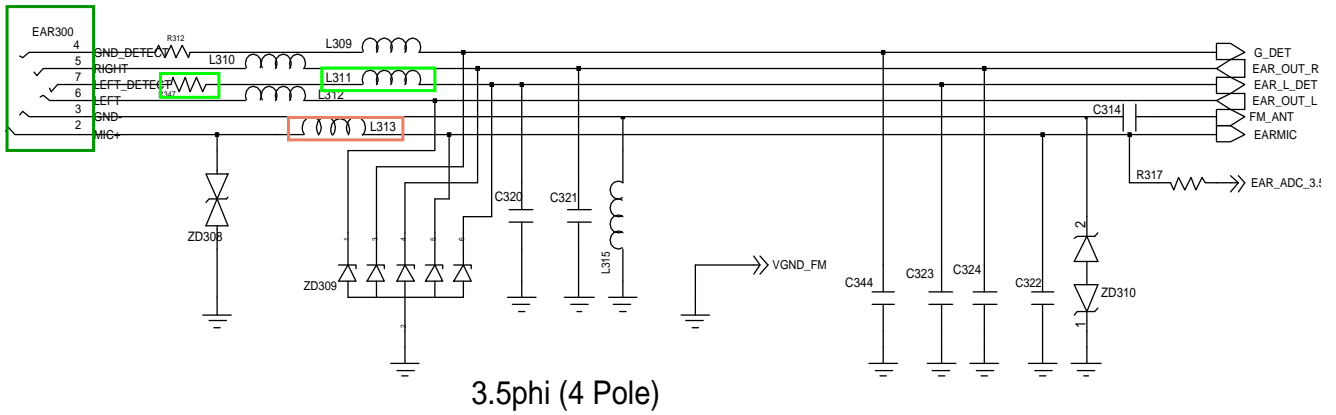


**SPEAKER**



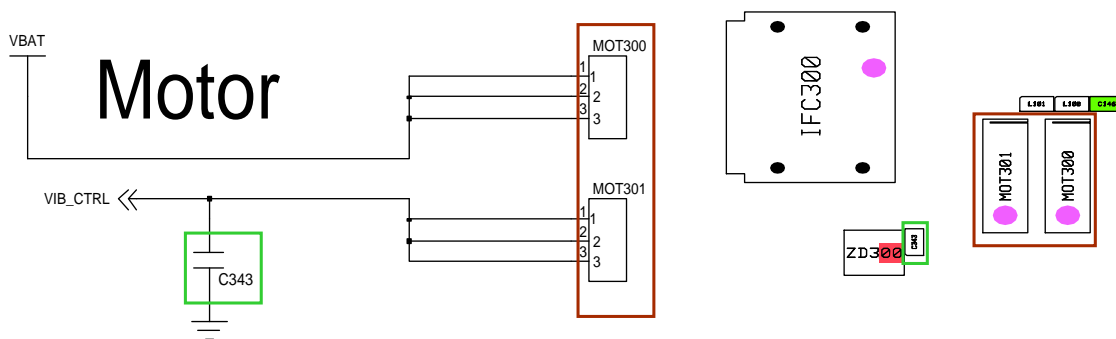
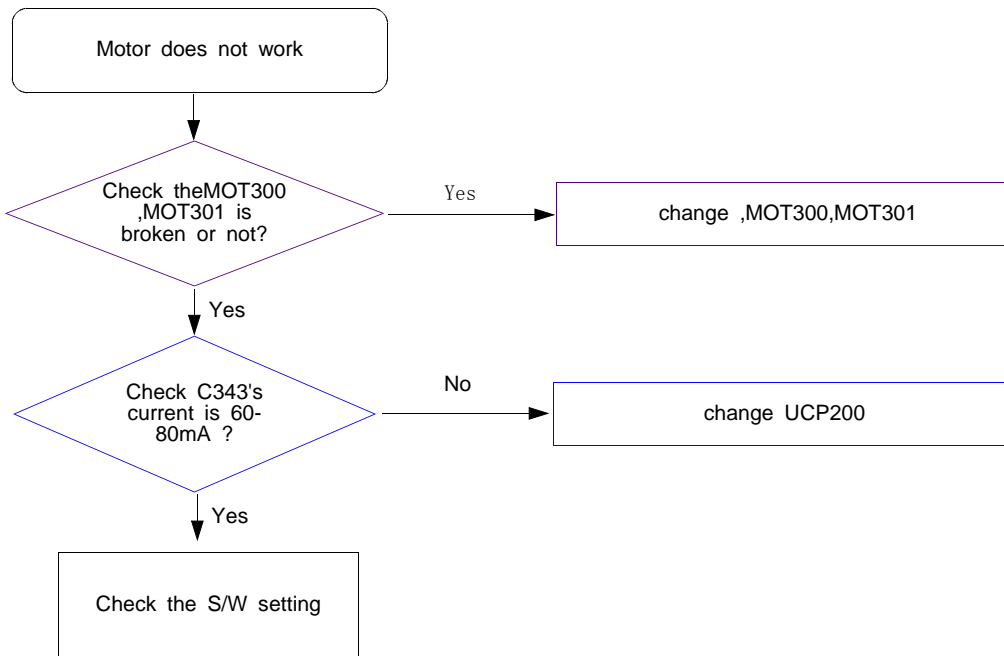
### 8-3-1-7. Stereo Headset Part



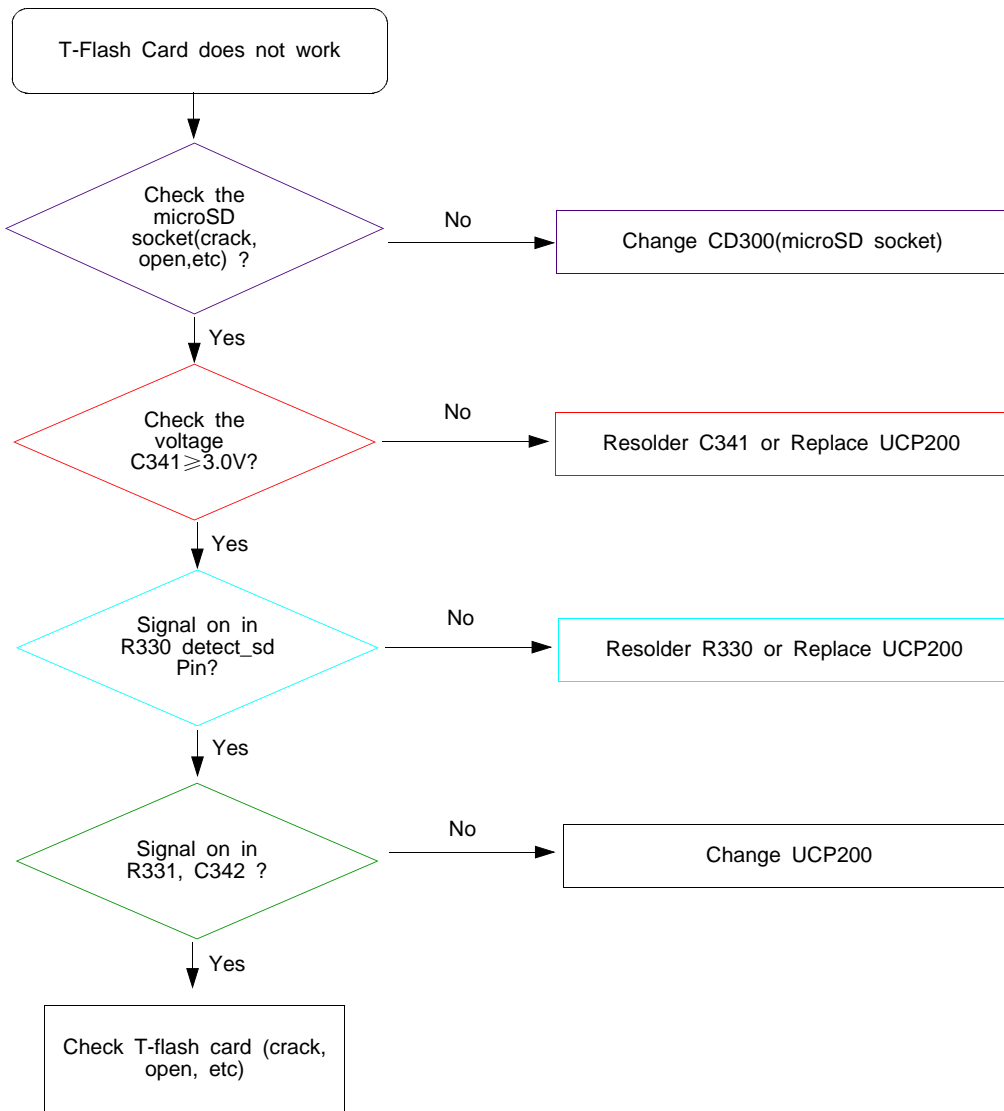


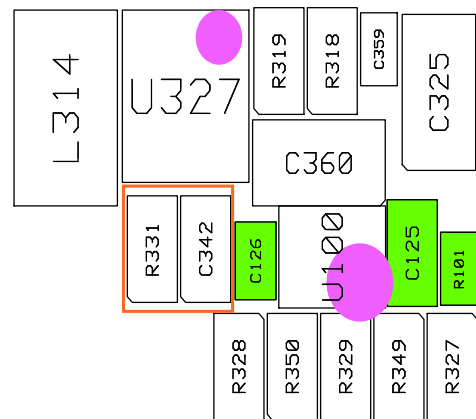
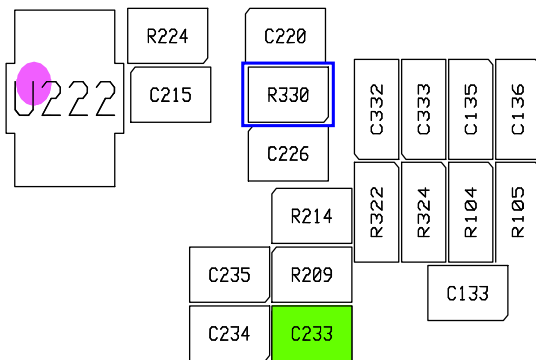
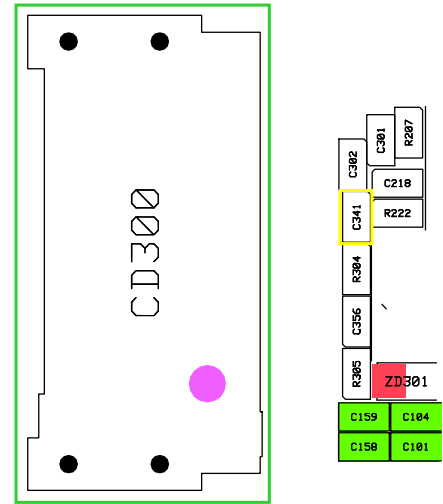
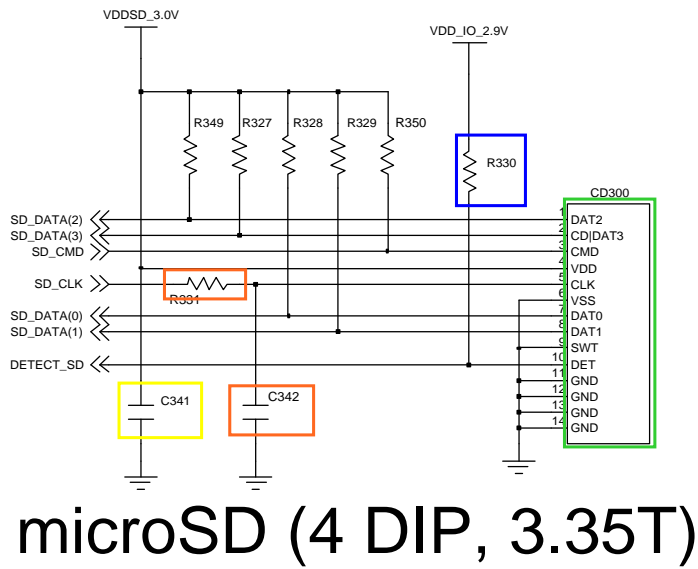


### 8-3-1-08. Motor Part

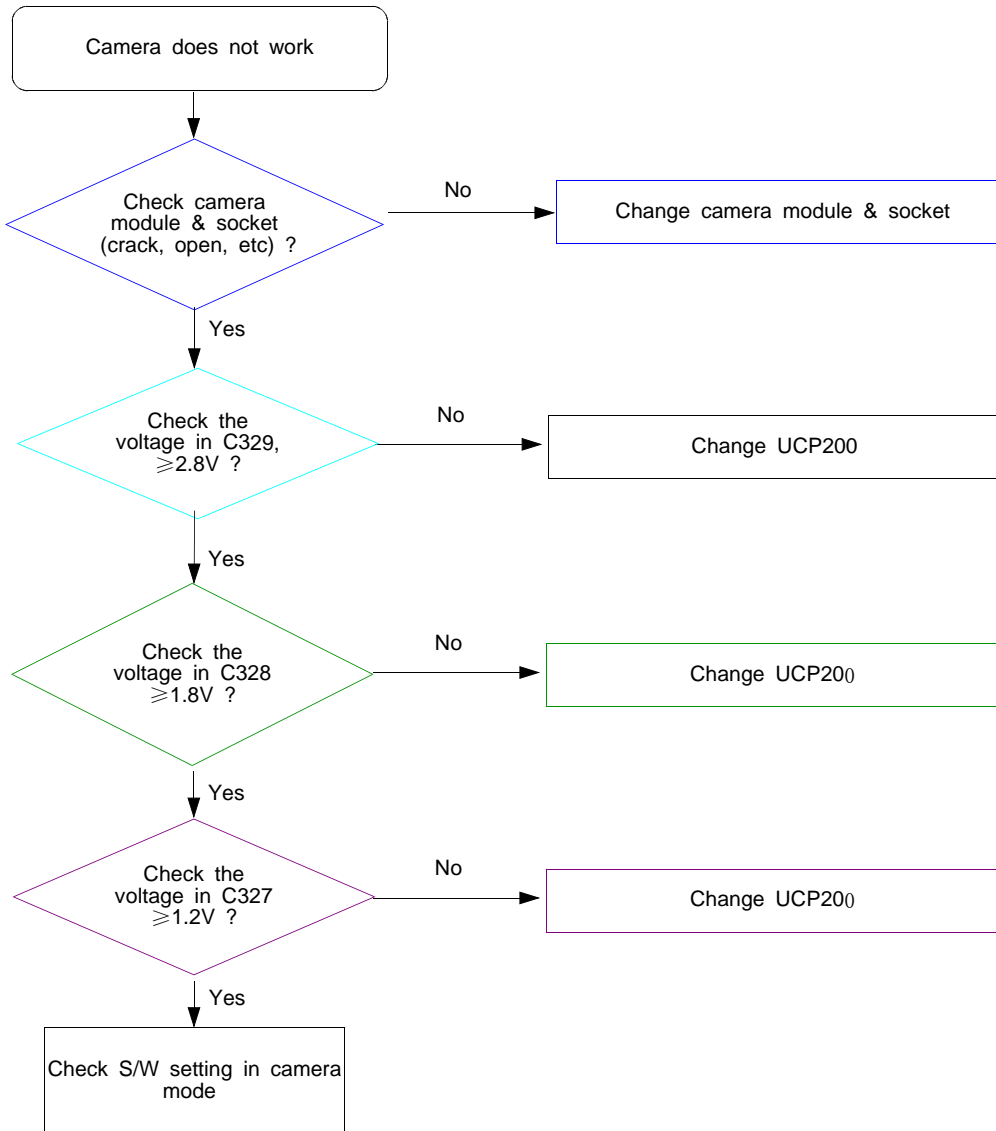


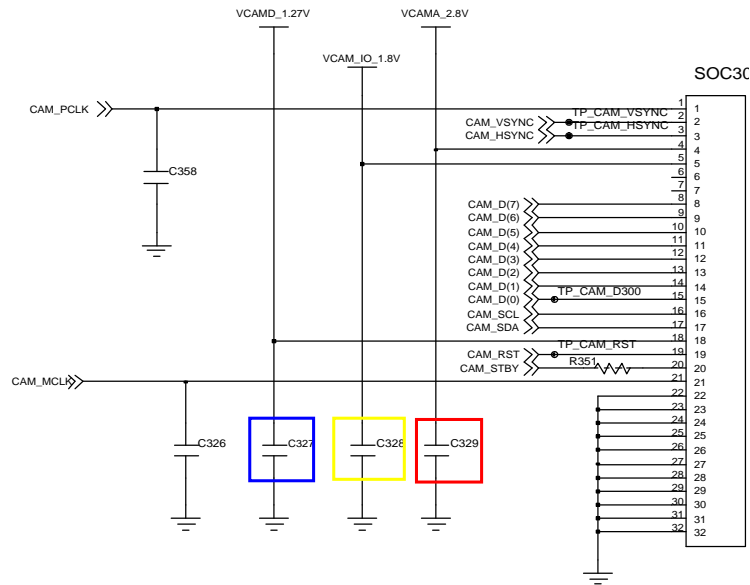
### 8-3-1-9. T-Flash Card Part



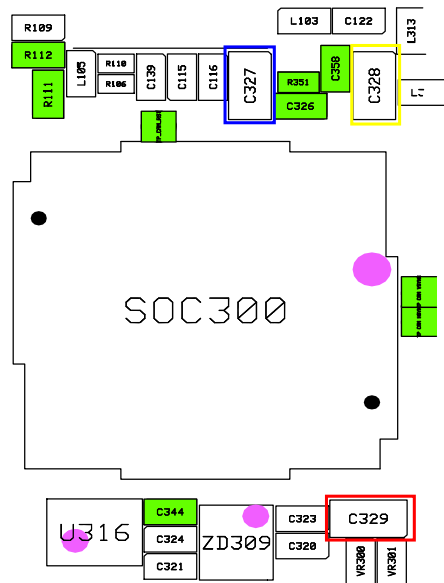


### 8-3-1-10. Camera Part



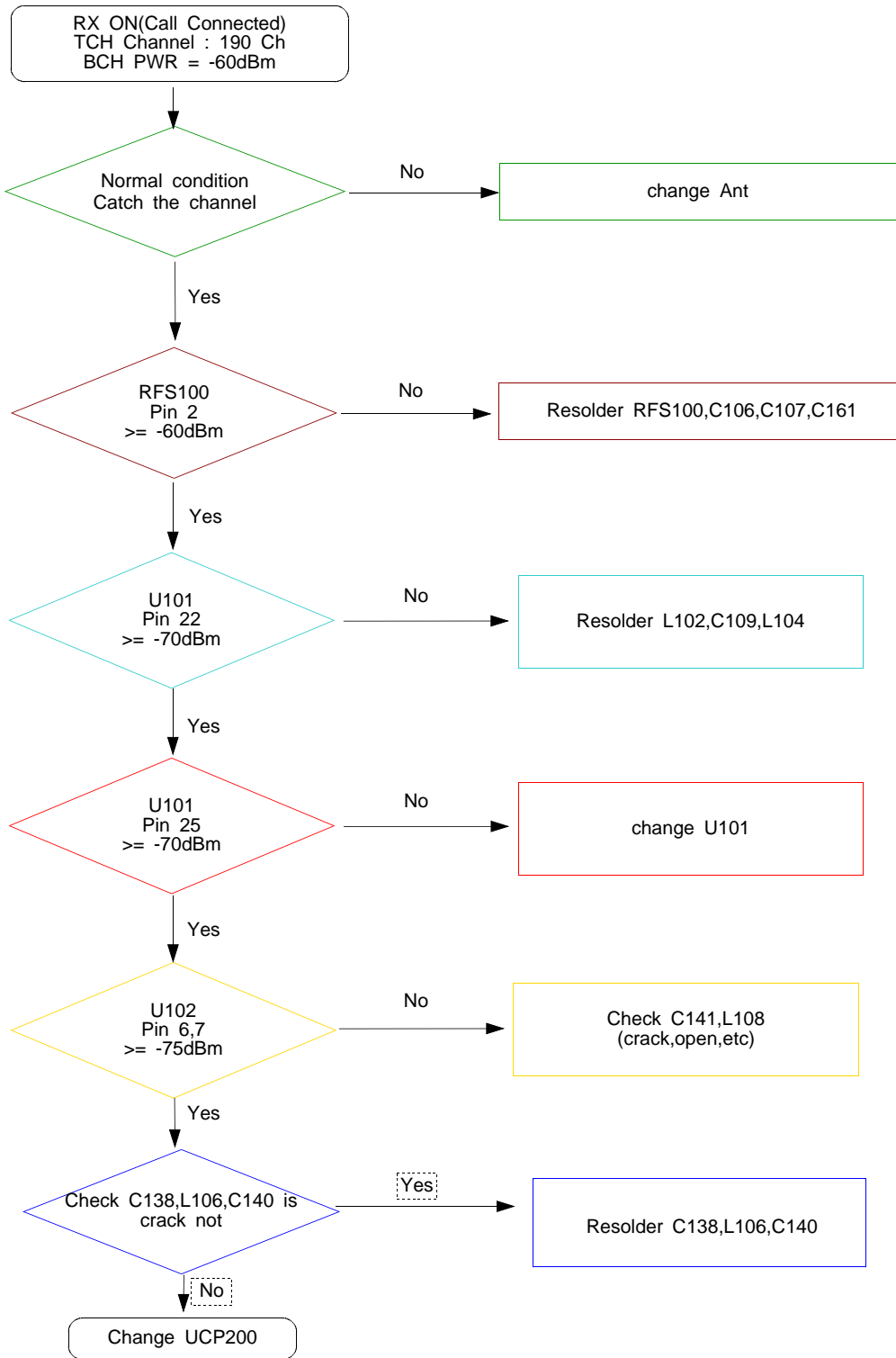


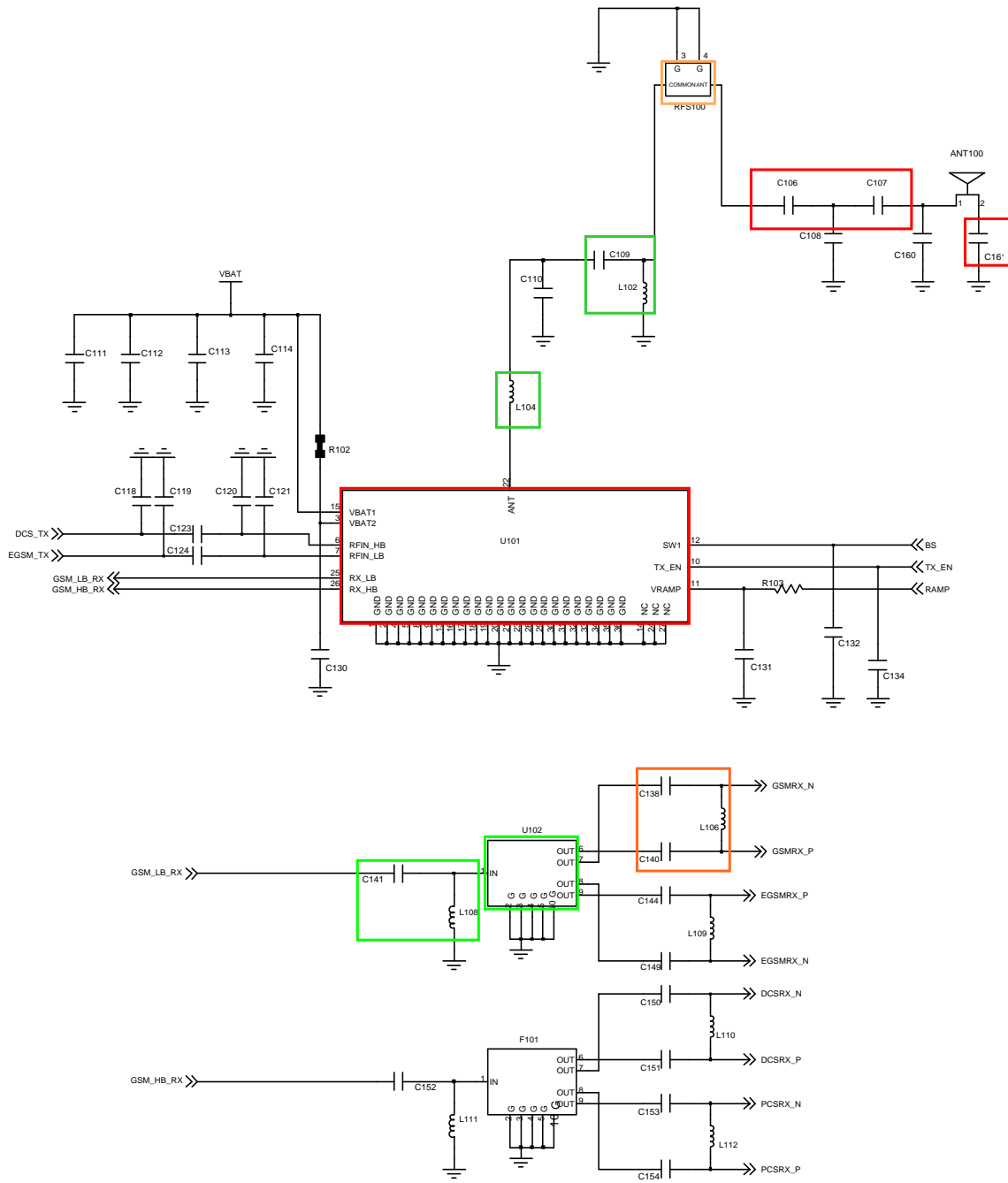
### 3M CAMERA



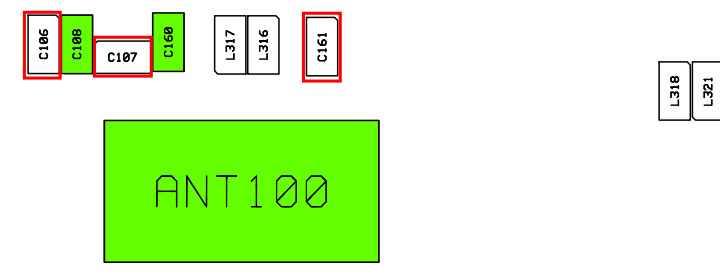
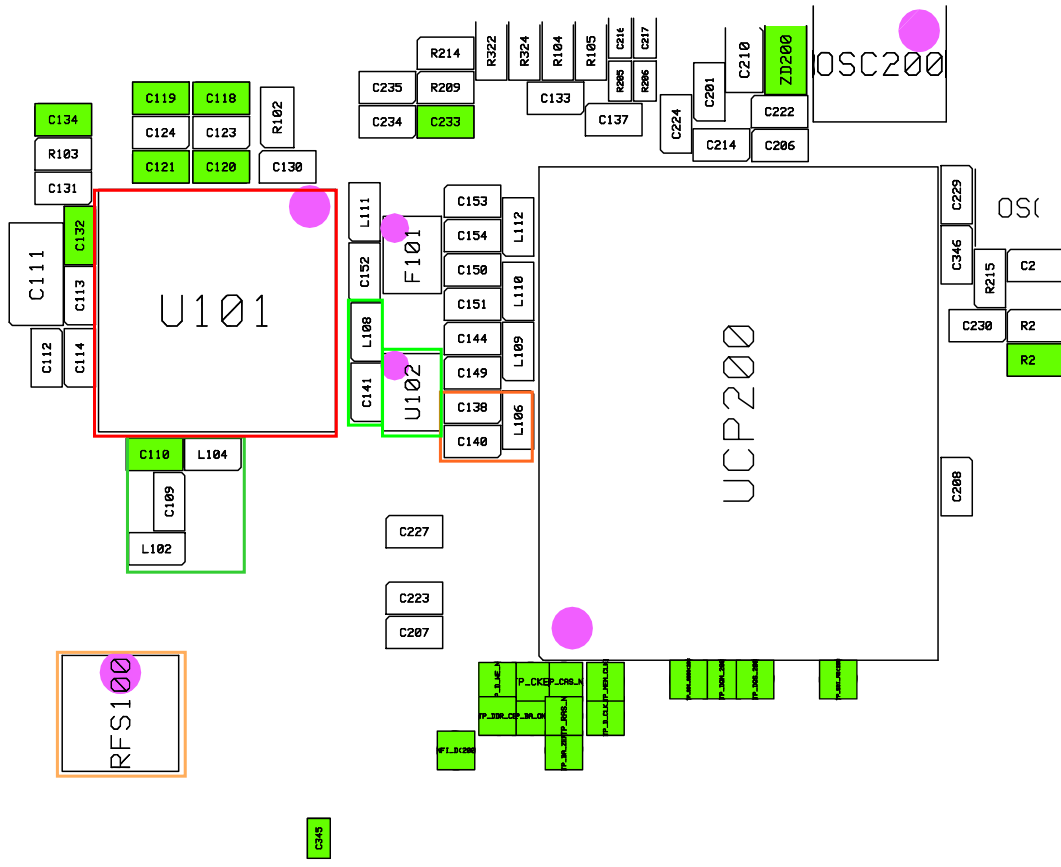
### 8-3-2. RF part

#### 8-3-2-1. GSM850 Receiver



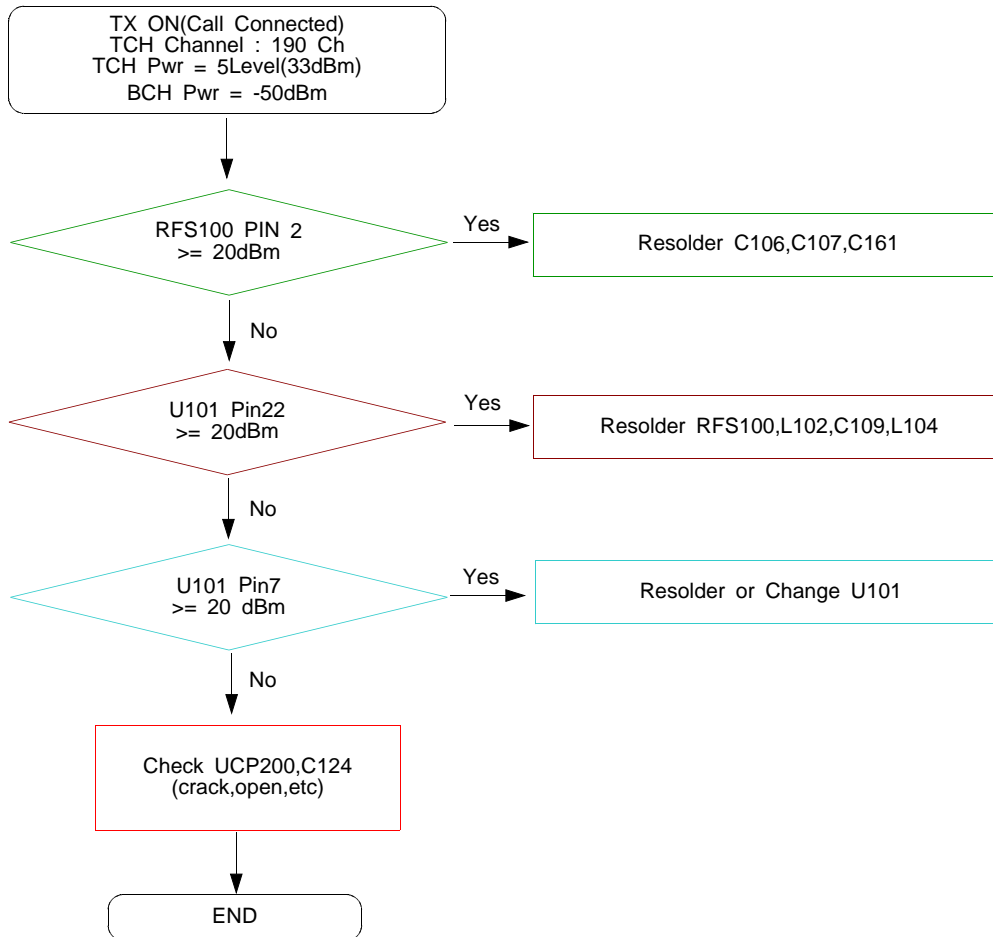


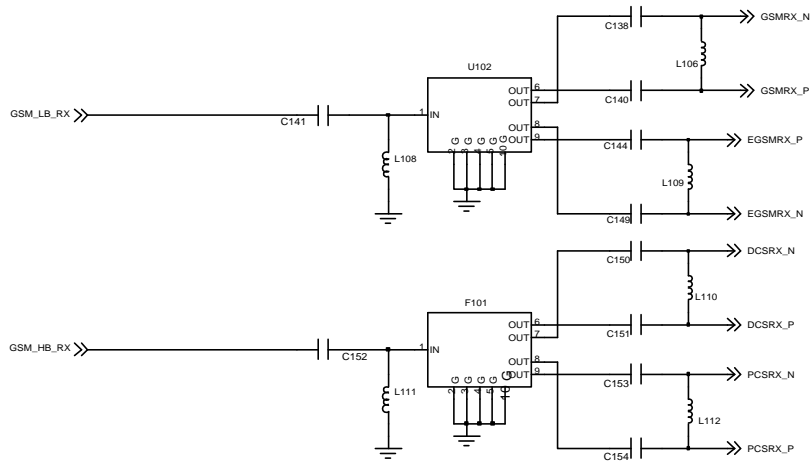
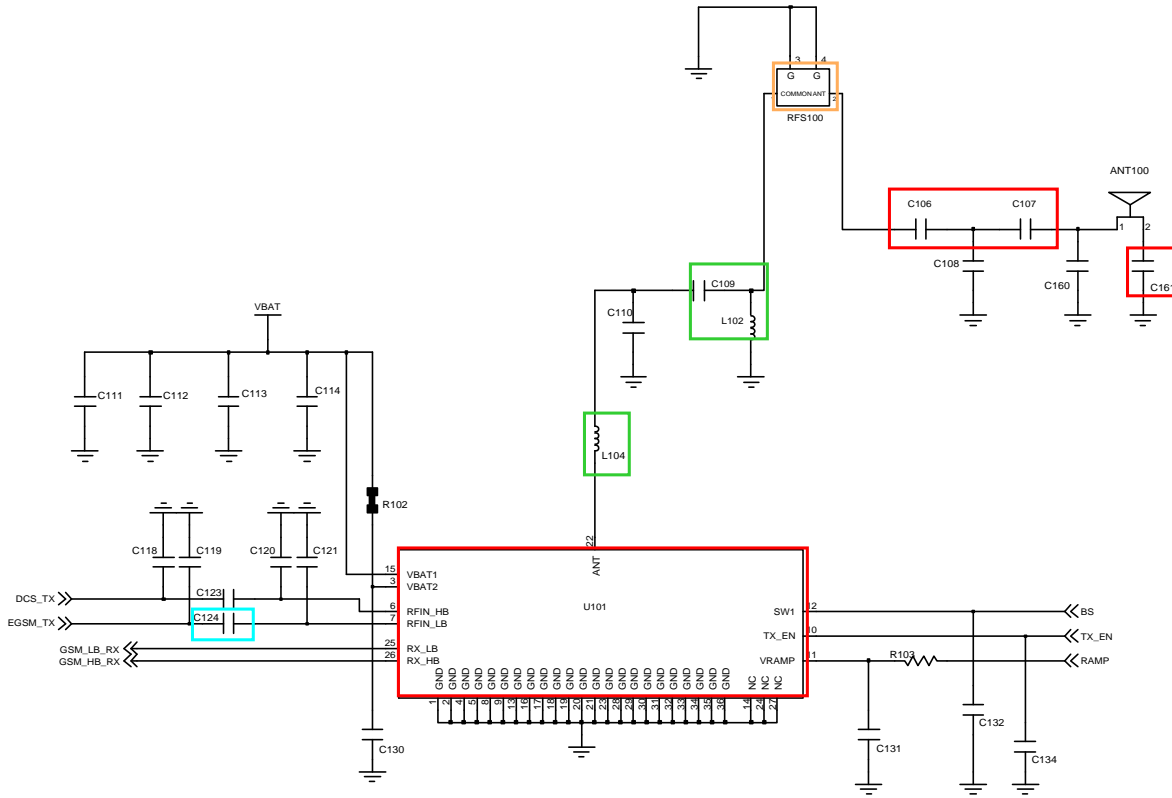
## 2G QUAD RF



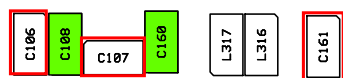
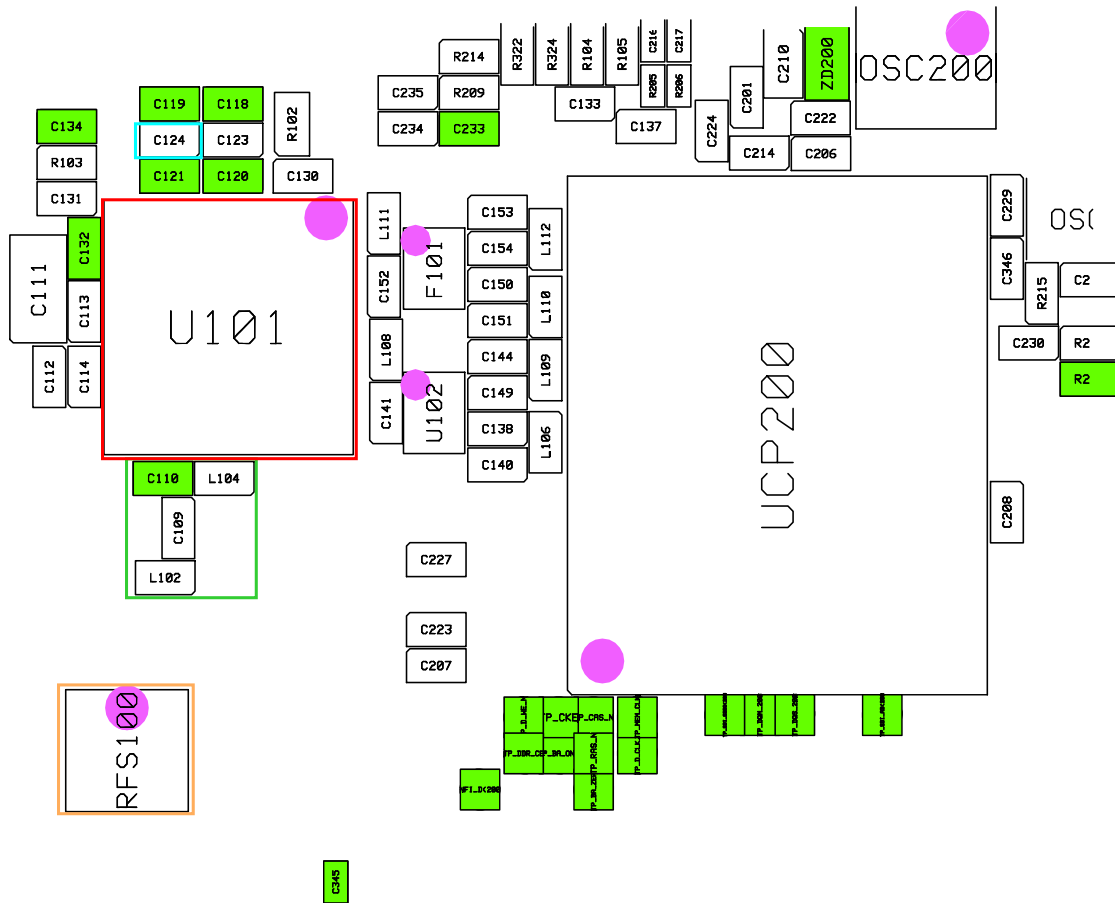


### 8-3-2-2. GSM850 Transmitter

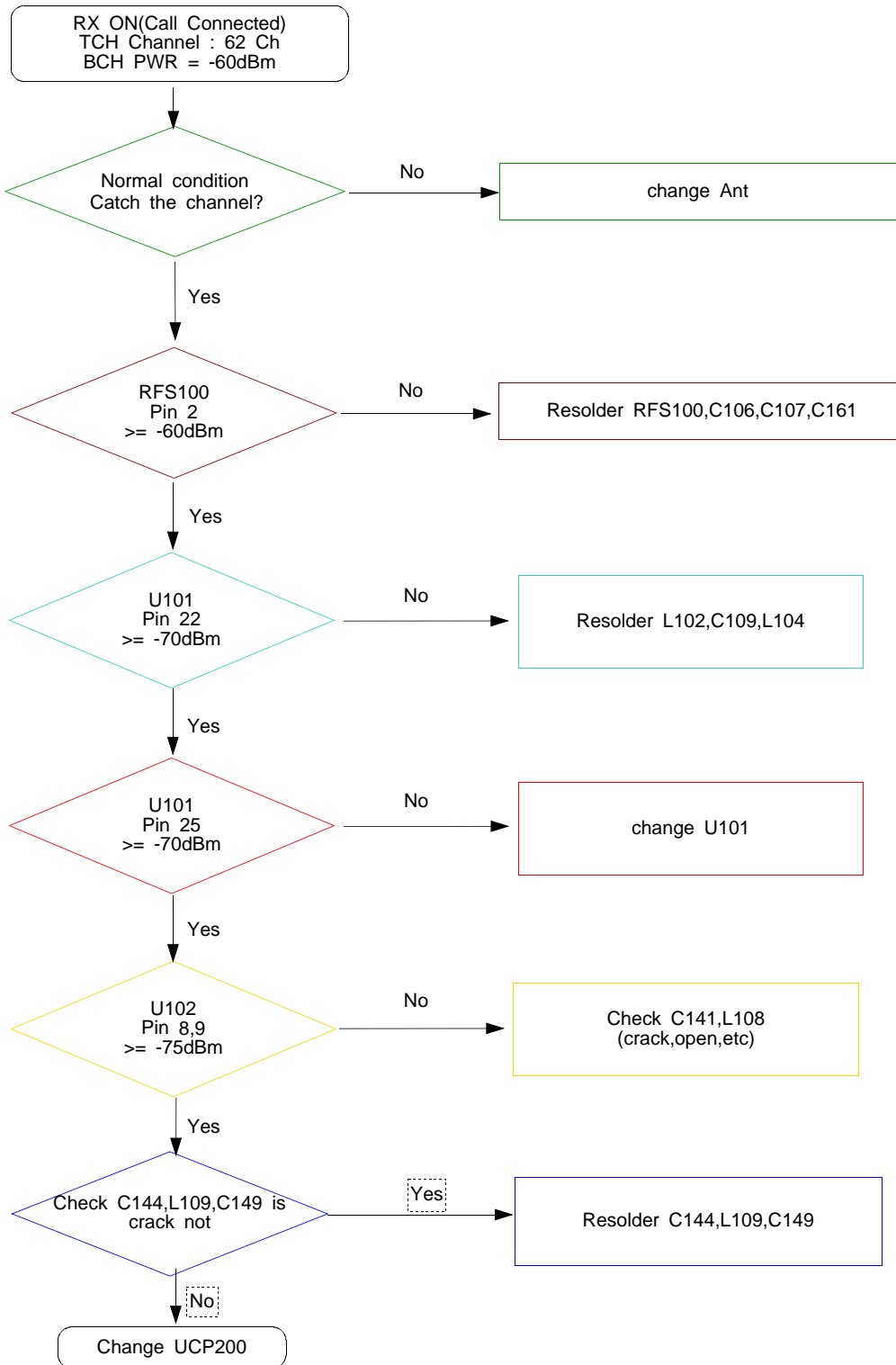


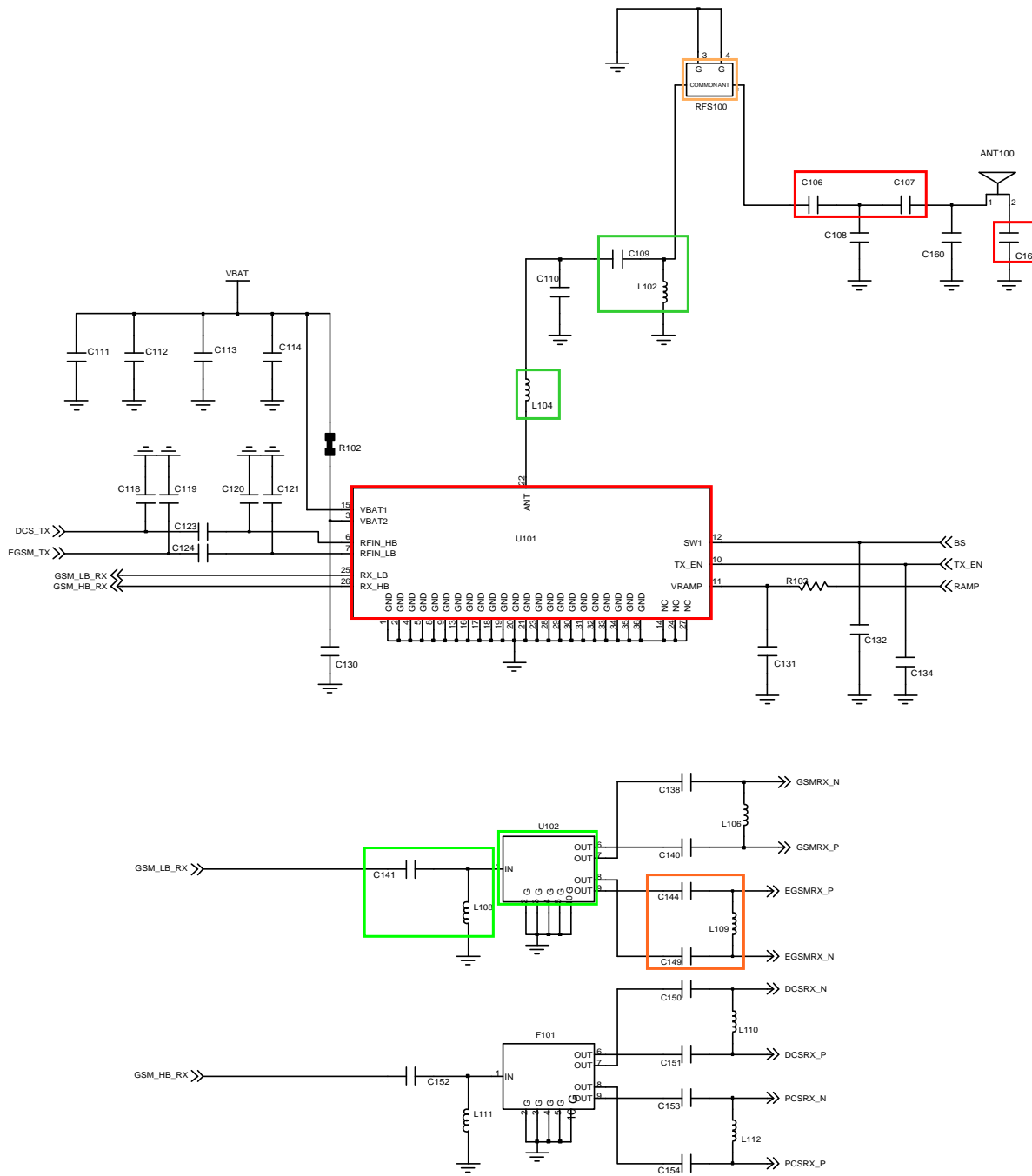


## 2G QUAD RF

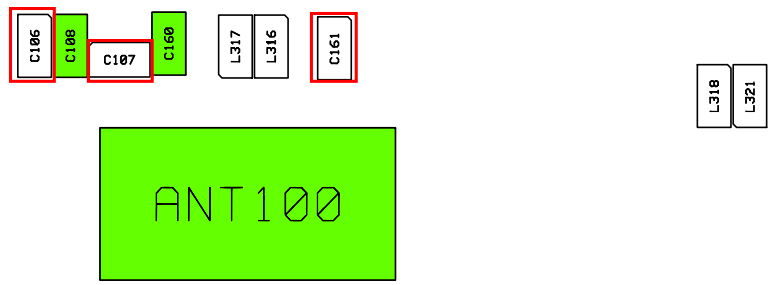
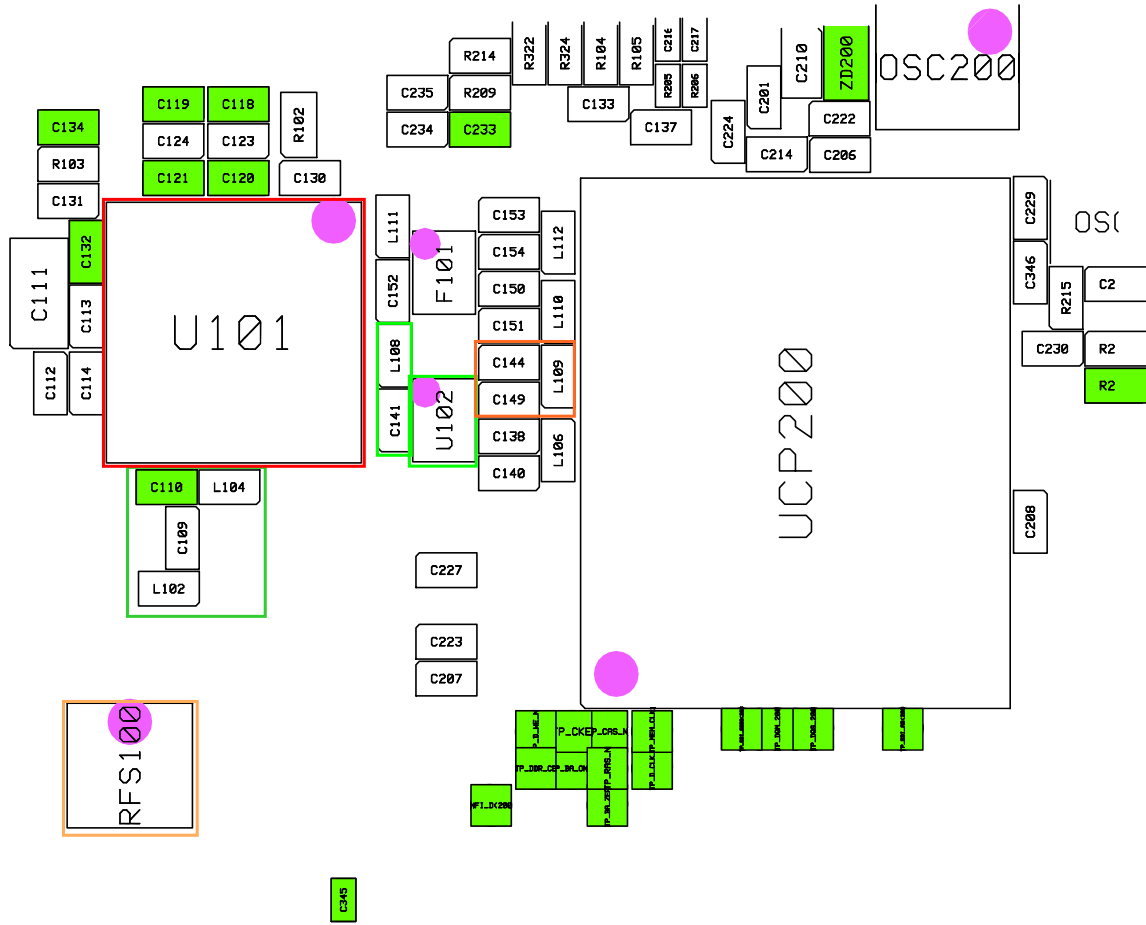


### 8-3-2-3. GSM900 Receiver

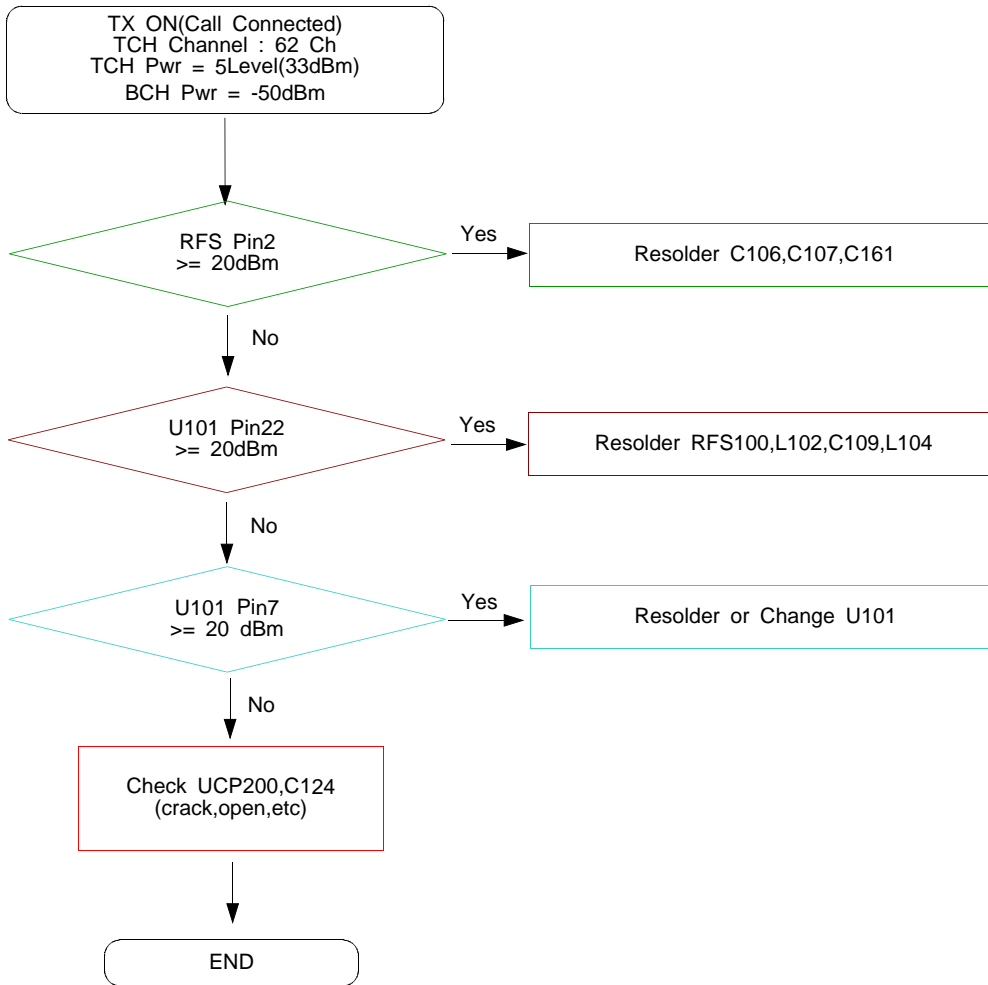


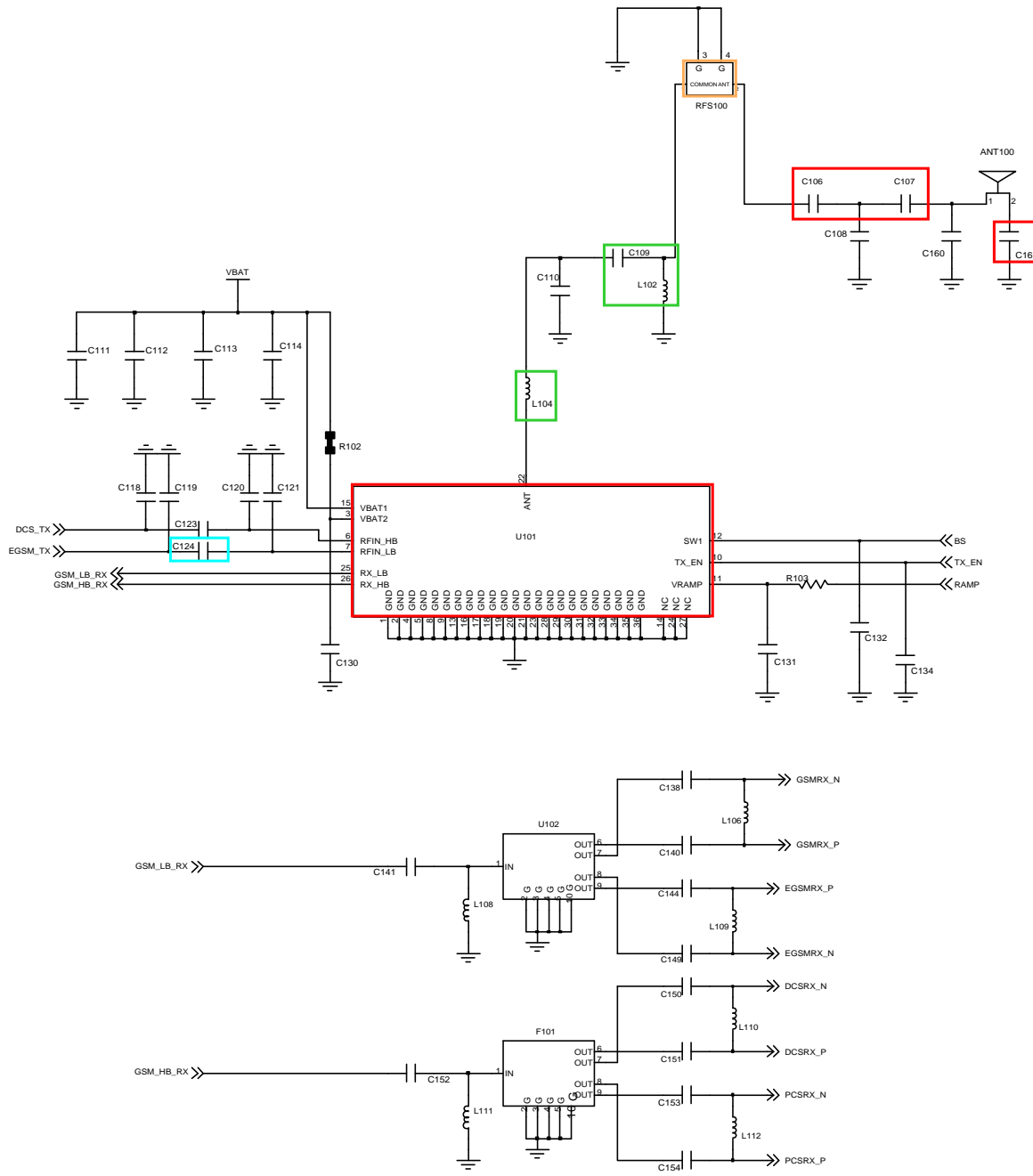


## 2G QUAD RF



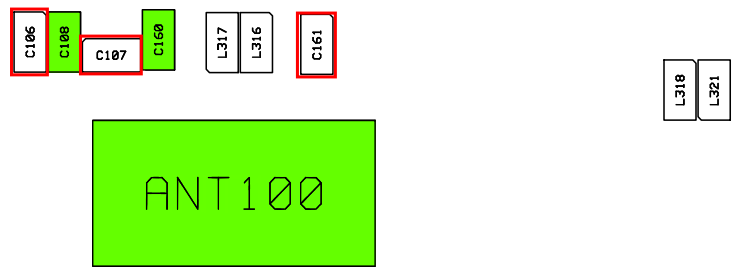
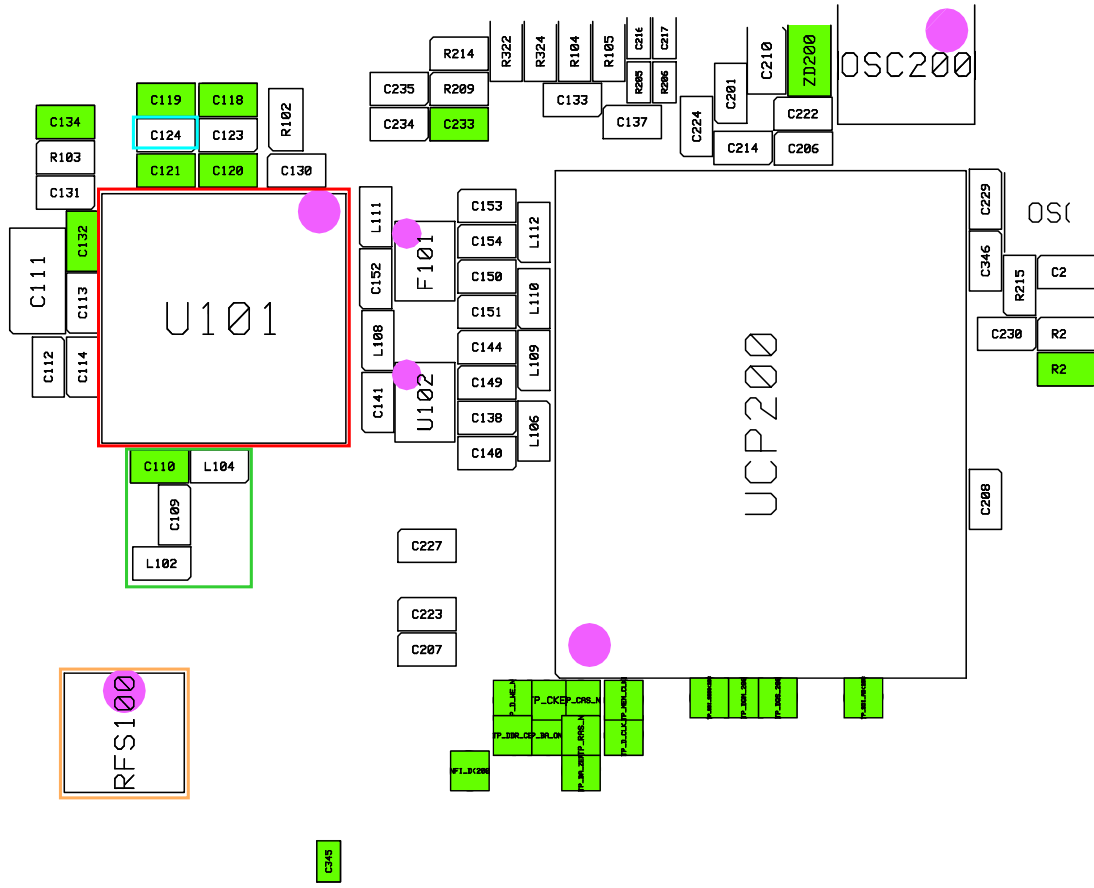
### 8-3-2-4. GSM900 Transmitter



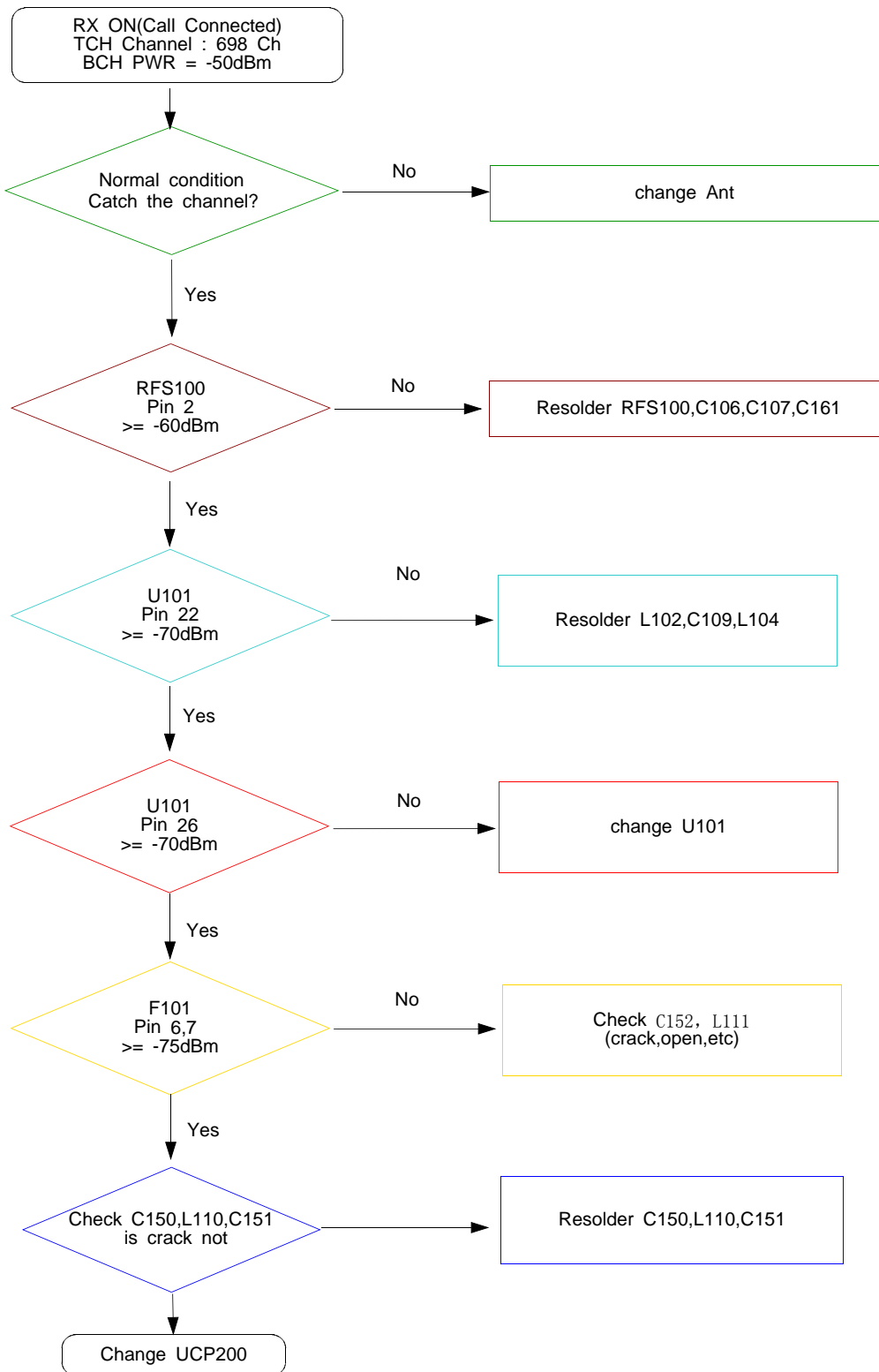


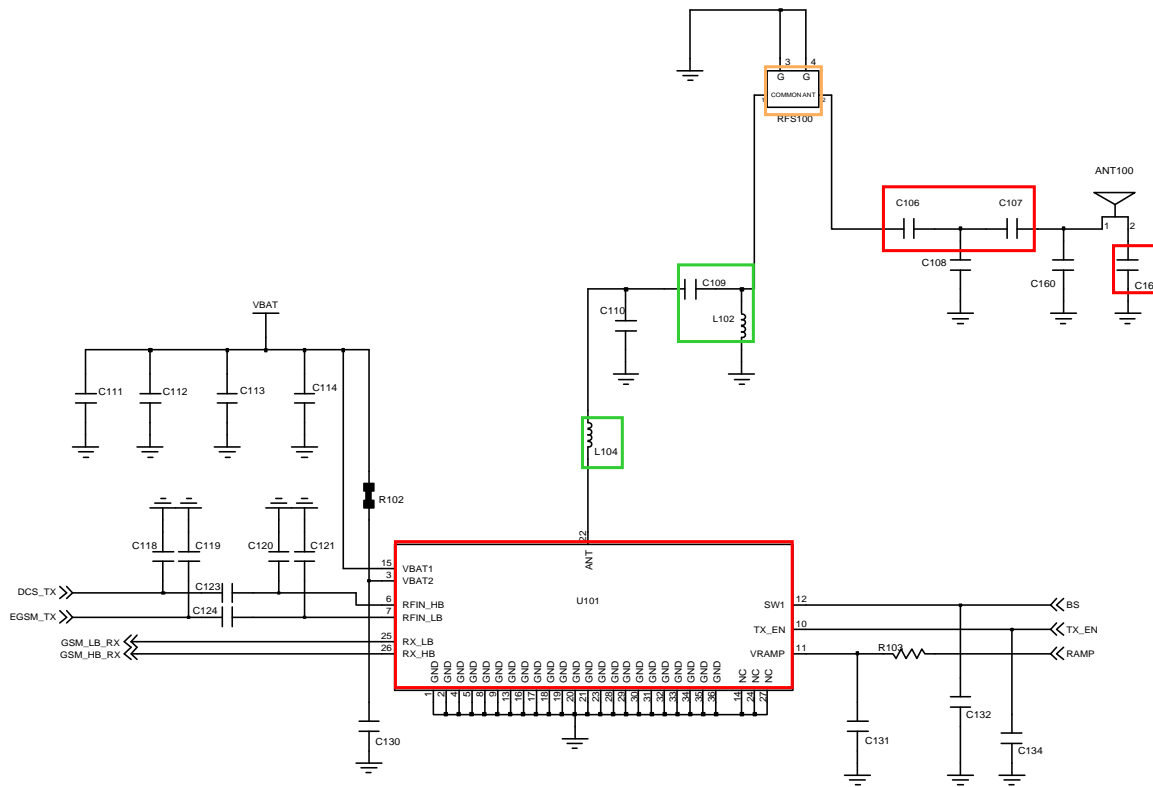
## 2G QUAD RF



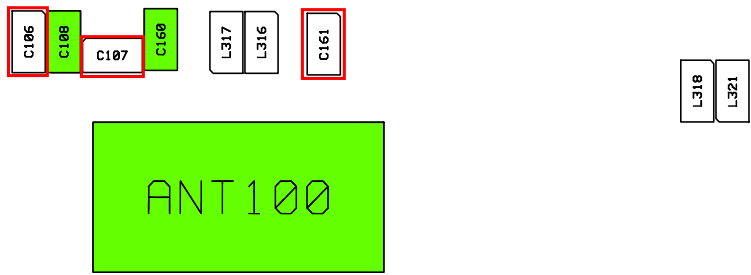
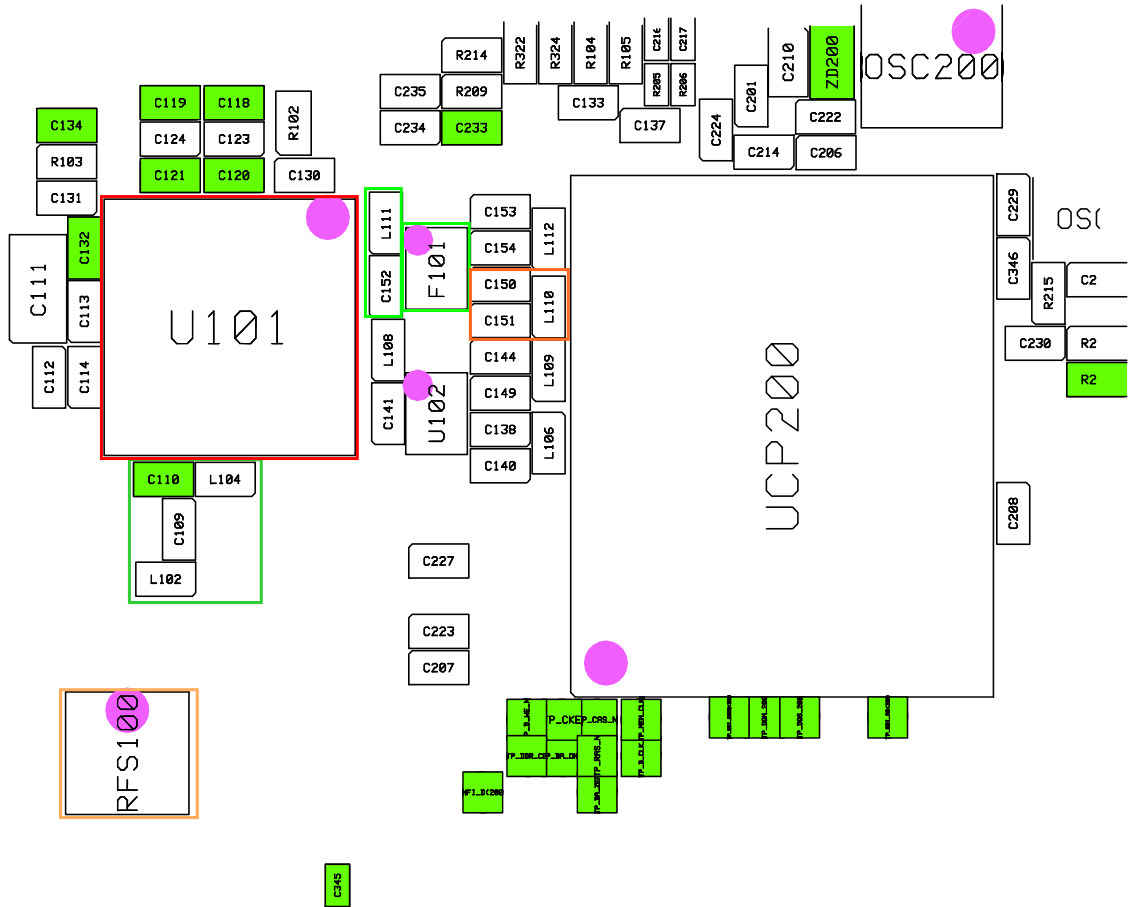


### 8-3-2-5. DCS Receiver

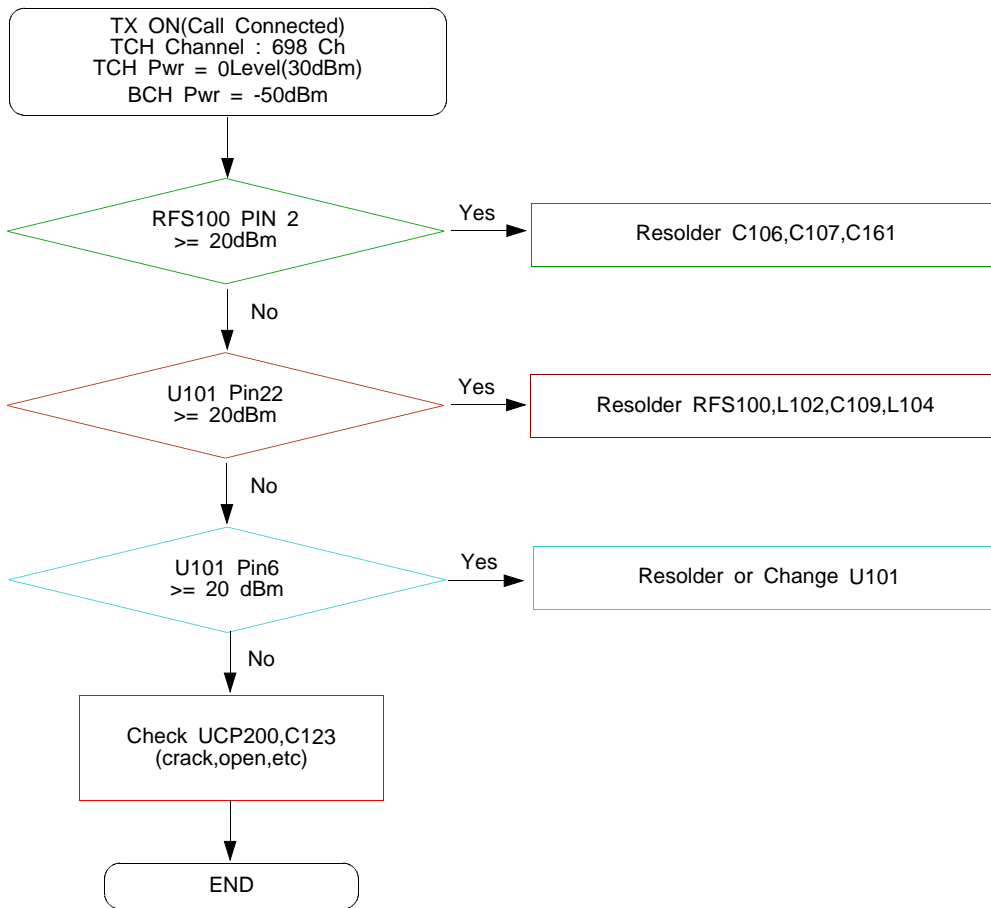


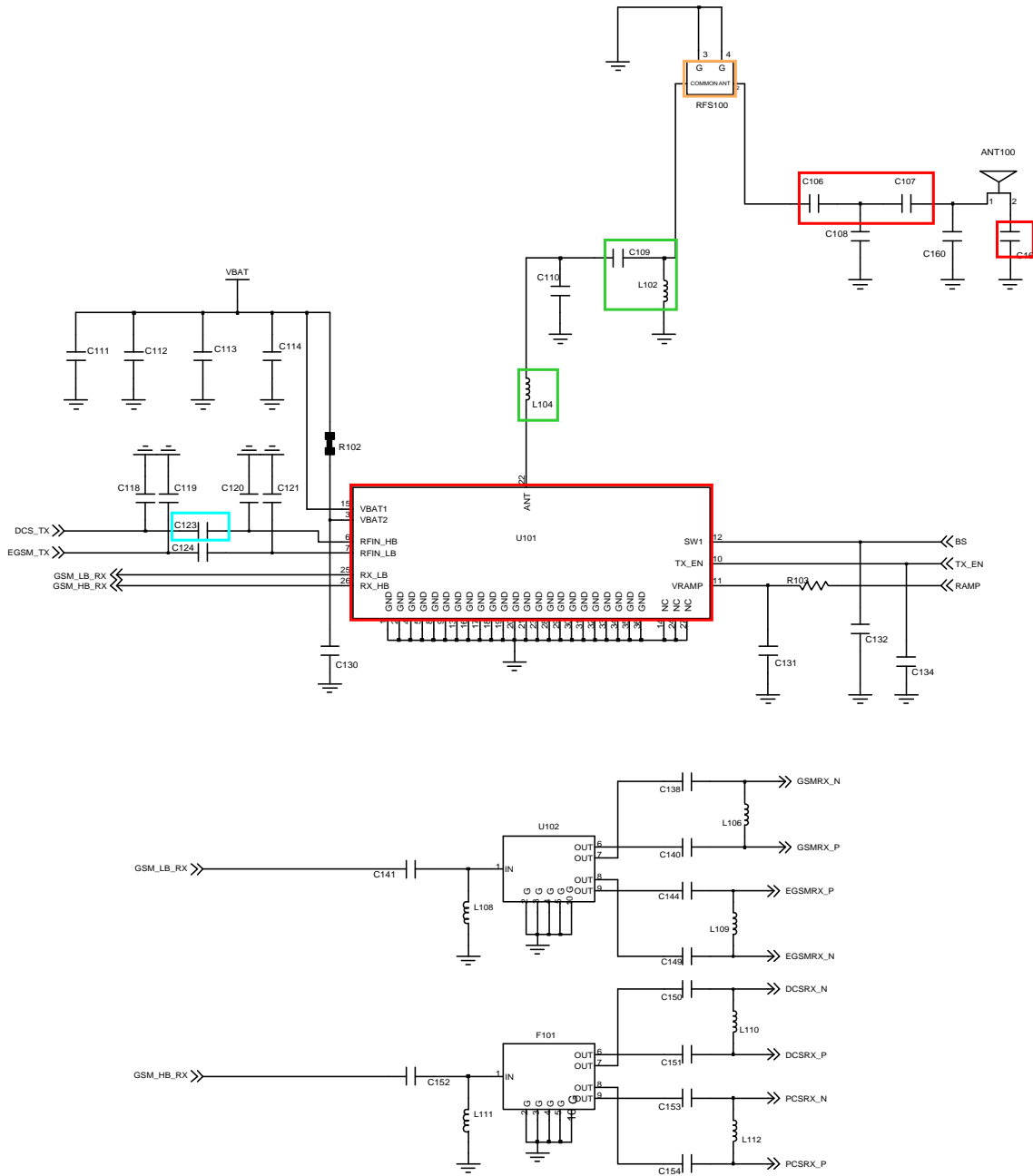


## 2G QUAD RF

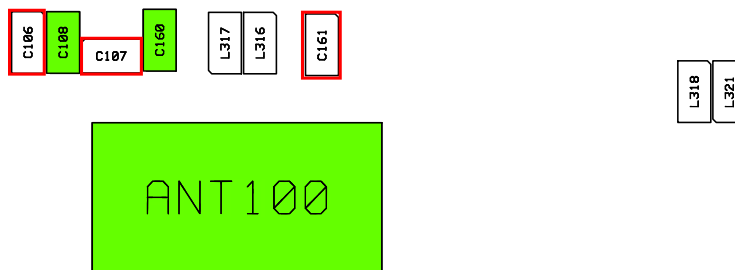
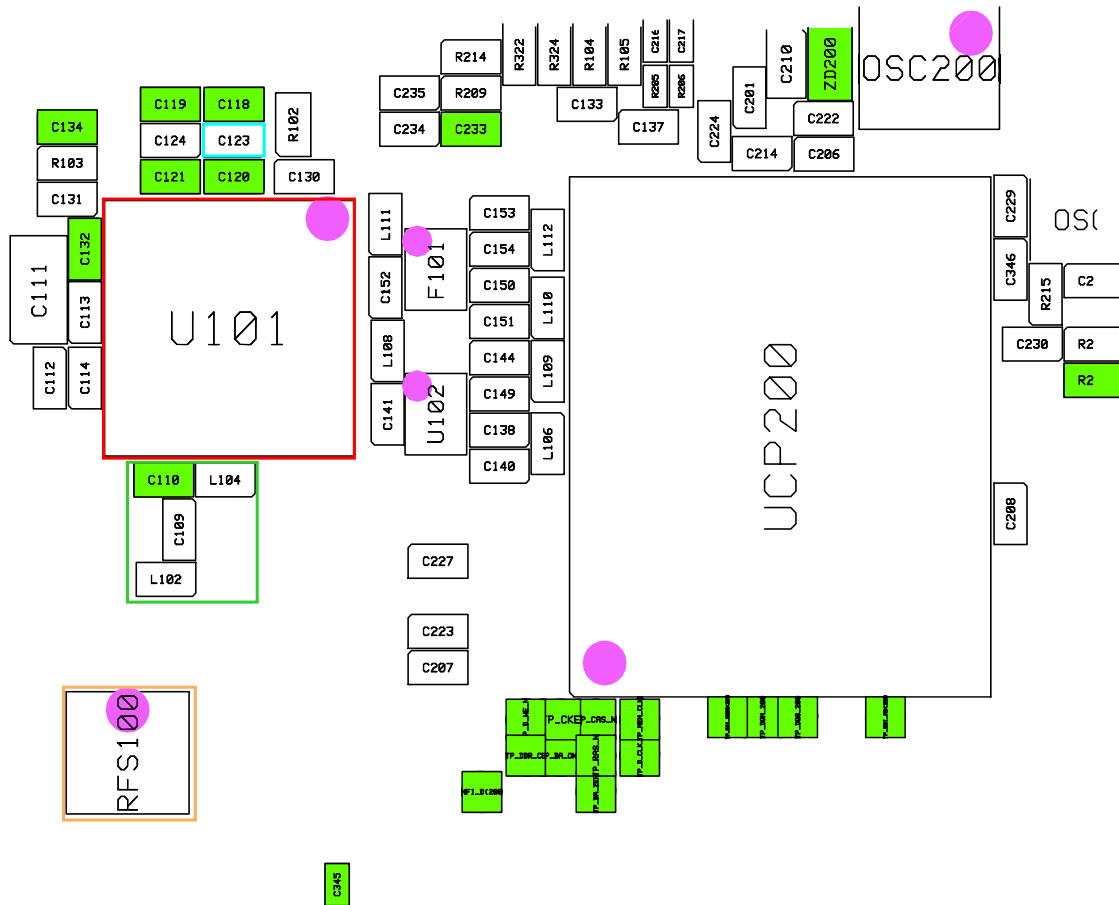


### 8-3-2-6. DCS Transmitter

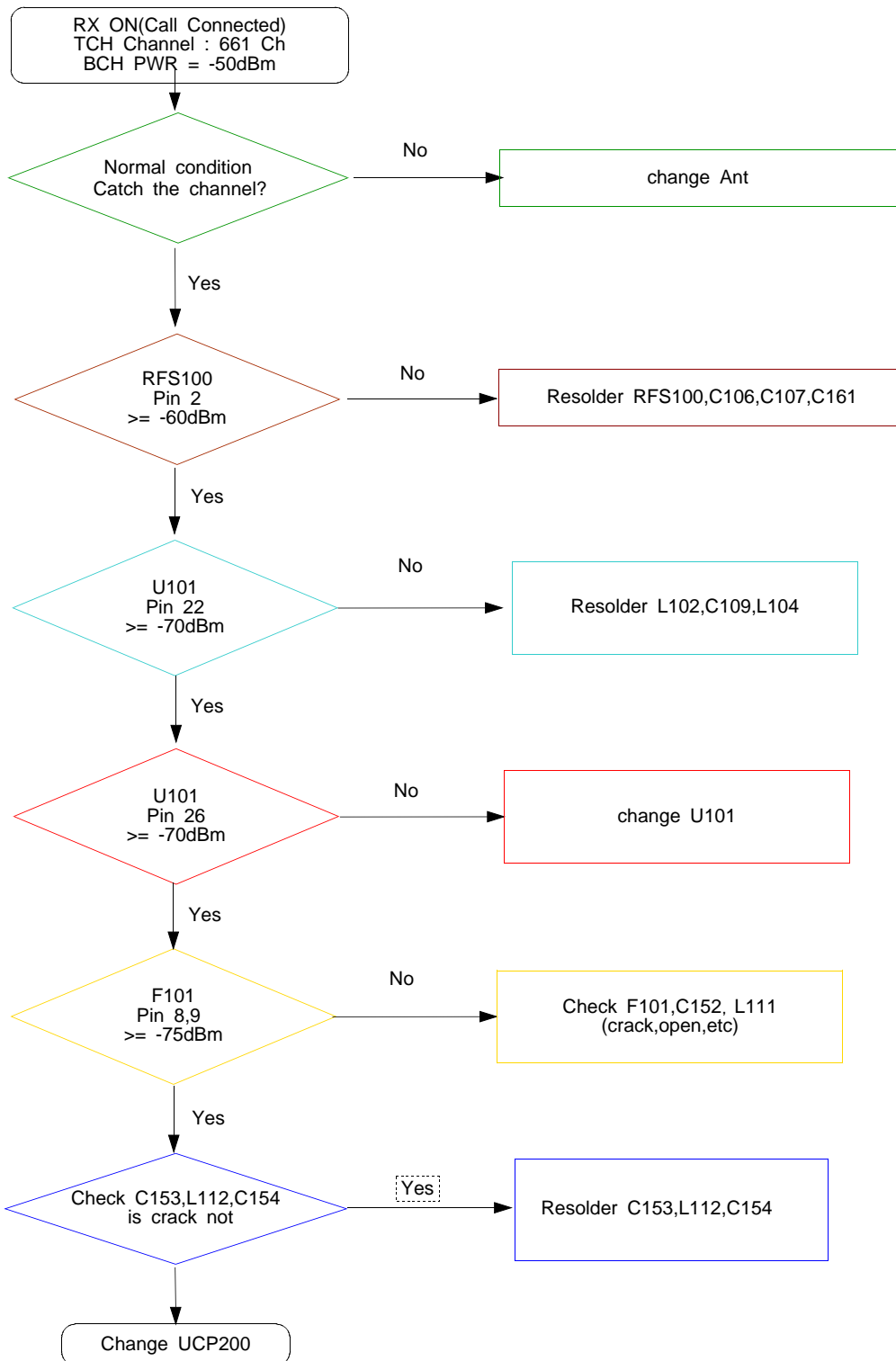




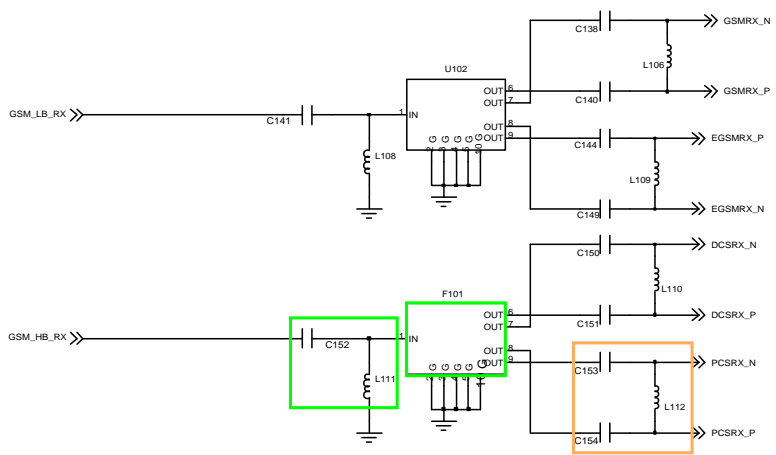
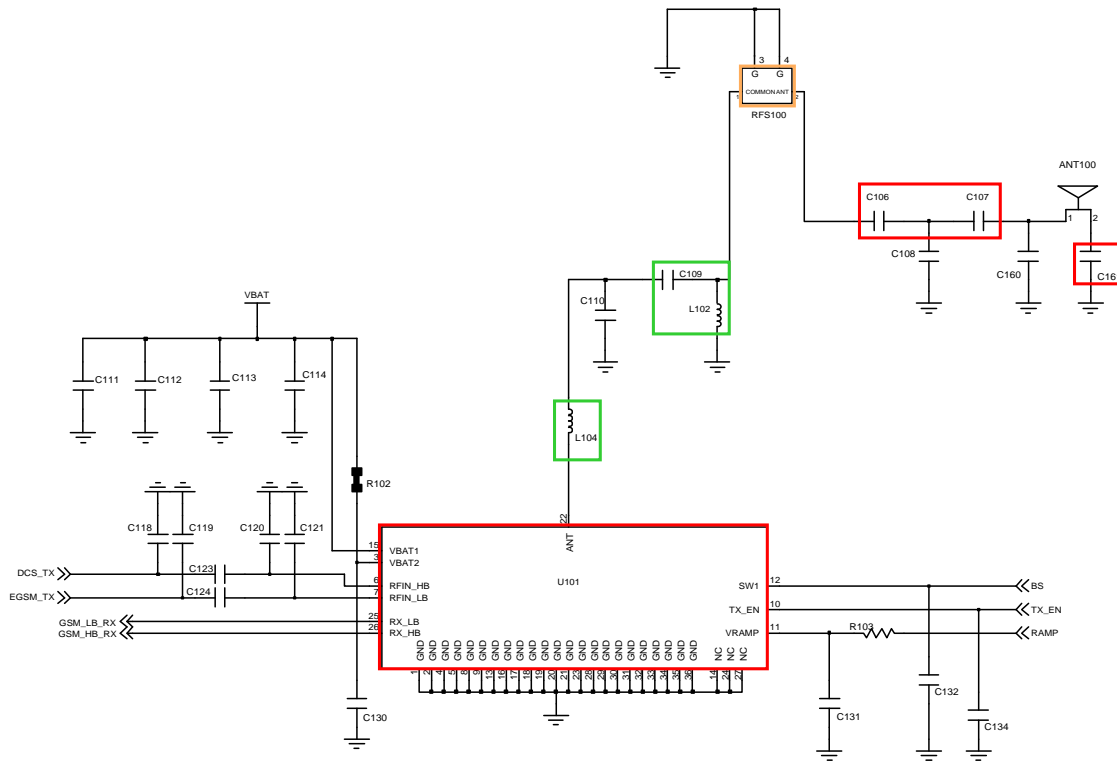
## 2G QUAD RF



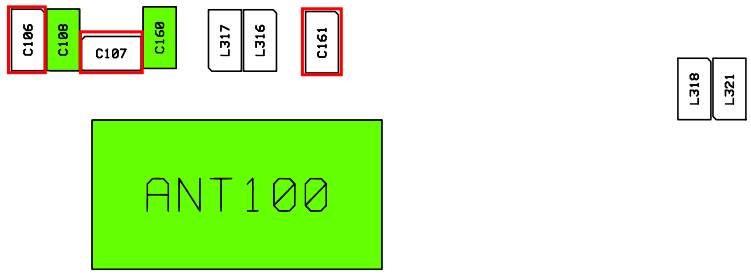
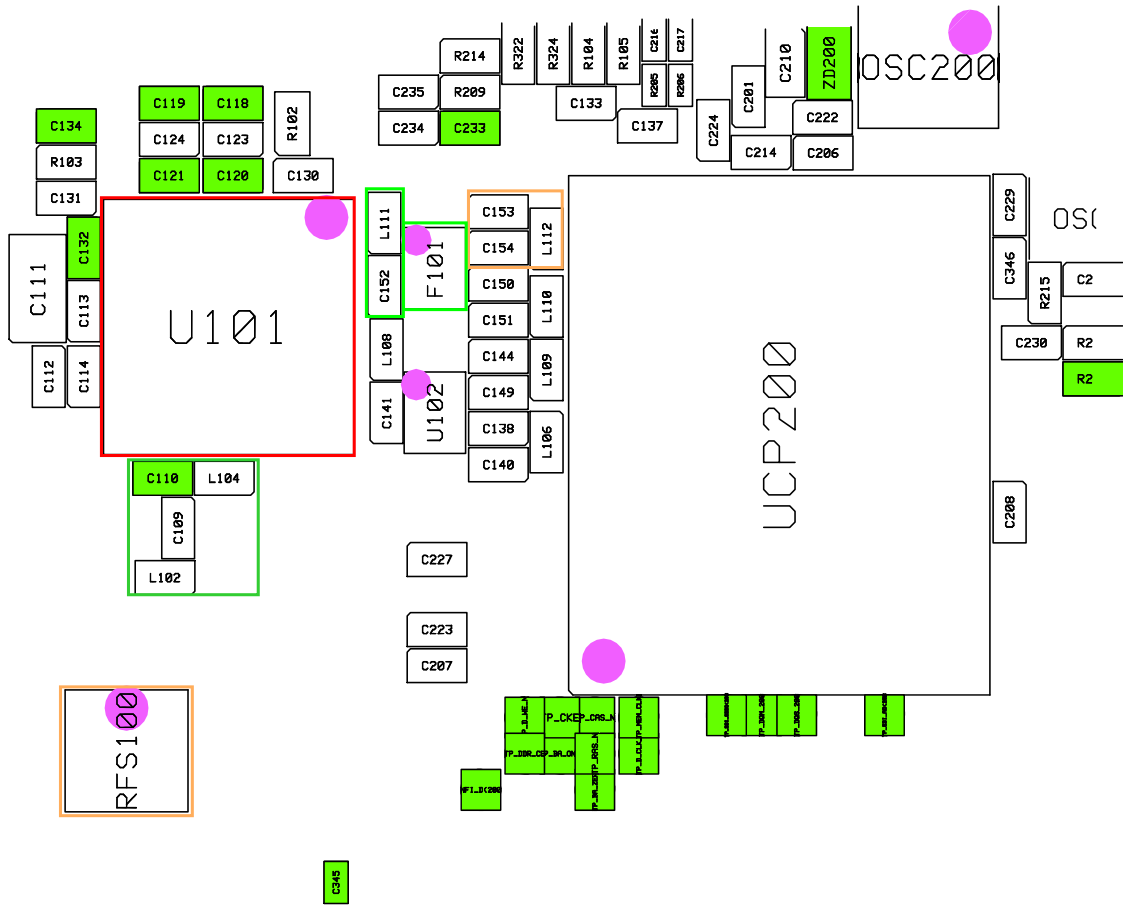
### 8-3-2-7. PCS Receiver



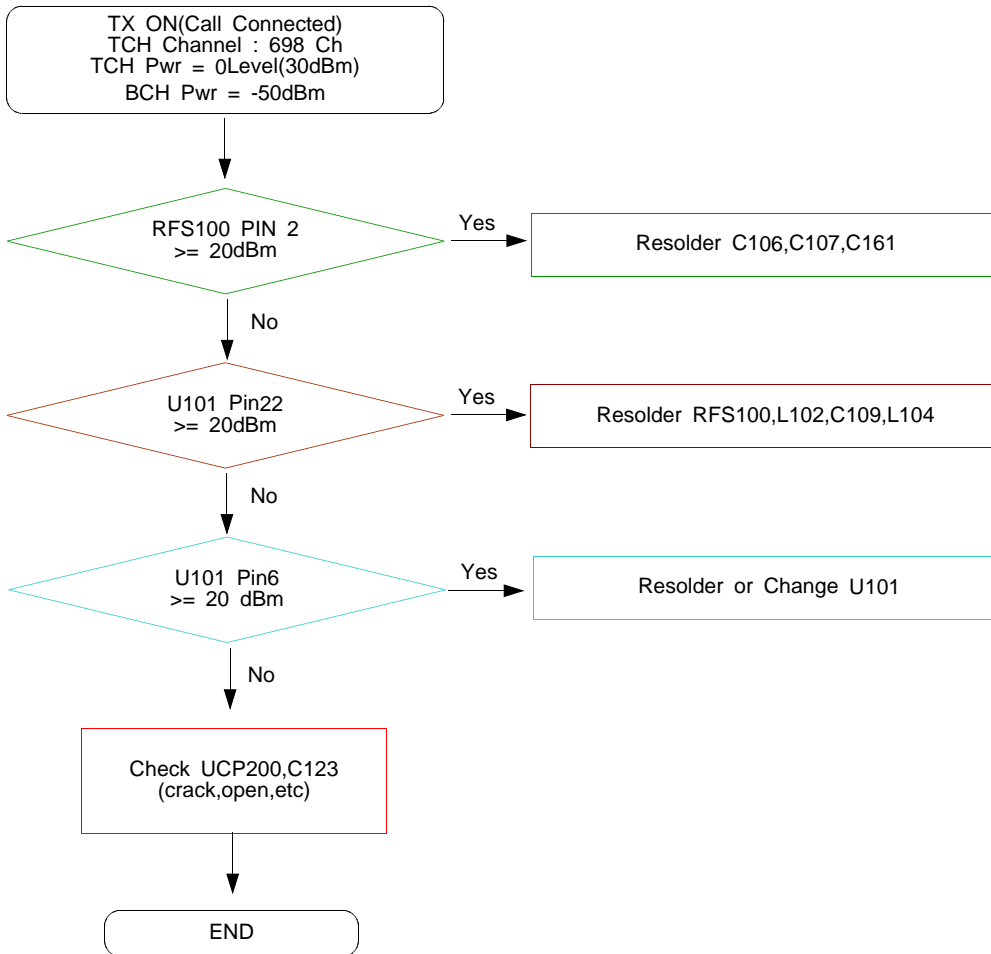


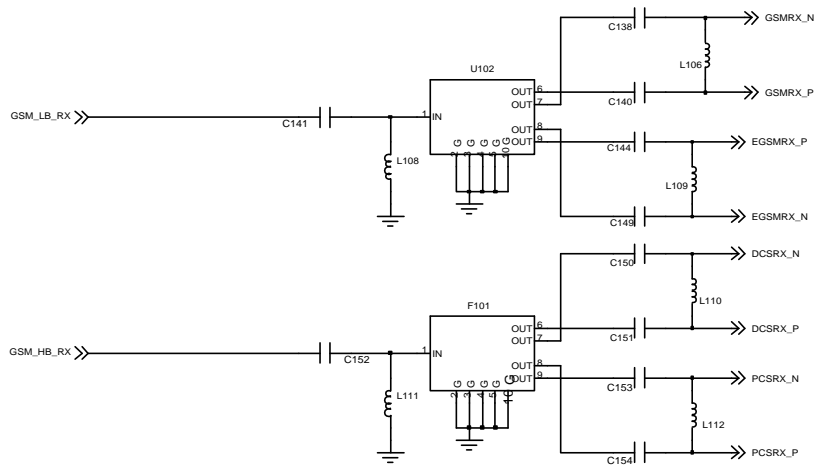
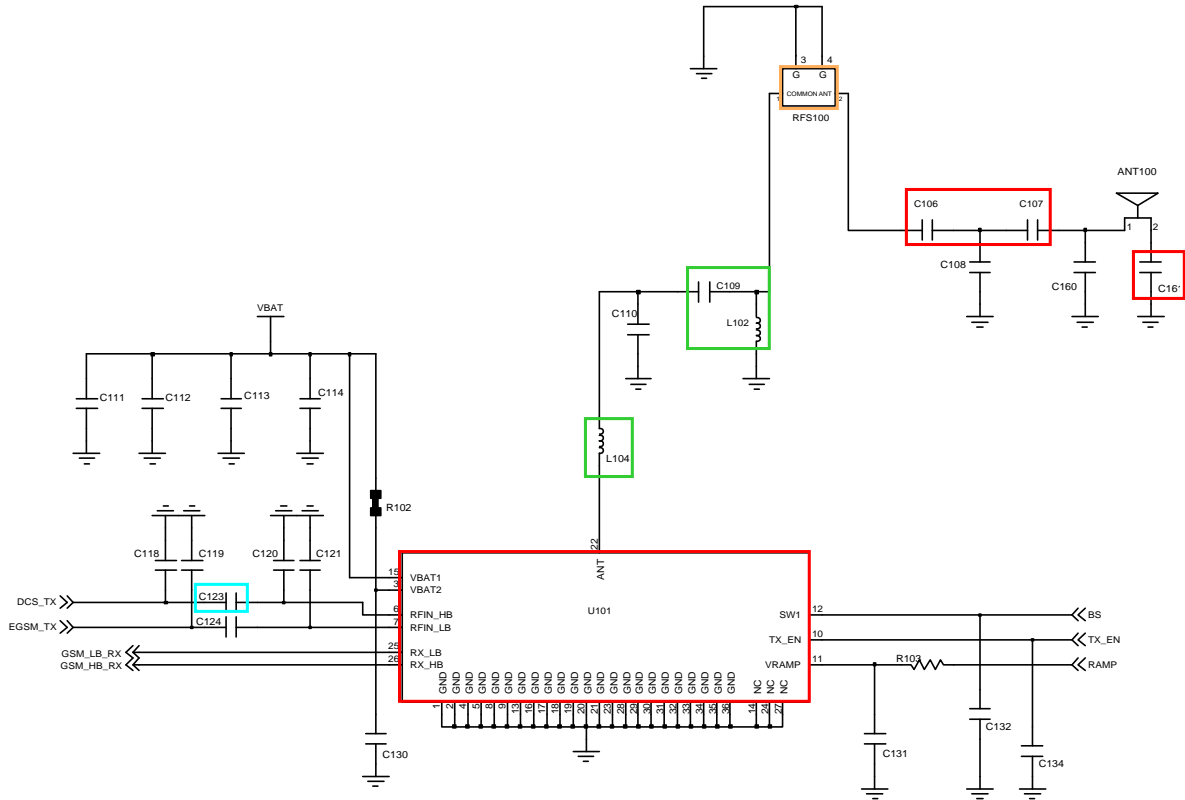


## 2G QUAD RF

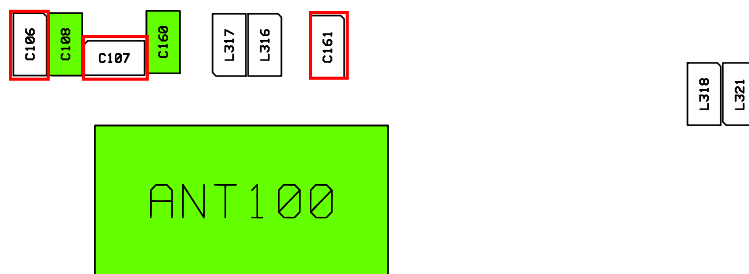
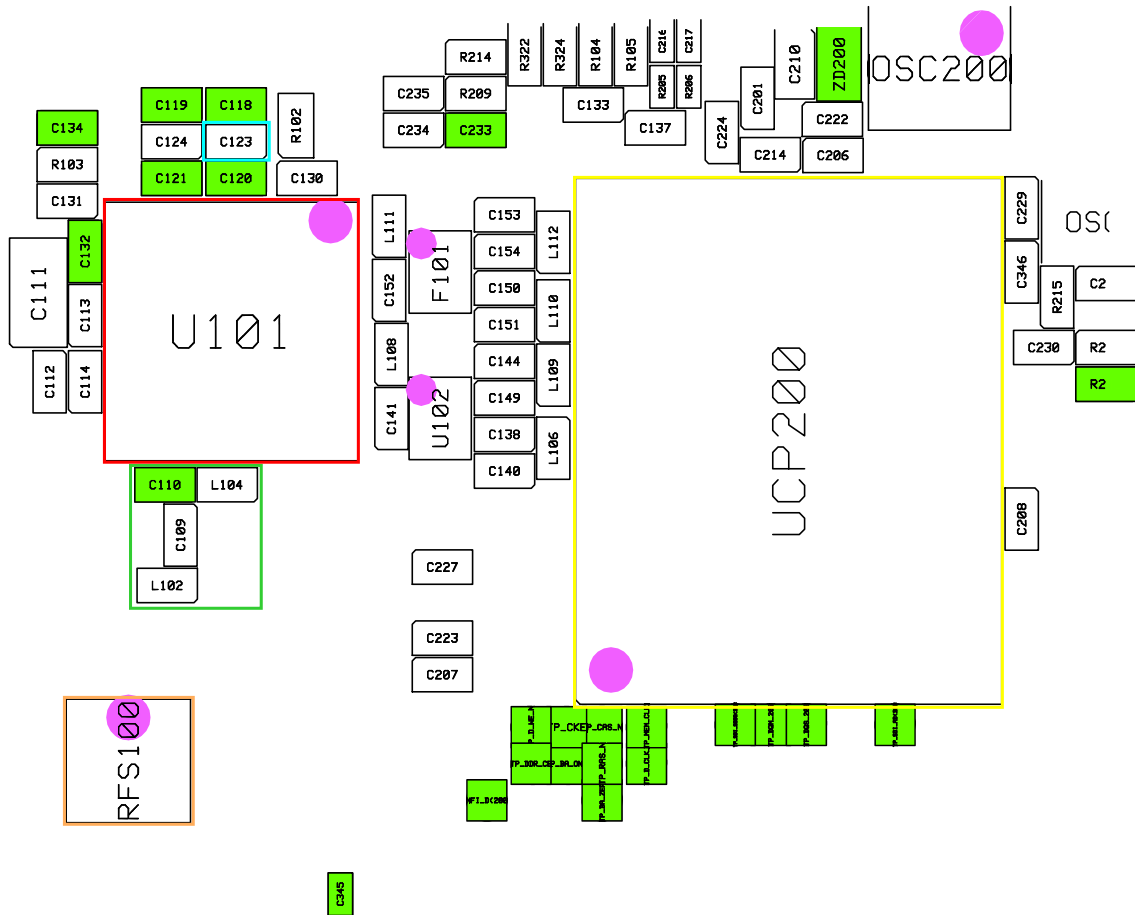


### 8-3-2-8. PCS Transmitter

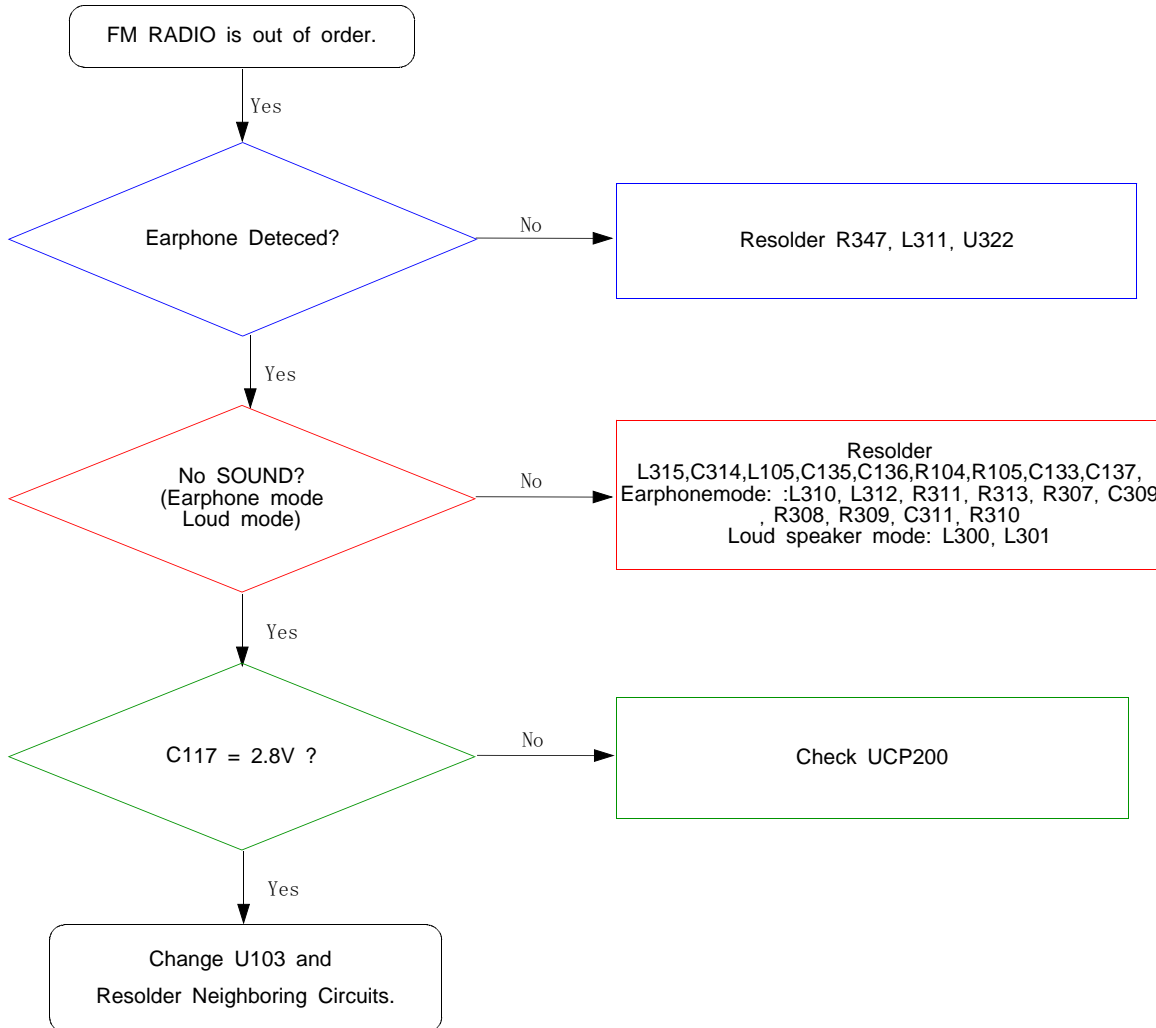


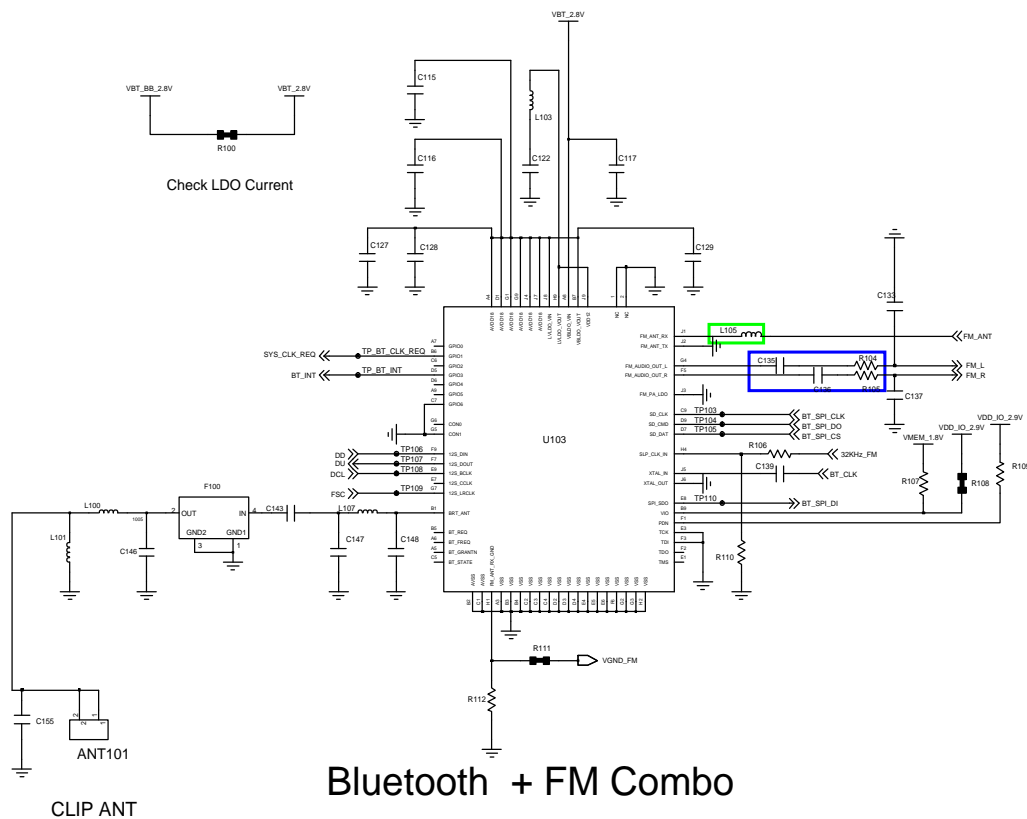
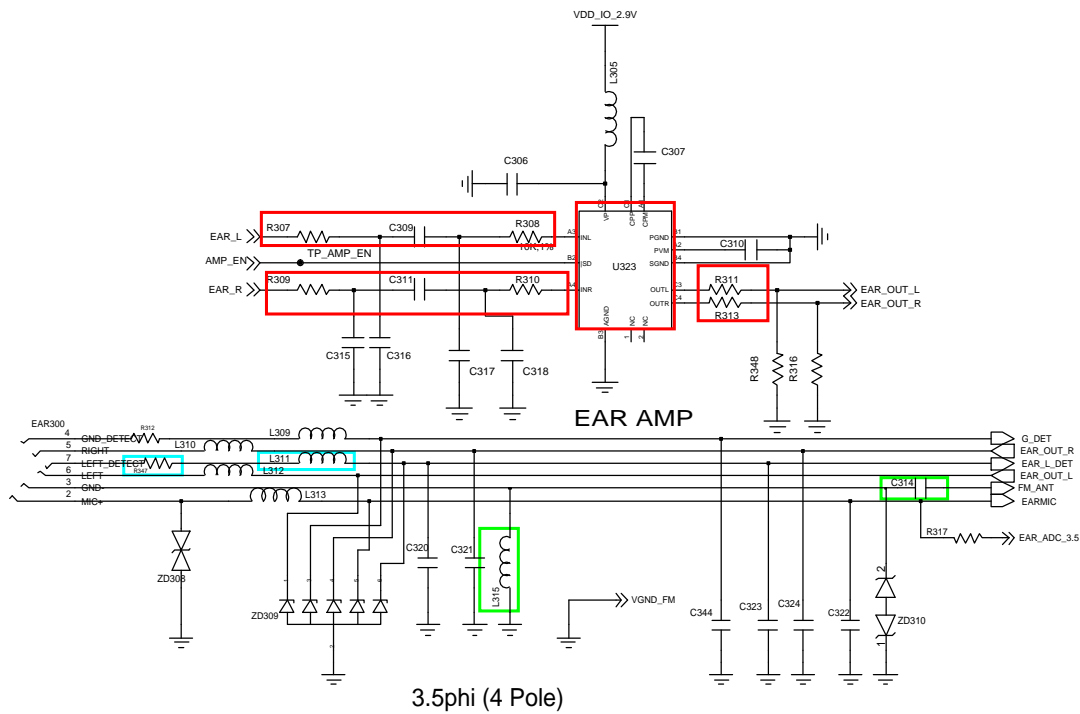


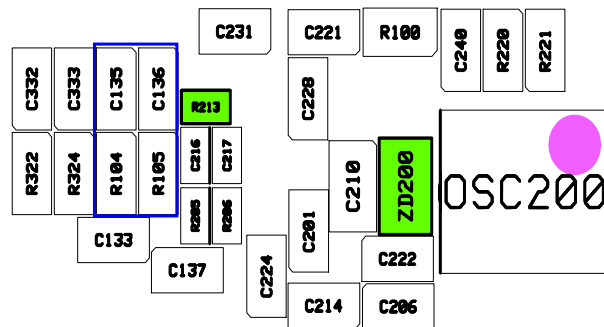
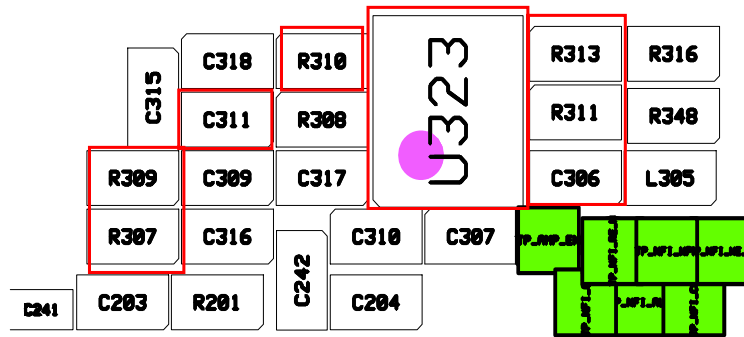
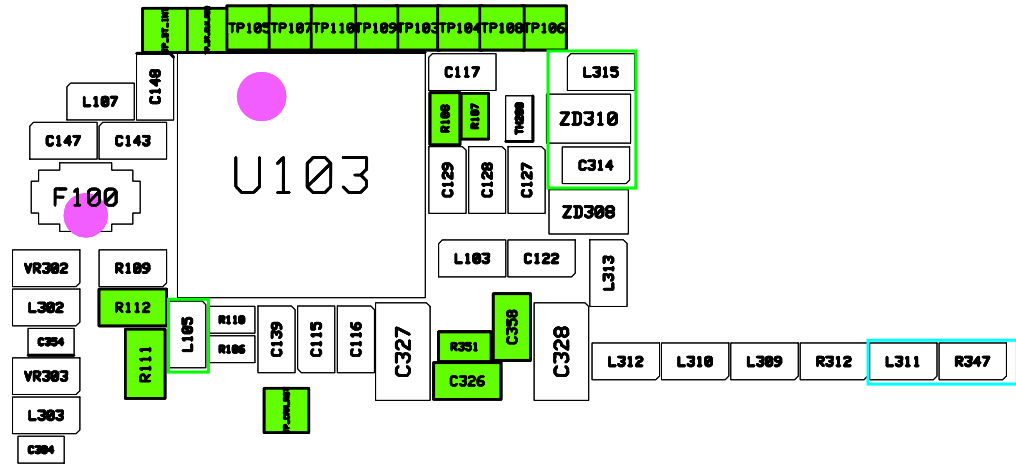
## 2G QUAD RF



### 8-3-2-9. FM RADIO

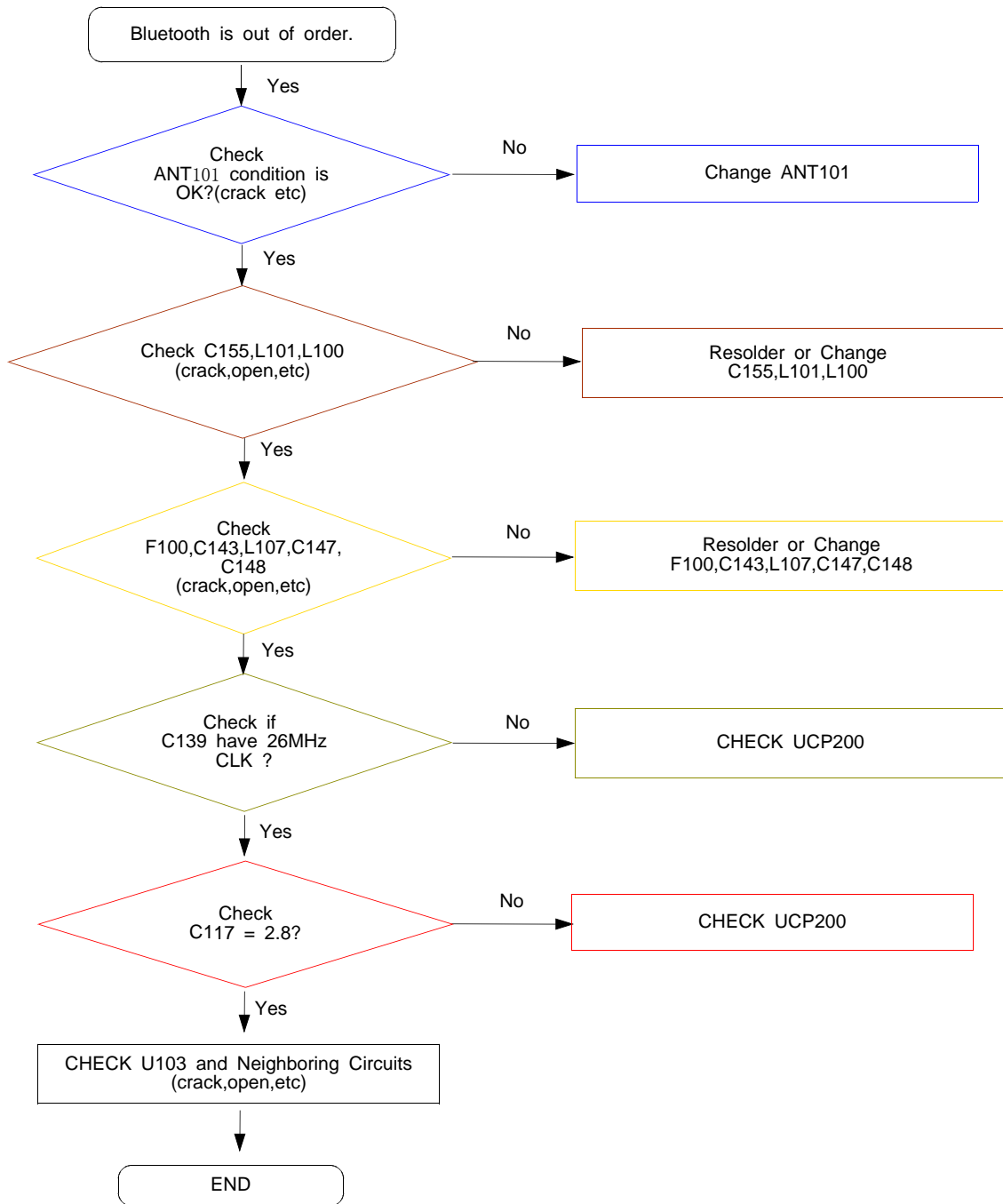


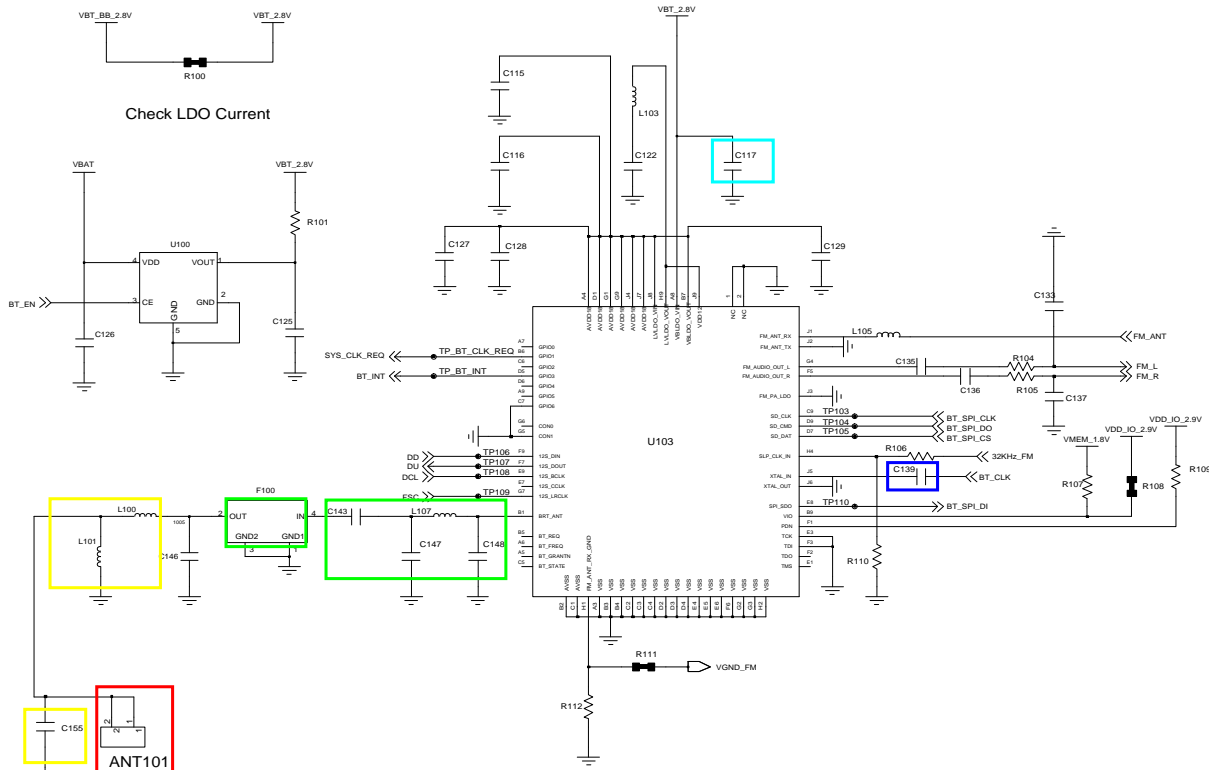






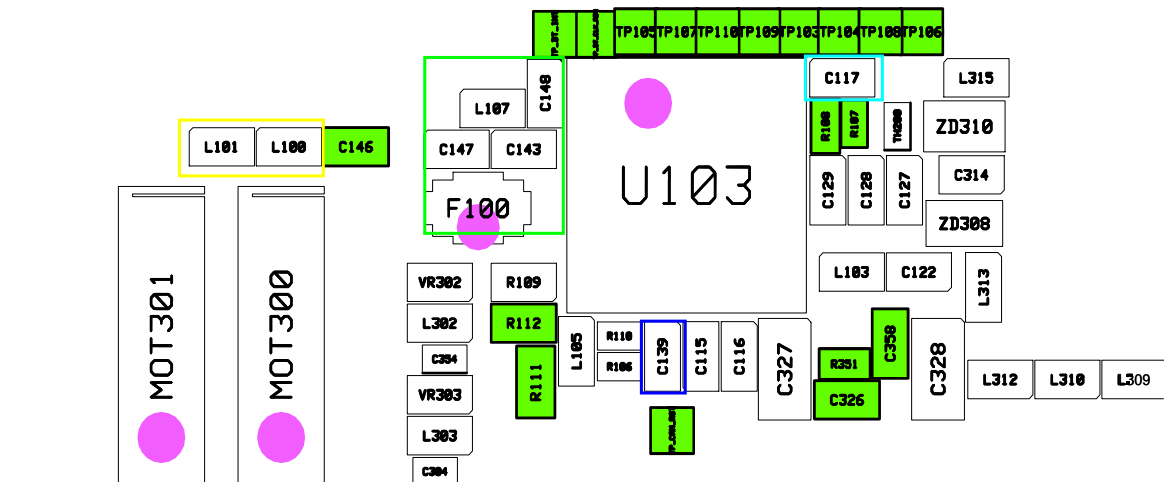
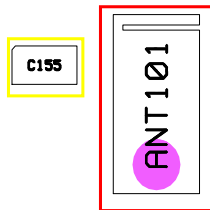
### 8-3-2-10. BLUETOOTH





Bluetooth + FM Combo

CLIP ANT



# NC Point(Top View)

● : NC

## UCP200

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
A	NC	EMCAS_N	NFALE	NFCEN0	VNF	NFD[0]	NFD[1]	NFD[13]	MTDI	MTCK	UJRTS	SPI0_DI	SPI0_CLK	AGND	AGND	TX_LB[BA]	RX_LBA_N	RX_LBB_N	RX_HBB_P	RX_HBB_N	AGND	AGND	AGND	AGND	AGND	AGND	
B	EMRAS_N	CLKDMEM	EMBA[1]	NFCLE	NFREN	NFD[7]	NFD[11]	NFD[13]	MTDO	MTCK	UJRTS	SPI0_DI	SPI0_CLK	AGND	AGND	TX_LB[BB]	RX_LBA_P	RX_LBB_P	RX_HBA_P	RX_HBA_N	AGND	AGND	AGND	AGND	AGND	AGND	
C		CLKDMEM	EMCKE[0]	NFVEN	NFD[3]		SCL0	MTR[0]				SPI0_DO		AGND										AGND	AGND	AGND	
D	EMD[19]	EMD[11]	EMBA[0]	NFD[2]	NFD[4]	NFD[10]	MTDO	MTR[1]	U1TXD			RFCTL1	RFCTL2	RFCTL8							AGND				AGND	AGND	
E	EMD[9]	EMD[19]	EMCS_N0	NFRB	NFD[1]	NFD[8]	NFD[12]	SDA0	CLK_AUX0	U1TXD	U1RXD	SPI0_CSN	RFCTL5	VDDCAMD1			WHTLED_IB0	WHTLED_IB1	BCTXREF	BSRXREF	AGND	AGND	AGND	AGND	AGND	AGND	
F	EMD[9]	EMDQ[31]	EMW_N	NFD[3]	NFD[5]	NFD[14]	U1RXD			RFCTL0	RFCTL3	RFCTL2	RFCTL3				WHTLED_IB3	ADG2		VDDRF0		VDDRF0	VDDRF0	HEADMICP	HEADMICP	EXTRSTN	
G	EMD[9]	EMD[8]	NFWPN	NFD[8]	VSS	AGND	UJCTS			RFCTL13		VDD28		WHTLED_IB2			WHTLED_IB4			AGND	AGND				HEADMICN	A11	
H	EMD[9]	EMD[8]	EMD[14]							PROOT	RFCTL14	VDD18		WHTLED_IB5			WHTLED_RSET	ADG1			AGND	AGND	AUXMICP	MICP	AIR1		
J	EMD[7]	EMD[13]	EMDQ[1]			VDD_D				VSS	VIO_0			VDDCAMD0	AVDD8B	ADG0	APCOUT	AGND					AUXMICN	MICN			
K	EMA[13]	EMD[4]		EMD[12]		VSS						VSS		VSS			AGND/DFC			AGND				MICBIAS	AUXMICBIAS		
L	EMA[12]	EMDQ[30]		EMDQ[0]		VMEM	VDD_D	VSS	VIO					VDDMEM	DVDD18		VBATD	VBAT_BB					VDDRF0	AORN	ACRP		
M	EMD[11]	EMD[2]	EMD[3]		VSS		VSS	VSS	VSS			VSS				PSINT	PSINT2	TP_XL	VBATD					VDDRF1	VDDCAMA		
N	EMA[7]	EMA[8]	EMA[10]	EMA[11]		VDD_D	VSS	VSS				VSS				TP_YU	TP_XR	TP_YD	VBATD	HEAD_P_L			AGND	VDDRF_DCV0	VBAT_RF		
P	EMA[8]	EMA[8]	VMEM			VDD_D					VSS				VIO_0		SIMCLK0		HEAD_P_R				AGND	REF_IN+	REF_IN-		
R	EMA[9]	EMA[9]	EMA[9]	EMA[9]											SMDA0	SMRST0	VDDSM1			AGND				VDDA0	VDDM		
T	EMA[4]	EMA[11]	VMEM	VSS	CCIRD[4]		SD_CLK			KEYN[3]	KEYN[3]	KEYOUT[5]				VSS	VBATBUCK	VDD_PA	VBATPA					VBAT_SENSE	REF_OUT		
U	EMA[9]	SDA1	CCIRD[7]	CCIRD[3]	CCIRD[1]	CCIRD[5]	LCD_D[8]	LCD_D[2]	LCD_D[0]	ISO_DI	KEYOUT[6]	KEYOUT[3]											EARP	EARN	VCHGR	ISENSE	REF2_OUT
V	CCIRD[0]	CCIRD[9]	CCIRD[9]	CCIRD[3]	CCIRD[3]	CCIRD[3]	VSS/SSB		LCD_D[7]	LCD_D[3]	ISO_MCK	KEYIN[1]	KEYOUT[4]												VCP	VDRV	
W	SCL1	CCIRD[8]	CCIRD[5]		DM	DP	LCD_CS[0]	LCD_D[8]	LCD_D[1]			KEYIN[2]	KEYOUT[1]	VSS	VDDRTC	VIBR_OUT	LX	VSS3AUCK	VFB	VSS_PA	VSS_PA	VDR	AGND	AGND	AVDDVB		
Y	CCIRD[2]	CCIRD[5]	CCIRD[3]	SD_D[2]	SD_D[3]	SD_D[0]	SD_CMD	LCD_FMARK	LCD_D[8]	LCD_D[4]	LCD_D[3]	ISO_LRCK	ISO_DO	KEYIN[3]	GPI02	KEYOUT[2]	VBATBK	OPTION2	VDDSM0	OSC32K0	OSC32K0	KPLED_OUT			AGND	AGND	
AA	NC	VCAM	SD_D[1]	LCD_RDN	LCD_WRN		VLCD	LCD_RSTN		ISO_CLK	KEYIN[4]		GPI06	GPI01			KEYOUT[0]						SIMCLK1	SMDA1	SMRST1	VDDSD0	AGND

## UME200

	1	2	3	4	5	6	7	8	9	10
A		DNU							DNU	DNU
B	DNU	NC	DQ0	VDD	VSS#	VCC#	NC	A3	NC	DNU
C		VSS	DQ2	DQ1	CLE	CE#	A0	A1	A2	
D		VDDQ	DQ4	DQ3	ALE	WE#	BA0	BA1	A10	
E		VSSQ	DQ6	DQ5	RE#	R/B#	RAS#	NC	CS#	
F		VDDQ	LDQS	DQ7	WP#	NC	CAS#	WE#	VSS	
G		VSS	LDQM	CLK#	NC	NC	A12	CKE	VDD	
H		VDD	UDQM	CLK	NC	NC	A8	A9	A11	
J		VSSQ	UDQS	DQ8	IO0	IO2	IO4	IO6	A7	
K		VDDQ	DQ9	DQ10	NC	NC	NC	NC	A6	
L		VSSQ	DQ11	DQ12	IO1	IO3	IO5	IO7	A5	
M		VDD	DQ13	DQ14	NC	NC	NC	NC	A4	
N	DNU	NC	DQ15	VSS	VSS#	VCC#	VCC#	VSS#	NC	DNU
P	DNU	DNU							DNU	DNU