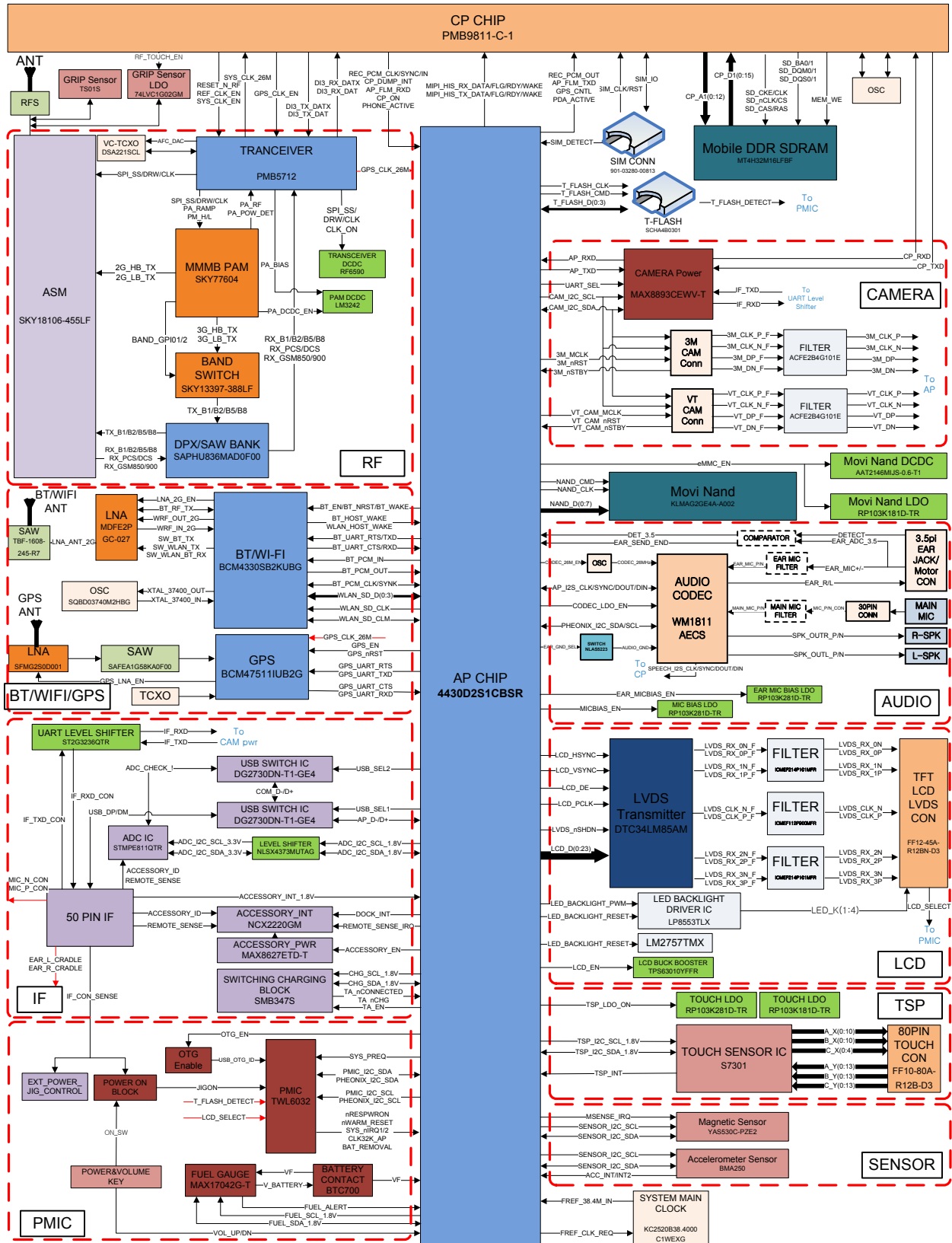


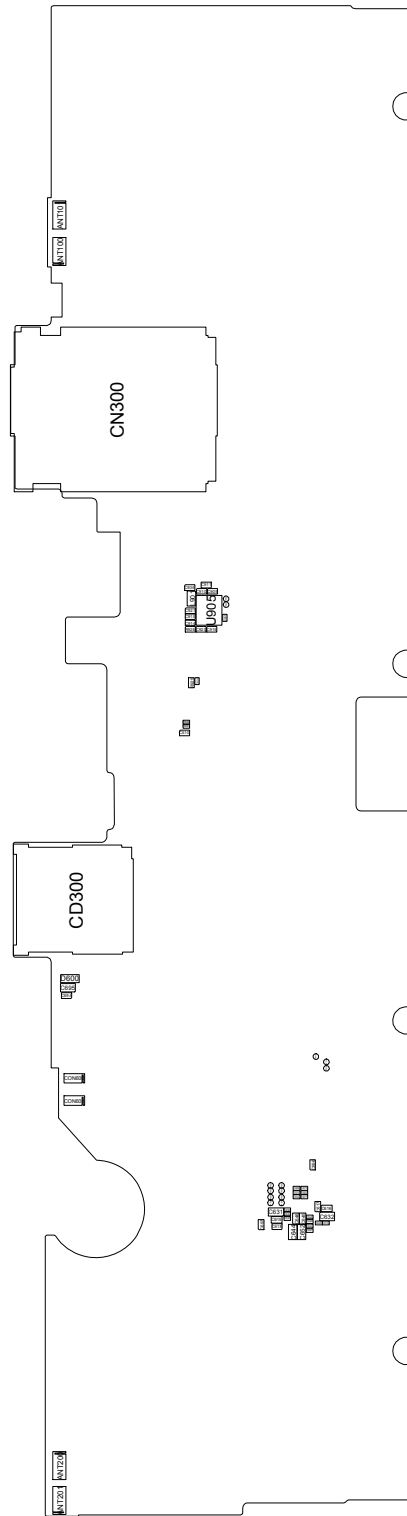
8. Level 3 Repair

8-1. Block Diagram



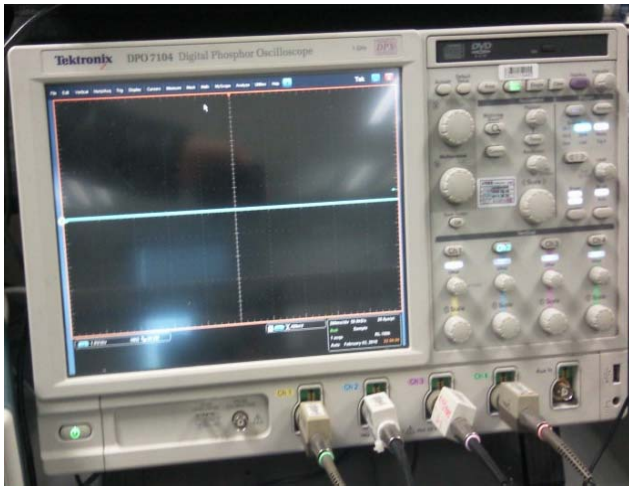
8-2. PCB Diagrams

8-2-1. Top



8-3. Flow Chart of Troubleshooting

Equipments



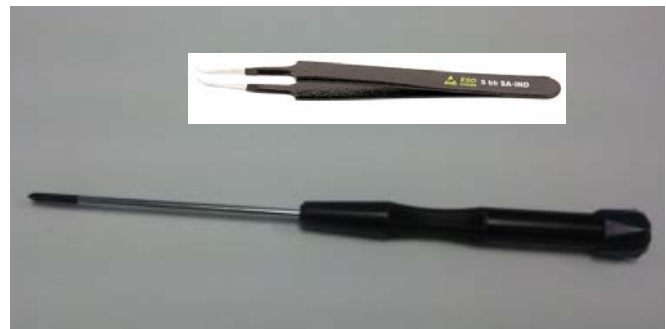
↑ Oscilloscope



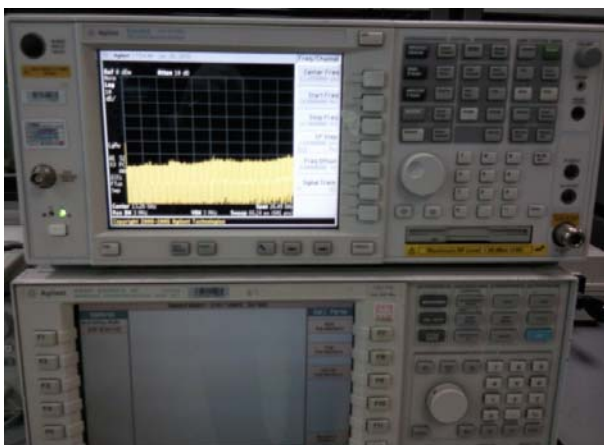
↑ Digital Multimeter



↑ Power Supply



↑ + driver, ESD Safe Tweezer

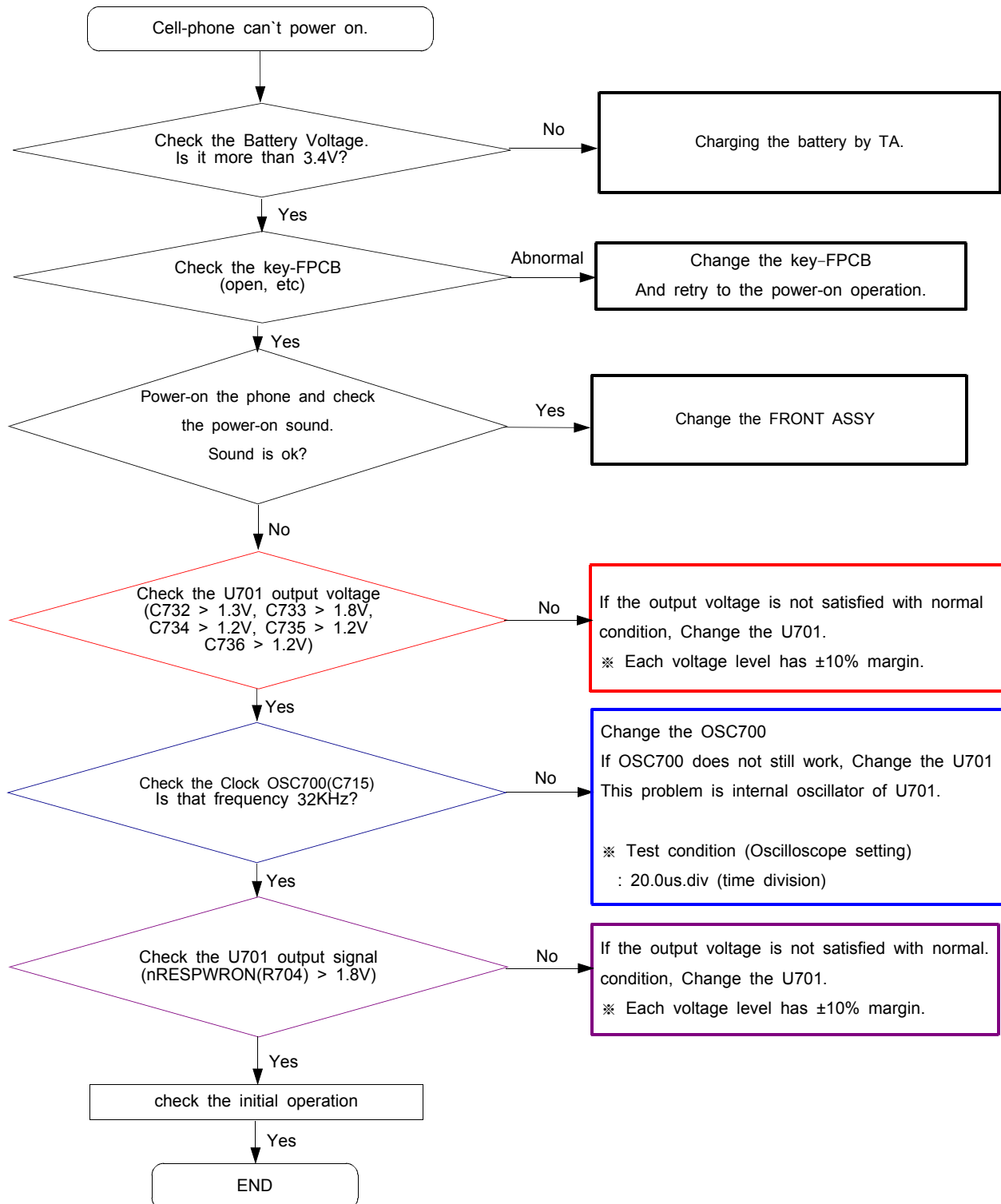


↑ 8960 & Spectrum Analyzer

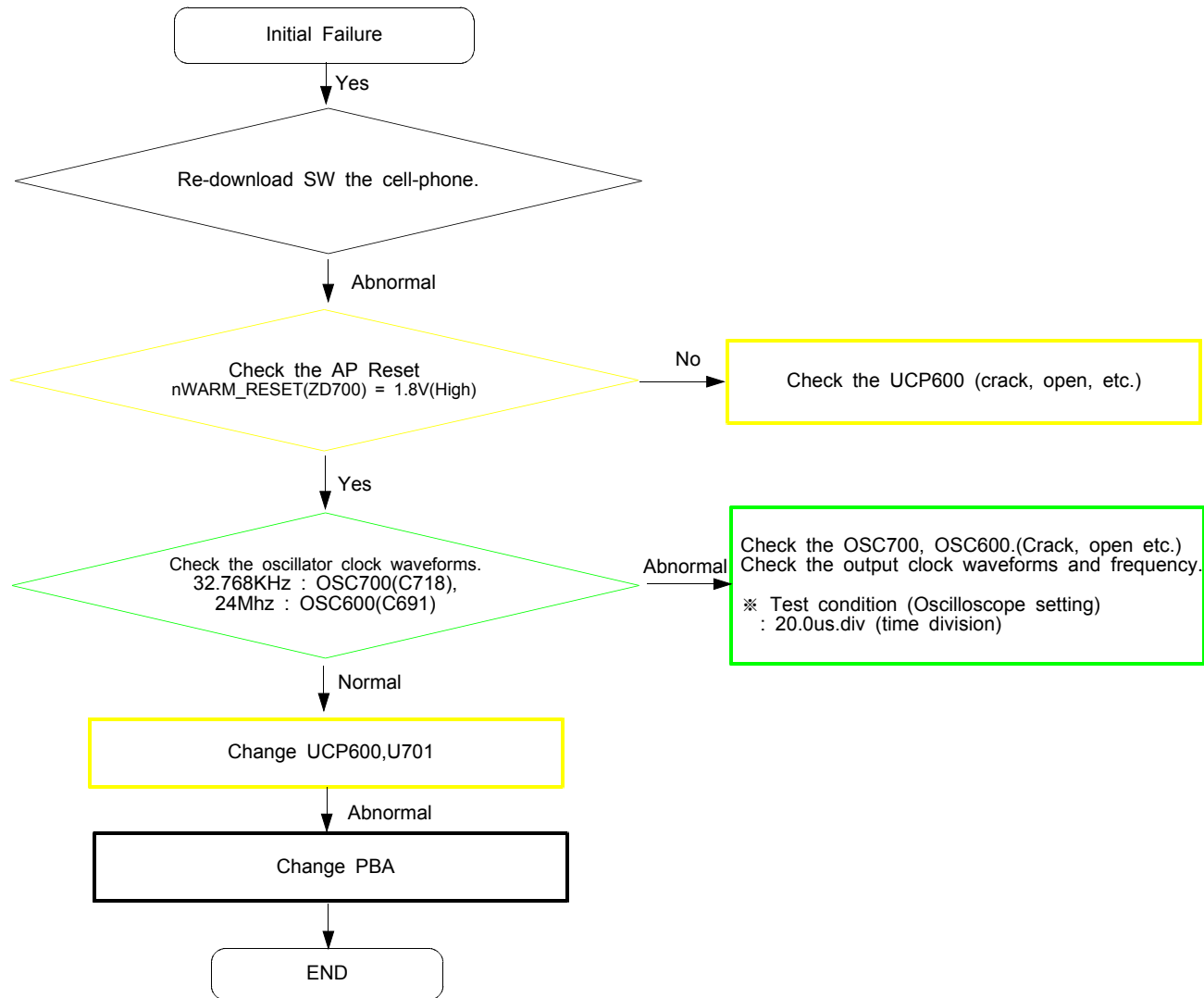


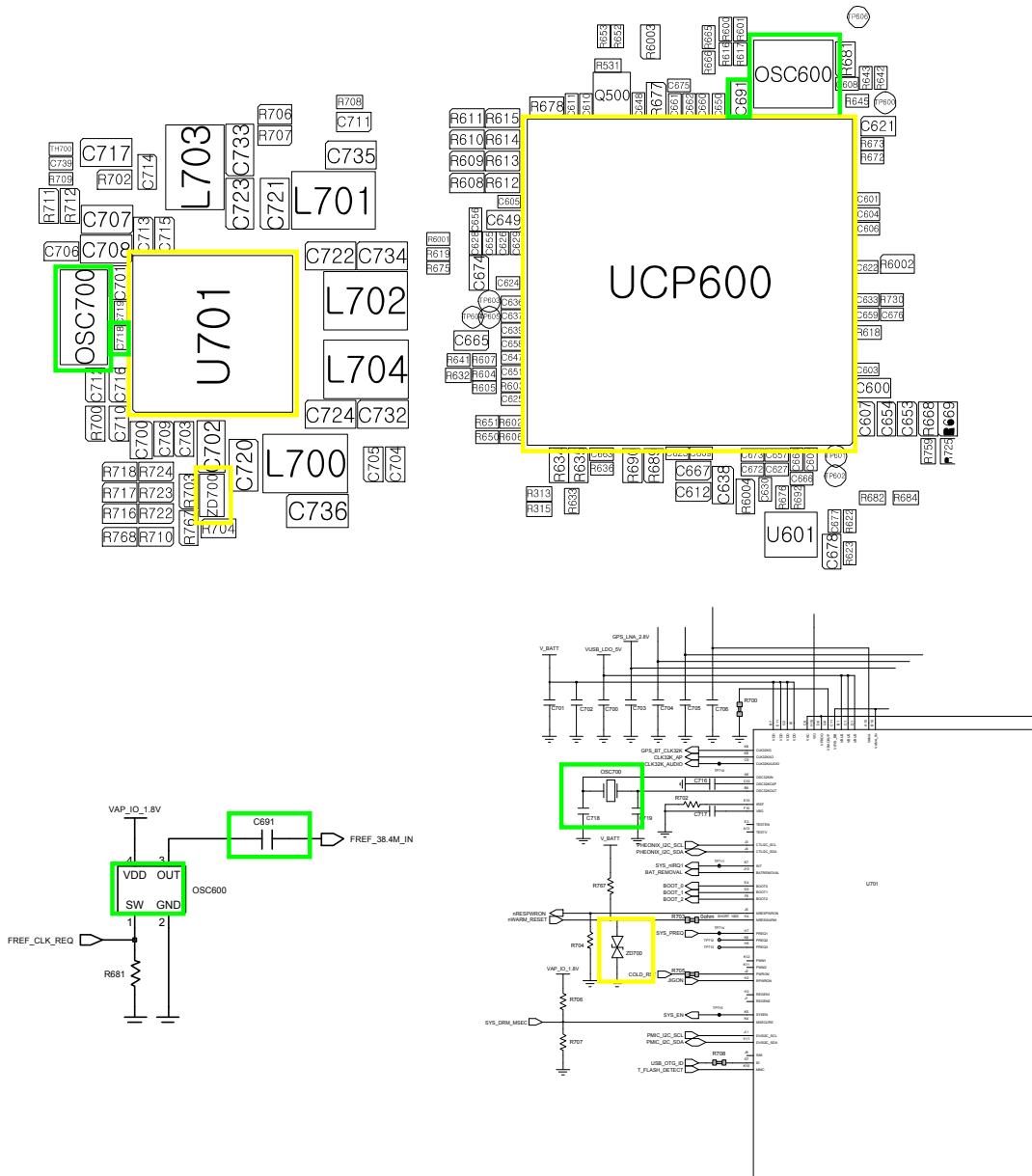
↑ Soldering iron

8-3-1. Power On

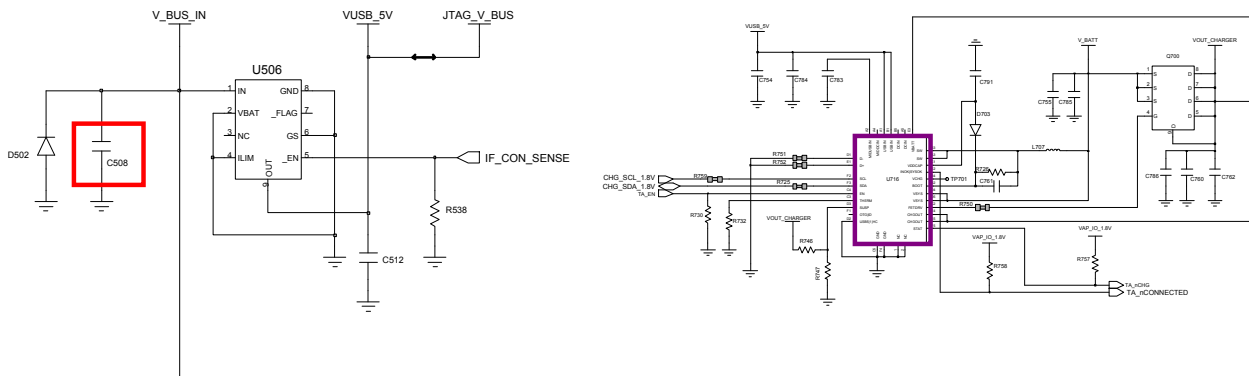
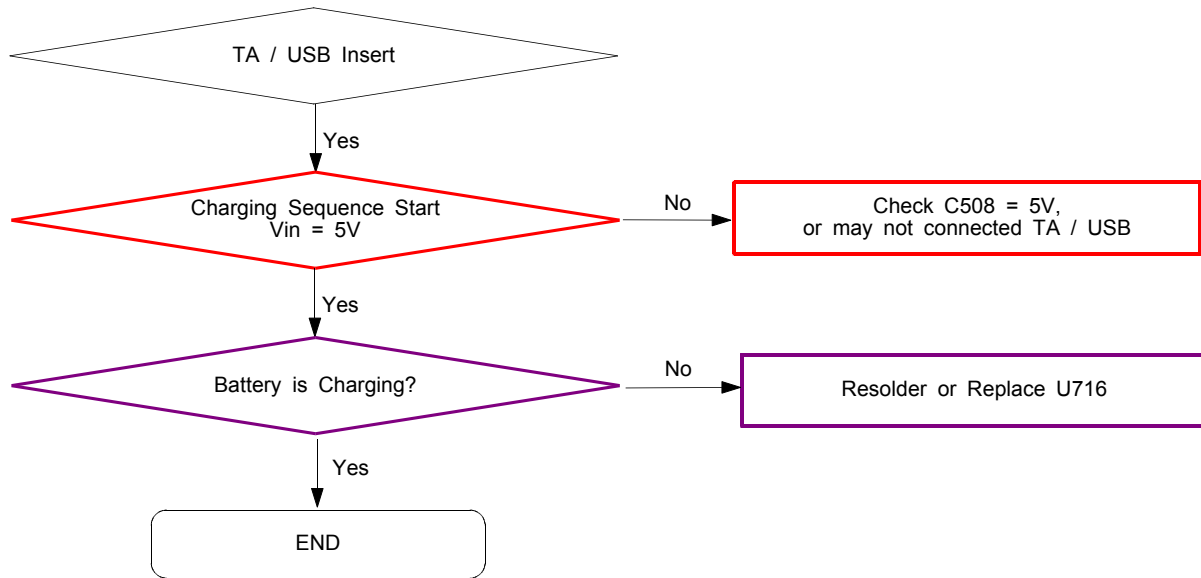


8-3-2. Initial

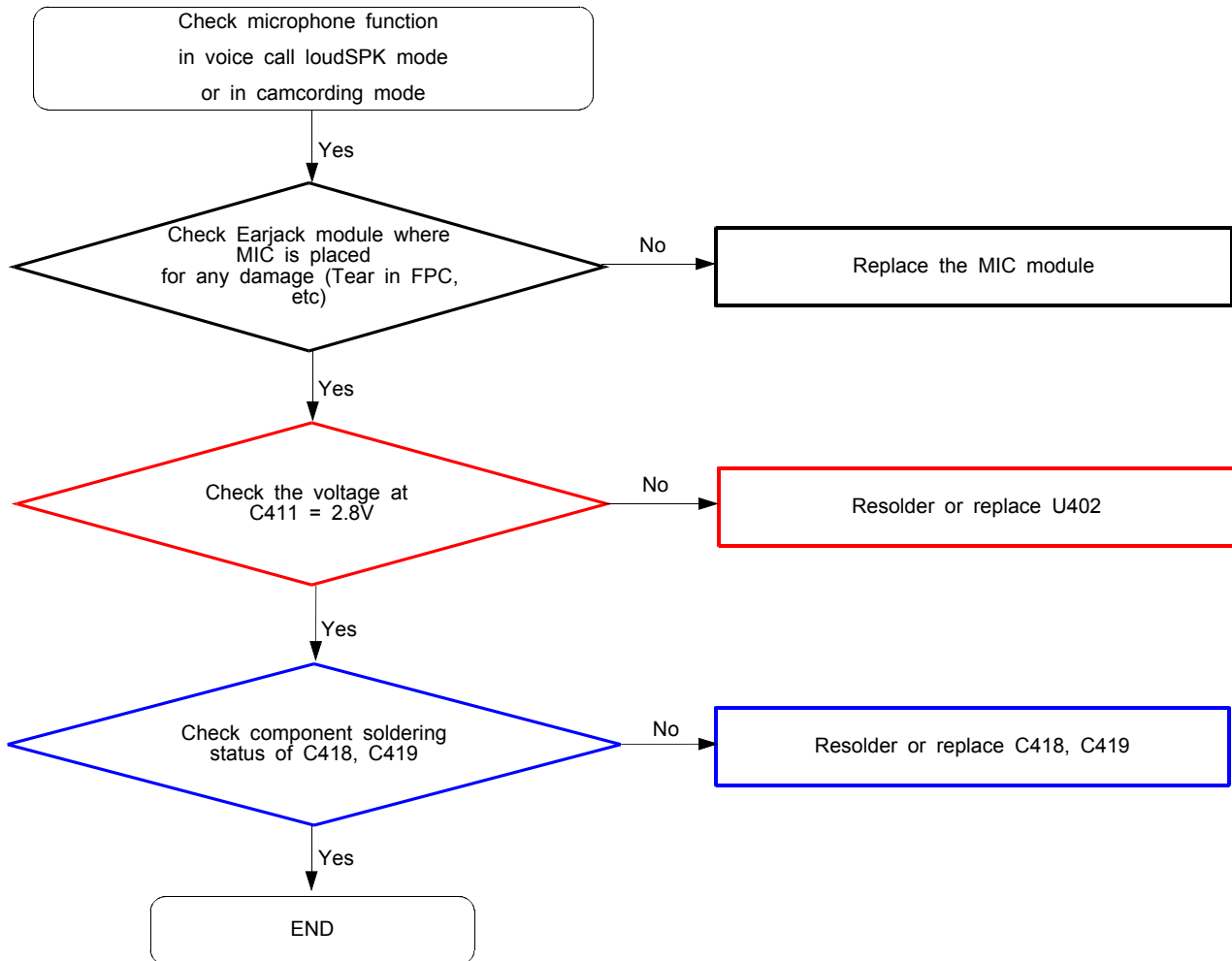


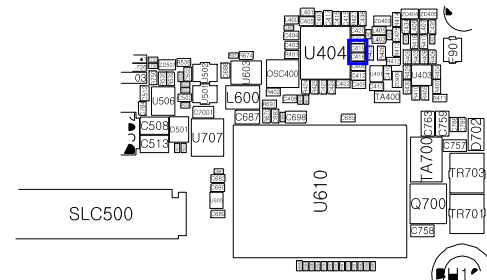
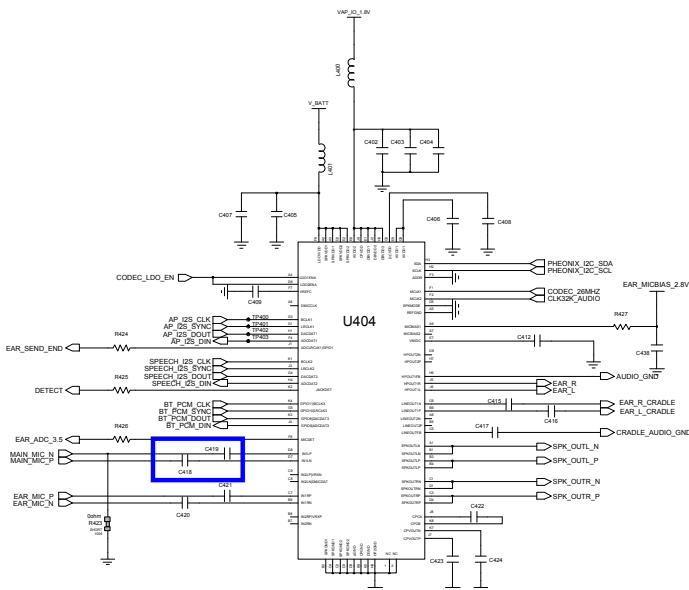
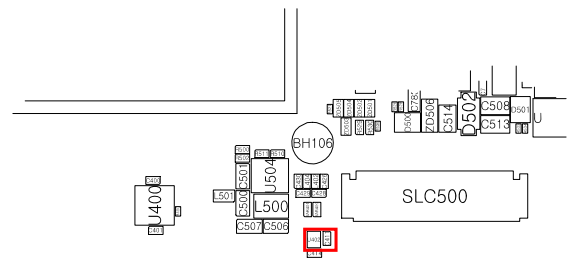
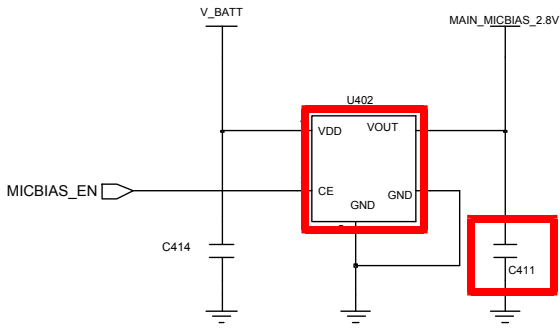


8-3-3. Charging Part

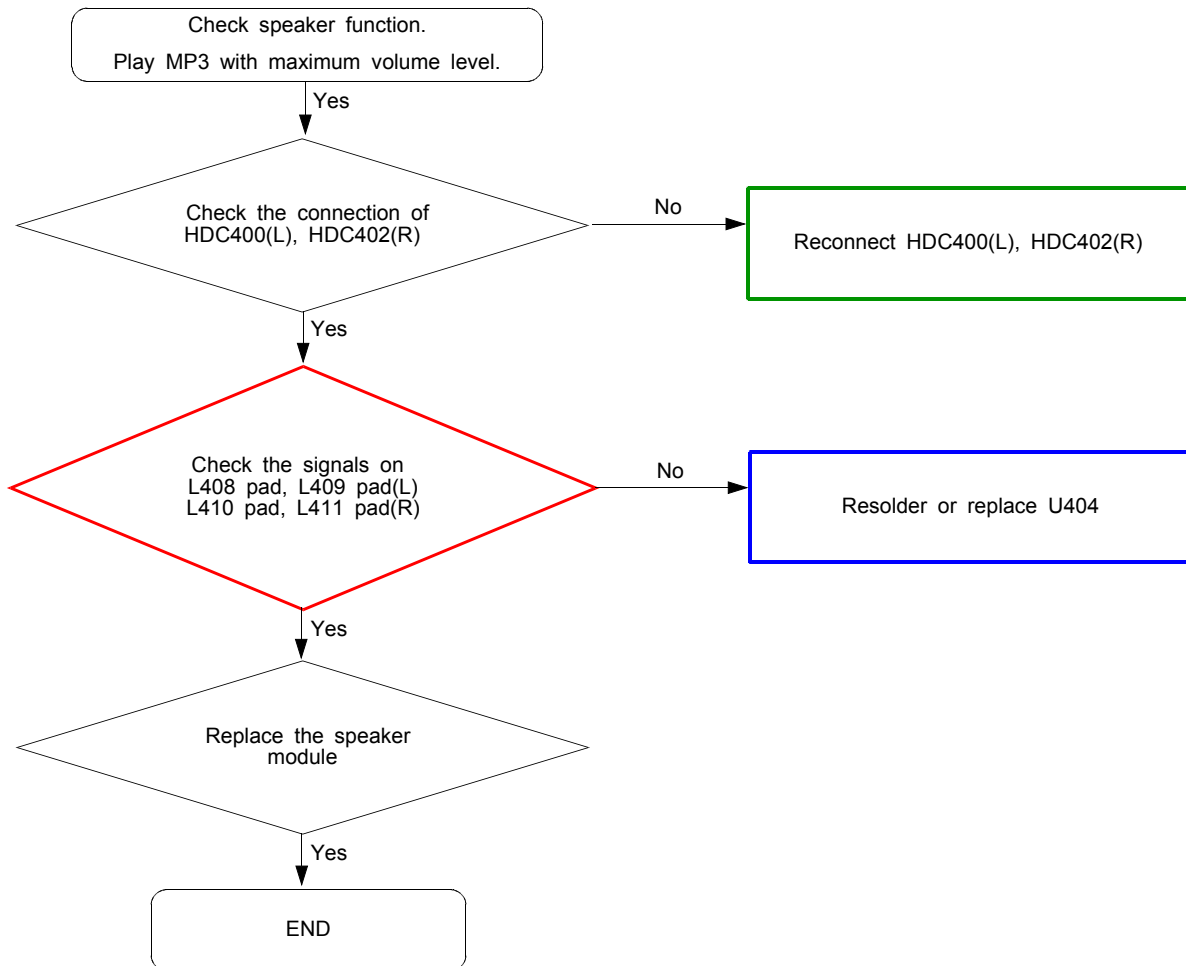


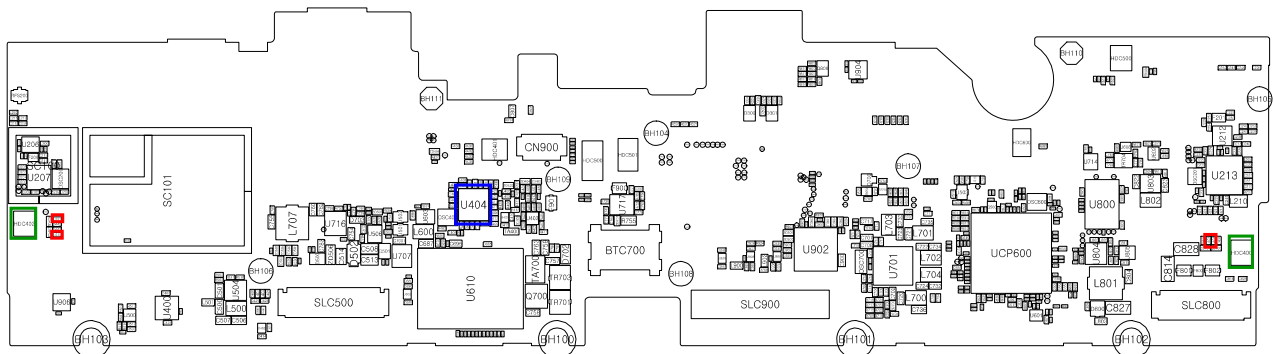
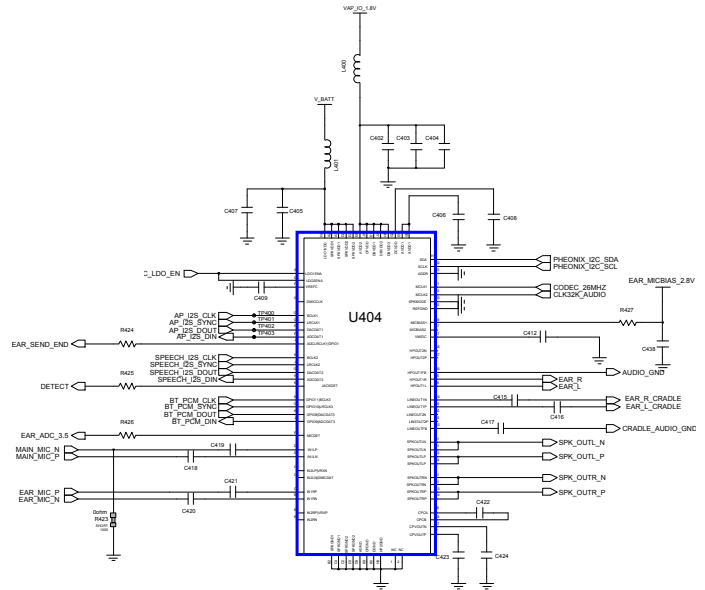
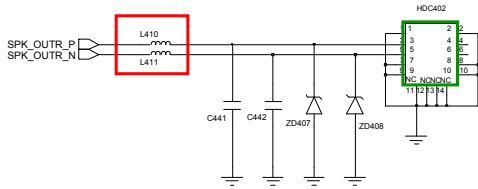
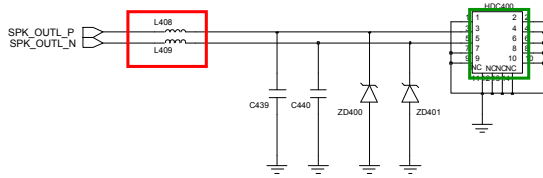
8-3-4. Microphone Part



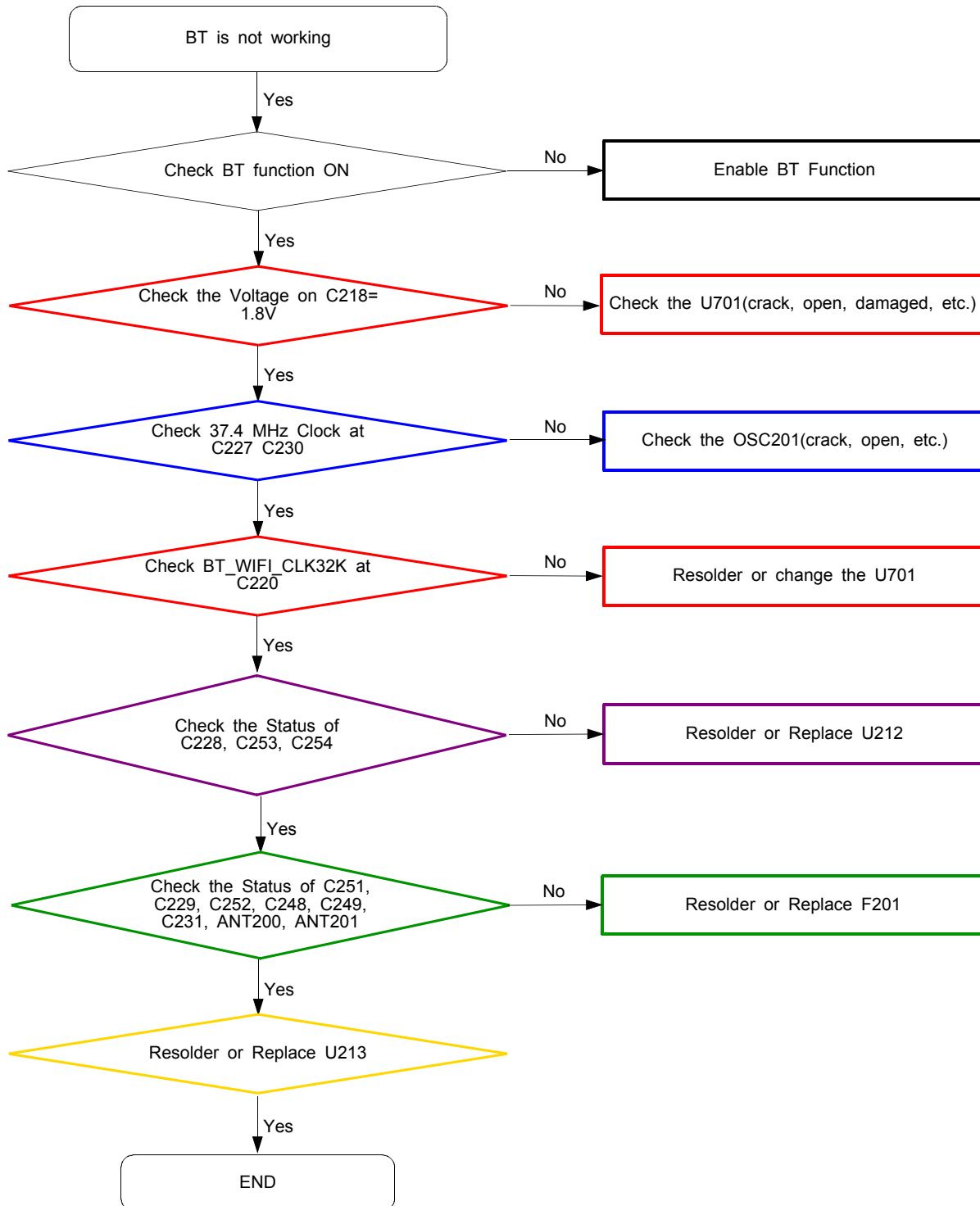


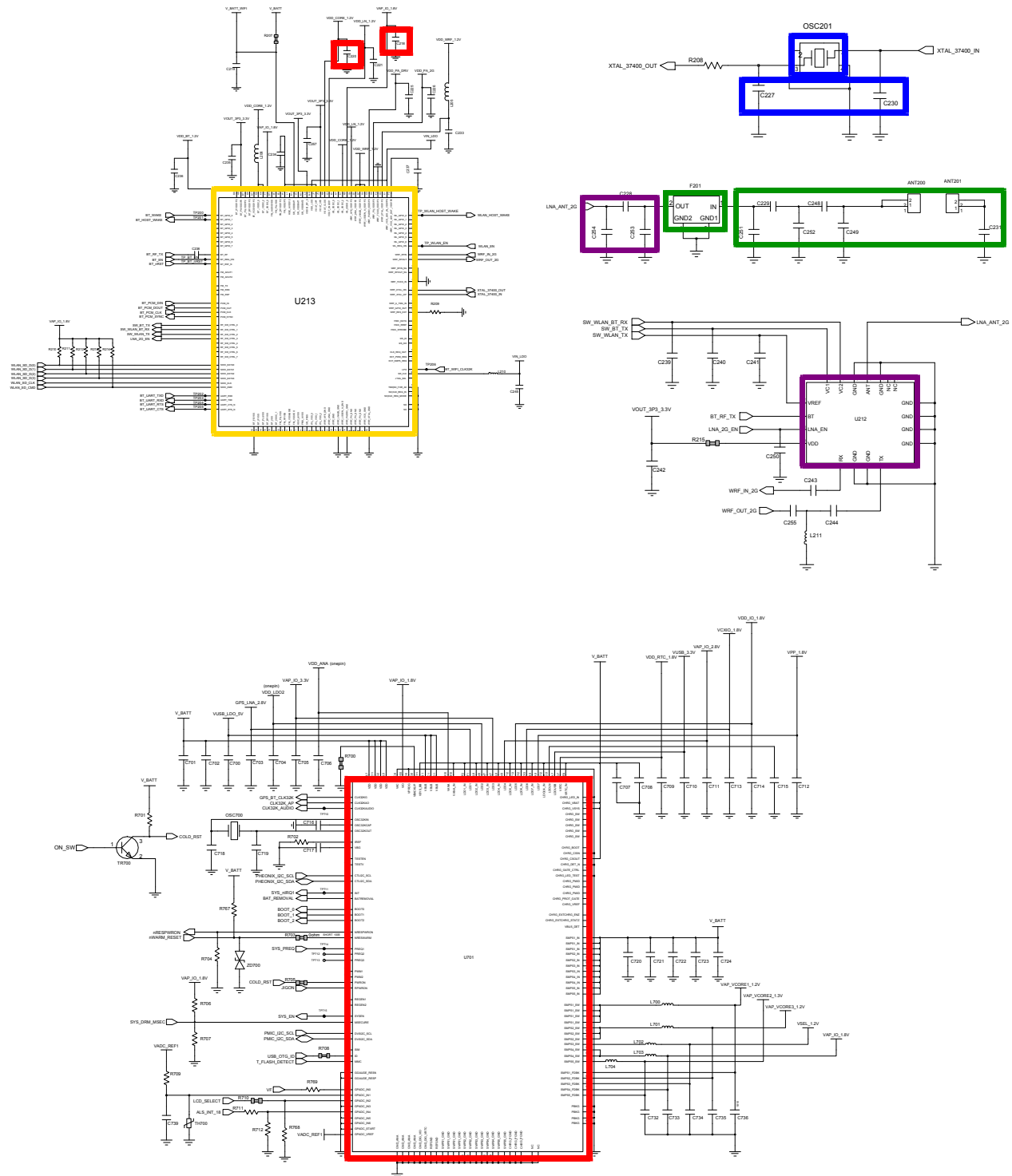
8-3-5. Speaker Part

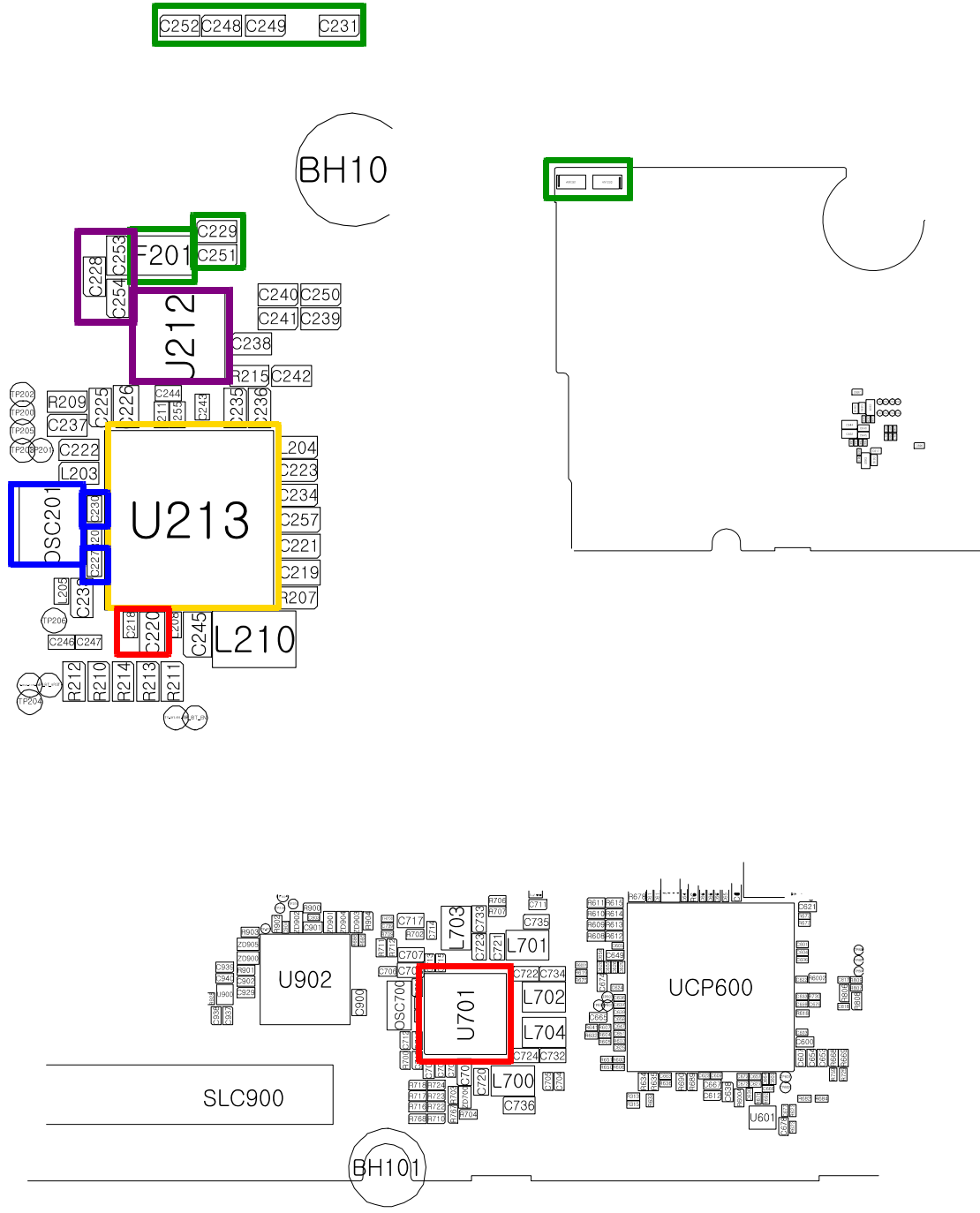




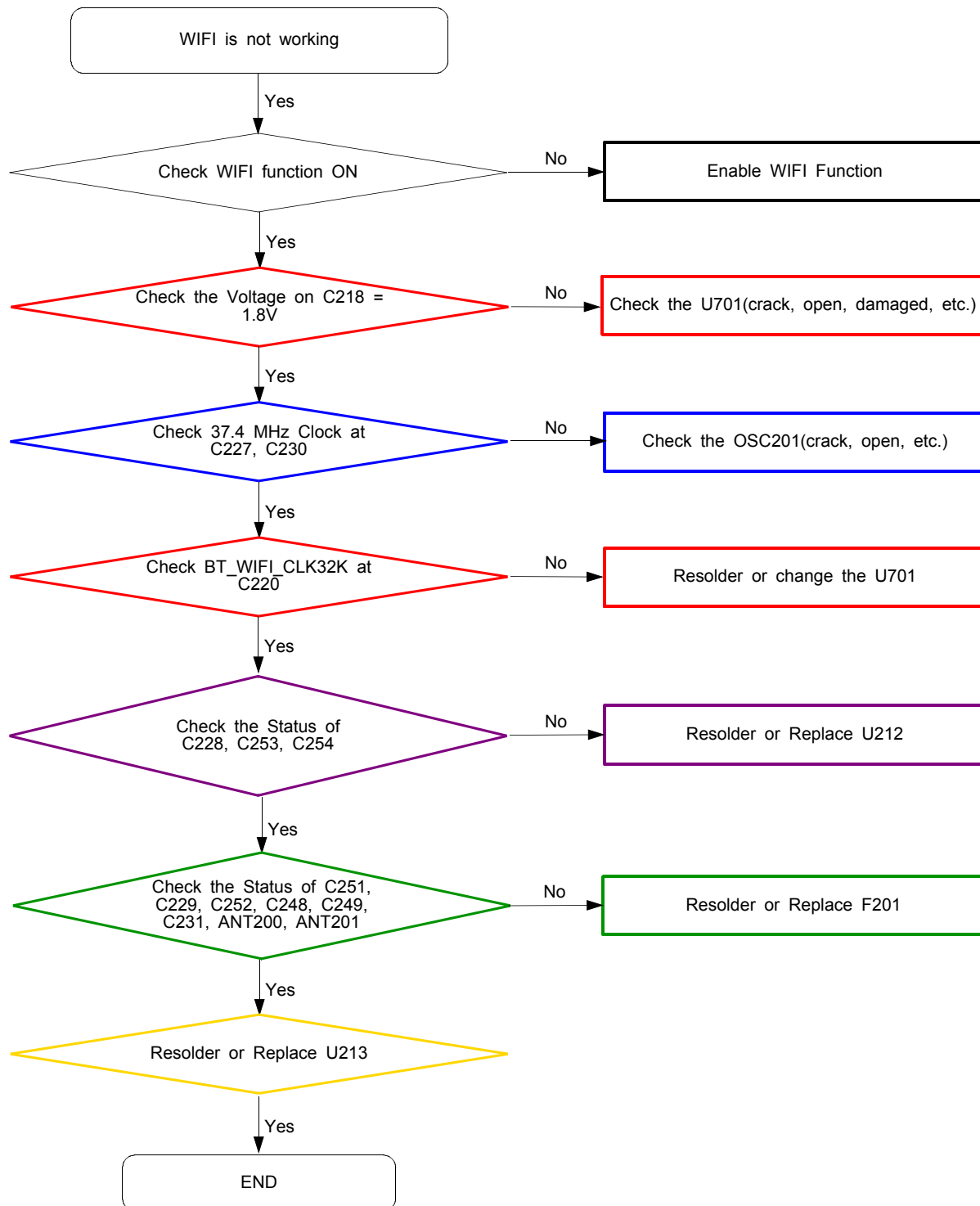
8-3-6. BT Part

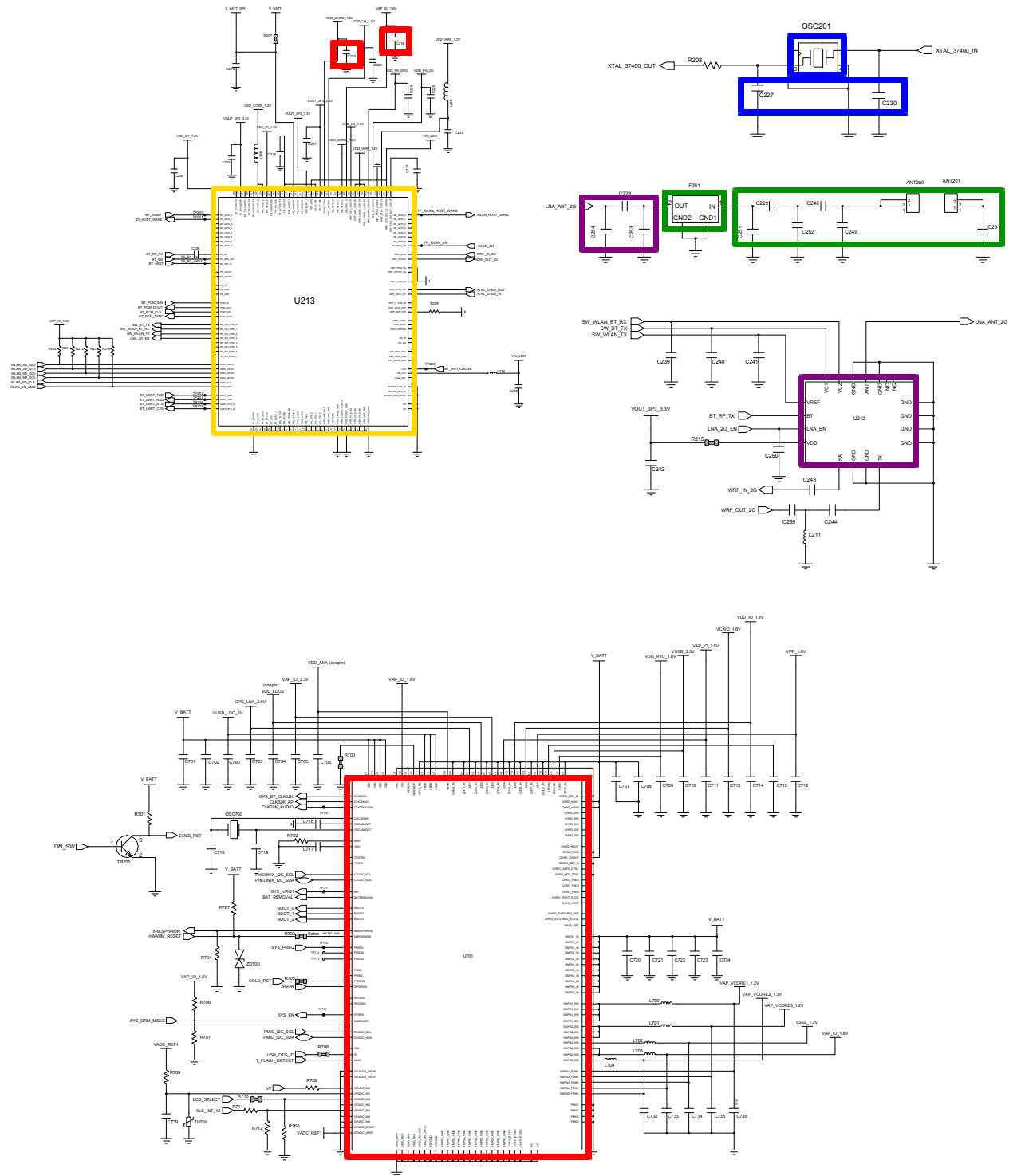


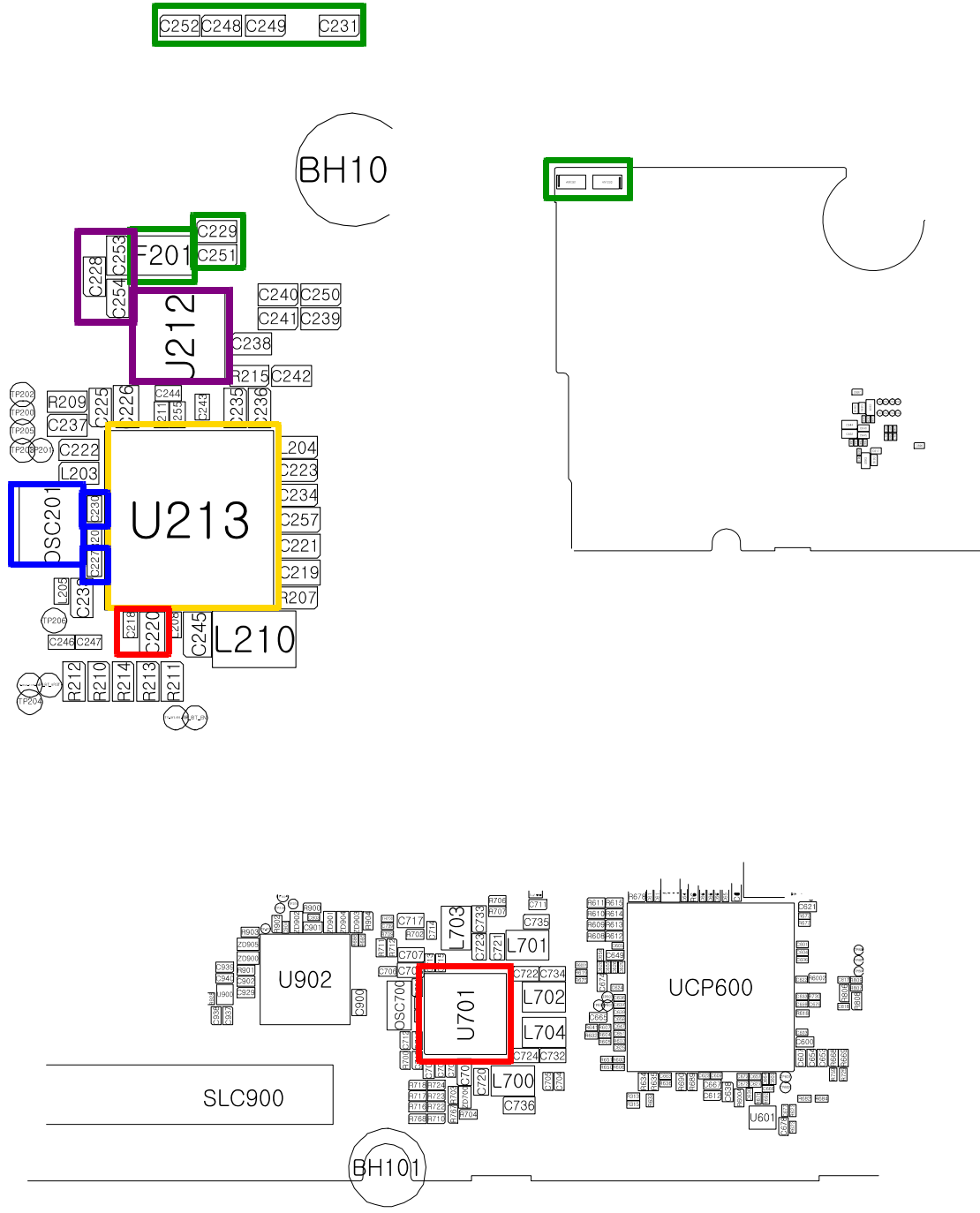




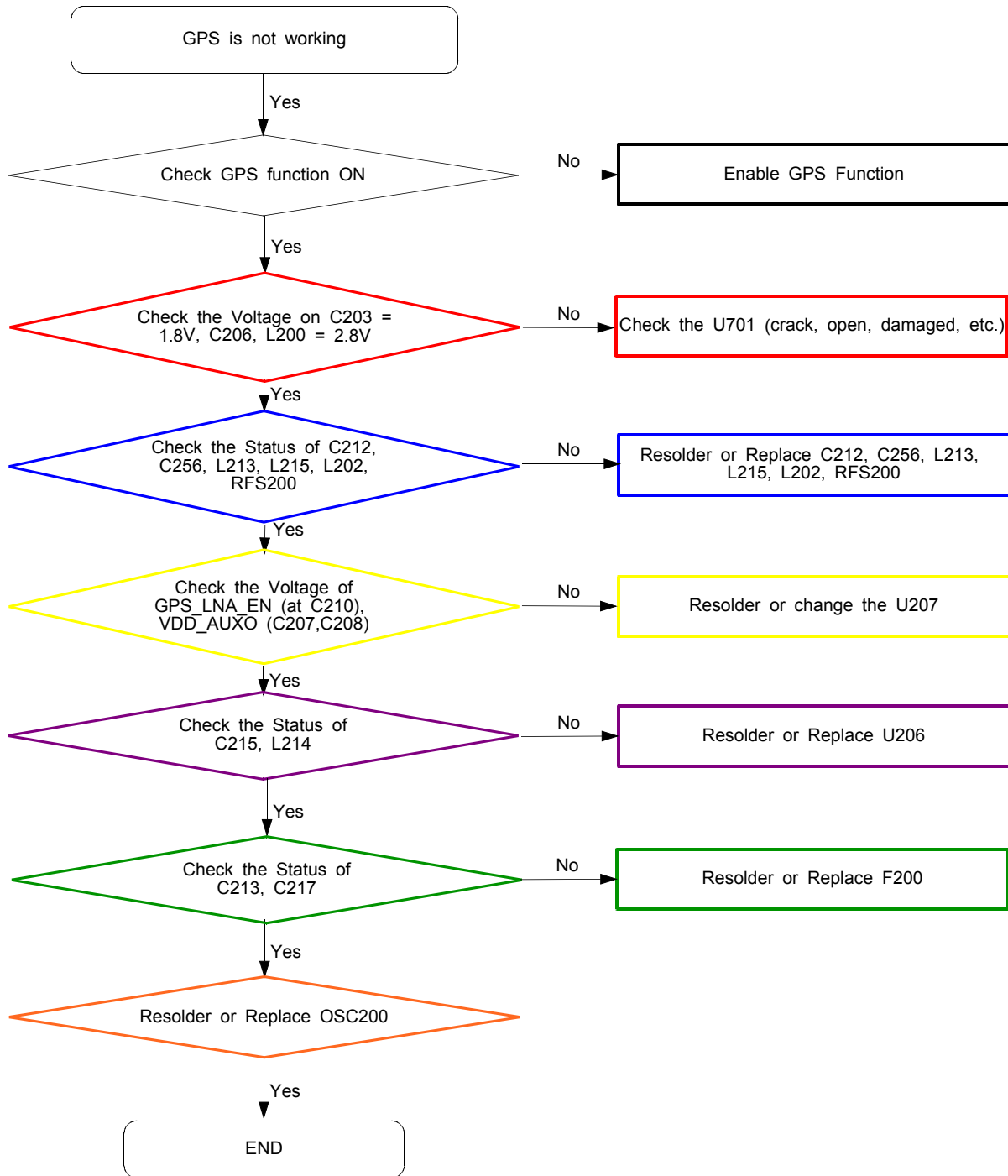
8-3-7. WIFI

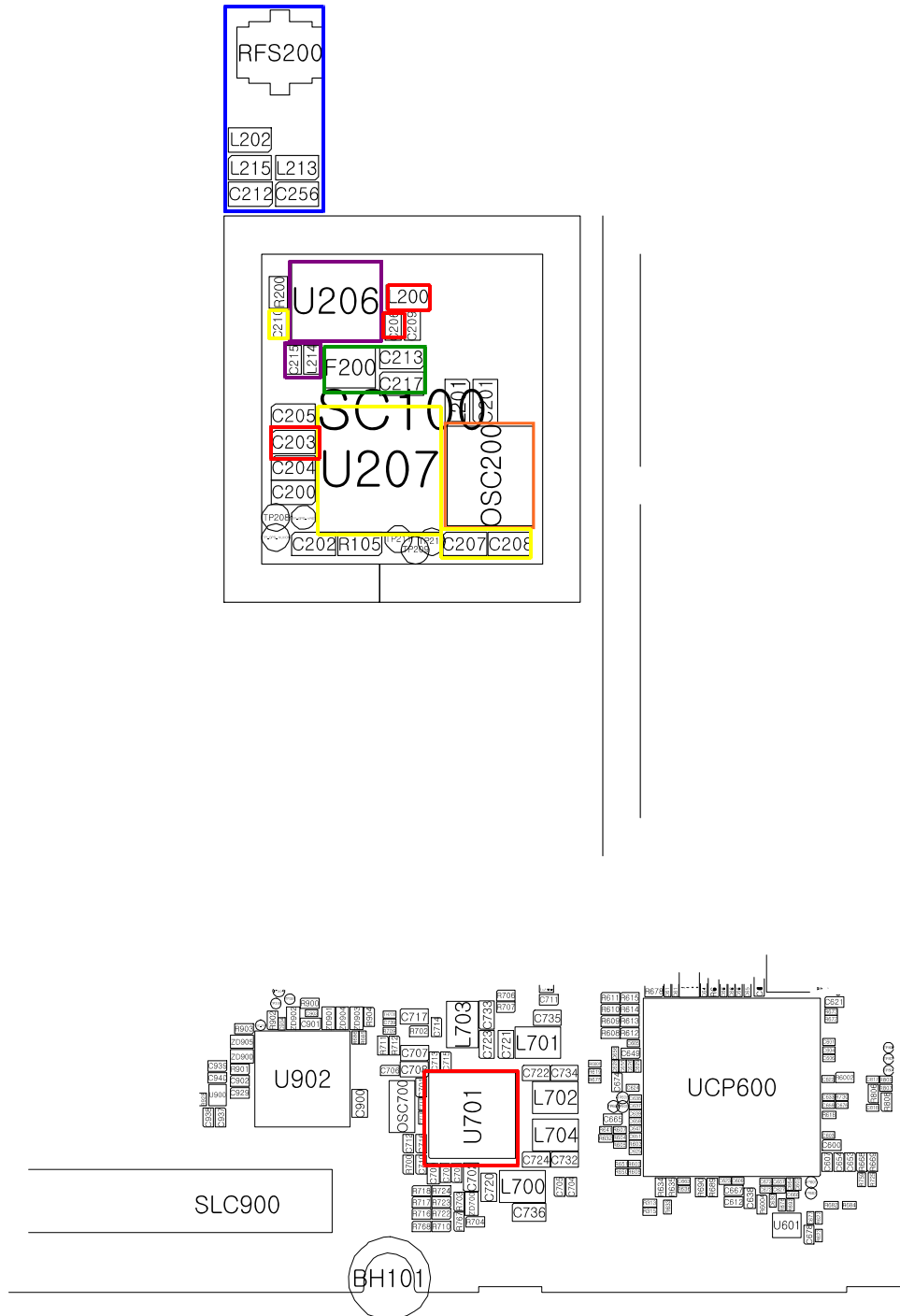




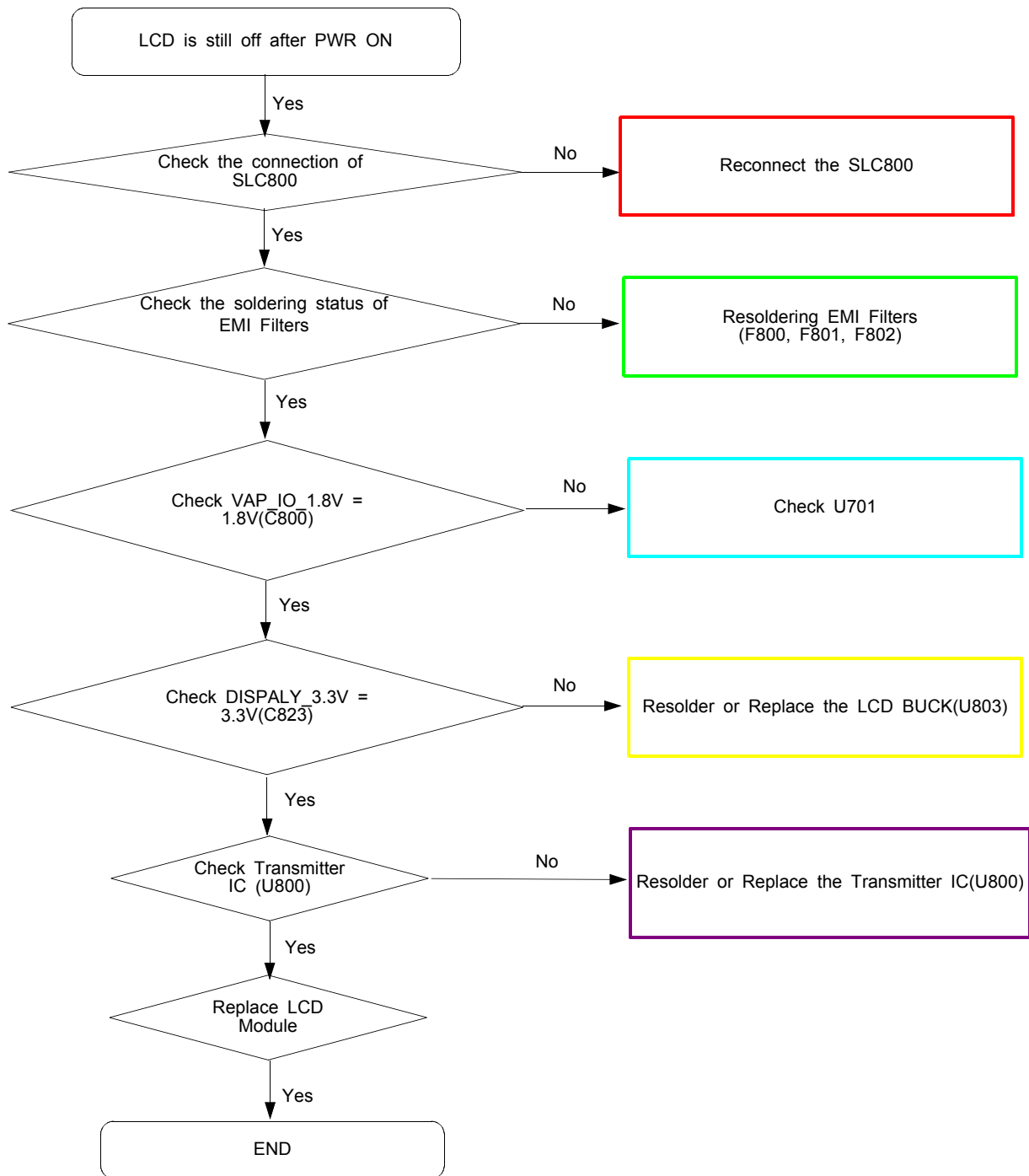


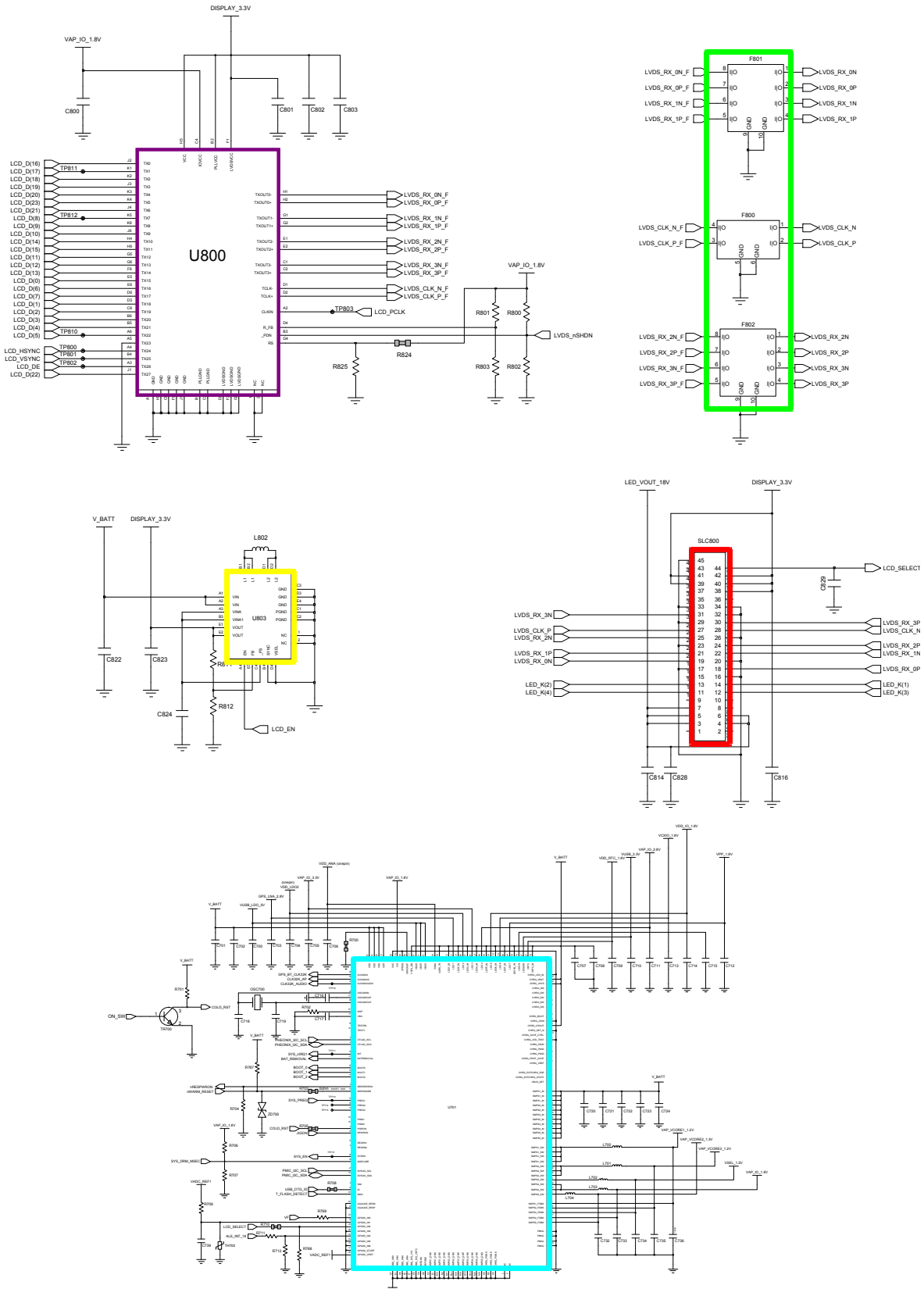
8-3-8. GPS

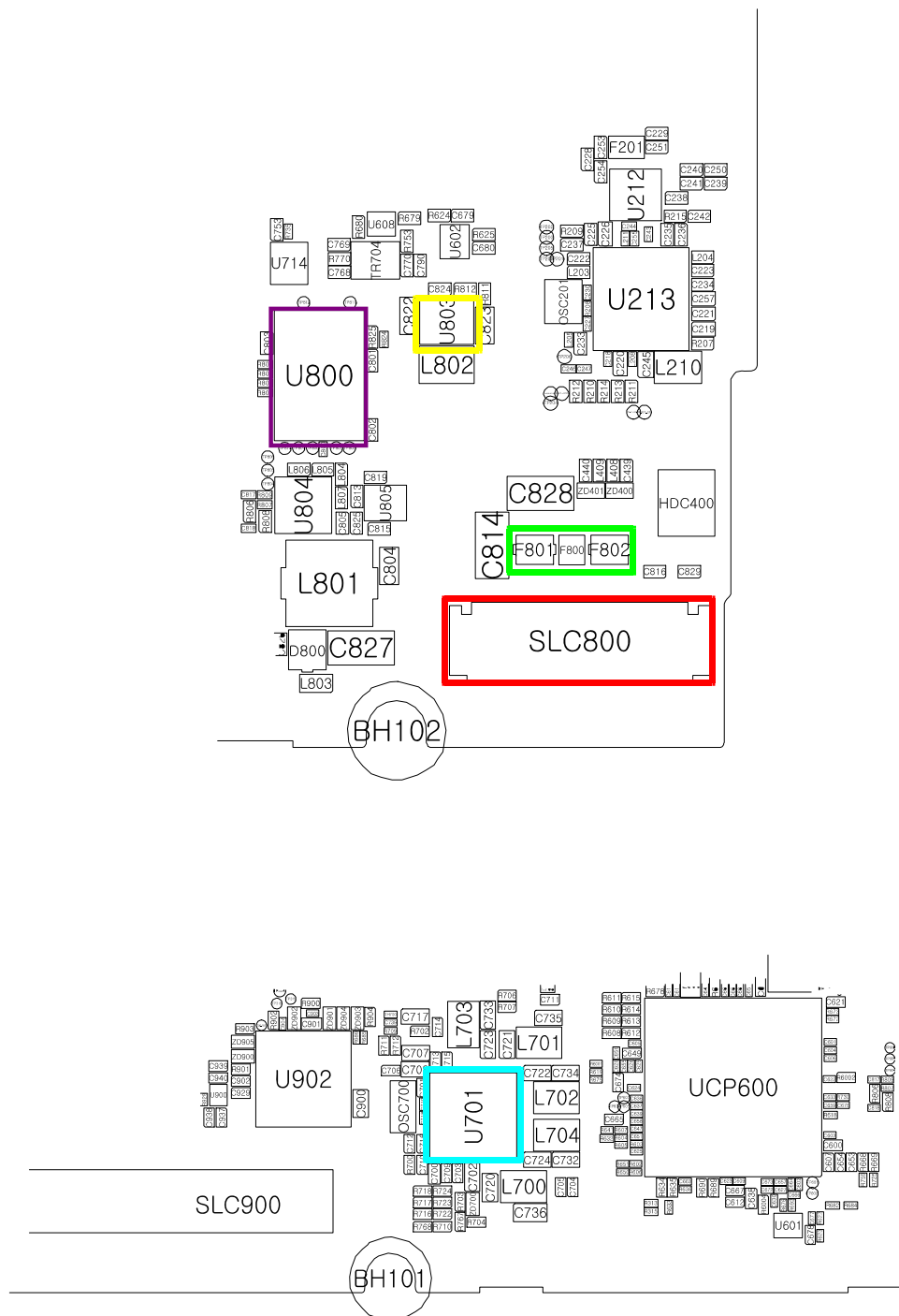




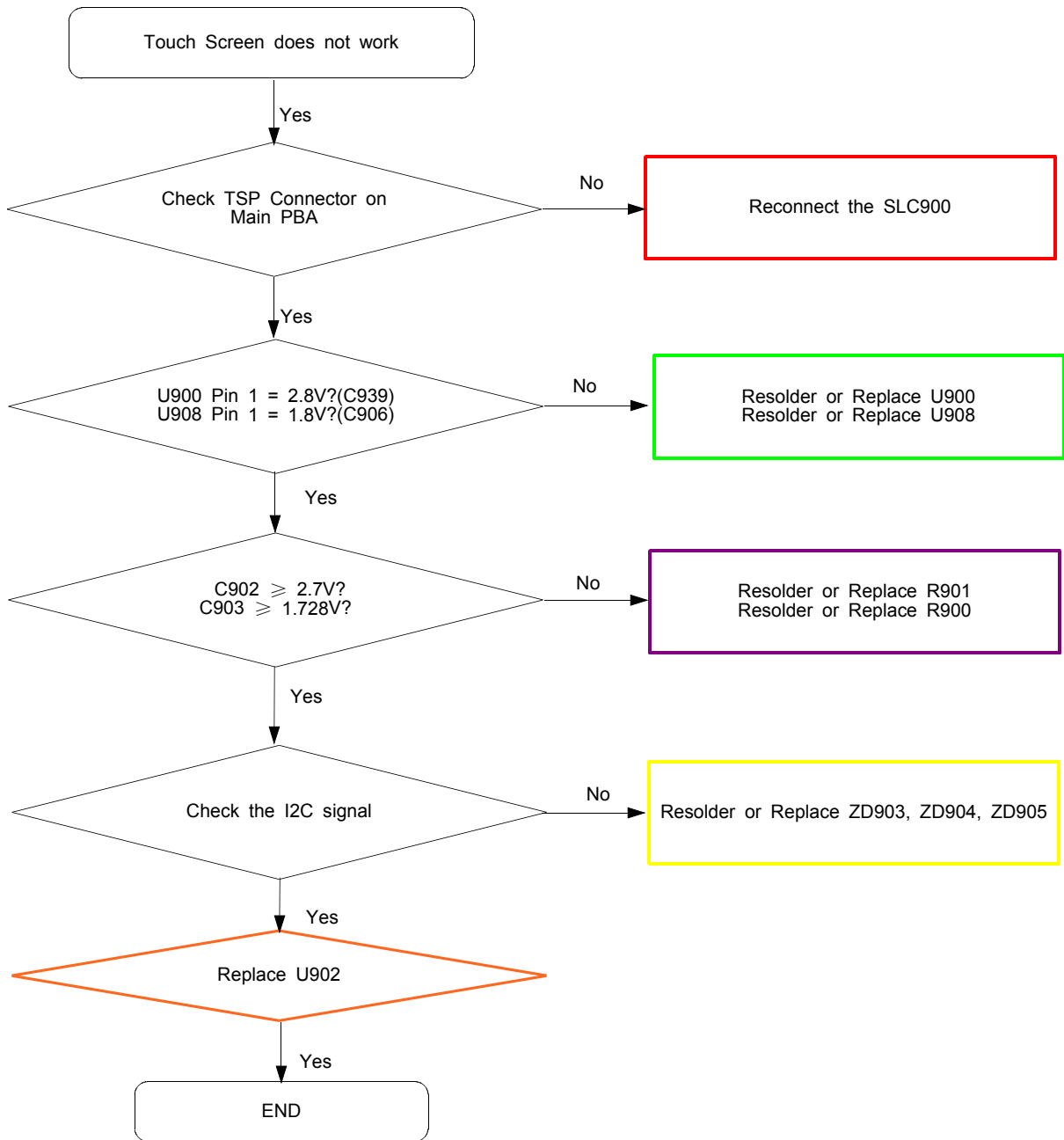
8-3-9. LCD

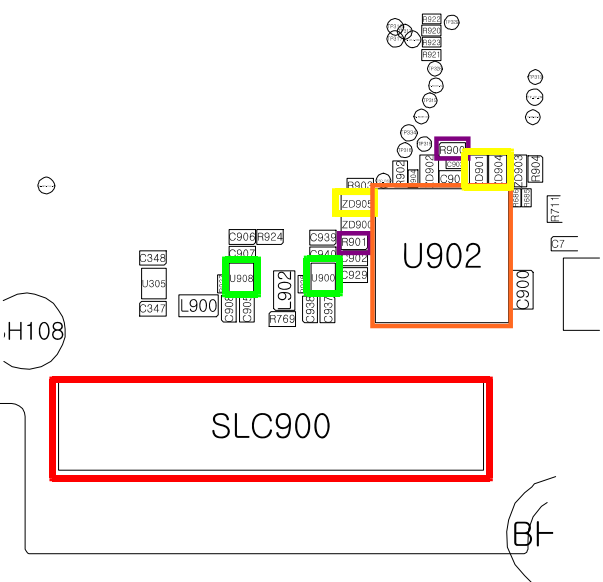
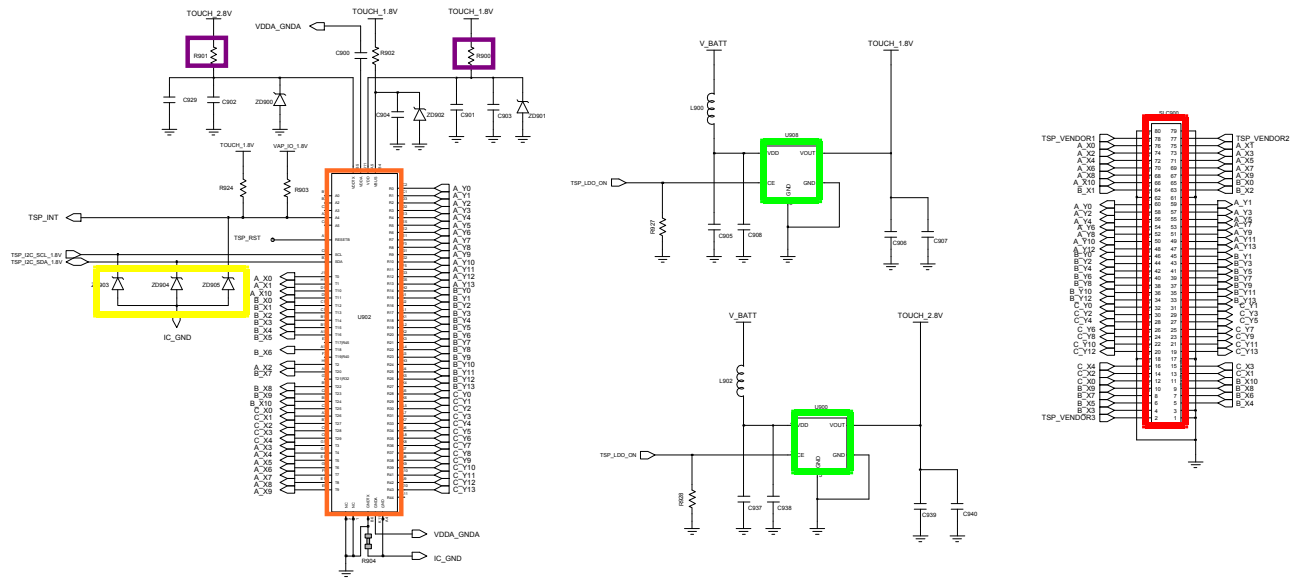




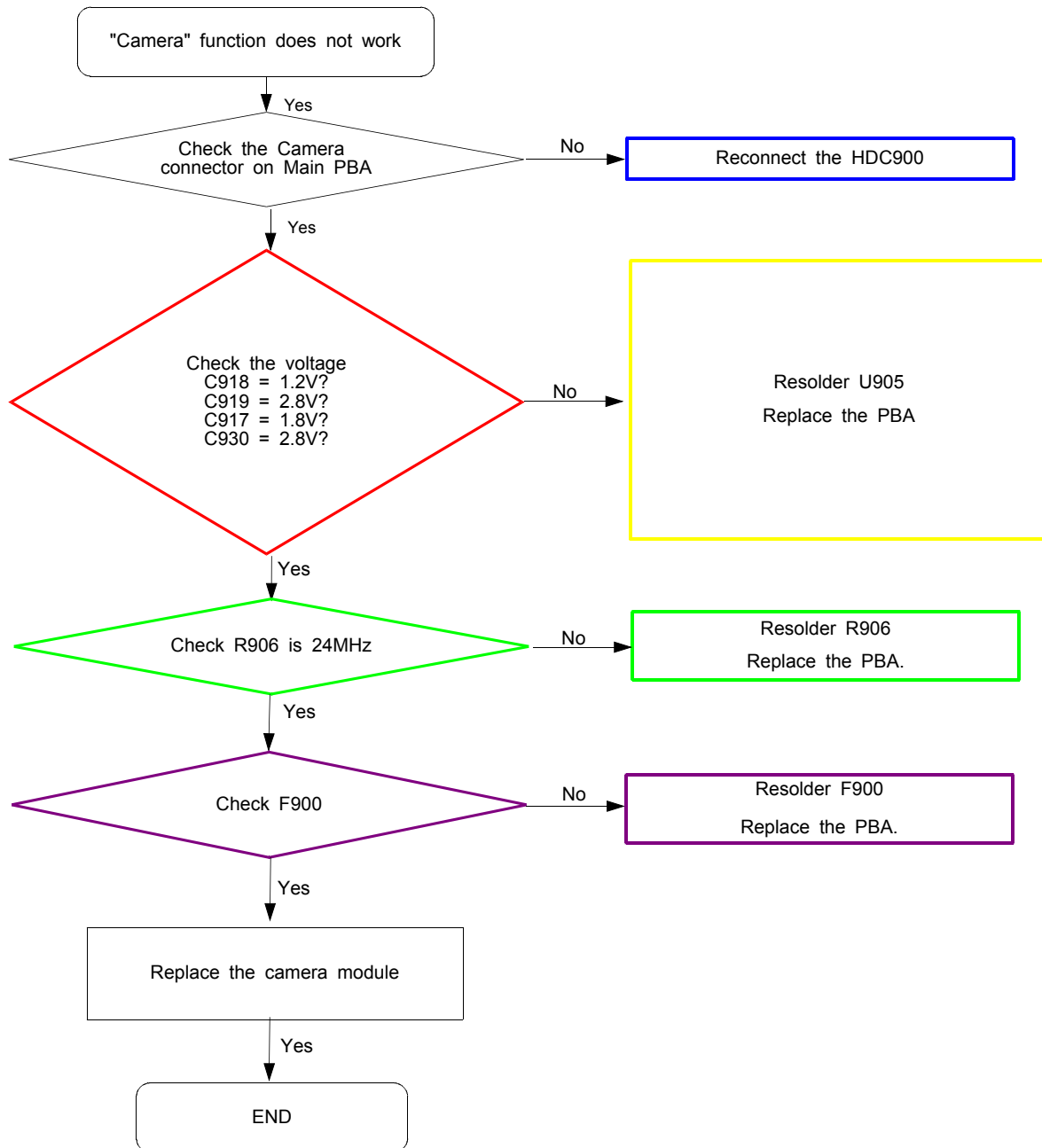


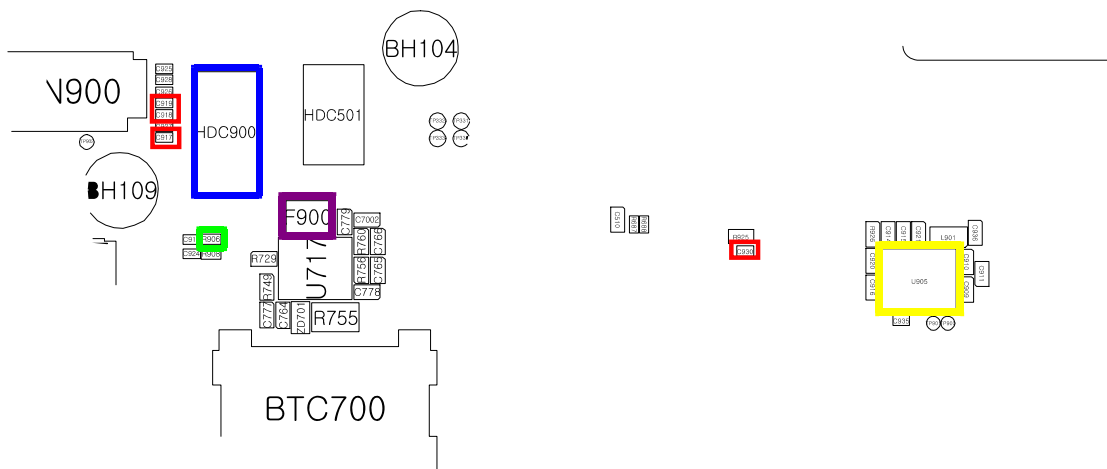
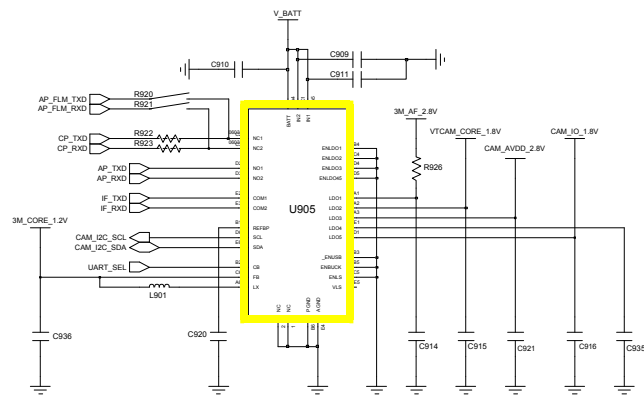
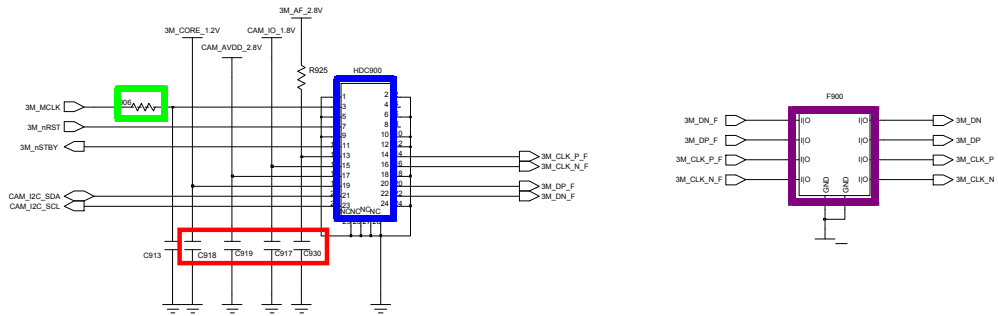
8-3-10. TSP



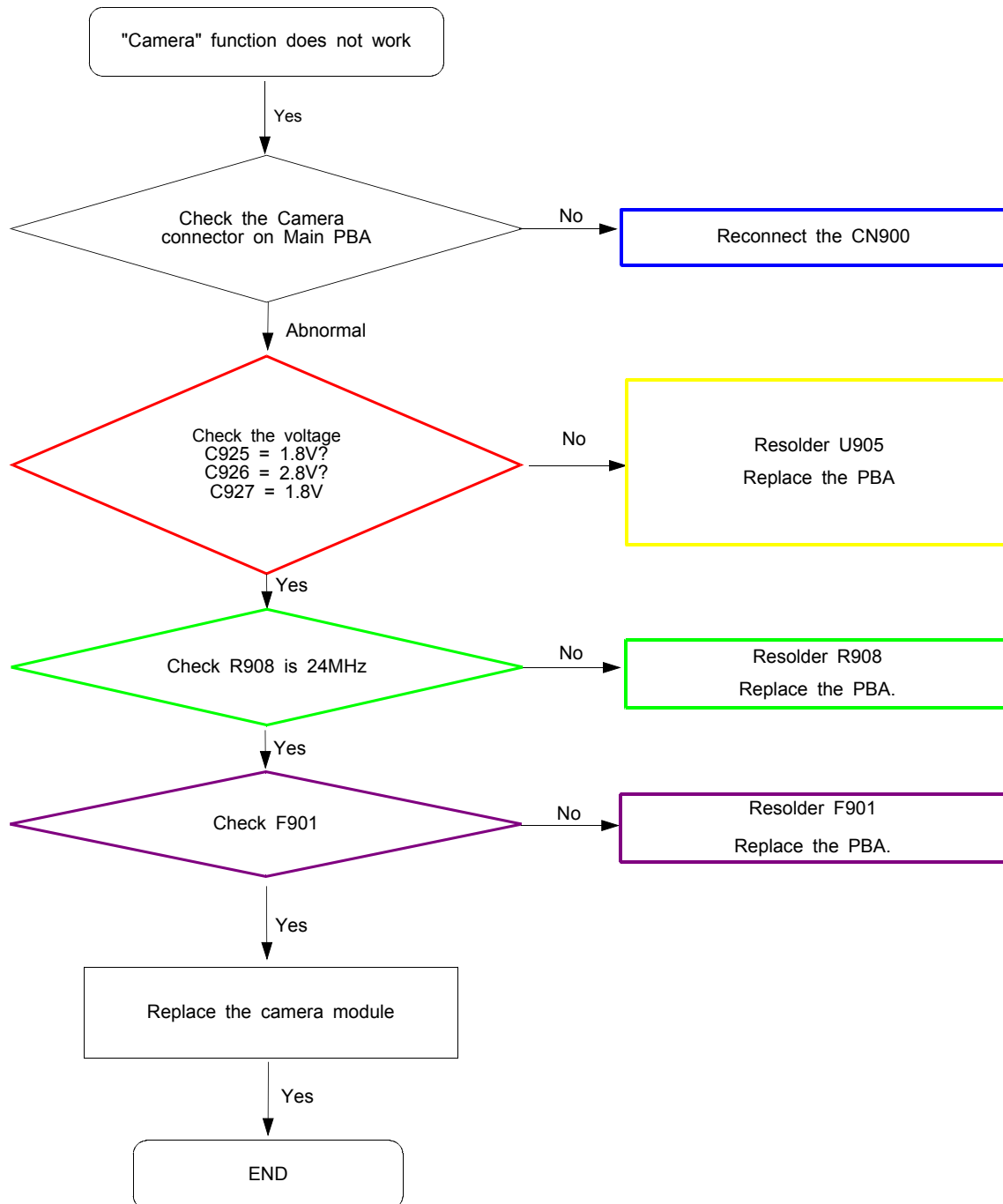


8-3-11. 3M CAM

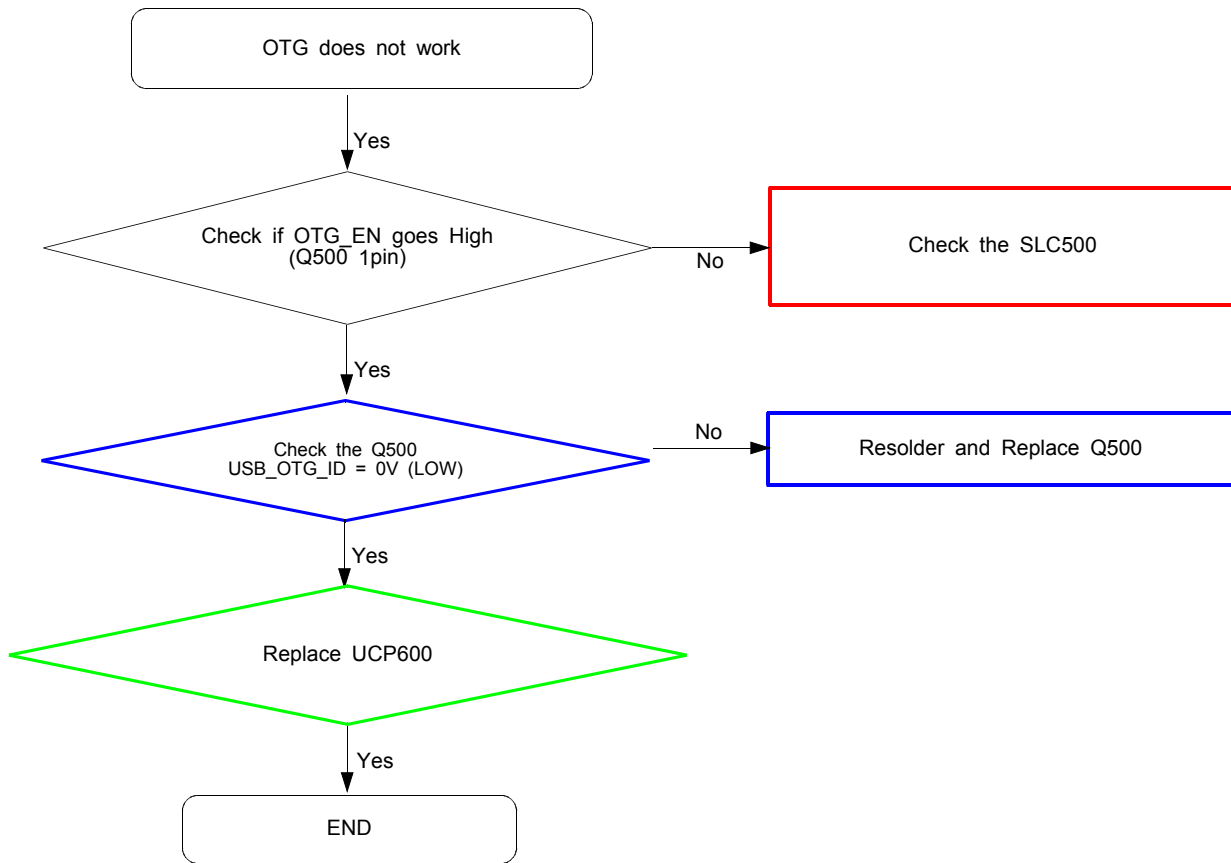




8-3-12. VGA CAM

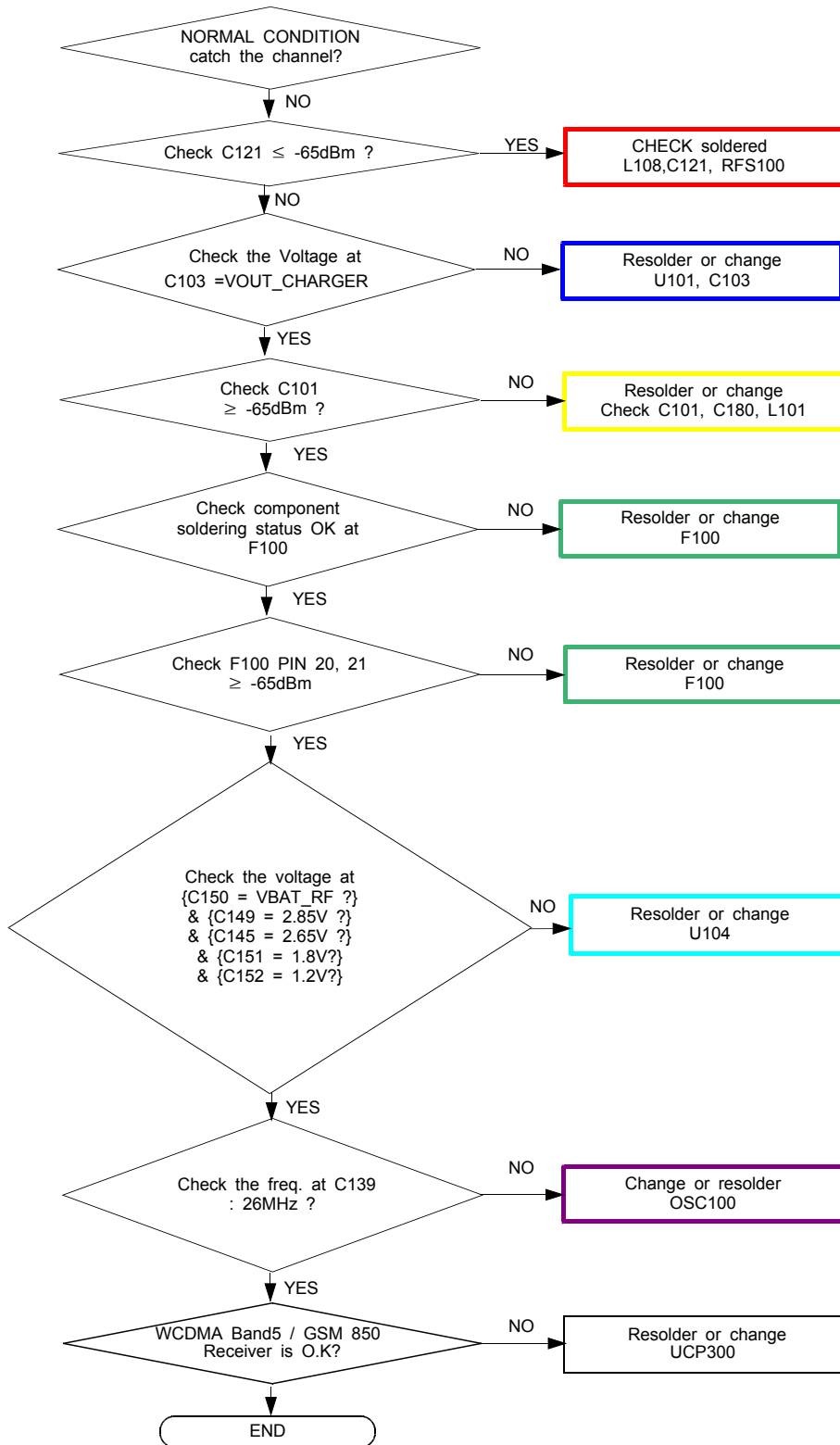


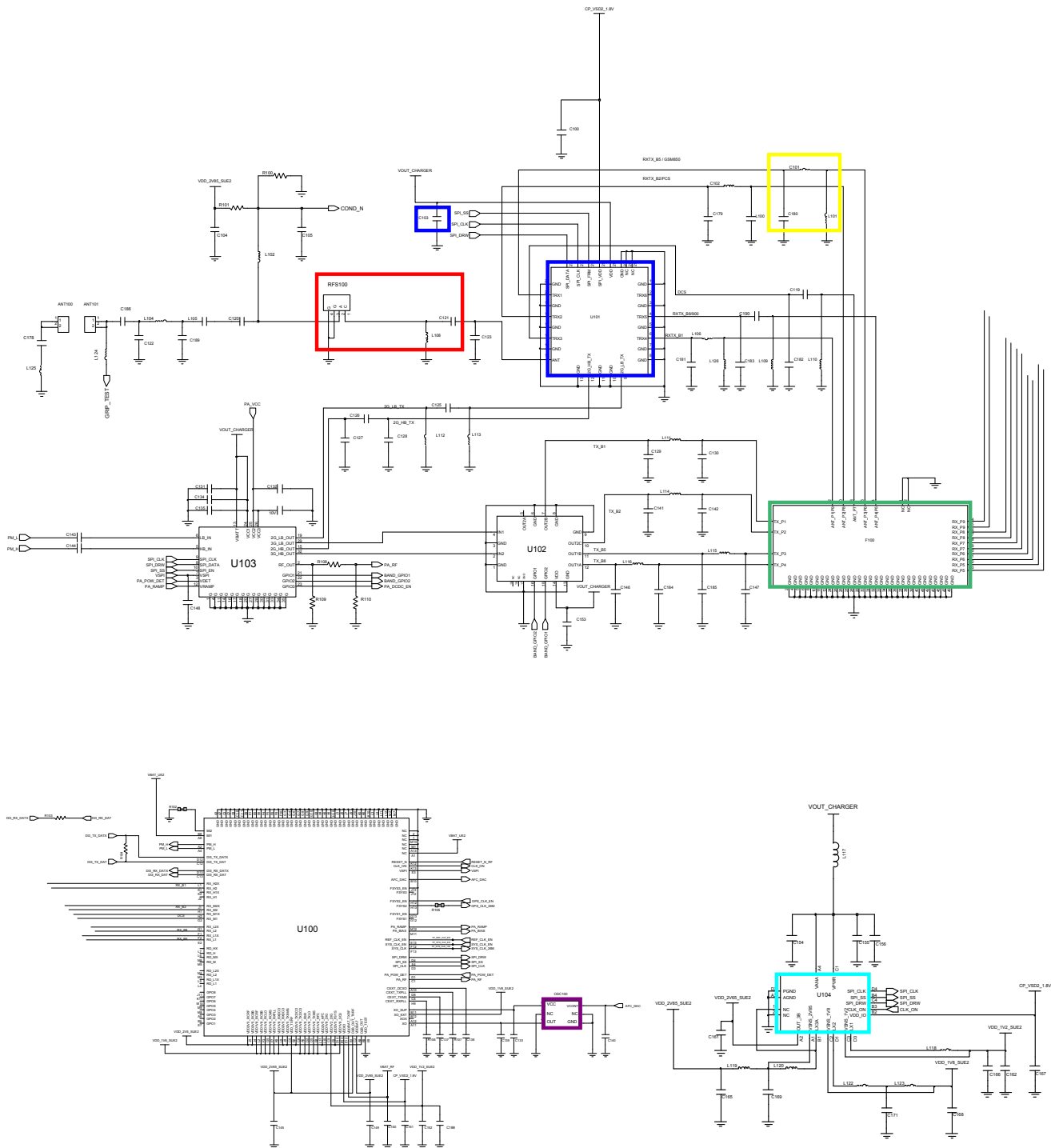
8-3-13. OTG



8-3-14. GSM850/ WCDMA Band5 RX

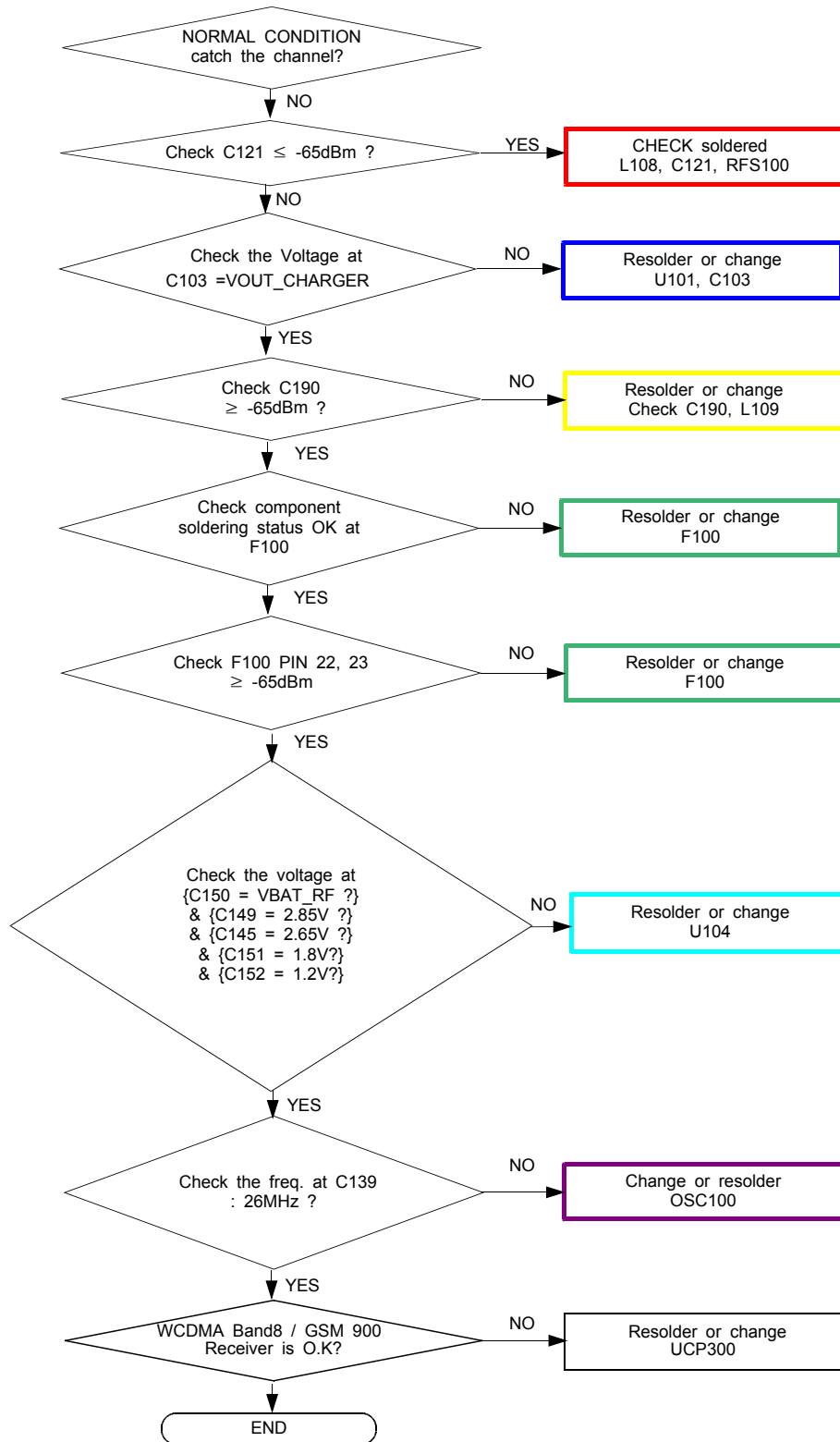
CONTINUO
 US RX ON
 RF INPUT : 4408CH
 AMP : -50dBm

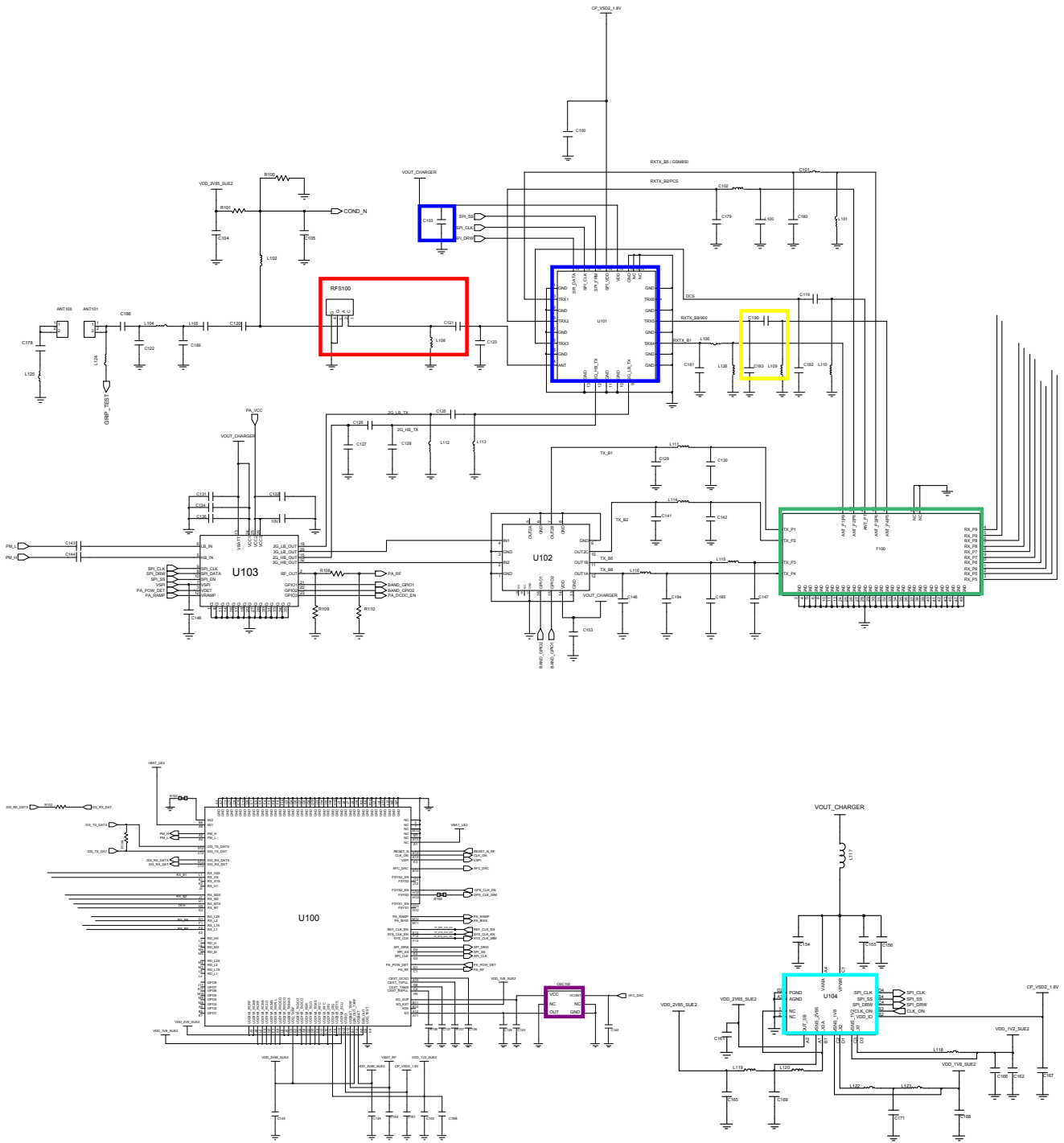


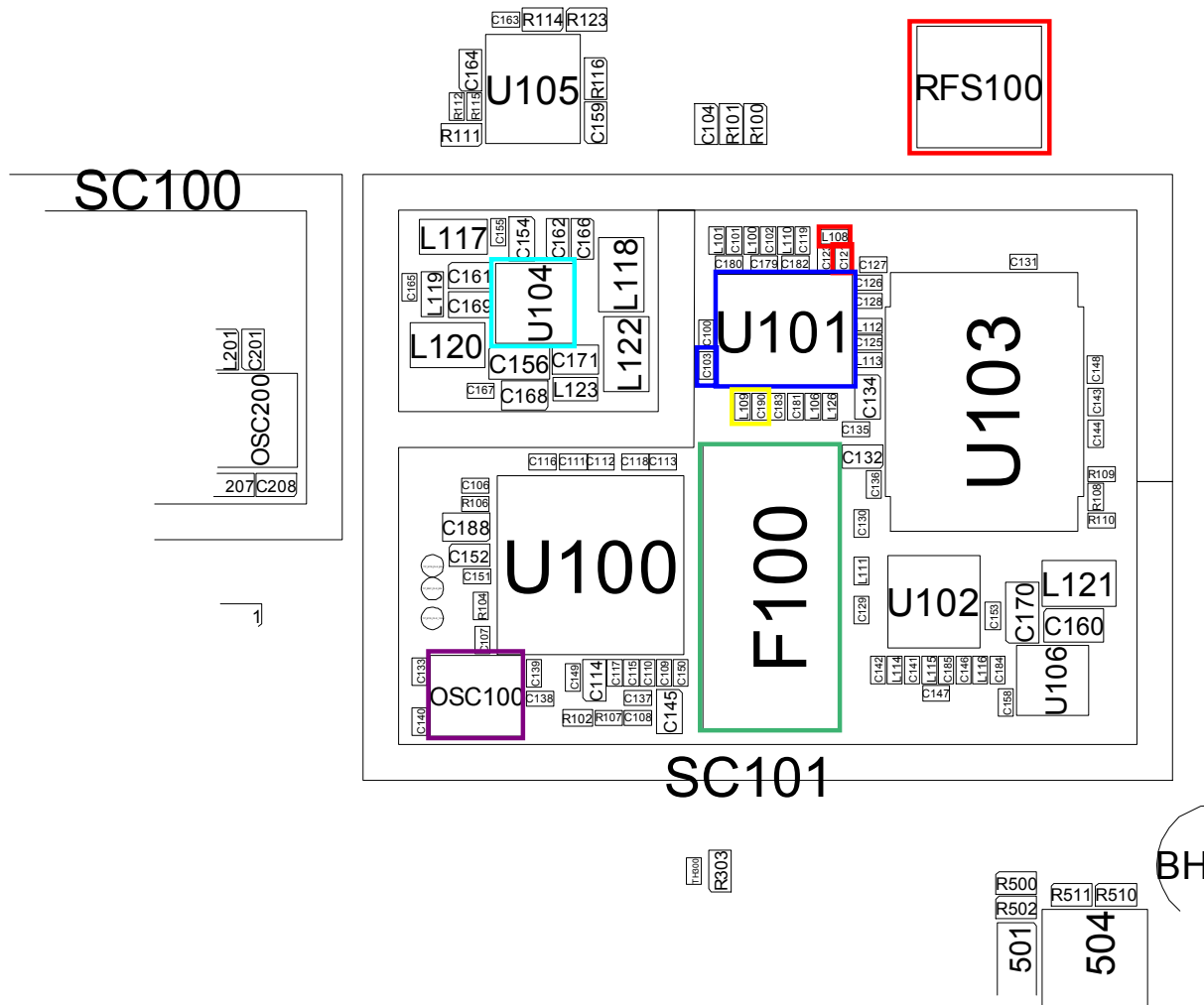


8-3-15. GSM900/ WCDMA Band8 RX

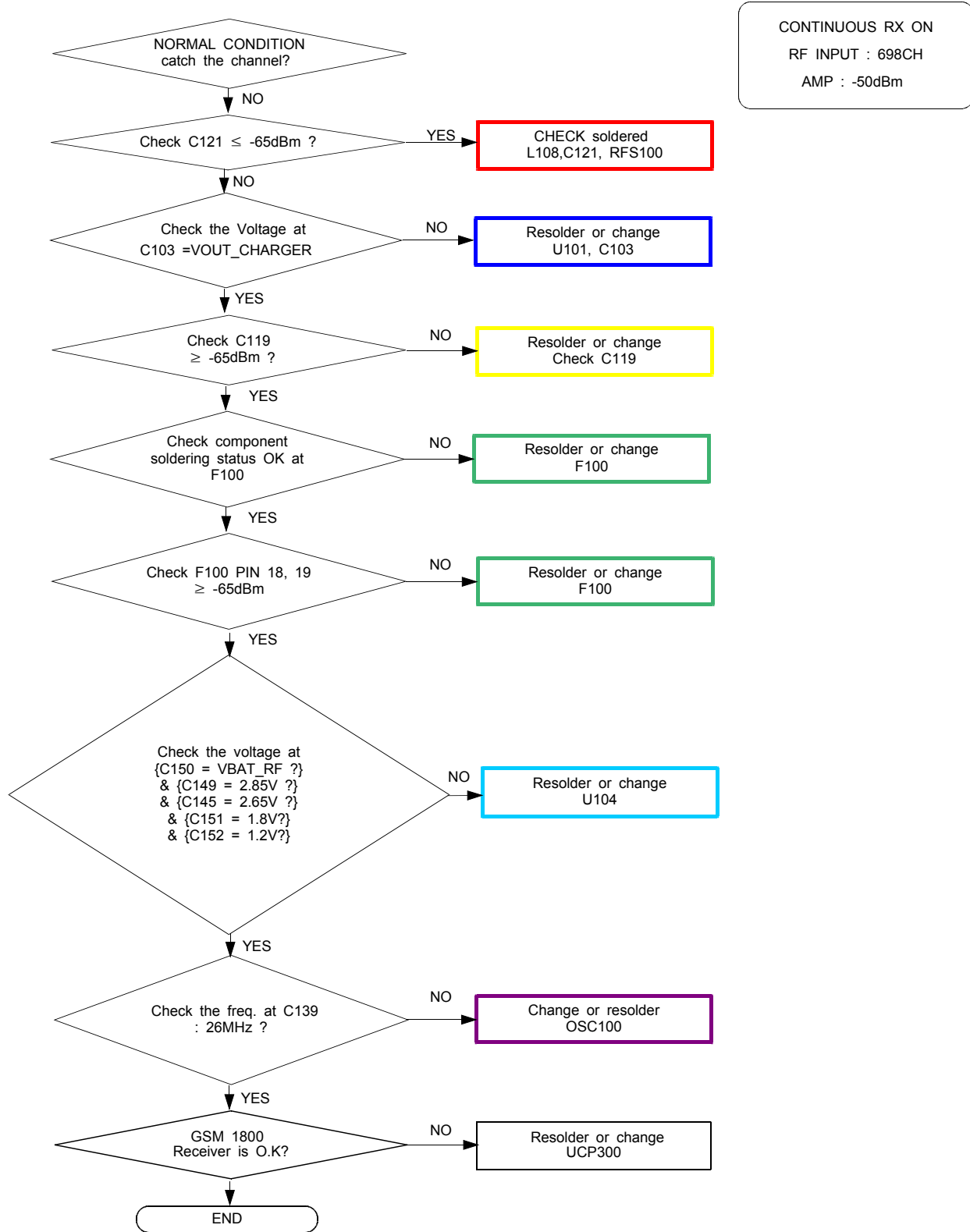
CONTINUOUS RX ON
RF INPUT : 3013CH
AMP : -50dBm

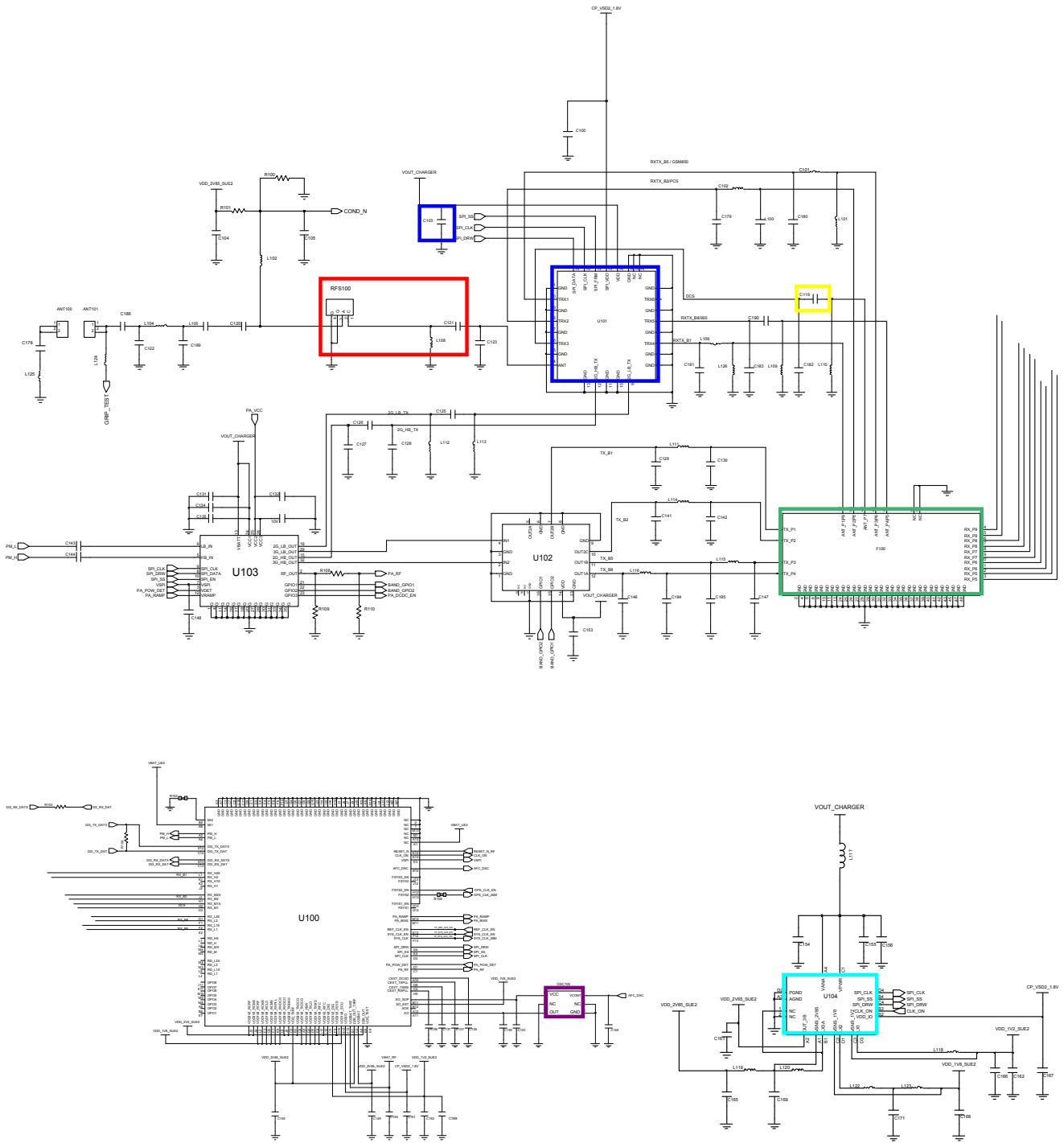




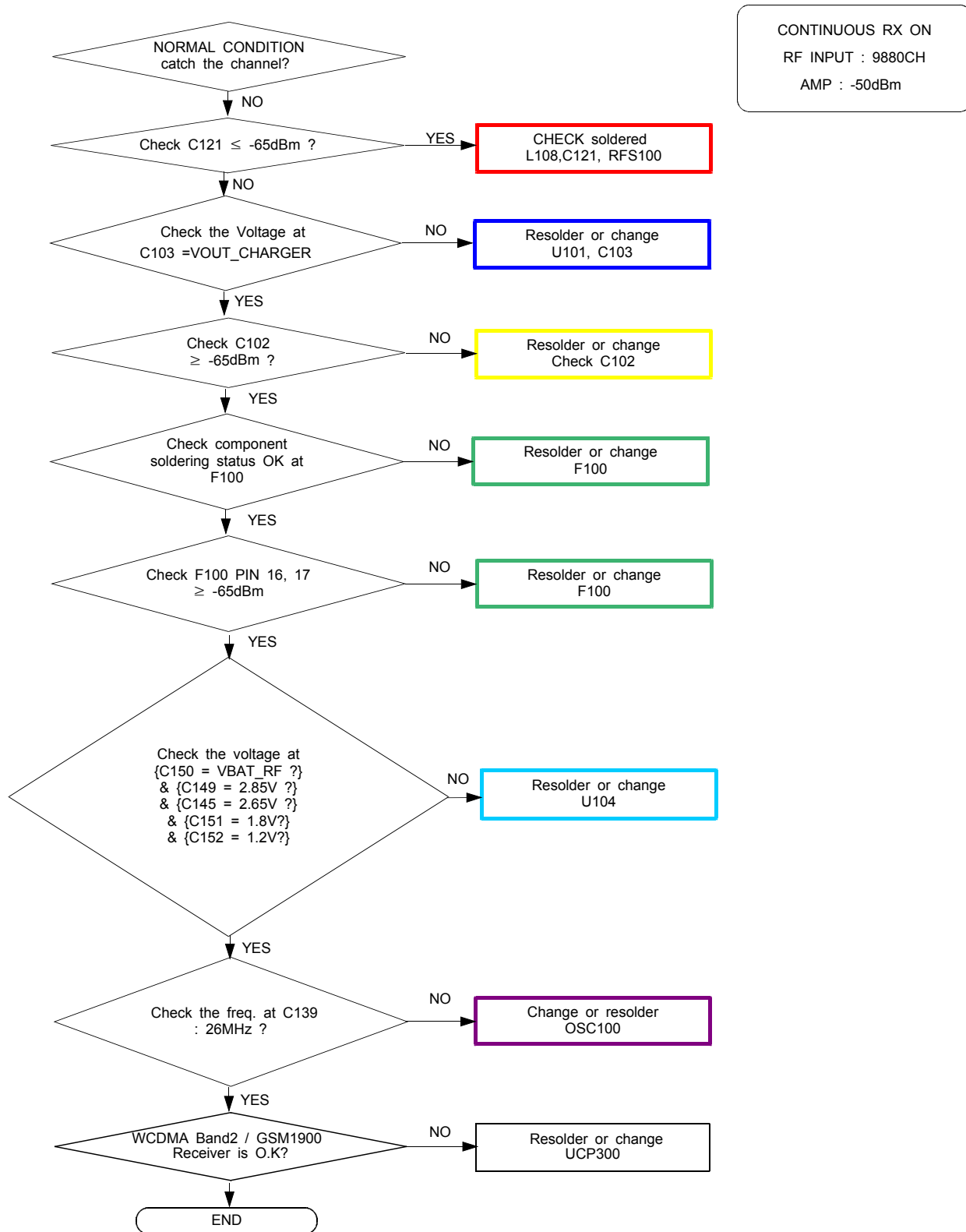


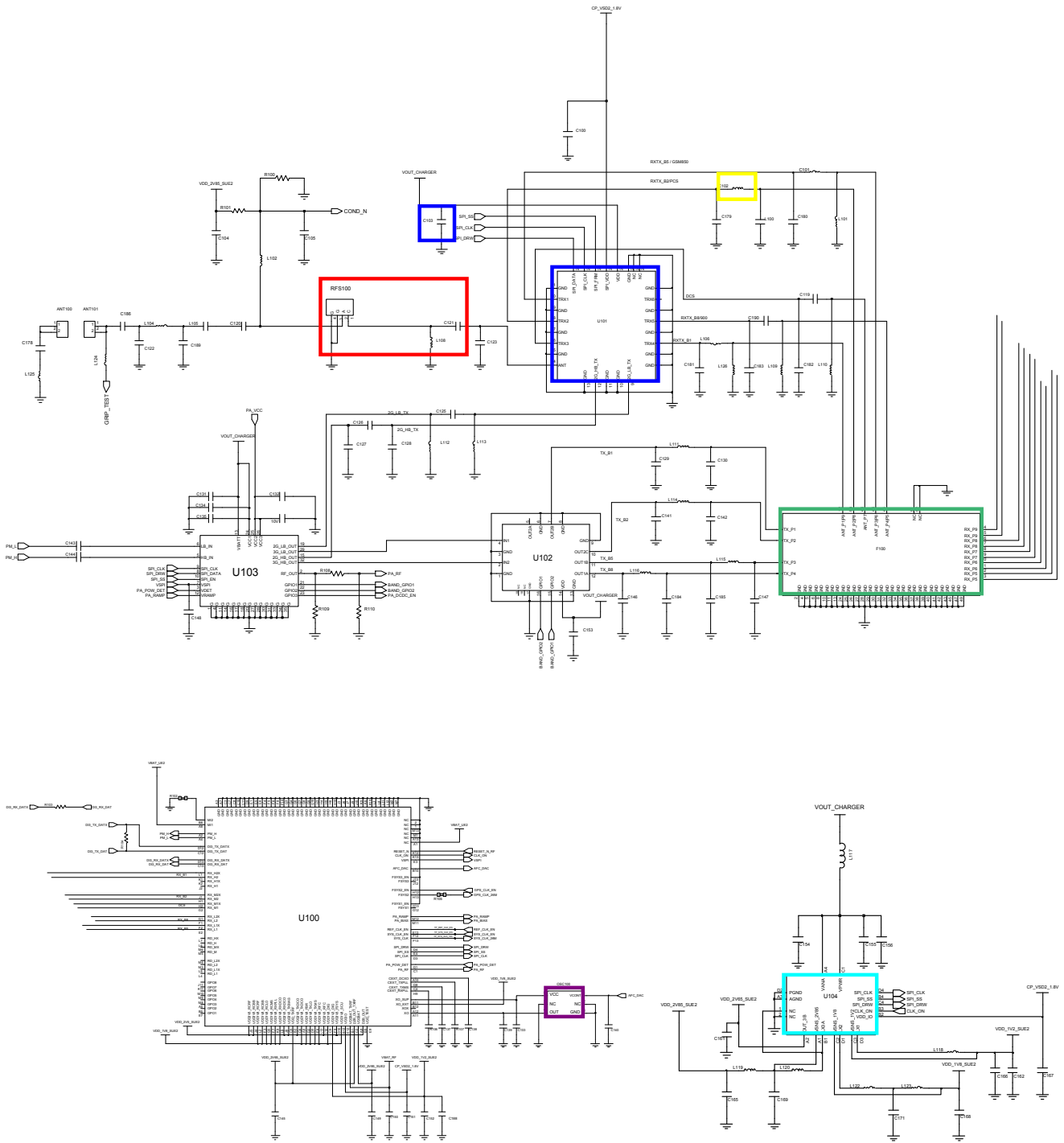
8-3-16. GSM1800 RX



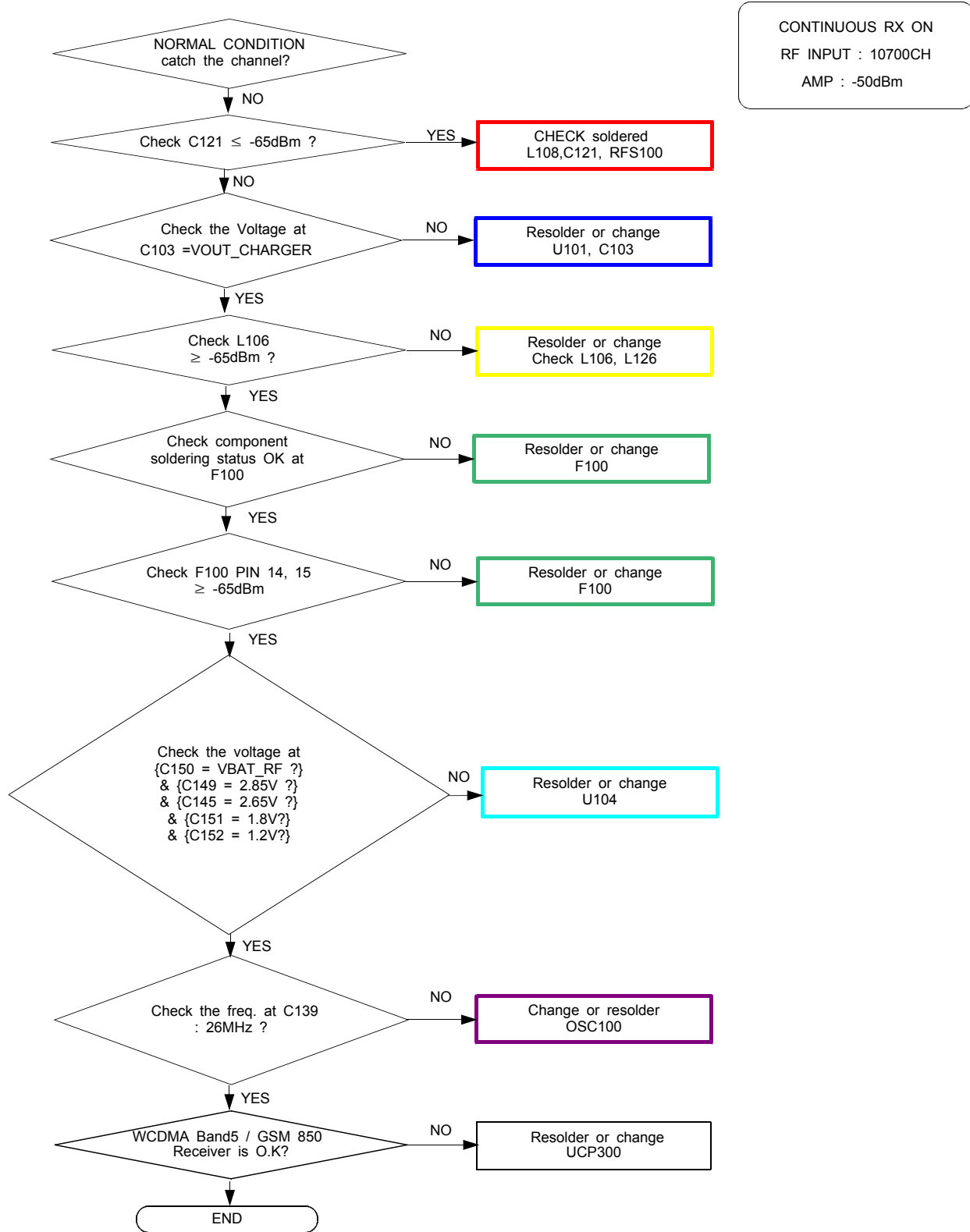


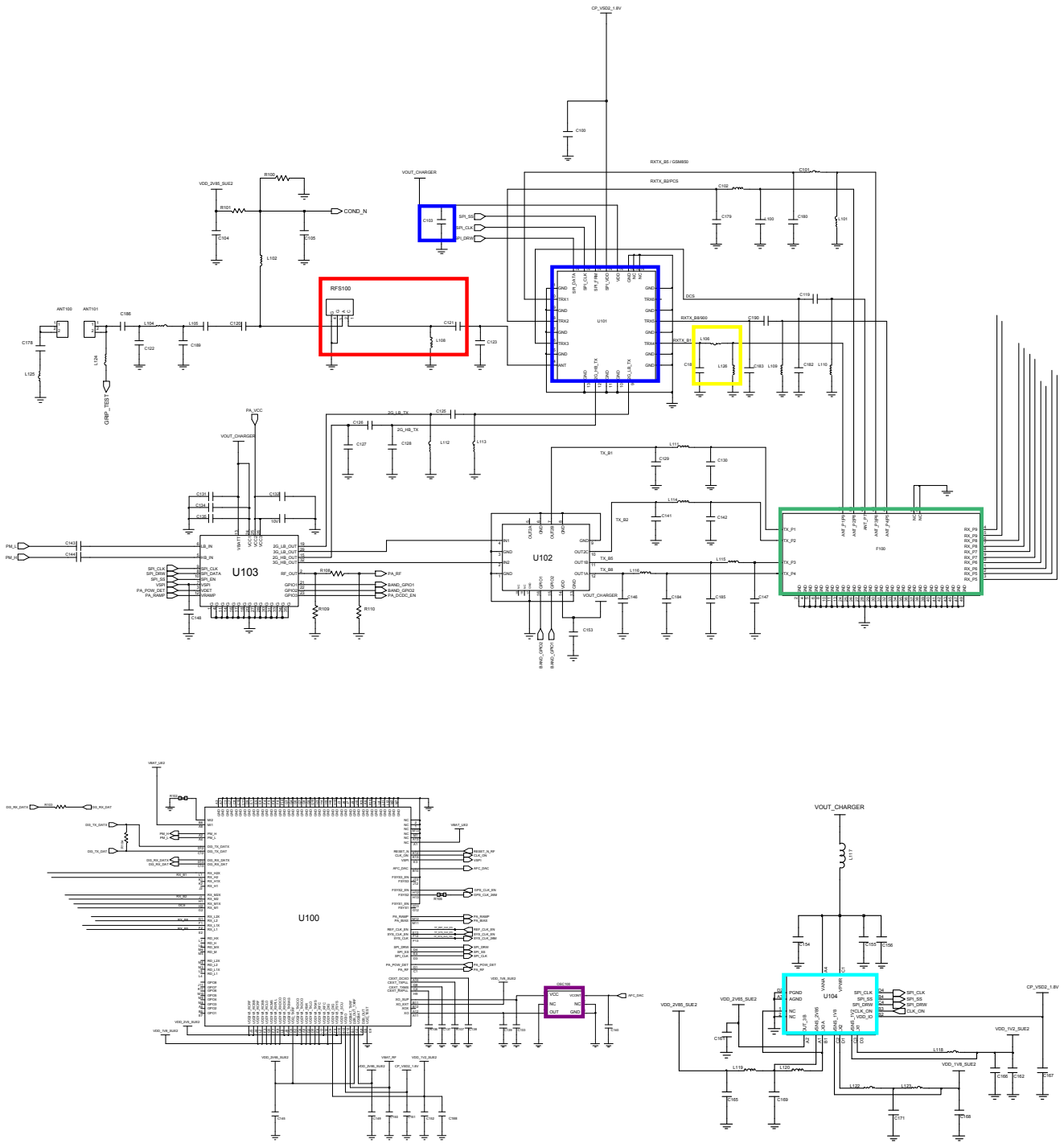
8-3-17. GSM1900/ WCDMA Band2 RX





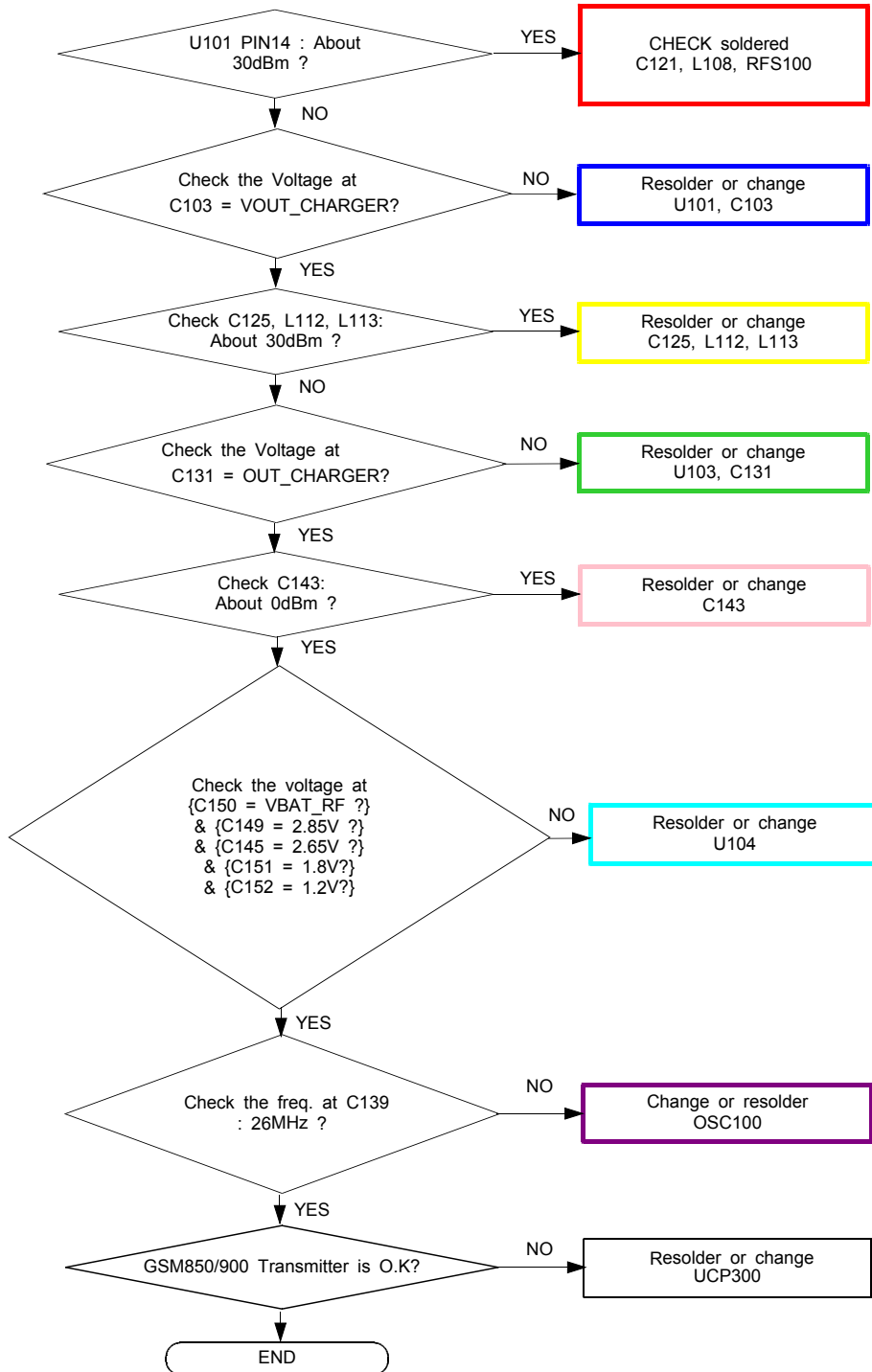
8-3-18. WCDMA Band1 RX

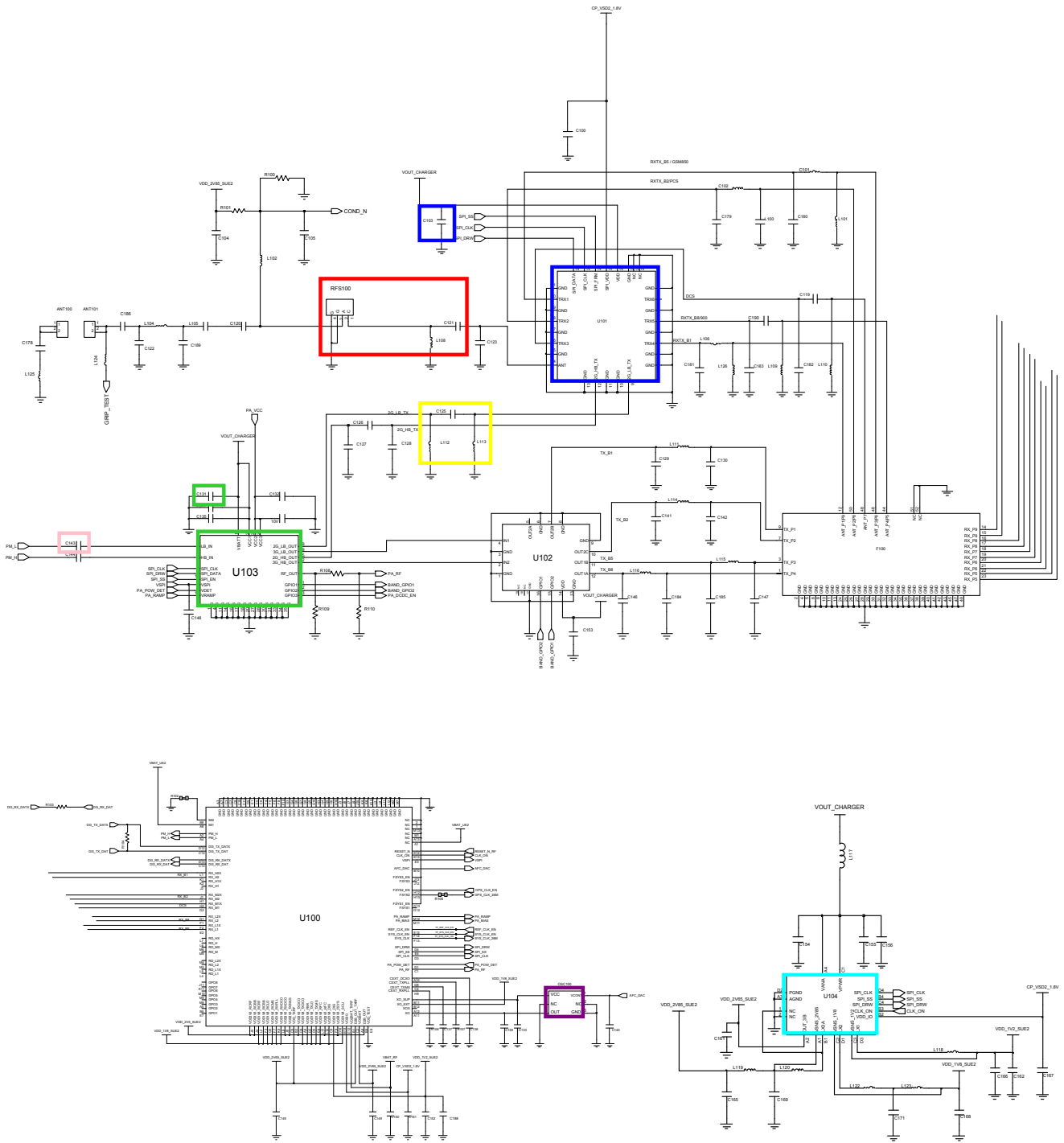


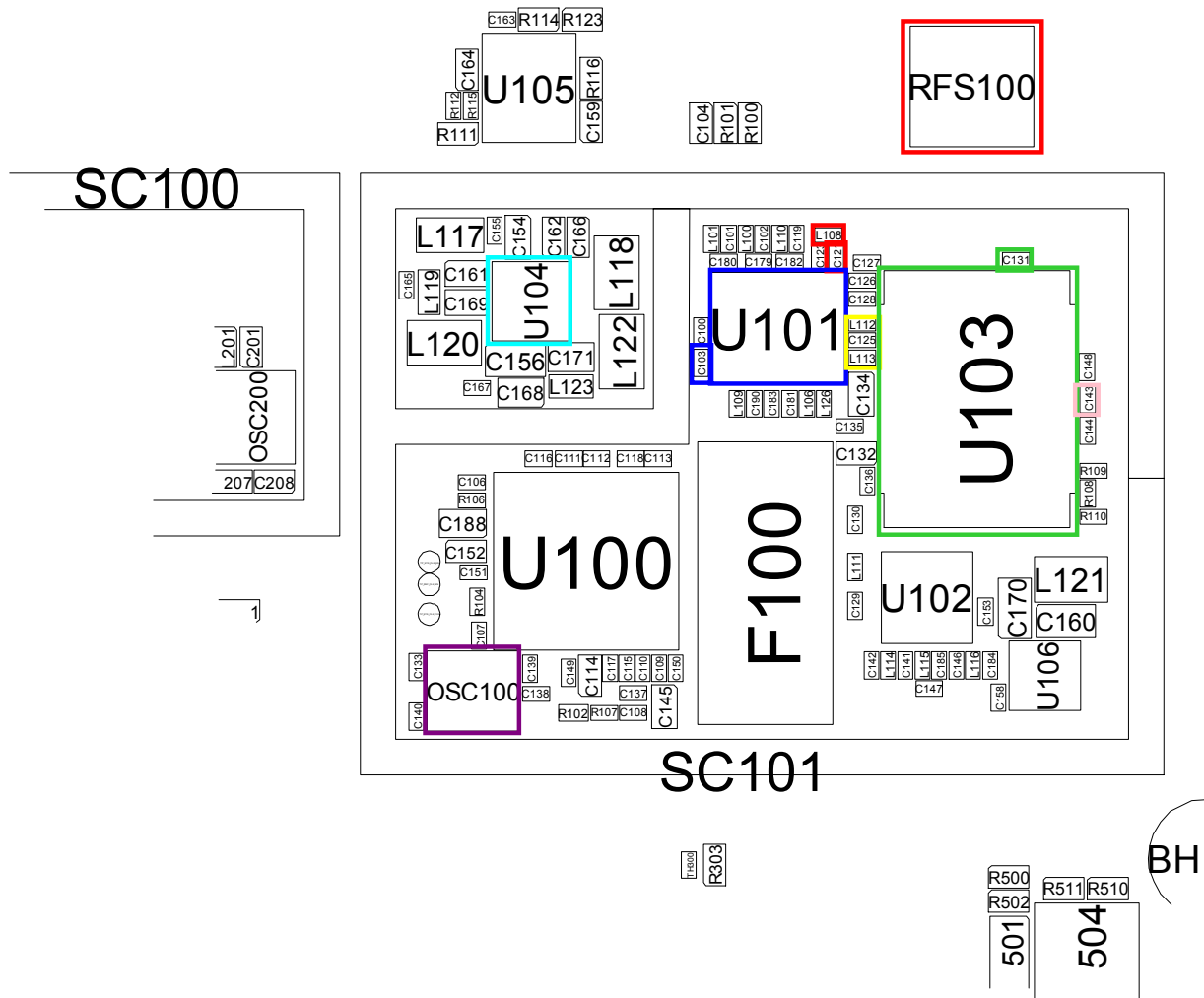


8-3-19. GSM850/ GSM900 TX

CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 GSM850 CH : 190
 GSM900 CH : 62
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

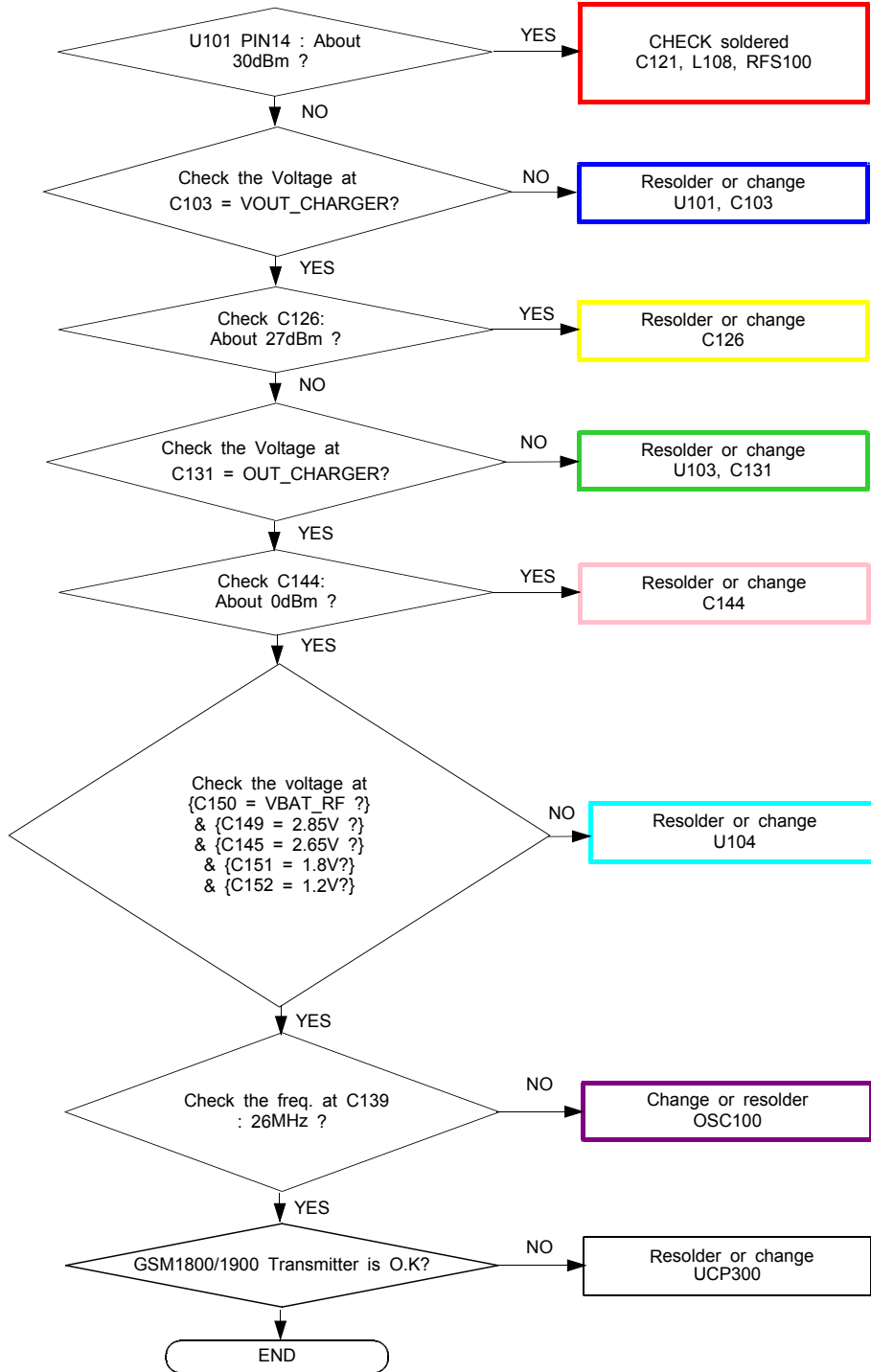


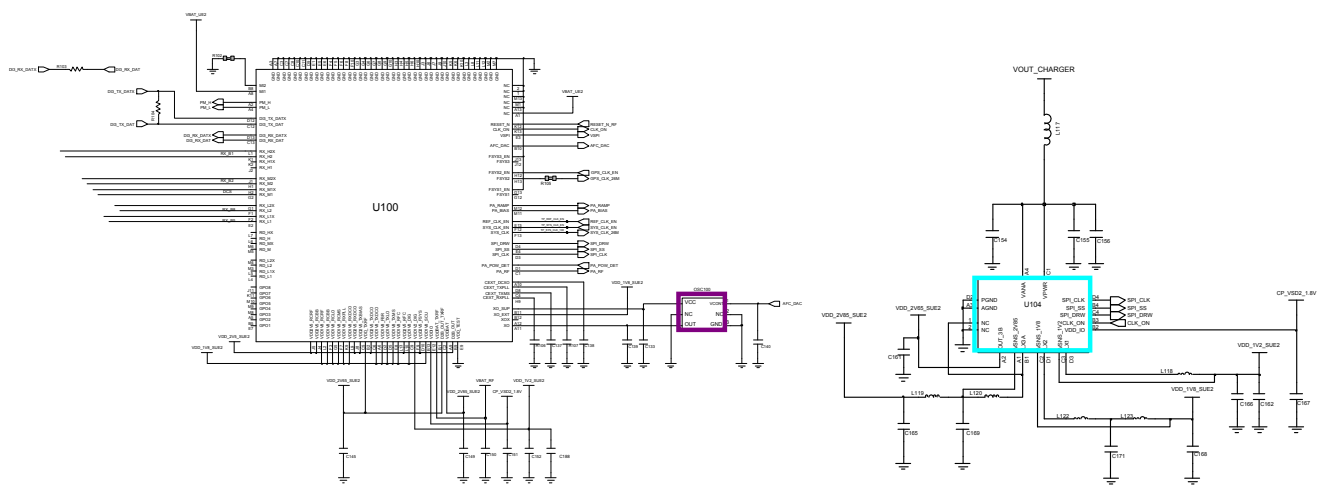
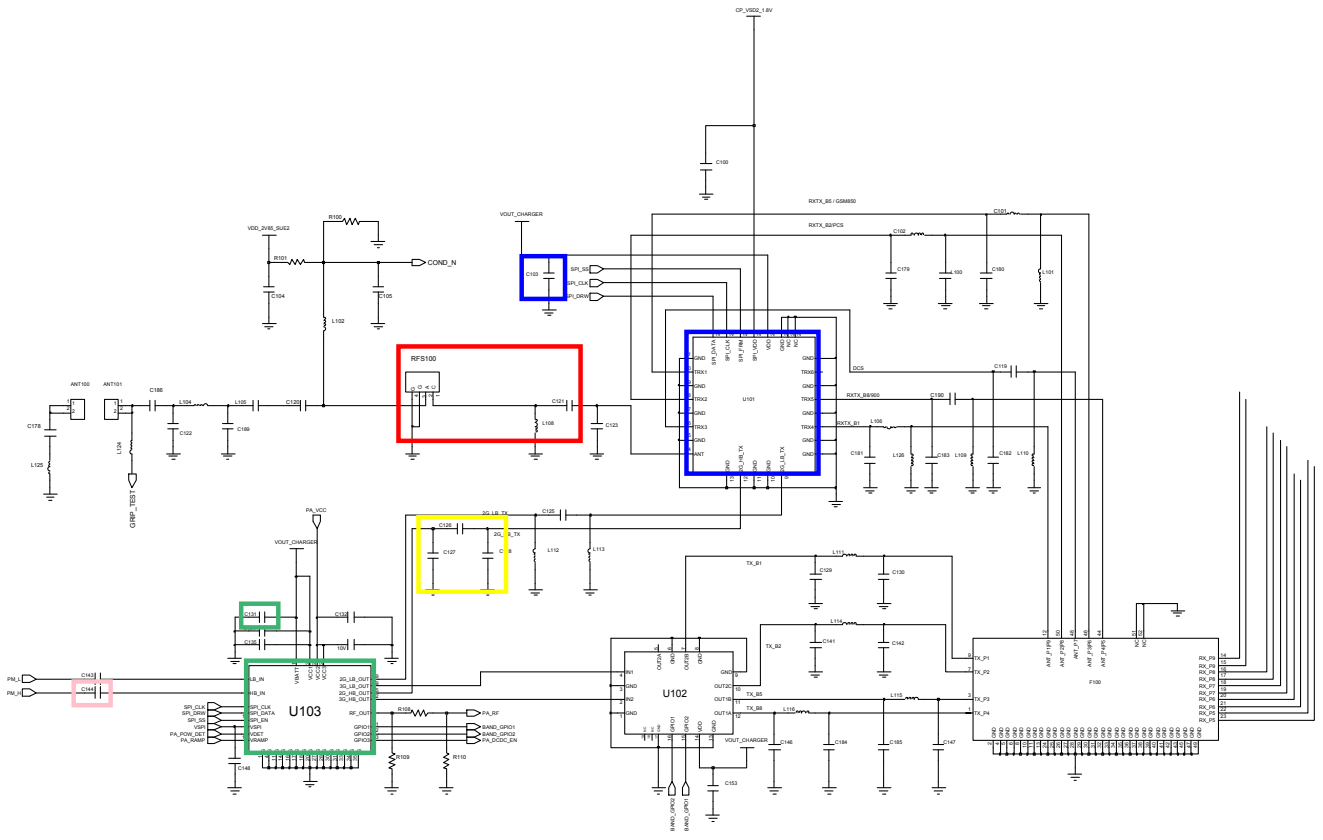




8-3-20. GSM1800/ GSM1900 TX

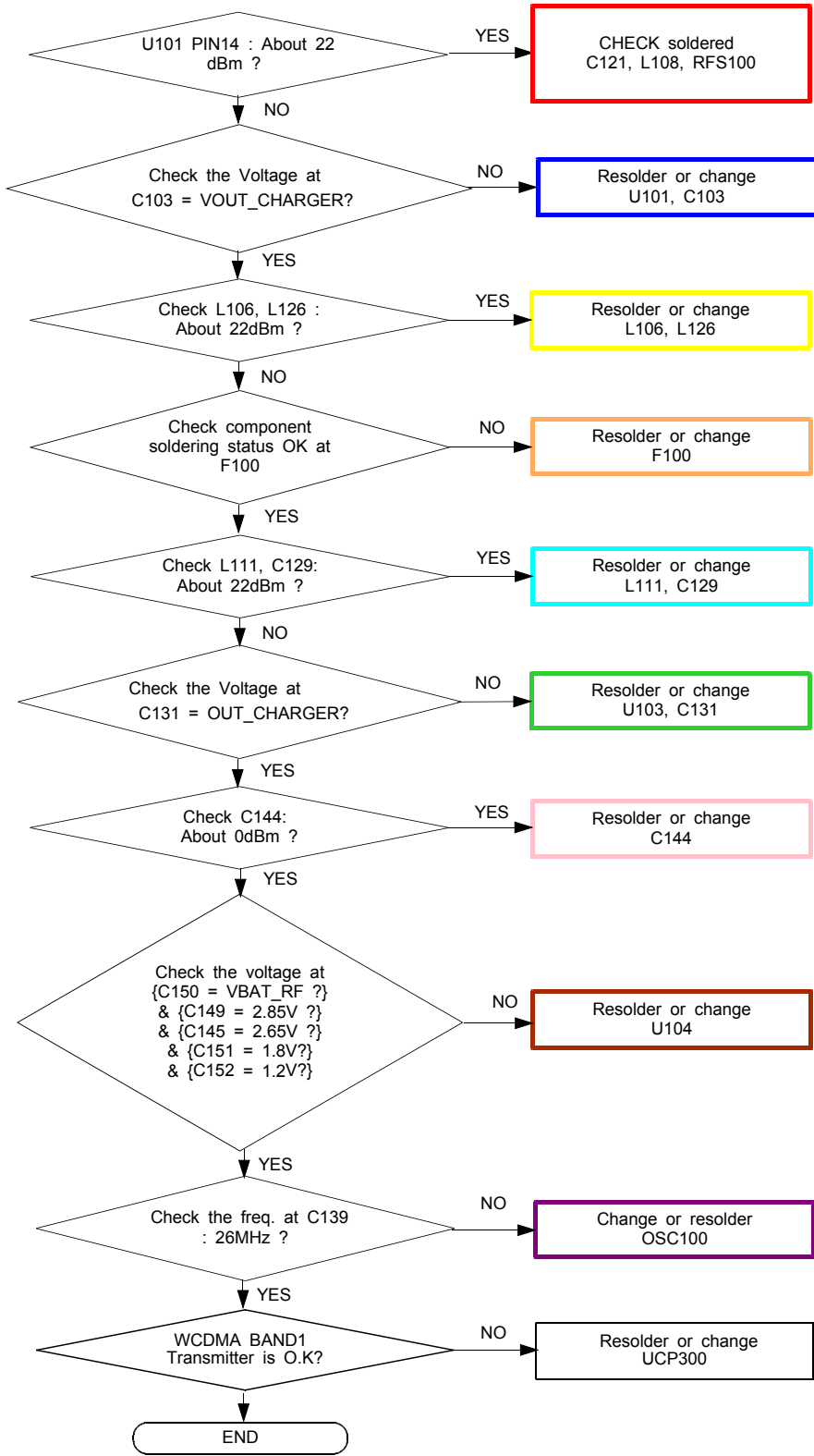
CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 DCS CH : 685
 PCS CH : 661
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

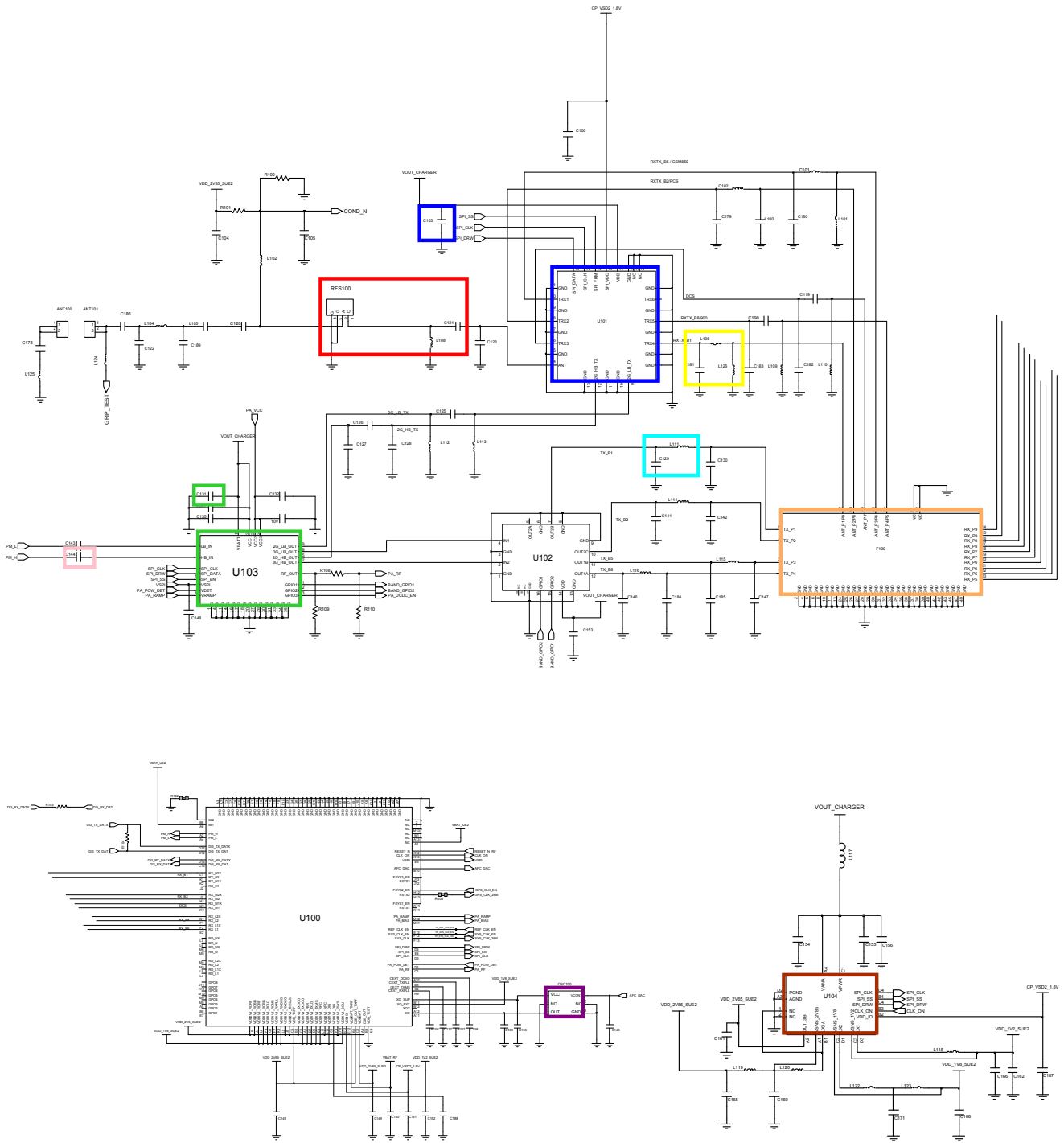




8-3-21. WCDMA BAND1 TX

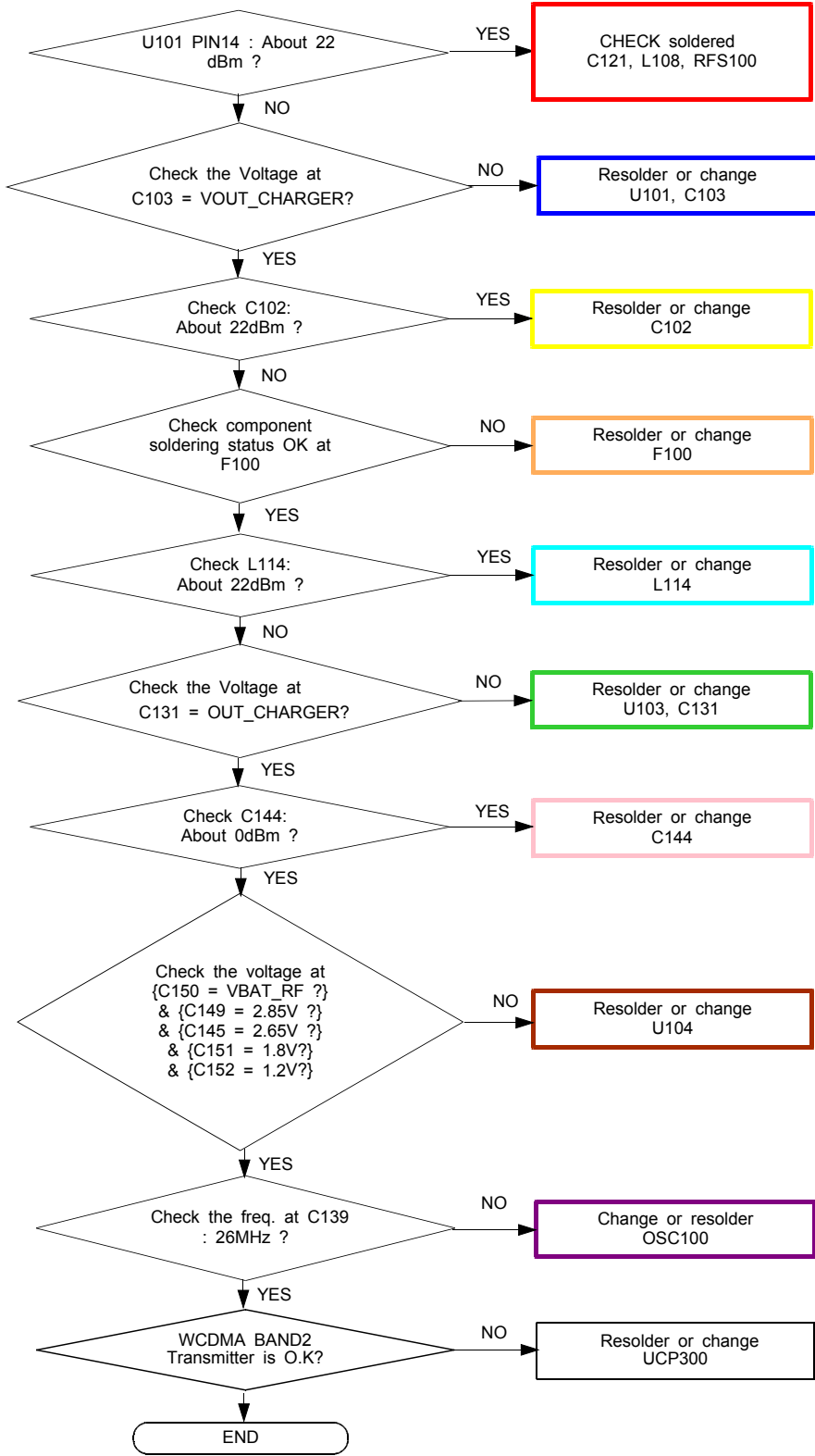
CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 WCDMA Band1 CH : 10700
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

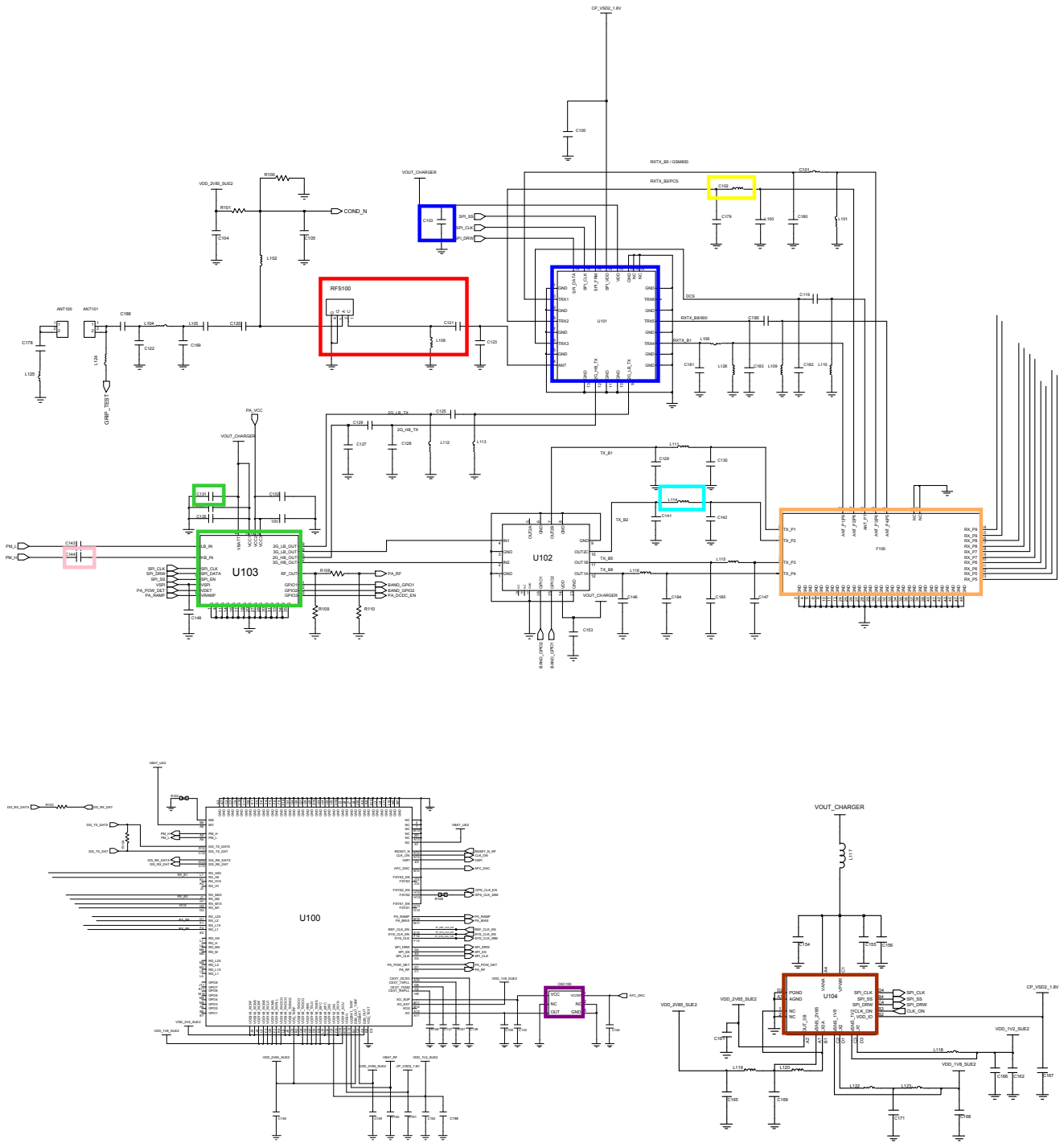




8-3-22. WCDMA BAND2 TX

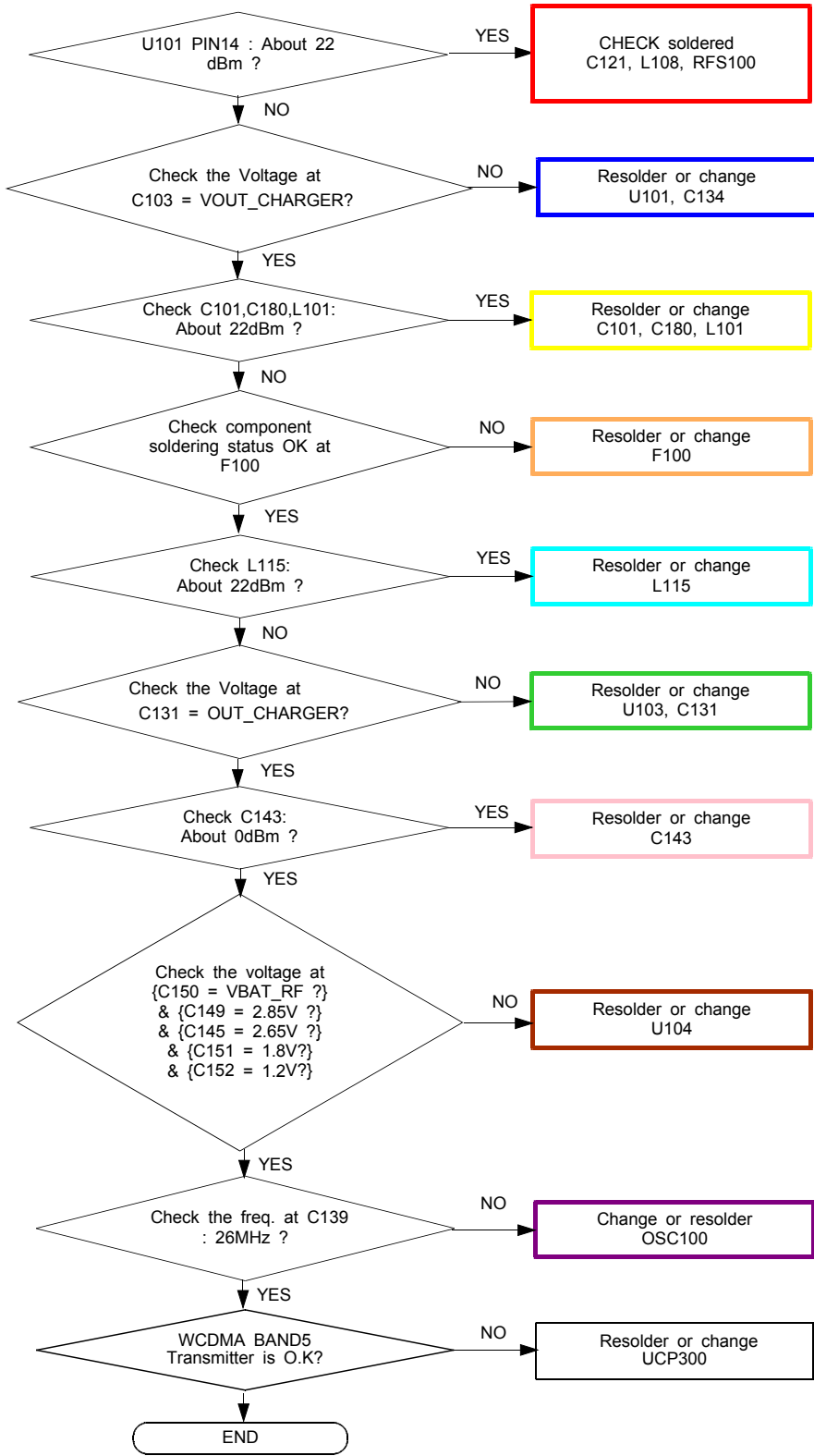
CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 WCDMA Band2 CH : 9880
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

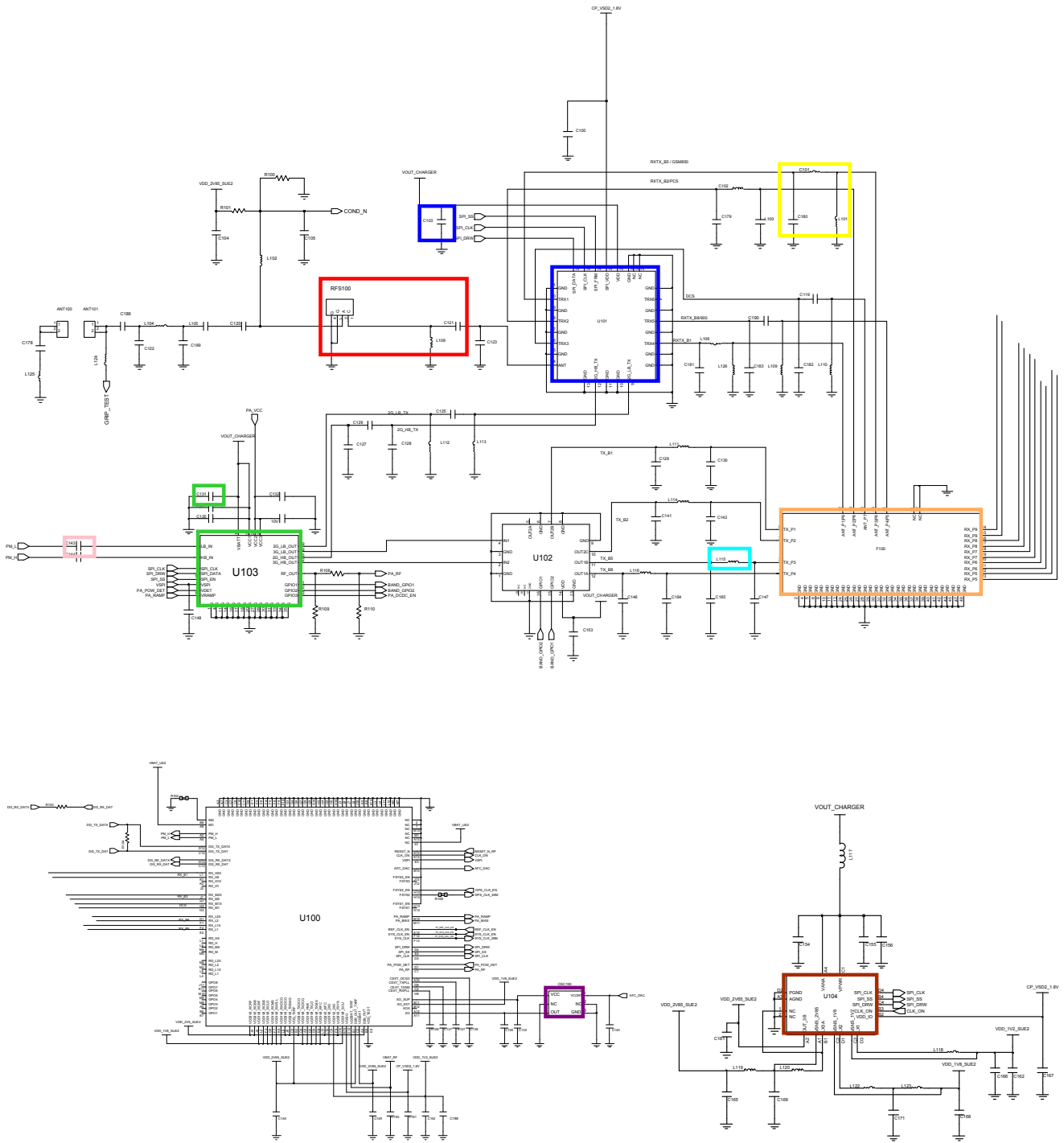


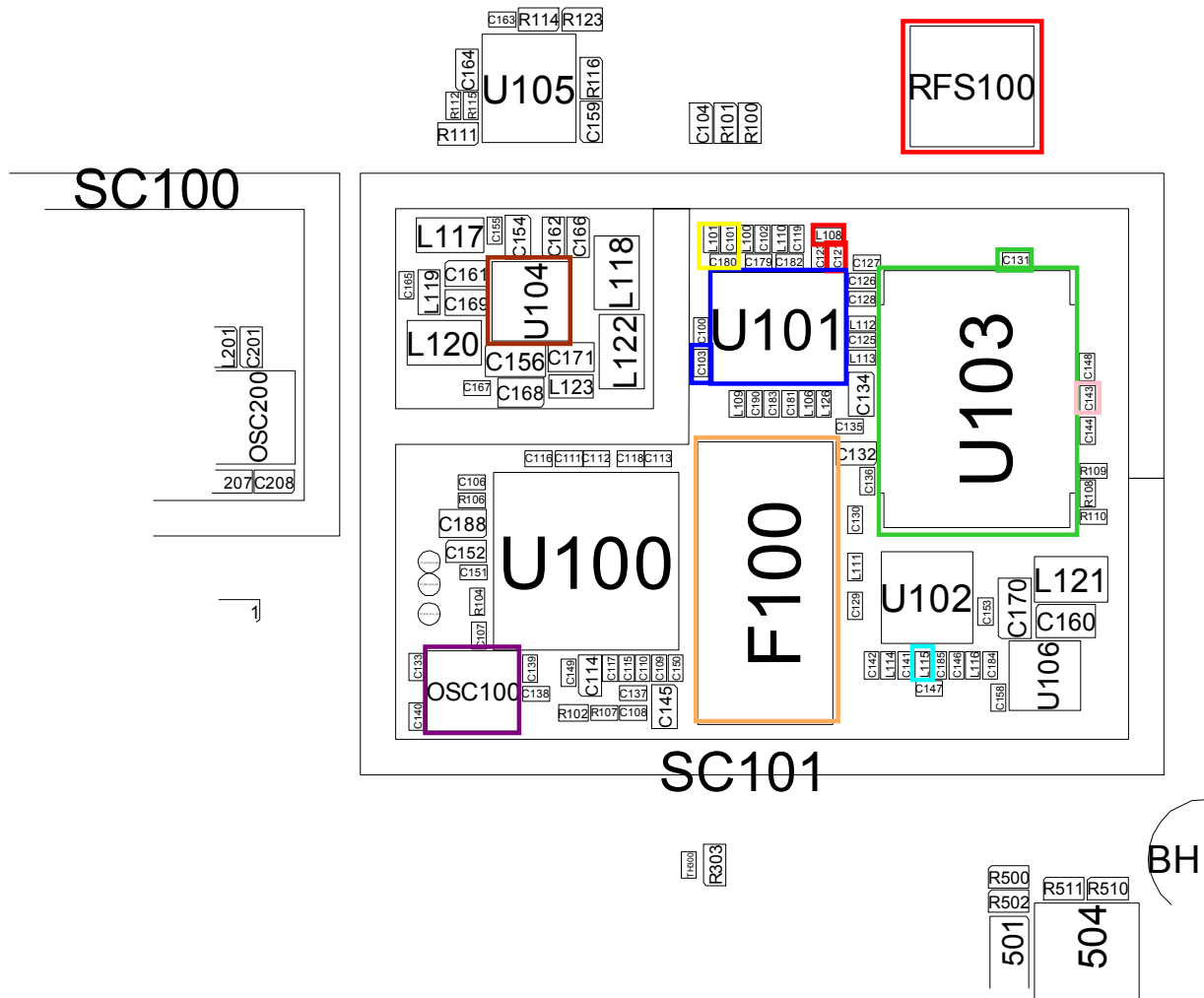


8-3-23. WCDMA BAND5 TX

CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 WCDMA Band5 CH : 4408
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

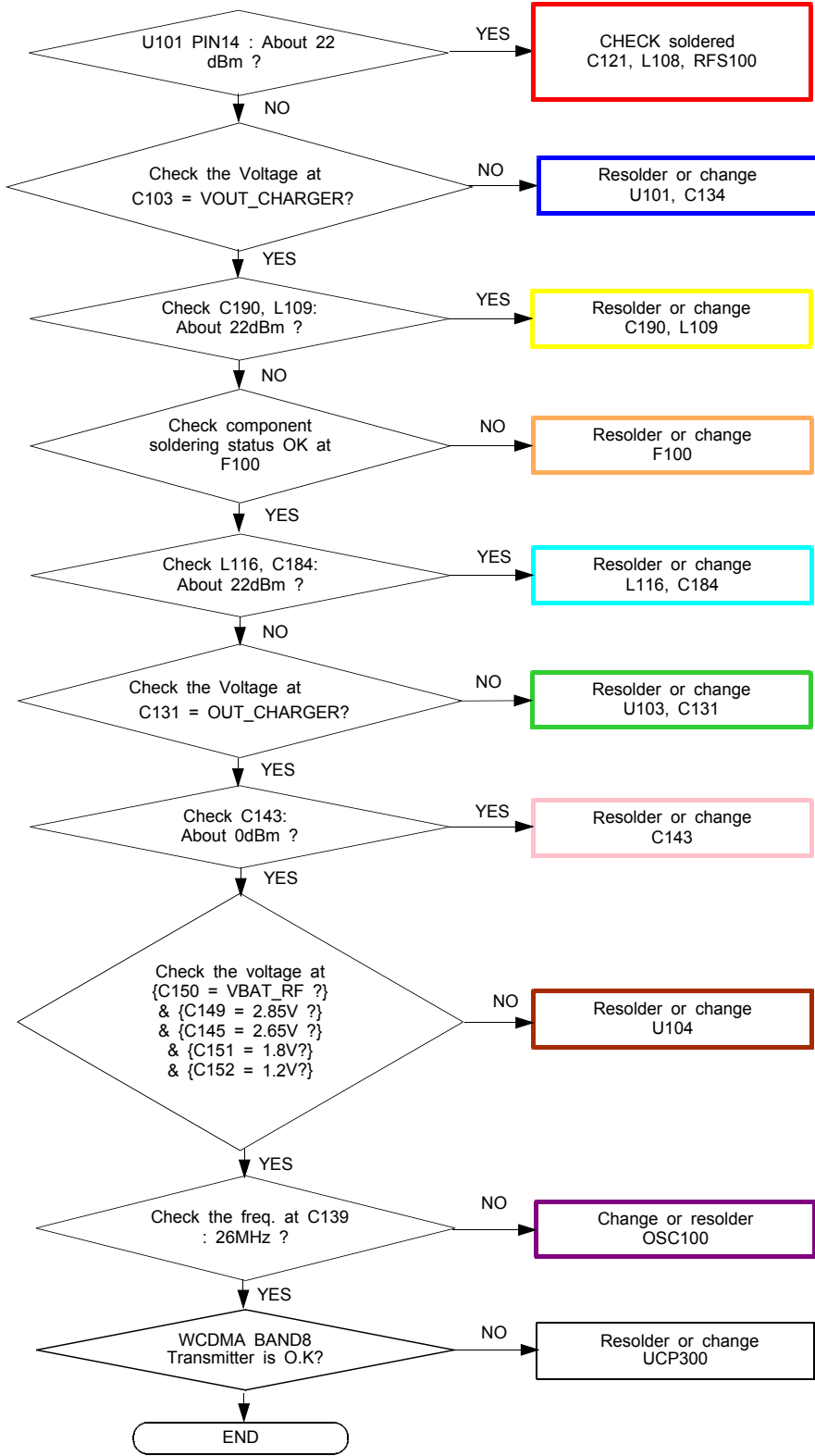


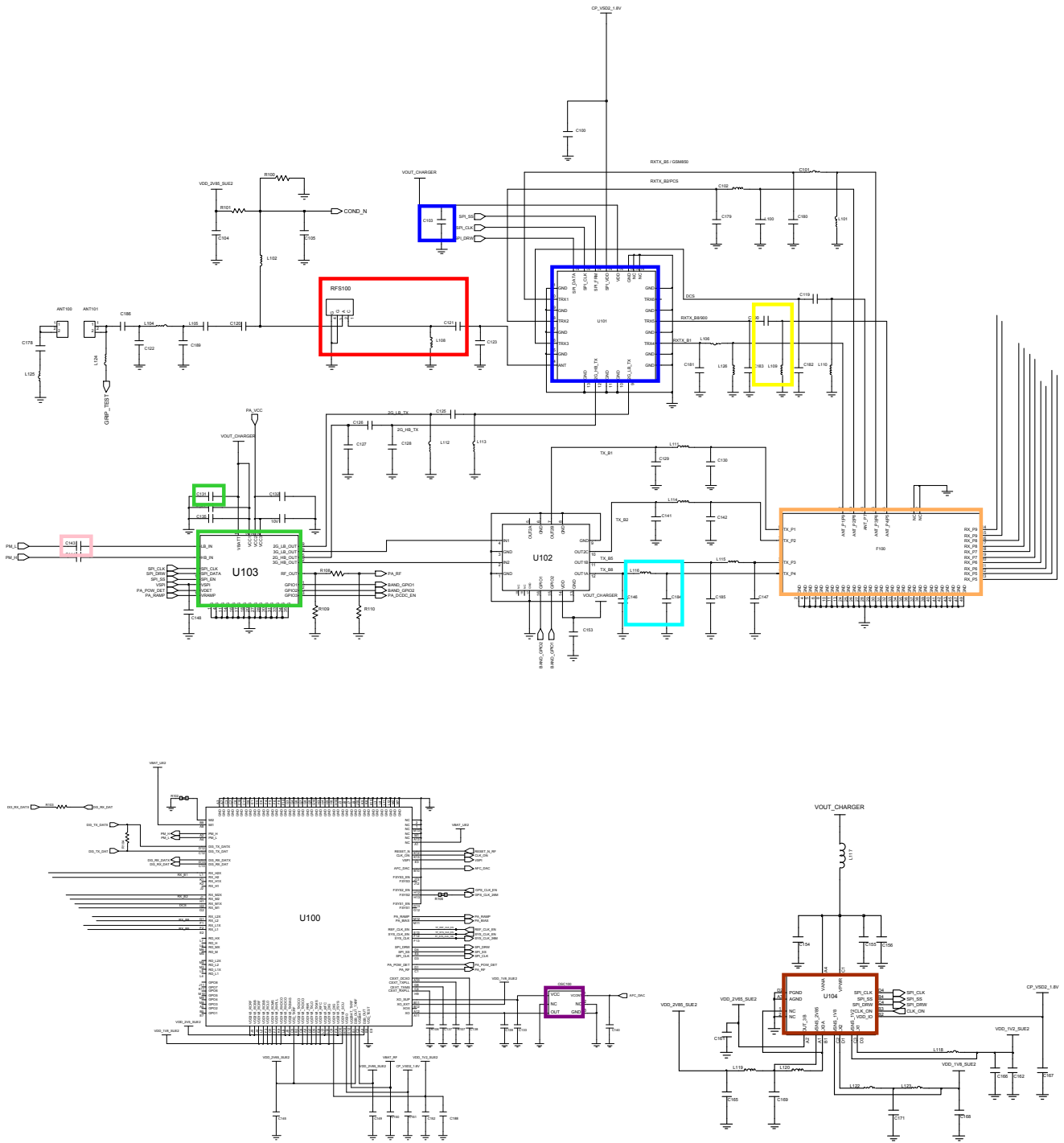


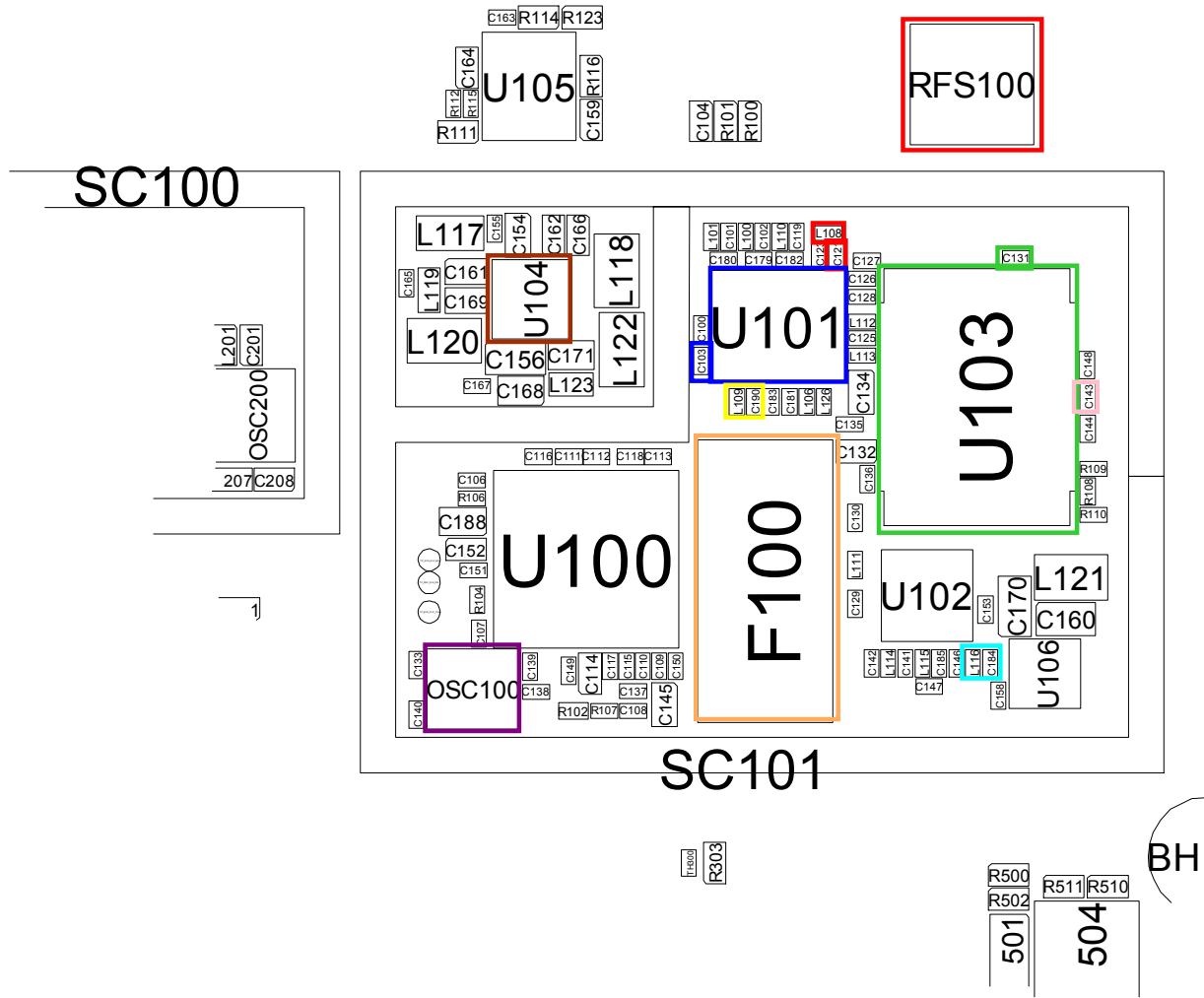


8-3-24. WCDMA BAND8 TX

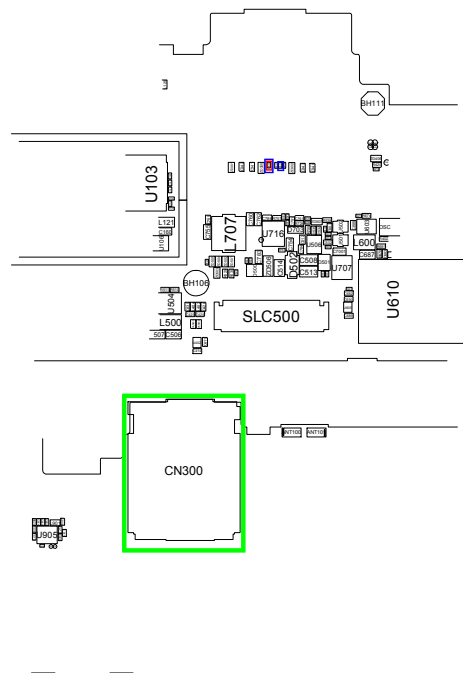
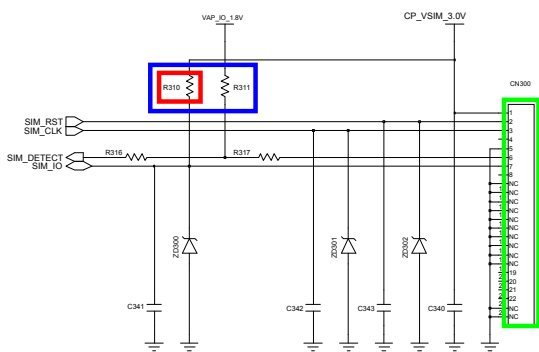
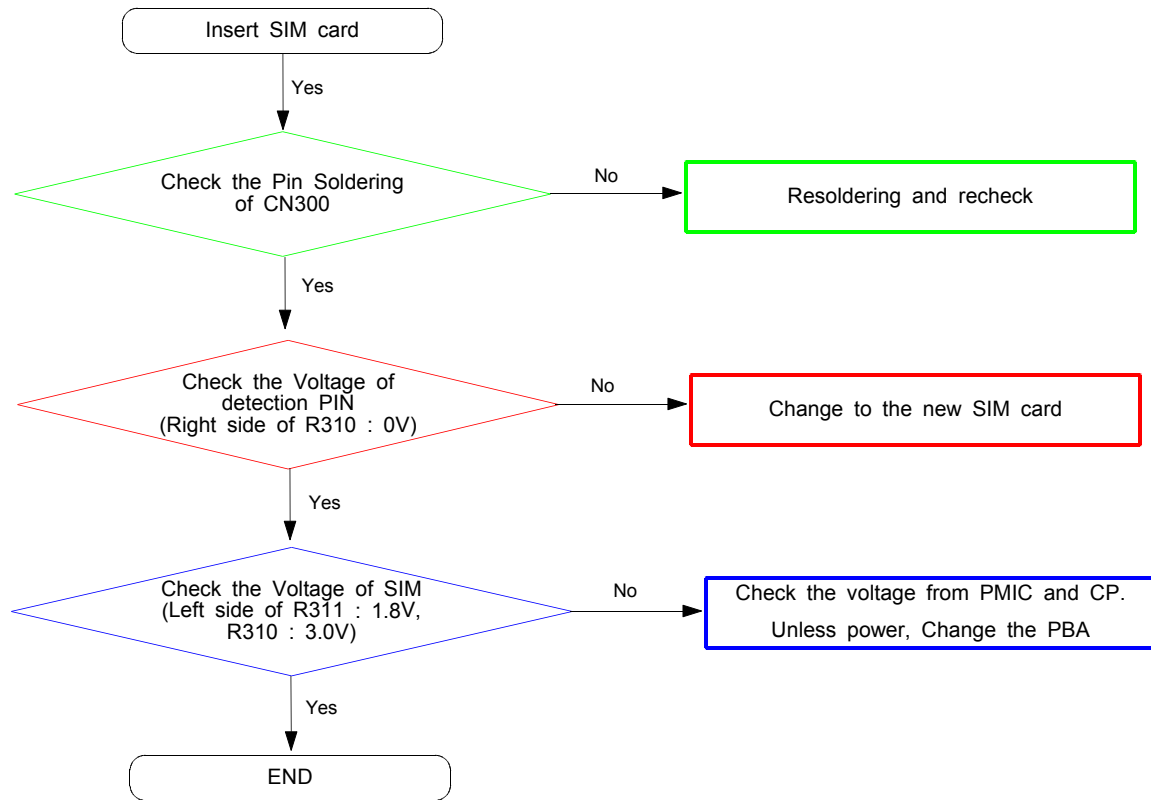
CONTINUOUS TX ON CONDITION
 TX POWER DAC:14500 CODE
 APPLIED
 WCDMA Band8 CH : 3013
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB







8-3-25. Sim Part



8-4. NC Point

- U213

 : NC

	12	11	10	9	8	7	6	5	4	3	2	1	
A	FM_AOU1	BT_VCOVDD1P2	BT_FEVSS	BT_RF	BT_PAVDD3P3	WRF_RFIN_2G	WRF_RFOUT_2G		WRF_VDDPA		WRF_RFOUT_5G		A
B	FM_AOU2	BT_PLLVDD1P2	BT_RFVSS	BT_RRVDD1P2	BT_IFVDD1P2	WRF_VDDINA_1P2_2G	WRF_PA_GND		WRF_PA_GND		WRF_PA_GND	WRF_RFIN_5G	B
C	FM_TX	FM_VSSAUDIO	BT_PLLVSS	BT_VSS	BT_IFVSS	WRF_GNDLNA_2G		WRF_GND	WRF_PADRV_GND	WRF_PADRV_VDD		WRF_ANA_GND	C
D	FM_RXN	FM_RXP	FM_VDDAUDIO	BT_GPIO_1	WL_GPIO_6	BT_CLK_REQ_IN	BT_UART_TXD	WL_GPIO_3	WRF_A_TSS_IN	WRF_LOGEN_A_GND	WRF_LOGEN_A_VDD1P2	WRF_VDDANA_1P2	D
E	FM_RFVDD1P2	FM_RXSS	FM_VDPL1P2	BT_CLK_REQ_MODE	BT_VDDC	WL_VDDC	BT_UART_RXD	WL_VSS_2	WRF_GPIO_OUT	WRF_RES_EXT		WRF_VDD_VOLD0_IN_1P8	E
F	FM_VDD2P5	FM_VSSVCO	FM_PLLVSS	BT_GPIO_0	BT_VSSC	BT_VDDO	BT_UART_RTS_N	JTAG_SEL	WRF_AFE_GND	WRF_TOXO_VDD	WRF_VCO_LDO_OUT_1P2	WRF_VCO_GND	F
G	BT_CLK_REQ_OUT	BT_TM0	BT_RST_N		BT_GPIO_7	BT_I2S_DI	BT_UART_CTS_N	WL_GPIO_1	WRF_VDDAFE_1P2	WRF_TOXO_IN		WRF_XTAL_OP	G
H	BT_GPIO_4		BT_GPIO_2	BT_GPIO_3	BT_GPIO_6	BT_I2S_DO	BT_PCM_CLK	WL_GPIO_2	WL_GPIO_0	WRF_XTAL_VDD_1P2	WRF_XTAL_GND	WRF_XTAL_ON	H
J	VOUT_3P3	VOUT_3P1	EXT_PWM_REQ	BT_GPIO_5	WL_GPIO_4	LPO	BT_PCM_IN	BT_PCM_OUT	RF_SW_CTRL_5	RF_SW_CTRL_6	RF_SW_CTRL_1	HSC_RREF	J
K	SR_VDDBAT1	SR_VDDBAT2	BT_REG_ON	EXT_SMPS_REQ	BT_VDDC	WL_VDDC	BT_PCM_SYNC	RF_SW_CTRL_0	RF_SW_CTRL_7	RF_SW_CTRL_4	WL_VSS_0	WL_VDDC	K
L	SR_VDDBAT1	PMU_AVSS	VOUT_LNLD01	WL_REG_ON	SDIO_DATA_3	SDIO_CMD	WL_GPIO_5	WL_VSS_1	RF_SW_CTRL_2	VDDIO_RF	HSC_DATA	HSC_AVDD12	L
M	SR_VLX	SR_PVSS	VIN_LDO	VOUT_CLDO	SDIO_DATA_1	SDIO_CLK	SDIO_DATA_0	SDIO_DATA_2	RF_SW_CTRL_3	WL_VDDO	HSC_STROBE	HSC_AVSS	M

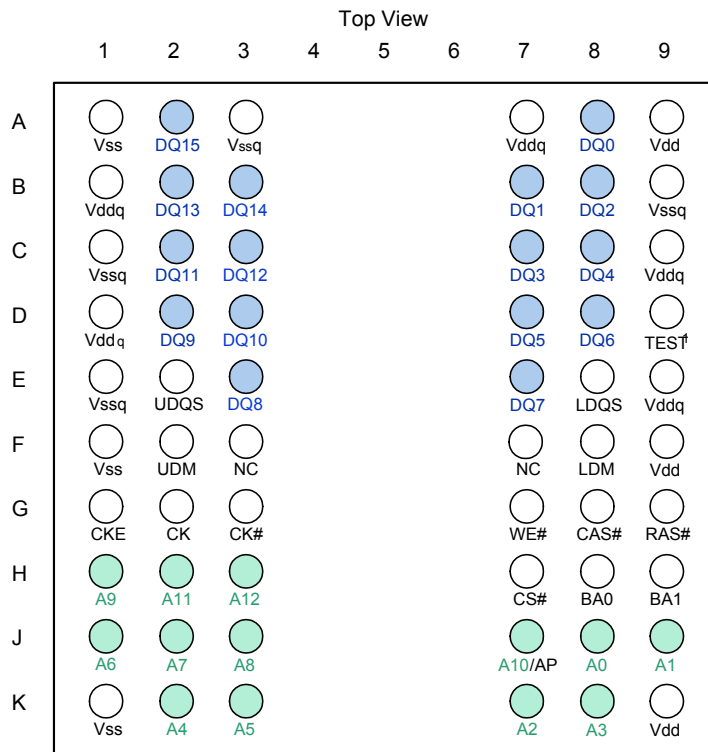
- UCP300

NC

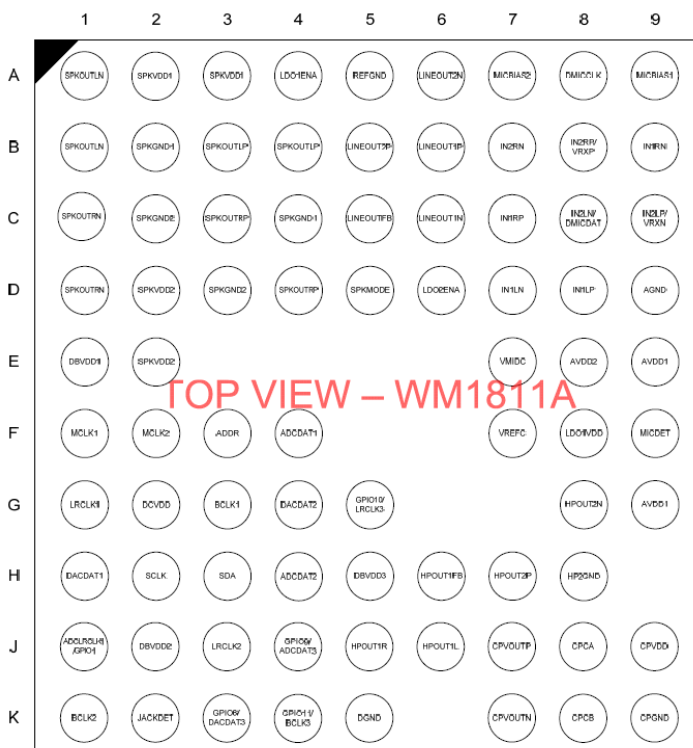
Bottom View

	17	16	15	14	13	12	11	10	9	8	765432						1	
A	NC	MEM_A_8	MEM_BFC_LKO_1	MEM_SDC_LKO	MEM_A_0	MEM_BC0_n	MEM_A_1	MEM_A_2	MEM_A_3	MEM_A_4	MEM_AD_9	FCDP_FB_n	VPLL	VDD_VBA_T_SD2	SD2_SW	SD2_SW	NC	A
B	MEM_A_9	MEM_A_2_3	MEM_BFC_LKO_0	MEM_CKE	MEM_RD_n	MEM_WR_n	VDD_IO18	MEM_BC2_n	MEM_A_6	FWP	MEM_CAS_n	DSP_AUDI_O_IN1	x	VIO_12	x	x	VSS_SD2	B
C	MEM_A_1_0	MEM_A_2_2	xx		x	MEM_A_5	x	x	MEM_A_7	x	x	x	x	VUSB_PD	VDD_VSD_2	SD2_FB	VDD_VBA_T_SD1	C
D	MEM_A_1_1	MEM_A_2_1	x	VSS	MEM_AD_13	MEM_AD_12	MEM_AD_11	MEM_AD_7	VSS	MEM_AD_3	x	x	x	ANAMON	SD1_FB	x	SD1_SW	D
E	MEM_A_1_2	MEM_A_2_0	x	MEM_RAS_n	VDDCORE	VDDCORE_EBU	MEM_AD_8	VDDCORE	MEM_AD_6	MEM_AD_5	x	x	x	VSS	FSS	x	SD1_SW	E
F	MEM_A_1_3	MEM_BC1_n	VDD_IO18	VSS	MEM_AD_15	xx		x	MEM_AD_4	x	x	TRIG_B	x	VRTC	VDD_VBA_T_PMU	VUSB_AN_A	VSS_SD1	F
G	MEM_A_1_4	MEM_BC3_n	MEM_A_1_9	MEM_BE0	MEM_BE1	x	MEM_AD_1	MEM_AD_V_n	MEM_AD_2	VSS	x	xxx		x	VPMU	VSIM	G	
H	MEM_A_1_5	MEM_A_1_7	x	MEM_CS2_n	MEM_CS3_n	x	MEM_AD_0	MEM_AD_10	VDDCORE	RESERVE_D	x	M1	x	x	AGND	ON1	VUSB_IO	H
J	VDD_IO18	MEM_A_1_6	MEM_A_1_8	MEM_CS0_n	MEM_CS1_n	MEM_AD_14	VSS	x	x	VSS	x	M2	M3	M4	RESET_P_WRDWN_N	ON2_N	VREF	J
K	MEM_WA_IT_n	VDD_MPI	x	VDDCORE	VSS	x	VDD_IO18	EINT3	VDDCORE	VDD_IO18	ETM11_T_RACECLK	x	ETM11_T_RACEPKT_4	TM_EN	REF_CLK_EN	RESET_B_B_N	ETM11_T_RACEPKT_7	K
L	F32K	VSS	x	VSS	MIPL_HSI_RX_RDY	x	MIPL_HSI_TX_FLG	VSS	ETM11_T_RACEPKT_5	VDD_MM_C	MMCH1_C_MD	x	ETM11_T_RACEPKT_6	ETM11_T_RACEPKT_2	x	ETM11_T_RACEPKT_3	ETM11_T_RACEPKT_1	L
M	OSC32K	VSS	MIPL_HSI_TX_RDY	MIPL_HSI_RX_FLG	MIPL_HSI_TX_WAKE	xx		x	EINT1	EINT2	x	MMCH1_D_AT_3	MMCH1_D_AT_0	MMCH1_D_AT_2	MMCH1_C_LK	MMCH1_D_AT_1	ETM11_T_RACEPKT_0	M
N	VDD_RTC	USB_ID	x	VSS_USB	MIPL_HSI_RX_DATA	MIPL_HSI_TX_DATA	VDD_IO18	I2C1_SCL	VPP	CLKOUT0	x	x	MMCH1_C_D	T_OUT0	x	I2S2_CLK_1	I2S2_CLK_0	N
P	USB_TEST	VBUS	x	VDD_USB_ANA	MIPL_HSI_RX_WAKE	SYS_CLK	VSS_PLL	CLKOUT2	I2C1_SDA	VSS	HW_MON_2	xx		x	T_OUT1	I2S2_TX	I2S2_RX	P
R	USB_DMIPUS	VDD_USBIO	xx		x	VDD_PLL	x	x	VSS	VDDCORE	x	HW_MON_1	RESET2_N	NC	x	I2S2_WA1	I2S2_WA0	R
T	USB_DPLUS	USB_TUNE	VDD_USB_PD	CC_RST	CC_IO	VDD_SIM	DMINUS	VDD_DIG_RF	XRESET_N	DI3_TX_D_ATX	DI3_TX_D_AT	TCK	TRIG_IN	TRST_n	USIF1_TXD_MTSR	USIF1_RXD_MRST	USIF1_SCLK	T
U	NC	VSS	VDD_IO12	CC_CLK	HSIC_USB_DATA	HSIC_USB_STRB	DPLUS	ALERT_N	SYSCLK_N	DI3_RX_D_ATX	DI3_RX_D_AT	TMS	TDI	TDO	USIF1_RTS_N	USIF1_CTS_N	NC	U

- UME300



- U404



- UCP600

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	27	28
AH	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AG	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AE	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AD	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AC	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AB	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AA	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
AY	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
W	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
V	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
U	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
T	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
R	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
P	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
N	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
M	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
L	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
K	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
J	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
I	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
H	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
G	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
F	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
E	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
D	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
C	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
B	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me
A	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me	me

- U610

