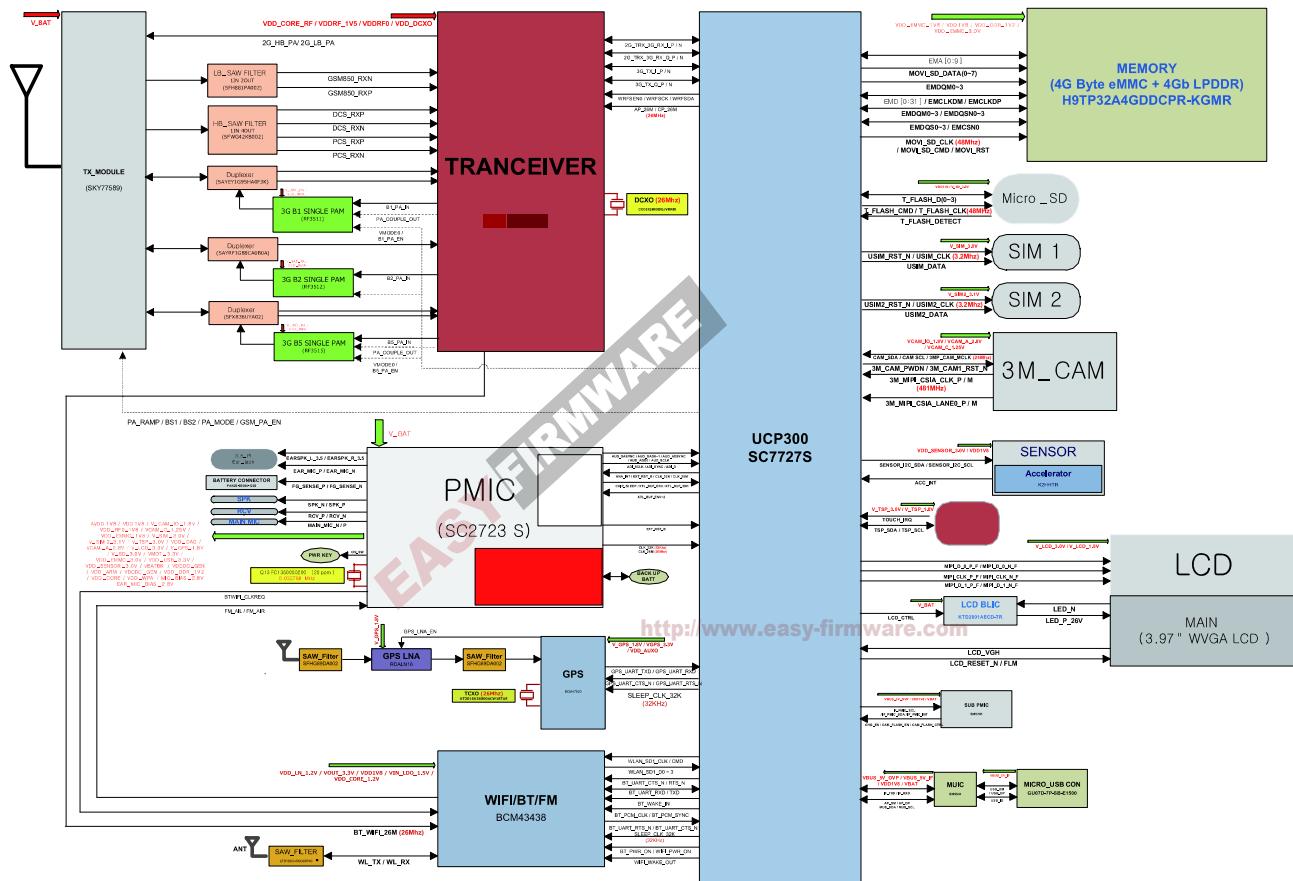


8. Level 3 Repair

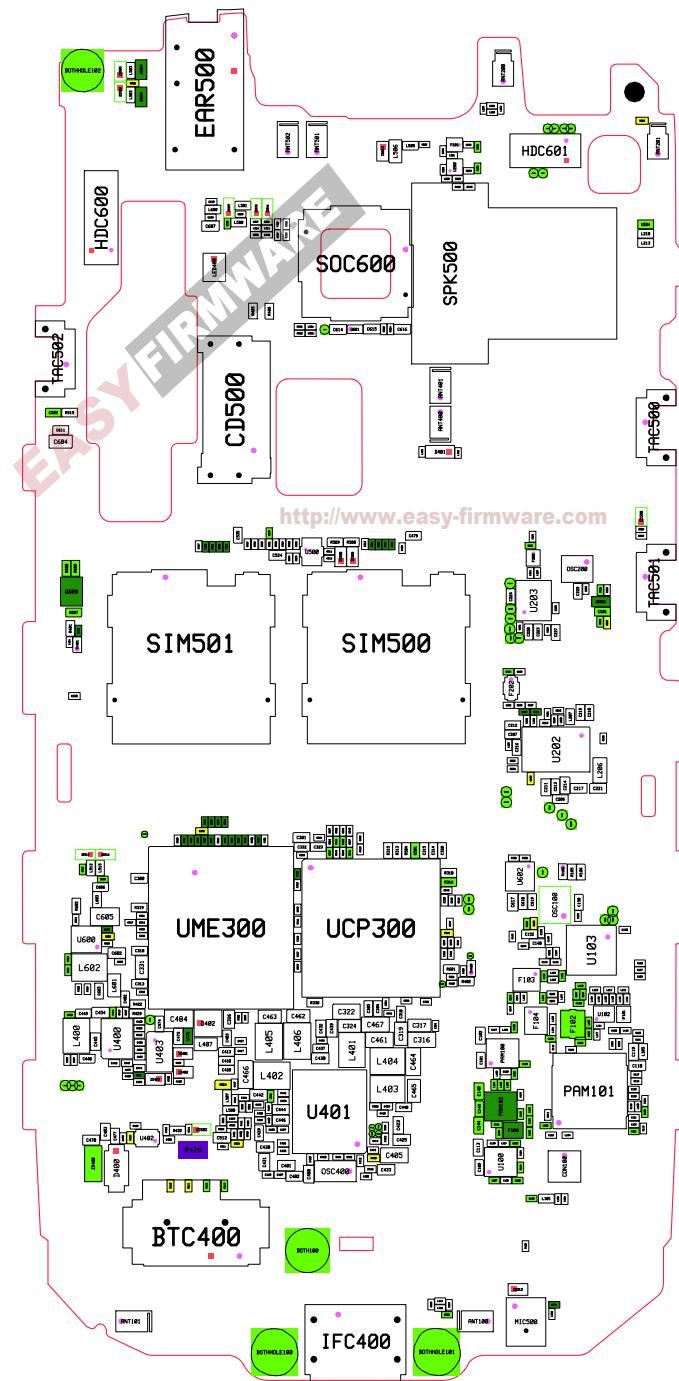
8-1. Block Diagram

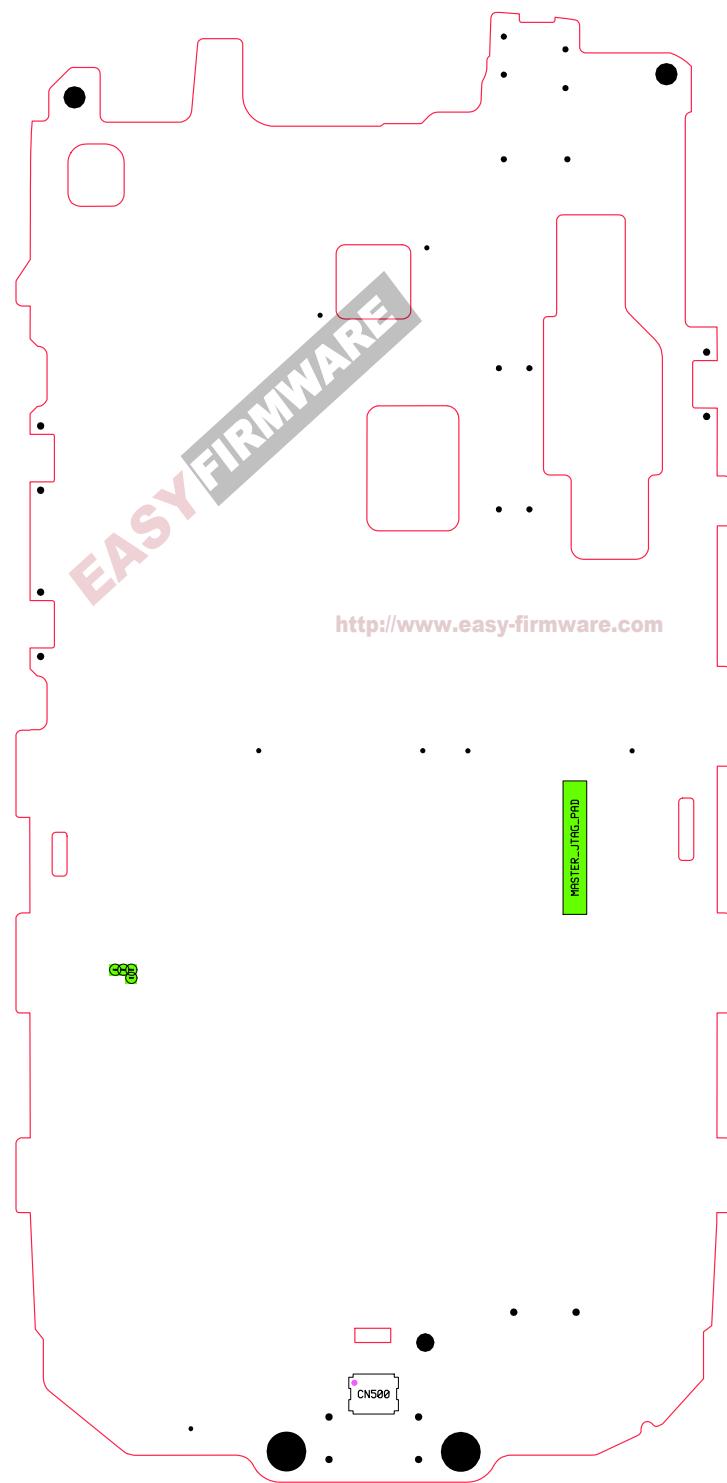
SM-G318ML/DS (Vivalto CO SAMCOL VE) BLOCK DIAGRAM



8-2. PCB Diagrams

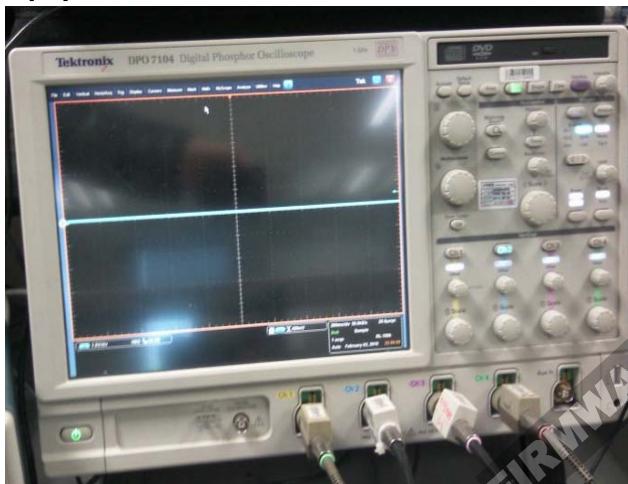
8-2-1. Top



8-2-2. Bottom

8-3. Flow Chart of Troubleshooting

Equipments



Oscilloscope

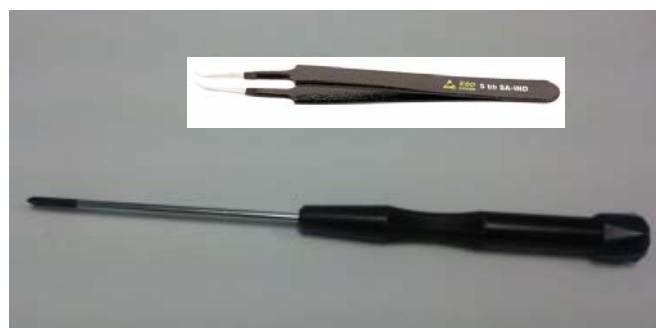


Digital Multimeter

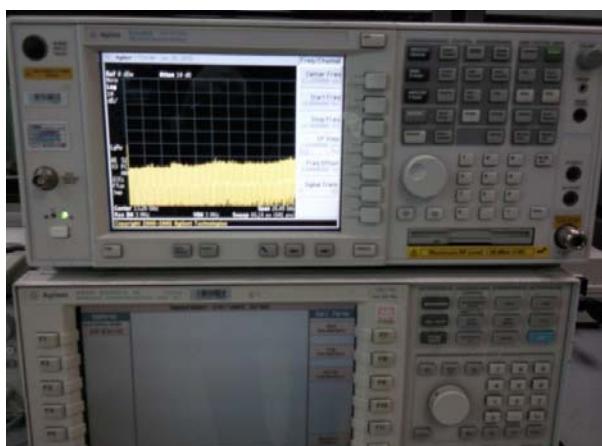


Power Supply

<http://www.easy-firmware.com>



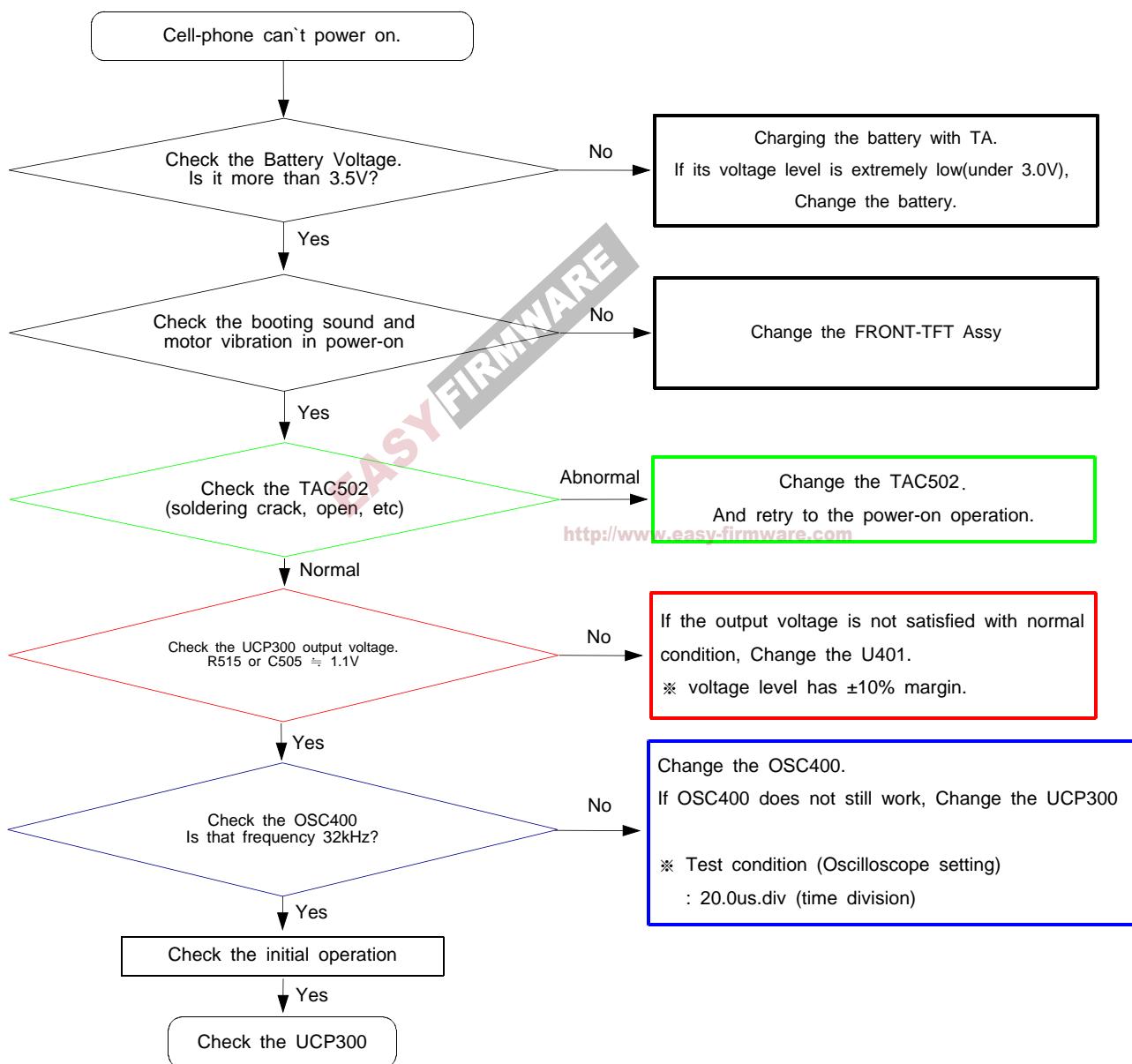
'+' driver, ESD Safe Tweezer

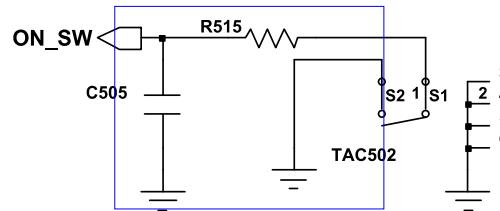


8960 & Spectrum Analyzer

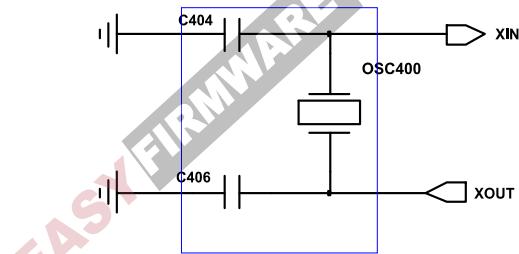


Soldering iron

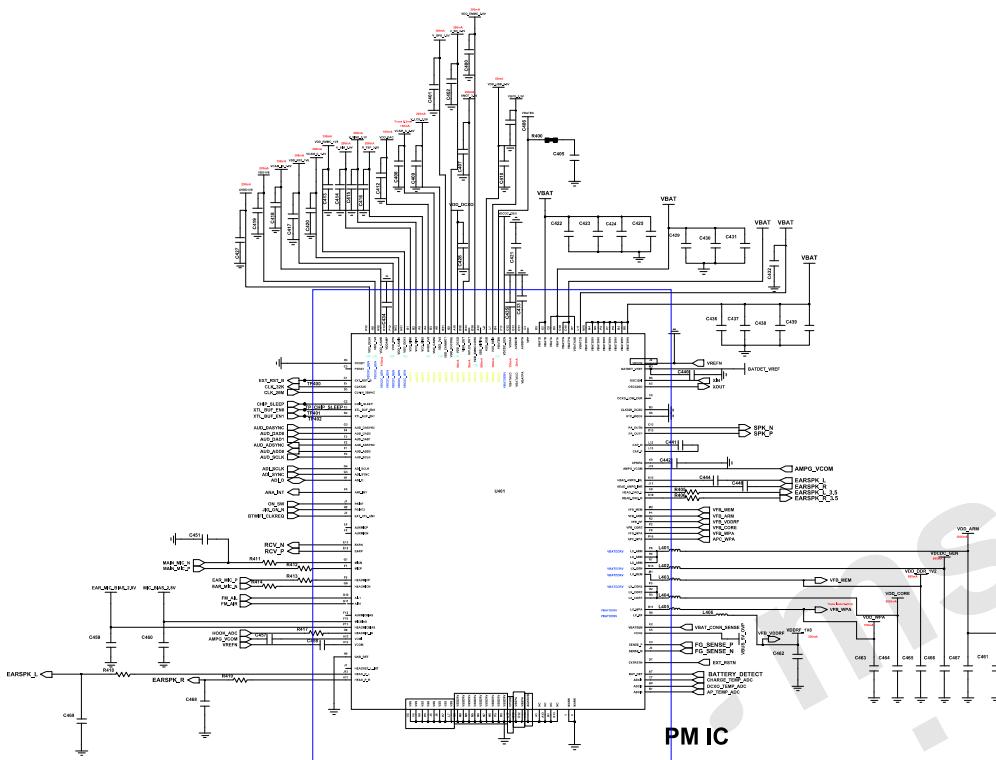
8-4-1. Power On

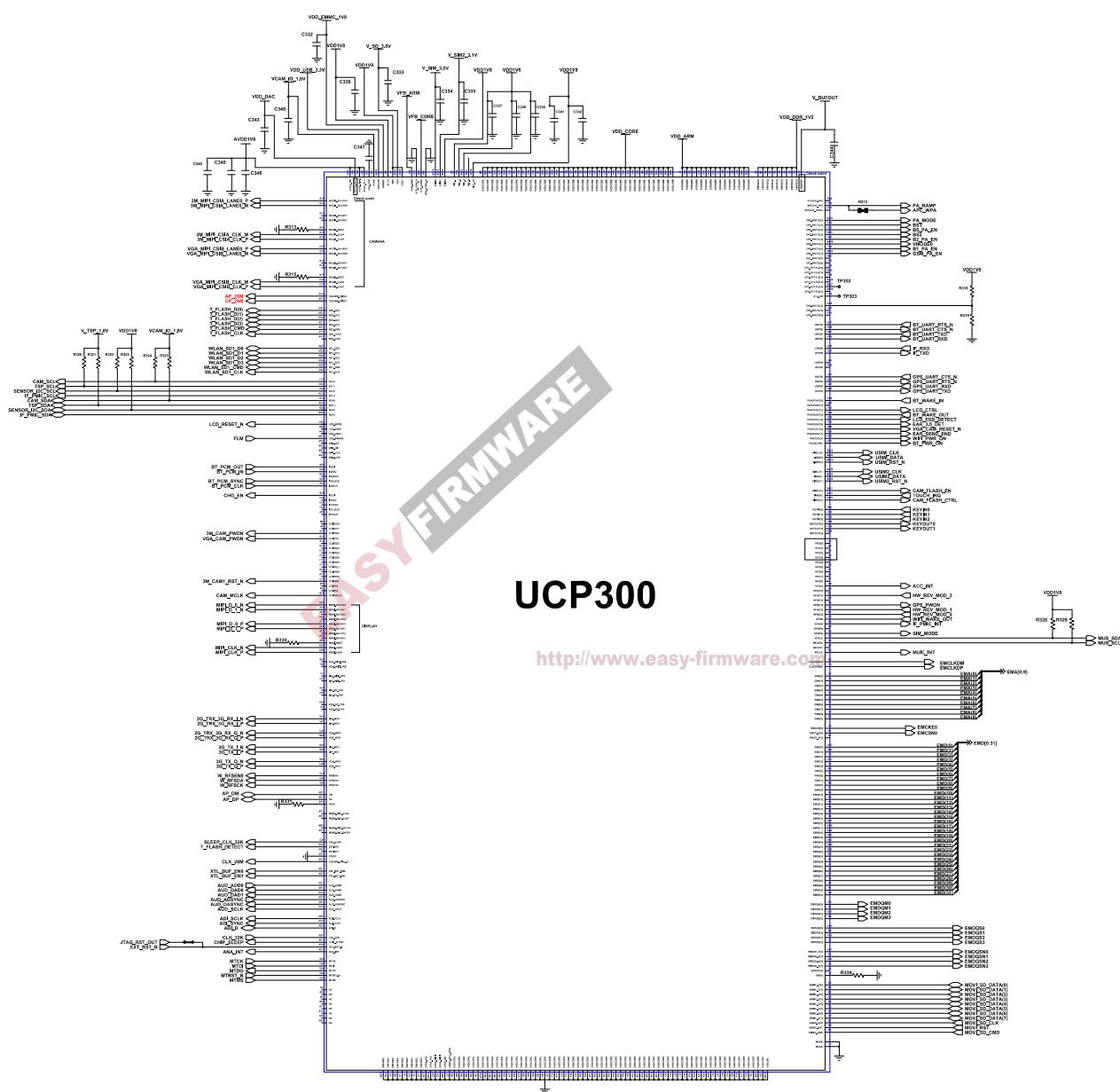


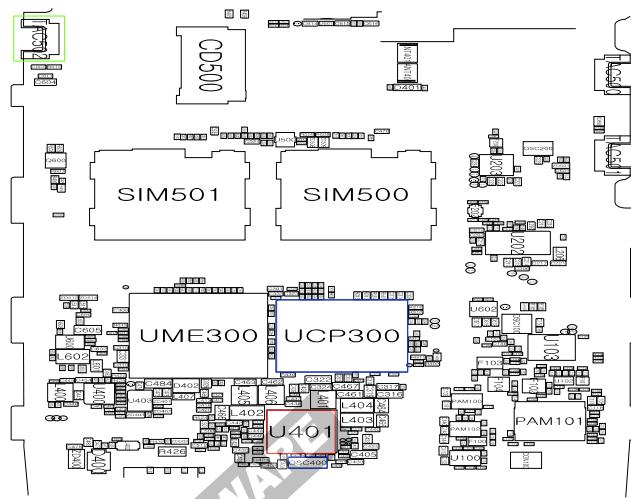
HOLD KEY



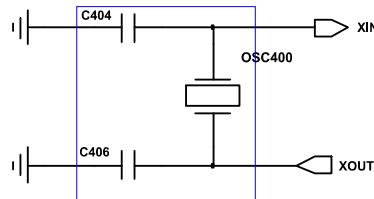
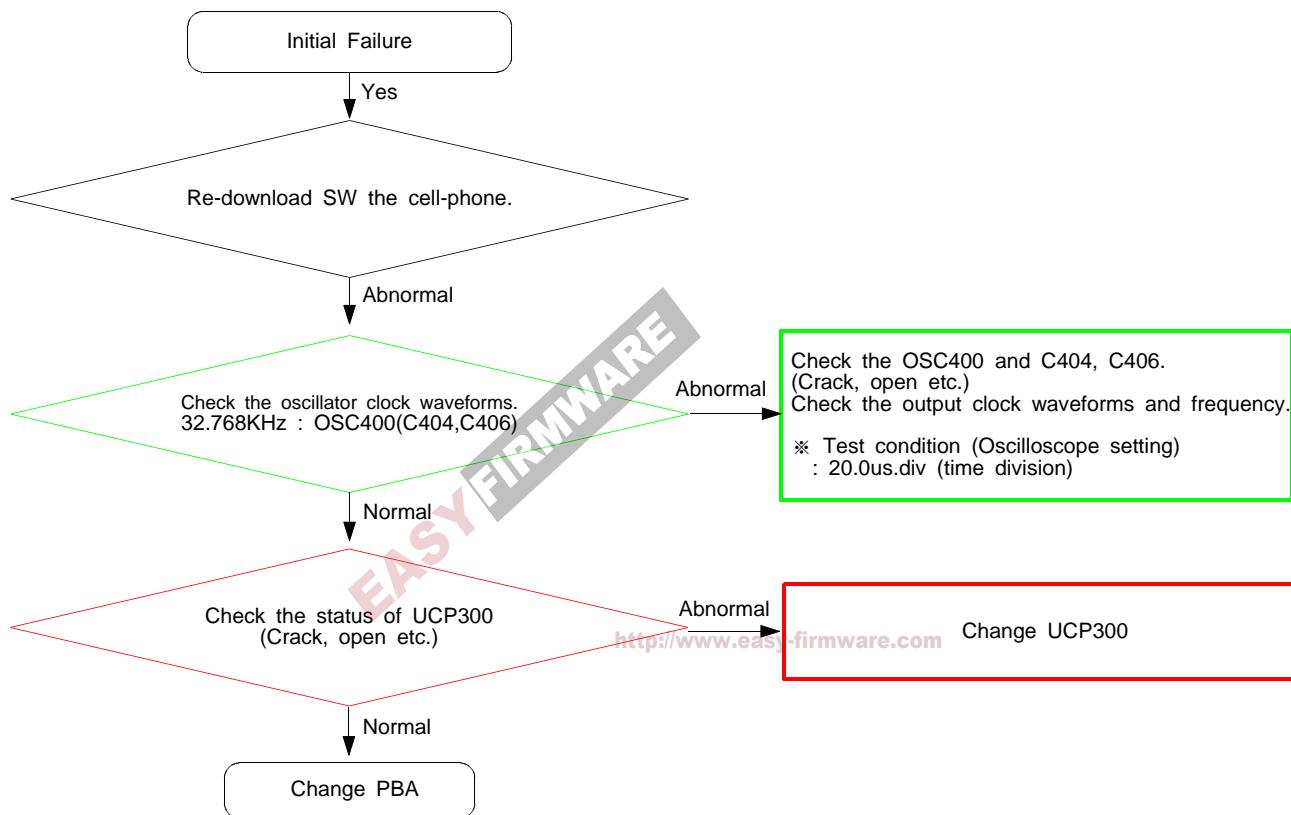
<http://www.easy-firmware.com>

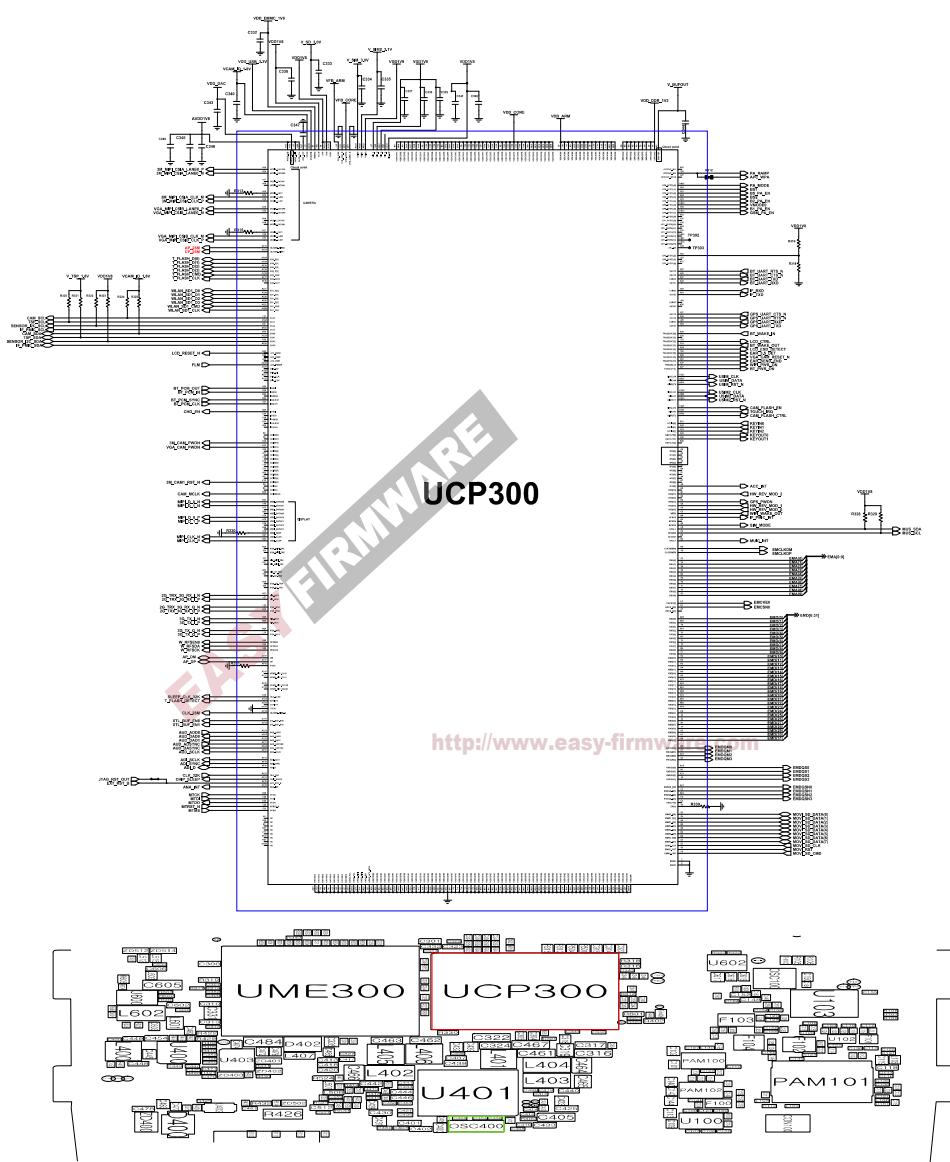


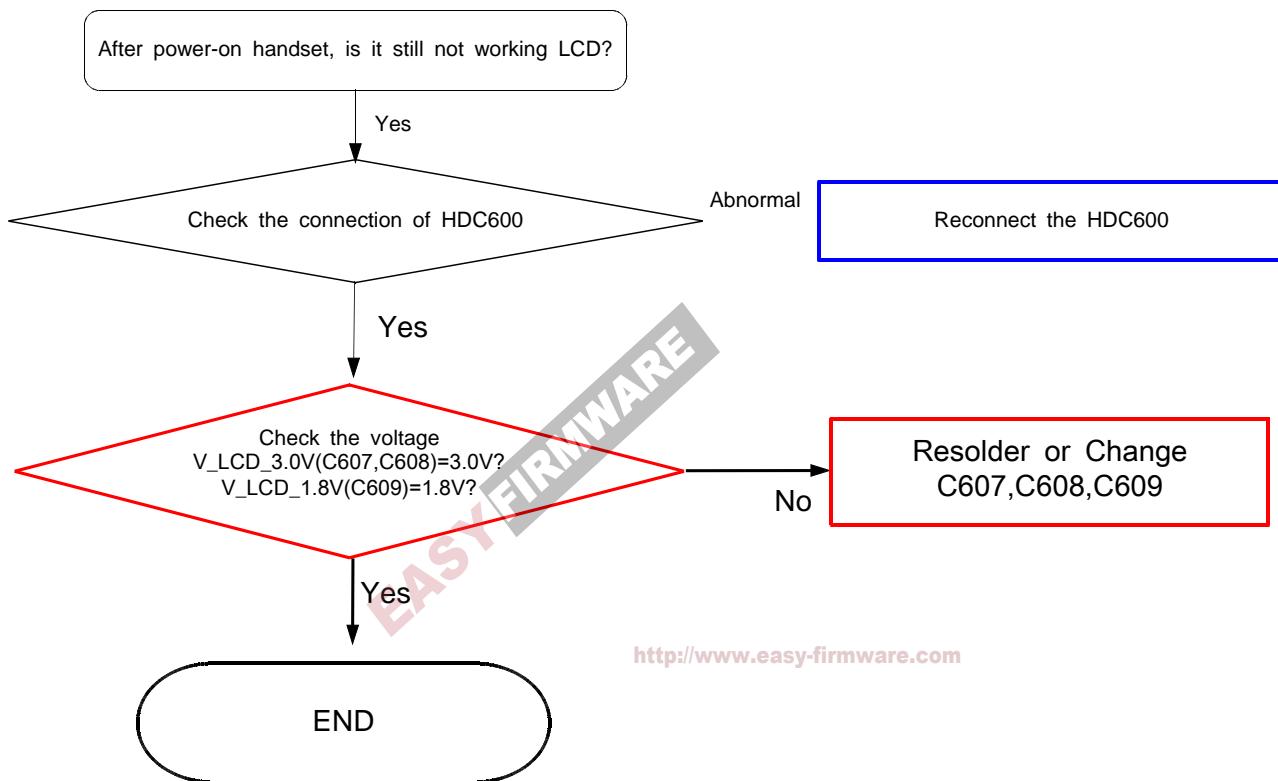


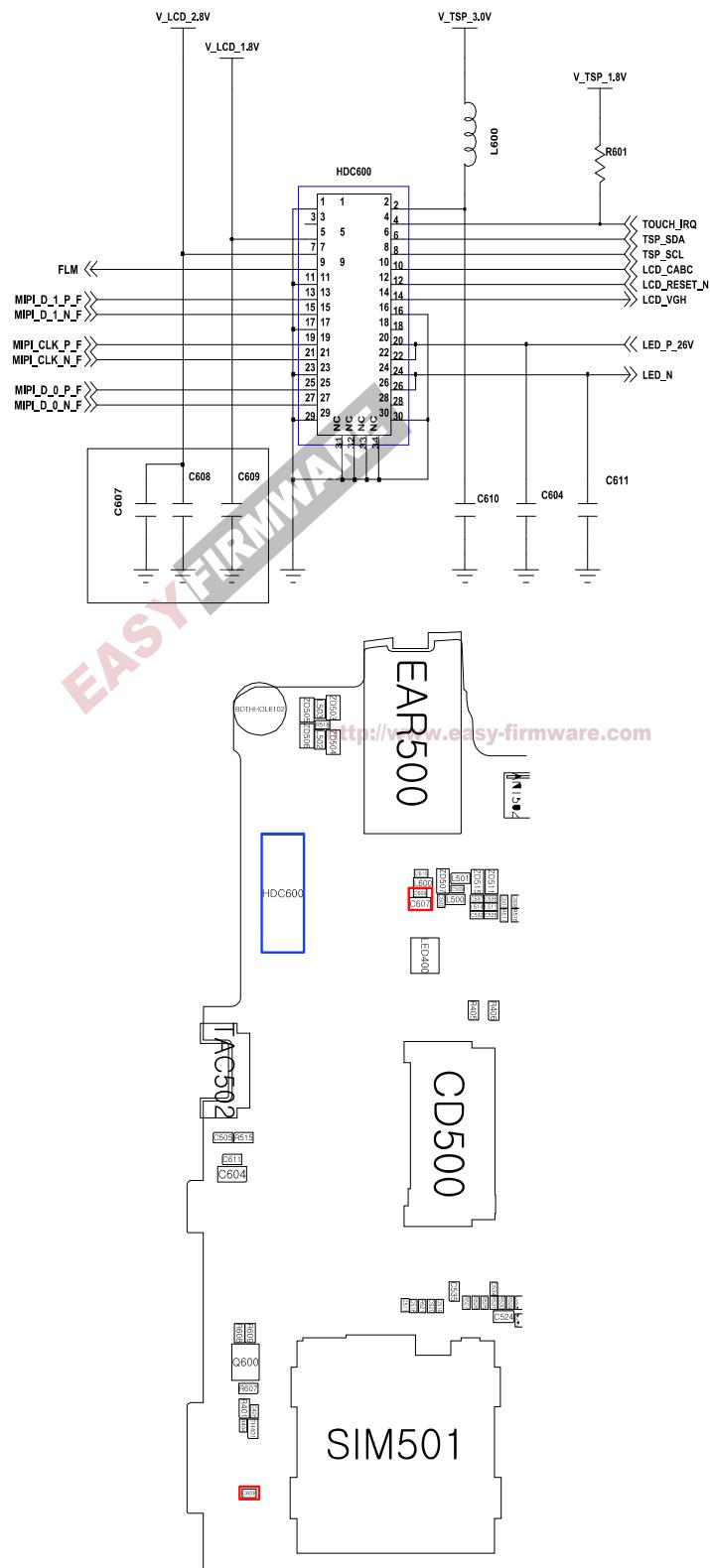


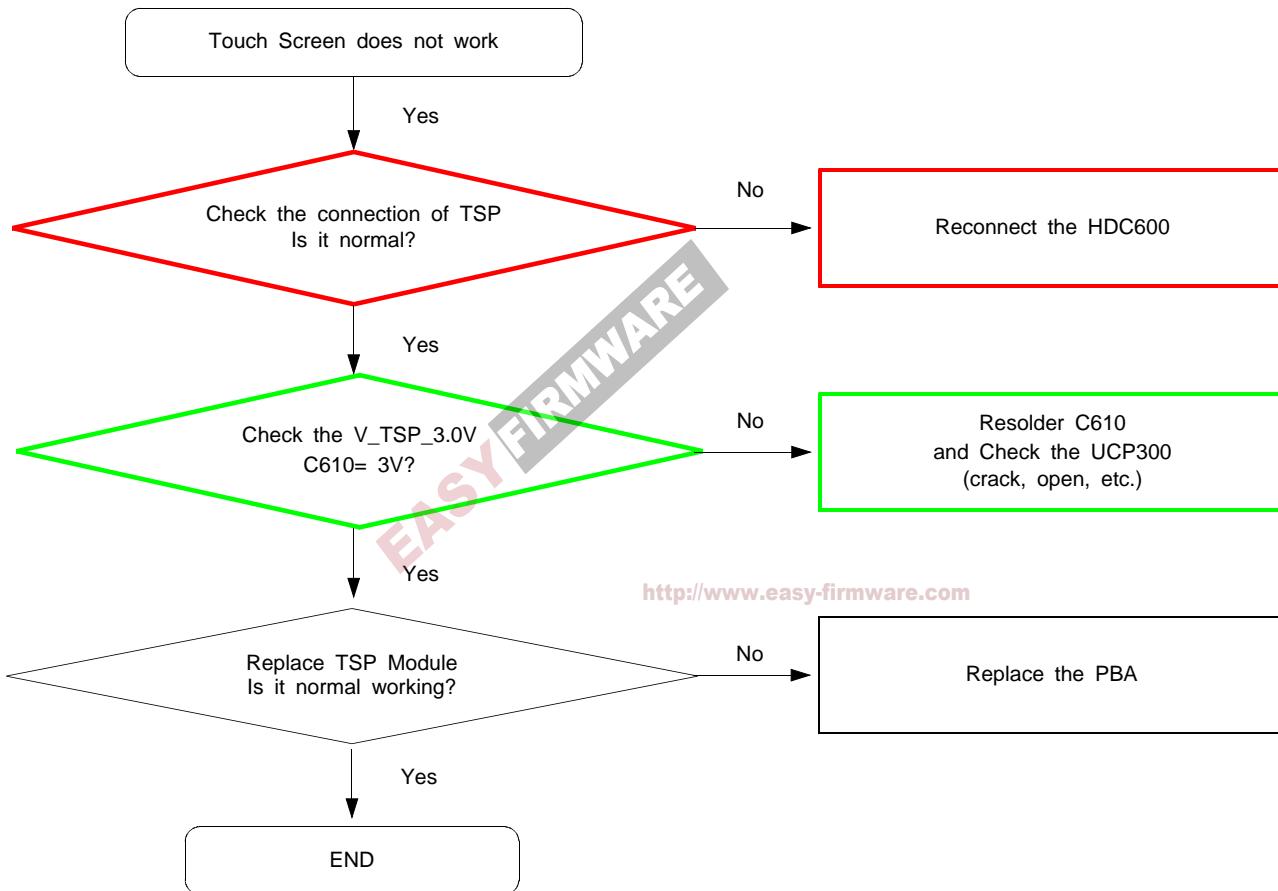
<http://www.easy-firmware.com>

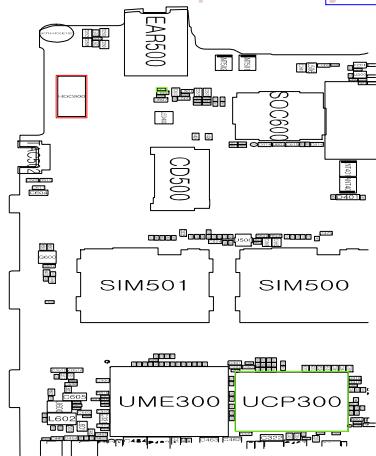
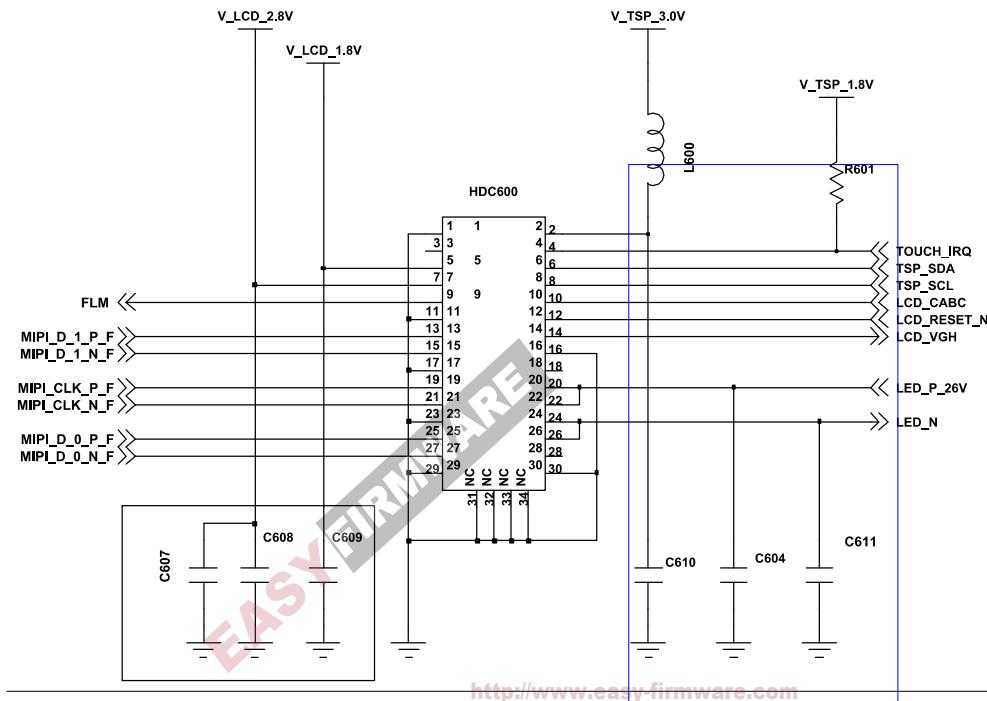
8-4-2. Initial

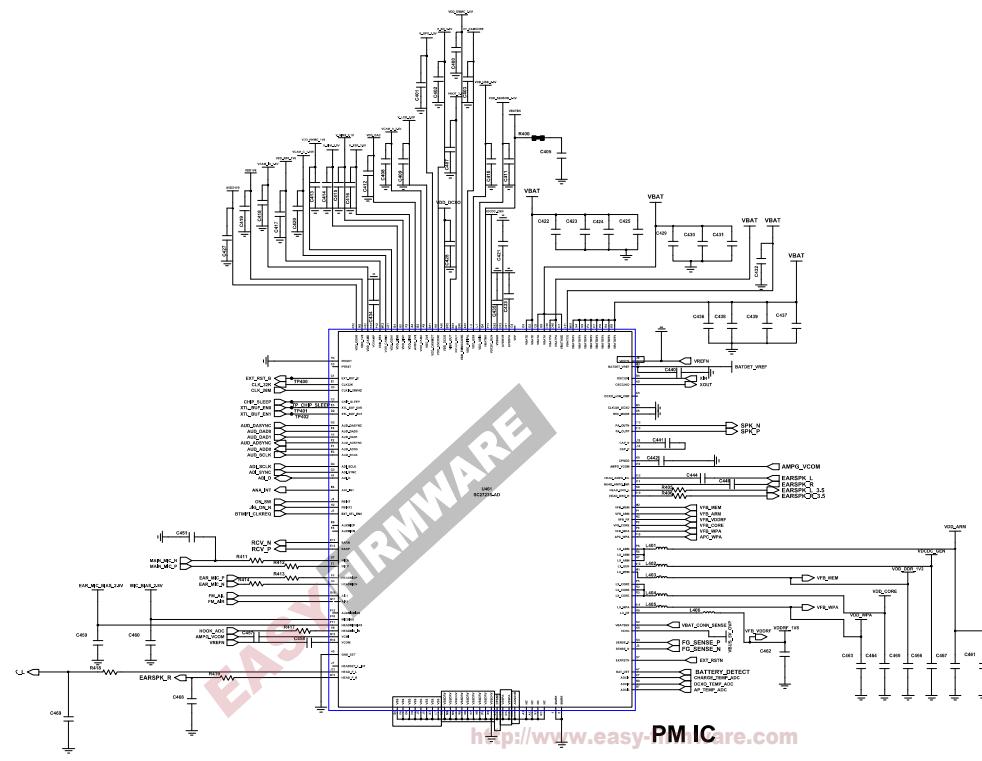


8-4-3. LCD



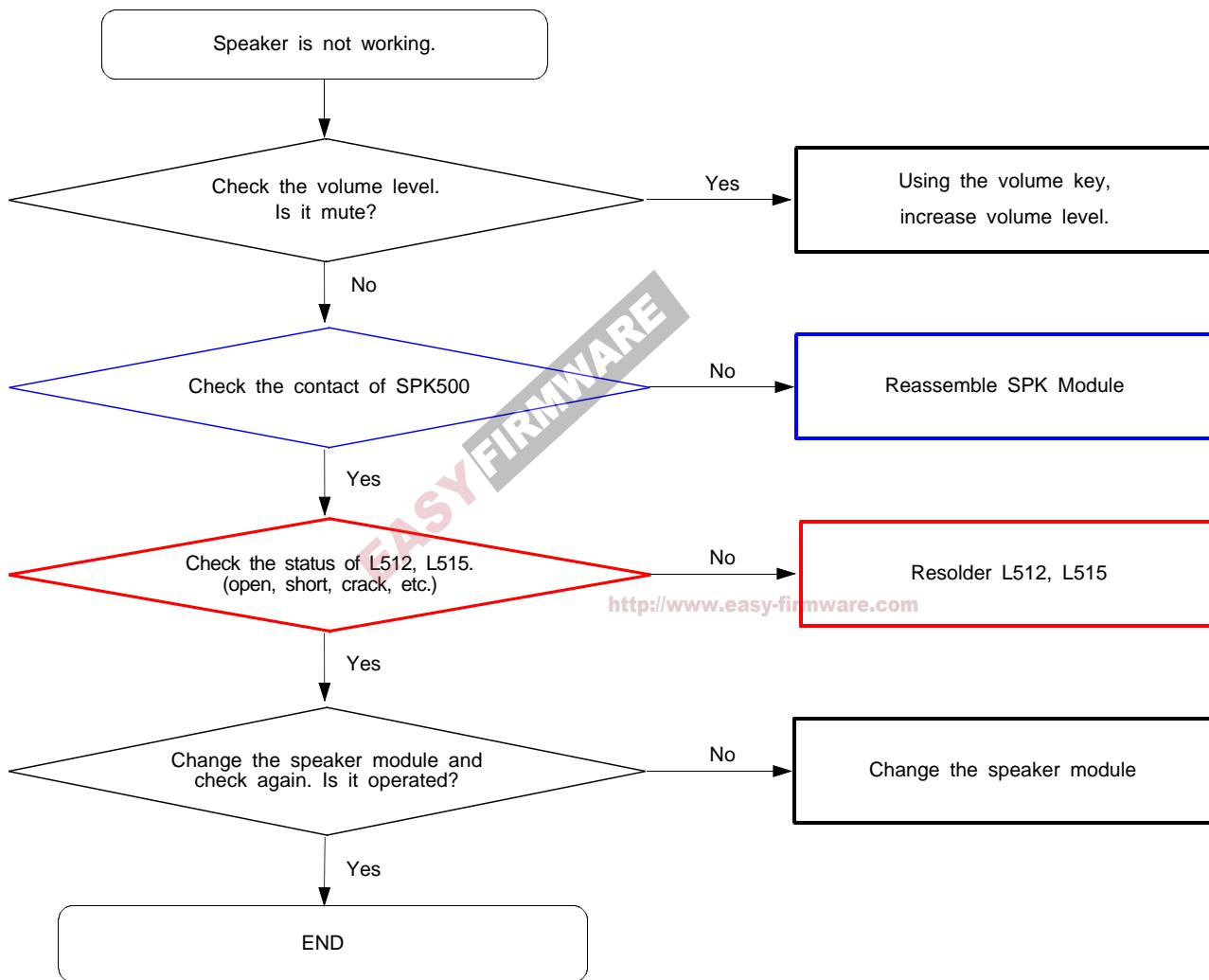
8-4-4. TSP

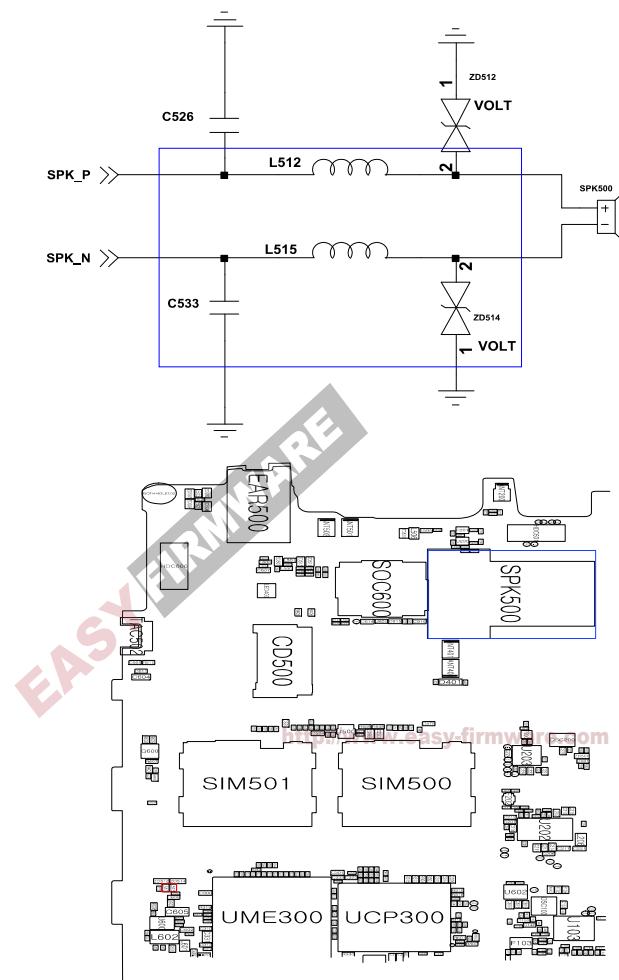




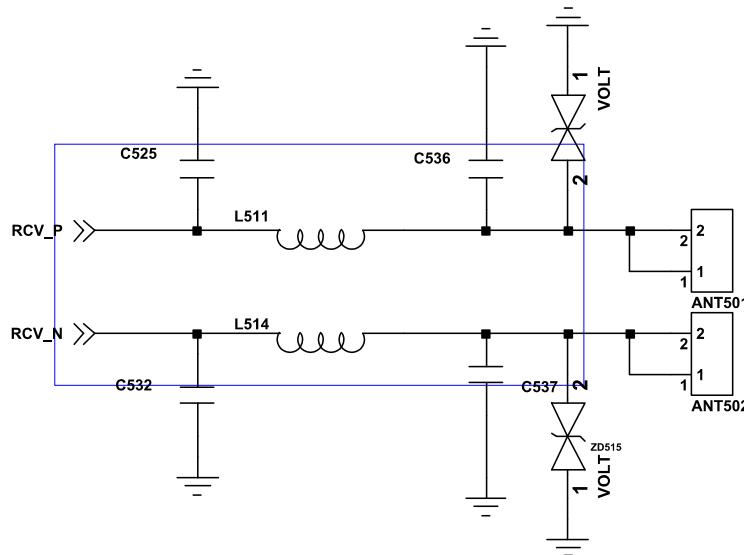
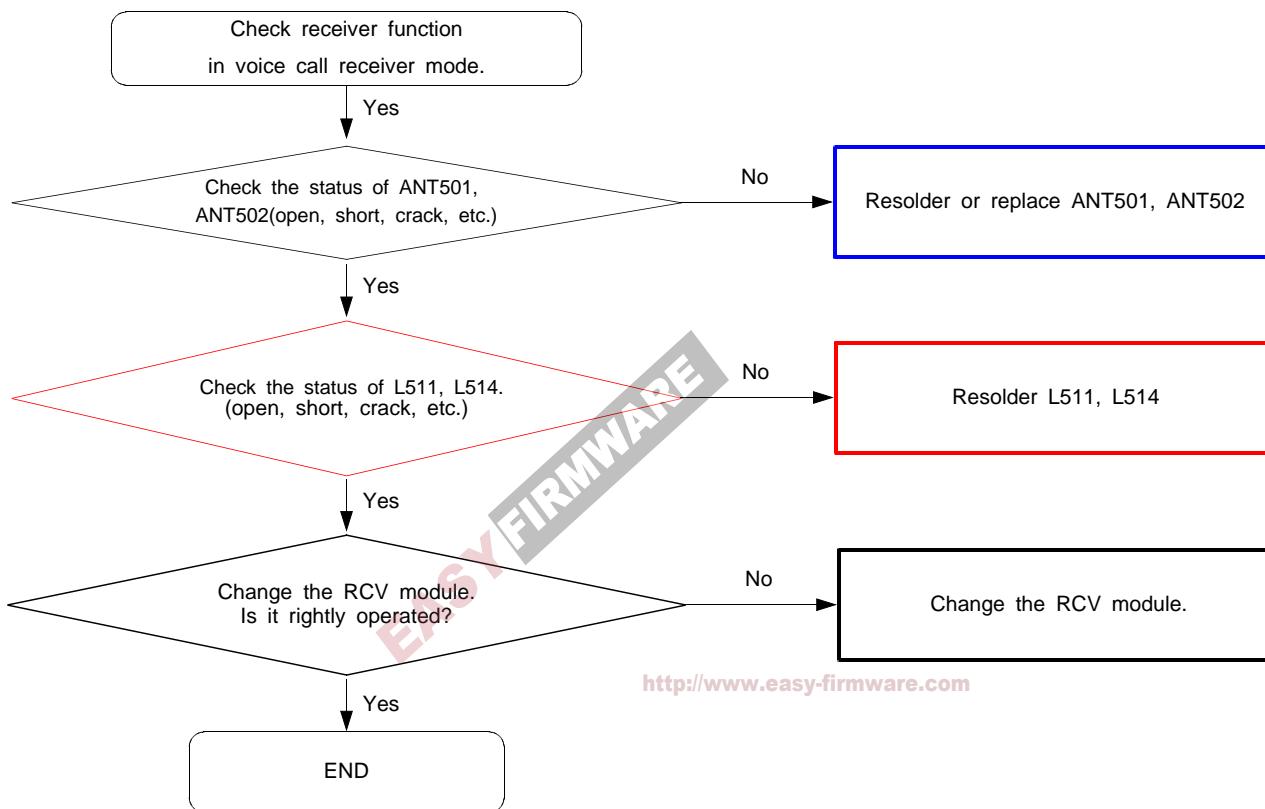
8-4-5. Audio Part

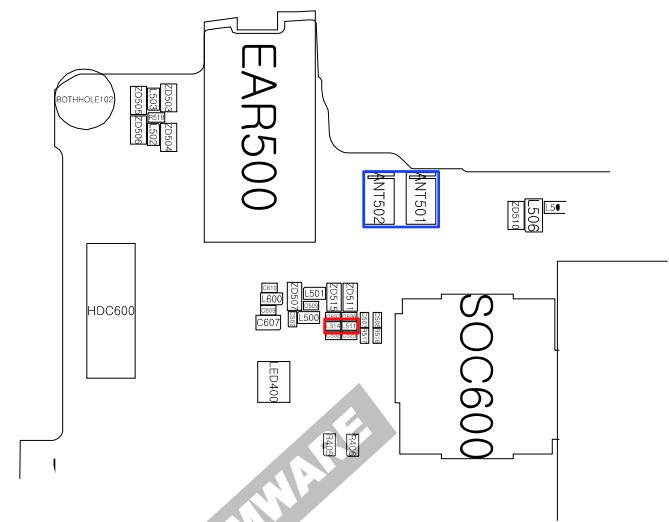
- Speaker Module



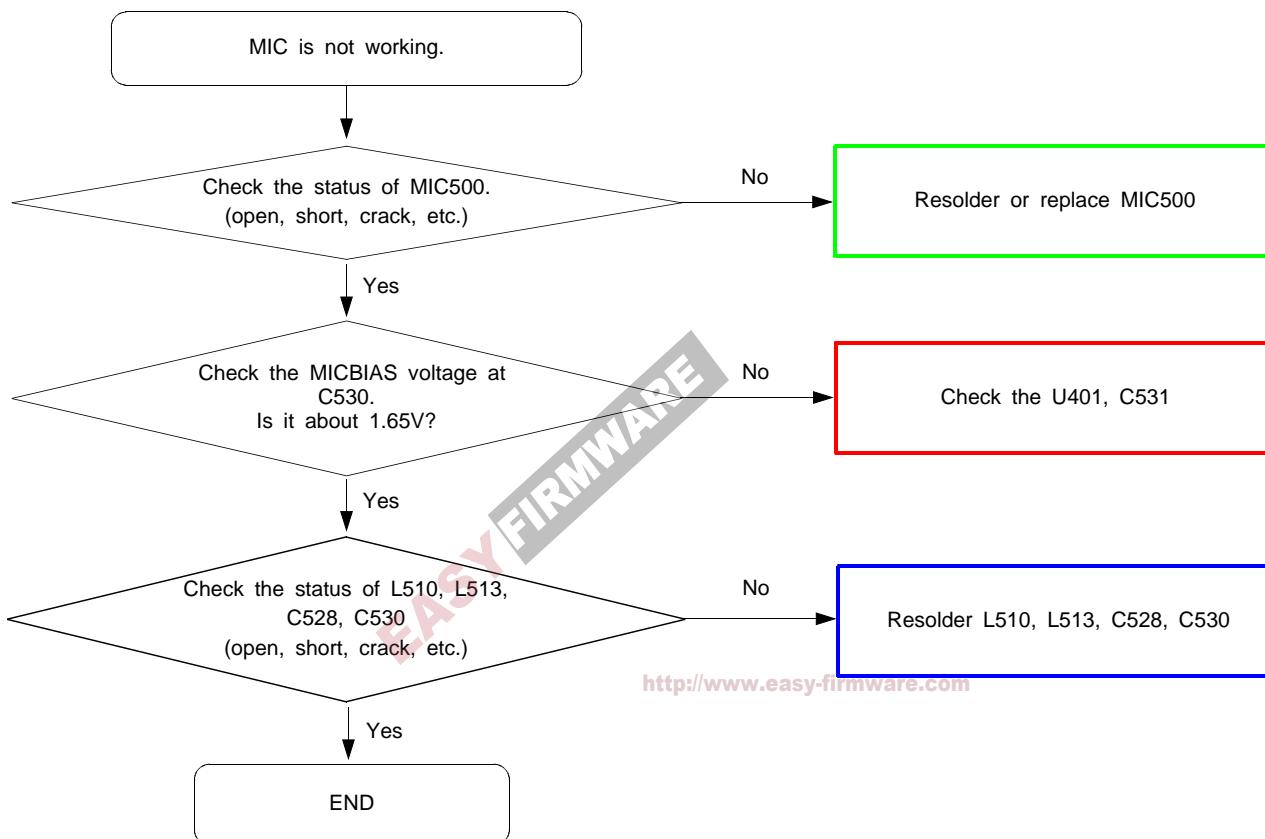


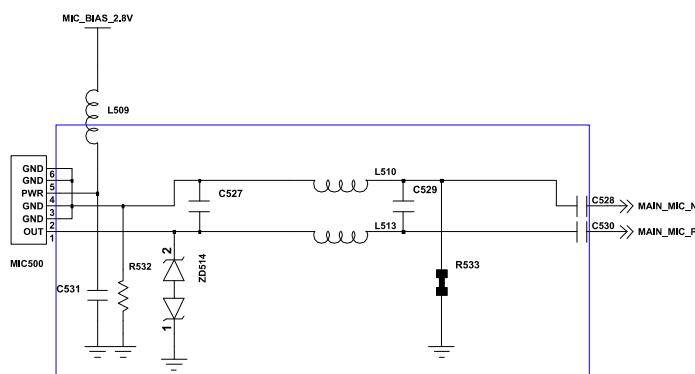
● Receiver Working



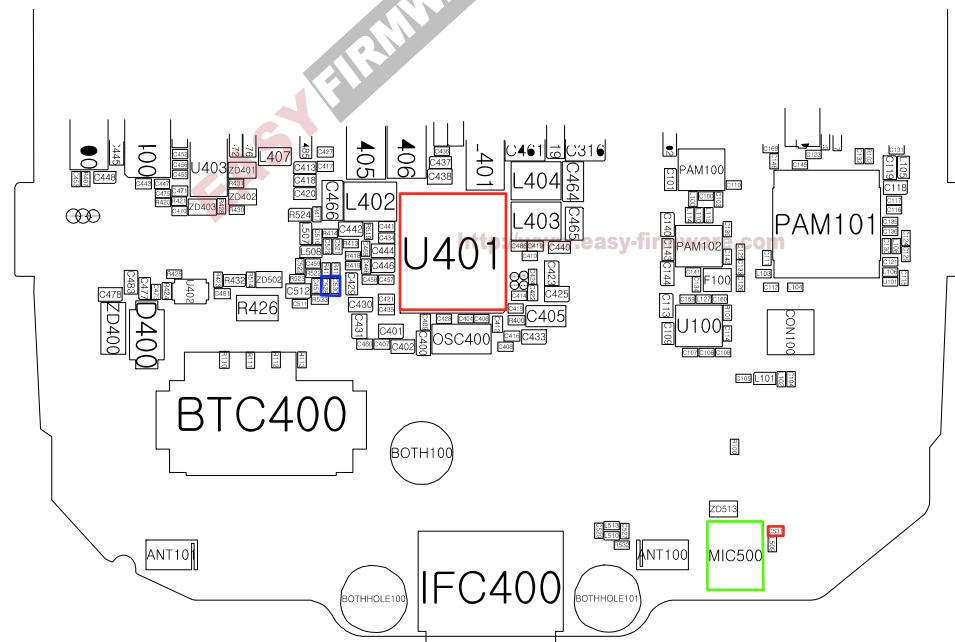


<http://www.easy-firmware.com>

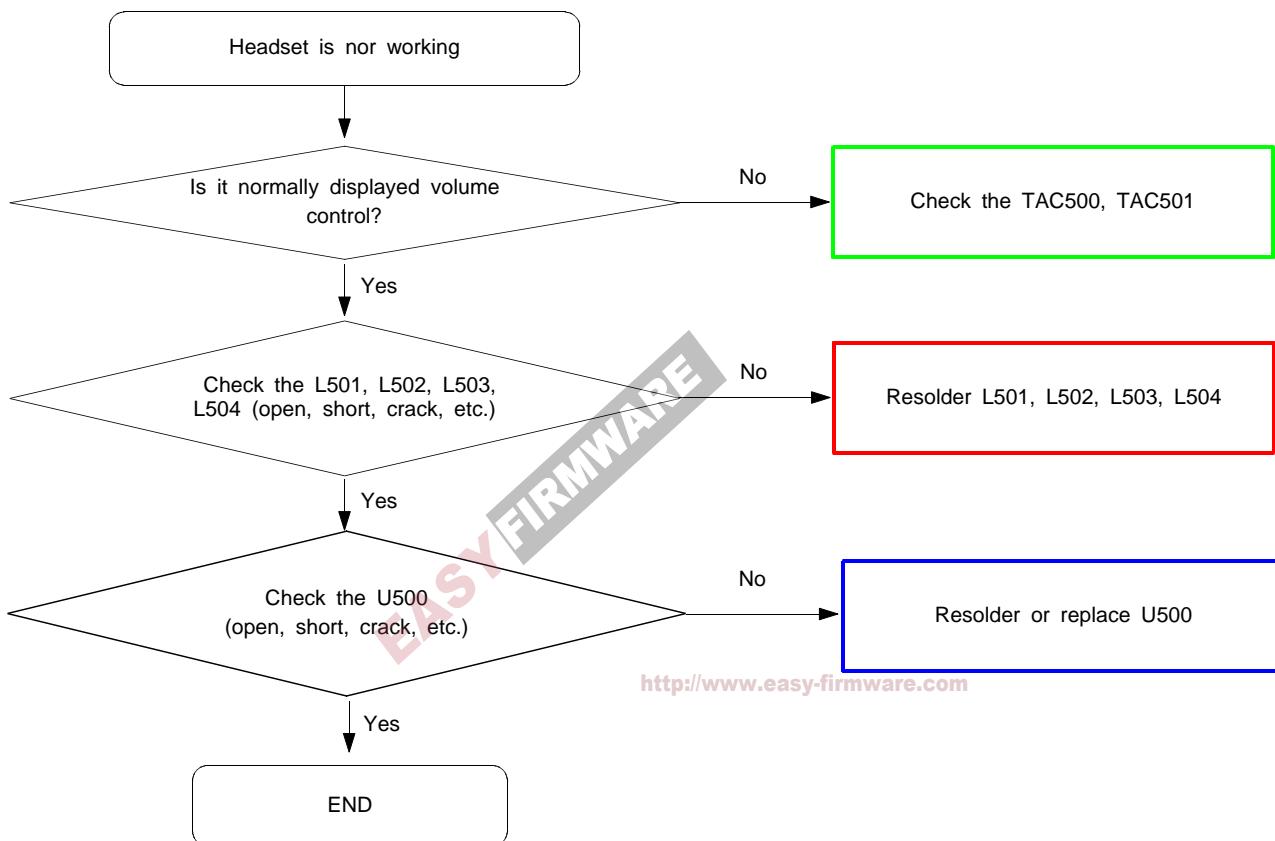
● MIC Working (Main MIC)



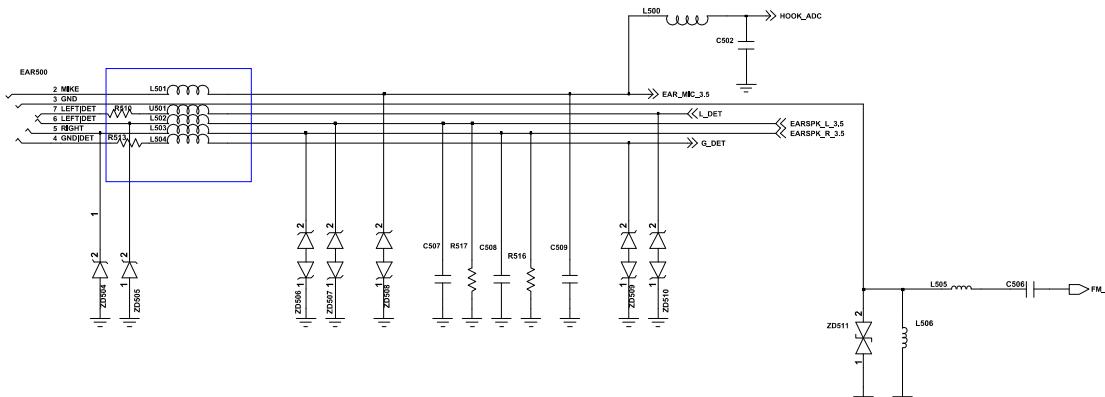
MAIN MIC



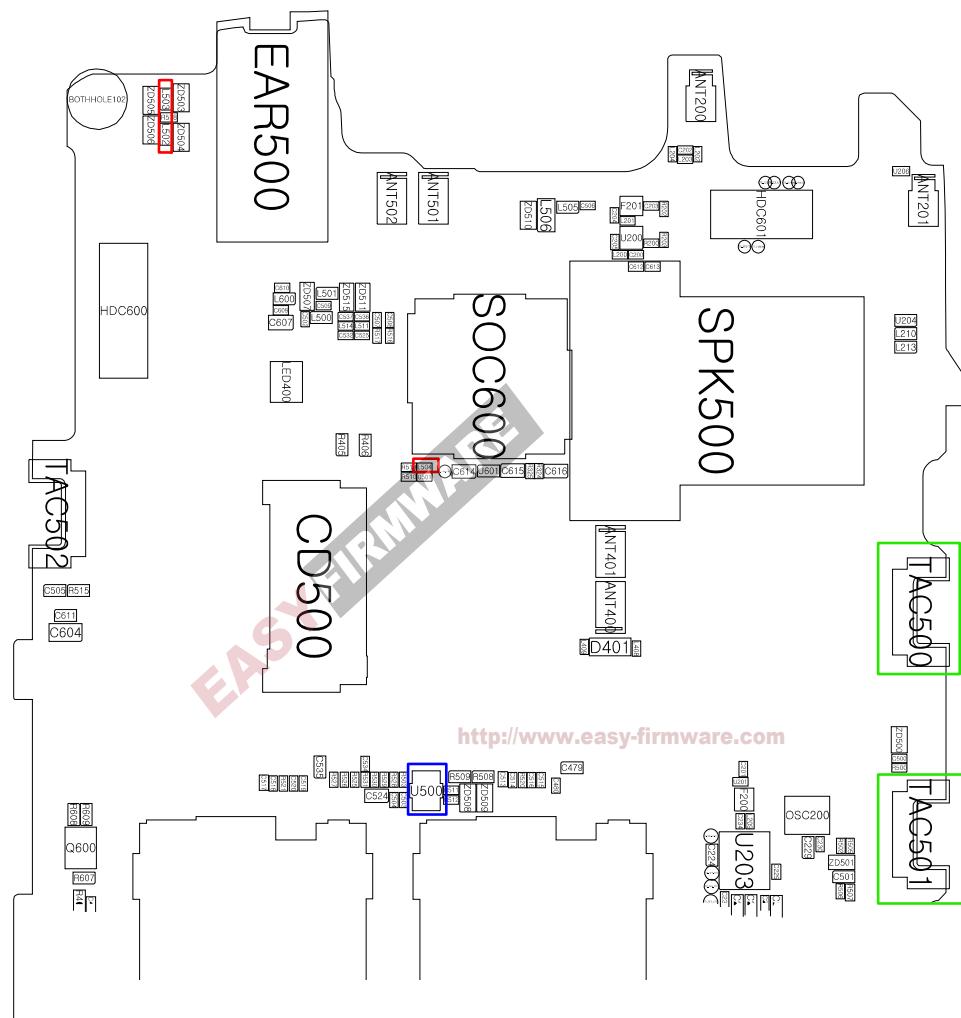
- Stereo Headset



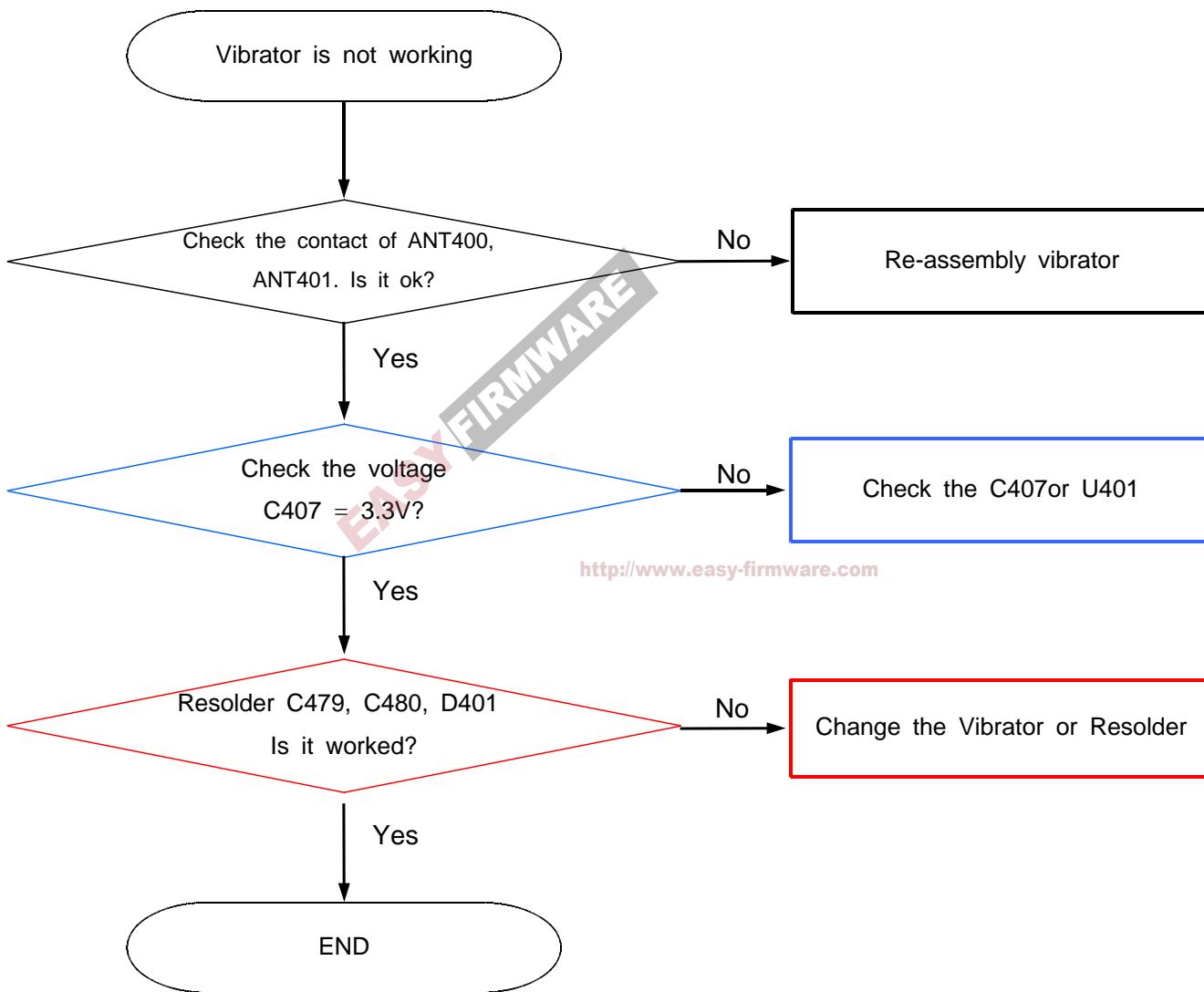
<http://www.easy-firmware.com>

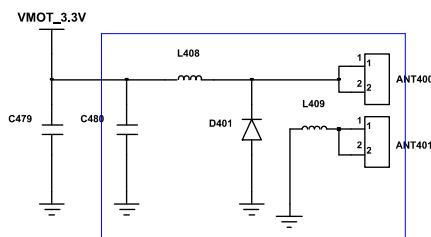


3.5 PHI EARJACK

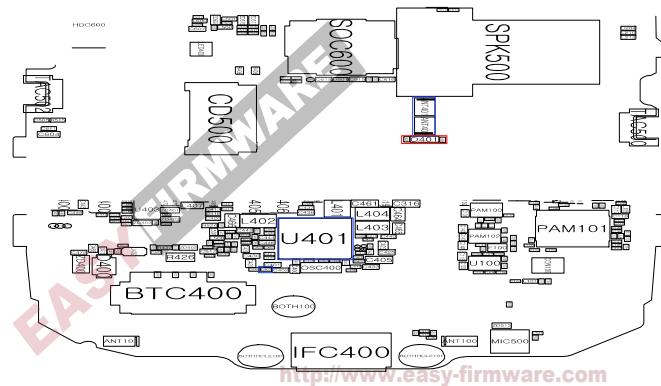


8-4-6. Vibrator Working

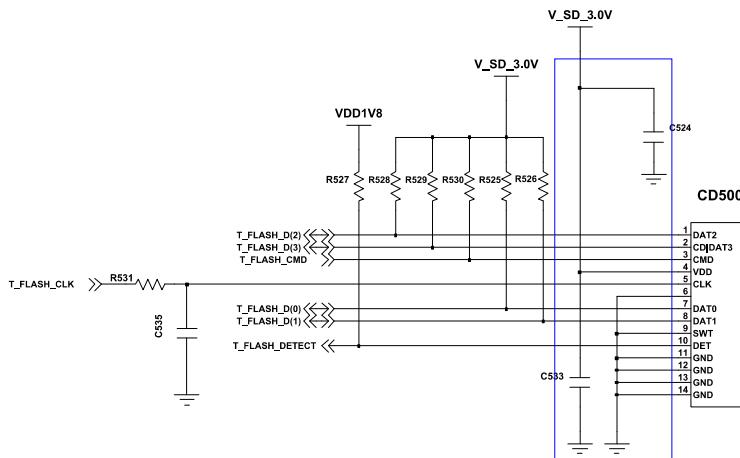
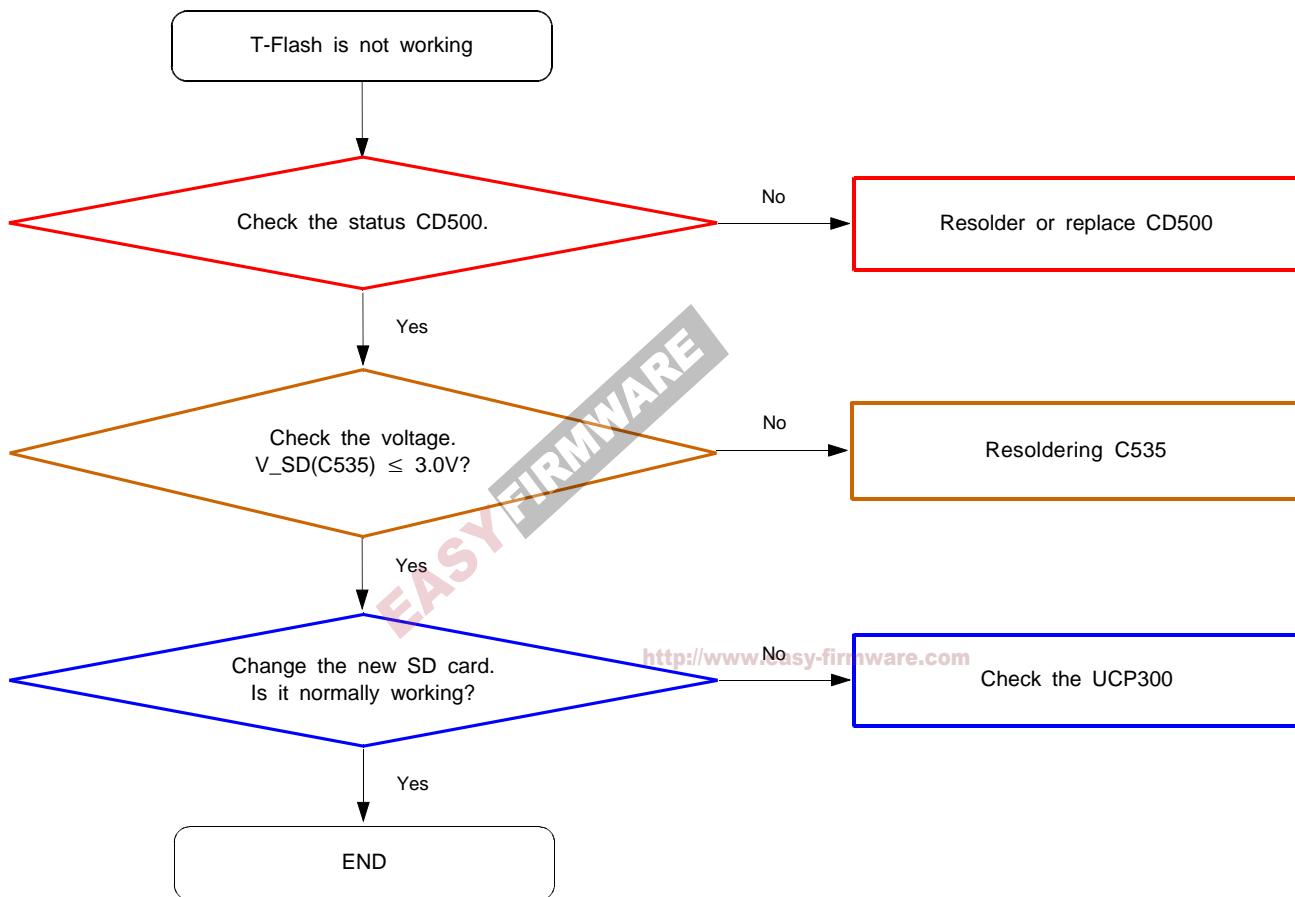




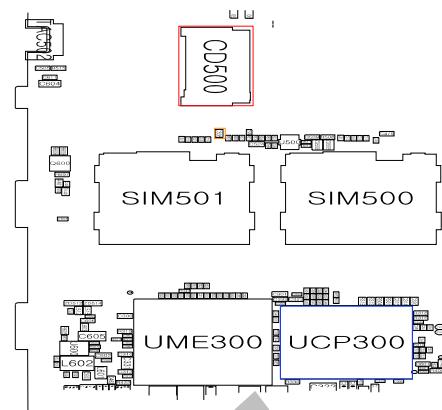
MOTOR_PAD



8-4-7. T-Flash Card Working



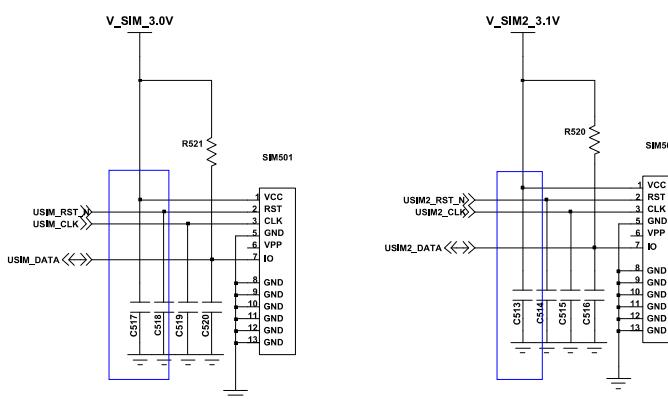
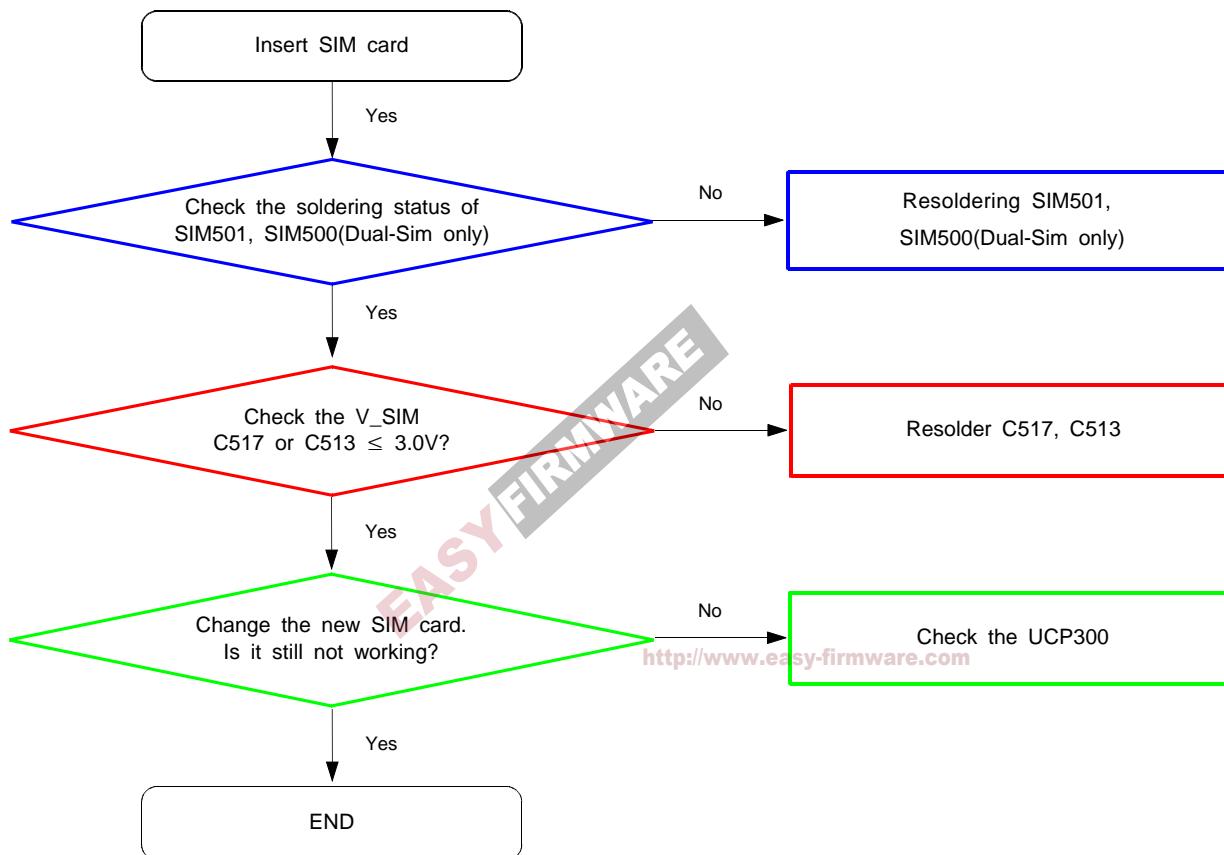
MicroSD Card CON



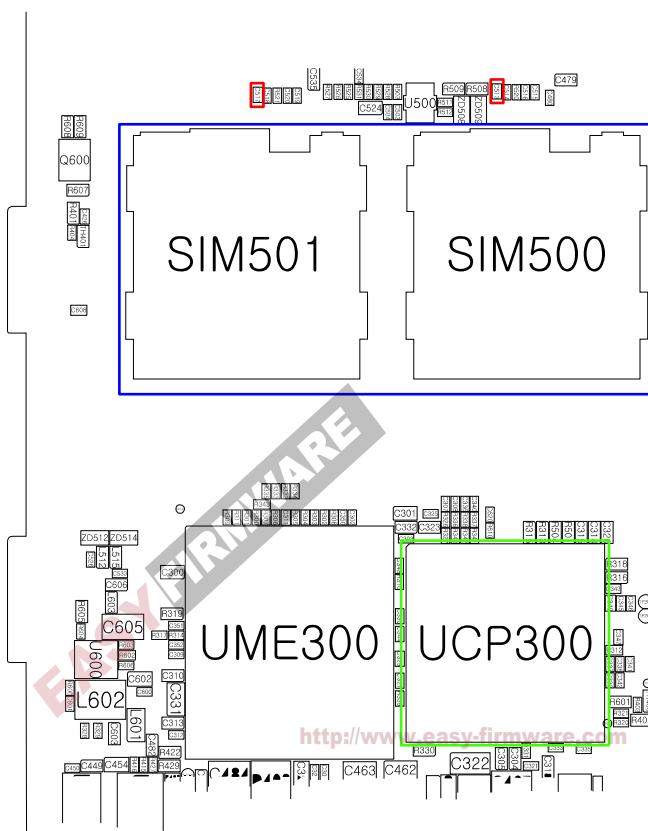
<http://www.easy-firmware.com>

EASY FIRMWARE

8-4-8. SIM Card

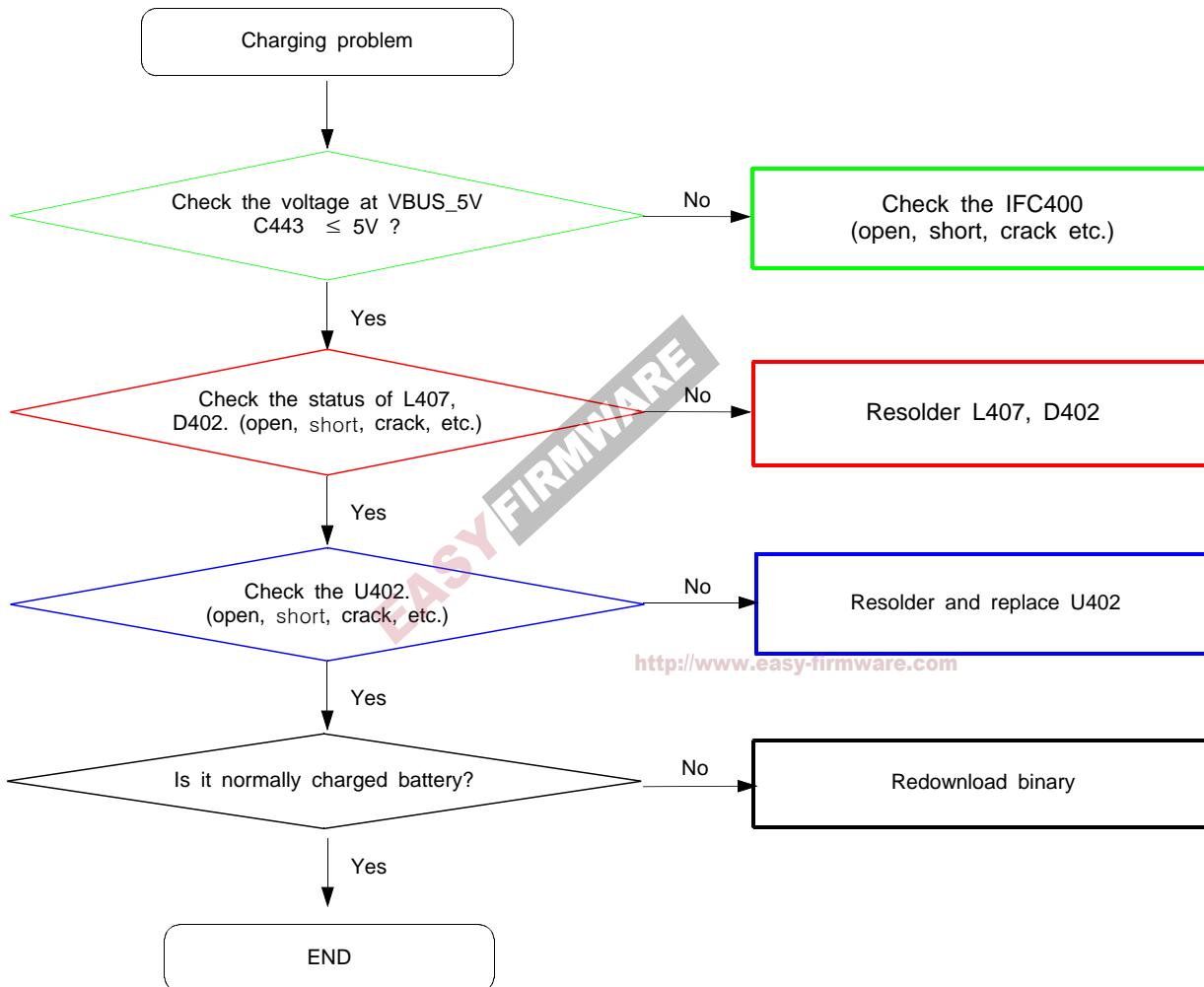


SIM CON(DUAL)

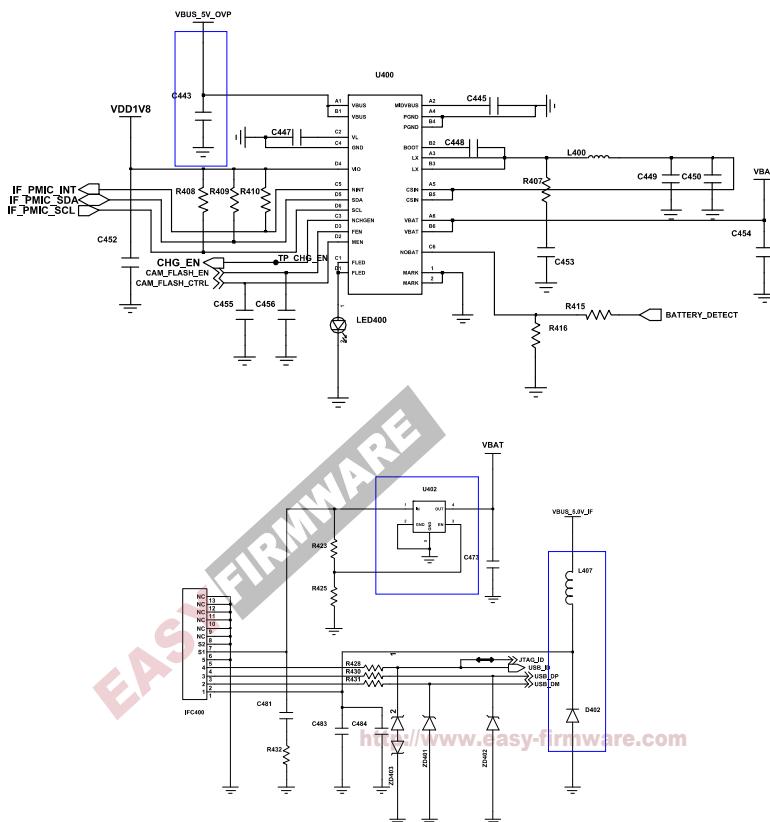


<http://www.easy-firmware.com>

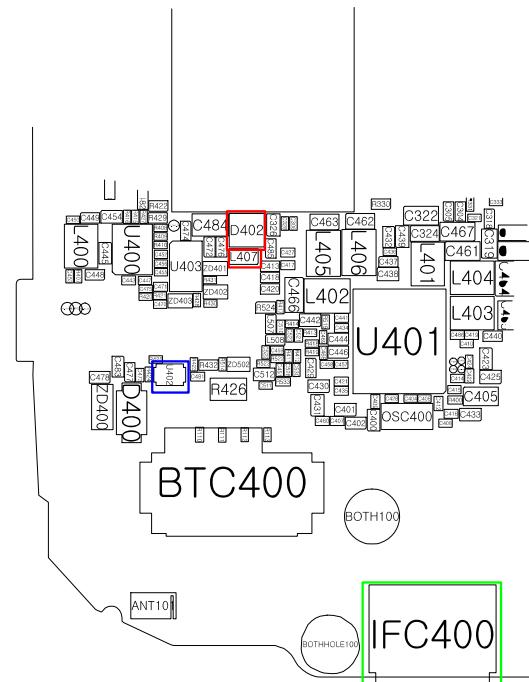
8-4-9. Charging

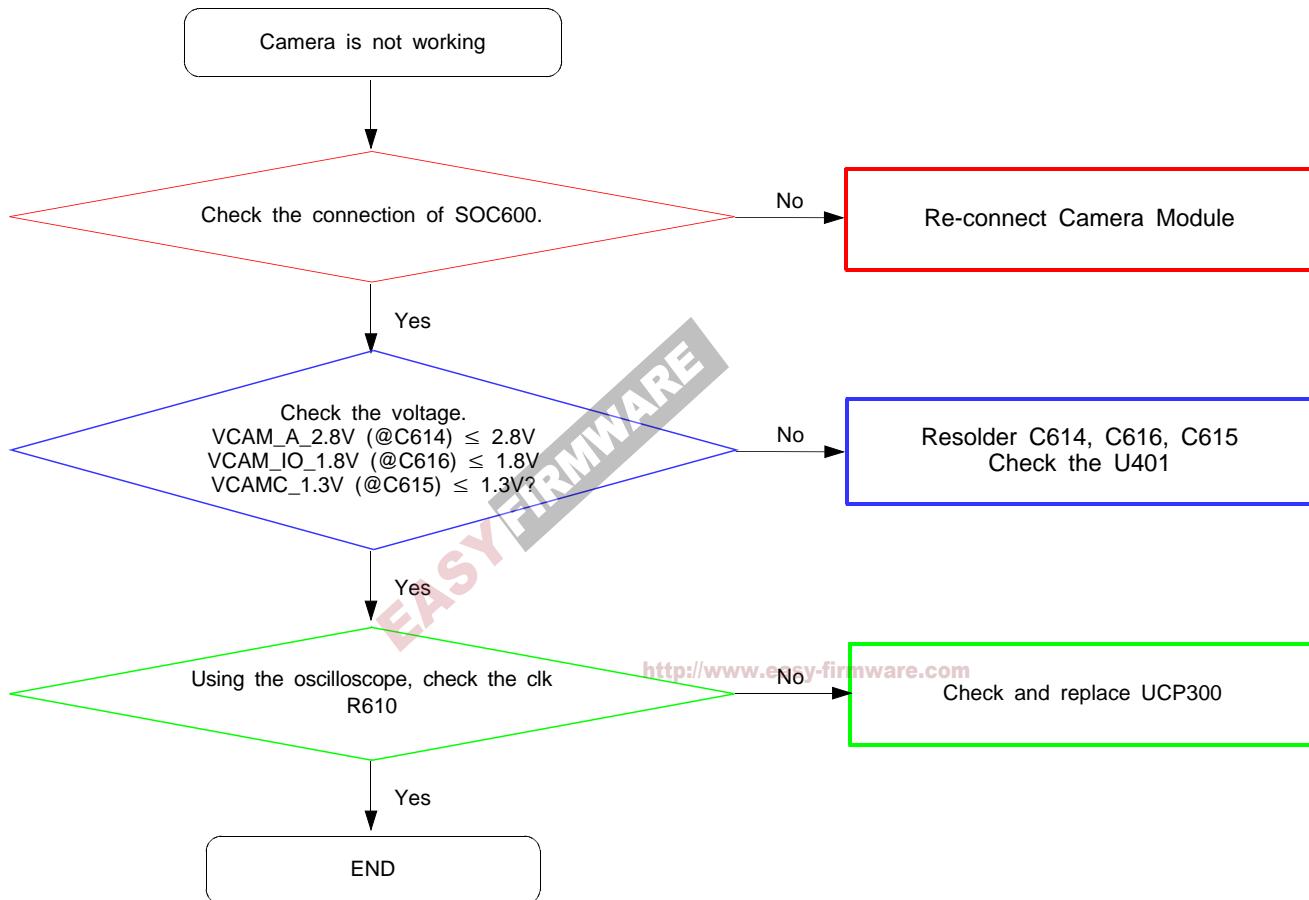


<http://www.easy-firmware.com>

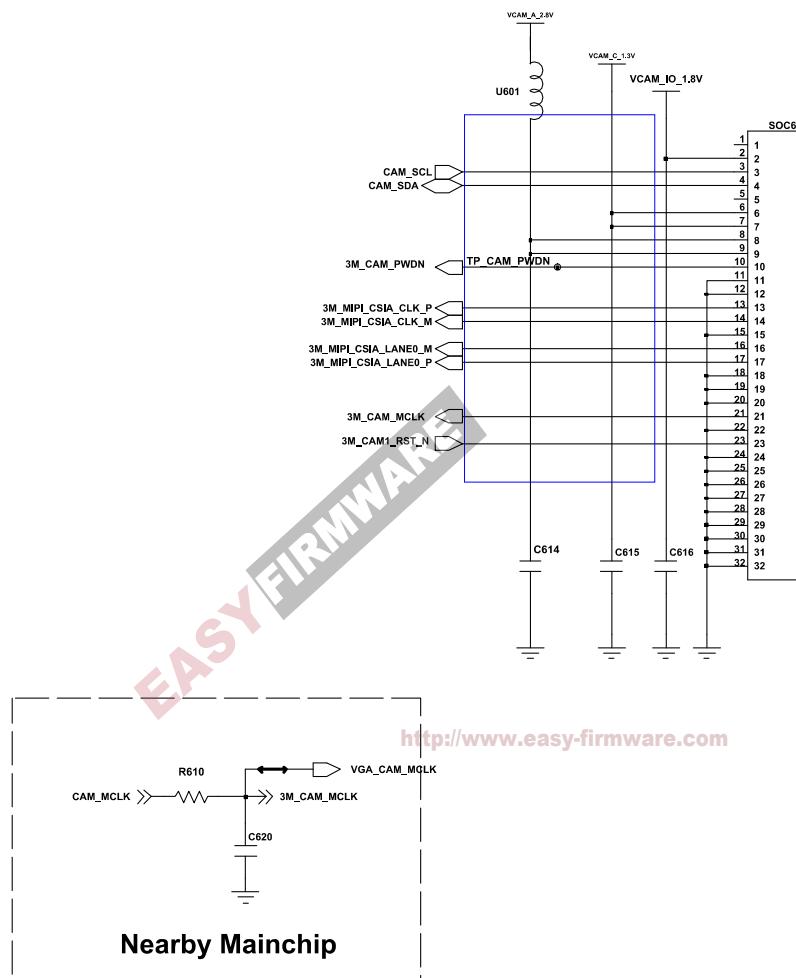


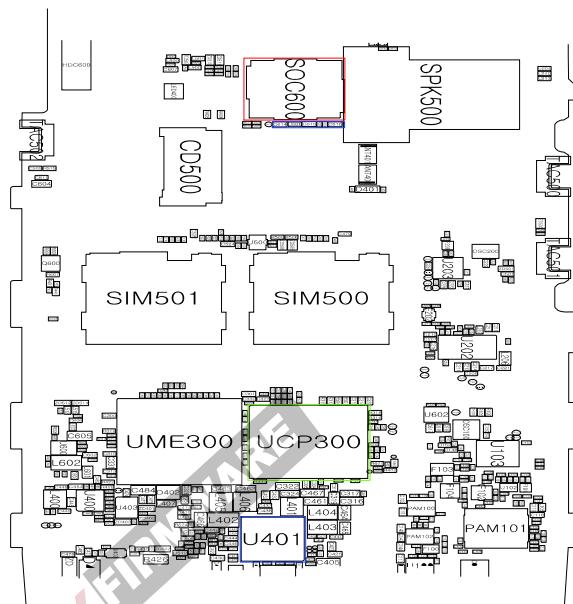
microUSB CON



8-4-10 CAMERA

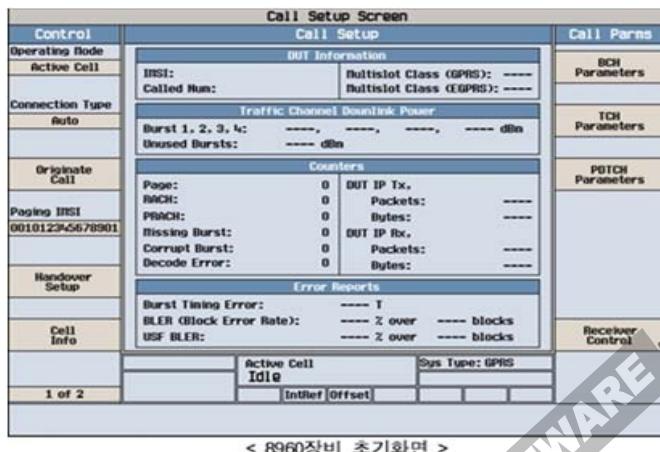
Level 3 Repair





<http://www.easy-firmware.com>

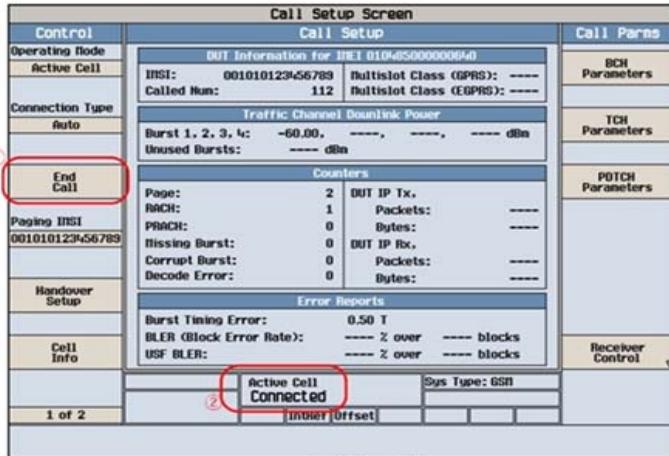
* presetting 8960



(Rx setting)

1. Active Cell : select GSM or GPRS
2. Connection Type : select Auto(GSM), BLER(GPRS)
3. BCH Parameter : select measuring band (DCS or EGSM)
4. Cell power : -60dBm

<http://www.easy-firmware.com>



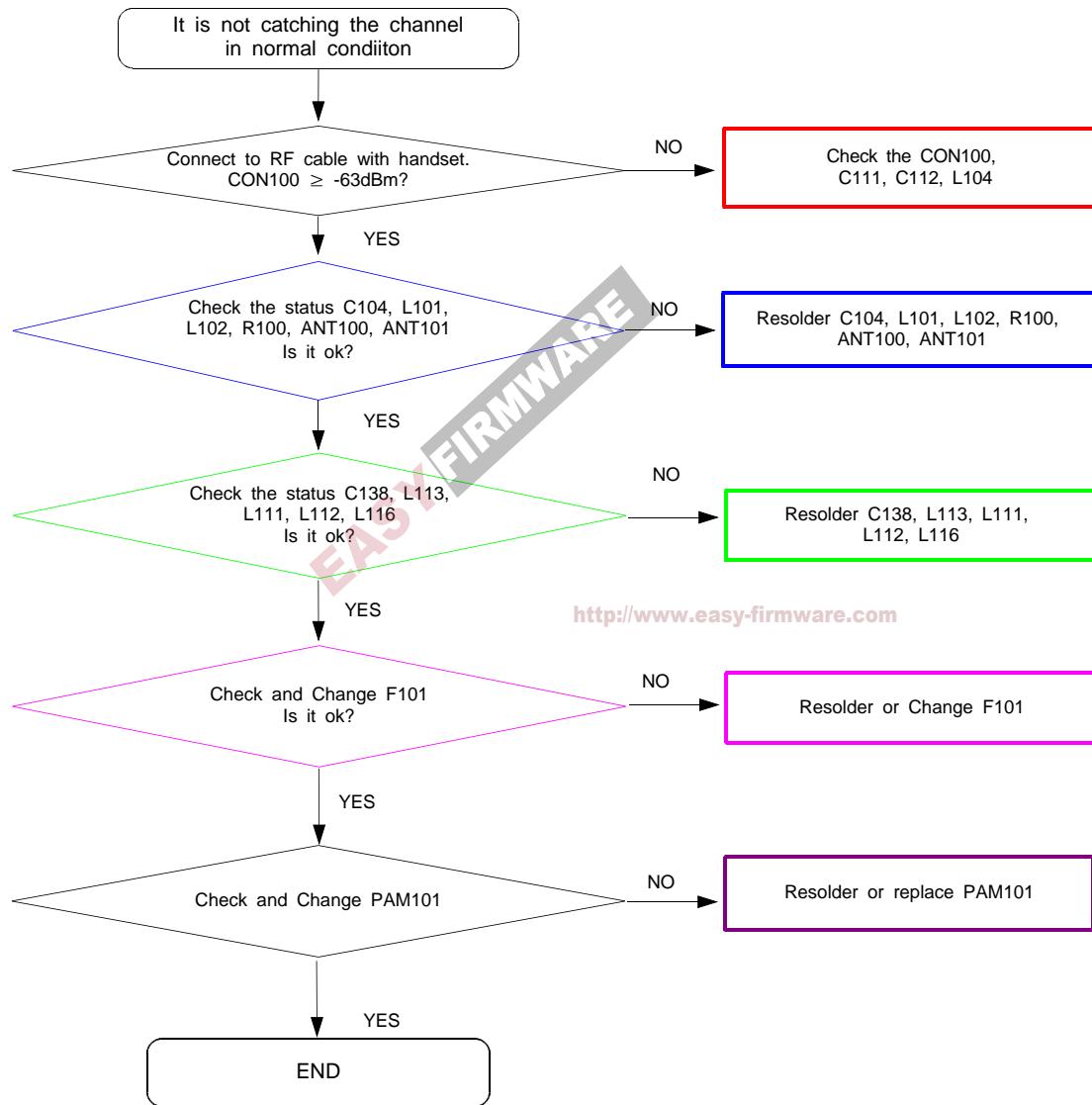
(Tx setting)

- * After setting 8960 (EGSM / DCS)
1. After setting, prepare the call setup Display
 2. Using an Originate Call, make a call.
 3. Confirm the display "connected"
 4. start the measuring

* 8960 & spectrum analyzer (down & up at picture)

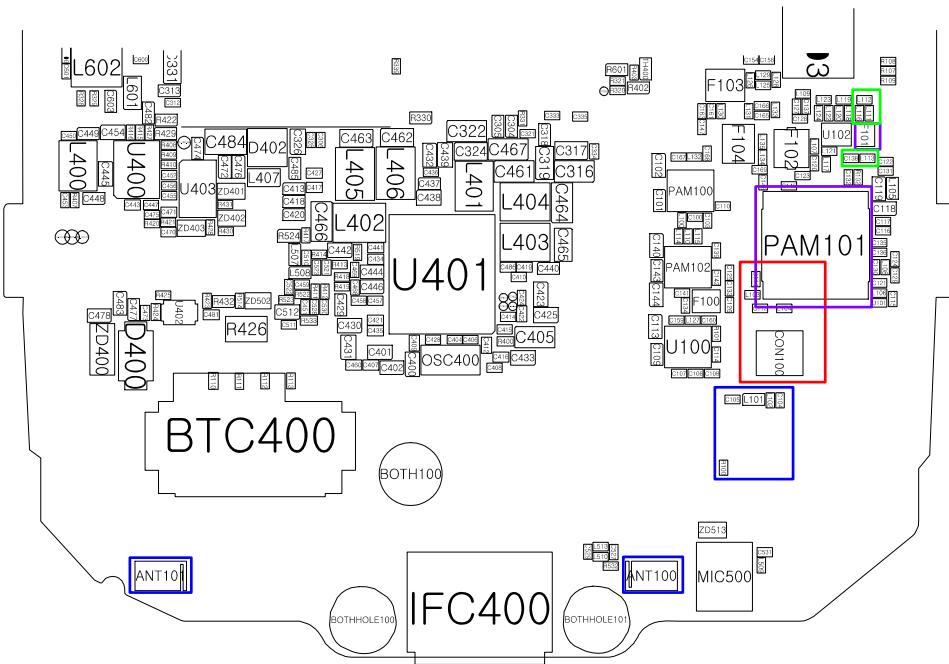
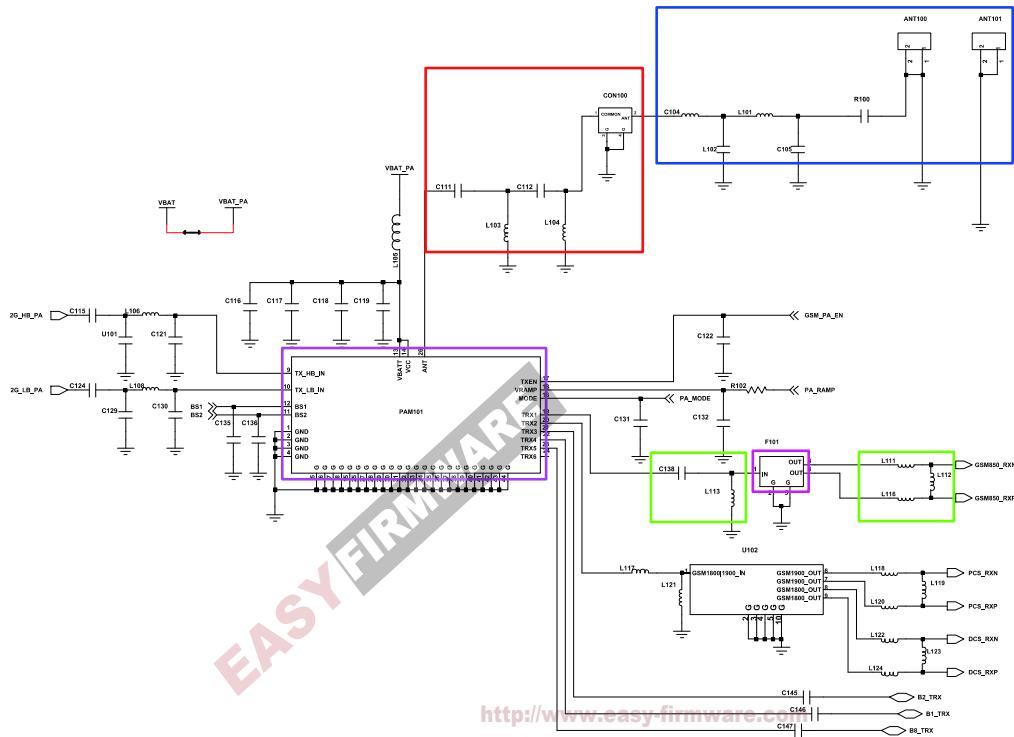
- spectrum analyzer : testing method = the way using an Oscilloscope
- 8960 : connect using RF Cable between 8960 & RF Connector in board.

8-5-1. GSM 900 Rx

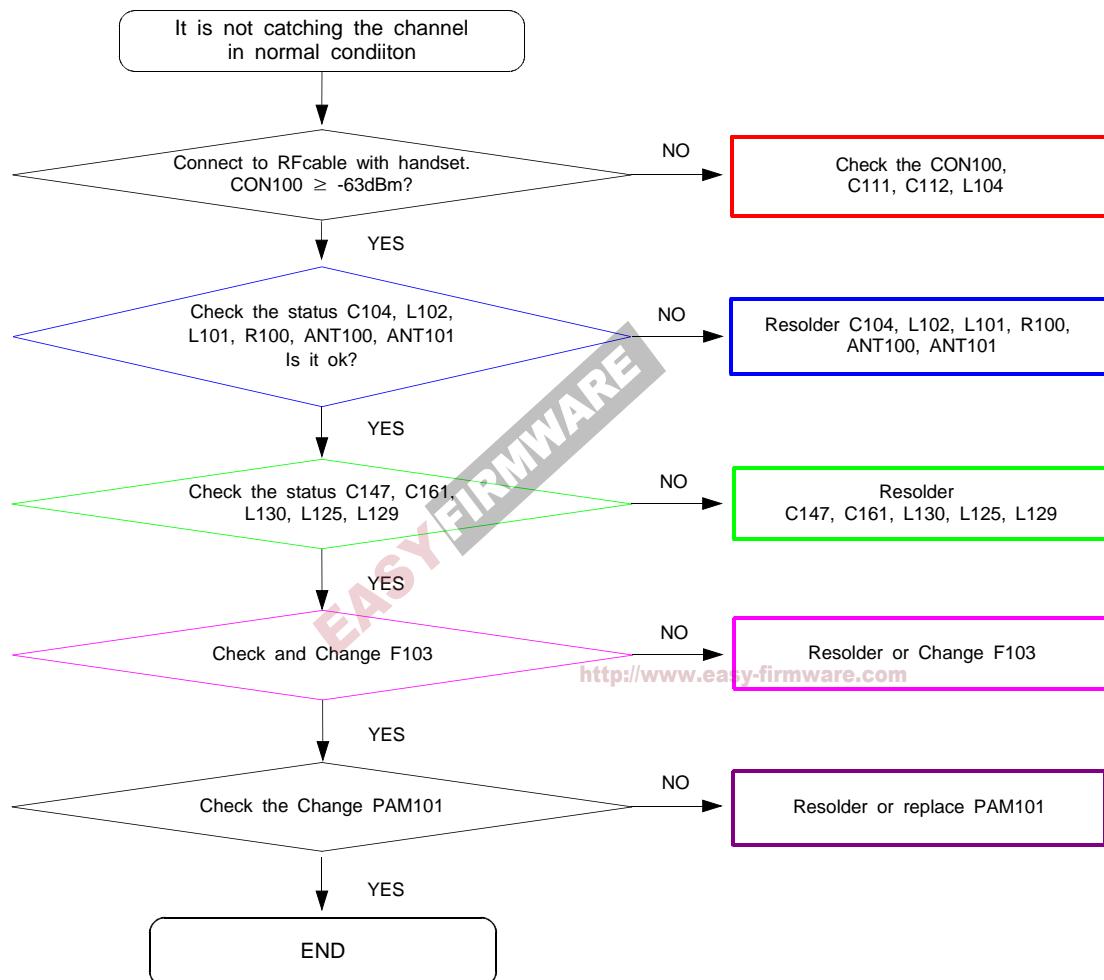


<http://www.easy-firmware.com>

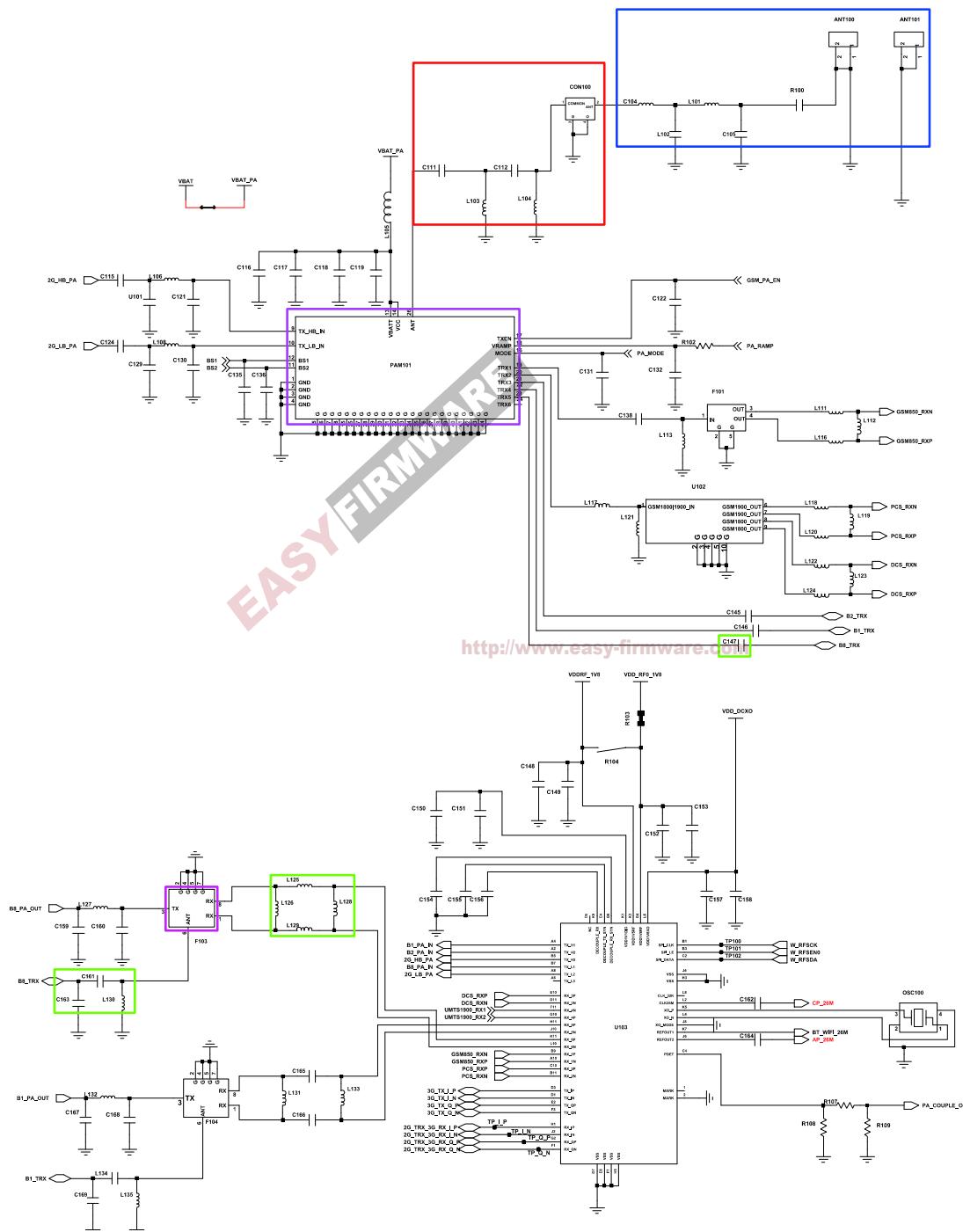
Level 3 Repair

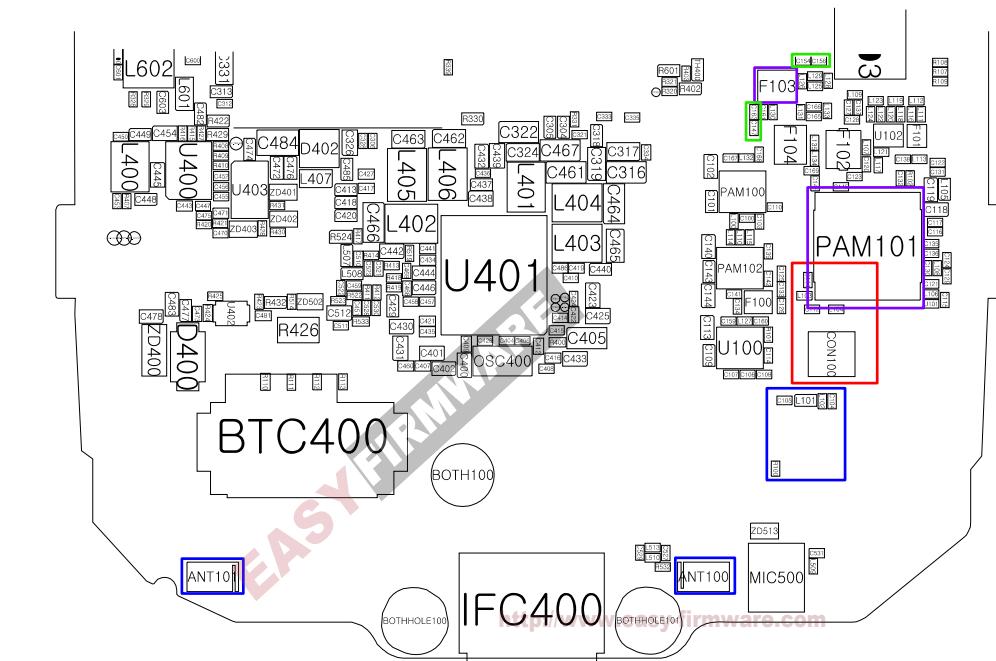


8-5-2. GSM 850 Rx / WCDMA Band5 (850) Rx

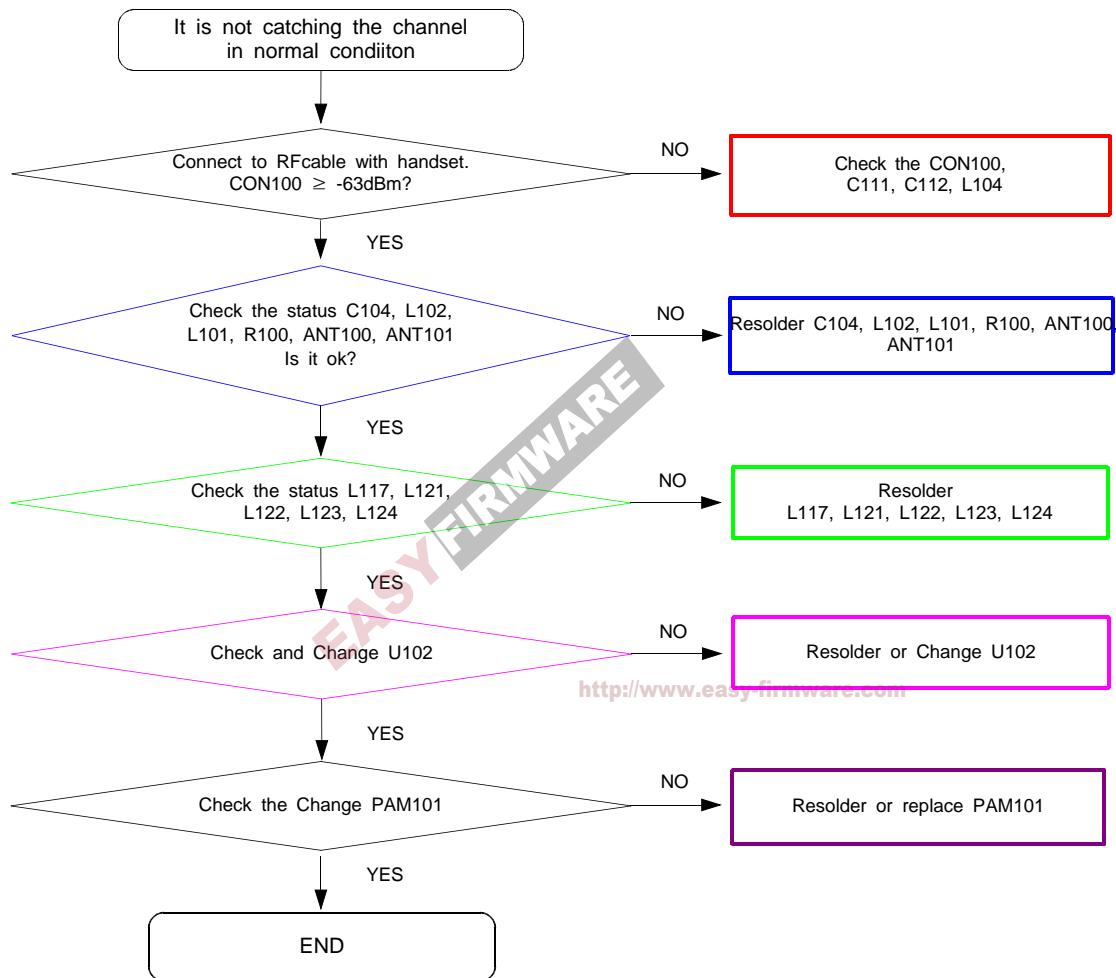


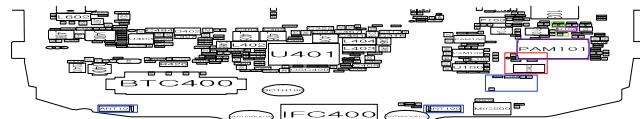
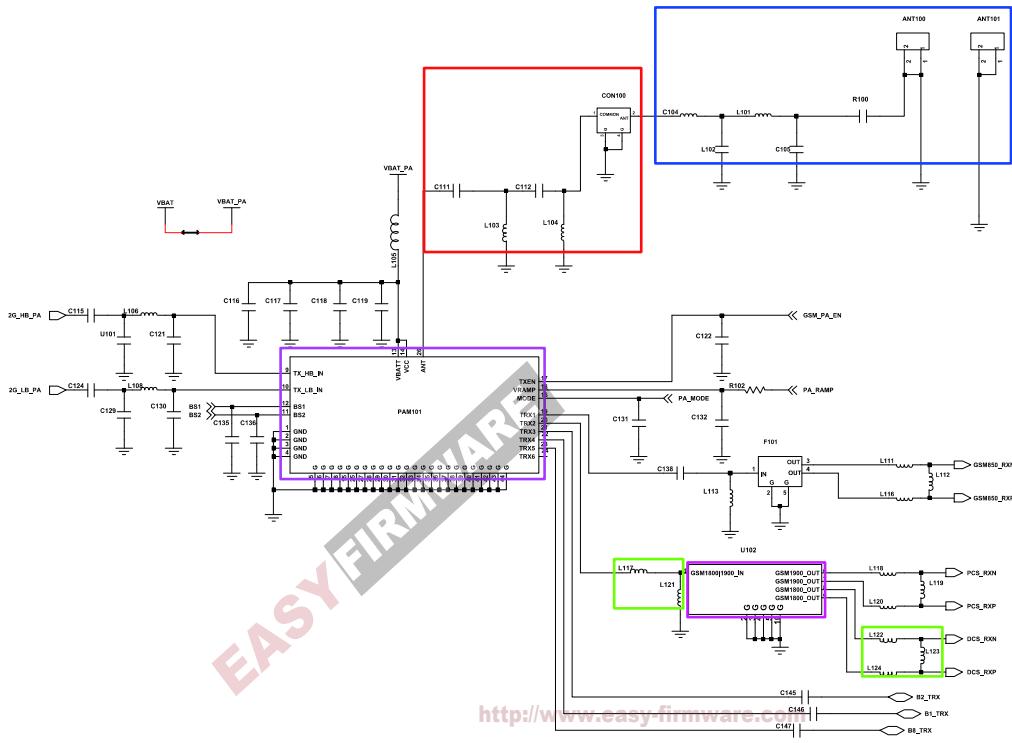
Level 3 Repair



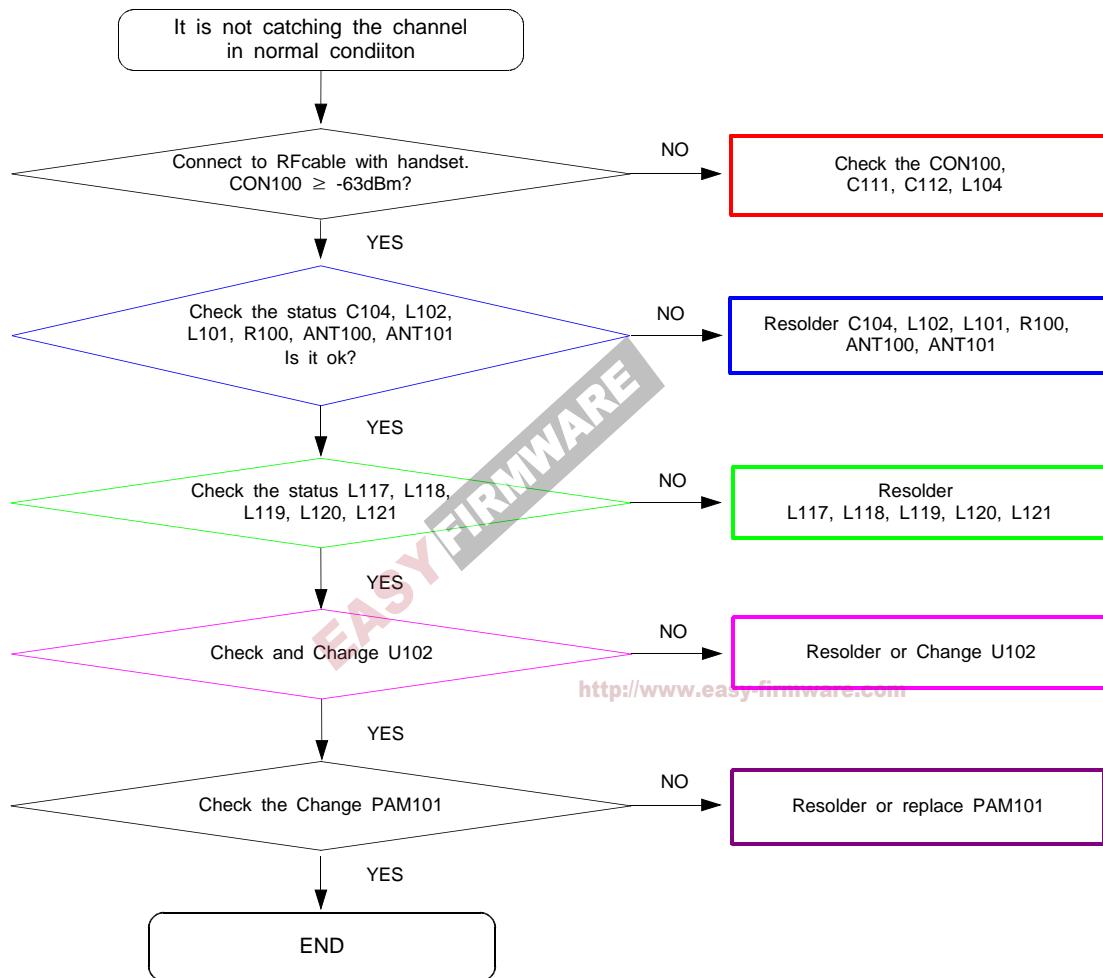


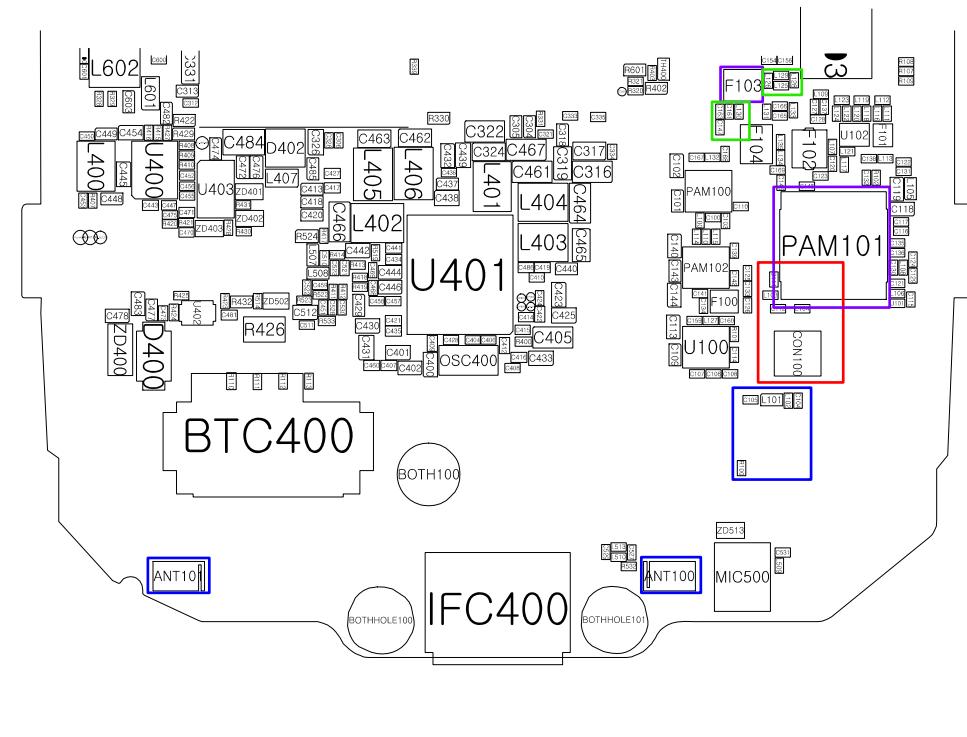
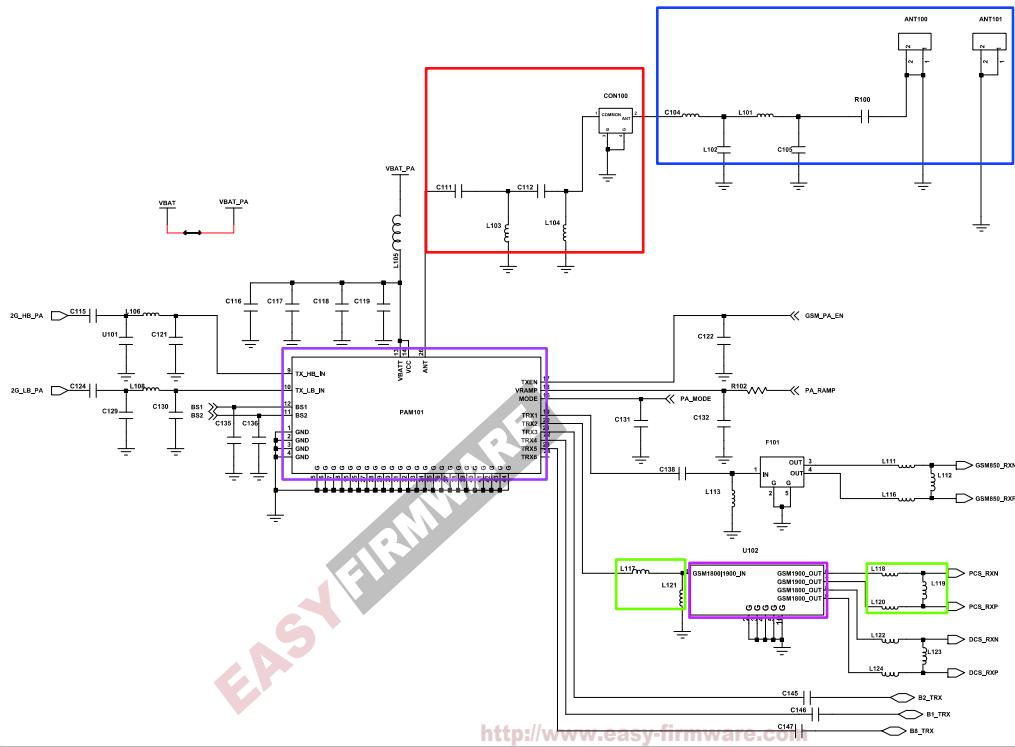
8-5-3. DCS1800 Rx

<http://www.easy-firmware.com>

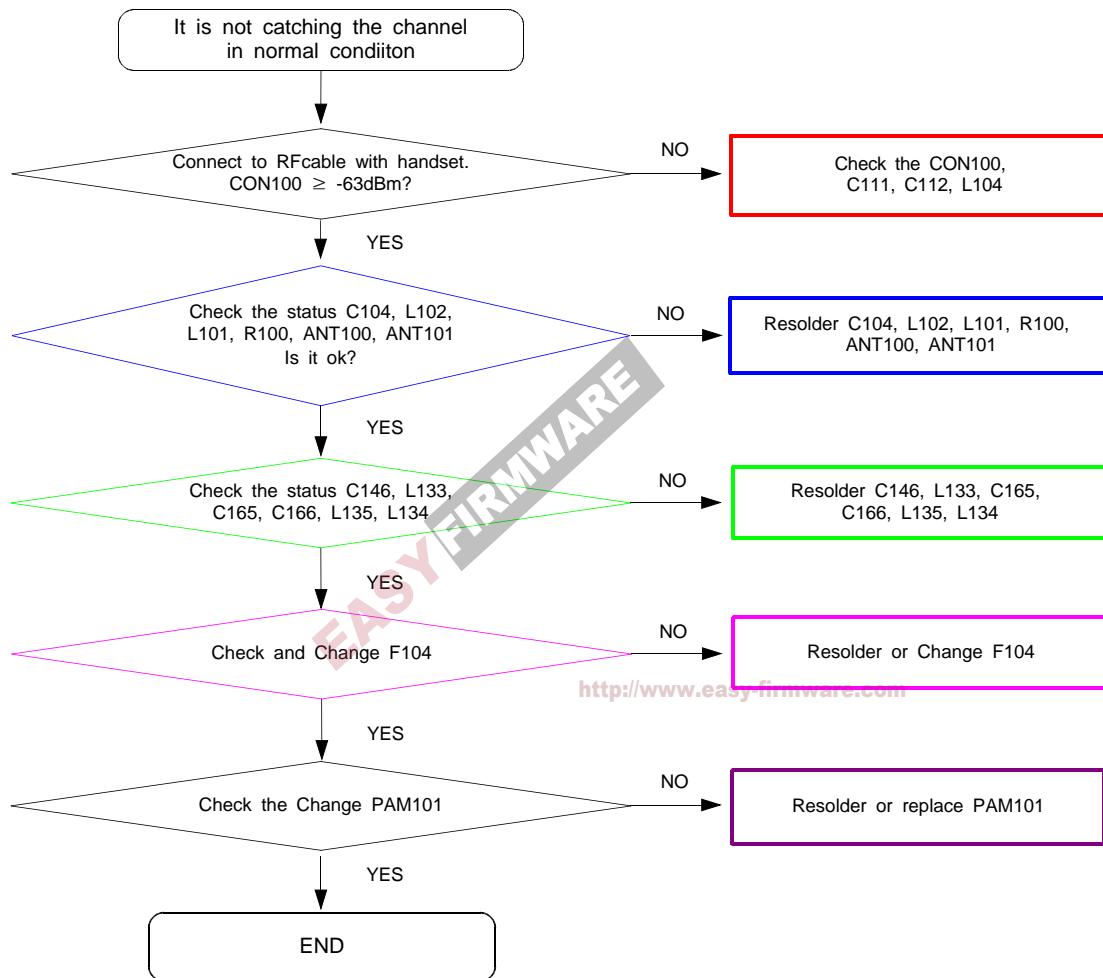


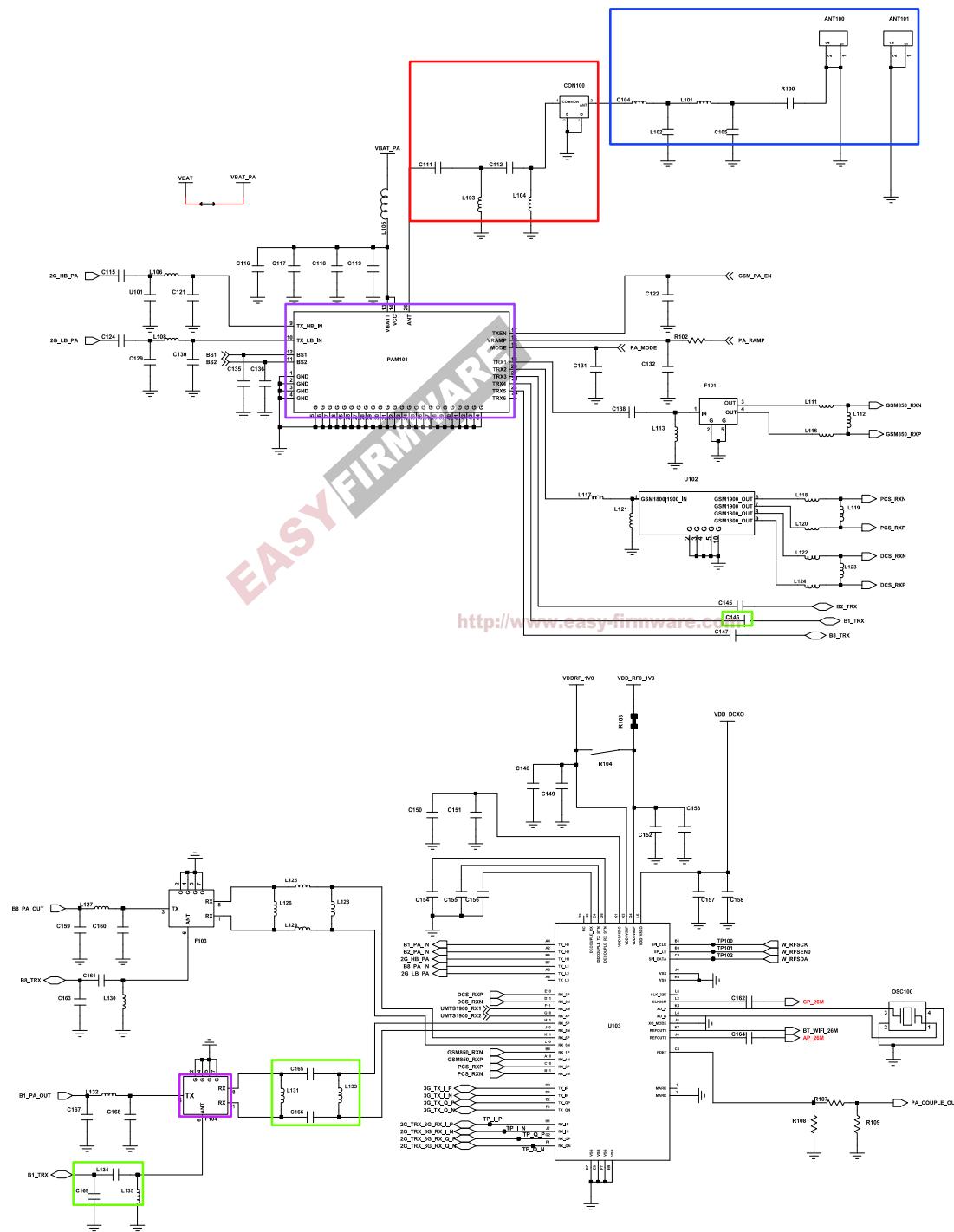
8-5-4. PCS1900 Rx

<http://www.easy-firmware.com>

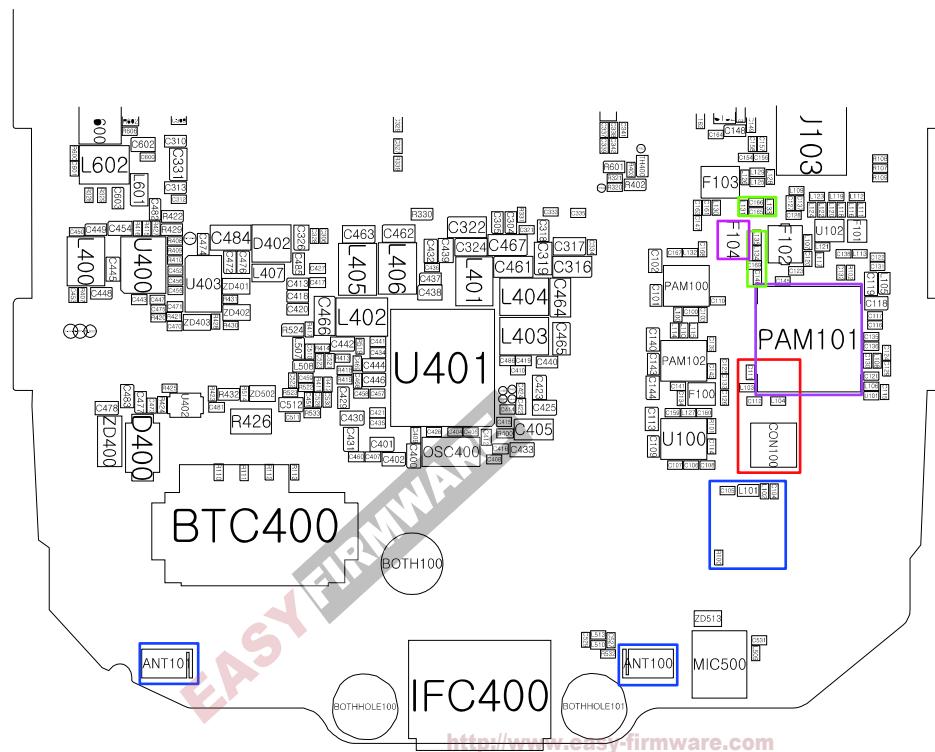


8-5-5. WCDMA Band1 (2100) Rx

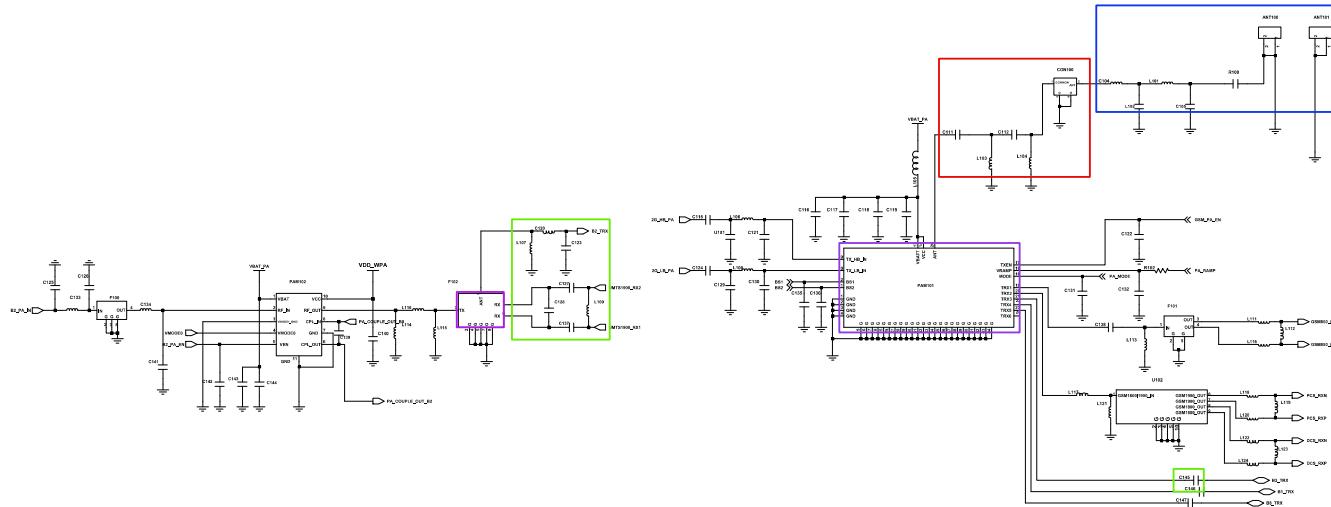
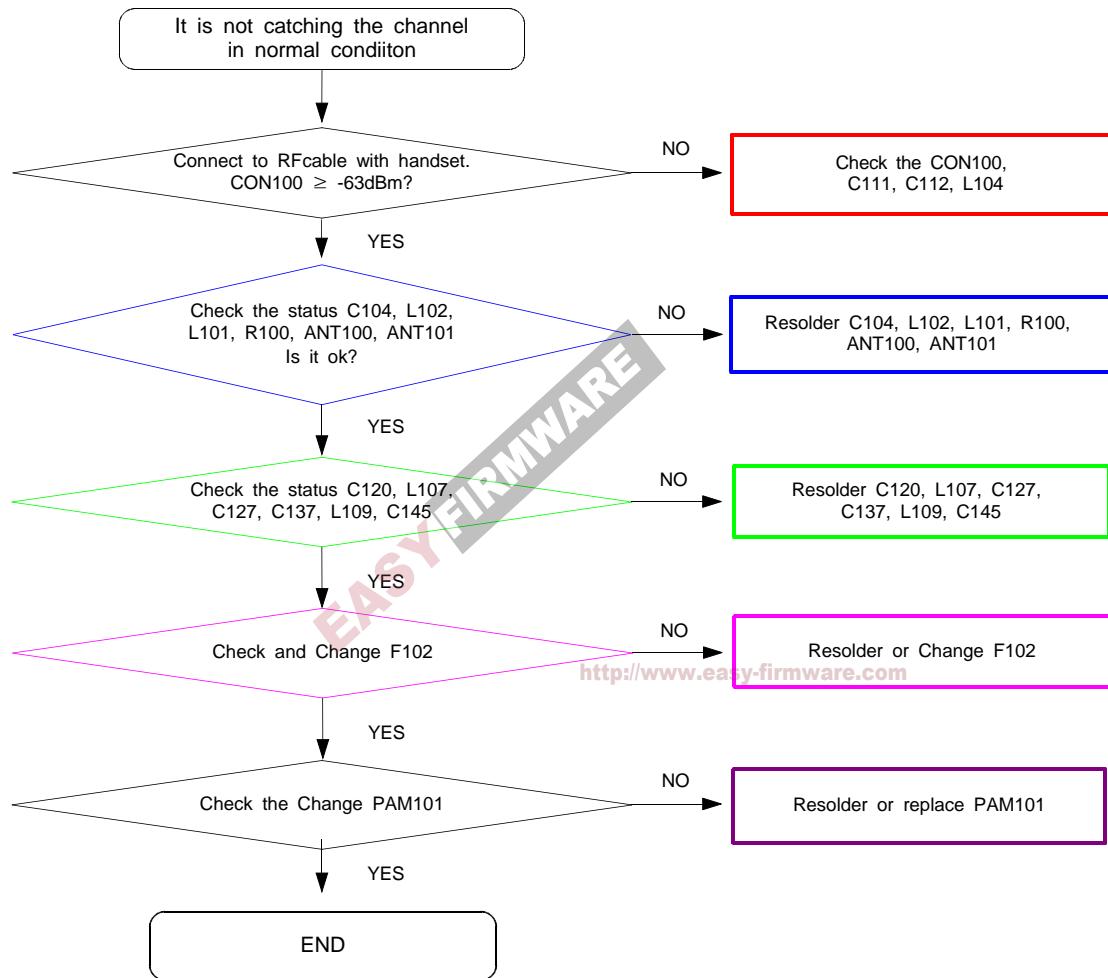


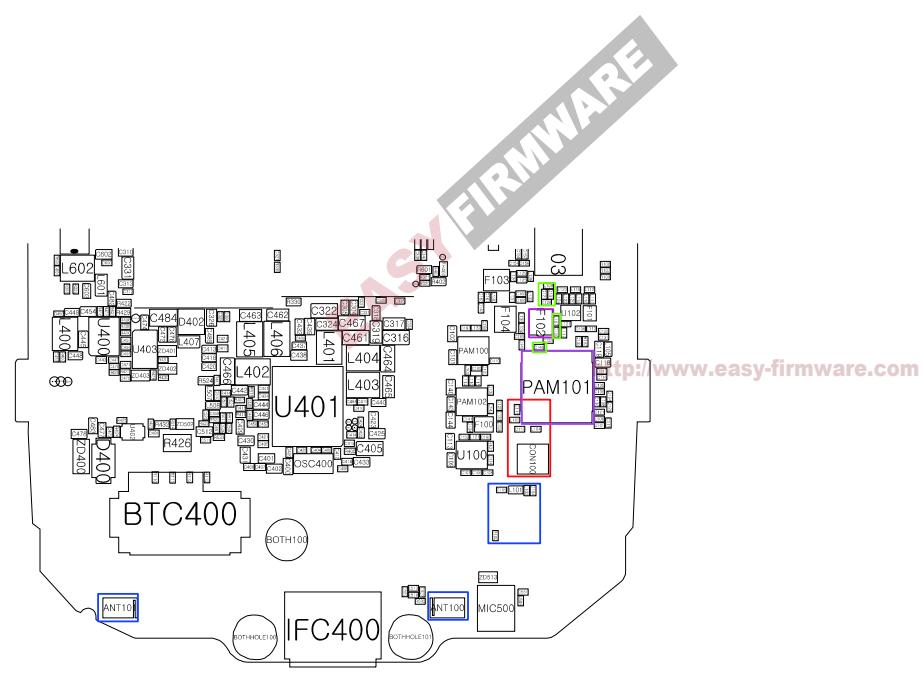


Level 3 Repair

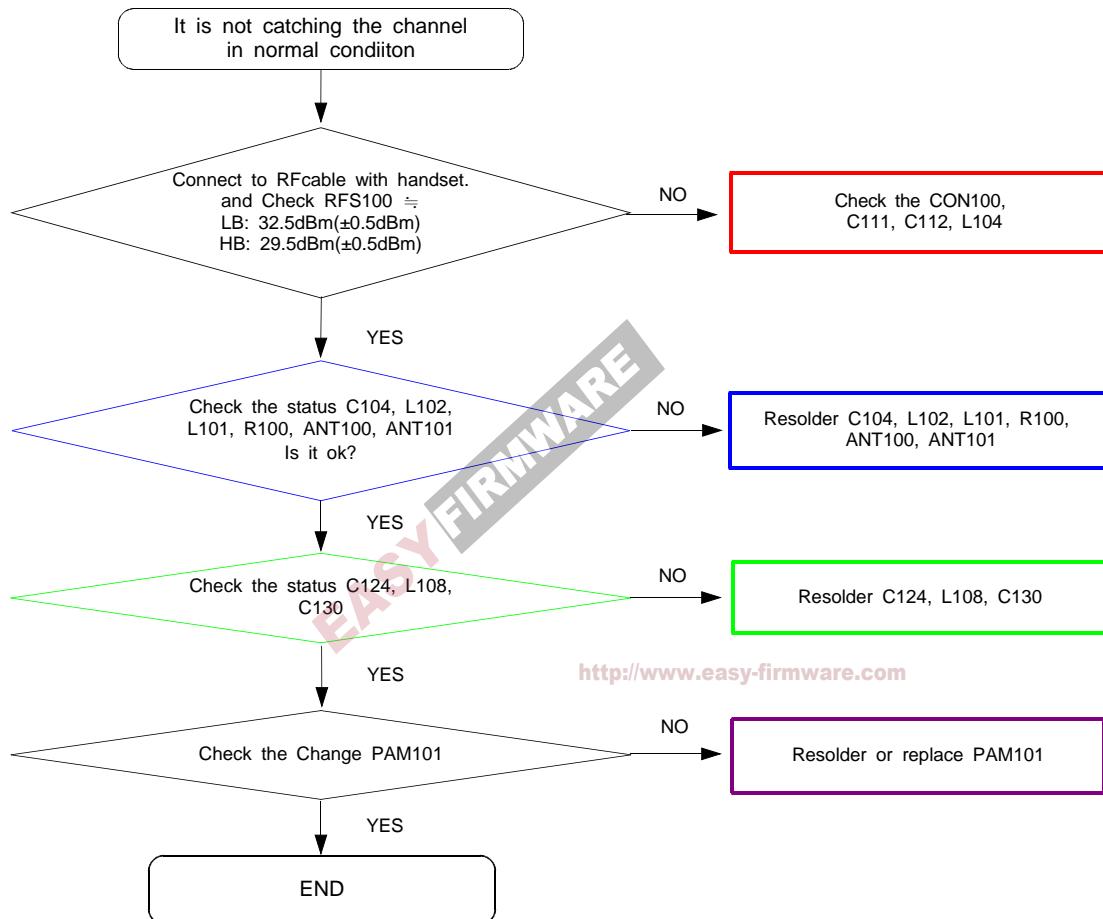


8-5-6. WCDMA Band2 (1900) Rx

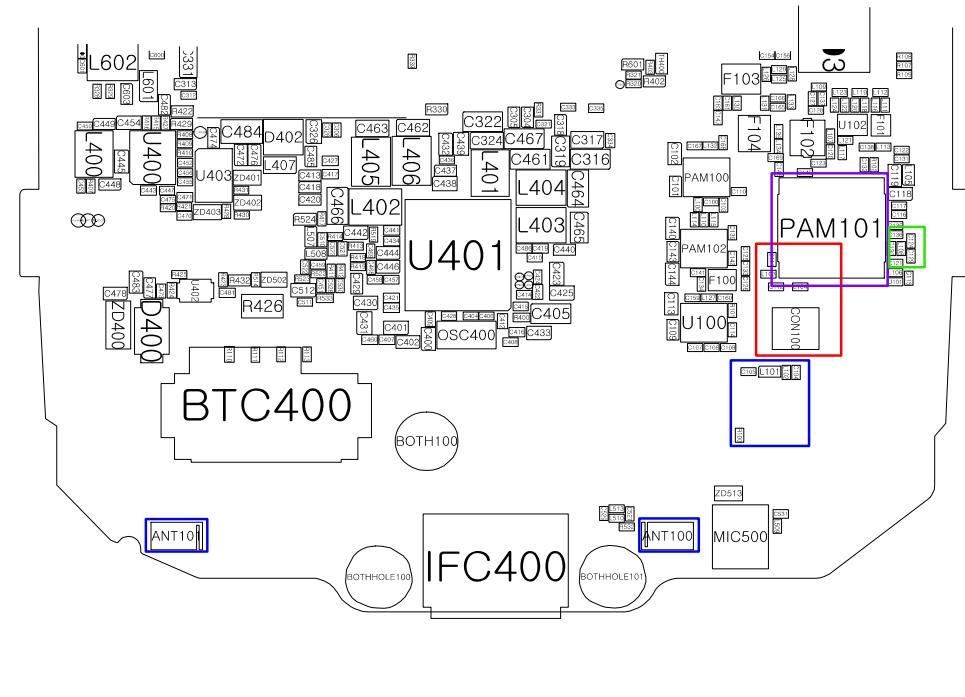
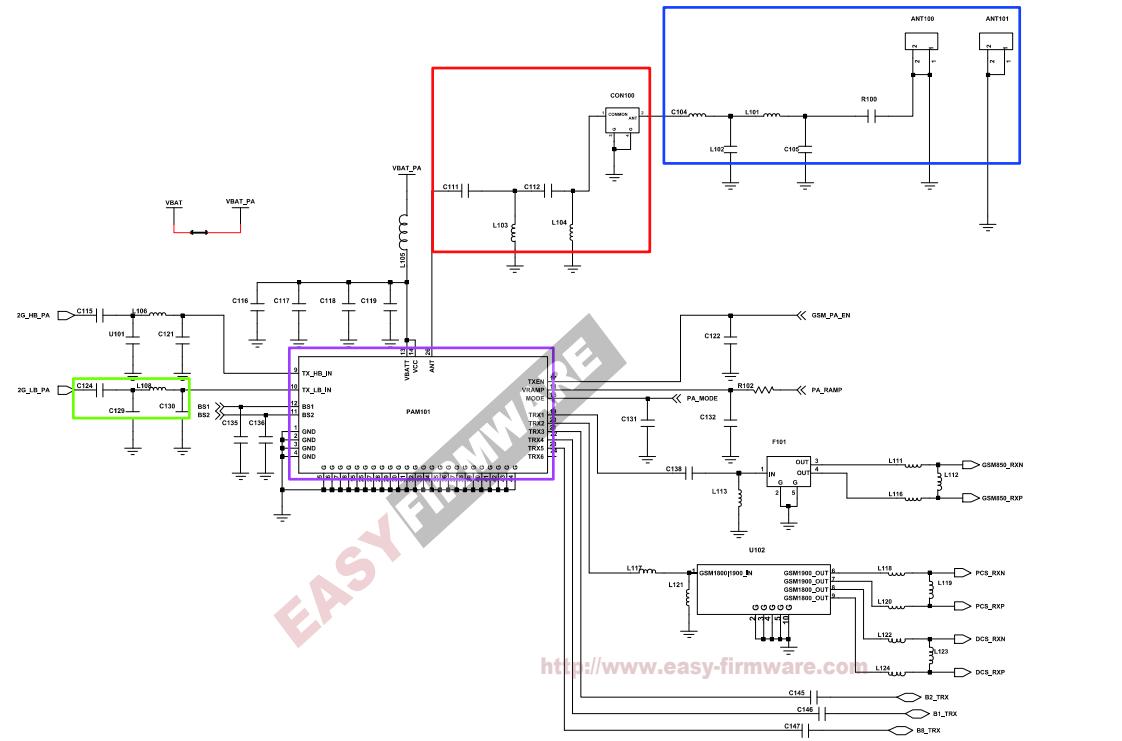




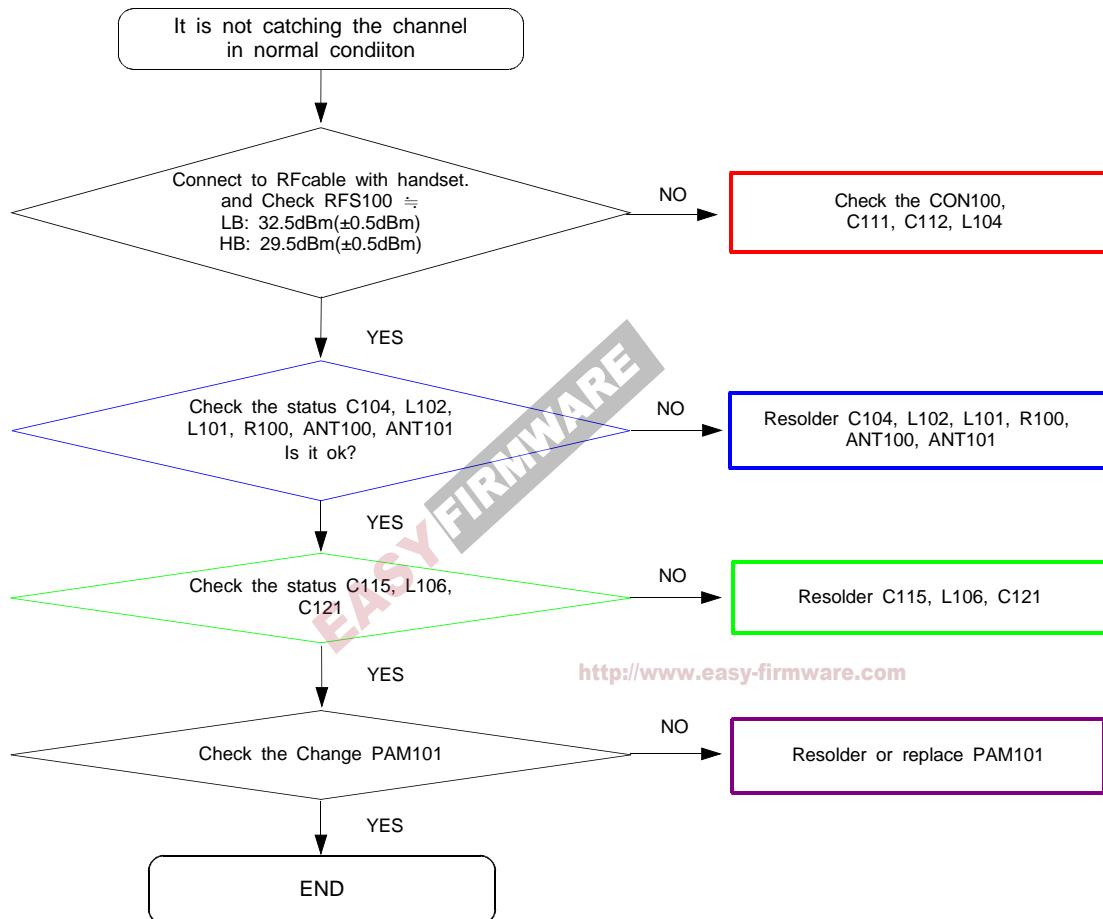
8-5-7. GSM 850 / 900 Tx

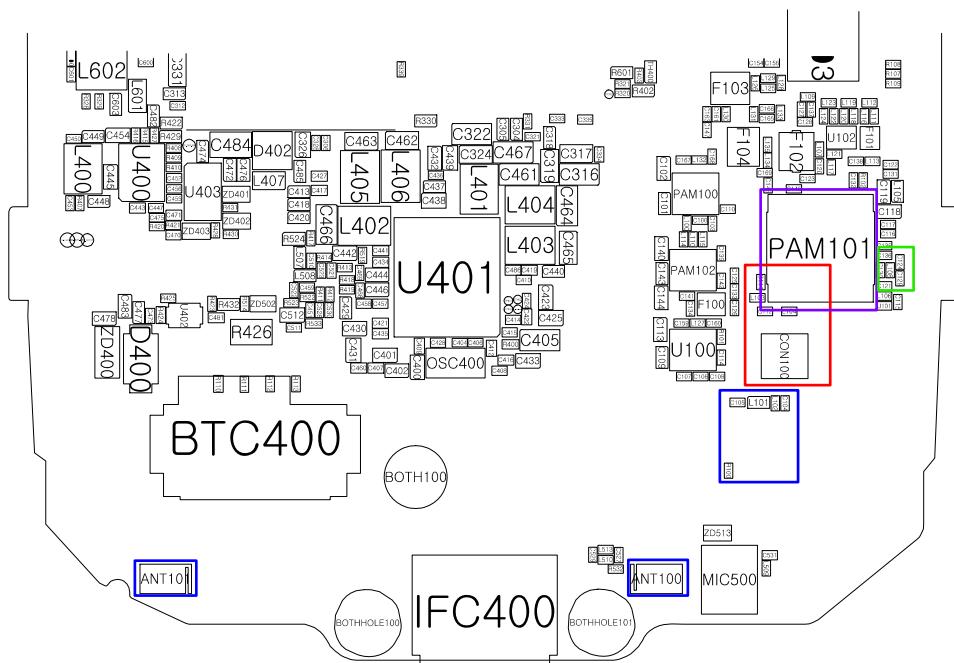
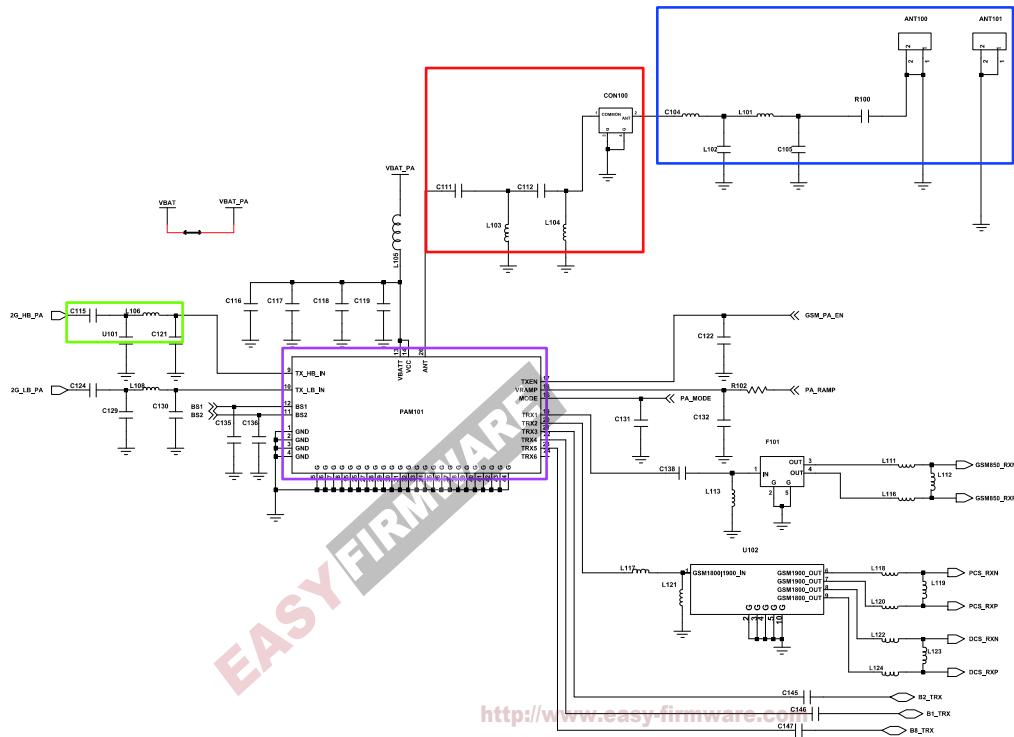


Level 3 Repair

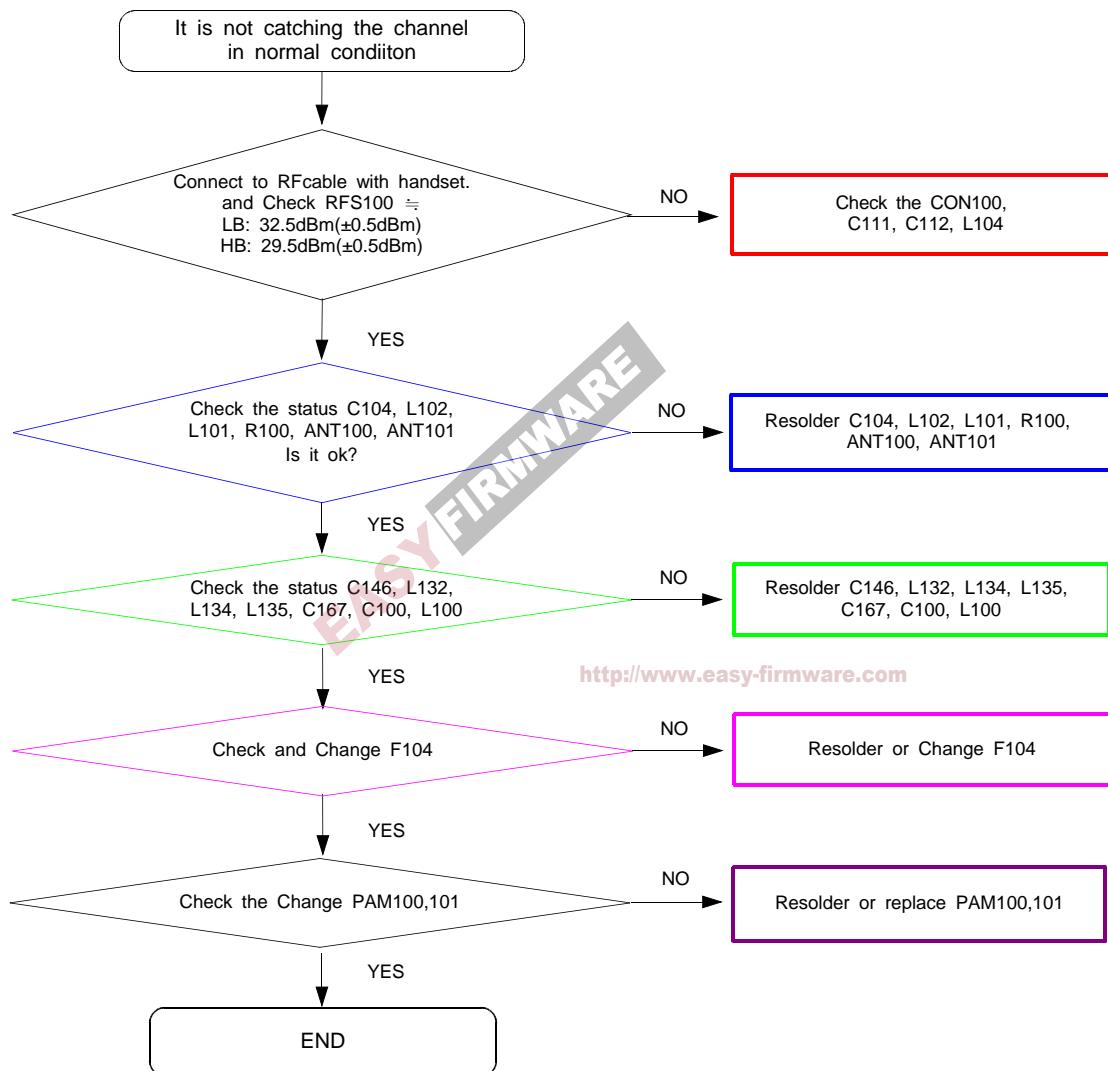


8-5-8. GSM 1800 / 1900 Tx

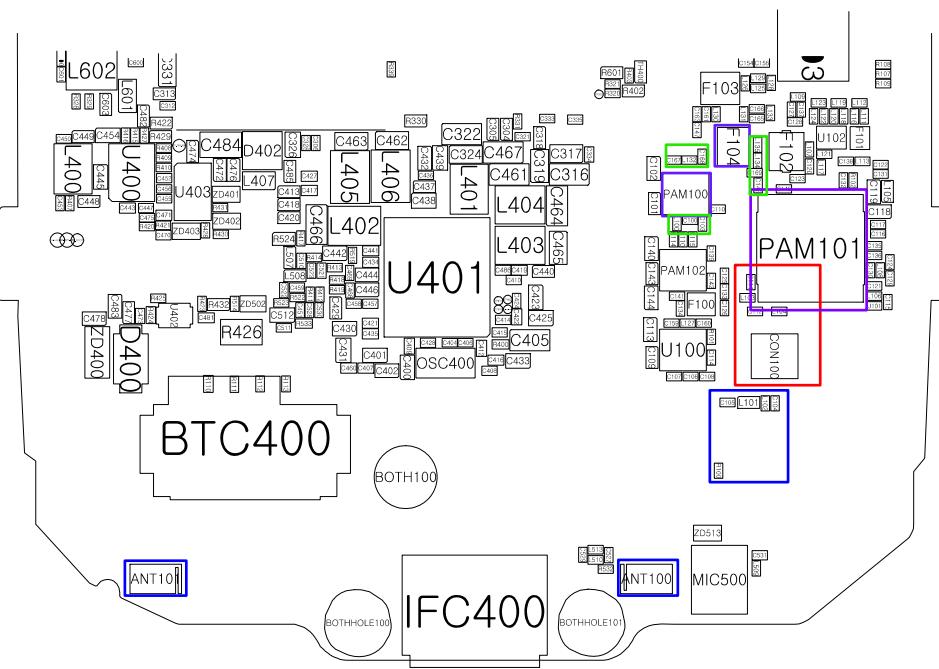
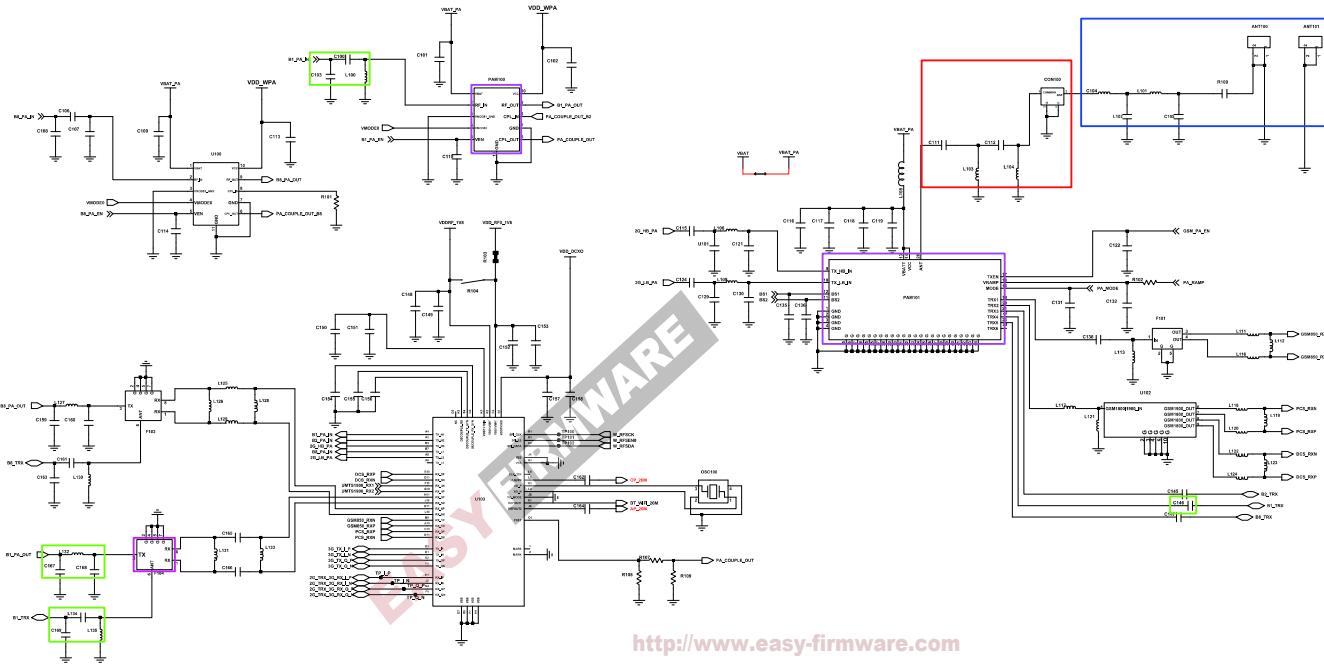




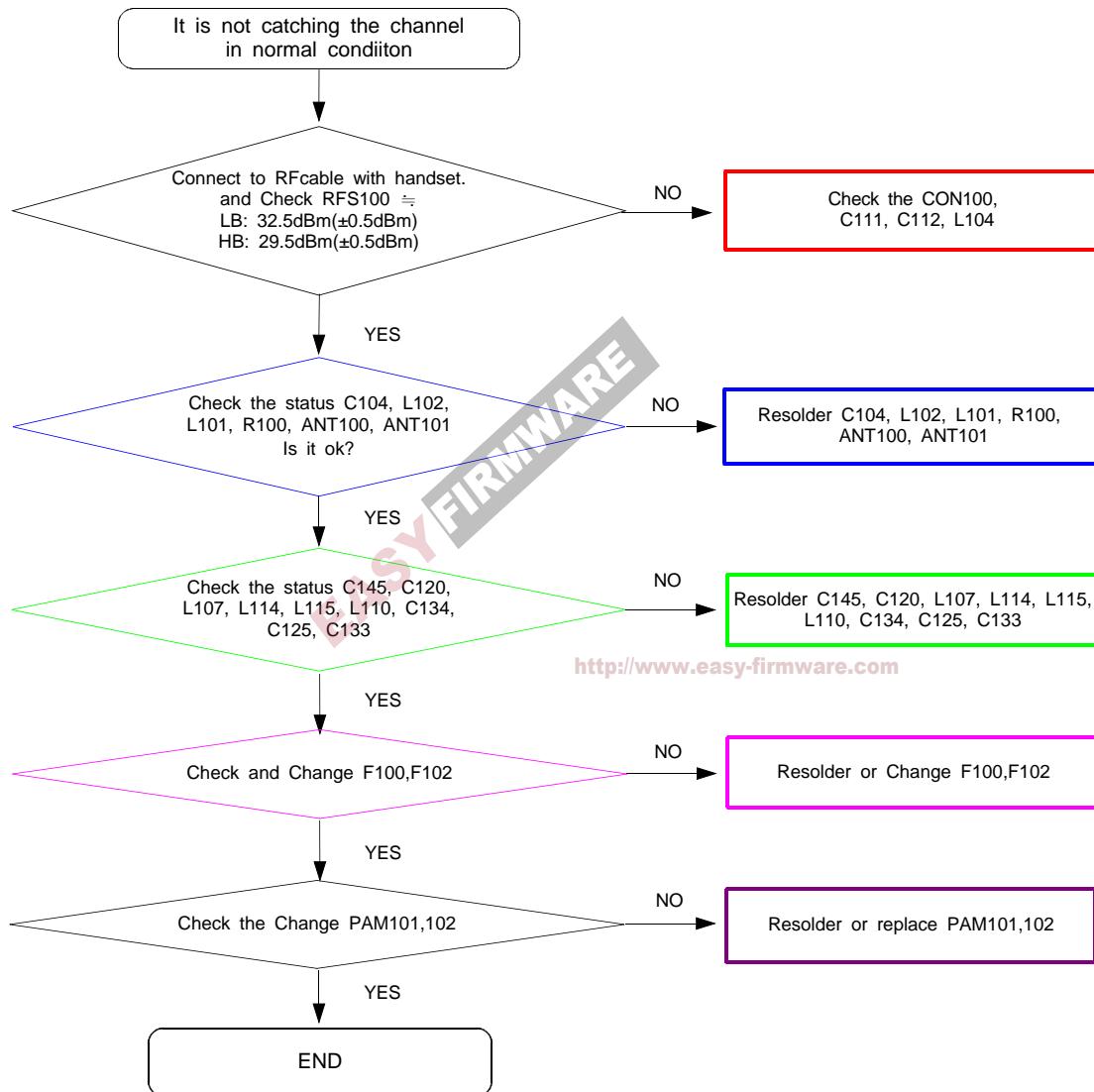
8-5-9. WCDMA Band1 (2100) Tx



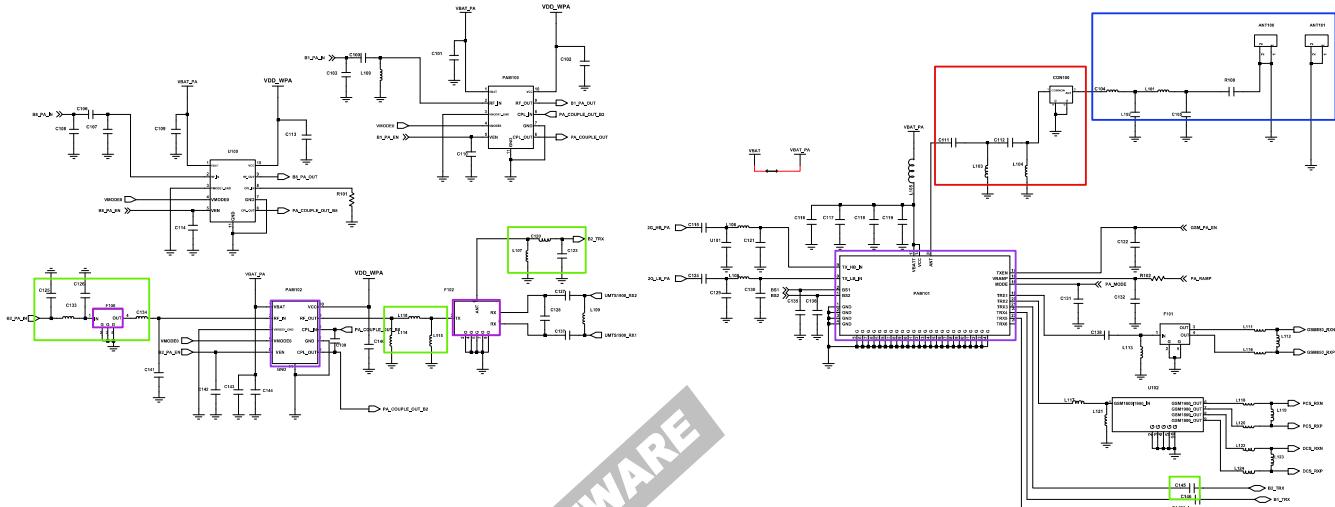
Level 3 Repair



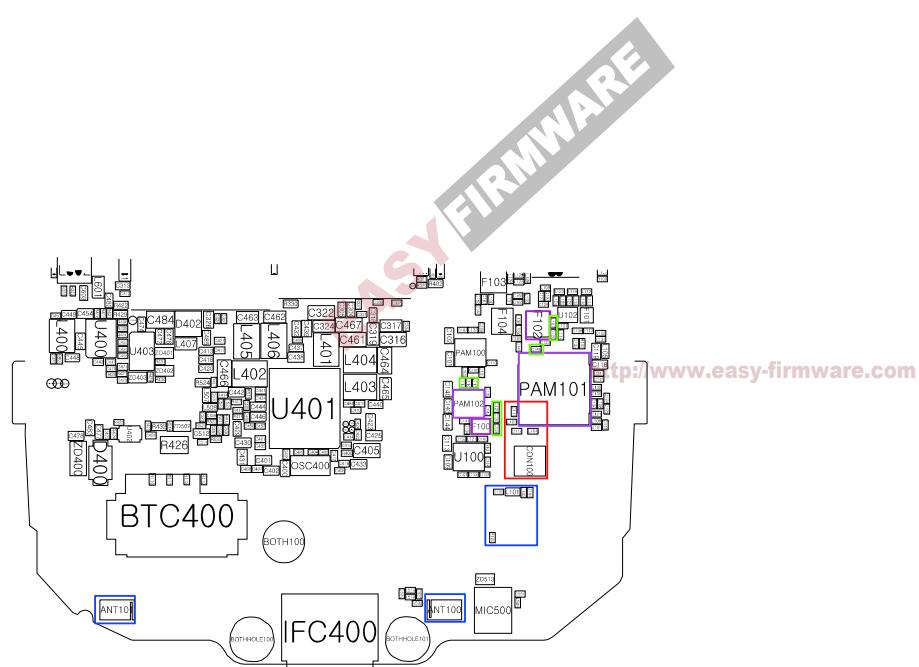
8-5-10. WCDMA Band2 (1900) Tx



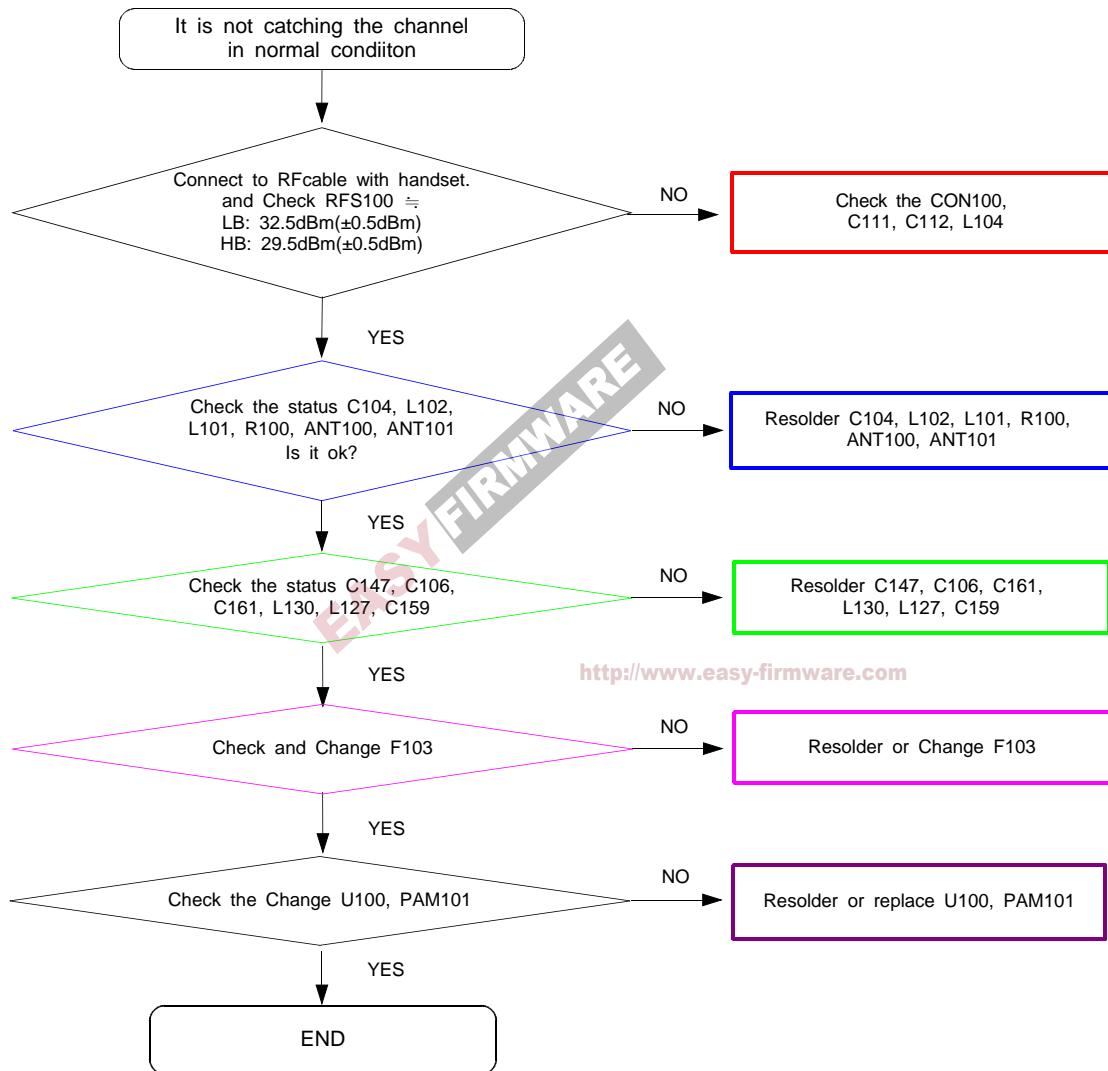
Level 3 Repair

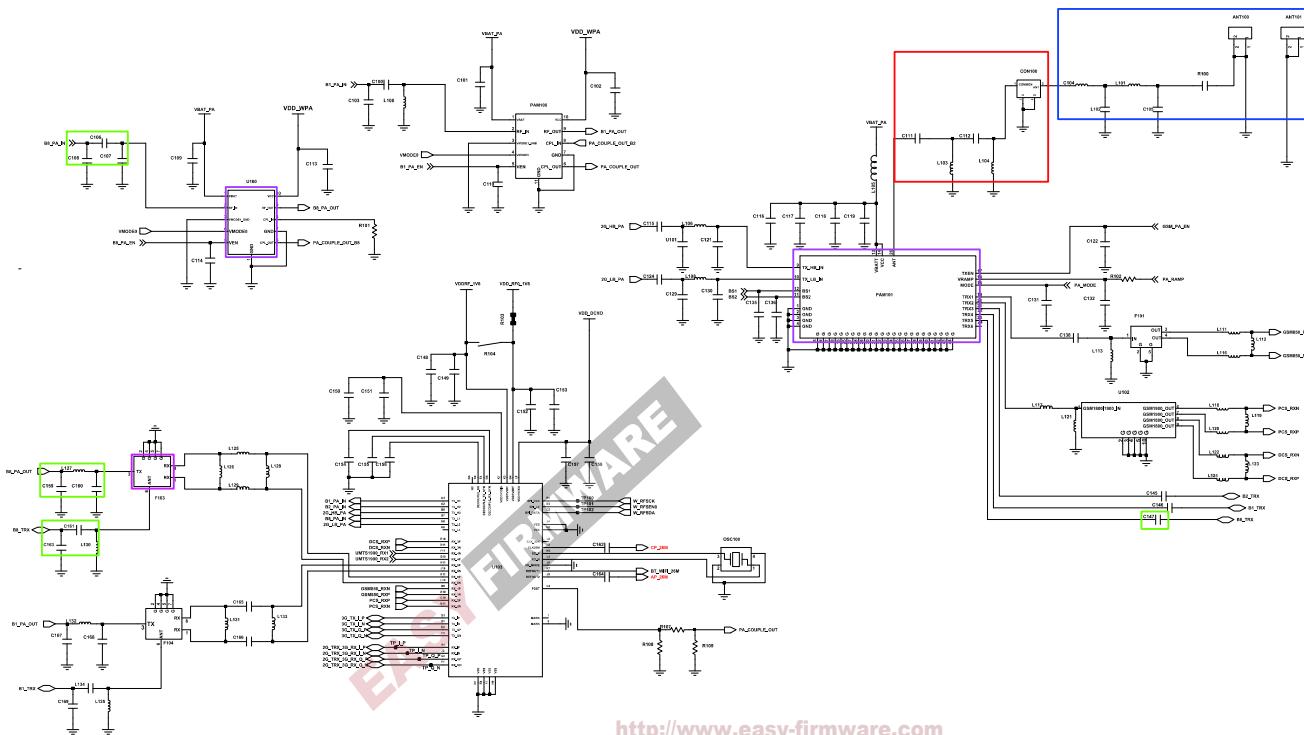


<http://www.easy-firmware.com>

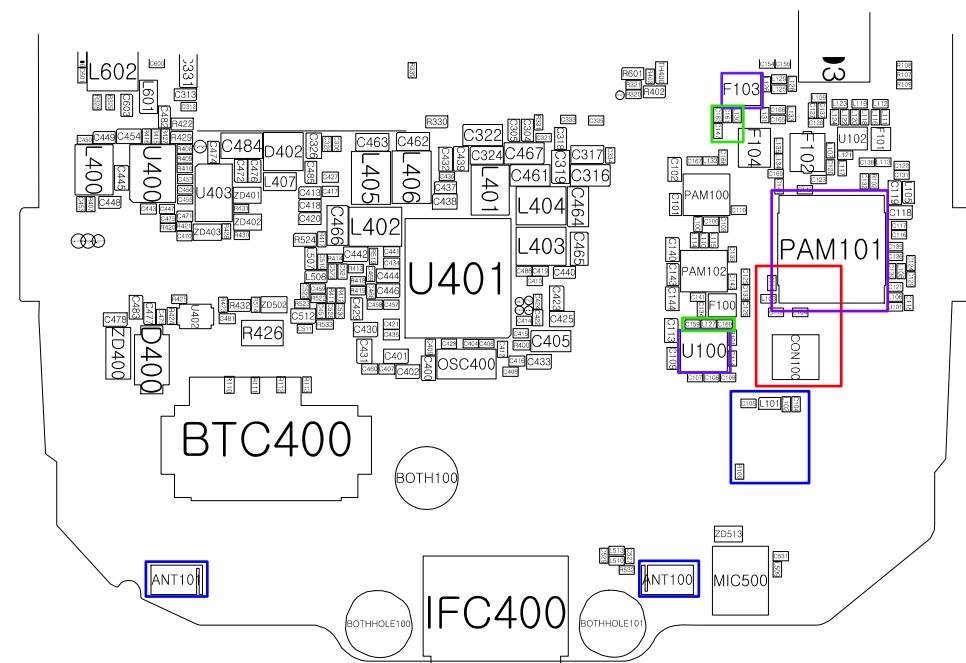


8-5-11. WCDMA Band5 (850) Tx

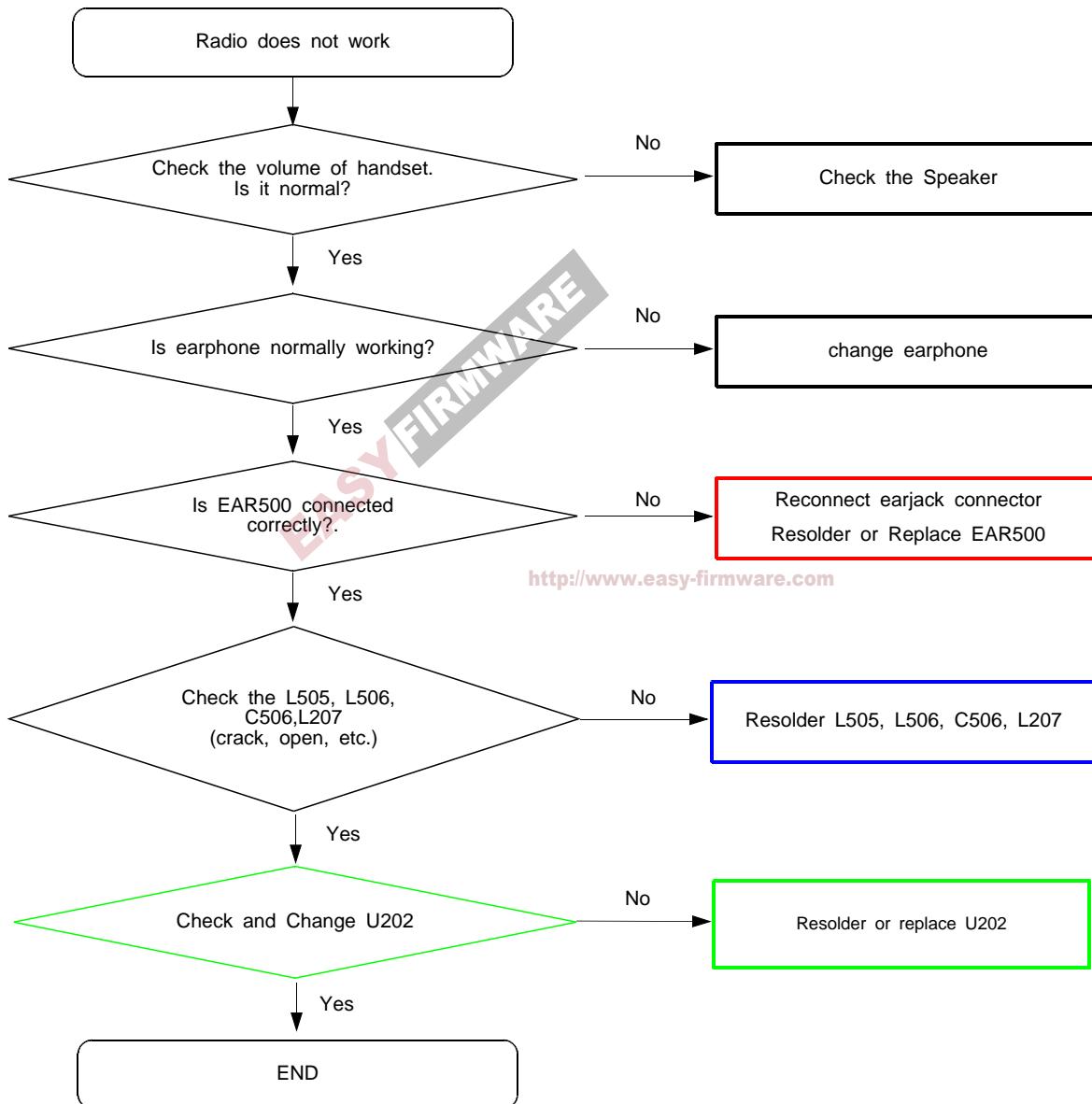


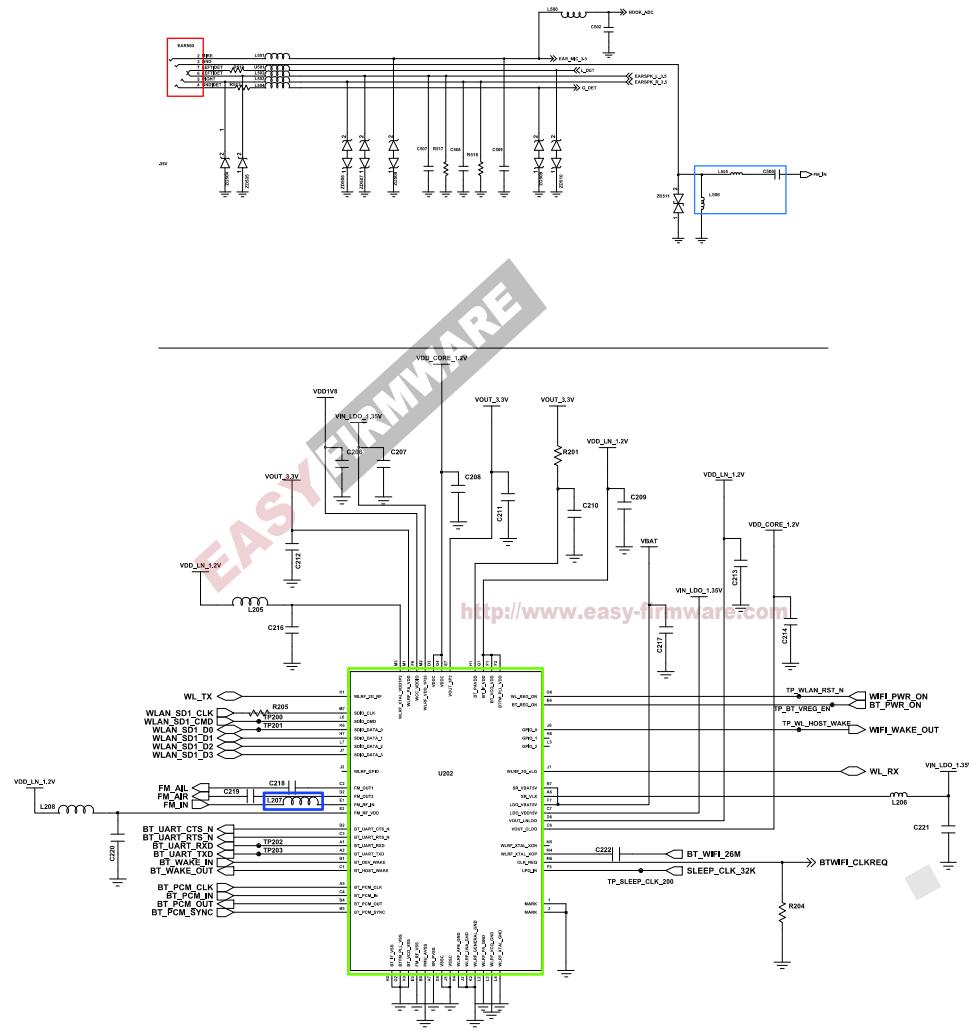


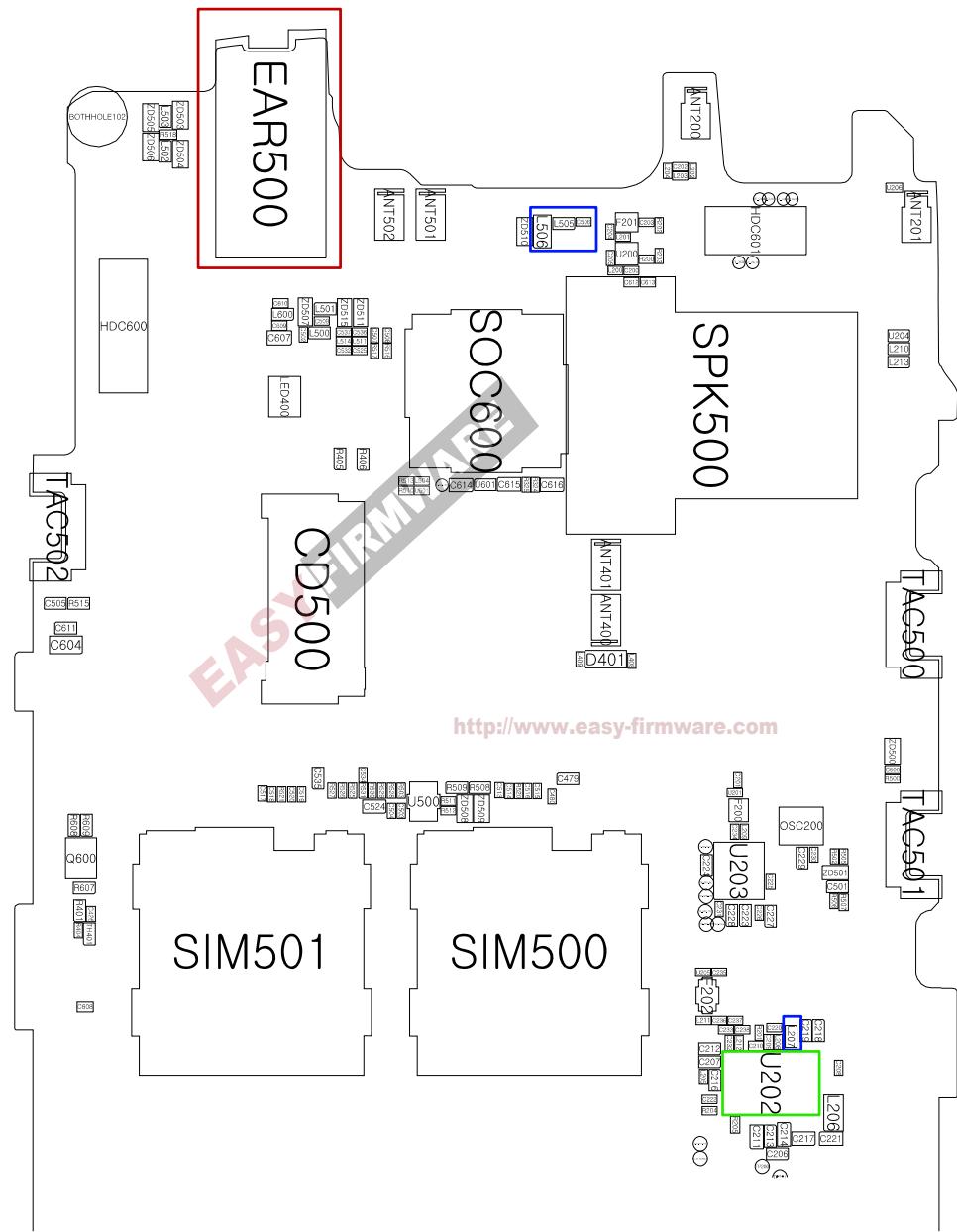
<http://www.easy-firmware.com>

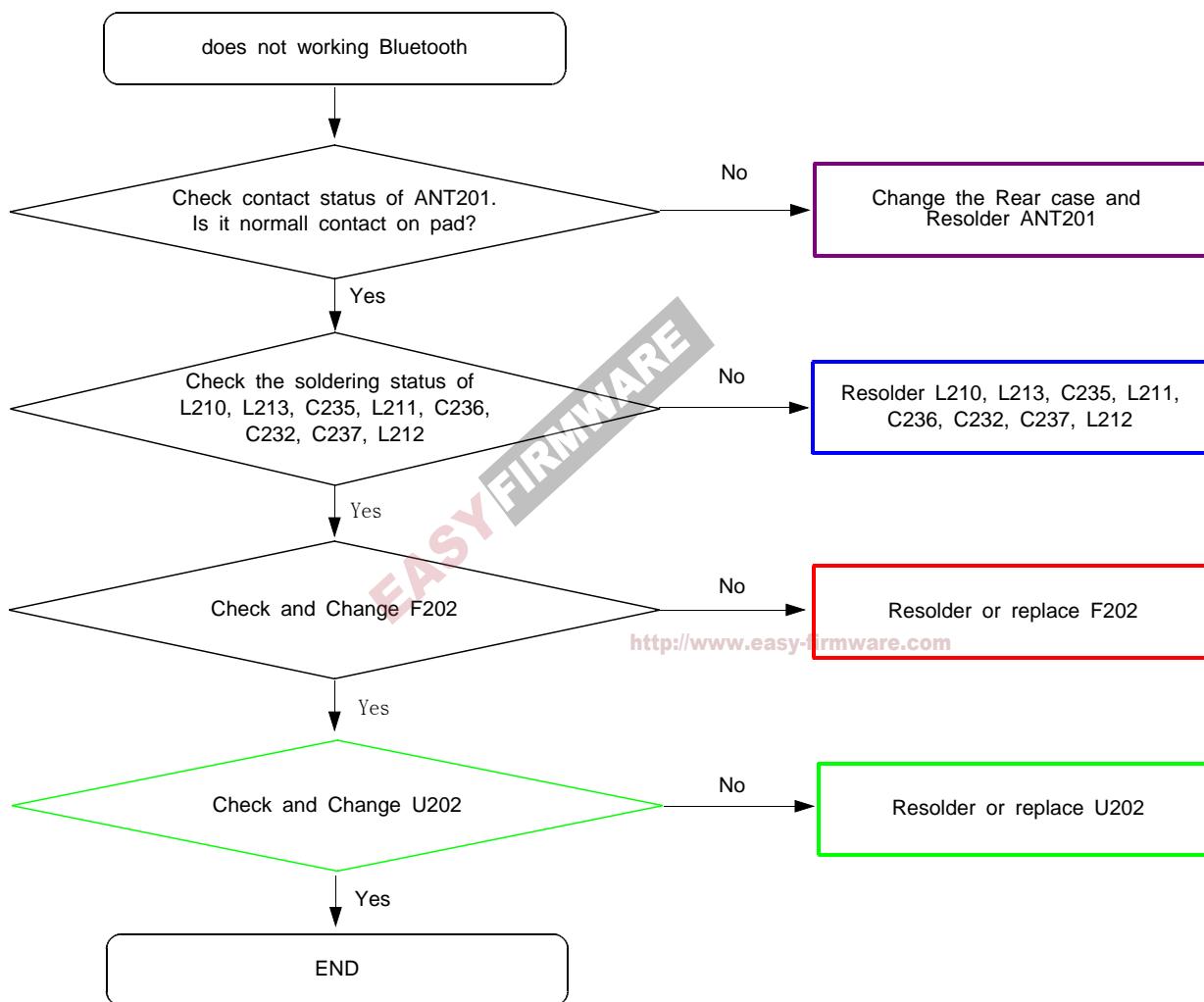


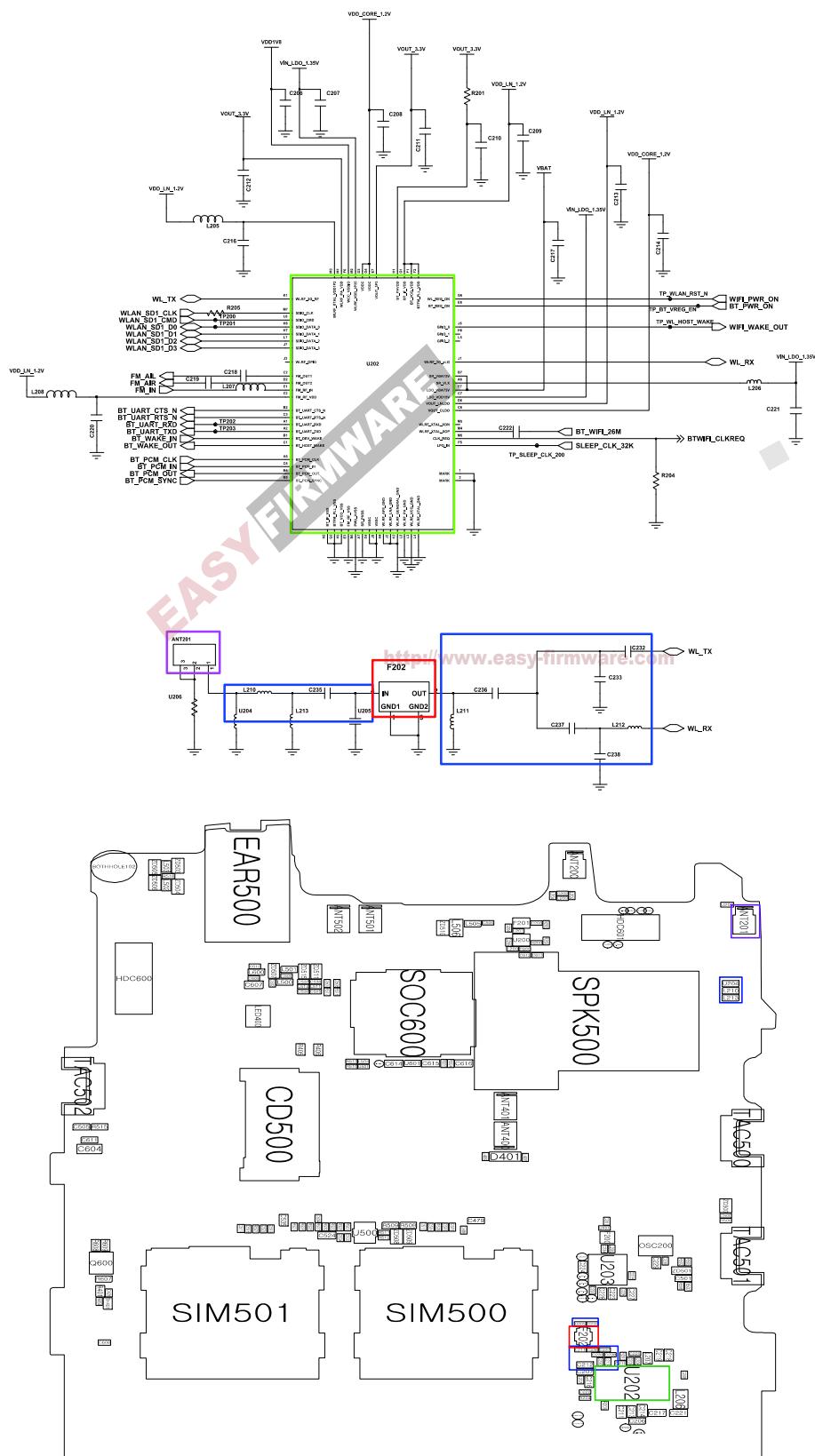
8-5-12. FM RADIO



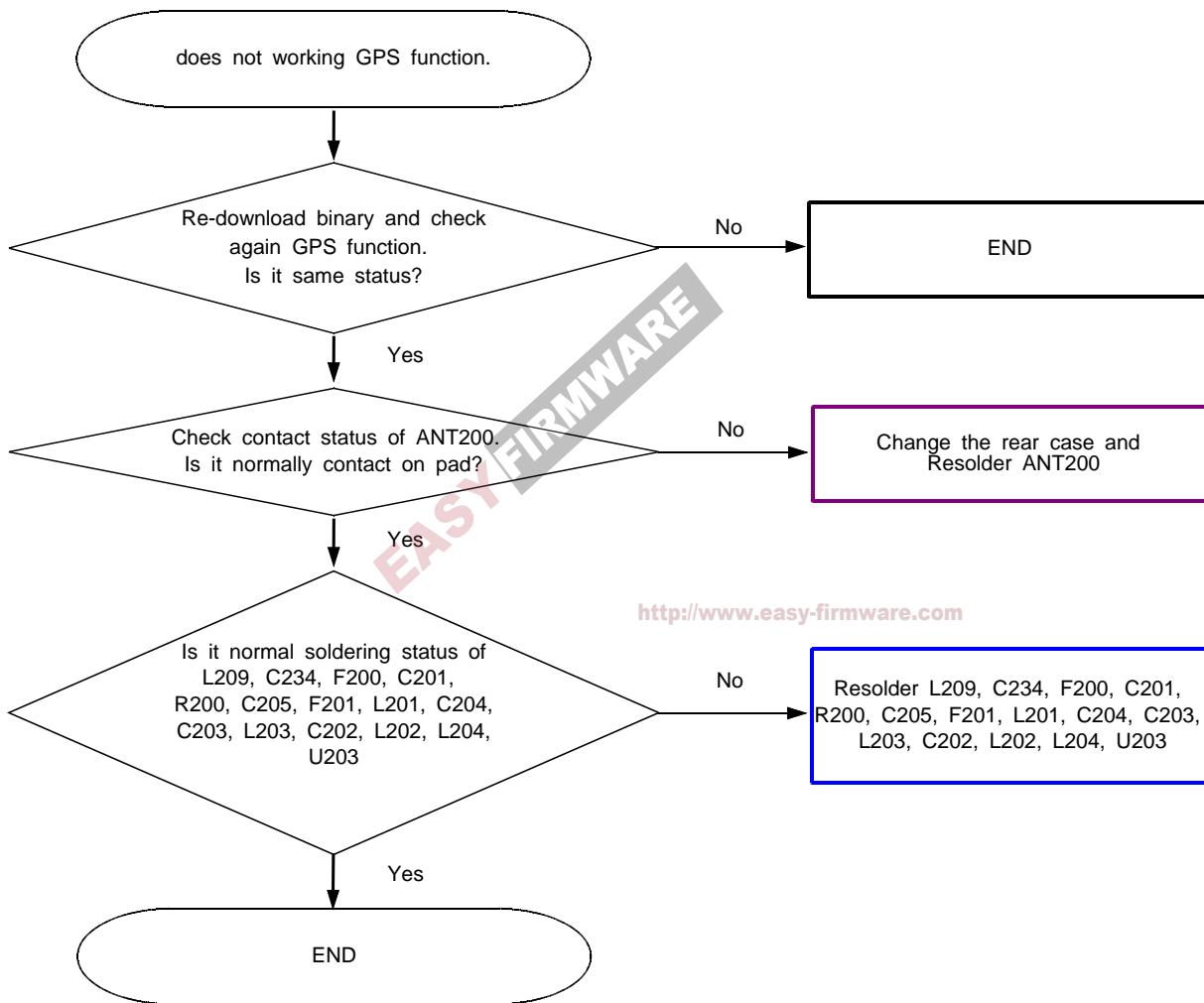




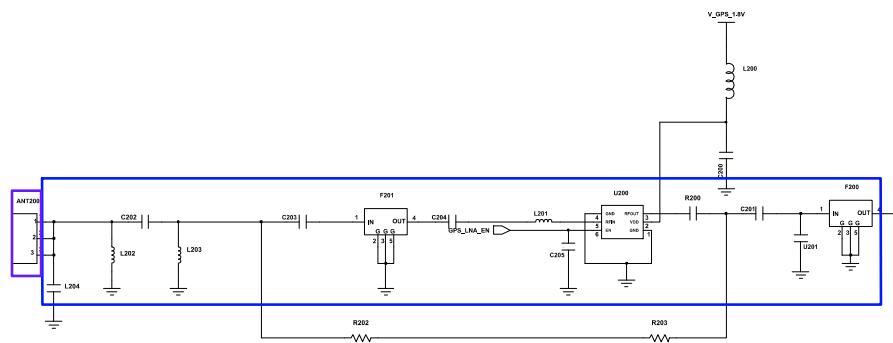
8-5-13. Bluetooth / WLAN



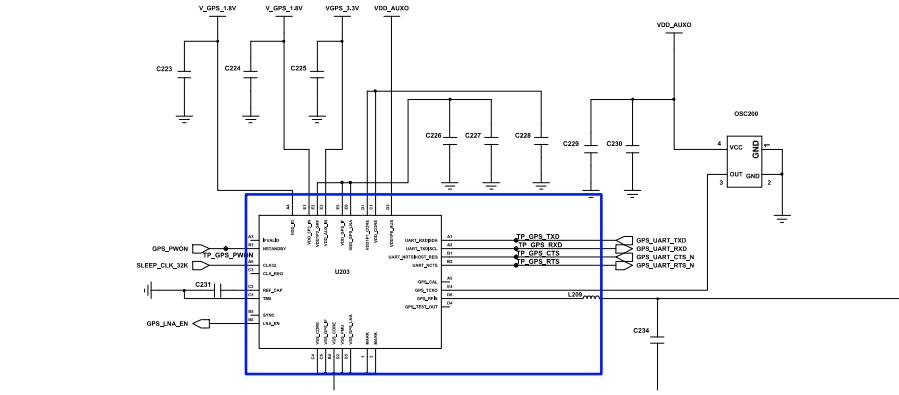
8-5-14. GPS

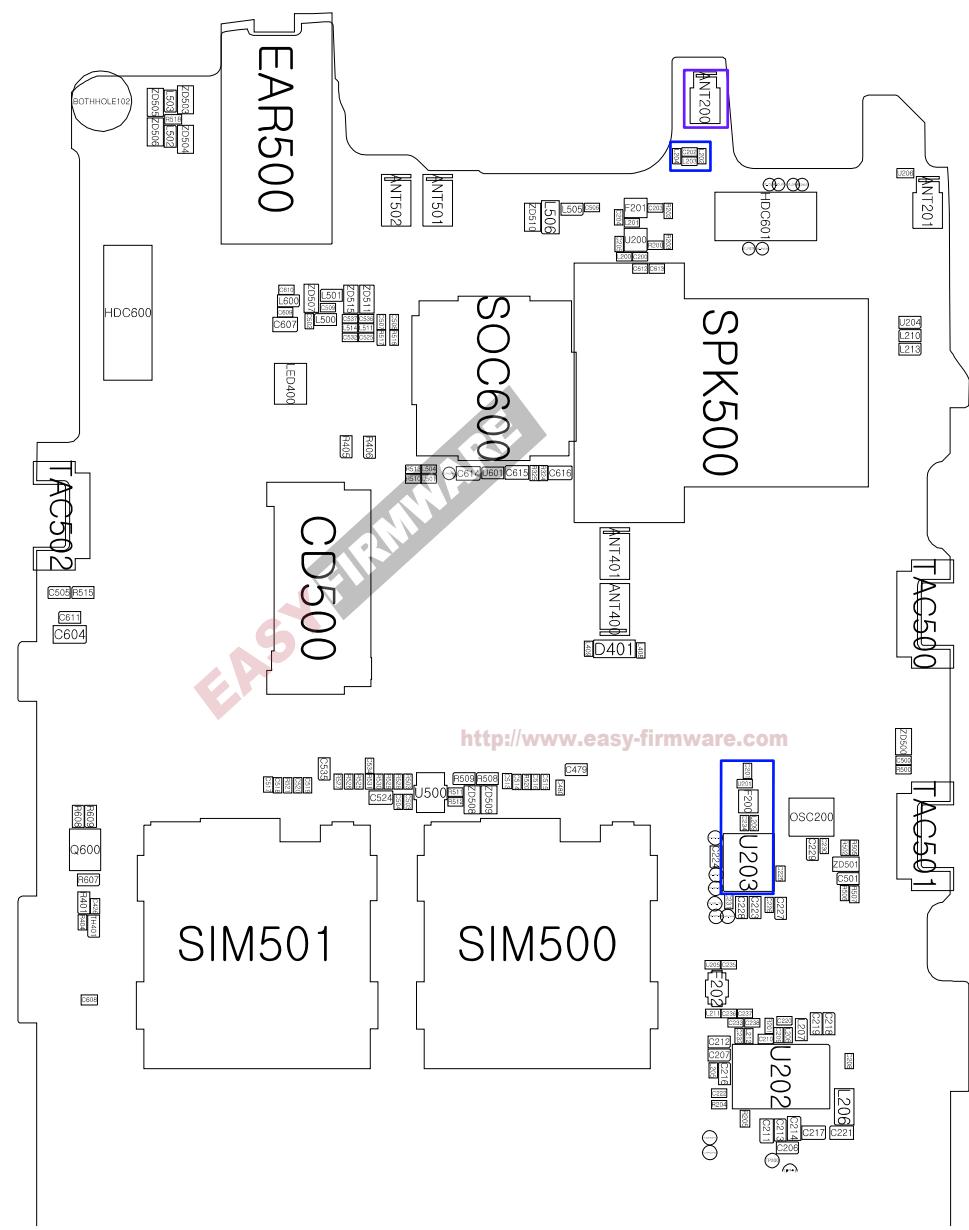
<http://www.easy-firmware.com>

Level 3 Repair



<http://www.easy-firmware.com>





8-6. Service Schematics**- NC Point(Top View)**

● : NC

UME300

	1	2	3	4	5	6	7	8	9	10
A	○	○	○	○	○	○	○	○	○	○
B	○	○	○	○	○	○	○	○	○	○
C	○	●	○	●	○	●				
D	●	●	●	●	●	●				
E	○	●	●		○	○	○	○	○	○
F	○	○	●		○	○	○	○	○	○
G	○	○	○		○	○	○	○	○	○
H	○	○	○		○	○	○	○	○	○
J	○	○	○		○	○	○	○	○	○
K	○	○	○		○	○	○	○	○	○
L	○	○	○		○	○				
M	○	●	○		○	○	○	○	○	○
N	○	●	●		○	○				
P	○	●	●		○	○	○	○	○	○
R	○	○	○		○	○	○	○	○	○
T	○	○	○		○	○	○	○	○	○
U	○	○	○		○	○	○	○	○	○
V	○	○	●		○	○	○	○	○	○
W	○	●	●		○	○	○	○	○	○
Y	○	○						○	○	

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UCP300

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
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	
A	EMV3Q	NC	NPWPN		NPD01	NFD[7]		NFD[8]	CCIR01	CCIR01	CCIR01	CCIR01	SDAO	MC81A CLKN	MC81A CLKP	MC81B CLKN	MC81B CLKP	KEYOUT [0]	KEYIN[11]	II80DI	II81CLK	NC					
B	NC	EMMC_D (6)	NFCU	NFRN	NFWEN	NFD[5]	NFD[8]	NFD[10]	CCIR00	CCIR00	CCIR00	CCIR01						KEYOUT [1]	KEYIN[0]	SDA2	II81DI	II80WCK	MTCK	NC			
C	EMMC_D (7)								NFD[14]	CCIR04	CCIR04	CCIR04		CCIRRS													
D	VEMM	EMMC_D (3)	EMMC_D (5)	EMMC_D (4)	EMMC_R ST	NFD[2]		NFD[13]	CCIRVS	CCIR05	CCIR05	CCIR05															
E	EMMCO (10)	EMMC_D (2)	EMMC_D (2)	EMMC_D (4)	EMMC_R ST	NFD[1]	NFD[11]	NFD[12]	CCIRHS	CCIR02	CCIR02	CCIR07		AVSS_M PI	AVSS_M PI	AVSS_M PI	AVSS_M PI										
F	EMV3Q	EMMC_C (1)	EMMC_D (2)	NFALE		NFD[16]		NFD[15]	CCIR05	CCIR05	SCLO																
G	EMD[30]	EMDQMI (3)				EMD[20]	EMD[27]																				
H	EMD[28]																										
J		EMD[29]	EMD[25]	EMD[24]																							
K	EMDDQ (2)	EMD[31]	EMD[18]	EMD[16]	EMD[17]																						
L	EMD[22]																										
M																											
N	EMCS_N (0)		EMD[23]	EMD[21]																							
P	EMCS_N (1)	EMA[0]	EMA[1]	EMA[2]	EMVREF																						
R		EMA[4]																									
T	EMAT	EMA[0]		EMA[1]																							
U	EMV3Q	EMCKE[0]				EMDIT[0]																					
V	EMZQ	EMAH[1]	EMA[2]	EMA[3]																							
W	EMDQMI (11)	EMD[8]				EMVSSQ																					
Y	EMD[14]	EMD[10]	EMD[11]	EMD[9]	EMVSSQ																						
AA						EMD[13]																					
AB						EMD[12]																					
AC	EMDDQ (0)	EMD[0]	EMD[1]	EMD[2]																							
AD	EMD[3]	EMD[5]		EMD[7]																							
AE																											
AF	NC		EMD[6]	EMD[8]	EMD[10]	EMD[12]	EMD[14]	EMD[16]	EMD[18]	EMD[20]	EMD[22]	EMD[24]	EMD[26]	MSD1_R EXT	XTL_BUF _LEN	XTL_BUF _LEN	XTL_BUF _LEN	XTL_BUF _LEN	XTL_BUF _LEN	VRES	SD0_CU K0	SD0_CL K1	SD1_D[0]	SD1_CM D	SD1_CM D	SD1_CM D	SD1_CM D
AG	EMV3Q	NC													LCD_RS TN	LCD_RS ARK	LCD_RS ARK	LCD_RS ARK	LCD_RS ARK	AVSS_M PI							