

SM-S916U_SREV0.7

2022. 10. 05

SHEET01 : RF

SHEET02 : BT/WIFI

SHEET03 : SPK AMP, NFC IC, MOTOR DRIVER IC, AUX SW, SIDE KEY

SHEET04 : AP(1/2), UFS, NVM

SHEET05 : AP(2/2), Charger block

SHEET06 : AP PMIC set, Clock Generator

SHEET07 : CAM PMIC, CAM Conn., CAM MCU, DISPLAY PMIC, DISPLAY Conn.

SHEET08 : 5G IFIC, mmW connector, RF PMIC #2

SHEET09 : INTERPOSER, SHIELDCAN

Engineer:	
Drawn by:	
REQ CHK:	TITLE:
DOC CTLR CHK:	Size:
MFG ENGR CHK:	L

TRANSCEIVER(Dual SDR735)

DRX_ANT Radiation Conduction

SUB ANT1_Frame
(lb_hb)

SUB3
(N77/78_WIFI 5G)

SUB5
(n79)

SUB ANT2_Slit
(MB_HB_N79_L1)

SUB4
(mb_WIFI 2.4G)

SUB6
(n77/78)



CCP

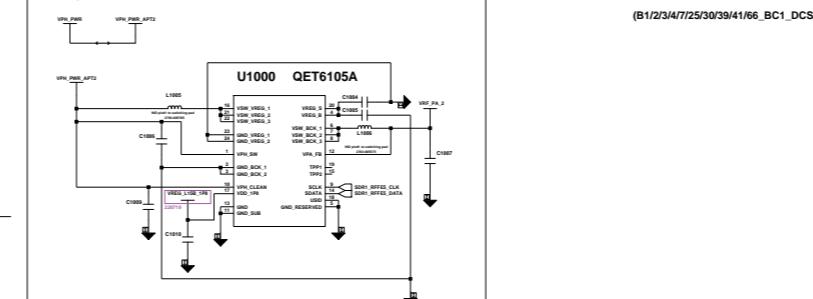
DRX_LB

(B5/8/12/13/14/17/18/19/20/26/28/29/71_BC0/10_G850/900)

DRX_MHB_2

(B2/4/7/25/30/41/66)

QET6105 #2



ENDC module

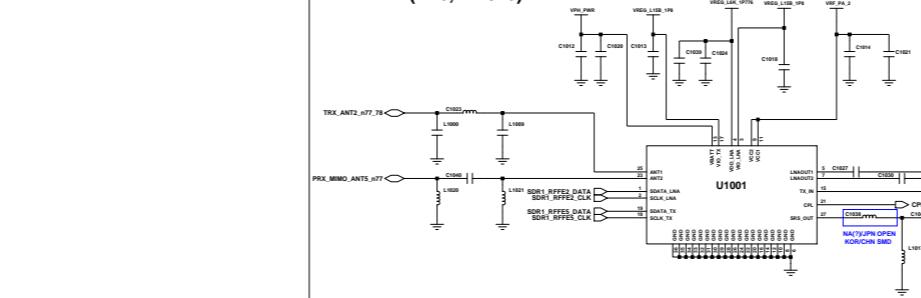
(B1/2/3/4/7/25/30/39/41/66_BC1_DCS/PCS)

PMR735D #0

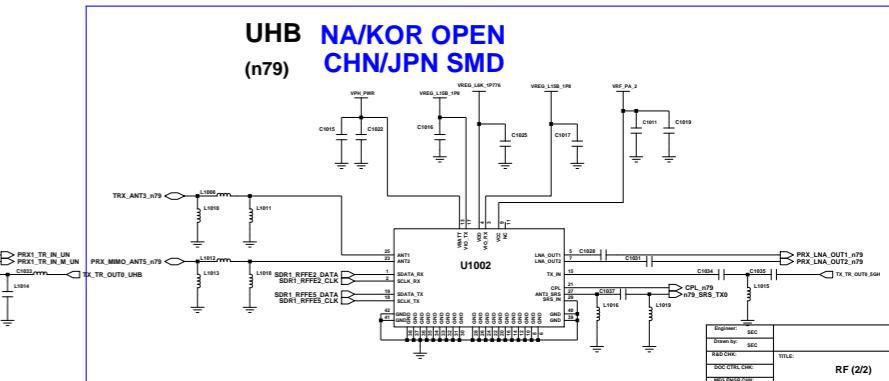
GPS_L1(for SUB4 opt)

GPS_L5

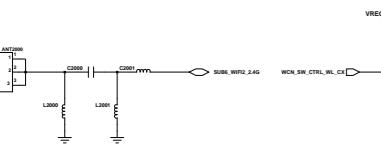
UHB
(B48, n77/78)



UHB NA/KOR OPEN
CHN/JPN SMD
(n79)

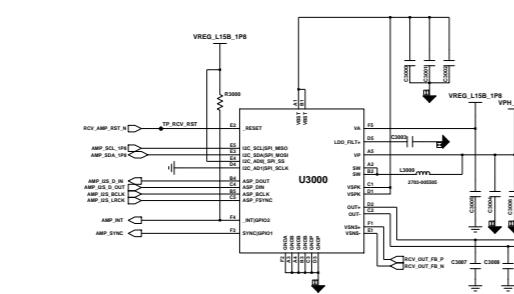


WIFI (WCN7851 CoB)

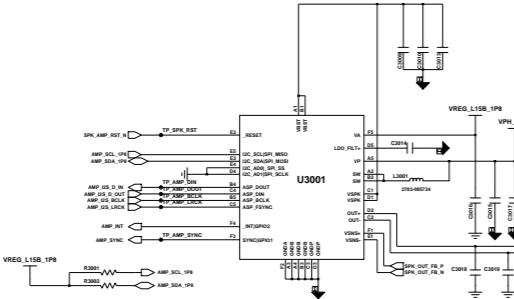


AUDIO

RCV AMP



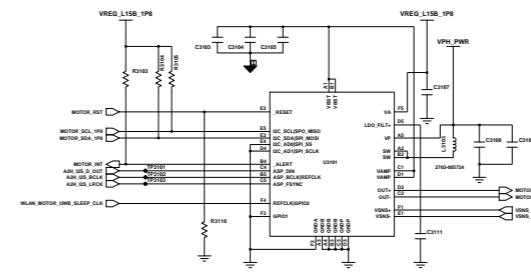
SPK AMP



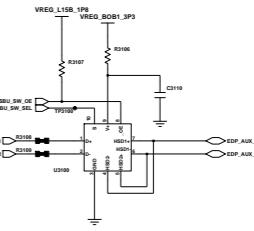
Visual SENSORS



Vol + Power key



MOTOR DRV IC

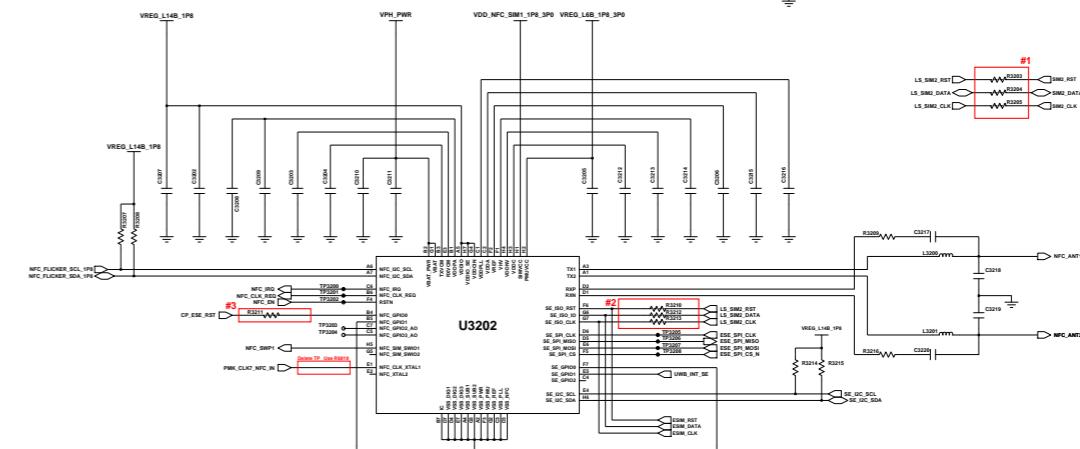


AUX sw

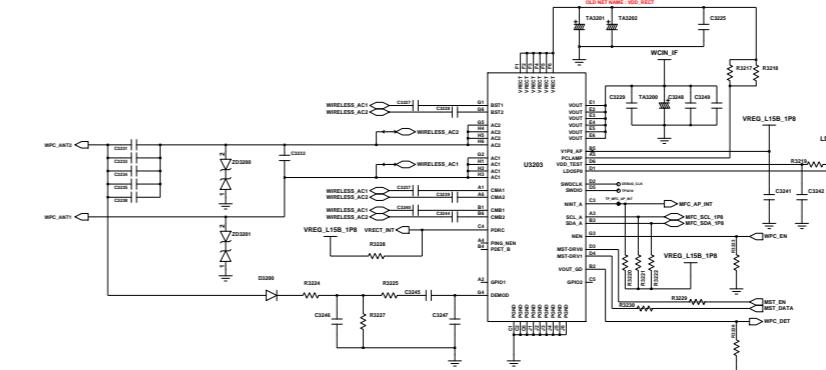
Power

		NFC IC	#1	#2	#3		Switch IC	ESIM_SIM2_SEL
NA/CAN	Nano + eSIM	SN220U	OPEN	SHORT	SHORT		NC	
Global	2-Nano + eSIM	SN220U	OPEN	OPEN	SHORT		SMD	HSD1(H)_SIM2 HSD2(L)_eSIM
CHN	2-Nano	SN220T	SHORT	OPEN	OPEN		NC	
JPN	Nano + eSIM	SN220P	OPEN	SHORT	SHORT		NC	

NFC

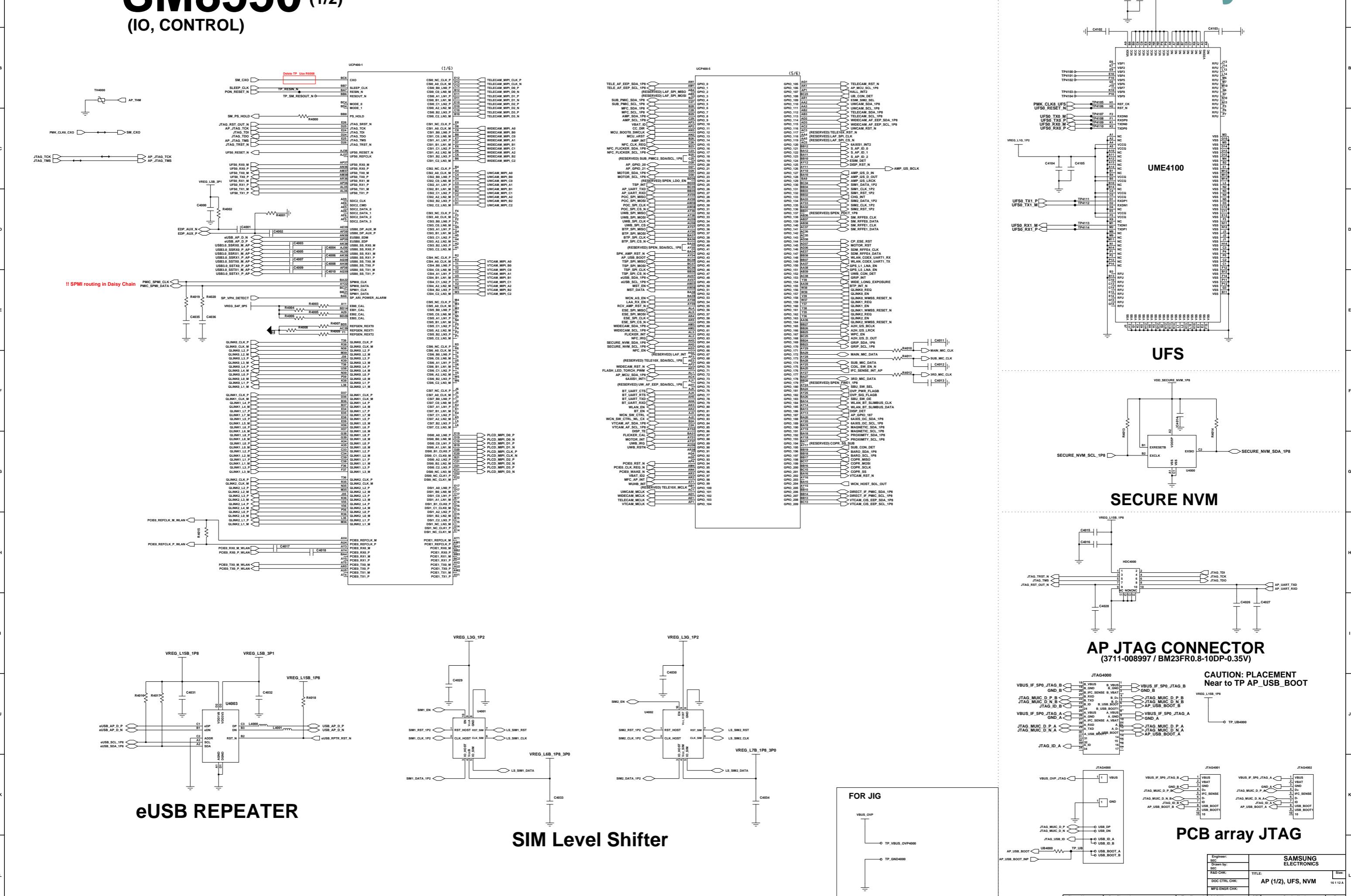


MFC



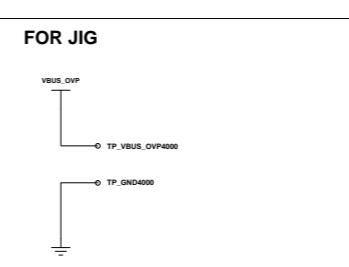
SM8550 (1/2) (IO, CONTROL)

System



eUSB REPEATER

SIM Level Shifter



PCB array JTAG

Engineer: SEC	Drawn by: SEC	Title: AP (1/2), UFS, NVM
R&D CHK:		Size: 16112A
DOC CTRL CHK:		Time Changed: 2:51pm
MFG ENGR CHK:		QA CHK: REV Drawing Number: 5

SAMSUNG
ELECTRONICS

Changed by:
hamyung, April 19, 2021

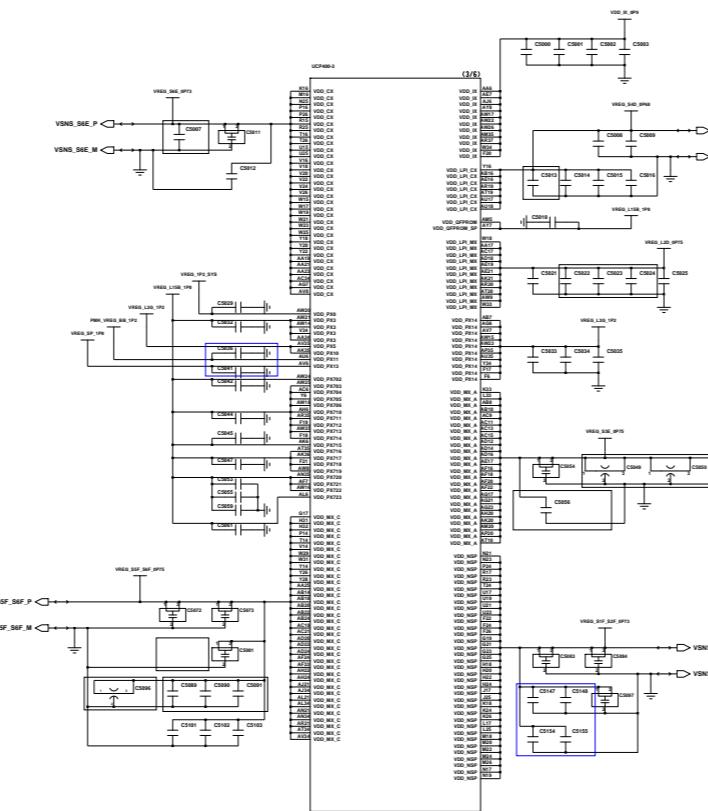
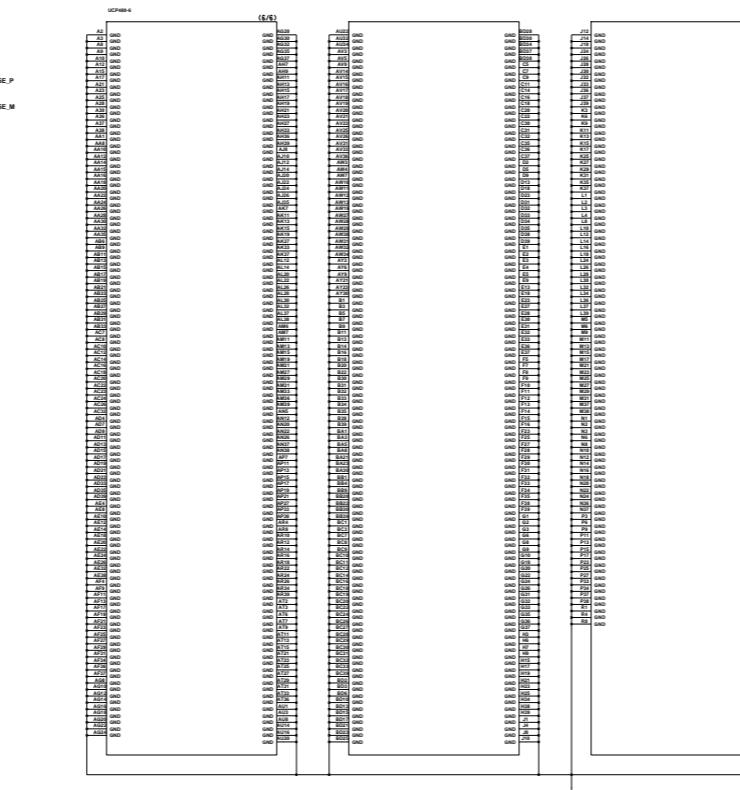
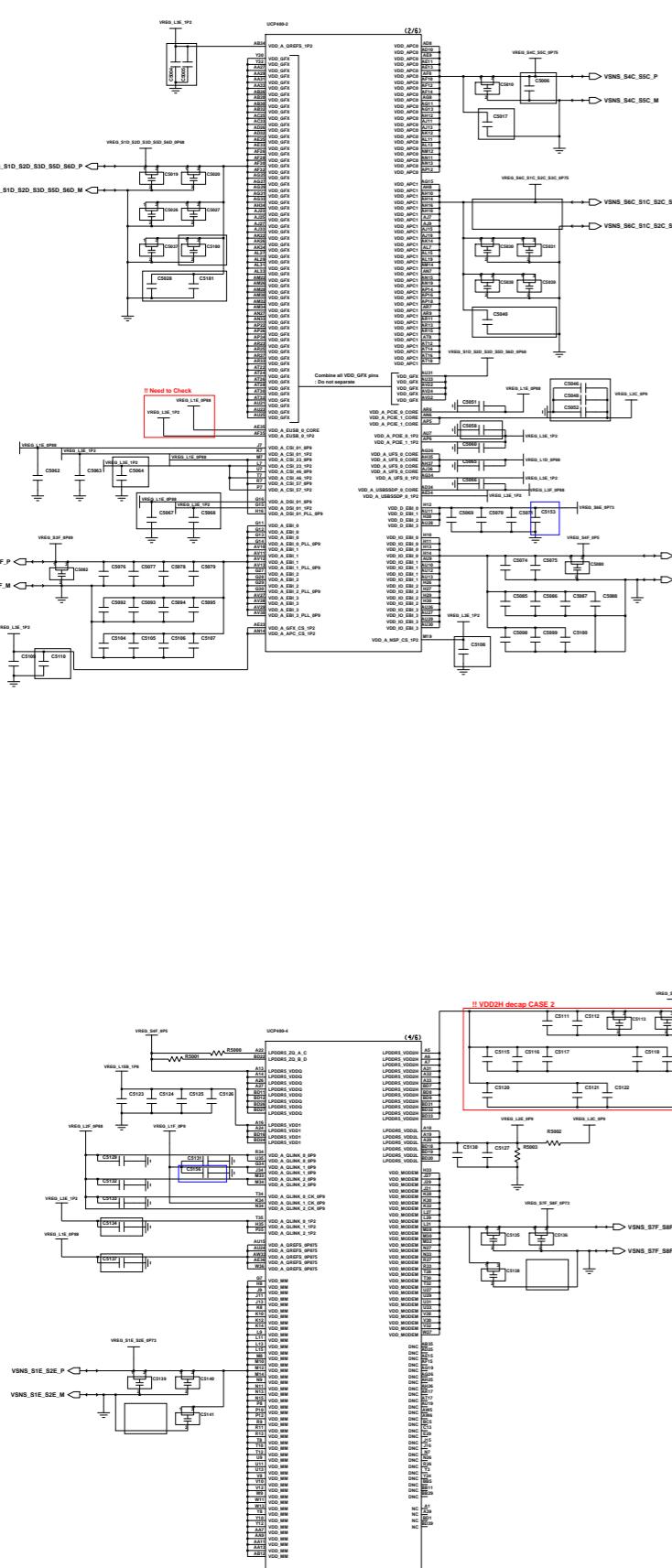
Date Changed:
2:51pm

Time Changed:
2:51pm

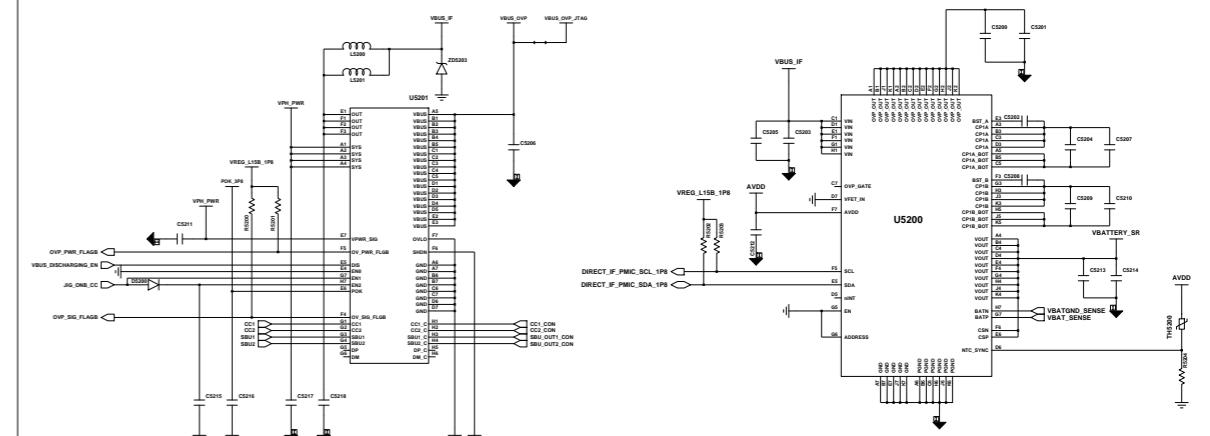
QA CHK:
REV Drawing Number:
5

Page:
5

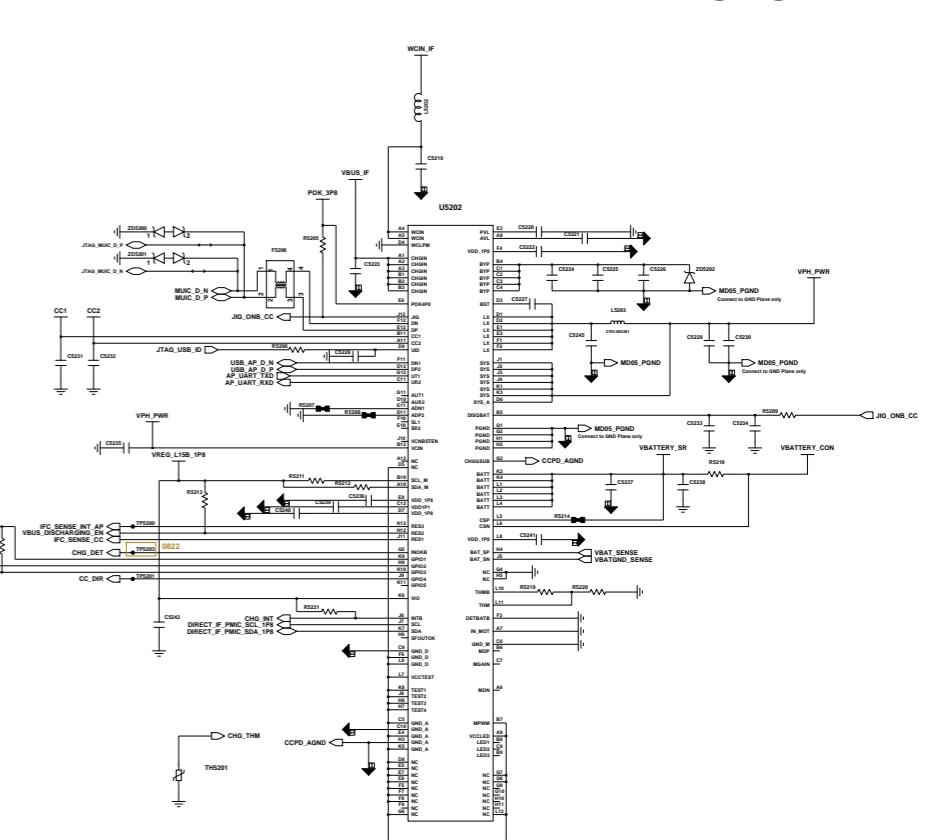
SM8550 (2/2) (POWER decap, GND)



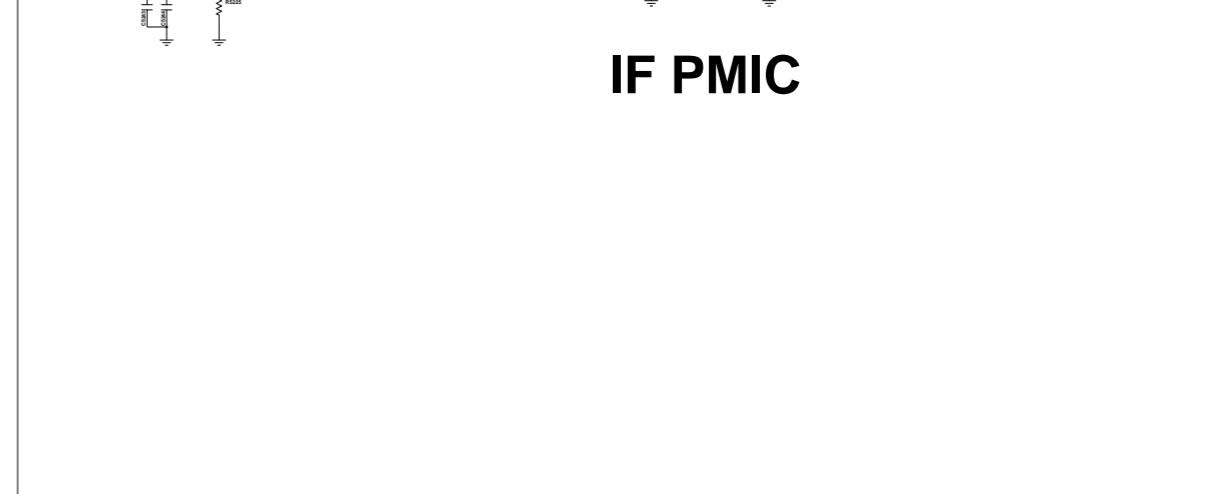
Power Charger block



OVP LS



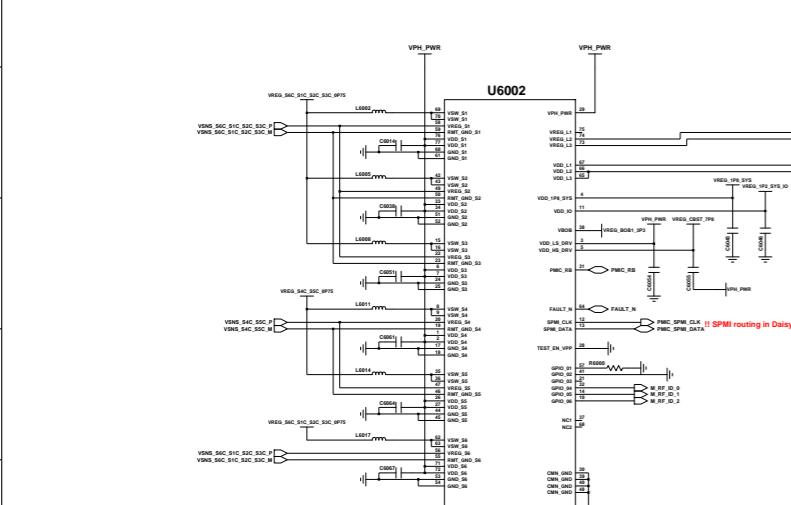
IF PMIC



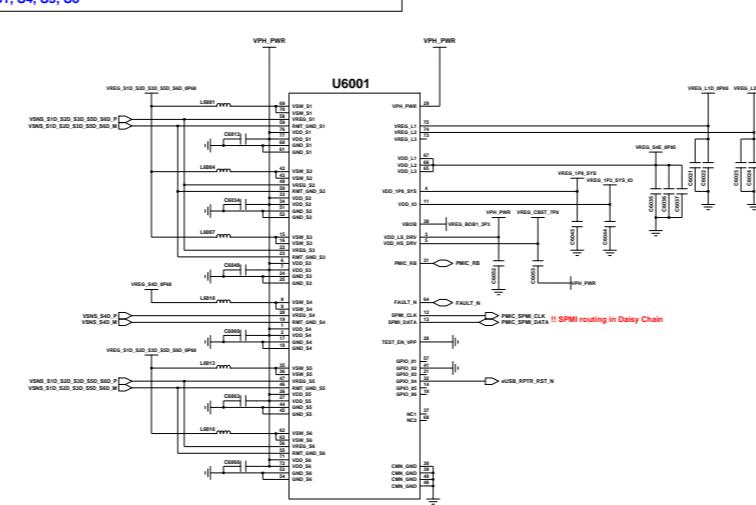
PM8550VS, PM8550VE

Power System

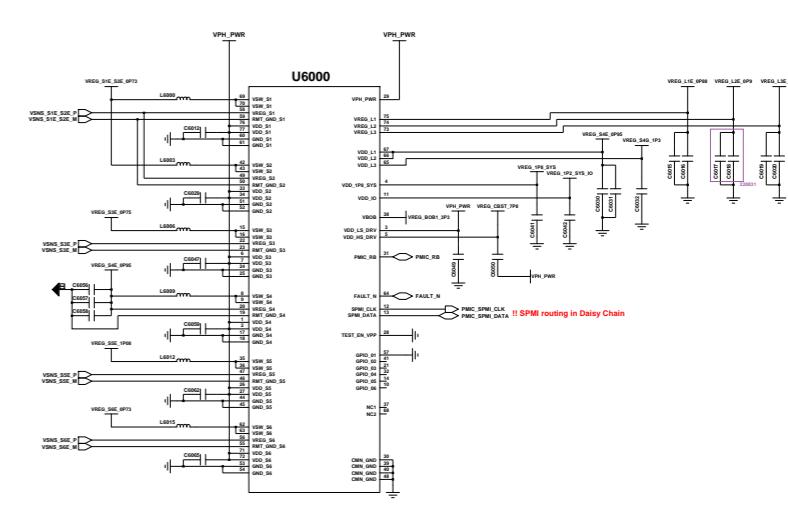
!! CAUTION !!
Place Cin 10uF Bulk Caps at corner of PM8550VS and PM8550VE as close as possible
- PM8550VS : VDD_S1, S3, S4, S6
- PM8550VE : VDD_S1, S4, S5, S8



PM8550VS_C

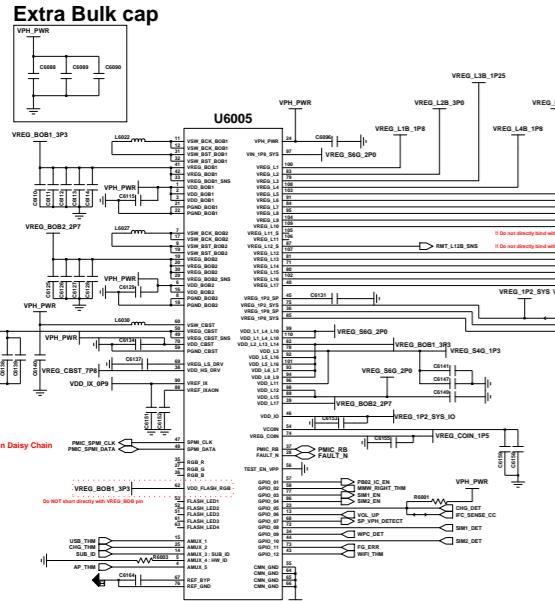


PM8550VS_D

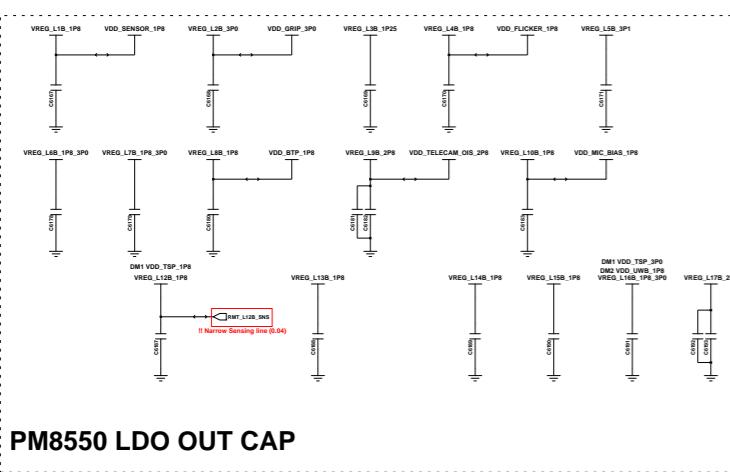


PM8550VS_E

PM8550



PM8550

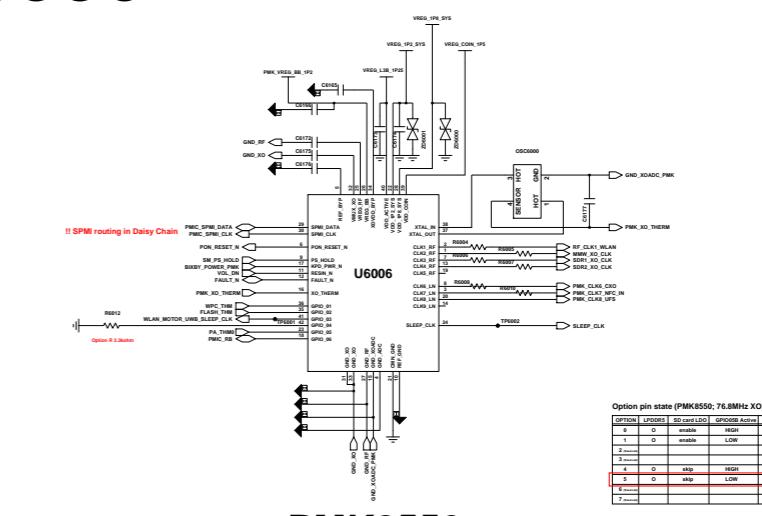


PM8550 LDO OUT CAP

H/W ID table (PM8550 AMUX_4)

HW ID	BOARD REVISION	Value	Mech
00	SM-S911U / 916U REV0.4	6.04K	
01	SM-S911U / 916U REV0.0	9.1K	
02	SM-S911U / 916U REV0.1	12.4K	
03	SM-S911U / 916U REV0.2 (ESv1)	18K	
04	SM-S911U / 916U REV0.2 (ESv2)	22K	
05	SM-S911U / 916U REV0.3 (ESv2)	30K	
06	SM-S911U / 916U REV0.4	39K	
07	SM-S911U / 916U REV0.4	47K	
08	SM-S911U / 916U REV0.5	56K	
09	SM-S911U / 916U REV0.5 (QPM6815)	68K	
10	SM-S911U / 916U REV0.5 (QPM6815)	82K	
11	SM-S911U / 916U REV0.6	100K	
12		120K	
13	SM-S911U / 916U REV0.7	150K	
14		180K	
15		200K	
16		240K	
17		280K	
18		330K	
19		430K	
20		560K	
21		750K	
22		1000K	
23		1500K	
24		3000K	

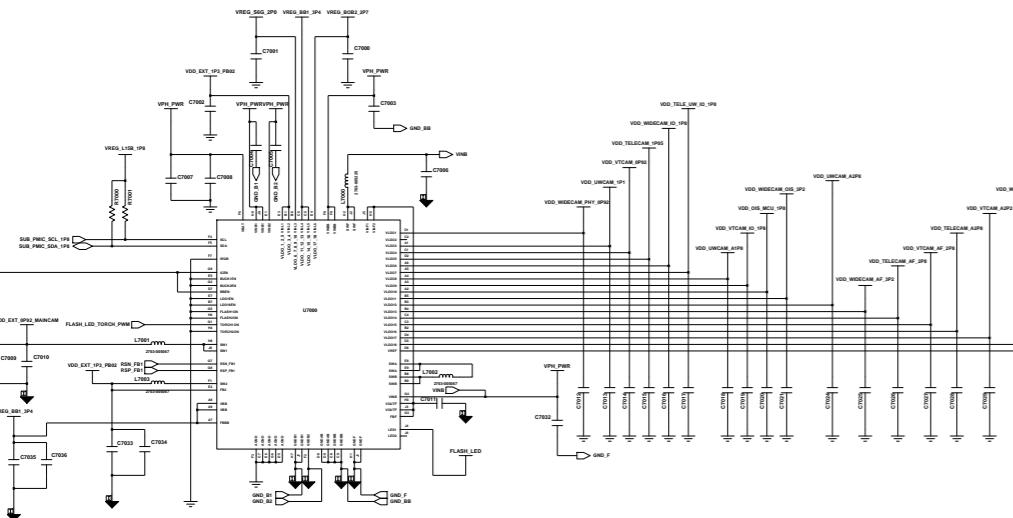
PMK8550



PMK8550

OPTION	D	STATE	OPTION	STATE	OPTION	STATE		
1	0	enable	2	0	enable	3	0	enable
2	---	---	3	---	---	4	---	---
4	0	stop	5	0	stop	6	0	stop
5	0	stop	6	0	stop	7	---	---

CAMERA



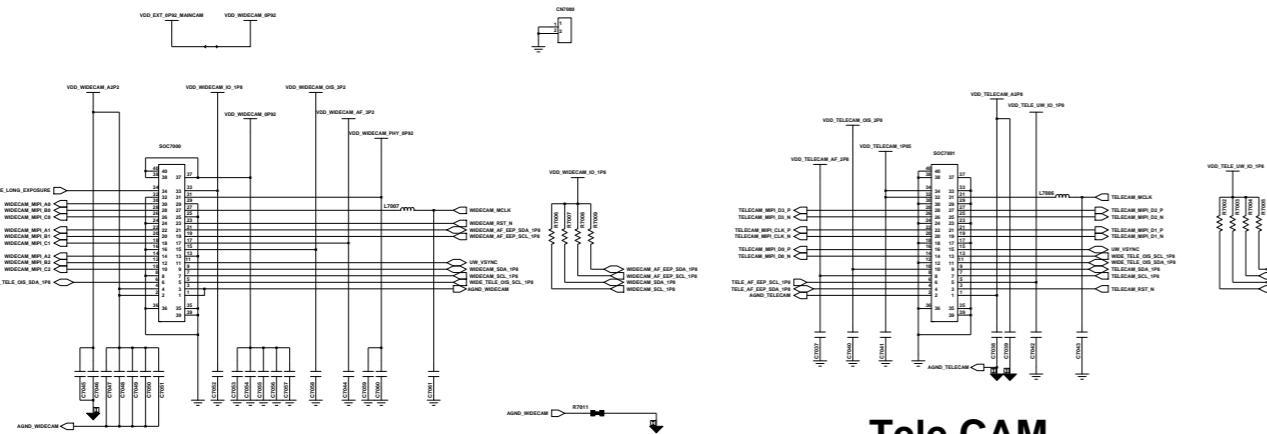
CAM PMIC (PB02)

Visual

DISPLAY

Visual

Flash & Flicker sensor



Tele CAM

Wide CAM

DISPLAY CONNECTOR

System

ULTRA WIDE CAM

FRONT CAM

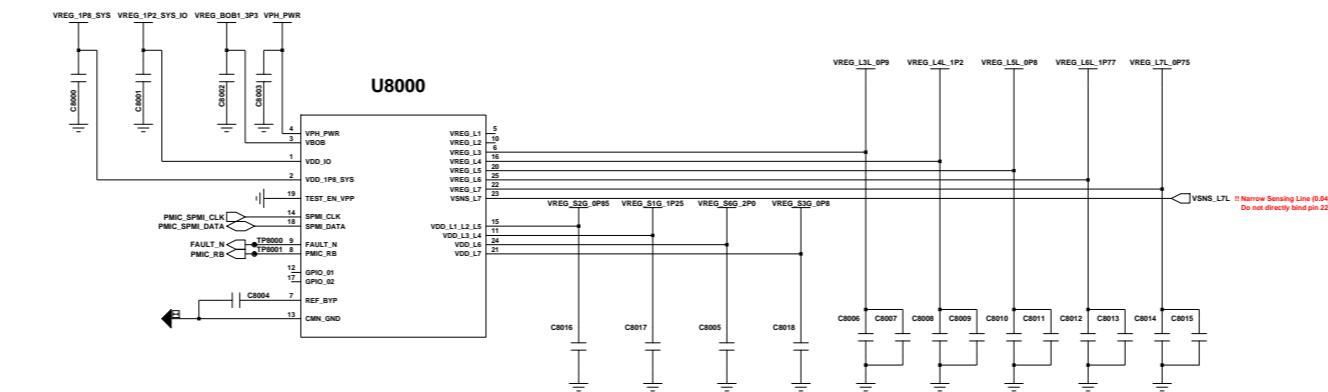


CAM MCU

IF SUB PBA Conn

Engineer:	SAMSUNG ELECTRONICS	
Drawn by:	RE2 CDR	State:
Rev:	DOC CTR:	Title:
Ver:	MRG DRG CDR:	24146-A
Date:	CAMERA, DISPLAY	

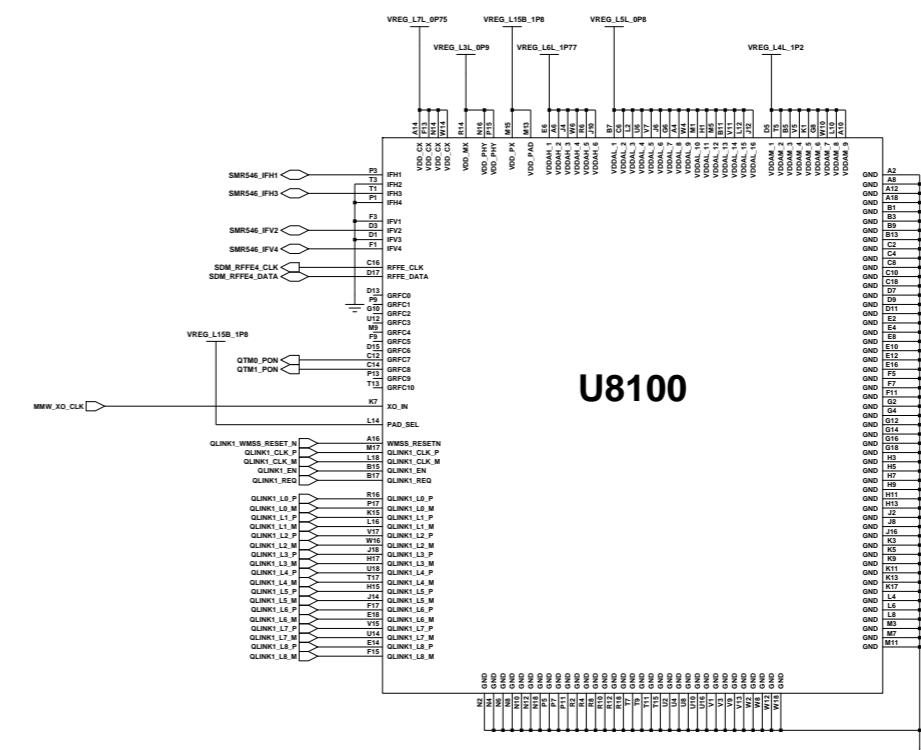
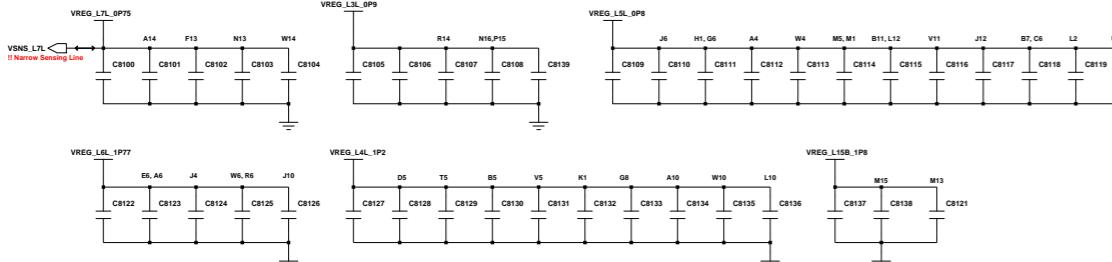
Power

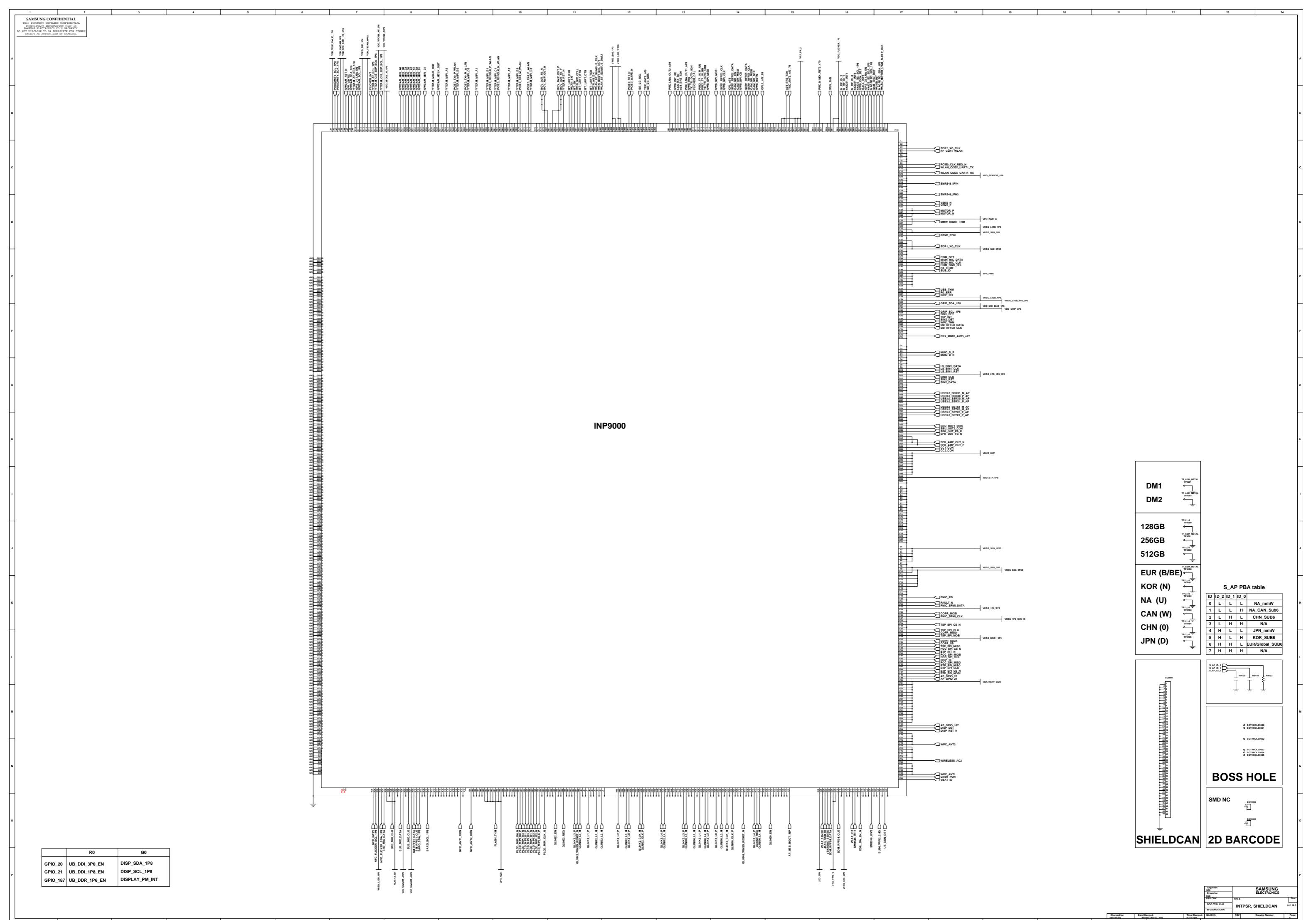


PMR735D #1

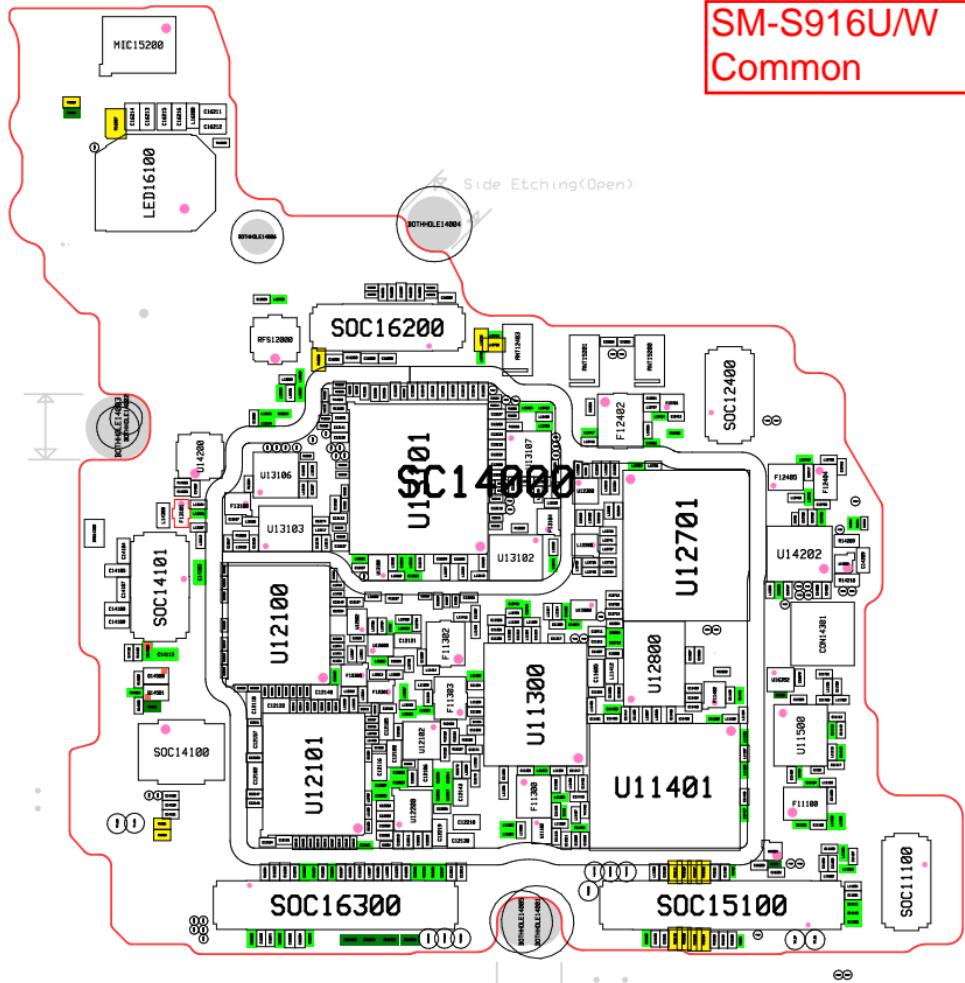
5G IFIC (SMR546)

Radiation

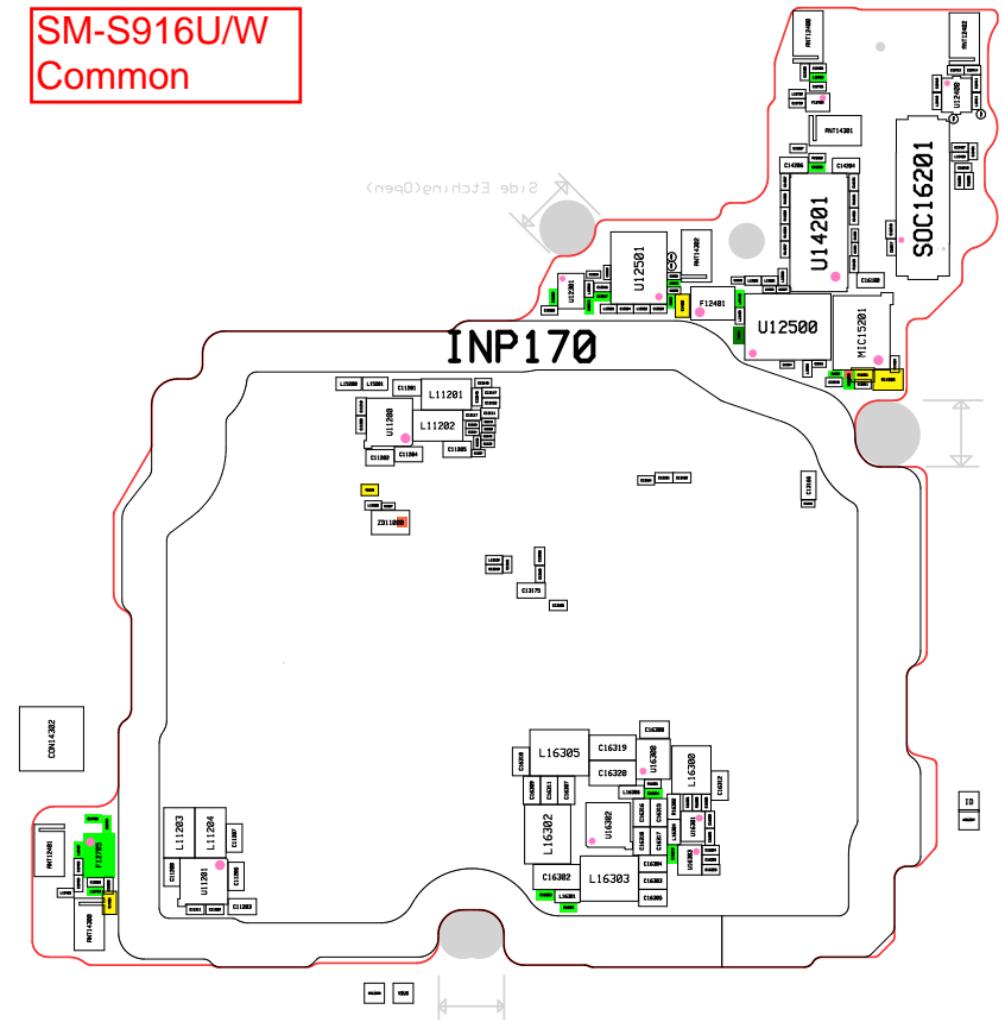




SM-S916U/W
Common



SM-S916U/W Common



SM-S916U M REV07

2022.10.19_SMD

SHEET01 : RF (1/2), FRC, ET, mmW CON

SHEET02 : RF (2/2), TRCV_SDR735, RF PMIC #1

SHEET03 : BT/WIFI

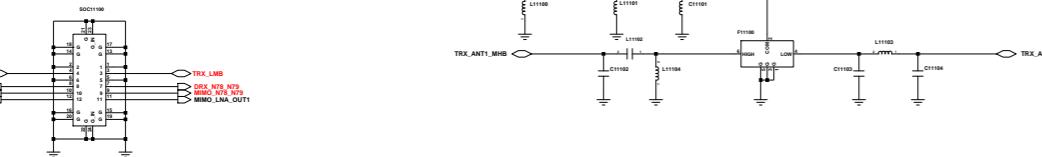
SHEET04 : BAT CON, W/C CON, SENSOR

SHEET05 : IF SUB CON, JTAG, RCV CON, MIC

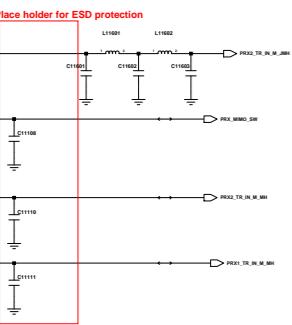
SHEET06 : UW CAM CON, Front CAM CON, DISPLAY PMIC, DISPLAY CON

SHEET07 : INTERPOSER

Engineer:	
Drawn by:	
R&D CHK:	
DOC CTLR CHK:	
MPG ENGR CHK:	



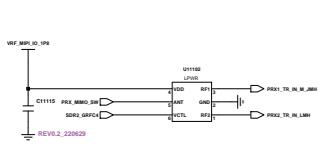
MAIN FRC



MAIN1 ANT (LB, MB, JPN B21)

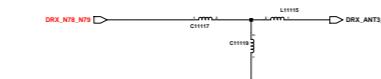


MHB MIMO_LNA OUT



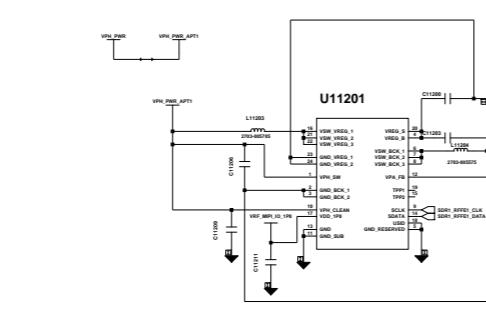
THERMISTERS

MAIN ANT4 (n77/78/79)

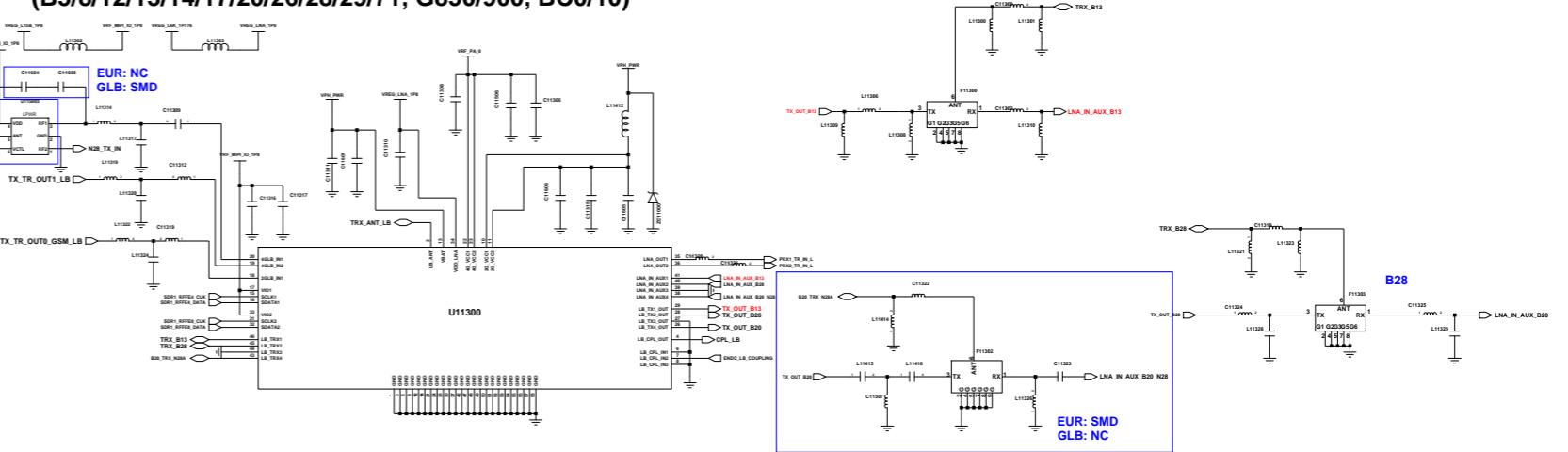


ET Modulator(QET6105#0)

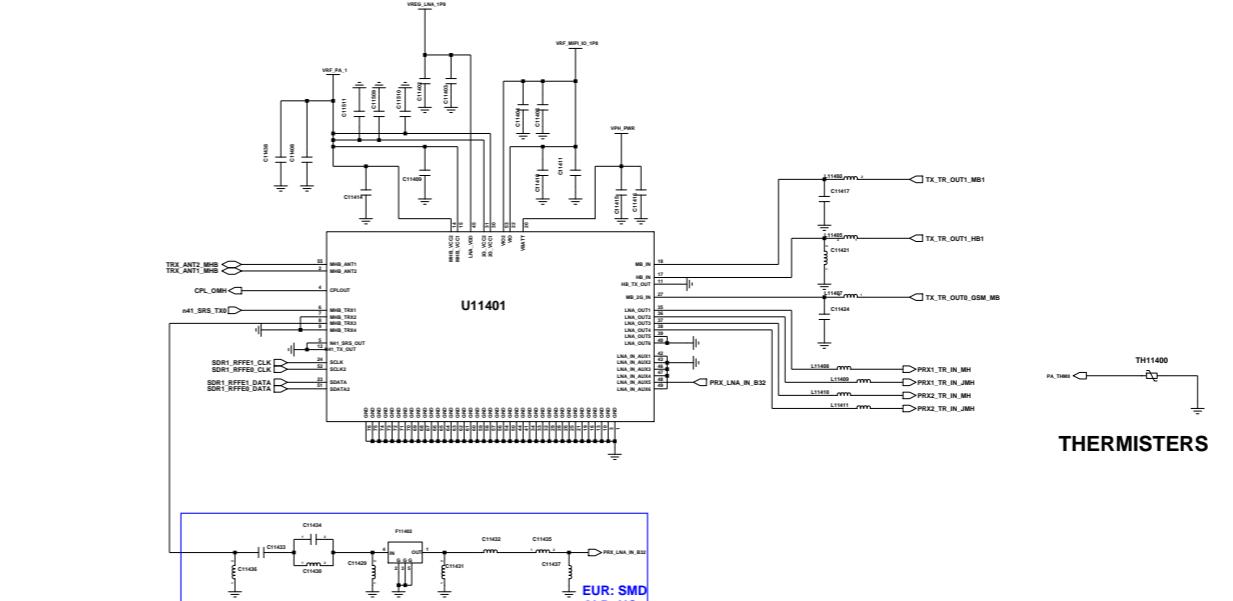
ET Modulator(QET6105#1)



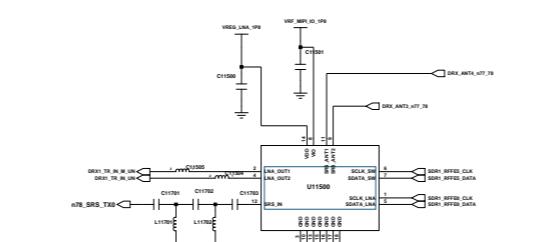
LB LPAMID (B5/8/12/13/14/17/20/26/28/29/71, G850/900, BC0/10)



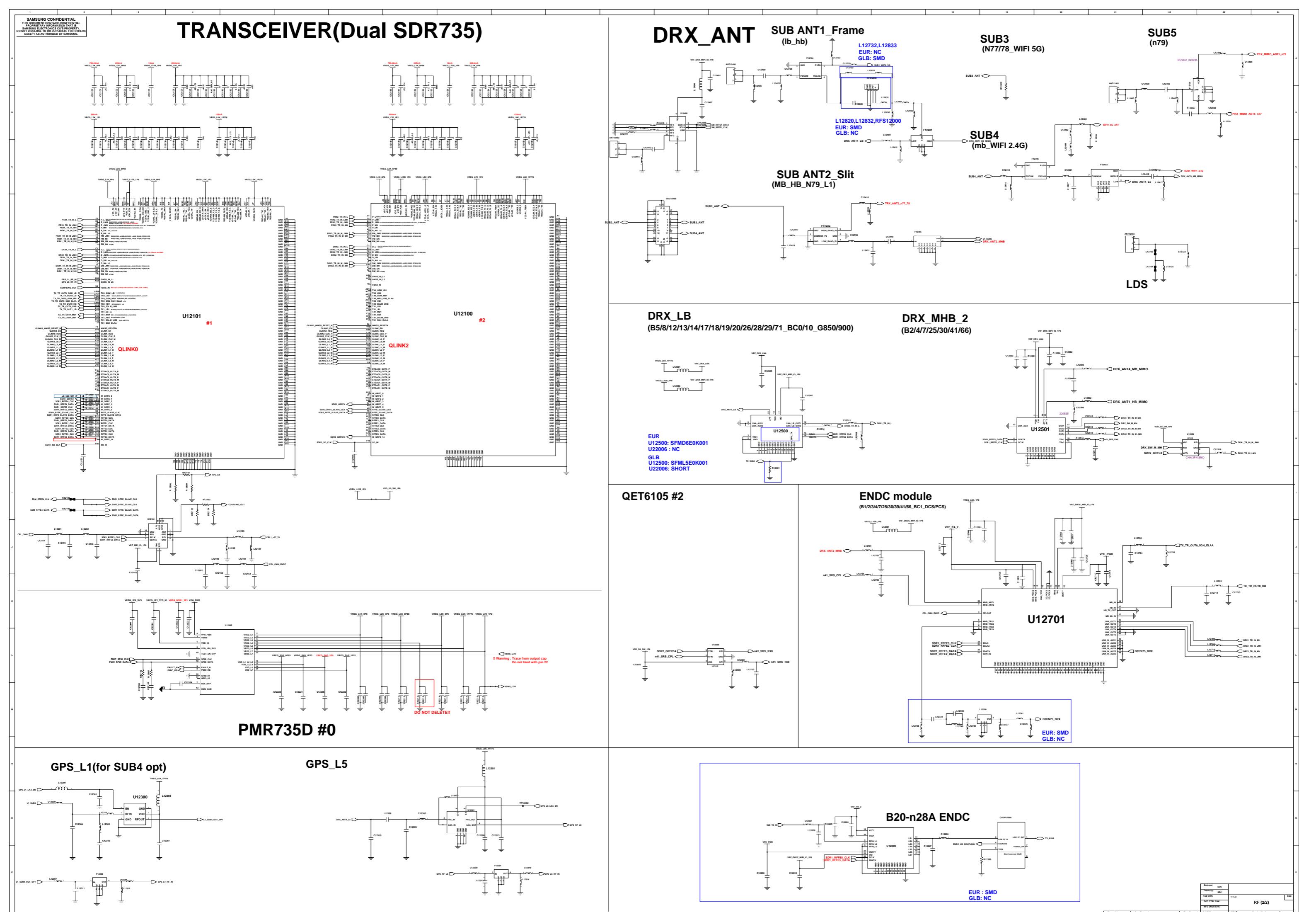
OMH LPAMID (B1/2/3/4/7/25/30/34/38/39/40/41/66, G1800/1900, BC1)



n77/78

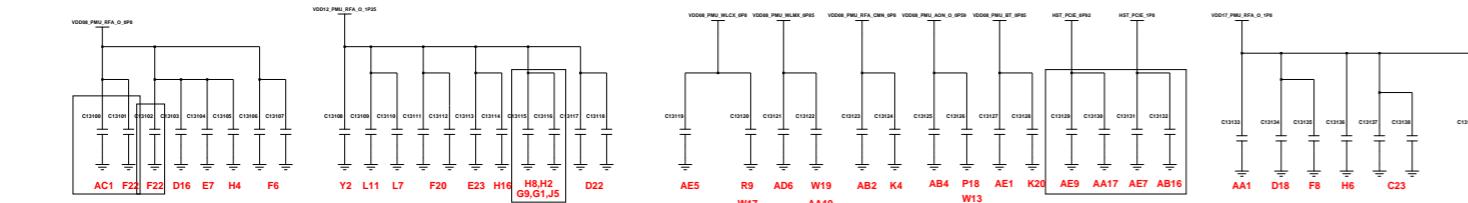


Radiation

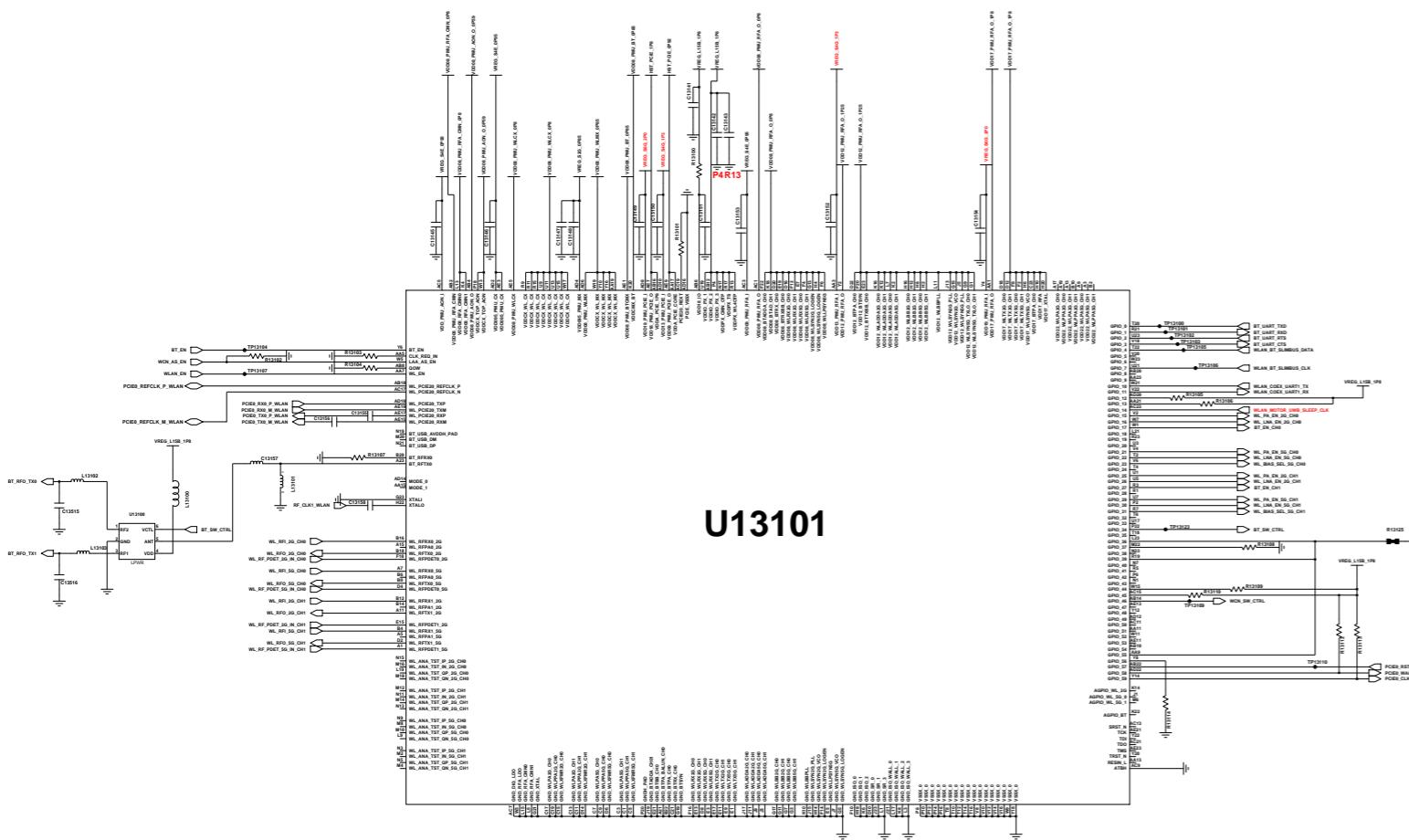


WIFI (WCN6856 CoB)

UWB

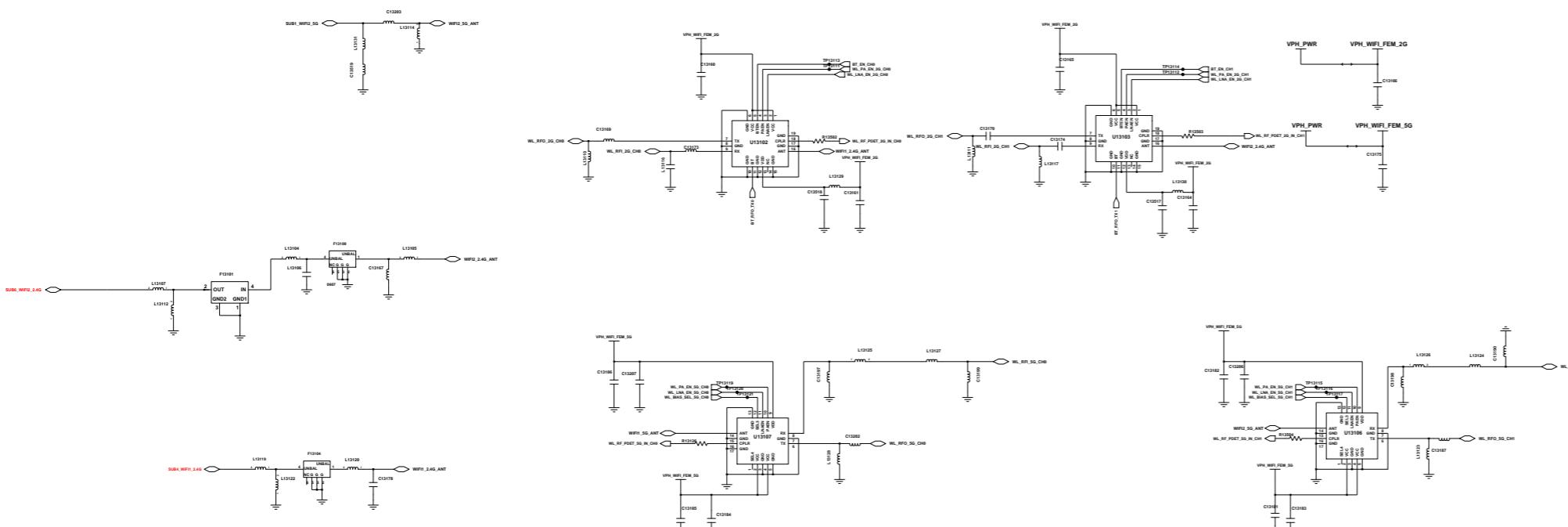


TH13100

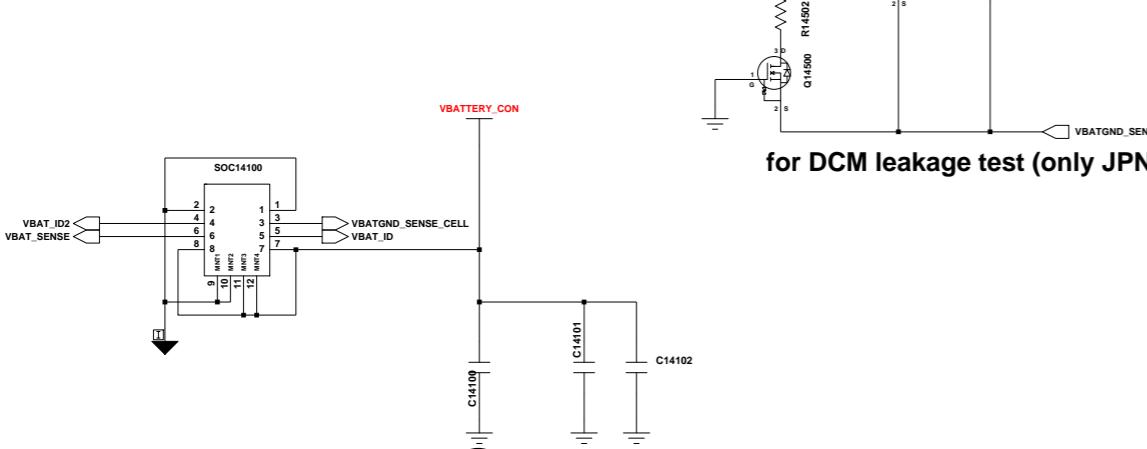


U13101

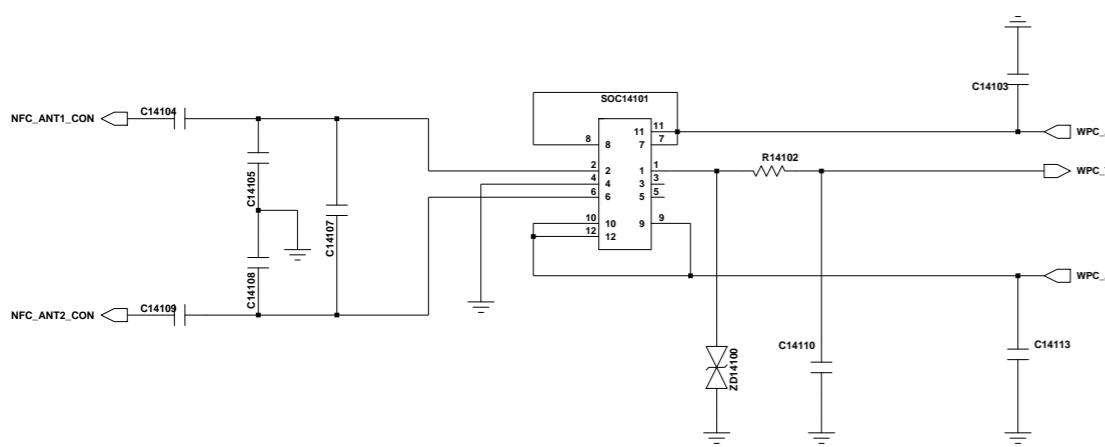
UWB Conn.



Power

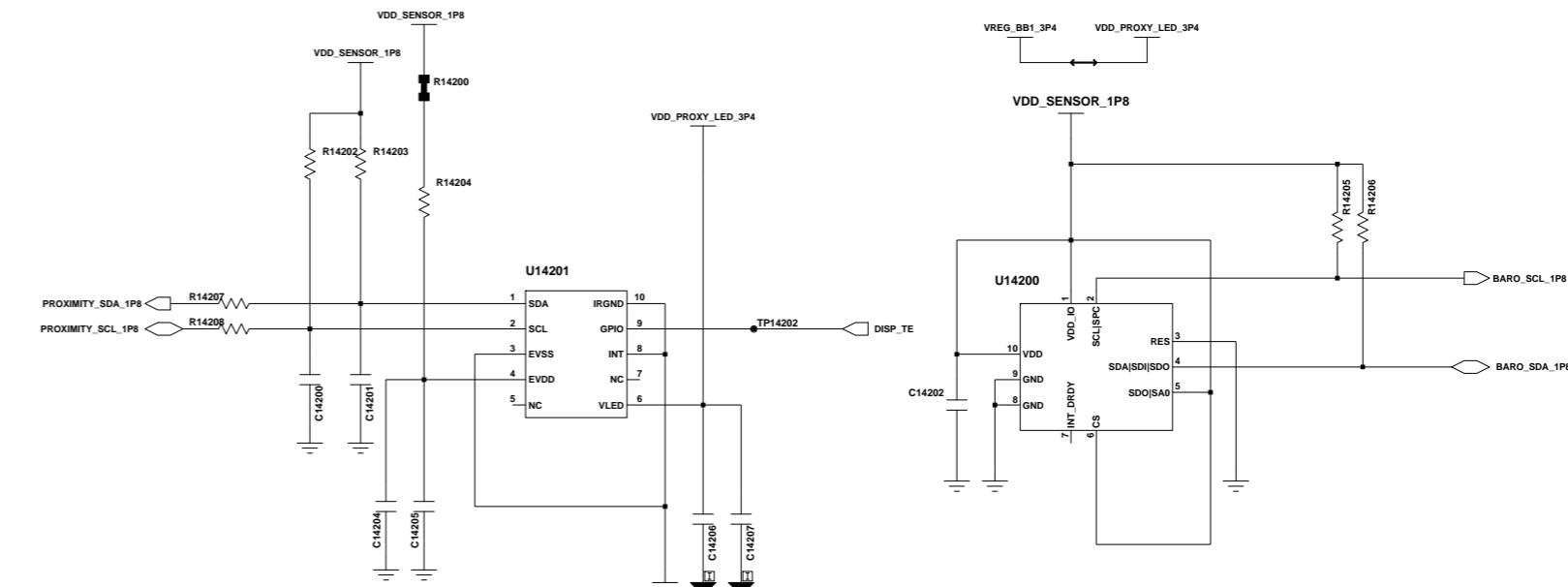


Battery Connector



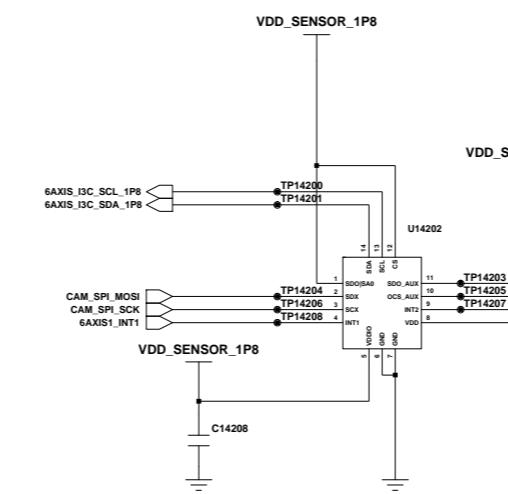
W/C CONNECTOR

MST SW

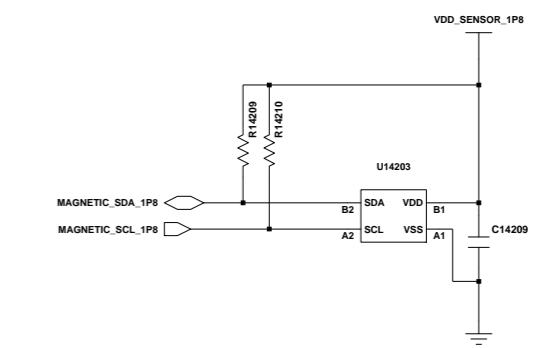


Proximeter/Ambient Light Sensor

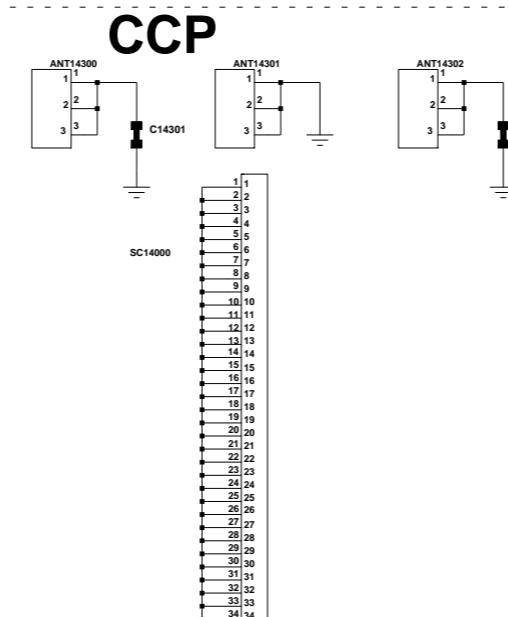
Barometer SENSOR



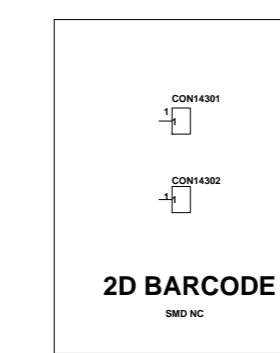
6 Axis SENSOR (GYRO,ACCEL)



Magnetic SENSOR



SHIELDCAN



IVH-COUPON

Changed by:	Date Changed:	Time Changed:	QA CHK:	REV:	Drawing Number:	Page:
kj100.kim	Tuesday, May 10, 2022	5:58:13 pm			DM1_R00_M_RF_220511_START	4

Engineer: SEC	SAMSUNG ELECTRONICS		
Drawn by: SEC			
R&D CHK:			
DOC CTRL CHK:			
MFG ENGR CHK:			
Size: 1218A			

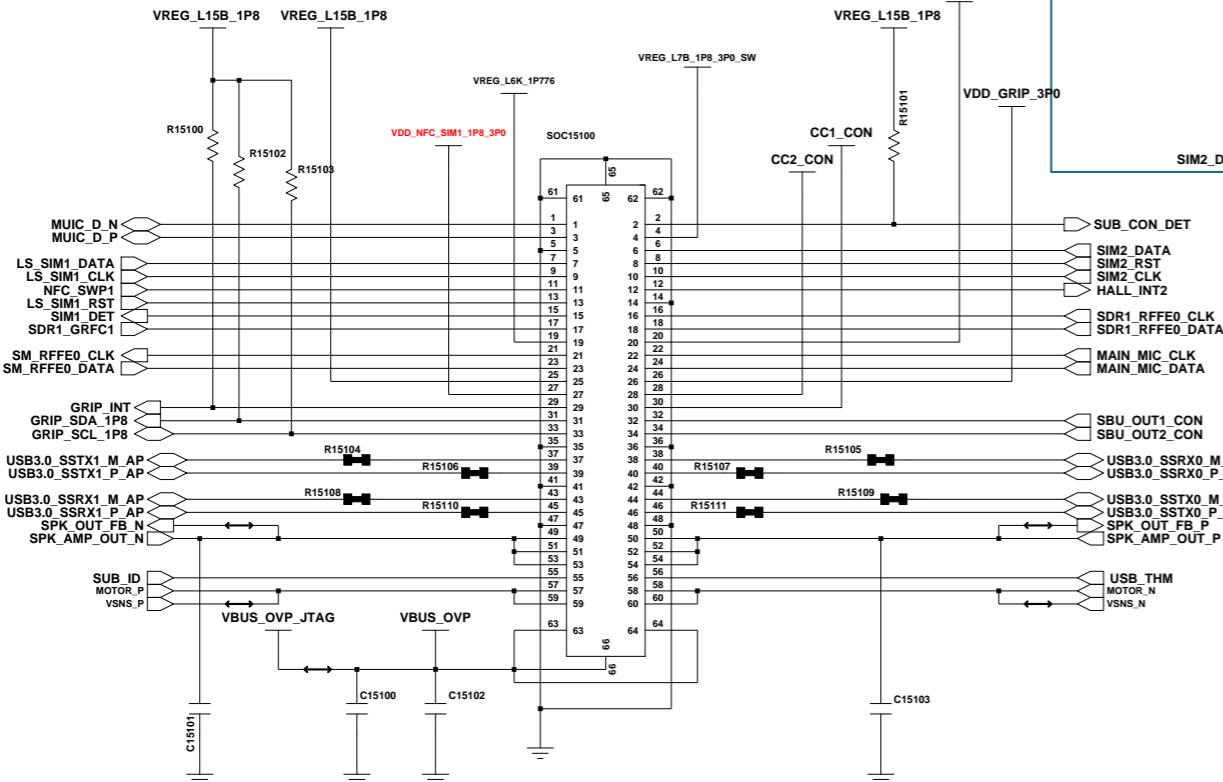


BOSS HOLE

Changed by:	Date Changed:	Time Changed:	QA CHK:	REV:	Drawing Number:	Page:
kj100.kim	Tuesday, May 10, 2022	5:58:13 pm			DM1_R00_M_RF_220511_START	4

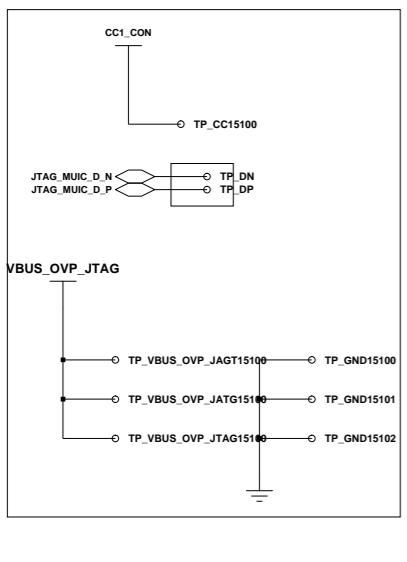
System

AUDIO

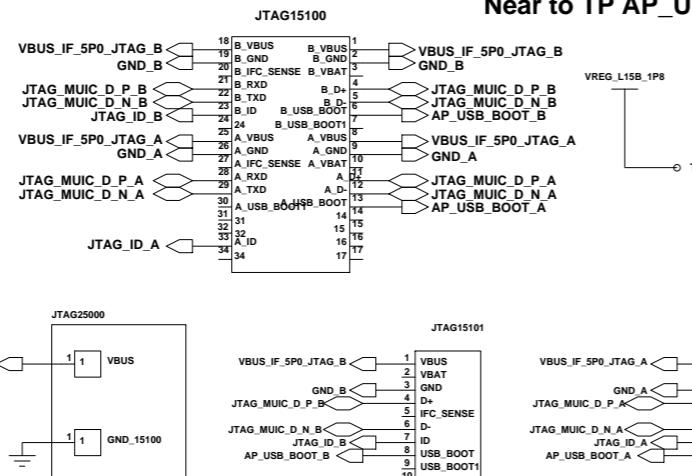


IF SUB PBA Conn

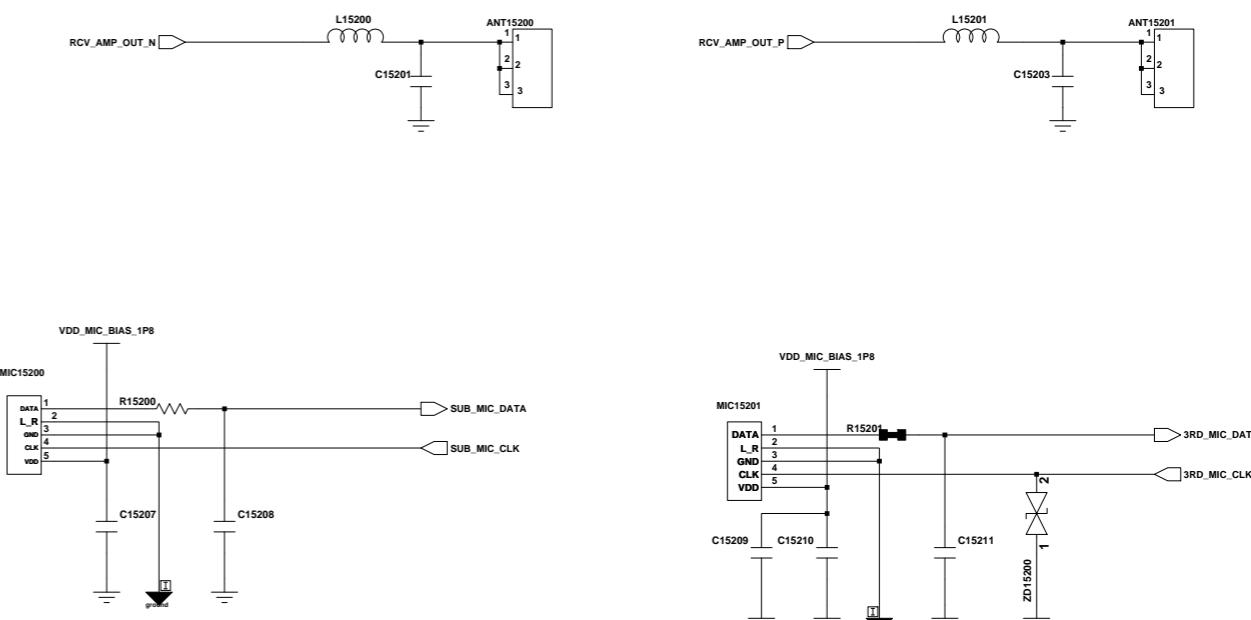
FOR JIG



**CAUTION: PLACEMENT
Near to TP_AP_USB_BOOT**

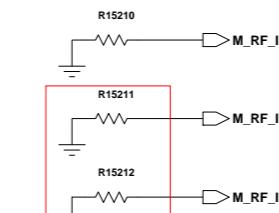
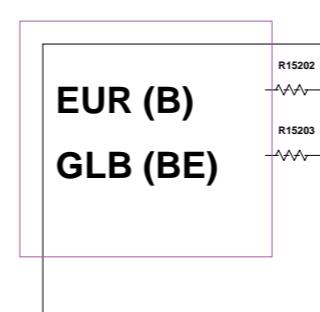


RCV Conn.



2nd MIC

3rd MIC



M_RF PBA table

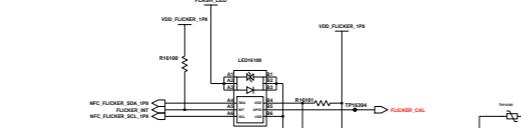
ID	ID_2	ID_1	ID_0	
0	L	L	L	NA_mmW
1	L	L	H	NA_CAN_Sub6
2	L	H	L	CHN_SUB6
3	L	H	H	Global_SUB6
4	H	L	L	JPN_mmW
5	H	L	H	KOR_SUB6
6	H	H	L	EUR_SUB6
7	H	H	H	N/A

CAMERA

Visual

DISPLAY

Visual



Flash & Flicker sensor

CAM PMIC (PB02)



Wide CAM



Tele CAM



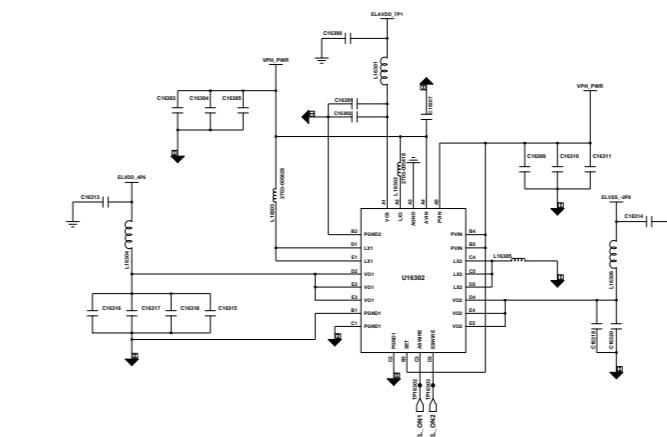
FRONT CAM



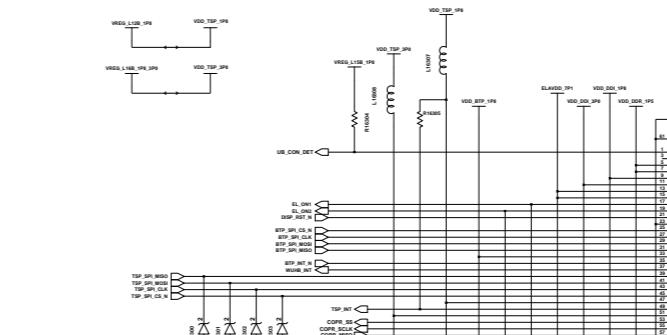
ULTRA WIDE CAM



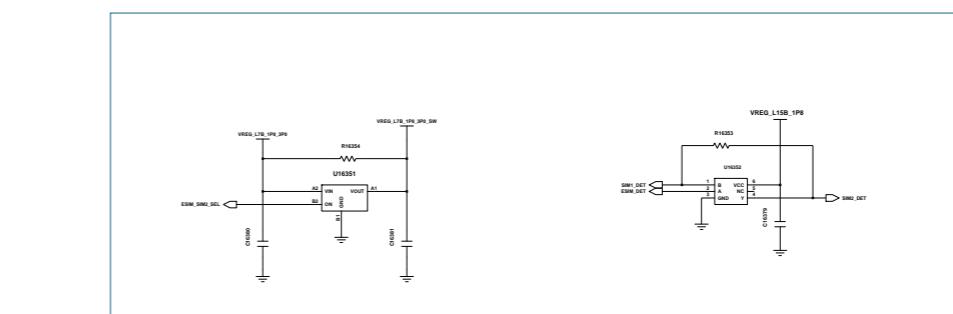
CAM MCU

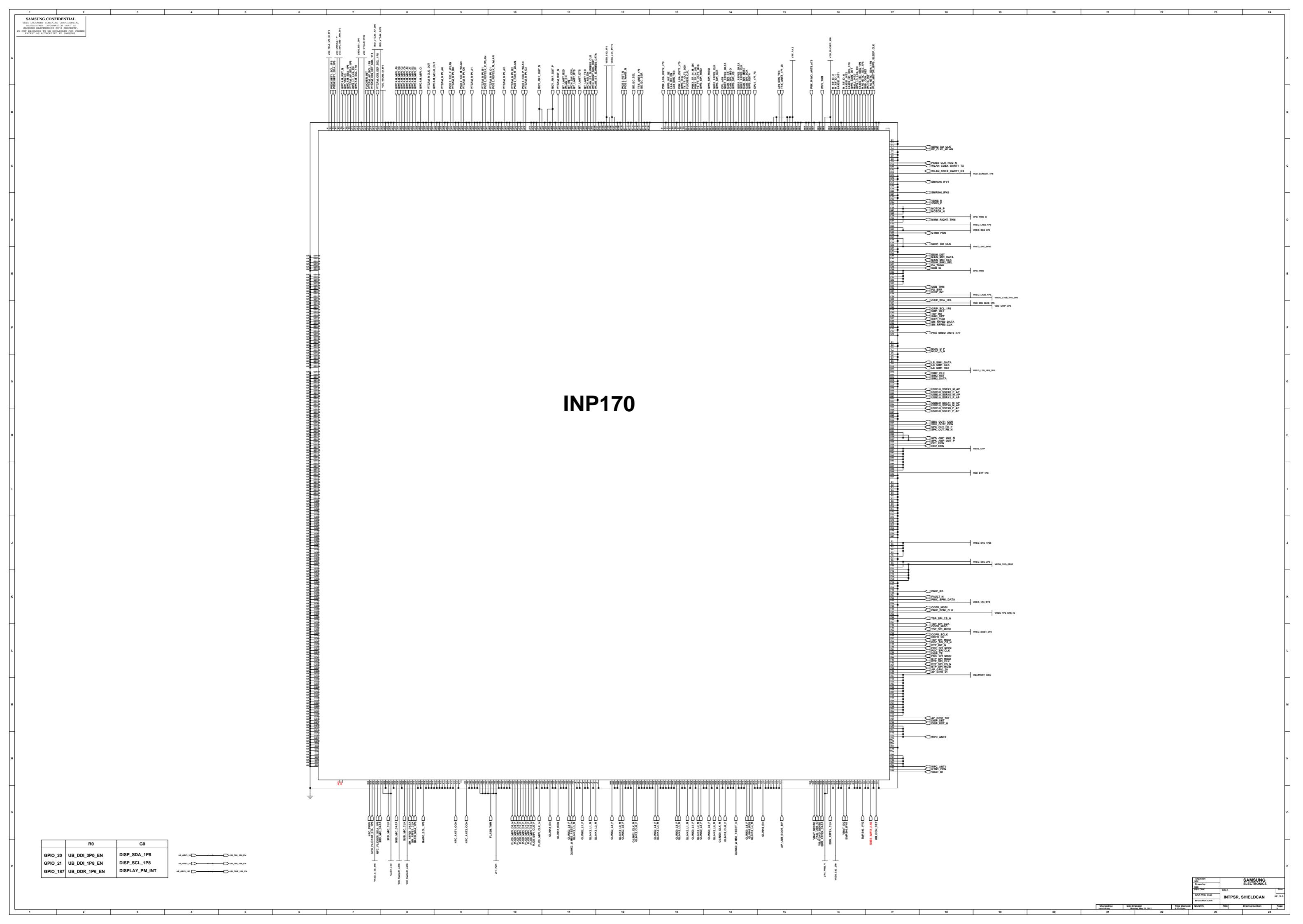


DISPLAY PMIC (SM3010)



DISPLAY CONNECTOR

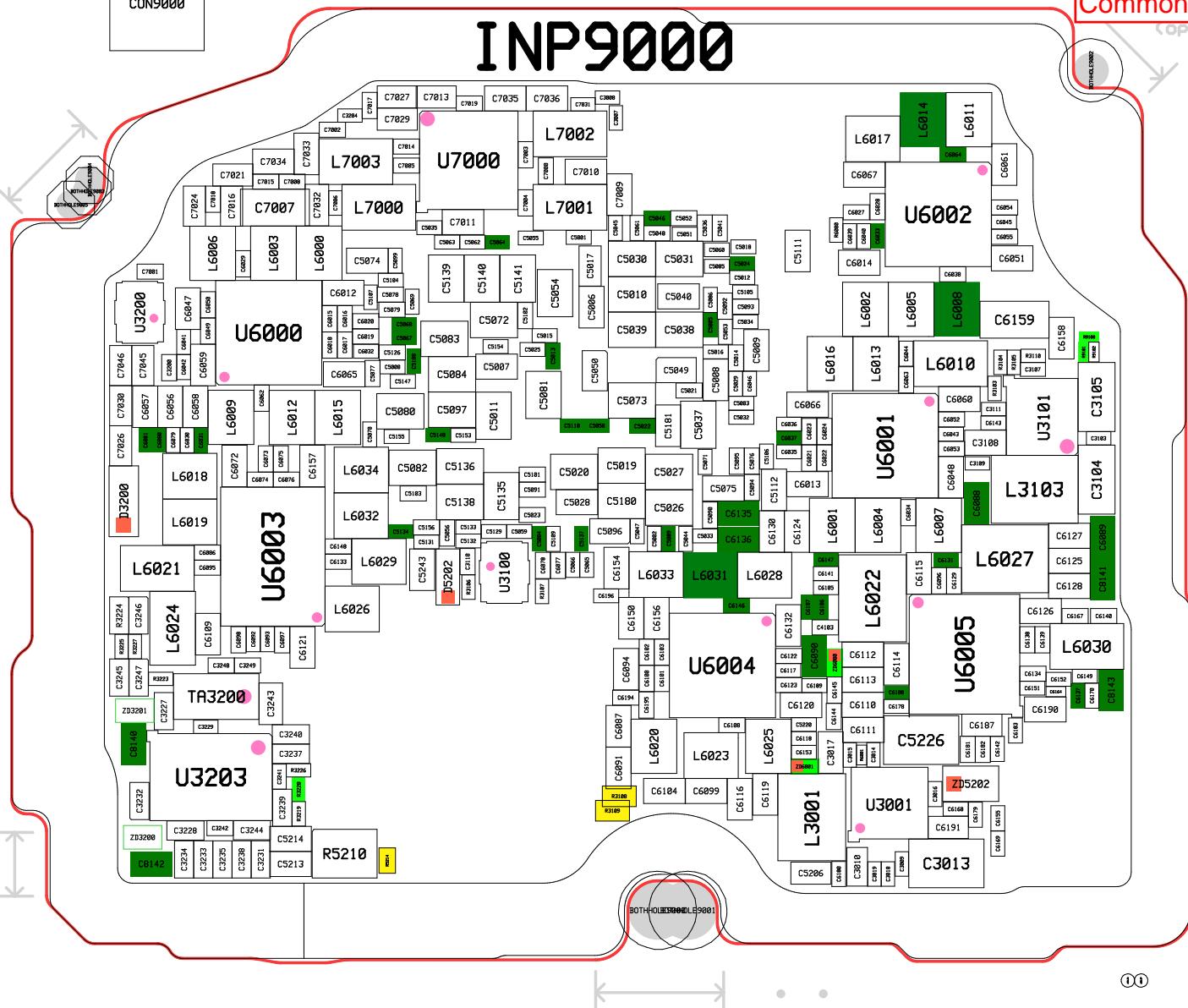




SM-S916U/W
Common

CON9000

INP9000



SM-S916U/W
Common

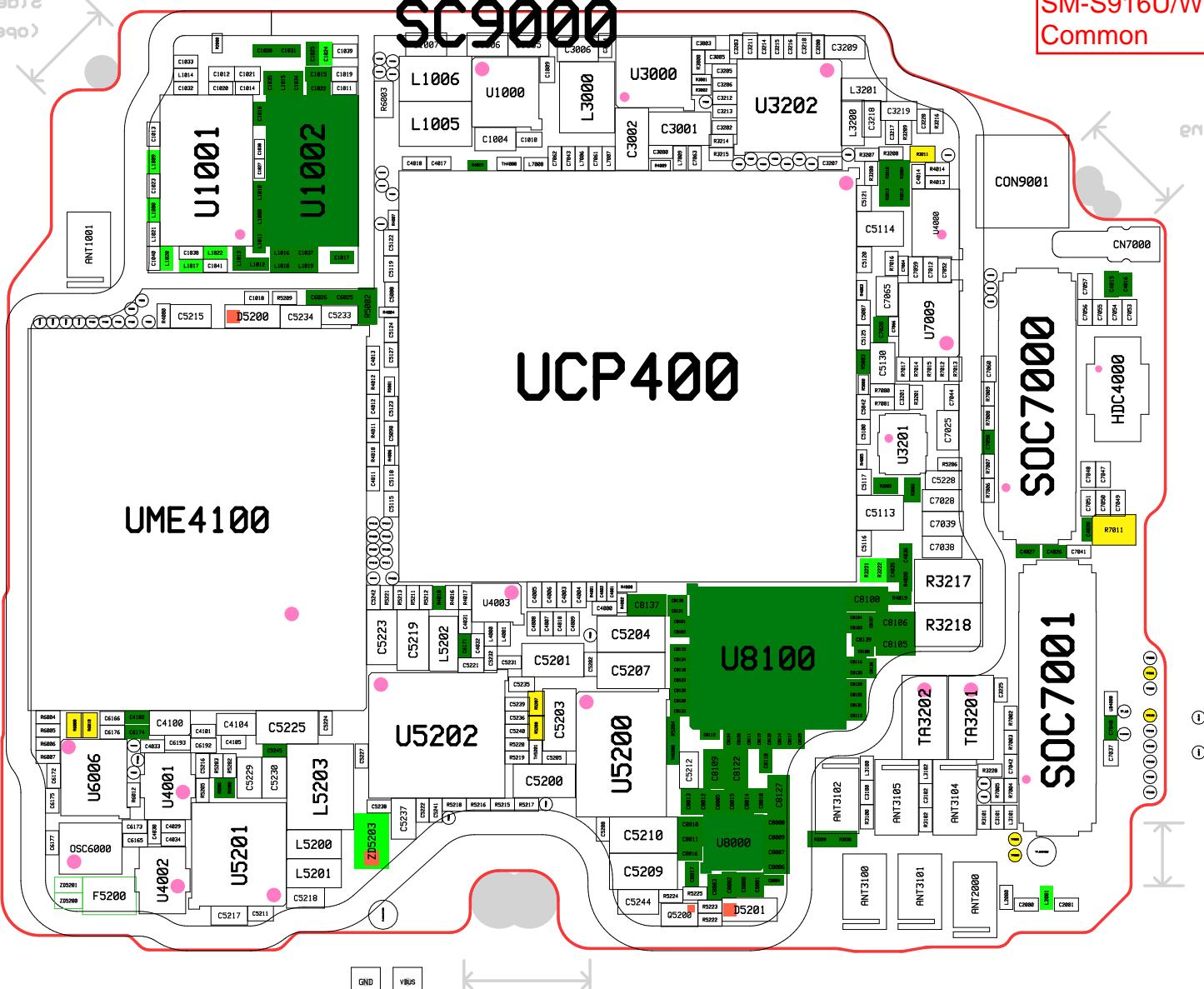
SC9000

UCP400

SOC7001

UME4100

JTAG4000



..... JTAG4001

..... JTAG4002

DM1 IFSUB PBA REV0.7

sheet01 : ANT

sheet02 : LOGIC

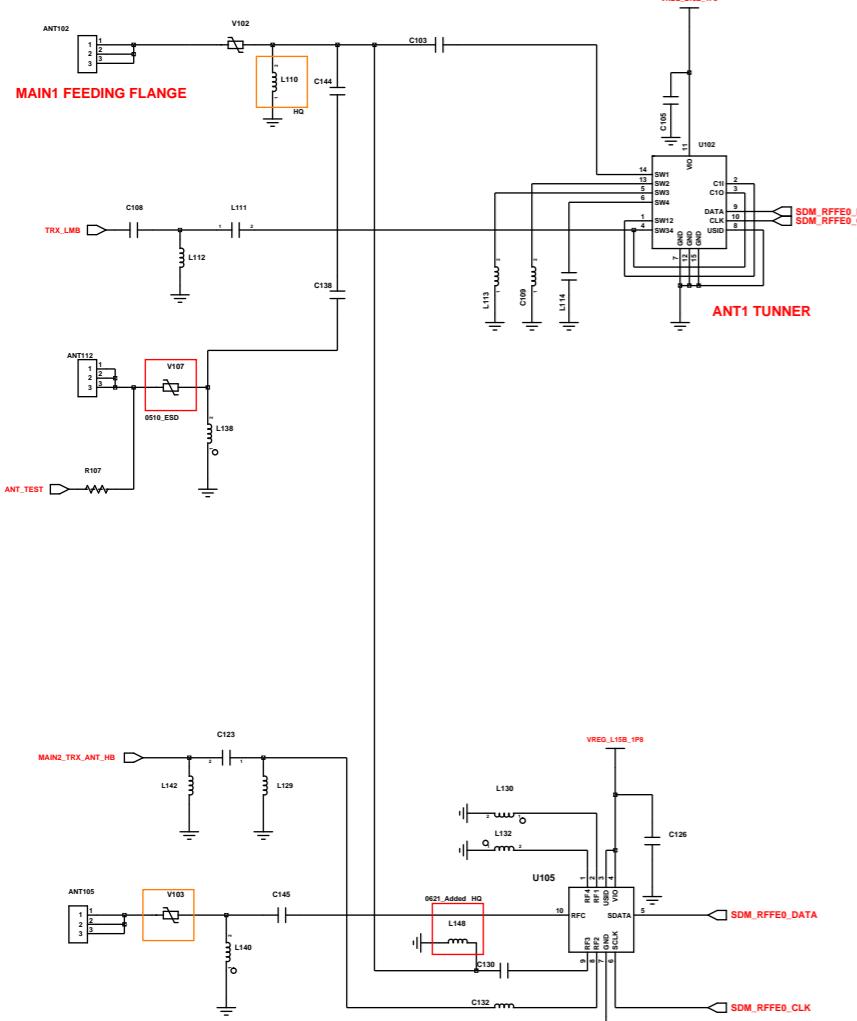
2022 . 09. 28.

Engineer:	
Drawn by:	
R&D CHK:	
DOC CTRL CHK:	
MFGR ENGR CHK:	

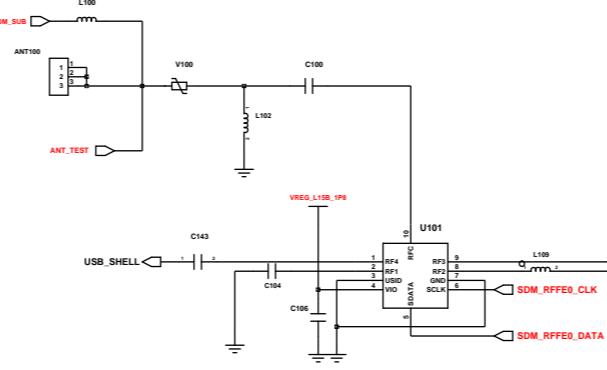
Changed by: Date Changed: Time Changed: QA CHK: REV Drawing Number: Page:
user99 14.09.2022 14:00 14:00 QA CHK: REV Drawing Number: Page:
9

MAIN ANT

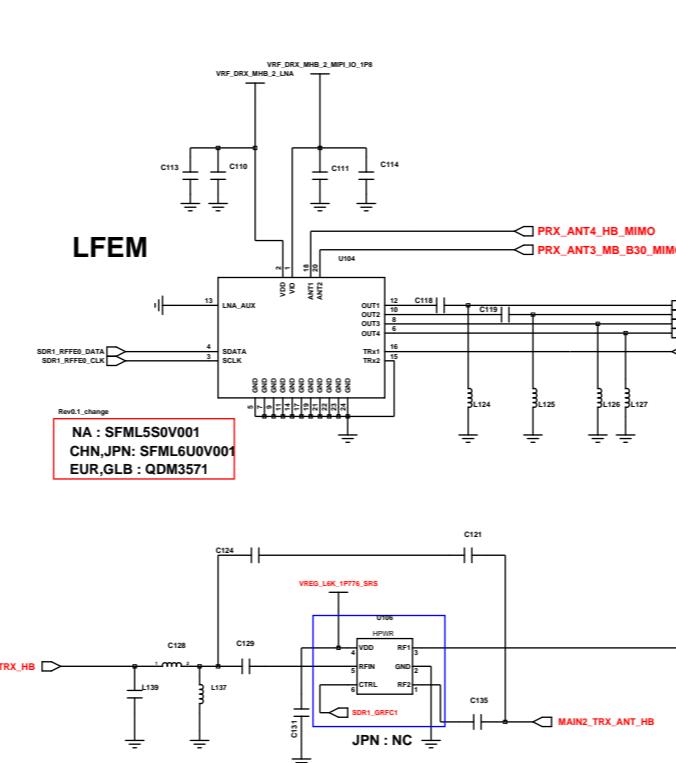
MAIN ANT1-1 LB/MB
(GSM LB/MB, B1/2/3/4/5/8/12/13/17/18/19/20/25/26/28,
TDD 34/39)



MAIN ANT2(HB/n77/n78)

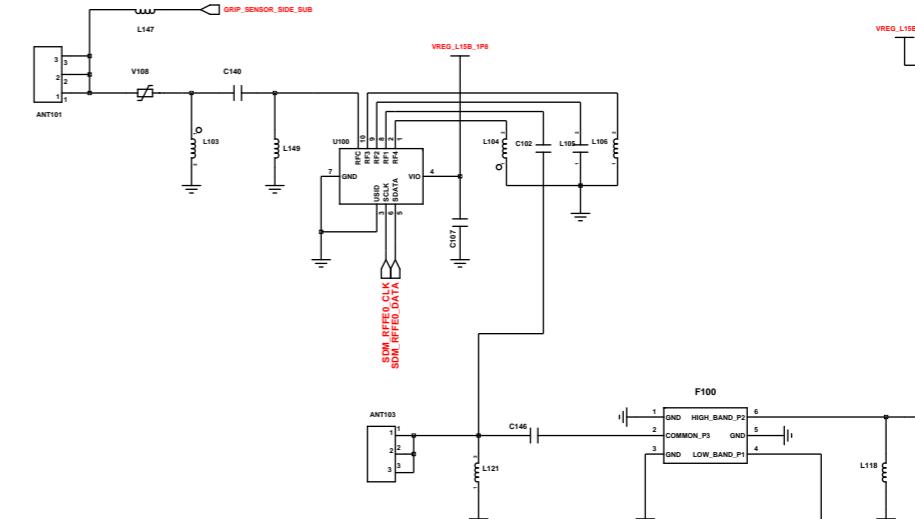


LOWER MAIN X GND SW

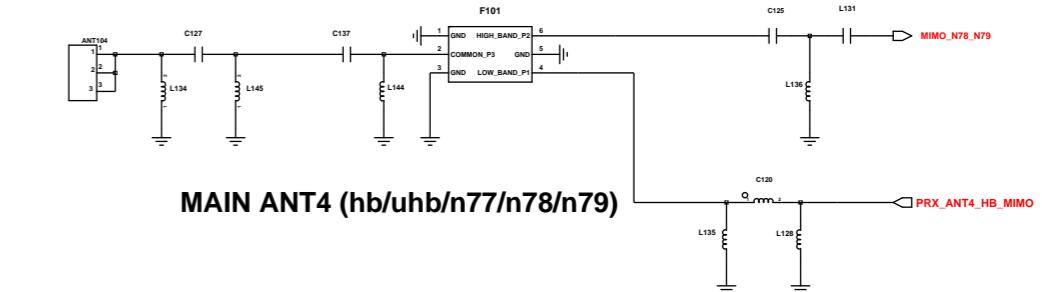


JPN	NA/CHN
U106	NC MXD622SES
C129	100pF
C135	100pF
C131	100nF
C124	100pF NC
C121	100pF NC

NA : SFML5S0V001
CHN, JPN : SFML6U0V001
EUR, GLB : QDM3571

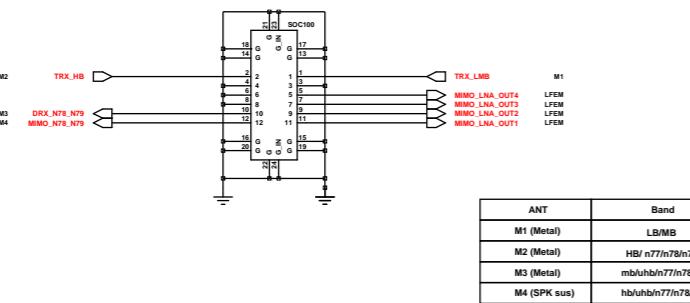


MAIN ANT3 (mb/b30/uhb/n77/n78/n79)

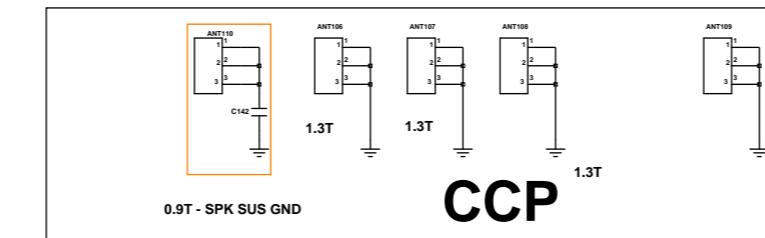


MAIN ANT4 (hb/uhb/n77/n78/n79)

FRC CON



RF Connector



CCP

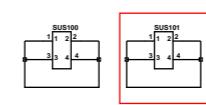
etc.



SHIELD CAN

EUR / GLB
NA
JPN
CHN
KOR
GLB_RD

BOTHHOLE

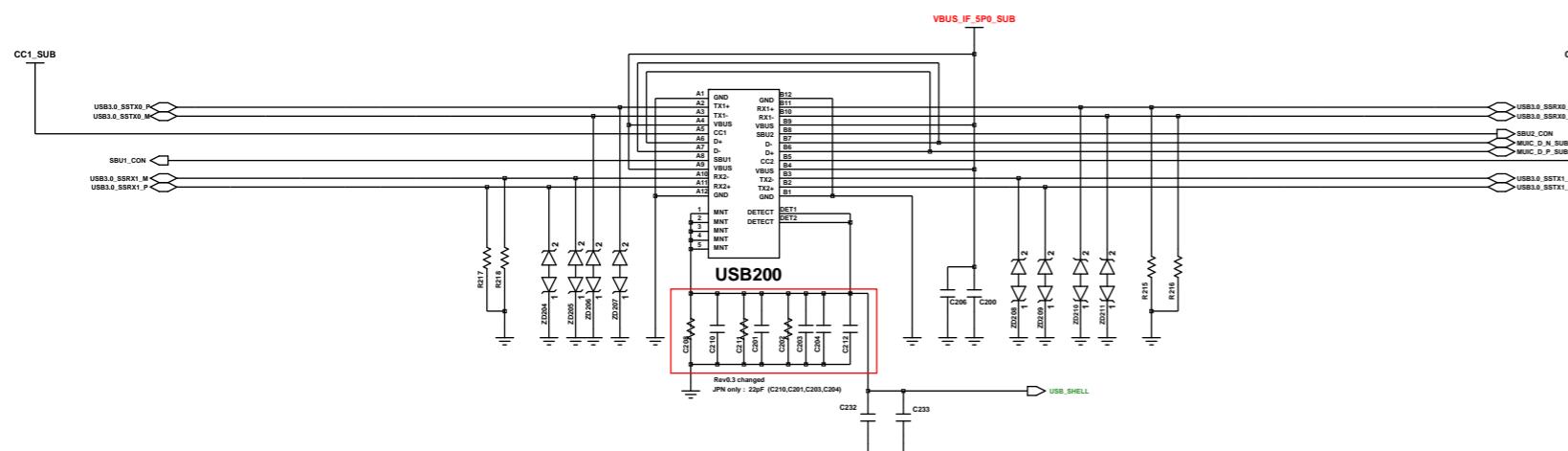


TP100 SHORT
TP101 NC
TP102 NC
TP103 NC
TP104 NC
TP105 NC
FM100 O
FM101 O
FM102 O
FM103 O
FM104 O
FM105 O

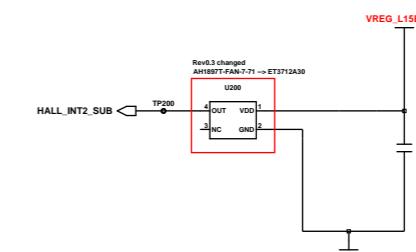
SCREW SUS

INSIK MARK

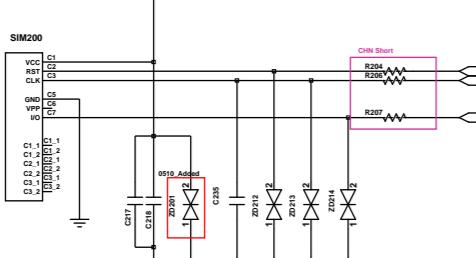
USB / SIM



SENSOR

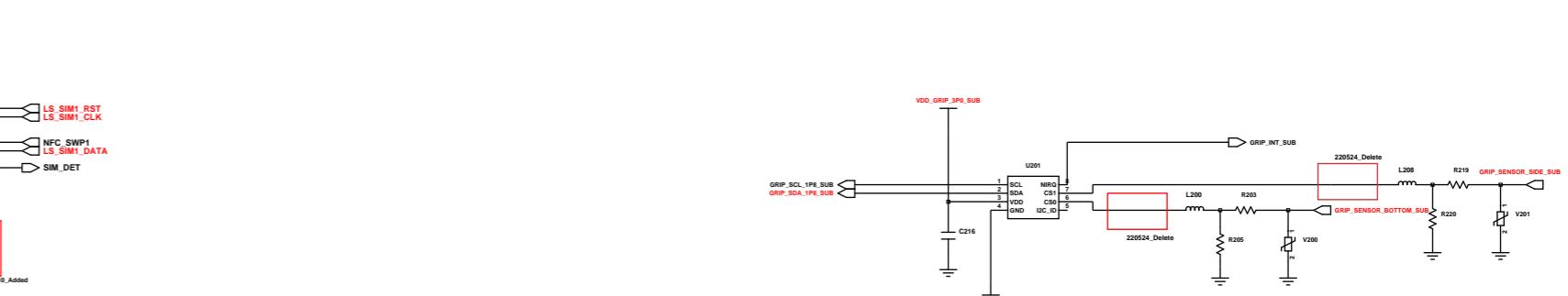
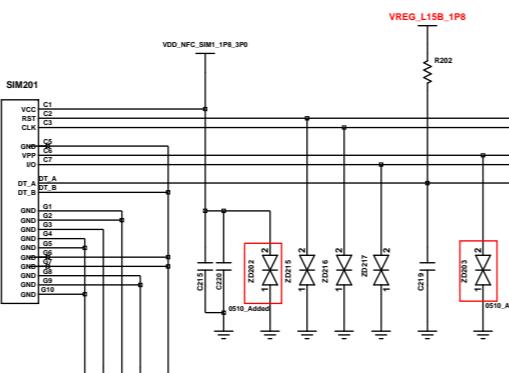


HALL SENSOR



USB TYPE C CONNECTOR

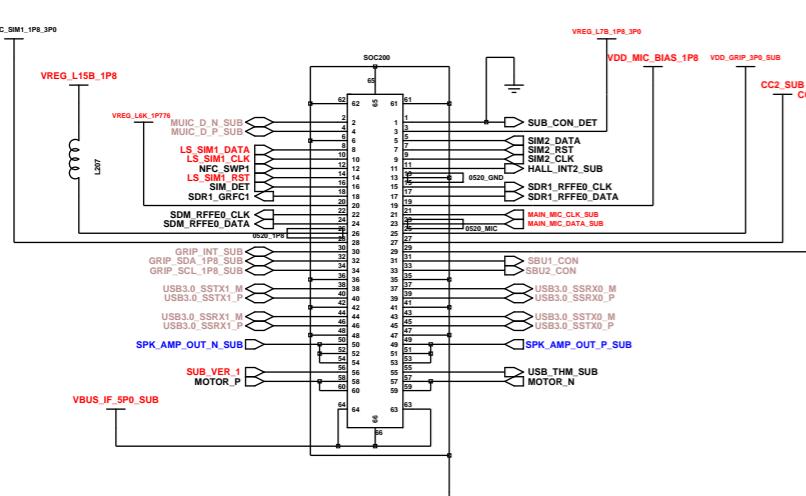
Deep Drawing



GRIP SENSOR

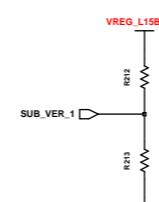
Stacked Dual SIM SOCKET

BtoB CON



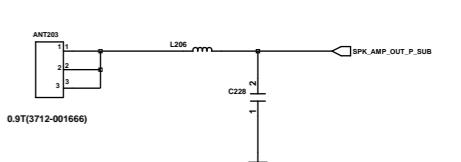
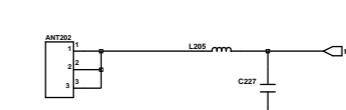
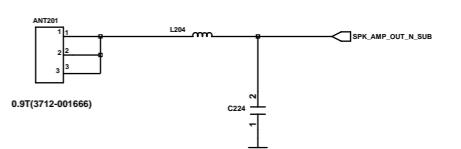
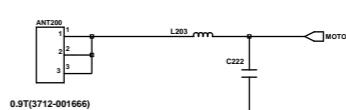
SUB PCB IF CONNECTOR

SUB VERSION



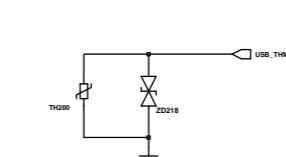
ADC RANGE	TYPICAL VALUE	ID	EXT_PU	EXT_PD	DM1
0 ~ 300	0	8	NC	332K, 1%	EUR_Sub6 Global_Sub6
301 ~ 600	480	0	332K, 1%	120K, 1%	NA_mmW NA_CAN_Sub6
601 ~ 900	720	4	270K, 1%	180K, 1%	CHN_Sub6
901 ~ 1200	1080	5	180K, 1%	270K, 1%	KOR_Sub6_RC
1201 ~ 1400	1320	6	120K, 1%	332K, 1%	JPN_mmW
1401 ~ 1530	1480	7	100K, 1%	470K, 1%	Global_Sub6_RD

AUDIO



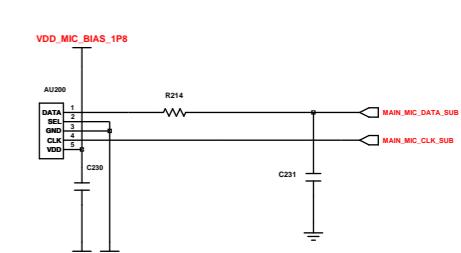
MOTOR conn.

SPK CONTACT

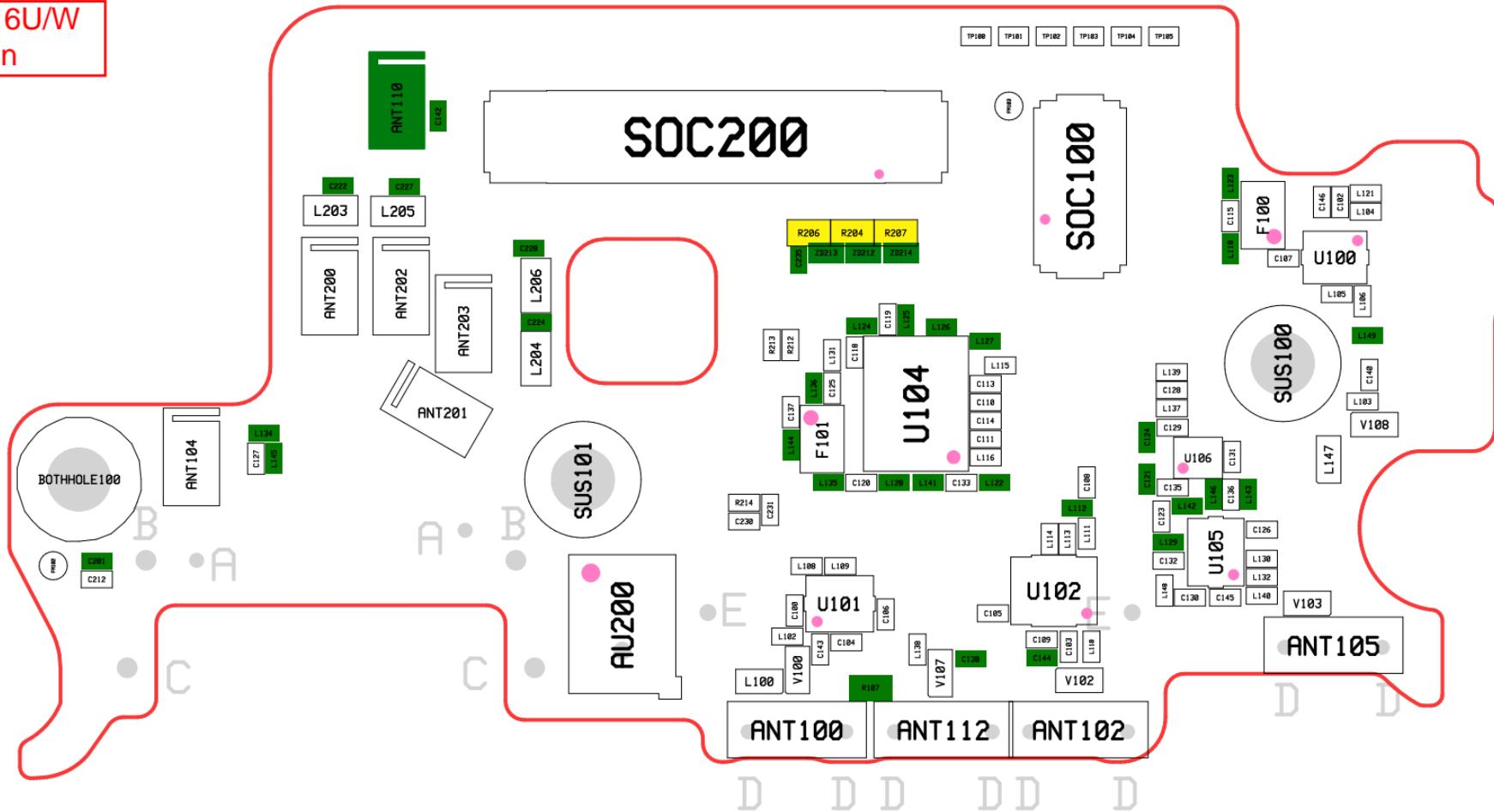


USB/BATTERY THERMISTOR

MAIN MIC



SM-S916U/W
Common



SM-S916U/W
Common

