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A	<div><div>SAMSUNG CONFIDENTIAL THIS DOCUMENT CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION THAT IS SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS EXCEPT AS AUTHORIZED BY SAMSUNG.</div></div>															
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# SM-G991B\_M\_REV0.5

2020.1106\_SMD

- sheet01 : RF(1/2)
- sheet02 : RF (2/2)
- sheet03 : UFS, NFC
- sheet04 : BT/WIFI, GPS, SENSOR HUB
- sheet05 modAP(Olympus) & System Clock
- sheet06 : modAP(Olympus) Power\_decoupling capacitor
- sheet07 : Power management IC(modAP / Peri) & Charging
- sheet08 : AUDIO
- sheet09 : CAMERA
- sheet10 : OVP
- sheet11 : DISPLAY PMIC
- sheet12 : mmW IC
- sheet13 : INTERPOSER (Master\_R)
- sheet14 : INTERPOSER (Master\_L)

Engineer:			
Drawn by:			
RDG CHK:	TITLE:		Size:
DOC CTRL CHK:			
MFG ENGR CHK:			
QA CHK:	REV:	Drawing Number:	Page:

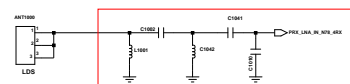
# MASTER

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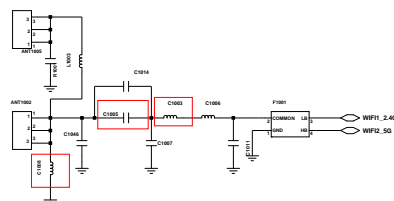
## RF2 - SUB ANT

### SUB4 ANT (Metal Slit)

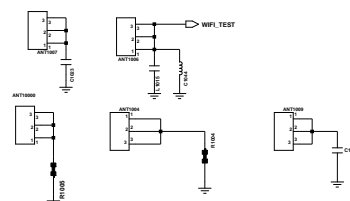
**SUB6 ANT (LDS)**



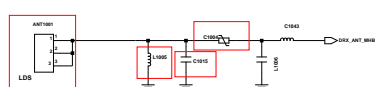
**SUB3 ANT (Metal Slit)**



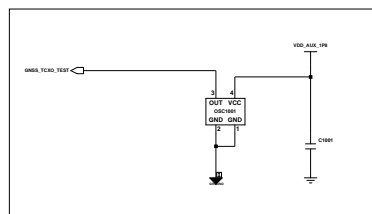
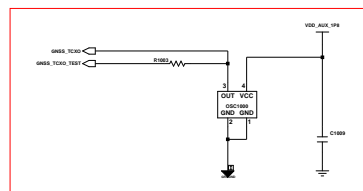
## CCP



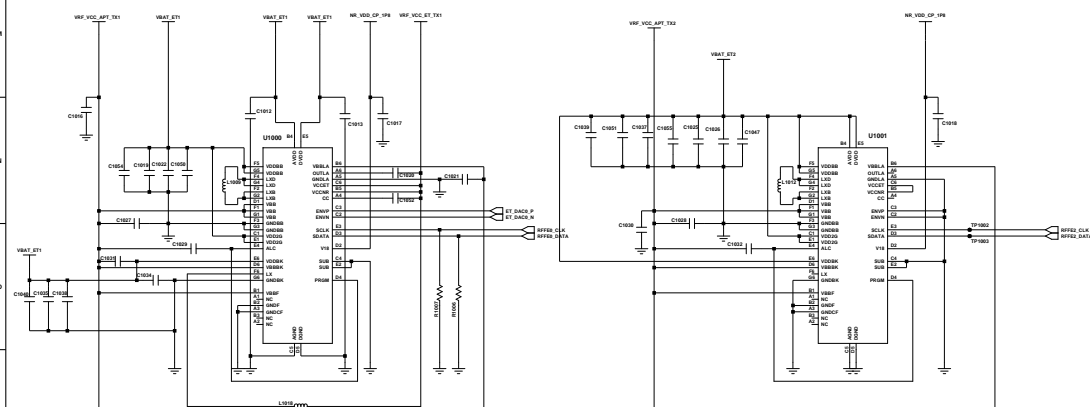
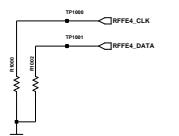
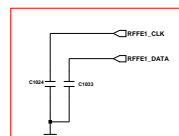
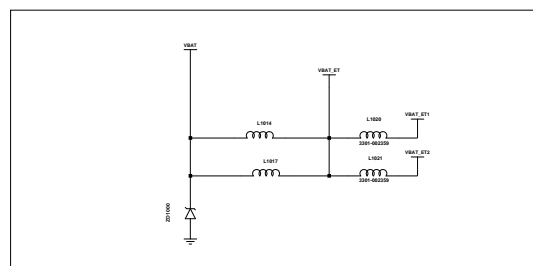
**SUB7 ANT (Deco Slit)**



GPS (BCM4775) TCXO



## mmW\_ANT\_CONN



**ET#1 (QPA5580, QM78217)**

**ET#2 (QPA4850-1, QM78143)**

ENGINEER: USER113		<b>SAMSUNG ELECTRONICS</b>		
DRAWN BY: USER113				
FILED CHK:	TITLE:			SIZE:
DOC CYCL CHK:	<b>SM-G975F</b>			
REF ENGR CHK:			24 118 A	
INSTR:	QA CHK:	REV:	DRAWING NUMBER:	PAGE:
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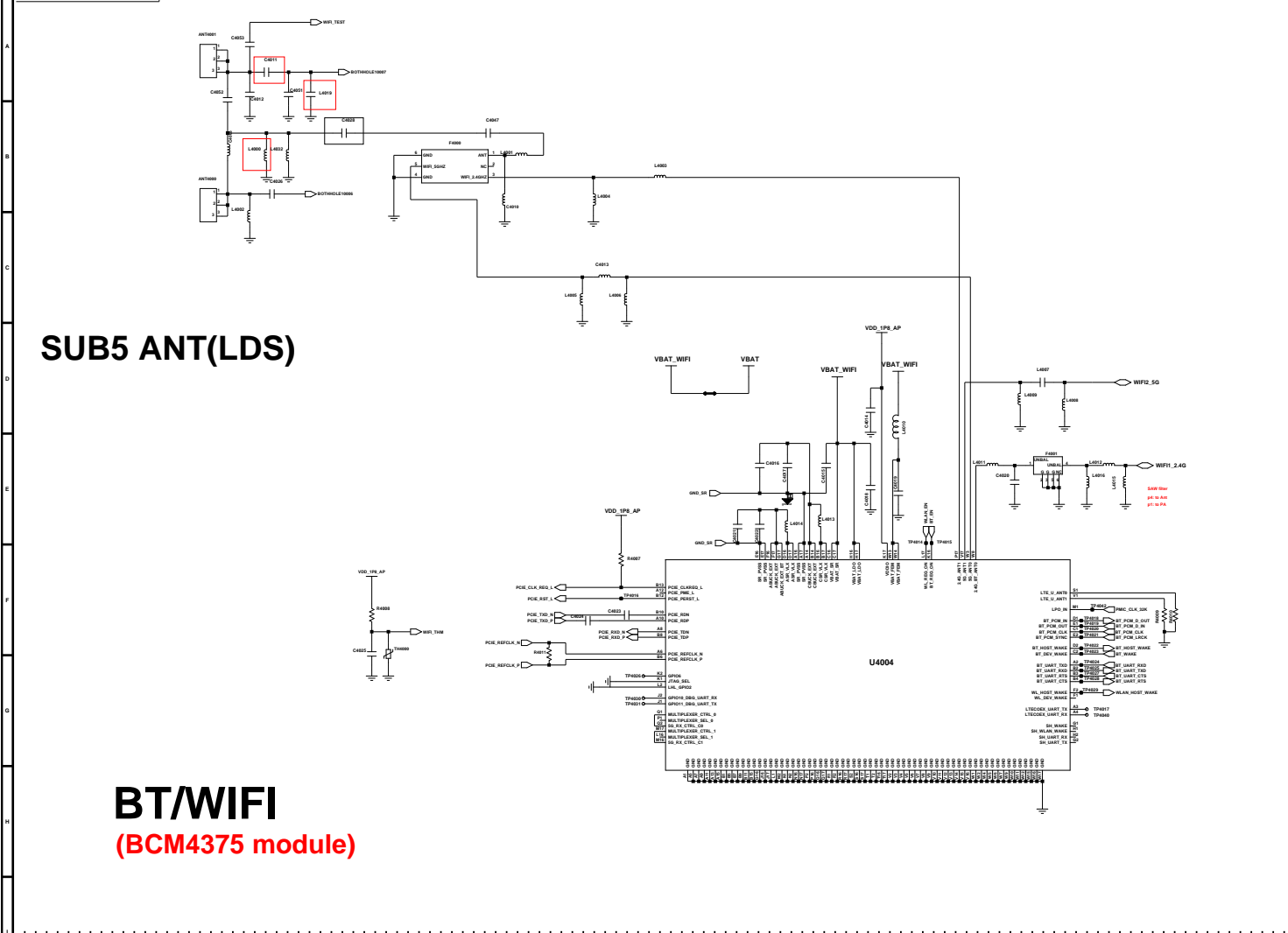


R3003		<b>128G</b>
R3004	 OPEN	<b>256G</b>
R3009		<b>512G</b>

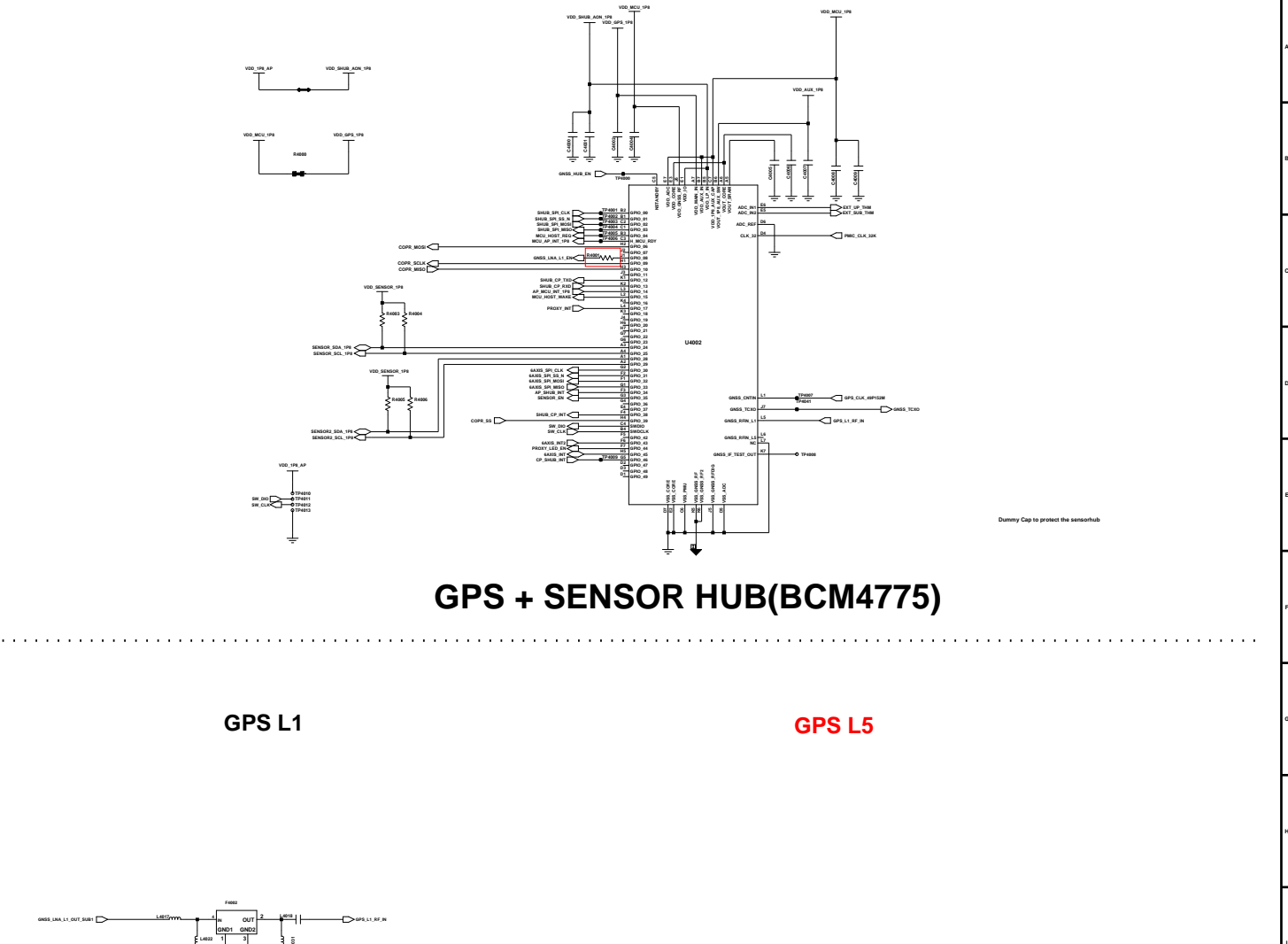
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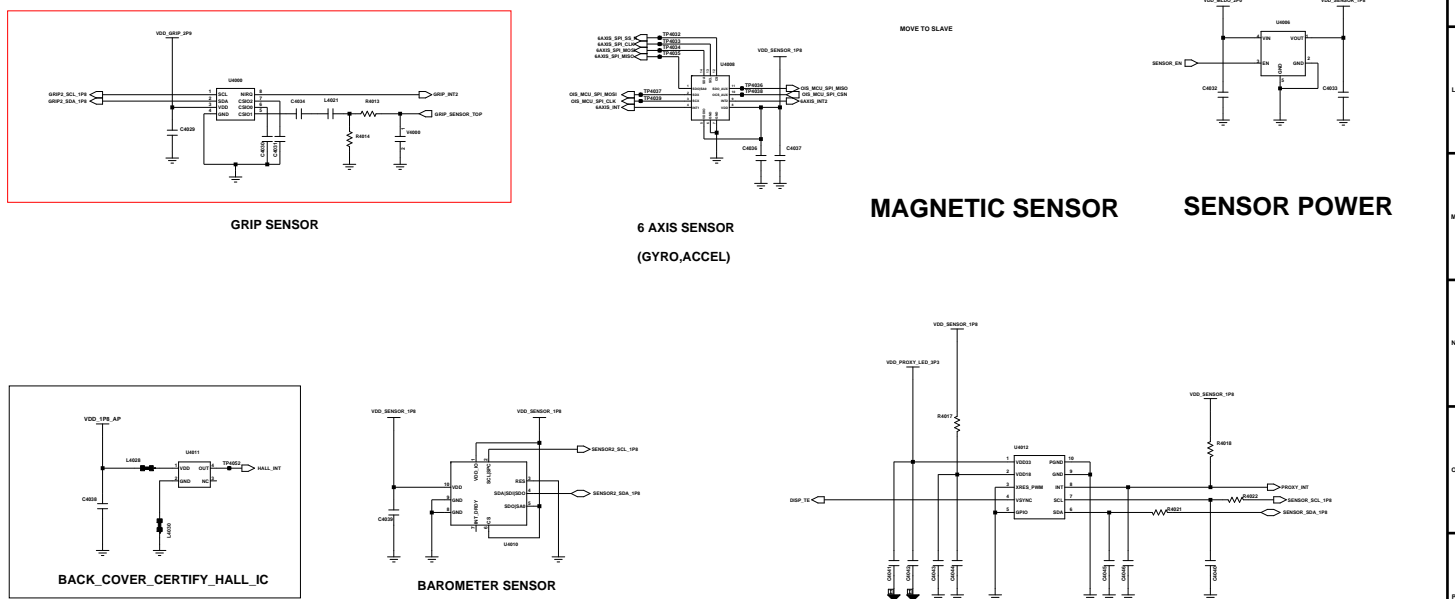
#### 4. CONNECTIVITY / SENSOR

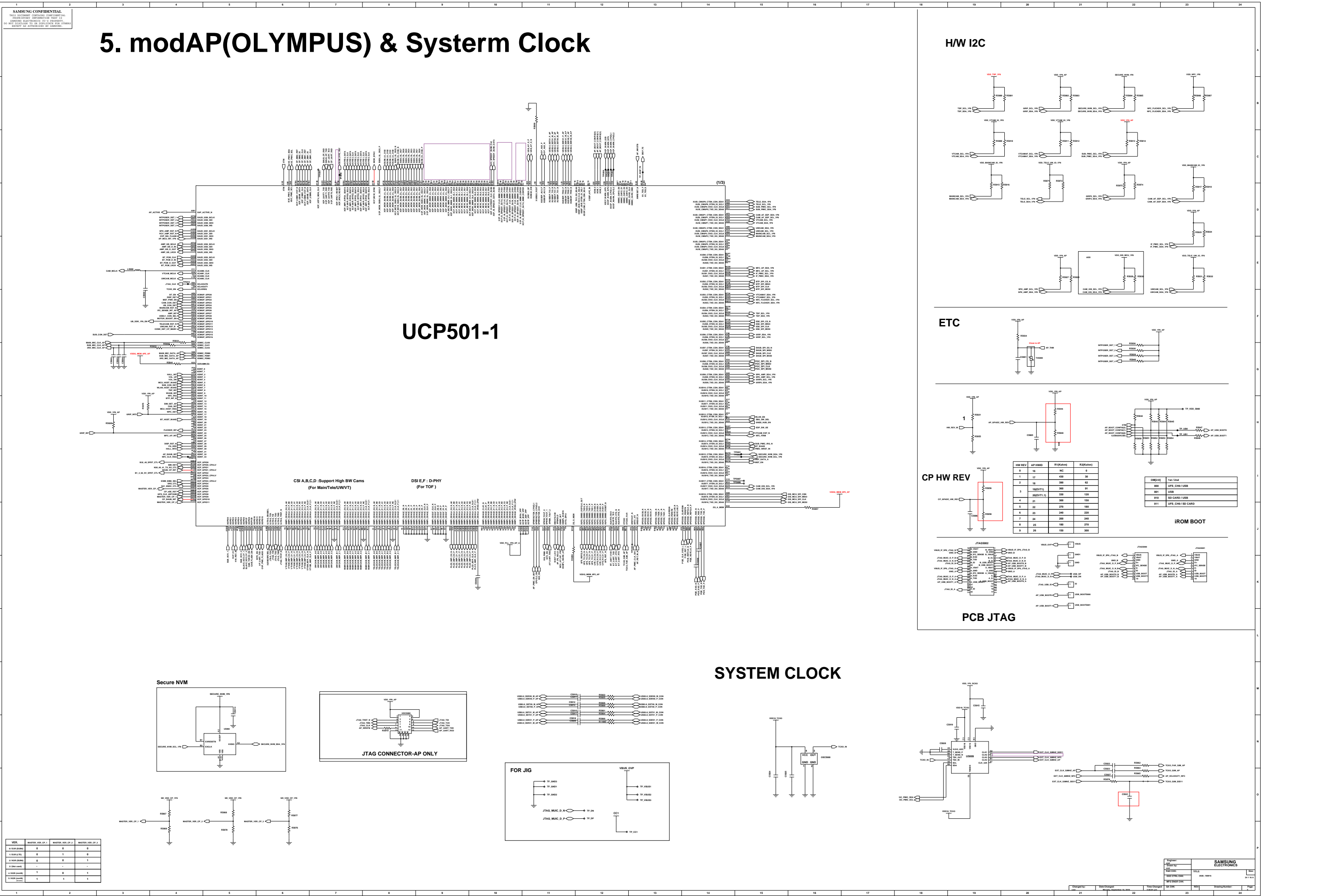


## UWB(For U2)



## SENSORS





# 5. modAP(OLYMPUS) & System Clock

## H/W I2C

## ETC

## CP HW REV

HW REV	AP XREF	R10(Kohm)	R23(Kohm)
0	16	NC	0
1	17	420	30
2	18	390	62
3	19(EVT1)	360	91
4	21	330	120
5	22	270	180
6	23	240	220
7	24	200	240
8	25	180	270
9	26	150	300

## IROM BOOT

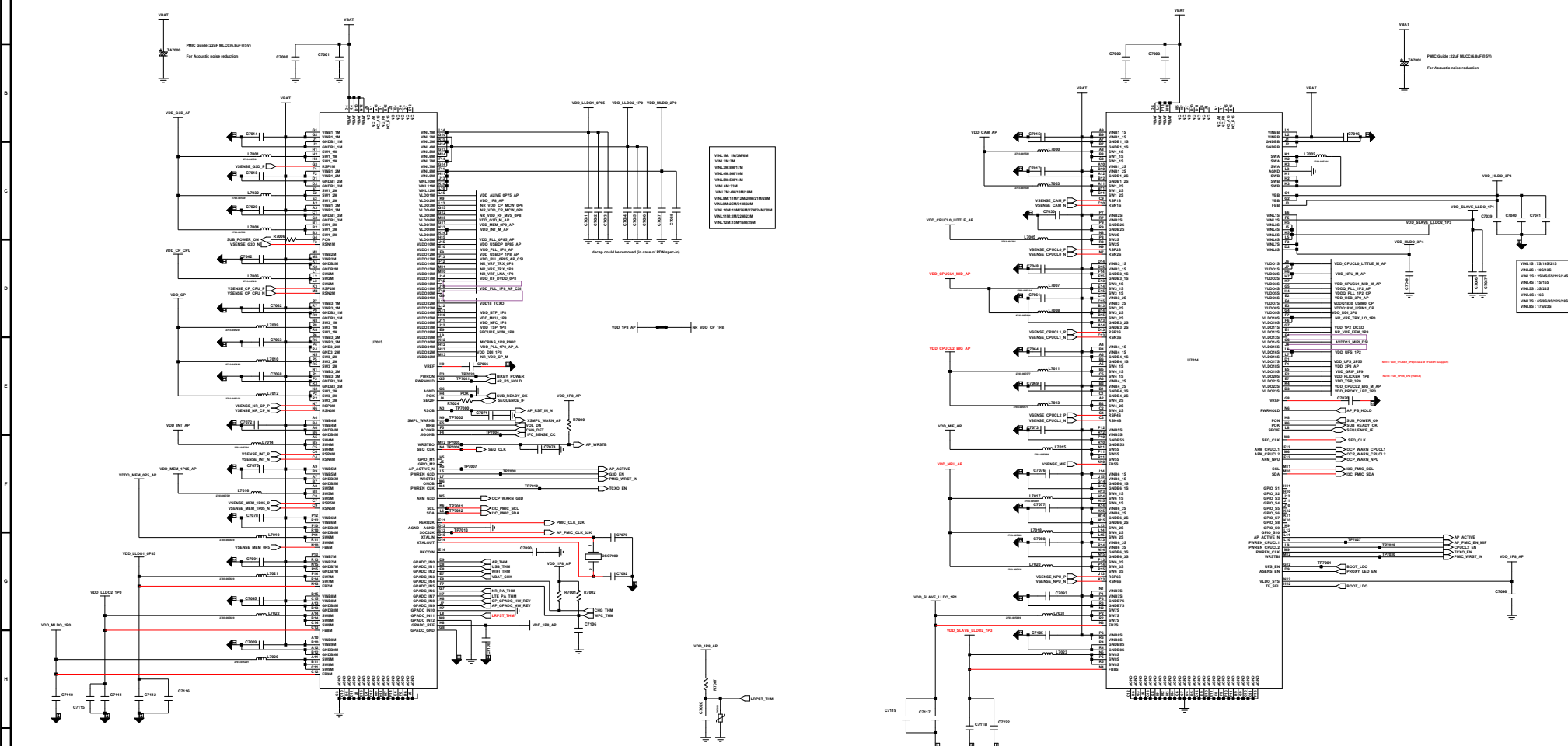
## SYSTEM CLOCK

1. Place de-caps around assigned pins
2. De\_caps could be removed(For powers that meet the Remote\_cap specification )



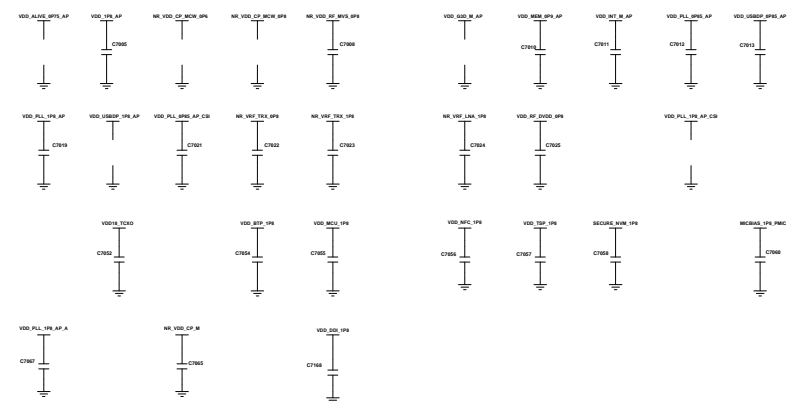
# MASTER

## 7. Power management IC (modAP/peri) & Charging



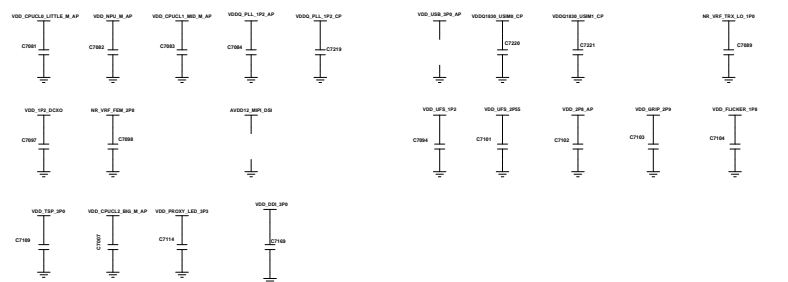
## S2MPS23 PMIC LDO Cap

In case of LDO remote cap spec-in, Decaps could be removed (need to check AP PI spec)

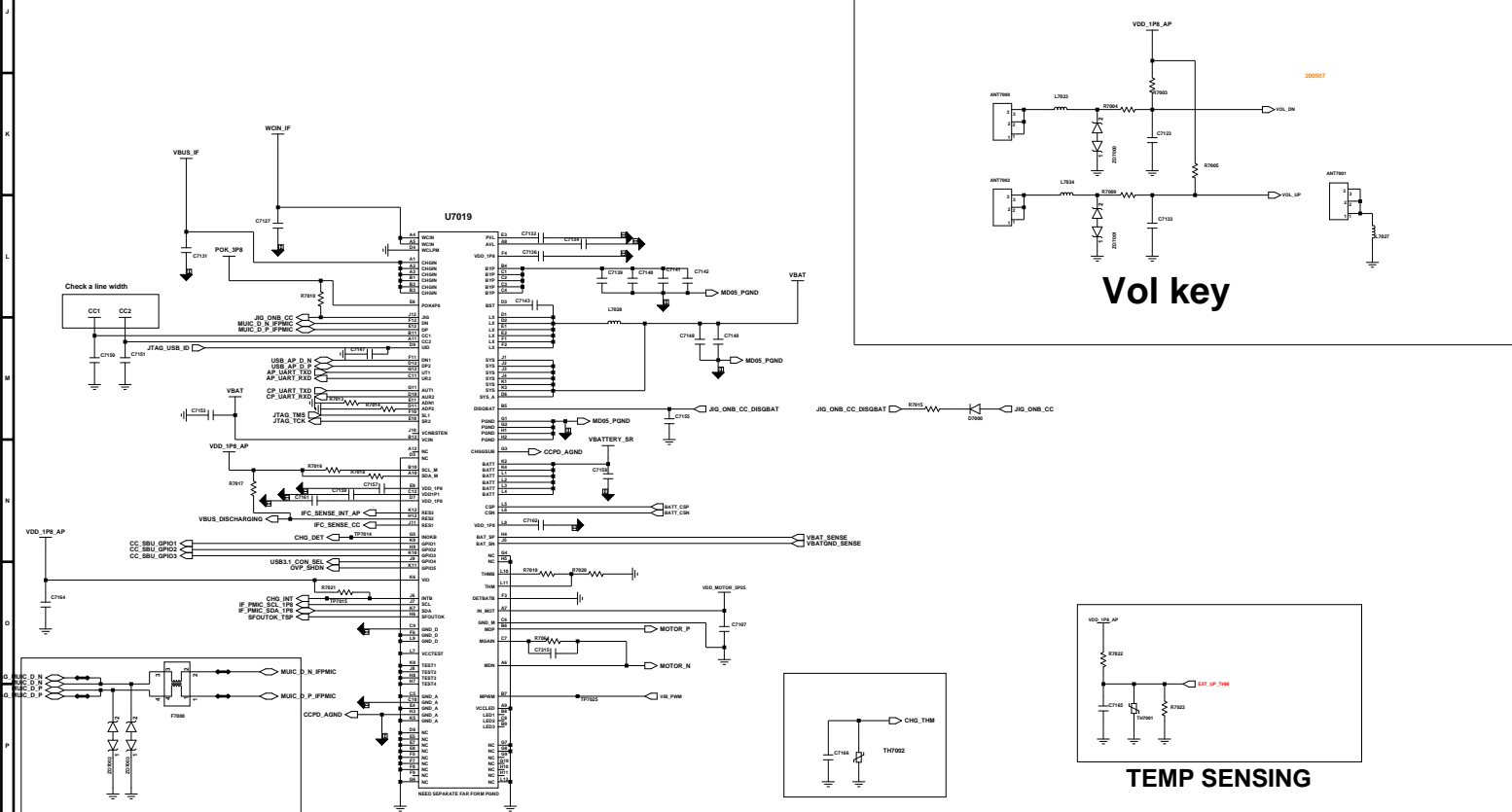


## S2MPS24 PMIC LDO Cap

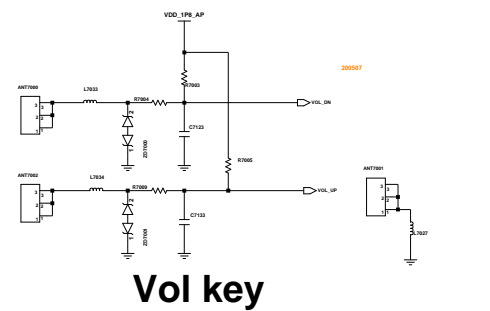
In case of LDO remote cap spec-in, Decapa could be removed (need to check API spec)



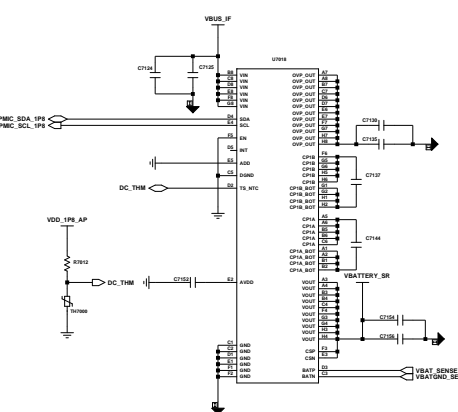
## Interface PMIC



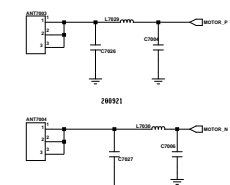
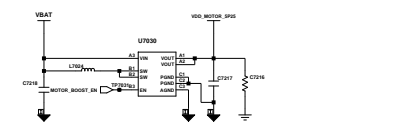
## Direct charger



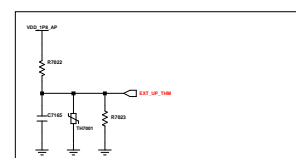
## Vol key



## MOTOR BOOSTER I



## MOTOR contr



## TEMP SENSING



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## 8. AUDIO

C	
D	



**G**



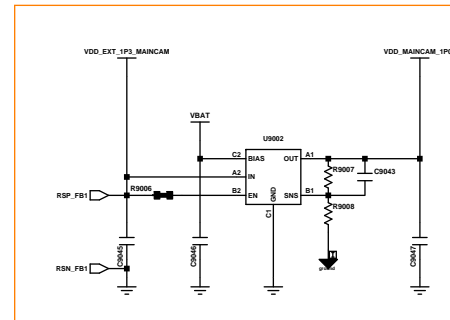
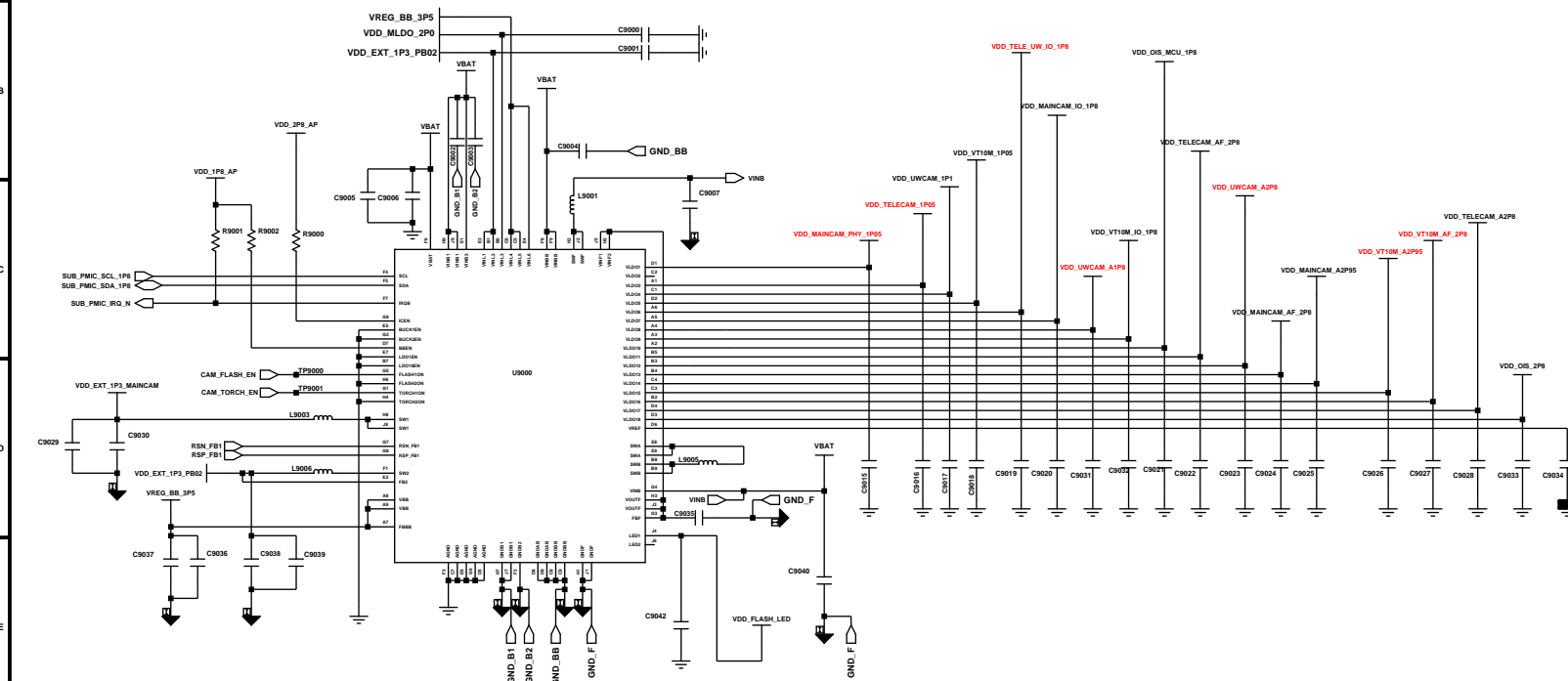
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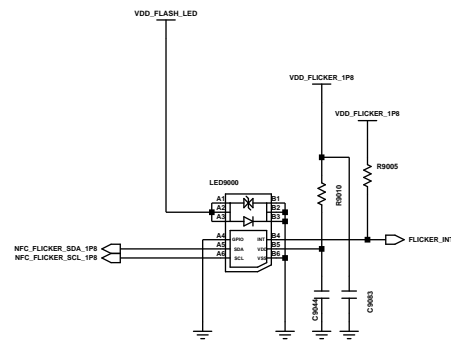
Changed by: lunghun.pac	Date Changed: Monday, February 10, 2020	Time Changed: 4:53:03 pm	QA CHK:	REV	Drawing Number:	Page: 8
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## 9. CAMERA

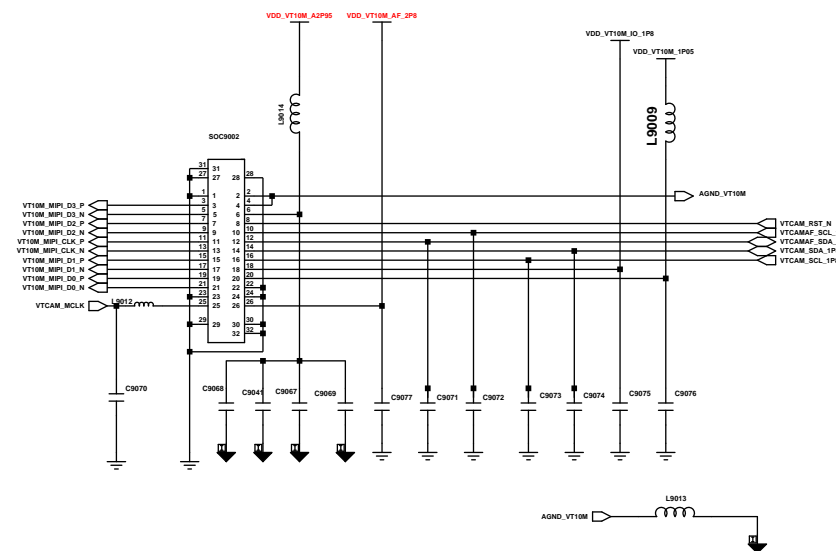
## 1st CAM PMIC(PB02)



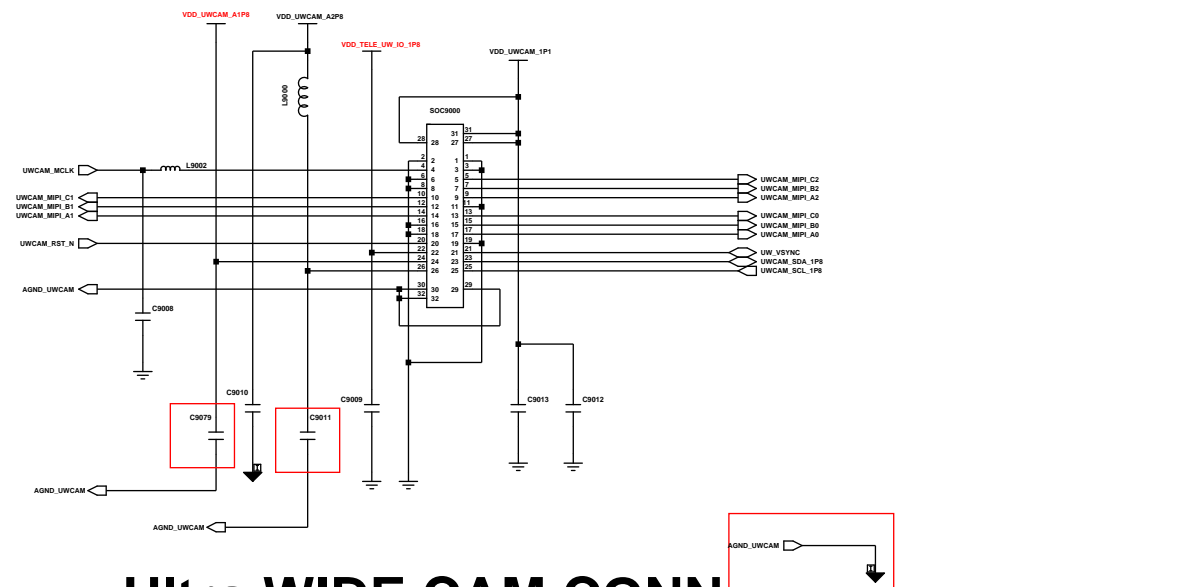
## MainCAM LDO



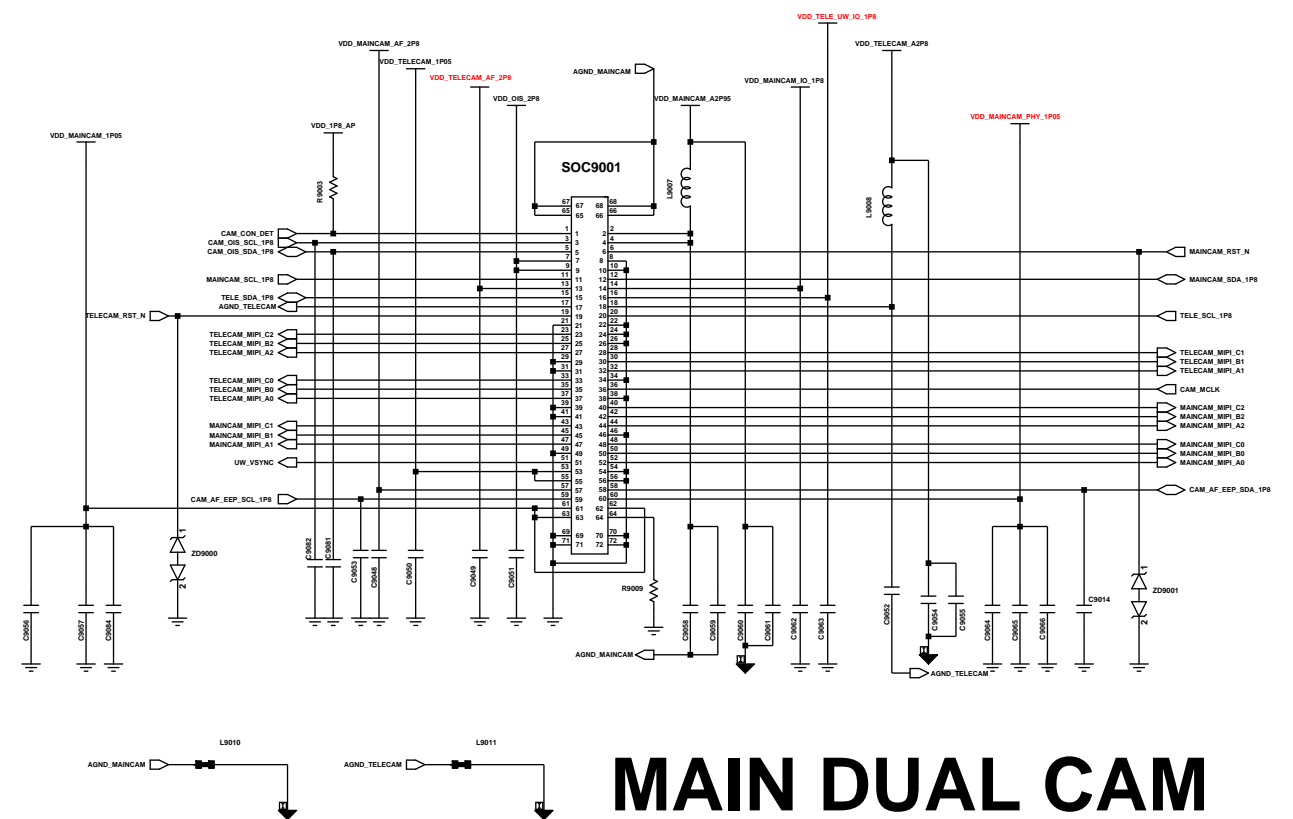
## Flash LED



## FRONT CAM(10M SINGLE)



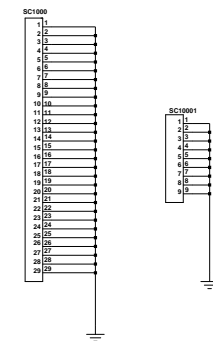
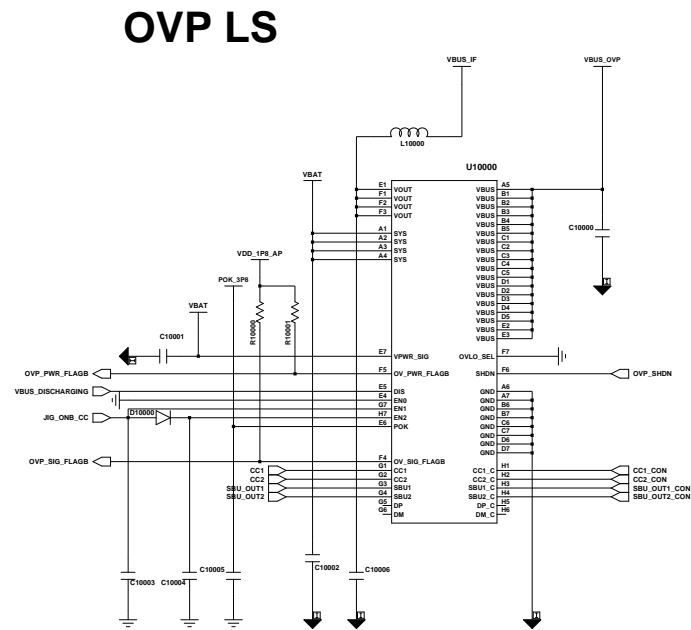
## Ultra WIDE CAM CONN



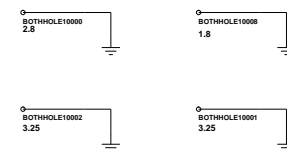
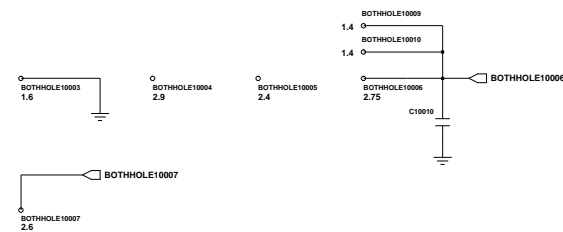
## MAIN DUAL CAM

ENGINEER:			
DRAWN BY:	CAMERA, DISPLAY, MHL		
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DOC CTRL CHK:	DREAM2_KANGCHEN		
MFG ENGR CHK:			
QI CHK:	REV:	DRAWING NUMBER:	PAGE:

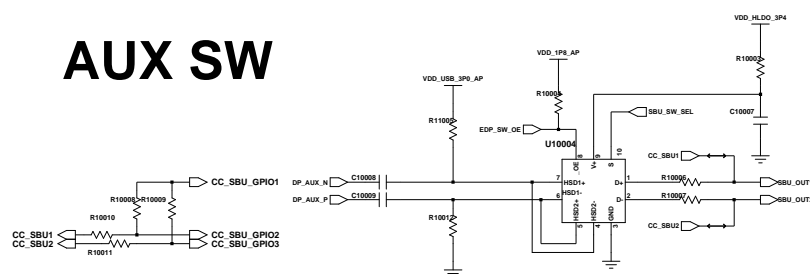
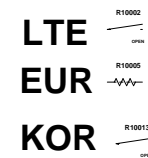
# MASTER



# Shieldcan



## BOSS HOLE

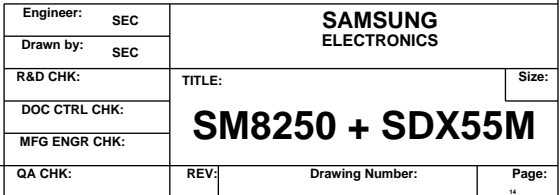


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R&D CHK:	TITLE:		
DOC CTRL CHK:	DREAM_REV00_KOR_0512		
MFG ENGR CHK:			
QA CHK:	REV:	Drawing Number:	Page: 10

# 11.DISPLAY

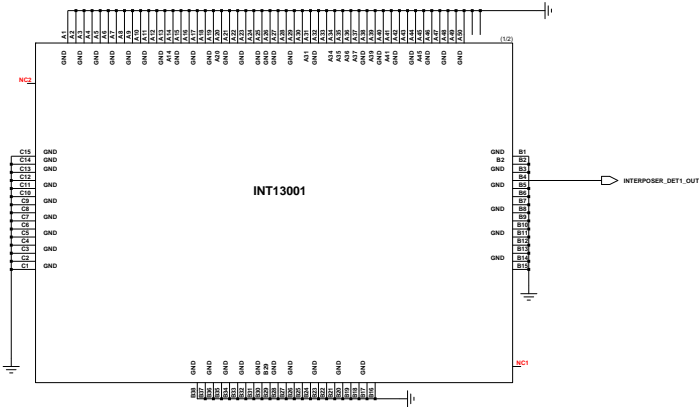
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# INTERPOSER



Engineer:	SEC	SAMSUNG ELECTRONICS	
Drawn by:	SEC		
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DOC CTRL CHK:		SM8250 + SDX55M	
MFG ENGR CHK:			
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			Page:

Changed by:	Date Changed:
ced	Thursday, December 1, 2016

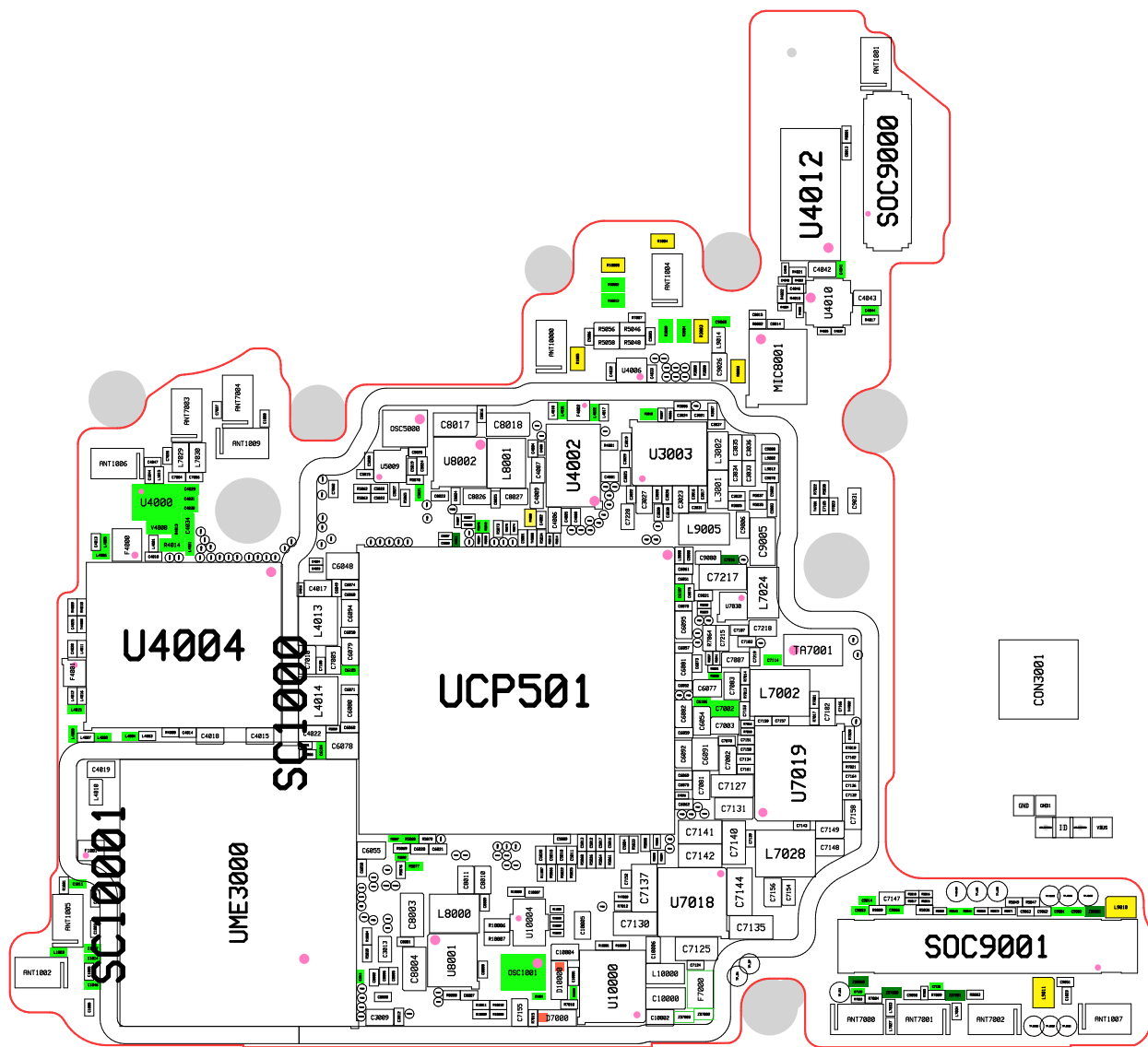
Time Changed:

3:17:21 pm

14







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01\_LSI\_SLAVE

2020.11.05

sheet01 : RF (1/2)

sheet02 : RF (2/2)

sheet03 : LOWER SUB CONN, DISPLAY CONN, Audio part

sheet04 : CHARGER part, MST/NFC/WPC CONN, BAT CONN

sheet05 : INTERPOSER

sheet06 : INTERPOSER

Engineer:

Drawn by:

REQ CHK:

DOC CTRL CHK:

MFG ENGGR CHK:

TITLE:

Size:

Changed by:

Date Changed:

Time Changed:

QA CHK:

REV

Drawing Number:

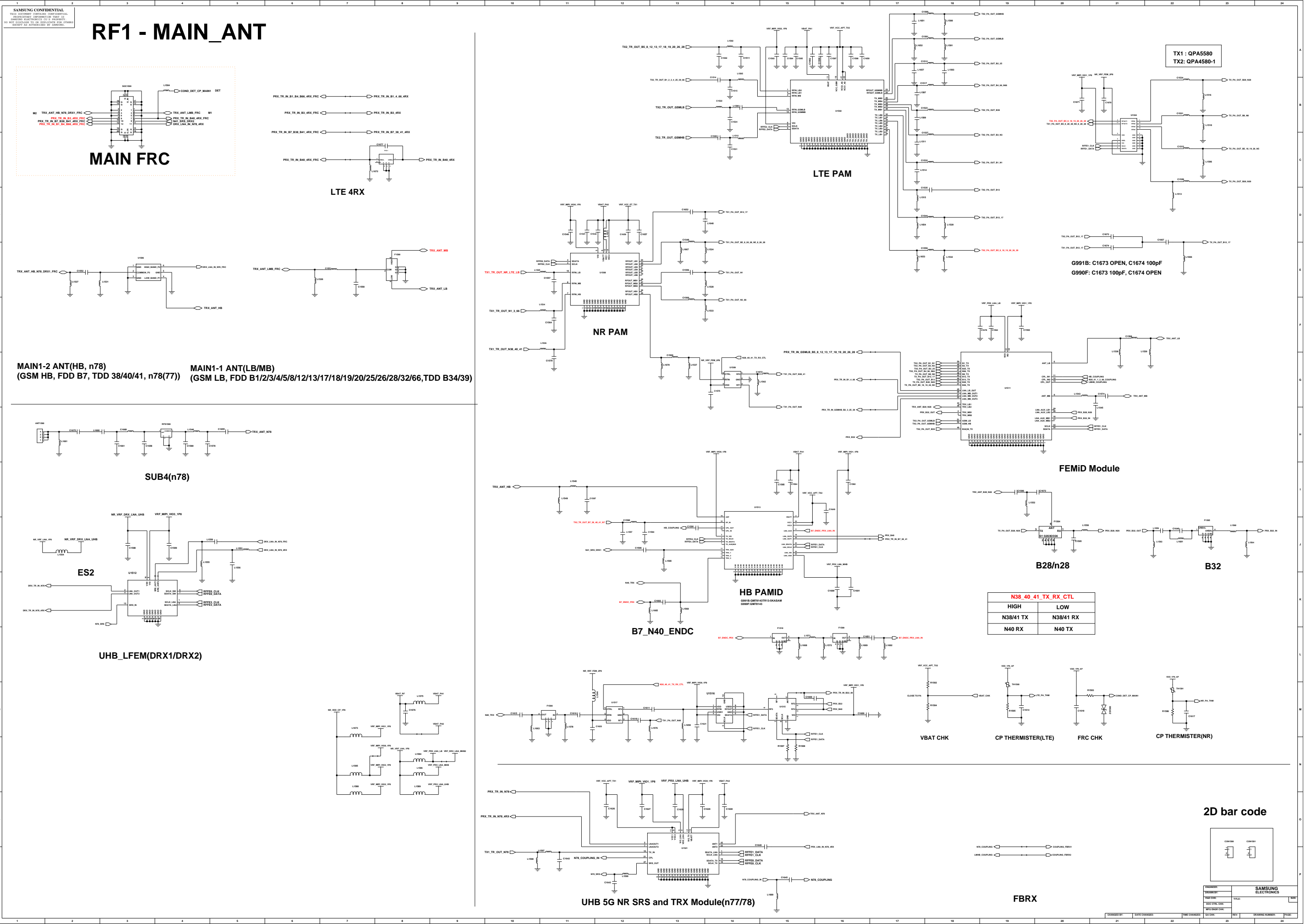
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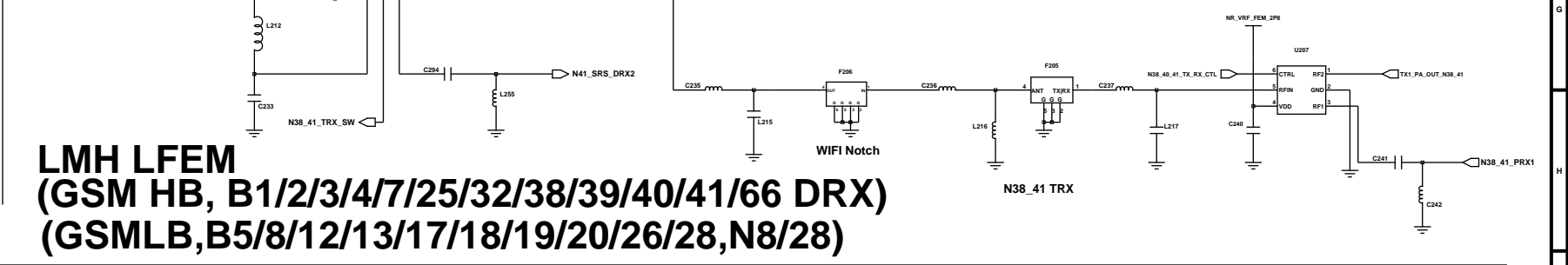
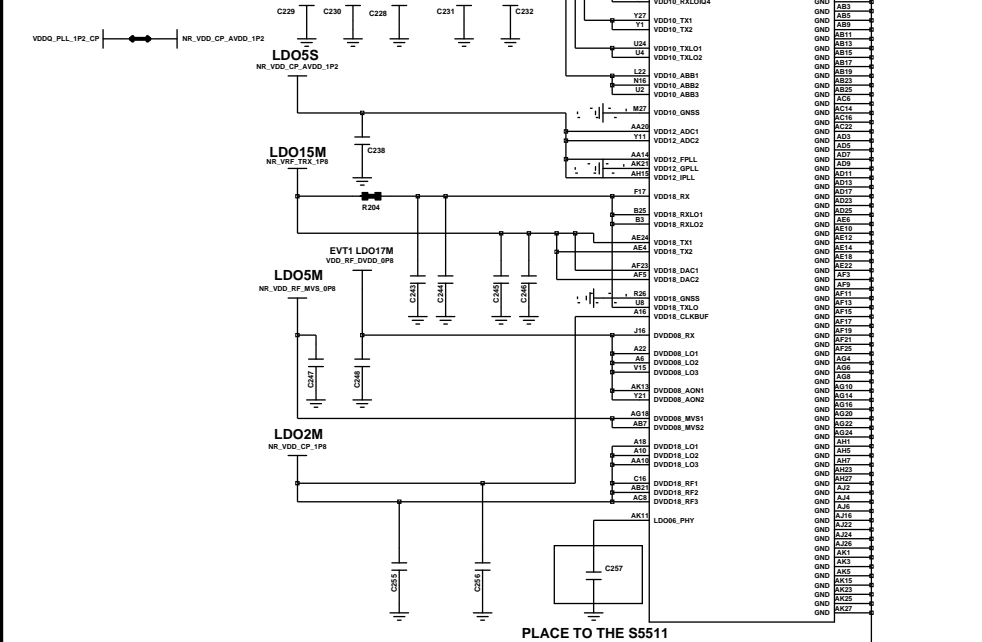
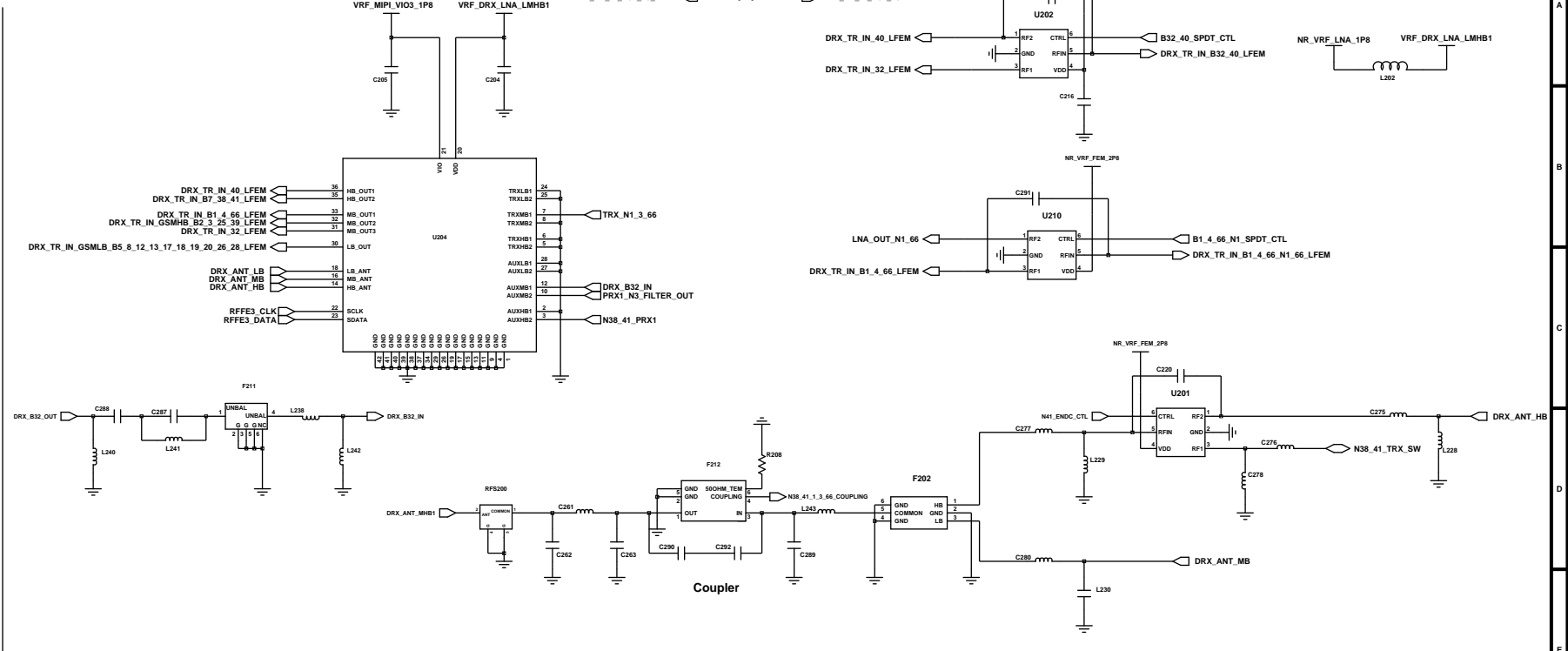
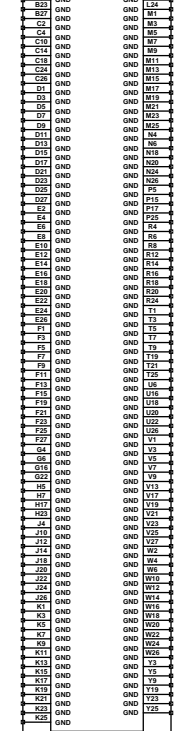
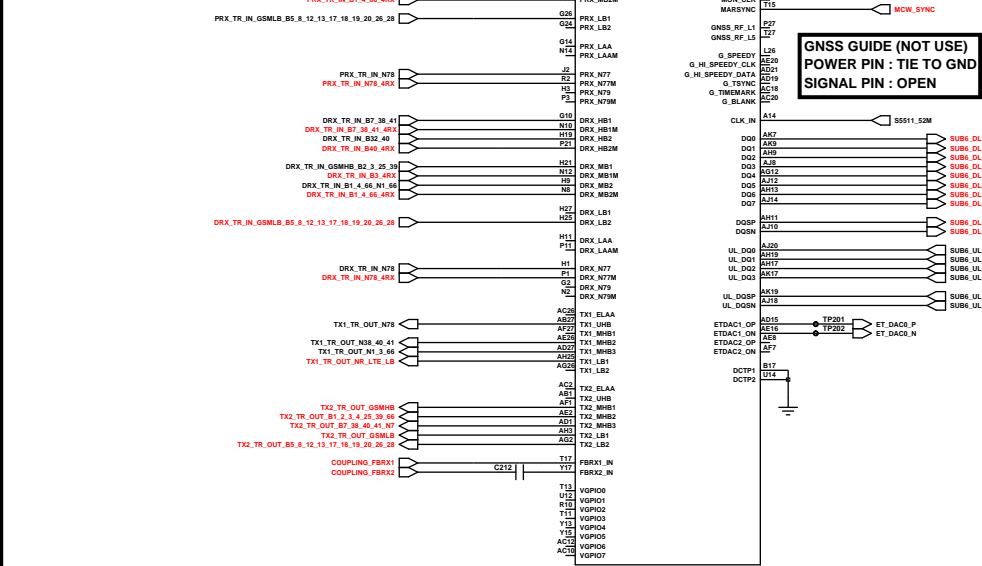
# O1\_LSI\_SLAVE

2020.11.05

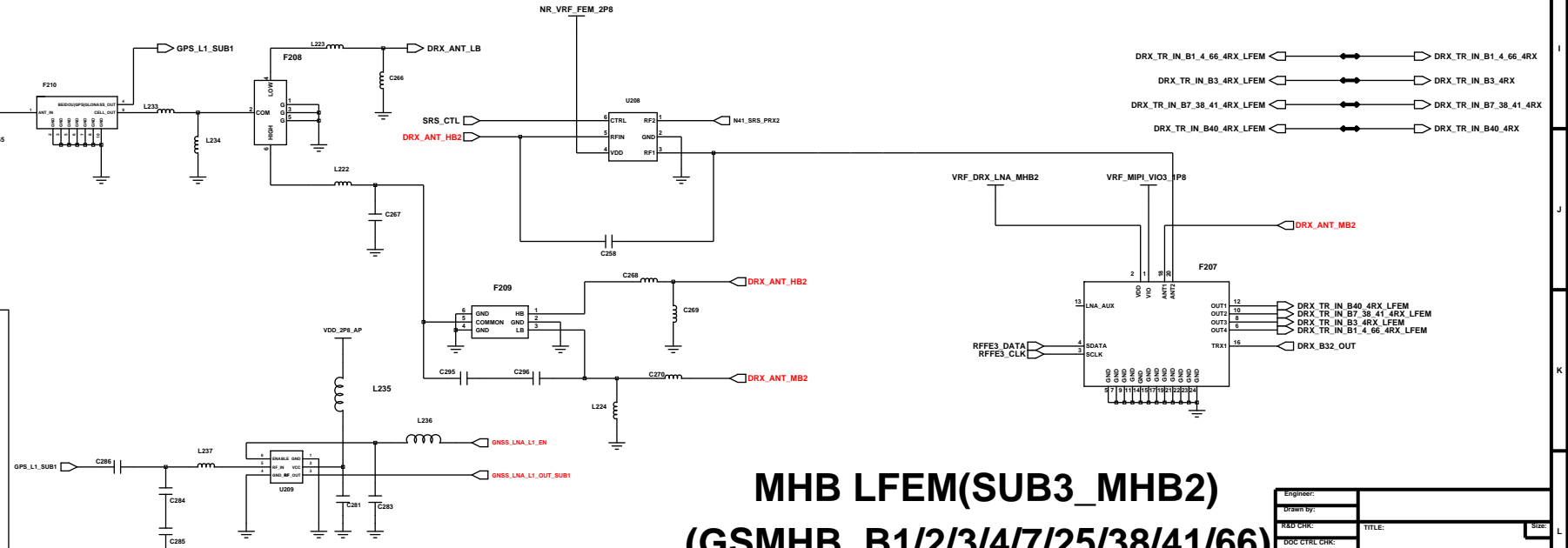
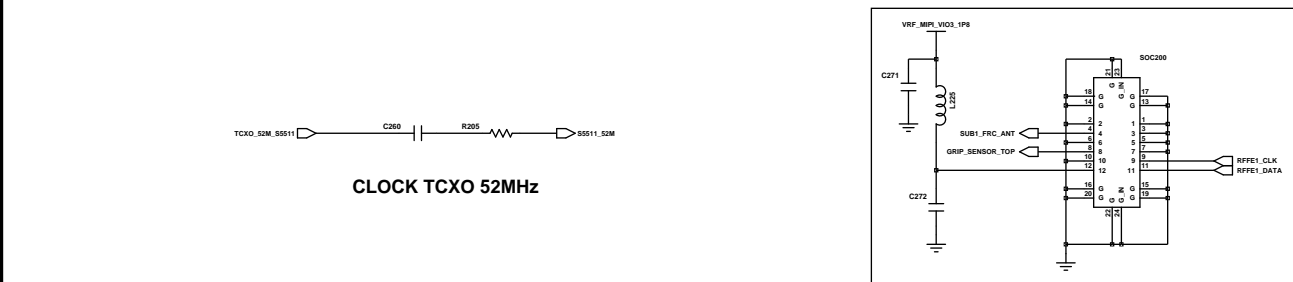
- sheet01 : RF (1/2)
- sheet02 : RF (2/2)
- sheet03 : LOWER SUB CONN, DISPLAY CONN, Audio part
- sheet04 : CHARGER part, MST/NFC/WPC CONN, BAT CONN
- sheet05 : INTERPOSER
- sheet06 : INTERPOSER

Engineer:			
Drawn by:			
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MFG ENGR CHK:			





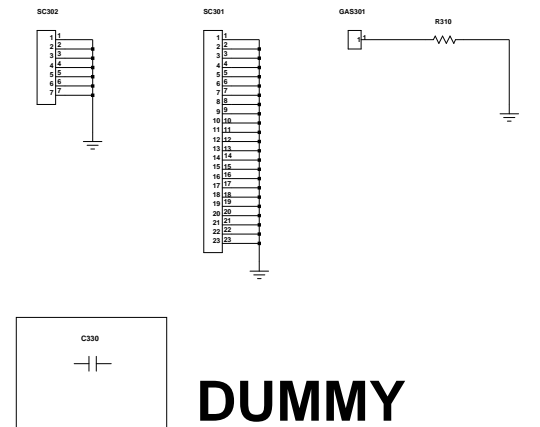
**LMH LFEM**  
**(GSM HB, B1/2/3/4/7/25/32/38/39/40/41/66 DRX)**  
**(GSMLB, B5/8/12/13/17/18/19/20/26/28, N8/28)**



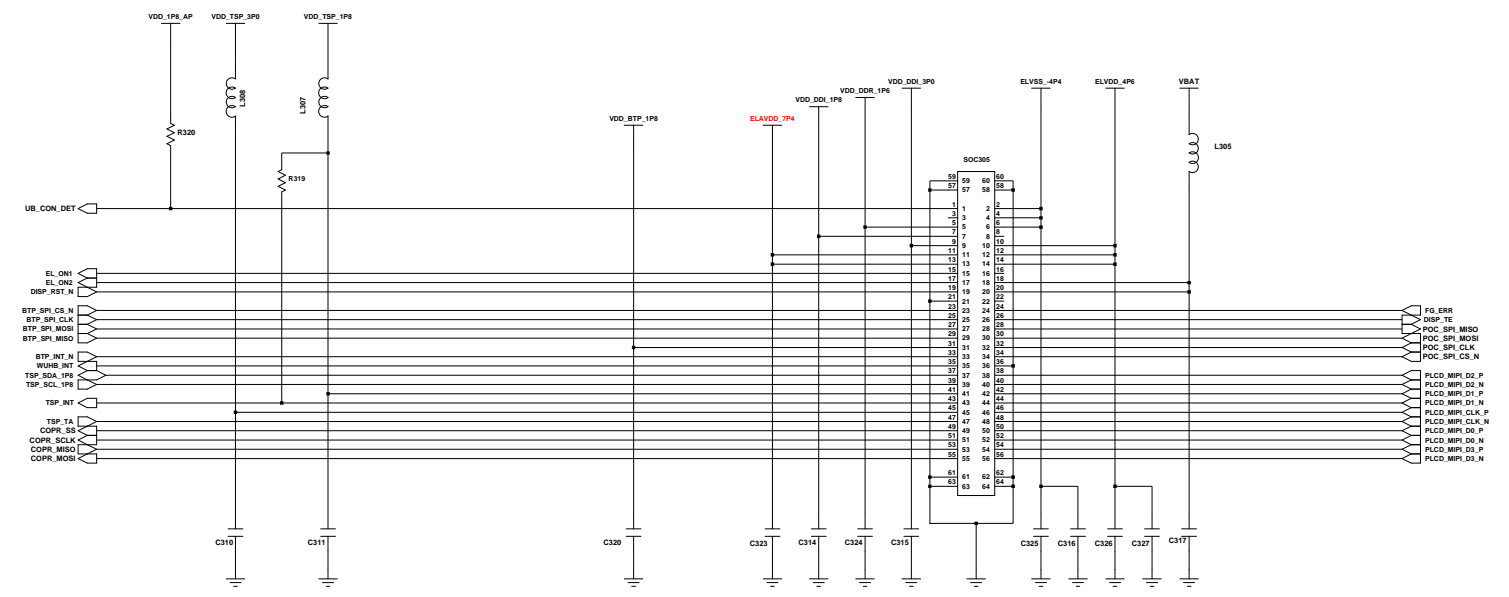
**MHB LFEM(SUB3\_MHB2)**  
**(GSMHB, B1/2/3/4/7/25/38/41/66)**

Engineer:		
Drawn by:		
R&D CHK:	TITLE:	Size:
DOC CTRL CHK:		
MFG ENGR CHK:		

# DUMMY



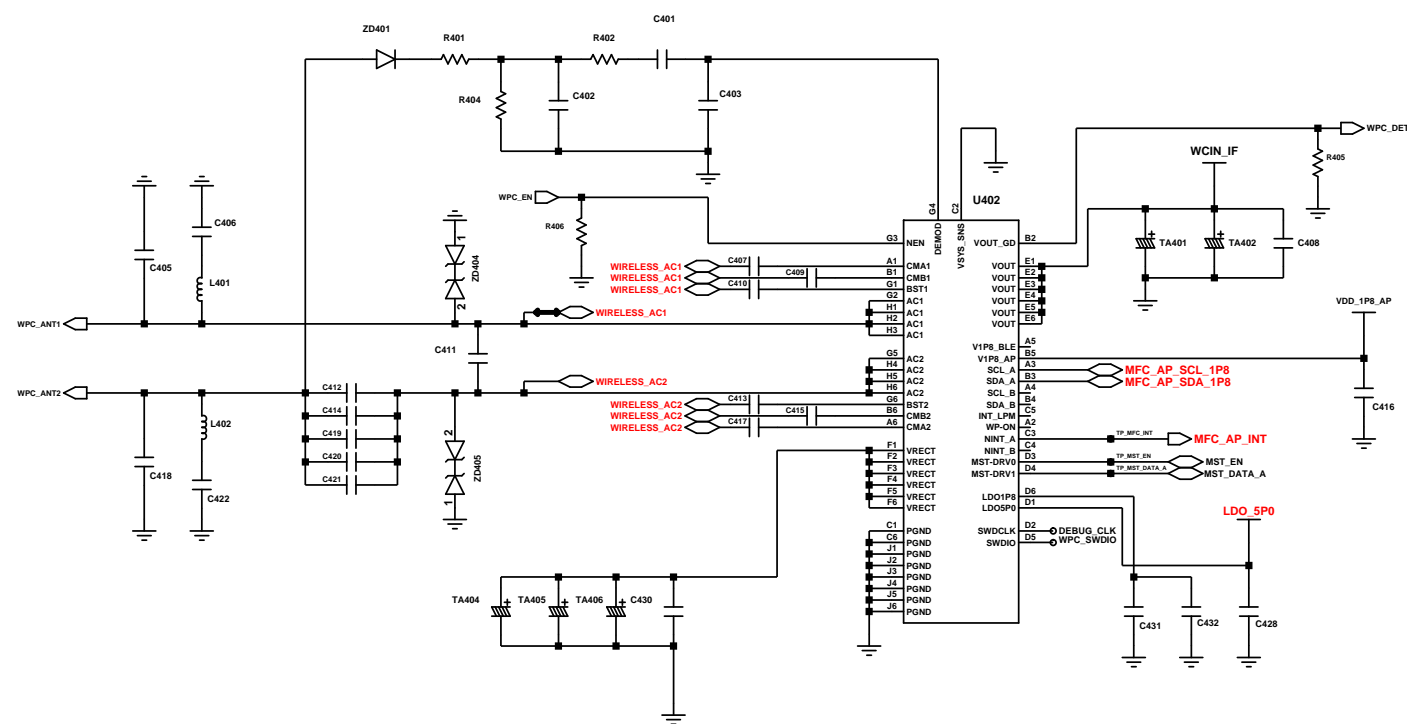
## RCV Conn.



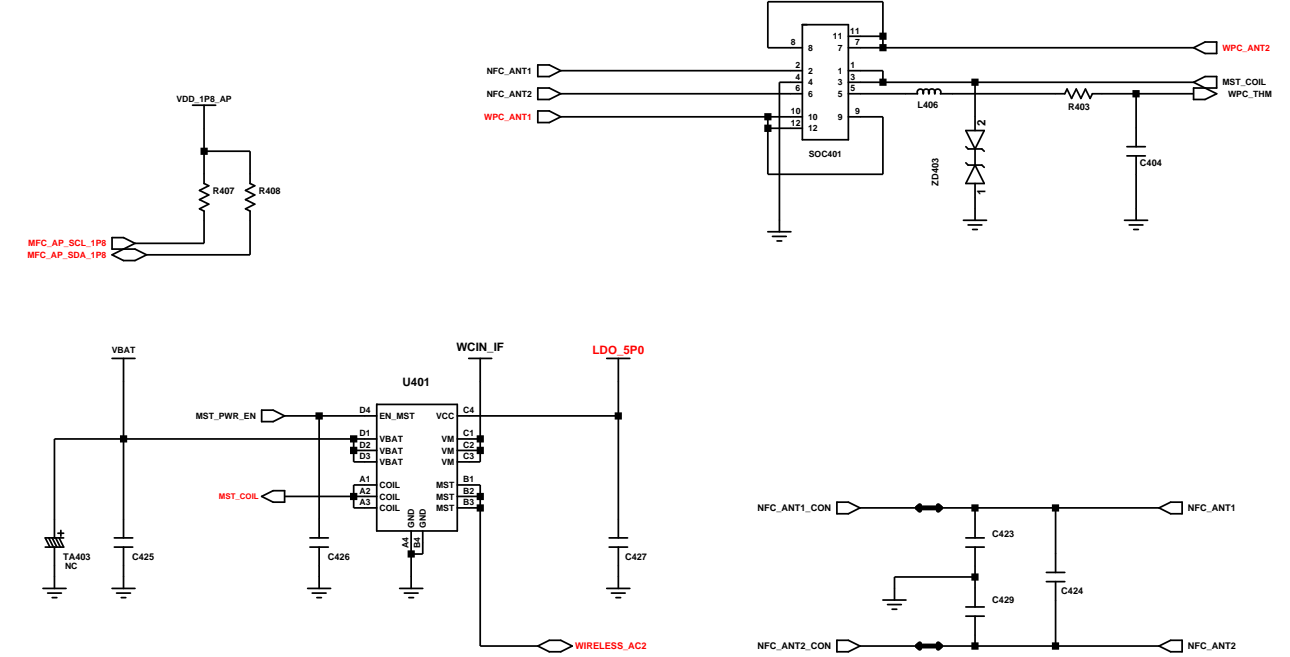
## DISPLAY CONNECTOR

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## MST,NFC,WPC Conn



## WIRELESS CHARGER IC

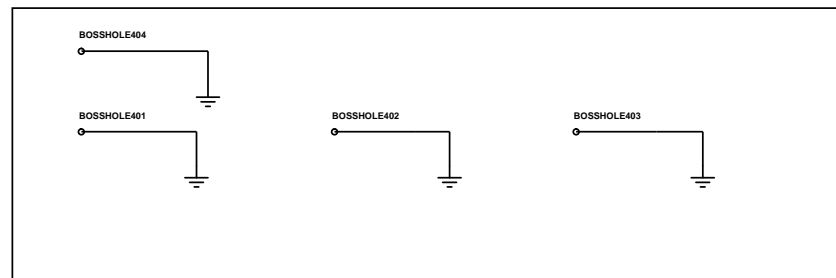
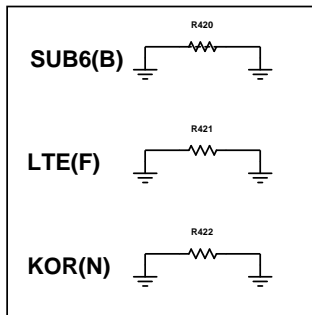


## MST SWITCH

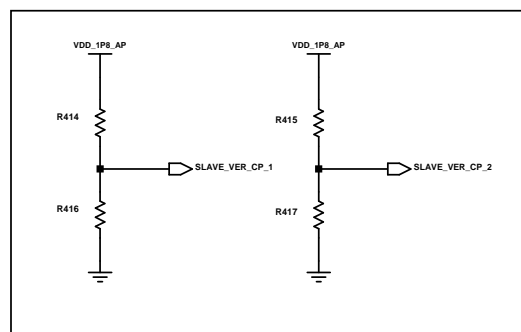
**FOR NFC**



## Boss Hole

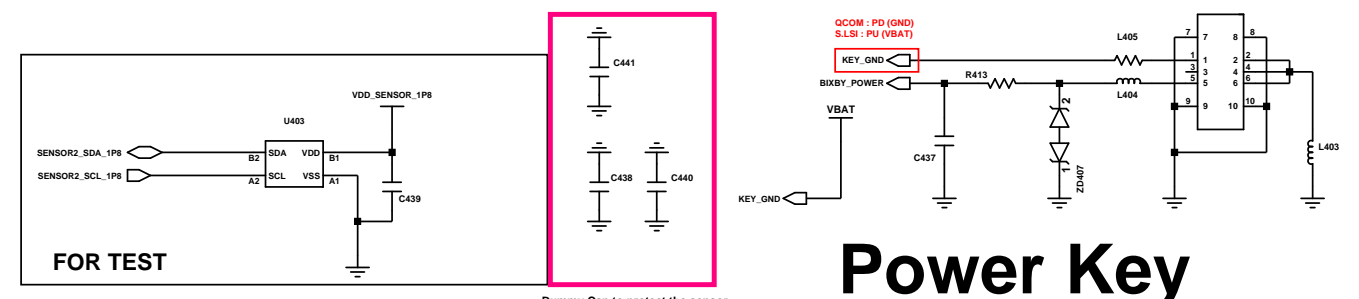
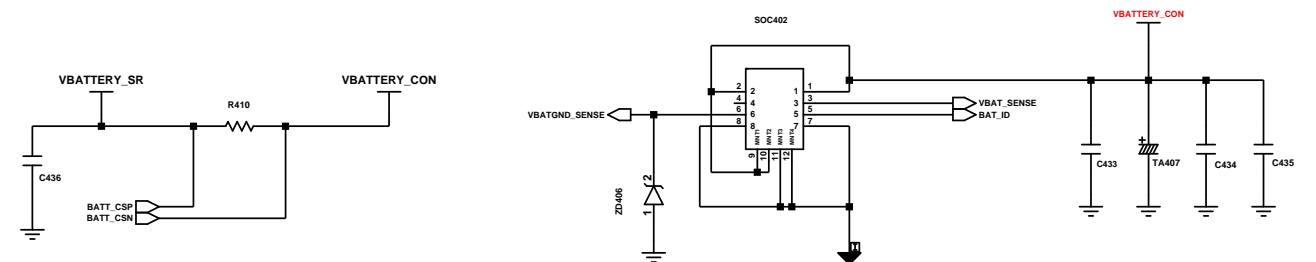


## MODEL Check




		SLAVE_VER_CP_1			SLAVE_VER_CP_2			M/M
			R414	R416		R415	R417	0 ohm
	SUB6	0	open	100K	0	open	100K	R420
	LTE	0	open	100K	1	100K	open	R421
	KOR	1	100K	open	0	open	100K	R422

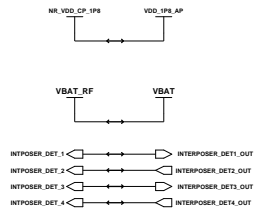
## BATTERY CONNECTOR




## MAGNETIC SENSOR

## Power Key

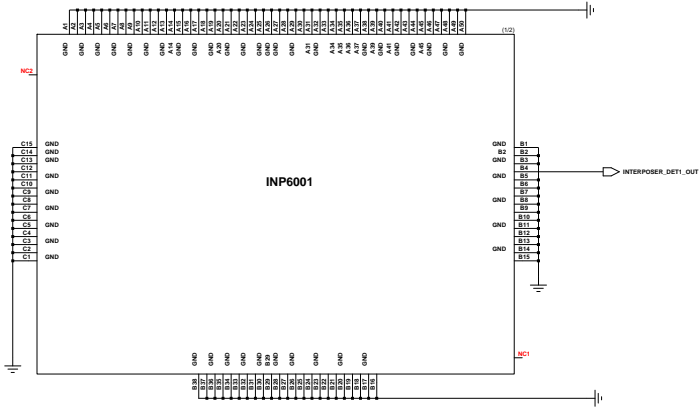
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Drawn by:			
R&D CHK:	TITLE:	Size:	
DOC CTRL CHK:			
MFG ENGR CHK:			
QA CHK:			



Engineer:	<div style="text-align: center;">  </div>		
Drawn by:			
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**INP5000**

This schematic diagram illustrates the layout of a printed circuit board (PCB) for two components, INP5000 and INP6001. The INP5000 component is represented by a large, irregularly shaped area on the left, outlined in red. It contains four connection points labeled CN401, CN402, CN403, and CON1500. CN401 and CN402 are L-shaped connectors on the left side, while CN403 is an L-shaped connector on the top right. CON1500 is a rectangular connector on the right side. The INP6001 component is a smaller, rectangular area on the right, also outlined in red. It features a connection point labeled CN404 on its right side. The entire layout is enclosed within a red border, with three circular mounting holes visible: one at the top left, one at the top right, and one at the bottom center. The text 'INP5000' is prominently displayed at the top left, and 'INP6001' is displayed at the bottom right.

CN402

CN403

CON1500

CN401

**INP6001**

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