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ROSELA LABS

SM-G928X_REV0.6_LDU

2015.07.02

	PAM1000	U9407	RF part	U9344 R5100/R5101 UCP302 R3035/R3036	SIM5000/SIM5001 R3013/R3457 R5093/R5094
928F/3CA/SS	LNTM1TFQ-HZ6	MFDRX14LJB-301	BAND 28	3CA S5M933DA02-6031 R3035 3CA SA5333DA01-L030 R5100	SIM5000 R5094 R3019
928C/2CA/SS	LNTM1TFQ-HZ6	MFDRX14LJB-301	BAND 28	2CA S5M933DA02-6331 R3036 2CA SA5333DA01-L330 R5101	SIM5000 R5094 R3019
928I/3CA/SS	SKY78042	MFDRX14LJB-304	BAND 28 + BAND 40	3CA S5M933DA02-6031 R3035 3CA SA5333DA01-L030 R5100	SIM5000 R5094 R3019
928G/2CA/SS	SKY78042	MFDRX14LJB-304	BAND 28 + BAND 40	2CA S5M933DA02-6331 R3036 2CA SA5333DA01-L330 R5101	SIM5000 R5094 R3019
928C/2CA/DS	SKY78042	MFDRX14LJB-304	BAND 28 + BAND 40/41	2CA S5M933DA02-6331 R3036 2CA SA5333DA01-L330 R5101	SIM5001 R5093 R3457

sheet01 : GSM / WCDMA / LTE RF
sheet02 : TRANCEIVER, DRX
sheet03 : S333, CP_PMIC
sheet04 : SENSORS, HUB, GPS, BT/WIFI, NFC
sheet05 : AP(ISTOR), SIM SOCKET
sheet06 : AP(ISTOR) POWER PART
sheet07 : AP PMIC, SUB PMIC, Wireless Charging, MST
sheet08 : AUDIO, SUB PCB CON.
sheet09 : CAMERA, DISPLAY, DCDC

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Engineer:
Initial Rel.:
R&D CHK:
DOC CTRL CHK:
MFG ENGR CHK:
QA CHK:
TITLE: SM-G928X_LDU
SIZE: A1
REV:
Drawing Number:
Page:
Changed by (ecid):
Date Changed:
Time Changed:

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BARCODE

Coaxial to u-USB PCB

LB/MB ANT PATH

AU LB ANT Matching
U9403 : 27nH
C1014 : 3.3nH
C1016 : 1.2pF

NC

EU/MA/SEA1 : LMTWHTFA-H26
AU/LA/SWA/SEA2 : SKY78042

LB PAMID

Coaxial to u-USB PCB

AU HB ANT Matching
L1071 : 100pF

HB ANT PATH

(For G928F)

(For G928I,G9287C)

B1 Rx LNA / Post SAW Circuit

B3 Rx LNA / Post SAW Circuit

PART_NUM	RF_MIPI_SEL_VAL
TO_CP	0
TO_RFIC	1

MB_GPI_SEL1	MB_GPI_SEL0	MODE
0	1	LB_CPL
1	0	HB_CPL
1	1	MB_CPL

POWER DETECT CIRCUIT

EU/MA/SEA : AFEM-9025-SG1

MB PAMID

NC : For HK / TW

B1-B3 CA

BAND40 Tx/Rx

Only 928I
C1135 : 100pF

Only 9287C
C1135 : open

(For G928I)

BAND41 Tx/Rx

MODE	TX_BAND_SEL_VAL
B40_TX	0
B41_TX	1

LTE-TDD B40/B41 PA

(For G9287C)

HB PA/PAD

B7 Rx LNA Module

B7 PAD

ISOLATION

ISOLATION

S710 ET MODULATOR

RF MAIN ANT / TX / PRX / ET

SM-G928X_LDU

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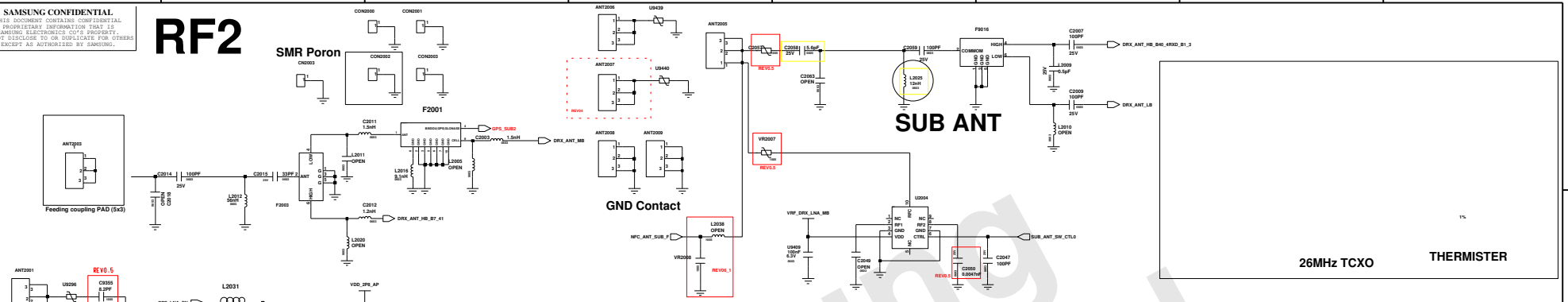
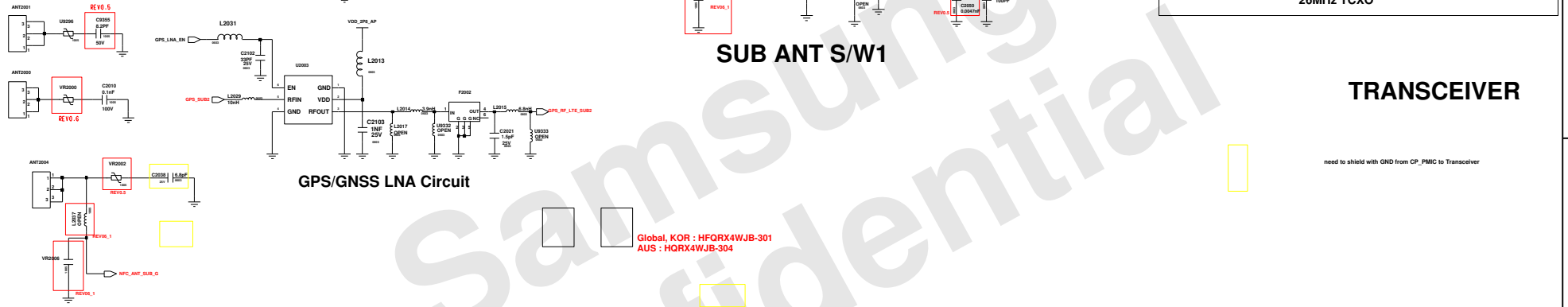
RF2



SUB ANT S/W1



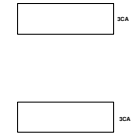
GPS/GNSS LNA Circuit

Global, KOR : HFQRX4WJB-301
AUS : HQRX4WJB-304

SUB ANT S/W2

LB LFEM

(EUR BAND 5/8/12/17/18/19/20/26)
(AUS BAND 5/8/12/17/18/19/26/28)



2CA S5M933DA02-6331
3CA S5M933DA02-6031

Share GND V15_T15_T13
Share GND V9_T9_U10

NC : For HK / TW

MB LFEM

(EUR BAND 1/2/3/4)
(AUS BAND 1/2/3/4)

EU/MA/SEA : HFQRXEVJB-303

HB LFEM

(EUR BAND 7 + 4RXD 1/3)
(AUS BAND 7/40 + 4RXD 1/3)

Engineer	RF DIVERSITY ANT / DRX / RFIC / GPS
Drawn by	
R&D CHK	
DOC CTRL CHK	
MFG ENGR CHK	
TITLE	SM-G928X_LDU
Size	A2

Changed by	Date Changed	Time Changed	QA CHK	REV	Drawing Number	Sheet

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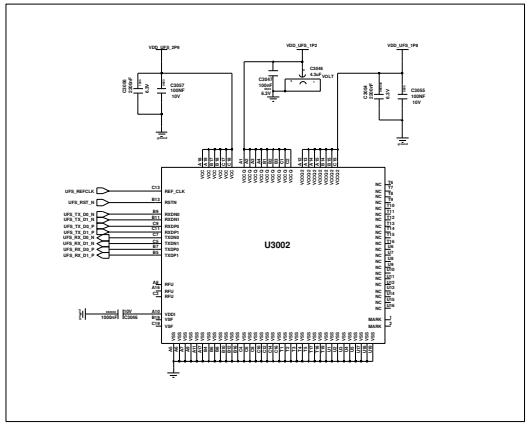
CP PART (S333)

CP PMIC



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CP HW VER

0110

REV0.0	0010	DV1
REV0.1	0011	DV2
REV0.2	0100	PV1
REV0.3	0101	PV2
REV0.4	0110	PV2_1

CP JTAG

Engineer:	
ENGR Sign:	
R&D CHK:	
DOC CTRL CHK:	
MFG ENGR CHK:	
QA CHK:	

CP, CP PMIC

TITLE: SM-G928X_LDU

SIZE: A1

Changed by: (MEITA)	Date Changed:	Time Changed:	Rev:	Drawing Number:	Page:

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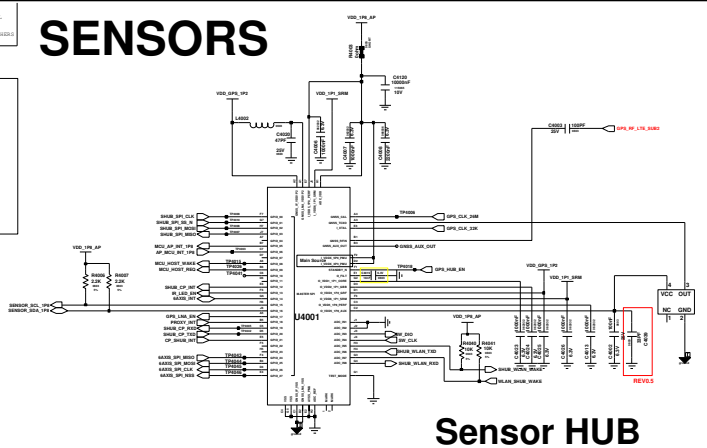
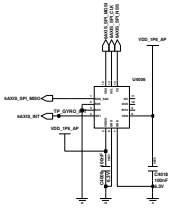
SENSORS

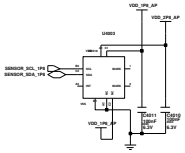
Debug port



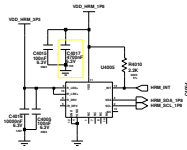
Sensor HUB



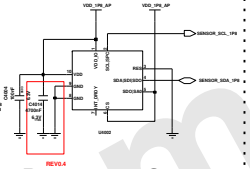
6 Axis Sensor
(GYRO,ACCEL)



Magnetic Sensor

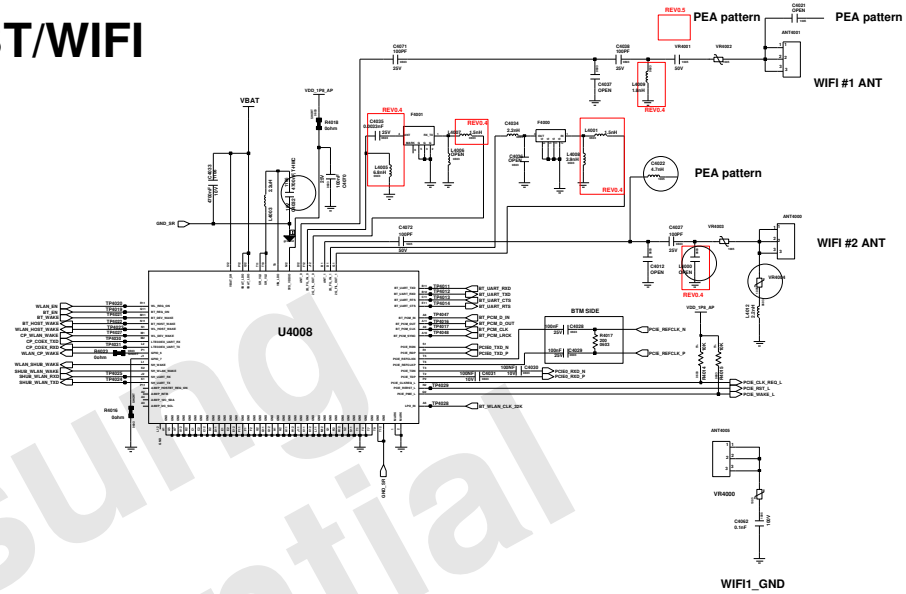


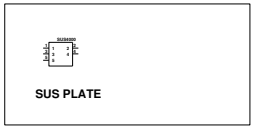
HRM Sensor



Barometer Sensor

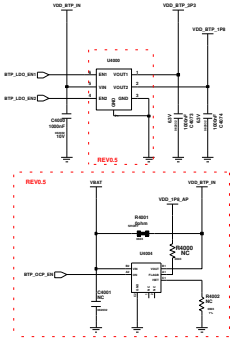
BT/WIFI



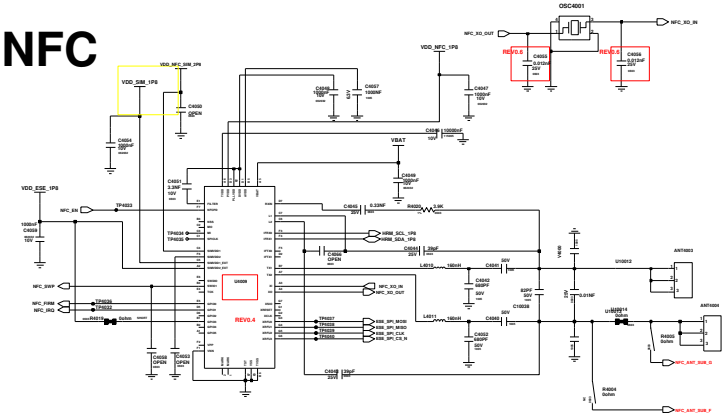


SUS PLATE

BTP



NFC



Engineer:	SENSOR, WIFI/BT/GPS/NFC
SENSOR H/W:	
RSD CTRL:	
DOC CTRL CHK:	SM-G928X_LDU
BPG ENGR CHK:	
QA CHK:	

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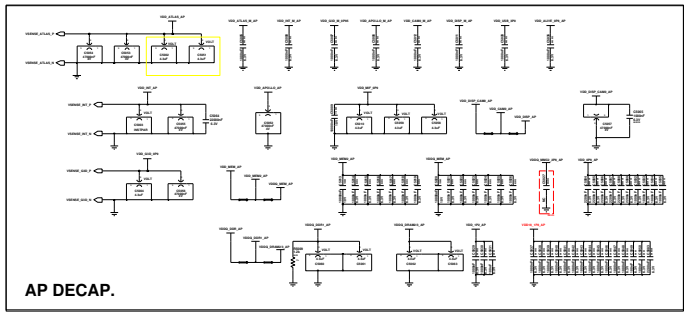
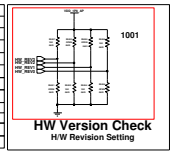
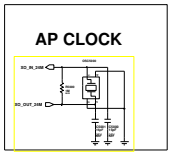
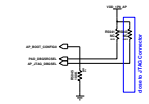
4. EXYNOS7420(ISTOR), eMMC



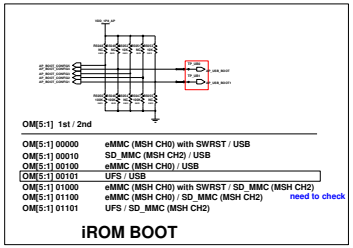
0000	None
0001	REV0.0_DV1
0010	None
0011	REV0.1_DV2
0100	REV0.2_PV1
0101	None
0110	None
0111	REV0.3_PV2
1000	None
1001	REV0.4_PV2_1
1010	

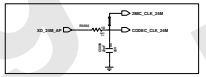


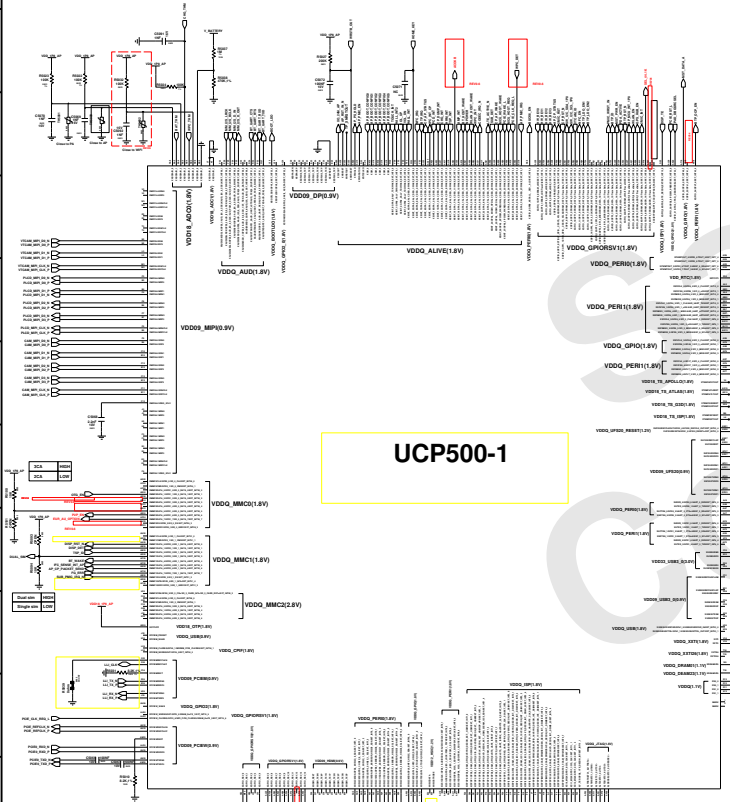


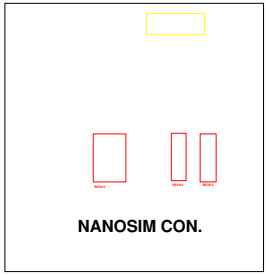


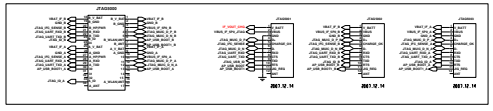
XOM0 H : ATLAS / L : APOLLO
XCCIBYPASS H : CCI Bypass / L : CCI Enable
XCPUAXI3SELACE H : AXI3 / L : ACE
PAD_DBGSRCSEL H : Audio JTAG / L : ARM JTAG
AP_JTAG_DBGSEL H : Test Mode / L : Function

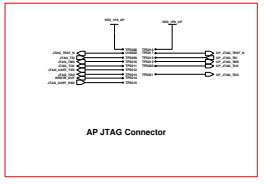












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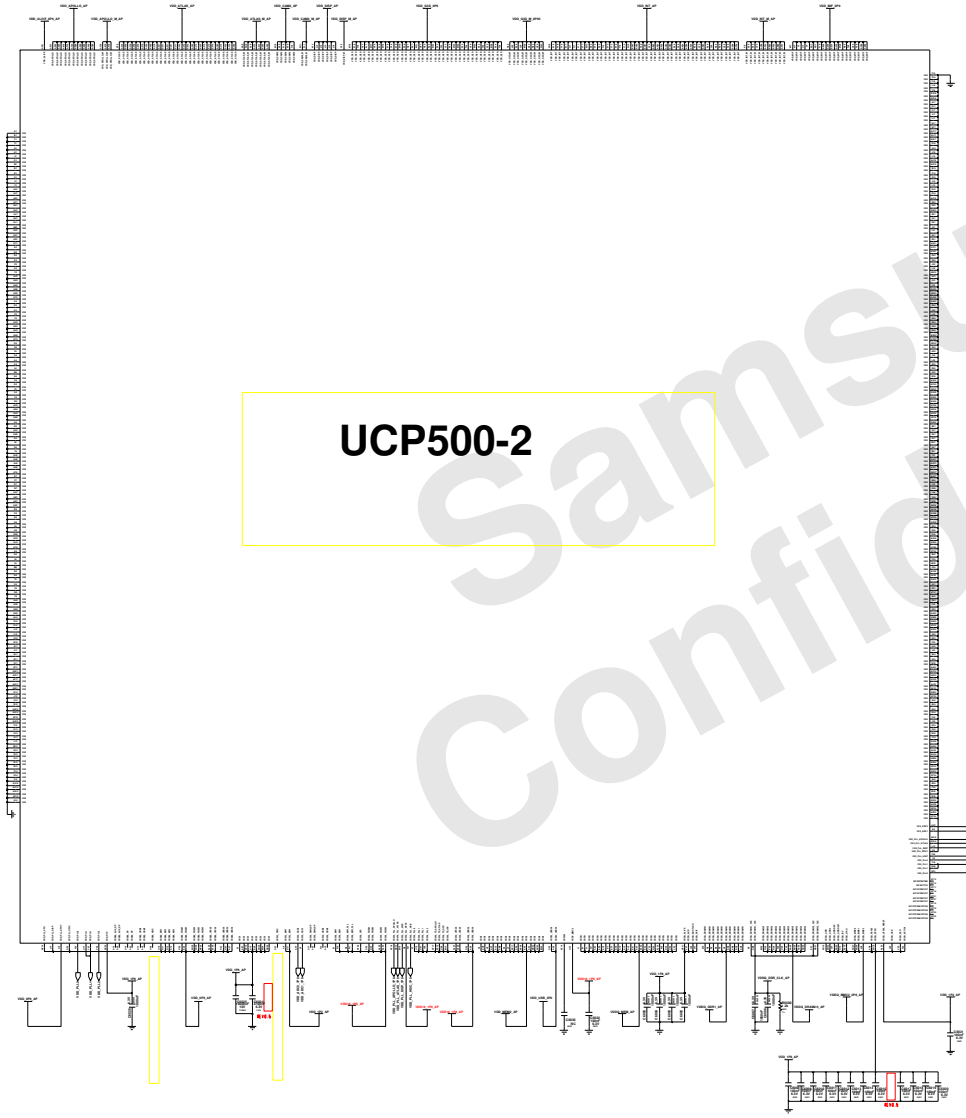


UCP500-2

32GB / 64 GB : USE SC6008 AND SC6009
128 GB : USE SC6001

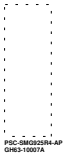
Shieldcan

FOR 32GB / 64GB

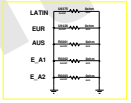
BRK SIDE

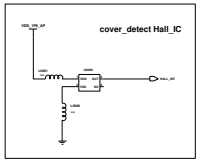
REAR SIDE

FOR 128GB



PSC-SM0202R4-AP
GH63-10007A





	AP, IRDA
	SM-G928X_LDU

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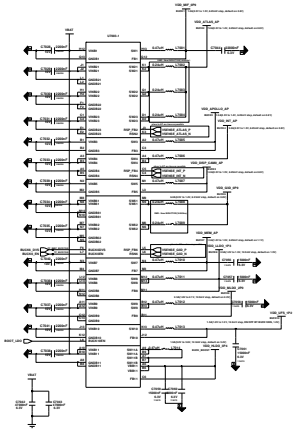
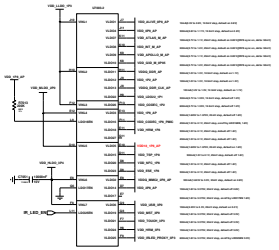
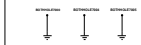
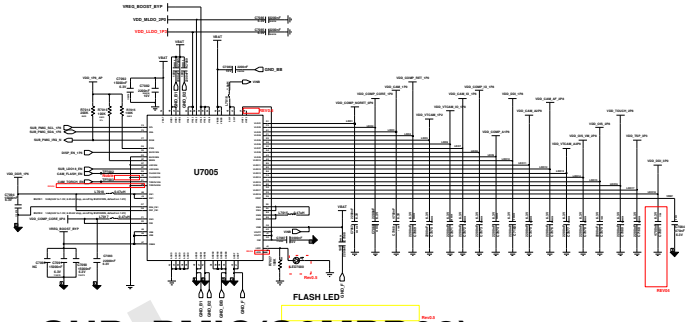
AP PMIC



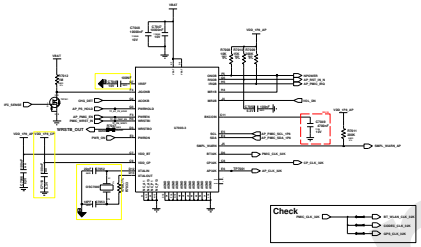


BOTHHOLE

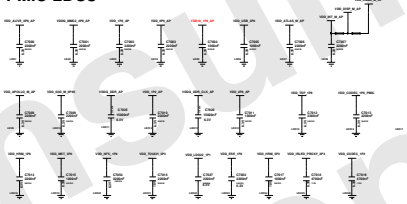


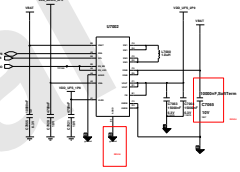


SUB_PMIC(S2MPB02)



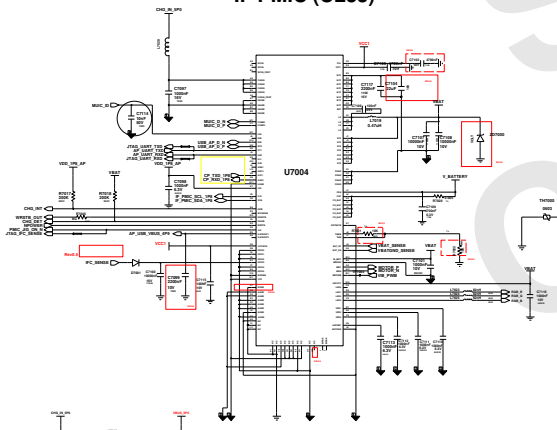
PMIC LDOs

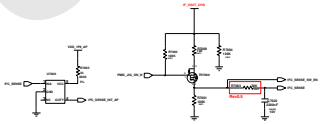


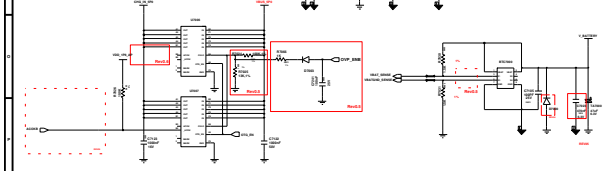


EMMC BUCK BOOSTER

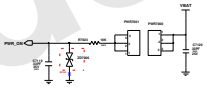
IF PMIC (CL33)



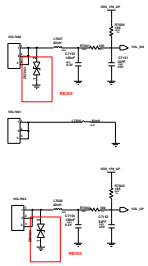




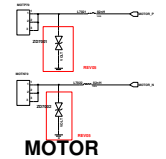
Battery Connector



POWER KEY



VOLUME KEY



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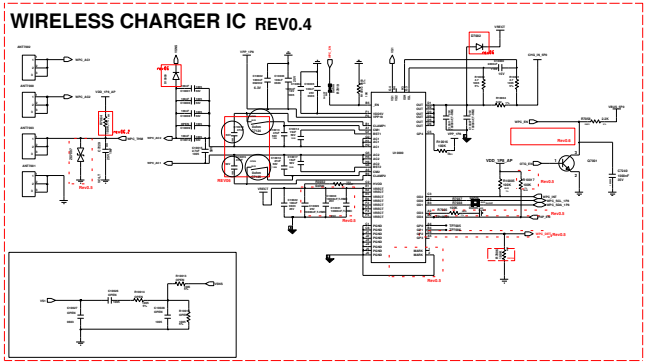

WIRELESS CHARGER IC REV0.4

MST

Engineer	AP/IF/SUB PMIC, WLCHG
Drawing No.	
Schematic No.	SM-G928X_LDU
Date	Drawing Revision

user73|swcad73|10.253.15.193|20150716-151500

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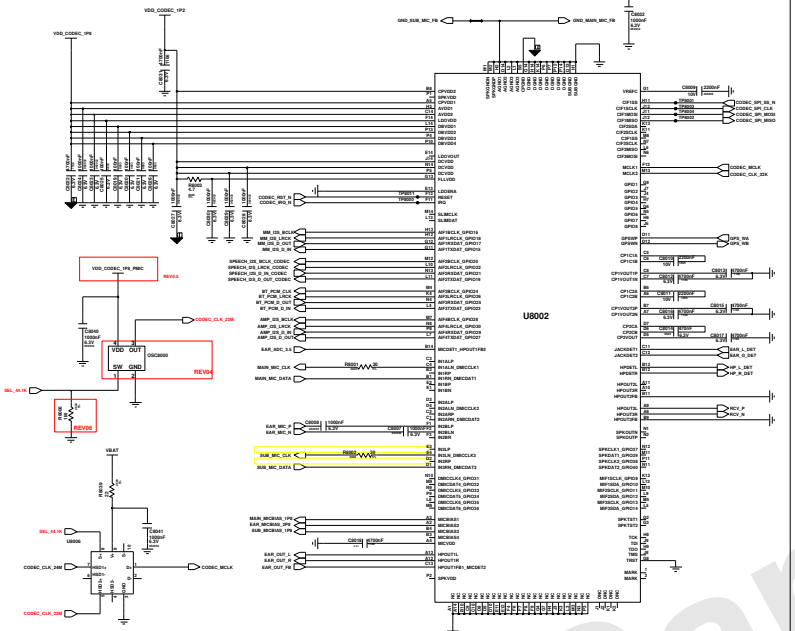
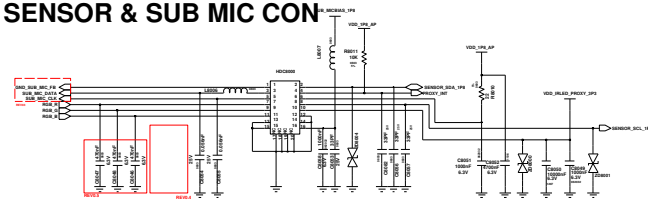
AUDIO



AUDIO CODEC

SENSOR & SUB MIC CON



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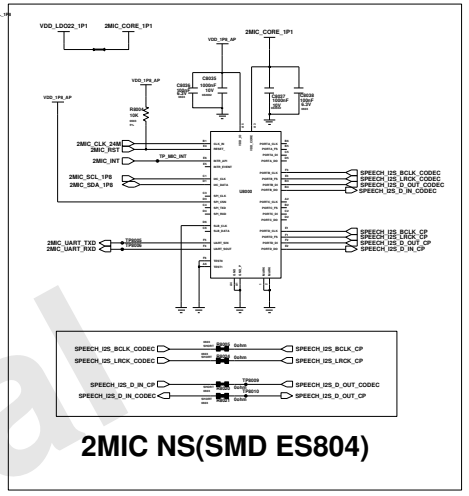

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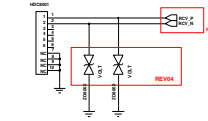

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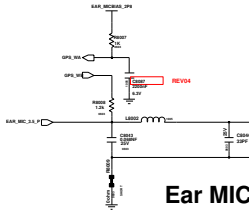
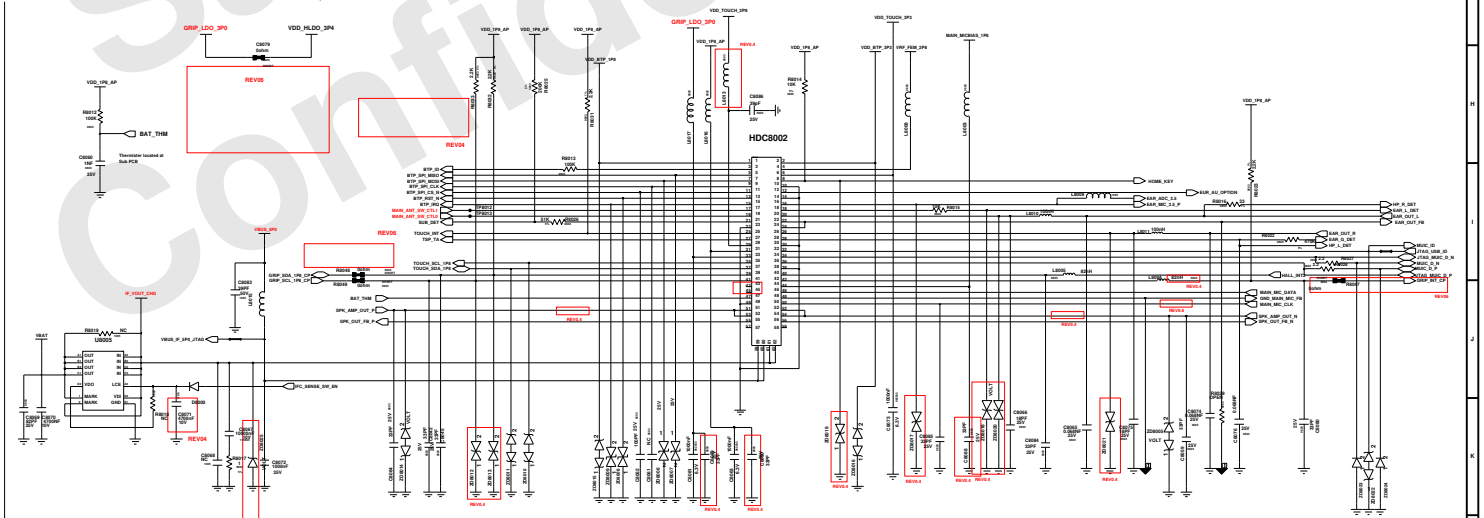


Ear MIC



SUB FPCB IF CONN.

(USB2.0 / Main ANT / MIC)

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Engineer:	AUDIO, SUB PCB CON.
Sheet(s):	
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MFG ENGR CHK:	
Changed By: / Date Changed: / Time Changed: / QA CHK:	REV: / Drawing Number: / Page:

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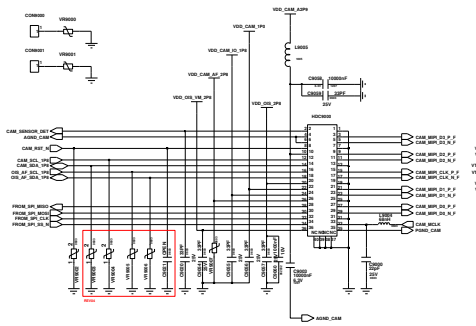
CAMERA



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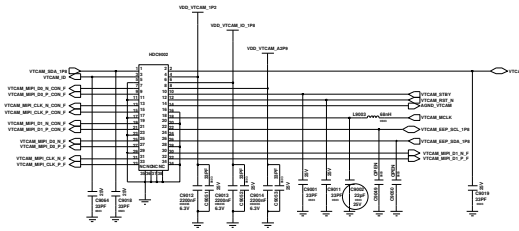

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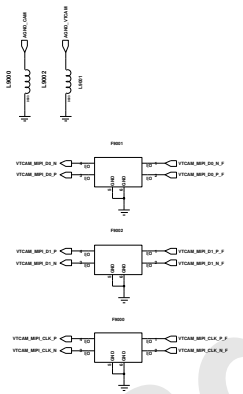

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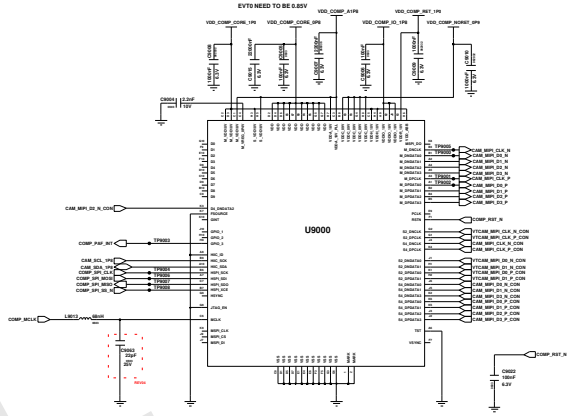

COMPANION IC

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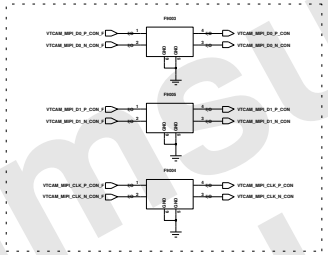

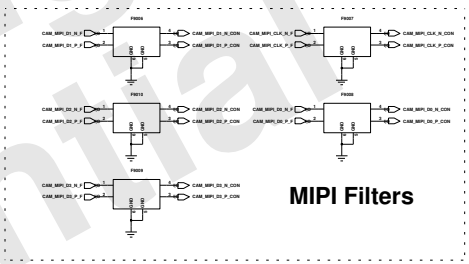

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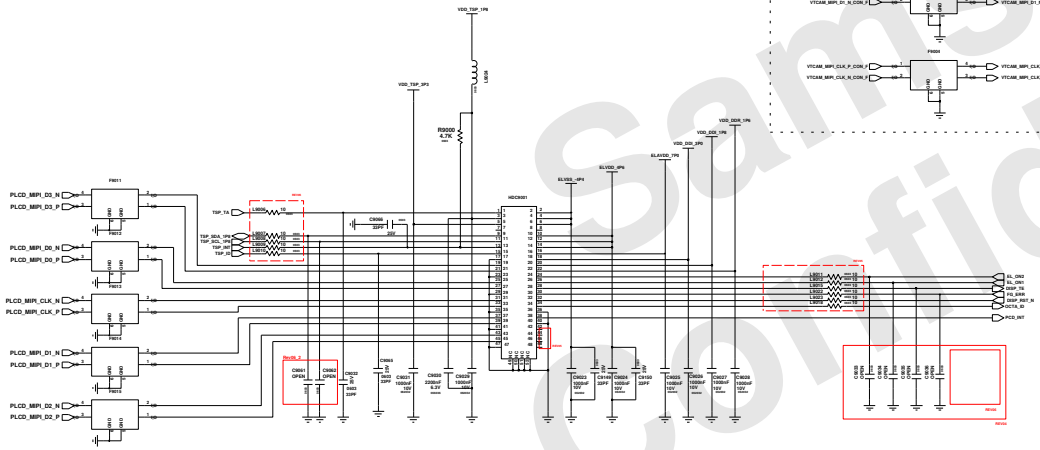

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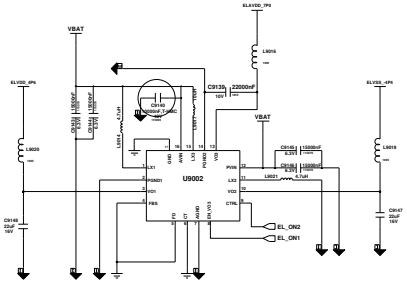

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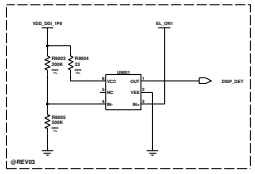

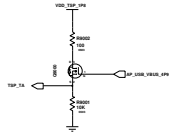

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Engineer:	CAMERA, DISPLAY, MHL
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R&D CHK:	TITLE:
SOC CTRL CHK:	SM-G928X_LDU
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Changed by:	Date Changed:
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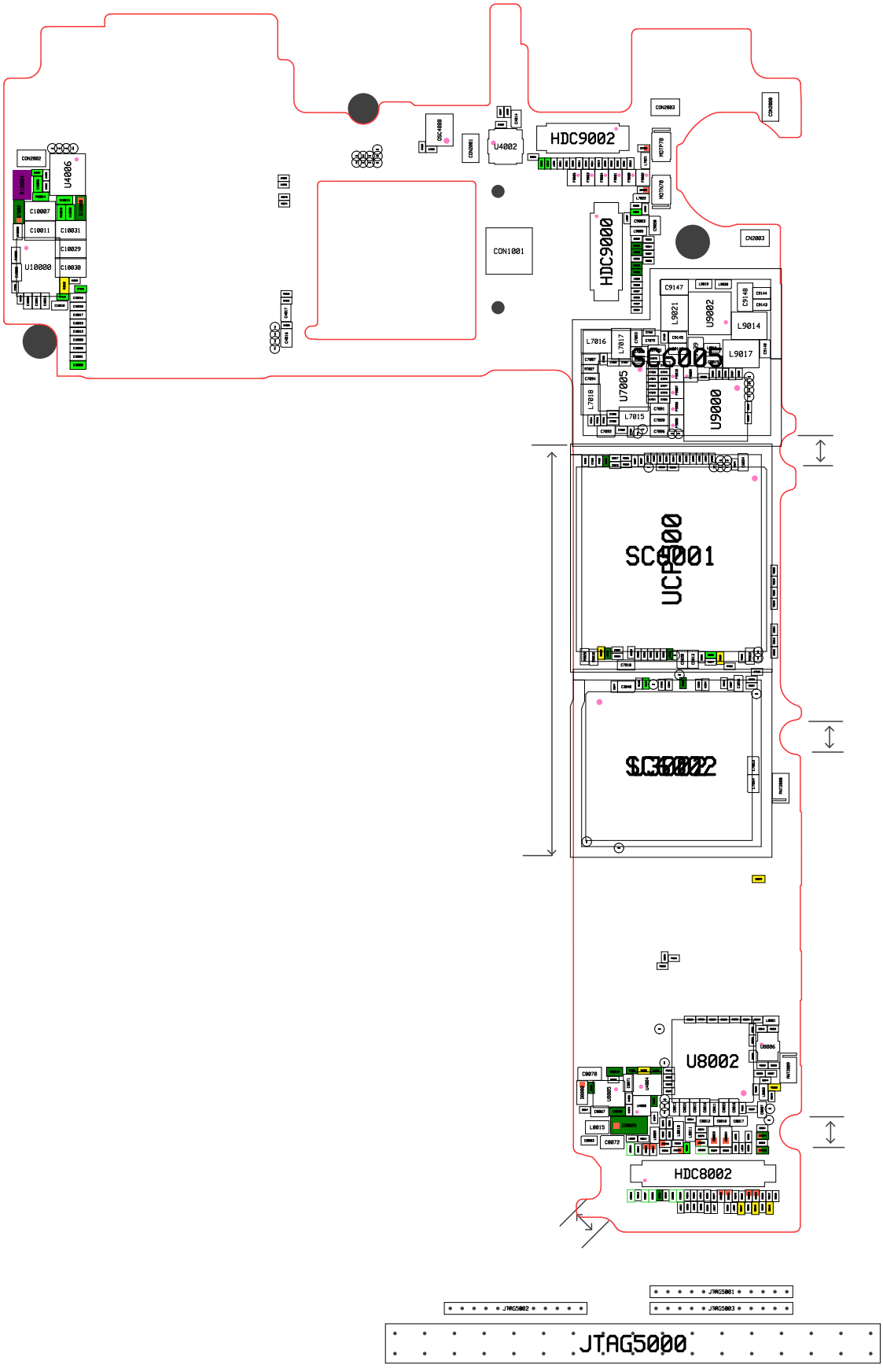
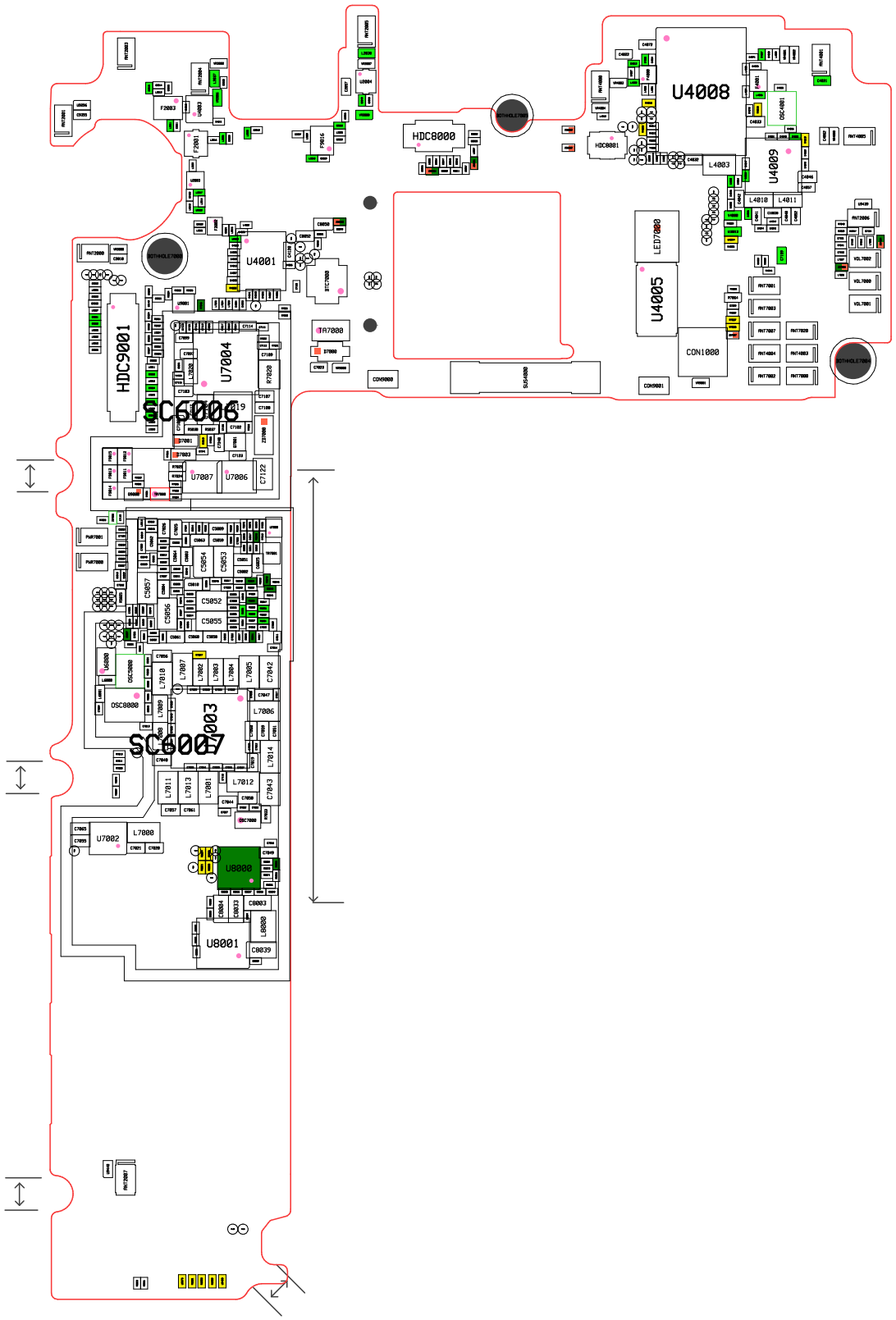
Setup(2015-05-20)_HHP



AON1605(TR7000) : IT'S Wrong Polarity possibility. Check the Pin1
2007-010848(R10004) : Check! Bottom Surface of Component

Setup(2015-05-20)_HHP



AON1605(TR7000) : IT'S Wrong Polarity possibility. Check the Pin1

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