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SM-A705_REV0.4

SM-A705FN/F/GM/MN/W Common

2019.02.27

SHEET 01 : MAIN RF FRONT-END
SHEET 02 : TRCV, APT, DIVERSITY RF FRONT-END
SHEET 03 : SENSORS, BT/WIFI/FM, NFC
SHEET 04 : AP (SM6150)
SHEET 05 : PMIC, IF-PMIC
SHEET 06 : SD/SIM SOCKET, MEMORY, INTERFACE
SHEET 07 : CAMERA, DISPLAY
SHEET 08 : AUDIO

EU	SM-A705FN	DS	RAM : 6	ROM : 128	eSE	X	
CIS	SM-A705FN	DS	RAM : 6	ROM : 128	eSE	MST	
MEA	SM-A705FN	DS / SS	RAM : 6	ROM : 128	eSE	X	
SWA	SM-A705GM	DS / SS	RAM : 6 / 8	ROM : 128	X	MST	
SEA	SM-A705F	DS / SS	RAM : 6 / 8	ROM : 128	X	X	
SEA	SM-A705MN	DS / SS	RAM : 6 / 8	ROM : 128	UICC	X	
LA	SM-A705MN	DS / SS	RAM : 6	ROM : 128	UICC	X	
Taiwan/Hongkong	SM-A7050	DS / SS	RAM : 6	ROM : 128	eSE	X	
Korea	SM-A705N	SS	RAM : 6	ROM : 128	UICC	MST	
China	SM-A7050	DS	RAM : 6	ROM : 128	eSE	MST	
Canada	SM-A705W	DS	RAM : 6	ROM : 128	eSE	X	

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Engineer:
Sign:
R&D CHK:
DOC CTRL CHK:
MFG ENGR CHK:
QA CHK:
TITLE: A70
SIZE: A1
REV:
Drawing Number:
Page:
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Date Changed
Time Changed

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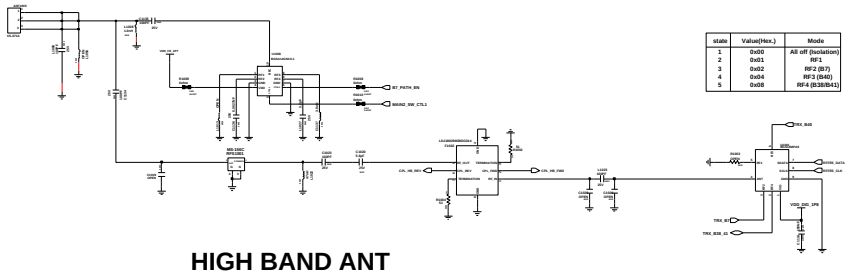
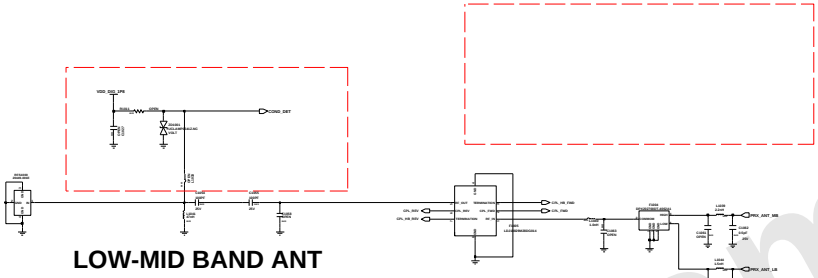
RF PART 1



state	Value(Hex.)	Mode
1	0x00	All off (Isolation)
2	0x01	RF1
3	0x02	RF2 (B7)
4	0x04	RF3 (B40)
5	0x08	RF4 (B38/B41)

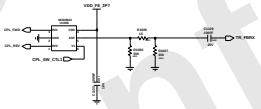
HIGH BAND ANT



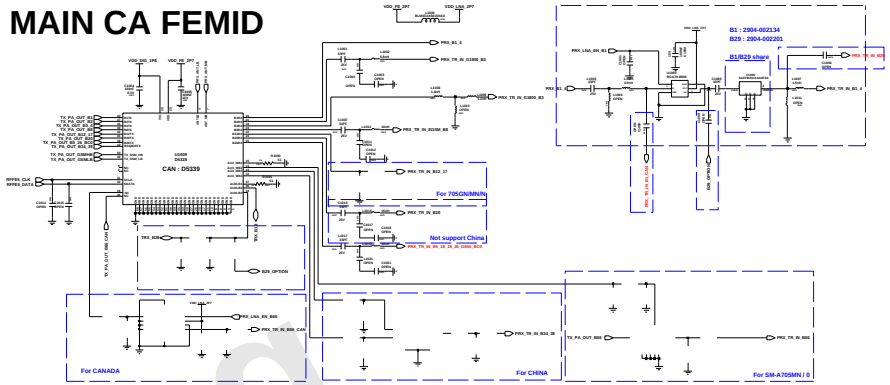
LOW-MID BAND ANT

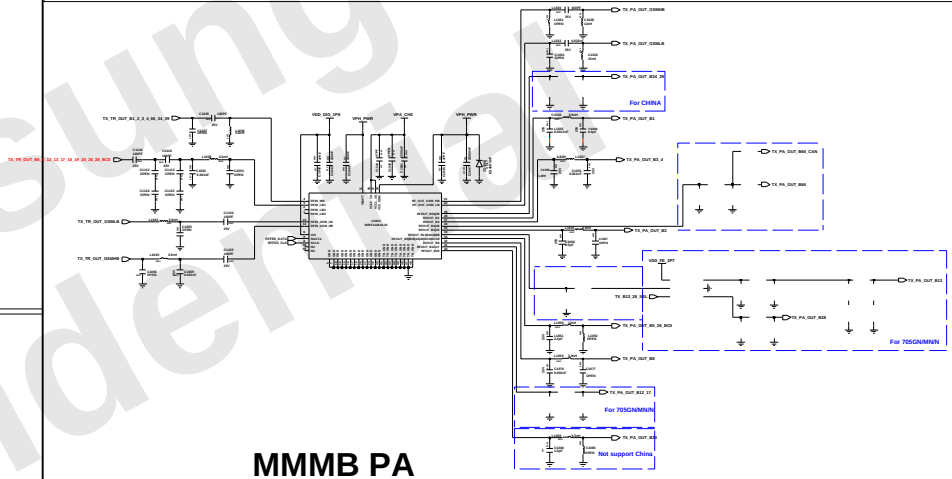
GND CONTACT

FBRX



MAIN CA FEMID



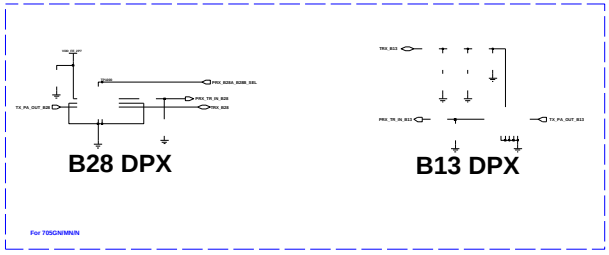


MMMB PA

2G : EGSM / DCS / PCS / GSM850

3G : B1 / 2 / 4 / 5 / 8 / BC0 / TD-A/F

LTE : B1 / 2 / 3 / 4 / 5 / 8 / 12 / 13 / 17 / 18 / 19 / 20 / 26 / 28 / 34 / 39 / 66



B28 DPX

B13 DPX

EU	SM-A705FN	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20	LTE TDD : B38, 40, 41
CIS	SM-A705FN	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20	LTE TDD : B38, 40, 41
MEA	SM-A705FN	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20	LTE TDD : B38, 40, 41
SWA	SM-A705GM	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20	LTE TDD : B38, 40, 41
SEA	SM-A705F	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20	LTE TDD : B38, 40, 41
SEA	SM-A705MN	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 4, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20 LTE FDD : B2, 4, 12, 13, 17, 28, 66	LTE TDD : B38, 40, 41
LA	SM-A705MN	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 4, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20 LTE FDD : B2, 4, 12, 13, 17, 28, 66	LTE TDD : B38, 40, 41
Taiwan/Hongkong	SM-A7050	GSM : 850, 900, 1800, 1900 / BC0	WCDMA : 1, 2, 4, 5, 8	LTE FDD : B1, 3, 5, 7, 8, 20 LTE FDD : B2, 4, 12, 13, 17, 28, 66	LTE TDD : B34, 38, 39, 40, 41
Korea	SM-A705N	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 4, 5	LTE FDD : B1, 3, 5, 7, 8, 20 LTE FDD : B4, 13, 17, 28	LTE TDD : B38, 39, 40, 41
China	SM-A7050	GSM : 850, 900, 1800, 1900 / BC0	WCDMA : 1, 2, 5, 8	LTE FDD : B1, 3, 5, 7, 8 LTE FDD : B4, 12, 17	LTE TDD : B34, 38, 39, 40, 41
Canada	SM-A705W	GSM : 850, 900, 1800, 1900	WCDMA : 1, 2, 4, 5, 8	LTE FDD : B1, 2, 3, 4, 5, 7, 12, 13, 17 LTE FDD : B20, 26, 29, 66	LTE TDD : B38, 40, 41

A70

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RF PART 2

SUB ANT

for KOR

X-GND SW

U2009 SDR660

SDR660 RF TRANCEIVER

PA Thermister

QFE4101 APT MODULATOR

HIGH BAND PA

FDD LTE: B7
TDD LTE: B38 / 40 / 41

DRX LFEM

B2/66 : SFWG62DBB02
B34/39 : SFWG00DB002

B2, B66

B38/41

B40

B28 : 2904-002336
B29 : 2904-002201

B28/B29 share

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Engineer:	SAMSUNG ELECTRONICS	
Drawn by:		
Sheet by:		
RED CHK:	TITLE: A70	SIZE: A1
DOC CTRL CHK:		16.1.32.A
MFG ENGR CHK:		
QA CHK:	REV:	Drawing Number: Page:

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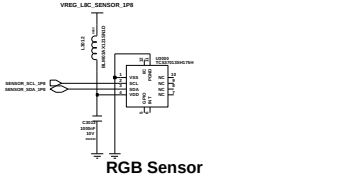
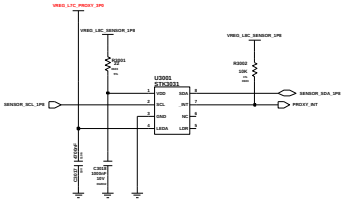
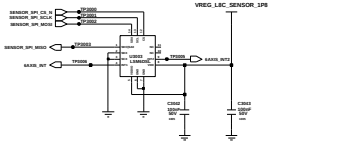
SENSOR



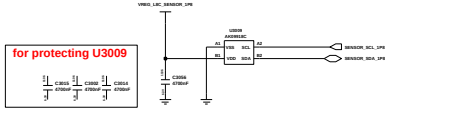
RGB Sensor



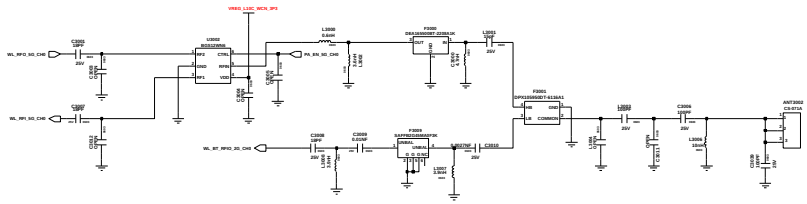
Proxy + RGB Sensor

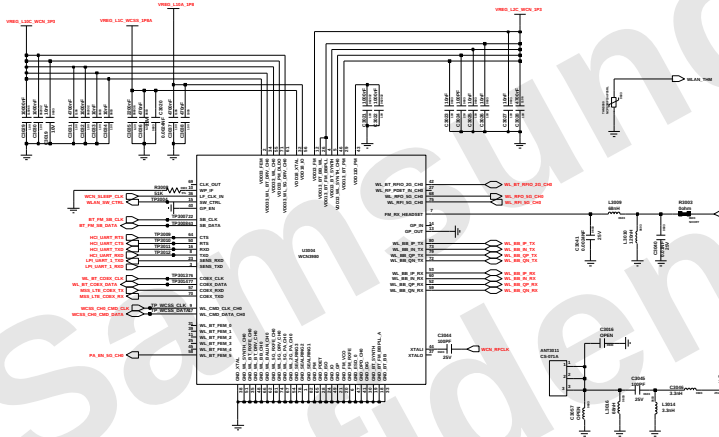


ACC&GYRO SENSOR

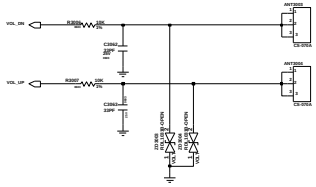


MAGNETIC SENSOR

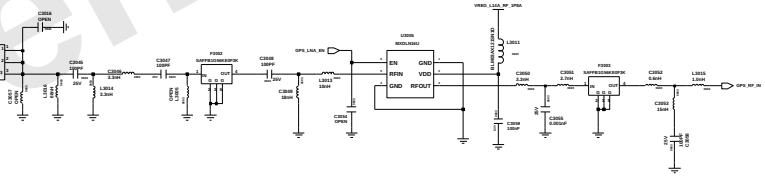




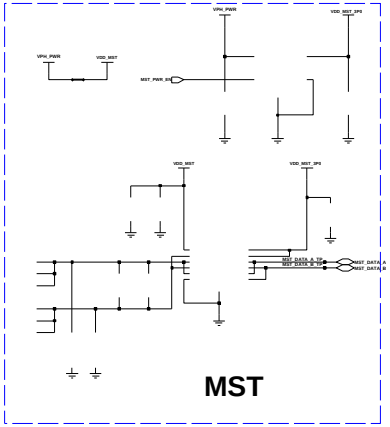
WIFI/BT/FM



Volume key

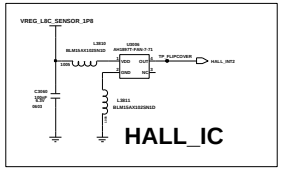


GPS / GNSS/BEIDOU



MST

POWER KEY



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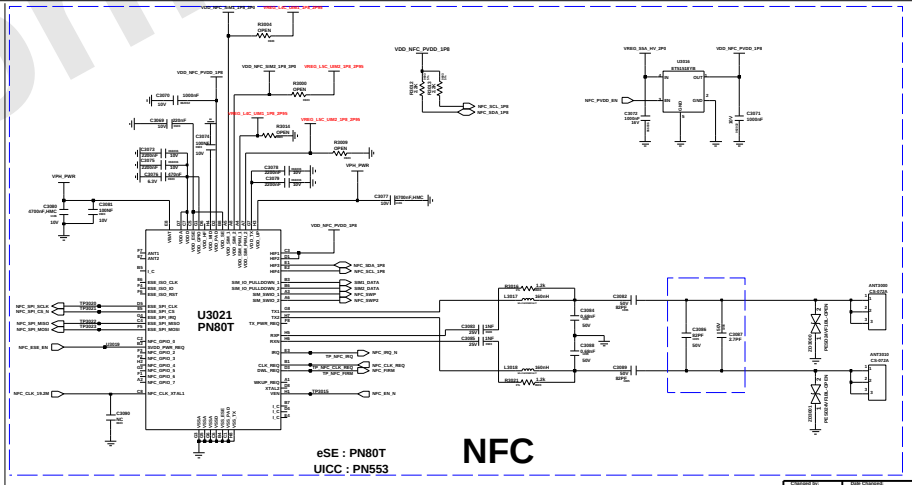

NFC

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Engineer:	SENSOR, WIFI/BT/GPS/NFC
Sensor Kp:	
R&D CHK:	TITLE:
DOC CTRL CHK:	A70
MFG ENGR CHK:	
QA CHK:	

Changed By | Date Changed | Time Changed | REV | Drawing Number: | Page

user64|swcad64|10.252.51.129|20190302-105901

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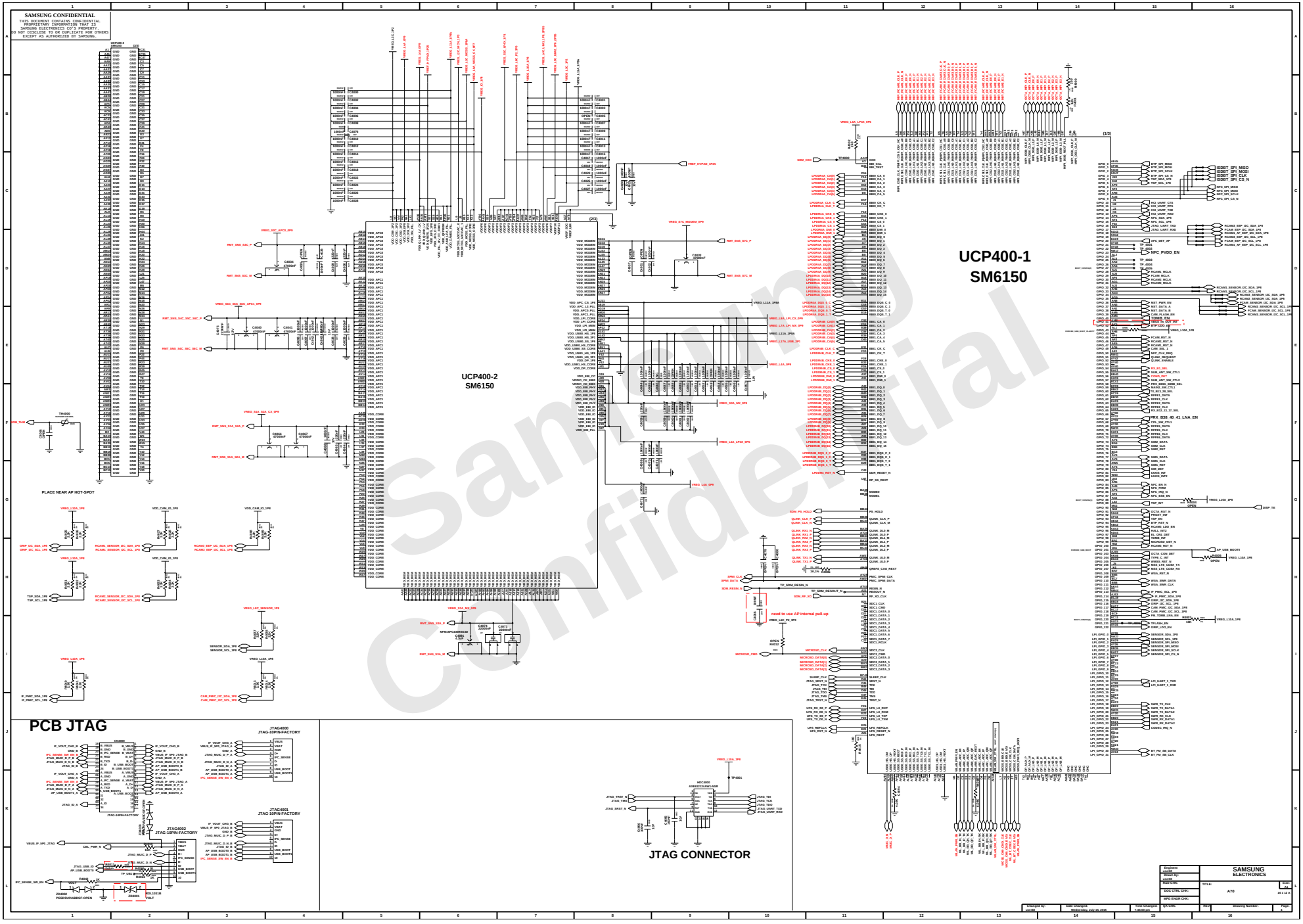

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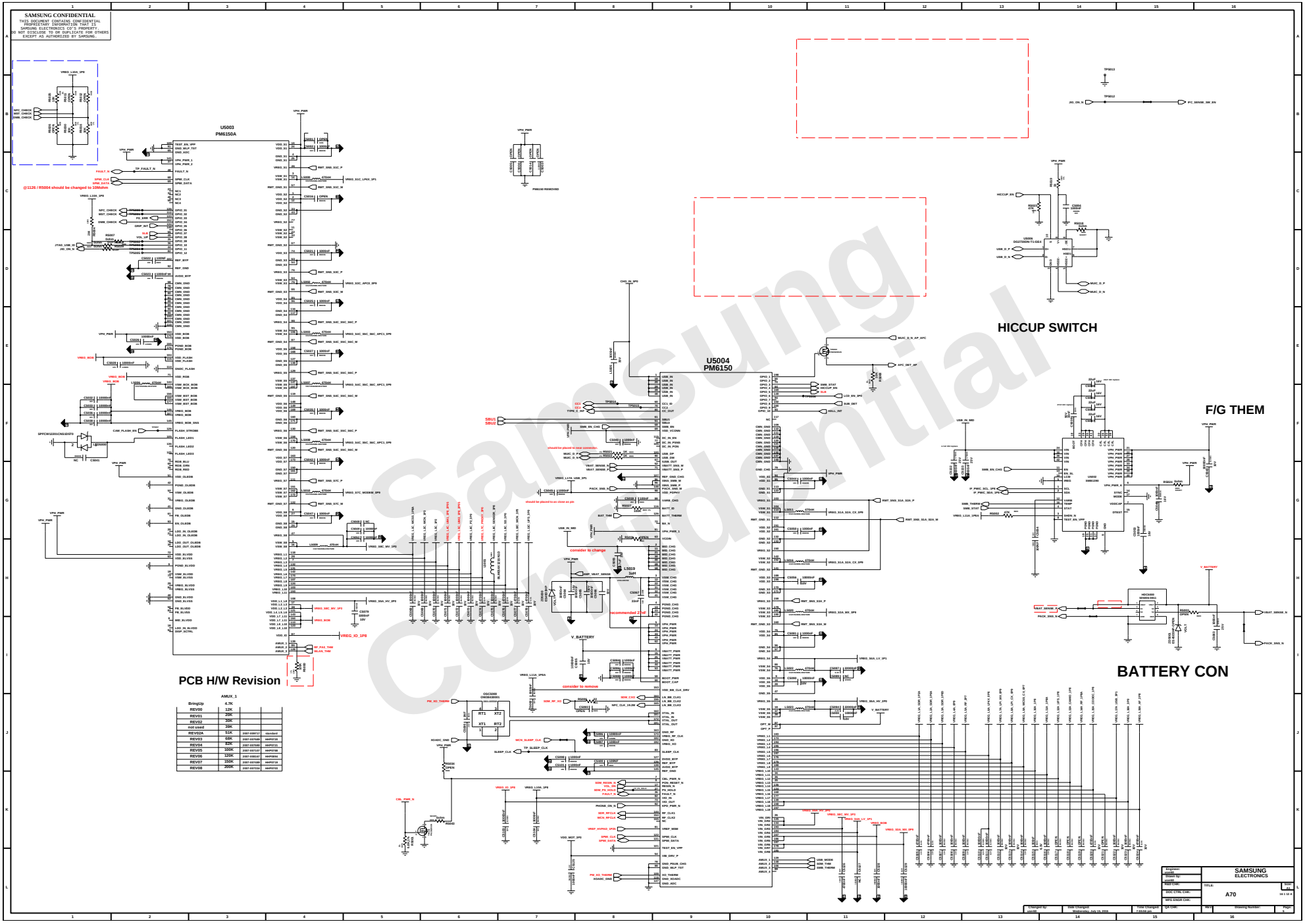

AMUX_1

BringUp	4.7K		
REV00	12K		
REV01	20K		
REV02	30K		
not used	39K		
REV02A	51K	2007-080717	nkandani
REV03	68K	2007-037680	HHP0720
REV04	82K	2007-037680	HHP0720
REV05	100K	2007-037107	HHP0708
REV06	120K	2007-037107	HHP0806
REV07	150K	2007-037080	HHP0718
REV08	200K	2007-037031	HHP0703

Engineer:	SAMSUNG ELECTRONICS		
SAMSUNG Rpt:			
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DOC CTRL CHK:			
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QA CHK:	REV:	Drawing Number:	Page: 1

Changed By: user08 | Date Changed: Wednesday, July 19, 2006 | Time Changed: 7:49:04 pm

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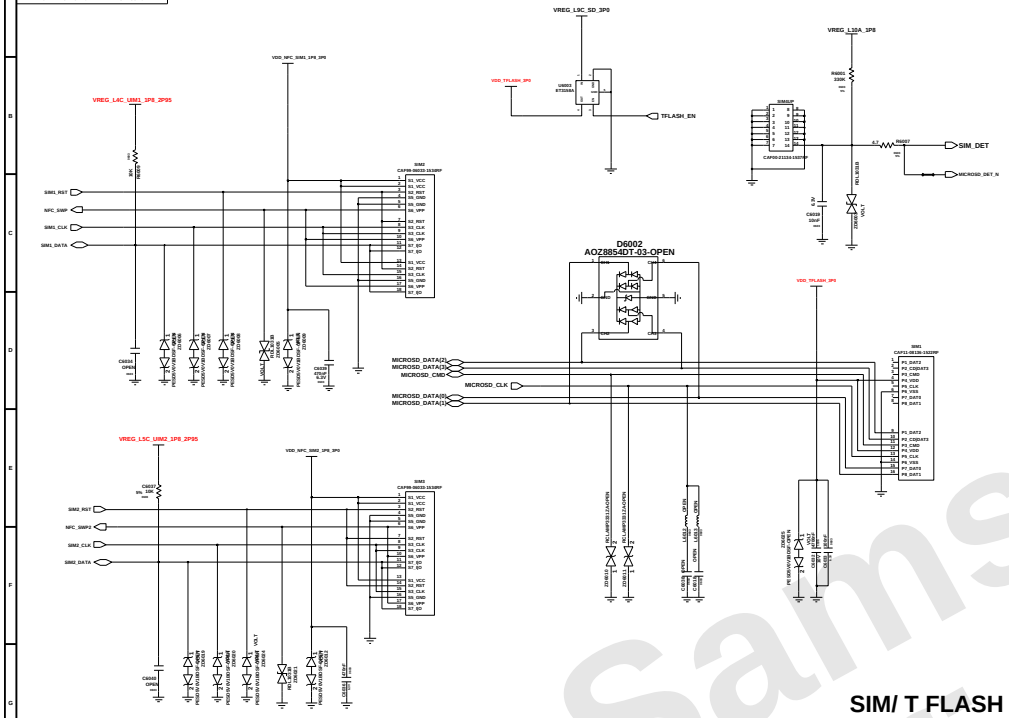
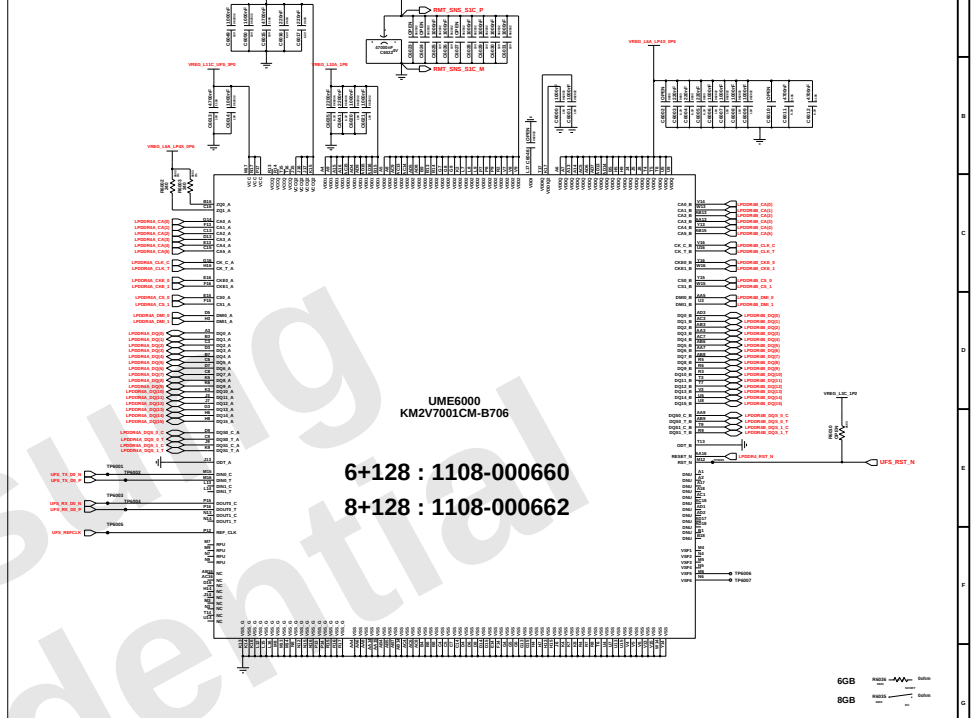
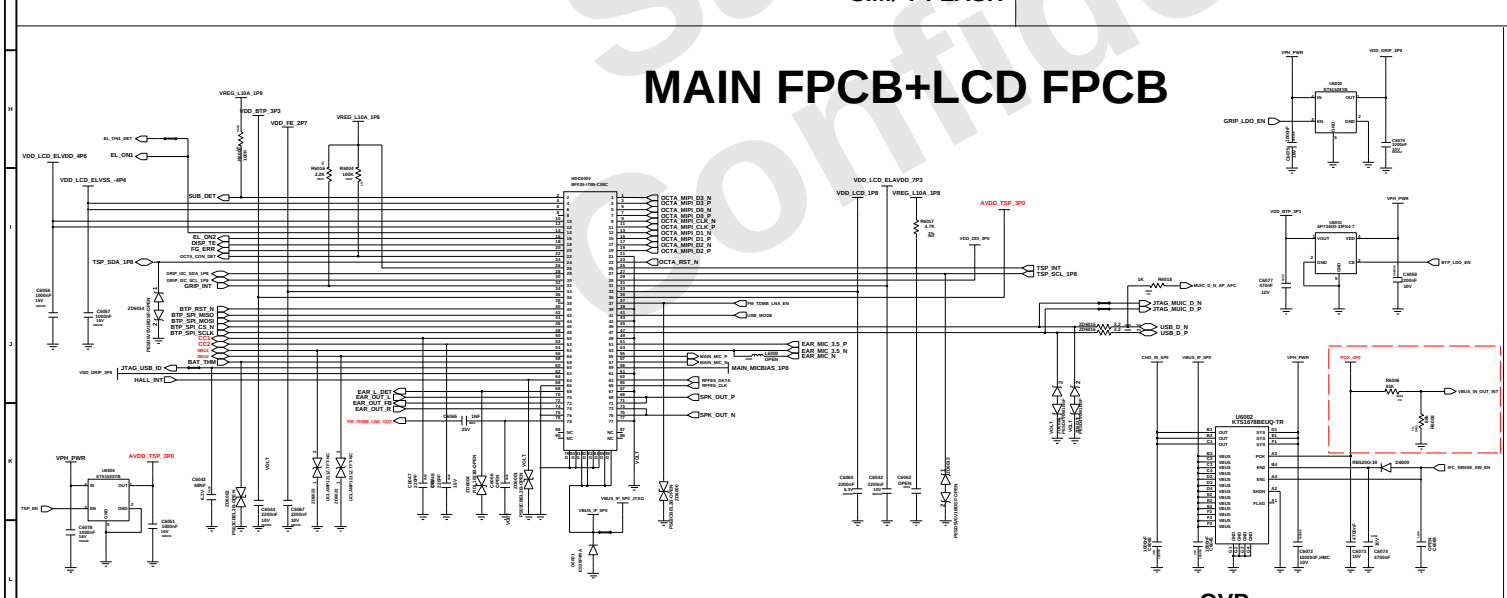


SIM/ T FLASH



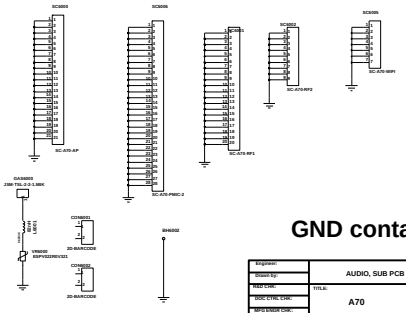
MAIN FPCB+LCD FPCB



OVP

		F	G	M	N	0
		R6032	R6000	R6033	R6011	R6013
EU / MEA	SM-A705FN	Solder			Solder	
CIS	SM-A705FN	Solder			Solder	Solder
SWA	SM-A705GM		Solder	Solder		
SEA	SM-A705F	Solder				
SEA	SM-A705MN			Solder	Solder	
LA	SM-A705MN			Solder	Solder	
Taiwan/HK	SM-A7050					Solder
Korea	SM-A705N				Solder	
China	SM-A7050					Solder
Canada	SM-A705W	Solder	Solder	Solder	Solder	Solder

SHIELD CAN/BOTH HOLE



GND contact

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Account Mgr:	AUDIO, SUB PCB CON.
R&D Line:	TITLE:
DOC CTRL Line:	A70
MFG Model Line:	

Changed By: | Date Changed: | Time Changed: | QA Line: | REV: | Drawing Number: | Page: 6

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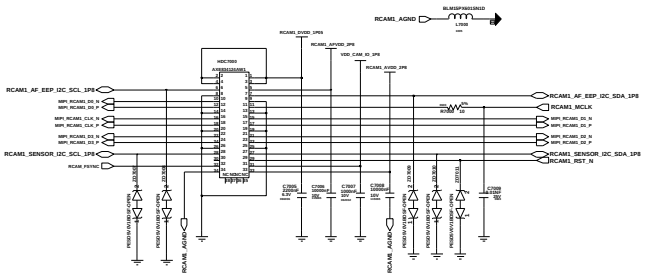
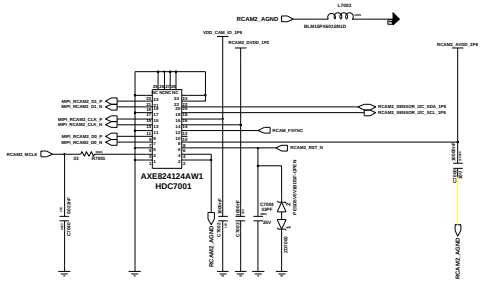
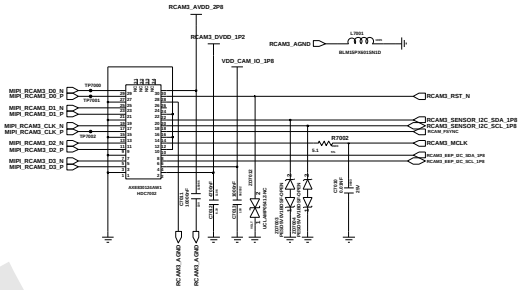
CAMERA



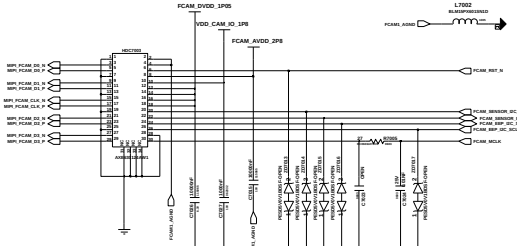
RCAM1_32M CAMERA(34PIN)



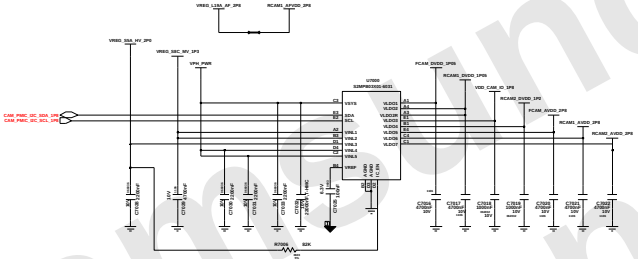
RCAM2_5M CAMERA(24PIN)



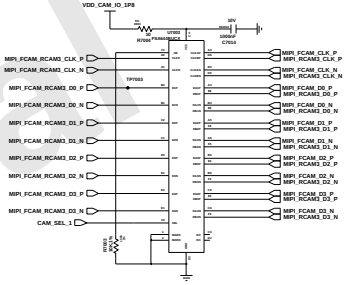
RCAM3_SUPER WIDE_8M CAMERA(30pin)



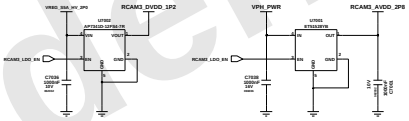
FRONT_32M CAMERA (30PIN)



CAM PMIC



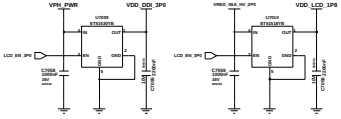
MIPI SWITCH (FCAM,RCAM3)

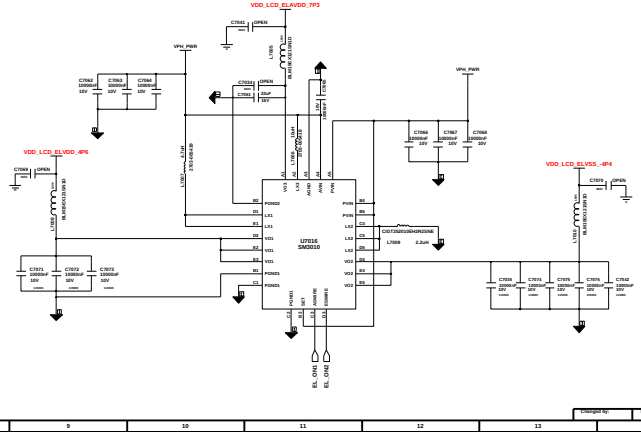


RCAM3 LDO

DISPLAY

DISPLAY PM IC





Engineer:	CAMERA, DISPLAY, MHL
Design by:	
RED CHK:	TITLE:
DOC CTRL CHK:	A70
MFG ENGR CHK:	
QA CHK:	

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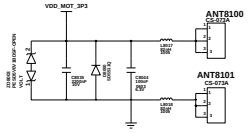
AUDIO



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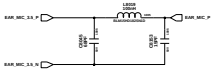

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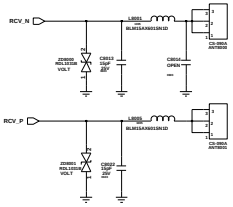

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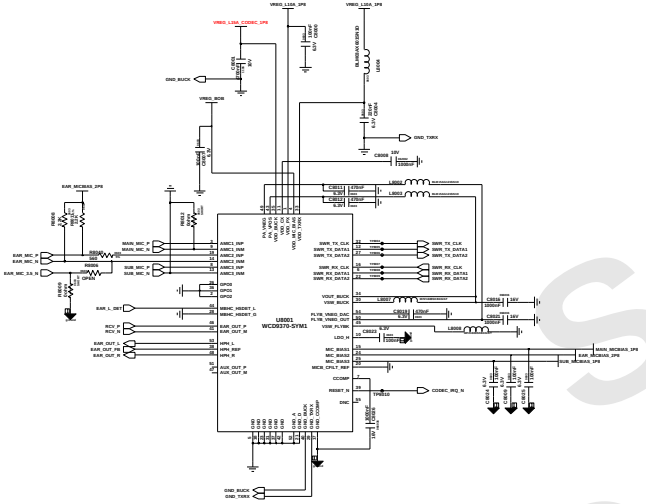
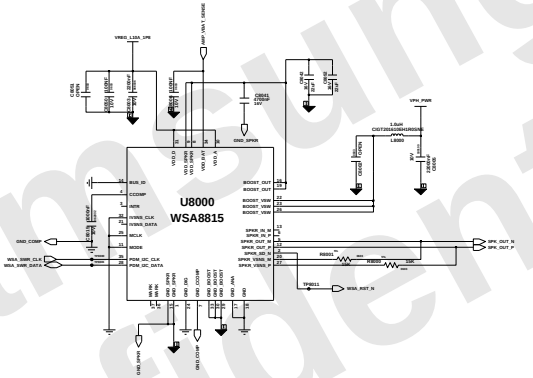
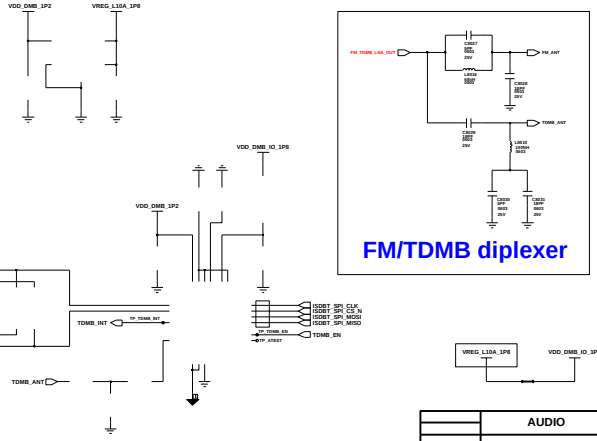
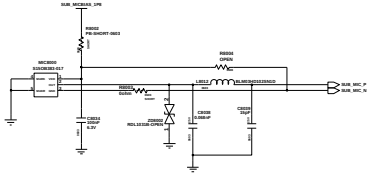




SPK I/V SENSING BOOST AMP

TDMB_for KOR





SUB MIC

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QA CHK:	

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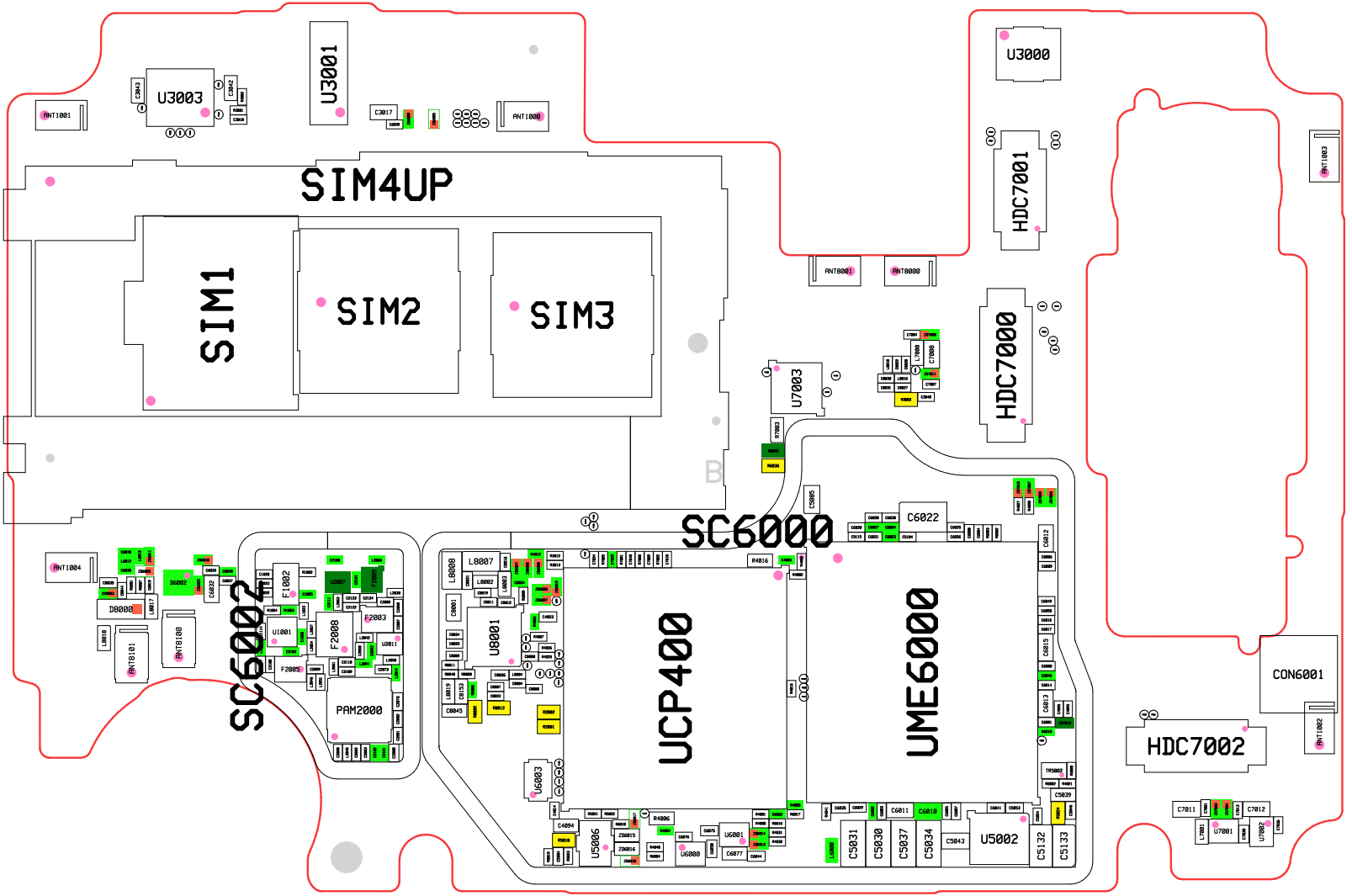
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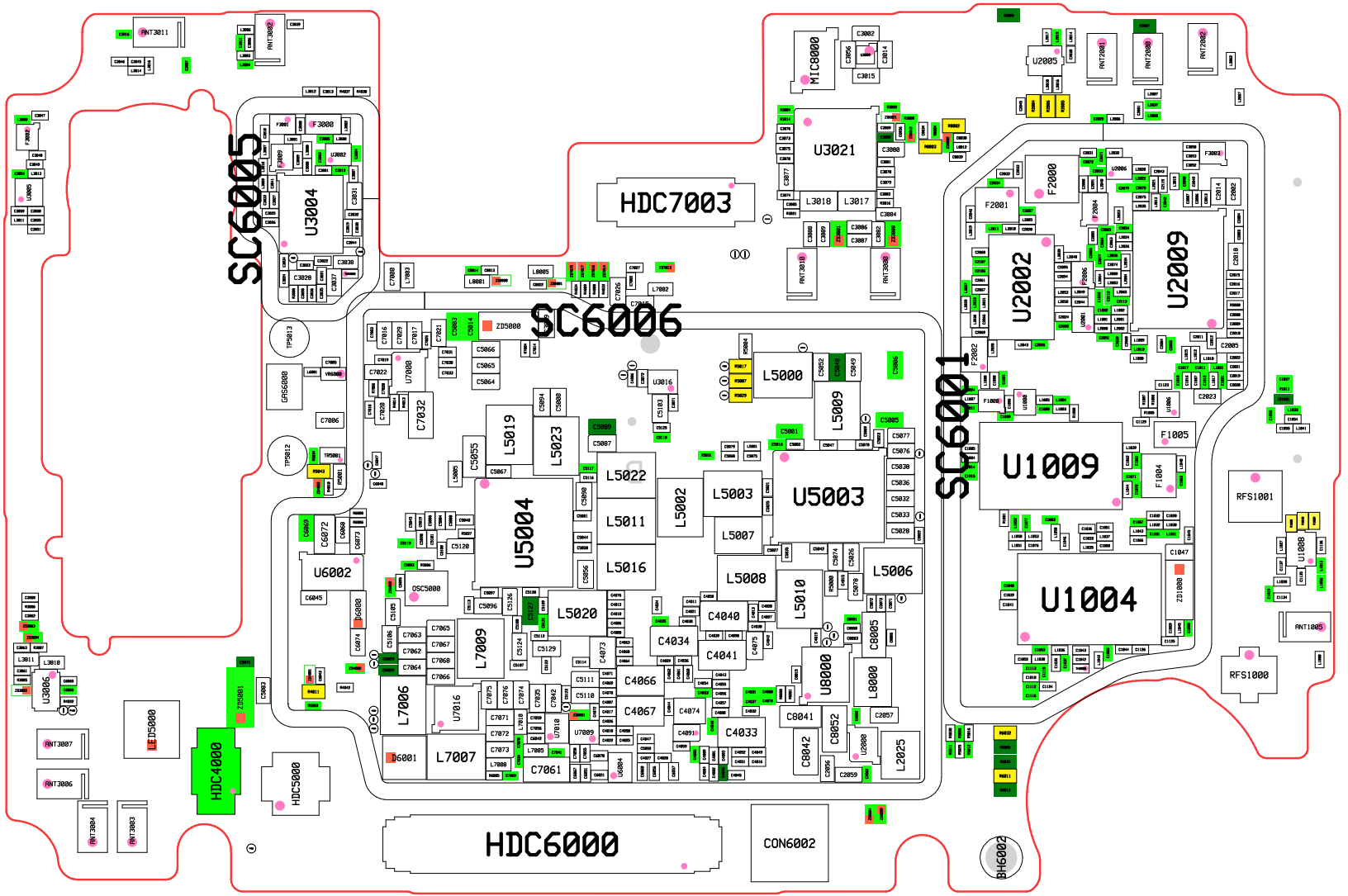
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