

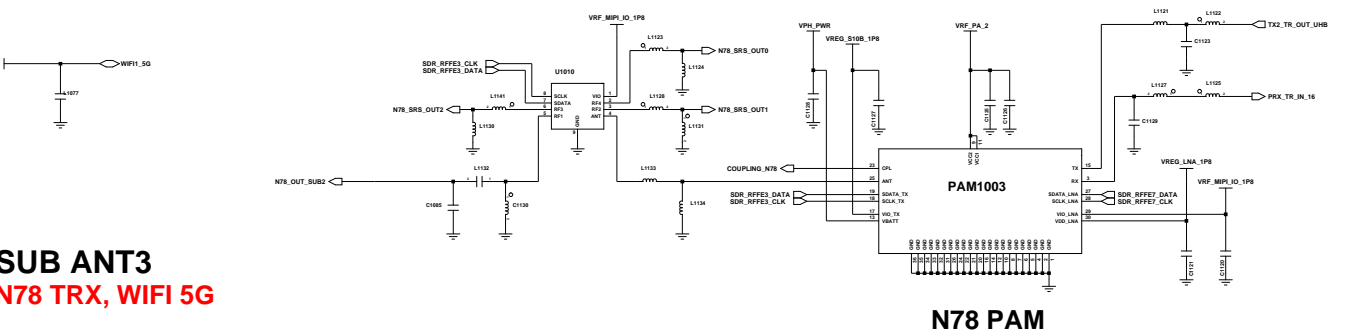
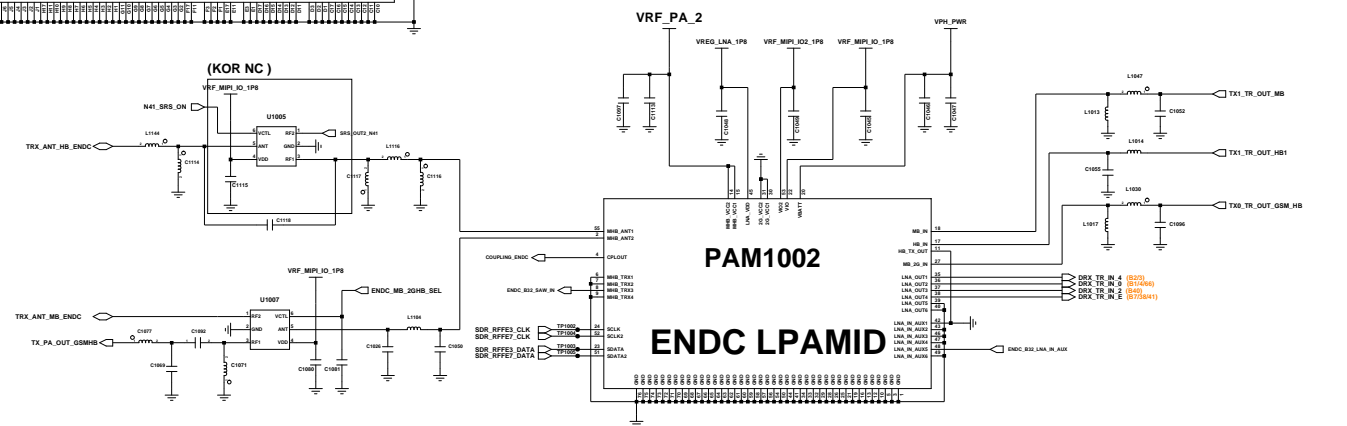
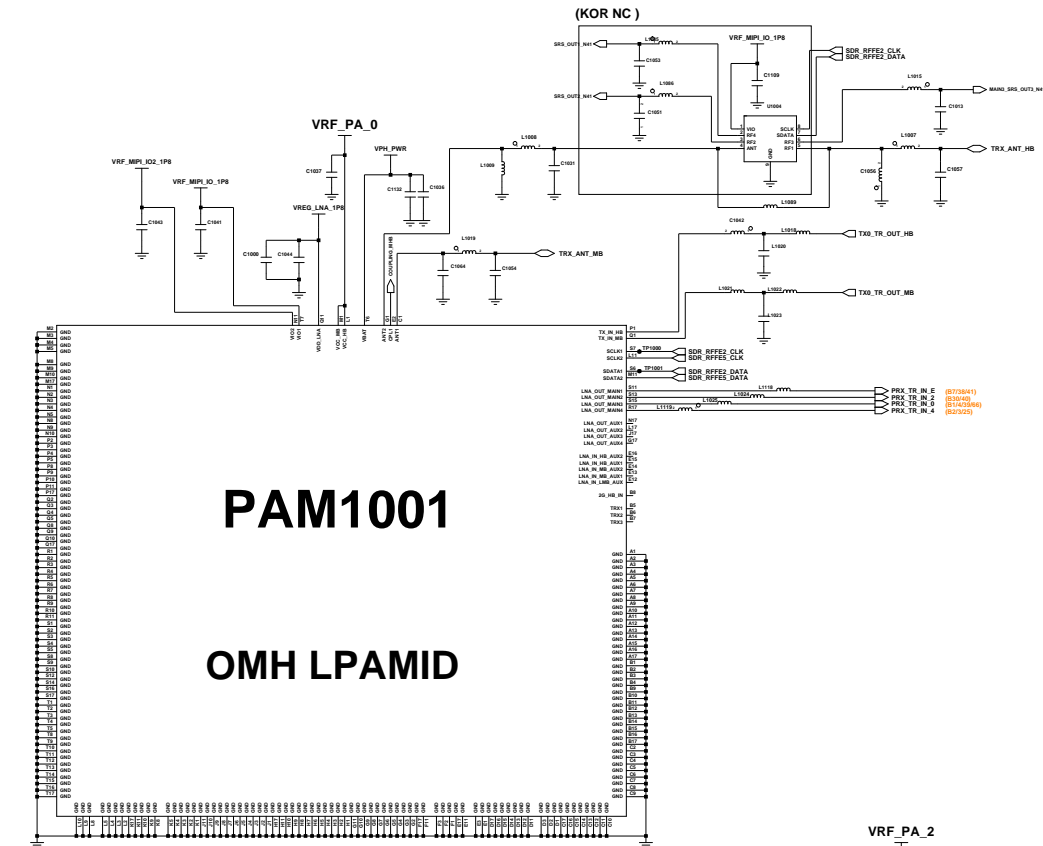
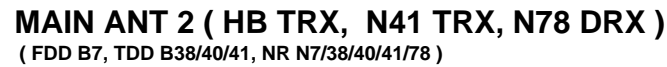
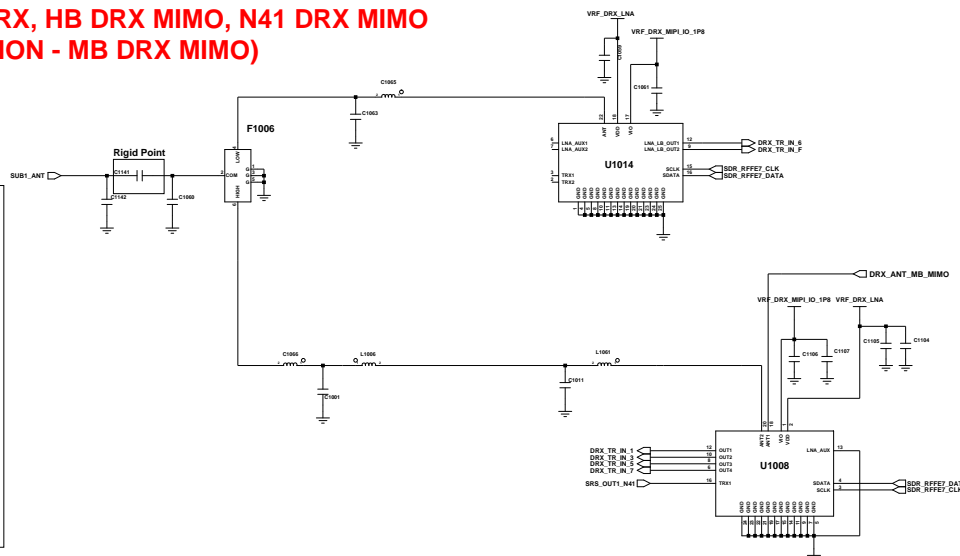
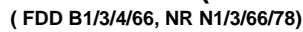
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A	<div>SAMSUNG CONFIDENTIAL THIS DOCUMENT CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION THAT IS SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS EXCEPT AS AUTHORIZED BY SAMSUNG.</div>															
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SM-G990B/N REV04A

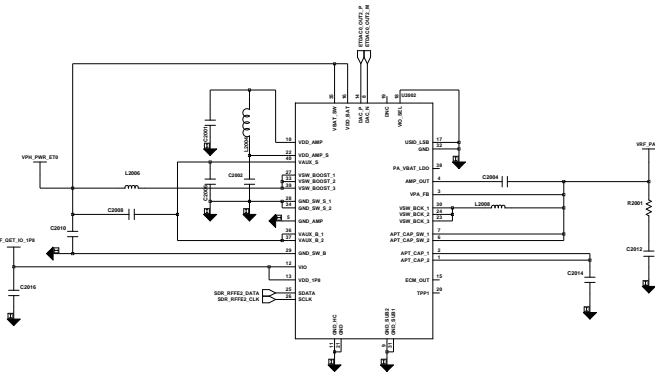
2021. 05. 26

- sheet01 : RF (1/2)
- sheet02 : RF (2/2)
- sheet03 : TRANSCEIVER, WIFI
- sheet04 : MFC, SENSORS, MOTOR
- sheet05 : ModAP(SM8350) & System Clock
- sheet06 : ModAP(SM8350) Power Decoupling Capacitor
- sheet07 : Power Management IC(ModAP / Peri) & Charging
- sheet08 : AUDIO
- sheet09 : CAMERA
- sheet10 : DISPLAY
- sheet11 : CONNECTORS, ETC
- sheet12 : RF PMIC

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

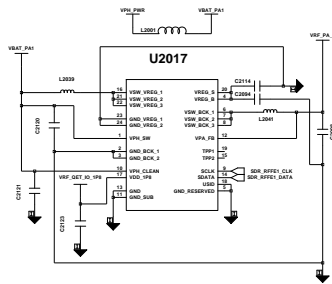


RF2



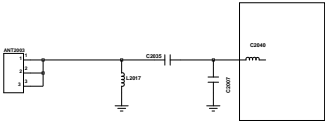
ET#1 2G/3G/LTE/NR MHB(2G,OMH LPAMID)

ET #2 3G/LTE/NR LB(LB LPAMID)

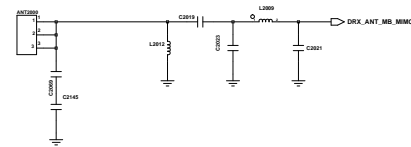


SUB ANT5 (TEST POINT)

ANT PASSIVE



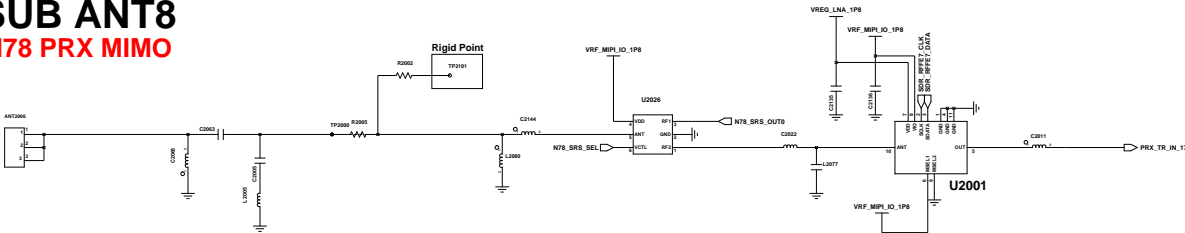
SUB ANT6 MB DRX MIMO



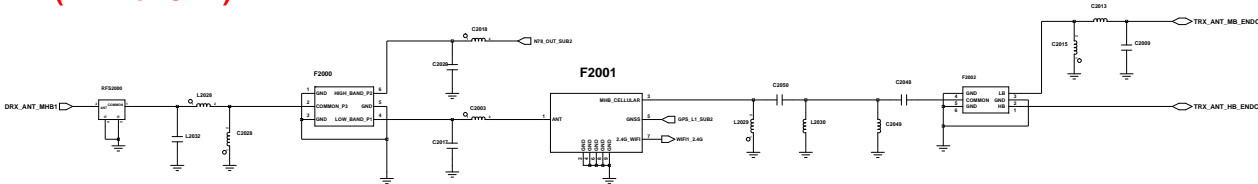
SUB ANT7 (OPTION_N78 PRX MIMO)



SUB ANT8 N78 PRX MIMO



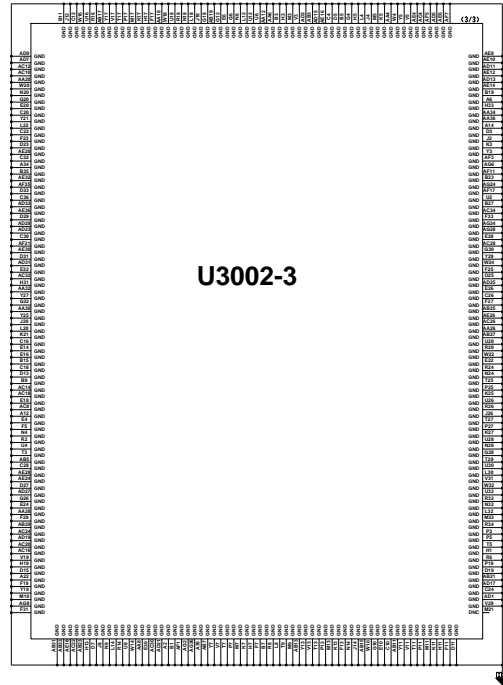
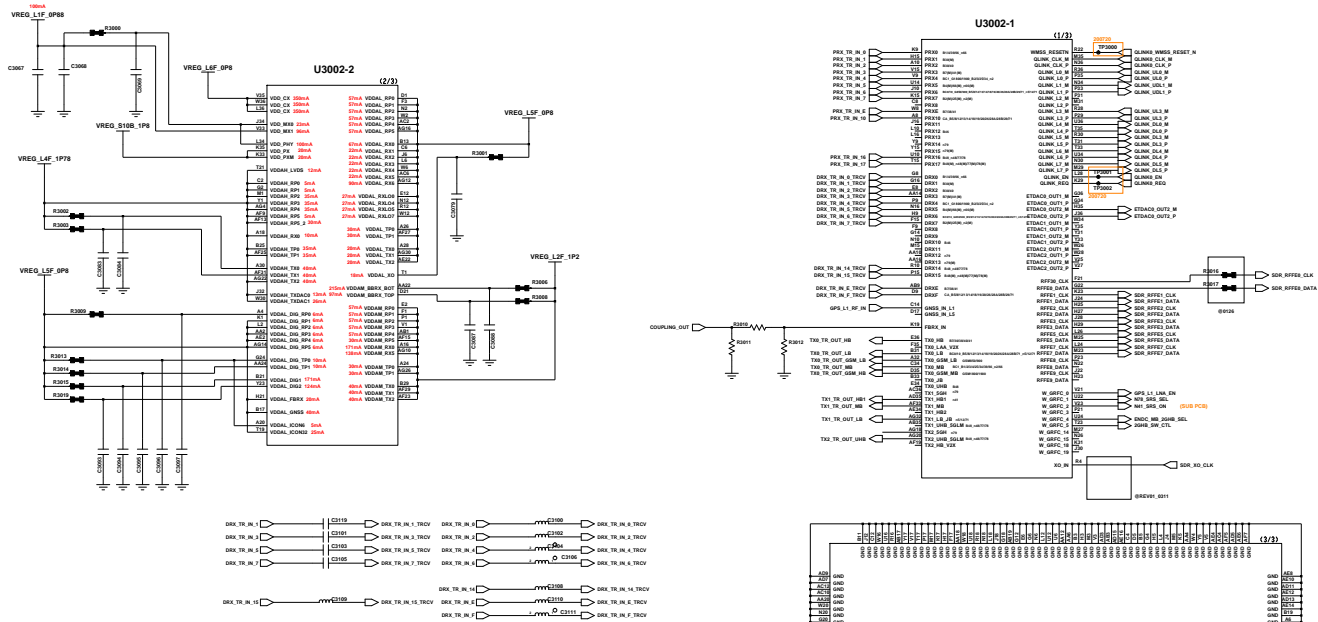
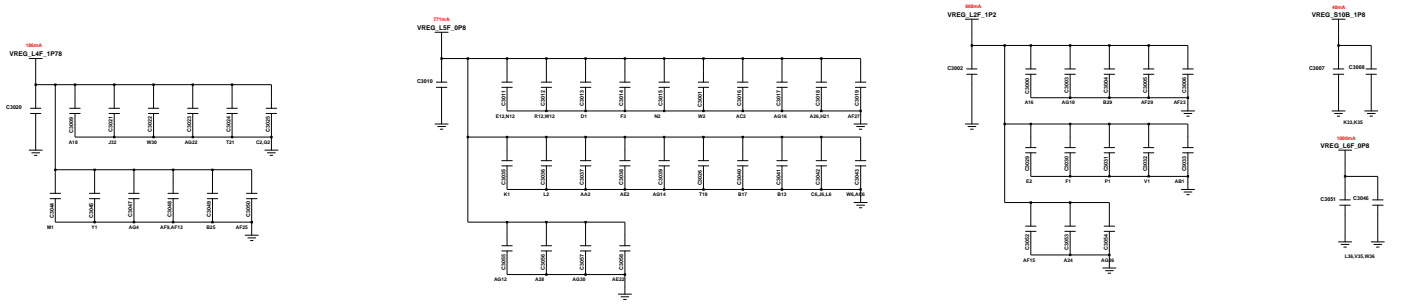
SUB ANT2 MHB DRX, n41 DRX (TRX for CHN) GPS, WIFI 2.4G



SUB2 ANT

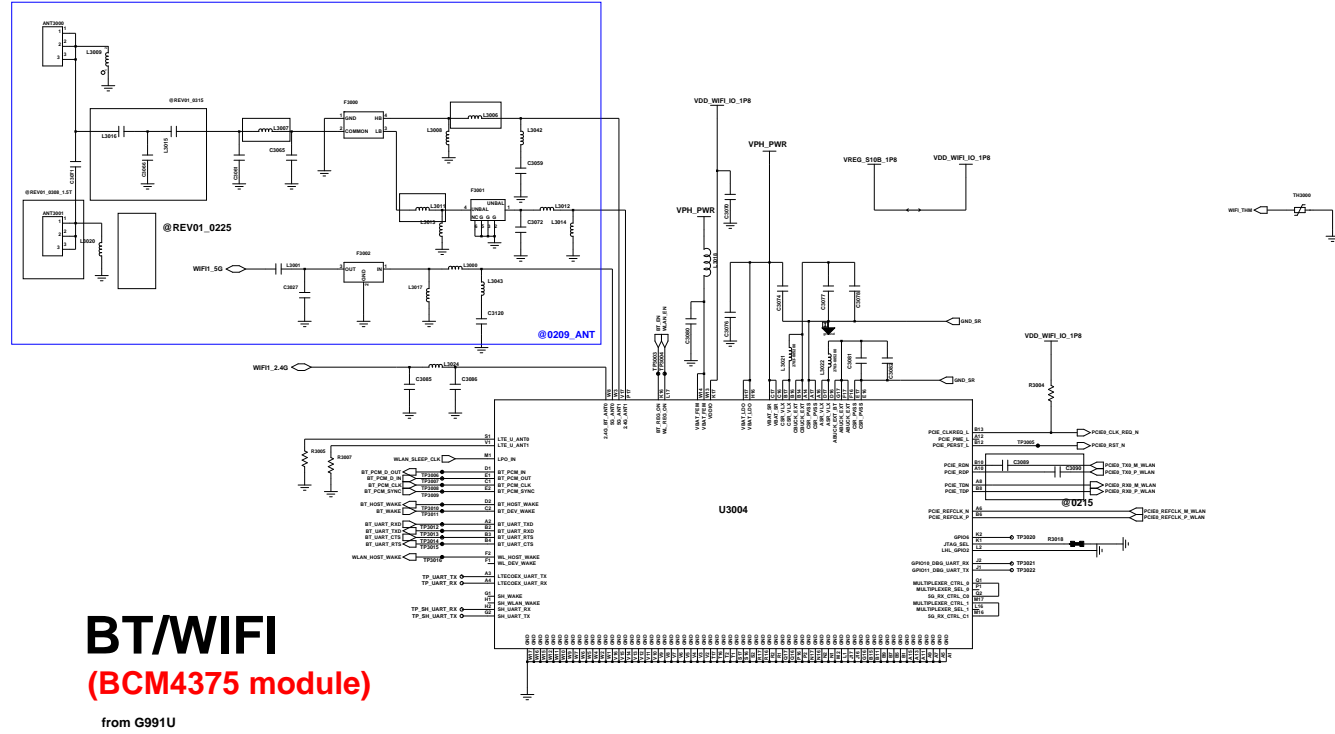
CCP

TRANSCEIVER(SDR868)



Connectivity

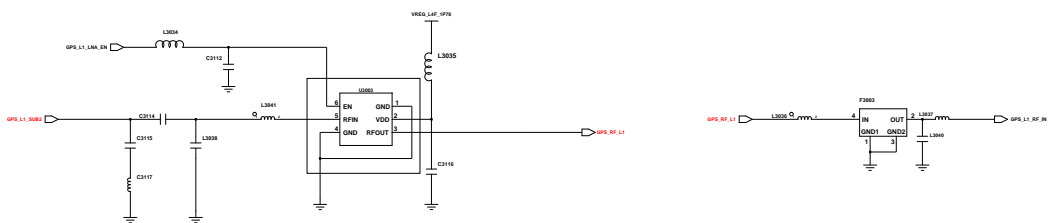
SUB4 (WiFi2 2.4G, 5G MIMO)



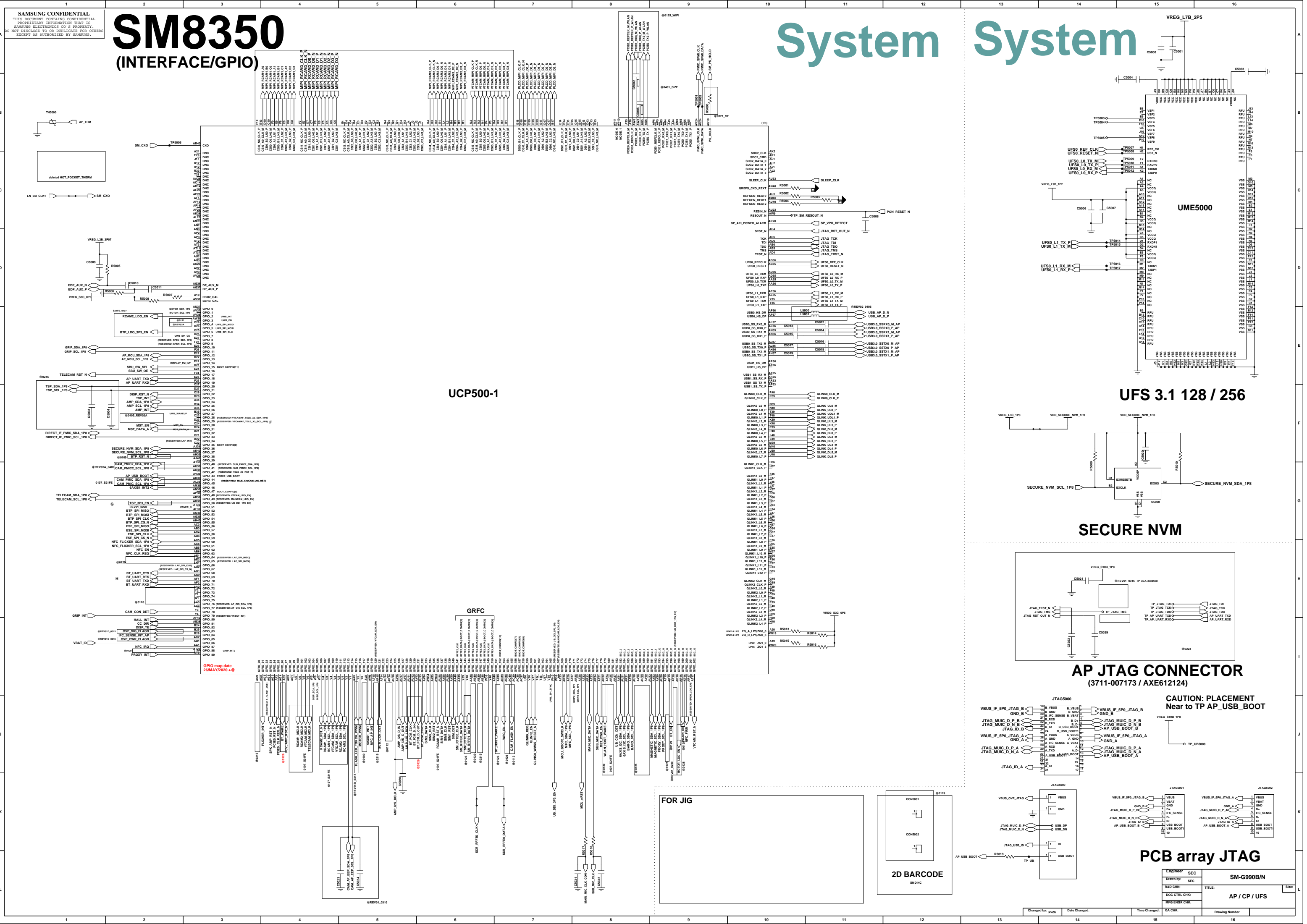
BT/WIFI (BCM4375 module)

from G991U

GPS_L1_SUB2



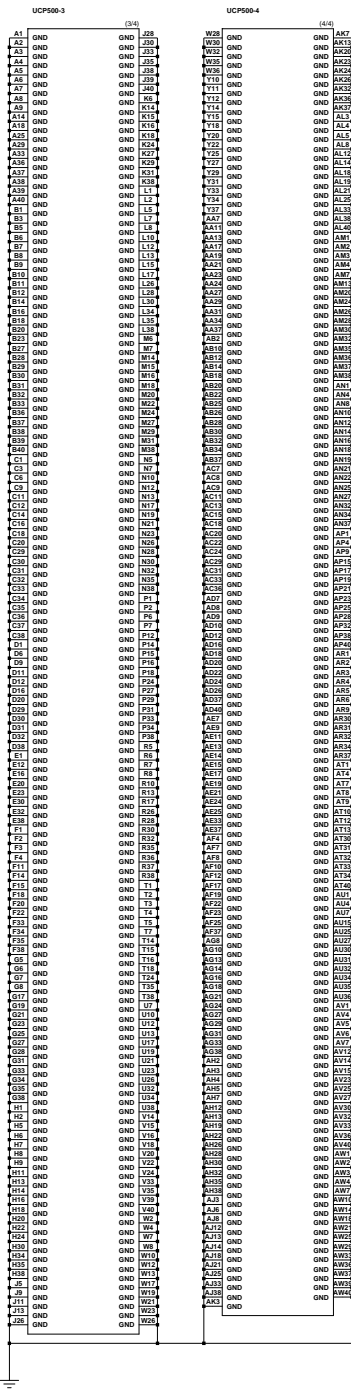




SM8350

(POWER, GND)

Power



R6004

Engineer:	SEC	SM-G990B/N		
Drawn by:	SEC			
R&D CHK:		TITLE: AP / CP	Size:	
DOC CTRL CHK:				
MFG ENGR CHK:				
QA CHK:	REV:		Drawing Number:	Page:

U7002

REV5.0911

!! HW workaround for PM350 ES1 leakage issue !!

HW ID	BOARD REVISION
00	
01	SM-G990B/N REV00
02	SM-G990B/N REV01
03	
04	
05	SM-G990B/N REV02
06	
07	SM-G990B/N REV03
08	SM-G990B/N REV04
09	SM-G990B/N REV04A
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!! HW workaround for PM8350 ES1 leakage issue !!
This components can be removed with EA2.0 or later PMICs

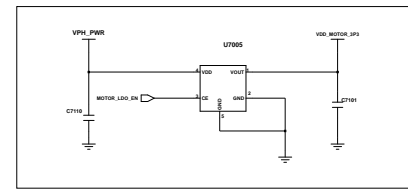
The diagram illustrates the internal architecture of the PM3530C, a power management IC. It features a central CPU_PSW block connected to various voltage regulators (VREG_L1C_1P0 to VREG_L1C_1P4) and a PMIC block. The PMIC block includes a PMIC_PSW block and a PMIC_PSW_CLK block. The diagram also shows the connection of various pins to the internal circuitry, including power pins (VDD, VSS), ground pins (GND), and control pins (CPU_PSW, PMIC_PSW, PMIC_PSW_CLK). A detailed pin list is provided on the right side of the diagram, listing the pin number, name, and function for each pin.

Pin List:

Pin	Signal	Function
1	VDD_L1C_1P0	Power
2	VSS_L1C_1P0	Ground
3	VDD_L1C_1P1	Power
4	VSS_L1C_1P1	Ground
5	VDD_L1C_1P2	Power
6	VSS_L1C_1P2	Ground
7	VDD_L1C_1P3	Power
8	VSS_L1C_1P3	Ground
9	VDD_L1C_1P4	Power
10	VSS_L1C_1P4	Ground
11	VDD_L1C_1P5	Power
12	VSS_L1C_1P5	Ground
13	VDD_L1C_1P6	Power
14	VSS_L1C_1P6	Ground
15	VDD_L1C_1P7	Power
16	VSS_L1C_1P7	Ground
17	VDD_L1C_1P8	Power
18	VSS_L1C_1P8	Ground
19	VDD_L1C_1P9	Power
20	VSS_L1C_1P9	Ground
21	VDD_L1C_1P10	Power
22	VSS_L1C_1P10	Ground
23	VDD_L1C_1P11	Power
24	VSS_L1C_1P11	Ground
25	VDD_L1C_1P12	Power
26	VSS_L1C_1P12	Ground
27	VDD_L1C_1P13	Power
28	VSS_L1C_1P13	Ground
29	VDD_L1C_1P14	Power
30	VSS_L1C_1P14	Ground
31	VDD_L1C_1P15	Power
32	VSS_L1C_1P15	Ground
33	VDD_L1C_1P16	Power
34	VSS_L1C_1P16	Ground
35	VDD_L1C_1P17	Power
36	VSS_L1C_1P17	Ground
37	VDD_L1C_1P18	Power
38	VSS_L1C_1P18	Ground
39	VDD_L1C_1P19	Power
40	VSS_L1C_1P19	Ground
41	VDD_L1C_1P20	Power
42	VSS_L1C_1P20	Ground
43	VDD_L1C_1P21	Power
44	VSS_L1C_1P21	Ground
45	VDD_L1C_1P22	Power
46	VSS_L1C_1P22	Ground
47	VDD_L1C_1P23	Power
48	VSS_L1C_1P23	Ground
49	VDD_L1C_1P24	Power
50	VSS_L1C_1P24	Ground
51	VDD_L1C_1P25	Power
52	VSS_L1C_1P25	Ground
53	VDD_L1C_1P26	Power
54	VSS_L1C_1P26	Ground
55	VDD_L1C_1P27	Power
56	VSS_L1C_1P27	Ground
57	VDD_L1C_1P28	Power
58	VSS_L1C_1P28	Ground
59	VDD_L1C_1P29	Power
60	VSS_L1C_1P29	Ground
61	VDD_L1C_1P30	Power
62	VSS_L1C_1P30	Ground
63	VDD_L1C_1P31	Power
64	VSS_L1C_1P31	Ground
65	VDD_L1C_1P32	Power
66	VSS_L1C_1P32	Ground
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91	VDD_L1C_1P45	Power
92	VSS_L1C_1P45	Ground
93	VDD_L1C_1P46	Power
94	VSS_L1C_1P46	Ground
95	VDD_L1C_1P47	Power
96	VSS_L1C_1P47	Ground
97	VDD_L1C_1P48	Power
98	VSS_L1C_1P48	Ground
99	VDD_L1C_1P49	Power
100	VSS_L1C_1P49	Ground
101	VDD_L1C_1P50	Power
102	VSS_L1C_1P50	Ground
103	VDD_L1C_1P51	Power

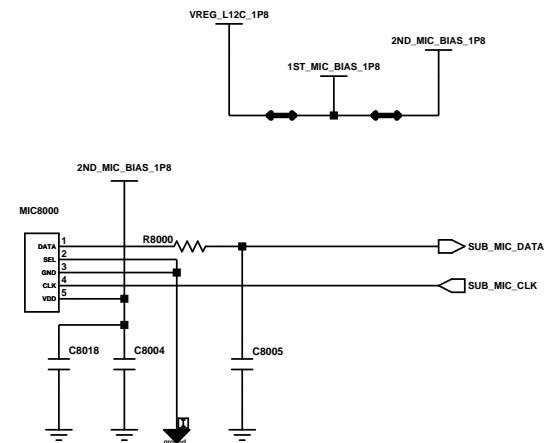
The schematic diagram shows the ATmega328P microcontroller with the following connections:

- VCC:** Connected to VCC_5V1_0V1.
- GND:** Connected to GND_5V1_0V1.
- RESET:** Connected to GND_5V1_0V1.
- TXD:** Connected to TXD_5V1_0V1.
- RXD:** Connected to RXD_5V1_0V1.
- PCINT0:** Connected to PCINT0_5V1_0V1.
- PCINT1:** Connected to PCINT1_5V1_0V1.
- PCINT2:** Connected to PCINT2_5V1_0V1.
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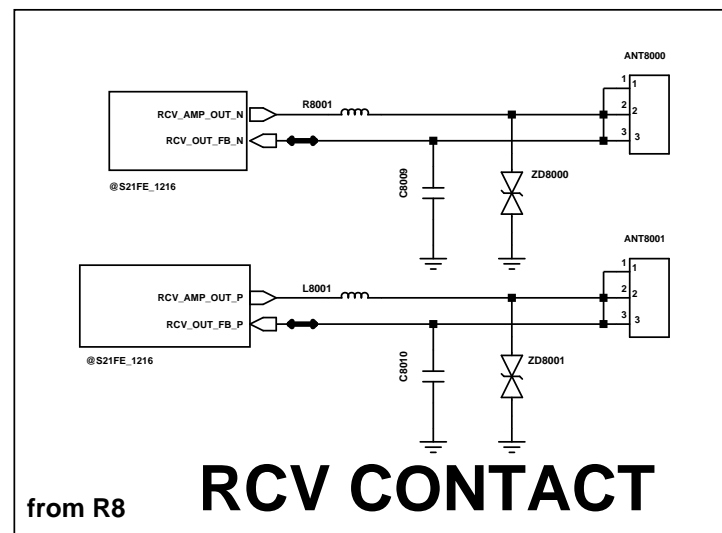


AUDIO PART

SPK AMP



2nd MIC

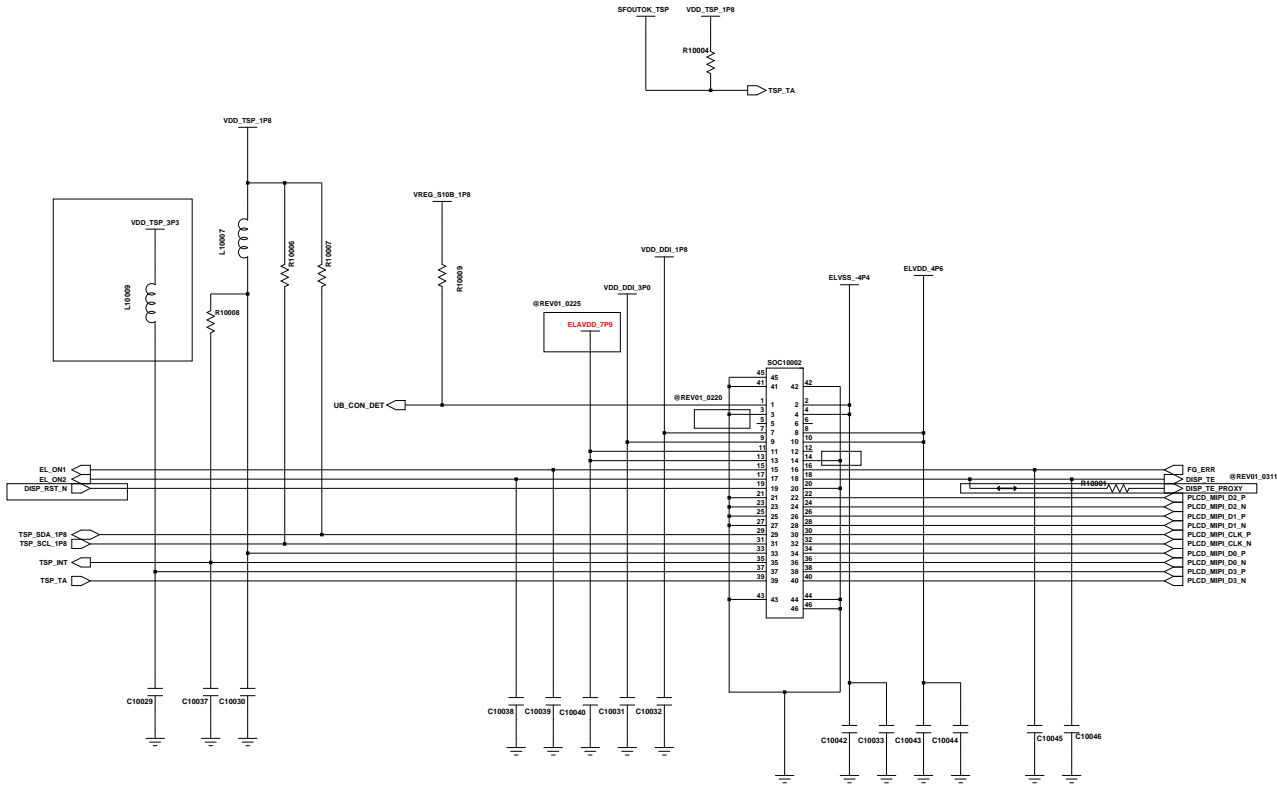
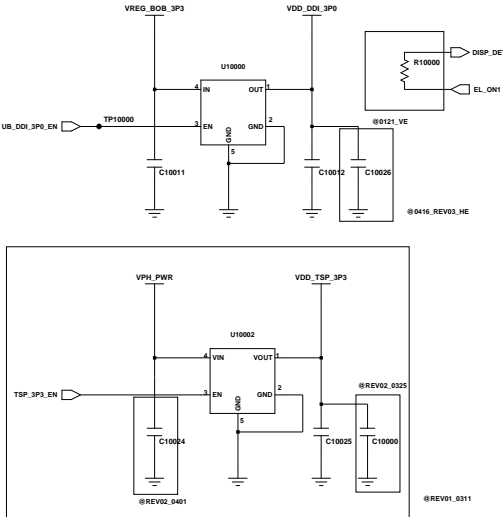


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from R1



DISPLAY PMIC



DISPLAY CONNECTOR

Engineer: SEC	SM-G990B/N				
Drawn by: SEC					
R&D CHK:				TITLE:	Size:
DOC CTRL CHK:				DISPLAY	
MFG ENGR CHK:					
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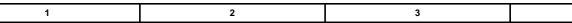
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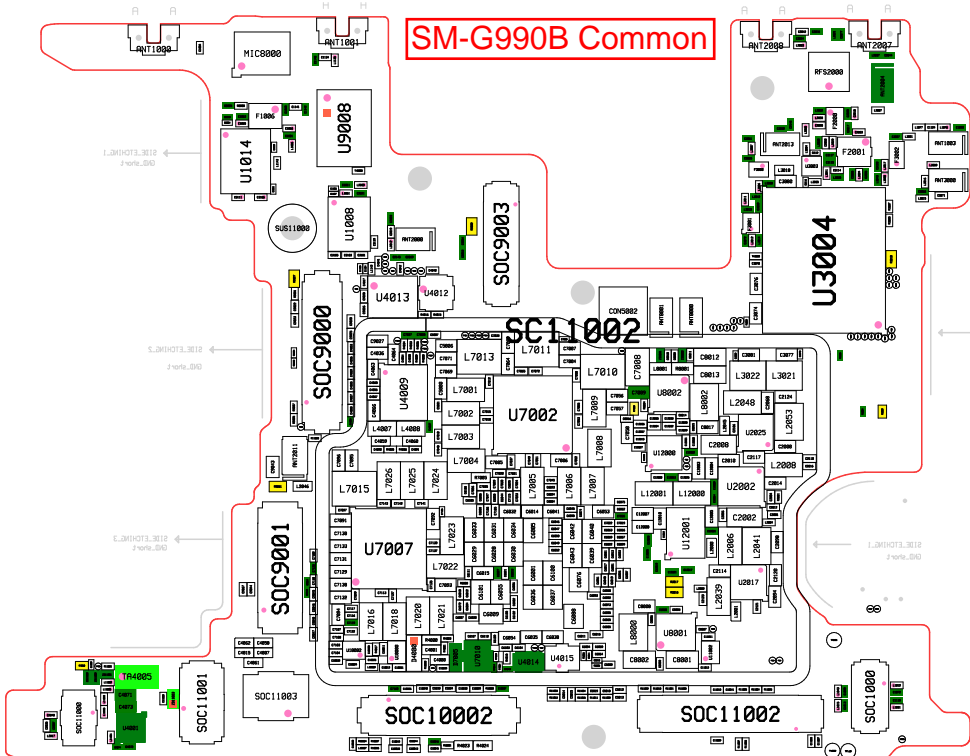


CHECK PIN MAP



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SM-G990B Common



SM-G990B Common

