




## A




<u>I2C0</u>	<u>DEVICE</u>	<u>BINARY</u>	<u>7-BIT HEX</u>	<u>8-BIT HEX</u>
	ADI PMU:	1110100X	0X74	0XE8
	LM3534 BL DRIVER:	1100011X	0X63	0XC6
	TRISTAR:	0011010X	0X1A	0X34
<u>I2C1</u>	CHESTNUT:	0100111X	0X27	0X4E
	TIGRIS CHARGER:	1110101X	0X75	0XE4
	LINER VIBE:	1011010X	0X5A	0XB4
	CS35119B AMP:	1000000X	0X40	0X80
MESA EPROM (MEMORY):	1010110X	0X56	0XAC	
MESA EPROM (ID):	1011110X	0X5E	0XBC	
<u>I2C2</u>				
	CT814 ALS:	0101001X	0X29	0X52
	DISPLAY EPROM:	1010001X	0X51	0XA2
<u>RCAM I2C</u>				
	OPEL STROBE DRIVER:	1100011X	0X63	0XC6
	REAR FACING CAM:	0010000X	0X10	0X20
	VCM AF DRIVER:	0001100X	0X0C	0X18
<u>FCAM I2C</u>				
	FRONT FACING CAM:	0010000X	0X10	0X20

NOTE: ACCEL, GYRO, COMPASS ALL USING SPI (VIA OSCAR) FOR AP COMMUNICATION.

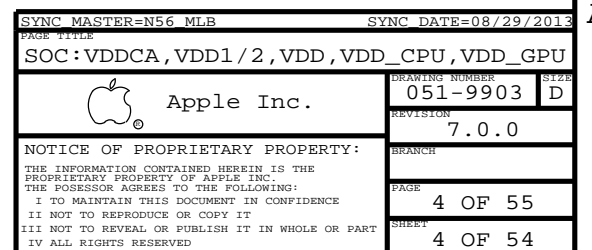
SYNC MASTER=N56 MLB		SYNC DATE=08/29/2013	
PAGE TITLE			
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	Apple Inc.		DRAWING NUMBER 051-9903
			SIZE D
		REVISION 7.0.0	
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			7.0.0
		BRANCH	
		PAGE	3 OF 55
		SHEET	
			3 OF 54

VDD\_CPU, VDD\_GPU

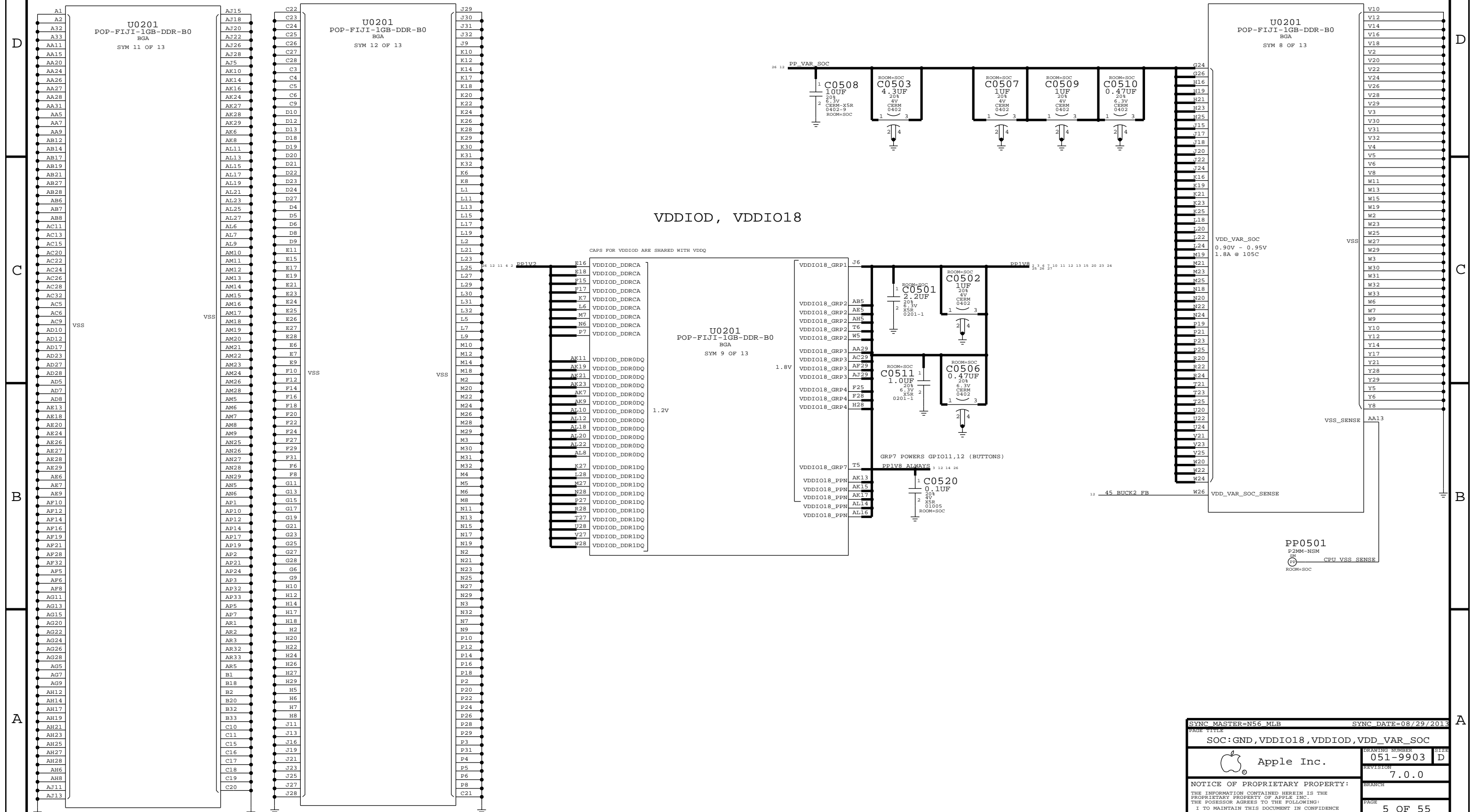




FIJI: VDDIOD, VDDIO18, VDD\_VAR\_SOC

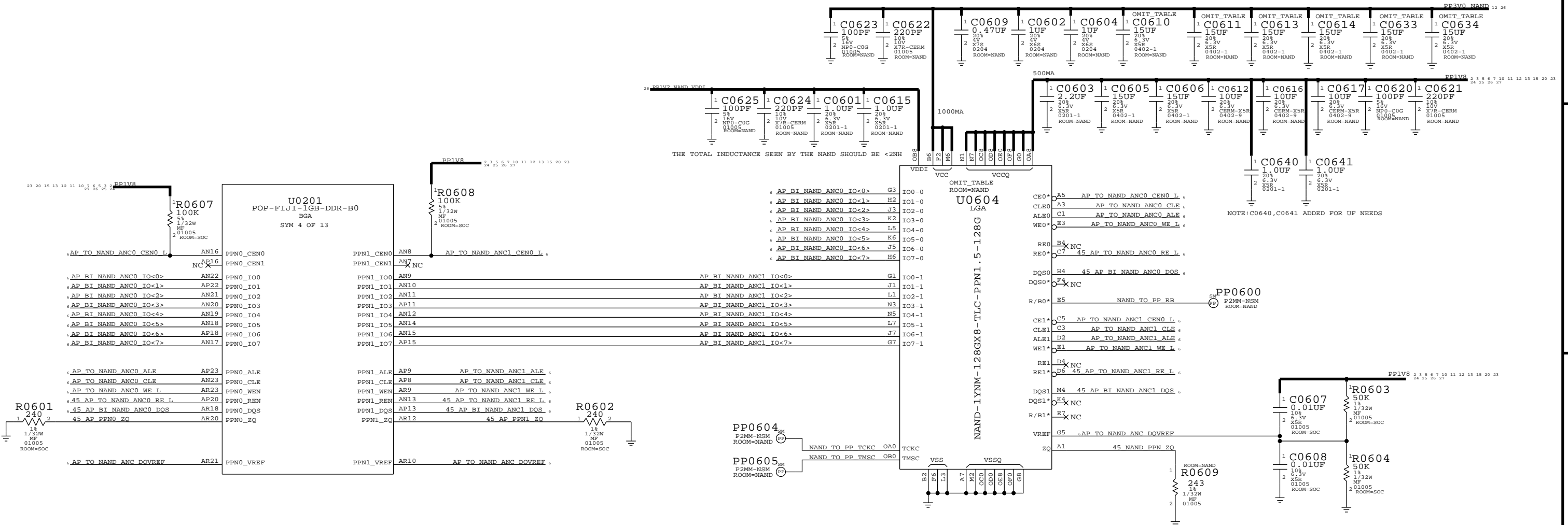
JUST A FEW GNDS

VDD\_SRAM, VDD\_SOC




# FIJI: NAND + 12X17 NAND PKG

SUPPORT FOR PPN1.5 (1.8V IO) ONLY



NOTE: NAND PADS SHOULD BE SHIELDED FROM TRACES WITH A GROUND PLANE

PP0601 P4MM  
ROOM=SOC 1 AP BI NAND ANCO IO<6> (IS A STATUS READY BIT)  
PP0602 P4MM  
ROOM=SOC 1 45 AP TO NAND ANCO RE L  
PP0603 P4MM  
ROOM=SOC 1 45 AP BI NAND ANCO DQS

SYNC MASTER=N56 MLB		SYNC DATE=08/29/2013	
PAGE TITLE			
SOC : NAND			
 Apple Inc.	DRAWING NUMBER	051-9903	SIZE
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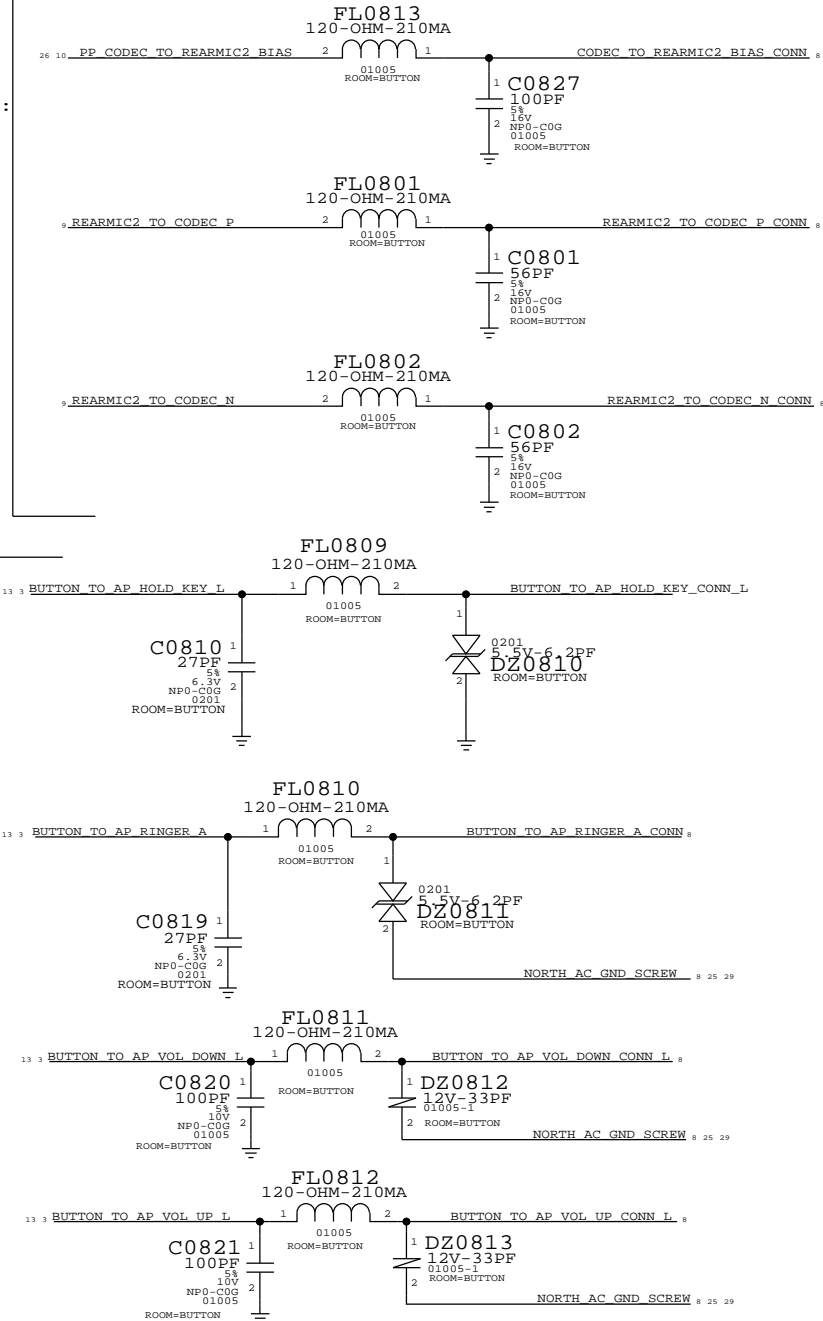
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8 7 6 5 4 3 2 1

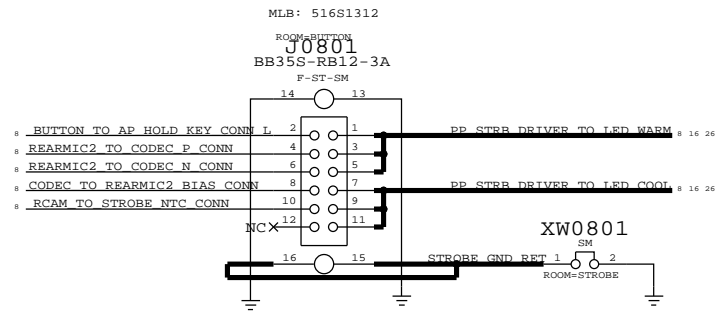
# BUTTON FLEX (BUTTONS, ANC REF MIC, STROBE, STROBE\_NTC, WIFI FLEX PAC)

MIC2 (ANC REF MIC):  
MIC2/4 BIAS,  
MIC2\_P,\_N

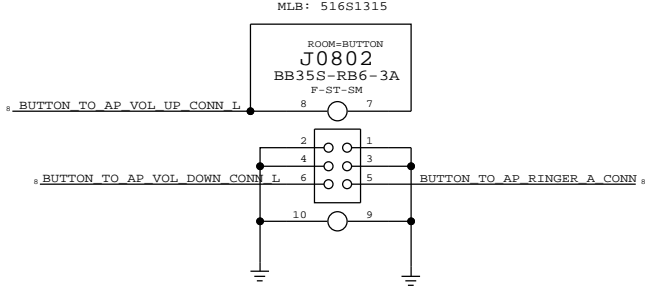
BUTTONS:  
RINGER, HOLD,  
VOL\_UP/DOWN,



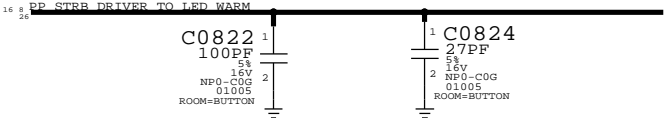
## RIGHT BUTTON B2B



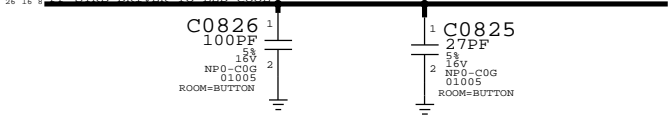
## LEFT BUTTON B2B



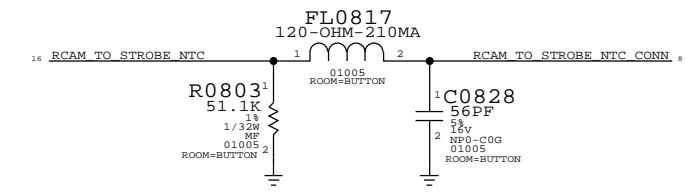
STROBE:  
LED WARM




STROBE:  
LED COOL



STROBE:  
NTC



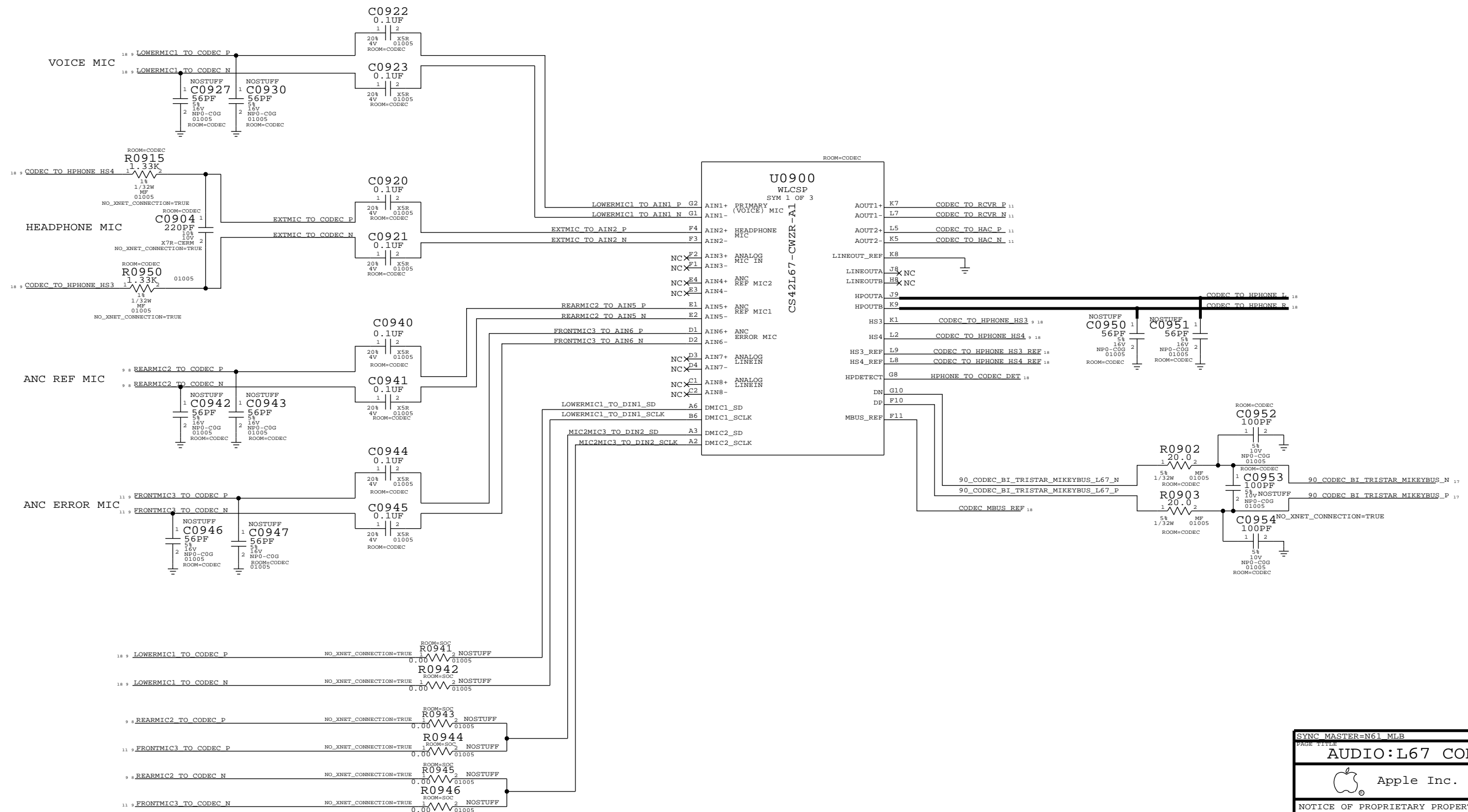
SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
PAGE TITLE			
IO:BUTTON FLEX CONN			
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# L67 AUDIO CODEC

## AUDIO I/O

(ANALOG MIC IN, DIG MIC IN, HPOUT, LINEOUT, RECEIVER OUT, MIKEYBUS)



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AUDIO:L67 CODEC (1/2)			
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		REVISION	7.0.0
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## D

## C

## B

A



# FRONT CAM FLEX B2B

(FCAM, PROX, ALS, RECEIVER, ANC ERROR MIC)

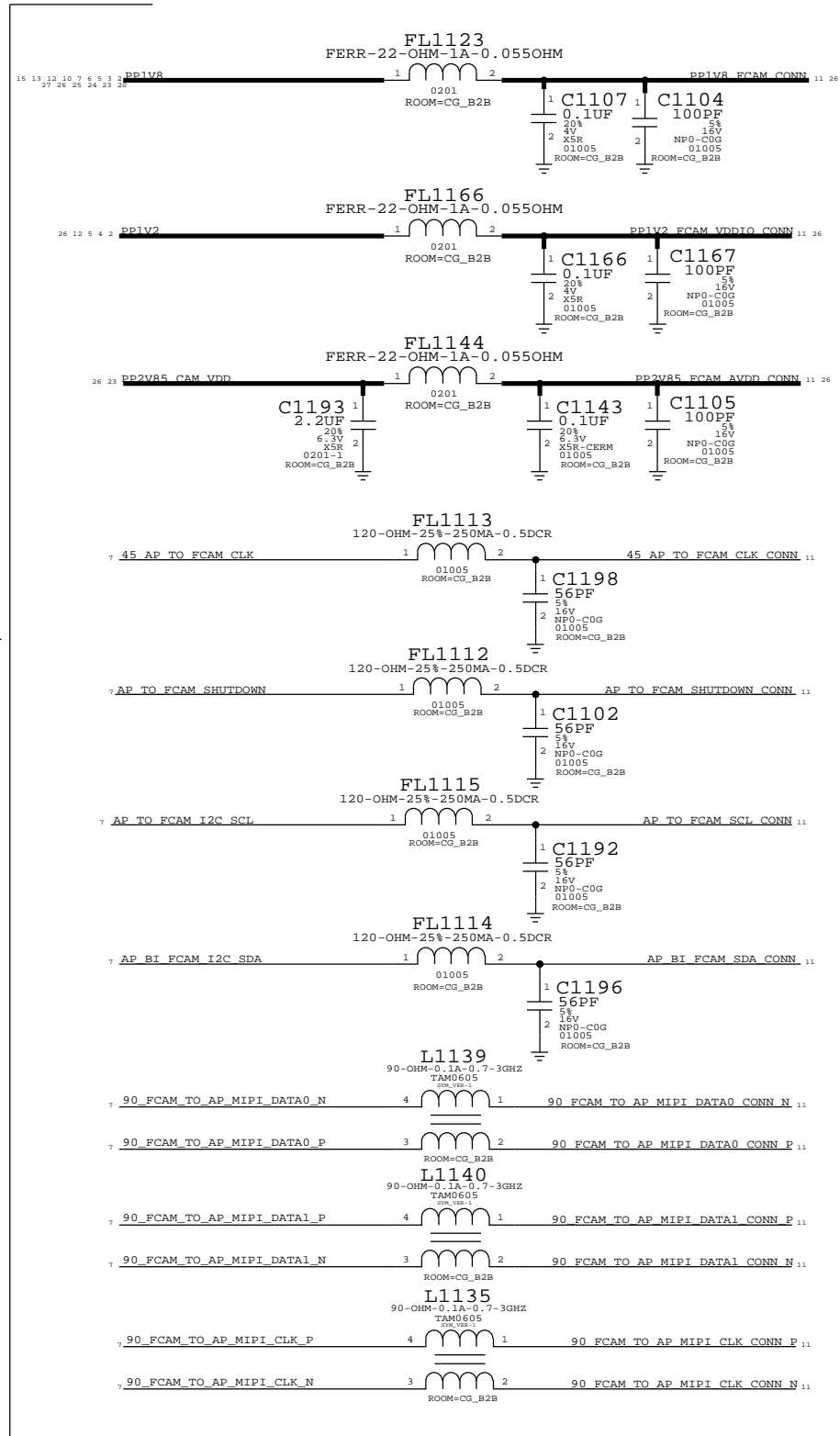
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C

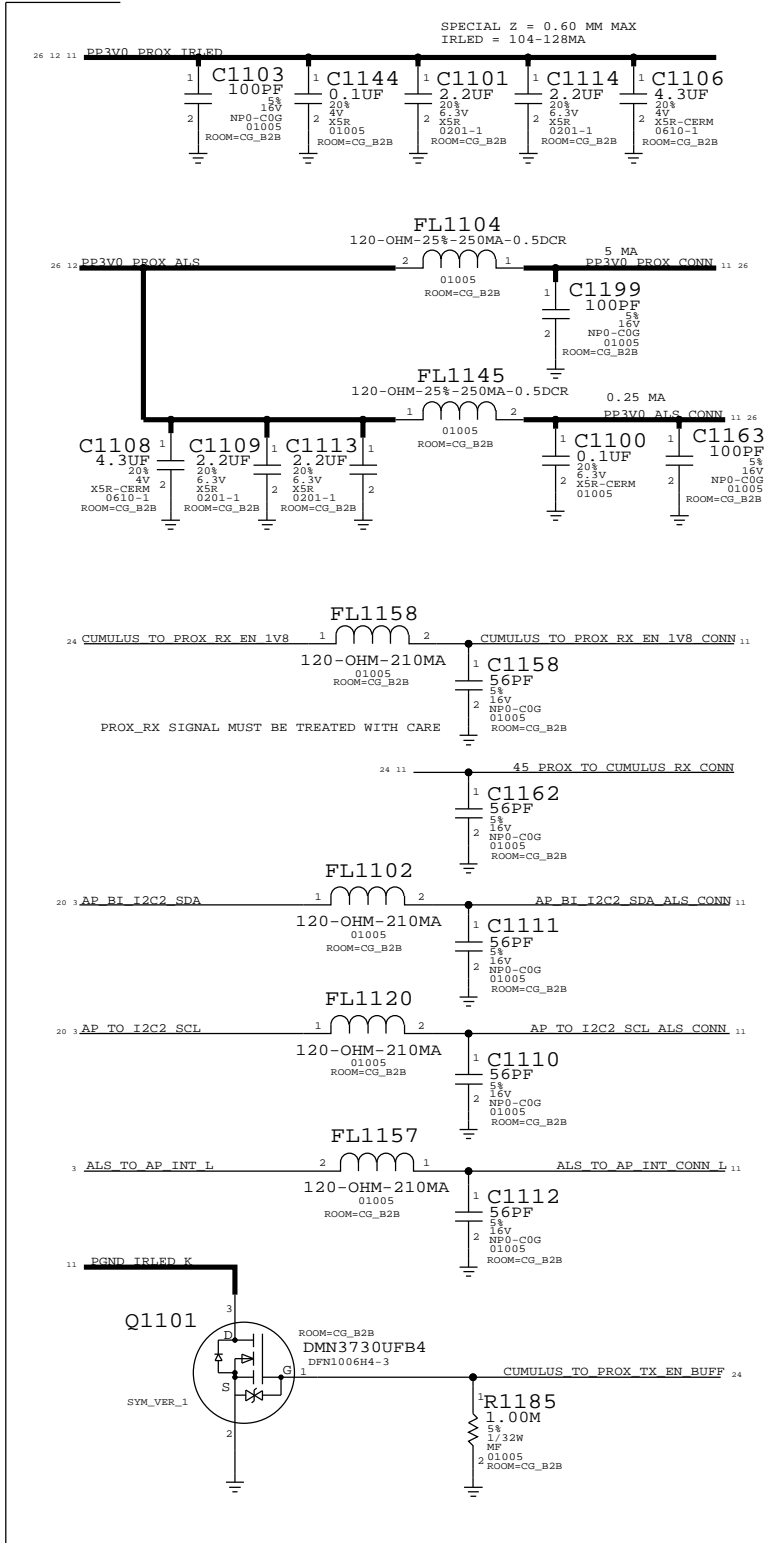
CAMERA

B

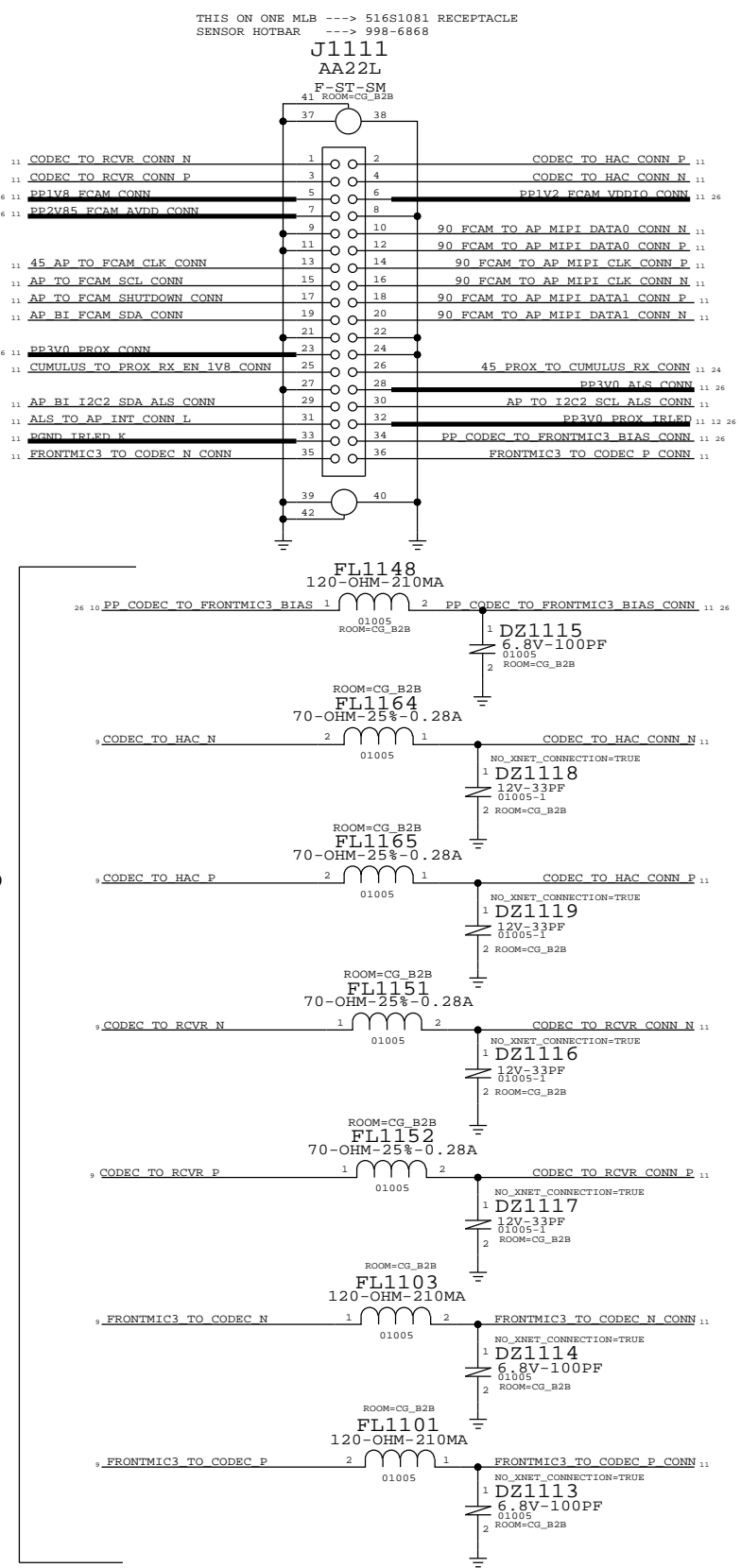
A




ALS,  
PROX



AUDIO



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PAGE TITLE			
CAMERA:FRONT FLEX CONN			
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# ADI PMU

(BUCK, LDO, VIBE DRIVER, 32K, CHARGER)

D

C

B

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NOTE: L1210, L1212 BOMPTIONS  
CONTROLLED ON PAGE1

APN: 338S1251 (ADI AZ)

U1202  
D2186AZE0FJAVAC  
FCCSP-N56-N61 ROOM=PMU  
SYM 1 OF 3

VBUS\_OVP\_OFF

VCENTER

VBUS

IBAT

VBAT

ACT\_DIO

CHG\_LX

VCC\_MAIN

VCC\_MAIN\_S

VDD\_BUCK1

VDD\_BUCK2

VDD\_BUCK3

VDD\_BUCK4

VDD\_BUCK5

VDD\_BUCK6

VDD\_BYP\_BUCK6

VDD\_BUCK001

VDD\_BUCK023

VDD\_LDO6

VDD\_LDO2

VDD\_LDO1\_3

VDD\_LDO4\_13

VDD\_LDO5

VDD\_LDO7\_8

VDD\_LDO10

VDD\_LDO9\_11

VDD\_VIB

VIB

VIB\_PWM\_EN

XTAL1

XTAL2

VSS\_RTC

VDD\_VIB

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XTAL2

VSS\_RTC

VDD\_VIB

VIB

VIB\_PWM\_EN

XTAL1

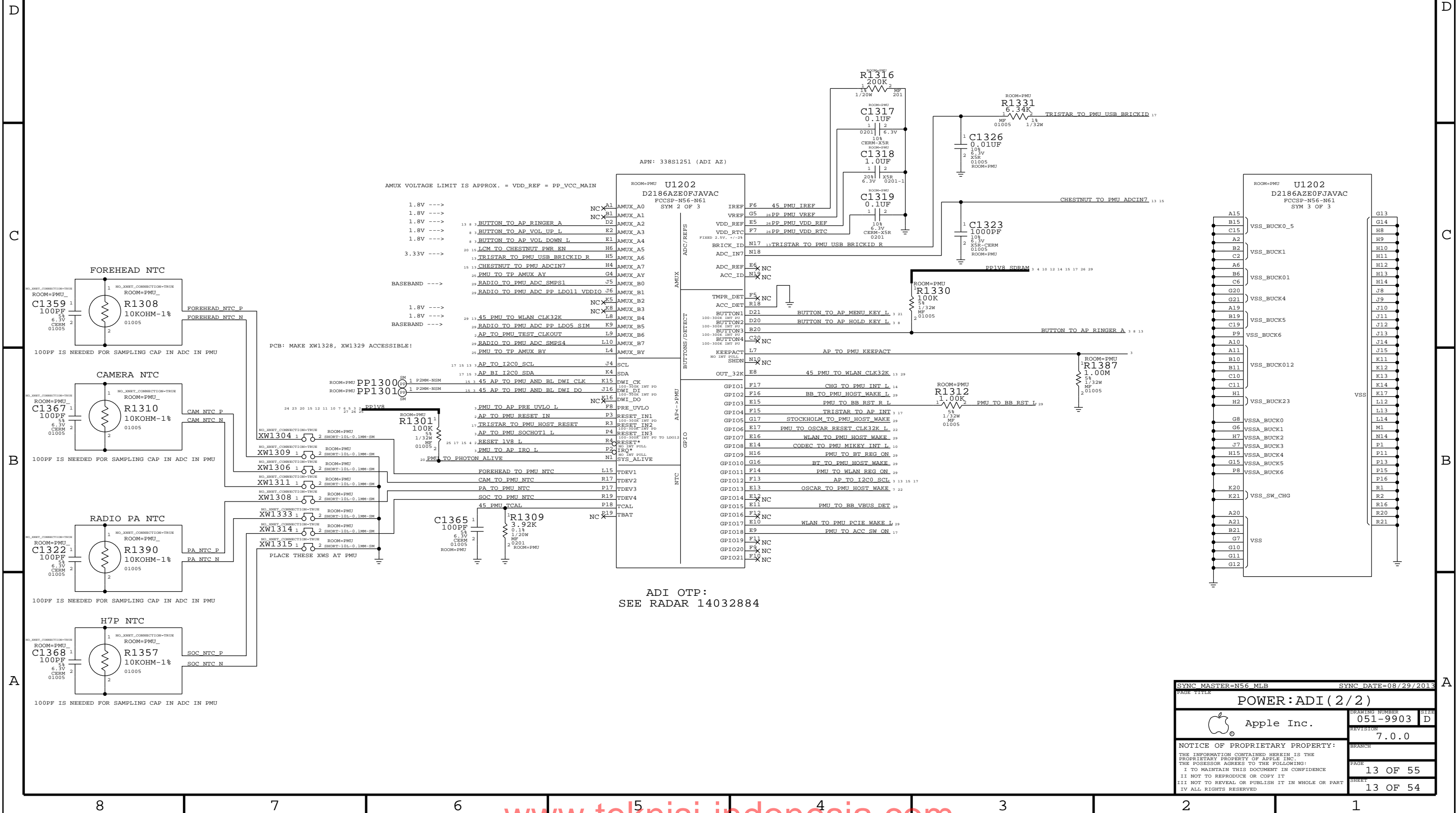
XTAL2

VSS\_RTC

VDD\_VIB

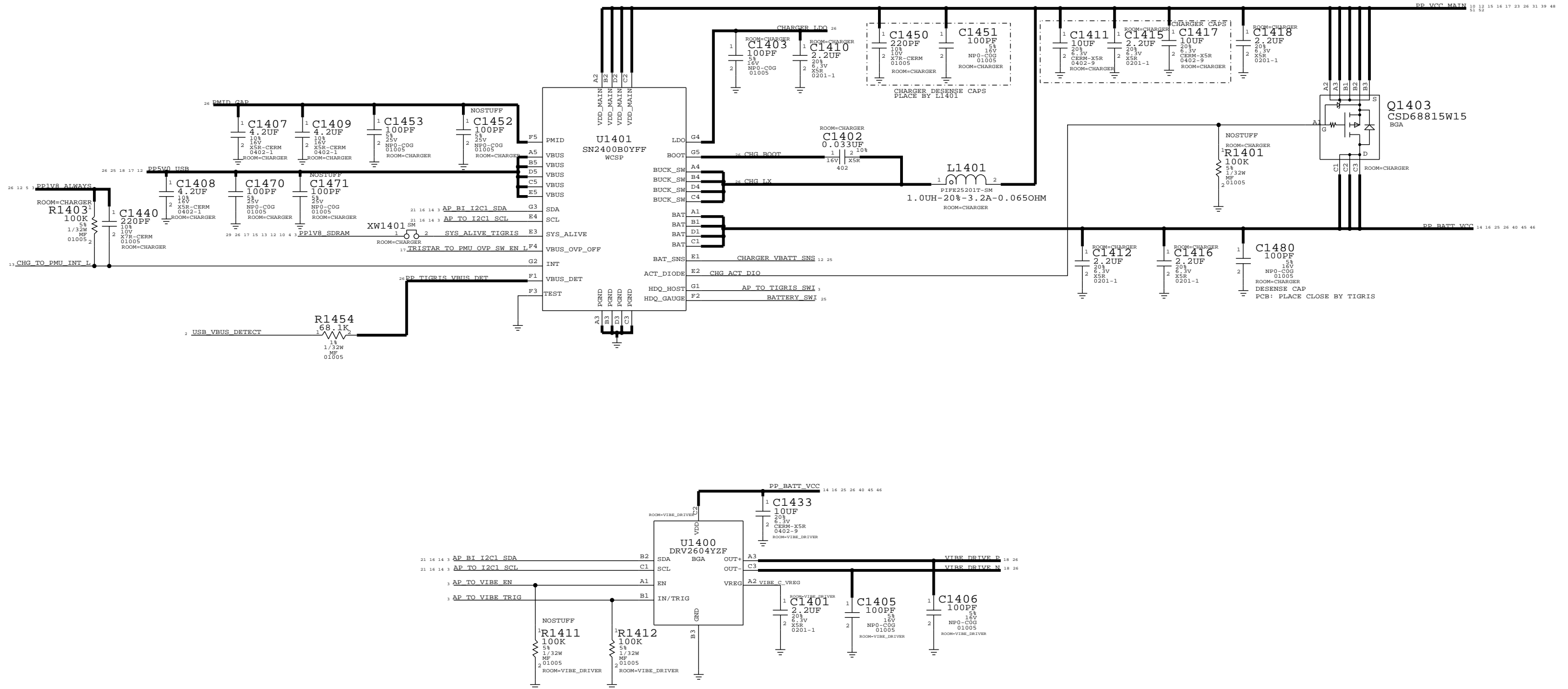
VIB


```
(AMUX, GPIO, BUTTONS, ADC, THERMISTORS, SYSTEM I/F, GND)
```





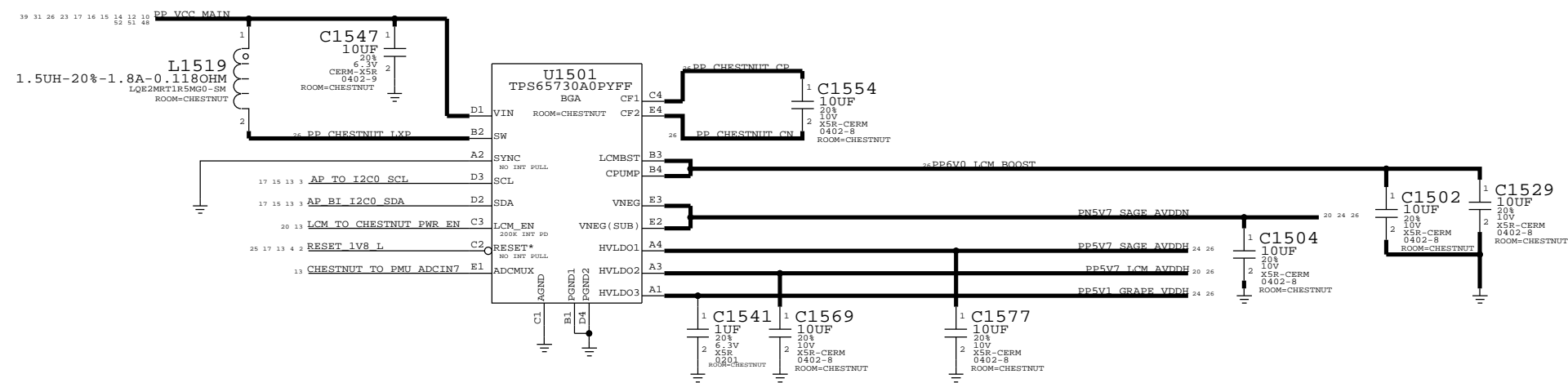
# TIGRIS CHARGER & VIBE DRIVER



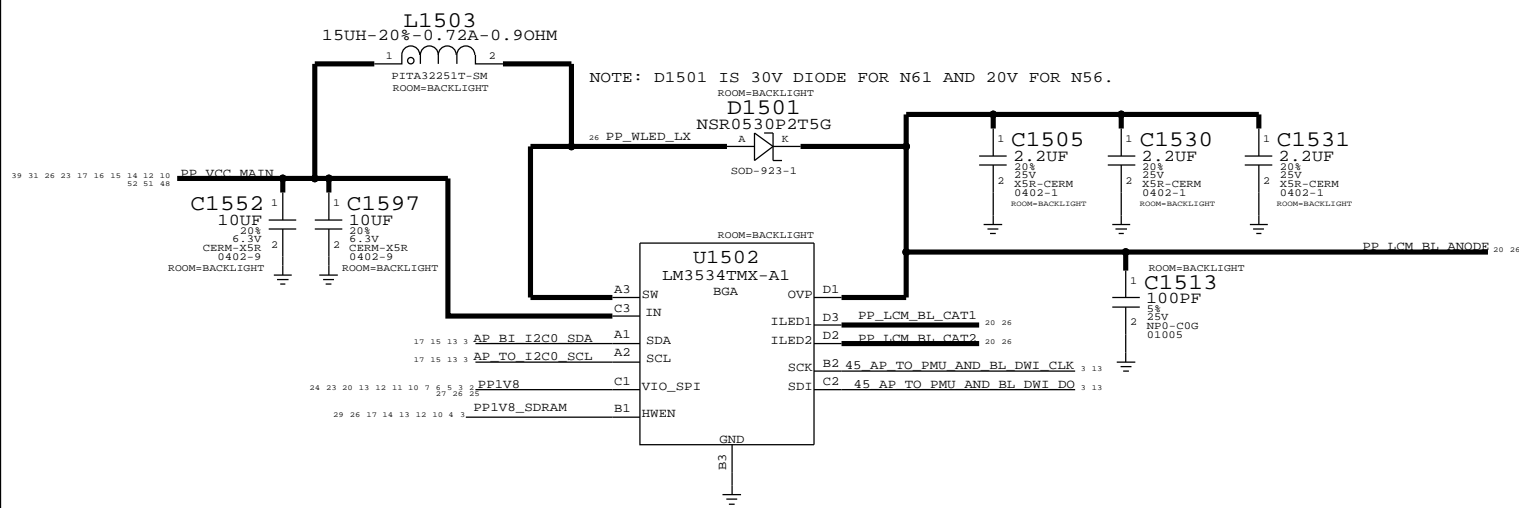
PAGE TITLE		
POWER:TIGRISR,VIBE DRIVER		
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# CHESTNUT, BACKLIGHT DRIVER, MESA BOOST

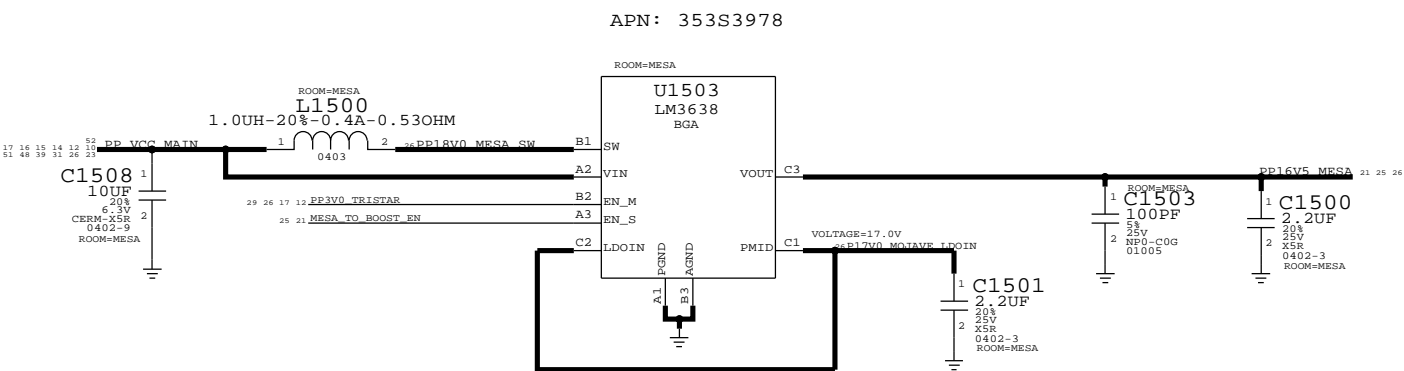
## D500 DISPLAY PMU (TI CHESTNUT, 338S1149)



## D500 BACKLIGHT DRIVER



## MESA BOOST A0



PAGE TITLE		PAGE NUMBER	
DISPLAY:CHESTNUT, BACKLIGHT DRIVER		051-9903	
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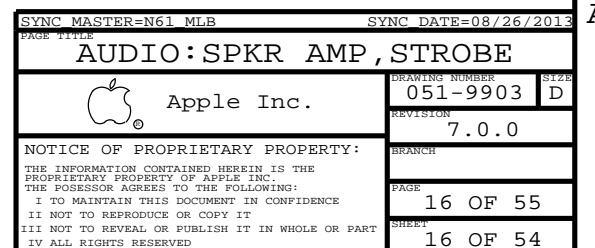
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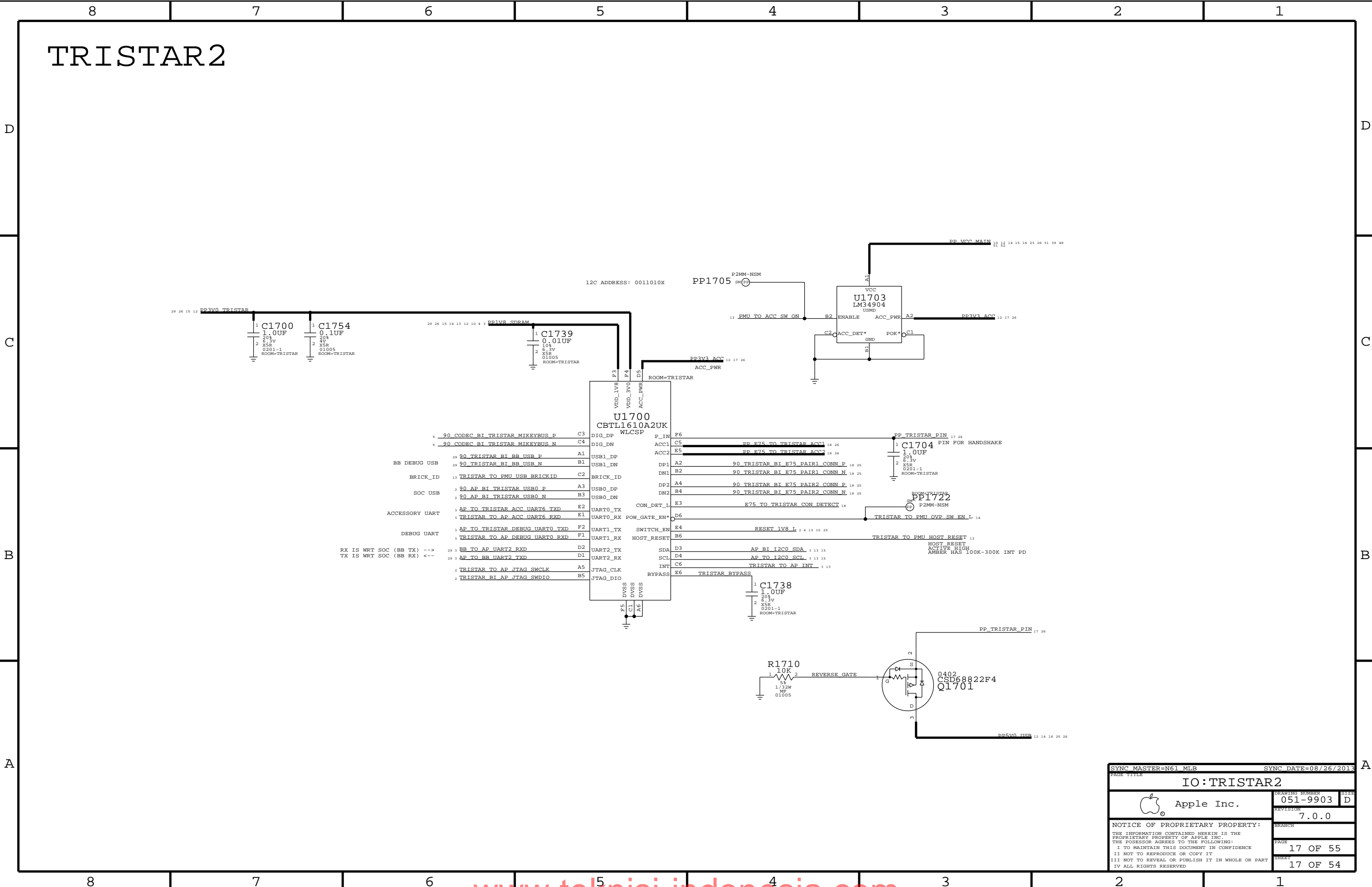
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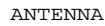
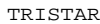


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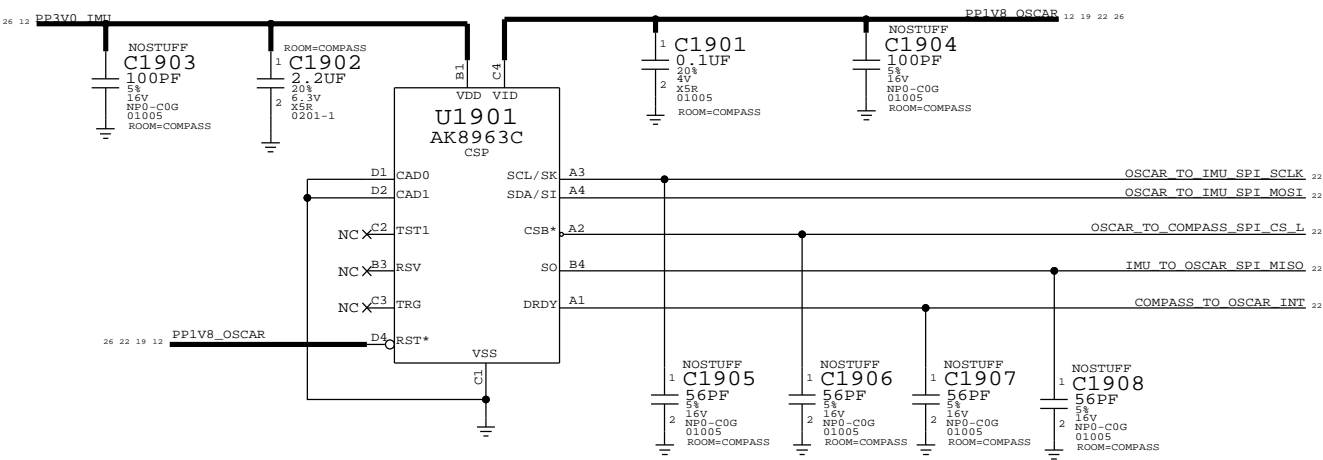



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# COMPASS - AKM COMPASS IN POR LOCATION

COMPASS CSP: 338S1014

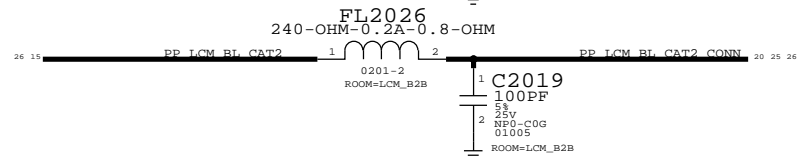
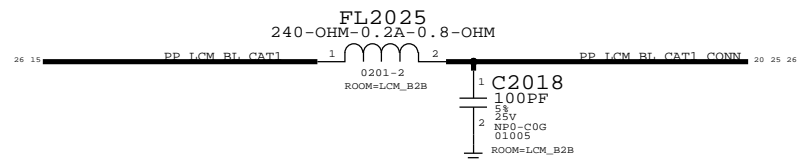
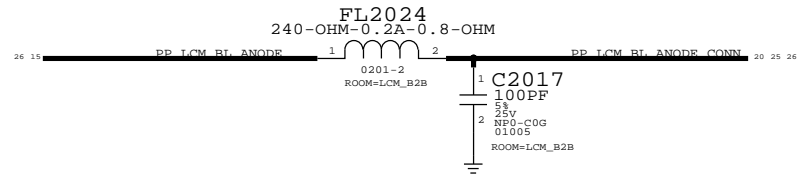


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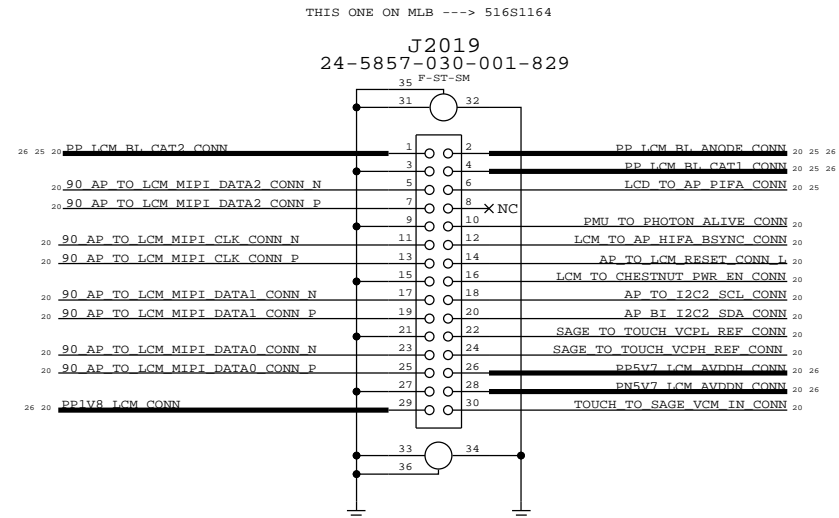
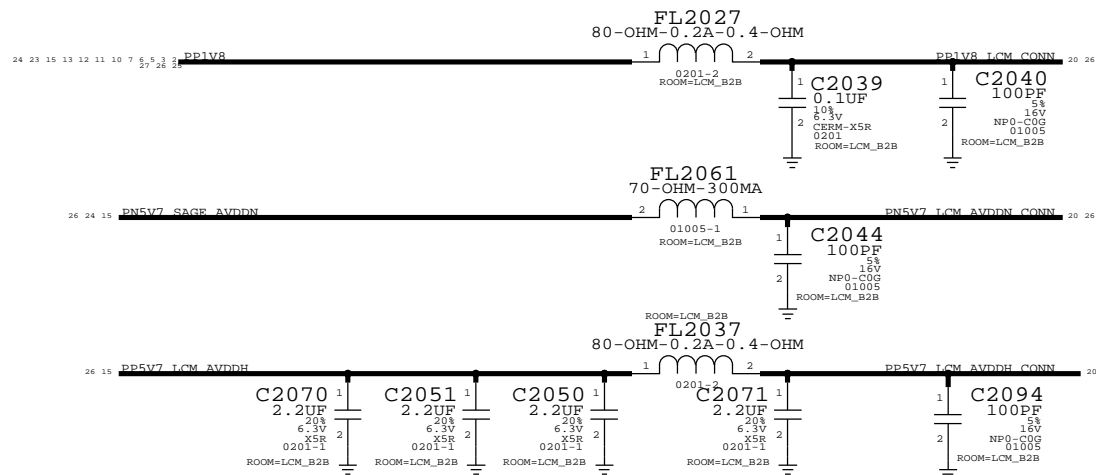
# LCD B2B

## Backlight

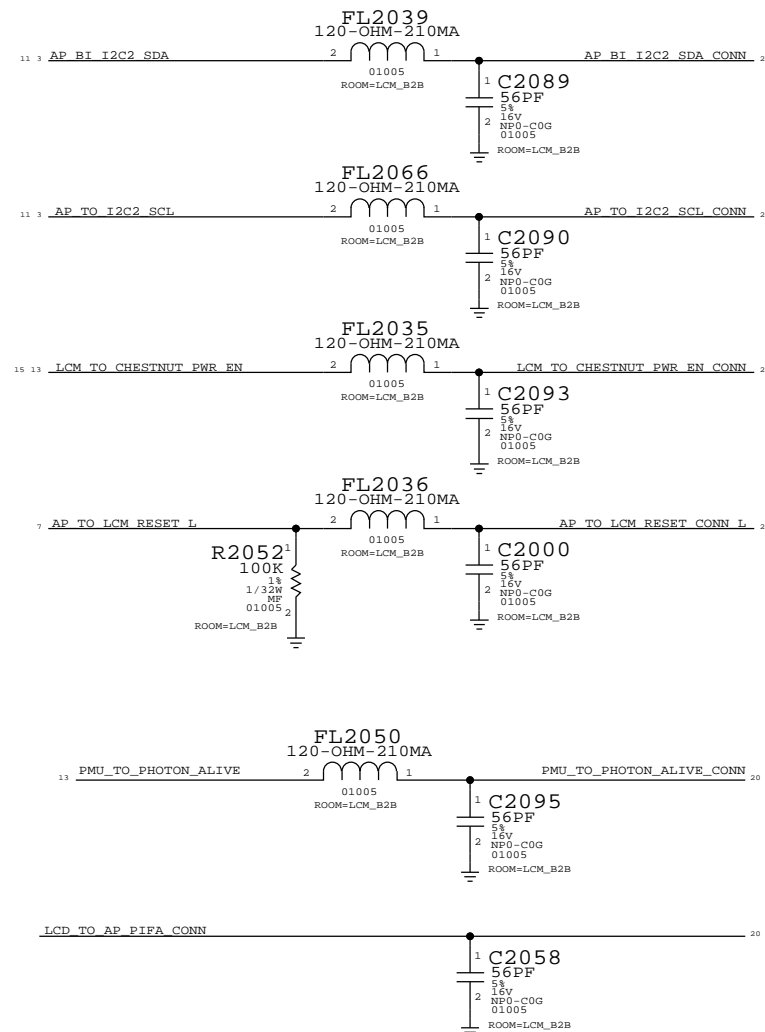
(N56 HAS A 2ND SET OF BL SIGNALS ON P. 19).



## LCM Supplies

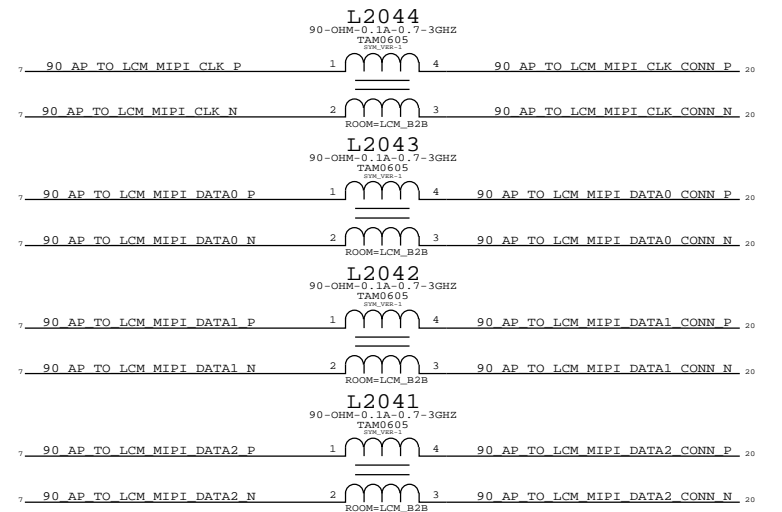


## Digital Interfaces

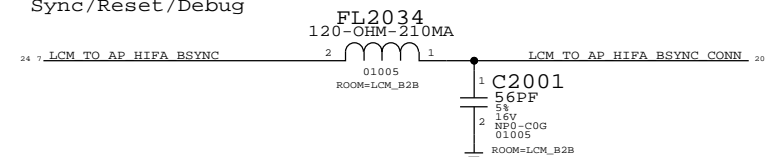


## MIPI Common Mode Chokes

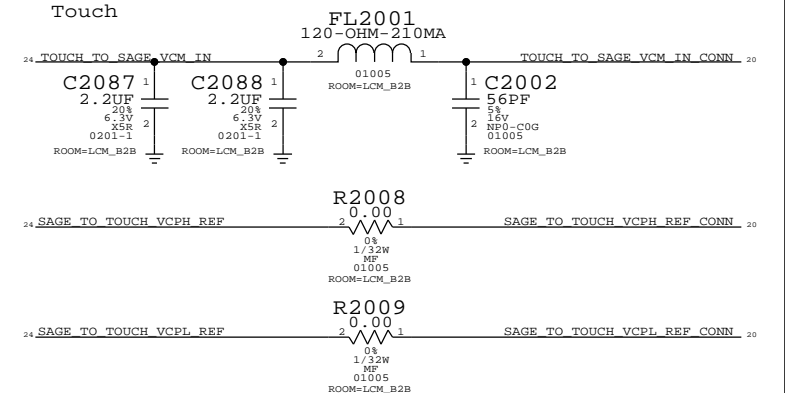
(N56 HAS A 4TH MIPI LANE ON P. 19).




## Sync/Reset/Debug

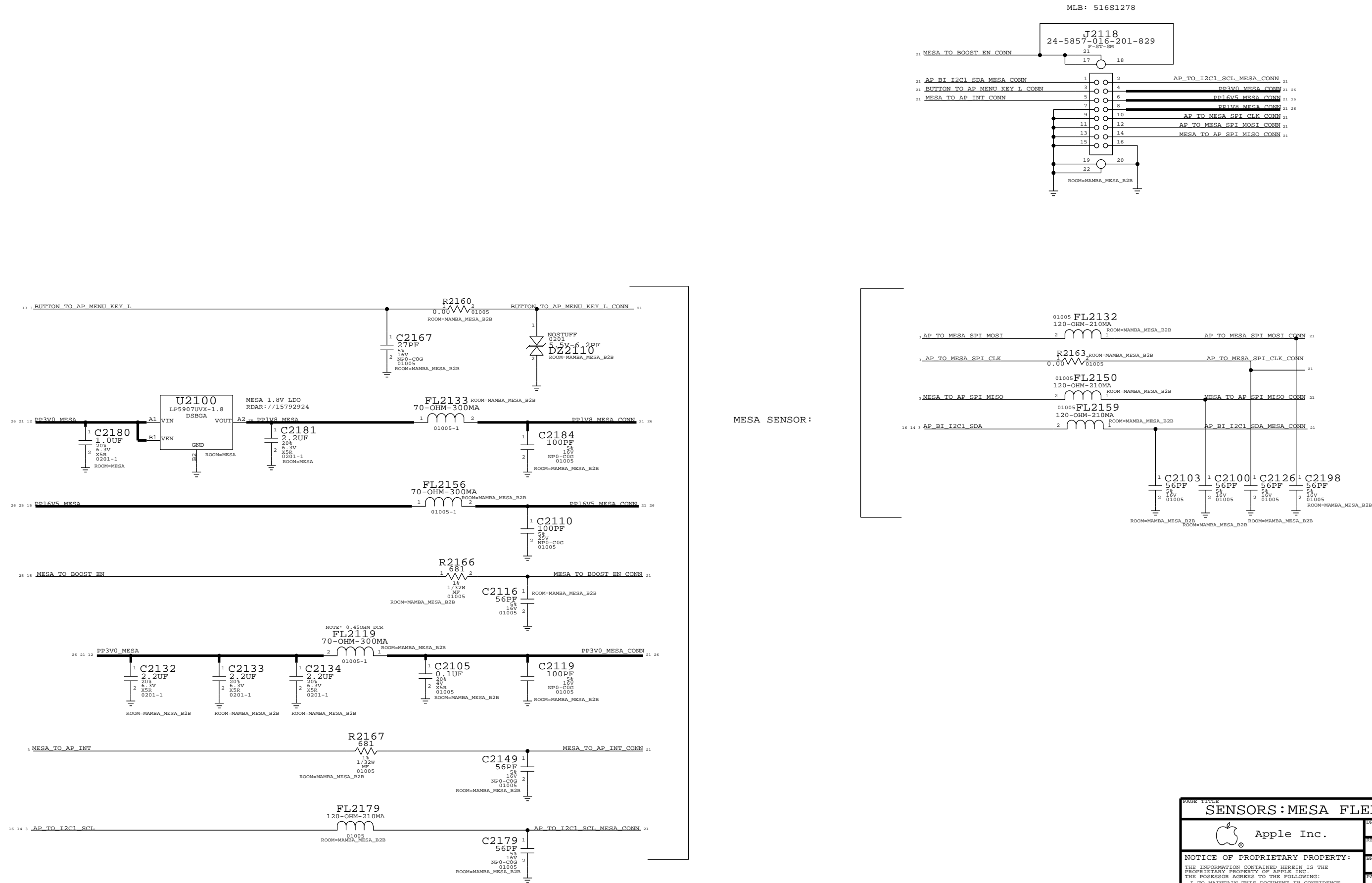


## Touch



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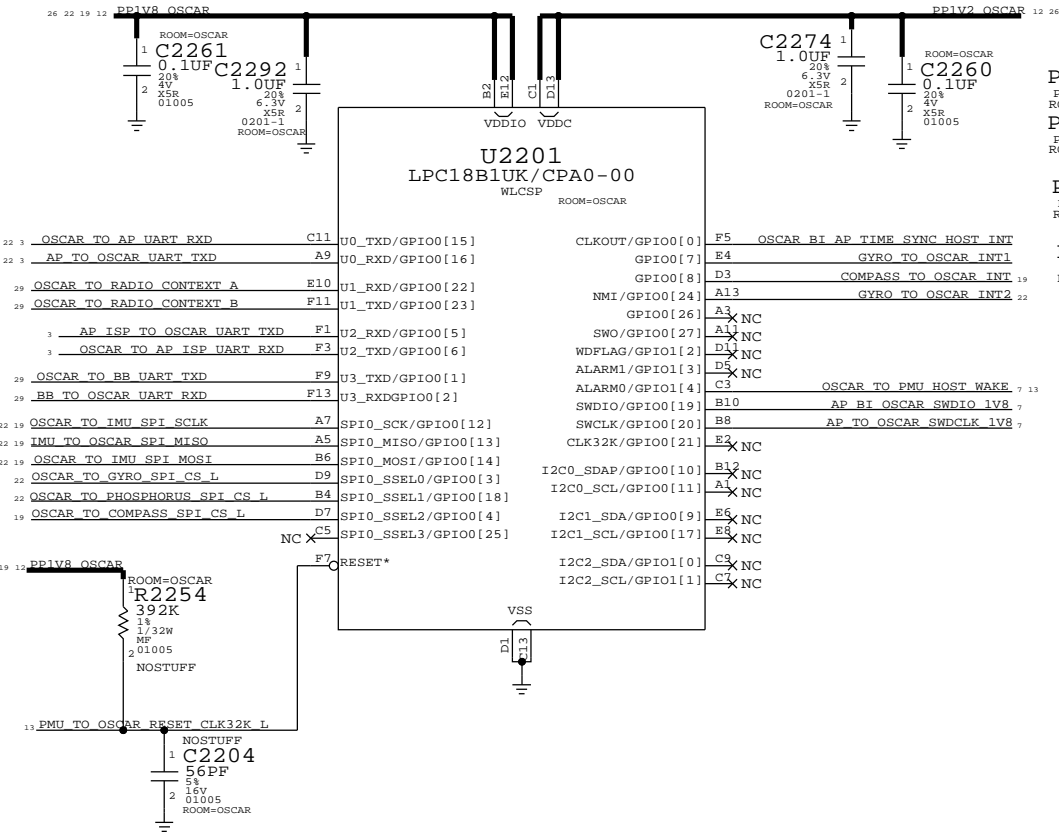
MESA CONNECTOR



PAGE TITLE		
SENSORS:MESA FLEX CONN		
Apple Inc.	DRAWING NUMBER	051-9903
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		SHEET
		21 OF 54

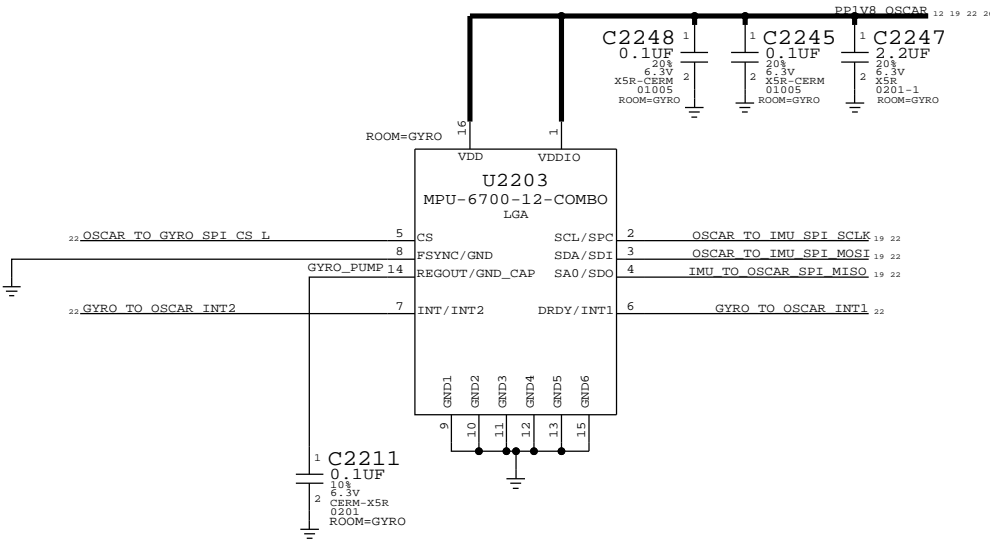
# OSCAR + SENSORS

OSCAR VDDIO = 1.8V ALWAYS ON (NEED TO MAKE HOST & RUN PLL)  
OSCAR CORE = 1.2V ALWAYS ON (NEED TO RUN IN SDRAM)



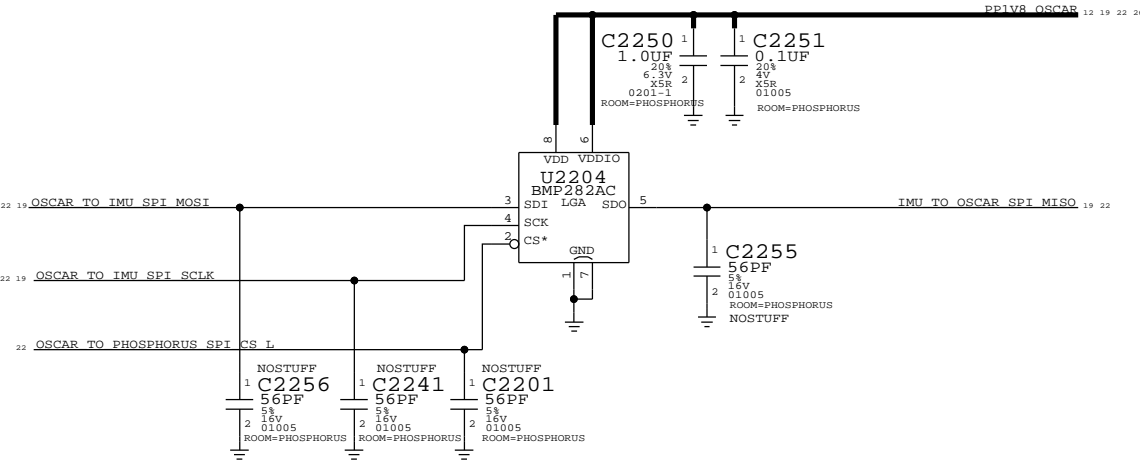
# CARBON (ACCEL GYRO COMBO)


INVENSENSE, APN 338S00017, C2211=0.1UF  
BOSCH, APN 338S00028, C2211=0.1UF  
ST, APN 338S00029, C2211=0.01UF,25V



THIS IS OUTSIDE OF SHIELD IN  
TO THE RIGHT OF THE NAND

# PHOSPHORUS



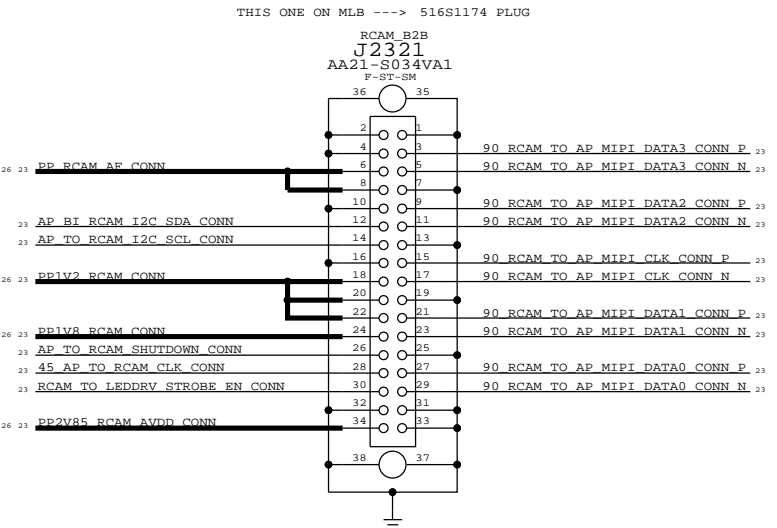
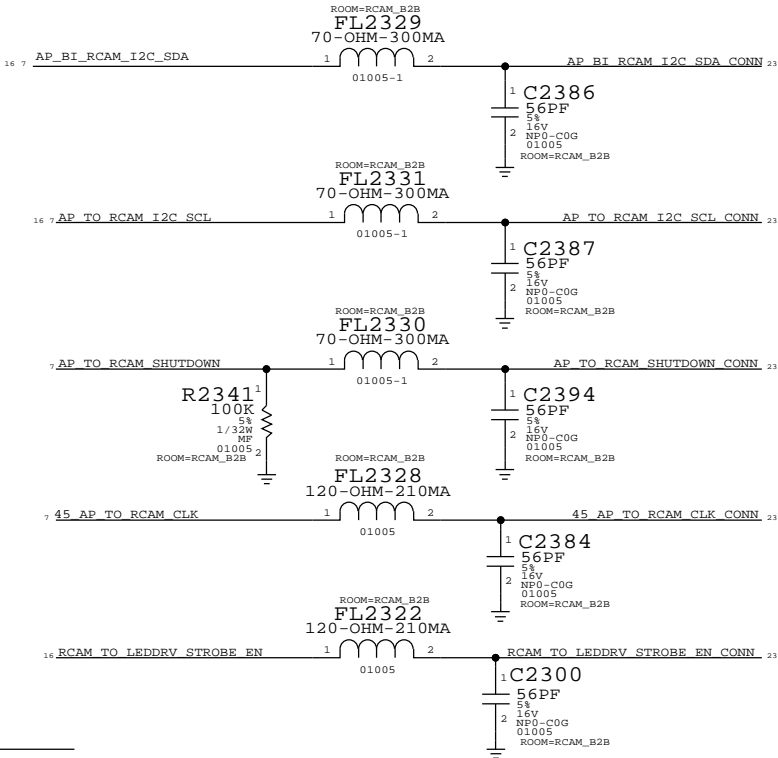
SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
PAGE TITLE			
SENSORS : OSCAR, CARBON, PHOS, MAGNESIUM			
 Apple Inc.		DRAWING NUMBER	051-9903
		SIZE	D
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		BRANCH	
		PAGE	22 OF 55
		SHEET	22 OF 54

RCAM B2B (REAR CAMERA CONNECTOR)

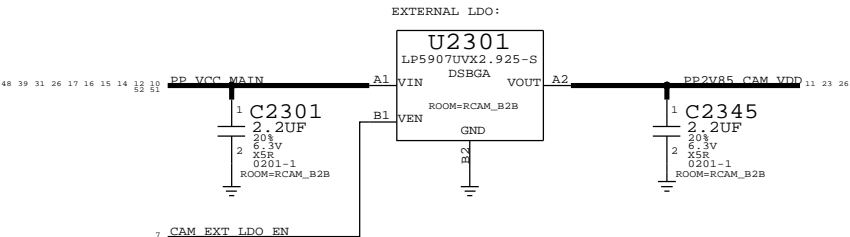
RCAM:  
4-LANE MIPI

RCAM:  
DIGITAL I/F  
(I2C, CTRL, CLK)

RCAM:  
POWER:  
(1.8V DVDD)  
(2.8V AVDD)  
(1.2V VCC)  
(1.8V/2V AF)



RCAM/FCAM AVDD RAIL EXT. LDO:



SYNC MASTER=N61_MLB		SYNC DATE=08/26/2013	
CAMERA:REAR FLEX CONN		DRAWING NUMBER	051-9903
Apple Inc.		REVISION	7.0.0
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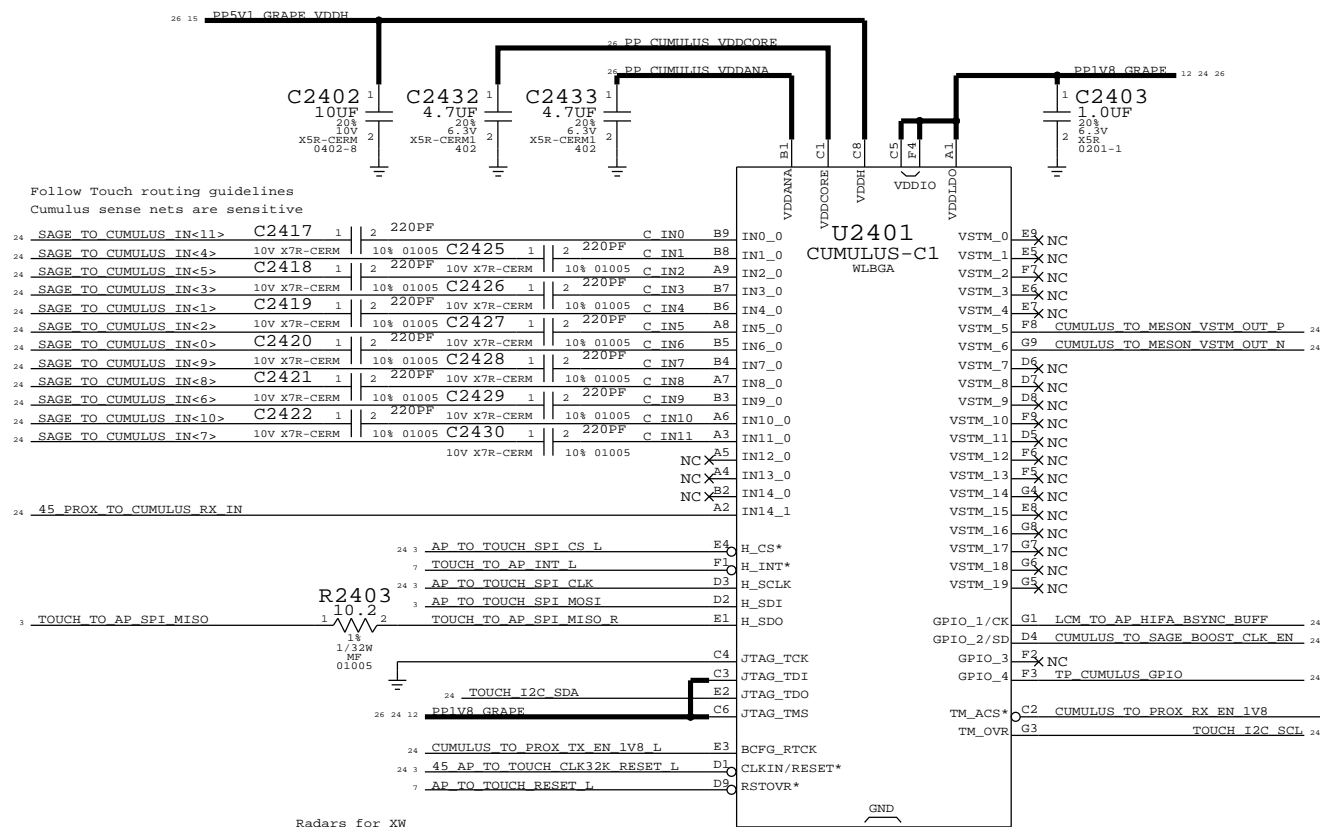


# Touch (B2B, Driver ICs)

## Cumulus

APN: 343S0638

Turn on is later than PPIV8\_GRAPE  
Turn off is same time as PPIV8\_GRAPE



## Touch B2B

MLB APN : 516S1086 (Receptacle)  
Flex APN: 516S1087 (Plug)

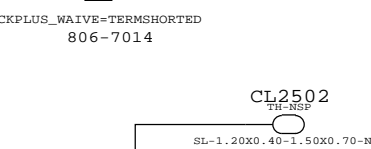


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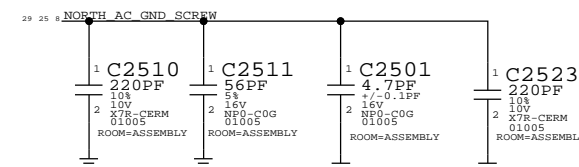


SH2505  
SHLD-SNOUT-1-N61

CKPLUS\_WAIVE=TERMSHORTED  
806-7014



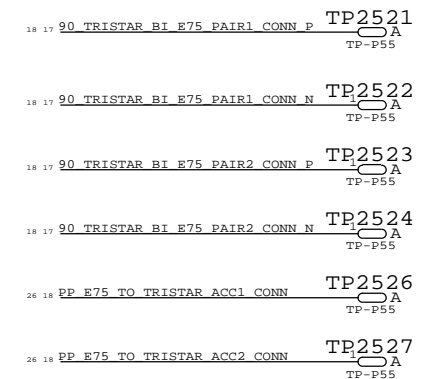
www.teknisi-indonesia.com



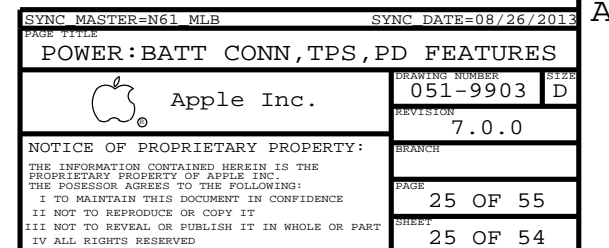
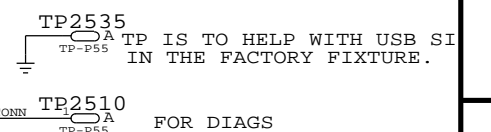
## TESTPOINTS



## E75 - USB/UART/ID/POWER



## LCM BACKLIGHT

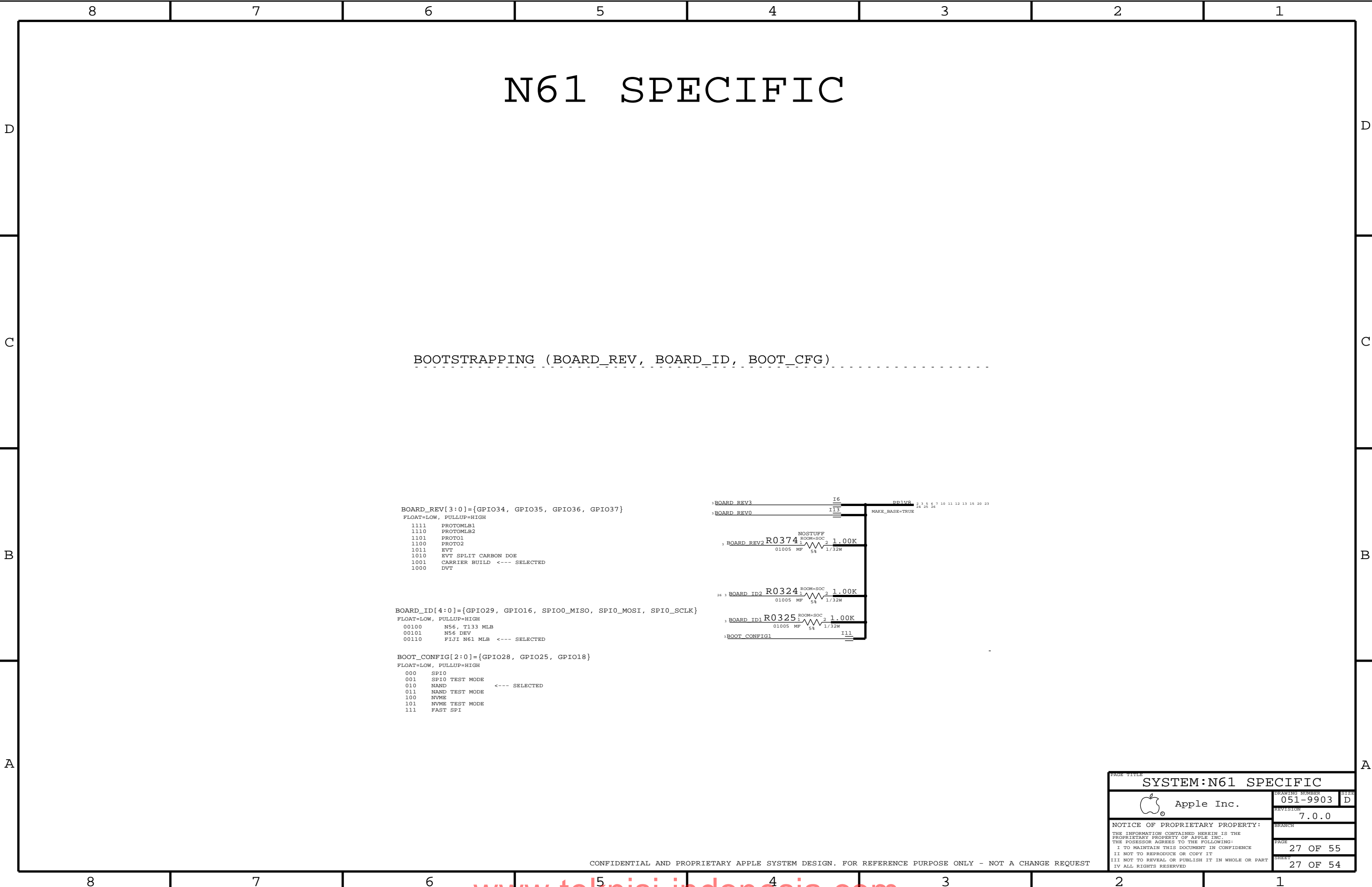


## D

C

B

A



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# RADIO\_MLB HIERARCHICAL SYMBOL

## POWER

VCC\_MAIN, VBAT GOES TO RADIO\_MLB DIRECTLY  
CHECK ALL PAGES IN RF SIDE!

## CELLULAR HOUSE KEEPING

3	AP_TO_RADIO_ON_L	MAKE_BASE+TRUE	I325	RADIO_ON_L	30 32
3	BB_TO_AP_RESET_DET_L	MAKE_BASE+TRUE	I324	BB_RESET_DET_L	30 35
13	PMU_TO_BB_RST_L	MAKE_BASE+TRUE	I326	RF_PMIC_RESET_L	30 32
3	AP_TO_BB_RST_L	MAKE_BASE+TRUE	I327	BB_RST_L	30 32
3	AP_TO_BB_WAKE_MODEM	MAKE_BASE+TRUE	I329	AP_WAKE_MODEM	35
13	BB_TO_PMU_HOST_WAKE_L	MAKE_BASE+TRUE	I328	BB_WAKE_HOST_L	30 35
13	BB_TO_AP_IPC_GPIO	MAKE_BASE+TRUE	I331	BB_IPC_GPIO	35
16	BB_TO_LEDDR_V_GSM_BLANK	MAKE_BASE+TRUE	I330	GSM_TXBURST_IND	35
3	BB_TO_AP_GPS_SYNC	MAKE_BASE+TRUE	I332	BB_GPS_SYNC	30 35

## HSIC IPC

2	50_AP_BI_BB_HSIC1_DATA	MAKE_BASE+TRUE	I368	50_BB_HSIC_DATA	30 34
3	50_AP_BI_BB_HSIC1_STB	MAKE_BASE+TRUE	I369	50_BB_HSIC_STROBE	30 34
3	AP_TO_BB_HOST_RDY	MAKE_BASE+TRUE	I371	BB_HOST_RDY	30 35
3	BB_TO_AP_DEVICE_RDY	MAKE_BASE+TRUE	I370	BB_DEVICE_RDY	30 35
3	BB_TO_AP_IPC_GPIO1	MAKE_BASE+TRUE	I372	BB_IPC_GPIO1	35

## UART IPC

3	AP_TO_BB_UART2_RTS_L	MAKE_BASE+TRUE	I373	BB_UART_CTS_L	30 35
3	BB_TO_AP_UART2_CTS_L	MAKE_BASE+TRUE	I374	BB_UART_RTS_L	30 35
17 3	AP_TO_BB_UART2_TXD	MAKE_BASE+TRUE	I374	BB_UART_RXD	30 35
17 3	BB_TO_AP_UART2_RXD	MAKE_BASE+TRUE	I375	BB_UART_TXD	30 35

## AUDIO I2S

3	45_AP_TO_BB_I2S3_BCLK	MAKE_BASE+TRUE	I377	BB_I2S_CLK	35
3	AP_TO_BB_I2S3_DOUT	MAKE_BASE+TRUE	I378	BB_I2S_RXD	30 35
3	BB_TO_AP_I2S3_DIN	MAKE_BASE+TRUE	I379	BB_I2S_TXD	30 35
3	AP_TO_BB_I2S3_LRCLK	MAKE_BASE+TRUE	I380	BB_I2S_WS	30 35

## OSCAR UART

22	OSCAR_TO_BB_UART_TXD	MAKE_BASE+TRUE	I382	BB_OTHER_RXD	30 35
22	BB_TO_OSCAR_UART_RXD	MAKE_BASE+TRUE	I381	BB_OTHER_TXD	30 35

## BB DEBUG INTERFACES

3	AP_TO_BB_COREDUMP	MAKE_BASE+TRUE	I384	BB_CORE_DUMP	30 35
13	PMU_TO_BB_VBUS_DET	MAKE_BASE+TRUE	I387	BB_USB_VBUS	30 34
17	90_TRISTAR_BI_BB_USB_N	MAKE_BASE+TRUE	I386	90_BB_USB_N	30 34
17	90_TRISTAR_BI_BB_USB_P	MAKE_BASE+TRUE	I388	90_BB_USB_P	30 34

## RADIO ANTENNA CONTROL

18	PP_BB_VDD_2V7	MAKE_BASE+TRUE	I389	PP_LDO14_RFSW	31 41 42
18	BB_GPIO0	MAKE_BASE+TRUE	I390	BB_LAT_GPIO0	35
18	BB_GPIO2	MAKE_BASE+TRUE	I391	BB_LAT_GPIO2	35
18	BB_GPIO3	MAKE_BASE+TRUE	I392	BB_LAT_GPIO3	35
18	BB_GPIO4	MAKE_BASE+TRUE	I394	BB_LAT_GPIO4	35

## FCT TESTING

13	RADIO_TO_PMU_ADC_SMPS1	MAKE_BASE+TRUE	I395	ADC_SMPS1	30
13	RADIO_TO_PMU_ADC_PP_LDO11_VDDIO	MAKE_BASE+TRUE	I396	ADC_PP_LDO11	30
13	RADIO_TO_PMU_ADC_PP_LDO5_SIM	MAKE_BASE+TRUE	I398	ADC_PP_LDO5	30
13	RADIO_TO_PMU_ADC_SMPS4	MAKE_BASE+TRUE	I397	ADC_SMPS4	30

## UPPER RADIO ANTENNA CONTROL

25	50_AP_WIFI_5G_CONN_ANT	MAKE_BASE+TRUE	I410	50_WIFI_5G_CONN_ANT	50
25	50_AP_UAT_FEED	MAKE_BASE+TRUE	I409	50_UPPER_ANT_FEED	50
	UAT_ANT_GND	MAKE_BASE+TRUE	I411	ANT_GND	50
29 26 17 15 12	PP3V0_TRISTAR	MAKE_BASE+TRUE	I404	PAC_VDD_3V0	53
25 8	NORTH_AC_GND_SCREW	MAKE_BASE+TRUE	I412	NORTH_ANT_GND	50

## POWER

26 17 15 14 13 12 10 4 3	PP1V8_SDRAM	MAKE_BASE+TRUE	I314	PP_WL_BT_VDDIO_AP	51
		MAKE_BASE+TRUE	I315	PP_STOCKHOLM_IVR_S2P	52 54
		MAKE_BASE+TRUE	I407	REFE_VIO_S2P	53

## WLAN/BT HOUSE KEEPING

13	45_PMU_TO_WLAN_CLK32K	MAKE_BASE+TRUE	I316	CLK32K_AP	30 51
13	PMU_TO_WLAN_REG_ON	MAKE_BASE+TRUE	I317	WLAN_REG_ON	30 51
13	WLAN_TO_PMU_HOST_WAKE	MAKE_BASE+TRUE	I318	HOST_WAKE_WLAN	30 51
13	PMU_TO_BT_REG_ON	MAKE_BASE+TRUE	I319	BT_REG_ON	30 51
3	AP_TO_BT_WAKE	MAKE_BASE+TRUE	I320	WAKE_BT	30 51
13	BT_TO_PMU_HOST_WAKE	MAKE_BASE+TRUE	I321	HOST_WAKE_BT	51

3	AP_TO_WLAN_JTAG_SWCLK	MAKE_BASE+TRUE	I333	WLAN_JTAG_SWCLK	30 51
3	AP_TO_WLAN_JTAG_SWDIO	MAKE_BASE+TRUE	I334	WLAN_JTAG_SWDIO	30 51
13	WLAN_TO_PMU_PCIE_WAKE_L	MAKE_BASE+TRUE	I335	WLAN_PCIE_WAKE_L	30 51
3	AP_TO_WLAN_DEVICE_WAKE	MAKE_BASE+TRUE	I336	PCIE_DEV_WAKE	30 51
3	90_WLAN_TO_AP_PCIE1_RXDP_P	MAKE_BASE+TRUE	I337	90_WLAN_PCIE_TDP	30 51
3	90_WLAN_TO_AP_PCIE1_RXDP_N	MAKE_BASE+TRUE	I338	90_WLAN_PCIE_TDN	30 51
3	90_AP_TO_WLAN_PCIE1_TXDP_P	MAKE_BASE+TRUE	I338	90_WLAN_PCIE_RDP	30 51
3	90_AP_TO_WLAN_PCIE1_TXDP_N	MAKE_BASE+TRUE	I339	90_WLAN_PCIE_RDN	30 51
3	90_AP_TO_WLAN_PCIE1_REFCLK1_P	MAKE_BASE+TRUE	I342	90_WLAN_PCIE_REFCLK_P	51
3	90_AP_TO_WLAN_PCIE1_REFCLK1_N	MAKE_BASE+TRUE	I341	90_WLAN_PCIE_REFCLK_N	51
3	WLAN_TO_AP_PCIE1_CLKREQ_L	MAKE_BASE+TRUE	I344	WLAN_PCIE_CLKREQ_L	30 51
3	AP_TO_WLAN_PCIE1_RST_L	MAKE_BASE+TRUE	I343	WLAN_PCIE_PERST_L	30 51

## WLAN HSIC IPC

3	WLAN_TO_AP_UART4_RXD	MAKE_BASE+TRUE	I345	WLAN_UART_TXD	30 51
3	AP_TO_WLAN_UART4_TXD	MAKE_BASE+TRUE	I348	WLAN_UART_RXD	30 51
3	WLAN_TO_AP_UART4_CTS_L	MAKE_BASE+TRUE	I347	WLAN_UART_RTS_L	30 51
3	AP_TO_WLAN_UART4_RTS_L	MAKE_BASE+TRUE	I346	WLAN_UART_CTS_L	30 51

## BT UART IPC

3	AP_TO_BT_UART1_RTS_L	MAKE_BASE+TRUE	I349	BT_UART_CTS_L	51
3	BT_TO_AP_UART1_CTS_L	MAKE_BASE+TRUE	I352	BT_UART_RTS_L	51
3	AP_TO_BT_UART1_TXD	MAKE_BASE+TRUE	I351	BT_UART_RXD	30 51
3	BT_TO_AP_UART1_RXD	MAKE_BASE+TRUE	I350	BT_UART_TXD	30 51

## BT AUDIO PCM


3	45_AP_TO_BT_I2S1_BCLK	MAKE_BASE+TRUE	I354	BT_PCM_CLK	51
3	AP_TO_BT_I2S1_DOUT	MAKE_BASE+TRUE	I353	BT_PCM_IN	51
3	BT_TO_AP_I2S1_DIN	MAKE_BASE+TRUE	I355	BT_PCM_OUT	51
3	AP_TO_BT_I2S1_LRCLK	MAKE_BASE+TRUE	I356	BT_PCM_SYNC	51

## OSCAR STATES

22	OSCAR_TO_RADIO_CONTEXT_A	MAKE_BASE+TRUE	I358	OSCAR_CONTEXT_A	51
22	OSCAR_TO_RADIO_CONTEXT_B	MAKE_BASE+TRUE	I357	OSCAR_CONTEXT_B	51

## STOCKHOLM

3	STOCKHOLM_TO_AP_UART3_CTS_L	MAKE_BASE+TRUE	I359	STOCKHOLM_RTS_L	30 52
3	AP_TO_STOCKHOLM_UART3_RTS_L	MAKE_BASE+TRUE	I360	STOCKHOLM_CTS_L	30 52
3	STOCKHOLM_TO_AP_UART3_RXD	MAKE_BASE+TRUE	I361	STOCKHOLM_UART_TXD	30 52
3	AP_TO_STOCKHOLM_UART3_TXD	MAKE_BASE+TRUE	I362	STOCKHOLM_UART_RXD	30 52
3	AP_TO_STOCKHOLM_DWLD_REQ	MAKE_BASE+TRUE	I362	STOCKHOLM_FW_DWLD_REQ	52
13	STOCKHOLM_TO_PMU_HOST_WAKE	MAKE_BASE+TRUE	I364	STOCKHOLM_HOST_WAKE	30 52
3	AP_TO_STOCKHOLM_EN	MAKE_BASE+TRUE	I365	STOCKHOLM_ENABLE	52
29 26 17 15 12	PP3V0_TRISTAR	MAKE_BASE+TRUE	I366	STOCKHOLM_VDD_MUX_3V0	54
3	AP_TO_STOCKHOLM_SIM_SEL	MAKE_BASE+TRUE	I367	STOCKHOLM_SIM_SEL	54
25	AP_TO_STOCKHOLM_ANT	MAKE_BASE+TRUE	I406	STOCKHOLM_ANT	52

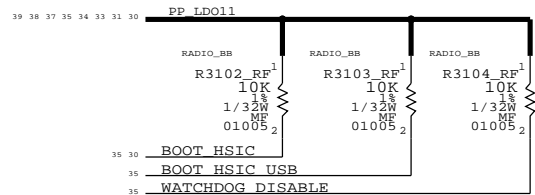
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# AP INTERFACE & DEBUG CONNECTORS

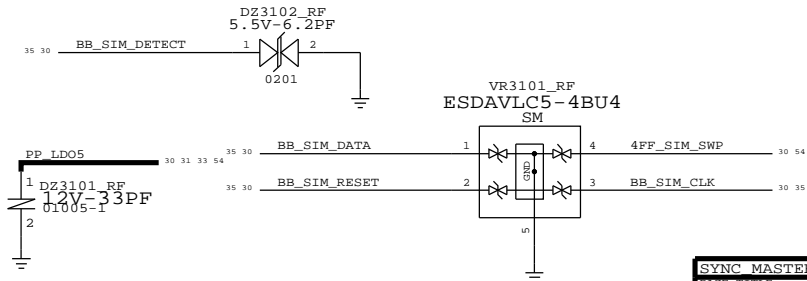
## PROBE POINTS

PP3105_RF P2MM-SM 1 CLK32K_AP WIFI_BT 29 51	PP3121_RF P2MM-NSM 1 STOCKHOLM_HOST_WAKE RADIO_STOCKHOLM 29 52	PP3115_RF P4MM-NSM 1 50_BB_HSIC_STROBE SIM_DEBUG 29 34	PP3130_RF P4MM-SM 1 BB_JTAG_RST_L SIM_DEBUG 34	PP3141_RF P4MM-SM 1 BB_UART_TXD SIM_DEBUG 29 35	PP3170_RF P4MM-SM 1 RFFE1_CLK RF_DEBUG 35 39 40 41 42 43 44
PP3113_RF P4MM-SM 1 BB_COEX_UART_RXD WIFI_BT 35 51	PP3122_RF P4MM-SM 1 BB_REQUEST_XO_CLK SIM_DEBUG 32 52	PP3116_RF P4MM-NSM 1 50_BB_HSIC_DATA SIM_DEBUG 29 34	PP3131_RF P4MM-SM 1 BB_JTAG_TCK SIM_DEBUG 34	PP3142_RF P4MM-SM 1 BB_UART_RXD SIM_DEBUG 29 35	PP3171_RF P4MM-SM 1 RFFE1_DATA RF_DEBUG 35 39 40 41 42 43 44
PP3114_RF P4MM-SM 1 BB_COEX_UART_TXD WIFI_BT 35 51	PP3123_RF P2MM-NSM 1 STOCKHOLM_UART_RXD RADIO_STOCKHOLM 29 52	PP3101_RF P4MM-SM 1 BB_DEBUG_ERROR SIM_DEBUG 35	PP3132_RF P4MM-SM 1 BB_JTAG_TMS SIM_DEBUG 34	PP3143_RF P4MM-SM 1 BB_UART_RTS_L SIM_DEBUG 29 35	PP3172_RF P4MM-SM 1 RFFE2_CLK RF_DEBUG 35 45 46 48
PP3119_RF P2MM-SM 1 BT_UART_TXD WIFI_BT 29 51	PP3124_RF P2MM-SM 1 STOCKHOLM_UART_TXD RADIO_STOCKHOLM 29 52	PP3102_RF P4MM-SM 1 RF_PMIC_RESET_L SIM_DEBUG 29 32	PP3133_RF P4MM-SM 1 BB_JTAG_TDO SIM_DEBUG 34	PP3144_RF P4MM-SM 1 BB_UART_CTS_L SIM_DEBUG 29 35	PP3173_RF P4MM-SM 1 RFFE2_DATA RF_DEBUG 35 45 46 48
PP3120_RF P2MM-NSM 1 BT_UART_RXD WIFI_BT 29 51	PP3125_RF P2MM-NSM 1 STOCKHOLM_CTS_L RADIO_STOCKHOLM 29 52	PP3103_RF P4MM-SM 1 PS_HOLD_PMIC SIM_DEBUG 32	PP3134_RF P4MM-SM 1 BB_JTAG_TDI SIM_DEBUG 34	PP3145_RF P4MM-SM 1 BB_HOST_RDY SIM_DEBUG 29 35	PP3175_RF P4MM-SM 1 BB_I2S_WS RF_DEBUG 29 35
PP3152_RF P2MM-SM 1 WAKE_BT WIFI_BT 29 51	PP3126_RF P2MM-NSM 1 STOCKHOLM_RTS_L RADIO_STOCKHOLM 29 52	PP3127_RF P4MM-SM 1 PMIC_RESOUT_L SIM_DEBUG 32 34	PP3135_RF P4MM-SM 1 BB_JTAG_TEST_L SIM_DEBUG 34	PP3146_RF P4MM-SM 1 BB_DEVICE_RDY SIM_DEBUG 29 35	PP3176_RF P4MM-SM 1 BB_I2S_RXD RF_DEBUG 29 35
PP3153_RF P4MM-SM 1 WLAN_REG_ON WIFI_BT 29 51	PP3128_RF P4MM-SM 1 PP_PN65_VCC_SIM RADIO_STOCKHOLM 52	PP3104_RF P4MM-SM 1 MDM_CLK SIM_DEBUG 32 34	PP3136_RF P4MM-SM 1 BB_DEBUG_STATUS SIM_DEBUG 35	PP3147_RF P4MM-SM 1 BB_GPS_SYNC SIM_DEBUG 29 35	PP3177_RF P4MM-SM 1 BB_I2S_TXD RF_DEBUG 29 35
PP3154_RF P4MM-SM 1 BT_REG_ON WIFI_BT 29 51	PP3144_RF P4MM-SM 1 STOCKHOLM_SIM_SWP SIM_DEBUG 52 54	PP3109_RF P4MM-SM 1 PP_LDO11 SIM_DEBUG 30 31 33 34 35 37 38	PP3137_RF P4MM-SM 1 BB_CORE_DUMP SIM_DEBUG 29 35	PP3148_RF P4MM-SM 1 BB_WAKE_HOST_L SIM_DEBUG 29 35	PP3178_RF P4MM-SM 1 BB_OTHER_TXD RF_DEBUG 29 35
PP3155_RF P2MM-SM 1 HOST_WAKE_WLAN WIFI_BT 29 51	PP3129_RF P4MM-SM 1 REF_CLK_FROM_BB SIM_DEBUG 32 52	PP3110_RF P4MM-SM 1 RADIO_ON_L SIM_DEBUG 29 32	PP3138_RF P4MM-SM 1 BB_USB_VBUS SIM_DEBUG 29 34	PP3149_RF P4MM-SM 1 BB_RESET_DET_L SIM_DEBUG 29 35	PP3179_RF P4MM-SM 1 BB_OTHER_RXD RF_DEBUG 29 35
PP3156_RF P2MM-SM 1 WLAN_PCIE_WAKE_L WIFI_BT 29 51	PP3165_RF P4MM-SM 1 DSDS_SIM_CLK SIM_DEBUG 34 54	PP3111_RF P4MM-SM 1 SPMI_DATA SIM_DEBUG 32 34	PP3139_RF P4MM-SM 1 90_BB_USB_N SIM_DEBUG 29 34	PP3150_RF P4MM-SM 1 BB_RST_L SIM_DEBUG 29 32	
PP3157_RF P2MM-SM 1 WLAN_PCIE_PERST_L WIFI_BT 29 51	PP3183_RF P4MM-SM 1 DSDS_SIM_RESET SIM_DEBUG 34 54	PP3112_RF P4MM-SM 1 SPMI_CLK SIM_DEBUG 32 34	PP3140_RF P4MM-SM 1 90_BB_USB_P SIM_DEBUG 29 34	PP3151_RF P4MM-SM 1 BOOT_HSIC SIM_DEBUG 30 35	
PP3158_RF P4MM-SM 1 WLAN_PCIE_CLKREQ_L WIFI_BT 29 51	PP3184_RF P4MM-SM 1 DSDS_SIM_DATA SIM_DEBUG 34 54				
PP3159_RF P4MM-SM 1 PCIE_DEV_WAKE WIFI_BT 29 51	PP3186_RF P4MM-SM 1 DSDS_SIM_DETECT SIM_DEBUG 34				
PP3160_RF P4MM-SM 1 WLAN_UART_RTS_L WIFI_BT 29 51	PP3187_RF P4MM-SM 1 PP_LDO6 SIM_DEBUG 31 33 54				
PP3161_RF P4MM-SM 1 WLAN_UART_CTS_L WIFI_BT 29 51	PP3188_RF P4MM-SM 1 DSDS_SIM_SWP SIM_DEBUG 54				
PP3162_RF P4MM-SM 1 WLAN_UART_RXD WIFI_BT 29 51	PP3189_RF P4MM-SM 1 DSDS_SIM_DATA_R SIM_DEBUG 54				
PP3163_RF P4MM-SM 1 WLAN_UART_TXD WIFI_BT 29 51					
PP3190_RF P4MM-SM 1 WLAN_JTAG_SWDCCLK WIFI_BT 29 51	PP 3178_RF P2MM-NSM 1 BB_SIM_RESET SIM_DEBUG 30 35				
PP3191_RF P4MM-SM 1 WLAN_JTAG_SWDIO WIFI_BT 29 51	PP 3179_RF P2MM-NSM 1 BB_SIM_CLK SIM_DEBUG 30 35				
	PP 3180_RF P2MM-NSM 1 BB_SIM_DATA SIM_DEBUG 30 35				
	PP 3183_RF P2MM-NSM 1 BB_SIM_DETECT SIM_DEBUG 30 35				
	PP 3184_RF P2MM-NSM 1 PP_LDO5 SIM_DEBUG 30 31 33 54				

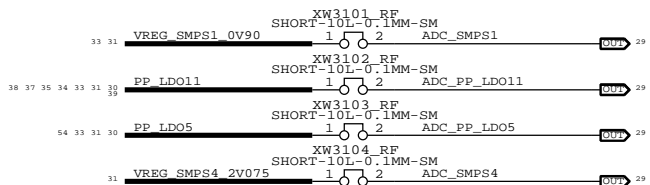
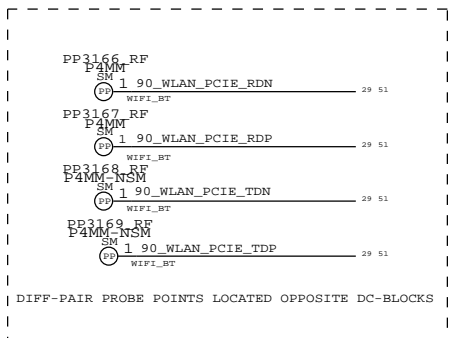
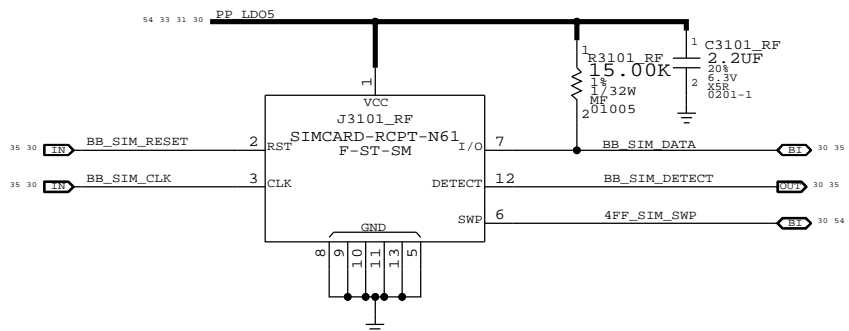
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0565	197S0593	ALTERNATE	Y3301_RF	KDS 19.2MHZ XTAL
197S0598	197S0593	ALTERNATE	Y3301_RF	AVX 19.2MHZ XTAL
138S00005	138S00003	ALTERNATE	C3216_RF	150F CAPACITOR
138S0739	138S0706	ALTERNATE	C4207_RF	1.00UF CAPACITOR
138S0945	138S0706	ALTERNATE	C4207_RF	1.00UF CAPACITOR
138S1103	138S0719	ALTERNATE	C4007_RF	4.7UF CAPACITOR
339S0231	339S0228	ALTERNATE	U5201_RF	CORONA MODULE USI
339S0242	339S0228	ALTERNATE	U5201_RF	CORONA MODULE TDK
155S00024	155S0950	ALTERNATE	F_TRI_RF	TRIPLEXER BIN2



## SIM CARD ESD PROTECTION



## SIM CARD CONNECTOR

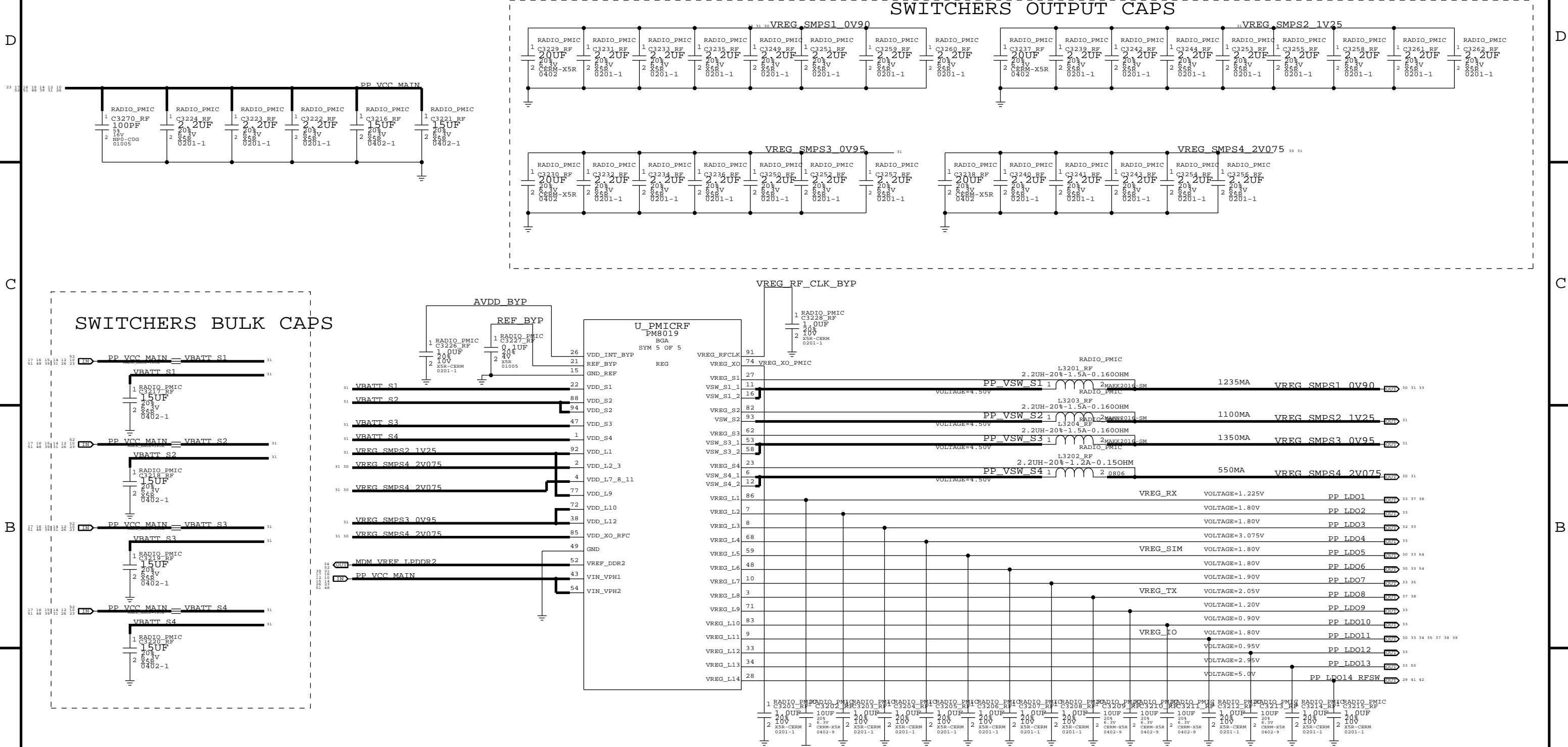



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		30 OF 54	

# BASEBAND PMU (1 OF 2)

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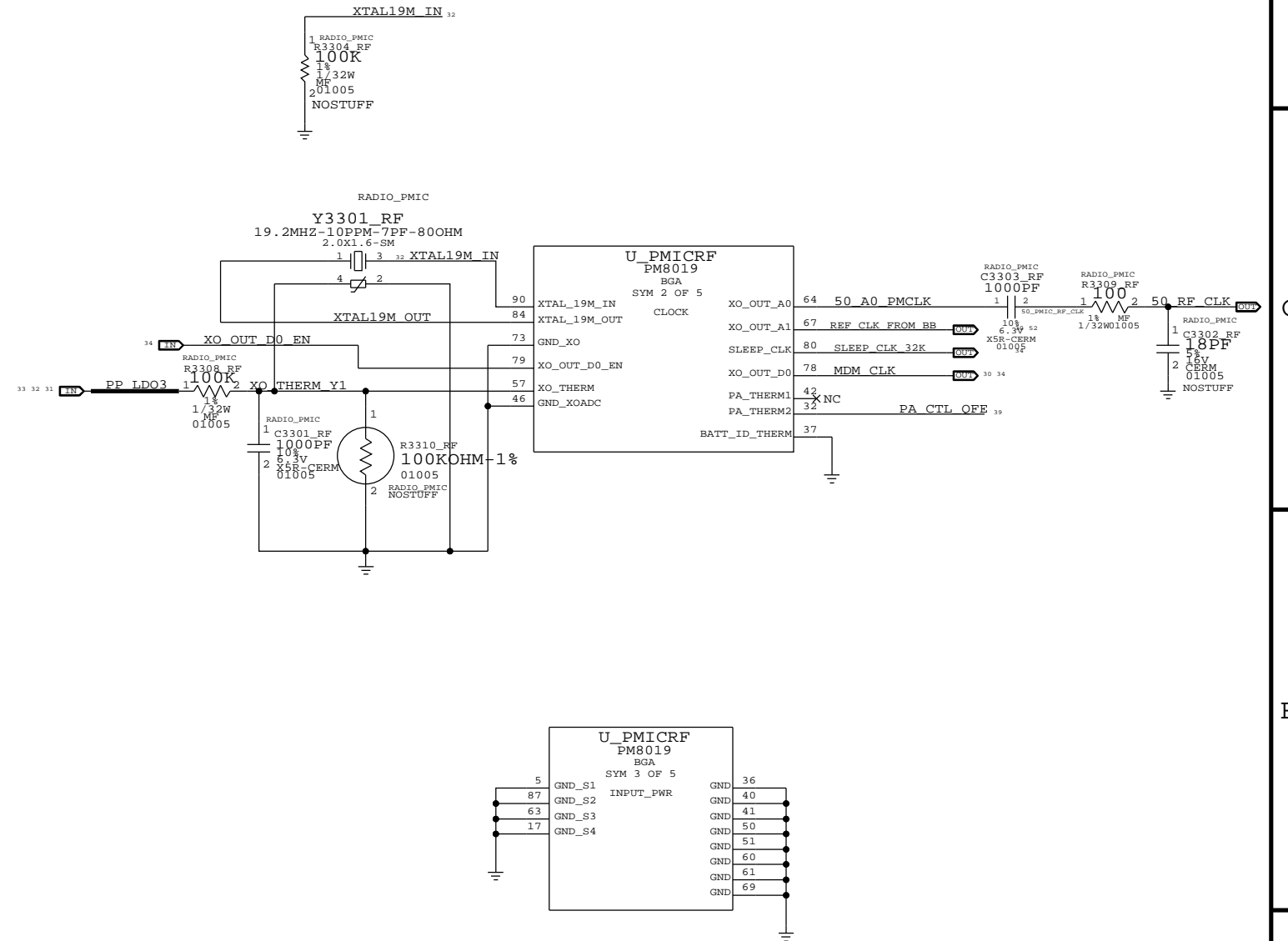
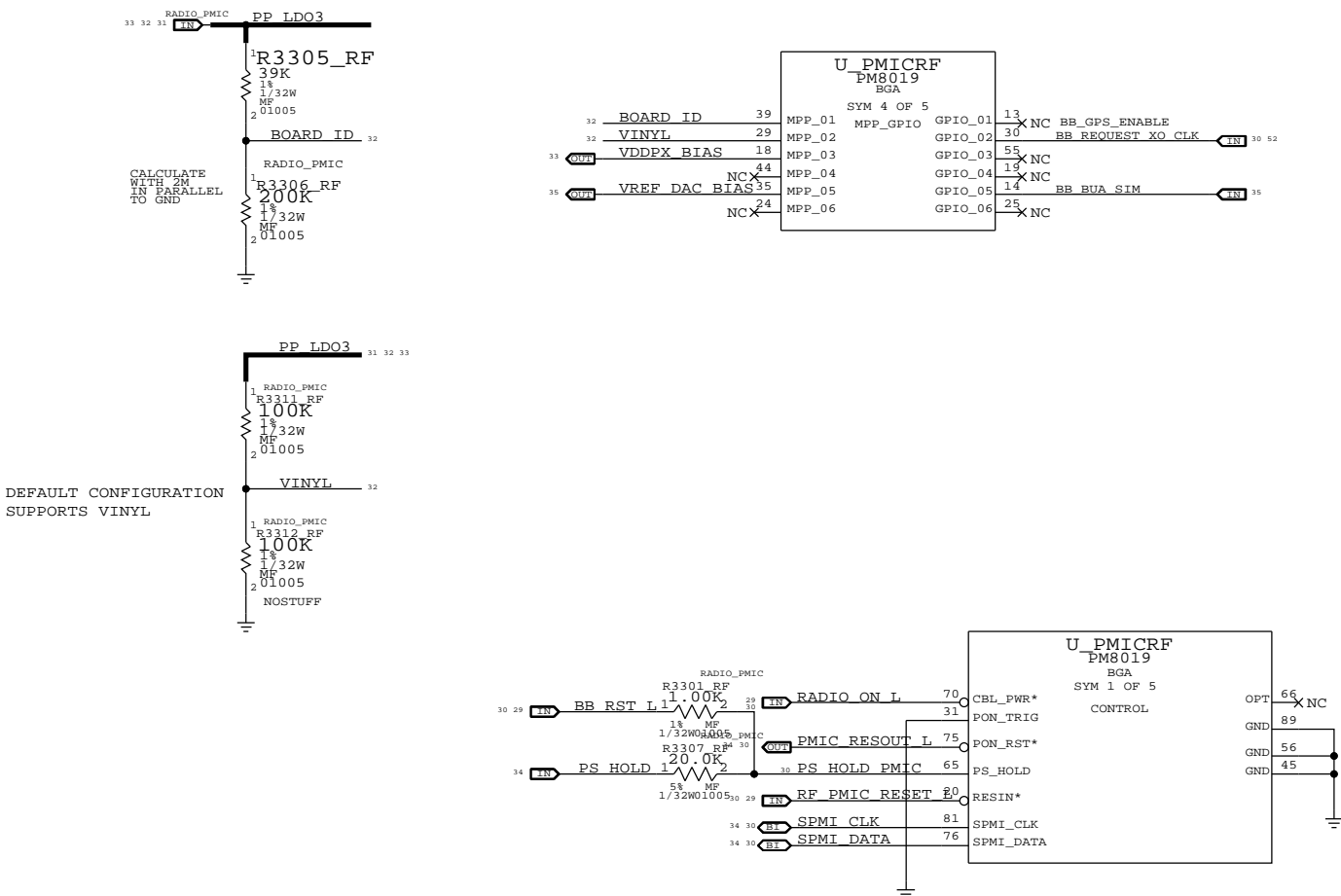
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# BASEBAND PMU ( 2 OF 2 )

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C401
R411
L400
U404

BOARD_ID	REVISION
0.00V	N61 PROTO_MLB1
0.50V	N61 DEV3
0.70V	N61 DEV4
0.90V	N61 PROTO_MLB2
1.10V	N61/N56 PROTO1
1.30V	N61/N56 PROTO2
1.40V	N61/N56 EVT1
1.50V	N61/N56 EVT2 (CARRIER)
1.60V	N61/N56 DVT
1.70V	N61/N56 PVT



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051-9903	D
REVISION	

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# BASEBAND (1 OF 3)

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C538  
R500  
L500  
U502

D

C

B

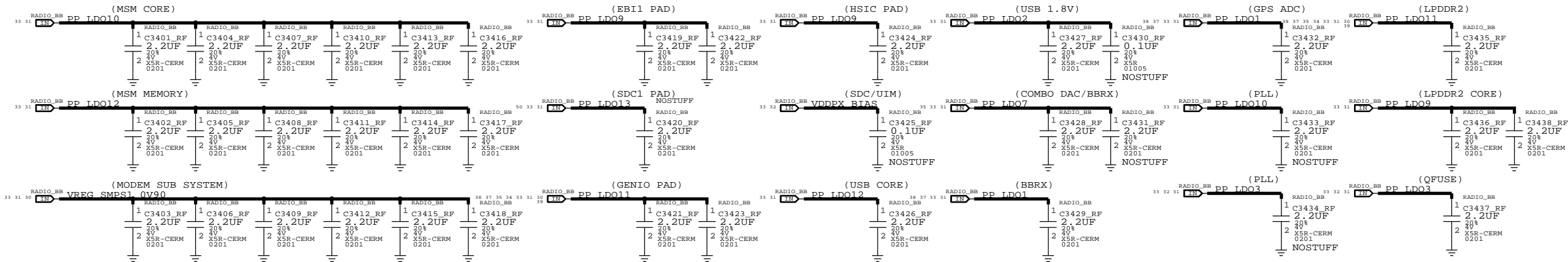
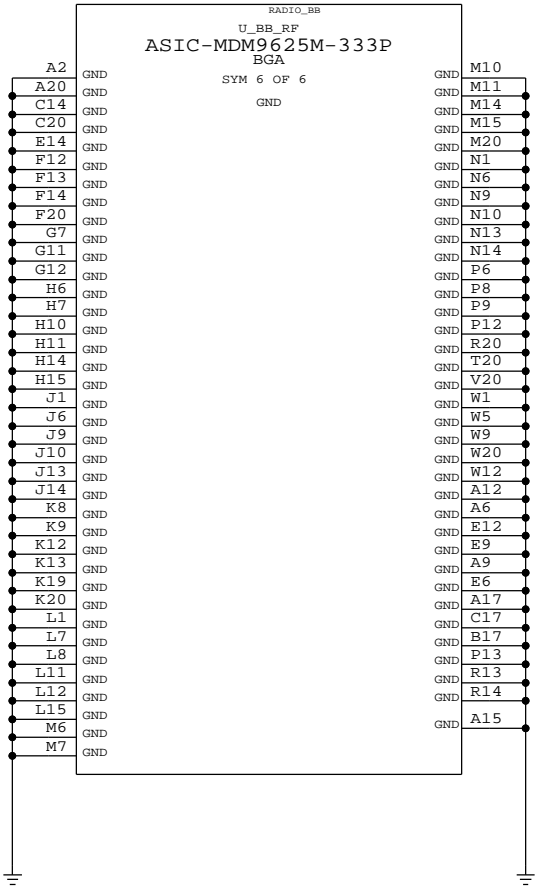
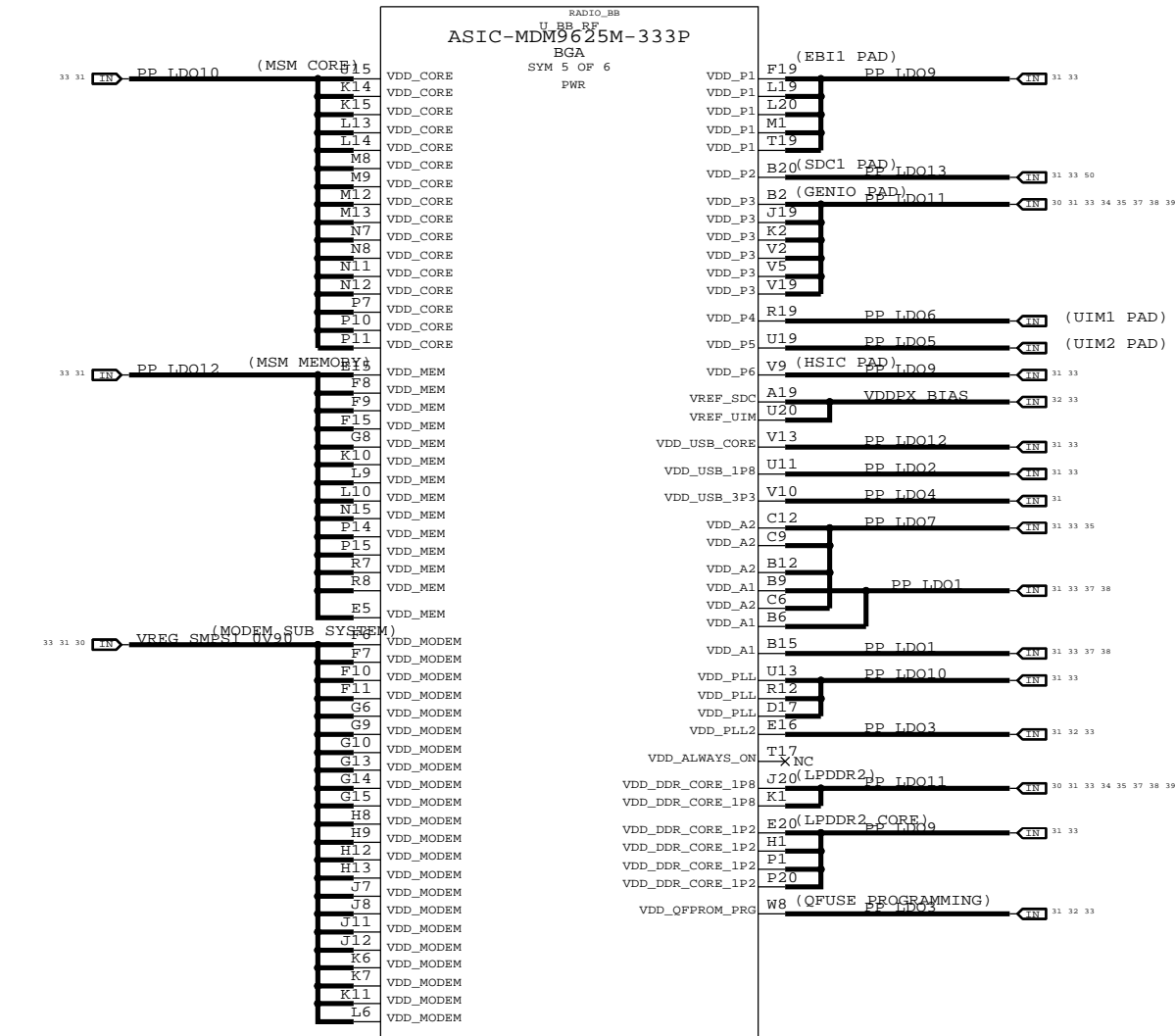
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D

C

B

A



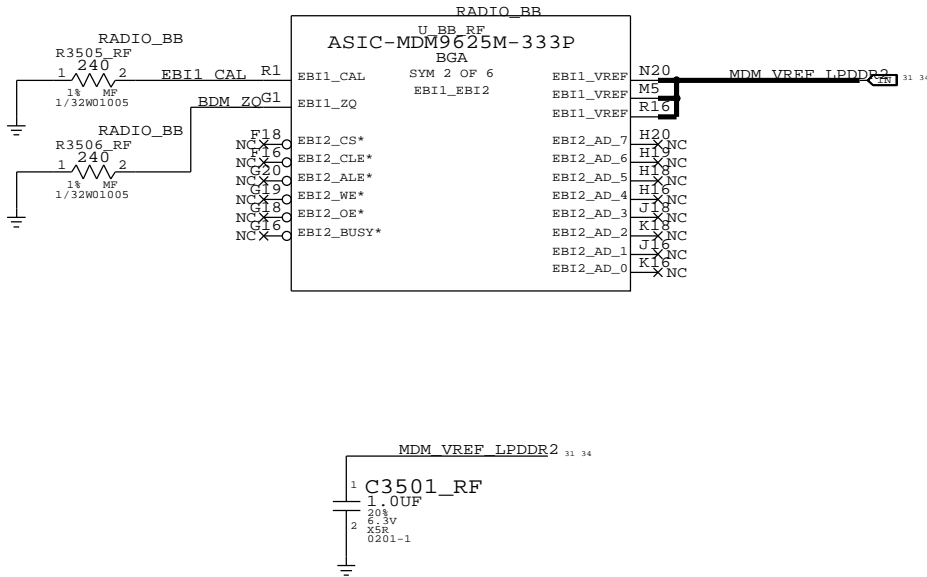
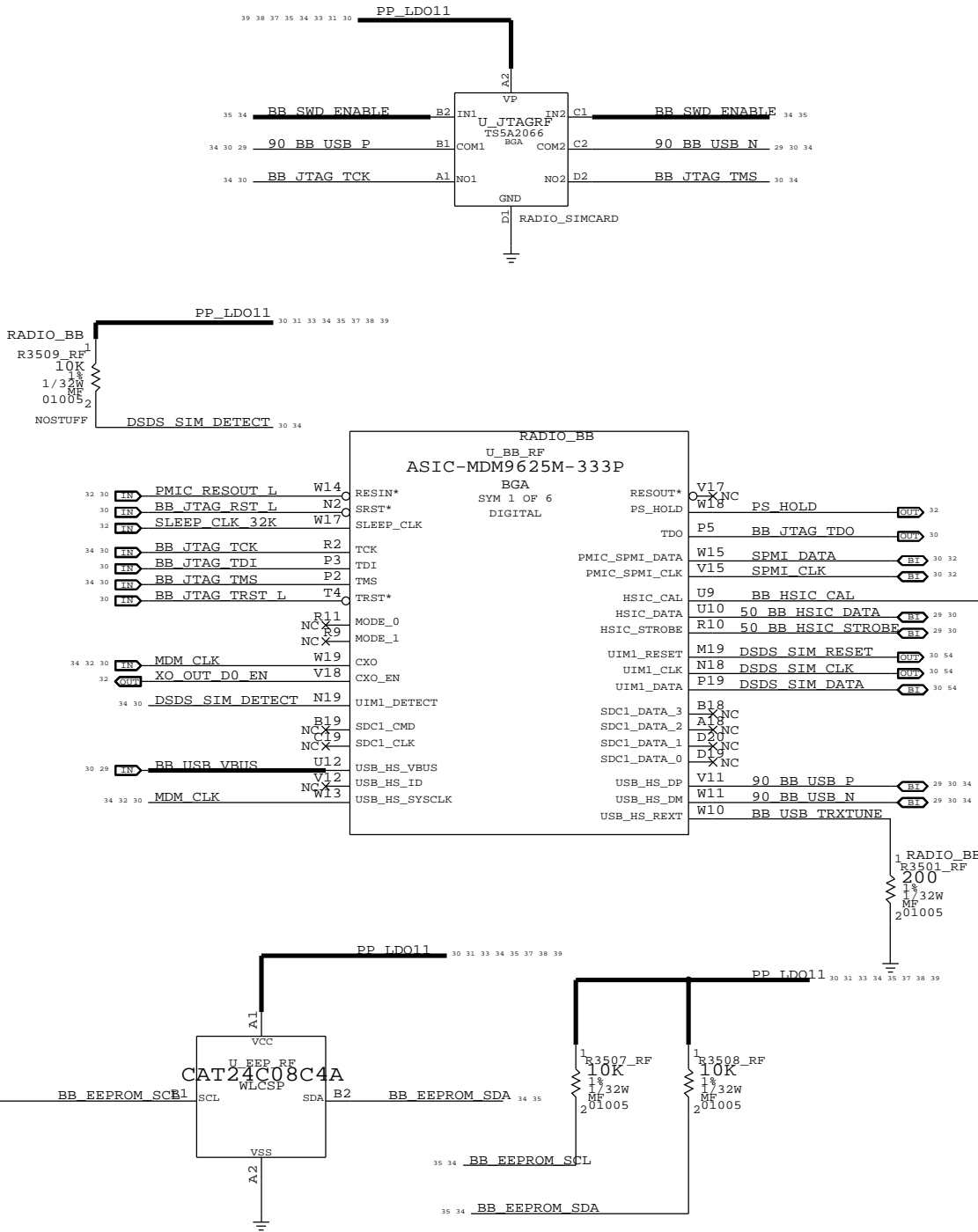
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C600  
R606  
L600  
U602

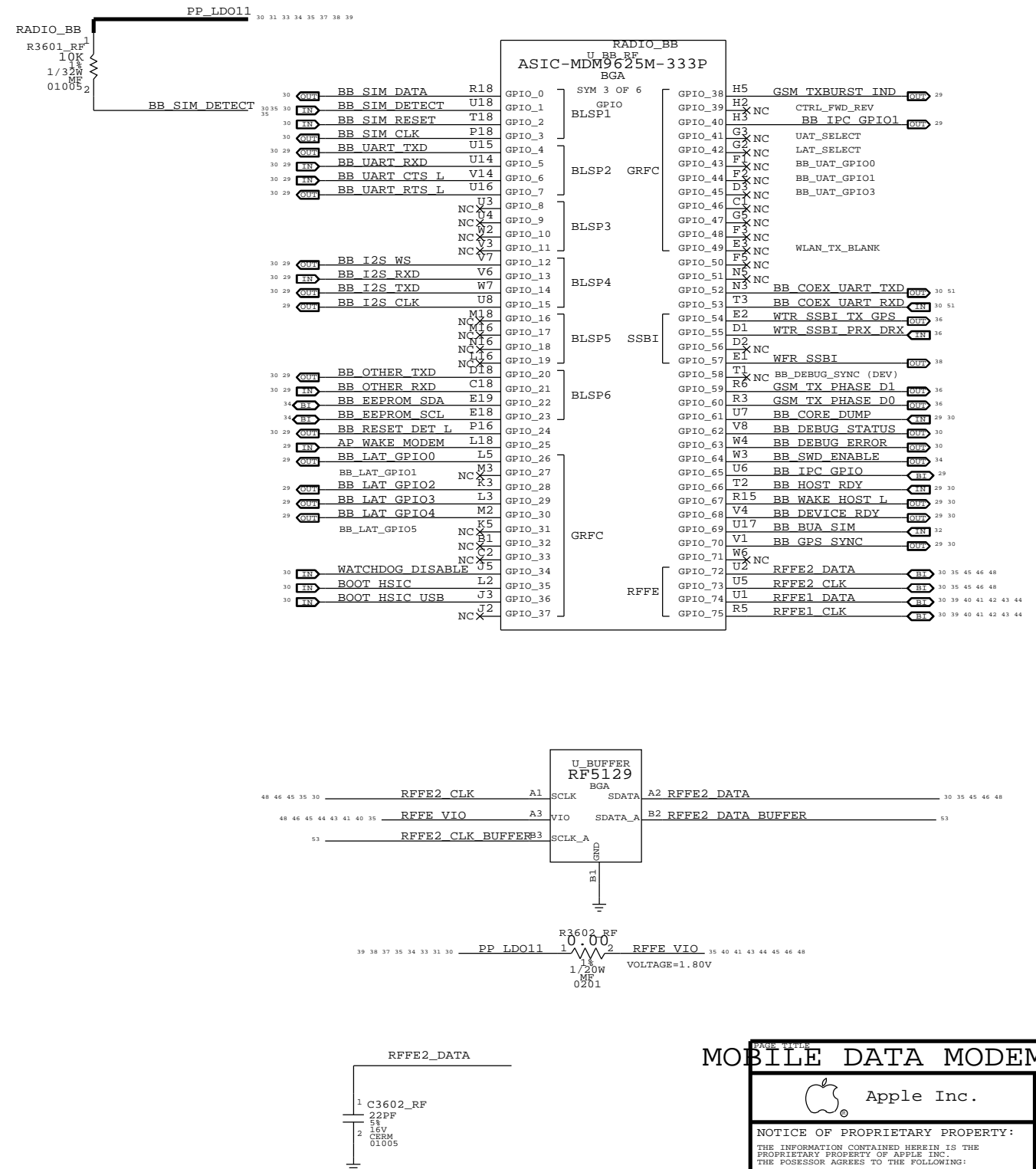


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U702



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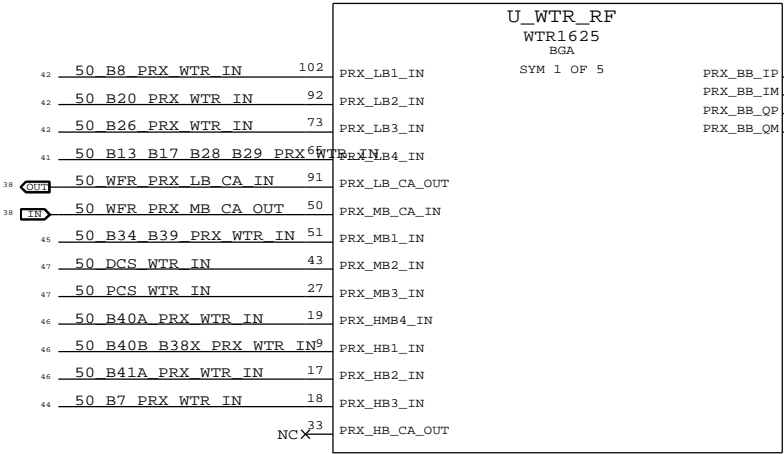
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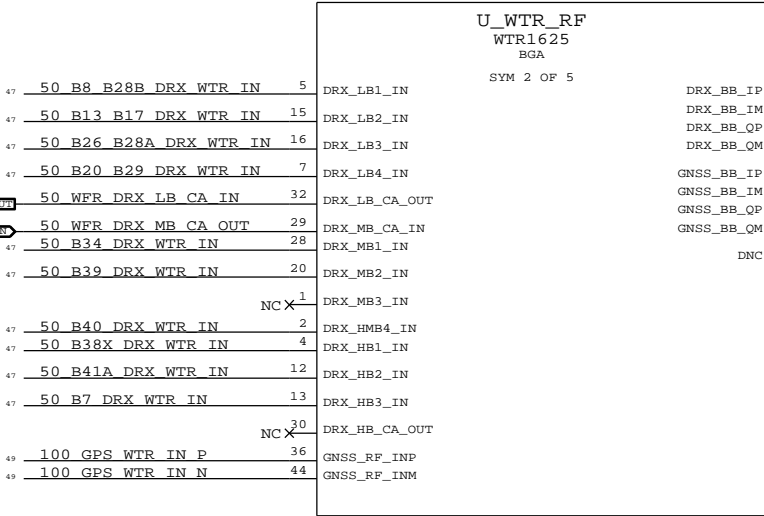
C802  
R802  
L800  
U803

LB1	DC
LB2	DC
LB3	DC
LB4	DC
MB1	NO DC
MB2	DC
MB3	DC
HB1	NO DC
HB2	DC
HB3	DC
HMB4	NO DC

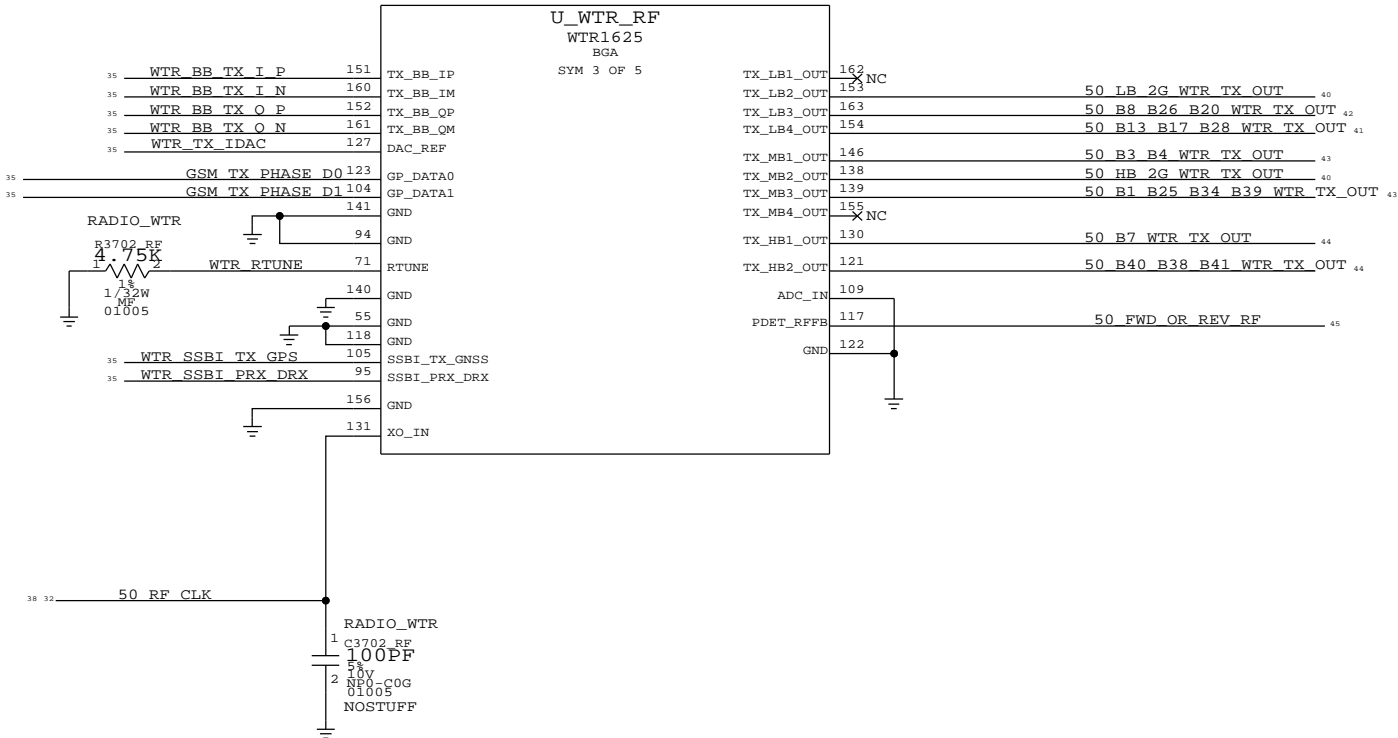


99	WTR_BB_PRX_I_P	35
108	WTR_BB_PRX_I_N	35
107	WTR_BB_PRX_O_P	35
97	WTR_BB_PRX_O_N	35

LB1	DC
LB2	DC
LB3	DC
LB4	DC
MB1	NO DC
MB2	DC
MB3	DC
HB1	NO DC
HB2	DC
HB3	DC
HMB4	NO DC




76	WTR_BB_DRX_I_P	RADIO_WTR
86	WTR_BB_DRX_I_N	RADIO_WTR
61	WTR_BB_DRX_O_P	RADIO_WTR
68	WTR_BB_DRX_O_N	RADIO_WTR
60	WTR_BB_GPS_I_P	RADIO_WTR
53	WTR_BB_GPS_I_N	RADIO_WTR
67	WTR_BB_GPS_O_P	RADIO_WTR
85	WTR_BB_GPS_O_N	RADIO_WTR



RF\_CLK IS SHARED BETWEEN WTR AND WFR. LENGTH DIFFERENCE BETWEEN THE TWO SHOULD BE < 5MM.

## RF TRANSCEIVER (1 OF 3)

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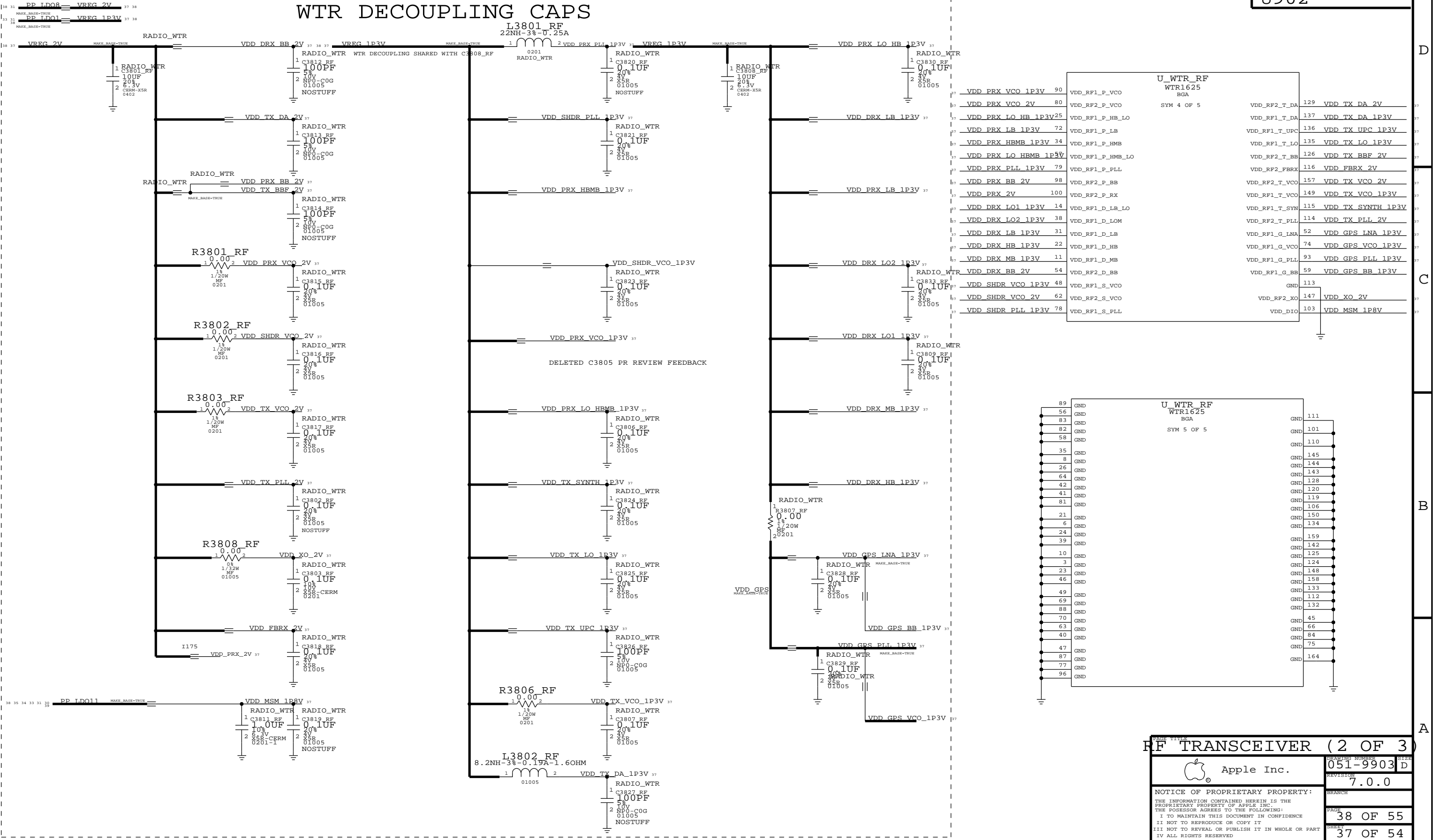
WTR TRANSCEIVER ( 2 OF 2 )

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C934  
R926  
L3802\_RF  
U902

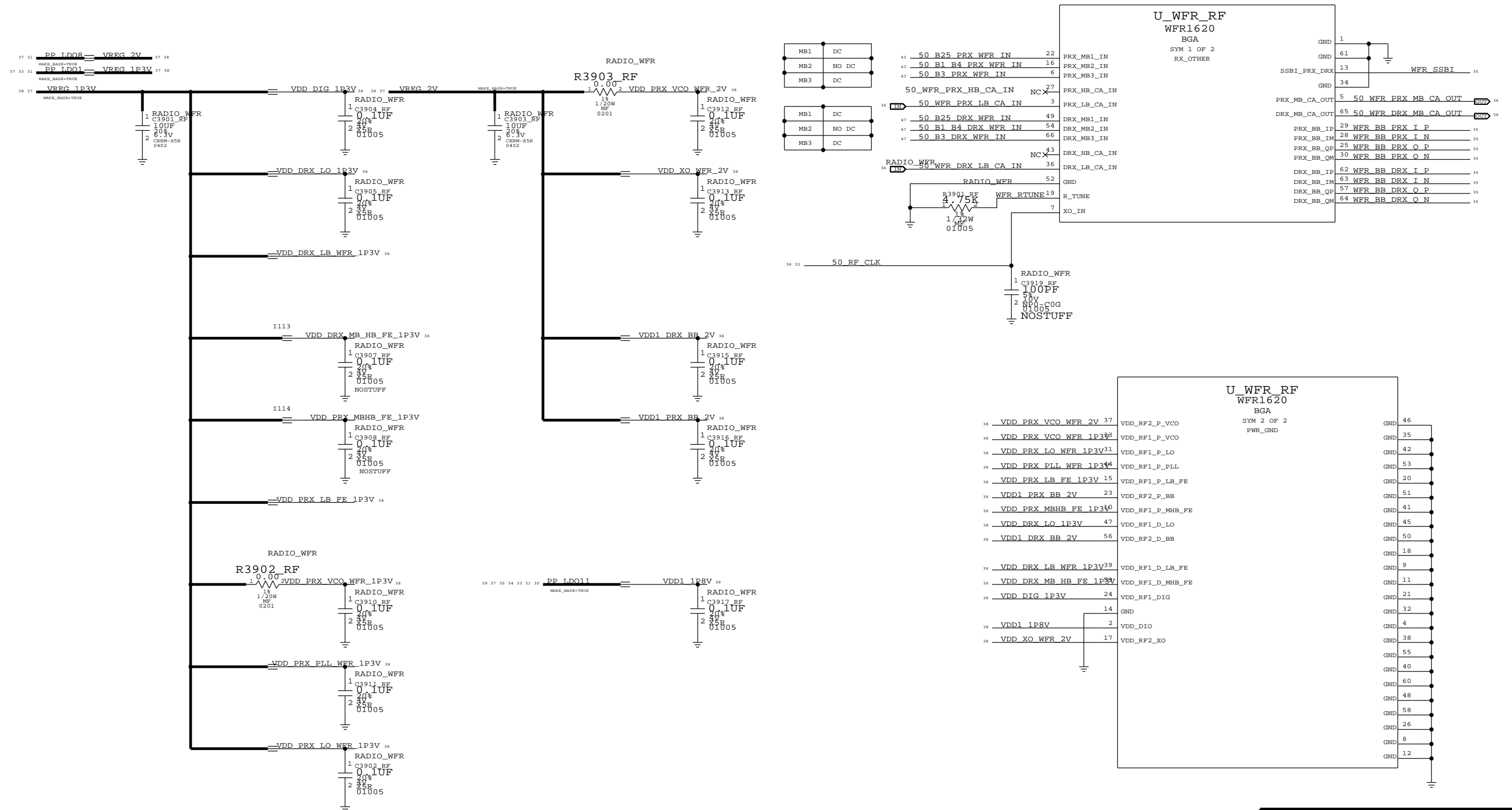
## WTR DECOUPLING CAPS

L3801 RF  
22NH-3%-0.25A



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C1019
R1016
L1000
U1002



RF TRANSCEIVER (3 OF 3)



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051-9903	D
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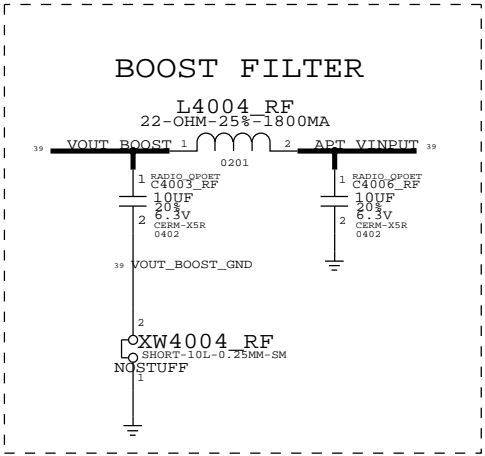
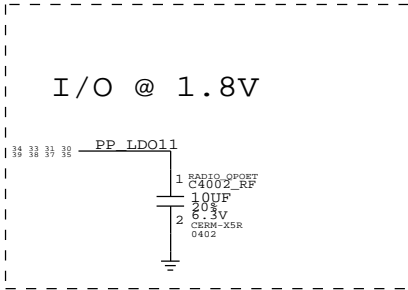
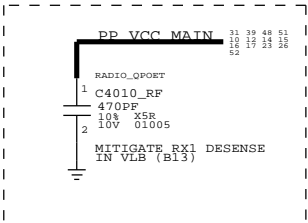
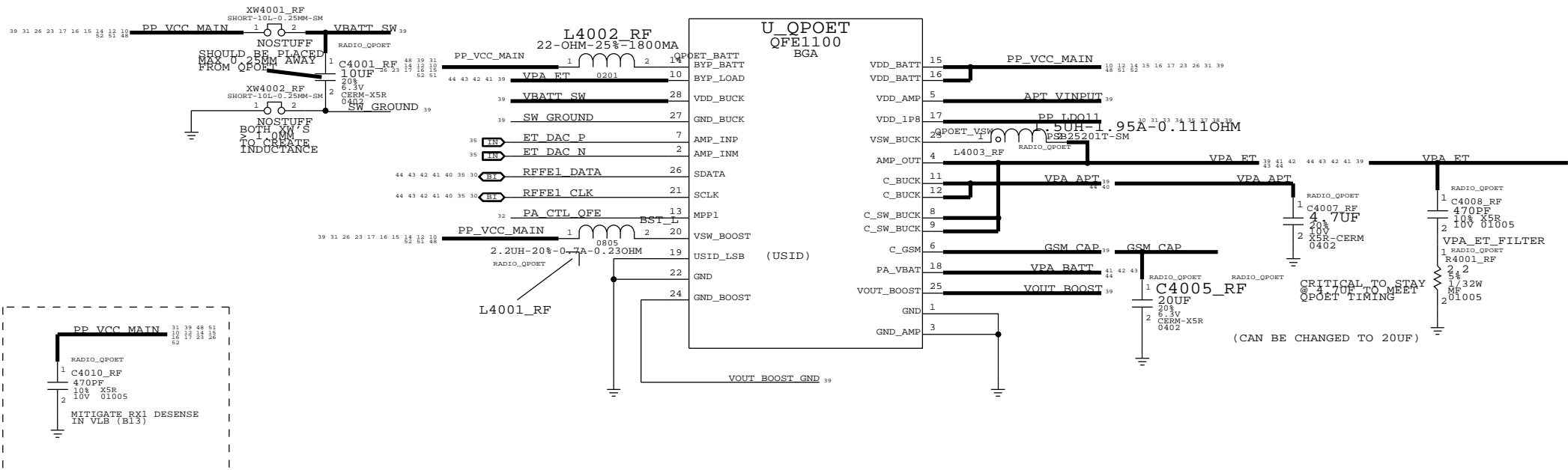
39 OF 55


SHEET  
38 OF 54

# QFE DCDC

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C1110
R1102
L1104
U1101

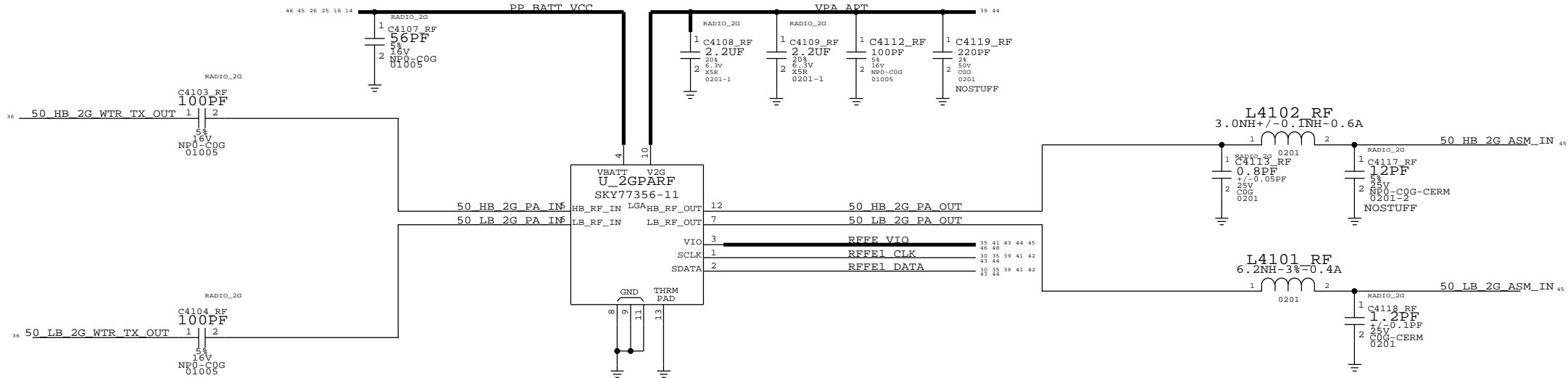



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# 2G PA

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C1208  
R1200  
L1204  
U1201

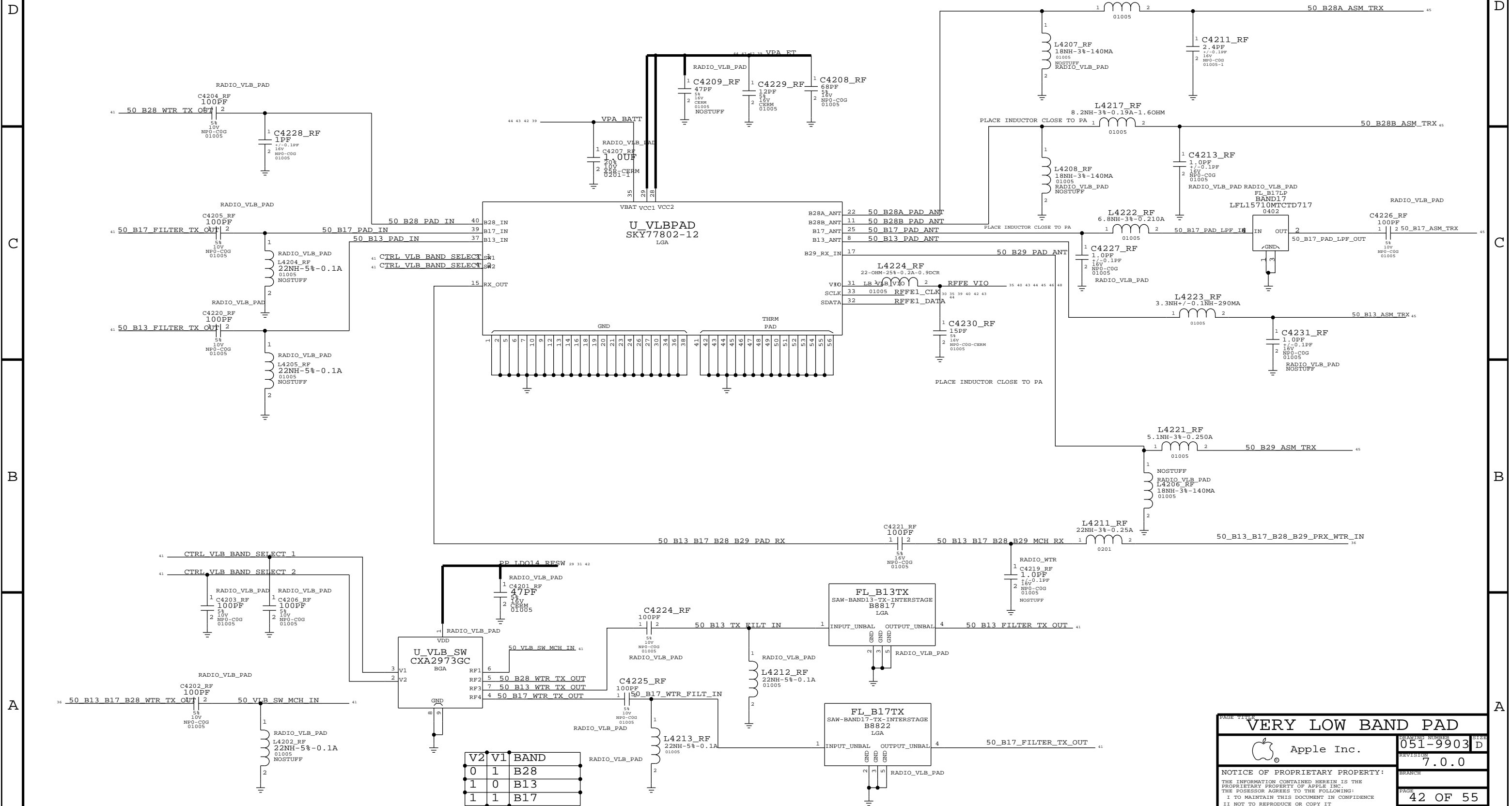


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2G PA		
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C1332
R1300
L4215_RF
U1304



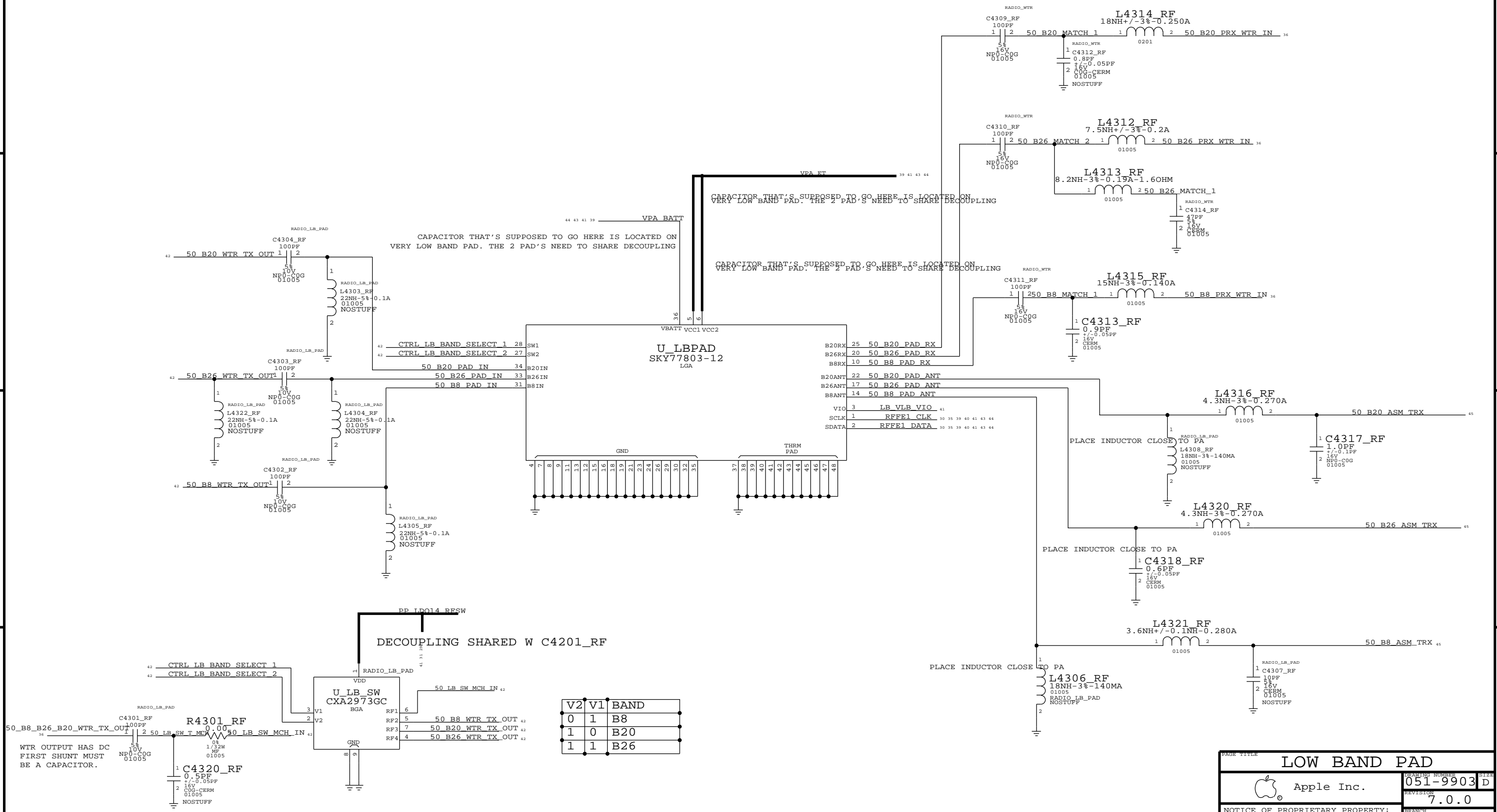
# LOW BAND PAD (B8, B26, B20)

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C4318\_RF  
R1400  
L4322\_RF  
U1402

D  
  
  
C  
  
  
B  
  
  
A

D  
  
  
C  
  
  
B  
  
  
A



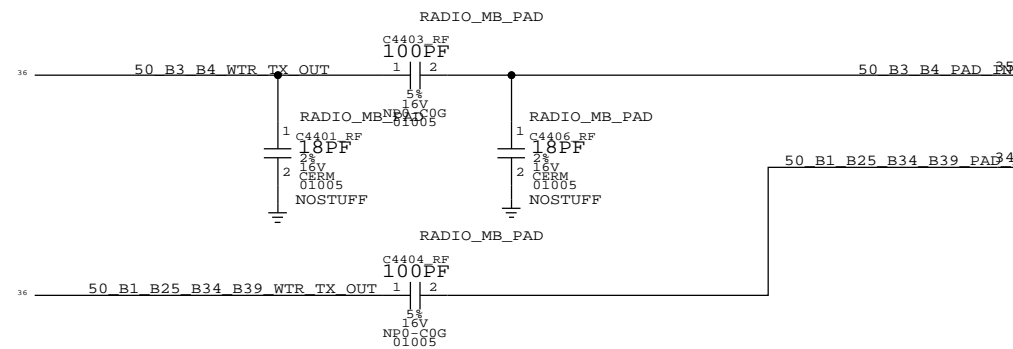
LOW BAND PAD


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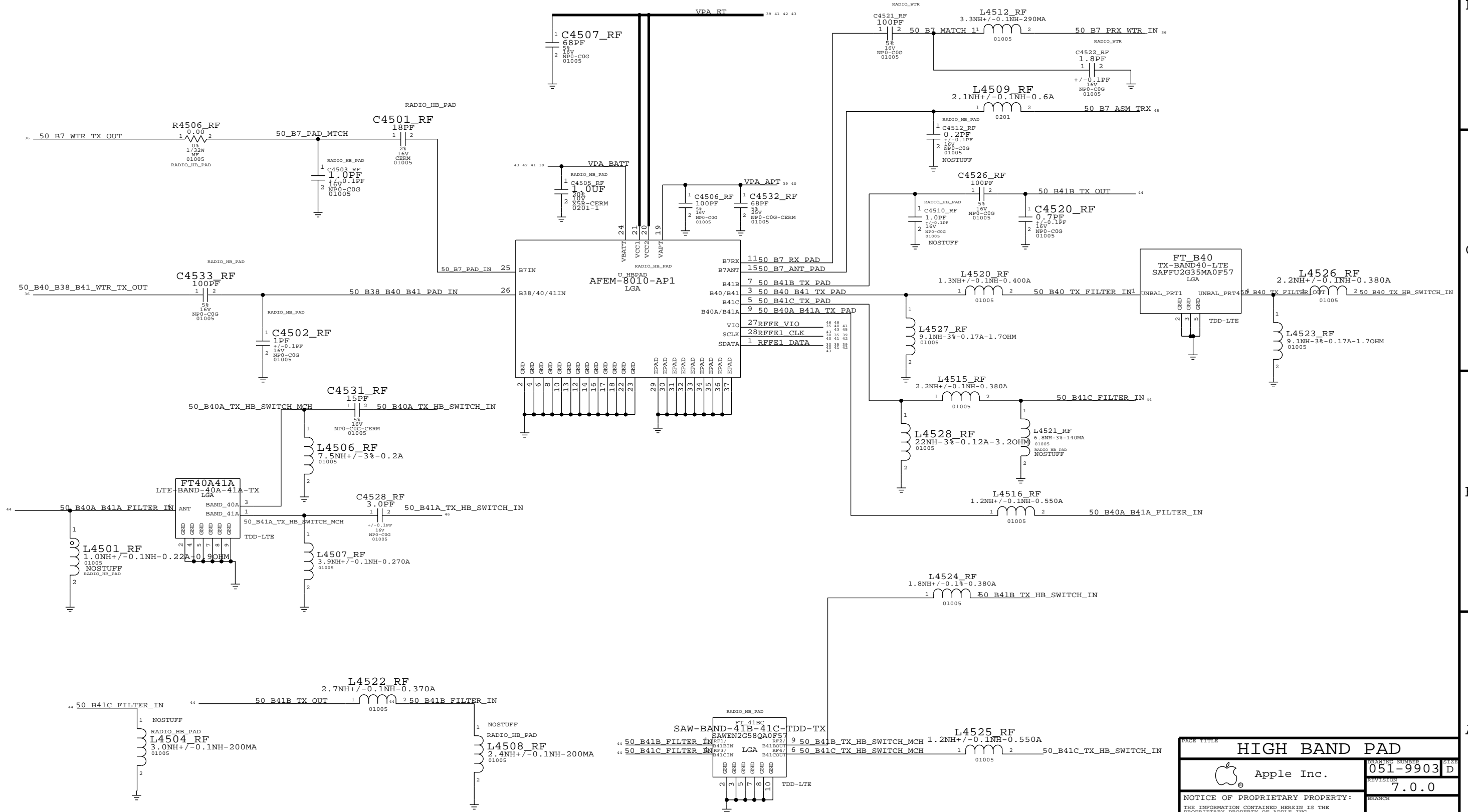
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HIGH BAND PAD (B7, B38, B40, B41, XGP)

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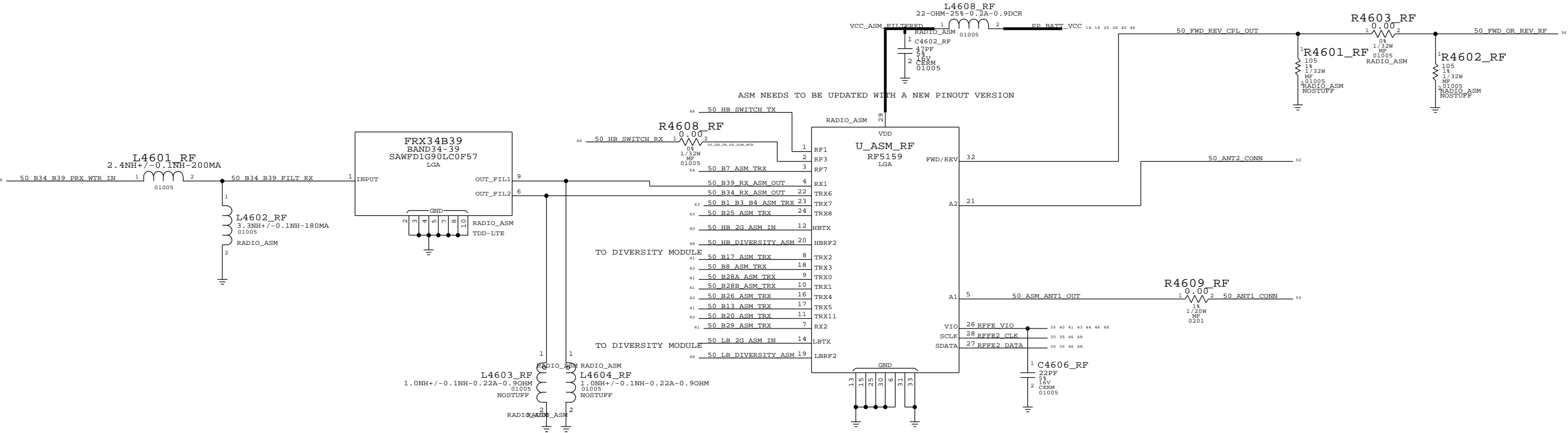
C4533_RF
R1600
L1616
U1601




# ANTENNA SWITCH

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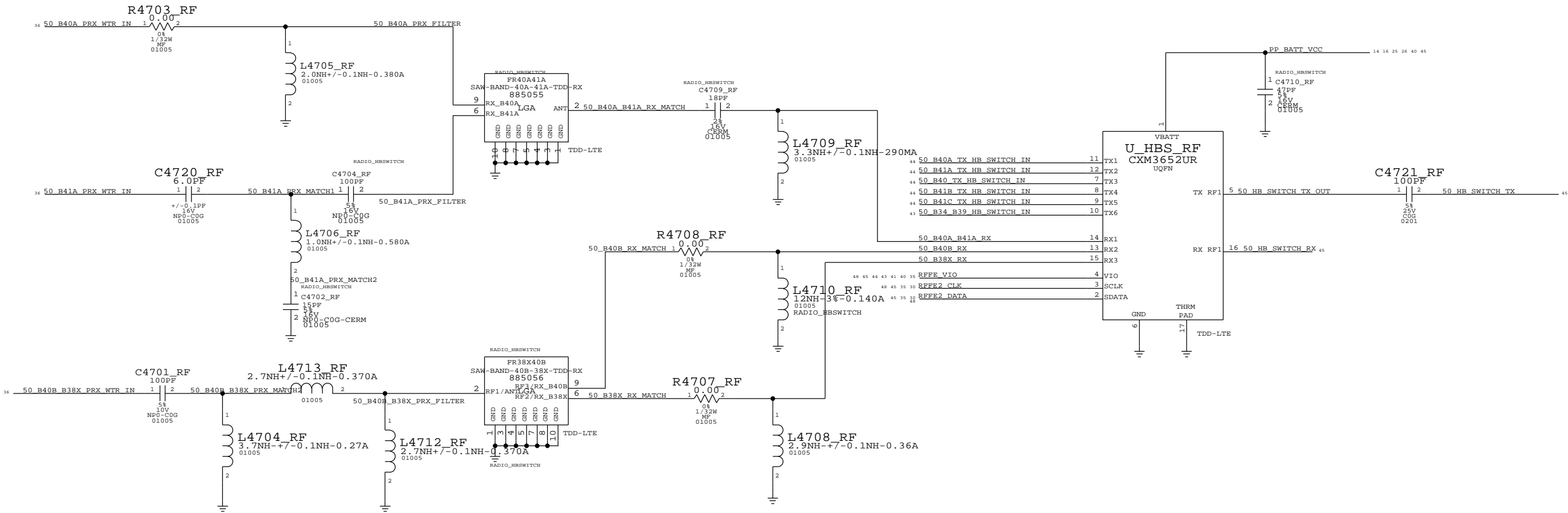
C1702
R1700
L4608_RF
U1702




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# HIGH BAND SWITCH

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RX DIVERSITY (1)

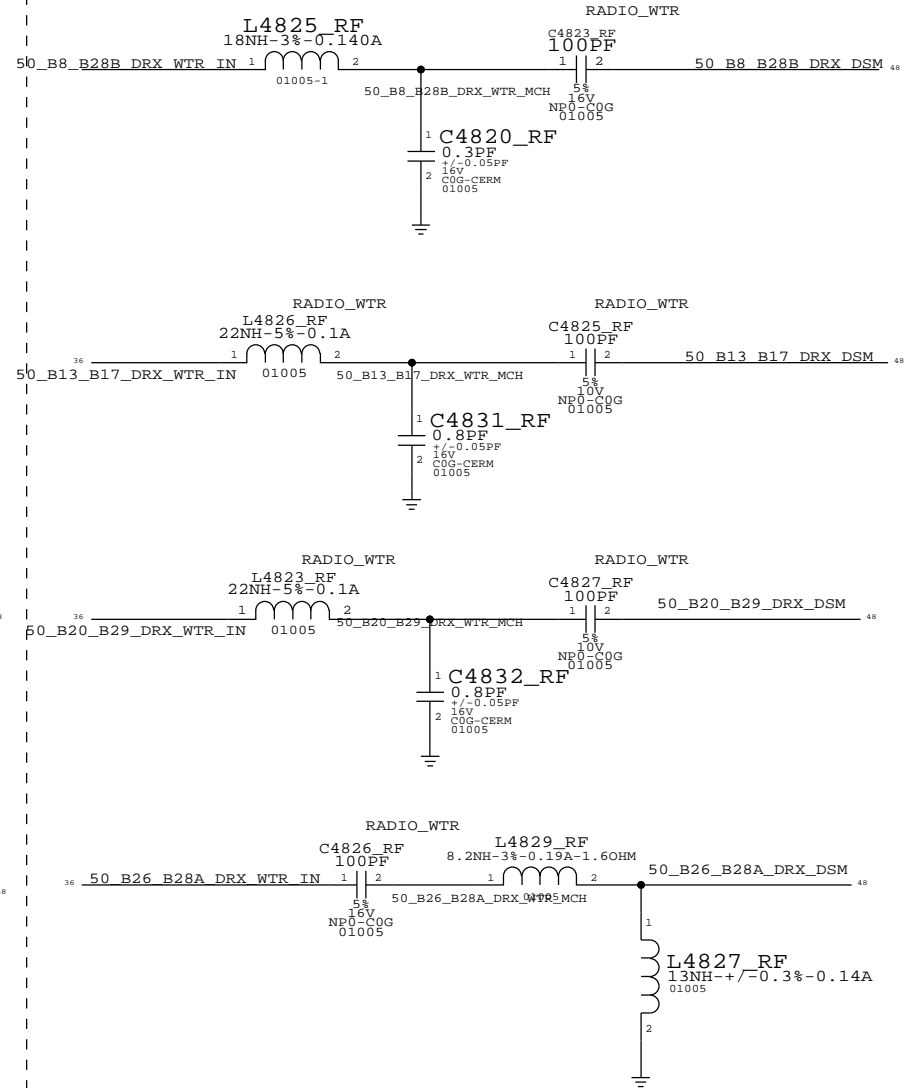
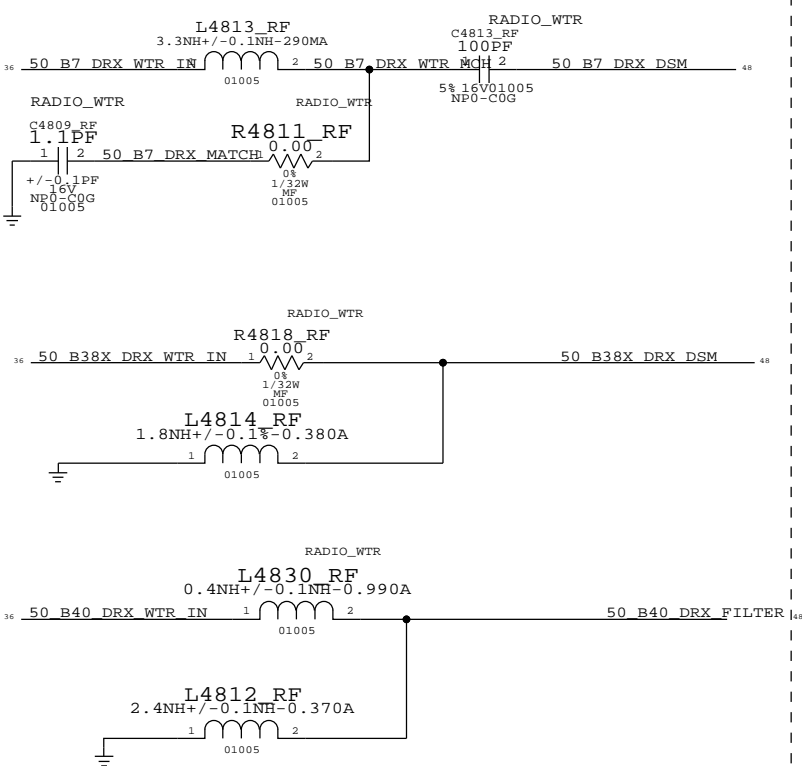
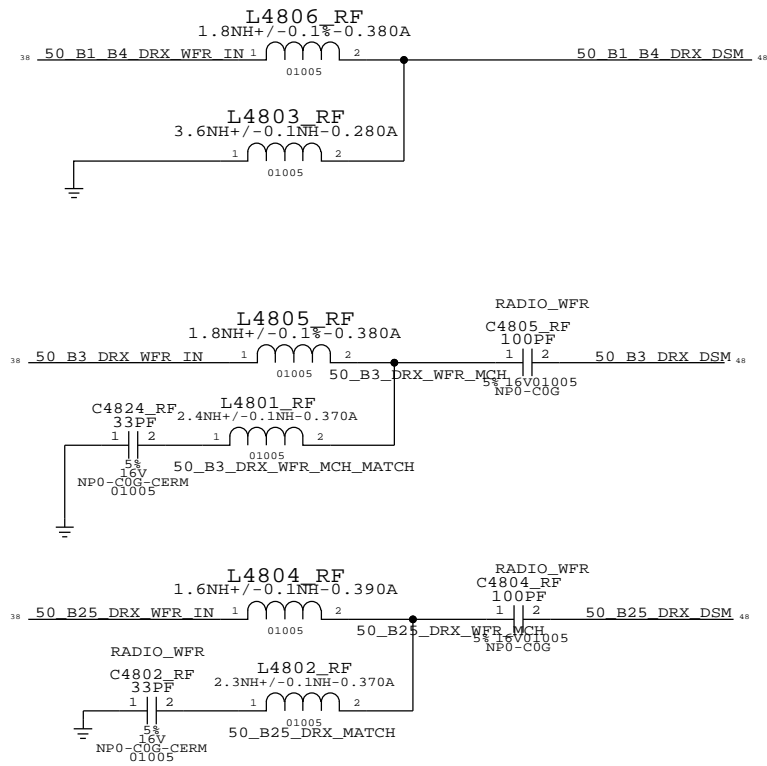
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C4826\_RF  
R1800  
L1829  
U1801

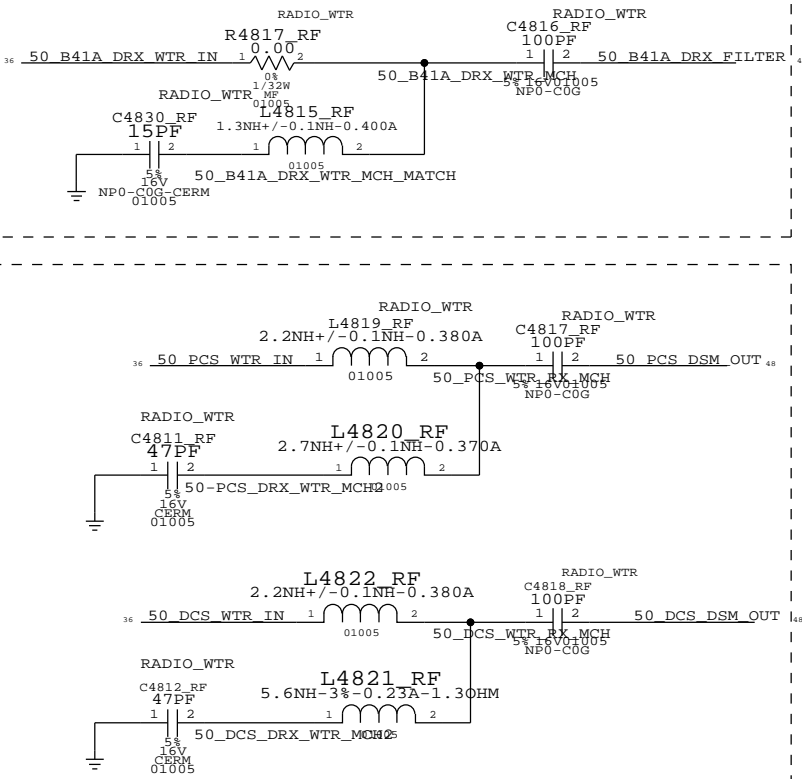
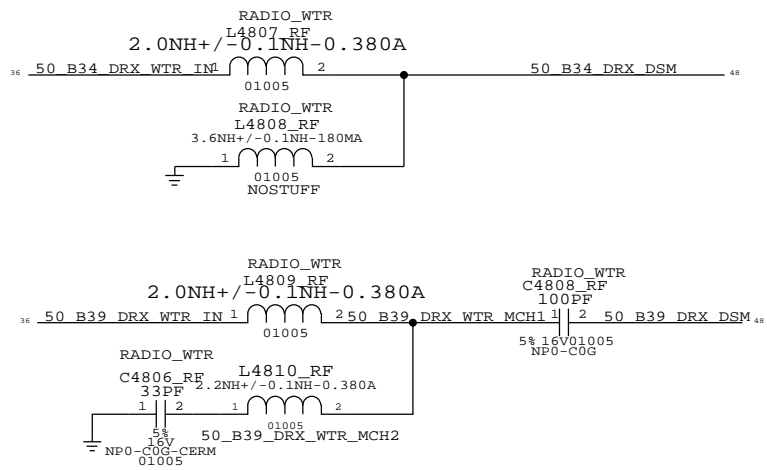
MIDBAND  
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HIGHBAND DIVERSITY - WTR

LOWBAND DIVERSITY - WTR



MIDBAND DIVERSITY - WTR

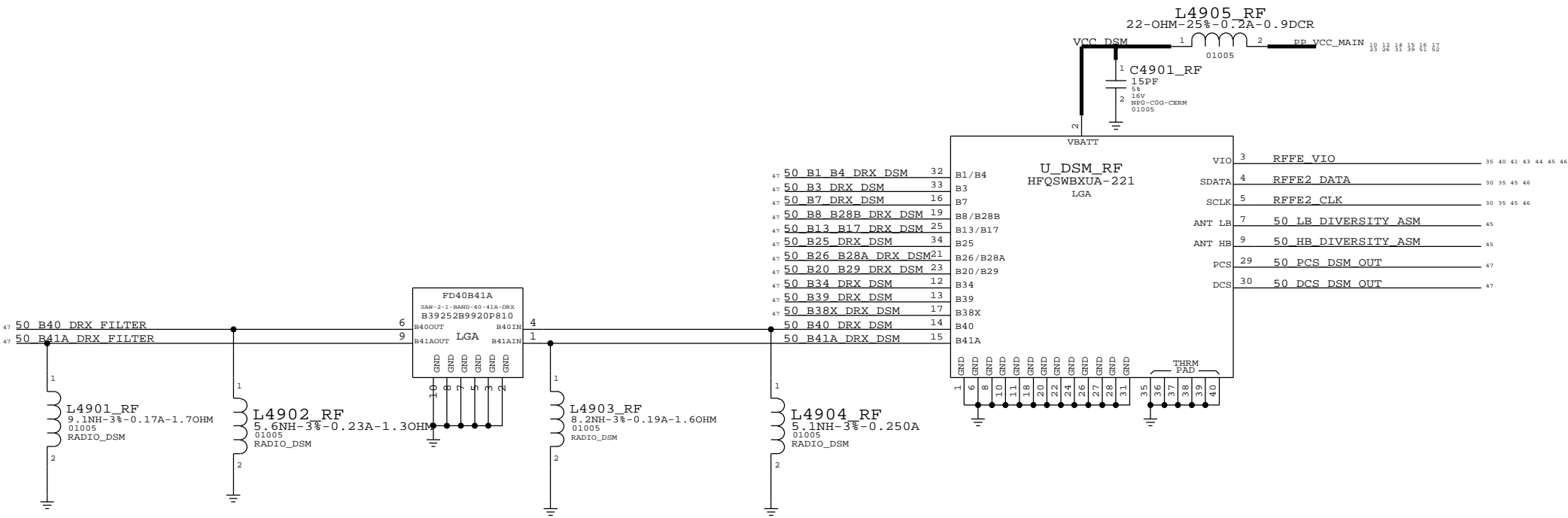


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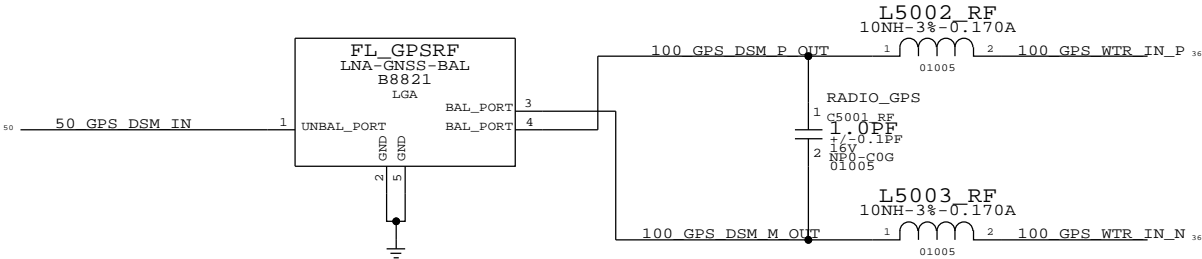
C1900  
R1900  
L1900  
U1901




# GPS

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C1900
R1900
L1900
U1901

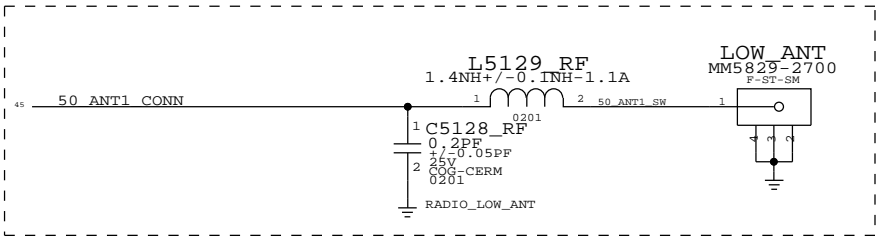
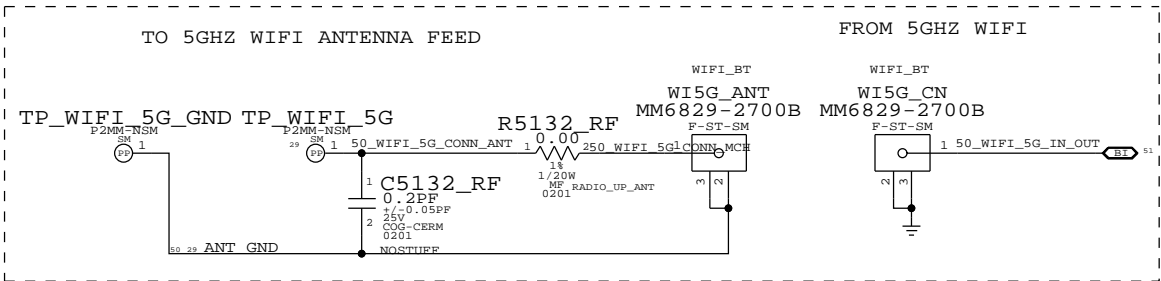
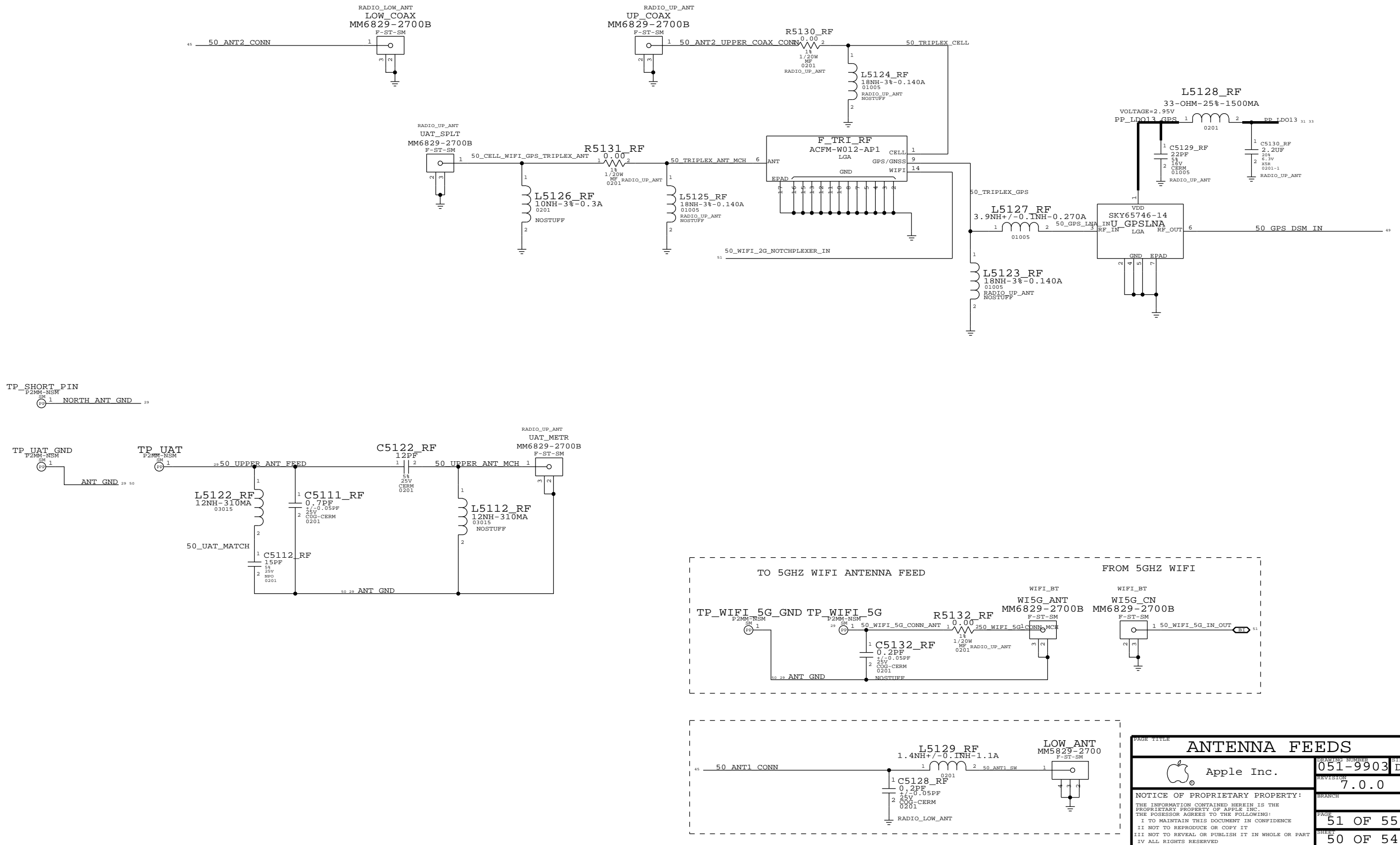


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# ANTENNA FEED'S

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TEST & COAX CONNECTOR FOR LOWER SECTION OF MLB



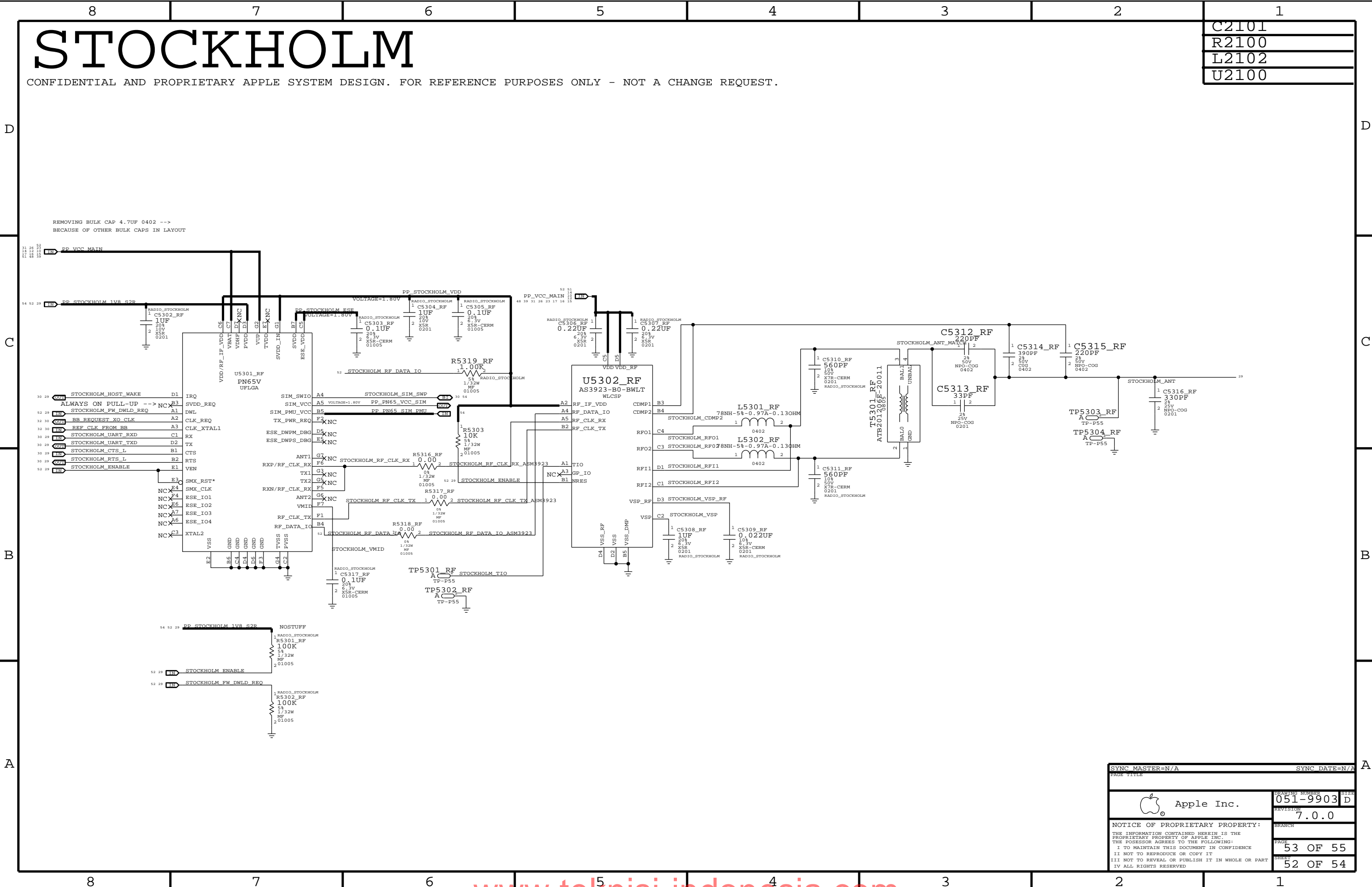
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## D



B

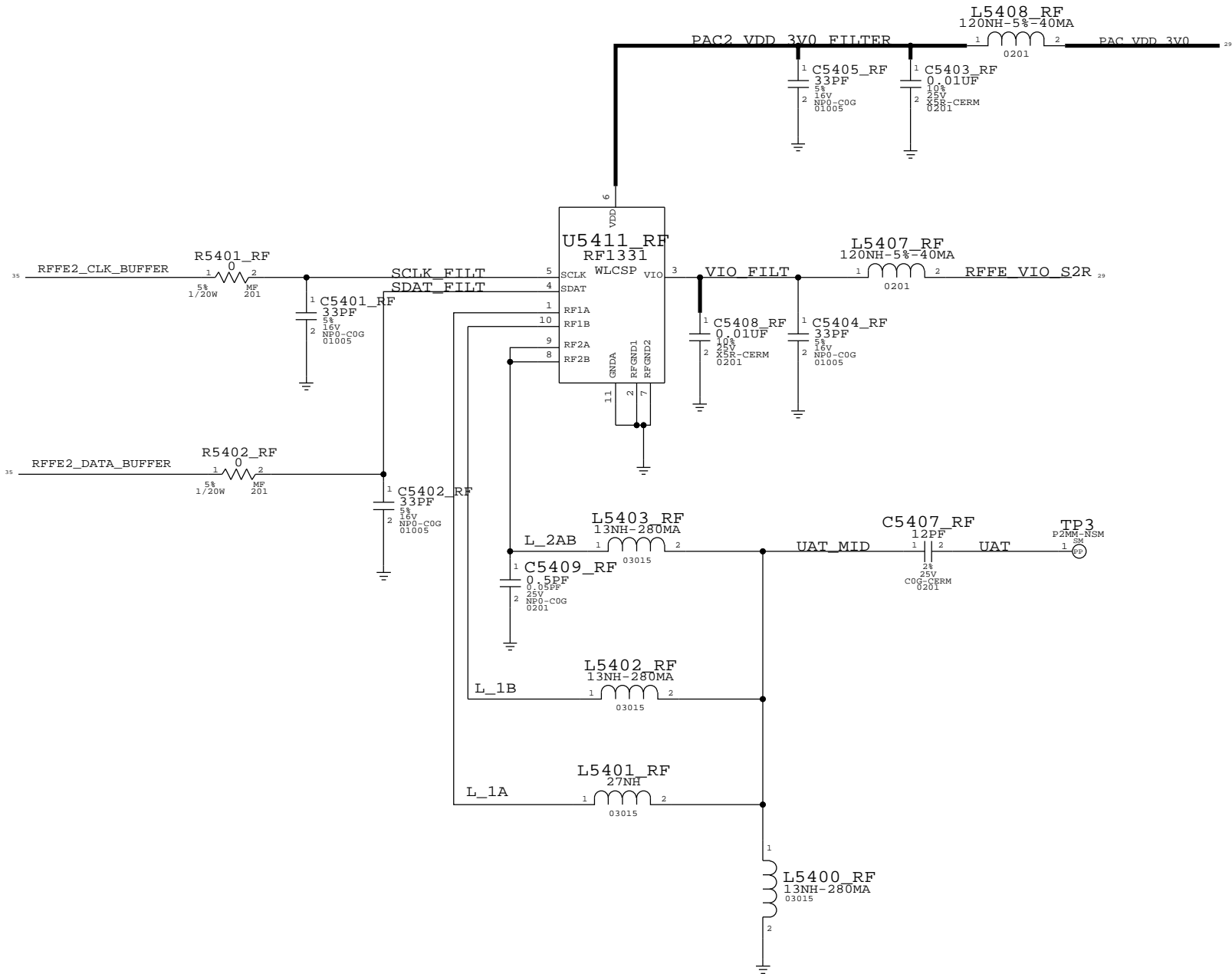
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# ON-BOARD JUMPER FLEX

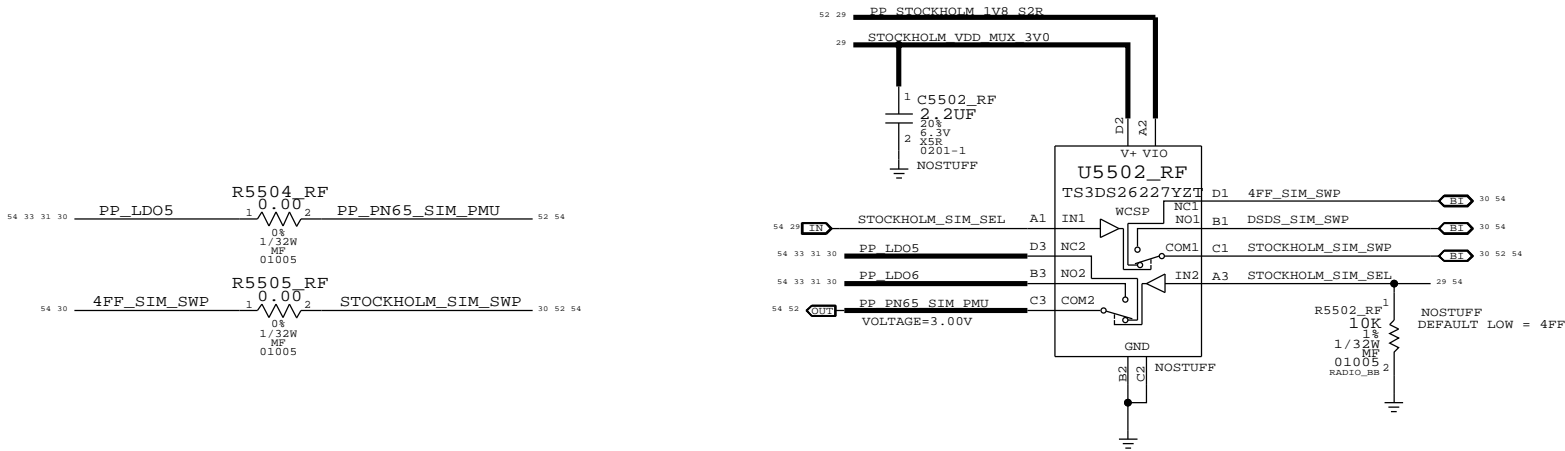
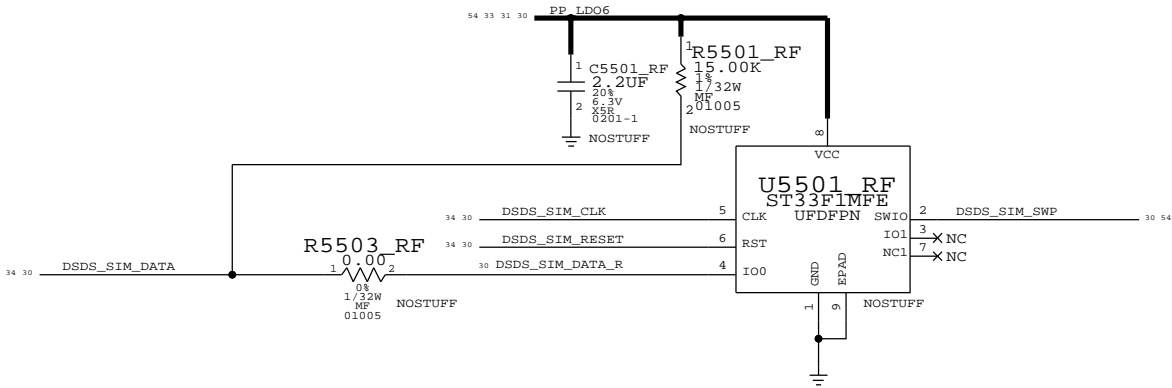
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PAGE TITLE		
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