

Thu Apr 17 17:11:44 2014

- 1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.
- 2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.
- 3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

REV	ECN	DESCRIPTION OF REVISION	CK APPD	DATE
7	0002727241	ENGINEERING RELEASED		2014-04-18

N61 CARRIER BUILD

N61 BOM CALLOUTS

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NAND BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0998	1	NAND,19NM,16GX8,MLC,PPN1.5	U0604	CRITICAL	NAND_16G
335S0993	1	NAND,19NM,32GX8,MLC,PPN1.5	U0604	CRITICAL	NAND_32G
335S0994	1	NAND,19NM,64GX8,MLC,PPN1.5	U0604	CRITICAL	NAND_64G
335S00010	1	NAND,19NM,128GX8,TLC,PPN1.5	U0604	CRITICAL	NAND_128G
138S0867	1	CAP,XSR,10UF,20%,6.3V,0.65MM,HRTZ,0402	C0610,C0611,C0614,C0634	CRITICAL	NAND_16G
138S0867	1	CAP,XSR,10UF,20%,6.3V,0.65MM,HRTZ,0402	C0613,C0633,C0610,C0611,C0614,C0634	CRITICAL	NAND_32G & NAND_64G
138S00003	1	CAP,XSR,15UF,20%,6.3V,0.65MM,HRTZ,0402	C0613,C0633,C0610,C0611,C0614,C0634	CRITICAL	NAND_128G

ALTERNATE NAND BOM OPTIONS

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0992	335S0998	ALTERNATE	J0604	TOSHIBA,NAND,16GB
335S1038	335S0998	ALTERNATE	J0604	HYNIX,NAND,16GB
335S1040	335S0994	ALTERNATE	J0604	HYNIX,NAND,64GB
335S00014	335S0994	ALTERNATE	J0604	TOSHIBA,NAND,64GB
335S00015	335S00010	ALTERNATE	J0604	TOSHIBA,NAND128GB
335S00009	335S0994	ALTERNATE	J0604	SANDISK,NAND,64GB,TLC

SHIELD BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
604-00241	1	SUBASSY, SHIELD, UPPER FRONT, N61	SH2501	CRITICAL	COMMON
604-00242	1	SUBASSY, SHIELD, LOWER FRONT, N61	SH2502	CRITICAL	COMMON
604-00243	1	SUBASSY, SHIELD, LOWER BACK, N61	SH2504	CRITICAL	COMMON
604-00244	1	SUBASSY, SA SHIELD, N61	SH2506	CRITICAL	COMMON

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-9903	1	SCH, MLB, N61	SCH	CRITICAL	?
820-3486	1	PCBF, MLB, N61	PCB	CRITICAL	?
825-6838	1	EEEE FOR 639-4237 16GB	EEEE_G16T	CRITICAL	EEEE_16G
825-6838	1	EEEE FOR 639-5838 32GB	EEEE_G16R	CRITICAL	EEEE_32G
825-6838	1	EEEE FOR 639-5839 64GB	EEEE_G16Q	CRITICAL	EEEE_64G
825-6838	1	EEEE FOR 639-00025 128GB	EEEE_G16N	CRITICAL	EEEE_128G
825-6838	1	EEEE FOR 639-00208 16GB	EEEE_F98F	CRITICAL	EEEE_16G_TDDLTE
825-6838	1	EEEE FOR 639-00209 32GB	EEEE_FQKQ	CRITICAL	EEEE_32G_TDDLTE
825-6838	1	EEEE FOR 639-00210 64GB	EEEE_FQJY	CRITICAL	EEEE_64G_TDDLTE
825-6838	1	EEEE FOR 639-00212 128GB	EEEE_FY9W	CRITICAL	EEEE_128G_TLC_TDDLTE

ALTERNATE BOM OPTIONS

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S1844	152S1836	ALTERNATE	L1604	TY ALT INDUCTOR
152S1842	152S1849	ALTERNATE	L1519	TY ALT INDUCTOR
197S0392	197S0369	ALTERNATE	Y1200	ESPON ALT XTAL
197S0399	197S0369	ALTERNATE	Y1200	NDK ALT XTAL
338S1285	338S1202	ALTERNATE	U1601	L21 SPKAMP
152S2034	152S2033	ALTERNATE	L1135	1.2MM 1.0UH, CYNTEC
152S00004	152S2049	ALTERNATE	L1135	1.2MM 0.47UH, CYNTEC
339S00005	339S0246	ALTERNATE	U0201	FIJI, B0, SAMSUNG
339S0247	339S0246	ALTERNATE	U0201	FIJI, B0, HYNIX
339S00006	339S0246	ALTERNATE	U0201	FIJI, B1, E
339S00007	339S0246	ALTERNATE	U0201	FIJI, B1, H
339S00008	339S0246	ALTERNATE	U0201	FIJI, B1, S
155S0773	155S0453	ALTERNATE	R1309	TY 1200HM FERRITE
118S0764	118S0717	ALTERNATE	R1309	3.92KOHM, 01005
343S0688	343S0638	ALTERNATE	U2401	CUMULUS C1, FAB4
138S00005	138S00003	ALTERNATE	C1290	15UF,0402,HRTZL CAP
155S00011	155S00008	ALTERNATE	L1135	CMC,900HM,MURATA
377S0168	377S0140	ALTERNATE	DZ1113	SUPPL,TRANS,VARIABLE,AMOTEC
155S0885	155S0610	ALTERNATE	FL1802,FL1809	FERR BE,1500NM,200NM,01005
138S0648	138S0652	ALTERNATE	C1018	CAP,4.7UF,20%,6.3V,0402,040-65MM
138S0657	138S0702	ALTERNATE	C1106	CAP,4.7UF,20%,4V,0402
338S00028	338S00017	ALTERNATE	J2203	CARBON, BOBCH, BMS1162BC
338S00029	338S00017	ALTERNATE	J2203	CARBON, ST, AP60S2AA
335S00013	335S0894	ALTERNATE	J0301	ST BK EEPROM

SCH 051-9903
BRD 820-3486
MCO 056-6825

BOM 639-4237 (16GB,BETTER) BOM 639-00208 (16GB,BETTER,DTD)
 BOM 639-5838 (32GB,BEST) BOM 639-00209 (32GB,BEST,DTD)
 BOM 639-5839 (64GB,ULTRA) BOM 639-00210 (64GB,ULTRA,DTD)
 BOM 639-00025 (128GB,SUPREME,TLC) BOM 639-00212 (128GB,SUPREME,TLC,DTD)

DRAWING TITLE		SCHEM,MLB,N61	
Apple Inc.	DRAWING NUMBER	051-9903	SIZE D
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Apple iPhone 6 Schematic Diagram

The BEST tips to use Apple iPhone:

(1) Discover How You Can Become an Expert with your iPhone!

"Weird" Trick to Master Your iPhone.

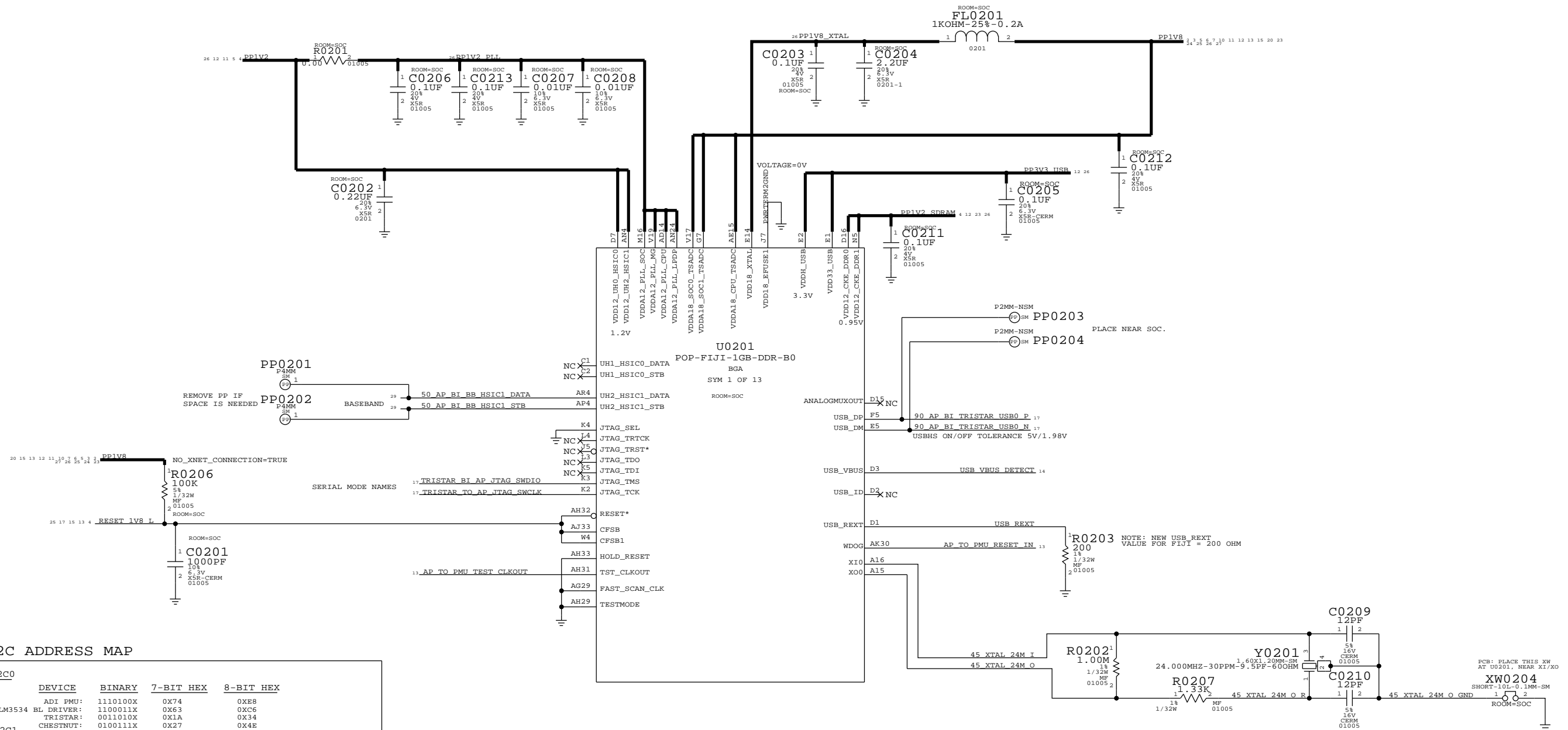


(2) iPhone Video Hero--Do you know how to make INCREDIBLE Videos with your iPhone?

-Find out why your iPhone is the BEST camera for Video Marketing you already own!



FIJI: JTAG, USB, HSIC, XTAL



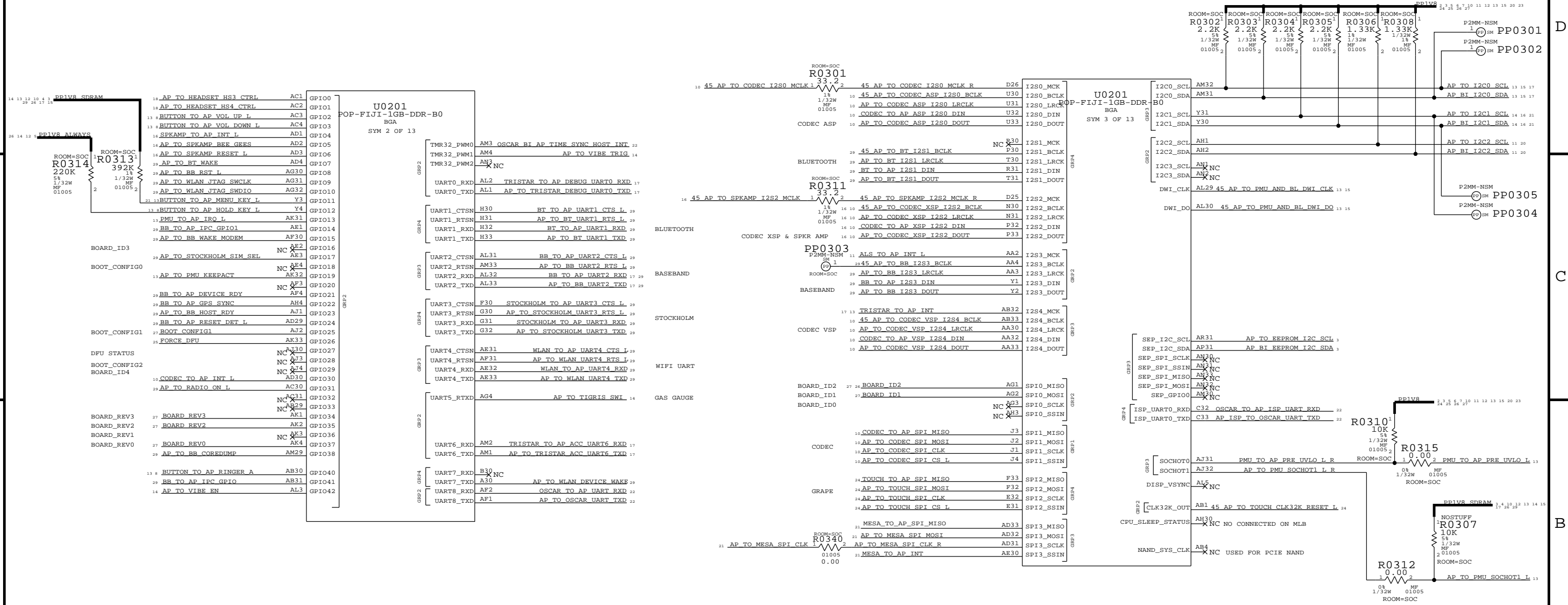
I2C ADDRESS MAP

I2C0	DEVICE	BINARY	7-BIT HEX	8-BIT HEX
I2C0	ADI PMU:	1110100X	0X74	0XE8
	LM3534 BL DRIVER:	1100011X	0X63	0XC6
	TRISTAR:	0011010X	0X1A	0X34
	CHESTNUT:	0100111X	0X27	0X4E
I2C1	TIGRIS CHARGER:	1110101X	0X75	0XEA
	LINEAR VIBE:	1011010X	0X5A	0XB4
	CS35L19B AMP:	1000000X	0X40	0X80
	MESA EEPROM (MEMORY):	1010110X	0X56	0XAC
	MESA EEPROM (ID):	1011110X	0X5E	0XBC
I2C2	CT814 ALS:	0101001X	0X29	0X52
	DISPLAY EEPROM:	1010001X	0X51	0XA2
RCAM I2C	OPEL STROBE DRIVER:	1100011X	0X63	0XC6
	REAR FACING CAM:	0010000X	0X10	0X20
	VCM AF DRIVER:	0001100X	0X0C	0X18
FCAM I2C	FRONT FACING CAM:	0010000X	0X10	0X20

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

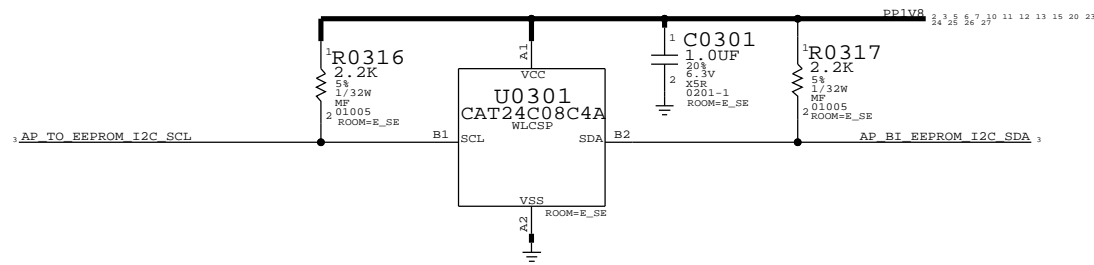
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SOC:MAIN			
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FIJI: DIGITAL I/O, BOOTSTRAPPING



ANTI-ROLLBACK EEPROM
ONSEMI EEPROM
APN: 335S0894

REMOVED HOLD + MENU KEY
BUFFERS SINCE NOT NEEDED FOR FIJI



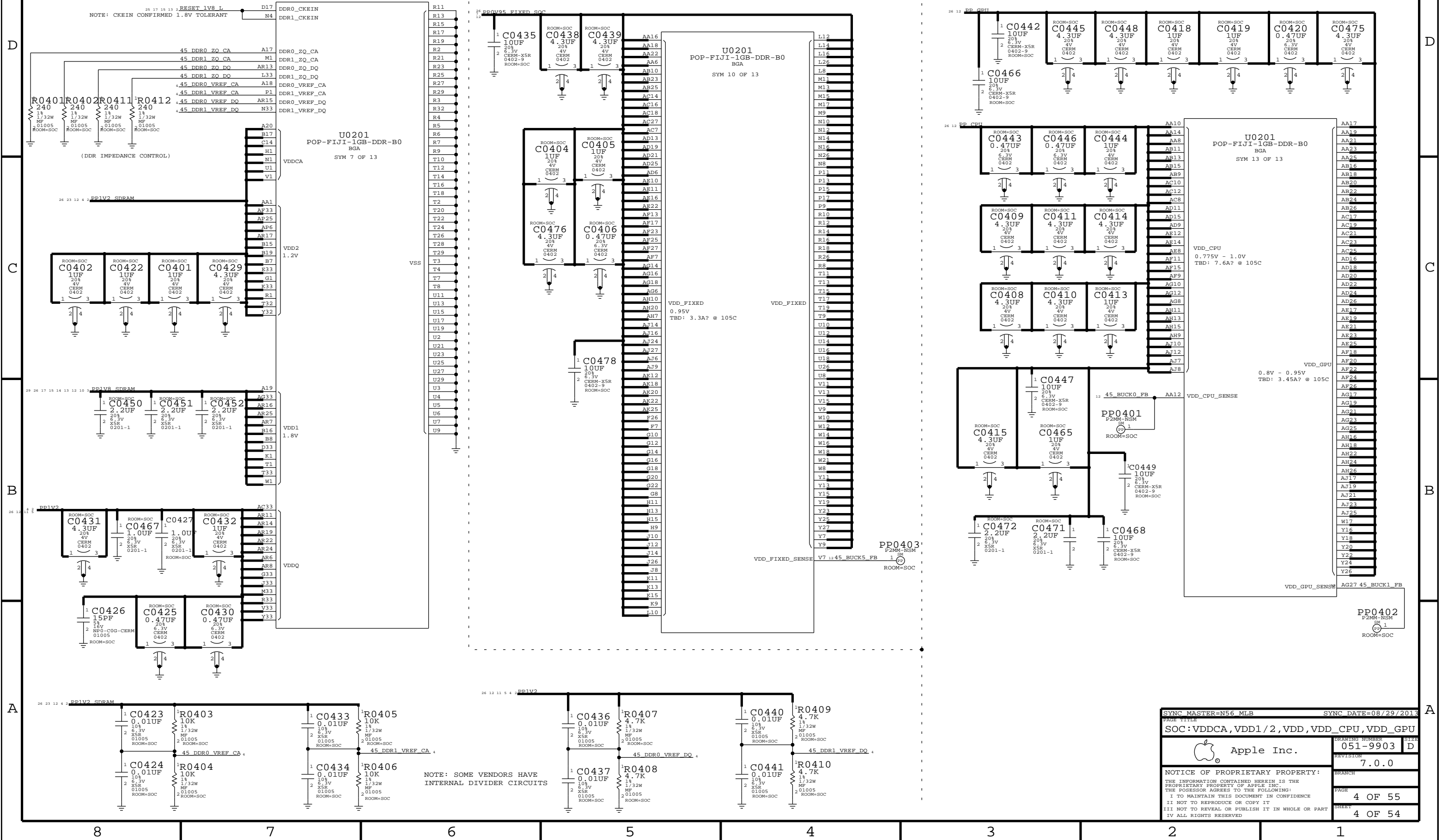
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FIJI: VDDCA, VDD1/2, VDDQ, VDD, VDD_FIXED, VDD_CPU, VDD_GPU

VDDCA, VDD1/2, VDDQ

VDD

VDD_CPU, VDD_GPU

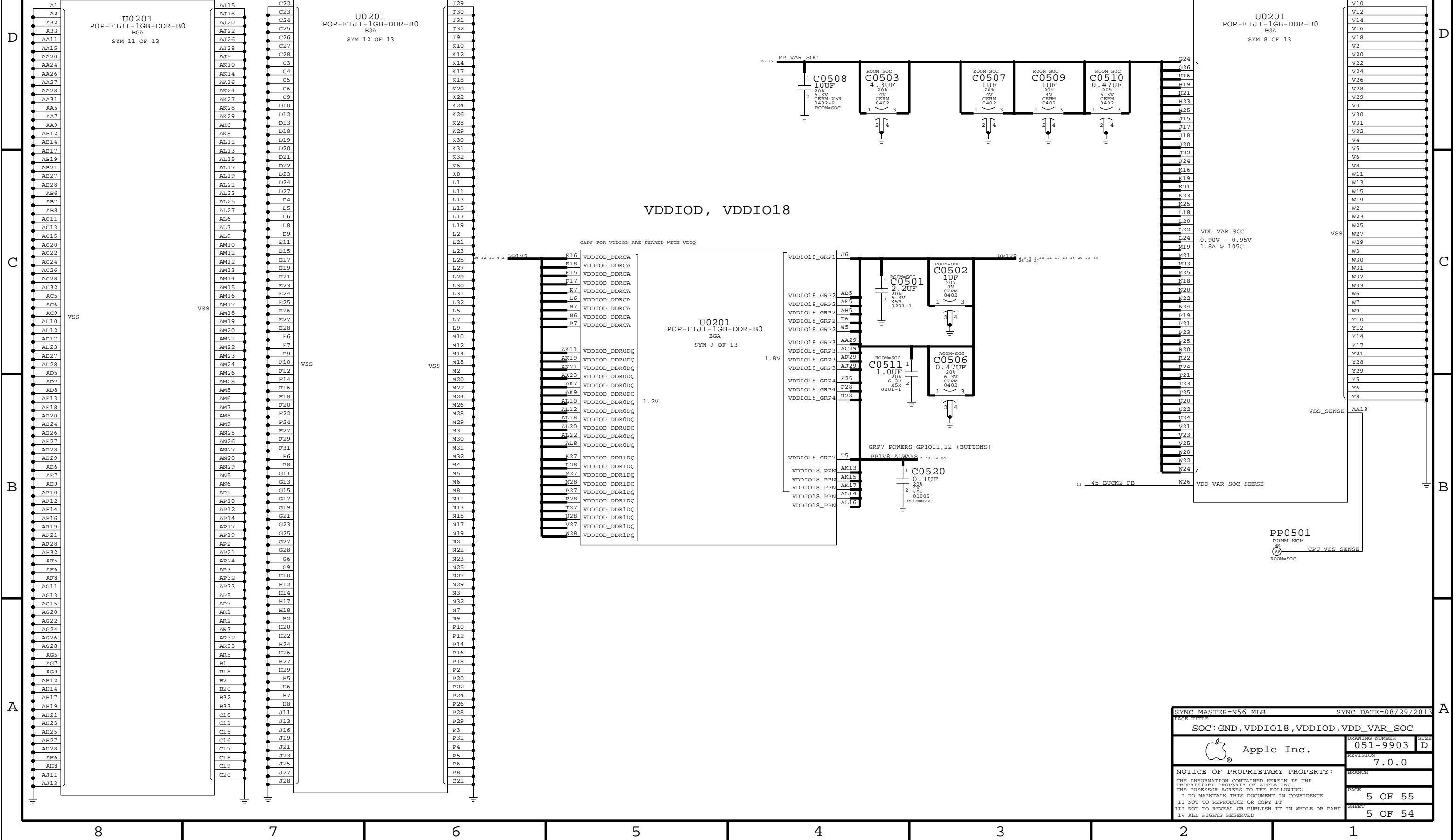


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PAGE TITLE SOC:VDDCA, VDD1/2, VDD, VDD_CPU, VDD_GPU			
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FIJI: VDDIOD, VDDIO18, VDD_VAR_SOC

JUST A FEW GNDS

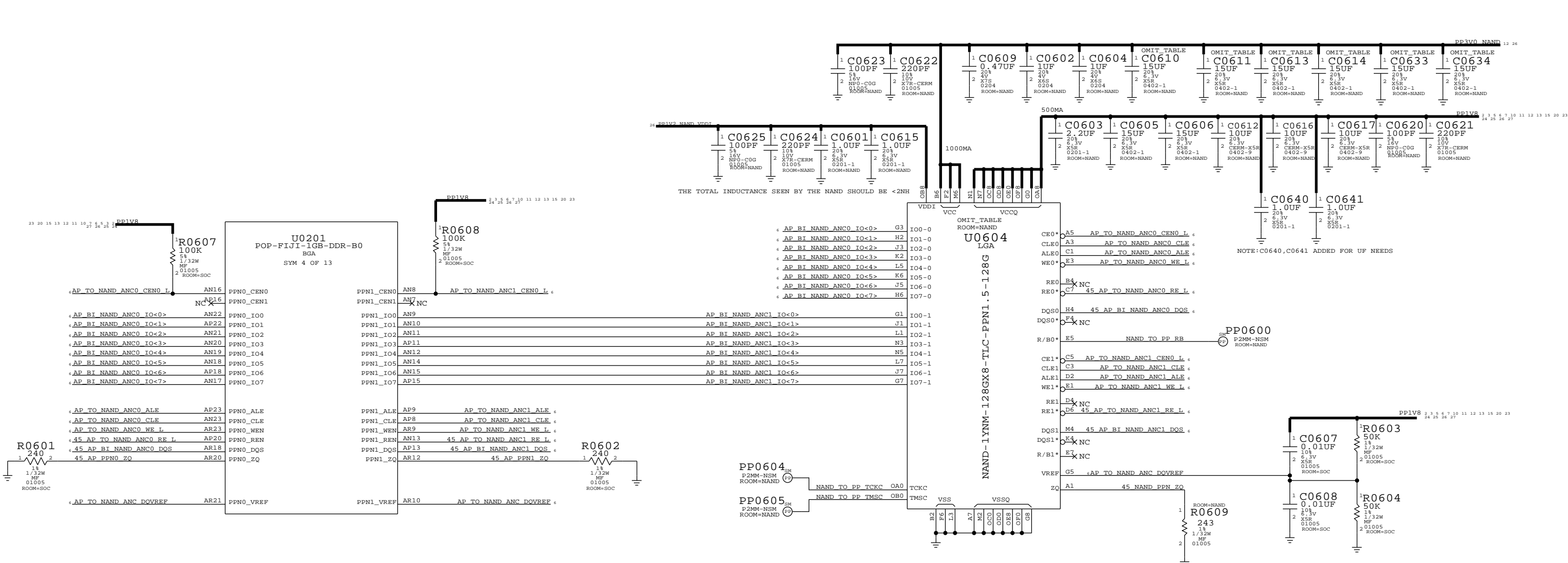
VDD_SRAM, VDD_SOC



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PAGE TITLE SOC: GND, VDDIO18, VDDIOD, VDD_VAR_SOC			
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FIJI: NAND + 12X17 NAND PKG

SUPPORT FOR PPN1.5 (1.8V IO) ONLY



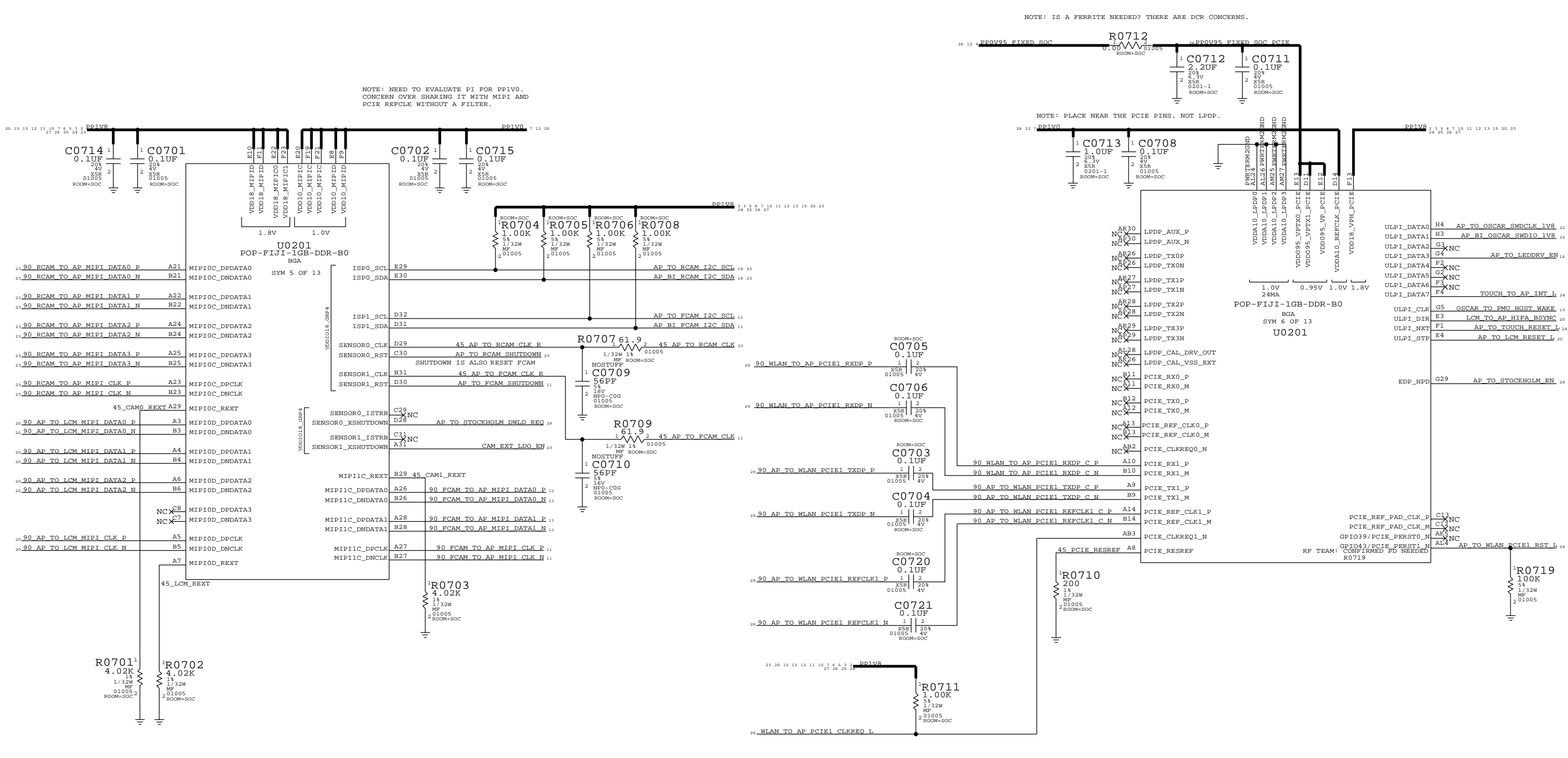
THE TOTAL INDUCTANCE SEEN BY THE NAND SHOULD BE <2NH

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

- PP0601 P4MM ROOM=SOC 1 AP BI NAND ANCO IO<6> NOTE: IO<6> PREFERRED BY MATT BYOM (N51) (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		DRAWING NUMBER	SIZE
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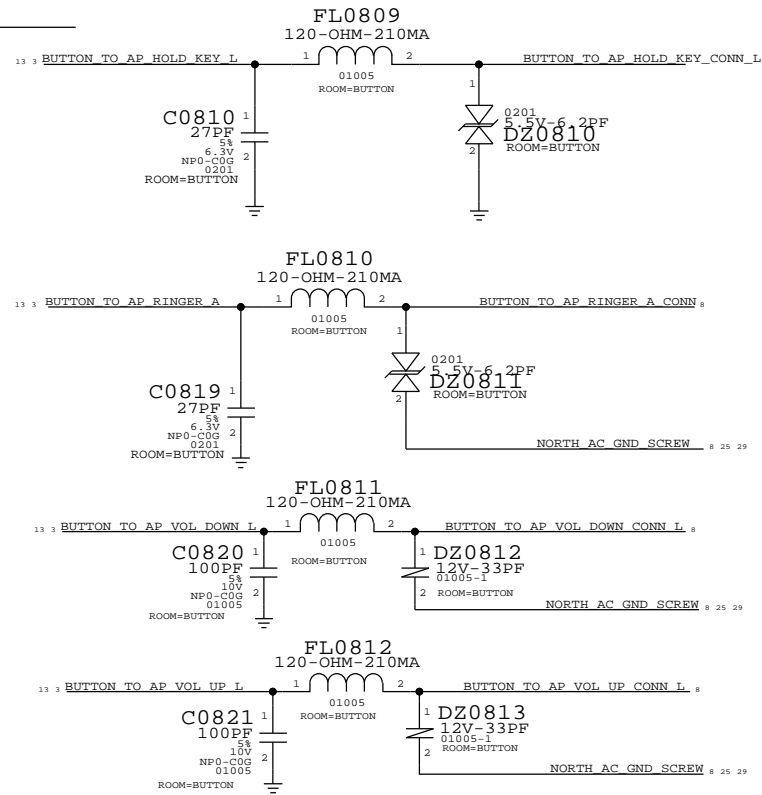
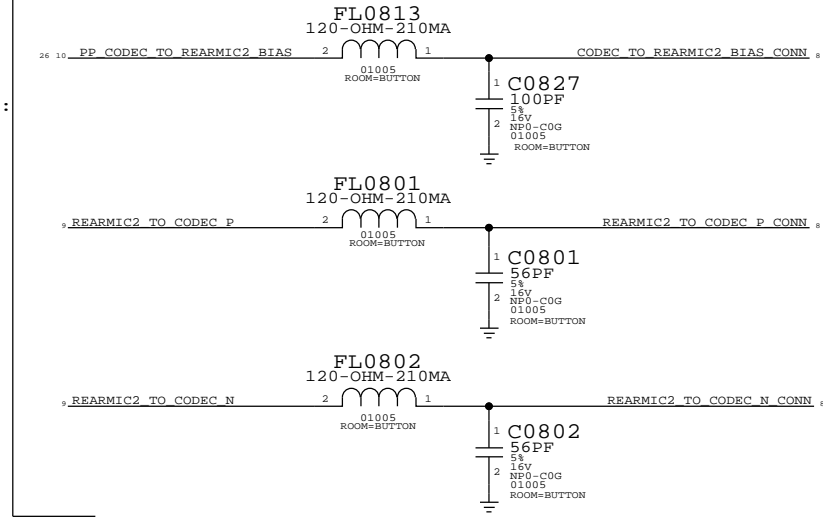
FIJI: HIGH SPEED DIG (CAM, LCD, LPDP, PCIE)



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SOC: CAM, LCD, LPDP, PCIE			
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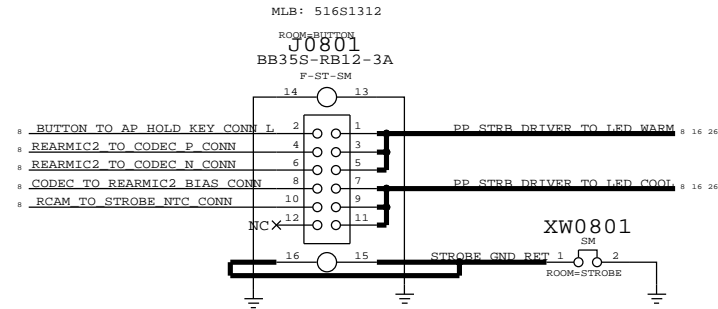
BUTTON FLEX (BUTTONS, ANC REF MIC, STROBE, STROBE_NTC, WIFI FLEX PAC)

MIC2 (ANC REF MIC):
MIC2_4 BIAS,
MIC2_P,_N

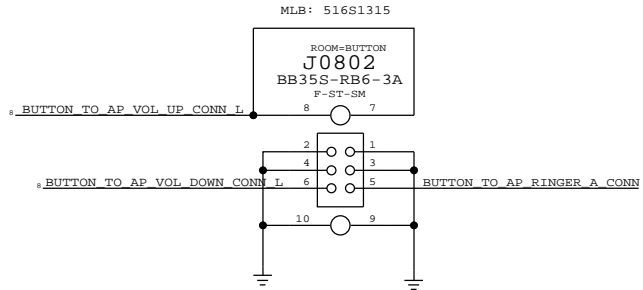


BUTTONS:
RINGER, HOLD,
VOL_UP/DOWN,

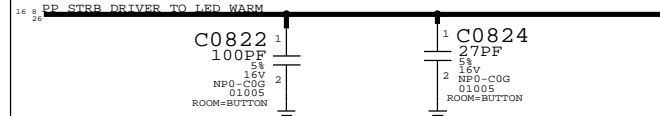
RIGHT BUTTON B2B



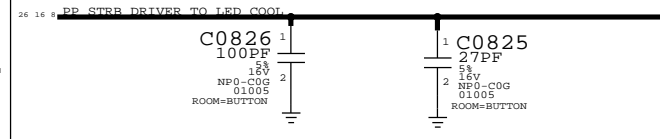
LEFT BUTTON B2B



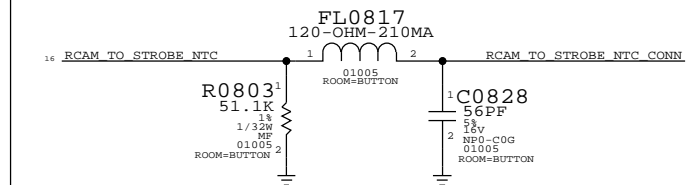
STROBE:
LED WARM



STROBE:
LED COOL



STROBE:
NTC

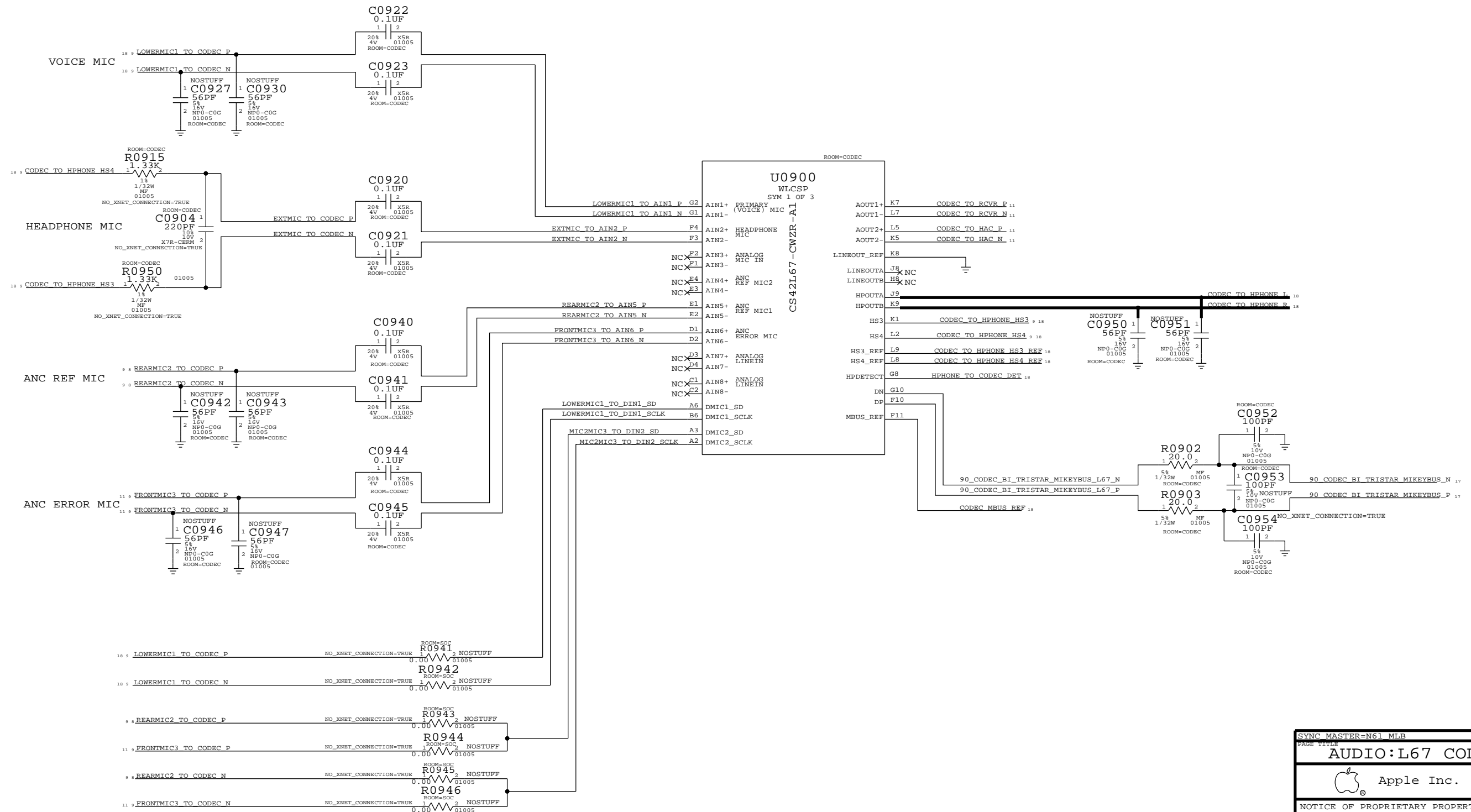


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L67 AUDIO CODEC

AUDIO I/O

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



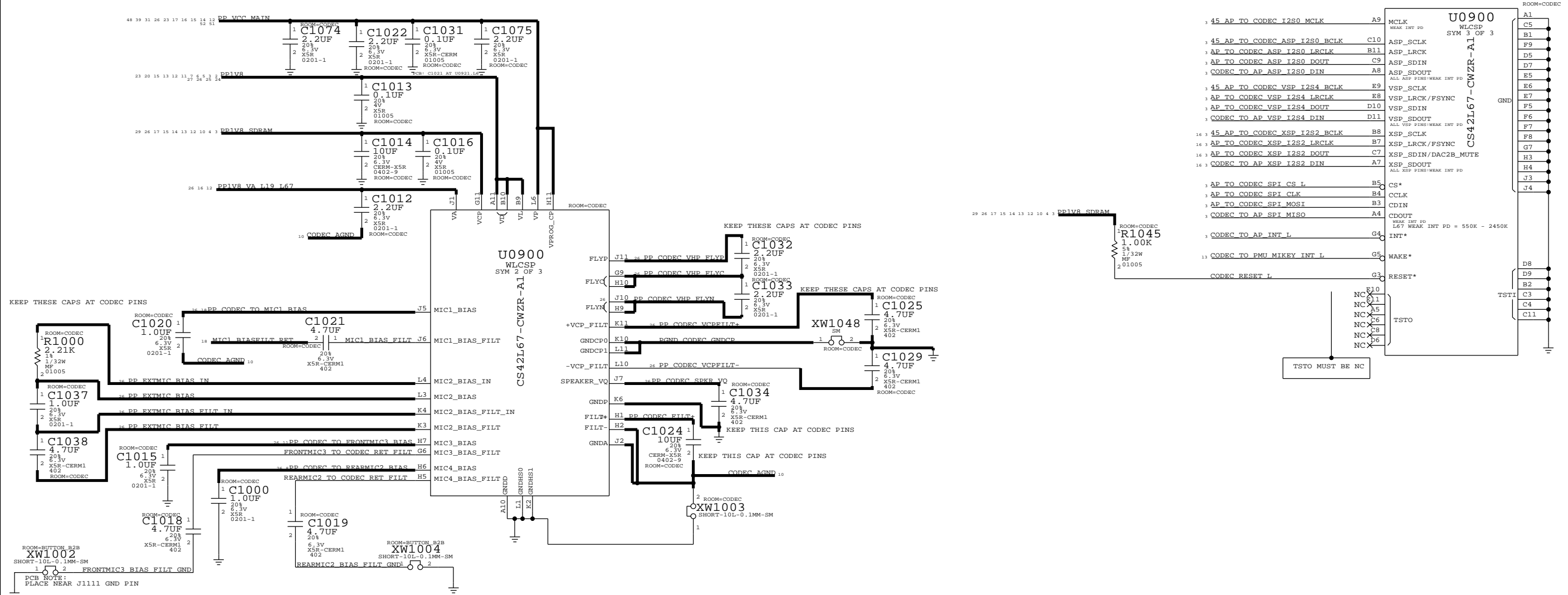
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L67 AUDIO CODEC

POWER, MICBIAS

DIGITAL SYSTEM I/O

NOTE: C1022 WAS REDUCED TO 2.2UF BECAUSE OF ADDITIONAL NEARBY VCC MAIN CAPS

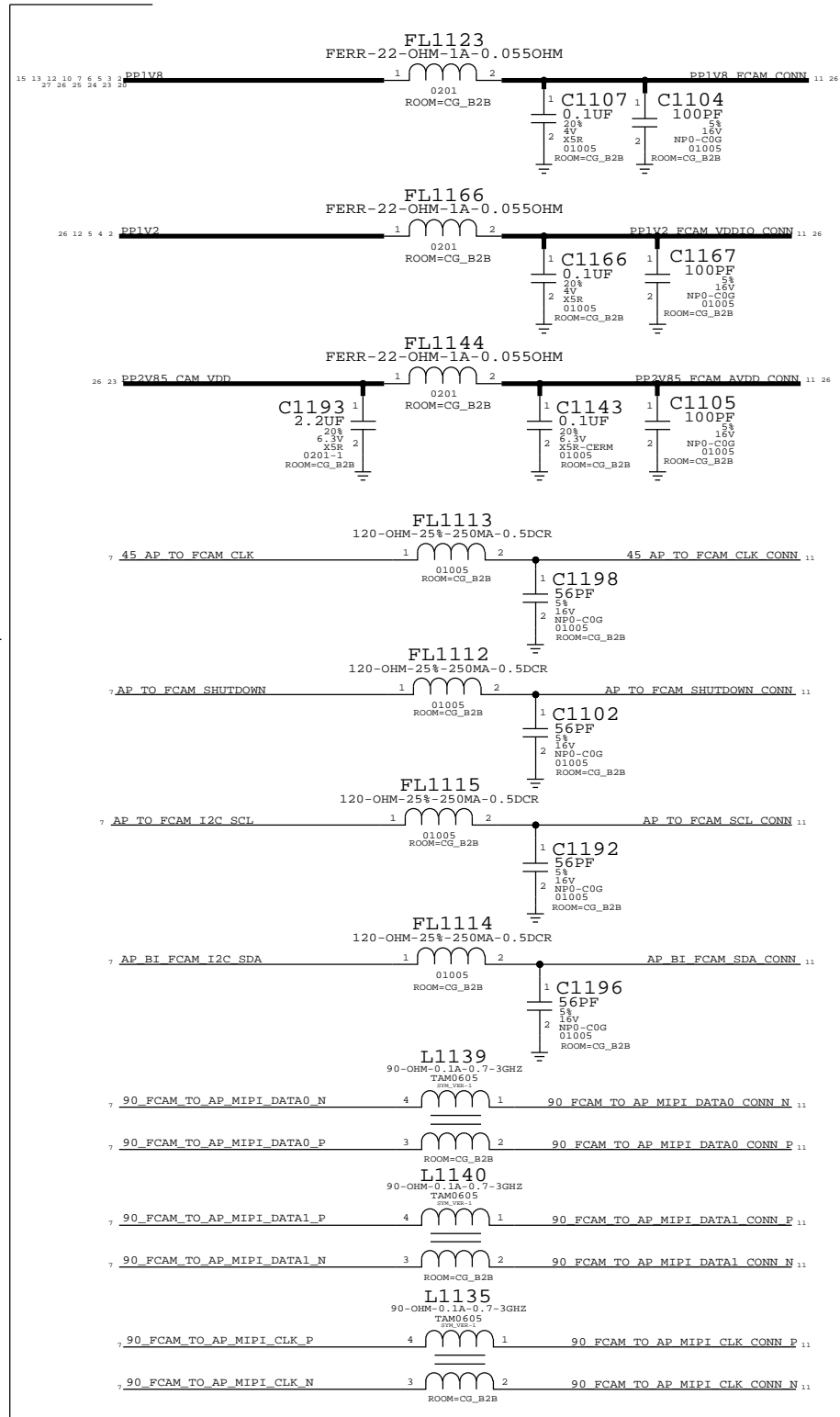
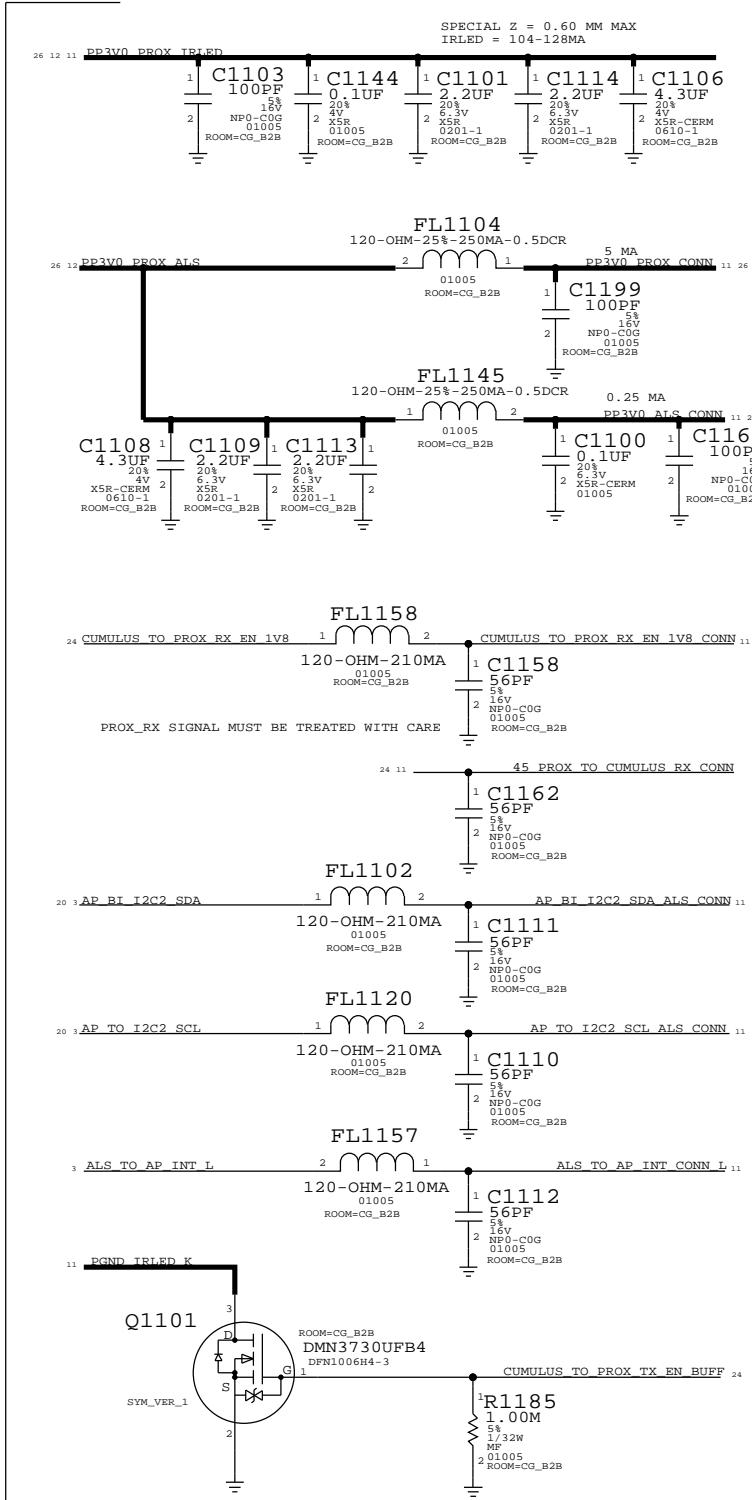
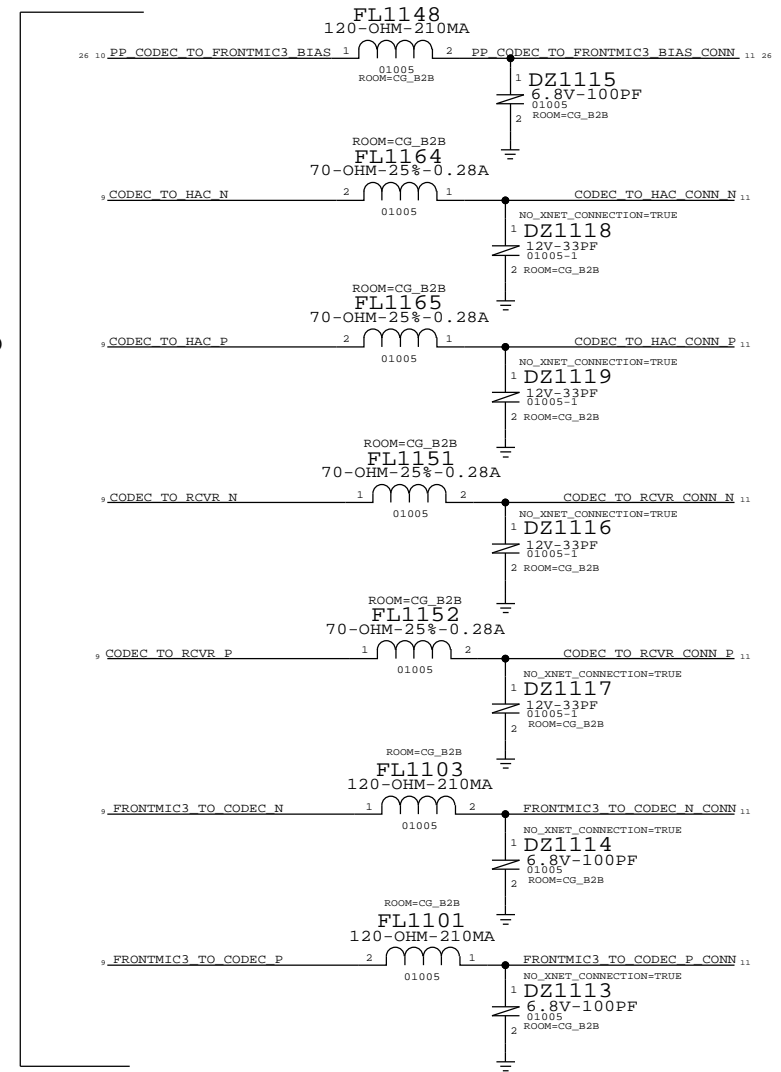
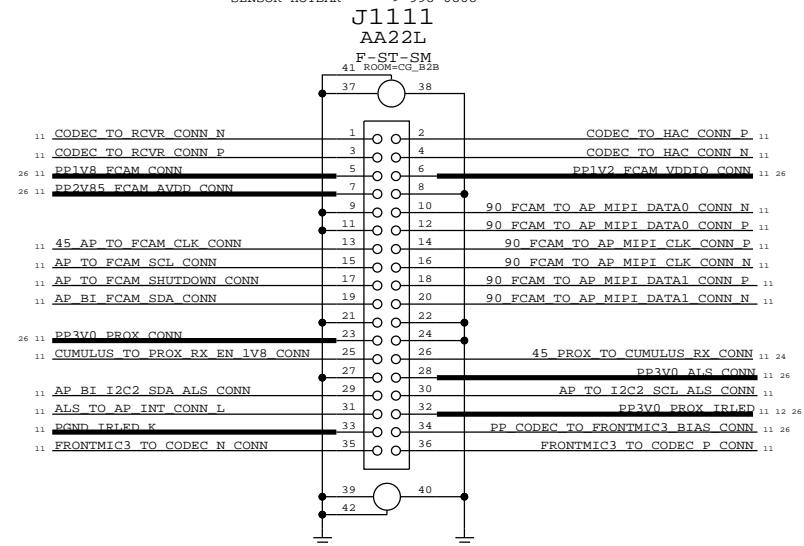


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PAGE TITLE AUDIO:L67 CODEC (2/2)			
Apple Inc.		DRAWING NUMBER 051-9903	SIZE D
		REVISION 7.0.0	BRANCH
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		PAGE 10 OF 55	SHEET 10 OF 54

FRONT CAM FLEX B2B

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

THIS ON ONE MLB ---> 516S1081 RECEPTACLE
SENSOR HOTBAR ---> 998-6868



SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
CAMERA: FRONT FLEX CONN			
Apple Inc.		DRAWING NUMBER	051-9903
		REVISION	7.0.0
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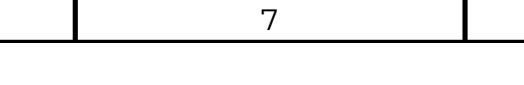
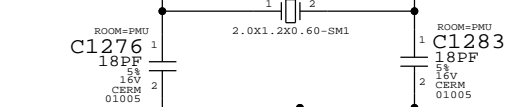
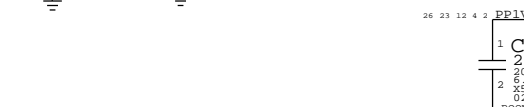
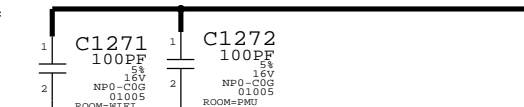
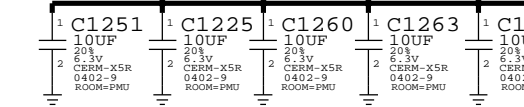
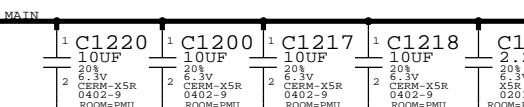
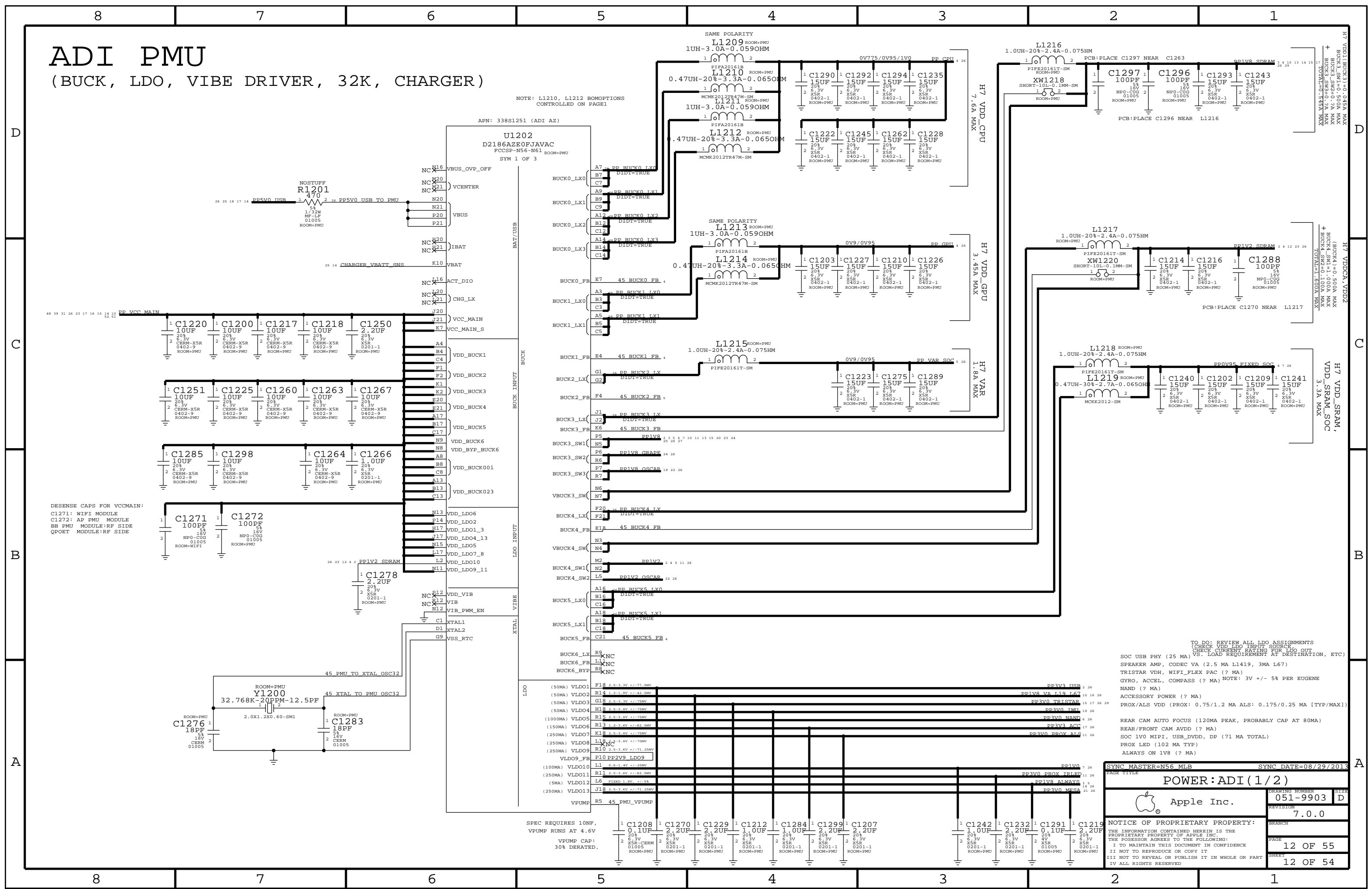
ADI PMU

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

NOTE: L1210, L1212 BOMPTIONS CONTROLLED ON PAGE1

APN: 338S1251 (ADI AZ)

U1202
D2186AZE0FJAVAC
FCCSP-N56-N61
SYM 1 OF 3



SPEC REQUIRES 10NF, VPUMP RUNS AT 4.6V
VPUMP CAP: 30% DERATED.

- TO DO: REVIEW ALL LDO ASSIGNMENTS (CHECK VDD LDO INPUT SOURCE)
CHECK CURRENT RATING FOR LDO OUT
CHECK CURRENT RATING FOR LDO OUT
- SOC USB PHY (25 MA)
 - SPEAKER AMP, CODEC VA (2.5 MA L1419, 3MA L67)
 - TRISTAR VDH, WIFI_FLEX PAC (? MA)
 - GYRO, ACCEL, COMPASS (? MA) NOTE: 3V +/- 5% PER EUGENE
 - NAND (? MA)
 - ACCESSORY POWER (? MA)
 - PROX/ALS VDD (PROX: 0.75/1.2 MA ALS: 0.175/0.25 MA [TYP/MAX])
 - REAR CAM AUTO FOCUS (120MA PEAK, PROBABLY CAP AT 80MA)
 - REAR/FRONT CAM AVDD (? MA)
 - SOC IVO MIPI, USB_DVDD, DP (71 MA TOTAL)
 - PROX LED (102 MA TYP)
 - ALWAYS ON IVB (? MA)

SYNC MASTER=N56 MLB SYNC DATE=08/29/2013

POWER:ADI (1 / 2)

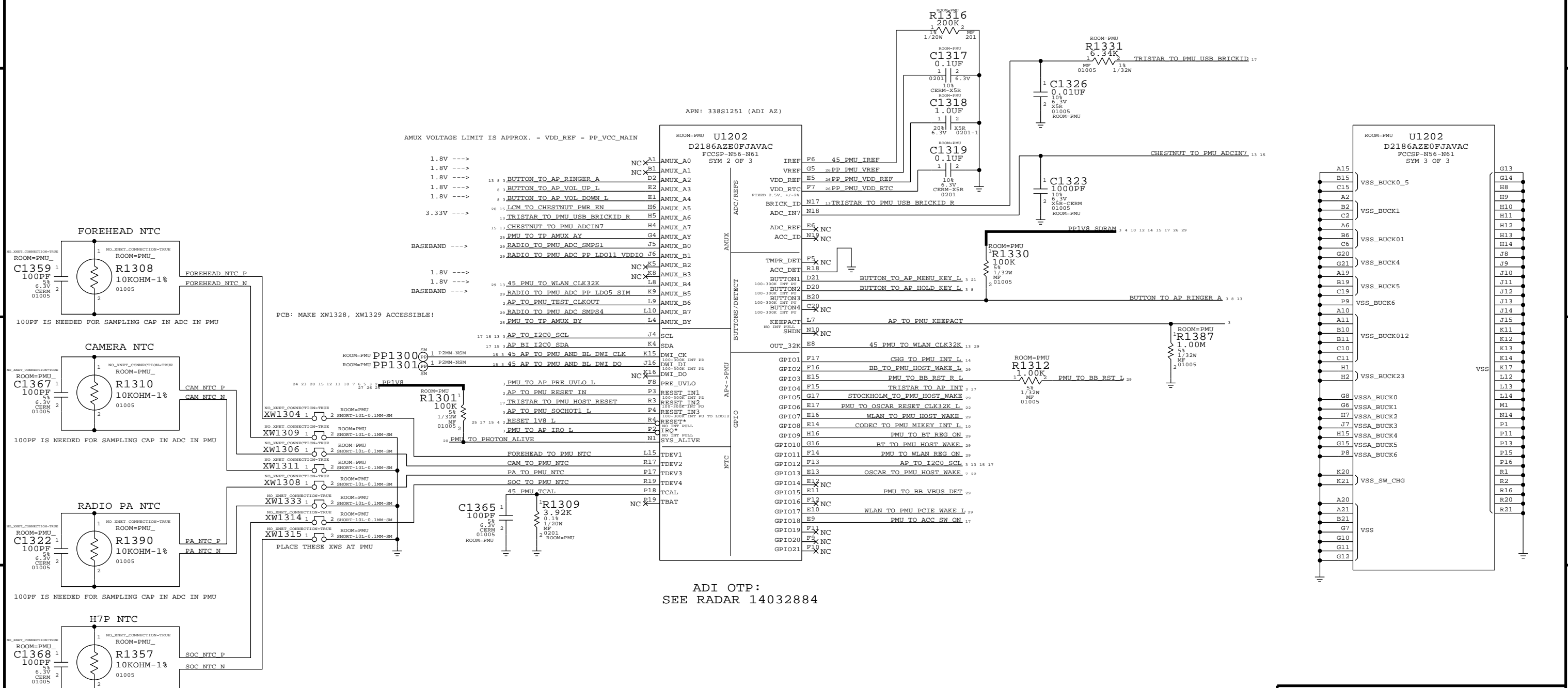
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DRAWING NUMBER: 051-9903
REVISION: 7.0.0
PAGE: 12 OF 55
SHEET: 12 OF 54

ADI PMU

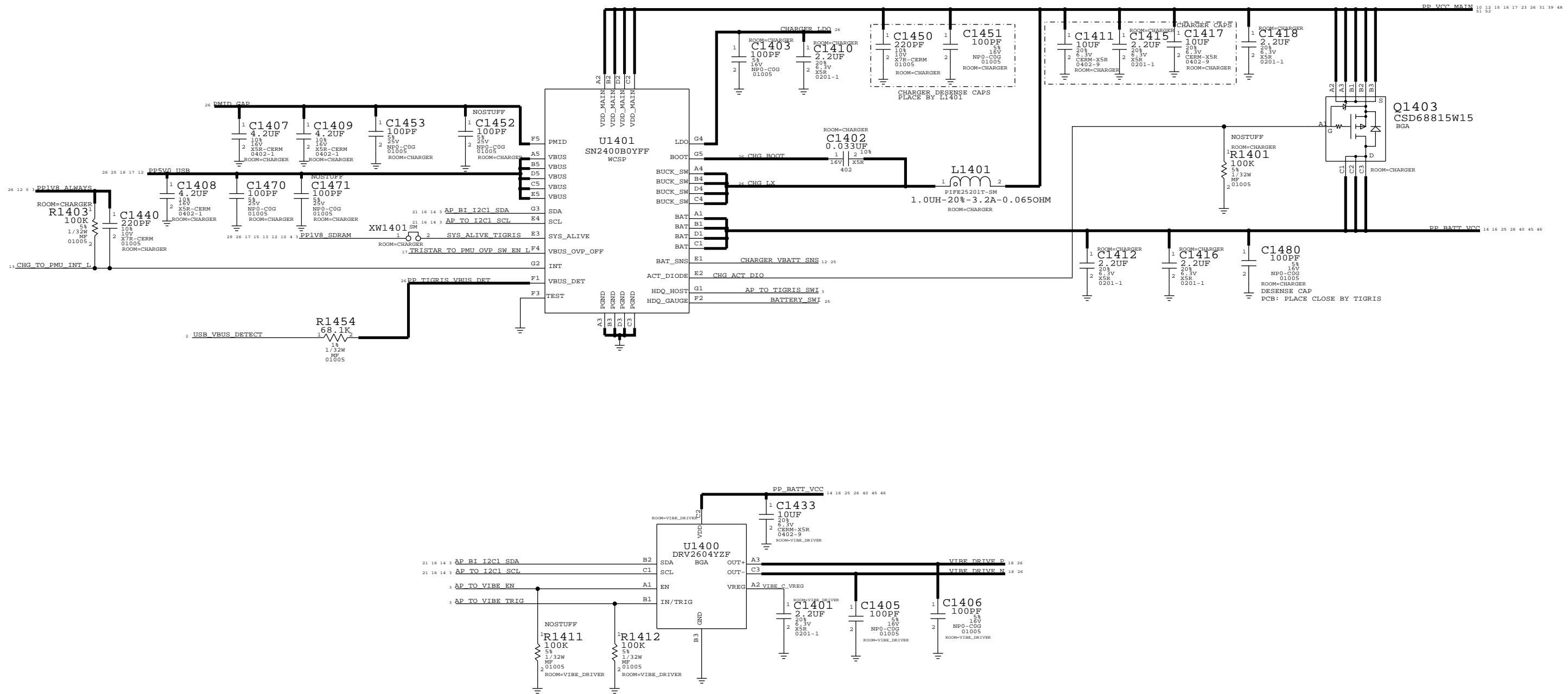
(AMUX, GPIO, BUTTONS, ADC, THERMISTORS, SYSTEM I/F, GND)



ADI OTP:
SEE RADAR 14032884

SYNC MASTER=N56 MLB		SYNC DATE=08/29/2013	
POWER:ADI (2 / 2)			
Apple Inc.	DRAWING NUMBER	051-9903	SIZE D
	REVISION	7.0.0	
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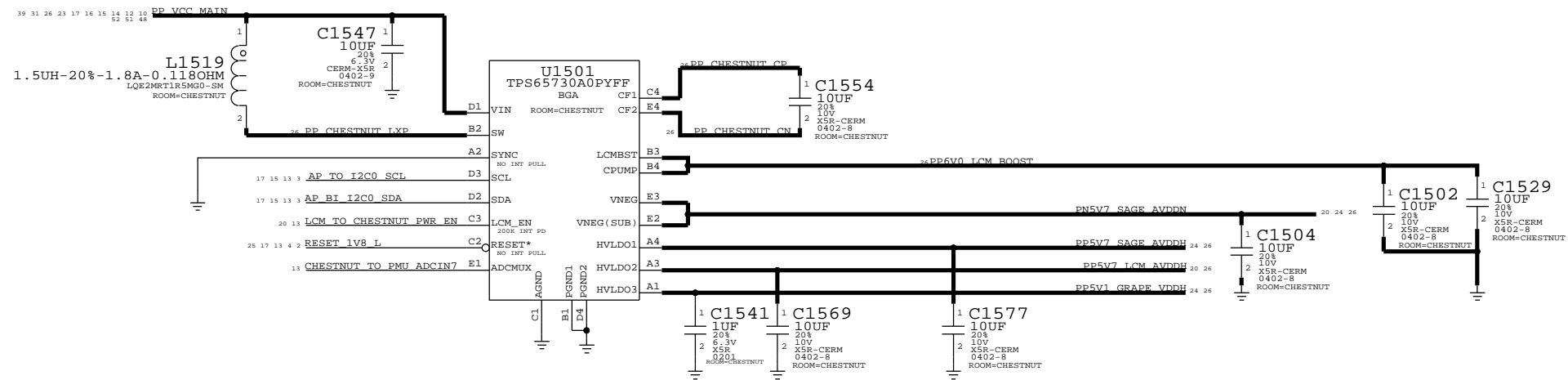
TIGRIS CHARGER & VIBE DRIVER



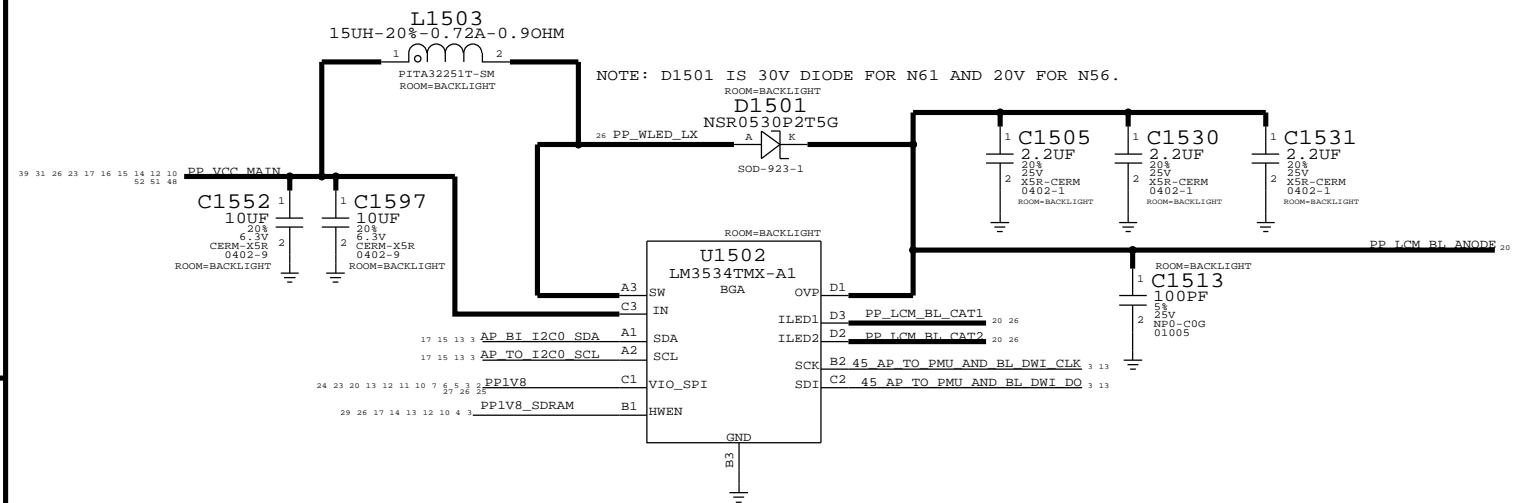
PAGE TITLE POWER:TIGRISR,VIBE DRIVER		
Apple Inc.	DRAWING NUMBER 051-9903	SIZE D
	REVISION 7.0.0	
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PAGE 14 OF 55	SHEET 14 OF 54	

CHESTNUT, BACKLIGHT DRIVER, MESA BOOST

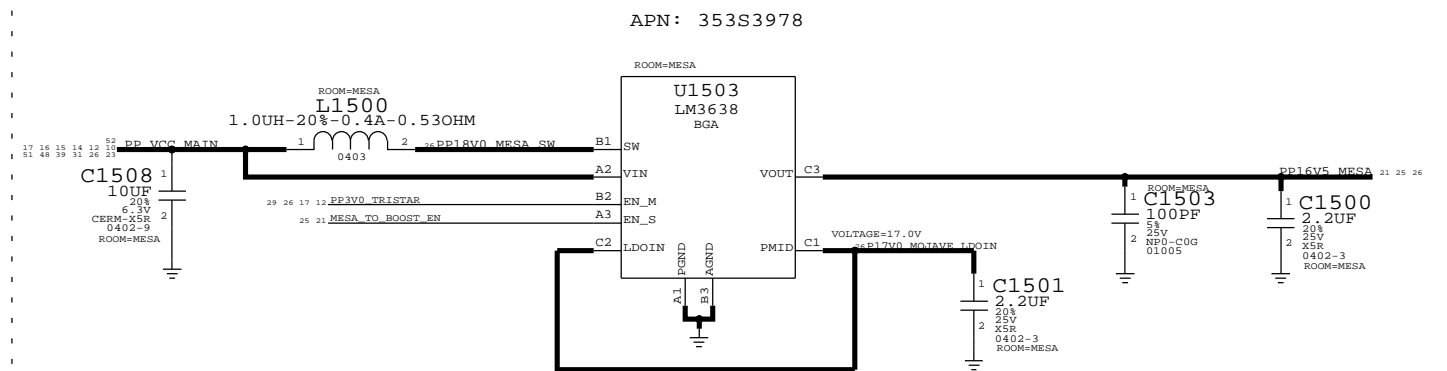
D500 DISPLAY PMU (TI CHESTNUT, 338S1149)



D500 BACKLIGHT DRIVER



MESA BOOST A0

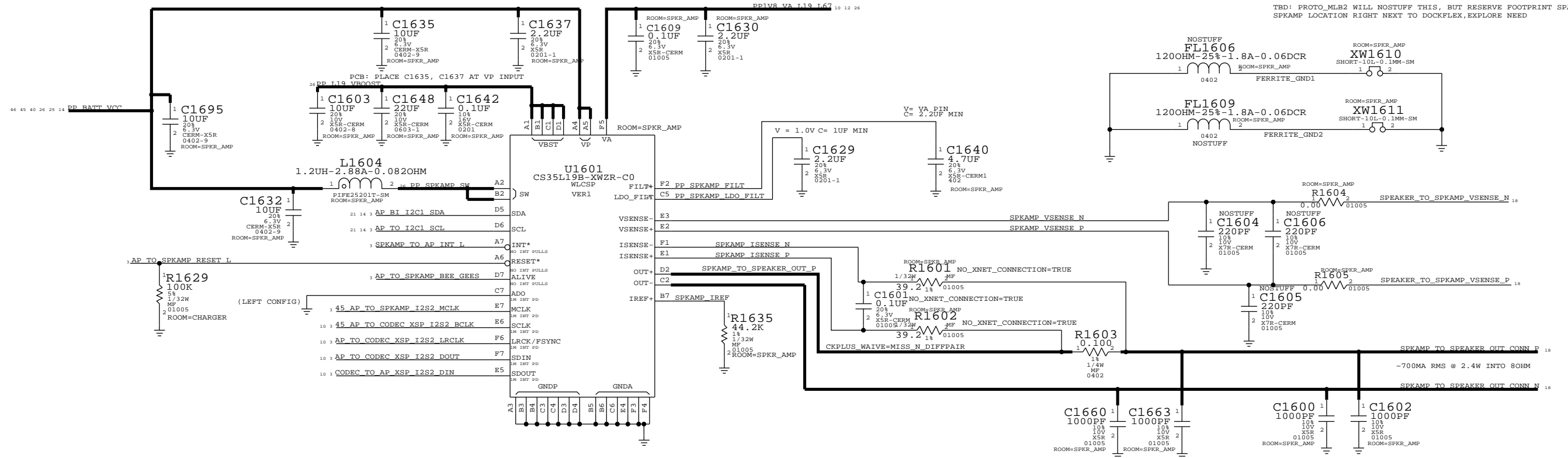


SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
PAGE TITLE DISPLAY:CHESTNUT, BACKLIGHT DRIVER			
DRAWING NUMBER 051-9903		SIZE D	
REVISION 7.0.0		BRANCH	
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SPEAKER AMP, LED DRIVER

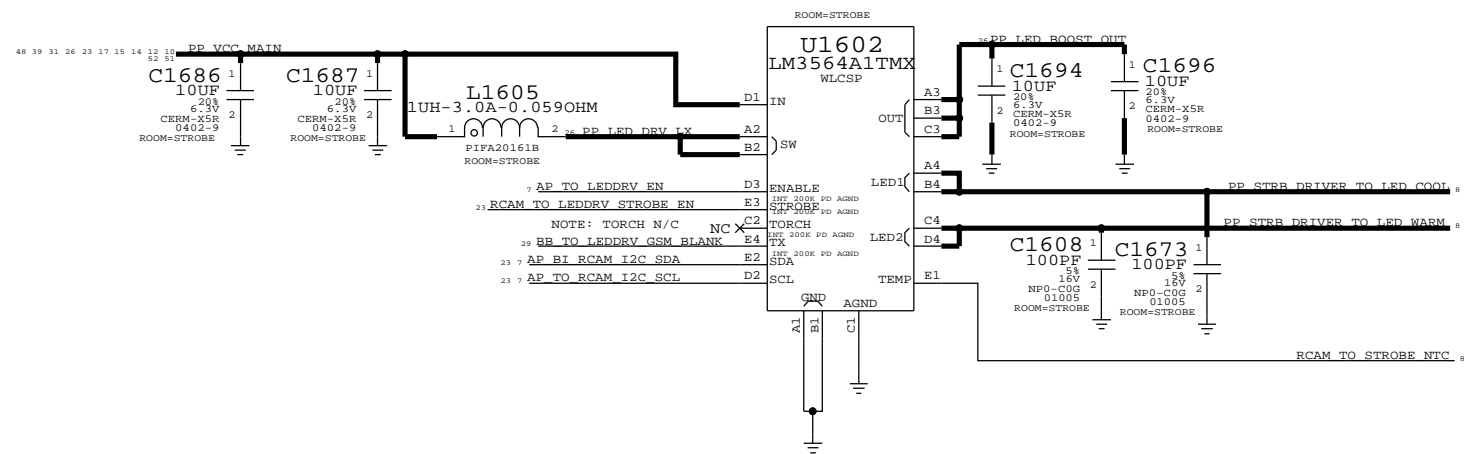
SPEAKER AMP

I2C ADDRESS: 1000000X



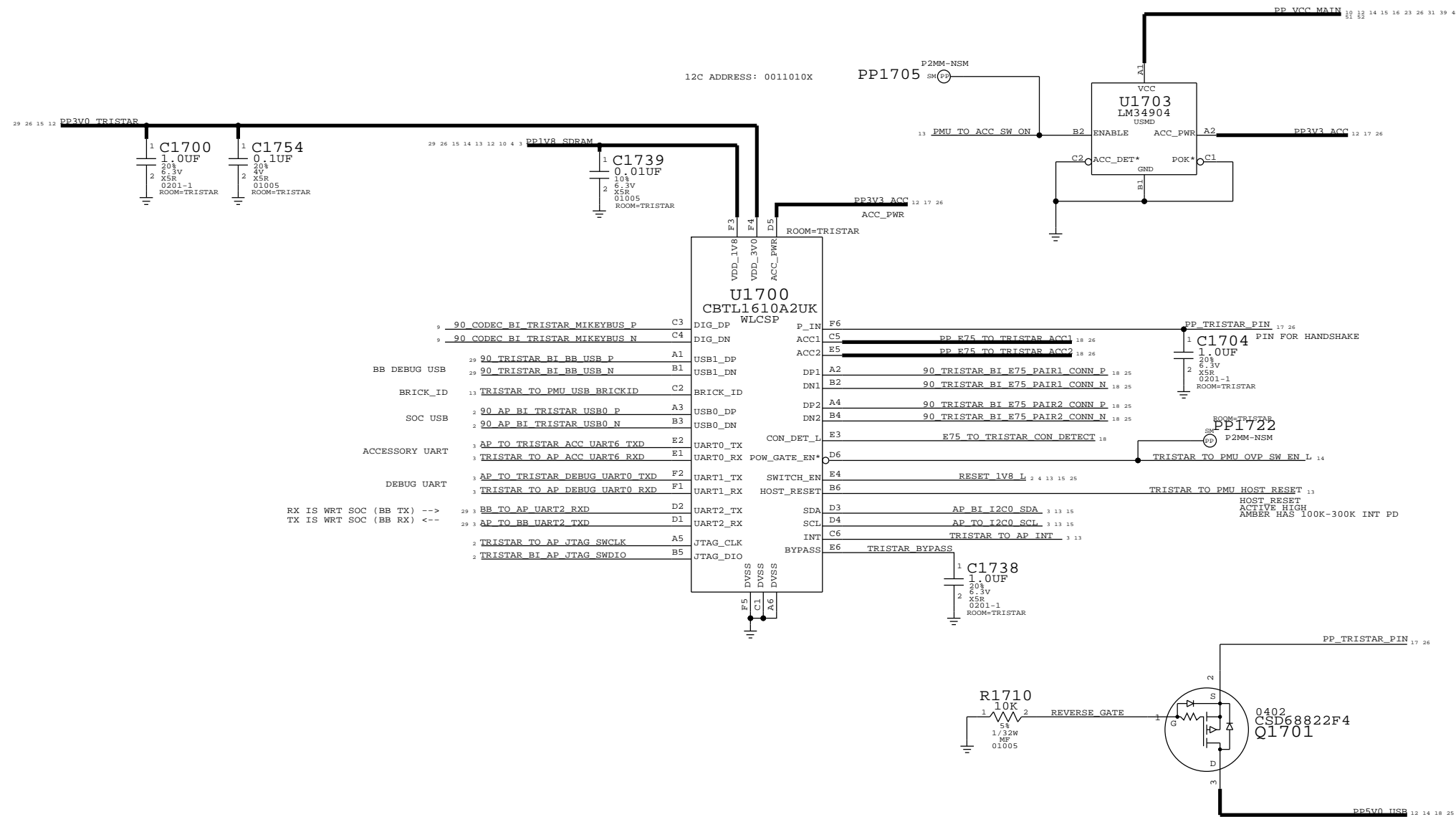
STROBE DRIVER

TI: APN 353S3899



SYNC MASTER=N61_MLB		SYNC DATE=08/26/2013	
PAGE TITLE			
AUDIO:SPKR AMP,STROBE			
DRAWING NUMBER		051-9903	
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BRANCH		PAGE	
16 OF 55		16 OF 54	
SHEET		16 OF 54	

TRISTAR2



SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
IO:TRISTAR2			
Apple Inc.		DRAWING NUMBER	SIZE
		051-9903	D
		REVISION	
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		SHEET	17 OF 54

DOCKFLEX B2B (USB VBUS, SPEAKER, ANTENNA LAT SW CTRL, MIC1 (PRIMARY MIC), ACC DET/ID/PWR, E75 DIFFPAIRS)

MLB: 516S1281 (RCPT)
 ROOM=DOCK_B2B J1817
 24-5859-036-201-829
 F-ST-SM

D
 LOWER MIC1
 (PRIMARY
 VOICE MIC)

C
 HEADPHONE

B

A
 CODEC TO
 HEADPHONE

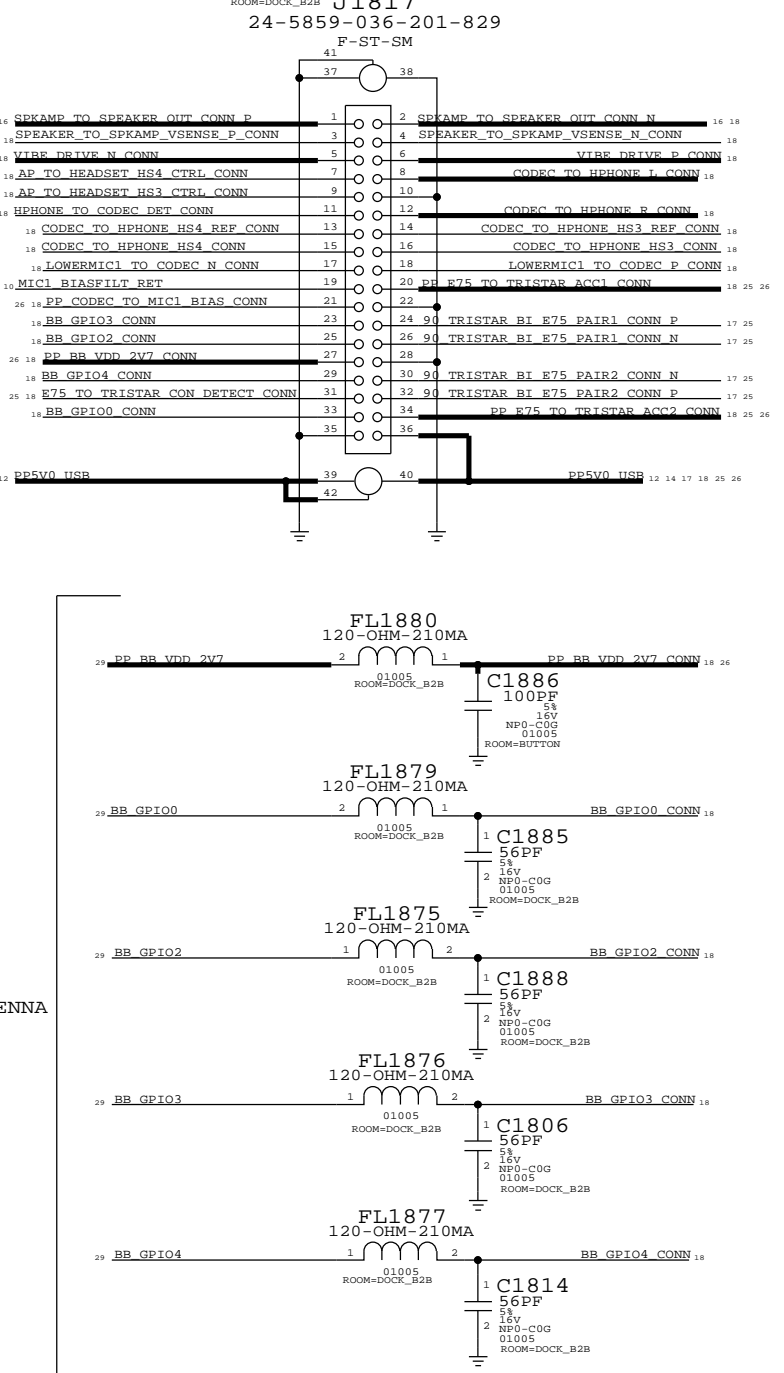
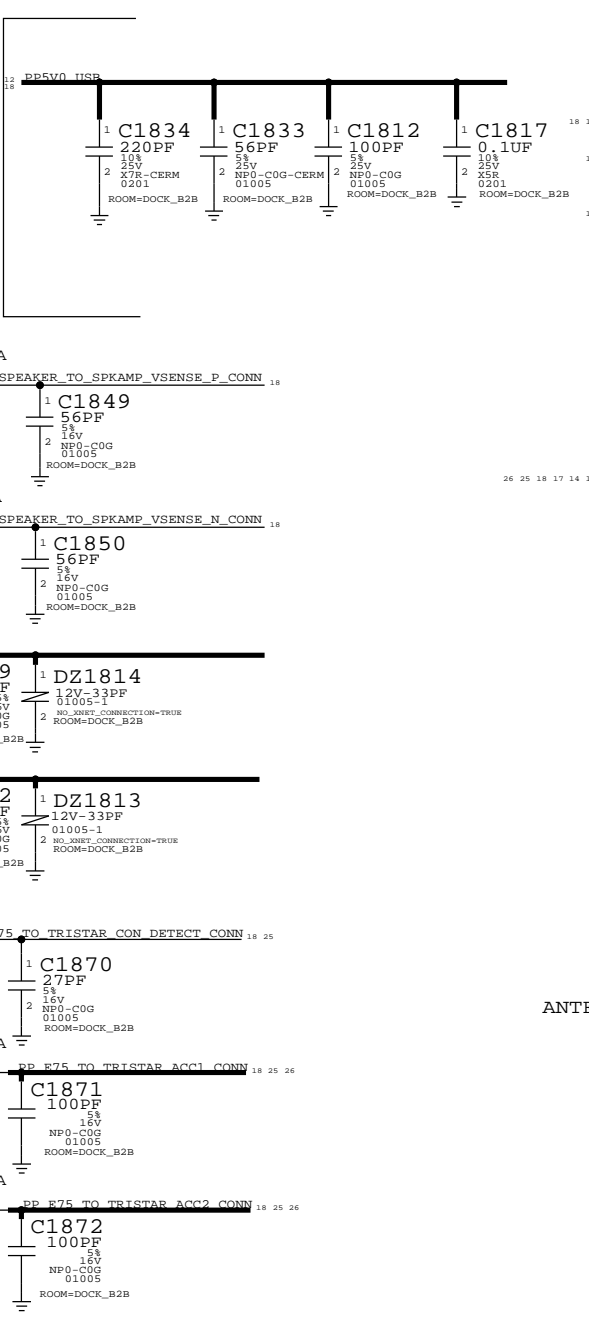
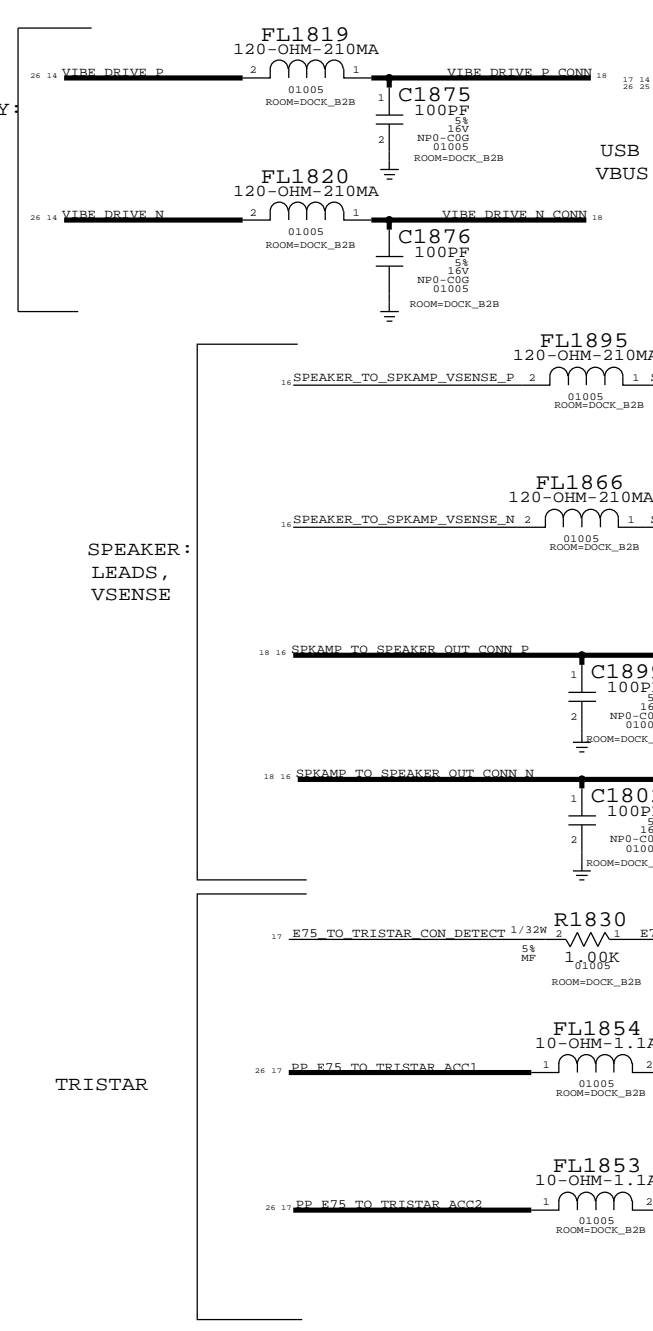
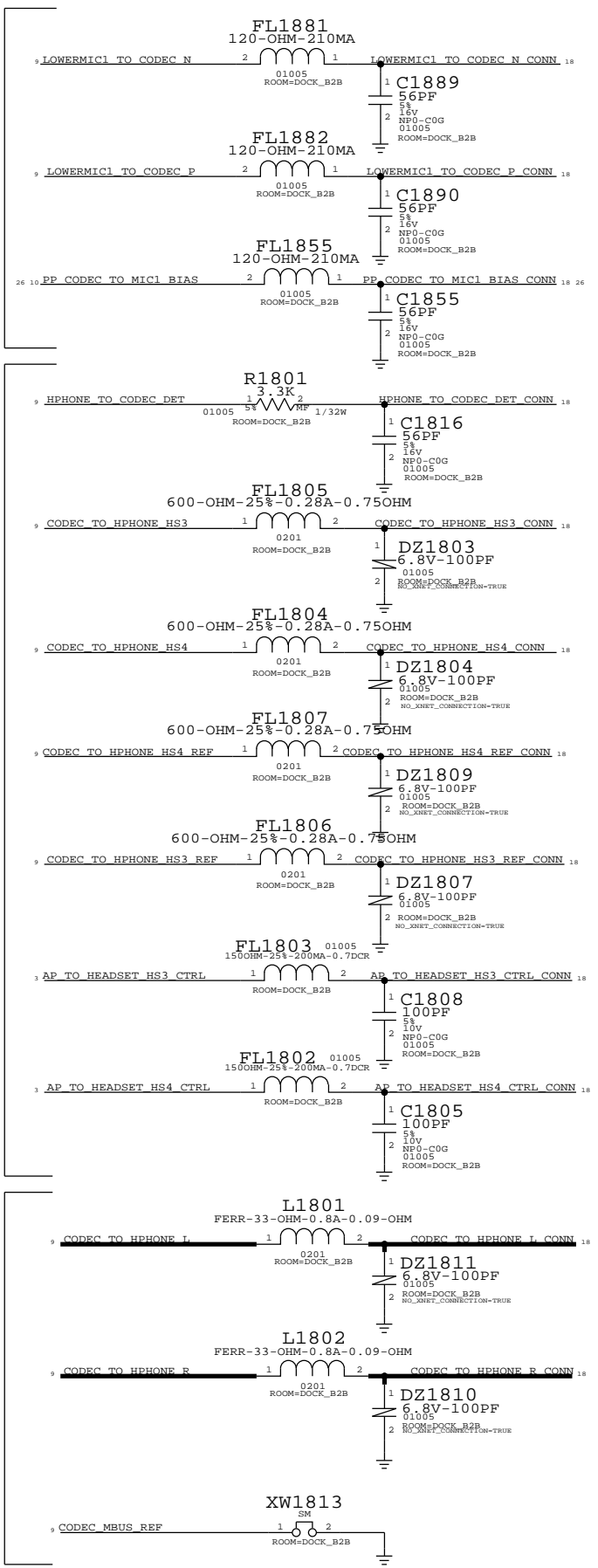
ACCESSORY:
 VIBE
 DRIVE

USB
 VBUS

SPEAKER:
 LEADS,
 VSENSE

TRISTAR

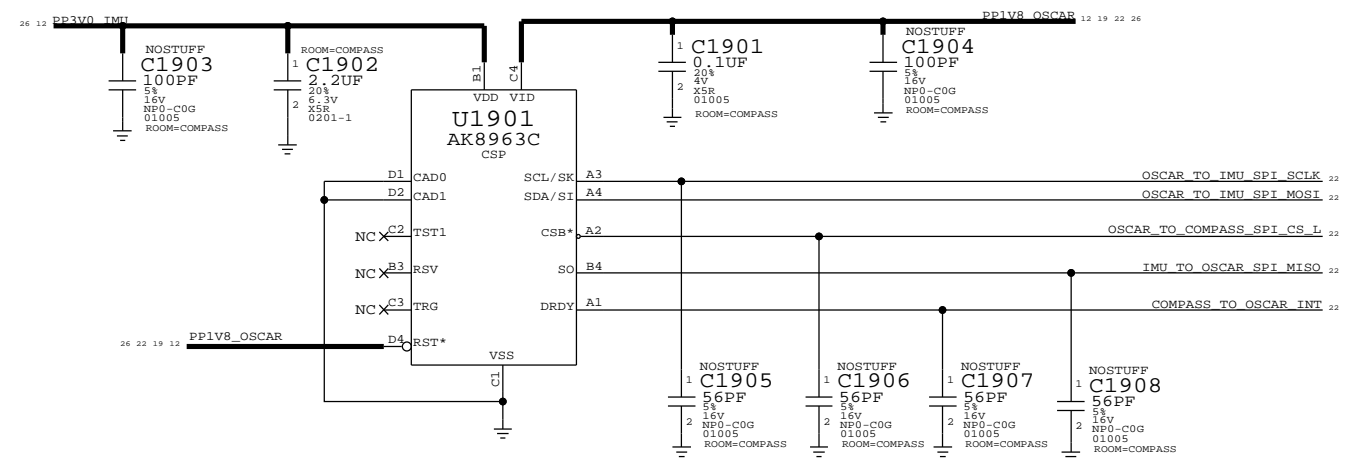
ANTENNA



SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
PAGE TITLE IO:DOCK FLEX CONN			
Apple Inc.		DRAWING NUMBER 051-9903	SIZE D
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		PAGE 18 OF 55	SHEET 18 OF 54

COMPASS - AKM COMPASS IN POR LOCATION

COMPASS CSP: 338S1014

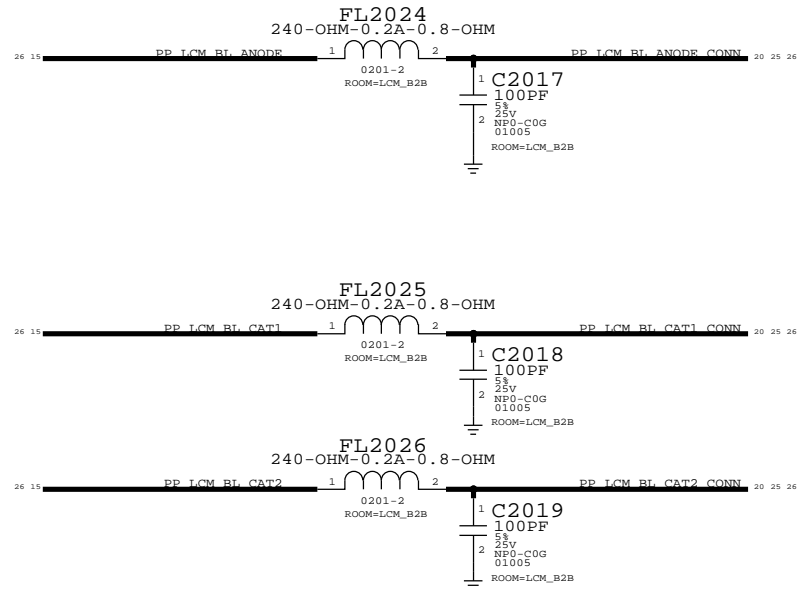


SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
SENSORS: COMPASS			
Apple Inc.		DRAWING NUMBER	SIZE
		051-9903	D
		REVISION	
		7.0.0	
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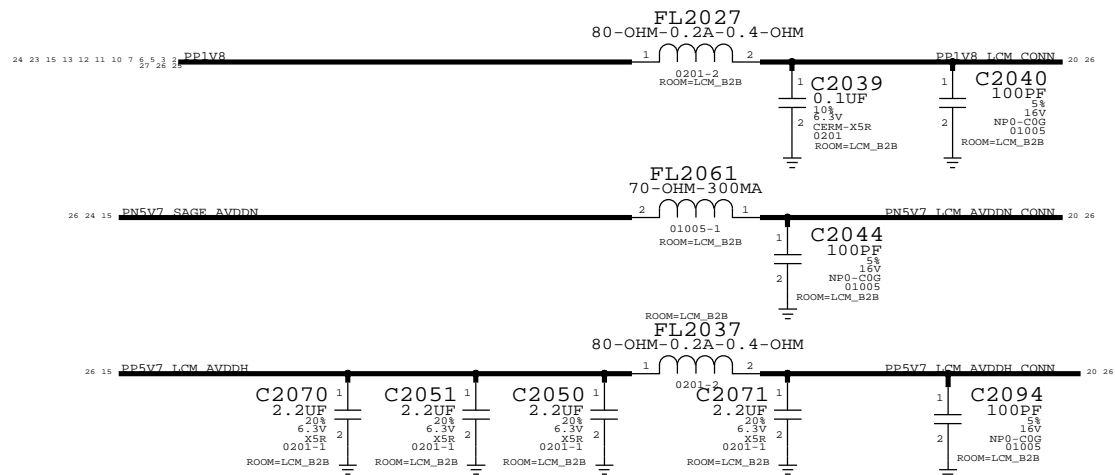
LCD B2B

Backlight

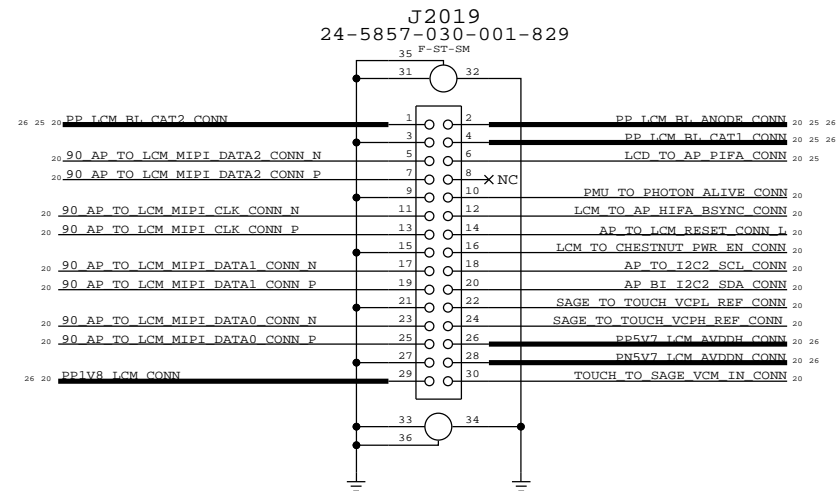
(N56 HAS A 2ND SET OF BL SIGNALS ON P. 19).



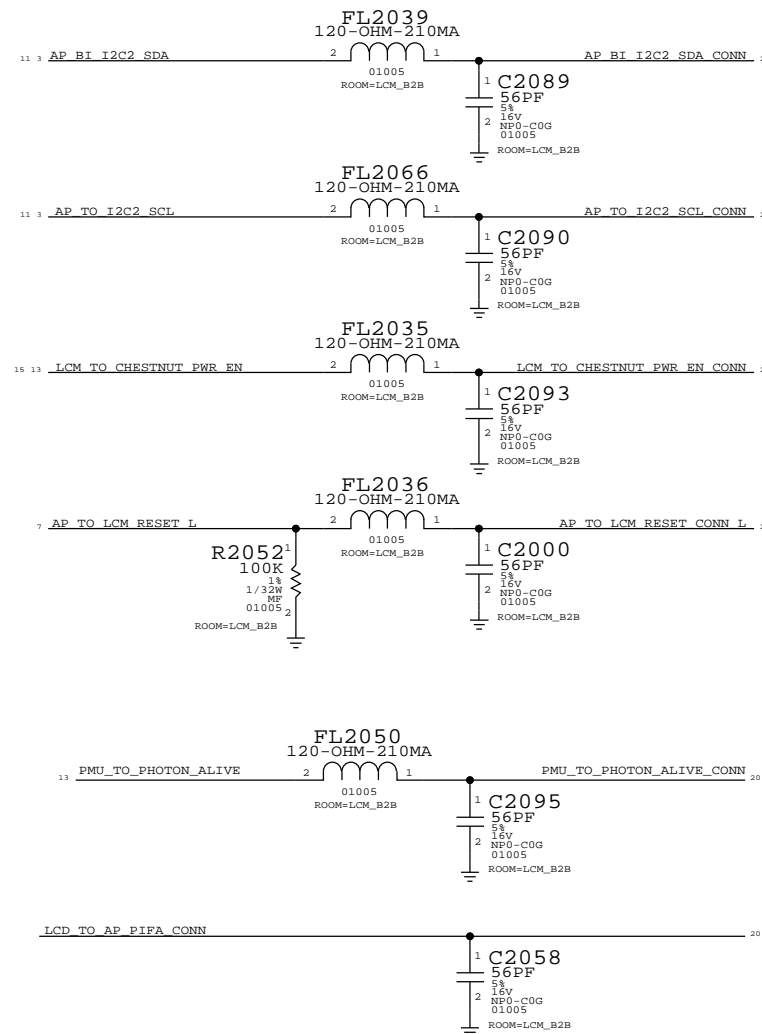
LCM Supplies



THIS ONE ON MLB ---> 516S1164

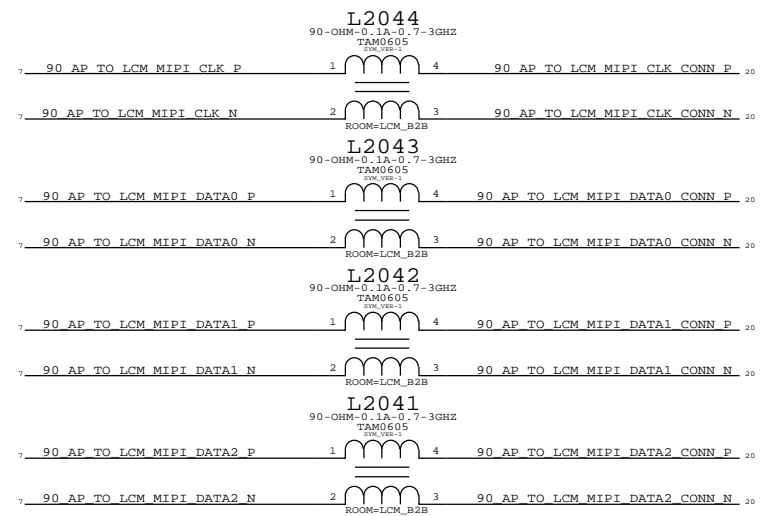


Digital Interfaces

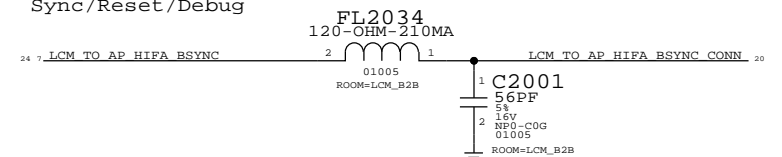


MIPI Common Mode Chokes

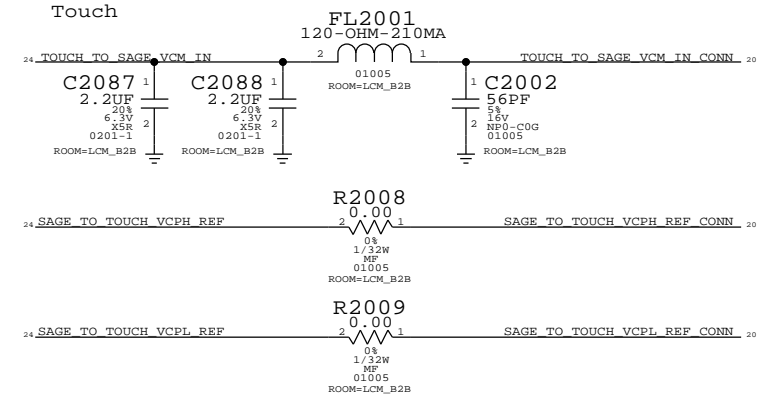
(N56 HAS A 4TH MIPI LANE ON P. 19).



Sync/Reset/Debug

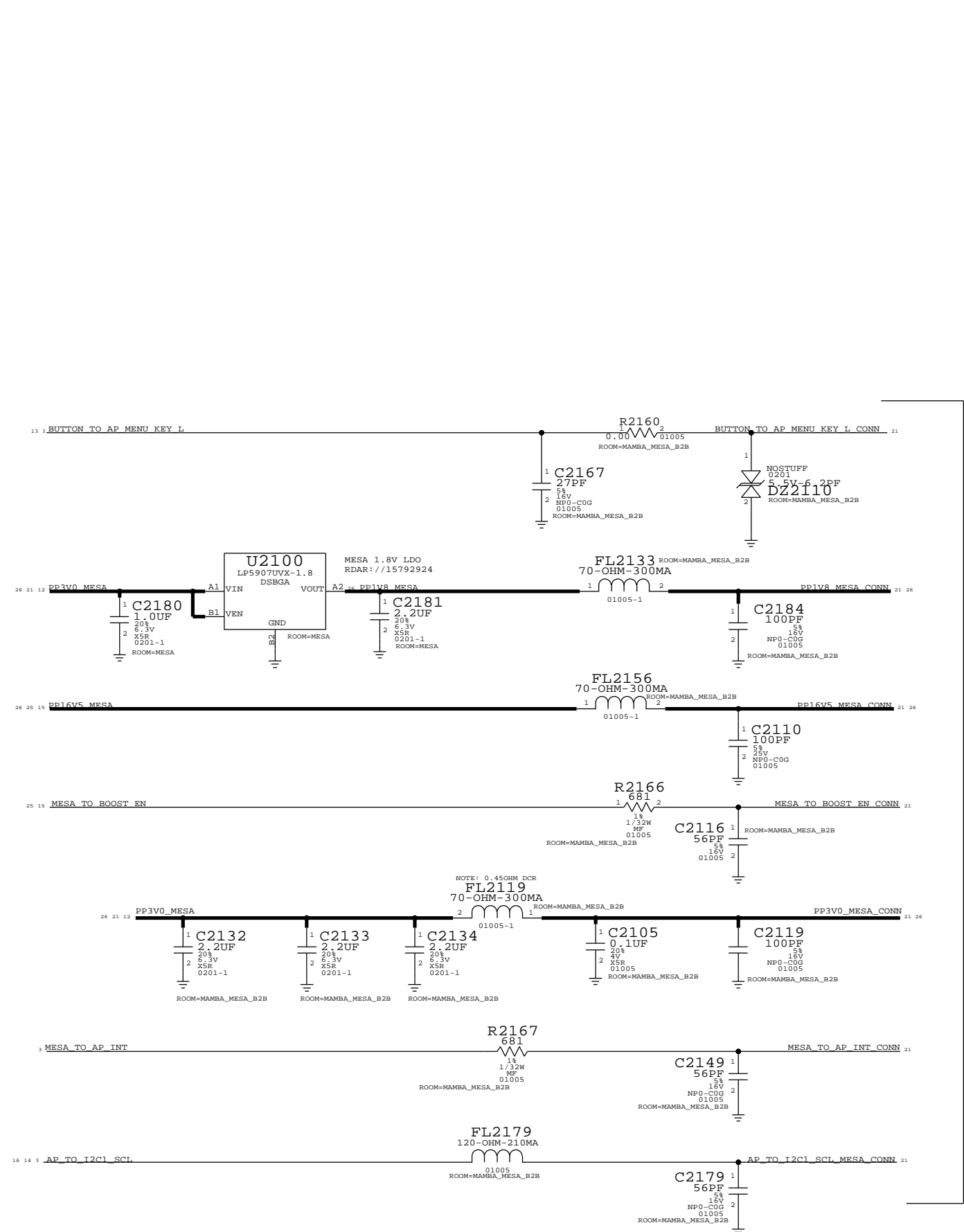


Touch

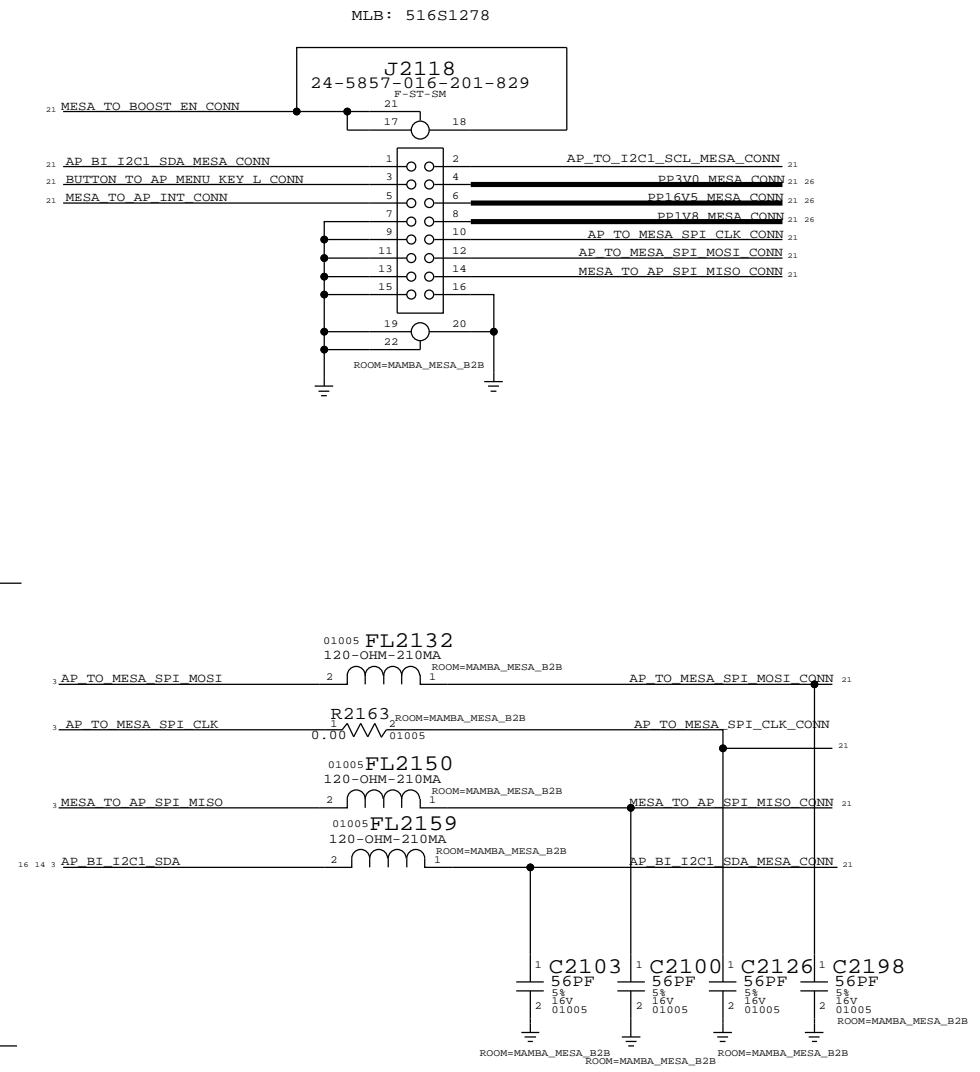


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PAGE TITLE			
DISPLAY: FLEX CONN			
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MESA CONNECTOR



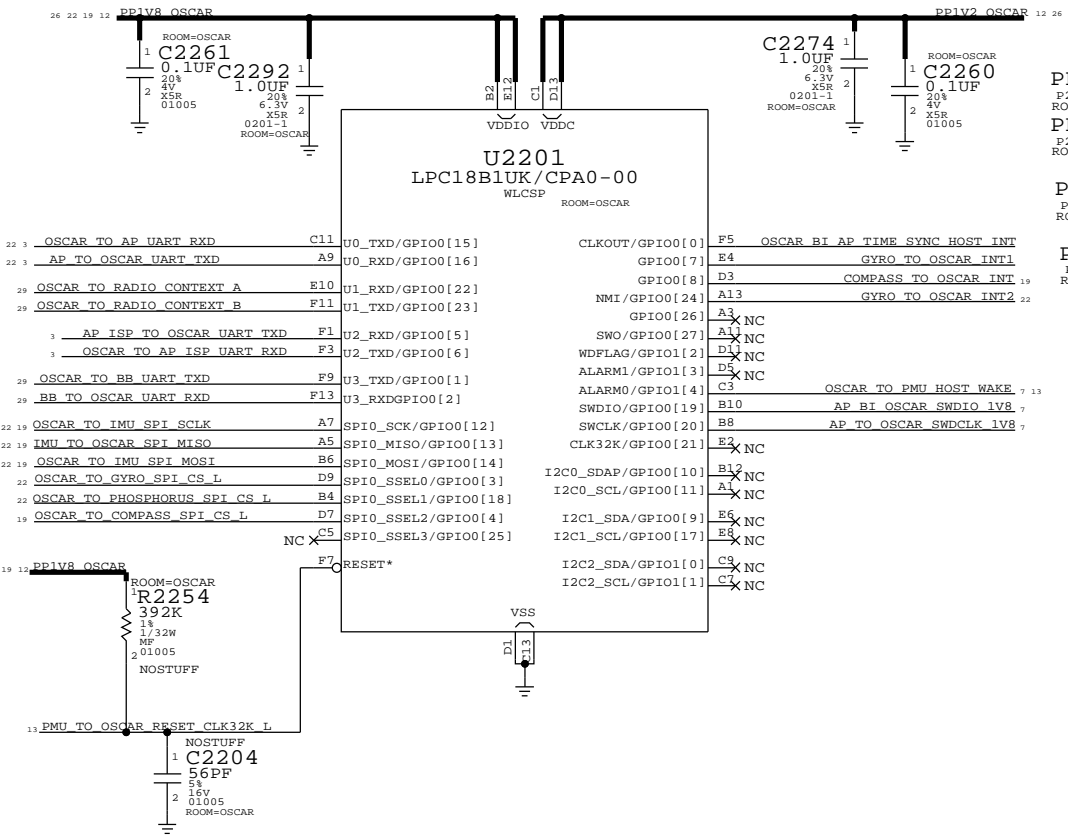
MESA SENSOR:



PAGE TITLE		
SENSORS: MESA FLEX CONN		
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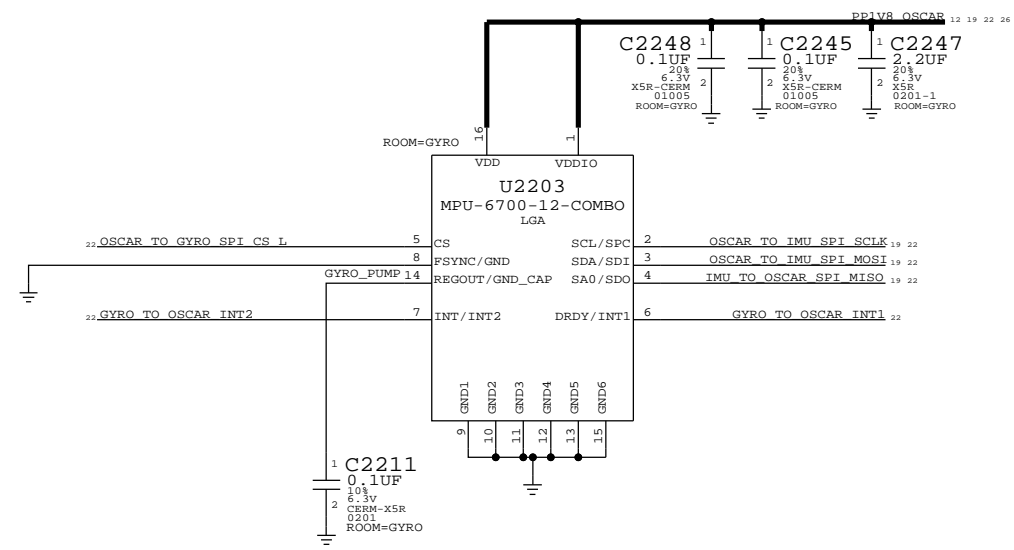
OSCAR + SENSORS

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

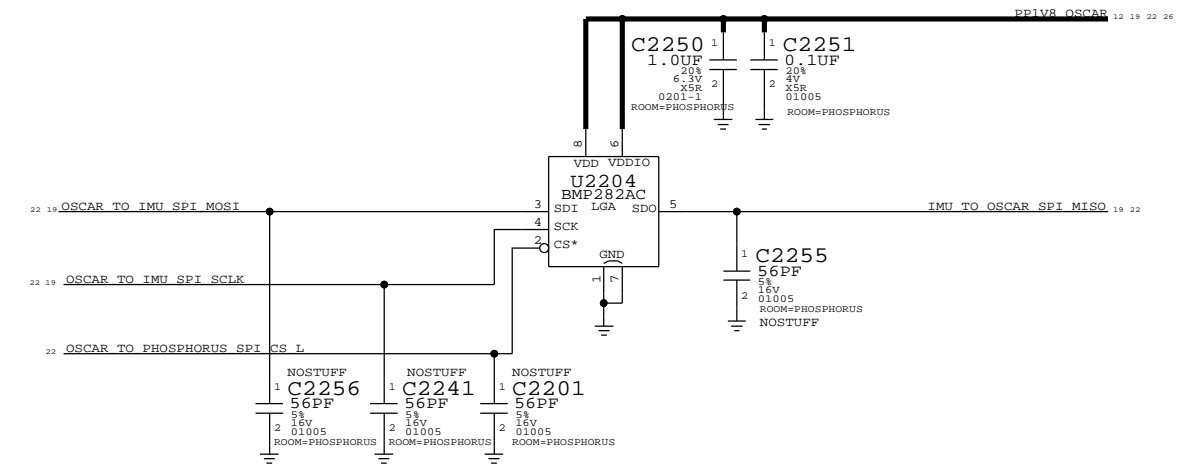


CARBON (ACCEL GYRO COMBO)

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



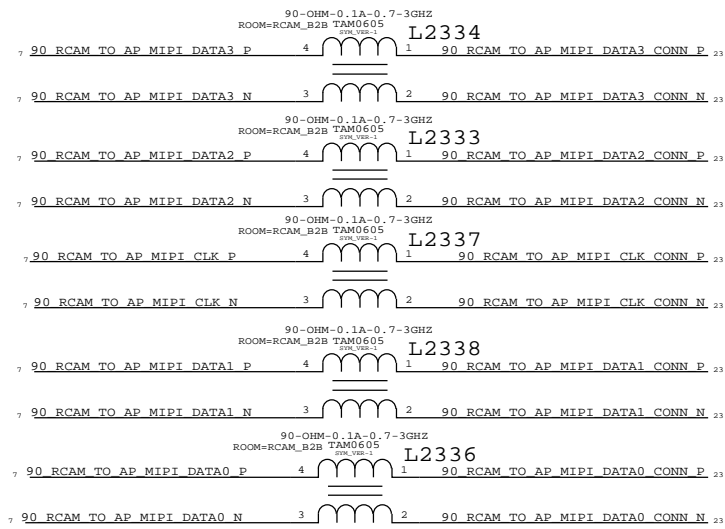
THIS IS OUTSIDE OF SHIELD IN
TO THE RIGHT OF THE NAND
PHOSPHORUS



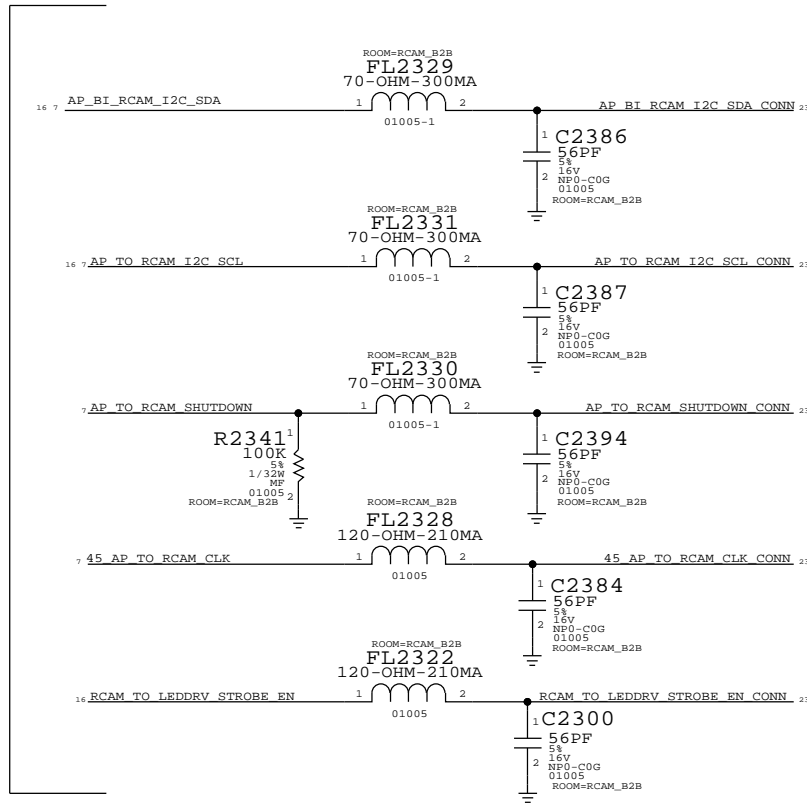
SYNC MASTER=N61 MLB		SYNC DATE=08/26/2013	
PAGE TITLE			
SENSORS: OSCAR, CARBON, PHOS, MAGNESIUM			
DRAWING NUMBER		SIZE	
051-9903		D	
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RCAM B2B (REAR CAMERA CONNECTOR)

RCAM:
4-LANE MIPI

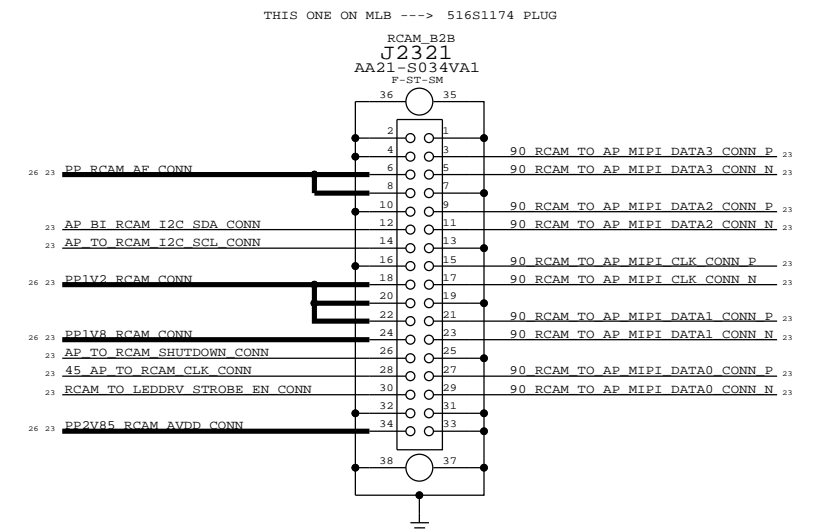
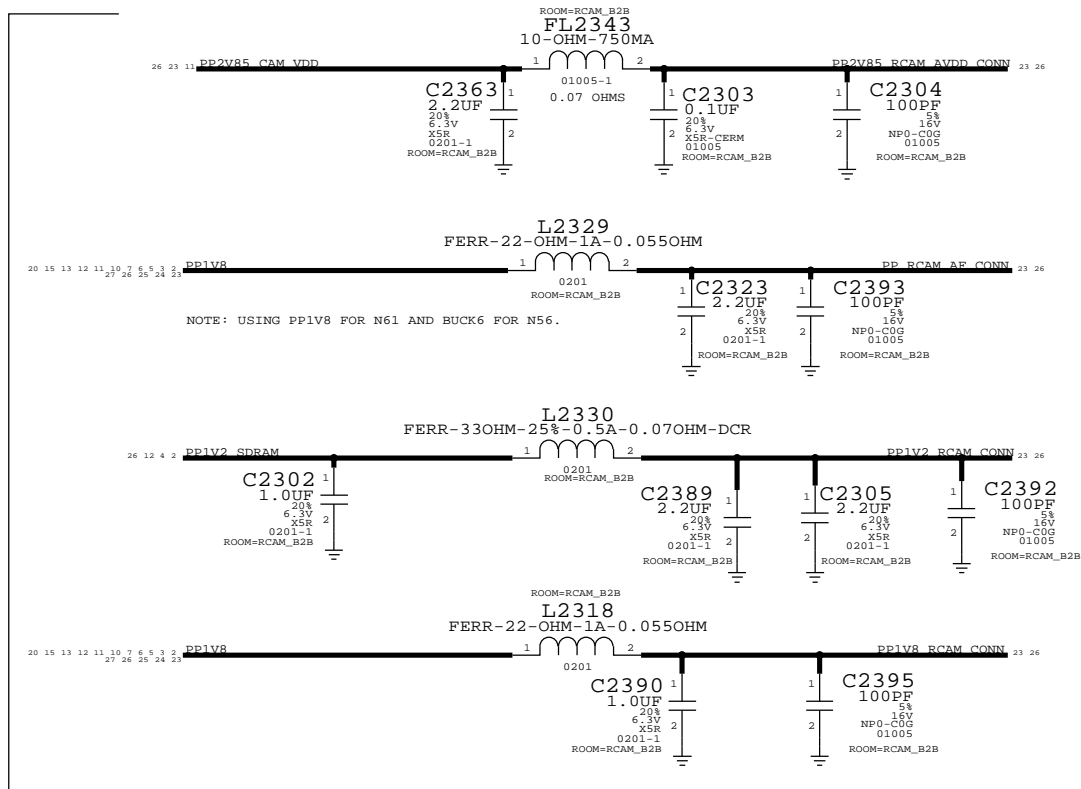


RCAM:
DIGITAL I/F
(I2C, CTRL, CLK)



RCAM/FCAM AVDD RAIL EXT. LDO:

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



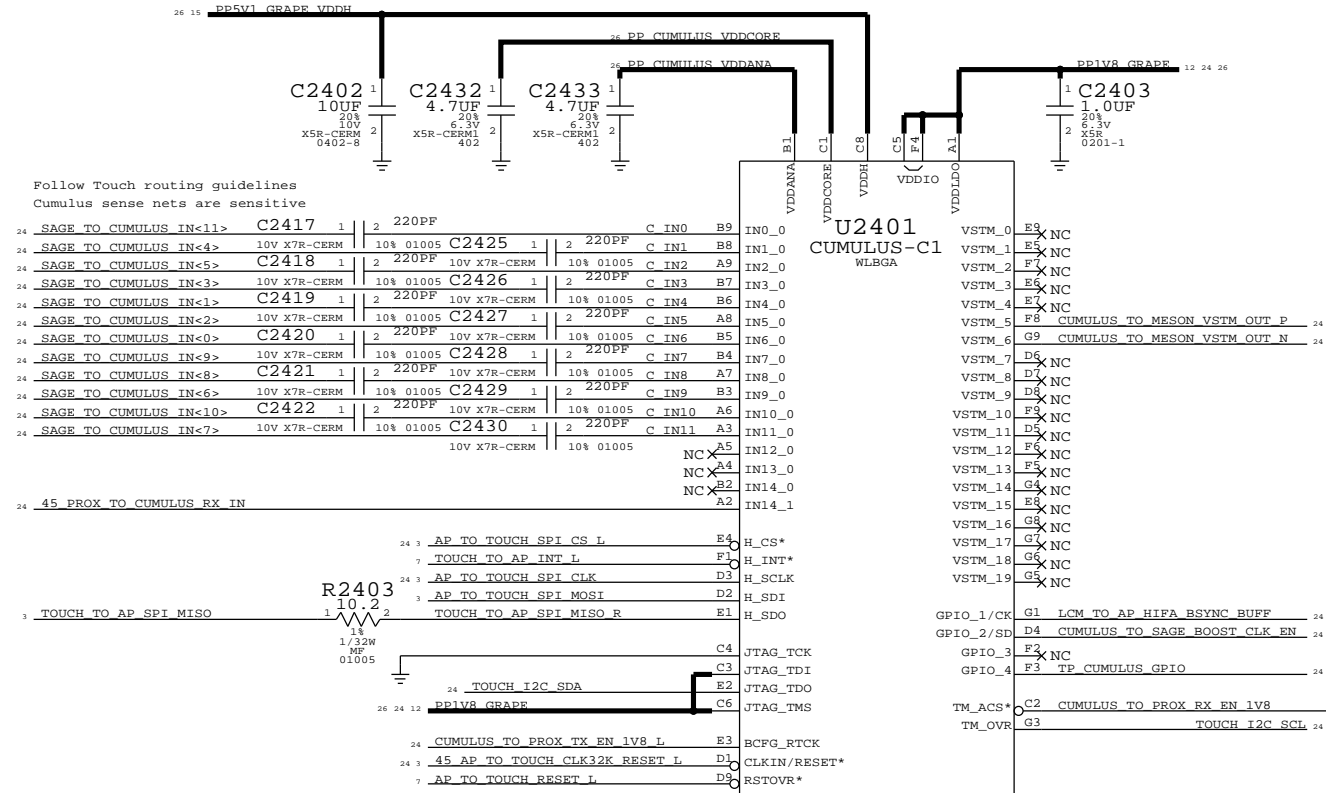
SYNC MASTER=N61_MLB		SYNC DATE=08/26/2013	
CAMERA:REAR FLEX CONN			
Apple Inc.		DRAWING NUMBER	051-9903
		REVISION	7.0.0
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Touch (B2B, Driver ICs)

Cumulus

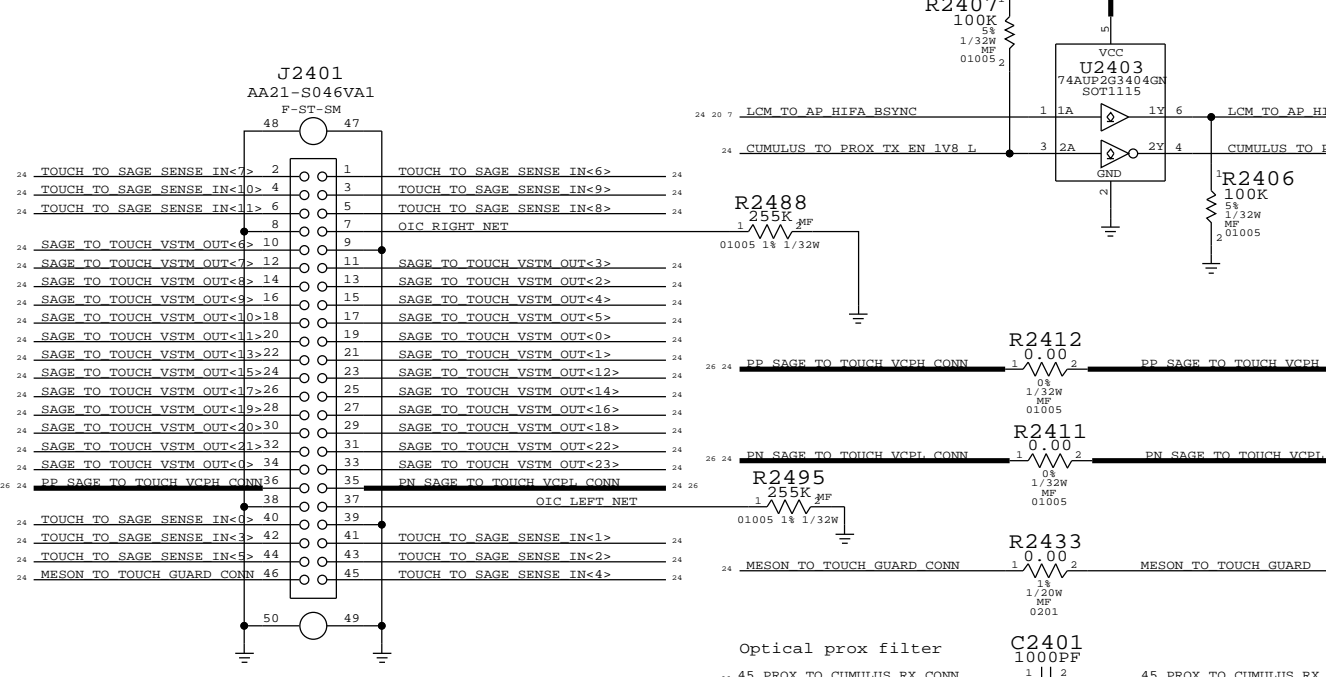
APN: 343S0638

Turn on is later than PPIV8_GRAPE
Turn off is same time as PPIV8_GRAPE

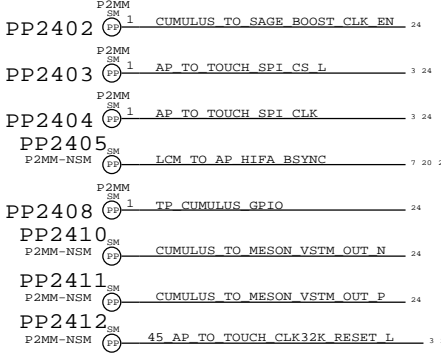


Touch B2B

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

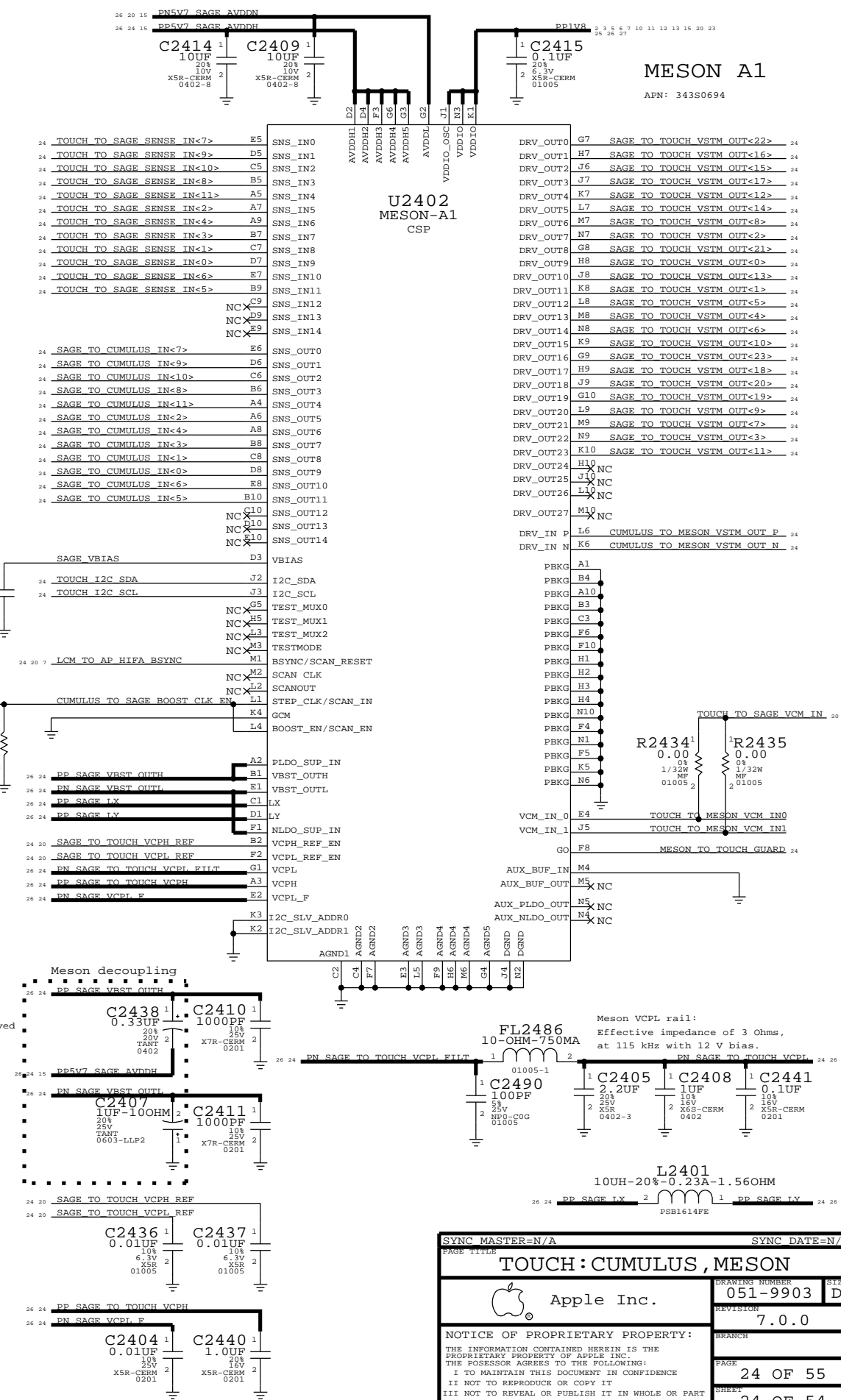


Touch probe points



MESON A1

APN: 343S0694



PAGE TITLE		SYNC DATE=N/A	
TOUCH : CUMULUS , MESON			
Apple Inc.		DRAWING NUMBER	051-9903
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		PAGE	24 OF 55
		SHEET	24 OF 54

VOLTAGE PROPERTIES

PP3V3 USB	3.3V	2 12
PP1V8 VA I19 I67	1.8V	10 12 16
PP3V0 TRISTAR	3.0V	12 15 17 29
PP3V0 TMI	3.0V	12 19
PP3V0 NAND	3.0V	6 12
PP3V3 ACC	3.0V	12 17
PP3V0 PROX AIS	3.0V	11 12
PP VCC MAIN	4.6V	10 12 14 15 16 17 23 31 39
PP1V0	1.0V	7 12
PP3V0 PROX TRIPD	3.0V	11 12
PP1V8 ALWAYS	1.8V	3 5 12 14
PP3V0 MESA	3.0V	12 21
PP CPU	1.1V	4 12
PP GPU	1.1V	4 12
PP1V2 SDRAM	1.2V	2 4 12 23
PP1V8 SDRAM	1.8V	3 4 10 12 13 14 15 17 29
PP1V8	1.8V	3 4 5 7 10 11 12 13 15 20 23
PP1V8 GRAPE	1.8V	12 24
PP1V8 OSCAR	1.8V	12 19 22
PP1V2 NAND VDDT	1.2V	6
PP EXTMIC BIAS FILT IN	1.8V	10
BOARD_ID2	1.8V	3 27
PP1V2	1.2V	3 4 5 11 12
PP_E75_TO_TRISTAR_ACC1_CONN	5.0V	18 25
PP_E75_TO_TRISTAR_ACC1	5.0V	17 18
PP_LCM_BI_ANODE	22.0V	15 20
PP_LCM_BI_CAT2	0.2V	15 20
PP_LCM_BI_CAT1	0.2V	15 20
PP_LCM_BI_CAT2_CONN	0.2V	20 25
PP_LCM_BI_CAT1_CONN	0.2V	20 25
PNSV7 SAGE AVDDN	-5.7V	15 20 24
PP1V2 OSCAR	1.2V	12 22
PP3V0 MESA_CONN	3.0V	21
PP6V0 LCM BOOST	6V	15
PP_STRB_DRIVER_TO_LED_WARM	5.0V	8 16
PP_STRB_DRIVER_TO_LED_COOL	5.0V	8 16
PP_CODEC_TO_MIC1_BIAS	1.8V	10 18
PP_EXTMIC_BIAS_FILT	1.8V	10
PP_EXTMIC_BIAS_FILT	1.8V	10
PP_CODEC_TO_FRONTMIC2_BIAS	1.8V	10 11
PP_CODEC_TO_REARMIC2_BIAS	1.8V	8 10
PP_CODEC_FILT+	1.8V	10
PP_CODEC_SPKR_VO	2.2V	10
PP_CODEC_VCPBLT-	2.5V	10
PP_CODEC_VCPBLT+	2.5V	10
PP_CODEC_VHP_FLN	2.5V	10
PP_CODEC_VHP_FLN	0.2V	10
PP_CODEC_VHP_FLN	2.5V	10
PP_CODEC_VHP_FLN	2.5V	10
PP1V8 ECAM_CONN	1.8V	11
PP2V85 ECAM AVDD_CONN	3.0V	11
PP_CODEC_TO_FRONTMIC1_BIAS_CONN	1.8V	11
PP3V0 ALS_CONN	3.0V	11
PP1V2 ECAM VDDIO_CONN	1.2V	11
PP5V0 USB	5.0V	12 14 17 18 25
PP5V0 USB_TO_EMU	5.0V	12
PP_BUCK5_LX0	4.6V	12
PP_BUCK3_LX	4.6V	12
PP_BUCK4_LX	4.6V	12
PP_BUCK2_LX	4.6V	12
PP_BUCK1_LX1	4.6V	12
PP_BUCK1_LX0	4.6V	12
PP_BUCK0_LX3	4.6V	12
PP_BUCK0_LX2	4.6V	12
PP_BUCK0_LX1	4.6V	12
PP_BUCK0_LX0	4.6V	12
PP_CHESTNUT_LXP	6.0V	15
PP_CHESTNUT_CP	6.0V	15
PP_CHESTNUT_CN	6.0V	15
PP5V7 SAGE AVDDH	5.7V	15 24
PNSV7 LCM AVDDH	5.7V	15 20
PNSV1 GRAPE VDDH	5.1V	15 24
PP_NLED_LX	22.0V	15
PP18V0 MESA_SW	18.0V	15
PP17V0 MESA_SW	17.0V	15
PP16V5 MESA	16.5V	15 21 25
PP_SPKAMP_SW	8.0V	16
PP_L19_VBOOST	8.0V	16
PP_SPKAMP_FILT	1.8V	16
PP_SPKAMP_LDO_FILT	1.8V	16
PP_LED_DRV_LX	5.0V	16
PP_LED_BOOST_OUT	5.0V	16
PP2V9 LDO9	2.9V	12
PP_CODEC_TO_MIC1_BIAS_CONN	1.8V	18
PP_E75_TO_TRISTAR_ACC2	4.6V	17 18
PP_E75_TO_TRISTAR_ACC2_CONN	4.6V	18 25
PP1V8 LCM_CONN	1.8V	20
PP_LCM_BI_ANODE_CONN	22.0V	20 25
PNSV7 LCM AVDDN_CONN	-5.7V	20
PNSV7 LCM AVDDH_CONN	5.7V	20
PP1V8 MESA	1.8V	21
PP16V5 MESA_CONN	16.5V	21
PP_TRISTAR_PIN	5.0V	17
PP1V2 ECAM_CONN	1.2V	23
PP1V8 ECAM_CONN	1.8V	23
PP2V85 CAM_VDD	3.0V	11 23
PP2V85 ECAM AVDD_CONN	1.8V	23
PP_CUMULUS_VDDCORE	1.8V	24
PP_CUMULUS_VDDANA	1.2V	24
PP_SAGE_TO_TOUCH_VCPH_CONN	13.5V	24
PP_SAGE_TO_TOUCH_VCPH_CONN	-12V	24
PP_SAGE_TO_TOUCH_VCPH	13.5V	24
PP_SAGE_TO_TOUCH_VCPH	-12V	24
PP_SAGE_VCPH_F	-12V	24
PP_SAGE_LX	5.7V	24
PP_SAGE_LX	17.0V	24
PP_EMU_VREF	1.8V	13
PP_SAGE_VBST_OUTH	14V	24
PP_TIGRIS_VBUS_DET	5.0V	14
PP1V8_FLL	1.8V	10
PP_MIPIOD_VREG	2.5V	13
BOARD_ID0	1.8V	10
PP_EMU_VDD_RBE	1.8V	10
PP_EXTMIC_BIAS	1.8V	10
PP1V8_XTAL	1.8V	2
PP_EMU_VDD_RTC	1.8V	13
PP_BATT_VCC	4.6V	14 16 25 40 45 46
PP1V8 MESA_CONN	1.8V	21
PP3V0 PROX_CONN	3.0V	11
PP0V95 FIXED SOC	1.0V	4 7 12
PP0V95 FIXED SOC_PCIE	1.0V	7
PP1V2 PLL	1.2V	2
PP_BUCK5_LX1	1.0V	12
PP_VA8_SOC	1.0V	5 12
PPMID_CAP	5.0V	14
CHARGER_LDO	5.0V	14
CHG_BOOT	4.6V	14
CHG_LX	4.6V	14
VIBR_DRIVE_P	3.0V	14 18
VIBR_DRIVE_N	3.0V	14 18
PP_BCAM_AE_CONN	1.8V	23
PP_SAGE_VBST_OUTH	-14.0V	24
PP_SAGE_TO_TOUCH_VCPH_FILT	-12.0V	24
PP_BB_VDD_2V7_CONN	2.7V	18

PAGE TITLE		
SYSTEM:VOLTAGE PROPERTIES		
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N61 SPECIFIC

BOOTSTRAPPING (BOARD_REV, BOARD_ID, BOOT_CFG)

```
BOARD_REV[3:0]={GPIO34, GPIO35, GPIO36, GPIO37}
FLOAT=LOW, PULLUP=HIGH
```

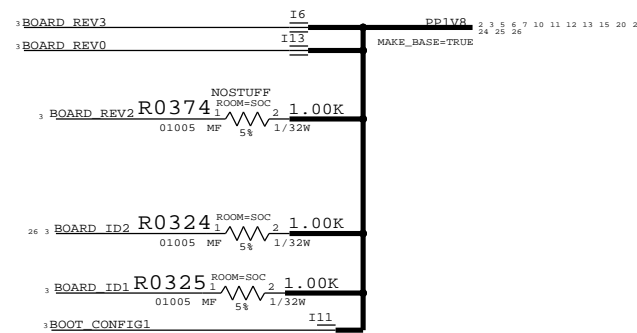
```
1111 PROTOMLB1
1110 PROTOMLB2
1101 PROTO1
1100 PROTO2
1011 EVT
1010 EVT SPLIT CARBON DOE
1001 CARRIER BUILD <--- SELECTED
1000 DVT
```

```
BOARD_ID[4:0]={GPIO29, GPIO16, SPI0_MISO, SPI0_MOSI, SPI0_SCLK}
FLOAT=LOW, PULLUP=HIGH
```

```
00100 N56, T133 MLB
00101 N56 DEV
00110 FIJI N61 MLB <--- SELECTED
```

```
BOOT_CONFIG[2:0]={GPIO28, GPIO25, GPIO18}
FLOAT=LOW, PULLUP=HIGH
```

```
000 SPI0
001 SPI0 TEST MODE
010 NAND <--- SELECTED
011 NAND TEST MODE
100 NVME
101 NVME TEST MODE
111 FAST SPI
```



PAGE TITLE		SYSTEM:N61 SPECIFIC	
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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

AP_TO_RADIO_ON_L	MAKE_BASE-TRIP	I325	RADIO_ON_L	30	32
BB_TO_AP_RESET_DET_L	MAKE_BASE-TRIP	I324	BB_RESET_DET_L	30	35
PMU_TO_BB_RST_L	MAKE_BASE-TRIP	I326	RF_PMIC_RESET_L	30	32
AP_TO_BB_RST_L	MAKE_BASE-TRIP	I327	BB_RST_L	30	32
AP_TO_BB_WAKE_MODEM	MAKE_BASE-TRIP	I329	AP_WAKE_MODEM	30	35
BB_TO_PMU_HOST_WAKE_L	MAKE_BASE-TRIP	I328	BB_WAKE_HOST_L	30	35
BB_TO_AP_IPC_GPIO	MAKE_BASE-TRIP	I331	BB_IPC_GPIO	30	35
BB_TO_LEDDRVM_GSM_BLANK	MAKE_BASE-TRIP	I330	GSM_TXBURST_IND	30	35
BB_TO_AP_GPS_SYNC	MAKE_BASE-TRIP	I332	BB_GPS_SYNC	30	35

WLAN/BT HOUSE KEEPING

45_PMU_TO_WLAN_CLK32K	MAKE_BASE-TRIP	I316	CLK32K_AP	30	51
PMU_TO_WLAN_REG_ON	MAKE_BASE-TRIP	I317	WLAN_REG_ON	30	51
WLAN_TO_PMU_HOST_WAKE	MAKE_BASE-TRIP	I318	HOST_WAKE_WLAN	30	51
PMU_TO_BT_REG_ON	MAKE_BASE-TRIP	I319	BT_REG_ON	30	51
AP_TO_BT_WAKE	MAKE_BASE-TRIP	I320	WAKE_BT	30	51
BT_TO_PMU_HOST_WAKE	MAKE_BASE-TRIP	I321	HOST_WAKE_BT	30	51

HSIC IPC

50_AP_BI_BB_HSIC1_DATA	MAKE_BASE-TRIP	I368	50_BB_HSIC_DATA	30	34
50_AP_BI_BB_HSIC1_STB	MAKE_BASE-TRIP	I369	50_BB_HSIC_STROBE	30	34
AP_TO_BB_HOST_RDY	MAKE_BASE-TRIP	I371	BB_HOST_RDY	30	35
BB_TO_AP_DEVICE_RDY	MAKE_BASE-TRIP	I370	BB_DEVICE_RDY	30	35
BB_TO_AP_IPC_GPIO1	MAKE_BASE-TRIP	I372	BB_IPC_GPIO1	30	35

AP_TO_WLAN_JTAG_SWCLK	MAKE_BASE-TRIP	I333	WLAN_JTAG_SWCLK	30	51
AP_TO_WLAN_JTAG_SWDIO	MAKE_BASE-TRIP	I334	WLAN_JTAG_SWDIO	30	51
WLAN_TO_PMU_PCIE_WAKE_L	MAKE_BASE-TRIP	I335	WLAN_PCIE_WAKE_L	30	51
AP_TO_WLAN_DEVICE_WAKE	MAKE_BASE-TRIP	I336	PCIE_DEV_WAKE	30	51
90_WLAN_TO_AP_PCIE1_RXDP_P	MAKE_BASE-TRIP	I337	90_WLAN_PCIE_TDP	30	51
90_WLAN_TO_AP_PCIE1_RXDP_N	MAKE_BASE-TRIP	I338	90_WLAN_PCIE_TDN	30	51
90_AP_TO_WLAN_PCIE1_TXDP_P	MAKE_BASE-TRIP	I339	90_WLAN_PCIE_RDP	30	51
90_AP_TO_WLAN_PCIE1_TXDP_N	MAKE_BASE-TRIP	I340	90_WLAN_PCIE_RDN	30	51
90_AP_TO_WLAN_PCIE1_REFCLK1_P	MAKE_BASE-TRIP	I341	90_WLAN_PCIE_REFCLK_P	51	
90_AP_TO_WLAN_PCIE1_REFCLK1_N	MAKE_BASE-TRIP	I342	90_WLAN_PCIE_REFCLK_N	51	
WLAN_TO_AP_PCIE1_CLKREQ_L	MAKE_BASE-TRIP	I343	WLAN_PCIE_CLKREQ_L	30	51
AP_TO_WLAN_PCIE1_RST_L	MAKE_BASE-TRIP	I344	WLAN_PCIE_PERST_L	30	51

UART IPC

AP_TO_BB_UART2_RTS_L	MAKE_BASE-TRIP	I373	BB_UART_CTS_L	30	35
BB_TO_AP_UART2_CTS_L	MAKE_BASE-TRIP	I374	BB_UART_RTS_L	30	35
AP_TO_BB_UART2_TXD	MAKE_BASE-TRIP	I375	BB_UART_RXD	30	35
BB_TO_AP_UART2_RXD	MAKE_BASE-TRIP	I376	BB_UART_TXD	30	35

WLAN HSIC IPC

WLAN_TO_AP_UART4_RXD	MAKE_BASE-TRIP	I345	WLAN_UART_TXD	30	51
AP_TO_WLAN_UART4_TXD	MAKE_BASE-TRIP	I346	WLAN_UART_RXD	30	51
WLAN_TO_AP_UART4_CTS_L	MAKE_BASE-TRIP	I347	WLAN_UART_RTS_L	30	51
AP_TO_WLAN_UART4_RTS_L	MAKE_BASE-TRIP	I348	WLAN_UART_CTS_L	30	51

AUDIO I2S

45_AP_TO_BB_I2S3_BCLK	MAKE_BASE-TRIP	I377	BB_I2S_CLK	30	35
AP_TO_BB_I2S3_DOUT	MAKE_BASE-TRIP	I378	BB_I2S_RXD	30	35
BB_TO_AP_I2S3_DIN	MAKE_BASE-TRIP	I379	BB_I2S_TXD	30	35
AP_TO_BB_I2S3_LRCLK	MAKE_BASE-TRIP	I380	BB_I2S_WS	30	35

BT UART IPC

AP_TO_BT_UART1_RTS_L	MAKE_BASE-TRIP	I349	BT_UART_CTS_L	51	
BT_TO_AP_UART1_CTS_L	MAKE_BASE-TRIP	I350	BT_UART_RTS_L	51	
AP_TO_BT_UART1_TXD	MAKE_BASE-TRIP	I351	BT_UART_RXD	30	51
BT_TO_AP_UART1_RXD	MAKE_BASE-TRIP	I352	BT_UART_TXD	30	51

OSCAR UART

OSCAR_TO_BB_UART_TXD	MAKE_BASE-TRIP	I382	BB_OTHER_RXD	30	35
BB_TO_OSCAR_UART_RXD	MAKE_BASE-TRIP	I383	BB_OTHER_TXD	30	35

BT AUDIO PCM

45_AP_TO_BT_I2S1_BCLK	MAKE_BASE-TRIP	I354	BT_PCM_CLK	51	
AP_TO_BT_I2S1_DOUT	MAKE_BASE-TRIP	I355	BT_PCM_IN	51	
BT_TO_AP_I2S1_DIN	MAKE_BASE-TRIP	I356	BT_PCM_OUT	51	
AP_TO_BT_I2S1_LRCLK	MAKE_BASE-TRIP	I357	BT_PCM_SYNC	51	

BB DEBUG INTERFACES

AP_TO_BB_COREDUMP	MAKE_BASE-TRIP	I384	BB_CORE_DUMP	30	35
PMU_TO_BB_VBUS_DET	MAKE_BASE-TRIP	I387	BB_USB_VBUS	30	34
90_TRISTAR_BI_BB_USB_N	MAKE_BASE-TRIP	I388	90_BB_USB_N	30	34
90_TRISTAR_BI_BB_USB_P	MAKE_BASE-TRIP	I389	90_BB_USB_P	30	34

OSCAR STATES

OSCAR_TO_RADIO_CONTEXT_A	MAKE_BASE-TRIP	I358	OSCAR_CONTEXT_A	51	
OSCAR_TO_RADIO_CONTEXT_B	MAKE_BASE-TRIP	I359	OSCAR_CONTEXT_B	51	

RADIO ANTENNA CONTROL

PP_BB_VDD_2V7	MAKE_BASE-TRIP	I389	PP_LD014_RFSW	31	41
BB_GPIO0	MAKE_BASE-TRIP	I390	BB_LAT_GPIO0	30	35
BB_GPIO2	MAKE_BASE-TRIP	I391	BB_LAT_GPIO2	30	35
BB_GPIO3	MAKE_BASE-TRIP	I392	BB_LAT_GPIO3	30	35
BB_GPIO4	MAKE_BASE-TRIP	I393	BB_LAT_GPIO4	30	35

STOCKHOLM

STOCKHOLM_TO_AP_UART3_CTS_L	MAKE_BASE-TRIP	I359	STOCKHOLM_RTS_L	30	52
AP_TO_STOCKHOLM_UART3_RTS_L	MAKE_BASE-TRIP	I360	STOCKHOLM_CTS_L	30	52
STOCKHOLM_TO_AP_UART3_RXD	MAKE_BASE-TRIP	I361	STOCKHOLM_UART_TXD	30	52
AP_TO_STOCKHOLM_UART3_TXD	MAKE_BASE-TRIP	I362	STOCKHOLM_UART_RXD	30	52
AP_TO_STOCKHOLM_DWLD_REQ	MAKE_BASE-TRIP	I363	STOCKHOLM_FW_DWLD_REQ	52	
STOCKHOLM_TO_PMU_HOST_WAKE	MAKE_BASE-TRIP	I364	STOCKHOLM_HOST_WAKE	30	52
AP_TO_STOCKHOLM_EN	MAKE_BASE-TRIP	I365	STOCKHOLM_ENABLE	52	
PP3V0_TRISTAR	MAKE_BASE-TRIP	I366	STOCKHOLM_VDD_MUX_3V0	54	
AP_TO_STOCKHOLM_SIM_SEL	MAKE_BASE-TRIP	I367	STOCKHOLM_SIM_SEL	54	
AP_TO_STOCKHOLM_ANT	MAKE_BASE-TRIP	I406	STOCKHOLM_ANT	52	

FCT TESTING

RADIO_TO_PMU_ADC_SMP51	MAKE_BASE-TRIP	I395	ADC_SMP51	30	
RADIO_TO_PMU_ADC_PP_LD011_VDDIO	MAKE_BASE-TRIP	I396	ADC_PP_LD011	30	
RADIO_TO_PMU_ADC_PP_LD05_SIM	MAKE_BASE-TRIP	I397	ADC_PP_LD05	30	
RADIO_TO_PMU_ADC_SMP54	MAKE_BASE-TRIP	I398	ADC_SMP54	30	

UPPER RADIO ANTENNA CONTROL

50_AP_WIFI_5G_CONN_ANT	MAKE_BASE-TRIP	I410	50_WIFI_5G_CONN_ANT	50	
50_AP_UAT_FEED	MAKE_BASE-TRIP	I409	50_UPPER_ANT_FEED	50	
UAT_ANT_GND	MAKE_BASE-TRIP	I411	ANT_GND	50	
PP3V0_TRISTAR	MAKE_BASE-TRIP	I404	PAC_VDD_3V0	53	
NORTH_AC_GND_SCREW	MAKE_BASE-TRIP	I412	NORTH_ANT_GND	50	

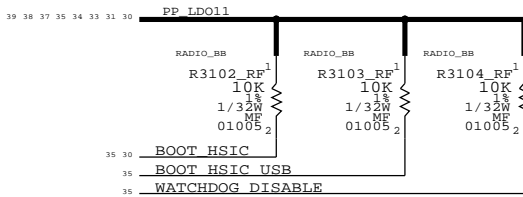
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AP INTERFACE & DEBUG CONNECTORS

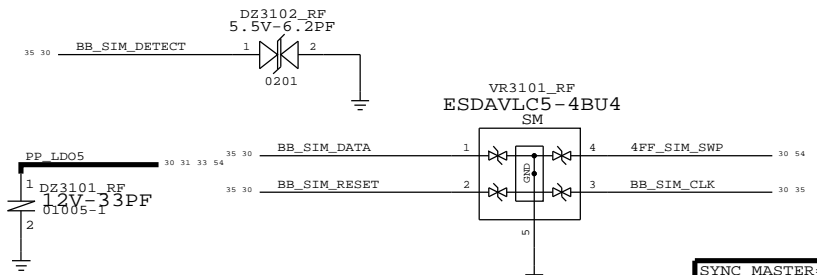
PROBE POINTS

PP3105_RF P2MM-NSM SM 1 1 CLK32K_AP 29 51	PP3121_RF P2MM-NSM SM 1 STOCKHOLM_HOST_WAKE 29 52	PP3115_RF P4MM-NSM SM 1 50_BB_HSIC_STROBE 29 34	PP3130_RF P4MM-NSM SM 1 1_BB_JTAG_RST_L 34	PP3141_RF P4MM-NSM SM 1 1_BB_UART_TXD 29 35	PP3170_RF P4MM-NSM SM 1 RFFE1_CLK 35 39 40 41 42 43 44
PP3113_RF P4MM-NSM SM 1 1_BB_COEX_UART_RXD 35 51	PP3122_RF P4MM-NSM SM 1 1_BB_REQUEST_XO_CLK 32 52	PP3116_RF P4MM-NSM SM 1 50_BB_HSIC_DATA 29 34	PP3131_RF P4MM-NSM SM 1 1_BB_JTAG_TCK 34	PP3142_RF P4MM-NSM SM 1 1_BB_UART_RXD 29 35	PP3171_RF P4MM-NSM SM 1 RFFE1_DATA 35 39 40 41 42 43 44
PP3114_RF P4MM-NSM SM 1 1_BB_COEX_UART_TXD 35 51	PP3123_RF P2MM-NSM SM 1 STOCKHOLM_UART_RXD 29 52	PP3101_RF P4MM-NSM SM 1 1_BB_DEBUG_ERROR 35	PP3132_RF P4MM-NSM SM 1 1_BB_JTAG_TMS 34	PP3143_RF P4MM-NSM SM 1 1_BB_UART_RTS_L 29 35	PP3172_RF P4MM-NSM SM 1 RFFE2_CLK 35 45 46 48
PP3119_RF P2MM-NSM SM 1 1_BT_UART_TXD 29 51	PP3124_RF P2MM-NSM SM 1 STOCKHOLM_UART_TXD 29 52	PP3102_RF P4MM-NSM SM 1 1_RF_PMIC_RESET_L 29 32	PP3133_RF P4MM-NSM SM 1 1_BB_JTAG_TDO 34	PP3144_RF P4MM-NSM SM 1 1_BB_UART_CTS_L 29 35	PP3173_RF P4MM-NSM SM 1 RFFE2_DATA 35 45 46 48
PP3120_RF P2MM-NSM SM 1 1_BT_UART_RXD 29 51	PP3125_RF P2MM-NSM SM 1 STOCKHOLM_CTS_L 29 52	PP3103_RF P4MM-NSM SM 1 1_PS_HOLD_PMIC 32	PP3134_RF P4MM-NSM SM 1 1_BB_JTAG_TDI 34	PP3145_RF P4MM-NSM SM 1 1_BB_HOST_RDY 29 35	PP3175_RF P4MM-NSM SM 1 BB_I2S_WS 29 35
PP3152_RF P2MM-NSM SM 1 1_WAKE_BT 29 51	PP3126_RF P2MM-NSM SM 1 STOCKHOLM_RTS_L 29 52	PP3127_RF P4MM-NSM SM 1 1_PMIC_RESOUT_L 32 34	PP3135_RF P4MM-NSM SM 1 1_BB_JTAG_TRST_L 34	PP3146_RF P4MM-NSM SM 1 1_BB_DEVICE_RDY 29 35	PP3176_RF P4MM-NSM SM 1 BB_I2S_RXD 29 35
PP3153_RF P2MM-NSM SM 1 1_WLAN_REG_ON 29 51	PP3128_RF P4MM-NSM SM 1 PP_PN65_VCC_SIM 52	PP3104_RF P4MM-NSM SM 1 1_MDM_CLK 32 34	PP3136_RF P4MM-NSM SM 1 1_BB_DEBUG_STATUS 35	PP3147_RF P4MM-NSM SM 1 1_BB_GPS_SYNC 29 35	PP3177_RF P4MM-NSM SM 1 BB_I2S_TXD 29 35
PP3154_RF P4MM-NSM SM 1 1_BT_REG_ON 29 51	PP3174_RF P4MM-NSM SM 1 STOCKHOLM_SIM_SWP 52 54	PP3109_RF P4MM-NSM SM 1 1_PP_LD011 30 31 33 34 35 37 38	PP3137_RF P4MM-NSM SM 1 1_BB_CORE_DUMP 29 35	PP3148_RF P4MM-NSM SM 1 1_BB_WAKE_HOST_L 29 35	PP3178_RF P4MM-NSM SM 1 BB_OTHER_TXD 29 35
PP3155_RF P2MM-NSM SM 1 1_HOST_WAKE_WLAN 29 51	PP3129_RF P4MM-NSM SM 1 REF_CLK_FROM_BB 32 52	PP3110_RF P4MM-NSM SM 1 1_RADIO_ON_L 29 32	PP3138_RF P4MM-NSM SM 1 1_BB_USB_VBUS 29 34	PP3149_RF P4MM-NSM SM 1 1_BB_RESET_DET_L 29 35	PP3179_RF P4MM-NSM SM 1 BB_OTHER_RXD 29 35
PP3156_RF P2MM-NSM SM 1 1_WLAN_PCIE_WAKE_L 29 51	PP3165_RF P4MM-NSM SM 1 1_DSDS_SIM_CLK 34 54	PP3111_RF P4MM-NSM SM 1 1_SPMI_DATA 32 34	PP3139_RF P4MM-NSM SM 1 1_90_BB_USB_N 29 34	PP3150_RF P4MM-NSM SM 1 1_BB_RST_L 29 32	
PP3157_RF P2MM-NSM SM 1 1_WLAN_PCIE_PERST_L 29 51	PP3183_RF P4MM-NSM SM 1 1_DSDS_SIM_RESET 34 54	PP3112_RF P4MM-NSM SM 1 1_SPMI_CLK 32 34	PP3140_RF P4MM-NSM SM 1 1_90_BB_USB_P 29 34	PP3151_RF P4MM-NSM SM 1 1_BOOT_HSIC 30 35	
PP3158_RF P4MM-NSM SM 1 1_WLAN_PCIE_CLKREQ_L 29 51	PP3184_RF P4MM-NSM SM 1 1_DSDS_SIM_DATA 34 54				
PP3159_RF P4MM-NSM SM 1 1_PCIE_DEV_WAKE 29 51	PP3188_RF P4MM-NSM SM 1 1_DSDS_SIM_DETECT 34				
PP3160_RF P2MM-NSM SM 1 1_WLAN_UART_RTS_L 29 51	PP3187_RF P4MM-NSM SM 1 PP_LD06 31 33 54				
PP3161_RF P2MM-NSM SM 1 1_WLAN_UART_CTS_L 29 51	PP3188_RF P4MM-NSM SM 1 1_DSDS_SIM_SWP 54				
PP3162_RF P2MM-NSM SM 1 1_WLAN_UART_RXD 29 51	PP3189_RF P4MM-NSM SM 1 1_DSDS_SIM_DATA_R 54				
PP3163_RF P2MM-NSM SM 1 1_WLAN_UART_TXD 29 51	PP 3178_RF P2MM-NSM SM 1 1_BB_SIM_RESET 30 35				
PP3190_RF P4MM-NSM SM 1 1_WLAN_JTAG_SWCLK 29 51	PP 3179_RF P2MM-NSM SM 1 1_BB_SIM_CLK 30 35				
PP3191_RF P4MM-NSM SM 1 1_WLAN_JTAG_SWDIO 29 51	PP 3180_RF P2MM-NSM SM 1 1_BB_SIM_DATA 30 35				
	PP 3183_RF P2MM-NSM SM 1 1_BB_SIM_DETECT 30 35				
	PP 3184_RF P2MM-NSM SM 1 PP_LD05 30 31 33 54				

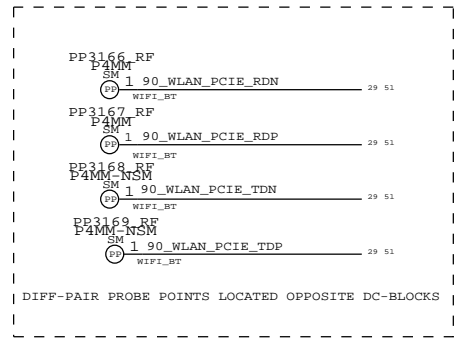
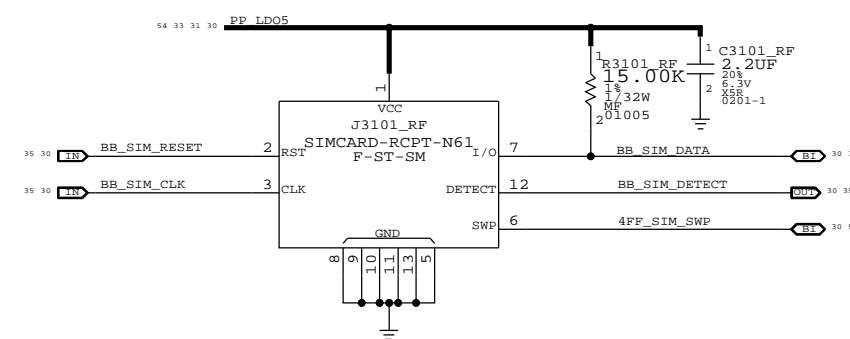
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
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197S0598	197S0593	ALTERNATE	Y3301_RF	AVX 19.2MHZ XTAL
138S00005	138S00003	ALTERNATE	C3216_RF	15UF CAPACITOR
138S0739	138S0706	ALTERNATE	C4207_RF	1.0UF CAPACITOR
138S0945	138S0706	ALTERNATE	C4207_RF	1.0UF 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

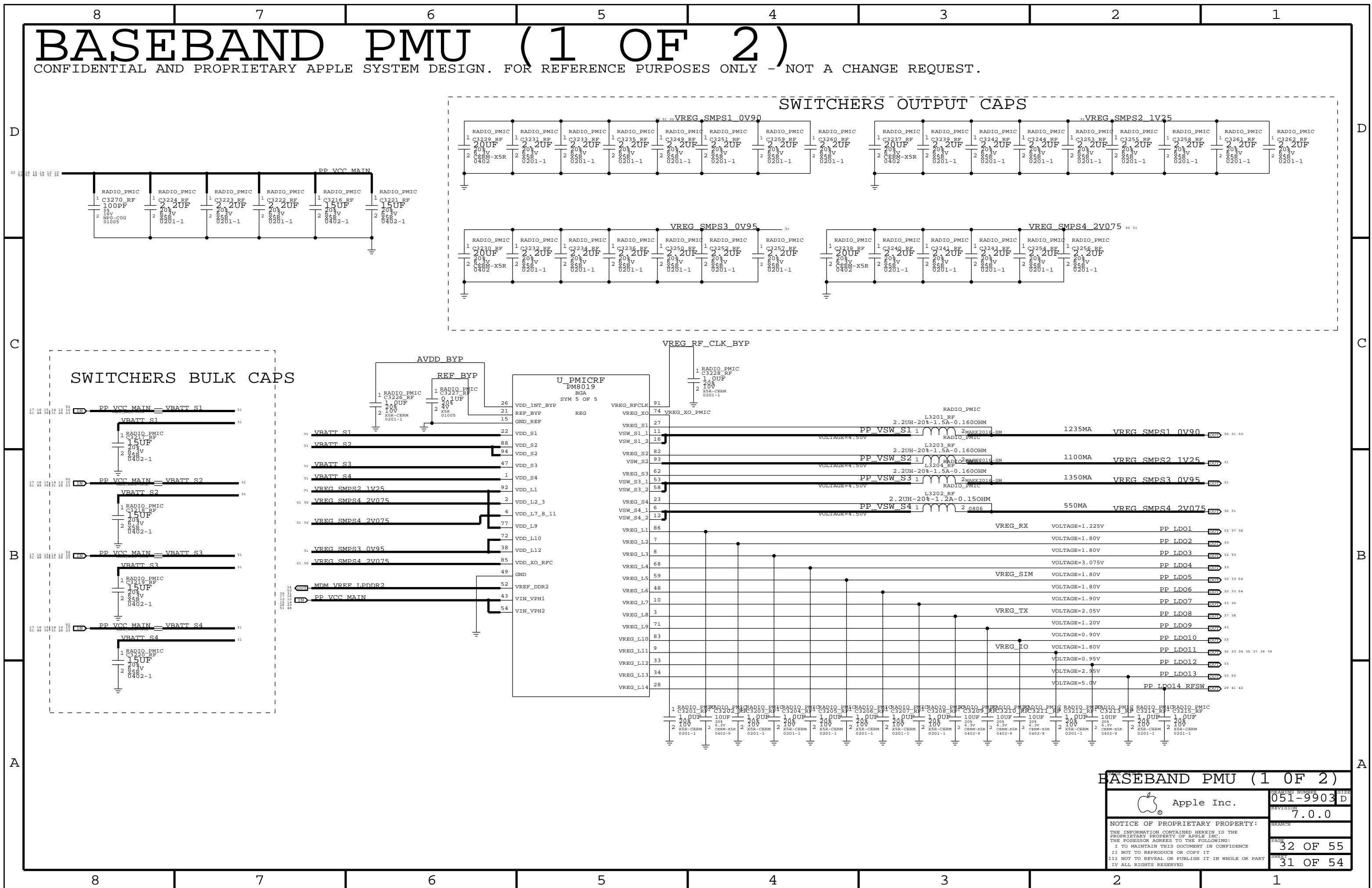


33 31	XW3101_RF	SHORT-10L-0.1MM-SM	ADC_SMPS1	29
38 37 35 34 33 32	VREG_SMPS1_0V90	1 0 2	ADC_SMPS1	29
	XW3102_RF	SHORT-10L-0.1MM-SM	ADC_PP_LD011	29
	PP_LD011	1 0 2	ADC_PP_LD011	29
54 33 31 30	XW3103_RF	SHORT-10L-0.1MM-SM	ADC_PP_LD05	29
	PP_LD05	1 0 2	ADC_PP_LD05	29
	XW3104_RF	SHORT-10L-0.1MM-SM	ADC_SMPS4	29
31	VREG_SMPS4_2V075	1 0 2	ADC_SMPS4	29


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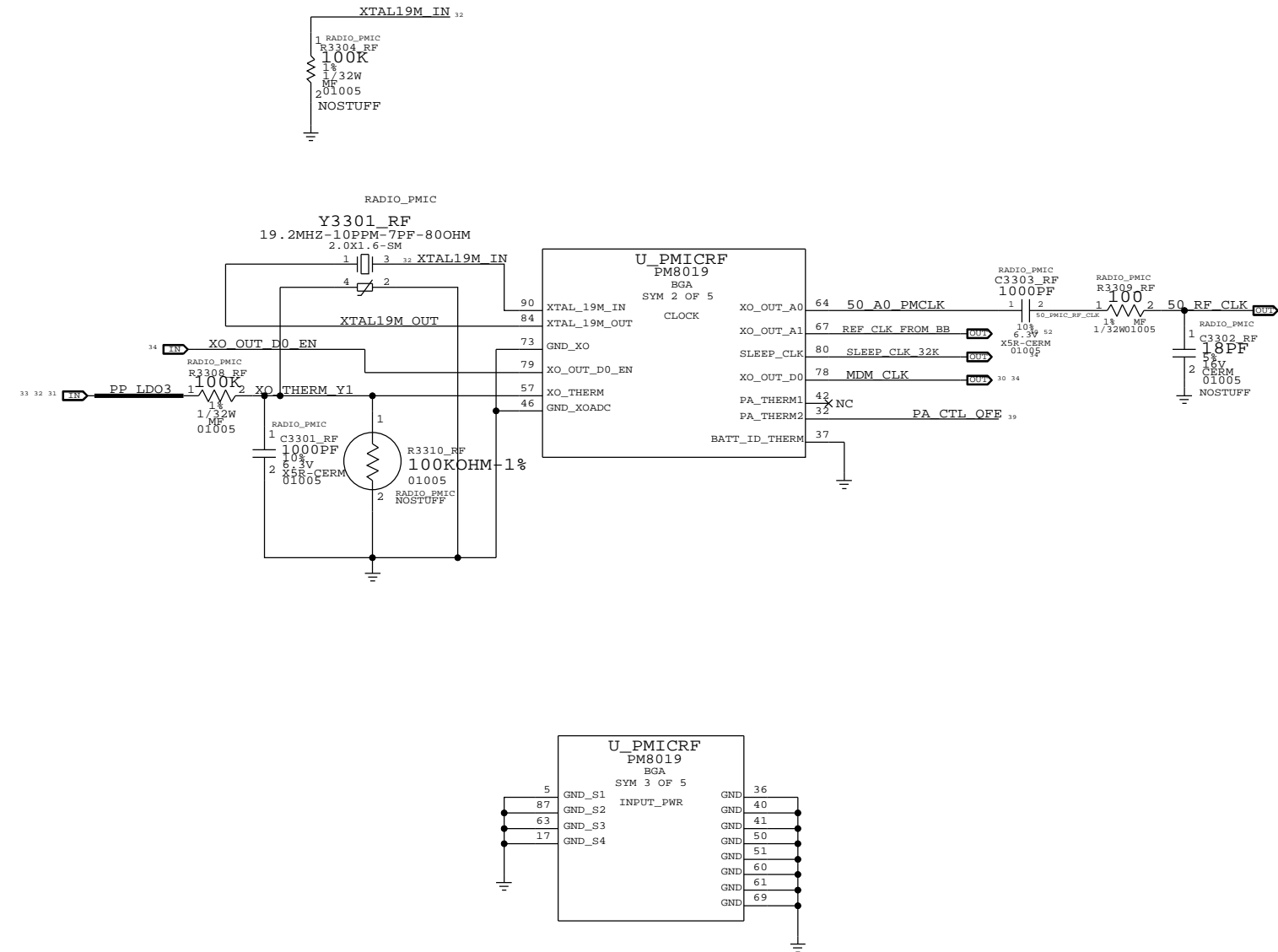
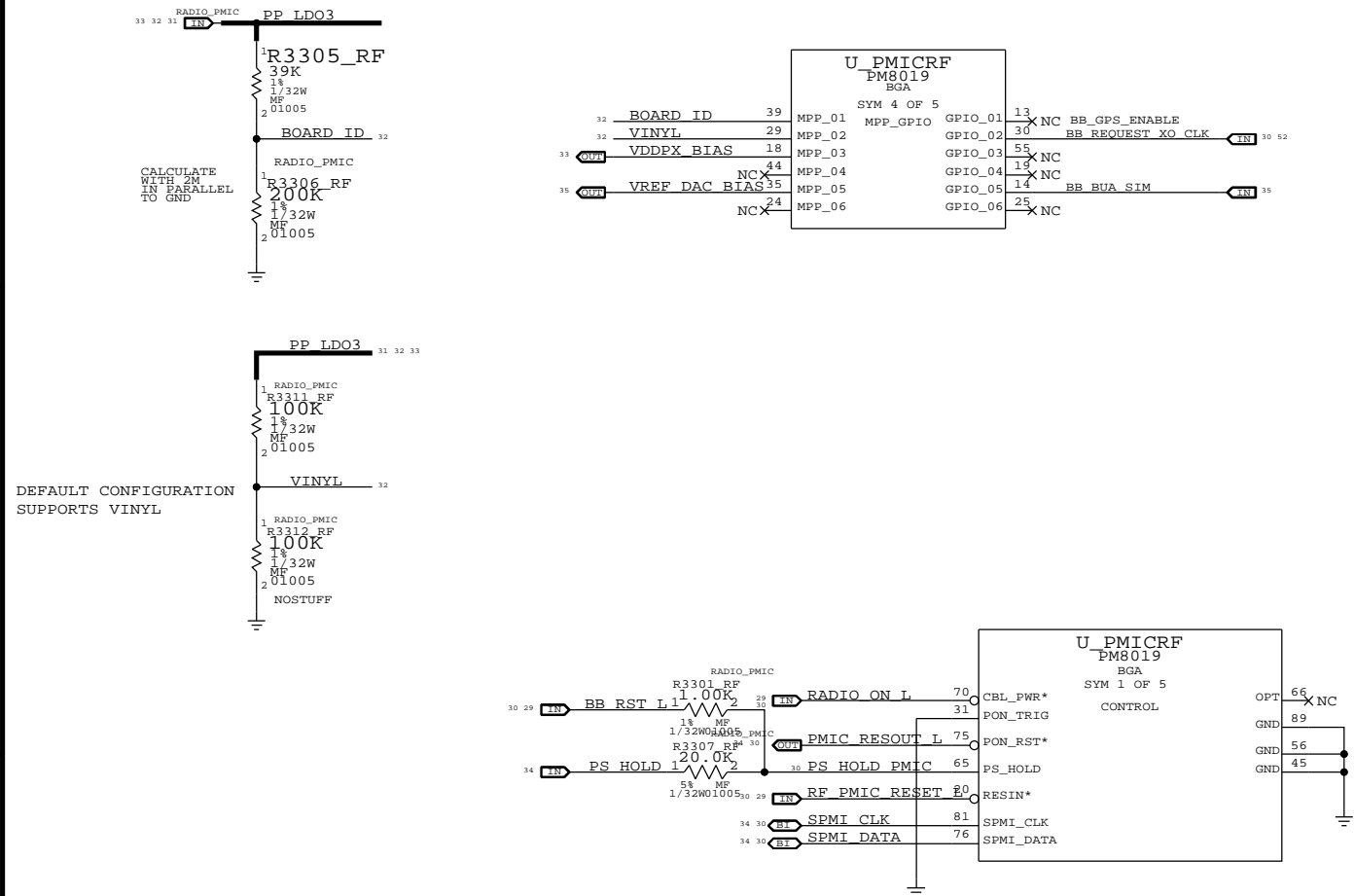
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	SHEET 31 OF 54

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

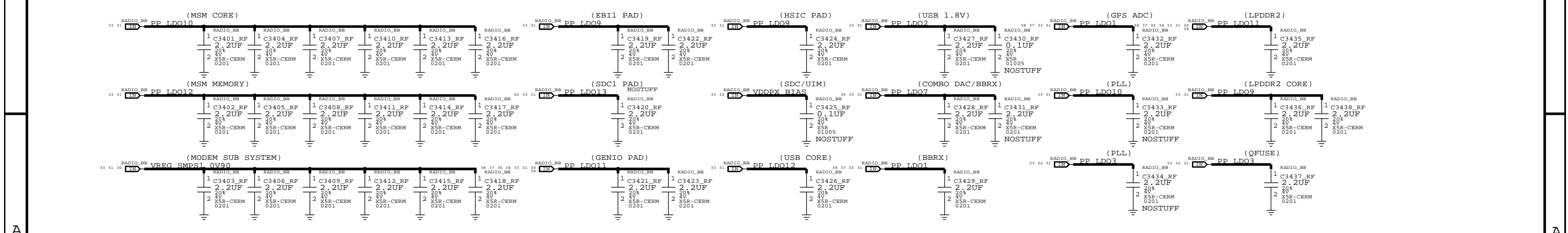
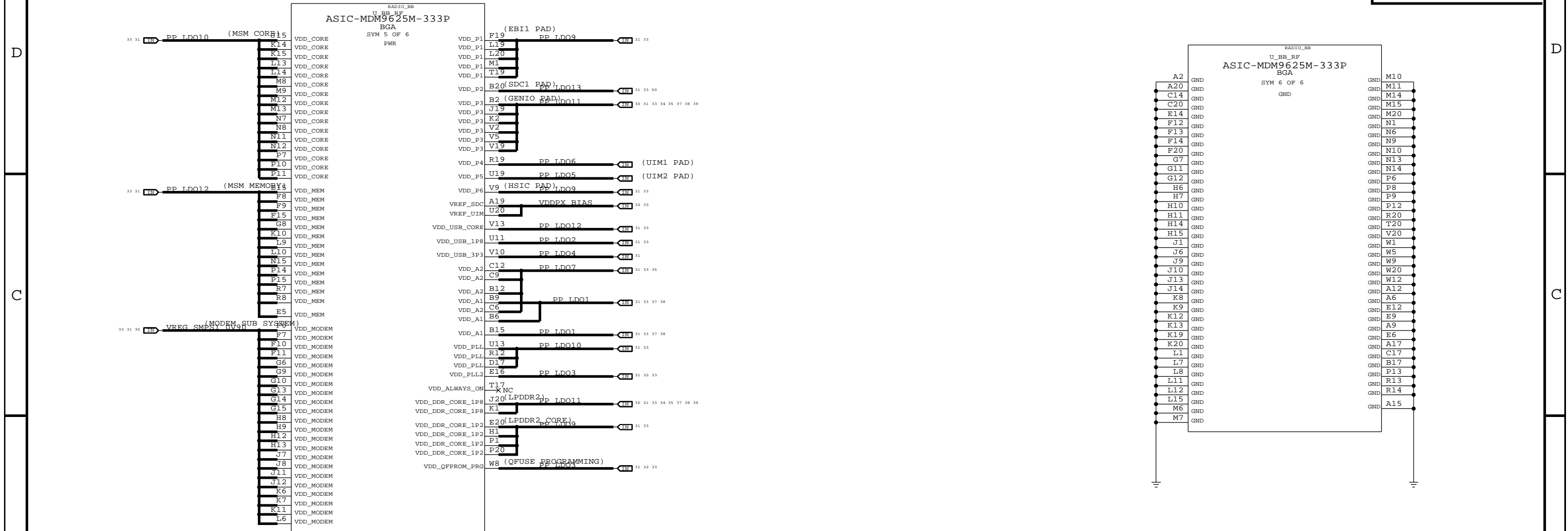


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BASEBAND (1 OF 3)

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C538
R500
L500
U502

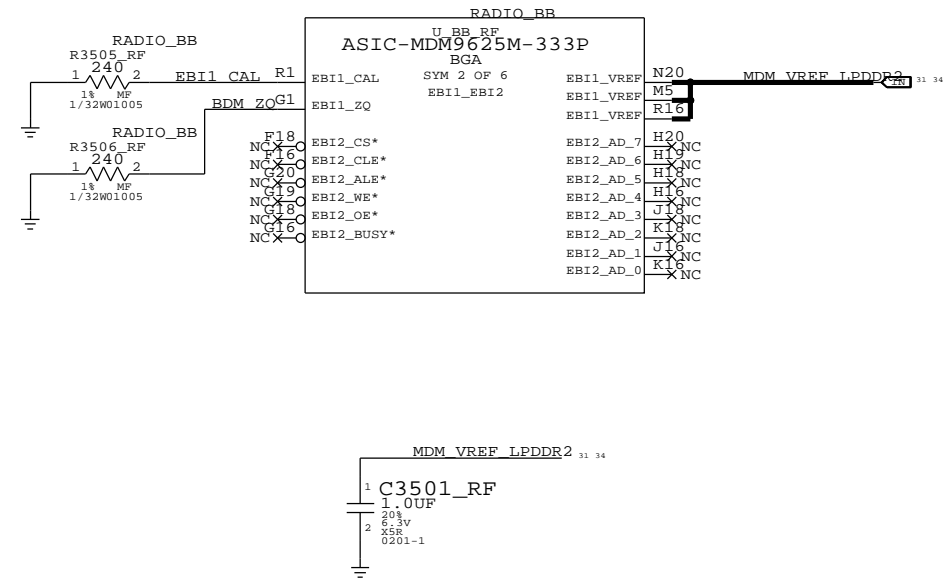
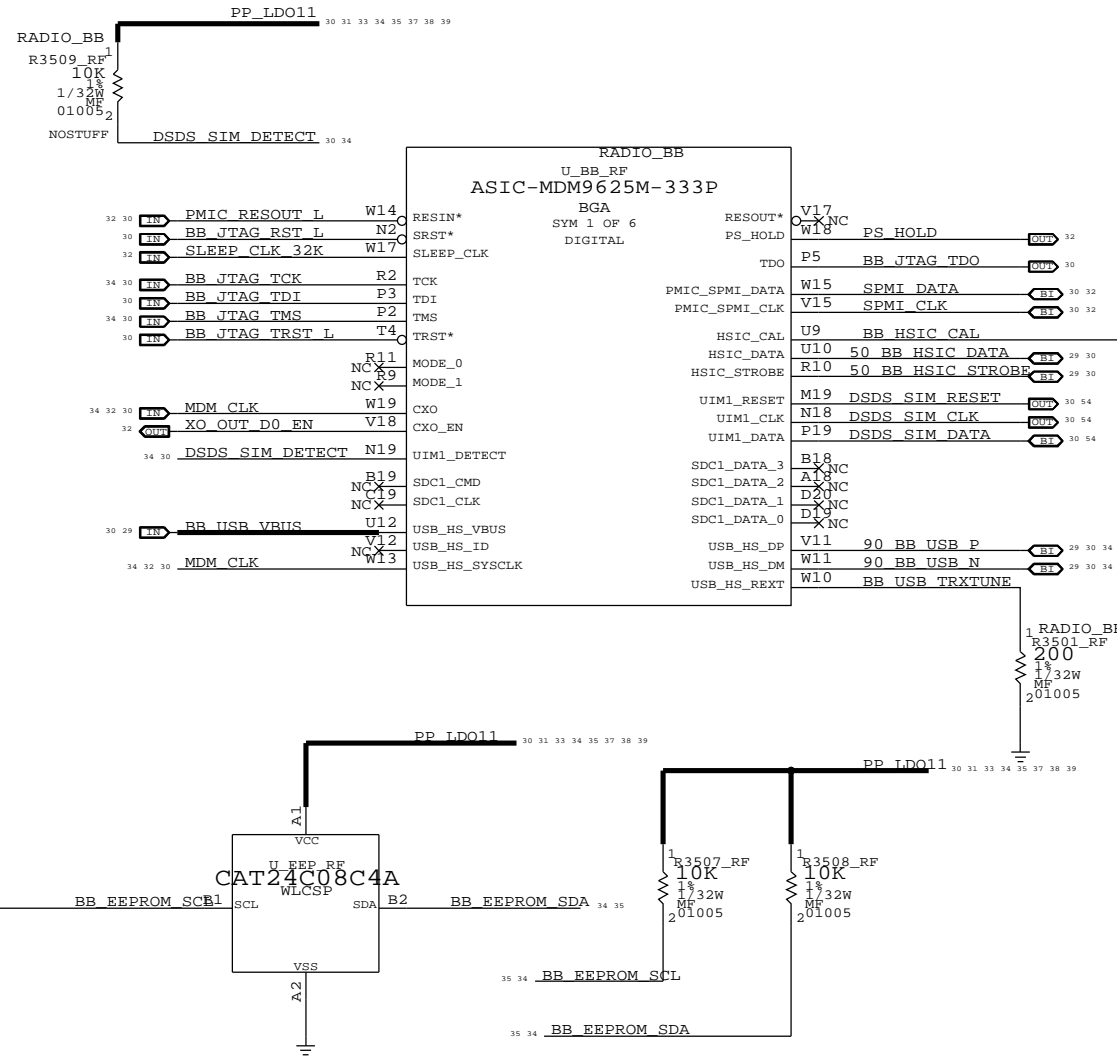
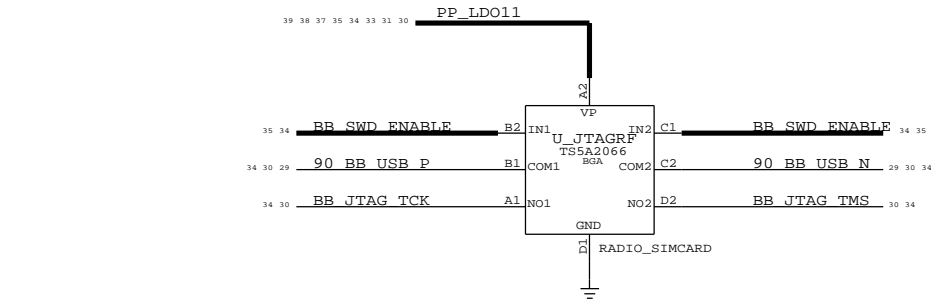


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BASEBAND (2 OF 3)

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C600
R606
L600
U602

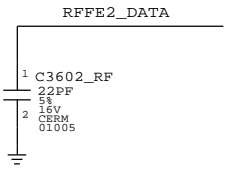
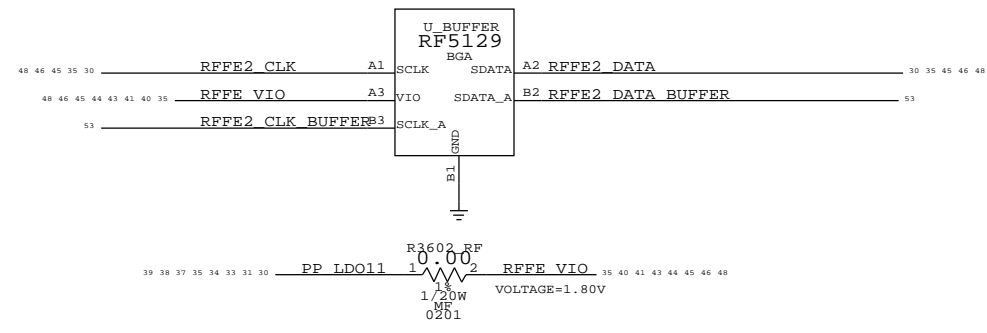
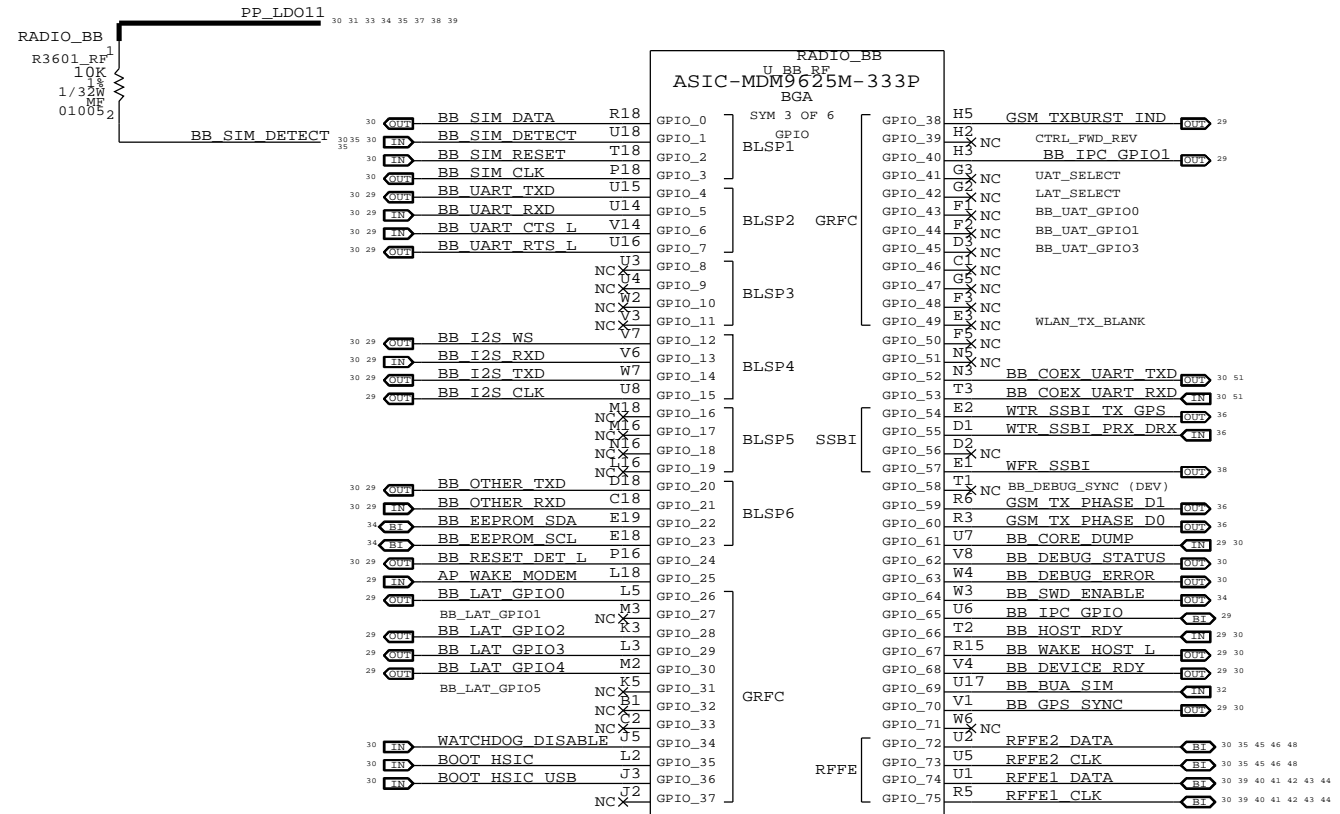
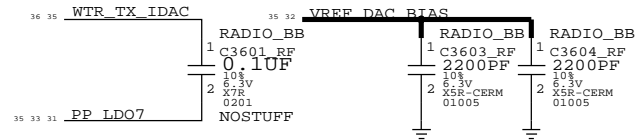
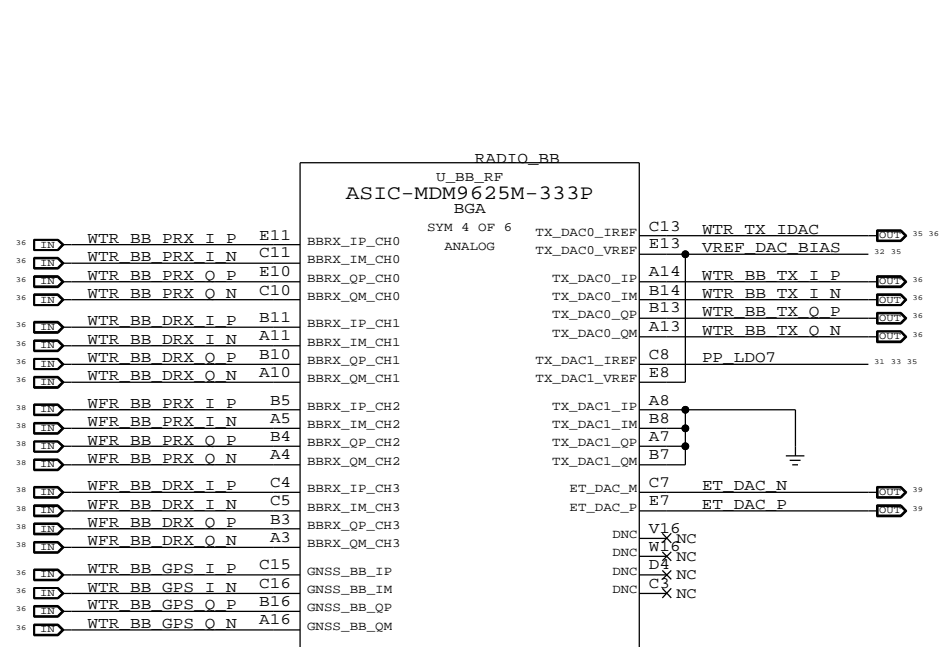


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Apple Inc.	DRAWING NUMBER	051-9903	SIZE
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BASEBAND (3 OF 3)

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C704
R700
L700
U702



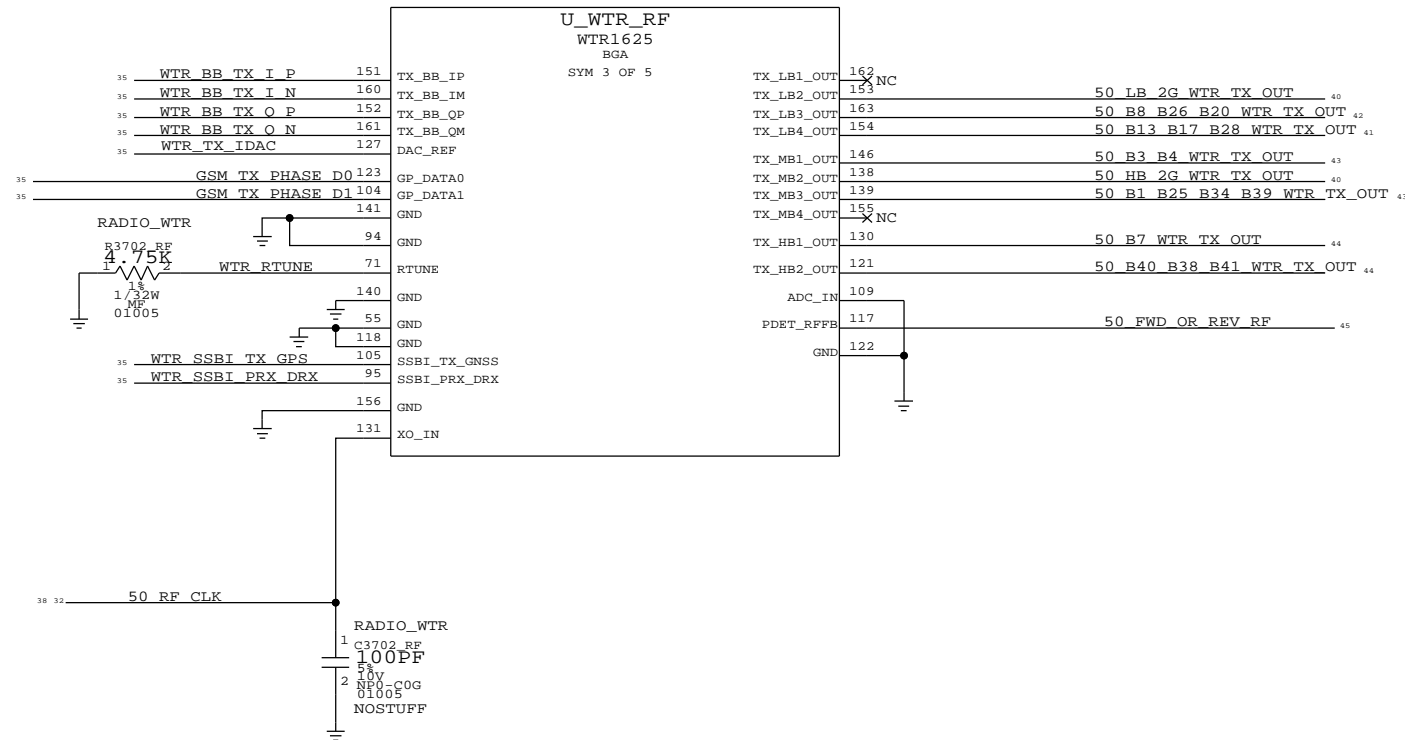
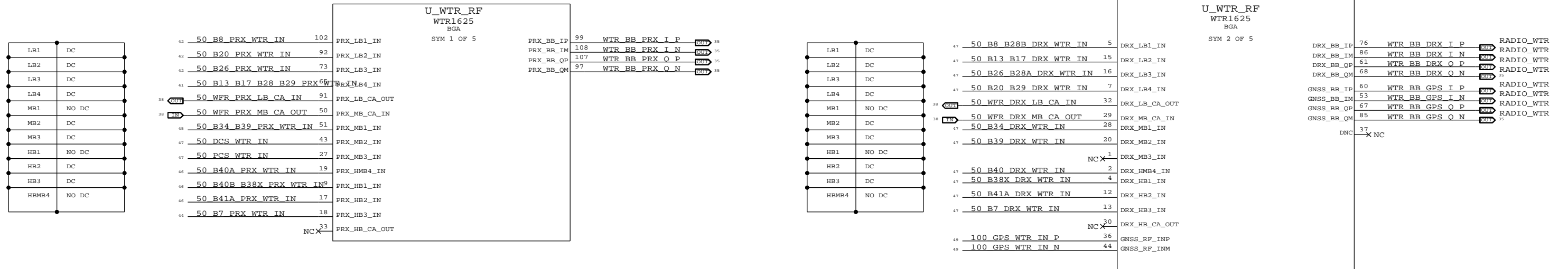
MOBILE DATA MODEM (2 OF 2)

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WTR TRANSCEIVER (1 OF 2)

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C802
R802
L800
U803



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

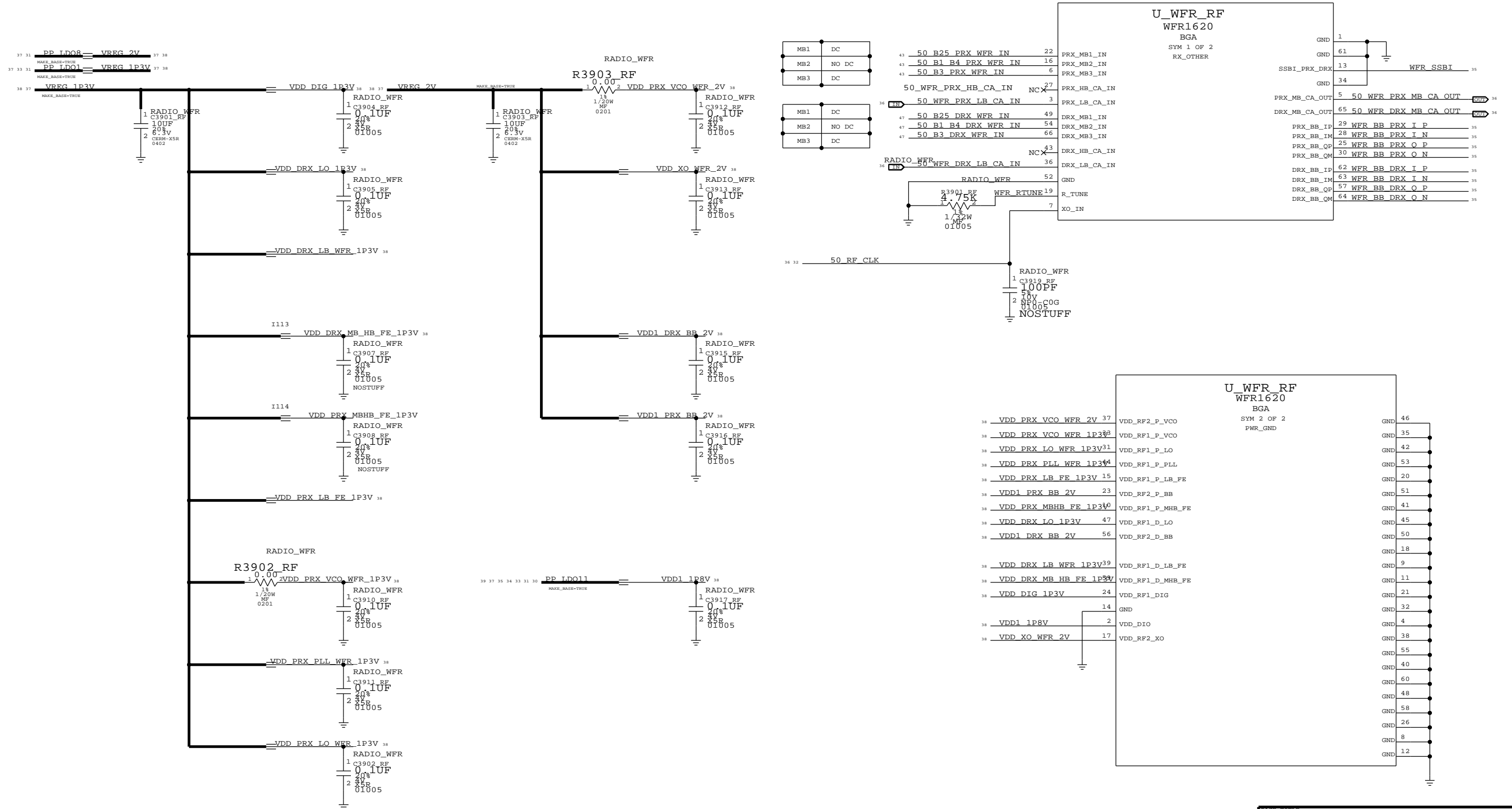
RF TRANSCEIVER (1 OF 3)

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WFR TRANSCEIVER

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C1019
R1016
L1000
U1002



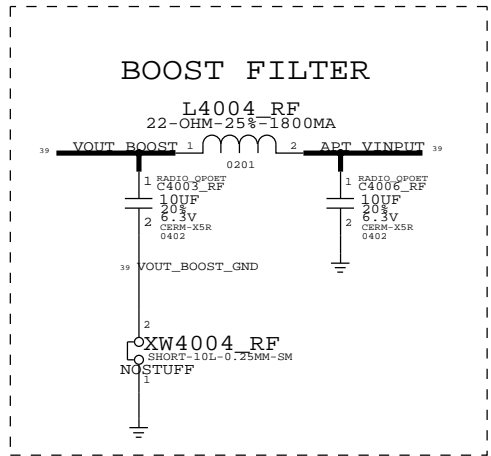
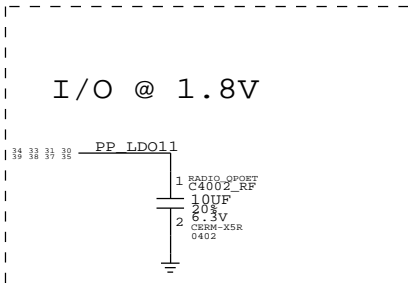
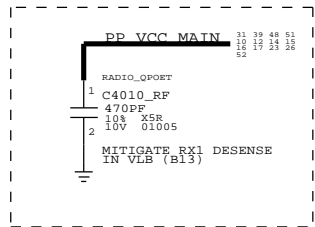
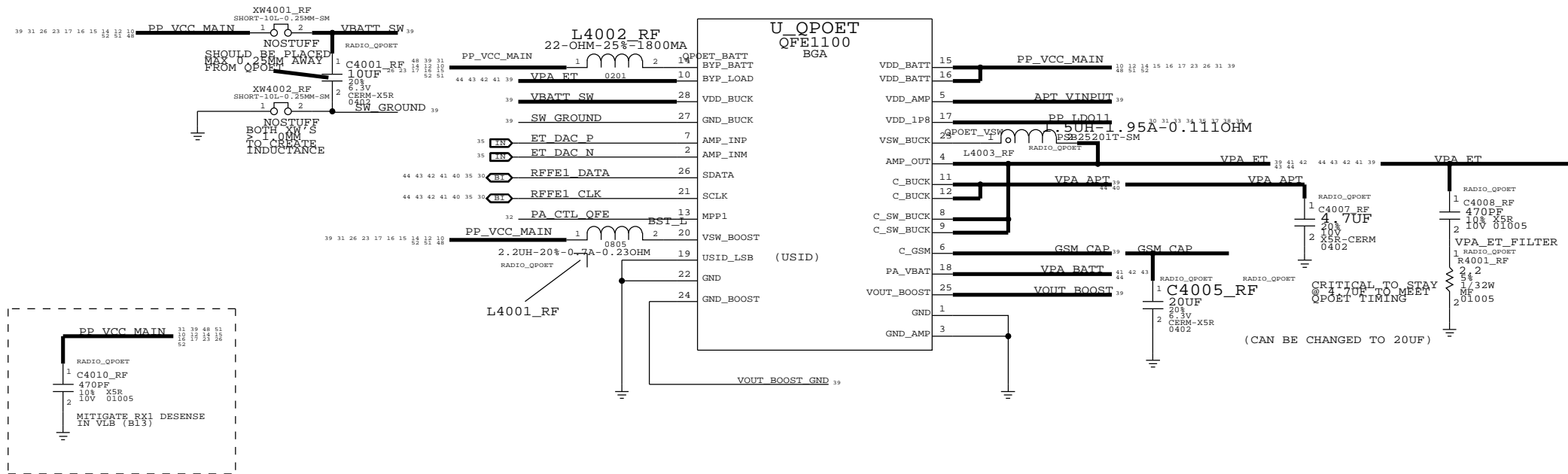
RF TRANSCEIVER (3 OF 3)

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QFE DCDC

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C1110
R1102
L1104
U1101

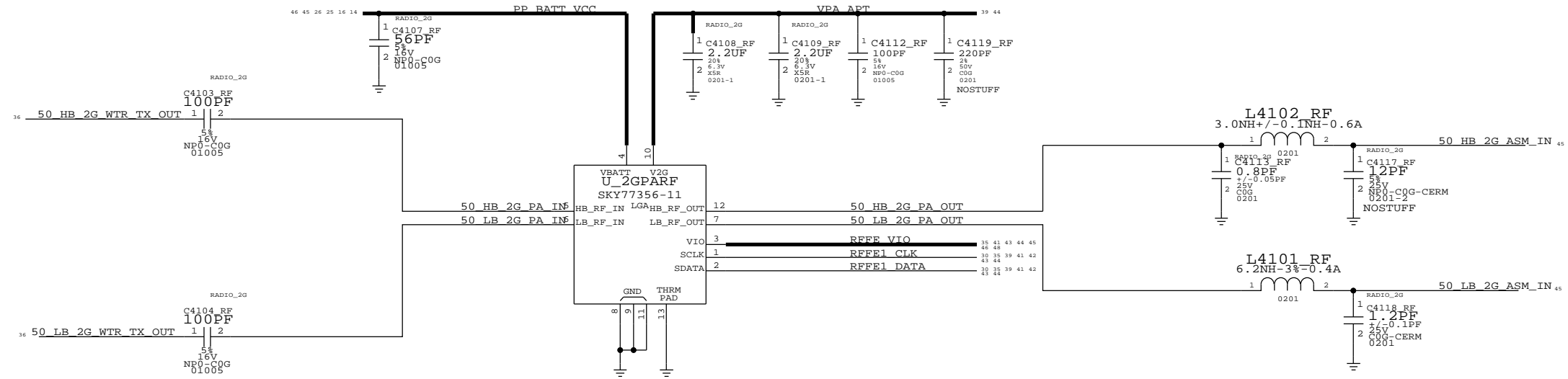


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2G PA

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C1208
R1200
L1204
U1201

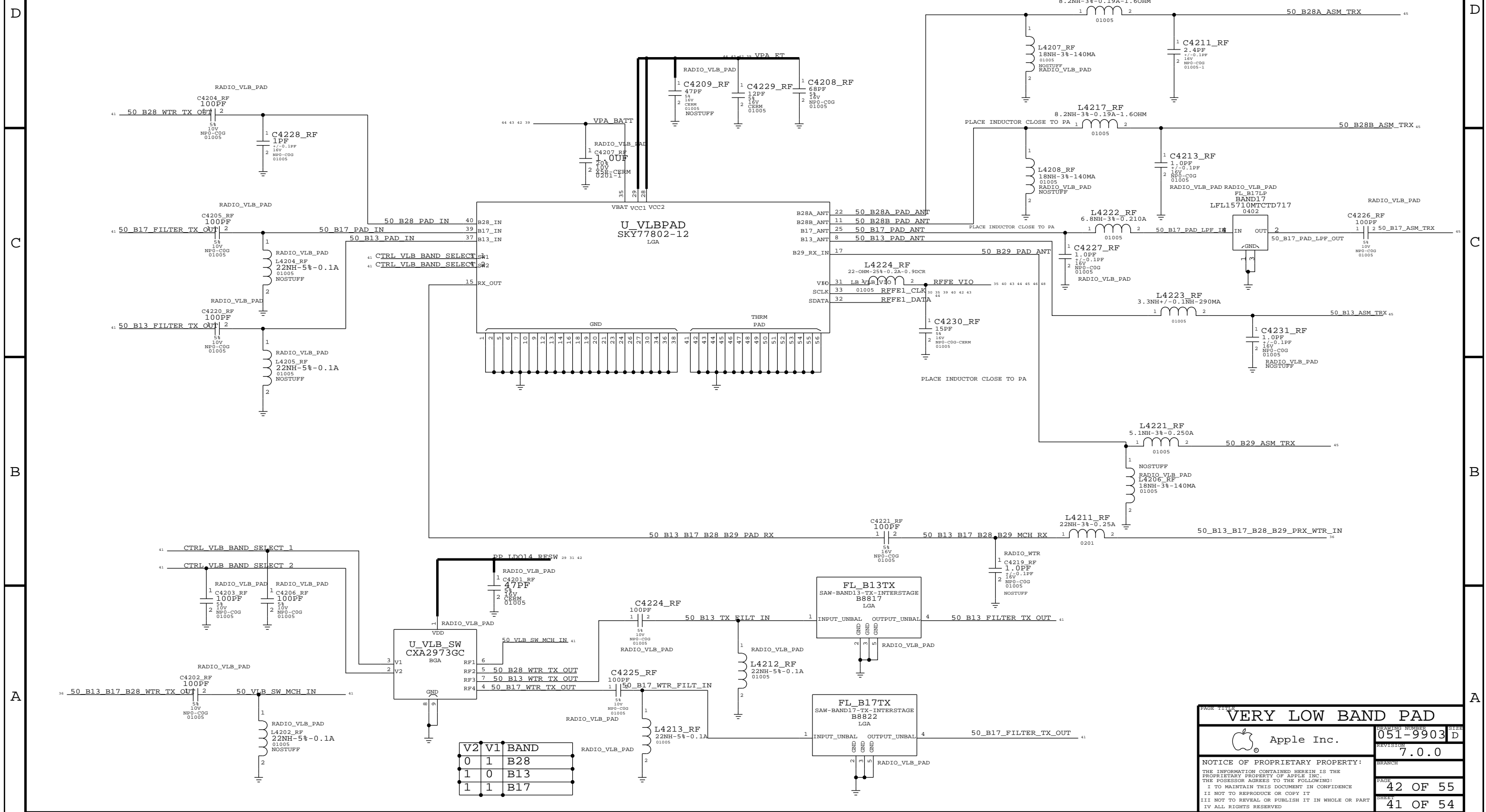


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VERY LOW BAND PAD (B13, B17, B28)

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C1332
R1300
L4215_RF
U1304



V2	V1	BAND
0	1	B28
1	0	B13
1	1	B17

VERY LOW BAND PAD

Apple Inc.

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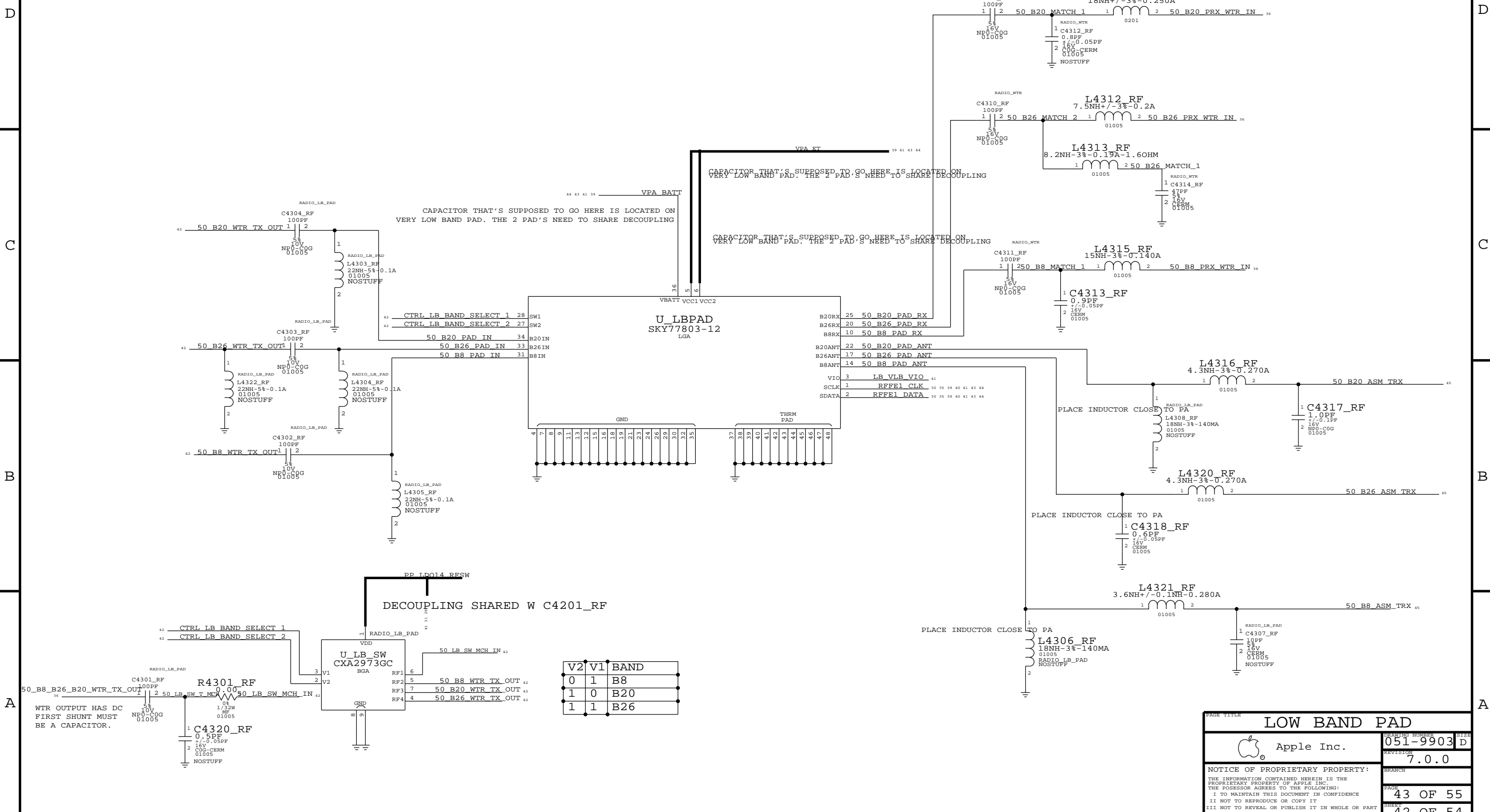
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LOW BAND PAD (B8, B26, B20)

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C4318_RF
R1400
L4322_RF
U1402



V2	V1	BAND
0	1	B8
1	0	B20
1	1	B26

LOW BAND PAD

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MID BAND PAD (B1, B25, B3, B4, B34, B39)

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C4426_RF
R1500
L4409_RF
U1501

D

C

B

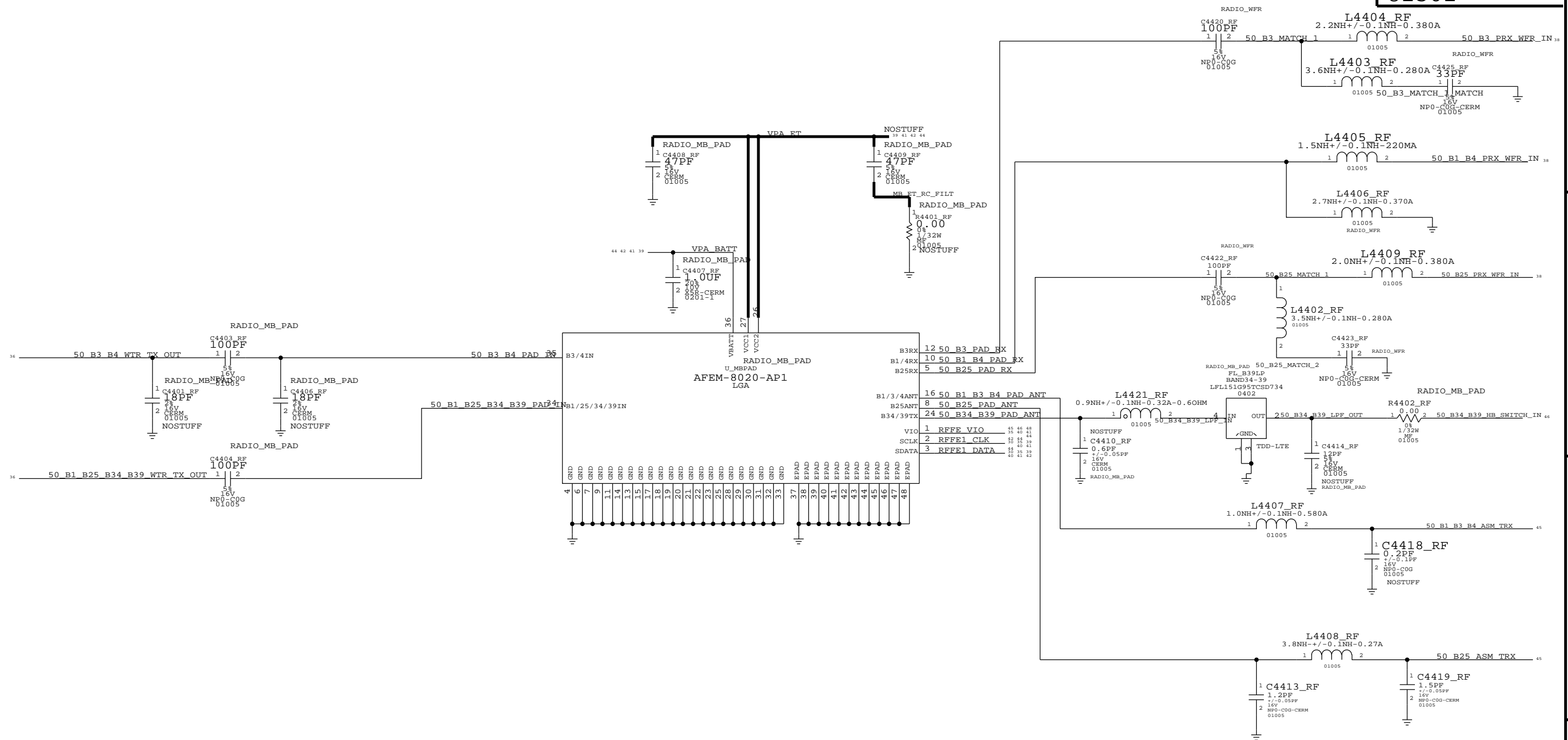
A

D

C

B

A

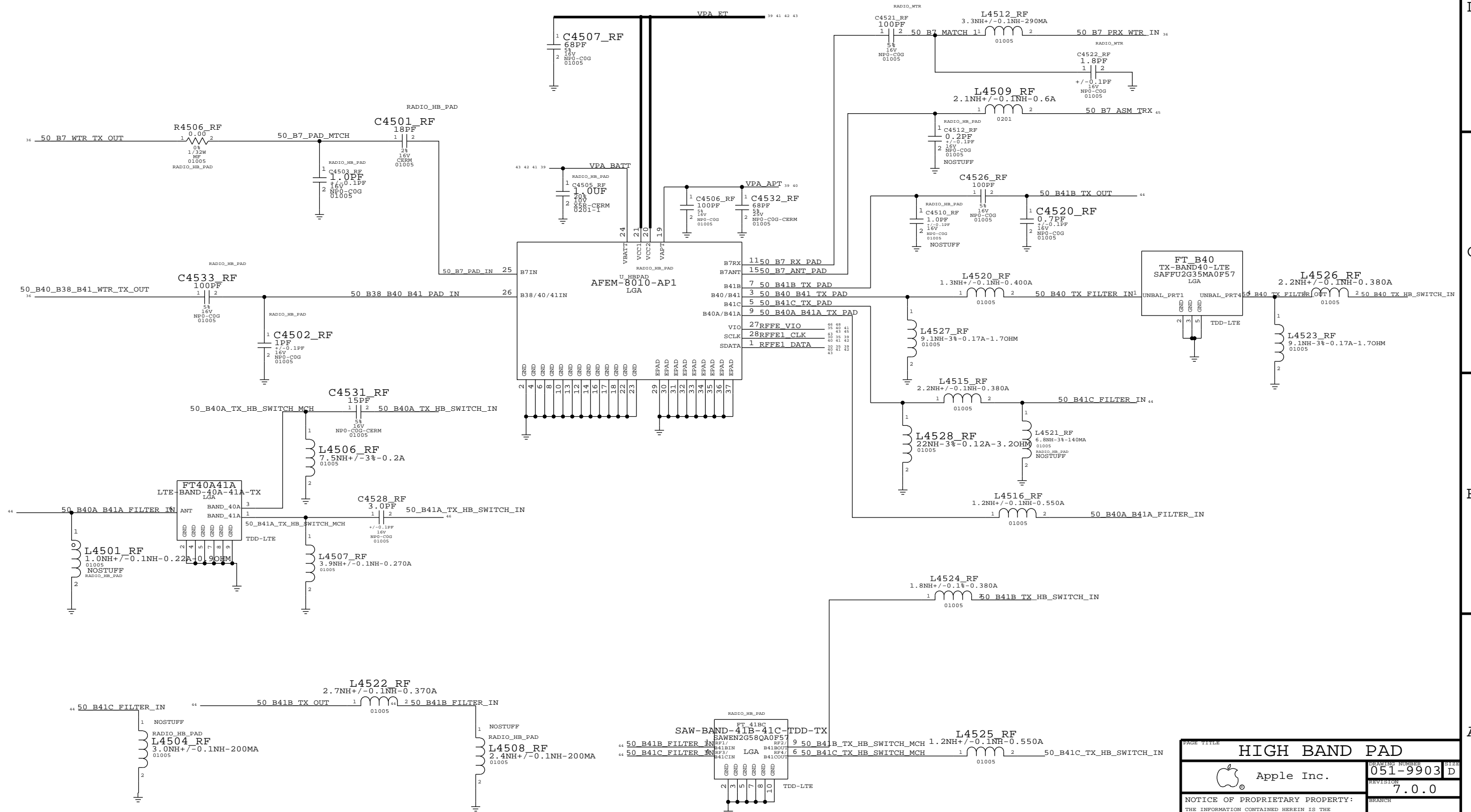


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HIGH BAND PAD (B7, B38, B40, B41, XGP)

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C4533_RF
R1600
L1616
U1601

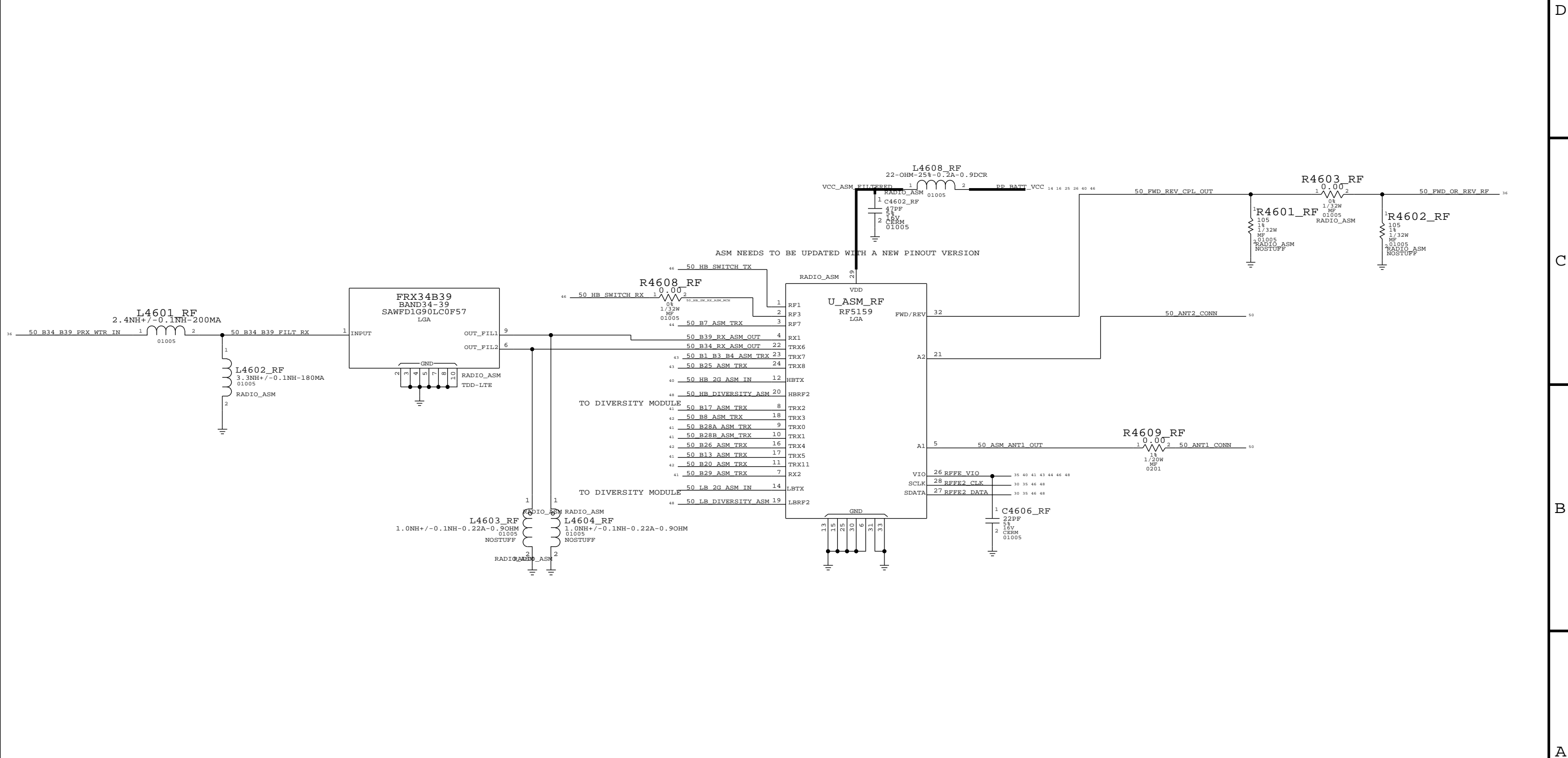


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ANTENNA SWITCH

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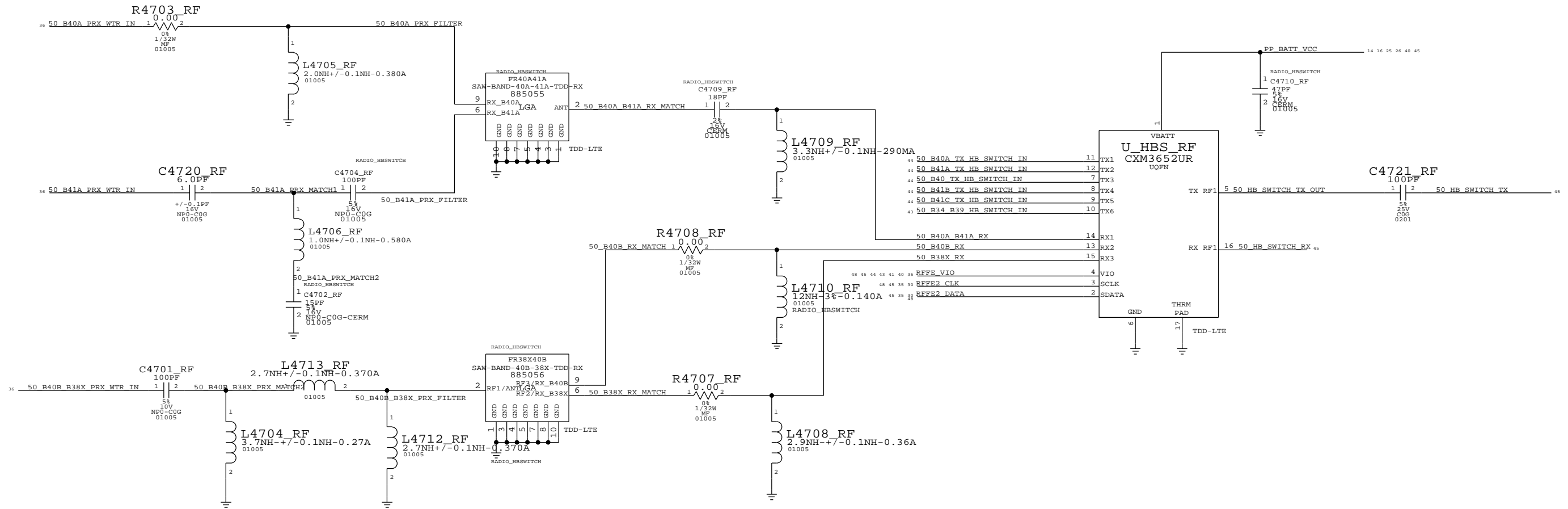
C1702
R1700
L4608_RF
U1702



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HIGH BAND SWITCH

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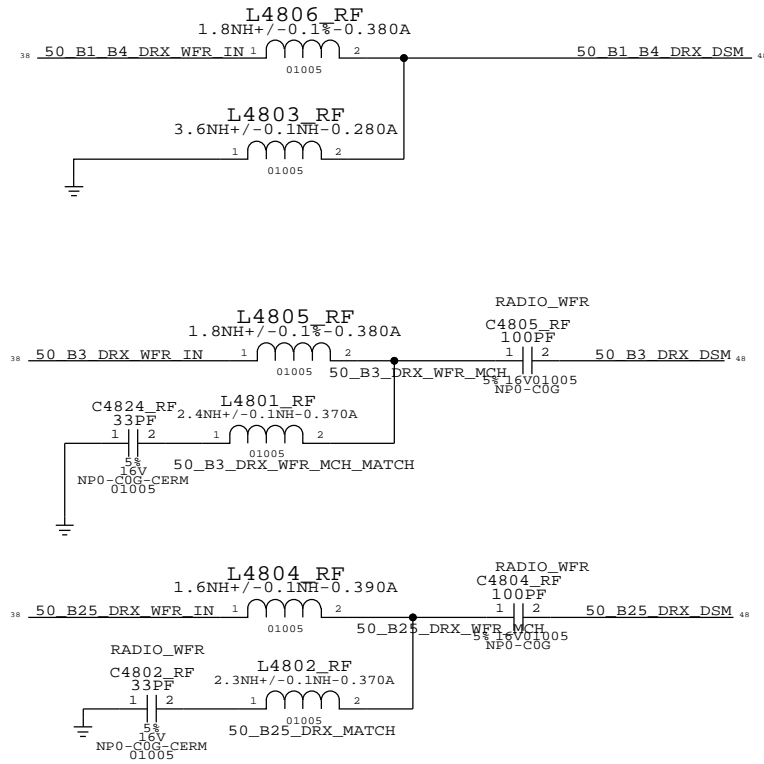
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HIGH BAND SWITCH		
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RX DIVERSITY (1)

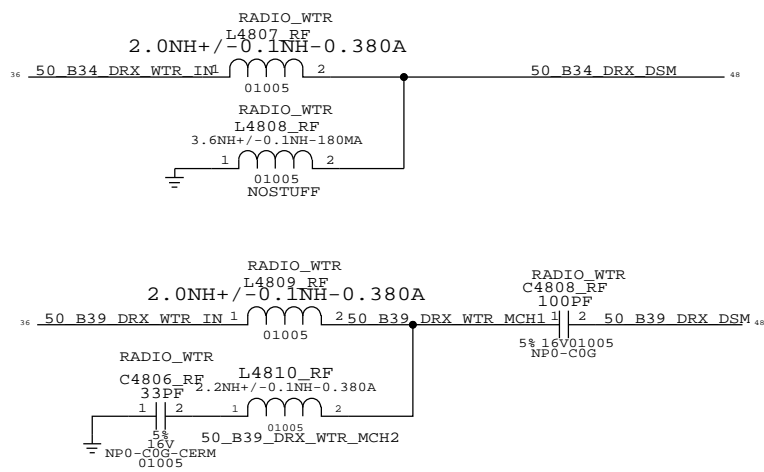
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C4826_RF
R1800
L1829
U1801

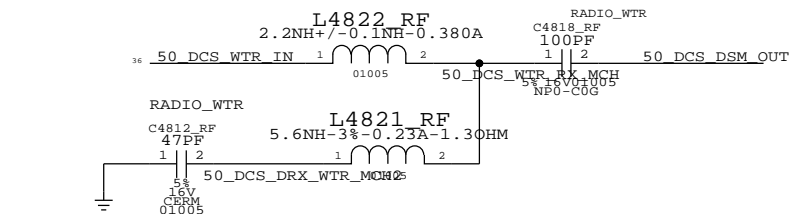
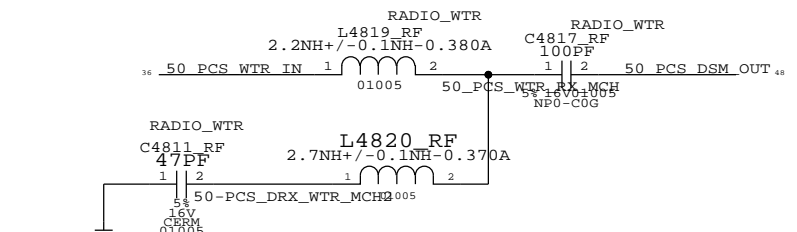
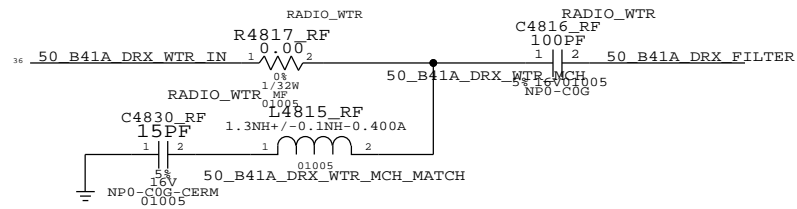
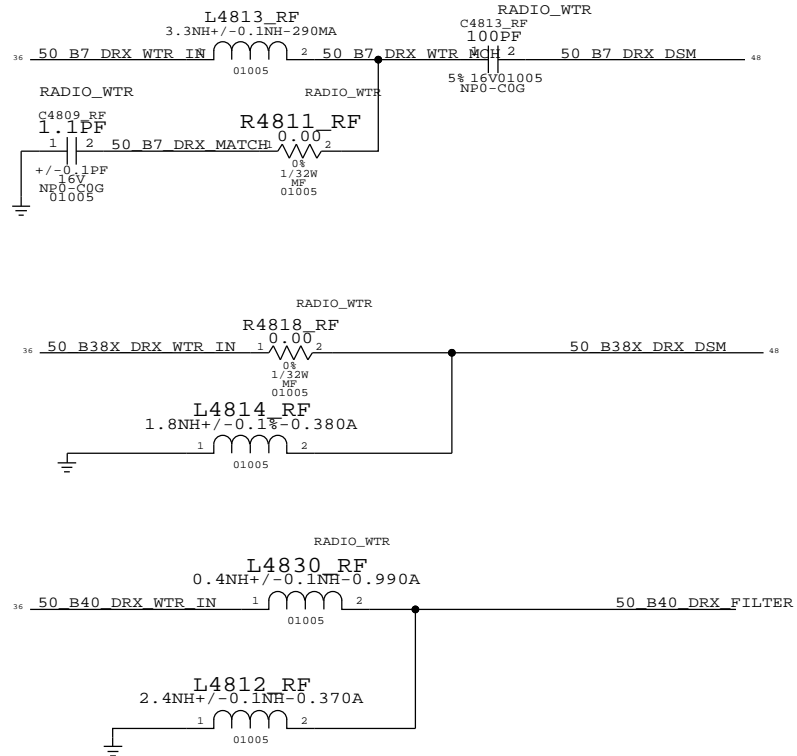
MIDBAND MIDBAND DIVERSITY - WFR



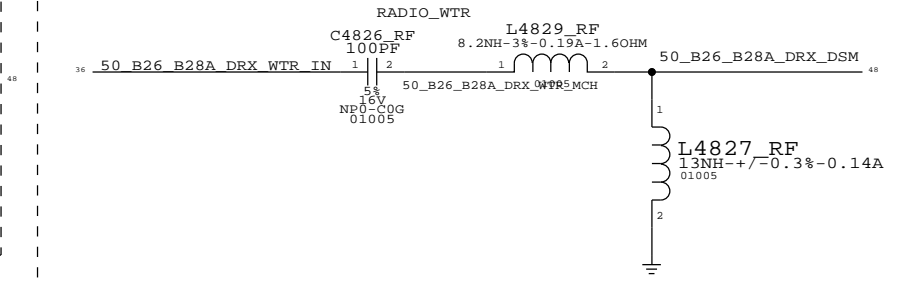
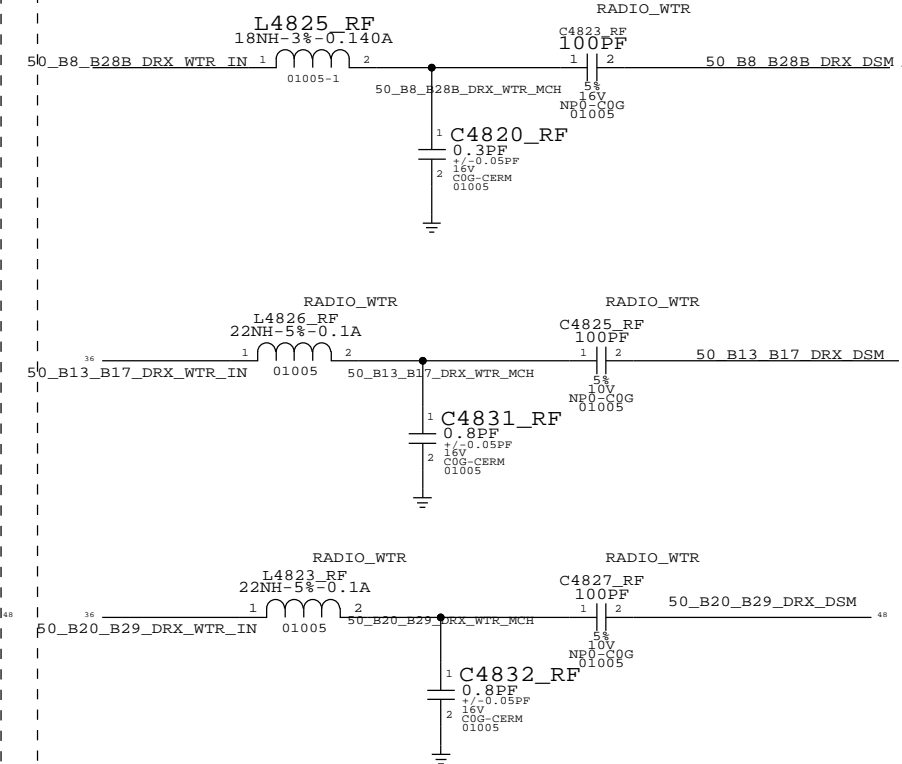
MIDBAND DIVERSITY - WTR



HIGHBAND DIVERSITY - WTR



LOWBAND DIVERSITY - WTR

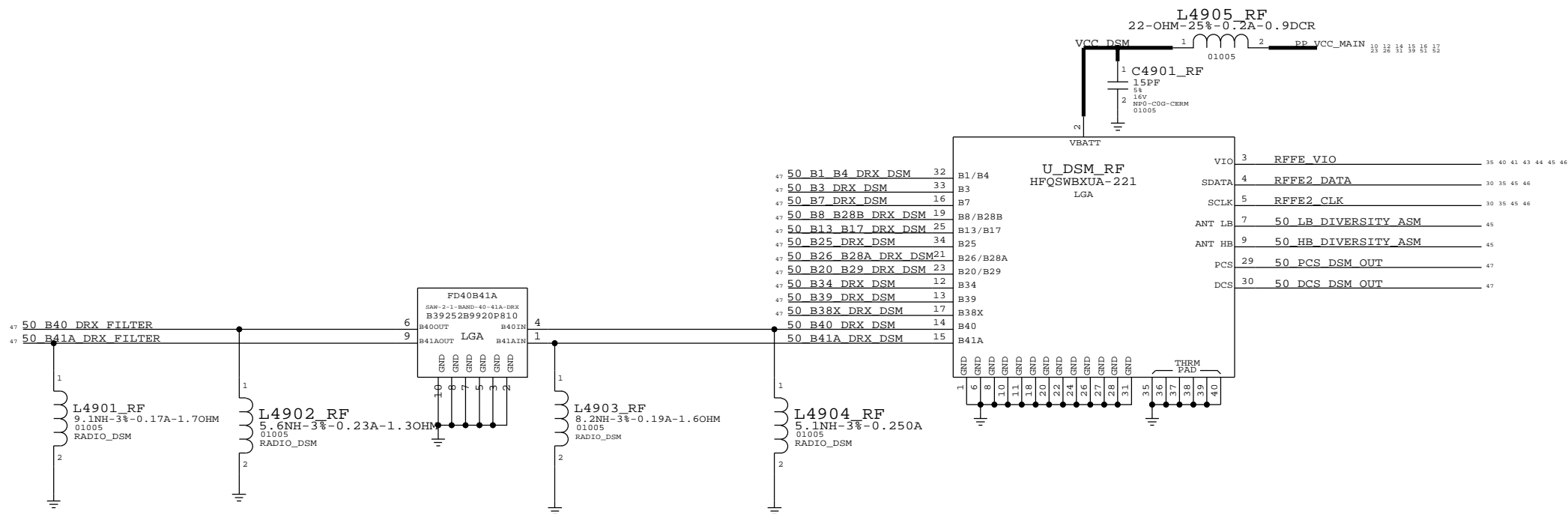


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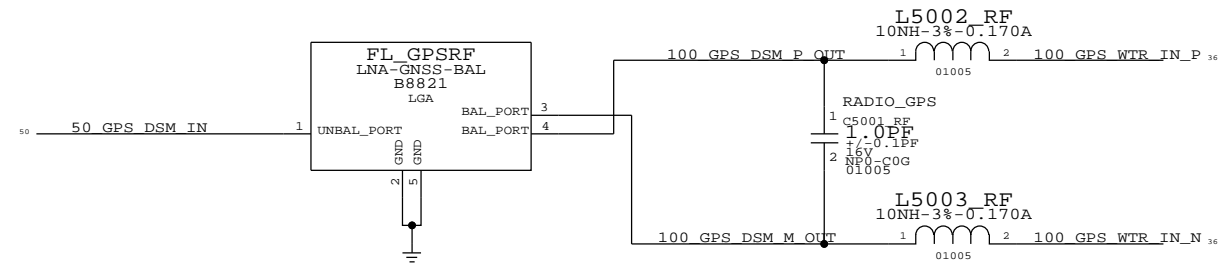



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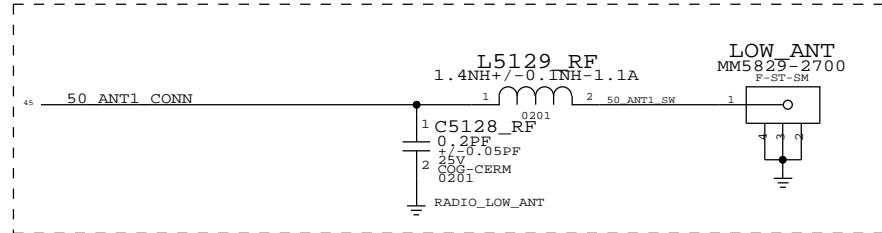
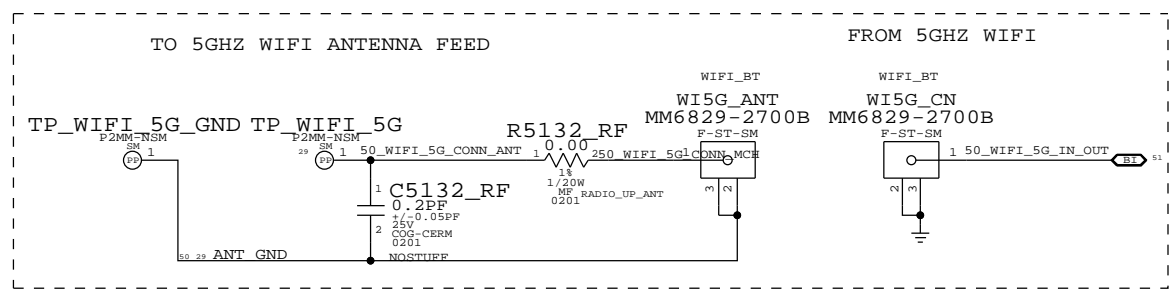
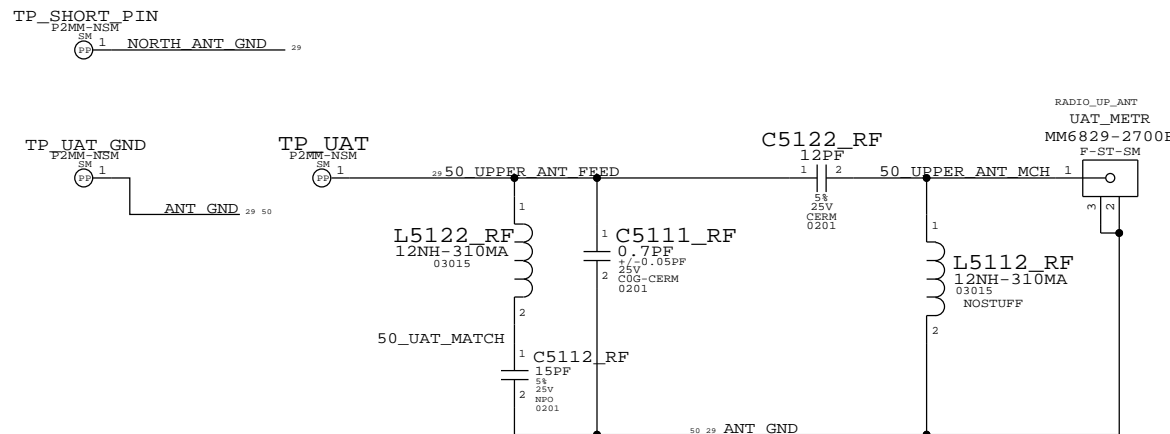
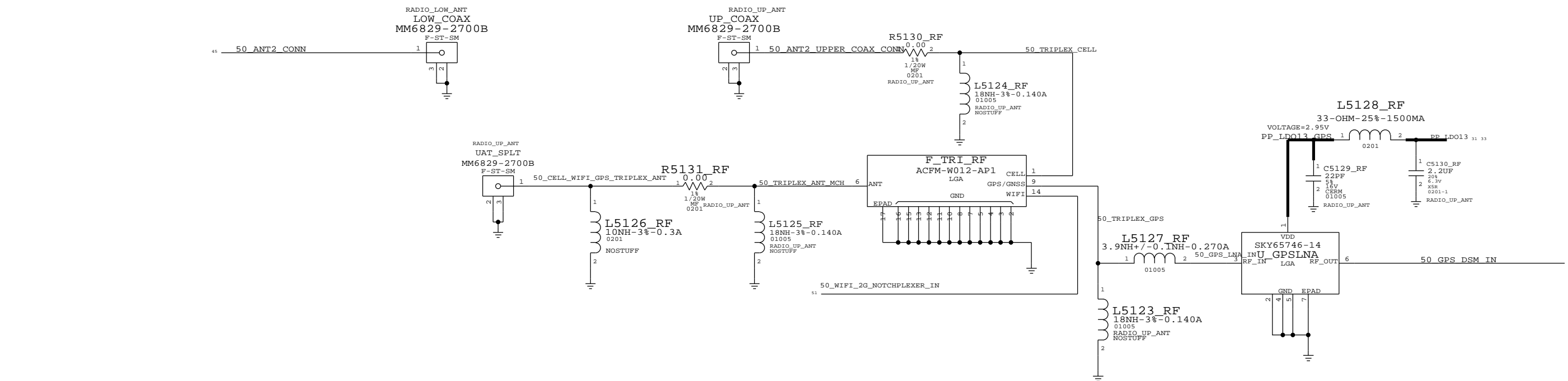


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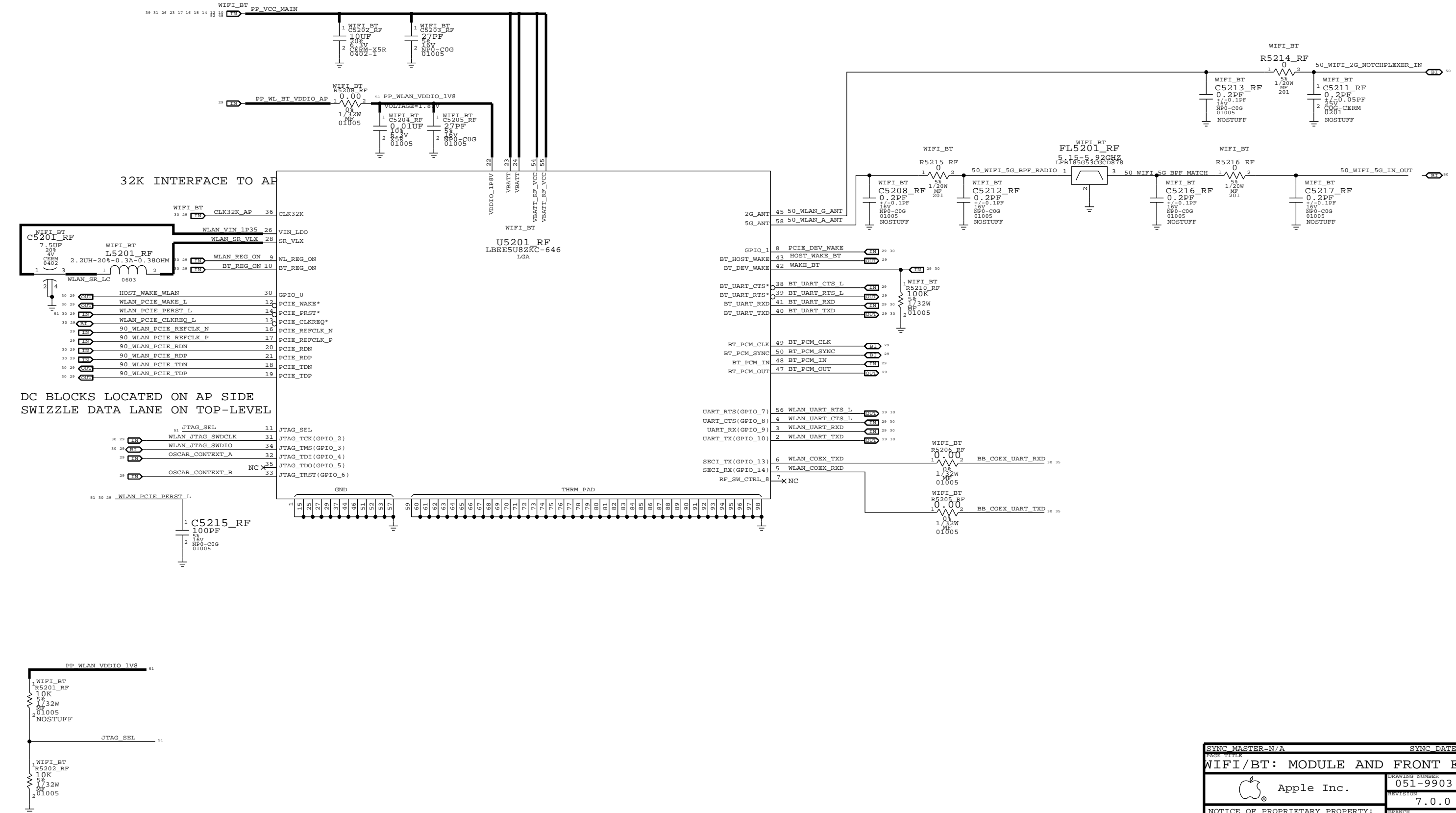
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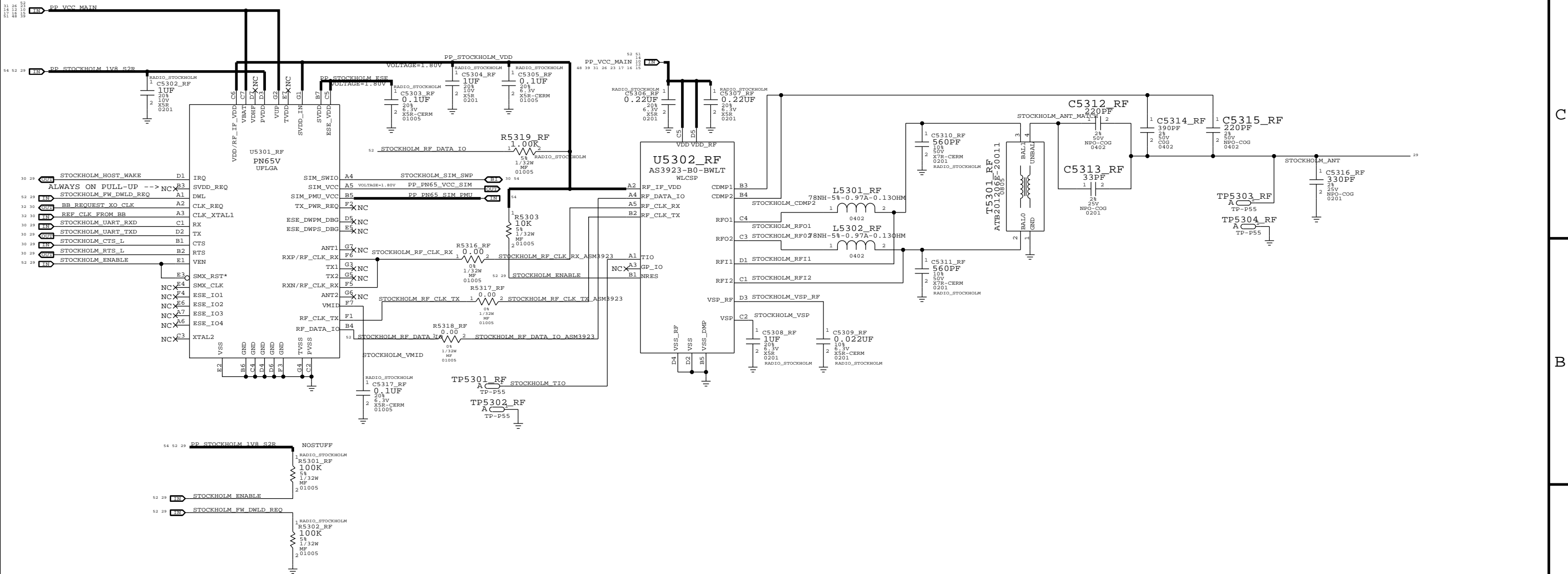
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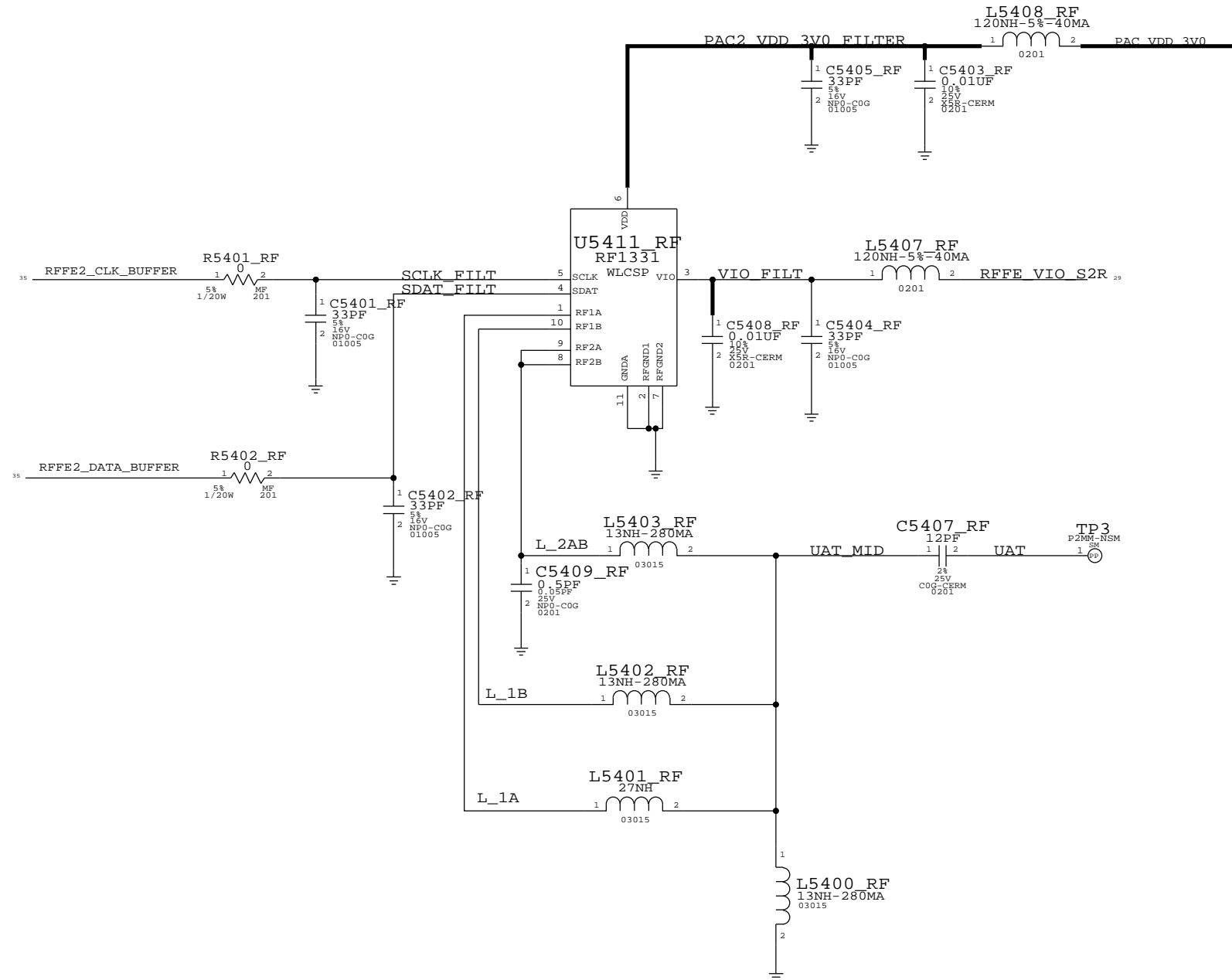
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Apple iPhone 6 Schematic Diagram

The BEST tips to use Apple iPhone:

(1) Discover How You Can Become an Expert with your iPhone!

"Weird" Trick to Master Your iPhone.



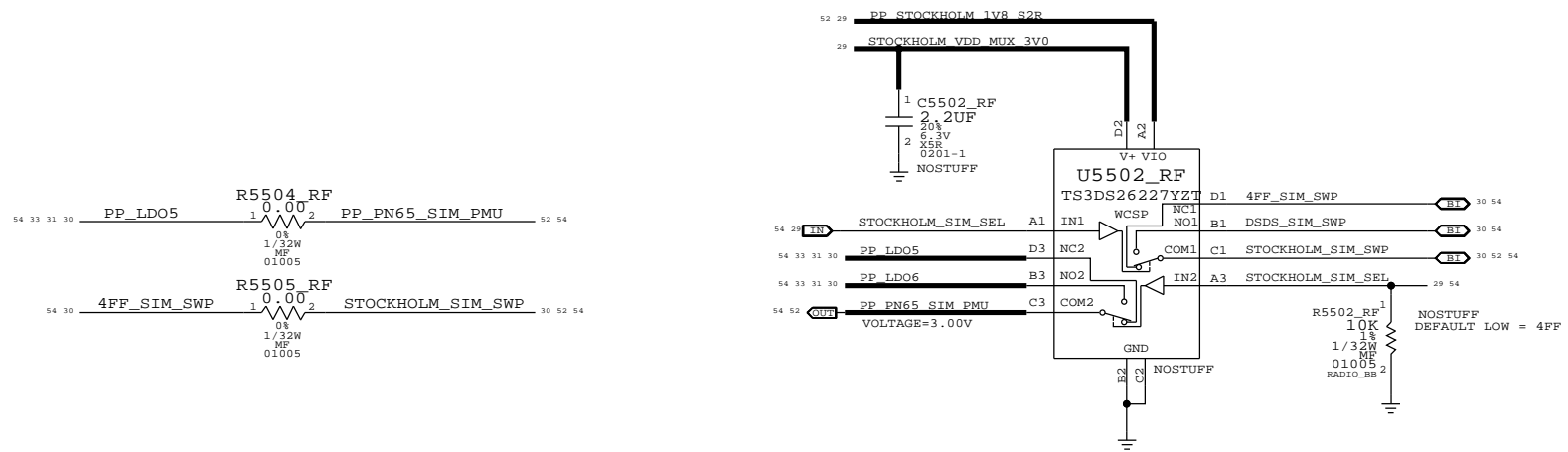
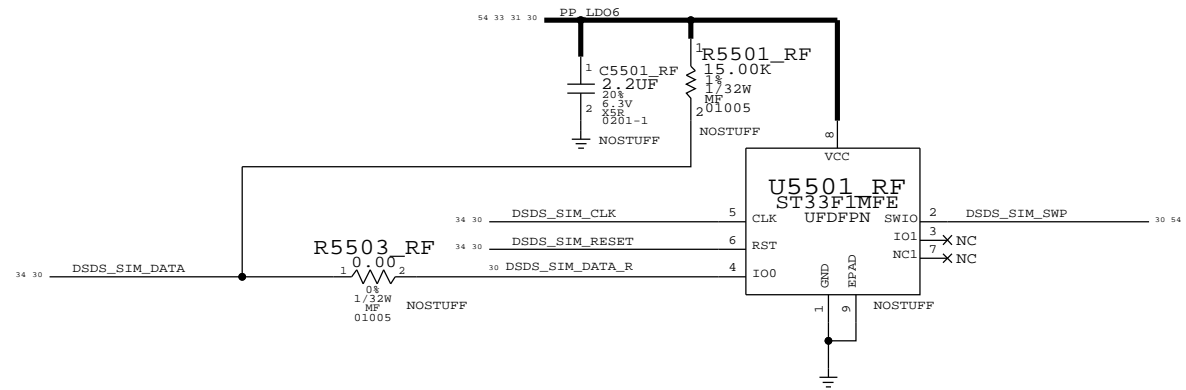
(2) iPhone Video Hero--Do you know how to make INCREDIBLE Videos with your iPhone?


-Find out why your iPhone is the BEST camera for Video Marketing you already own!



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