

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
11	0001447874	ENGINEERING RELEASED		2012-05-02

N41 SINGLE BRD EVT3

Mon Apr 30 16:28:35 2012

PDF PAGE	CSA PAGE	CONTENTS	SYNC MASTER	DATE
2	2	H5P JTAG, USB ,PLL	N/A	N/A
3	3	H5P GPIO & CONTROL	N/A	N/A
4	4	H5P IO POWER	N/A	N/A
5	5	H5P SOC/CPU/SRAM PWR	N/A	N/A
6	6	H5P W/ NAND	N/A	N/A
7	7	H5P VIDEO	N/A	N/A
8	8	BUTTON CONNECTOR	N/A	N/A
9	9	CS42L65 AUDIO CODEC (1/2)	N/A	N/A
10	10	CS42L65 AUDIO CODEC (2/2)	N/A	N/A
11	11	CG FLEX CONNECTOR	N/A	N/A
12	12	AGATHA PMU(1/2)	N/A	N/A
13	13	AGATHA PMU(2/2)	N/A	N/A
14	14	ACCEL, GYRO, COMPASS, SPK AMP	N/A	N/A
15	15	TRISTAR	N/A	N/A
16	16	DOCK CONNECTOR	N/A	N/A
17	17	GRAPE & CONNECTOR	N/A	N/A
18	18	LCM CONNECTOR	N/A	N/A
19	19	STROBE & NEGATIVE RAIL	N/A	N/A
20	20	CAM0 CONNECTOR	N/A	N/A
21	21	BATTERY & RF INT.	N/A	N/A
22	22	TEST POINTS	N/A	N/A

N41 BOM CALLOUTS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-9113	1	N41 SINGLE_BRD SCHEMATIC	SCH	Y	?
820-3141	1	N41 SINGLE_BRD PCB	PCB	Y	?
825-6383	1	LABEL FOR N41 639-3259	EEEE_DWJG	Y	EEEE_16G
825-6383	1	LABEL FOR N41 639-3420	EEEE_DY6Q	Y	EEEE_32G
825-6383	1	LABEL FOR N41 639-3421	EEEE_DY6R	Y	EEEE_64G
825-6383	1	LABEL FOR N42 639-2456	EEEE_DNVD	Y	EEEE_16G_N42
825-6383	1	LABEL FOR N41 639-3858	EEEE_F322	Y	EEEE_32G_N42
825-6383	1	LABEL FOR N41 639-3859	EEEE_F321	Y	EEEE_64G_N42

N41 = BAND 17 COMP
 N42 = BAND 13 COMP

NAND OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0871	1	NAND, 20NM, 16GX8, MLC, PPN1.5	U4	?	NAND_16G
335S0872	1	NAND, 20NM, 32GX8, MLC, PPN1.5	U4	?	NAND_32G
335S0873	1	NAND, 20NM, 64GX8, MLC, PPN1.5	U4	?	NAND_64G

RADIO_MLB TDMA CAP OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S0711	3	10UF 0402 6.3V RANDOM	C235_RF, C236_RF, C237_RF	Y	?
138S0711	2	10UF 0402 6.3V RANDOM	C1201_RF, C1801_RF	Y	?

INDUCTOR 607-XXXX SUBBOM GEN

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1547	4	IND, PWR, 1.5UH, 1.95A, 111MOHM, 2520	L10, L50, L14, L54	Y	CPU0_1_TDK_SUBBOM
152S1696	3	IND, PWR, 2.2UH, 1.45A, 138MOHM, 2520	L11, L12, L13	Y	SOC_CYNTEC_SUBBOM
152S1695	4	IND, PWR, 1.5UH, 1.95A, 111MOHM, 2520	L10, L50, L14, L54	Y	CPU0_1_CYNTEC_SUBBOM
152S1432	3	IND, PWR, 2.2UH, 1.45A, 125MOHM, 2520	L11, L12, L13	Y	SOC_TDK_SUBBOM

INDUCTOR SUBBOM ADDITION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
607-9979	1	CPU0_1, PWR IND SUBBOM	CPU_IND	Y	?
607-9980	1	SOC, PWR IND SUBBOM	SOC_IND	Y	?

ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
138S0648	138S0652	?	?	4.7UF CERM 0402 6.3V
138S0703	138S0648	?	?	4.7UF CERM 0402 6.3V
138S0702	138S0657	?	?	4.3UF CERM 0610 4V
138S0697	138S0695	?	?	1UF CERM 0204 4V
138S0746	138S0705	?	?	10UF CERM 0402 10V
138S0739	138S0706	?	?	1UF CERM 0201 10V
197S0369	197S0392	?	?	TXC 32KHZ XTAL ALT
197S0399	197S0392	?	?	NDK 32KHZ XTAL ALT
155S0667	155S0583	?	?	PANASONIC CMC
107S0146	107S0208	?	?	TDK 10K NTC ALT
152S1696	152S1432	?	L2	CYNTEC 2.2UH IND ALT
152S1604	152S1518	?	L16	TDK 2.2UH IND ALT
152S1602	152S1518	?	L16	CYNTEC 2.2UH IND ALT
152S1602	152S1604	?	L19	CYNTEC 2.2UH IND ALT
311S0591	311S0273	?	?	74LVCI932 OR GATE ALT
311S0548	311S0398	?	?	74AUP1008 AND GATE ALT
311S0560	311S0515	?	?	74LV2G07 BUFFER ALT
339S0177	339S0176	?	?	H5P ALT
339S0178	339S0176	?	?	H5P ALT
155S0773	155S0453	?	?	TAIYO ALT FERRITE

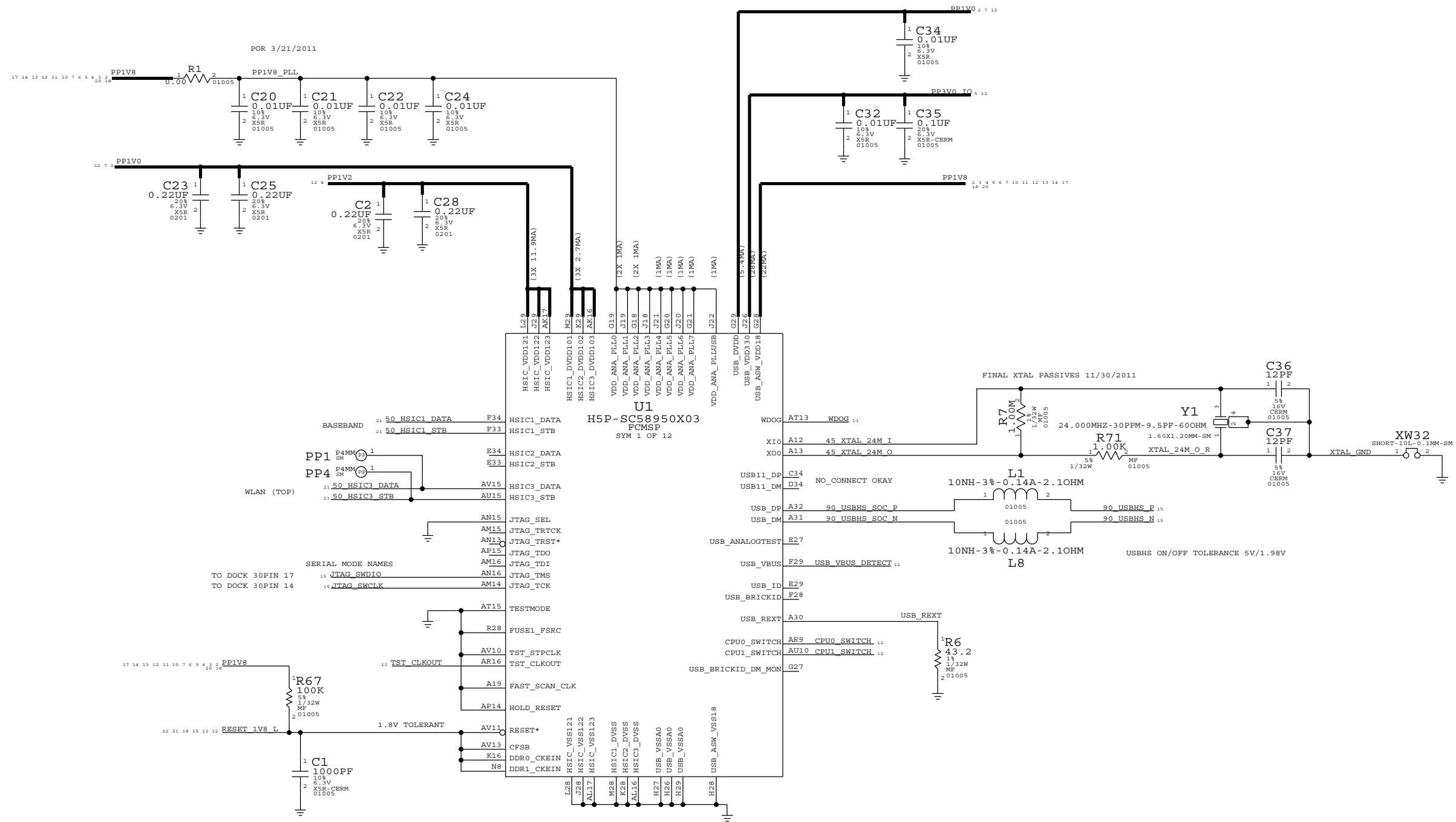
PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0878	335S0871	NAND_16G	U4	TOSHIBA 16G
335S0881	335S0871	NAND_16G	U4	SAMSUNG 16G
335S0900	335S0871	NAND_16G	U4	SANDISK 16G
335S0879	335S0872	NAND_32G	U4	TOSHIBA 32G
335S0882	335S0872	NAND_32G	U4	SAMSUNG 32G
335S0901	335S0872	NAND_32G	U4	SANDISK 32G
335S0880	335S0873	NAND_64G	U4	TOSHIBA 64G
335S0883	335S0873	NAND_64G	U4	SAMSUNG 64G
335S0902	335S0873	NAND_64G	U4	SANDISK 64G

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
607-9983	607-9979	?	CPU_IND	ALT CPU CYNTEC SUBBOM
607-9984	607-9980	?	SOC_IND	ALT SOC CYNTEC SUBBOM

SCH 051-9113
 BRD 820-3141
 MCO 056-4519
 BOM 639-3259 (16GB) BTR N41
 BOM 639-3420 (32GB) BST N41
 BOM 639-3421 (64GB) ULT N41
 BOM 639-2456 (16GB) BTR N42
 BOM 639-3858 (32GB) BST N42
 BOM 639-3839 (64GB) ULT N42

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0895	335S0874	?	U601_RF	WINBOND ALT
197S0437	197S0410	?	Y301_RF	KYROCHRA 19.2MHZ XTAL ALT
197S0409	197S0410	?	Y301_RF	RAKON 19.2MHZ XTAL ALT

DRAWING TITLE		SCHEM, MLB, N41	
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H5P JTAG, USB, PLL			
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BOARD_REV[3:0] = {EHCI_PORT3, EHCI_PORT_PWR2, EHCI_PORT_PWR1, EHCI_PORT_PWR0}

1111 DEV3
1110 PROTO 0, DEV4 & DEV5
1100 PROTO 1
1100 PROTO 2A TRISTAR / PROTO_2C LM3534
1010 PROTO 3, DEV7
1000 EVT1, DOE1(2/3/4/5/6/7/8/9
0111 EVT3, DOE16/11/15/20/21 <--- SELECTED

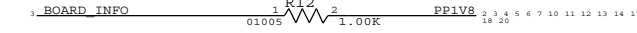
BOARD_ID[3:0] = {GPIO16, SPI0_MISO, SPI0_MOSI, SPI0_SCLK}

0000 N41 MLB <--- SELECTED
0001 N41 DEV
0010 N42 MLB <--- SELECTED W/ B3_13 BOM OPTION
0011 N42 DEV

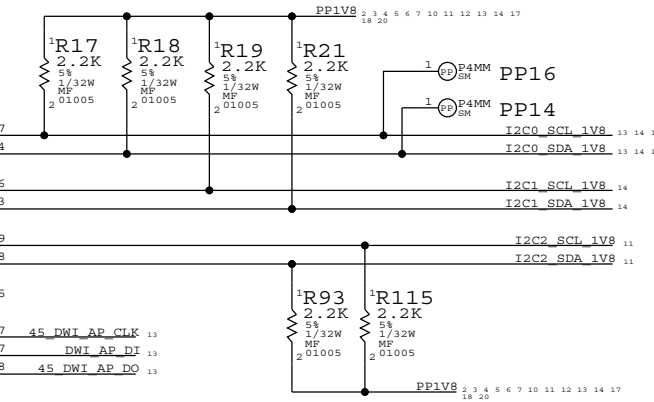
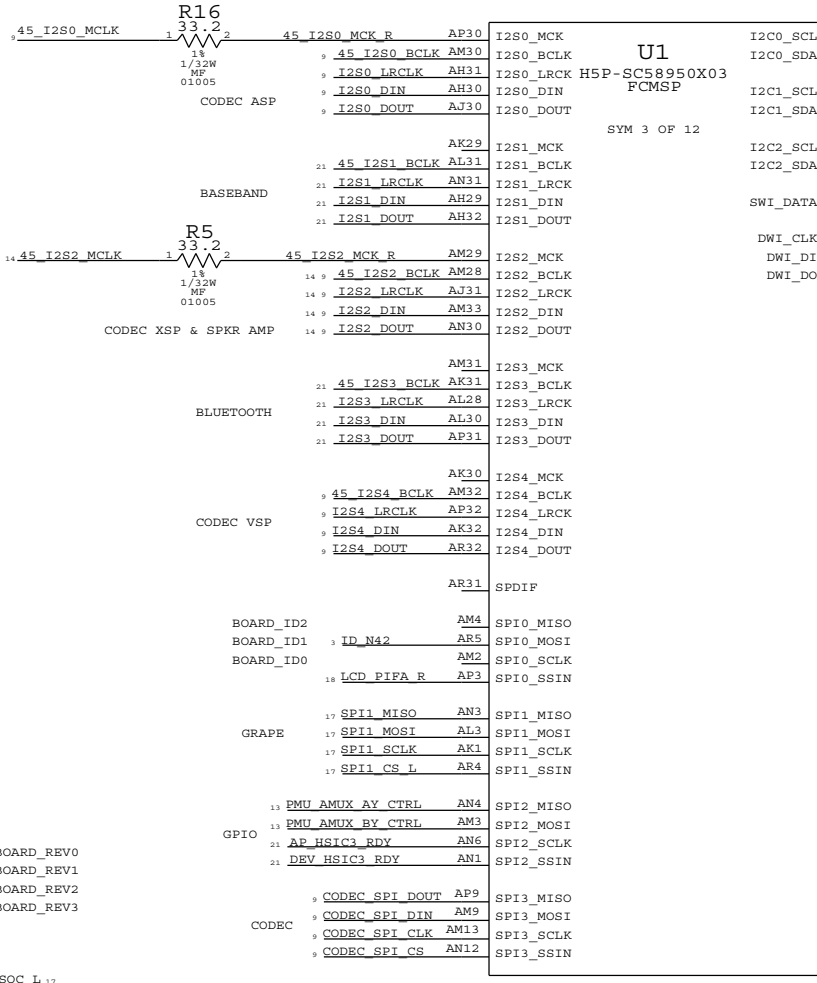
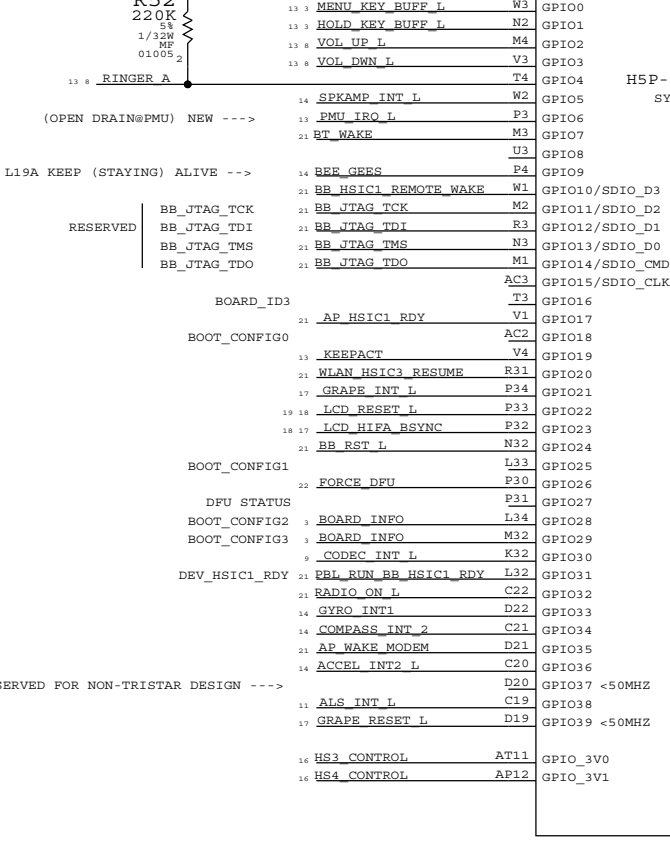
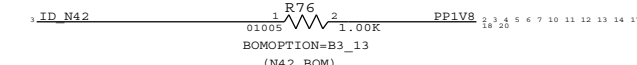
BOOT_CONFIG[3:0] = {GPIO29_CONFIG3, GPIO28_CONFIG2, GPIO25_CONFIG1, GPIO18_CONFIG0}

0000 SPI0
0001 SPI3
0010 SPI0 W/TEST
0011 SPI3 W/TEST
0100 FM10 2CS
0101 FM10 4CS
0110 FM10 4CS W/TEST
0111 RESERVED
1000 FM11 2 CS
1001 FM11 4 CS
1010 FM11 4CS W/TEST
1100 FM10/1 2/2 CS <--- SELECTED AT EVT3
1101 FM10/1 4/4 CS
1110 FM10/1 4/4 CS W/TEST
1111 RESERVED

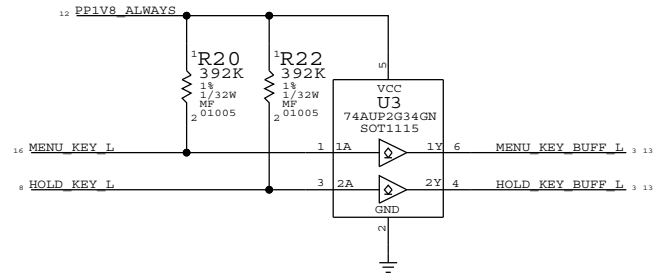
COMMON PULL UP FOR BOARD_REV, BOARD_ID AND BOOT_CONFIG PINS



R12 MUST WIN OVER 6X INTERNAL PULL-DOWNS THAT ARE ~100K

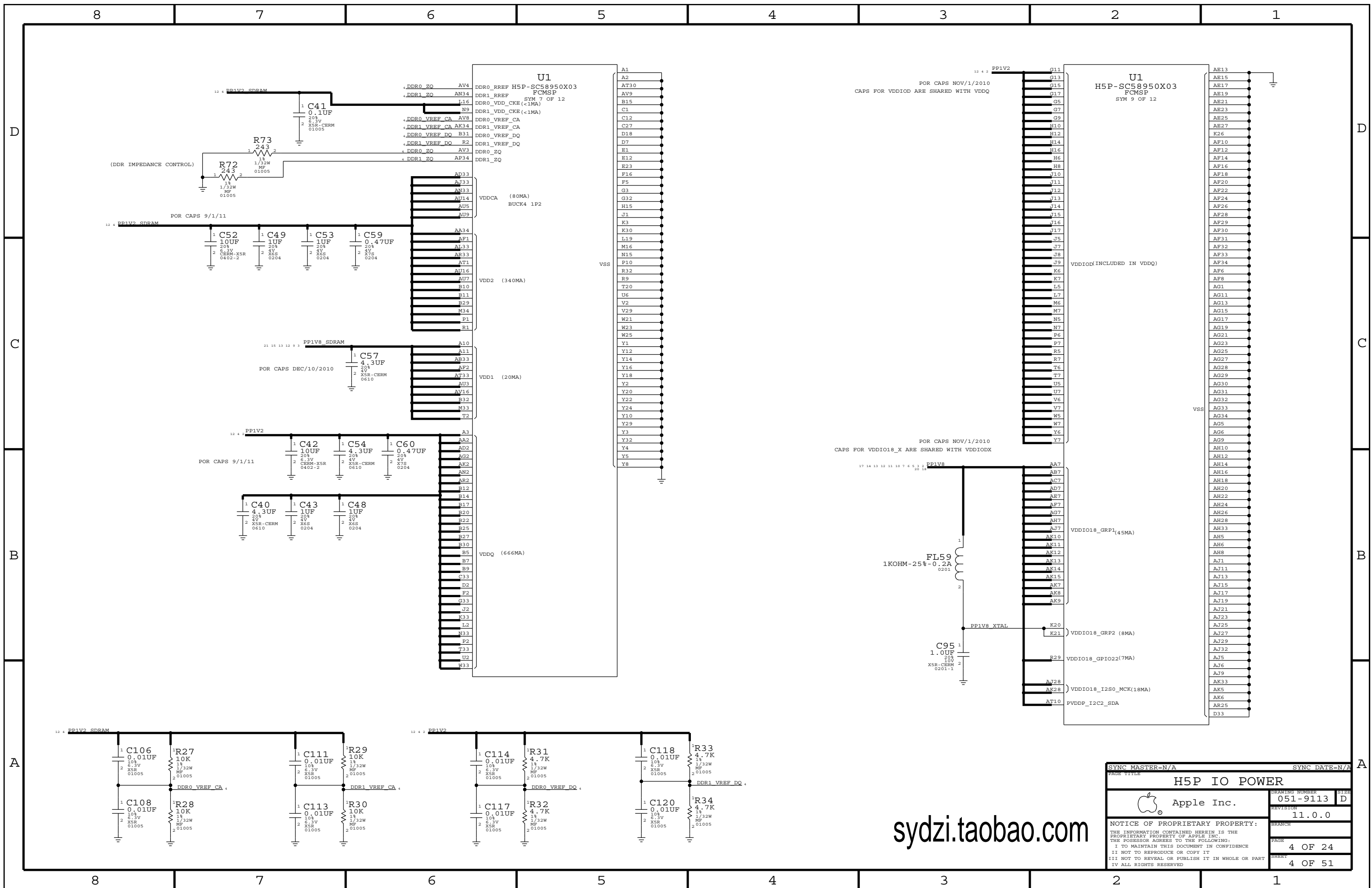


MENU & POWER / HOLD KEY



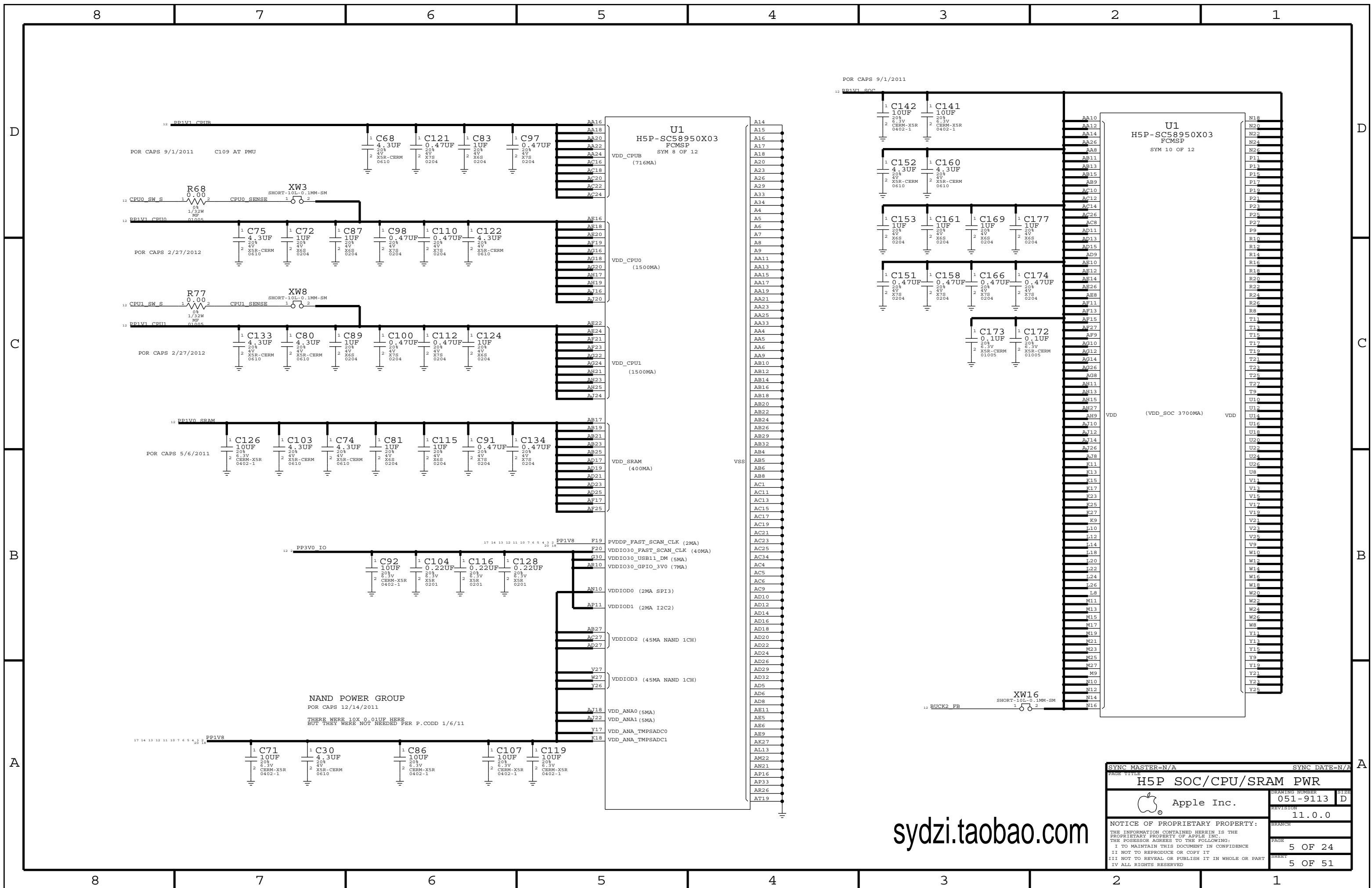
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H5P GPIO & CONTROL			
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H5P IO POWER			
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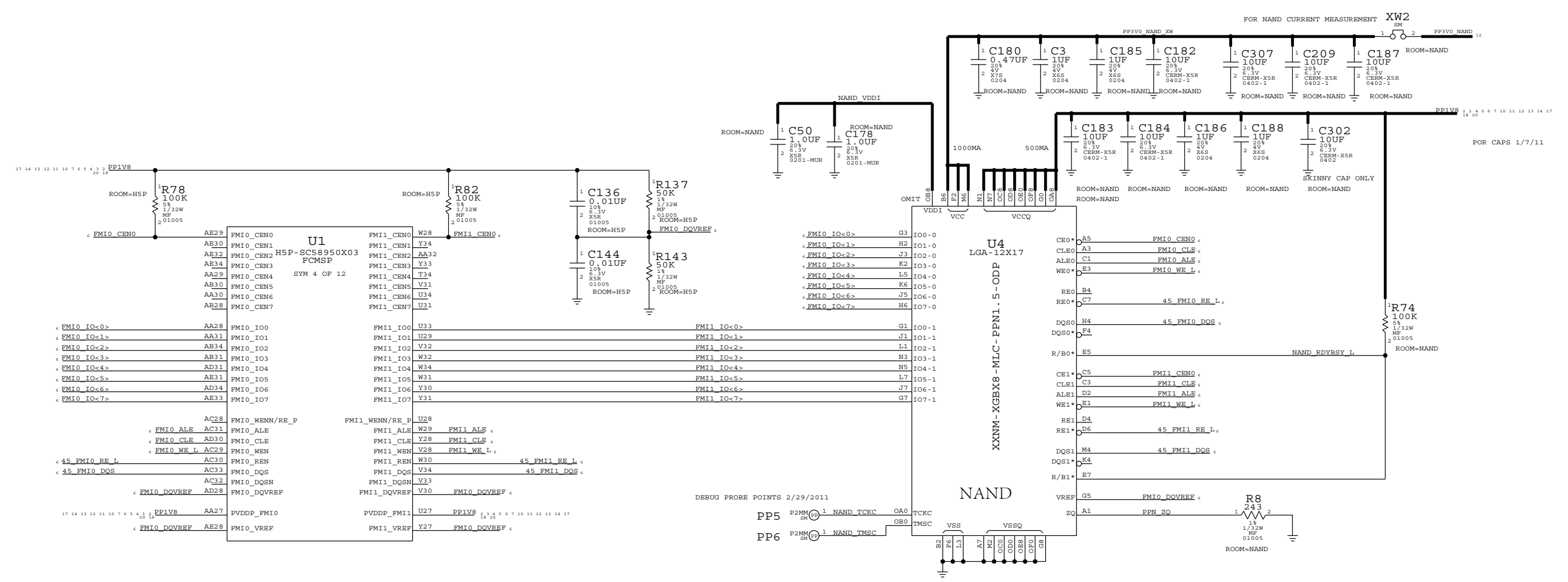


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H5P SOC/CPU/SRAM PWR			
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NAND

SUPPORT FOR PPN1.5 AND PPN1.0 W/ 1.8V IO ONLY



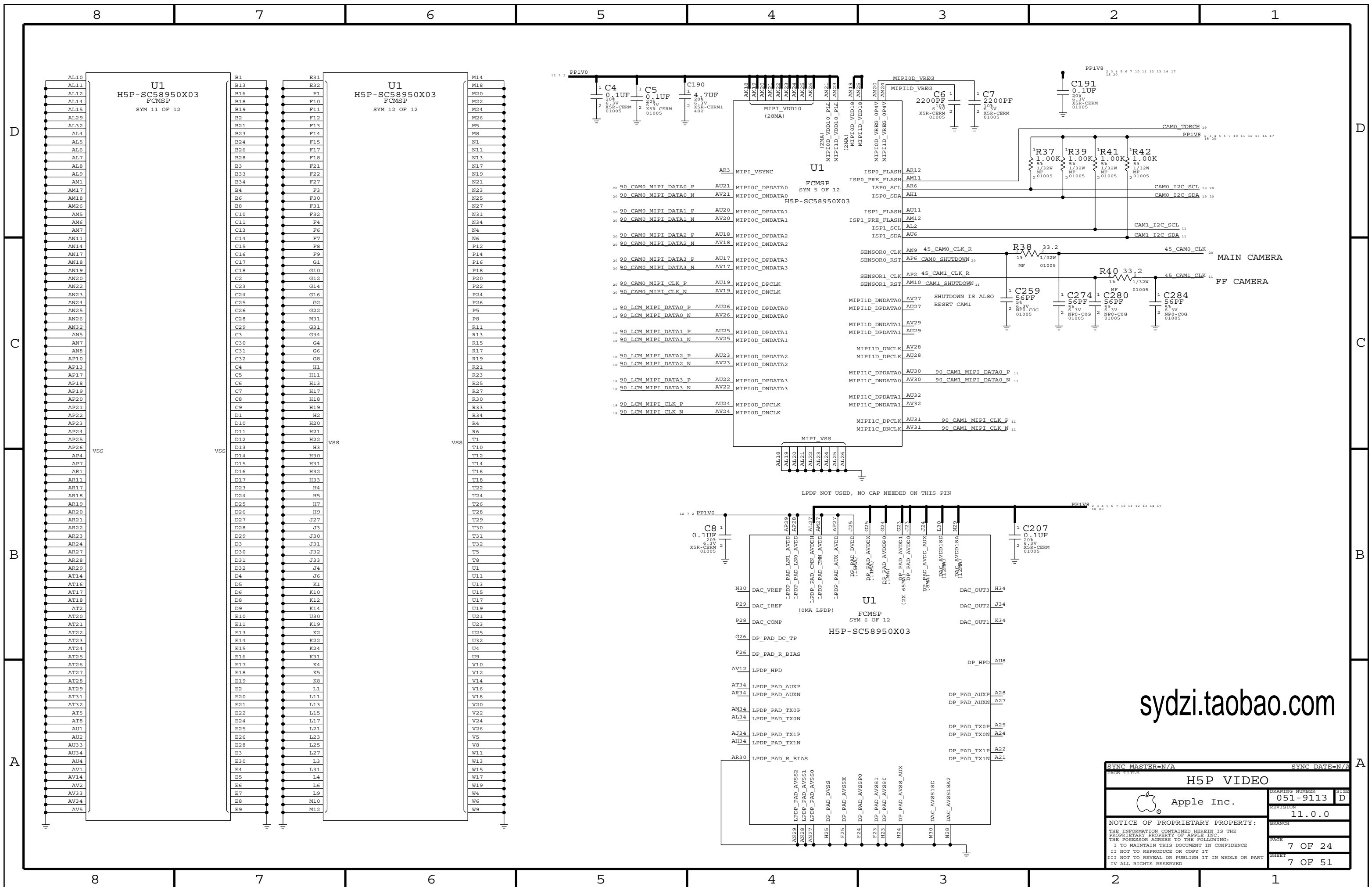
DEBUG PROBE POINTS 2/29/2011

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

- PP2 P4MM SH 1 FMI0 IO<0>
- PP3 P4MM SH 1 45_FMI0_RE_L
- PP10 P4MM SH 1 45_FMI0_DQS

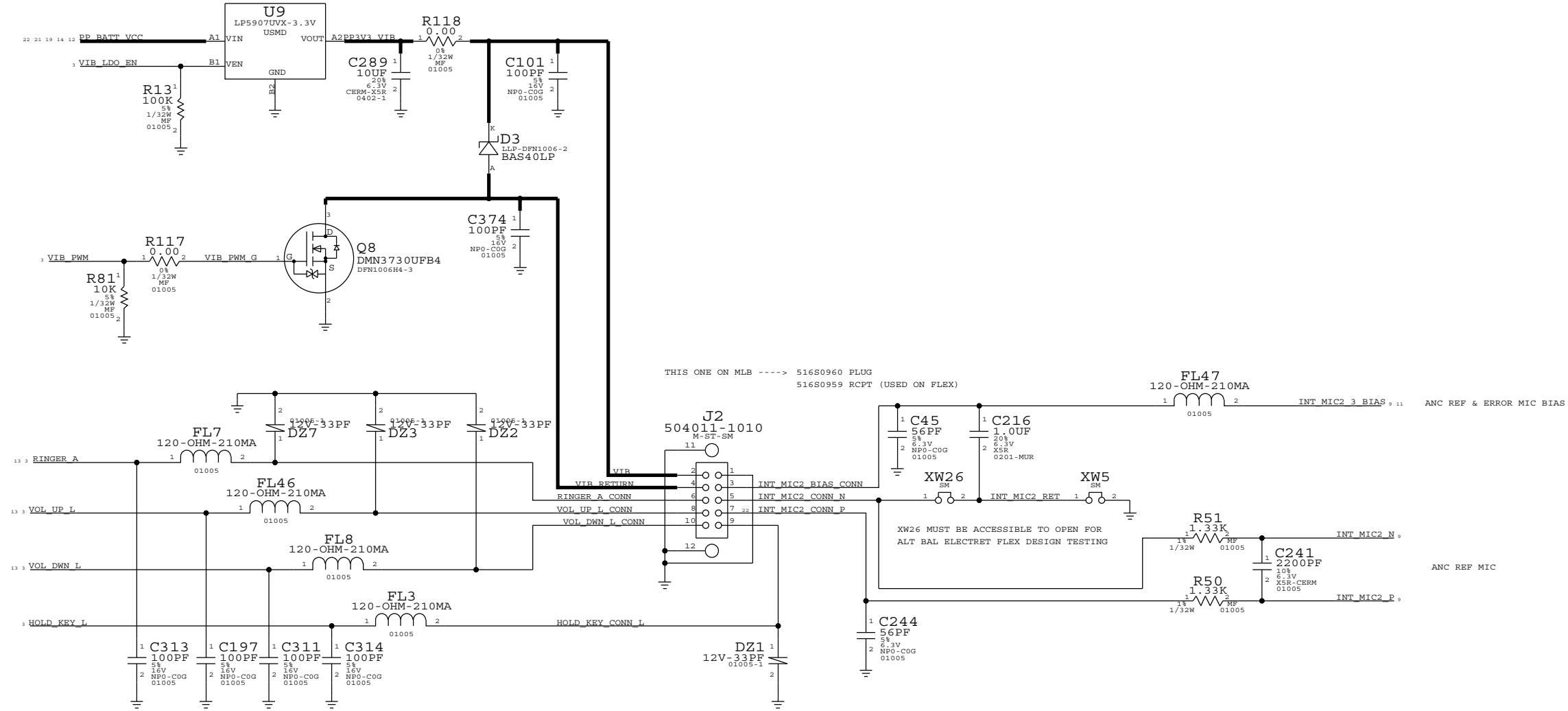
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H5P W/ NAND			
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SHARES INPUT CAPS WITH STROBE DRIVER

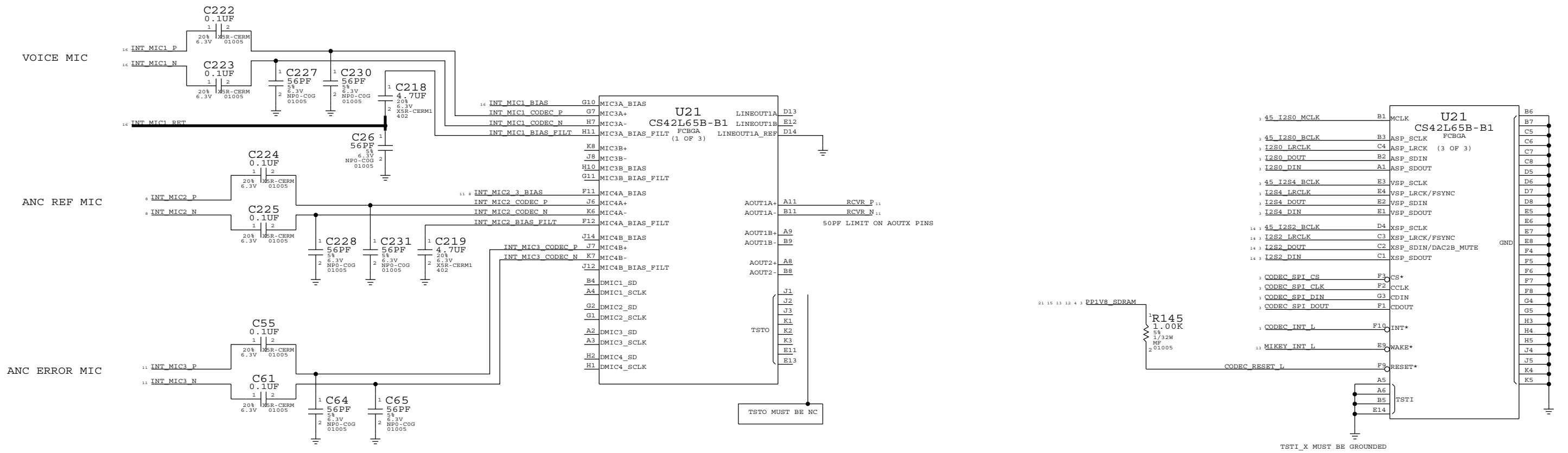


THIS ONE ON MLB ----> 516S0960 PLUG
 516S0959 RCPT (USED ON FLEX)

XW26 MUST BE ACCESSIBLE TO OPEN FOR
 ALT BAL ELECTRET FLEX DESIGN TESTING

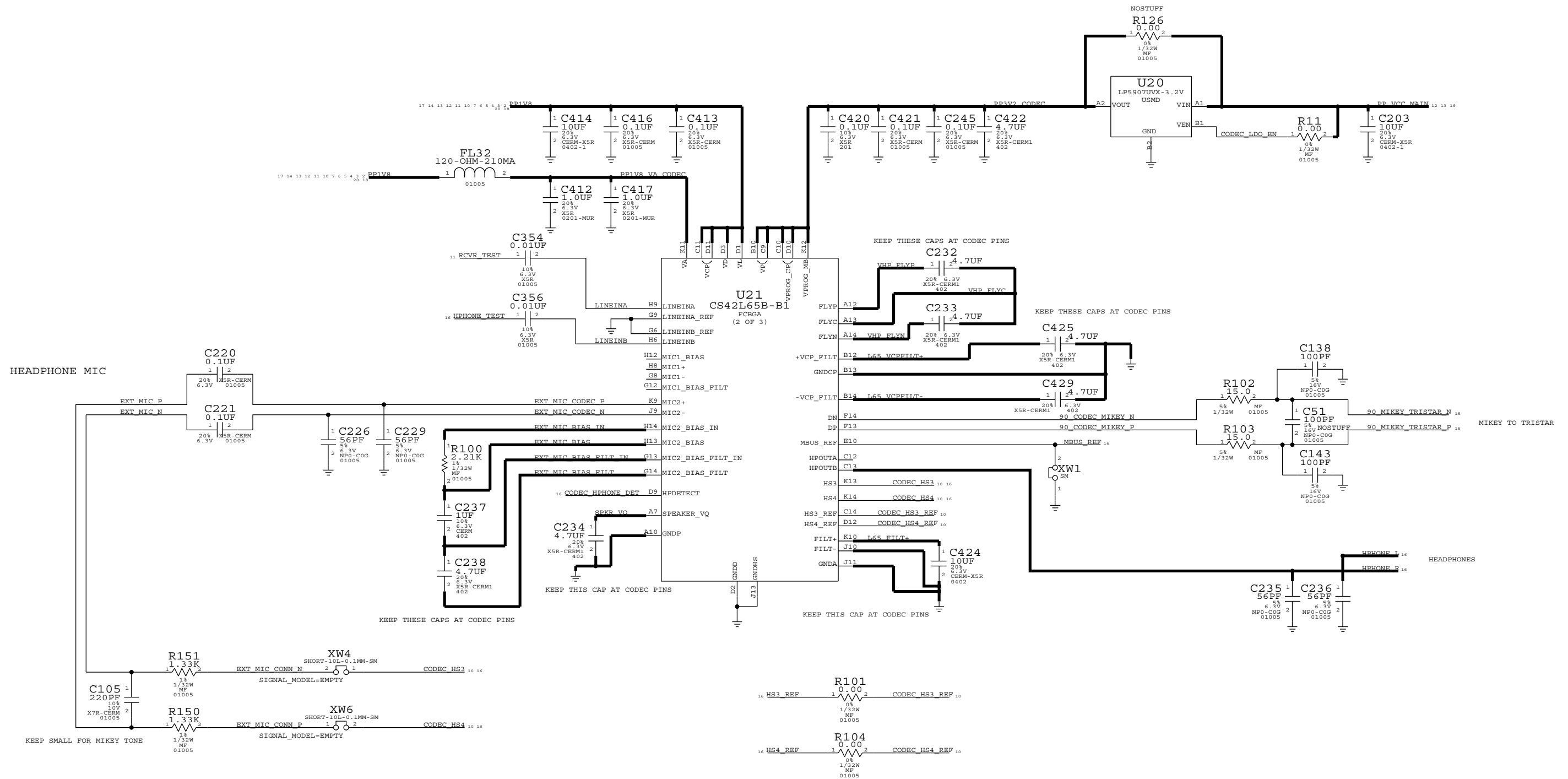
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BUTTON CONNECTOR			
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CS42L65 AUDIO CODEC

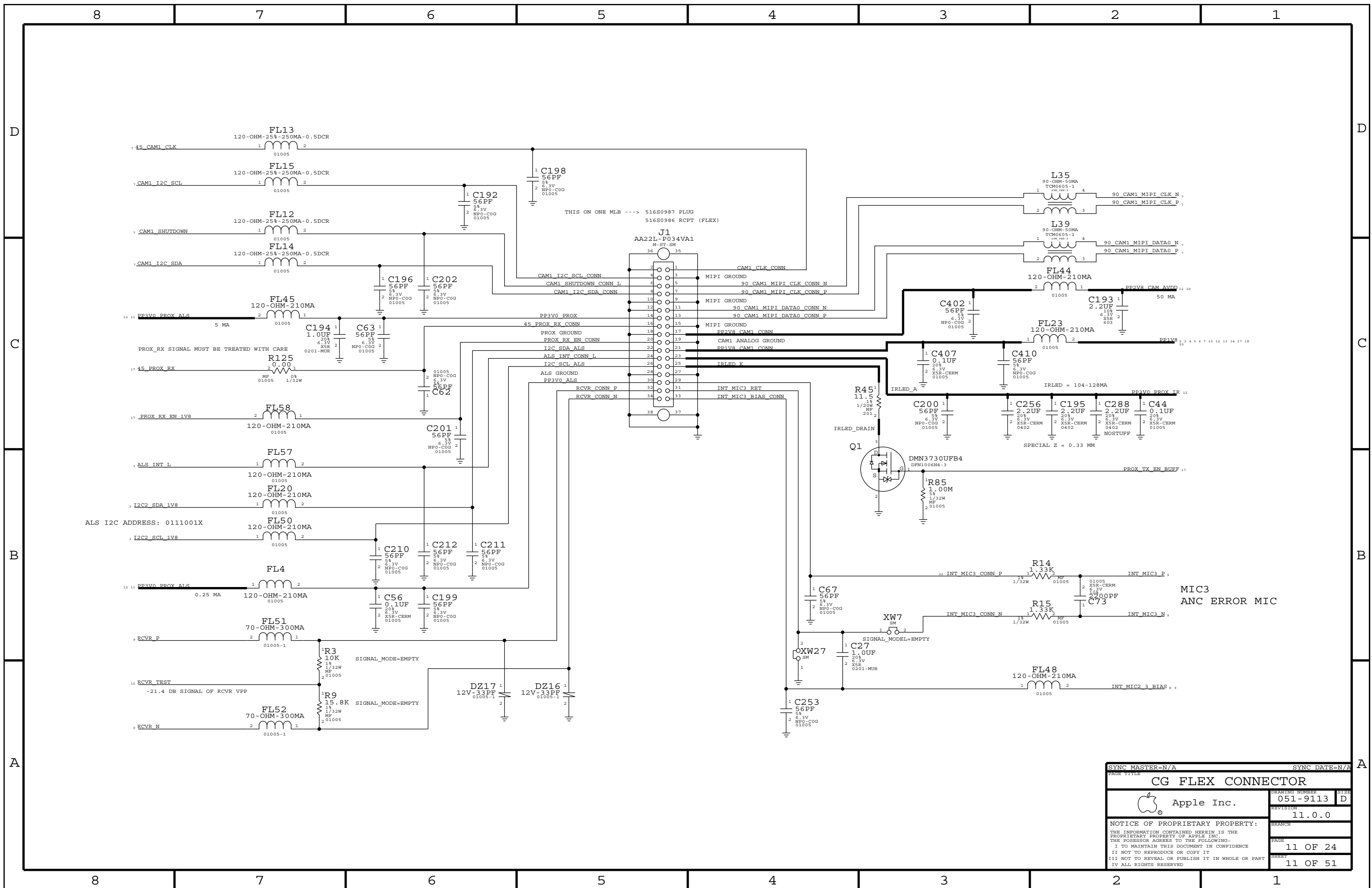


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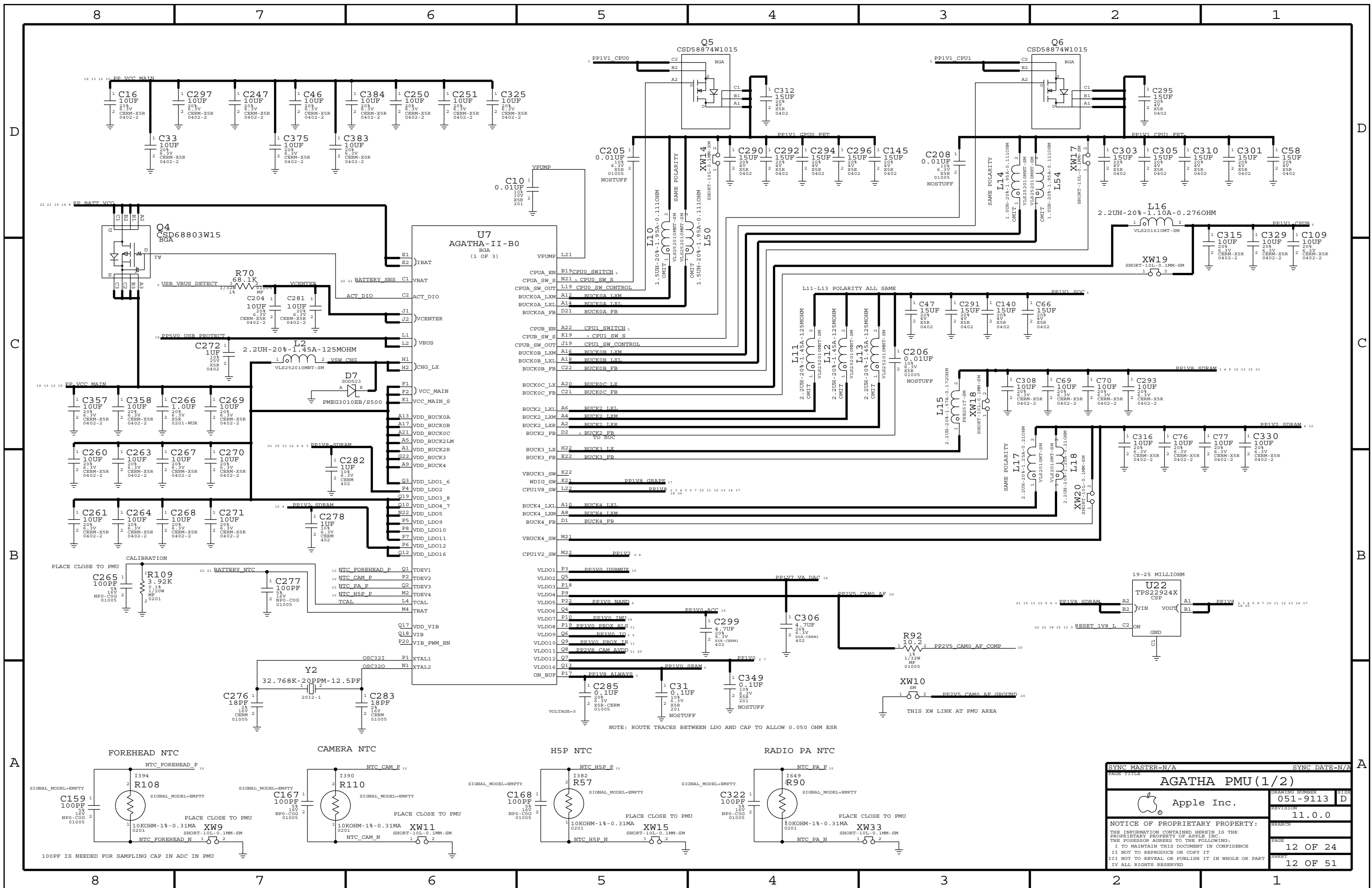
CS42L65 AUDIO CODEC



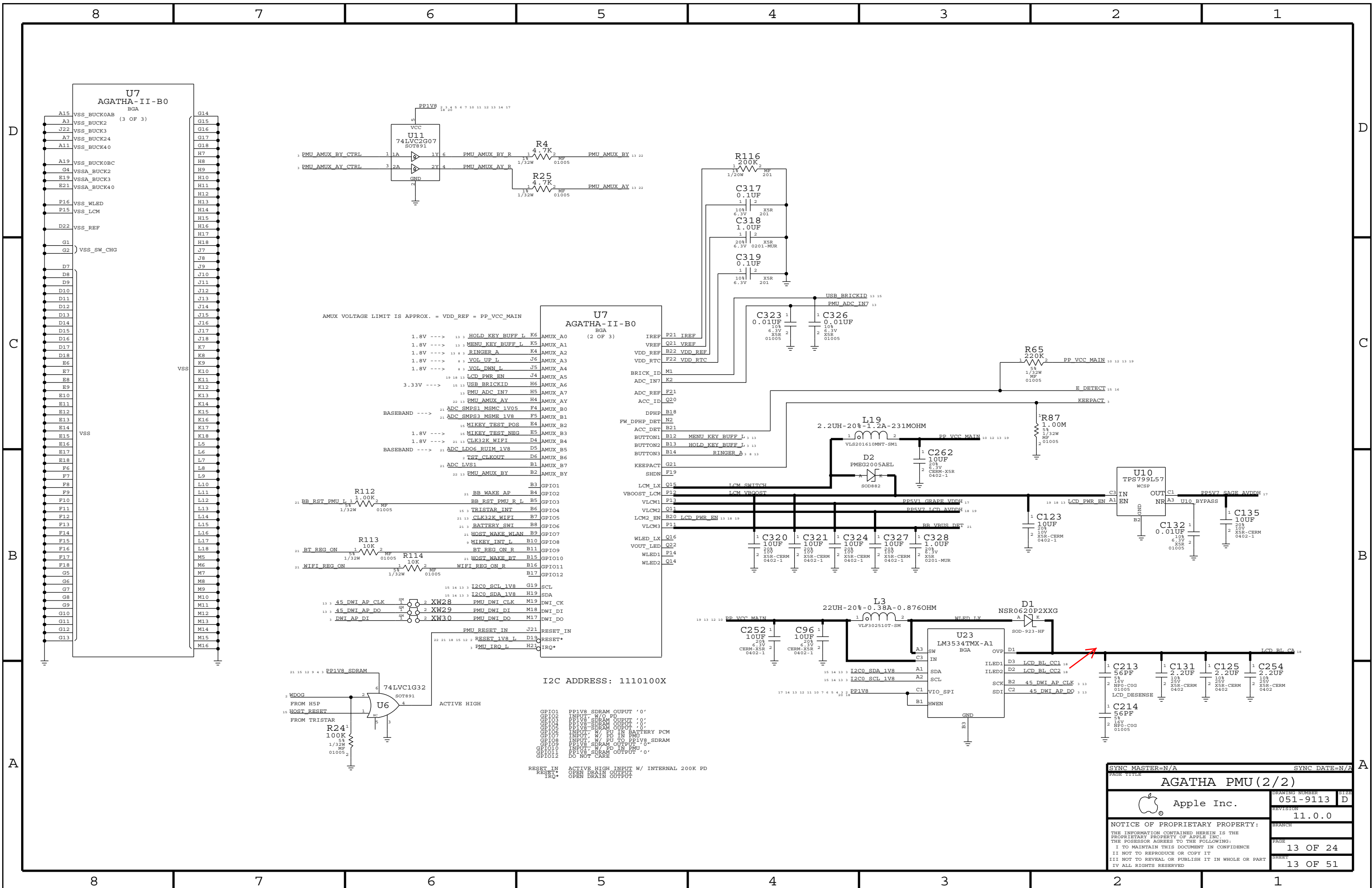
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CG FLEX CONNECTOR			
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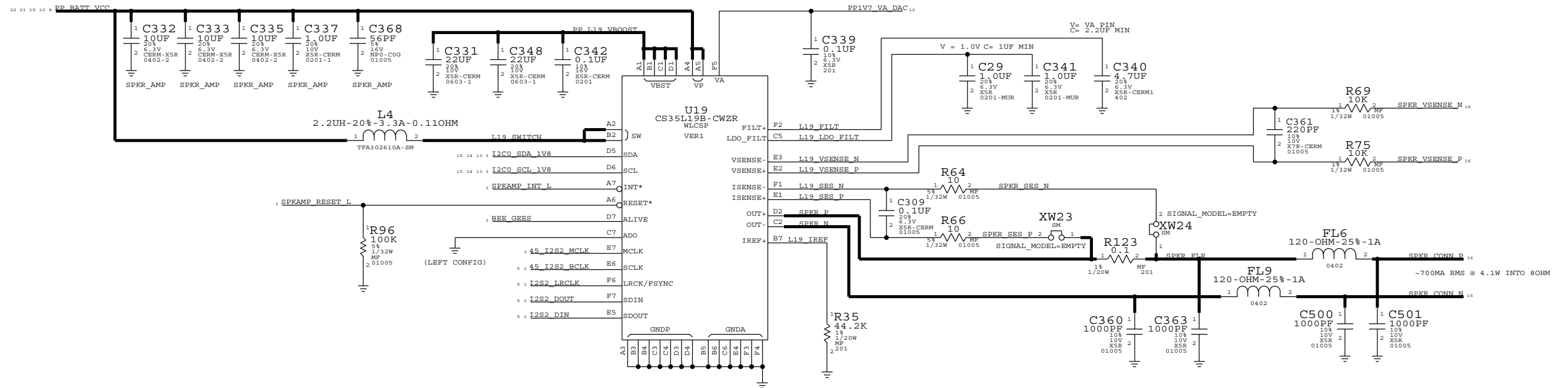
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AGATHA PMU (1/2)			
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PAGE TITLE			
AGATHA PMU (2/2)			
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SPEAKER AMP

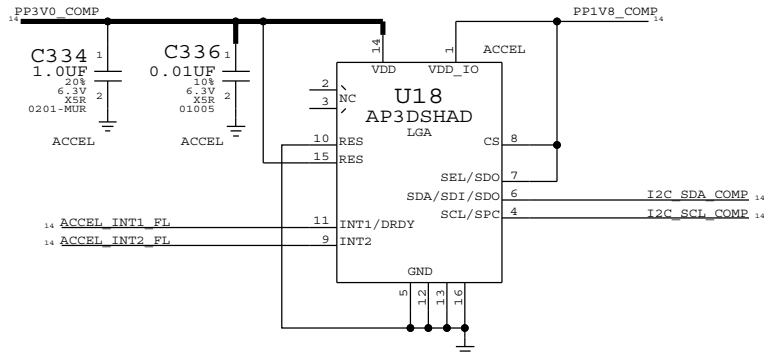
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THESE PARTS OUTSIDE OF SHIELD

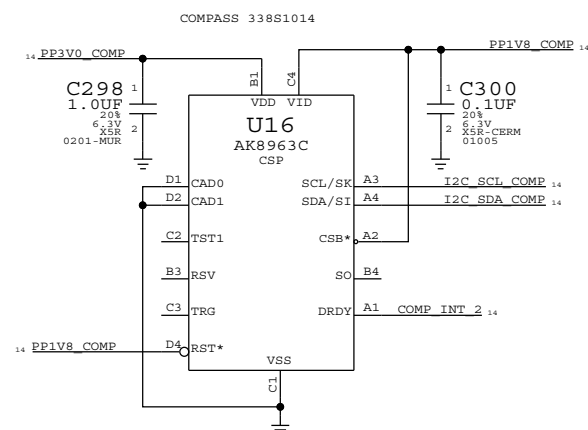
ACCELEROMETER

I2C ADDRESS: 0011101X



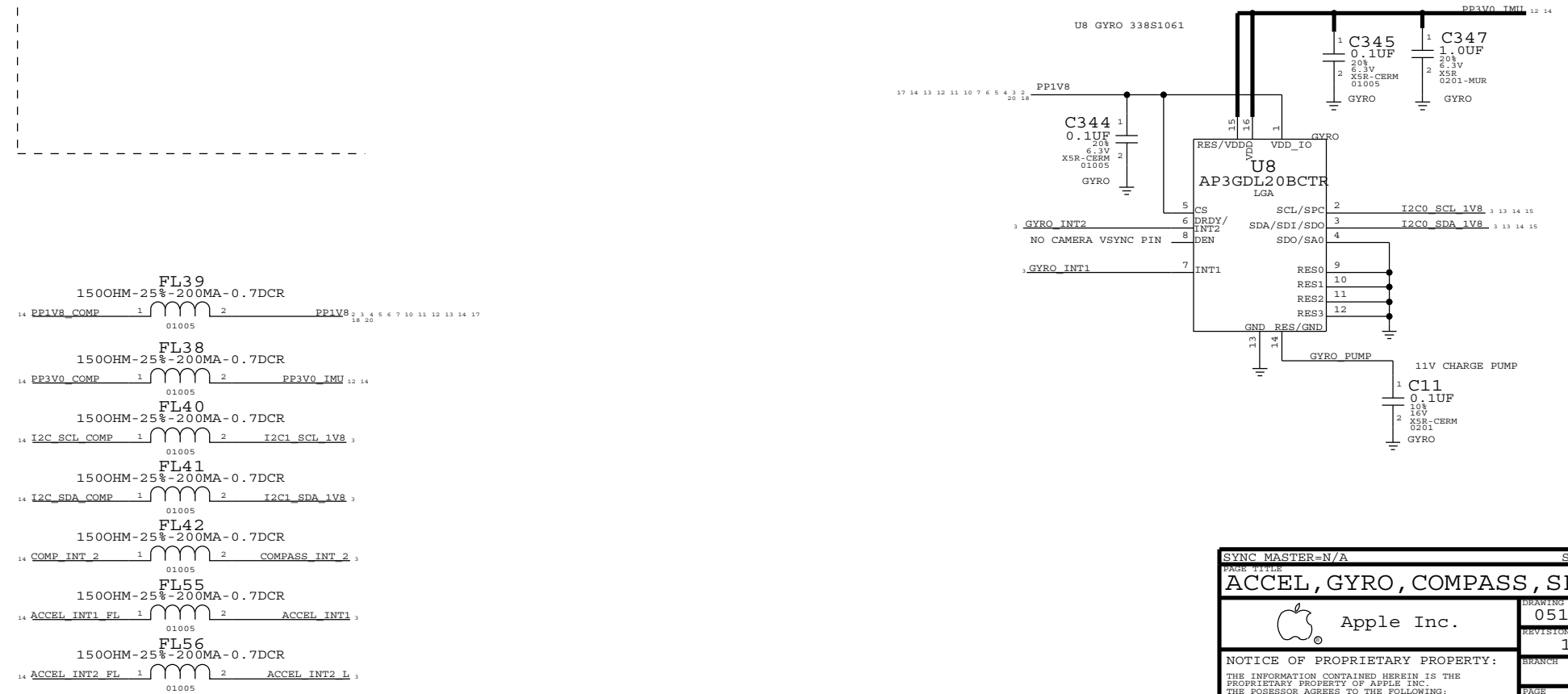
COMPASS 2

I2C ADDR: 0001100X



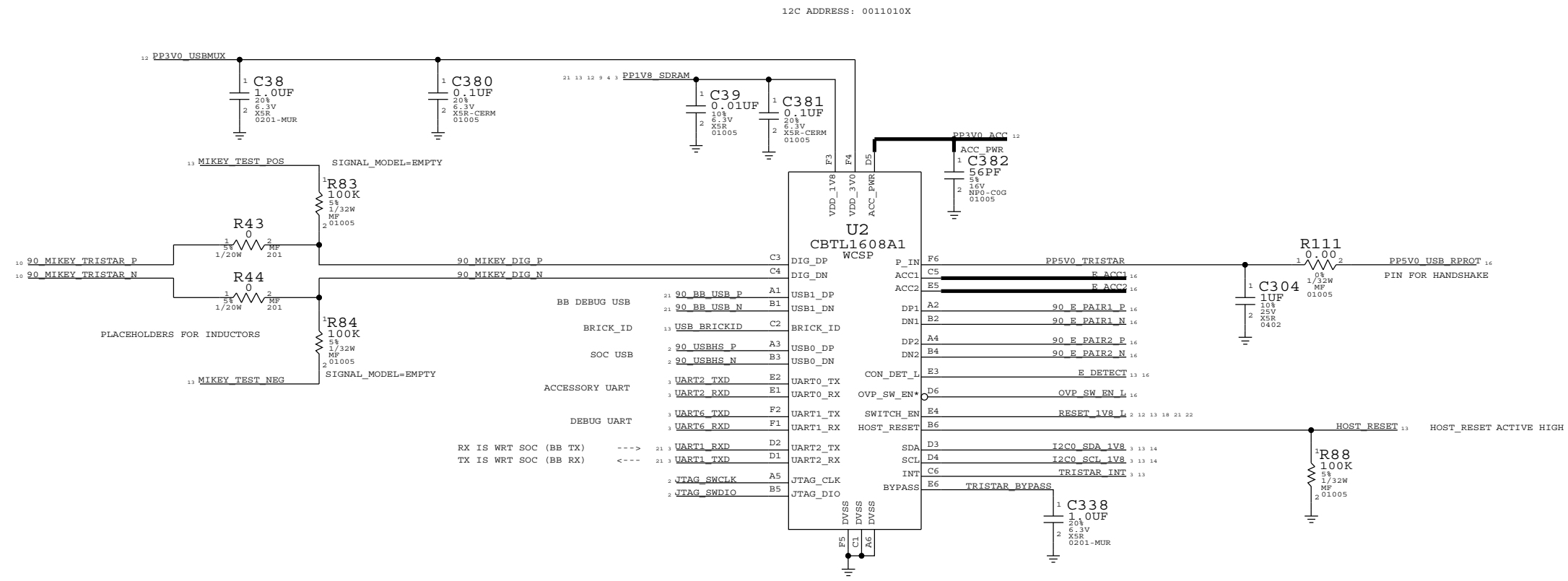
GYRO 20KHZ

I2C ADDRESS: 1101010X

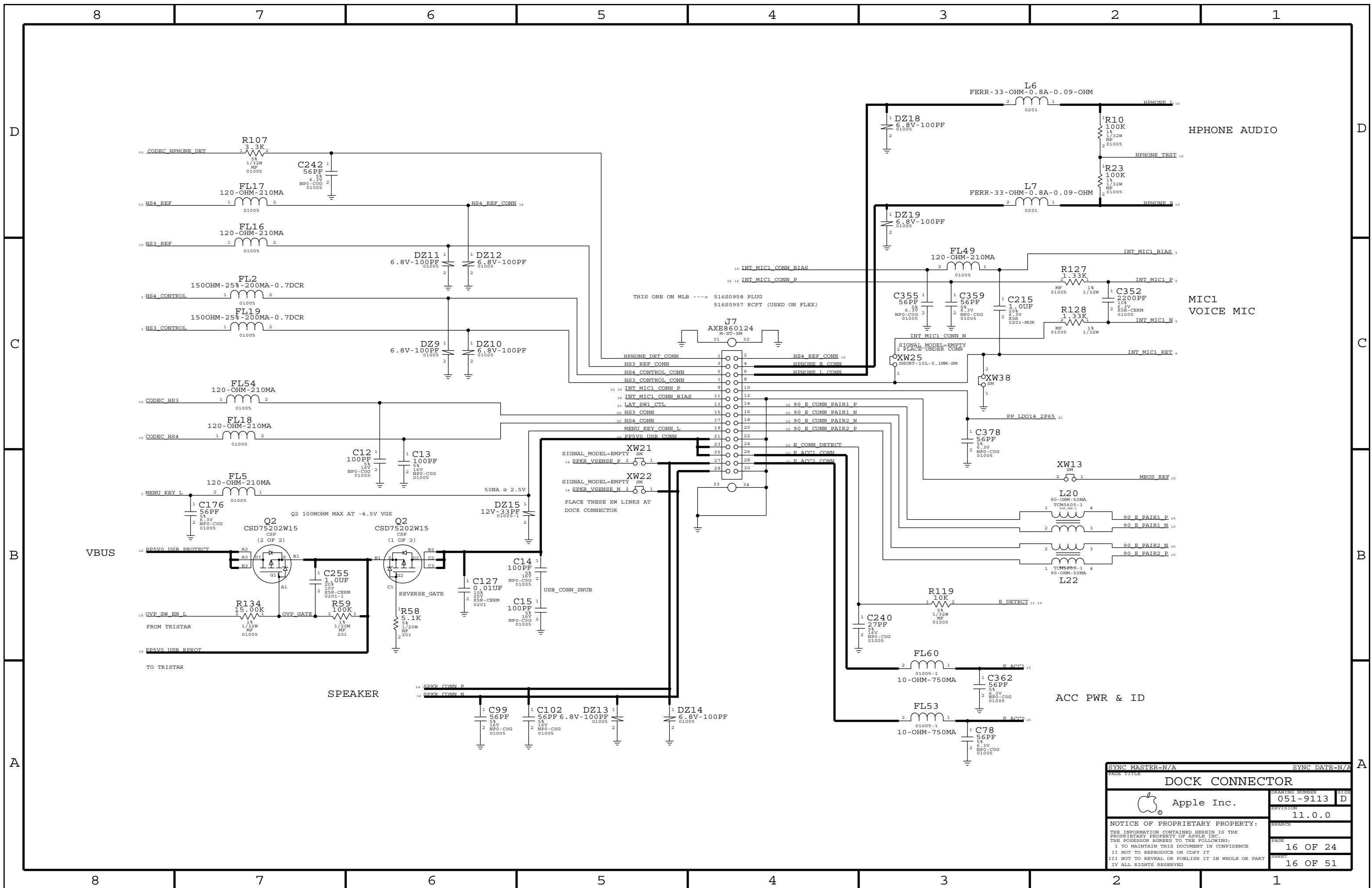



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TRISTAR



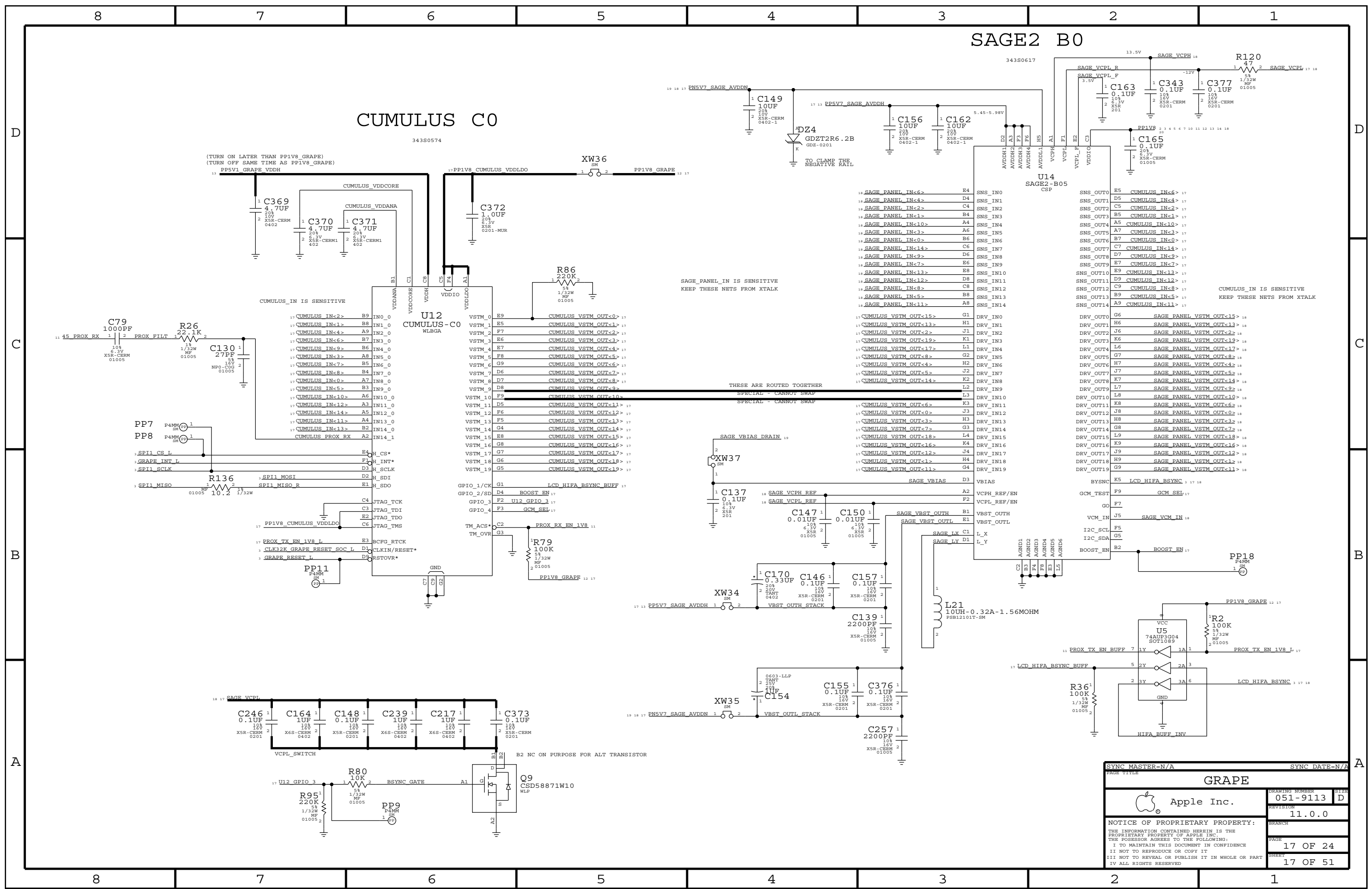
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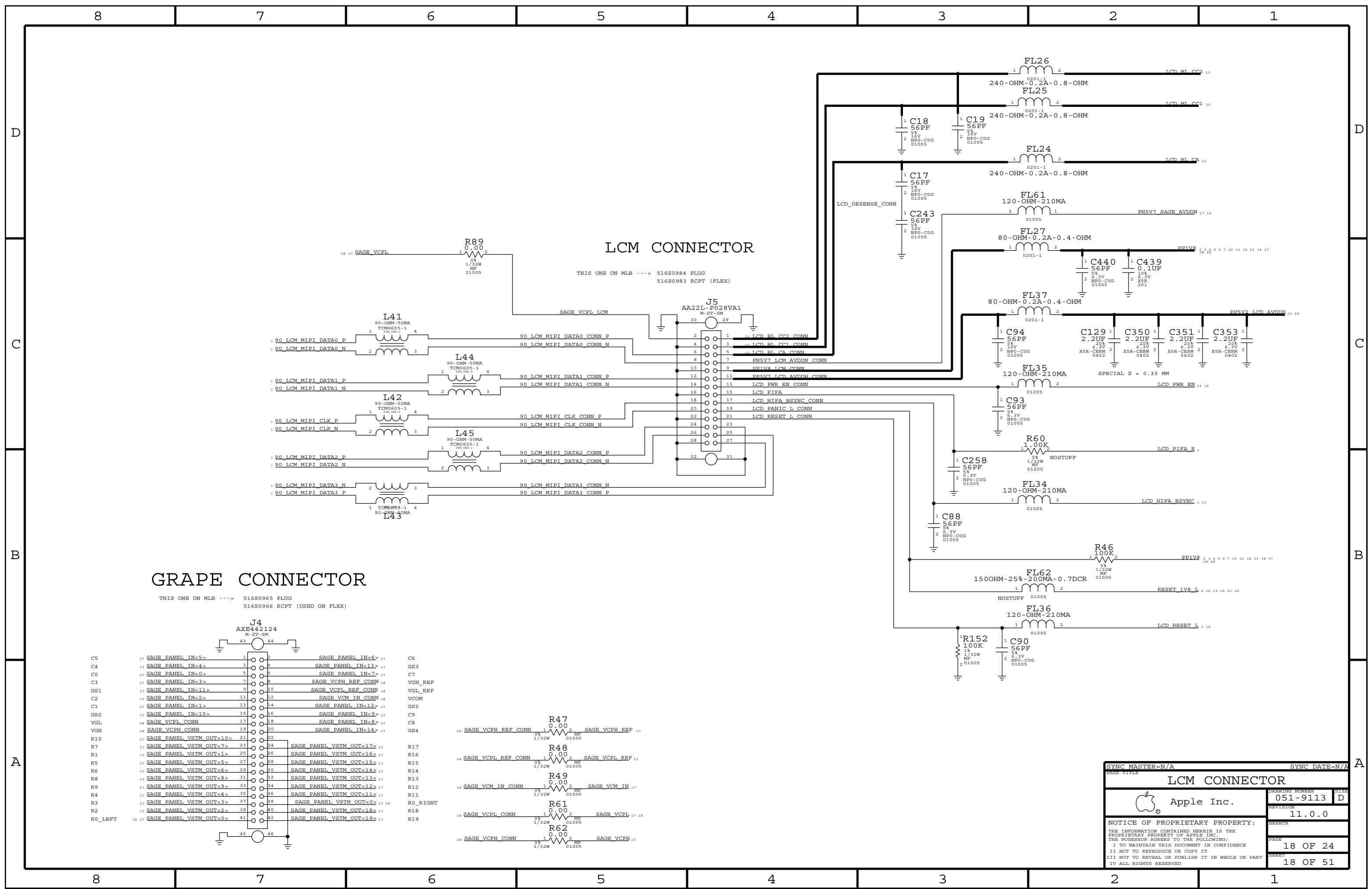
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DOCK CONNECTOR			
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	REVISION	11.0.0	
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SAGE2 B0

CUMULUS C0



PAGE TITLE		SYNC DATE=N/A	
GRAPE			
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LCM CONNECTOR

THIS ONE ON MLB ---> 516S0984 PLUG
516S0983 RCPT (FLEX)

GRAPE CONNECTOR

THIS ONE ON MLB ---> 516S0965 PLUG
516S0966 RCPT (USED ON FLEX)

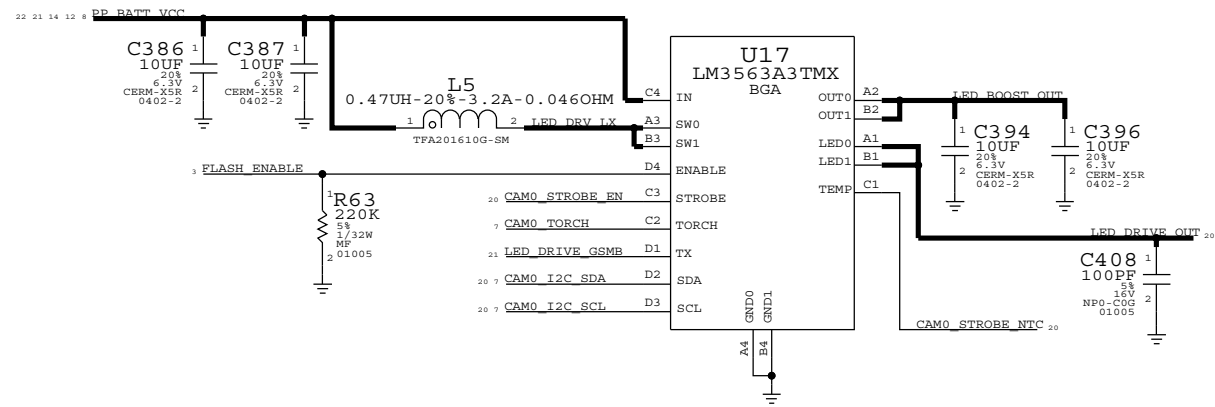
J4 AXE442124 M-ST-2M

C5	17	SAGE_PANEL_IN<5>	1	2	SAGE_PANEL_IN<6>	17	C6
C4	17	SAGE_PANEL_IN<4>	3	4	SAGE_PANEL_IN<13>	17	GS3
C0	17	SAGE_PANEL_IN<0>	5	6	SAGE_PANEL_IN<7>	17	C7
C3	17	SAGE_PANEL_IN<3>	7	8	SAGE_VCPH_REF_CONN	18	VGH_REF
GS1	17	SAGE_PANEL_IN<11>	9	10	SAGE_VCPL_REF_CONN	18	VGL_REF
C2	17	SAGE_PANEL_IN<2>	11	12	SAGE_VCM_IN_CONN	18	VCOM
C1	17	SAGE_PANEL_IN<1>	13	14	SAGE_PANEL_IN<12>	17	GS2
GS0	17	SAGE_PANEL_IN<10>	15	16	SAGE_PANEL_IN<9>	17	C9
VGL	18	SAGE_VCPL_CONN	17	18	SAGE_PANEL_IN<8>	17	C8
VGH	18	SAGE_VCPH_CONN	19	20	SAGE_PANEL_IN<14>	17	GS4
R10	17	SAGE_PANEL_VSTM_OUT<10>	21	22			
R7	17	SAGE_PANEL_VSTM_OUT<7>	23	24	SAGE_PANEL_VSTM_OUT<17>	17	R17
R1	17	SAGE_PANEL_VSTM_OUT<1>	25	26	SAGE_PANEL_VSTM_OUT<16>	17	R16
R5	17	SAGE_PANEL_VSTM_OUT<5>	27	28	SAGE_PANEL_VSTM_OUT<15>	17	R15
R6	17	SAGE_PANEL_VSTM_OUT<6>	29	30	SAGE_PANEL_VSTM_OUT<14>	17	R14
R8	17	SAGE_PANEL_VSTM_OUT<8>	31	32	SAGE_PANEL_VSTM_OUT<13>	17	R13
R9	17	SAGE_PANEL_VSTM_OUT<9>	33	34	SAGE_PANEL_VSTM_OUT<12>	17	R12
R4	17	SAGE_PANEL_VSTM_OUT<4>	35	36	SAGE_PANEL_VSTM_OUT<11>	17	R11
R3	17	SAGE_PANEL_VSTM_OUT<3>	37	38	SAGE_PANEL_VSTM_OUT<0>	17	R0_RIGHT
R2	17	SAGE_PANEL_VSTM_OUT<2>	39	40	SAGE_PANEL_VSTM_OUT<18>	17	R18
R0_LEFT	17	SAGE_PANEL_VSTM_OUT<0>	41	42	SAGE_PANEL_VSTM_OUT<19>	17	R19

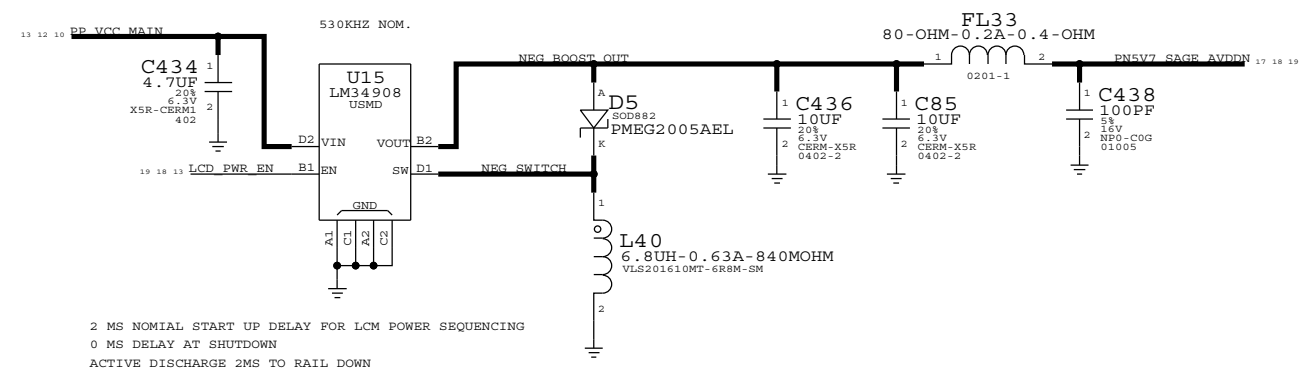
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LCM CONNECTOR			
Apple Inc.		DRAWING NUMBER	051-9113
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LED DRIVER

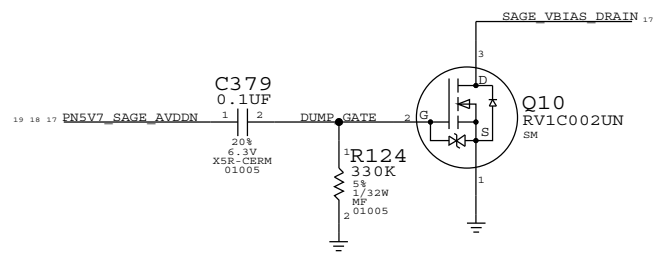
I2C ADDRESS: 1100011X



NEGATIVE BOOST SUPPLY

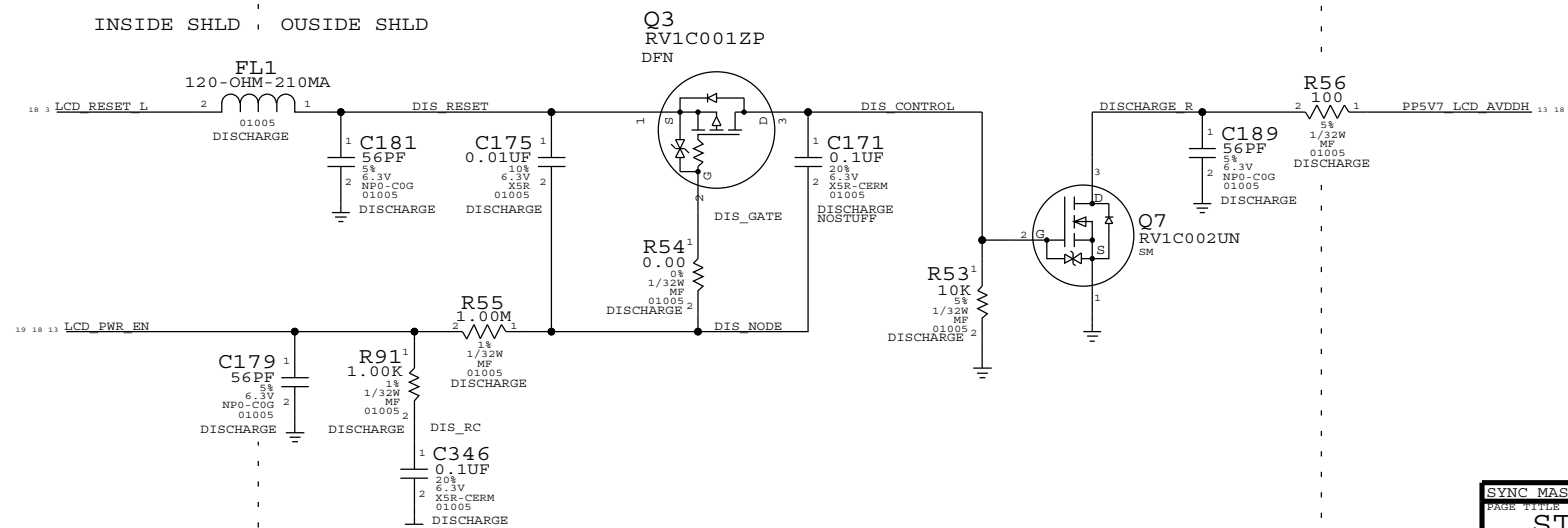


SAGE_VBIAS DISCHARGE



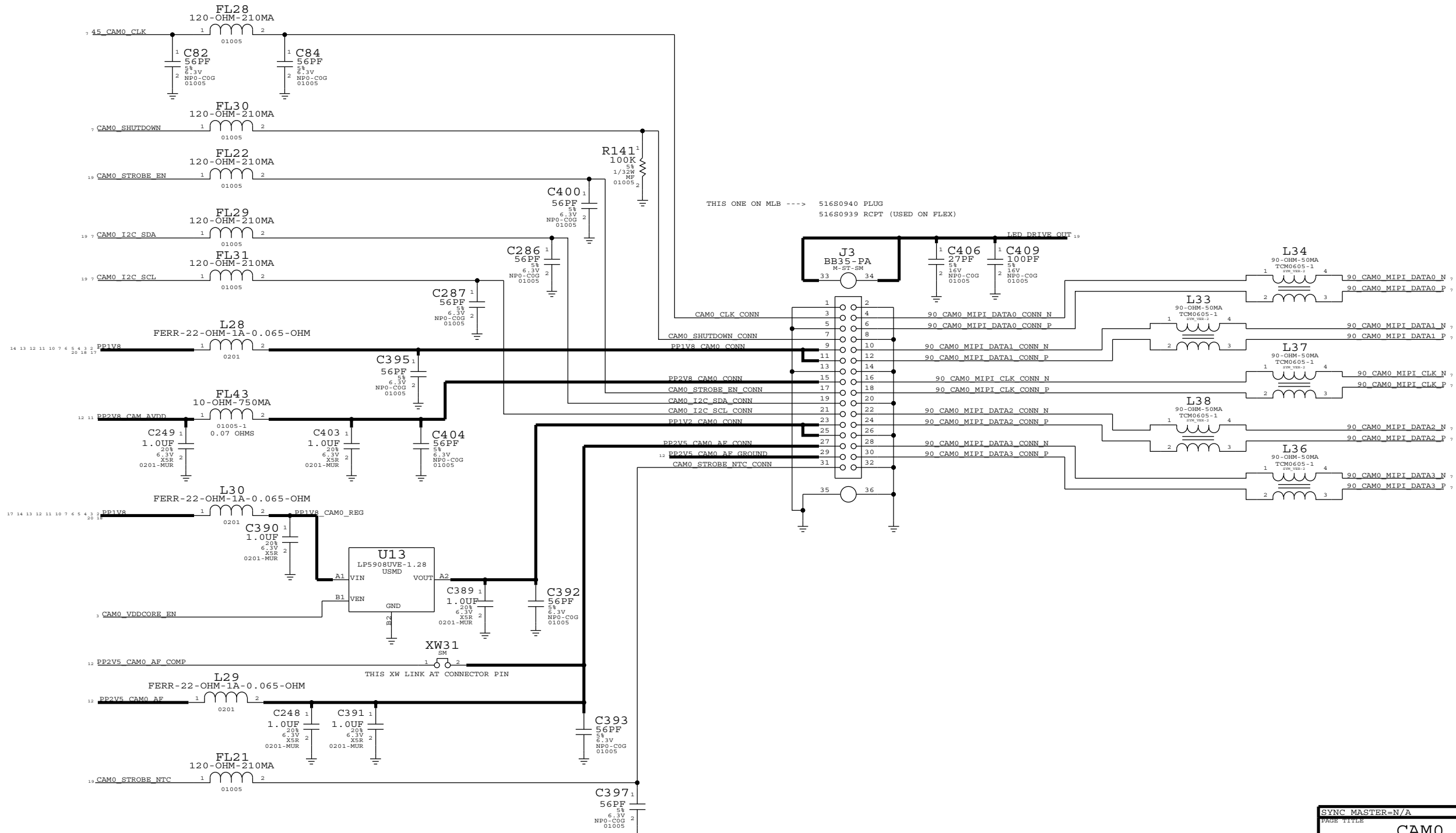
THIS CIRCUIT IS BEHIND THE SIM TRAY

INSIDE SHLD OUSIDE SHLD



SYNC MASTER=N/A		SYNC DATE=N/A	
STROBE & NEGATIVE RAIL			
Apple Inc.		DRAWING NUMBER	SIZE
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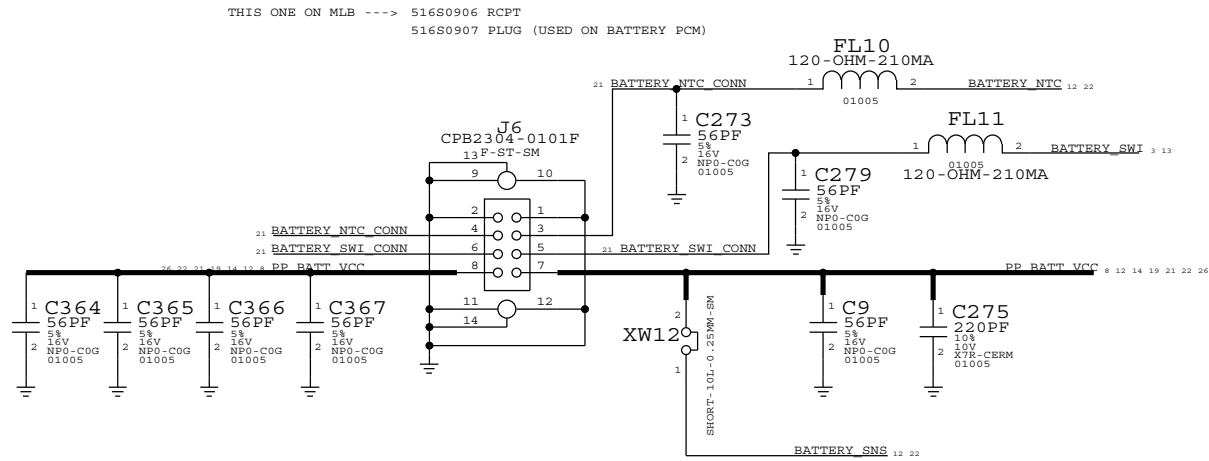
CAM0: MAIN CAMERA CONNECTOR



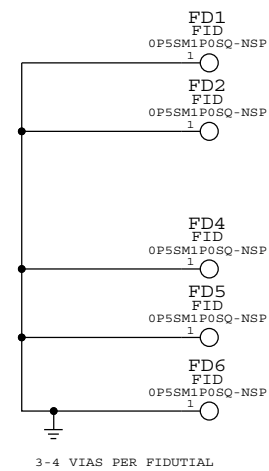
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Apple Inc.		DRAWING NUMBER	SIZE
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AP/RADIO INTERFACE

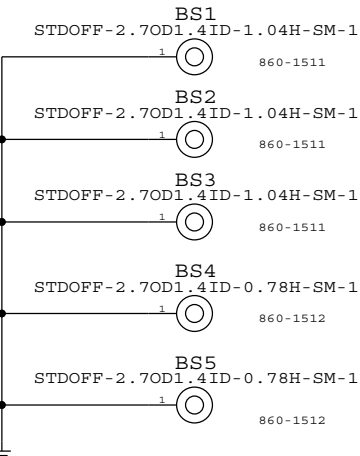
BATTERY CONN



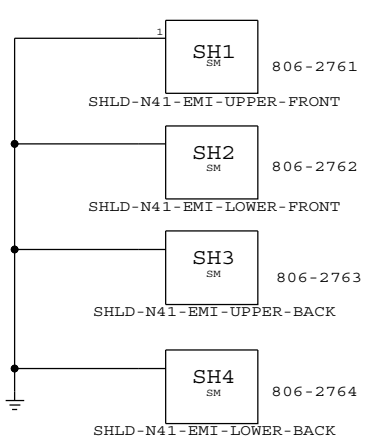
FIDUCIALS



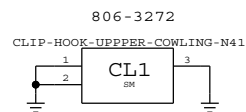
STANDOFFS



SHIELDS



UPPER COWLING CLIP/HOOK



SUBDESIGN_SUFFIX=RF I594

26 22 21 19 14 12	PP_BATT_VCC	MAKE BASE-TRUE	PP_BATT_VCC_CONN	AP_HSIC3_RDY	MAKE BASE-TRUE	AP_HSIC3_RDY	3 42
26 1	RADIO_ON_L	MAKE BASE-TRUE	RADIO_ON_L	DEV_HSIC3_RDY	MAKE BASE-TRUE	DEV_HSIC3_RDY	3 42
26 3	BB_RESET_DET_L	MAKE BASE-TRUE	RESET_DET_L	BB_JTAG_TCK	MAKE BASE-TRUE	BB_JTAG_TCK	3 26
26 11	BB_RST_PMU_L	MAKE BASE-TRUE	RESET_PMU_L	BB_JTAG_TDI	MAKE BASE-TRUE	BB_JTAG_TDI	3 26
26 4	BB_RST_L	MAKE BASE-TRUE	BB_RST_L	BB_JTAG_TMS	MAKE BASE-TRUE	BB_JTAG_TMS	3 26
26 13	BB_WAKE_AP	MAKE BASE-TRUE	HOST_WAKE_BB	BB_JTAG_TRST_L	MAKE BASE-TRUE	BB_JTAG_TRST_L	3 26
26 12	RESET_V18_L	MAKE BASE-TRUE	RF_RESET_L	BB_JTAG_TDO	MAKE BASE-TRUE	BB_JTAG_TDO	3 26
26 3	PBL_RUN_BB_HSIC1_RDY	MAKE BASE-TRUE	PBL_RUN_BB_HSIC1_RDY				
30 3	BB_HSIC1_REMOTE_WAKE	MAKE BASE-TRUE	BB_HSIC1_REMOTE_WAKE				
30 15	LED_DRIVE_GSMB	MAKE BASE-TRUE	TX_QTR_THRESH				
26 11	BB_VBUS_DET	MAKE BASE-TRUE	BB_USB_VBUS				
26 11	90_BB_USB_N	MAKE BASE-TRUE	90_BB_USB_D_N				
26 11	90_BB_USB_P	MAKE BASE-TRUE	90_BB_USB_D_P				
26 3	UART1_RTS_L	MAKE BASE-TRUE	BB_UART_CTS_L	RADIO_MLB			
26 3	UART1_CTS_L	MAKE BASE-TRUE	BB_UART_RTS_L				
26 3	UART1_TXD	MAKE BASE-TRUE	BB_UART_RXD				
26 3	UART1_RXD	MAKE BASE-TRUE	BB_UART_TXD				
30 3	BB_PP_SYNC	MAKE BASE-TRUE	PP_SYNC				
30 3	45_I2S1_BCLK	MAKE BASE-TRUE	BB_I2S_CLK				
30 3	I2S1_DOUT	MAKE BASE-TRUE	BB_I2S_RXD				
30 3	I2S1_DIN	MAKE BASE-TRUE	BB_I2S_TXD				
30 3	I2S1_LRCLK	MAKE BASE-TRUE	BB_I2S_WS				
26 13	ADC_SMP31_MSMC_1V05	MAKE BASE-TRUE	ADC_SMP31_MSMC_1V05				
26 13	ADC_SMP31_MSME_1V8	MAKE BASE-TRUE	ADC_SMP31_MSME_1V8				
26 13	ADC_LDO6_RUIM_1V8	MAKE BASE-TRUE	ADC_LDO6_RUIM_1V8				
26 13	ADC_LVS1	MAKE BASE-TRUE	ADC_LVS1				
42 15 13 9 4 3	PP1V8_SDRAM	MAKE BASE-TRUE	PP_WL_BT_VDDIO_AP				
26 11	WIFI_REG_ON	MAKE BASE-TRUE	WLAN_REG_ON				
26 11	BT_REG_ON	MAKE BASE-TRUE	BT_REG_ON				
42 3	UART4_TXD	MAKE BASE-TRUE	WLAN_UART_RXD				
42 3	UART4_RXD	MAKE BASE-TRUE	WLAN_UART_TXD				
42 3	HOST_WAKE_WLAN	MAKE BASE-TRUE	HOST_WAKE_WLAN				
26 3	BT_WAKE	MAKE BASE-TRUE	BT_WAKE				
42 11	CLK32K_WIFI	MAKE BASE-TRUE	CLK32K_AP				
42 13	HOST_WAKE_BT	MAKE BASE-TRUE	HOST_WAKE_BT				
42 3	UART3_RTS_L	MAKE BASE-TRUE	BT_UART_CTS_L				
42 3	UART3_CTS_L	MAKE BASE-TRUE	BT_UART_RTS_L				
26 3	UART3_TXD	MAKE BASE-TRUE	BT_UART_RXD				
26 3	UART3_RXD	MAKE BASE-TRUE	BT_UART_TXD				
42 3	45_I2S3_BCLK	MAKE BASE-TRUE	BT_PCM_CLK				
42 3	I2S3_DOUT	MAKE BASE-TRUE	BT_PCM_IN				
42 3	I2S3_DIN	MAKE BASE-TRUE	BT_PCM_OUT				
42 3	I2S3_LRCLK	MAKE BASE-TRUE	BT_PCM_SYNC				
26 3	50_HSIC1_DATA	MAKE BASE-TRUE	50_HSIC_BB_DATA				
26 3	50_HSIC1_STB	MAKE BASE-TRUE	50_HSIC_BB_STROBE				
30 3	AP_WAKE_MODEM	MAKE BASE-TRUE	AP_WAKE_MODEM				
42 2	50_HSIC3_DATA	MAKE BASE-TRUE	50_HSIC_WLAN_DATA				
42 2	50_HSIC3_STB	MAKE BASE-TRUE	50_HSIC_WLAN_STROBE				
26 3	AP_HSIC1_RDY	MAKE BASE-TRUE	AP_HSIC1_RDY				
27 16	PP_LDO14_2P65	MAKE BASE-TRUE	PP_LDO14_2P65				
26 16	LAT_SW1_CTL	MAKE BASE-TRUE	LAT_SW1_CTL				
42 2	WLAN_HSIC3_RESUME	MAKE BASE-TRUE	WLAN_HSIC3_RESUME				

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BATTERY & RF INT.			
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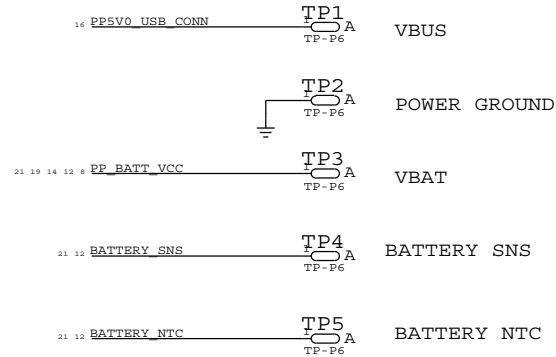
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3

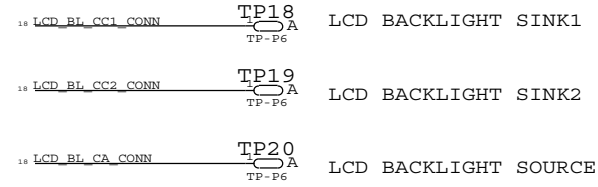
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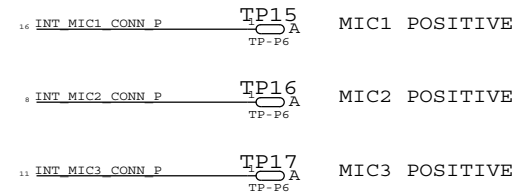
POWER TP



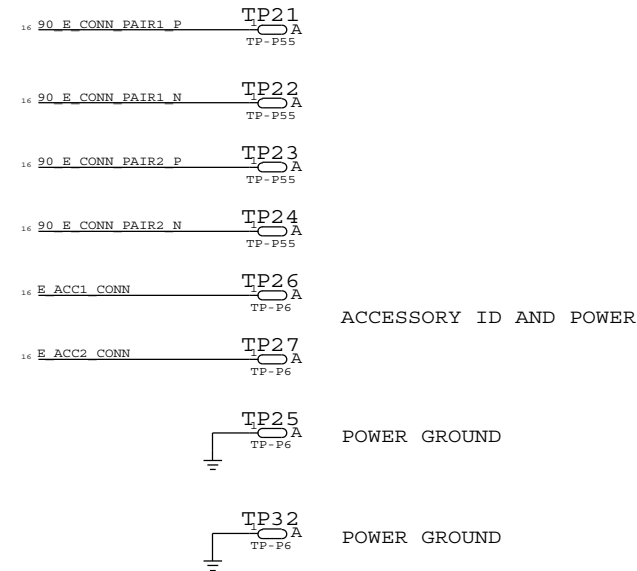
LCM BACKLIGHT



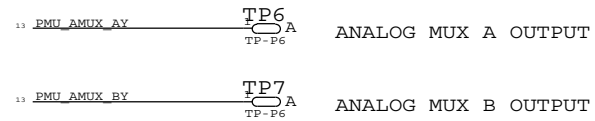
MIC AUDIO



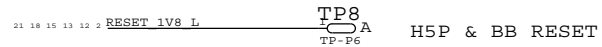
E75 - USB/UART/ID/POWER



SUPER TP



RESET

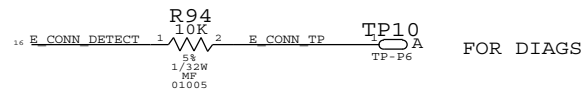
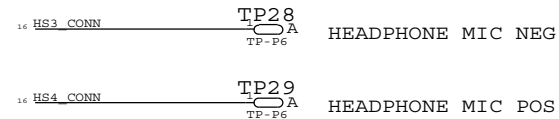


DFU



DRIVE MIC WRT NEAREST GROUND TEST POINT

HEADPHONE MIC



D

D

C

C

B

B

A

A

8

7

6

5

4

3

2

1

SYNC MASTER=N/A		SYNC DATE=N/A	
TEST POINTS			
		DRAWING NUMBER	051-9113
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RADIO BOM OPTIONS

CONFIDENTIAL AND PROPRIETARY APPLE SYSTEM DESIGN. FOR REFERENCE PURPOSES ONLY - NOT A CHANGE REQUEST.

HW ID PA ID BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
118S0685	1	PA_ID RES DIVIDER	R304_RF	Y	B4_17
118S0656	1	PA_ID RES DIVIDER	R304_RF	Y	B3_13
118S0719	1	PA_ID RES DIVIDER	R302_RF	Y	B4_17
118S0685	1	PA_ID RES DIVIDER	R302_RF	Y	B3_13

SPI NOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B4_17
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B3_13

B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3415	1	SKY77487 BAND 5/8 PAD	U1001_RF	Y	B4_17
353S3568	1	SKY77491 BAND5E/8 PAD	U1001_RF	Y	B3_13
155S0552	1	BAND5 TX SAW	FL1001_RF	Y	B4_17
155S0742	1	BAND5/BC10 TX SAW	FL1001_RF	Y	B3_13
152S1563	1	1.5NH, INDUCTOR - MURATA	L1001_RF	Y	B4_17
152S1662	1	1.5NH, INDUCTOR - TDK	L1001_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1002_RF	Y	B4_17
152S1665	1	15NH, INDUCTOR - TDK	L1002_RF	Y	B3_13
152S1576	1	12NH, INDUCTOR - MURATA	L1003_RF	Y	B4_17
152S1664	1	12NH, INDUCTOR - TDK	L1003_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1010_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1010_RF	Y	B3_13

B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1328	1	4.3NH INDUCTOR - 0201	C1111_RF	Y	B4_17
152S1353	1	3.6NH INDUCTOR - 0201	C1111_RF	Y	B3_13
131S0198	1	1.8PF CAPACITOR - 0201	L1103_RF	Y	B4_17
118S0724	1	0 OHM JUMPER - 0201	C1112_RF	Y	B4_17
131S0204	1	22PF CAPACITOR - 0201	C1112_RF	Y	B3_13
118S0724	1	0 OHM JUMPER - 0201	L1105_RF	Y	B4_17
152S1443	1	2.0NH INDUCTOR - 0201	L1105_RF	Y	B3_13
152S1320	1	7.5NH INDUCTOR - 0201	C1113_RF	Y	B4_17
131S0166	1	39PF CAPACITOR - 0201	C1113_RF	Y	B3_13
131S0176	1	2.4PF CAPACITOR - 0201	C1117_RF	Y	B4_17

DCDC BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B4_17
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1205_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1205_RF	Y	B3_13

WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B4_17
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B3_13

SINGING CAP BOM OPTIONS
NEED TO COPY FROM AP TABLE
WHEN STAN FINISHES

B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0620	1	BAND17 TX SAW	FL1101_RF	Y	B4_17
155S0619	1	BAND13 TX SAW	FL1101_RF	Y	B3_13
353S3567	1	BAND17 PAM - SKYWORKS	U1101_RF	Y	B4_17
353S3441	1	BAND13 PAM - AVAGO	U1101_RF	Y	B3_13
155S0709	1	BAND17 DUPLEXER - MURATA	U1102_RF	Y	B4_17
155S0738	1	BAND13 DUPLEXER - EPCOS	U1102_RF	Y	B3_13
152S1336	1	BAND17 INDUCTOR - 8.2NH	L1104_RF	Y	B4_17
152S1342	1	BAND13 INDUCTOR - 15NH	L1104_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1102_RF	Y	B4_17
152S1576	1	12NH, INDUCTOR - MURATA	L1102_RF	Y	B3_13

B2 PAD BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3715	1	TQM666084 B2 TQS PAD	U1501_RF	Y	B4_17
353S3459	1	TQM666083 B25 TQS PAD	U1501_RF	Y	B3_13

DIVERISTY MODULE BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3516	1	B17 MURATA DIVERSITY MODULE	U1601_RF	Y	B4_17
353S3562	1	B13/BC10 DIVERSITY MODULE	U1601_RF	Y	B3_13

B3/DCS1800 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0596	1	DCS1800 RX FIL	FL1301_RF	Y	B4_17
155S0729	1	BAND3 RX FIL	FL1301_RF	Y	B3_13
155S0695	1	THRU LINE	FL1302_RF	Y	B4_17
155S0722	1	BAND13 TX LPF	FL1302_RF	Y	B3_13
152S1656	1	3.0NH INDUCTOR	R1301_RF	Y	B3_13
117S0161	1	0OHM RES	R1302_RF	Y	B4_17
118S0652	1	49.90HM RES	R1303_RF	Y	B3_13
118S0652	1	49.90HM RES	R1305_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR	L1304_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1304_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR	L1305_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1305_RF	Y	B3_13
152S1569	1	3.9NH INDUCTOR	L1301_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR	L1301_RF	Y	B3_13

B3/B4 RX BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1570	1	4.7NH INDUCTOR - 01005	C1414_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1415_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1420_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR - 01005	L1416_RF	Y	B4_17
152S1571	1	5.6NH INDUCTOR - 01005	C1414_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1415_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1420_RF	Y	B3_13
152S1571	1	5.6NH INDUCTOR - 01005	L1416_RF	Y	B3_13
131S0219	1	10PF CAPACITOR - 01005	L1420_RF	Y	B4_17
131S0219	1	10PF CAPACITOR - 01005	L1421_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR - 01005	L1420_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR - 01005	L1421_RF	Y	B3_13
152S1328	1	4.3NH INDUCTOR - 0201	R1402_RF	Y	B4_17
152S1688	1	3.5NH INDUCTOR - 0201	C1416_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	R1402_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1416_RF	Y	B3_13

B3/B4 TX BOM OPTIONS

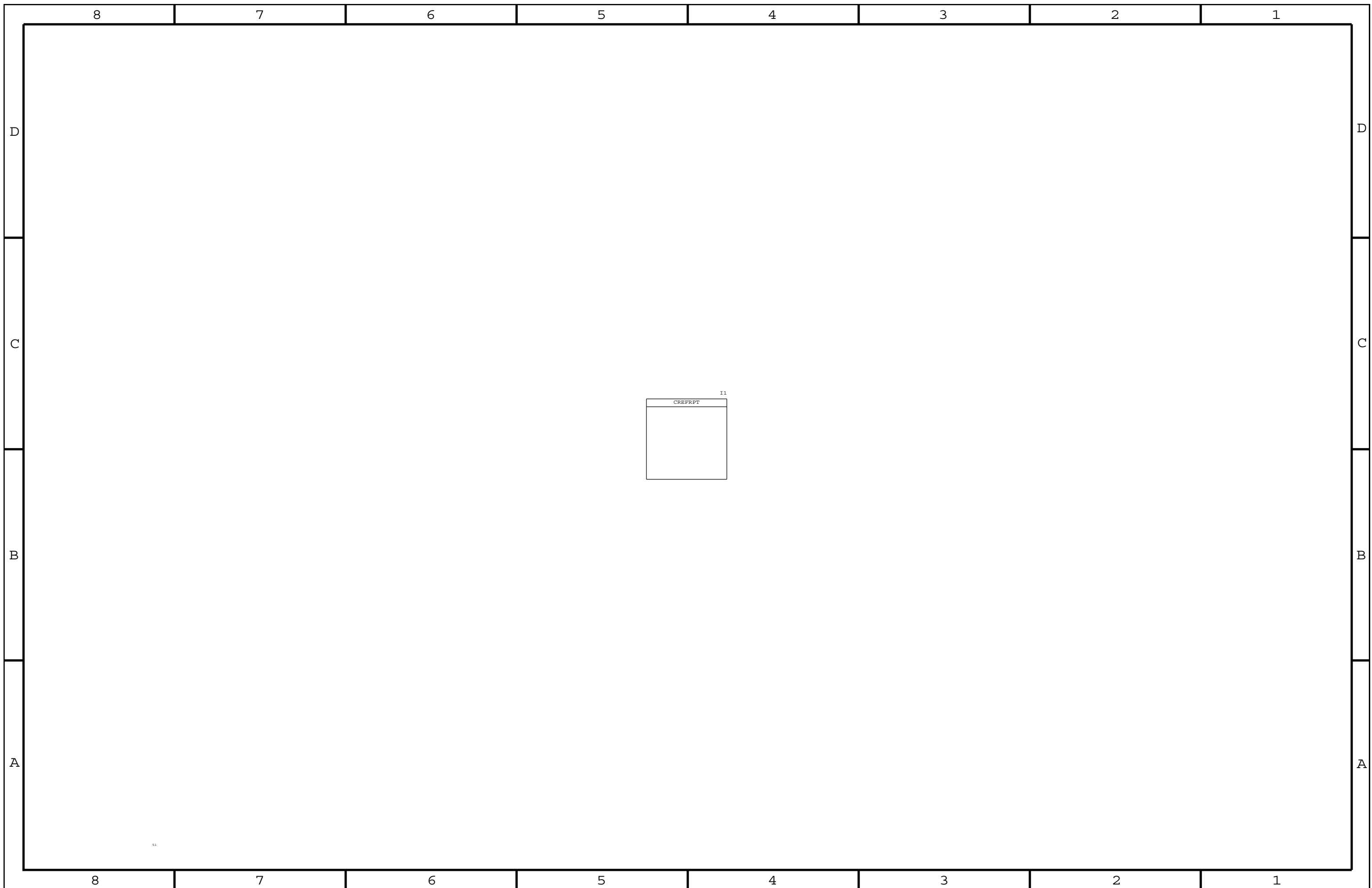
PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0215	1	22PF CAPACITOR - 01005	L1417_RF	Y	B4_17
152S1569	1	3.9NH INDUCTOR - 01005	L1417_RF	Y	B3_13
131S0369	1	0.5PF CAPACITOR - 01005	L1408_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B4_17
152S1705	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B4_17
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B3_13
152S1705	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B3_13
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B3_13

B3/B4 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3255	1	B1/4 PAD - AVAGO	U1401_RF	Y	B4_17
353S3443	1	B1/3 PAD - AVAGO	U1401_RF	Y	B3_13
155S0590	1	B4 TX FIL	FL1402_RF	Y	B4_17
155S0712	1	B3 TX FIL	FL1402_RF	Y	B3_13

DRAWING NUMBER		051-9113	SIZE	D
REVISION		11.0.0	BRANCH	
PAGE		23 OF 24	SHEET	
SHEET		23 OF 51		

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CREFRPT

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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
11	0001447874	ENGINEERING RELEASED		2012-05-02

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N41 RADIO_MLB SUBDESIGN

RADIO - 04/30/2012: SUBDESIGN

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02	AP INTERFACE AND DEBUG CONNECTORS
03	BASEBAND PMU (1 OF 2)
04	BASEBAND PMU (2 OF 2)
05	BASEBAND (1 OF 2)
06	BASEBAND (2 OF 2) & SERIAL EEPROM
07	RF TRANSCEIVER (1 OF 3)
08	RF TRANSCEIVER SWITCHING NETWORKS (2 OF 3)
09	RF TRANSCEIVER DECOUPLING (3 OF 3)
10	BAND 5/8 PAD
11	BAND 13 INTERSTAGE, PA, AND DUPLEXER
12	2G PA, PA DCDC CONVERTER
13	ASM, DCS RX
14	BAND 1/4 PAD
15	BAND 2 PAD
16	RX DIVERSITY
17	GPS
18	WLAN/BT
19	BOM OPTION TABLES

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-9119	1	N41_RADIO_MLB	SCH	Y	
825-2029	1	EEE FOR 639-2482	EEEE_DNVM	Y	B4_17
825-2029	1	EEE FOR 639-3241	EEEE_DW3L	Y	B3_13

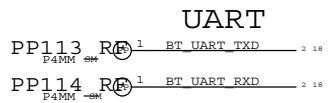
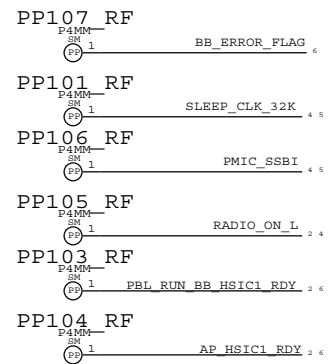
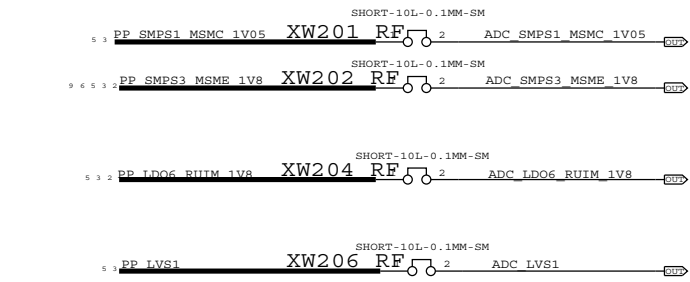
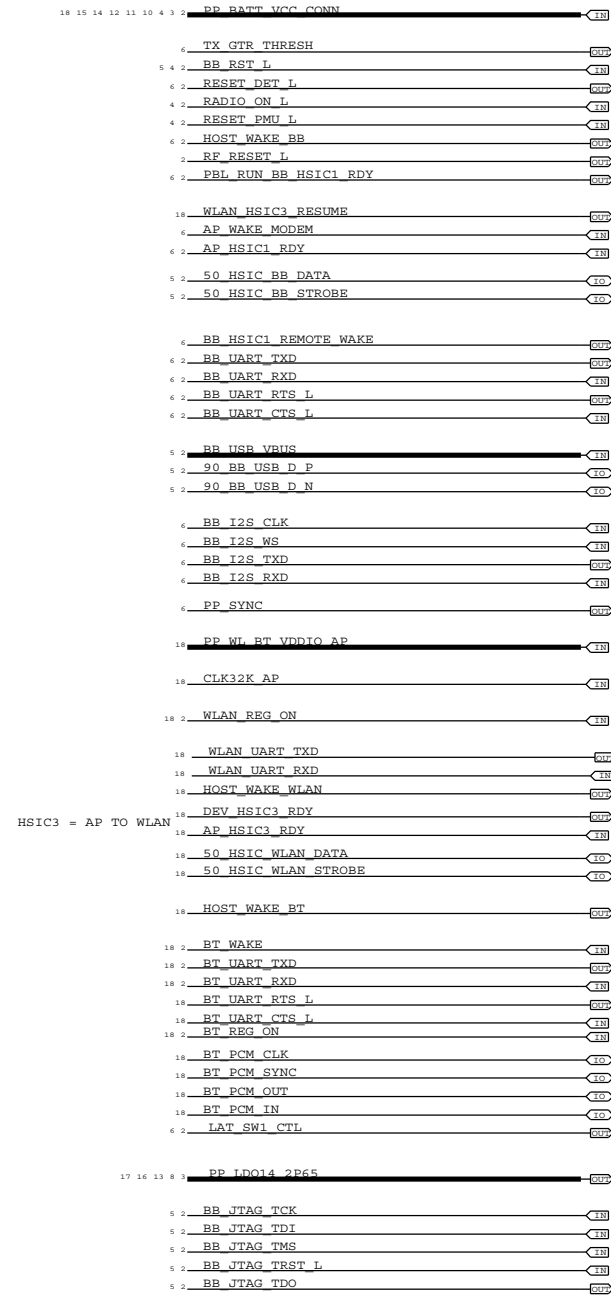
SCH #: 051-9119
 BOM (B4_17): 639-2482
 BOM (B3_13): 639-3241

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		SHEET	25 OF 51

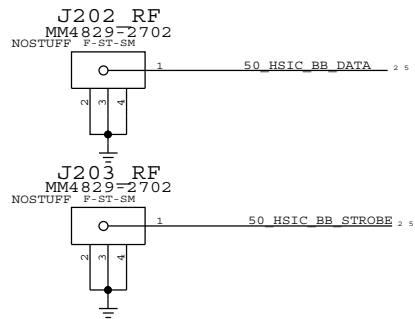
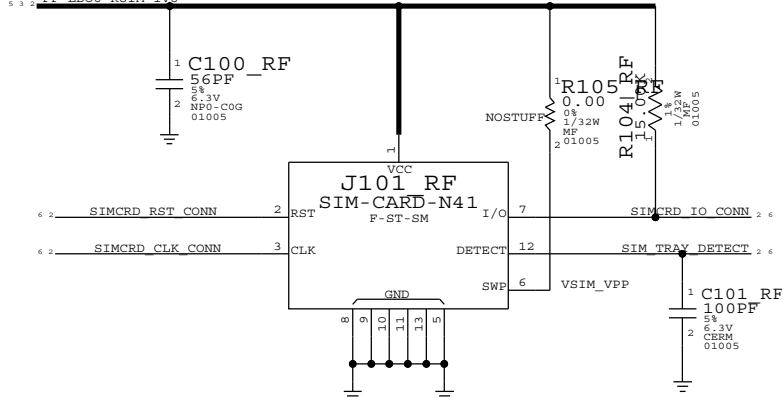
AP INTERFACE & DEBUG CONNECTOR

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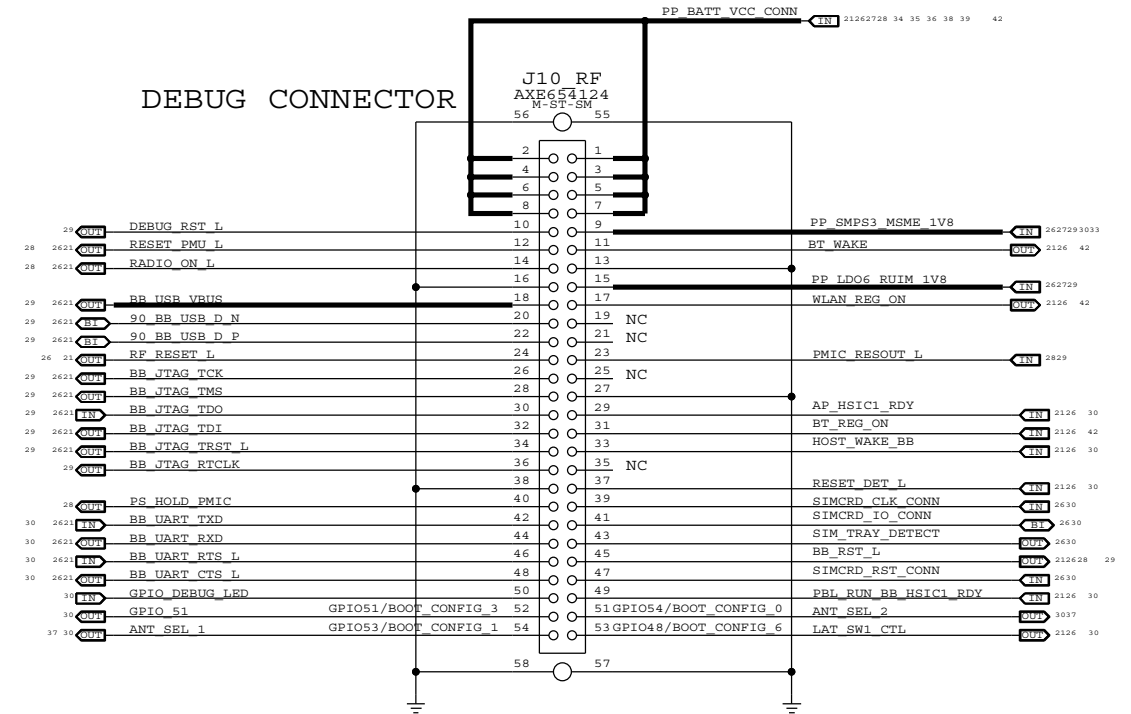
AP CONNECTIONS



SIM CARD CONNECTOR



DEBUG CONNECTOR



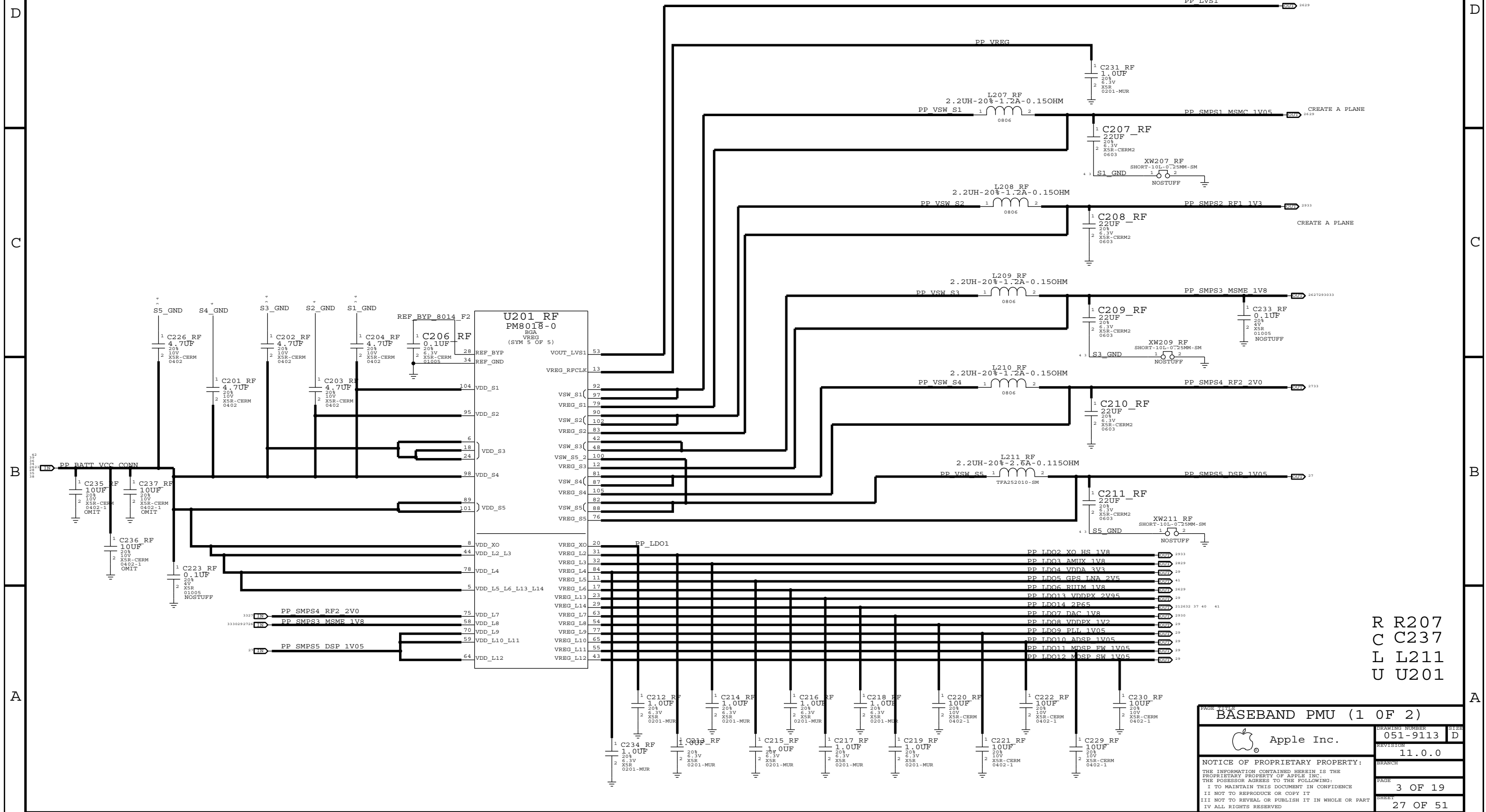
BOOT OPTIONS	BOOT_CONFIG SW REGISTER VALUE	GPIO/BOOT_CONFIG CONFIGURATION								
		6	5	4	3	2	1	0		
BOOT_DEFAULT_OPTION	0X00	X	0	0	0	0	0	0	0	X
BOOT_NAND_OPTION	0X01	X	1	0	0	0	0	0	1	X
BOOT_HSIC_OPTION	0X02	X	1	0	0	0	0	1	0	X
BOOT_USB_OPTION	0X03	X	1	0	0	0	0	1	1	X
ENABLE SAHARA PROTOCOL	0X08	X	1	0	0	1	0	X	X	X

R R105
C C101
XWXW206
DZDZ101
U U101

SYSTEM & DEBUG CONNECTORS		
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BASEBAND PMU (1 OF 2)

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R R207
C C237
L L211
U U201

Apple Inc.		
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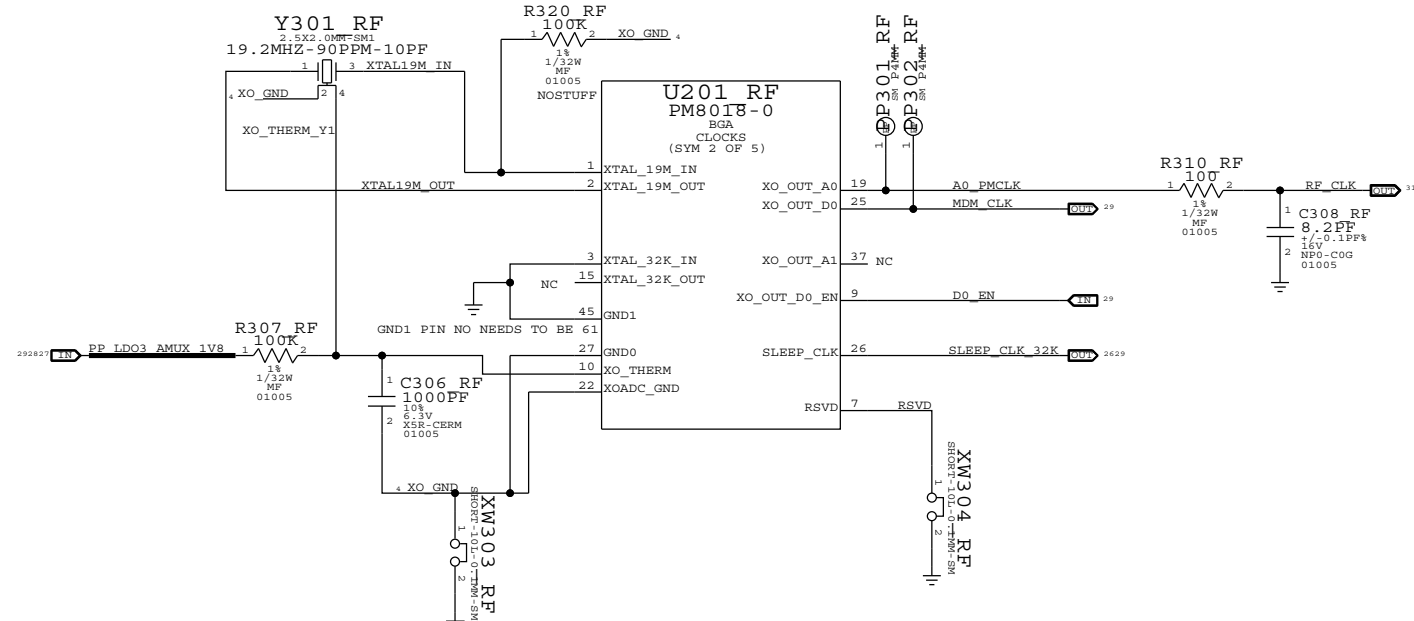
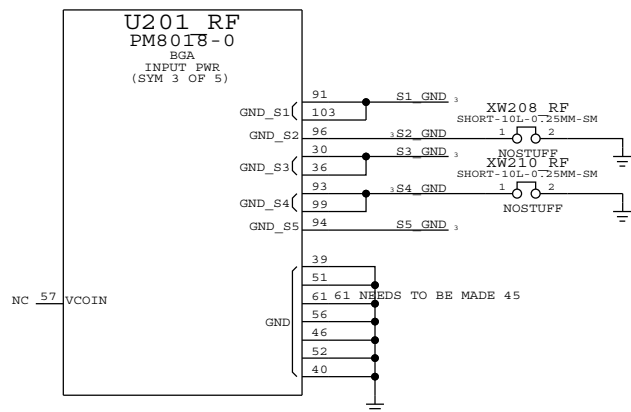
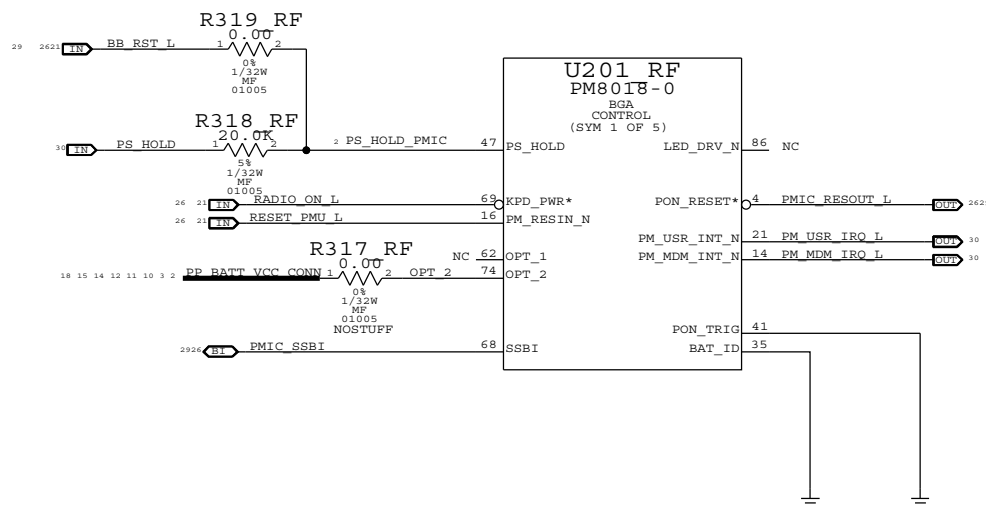
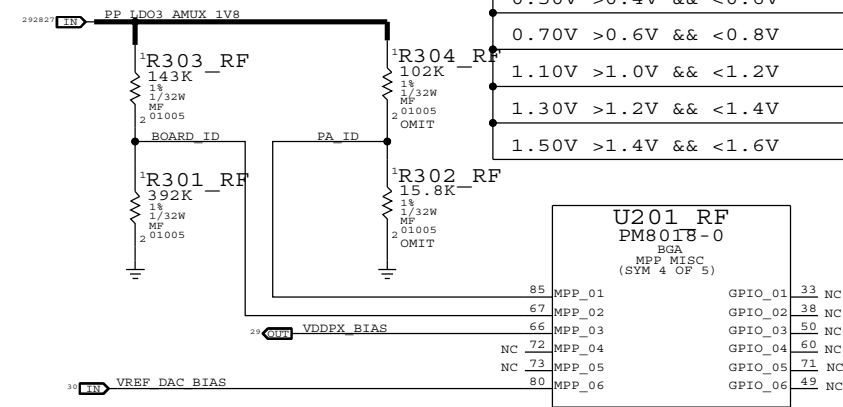
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BASEBAND PMU (2 OF 2)

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BOARD_ID	REVISION
0.25V : >0.2V && <0.4V	PROTO1
0.50V : >0.4V && <0.6V	PROTO2
0.70V : >0.6V && <0.8V	PROTO3
0.90V : >0.8V && <1.0V	EVT1
1.10V : >1.0V && <1.2V	EVT2
1.30V : >1.2V && <1.4V	EVT3

PA_ID	PA CONFIG
0.25V >0.2V && <0.4V	B4_17 MAIN
0.50V >0.4V && <0.6V	BUILD MATRIX
0.70V >0.6V && <0.8V	BUILD MATRIX
1.10V >1.0V && <1.2V	B3_13 MAIN
1.30V >1.2V && <1.4V	BUILD MATRIX
1.50V >1.4V && <1.6V	BUILD MATRIX

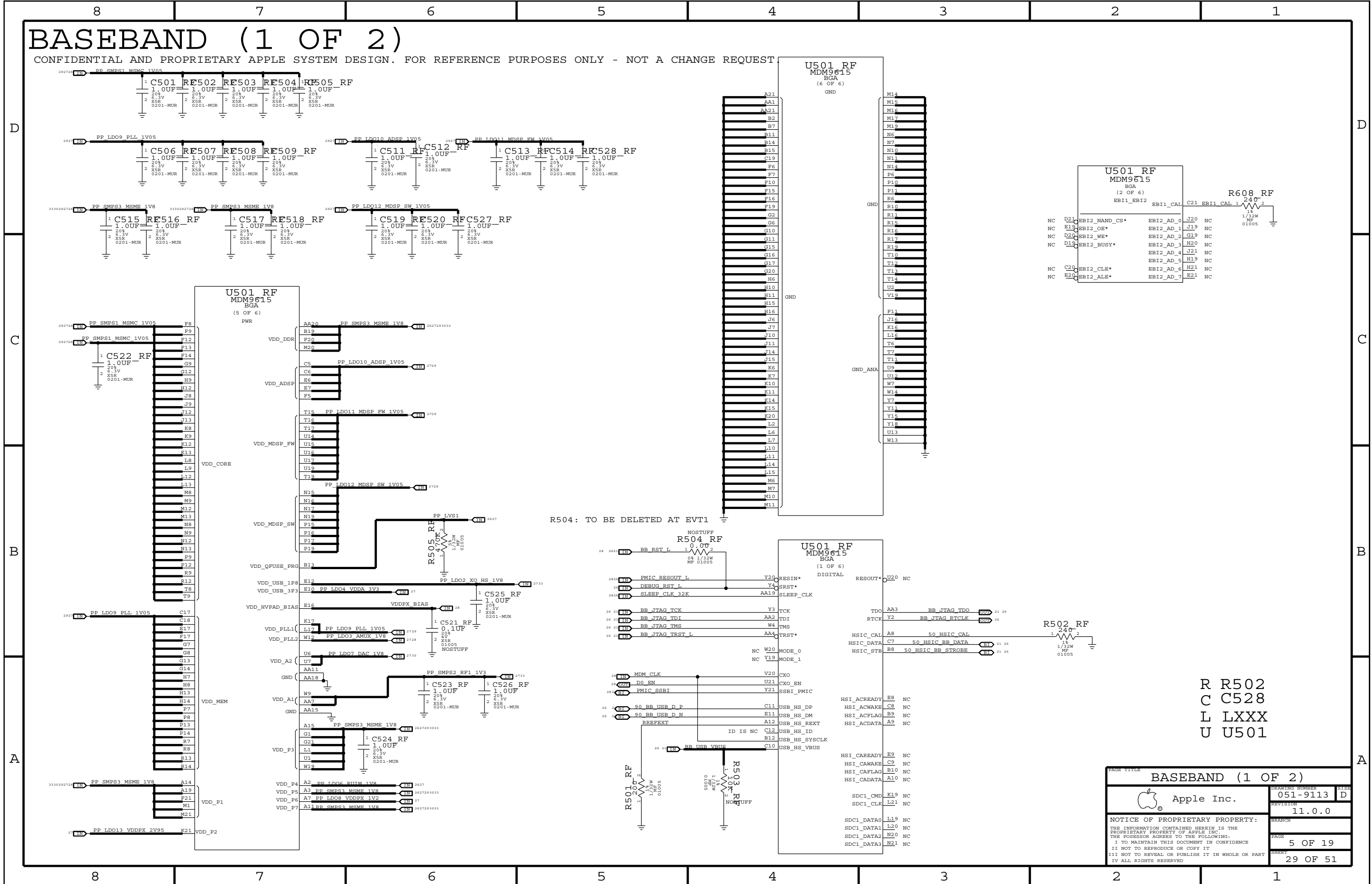


R R320
C C309
L LXXX
U U301
XW XW305

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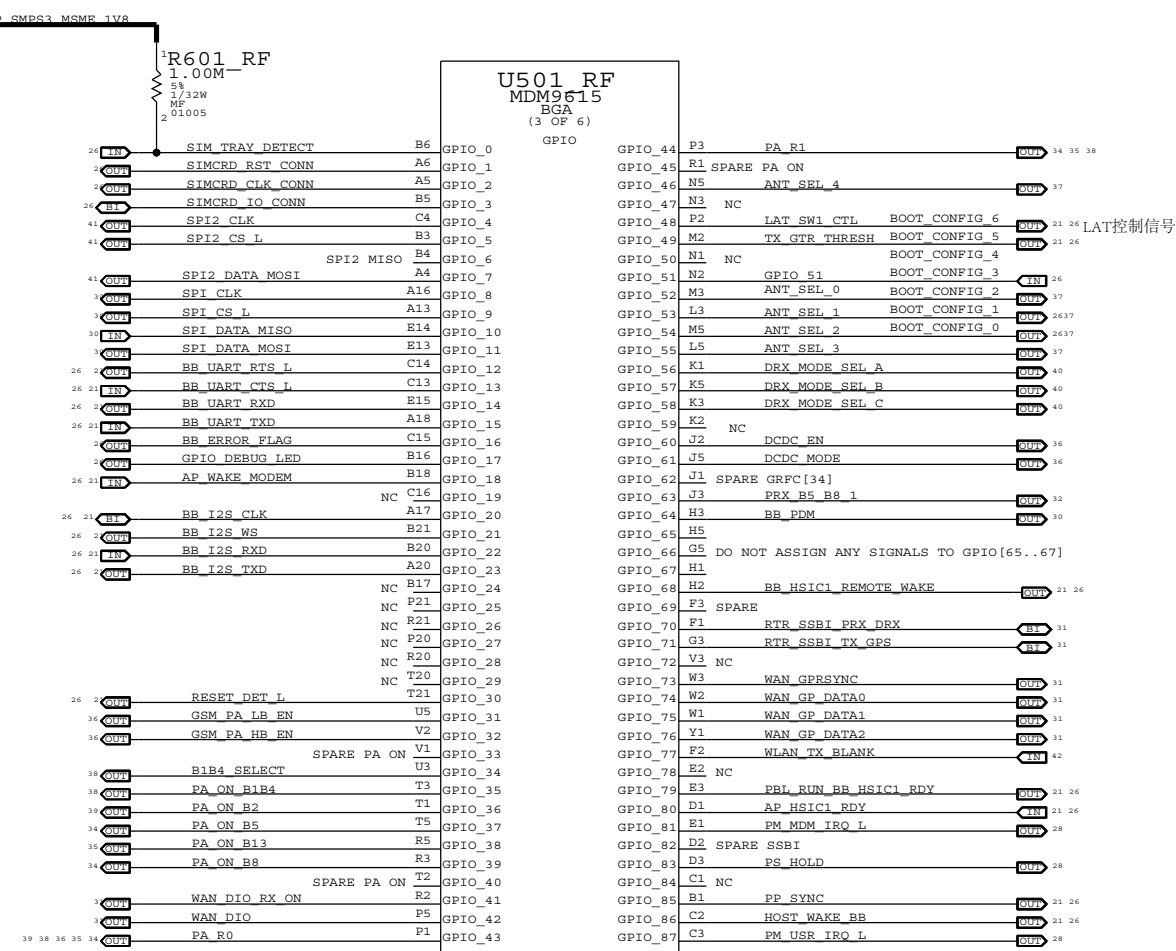
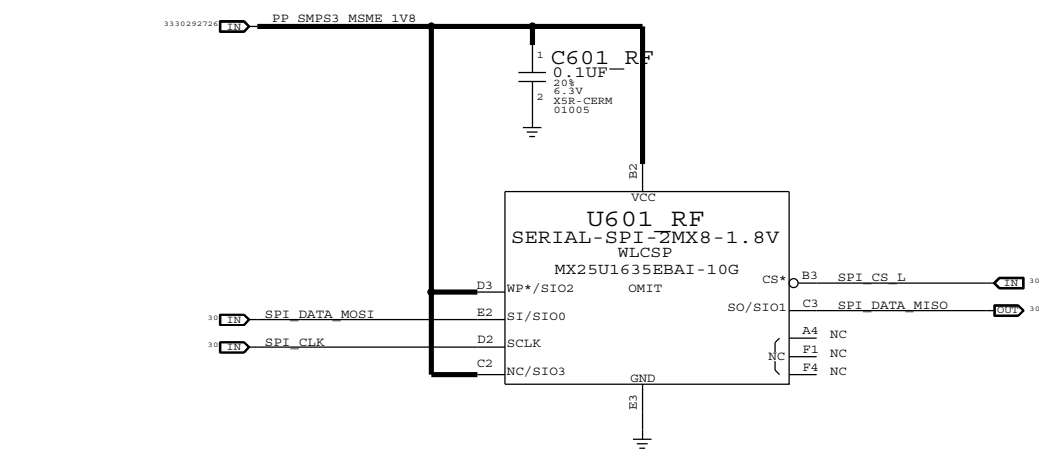
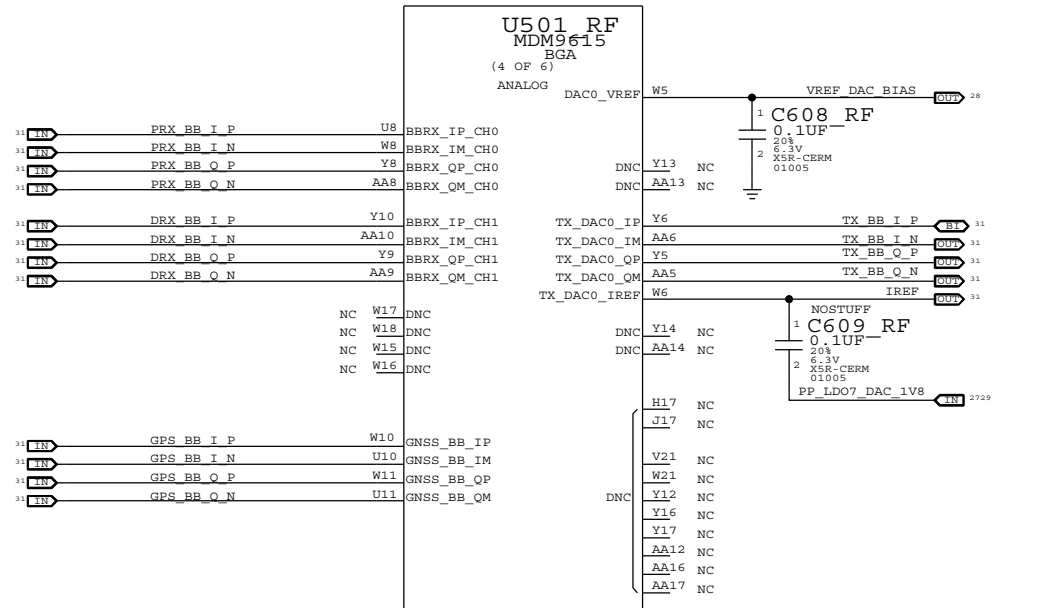


R R502
C C528
L LXXX
U U501

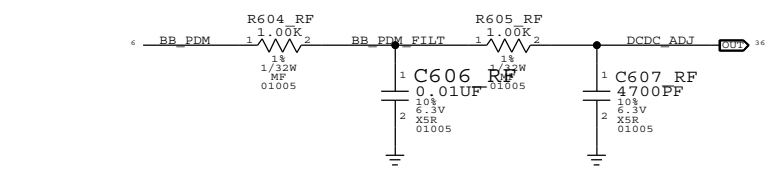
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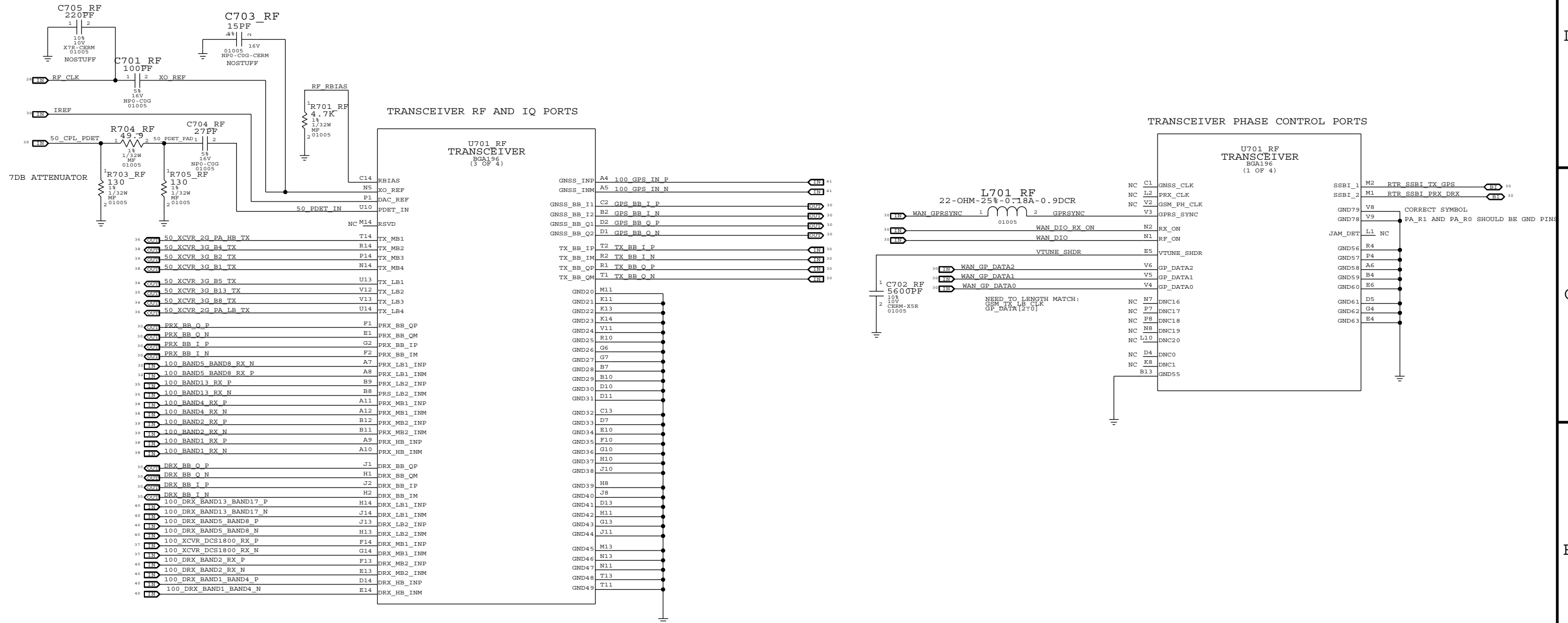
R R608
C C609
L L601



MOBILE DATA MODEM (2 OF 2)		
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RF TRANSCEIVER (1 OF 3)

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R R705
C C705
L L701
U U701

RF TRANSCEIVER (1 OF 3)		
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		PAGE 7 OF 19
		SHEET 31 OF 51

RF TRANSCEIVER SWITCHING NETWORKS (2 OF 3)

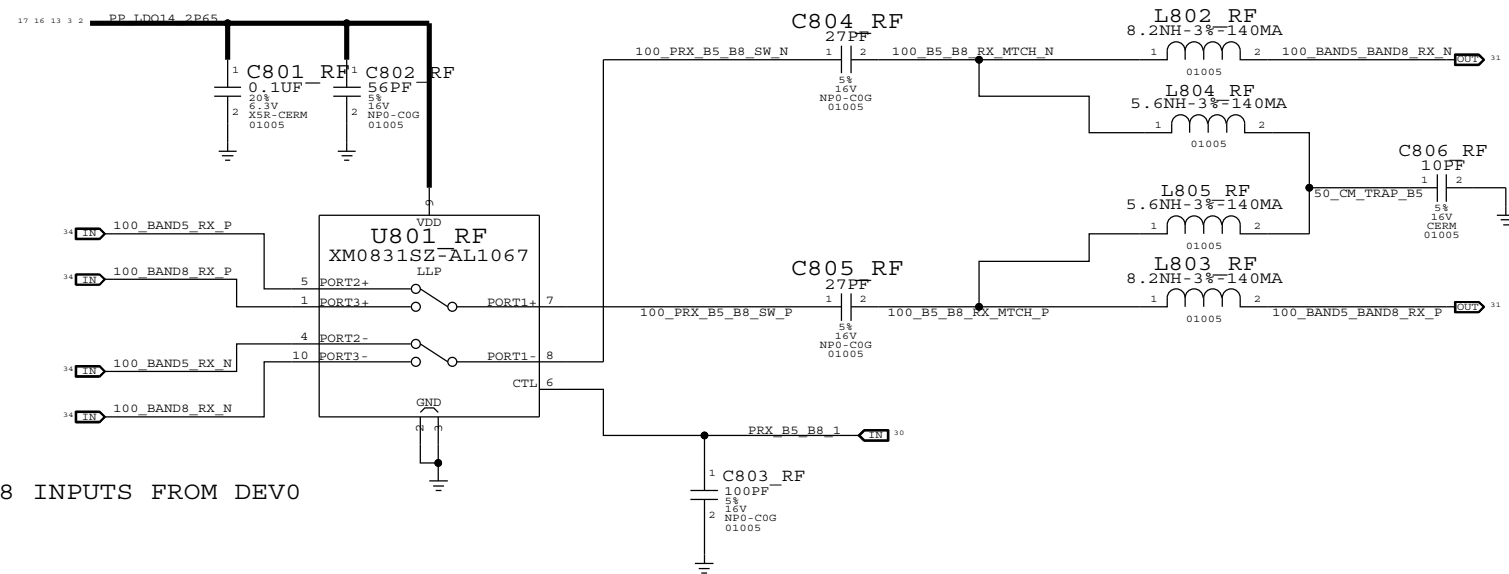
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BAND 5/BAND 8 PRX TRANSCEIVER SWITCH

XM0830SZ SWITCH LOGIC

PRX_B5_B8	ACTIVE BAND	PORT
HIGH	8	PORT 1 TO PORT 3
LOW	5	PORT 1 TO PORT 2

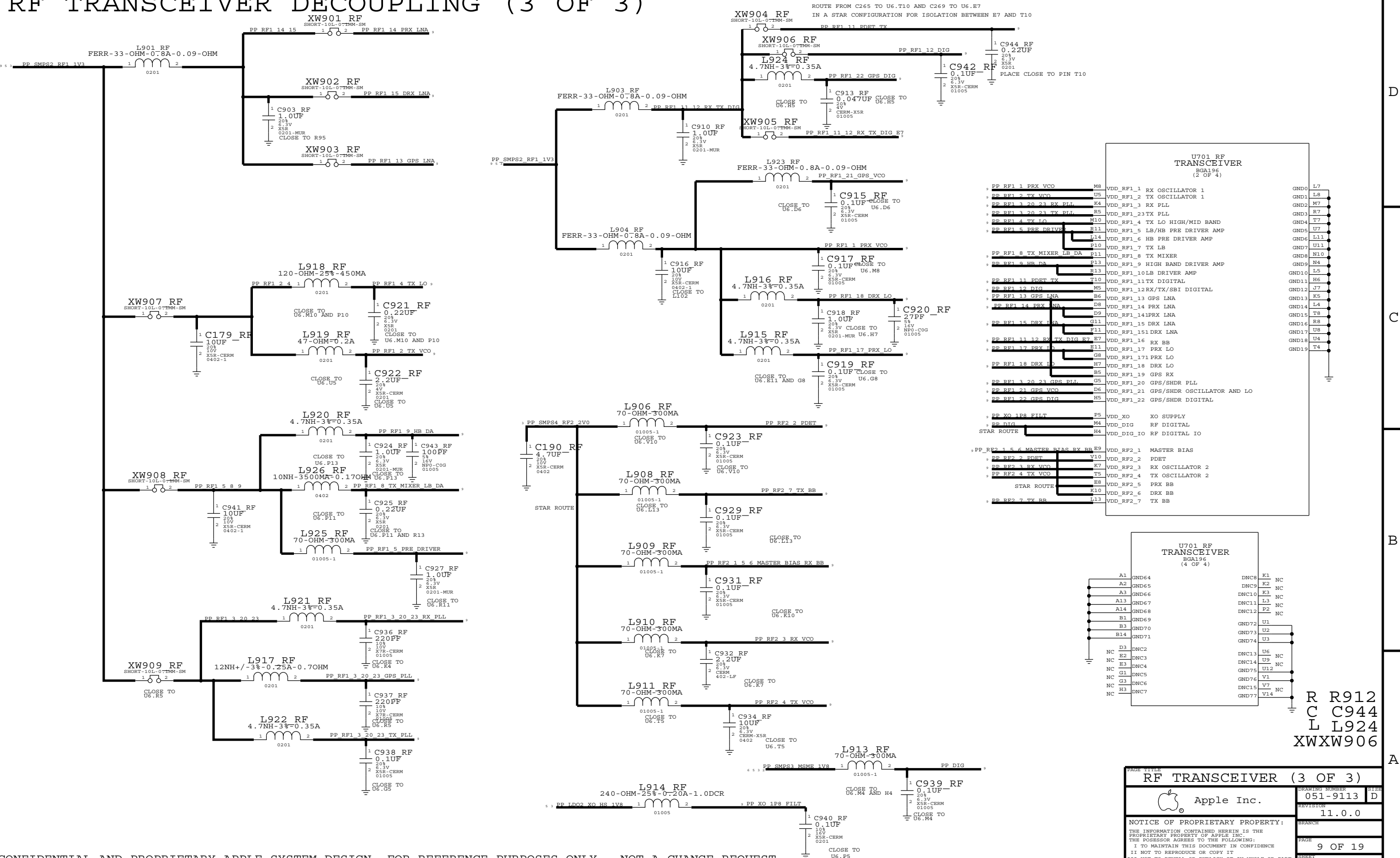
SWAPPED BAND5 AND BAND8 INPUTS FROM DEVO



R RXXX
C C806
L L803
U U801

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RF TRANSCEIVER DECOUPLING (3 OF 3)



U701 RF TRANSCEIVER (BGA196) (2 OF 4)

PP RF1 1 PRX VCO	M8	VDD_RF1_1 RX OSCILLATOR 1	GND0	L7
PP RF1 2 TX VCO	U5	VDD_RF1_2 TX OSCILLATOR 1	GND1	L8
PP RF1 3 20 23 RX PLL	K4	VDD_RF1_3 RX PLL	GND2	M7
PP RF1 3 20 23 TX PLL	R5	VDD_RF1_23 TX PLL	GND3	R7
PP RF1 4 TX LO	M10	VDD_RF1_4 TX LO HIGH/MID BAND	GND4	T7
PP RF1 5 PRE DRIVER	R11	VDD_RF1_5 LB/HB PRE DRIVER AMP	GND5	U7
	L14	VDD_RF1_6 HB PRE DRIVER AMP	GND6	L11
	P10	VDD_RF1_7 TX LB	GND7	U11
PP RF1 8 TX MIXER LB DA	P11	VDD_RF1_8 TX MIXER	GND8	N10
PP RF1 9 HB DA	P13	VDD_RF1_9 HIGH BAND DRIVER AMP	GND9	N4
	R13	VDD_RF1_10 LB DRIVER AMP	GND10	L5
PP RF1 11 PDET TX	T10	VDD_RF1_11 TX DIGITAL	GND11	H6
PP RF1 12 DIG	M5	VDD_RF1_12 RX/TX/SBI DIGITAL	GND12	J7
PP RF1 13 GPS LNA	B6	VDD_RF1_13 GPS LNA	GND13	K5
PP RF1 14 PRX LNA	D8	VDD_RF1_14 PRX LNA	GND14	L4
PP RF1 15 DRX LNA	D9	VDD_RF1_141 PRX LNA	GND15	T8
	G11	VDD_RF1_15 DRX LNA	GND16	R8
	F11	VDD_RF1_151 DRX LNA	GND17	U4
PP RF1 11 12 RX TX DIG E7	P11	VDD_RF1_16 RX BB	GND18	U8
PP RF1 17 PRX LO	G8	VDD_RF1_17 PRX LO	GND19	T4
PP RF1 18 DRX LO	H7	VDD_RF1_171 PRX LO		
	H5	VDD_RF1_18 DRX LO		
	B5	VDD_RF1_19 GPS RX		
PP RF1 3 20 23 GPS PLL	G5	VDD_RF1_20 GPS/SHDR PLL		
PP RF1 21 GPS VCO	D6	VDD_RF1_21 GPS/SHDR OSCILLATOR AND LO		
PP RF1 22 GPS DIG	H5	VDD_RF1_22 GPS/SHDR DIGITAL		
PP XO 1PB FILT	P5	VDD_XO XO SUPPLY		
PP DIG	M4	VDD_DIG RF DIGITAL IO		
STAR ROUTE	H4	VDD_DIG_IO RF DIGITAL IO		
PP RF2 1 5 6 MASTER BIAS RX BB	E9	VDD_RF2_1 MASTER BIAS		
PP RF2 2 PDET	V10	VDD_RF2_2 PDET		
PP RF2 3 RX VCO	K7	VDD_RF2_3 RX OSCILLATOR 2		
PP RF2 4 TX VCO	T5	VDD_RF2_4 TX OSCILLATOR 2		
STAR ROUTE	E8	VDD_RF2_5 PRX BB		
	K10	VDD_RF2_6 DRX BB		
PP RF2 7 TX BB	L13	VDD_RF2_7 TX BB		

U701 RF TRANSCEIVER (BGA196) (4 OF 4)

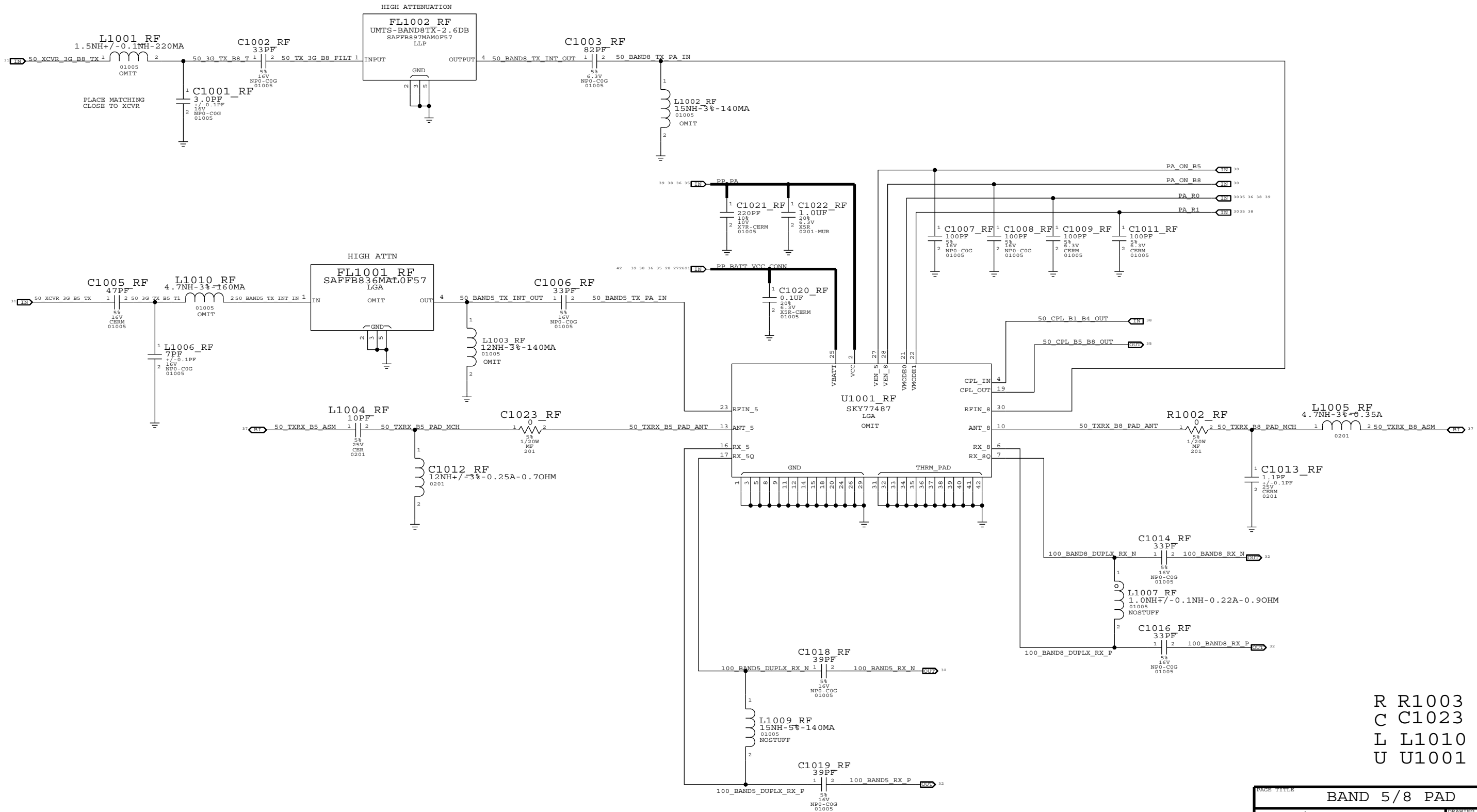
A1	GND64	DNC8	K1	NC
A2	GND65	DNC9	K2	NC
A3	GND66	DNC10	K3	NC
A13	GND67	DNC11	L3	NC
A14	GND68	DNC12	P2	NC
B1	GND69	GND72	U1	
B3	GND70	GND73	U2	
B14	GND71	GND74	U3	
D3	DNC2	DNC13	U6	NC
E2	DNC3	DNC14	U9	NC
E3	DNC4	GND75	U12	NC
G1	DNC5	GND76	V1	
G3	DNC6	DNC15	V7	NC
H3	DNC7	GND77	V14	

R R912
C C944
L L924
XW906

RF TRANSCEIVER (3 OF 3)	
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BAND 5/8 PAD

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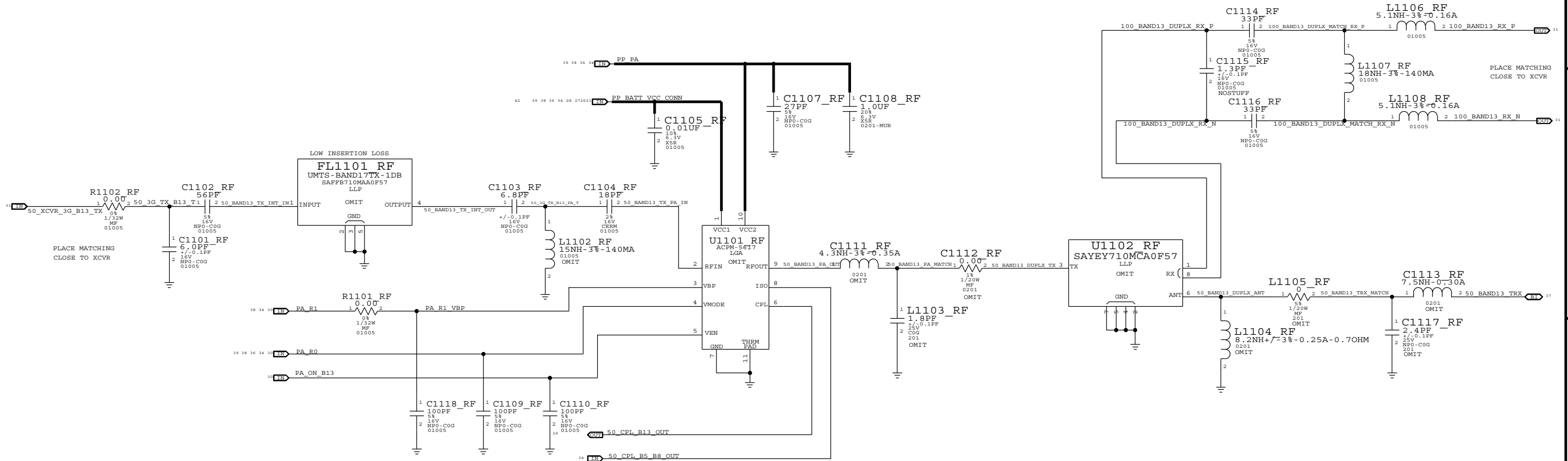


- R R1003
- C C1023
- L L1010
- U U1001

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BAND 5/8 PAD		
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B13/17 INTERSTAGE, PA, AND DUPLEXER

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PA POWER MODES

MODE	PA_R0	PA_R1
LOW	HIGH	HIGH
MEDIUM	LOW	HIGH
HIGH	LOW	LOW

FLFL1101
R R1102
C C1118
L L1108
U U1102

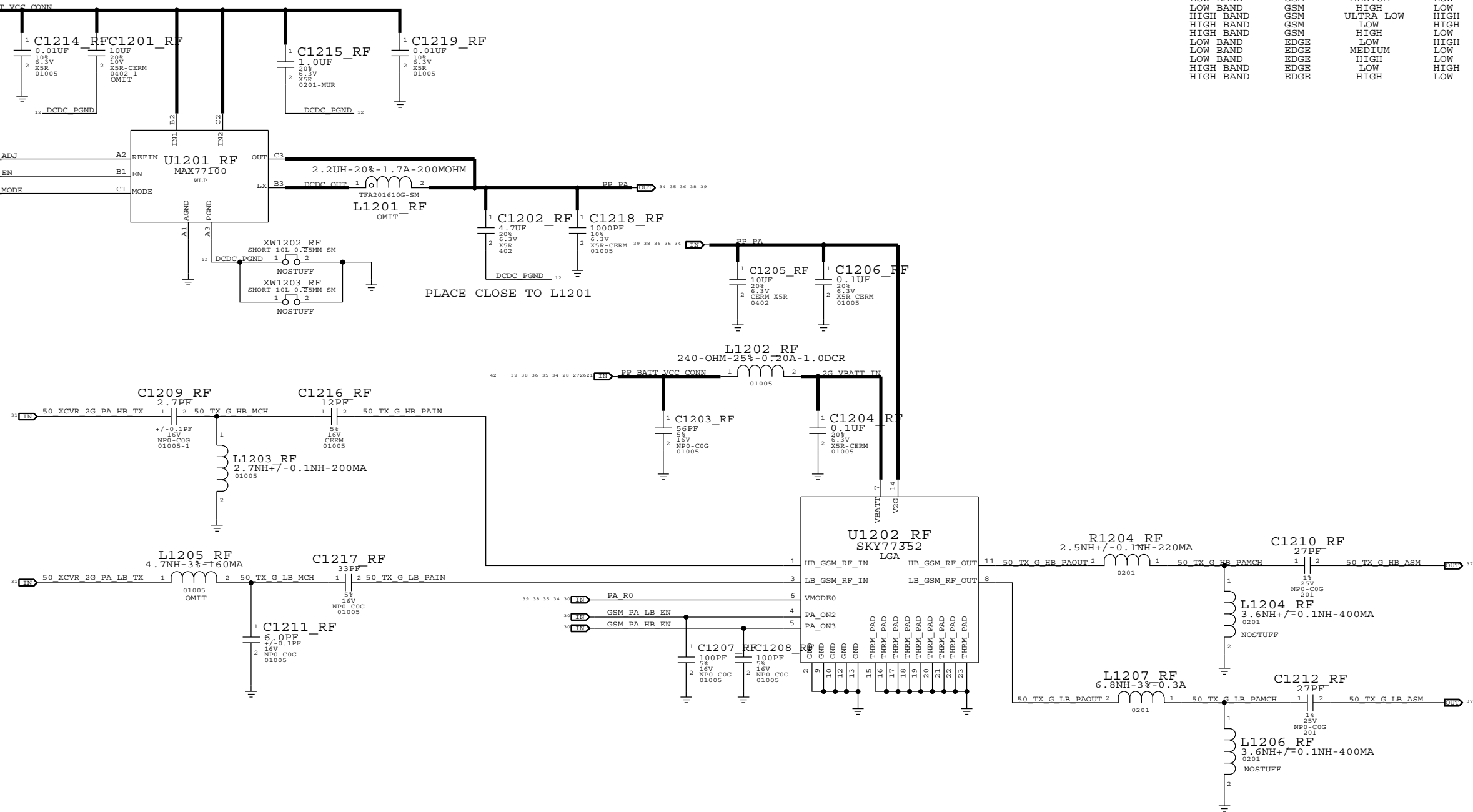
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2G PA, PA DC/DC CONVERTER

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2G PA GAIN MODES

BAND	MODE	GAIN MODE	PA R1	PCL RANGE
LOW BAND	GSM	ULTRA LOW	HIGH	16 TO 19
LOW BAND	GSM	LOW	HIGH	14 TO 15
LOW BAND	GSM	MEDIUM	LOW	7 TO 13
LOW BAND	GSM	HIGH	LOW	5 TO 6
HIGH BAND	GSM	ULTRA LOW	HIGH	10 TO 15
HIGH BAND	GSM	LOW	HIGH	7 TO 9
HIGH BAND	GSM	HIGH	LOW	0 TO 6
LOW BAND	EDGE	LOW	HIGH	15 TO 19
LOW BAND	EDGE	MEDIUM	LOW	10 TO 14
LOW BAND	EDGE	HIGH	LOW	8 TO 9
HIGH BAND	EDGE	LOW	HIGH	9 TO 15
HIGH BAND	EDGE	HIGH	LOW	2 TO 8

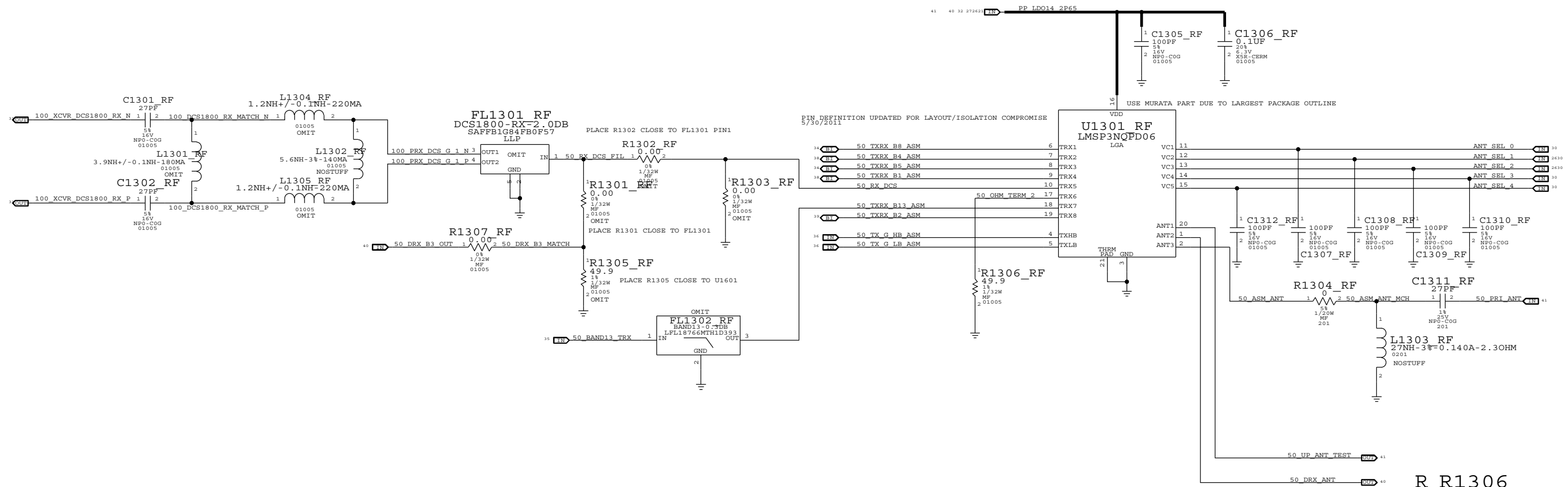


R R1209
C C1220
L L1207
U U1202

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	SIZE	D

ASM, DCS RX

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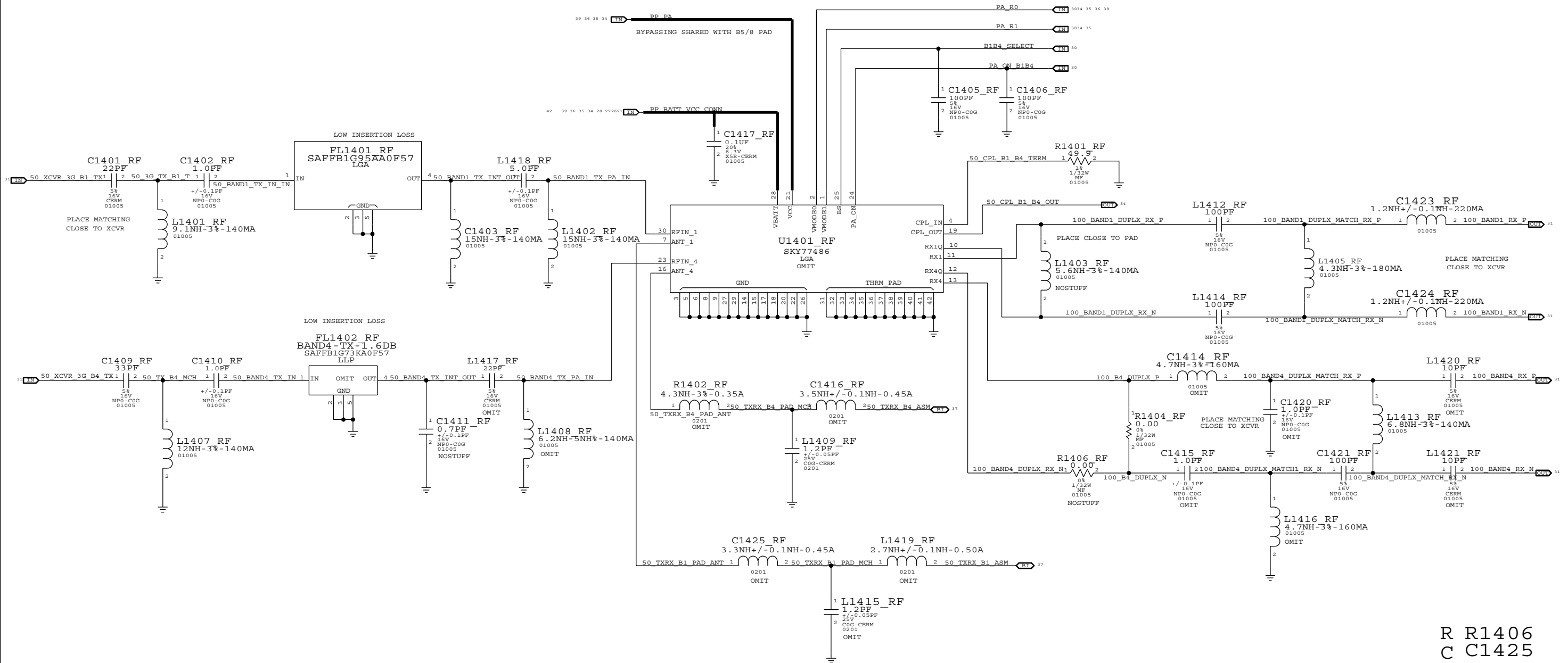


R R1306
C C1312
L 1305
U U1301
FL FL1302

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DCS RX, ASM		
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BAND 1/4 PAD

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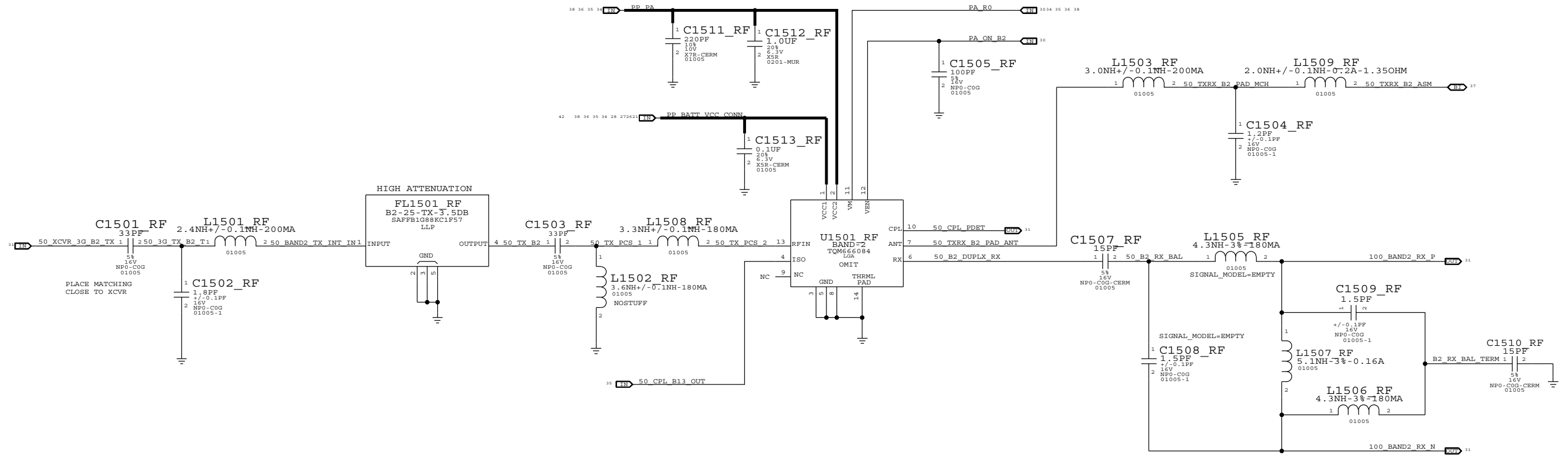


- R R1406
- C C1425
- L L1422
- U U1401
- FL FL1101

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BAND2 PAD

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- R R1501
- C C1513
- L L1509
- U U1501
- FL FL1501

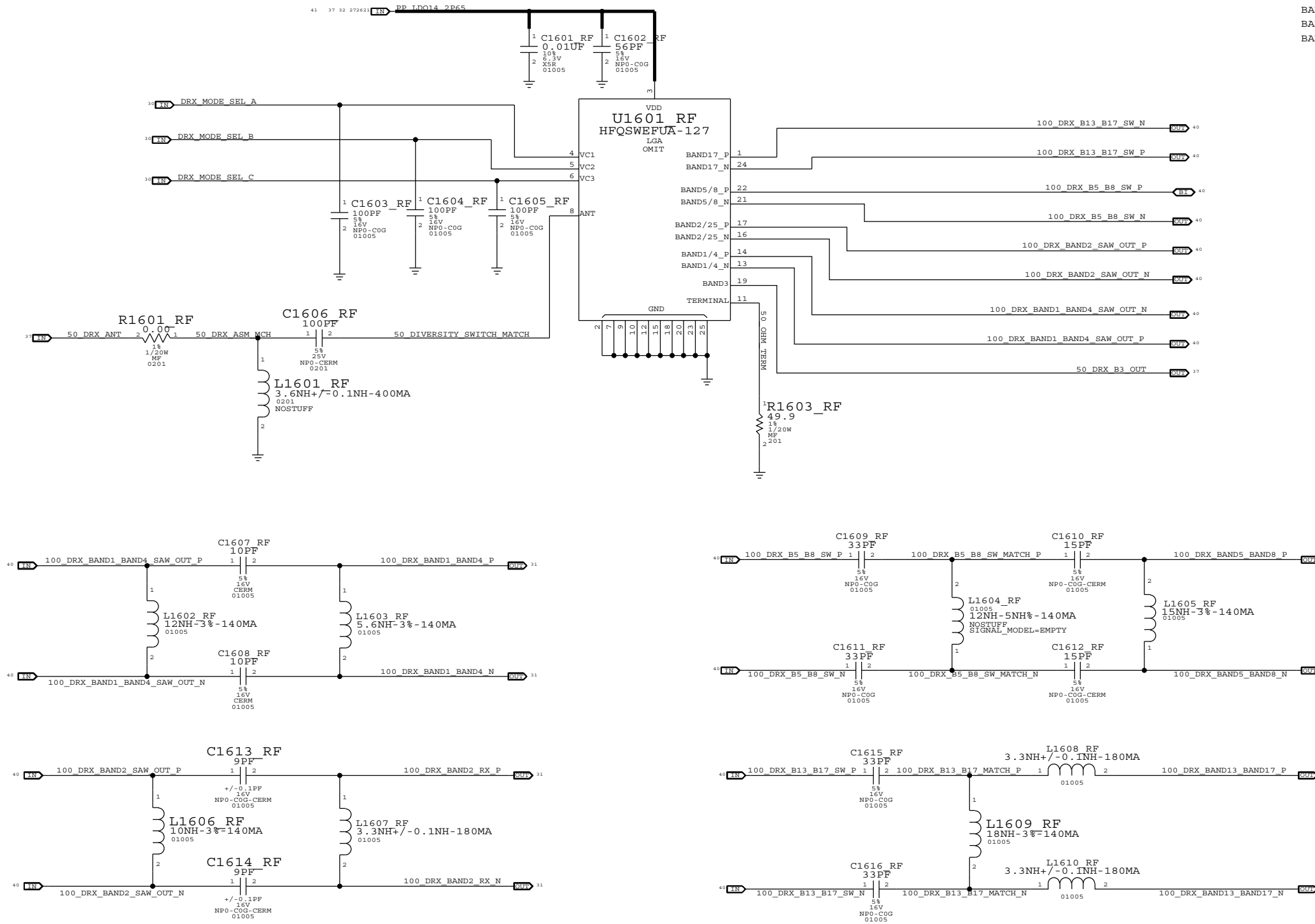
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RX DIVERSITY


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DIVERSITY MODULE LOGIC

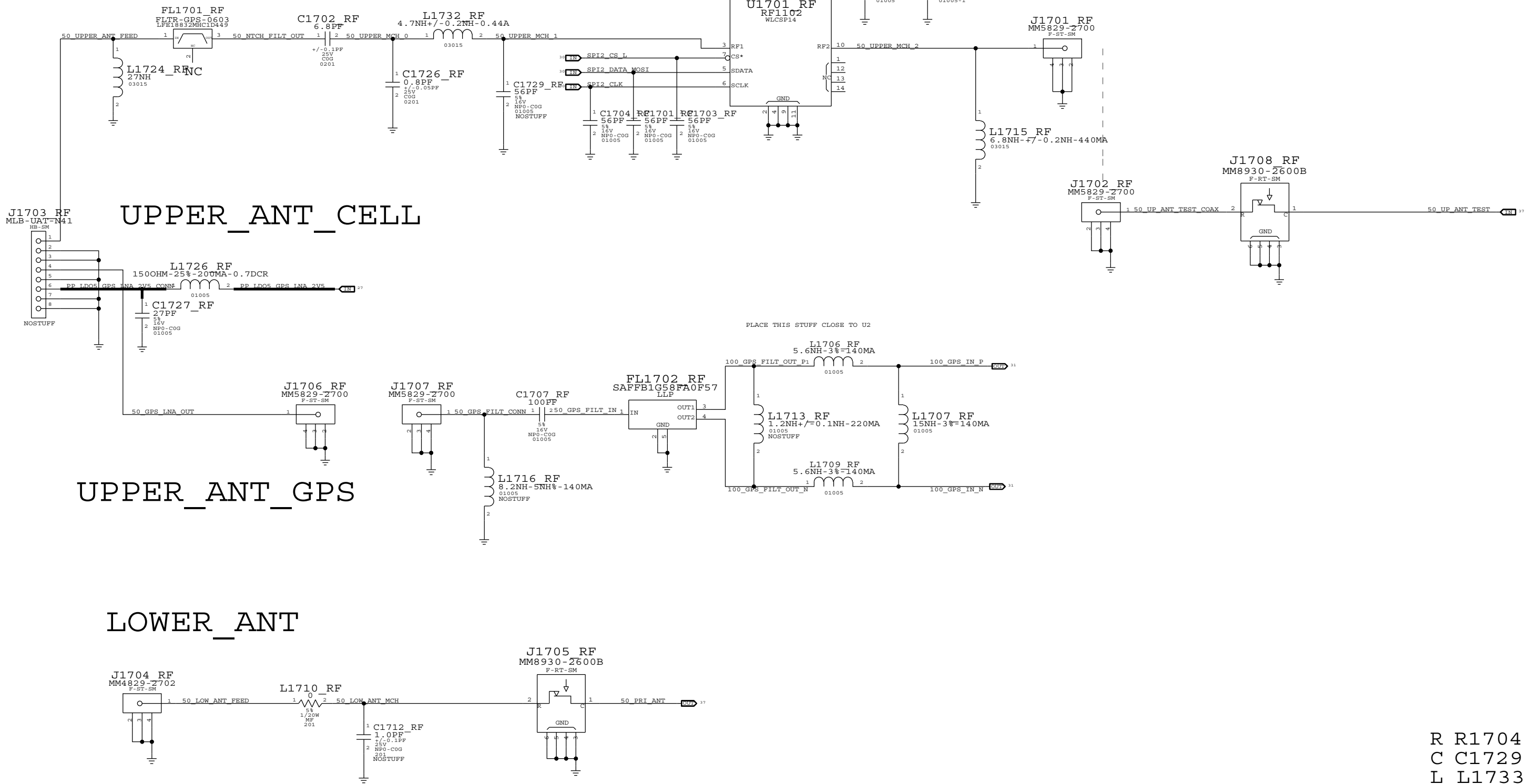
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BAND 1/4			
BAND 2			
BAND 5			
BAND 8			
BAND 13/17			




R.R1603
C C1616
L L1610
U U1601

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RX DIVERSITY		
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GPS

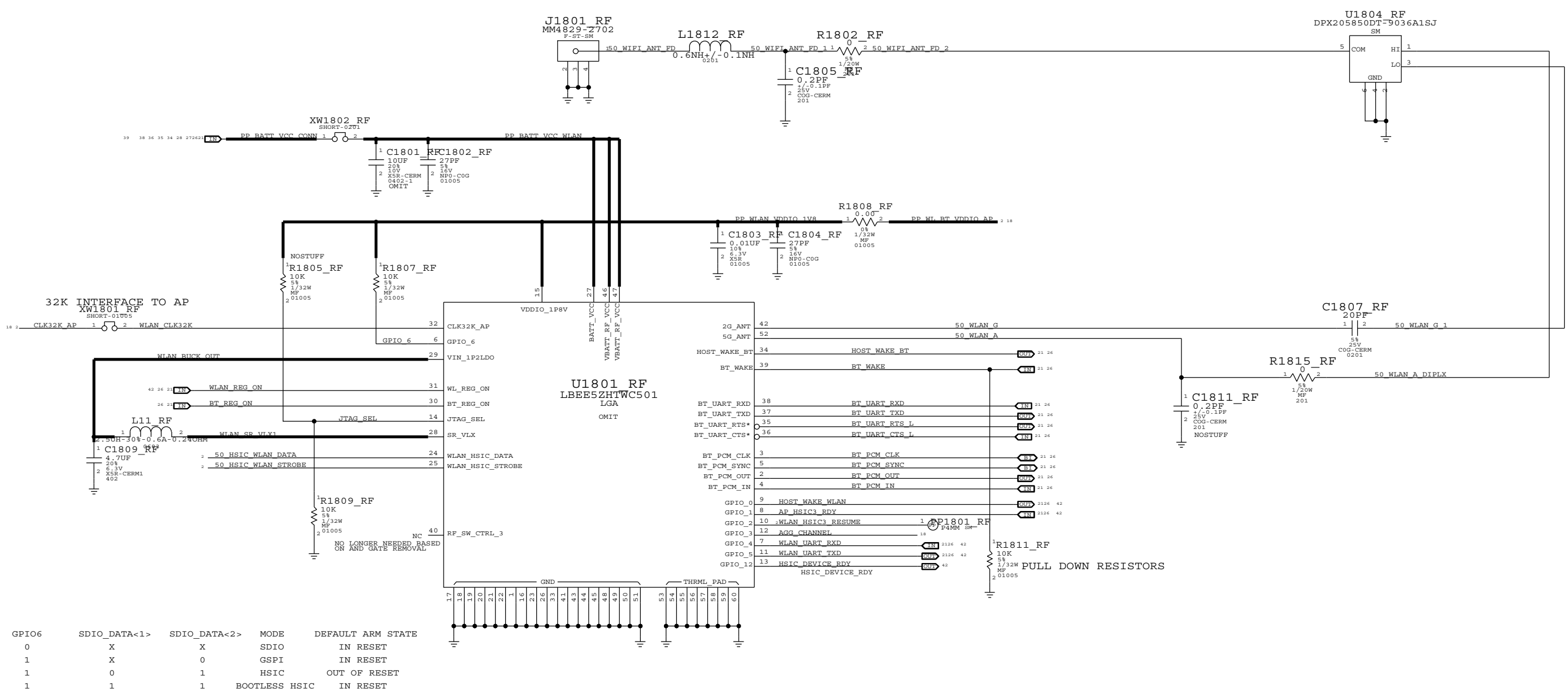


R R1704
C C1729
L L1733
U U1703

GPS		
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WLAN/BT

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- R R1815
- C C1811
- L L1812
- U U1802
- J J1802

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WIFI/BT		
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RADIO BOM OPTIONS

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HW ID PA ID BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
118S0685	1	PA_ID RES DIVIDER	R304_RF	Y	B4_17
118S0656	1	PA_ID RES DIVIDER	R304_RF	Y	B3_13
118S0719	1	PA_ID RES DIVIDER	R302_RF	Y	B4_17
118S0685	1	PA_ID RES DIVIDER	R302_RF	Y	B3_13

SPI NOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B4_17
335S0874	1	SERIAL SPI NOR - MICRONIX	U601_RF	Y	B3_13

B5/B5E BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3415	1	SKY77487 BAND 5/8 PAD	U1001_RF	Y	B4_17
353S3568	1	SKY77491 BAND5E/8 PAD	U1001_RF	Y	B3_13
155S0552	1	BAND5 TX SAW	FL1001_RF	Y	B4_17
155S0742	1	BAND5/BC10 TX SAW	FL1001_RF	Y	B3_13
152S1563	1	1.5NH, INDUCTOR - MURATA	L1001_RF	Y	B4_17
152S1662	1	1.5NH, INDUCTOR - TDK	L1001_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1002_RF	Y	B4_17
152S1665	1	15NH, INDUCTOR - TDK	L1002_RF	Y	B3_13
152S1576	1	12NH, INDUCTOR - MURATA	L1003_RF	Y	B4_17
152S1664	1	12NH, INDUCTOR - TDK	L1003_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1010_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1010_RF	Y	B3_13

B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1328	1	4.3NH INDUCTOR - 0201	C1111_RF	Y	B4_17
152S1353	1	3.6NH INDUCTOR - 0201	C1111_RF	Y	B3_13
131S0198	1	1.8PF CAPACITOR - 0201	L1103_RF	Y	B4_17
118S0724	1	0 OHM JUMPER - 0201	C1112_RF	Y	B4_17
131S0204	1	22PF CAPACITOR - 0201	C1112_RF	Y	B3_13
118S0724	1	0 OHM JUMPER - 0201	L1105_RF	Y	B4_17
152S1443	1	2.0NH INDUCTOR - 0201	L1105_RF	Y	B3_13
152S1320	1	7.5NH INDUCTOR - 0201	C1113_RF	Y	B4_17
131S0166	1	39PF CAPACITOR - 0201	C1113_RF	Y	B3_13
131S0176	1	2.4PF CAPACITOR - 0201	C1117_RF	Y	B4_17

DCDC BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B4_17
152S1648	1	POWER INDUCTOR - TAIYO YUDEN	L1201_RF	Y	B3_13
152S1570	1	4.7NH, INDUCTOR - MURATA	L1205_RF	Y	B4_17
152S1663	1	4.7NH, INDUCTOR - TDK	L1205_RF	Y	B3_13

WIFI BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B4_17
339S0171	1	WIFI MODULE - MURATA	U1801_RF	Y	B3_13

SINGING CAP BOM OPTIONS
NEED TO COPY FROM AP TABLE
WHEN STAN FINISHES

B13/17 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0620	1	BAND17 TX SAW	FL1101_RF	Y	B4_17
155S0619	1	BAND13 TX SAW	FL1101_RF	Y	B3_13
353S3567	1	BAND17 PAM - SKYWORKS	U1101_RF	Y	B4_17
353S3441	1	BAND13 PAM - AVAGO	U1101_RF	Y	B3_13
155S0709	1	BAND17 DUPLEXER - MURATA	U1102_RF	Y	B4_17
155S0738	1	BAND13 DUPLEXER - EPCOS	U1102_RF	Y	B3_13
152S1336	1	BAND17 INDUCTOR - 8.2NH	L1104_RF	Y	B4_17
152S1342	1	BAND13 INDUCTOR - 15NH	L1104_RF	Y	B3_13
152S1577	1	15NH, INDUCTOR - MURATA	L1102_RF	Y	B4_17
152S1576	1	12NH, INDUCTOR - MURATA	L1102_RF	Y	B3_13

B2 PAD BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3715	1	TQM666084 B2 TQS PAD	U1501_RF	Y	B4_17
353S3459	1	TQM666083 B25 TQS PAD	U1501_RF	Y	B3_13

DIVERISTY MODULE BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3516	1	B17 MURATA DIVERSITY MODULE	U1601_RF	Y	B4_17
353S3562	1	B13/BC10 DIVERSITY MODULE	U1601_RF	Y	B3_13

B3/DCS1800 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0596	1	DCS1800 RX FIL	FL1301_RF	Y	B4_17
155S0729	1	BAND3 RX FIL	FL1301_RF	Y	B3_13
155S0695	1	THRU LINE	FL1302_RF	Y	B4_17
155S0722	1	BAND13 TX LFF	FL1302_RF	Y	B3_13
152S1656	1	3.0NH INDUCTOR	R1301_RF	Y	B3_13
117S0161	1	00HM RES	R1302_RF	Y	B4_17
118S0652	1	49.90HM RES	R1303_RF	Y	B3_13
118S0652	1	49.90HM RES	R1305_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR	L1304_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1304_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR	L1305_RF	Y	B4_17
152S1720	1	1.8NH INDUCTOR	L1305_RF	Y	B3_13
152S1569	1	3.9NH INDUCTOR	L1301_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR	L1301_RF	Y	B3_13

B3/B4 RX BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1570	1	4.7NH INDUCTOR - 01005	C1414_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1415_RF	Y	B4_17
131S0375	1	1.0PF CAPACITOR - 01005	C1420_RF	Y	B4_17
152S1570	1	4.7NH INDUCTOR - 01005	L1416_RF	Y	B4_17
152S1571	1	5.6NH INDUCTOR - 01005	C1414_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1415_RF	Y	B3_13
131S0377	1	1.2PF CAPACITOR - 01005	C1420_RF	Y	B3_13
152S1571	1	5.6NH INDUCTOR - 01005	L1416_RF	Y	B3_13
131S0219	1	10PF CAPACITOR - 01005	L1420_RF	Y	B4_17
131S0219	1	10PF CAPACITOR - 01005	L1421_RF	Y	B4_17
152S1562	1	1.2NH INDUCTOR - 01005	L1420_RF	Y	B3_13
152S1562	1	1.2NH INDUCTOR - 01005	L1421_RF	Y	B3_13
152S1328	1	4.3NH INDUCTOR - 0201	R1402_RF	Y	B4_17
152S1688	1	3.5NH INDUCTOR - 0201	C1416_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	R1402_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1416_RF	Y	B3_13

B3/B4 TX BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
131S0215	1	22PF CAPACITOR - 01005	L1417_RF	Y	B4_17
152S1569	1	3.9NH INDUCTOR - 01005	L1417_RF	Y	B3_13
131S0369	1	0.5PF CAPACITOR - 01005	L1408_RF	Y	B3_13
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B4_17
152S1705	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B4_17
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B4_17
152S1284	1	3.3NH INDUCTOR - 0201	C1425_RF	Y	B3_13
152S1705	1	2.7NH INDUCTOR - 0201	L1419_RF	Y	B3_13
131S0551	1	1.2PF CAPACITOR - 0201	L1415_RF	Y	B3_13

B3/B4 BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S3255	1	B1/4 PAD - AVAGO	U1401_RF	Y	B4_17
353S3443	1	B1/3 PAD - AVAGO	U1401_RF	Y	B3_13
155S0590	1	B4 TX FIL	FL1402_RF	Y	B4_17
155S0712	1	B3 TX FIL	FL1402_RF	Y	B3_13

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Table with columns 1-8 and rows A-D. The table lists various components and their values across the columns. Column 8 contains component names, column 7 contains values, column 6 contains component names, column 5 contains values, column 4 contains component names, column 3 contains values, column 2 contains component names, and column 1 contains values. The table is organized into four vertical sections labeled A, B, C, and D. The bottom row contains the column numbers 8, 7, 6, 5, 4, 3, 2, 1 from left to right.

8				7				6				5				4				3				2				1																																																																																																																																																																																																																																																																																																																																																			
C601_RF	CAP_01005	radio_mlb[3087]single_brd[21]	C1424_RF	IND_01005	radio_mlb[38C1]single_brd[21]	FL23	FILTER_2P_01005	single_brd[11C2]	L20	M1	FILTER_4P_TCM0605-1	single_brd[16B2]	L21	IND_PSB121017-SM	single_brd[17B3]	L22	FILTER_4P_TCM0605-1	single_brd[16B2]	L28	IND_0201	single_brd[20C7]	L29	IND_0201	single_brd[20A7]	L30	IND_0201	single_brd[20B7]	L33	FILTER_4P_TCM0605-1	single_brd[20C3]	L34	FILTER_4P_TCM0605-1	single_brd[20C3]	L35	FILTER_4P_TCM0605-1	single_brd[11D2]	L36	FILTER_4P_TCM0605-1	single_brd[20B2]	L37	FILTER_4P_TCM0605-1	single_brd[20B2]	L38	FILTER_4P_TCM0605-1	single_brd[20B3]	L39	FILTER_4P_TCM0605-1	single_brd[11C2]	L40	IND_P_VLS25201610MT-6R	single_brd[19C3]	L41	8M-SM	L42	FILTER_4P_TCM0605-1	single_brd[18C6]	L43	FILTER_4P_TCM0605-1	single_brd[18B6]	L44	FILTER_4P_TCM0605-1	single_brd[18C6]	L45	FILTER_4P_TCM0605-1	single_brd[18B6]	L50	IND_P_VLS25201610MNT-S	single_brd[12C4]	M	L54	IND_P_VLS25201610MNT-S	single_brd[12D2]	M	L207_RF	IND_0806	radio_mlb[27D3]single_brd[21]	L208_RF	IND_0806	radio_mlb[27C3]single_brd[21]	L209_RF	IND_0806	radio_mlb[27C3]single_brd[21]	L210_RF	IND_0806	radio_mlb[27B3]single_brd[21]	L211_RF	IND_TFA252010-SM	radio_mlb[27B3]single_brd[21]	L701_RF	FILTER_2P_01005	radio_mlb[31C3]single_brd[21]	L802_RF	IND_01005	radio_mlb[32C3]single_brd[21]	L803_RF	IND_01005	radio_mlb[32B3]single_brd[21]	L804_RF	IND_01005	radio_mlb[32C3]single_brd[21]	L805_RF	IND_01005	radio_mlb[32C3]single_brd[21]	L901_RF	IND_0201	radio_mlb[33D7]single_brd[21]	L914_RF	IND_0201	radio_mlb[33C4]single_brd[21]	L904_RF	IND_0201	radio_mlb[33C5]single_brd[21]	L906_RF	FILTER_2P_01005-1	radio_mlb[33C5]single_brd[21]	L908_RF	FILTER_2P_01005-1	radio_mlb[33B5]single_brd[21]	L909_RF	FILTER_2P_01005-1	radio_mlb[33B5]single_brd[21]	L910_RF	FILTER_2P_01005-1	radio_mlb[33B5]single_brd[21]	L911_RF	FILTER_2P_01005-1	radio_mlb[33A5]single_brd[21]	L913_RF	FILTER_2P_01005-1	radio_mlb[33A3]single_brd[21]	L914_RF	FILTER_2P_01005	radio_mlb[33A5]single_brd[21]	L915_RF	IND_0201	radio_mlb[33C4]single_brd[21]	L916_RF	IND_0201	radio_mlb[33A7]single_brd[21]	L918_RF	FILTER_2P_0201	radio_mlb[33C7]single_brd[21]	L919_RF	FILTER_2P_0201	radio_mlb[33C6]single_brd[21]	L920_RF	IND_0201	radio_mlb[33B6]single_brd[21]	L921_RF	IND_0201	radio_mlb[33B7]single_brd[21]	L922_RF	IND_0201	radio_mlb[33A7]single_brd[21]	L923_RF	IND_0201	radio_mlb[33D4]single_brd[21]	L924_RF	IND_0201	radio_mlb[33D4]single_brd[21]	L925_RF	FILTER_2P_01005-1	radio_mlb[33B6]single_brd[21]	L926_RF	IND_0402	radio_mlb[33B7]single_brd[21]	L1001_RF	IND_01005	radio_mlb[34D8]single_brd[21]	L1002_RF	IND_01005	radio_mlb[34D5]single_brd[21]	L1003_RF	IND_01005	radio_mlb[34C6]single_brd[21]	L1004_RF	CAP_0201	radio_mlb[34B7]single_brd[21]	L1005_RF	IND_0201	radio_mlb[34B2]single_brd[21]	L1006_RF	CAP_01005	radio_mlb[34C8]single_brd[21]	L1007_RF	IND_P_01005	radio_mlb[34B3]single_brd[21]	L1009_RF	IND_01005	radio_mlb[34A5]single_brd[21]	L1010_RF	IND_01005	radio_mlb[34C7]single_brd[21]	L1102_RF	IND_01005	radio_mlb[35D5]single_brd[21]	L1103_RF	CAP_201	radio_mlb[35B4]single_brd[21]	L1104_RF	IND_0201	radio_mlb[35B2]single_brd[21]	L1105_RF	RES_201	radio_mlb[35C2]single_brd[21]	L1106_RF	IND_01005	radio_mlb[35D1]single_brd[21]	L1107_RF	IND_01005	radio_mlb[35C2]single_brd[21]	L1108_RF	IND_01005	radio_mlb[35C1]single_brd[21]	L1201_RF	IND_P_TFA201610G-SM	radio_mlb[36D6]single_brd[21]	L1202_RF	FILTER_2P_01005	radio_mlb[36C5]single_brd[21]	L1203_RF	IND_01005	radio_mlb[36C7]single_brd[21]	L1204_RF	IND_0201	radio_mlb[36B3]single_brd[21]	L1205_RF	IND_01005	radio_mlb[36B7]single_brd[21]	L1206_RF	IND_0201	radio_mlb[36B3]single_brd[21]	L1207_RF	IND_0201	radio_mlb[36B3]single_brd[21]	L1301_RF	IND_01005	radio_mlb[37C7]single_brd[21]	L1302_RF	IND_01005	radio_mlb[37C6]single_brd[21]	L1303_RF	IND_0201	radio_mlb[37B2]single_brd[21]	L1304_RF	IND_01005	radio_mlb[37C7]single_brd[21]	L1305_RF	IND_01005	radio_mlb[37B7]single_brd[21]	L1401_RF	IND_01005	radio_mlb[38C1]single_brd[21]	L1402_RF	IND_01005	radio_mlb[38C6]single_brd[21]	L1403_RF	IND_01005	radio_mlb[38C3]single_brd[21]	L1405_RF	IND_01005	radio_mlb[38C2]single_brd[21]	L1407_RF	IND_01005	radio_mlb[38B8]single_brd[21]	L1408_RF	IND_01005	radio_mlb[38B6]single_brd[21]	L1409_RF	CAP_0201	radio_mlb[38B5]single_brd[21]	L1412_RF	CAP_01005	radio_mlb[38C2]single_brd[21]	L1413_RF	IND_01005	radio_mlb[38B2]single_brd[21]	L1414_RF	CAP_01005	radio_mlb[38C2]single_brd[21]	L1415_RF	CAP_0201	radio_mlb[38A4]single_brd[21]	L1416_RF	IND_01005	radio_mlb[38B2]single_brd[21]	L1417_RF	CAP_01005	radio_mlb[38B6]single_brd[21]	L1418_RF	CAP_01005	radio_mlb[38C6]single_brd[21]	L1419_RF	IND_0201	radio_mlb[38B4]single_brd[21]	L1420_RF	CAP_01005	radio_mlb[38B1]single_brd[21]	L1421_RF	CAP_01005	radio_mlb[38B1]single_brd[21]	L1501_RF	IND_01005	radio_mlb[39C7]single_brd[21]	L1502_RF	IND_01005	radio_mlb[39C5]single_brd[21]	L1503_RF	IND_01005	radio_mlb[39C7]single_brd[21]	L1505_RF	IND_01005	radio_mlb[39C2]single_brd[21]	L1506_RF	IND_01005	radio_mlb[39B2]single_brd[21]	L1507_RF	IND_01005	radio_mlb[39B2]single_brd[21]	L1508_RF	IND_01005	radio_mlb[39C5]single_brd[21]	L1509_RF	IND_01005	radio_mlb[39C2]single_brd[21]	L1601_RF	IND_0201	radio_mlb[40C6]single_brd[21]	L1602_RF	IND_01005	radio_mlb[40B7]single_brd[21]	L1603_RF	IND_01005	radio_mlb[40B6]single_brd[21]	L1604_RF	IND_01005	radio_mlb[40B3]single_brd[21]	L1605_RF	IND_01005	radio_mlb[40B2]single_brd[21]	L1606_RF	IND_01005	radio_mlb[40B6]single_brd[21]	L1607_RF	IND_01005	radio_mlb[40B6]single_brd[21]	L1608_RF	IND_01005	radio_mlb[40B3]single_brd[21]	L1609_RF	IND_01005	radio_mlb[40A3]single_brd[21]	L1610_RF	IND_01005	radio_mlb[40A3]single_brd[21]	L1706_RF	IND_01005	radio_mlb[41C4]single_brd[21]	L1707_RF	IND_01005	radio_mlb[41C4]single_brd[21]	L1709_RF	IND_01005	radio_mlb[41B4]single_brd[21]	L1710_RF	RES_201	radio_mlb[41A7]single_brd[21]

