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PDF PAGE CSA PAGE CONTENTS SYNC MASTER DATE

22H6P JTAG,USB,PLL,HSIC,XTALN/A N/A

33H6P DIGITAL I/O,BOOTSTRAPPINGN/A N/A

44H6P VDDCA,VDD1/2,VDD,VDD_CPU,VDD_GPUN/A N/A

55H6P GND,VDDIO18,VDDIOD,VDD_SRAM,VDD_SOCN/A N/A

66H6P NAND,NAND 12X17N/A N/A

77H6P HIGH SPEED DIG (CAM,LCM,DP)N/A N/A

88BUTTON FLEX B2BN/A N/A

99L67 AUDIO CODEC (1/2)N/A N/A

1010L67 AUDIO CODEC (2/2)N/A N/A

1111FRONT CAM FLEX B2BN/A N/A

1212AMBER PMU(1/2)N/A N/A

1313AMBER PMU(2/2)N/A N/A

1414CHESTNUT,BACKLIGHT DRIVER,MESA BOOSTN/A N/A

1515SPKR AMP + STROBE DRIVERN/A N/A

1616TRISTAR,EEPROMN/A N/A

1717DOCKFLEX B2BN/A N/A

1818D403 (TOUCH B2B, DRIVER ICS)N/A N/A

1919LCM B2BN/A N/A

2020OSCAR + SENSORSN/A N/A

2121REAR CAM B2BN/A N/A

2222BATT B2B, TPS, PD FEATURESN/A N/A

2323VOLTAGE PROPERTIES

2424RADIO_MLB HIERARCH. SYMBOLN/A N/A

2525Cross Reference Page

2626Cross Reference Page

2727Cross Reference Page

COMPASS BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
639-4269	1	COMPASS INTERPOSER X152/X145	U16	Y	COMPASS_INTERPOSER

HORIZONTAL AND OTHER CAP BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
138S0801	5	HRZNTL CAPS_1: 10UF,0402,6.3V	C422,C399,C405,C417,C418	Y	HRZNTL_CAP_GRP1
138S0801	5	HRZNTL CAPS_2: 10UF,0402,6.3V	C250,C251,C325,C357,C358	Y	HRZNTL_CAP_GRP2
138S0801	5	HRZNTL CAPS_3: 10UF,0402,6.3V	C260,C263,C267,C270,C261	Y	HRZNTL_CAP_GRP3
138S0801	4	HRZNTL CAPS_4: 10UF,0402,6.3V	C264,C268,C271,C385	Y	HRZNTL_CAP_GRP4
138S0801	4	HRZNTL CAPS_5: 10UF,0402,6.3V	C398,C411,C252,C297	Y	HRZNTL_CAP_GRP5
138S0801	5	HRZNTL CAPS_6: 10UF,0402,6.3V	C386,C387,C333,C332,C335	Y	HRZNTL_CAP_GRP6
138S0801	3	HRZNTL CAPS_7: 10UF,0402,6.3V	C42_RF,C43_RF,C44_RF	Y	HRZNTL_CAP_GRP7
138S0801	1	HRZNTL CAPS_8: 10UF,0402,6.3V	C1281_RF	Y	HRZNTL_CAP_GRP8
138S0801	1	HRZNTL CAPS_9: 10UF,0402,6.3V	C103_RF	Y	HRZNTL_CAP_GRP9
138S0801	4	HRZNTL CAPS_10: 10UF,0402,6.3V	C182,C307,C209,C187	Y	HRZNTL_CAP_GRP10
138S0794	2	HRZNTL CAPS_11: 10UF,0402,10V	C52,C156	Y	HRZNTL_CAP_GRP11

INDUCTOR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
152S1785	3	BUCK0 SLAVE IND: 0.47UH, TFA-A TDK	L10,L12,L14	Y	IND_BUCK0_SLV_P47UH_TFA-A_TDK
152S1834	3	BUCK0 SLAVE IND: 0.47UH, CYNTEC	L10,L12,L14	Y	IND_BUCK0_SLV_P47UH_CYNTEC
152S1839	3	BUCK0 SLAVE IND: 0.47UH, TAIYO	L10,L12,L14	Y	IND_BUCK0_SLV_P47UH_TAIYO
152S1807	6	AMBER BUCKXX IND: 1UH TFA-A TDK	L9,L11,L13,L15,L16,L17	Y	IND_BUCKXX_1UH_TFA-A_TDK
152S1801	6	AMBER BUCKXX IND: 1UH CYNTEC	L9,L11,L13,L15,L16,L17	Y	IND_BUCKXX_1UH_CYNTEC
152S1840	6	AMBER BUCKXX IND: 1UH TAIYO	L9,L11,L13,L15,L16,L17	Y	IND_BUCKXX_1UH_TAIYO
152S1807	1	STROBE IND: 1UH TFA-A TDK	L5	Y	IND_STROBE_1UH_TFA-A_TDK
152S1801	1	STROBE IND: 1UH CYNTEC	L5	Y	IND_STROBE_1UH_CYNTEC
152S1840	1	STROBE IND: 1UH TAIYO	L5	Y	IND_STROBE_1UH_TAIYO
152S1809	1	BUCK5 2012 IND: 1UH TFA-A TDK	L18	Y	IND_BUCK5_1UH_TFA-A_TDK
152S1835	1	BUCK5 2012 IND: 1UH CYNTEC	L18	Y	IND_BUCK5_1UH_CYNTEC
152S1843	1	BUCK5 2012 IND: 1UH TAIYO	L18	Y	IND_BUCK5_1UH_TAIYO
152S1836	1	SPKR AMP IND: 1.2UH CYNTEC	L4	Y	IND_SPKRAMP_1P2UH_CYNTEC
152S1844	1	SPKR AMP IND: 1.2UH TAIYO	L4	Y	IND_SPKRAMP_1P2UH_TAIYO
152S1721	1	CHARGER IND: 2.2UH TAIYO	L8	Y	IND_CHGR_2P2UH_TAIYO

FOR CHESTNUT BOMTABLE - SEE PG 14

FOR RADIO BOMTABLE - SEE PG 24

FOR MISC R/L/C ALTS - SEE PG 2

I2C ADDRESS MAP

I2C0

DEVICE	BINARY	7-BIT HEX	8-BIT HEX
AMBER PMU:	11010100X	0X74	0XE8
CS35L19B AMP:	10000000X	0X40	0X80
LM3534 BL DRIVER:	11000111X	0X63	0XC6
TRISTAR:	00110101X	0X1A	0X34
CHESTNUT:	01001111X	0X27	0X4E

I2C1

CT814 ALS:	0101001X	0X29	0X52
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RCAM I2C

OPEL STROBE DRIVER:	1100011X	0X63	0XC6
REAR FACING CAM:	0010000X	0X10	0X20
ADI VCM AF DRIVER:	0001110X	0X0E	0X1C
ROHM VCM AF DRIVER:	0001100X	0X0C	0X18

FCAM I2C

FRONT FACING CAM:	0110110X	0X36	0X6C
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NOTE: ACCEL, GYRO, COMPASS ALL USING SPI (VIA OSCAR) FOR AP COMMUNICATION.

X152 BOM CALLOUTS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-9681	1	SCH, SINGLE_BRD, X152	SCH	Y	?
820-3382	1	PCBF, SINGLE_BRD, X152	PCB	Y	?
825-6838	1	EEEE FOR 639-4159 16GB	EEEE_F7V1	Y	EEEE_16G
825-6838	1	EEEE FOR 639-4160 32GB	EEEE_F7V2	Y	EEEE_32G
825-6838	1	EEEE FOR 639-3973 64GB	EEEE_F4LR	Y	EEEE_64G
339S0206	1	H6P + 1GB SAMSUNG	U1	Y	H6P_1GB_SAMSUNG
339S0207	1	H6P + 1GB ELPIDA	U1	Y	H6P_1GB_ELPIDA
339S0208	1	H6P + 1GB HYNIX	U1	Y	H6P_1GB_HYNIX

OSCAR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
337S4370	1	OSCAR CSP	U9	Y	OSCAR_CSP
337S4417	1	OSCAR FCLGA	U9	Y	OSCAR_FCLGA

OPEL BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
353S8399	1	TI OPEL	U17	Y	OPEL_TI

NAND BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S0930	1	NAND,19NM,16GX8,MLC,PPN1.5	U4	Y	NAND_16G_HYNIX
335S0931	1	NAND,19NM,32GX8,MLC,PPN1.5	U4	Y	NAND_32G_HYNIX
335S0932	1	NAND,19NM,64GX8,MLC,PPN1.5	U4	Y	NAND_64G_HYNIX

NAND BOM ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S0921	335S0930	NAND_16G_TOSH	U4	?
335S0933	335S0930	NAND_16G_SAND	U4	?
335S0922	335S0931	NAND_32G_TOSH	U4	?
335S0934	335S0931	NAND_32G_SAND	U4	?
335S0923	335S0932	NAND_64G_TOSH	U4	?
335S0935	335S0932	NAND_64G_SAND	U4	?

USB GOLDENEYE BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0583	2	E75 COMMON MODE CHOKES	L20,L22	Y	CMC_E75_DIFFPFAIRS
152S1737	2	USB TX 10UH SERIES INDUCTORS	R163,R164	Y	USB_TX_SERIES_IND

TRISTAR BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
343S0614	1	CBTL1608A1UK,WCSF,TRISTAR	U2	Y	TRISTAR
343S0639	1	CBTL1610A0UK,WCSF,TRISTAR2	U2	Y	TRISTAR2
117S0202	2	RES 20OHM 01005 5%, TRISTAR2	R102,R103	Y	TRISTAR2
118S0671	2	RES 15OHM 01005 5%, TRISTAR	R102,R103	Y	TRISTAR

AUDIO BOM OPTION

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
155S0556	2	FERRITE 0402 P14OHM 1A	FL6, FL9	Y	SPKAMP_FERRITE_REG
155S0731	2	FERRITE 0402 P060HM 1P8A	FL6, FL9	Y	SPKAMP_FERRITE_LOWDCR
116S0004	2	RESISTOR 0402 00HM 1A	FL6, FL9	Y	SPKAMP_FERRITE_00HM
132S0396	2	CAP 01005 10V 1000PF	C500, C501	Y	SPKAMP_CAPFILT_1000PF
132S0437	2	CAP 01005 10V 150PF	C500, C501	Y	SPKAMP_CAPFILT_150PF
131S0283	2	CAP 01005 10V 100PF	DZ13, DZ14	Y	SPKAMP_ESDFILT_100PF
338S1077	1	CLASSD AMP, L19	U22	Y	SPKAMP_IC_L19
338S1161	1	CLASSD AMP, L20	U22	Y	SPKAMP_IC_L20
117S0002	1	0201 00HM	R128	Y	SPKAMP_SENSE_R_L20
118S0583	1	0201 0.10HM	R128	Y	SPKAMP_SENSE_R_L19

SCH 051-9681

BRD 820-3382

MCO 056-5179

BOM 639-4159 (16GB) X152

BOM 639-4160 (32GB) X152

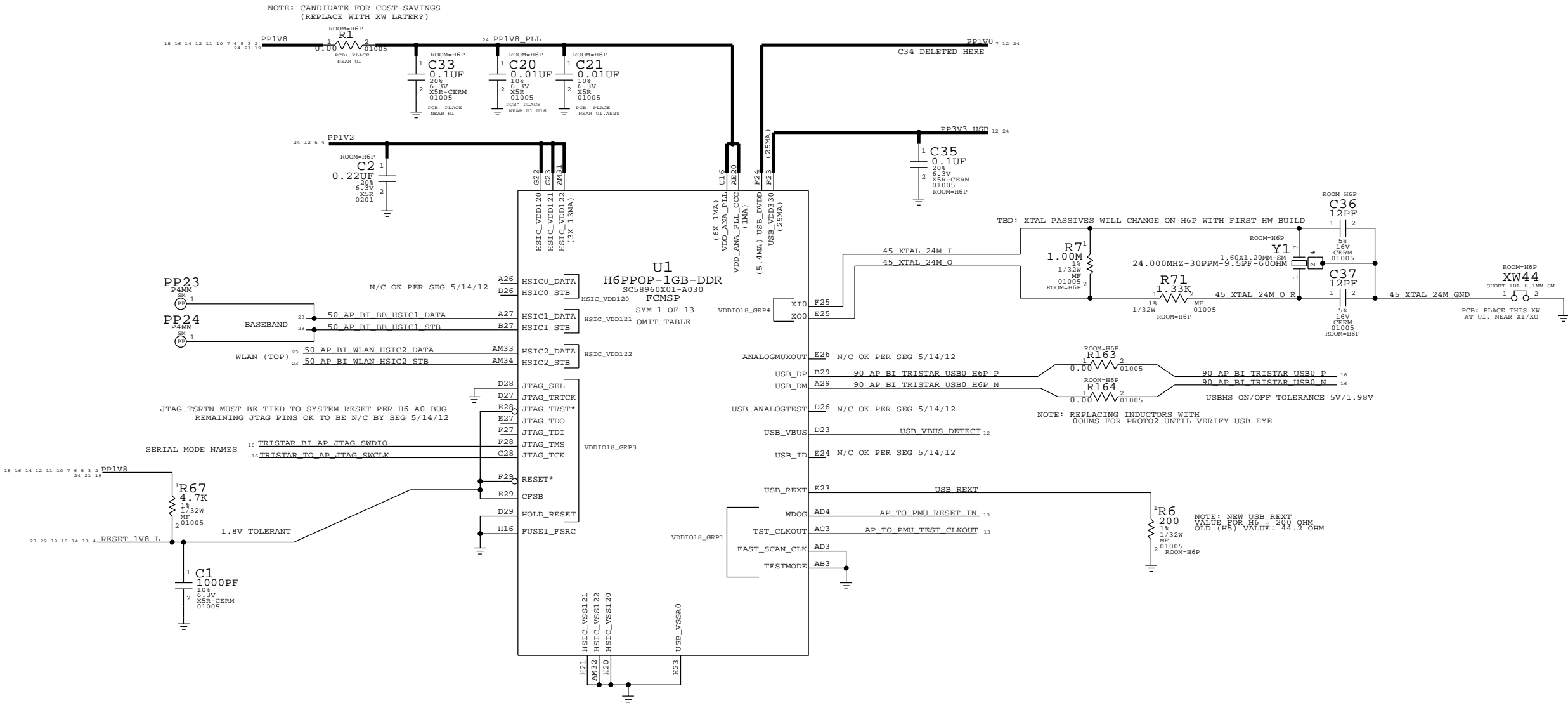
BOM 639-3973 (64GB) X152

H6P: JTAG, USB, PLL, HSIC, XTAL

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MISC COMPONENTS ALTERNATES

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
107S0146	107S0208			ALT FOR THERMISTOR
138S0702	138S0657			?
138S0697	138S0695			?
138S0746	138S0705			?
138S0739	138S0706			?
155S0773	155S0453			?
155S0667	155S0583			?
335S0895	335S0874			?
138S0703	138S0648			?



H6P: DIGITAL I/O, BOOTSTRAPPING

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D

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C

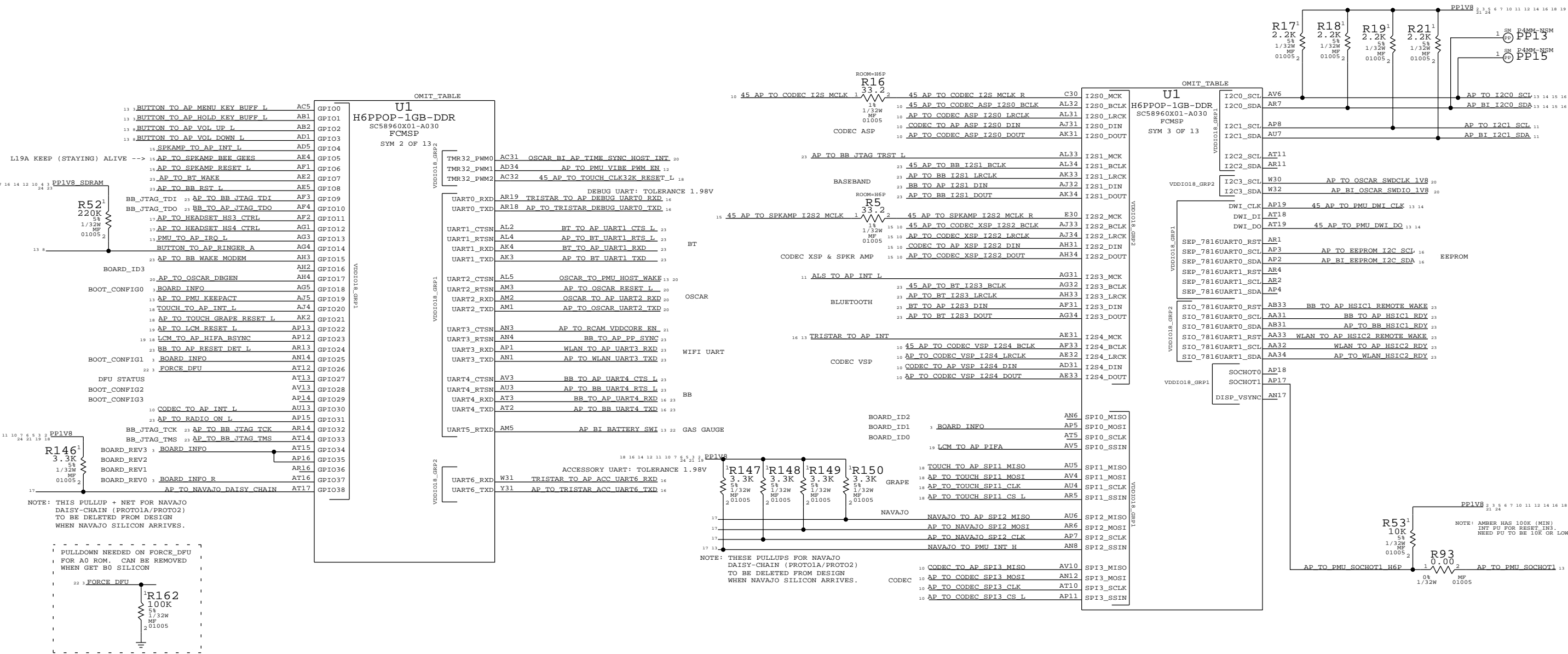
C

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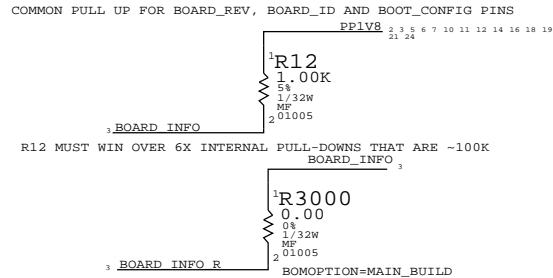


BOOTSTRAPPING (BOARD_REV, BOARD_ID, BOOT_CFG)

```
BOARD_REV[3:0]={GPIO34, GPIO35, GPIO36, GPIO37}
FLOAT=LOW, PULLUP=HIGH
1111 PROTO2/2A, TRISAR/L19
1110 PROTO2A, TRISAR2/L20
1101 EVT1 MAIN BUILD
1100 EVT1 MESA BUILD
```

```
BOARD_ID[3:0]={GPIO16, SPI0_MISO, SPI0_MOSI, SPI0_SCLK}
FLOAT=LOW, PULLUP=HIGH
0000 X145 MLB
0001 X145 DEV
0010 X152 MLB <--- SELECTED
0011 X152 DEV
```

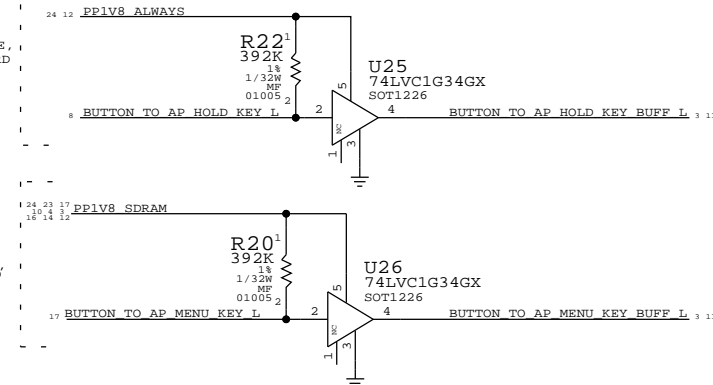
```
BOOT_CONFIG[3:0]={GPIO29_CONFIG3,GPIO28_CONFIG2,GPIO25_CONFIG1,GPIO18_CONFIG0}
FLOAT=LOW, PULLUP=HIGH
0000 SPI0
0001 SPI0 TEST MODE
0010 NAND
0011 NAND TEST MODE <--- SELECTED
```



PCB: PLACE THIS TOP SIDE,
NORTH END OF SINGLE_BRD

PCB: PLACE THIS BOTTOM SIDE,
SOUTH END OF SINGLE_BRD

MENU & POWER / HOLD KEY BUFFER

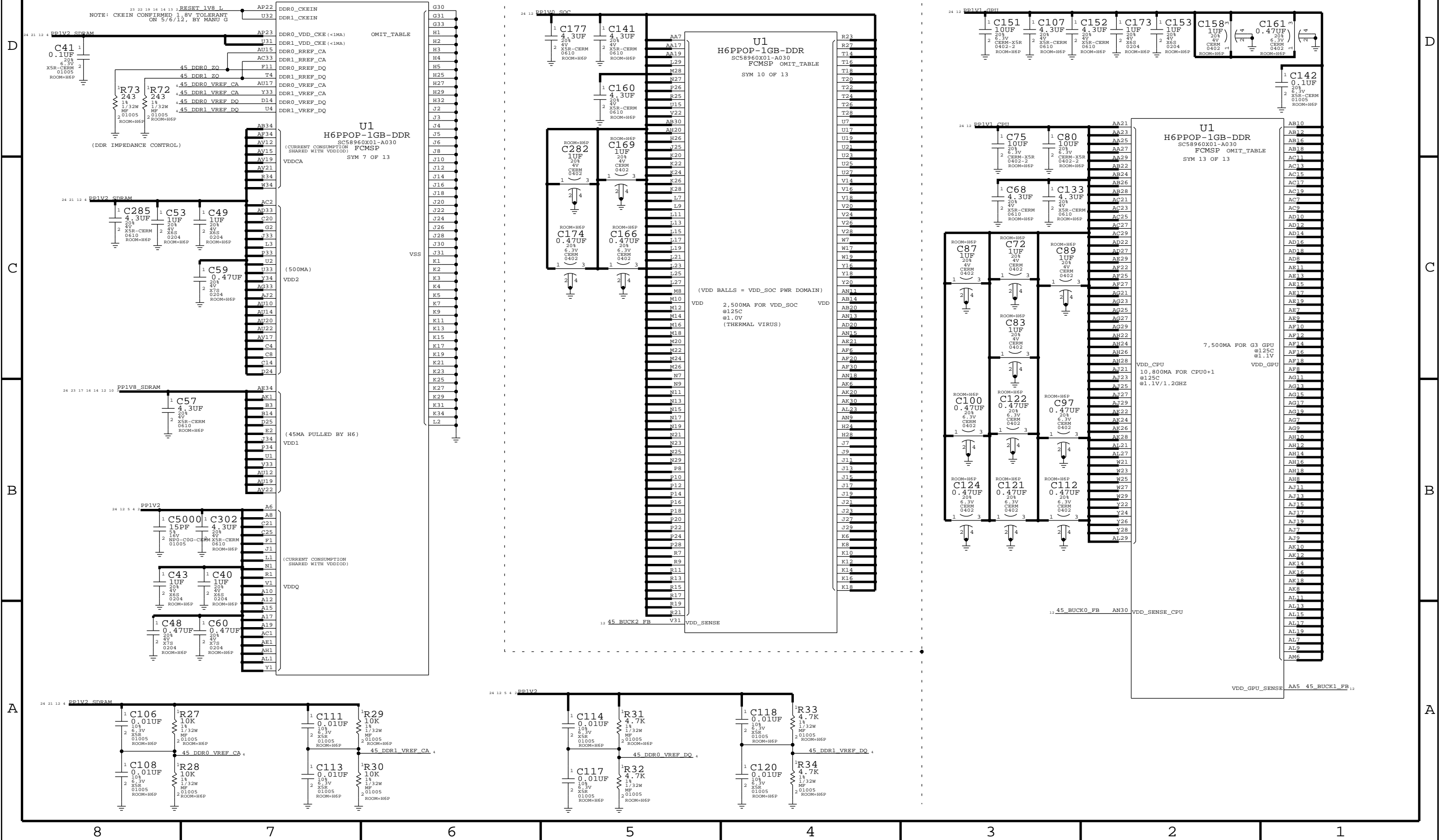


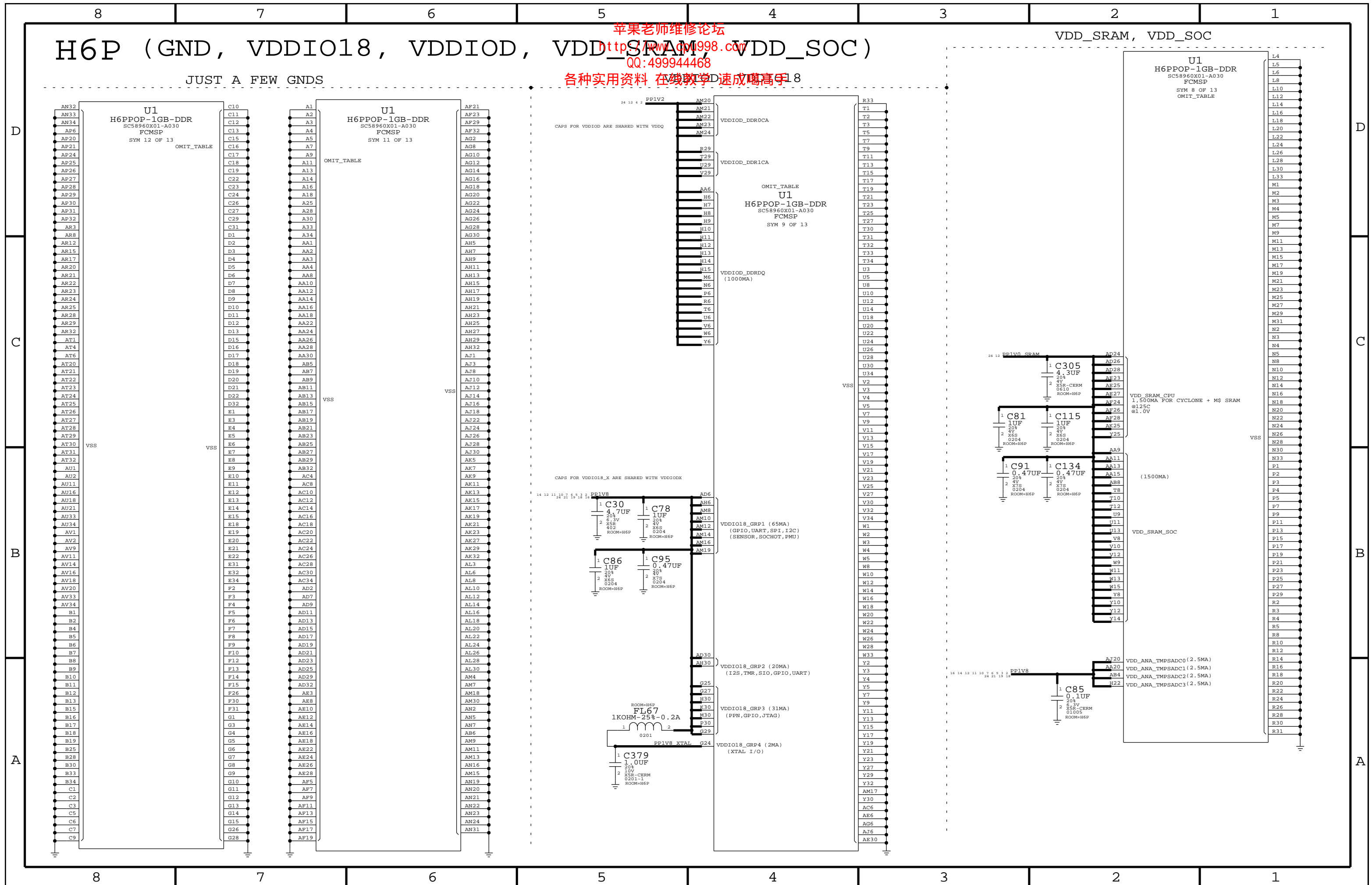
H6P: GND, VDDCA, VDD1/2, VDD, VDD_CPU, VDD_GPU

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VDDCA, VDD1/2, VDDQ

VDD_CPU, VDD_GPU





H6P NAND + 12X17 NAND PKG

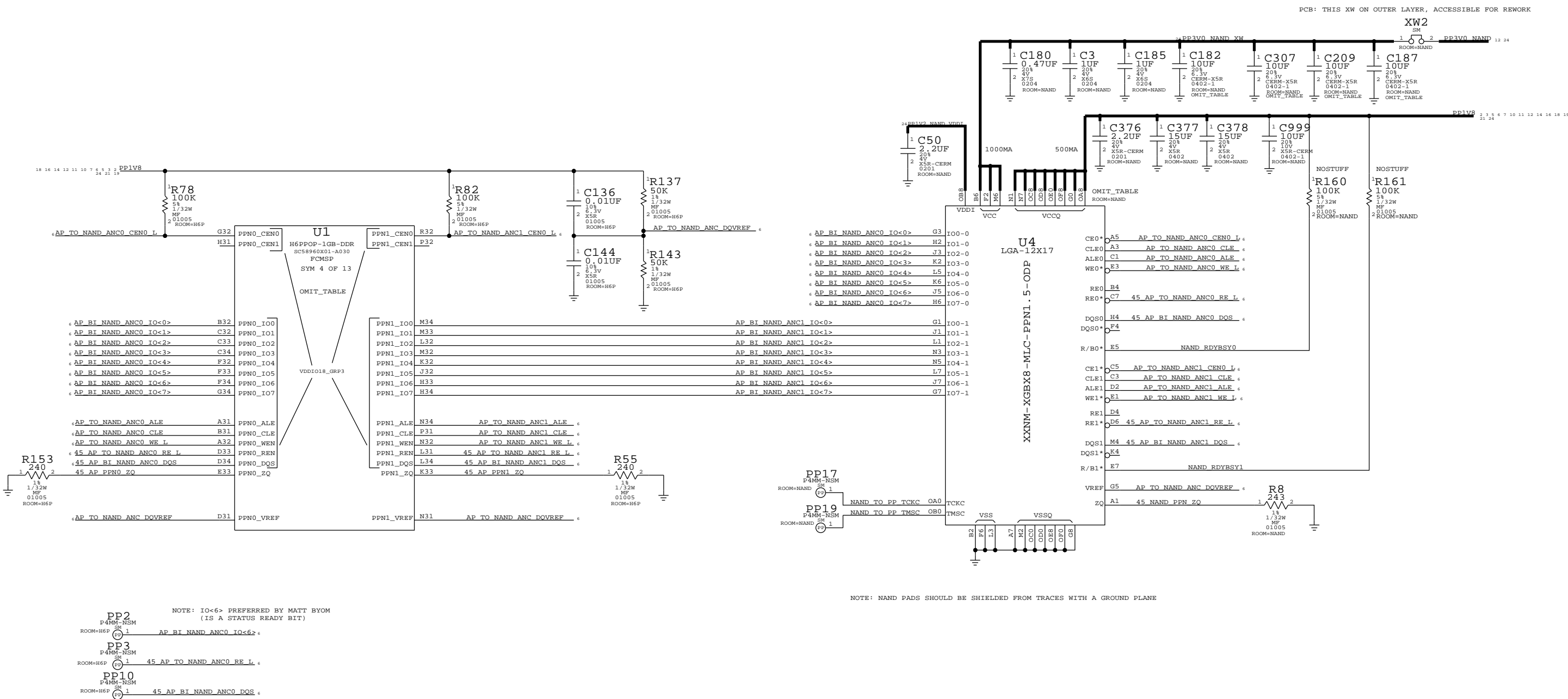
SUPPORT FOR PPN1.5 (1.8V IO) ONLY

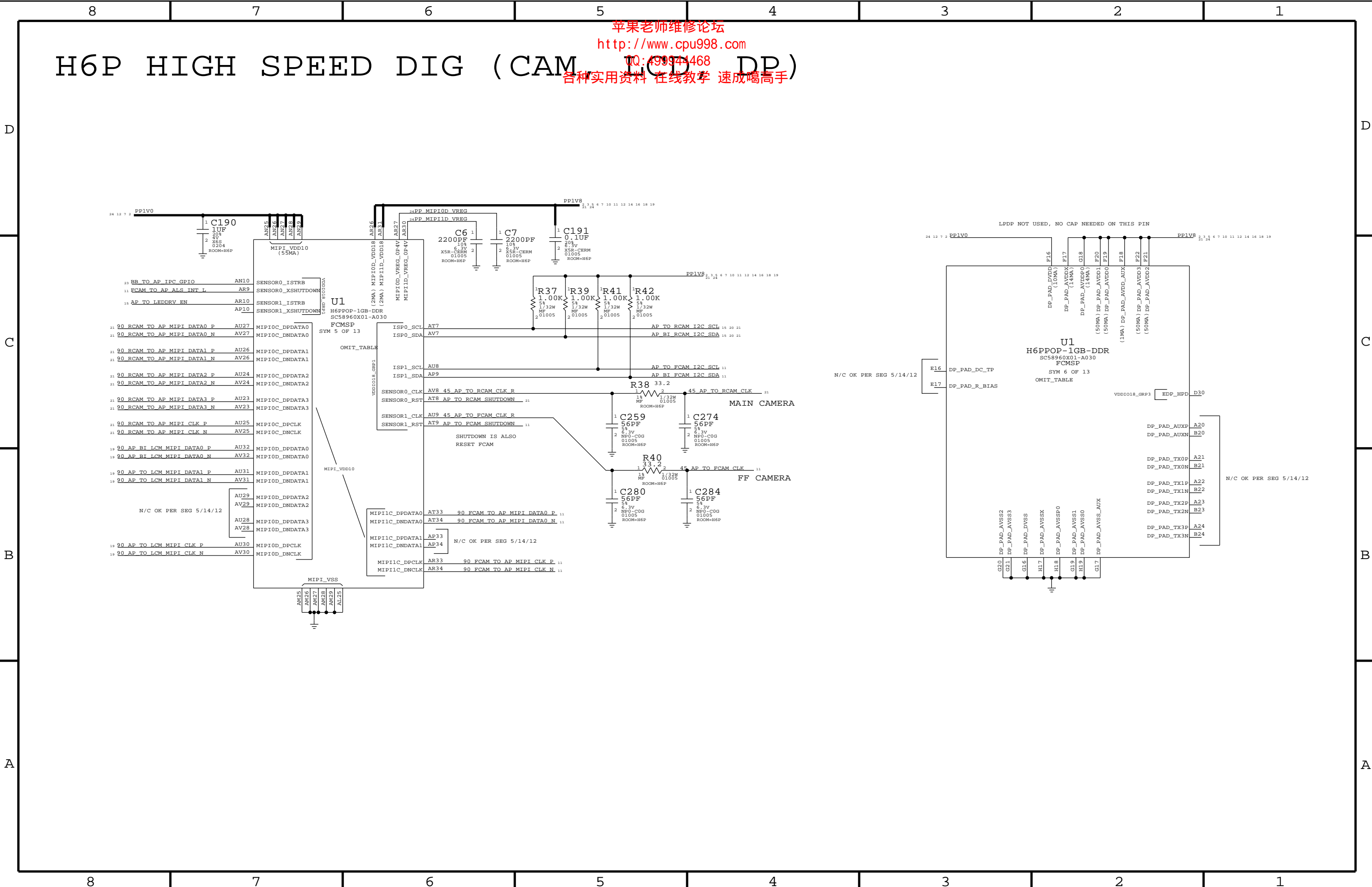
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H6P HIGH SPEED DIG (CAM, LCD, DP)

87654321

按钮驱动, 按钮, anc ref mic, strobe, strobe_ntc

87654321

STROBE:
LED WARM, RETURN

WIFI FLEX PAC:
VDD (3.0V)

VIBE DRIVE

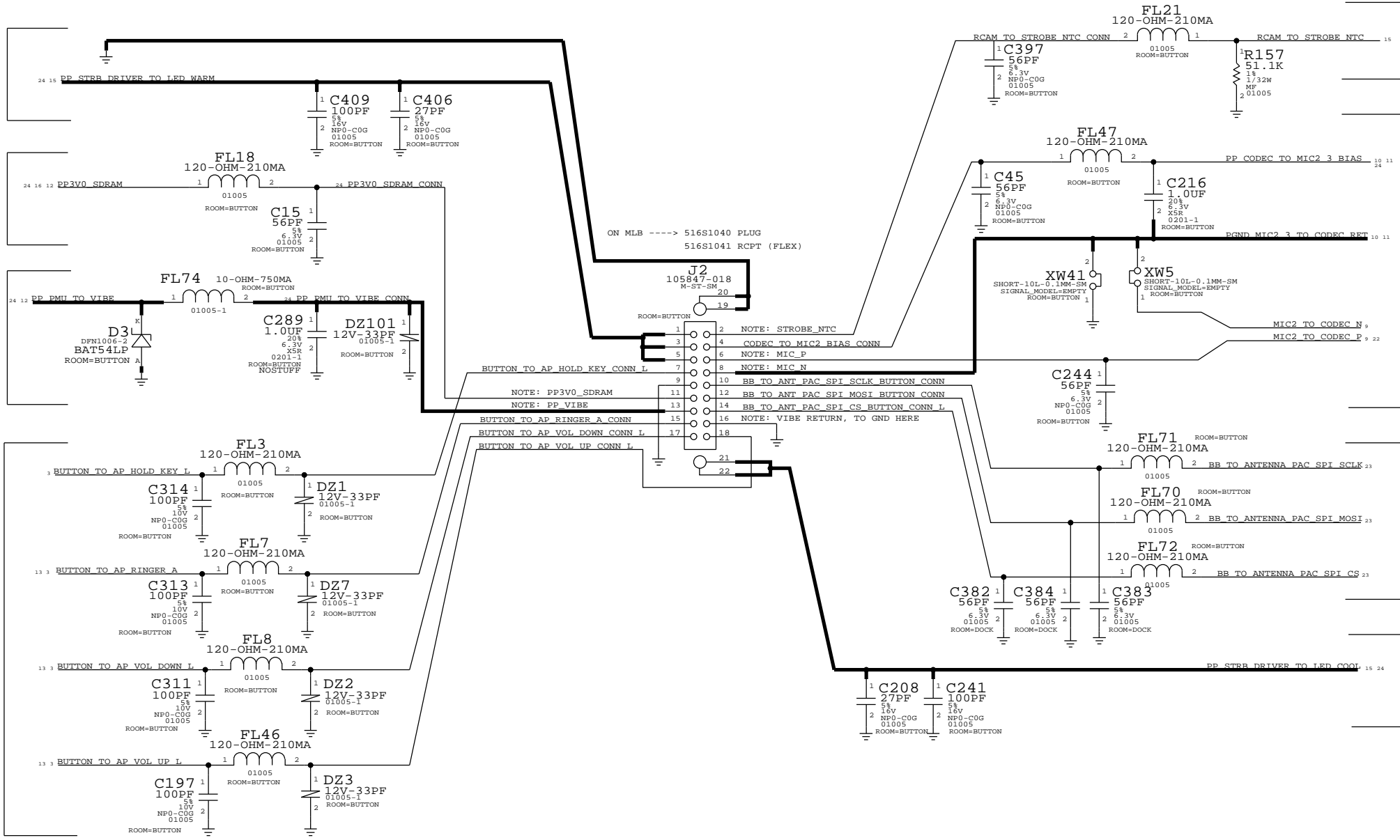
BUTTONS:
RINGER, HOLD,
VOL_UP/DOWN

STROBE:
STROBE NTC

MIC2 (ANC REF MIC):
MIC2/3 BIAS,
MIC2_P,_N

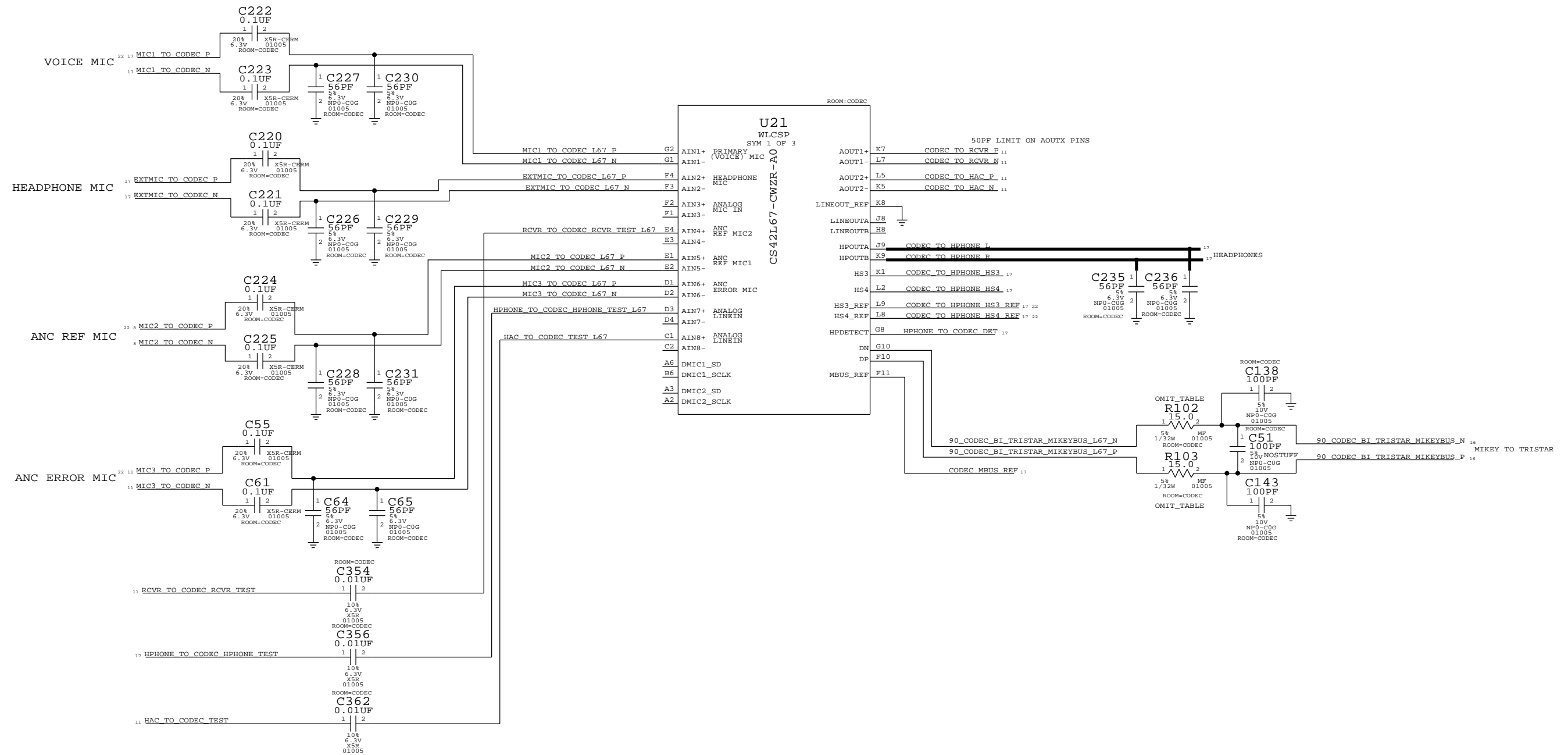
WIFI FLEX PAC:
PAC SPI BUS

STROBE:
LED COOL



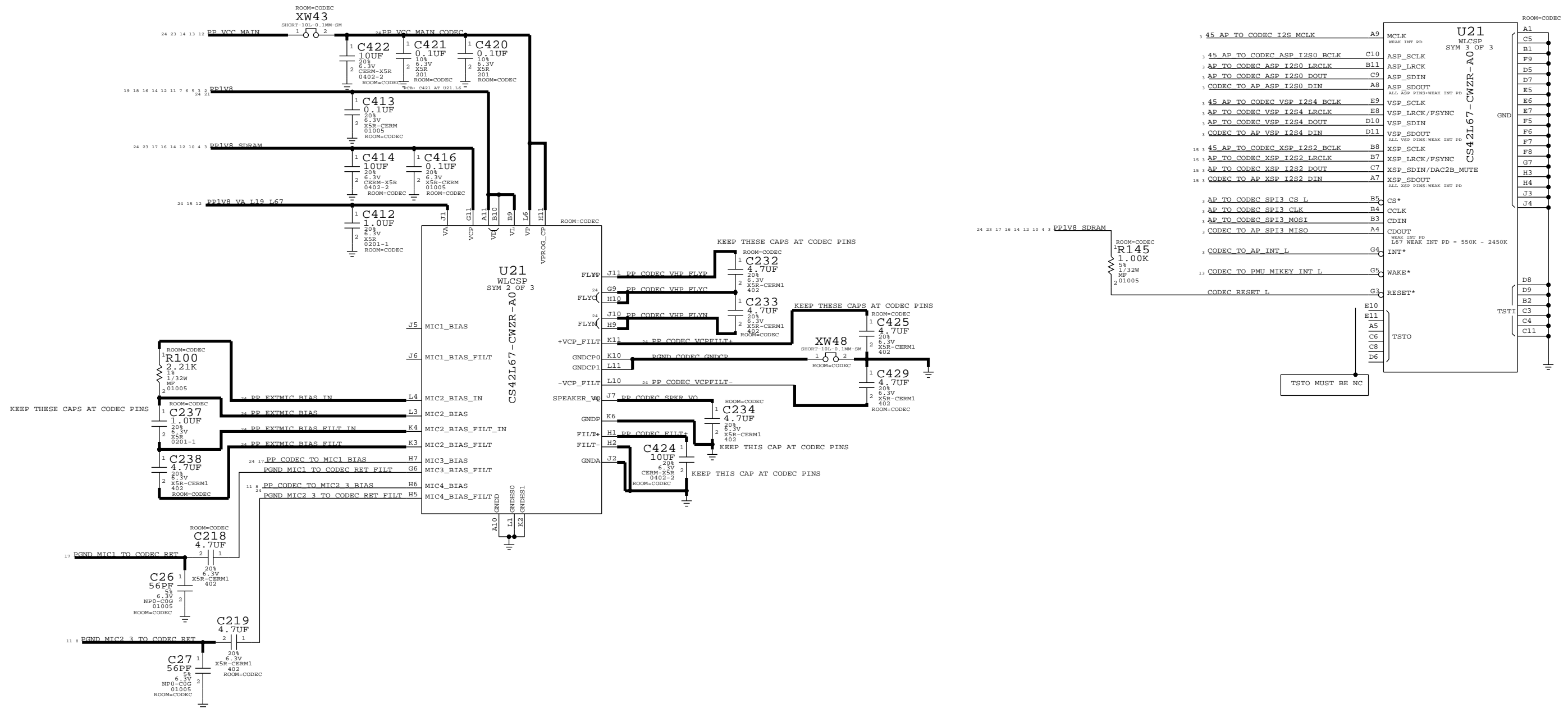
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(ANALOG MIC IN, DIG MIC IN, HPOUT, LINEOUT, RECEIVER OUT, MIKEYBUS)

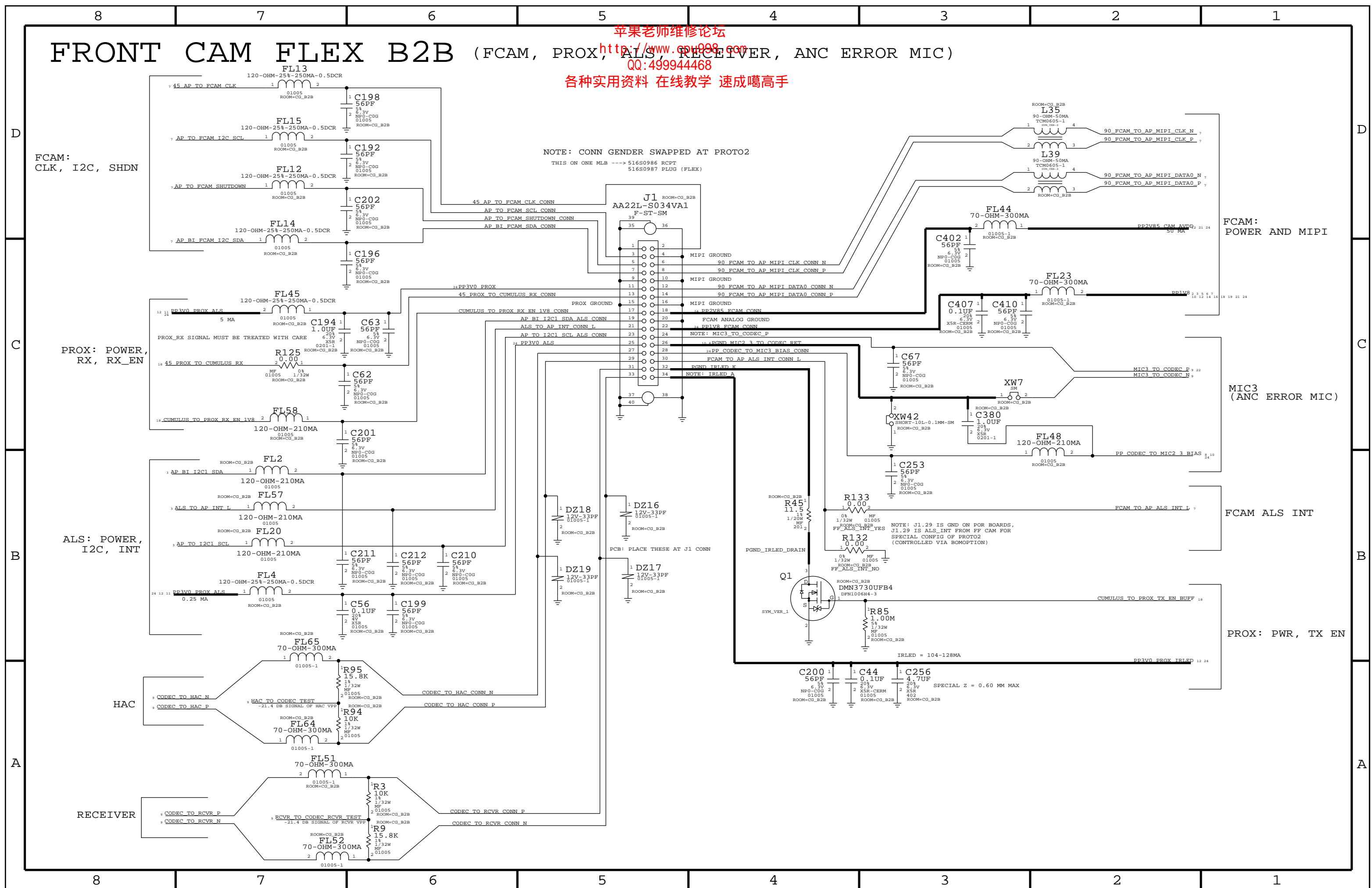


A

A

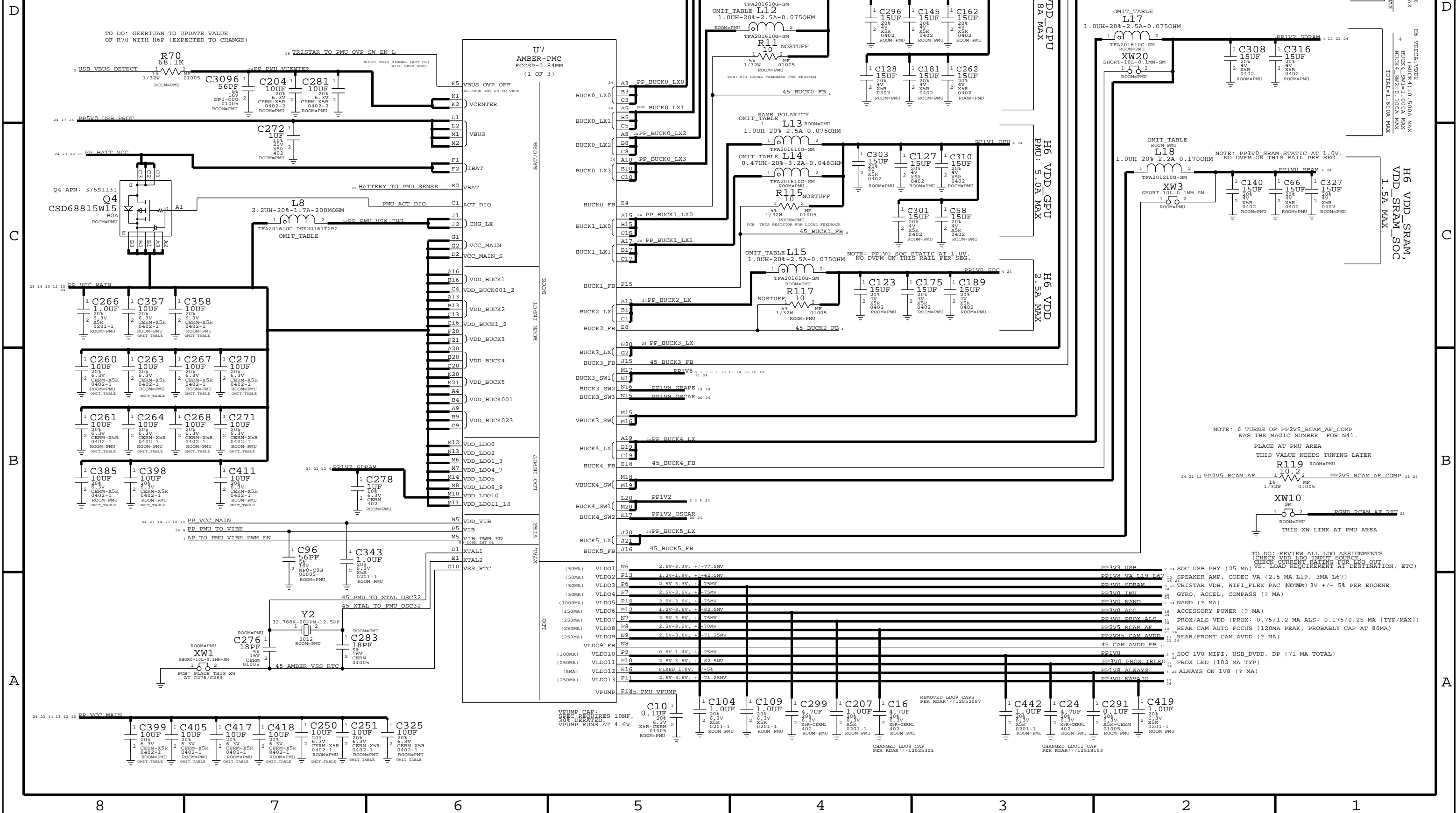


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```
(BUCK, LDO, VIBE DRIVER, 32K, CHARGER)
```

NOTE: L10, L12 BOMOPTIONS
CONTROLLED ON PAGE1



AMBER PMU

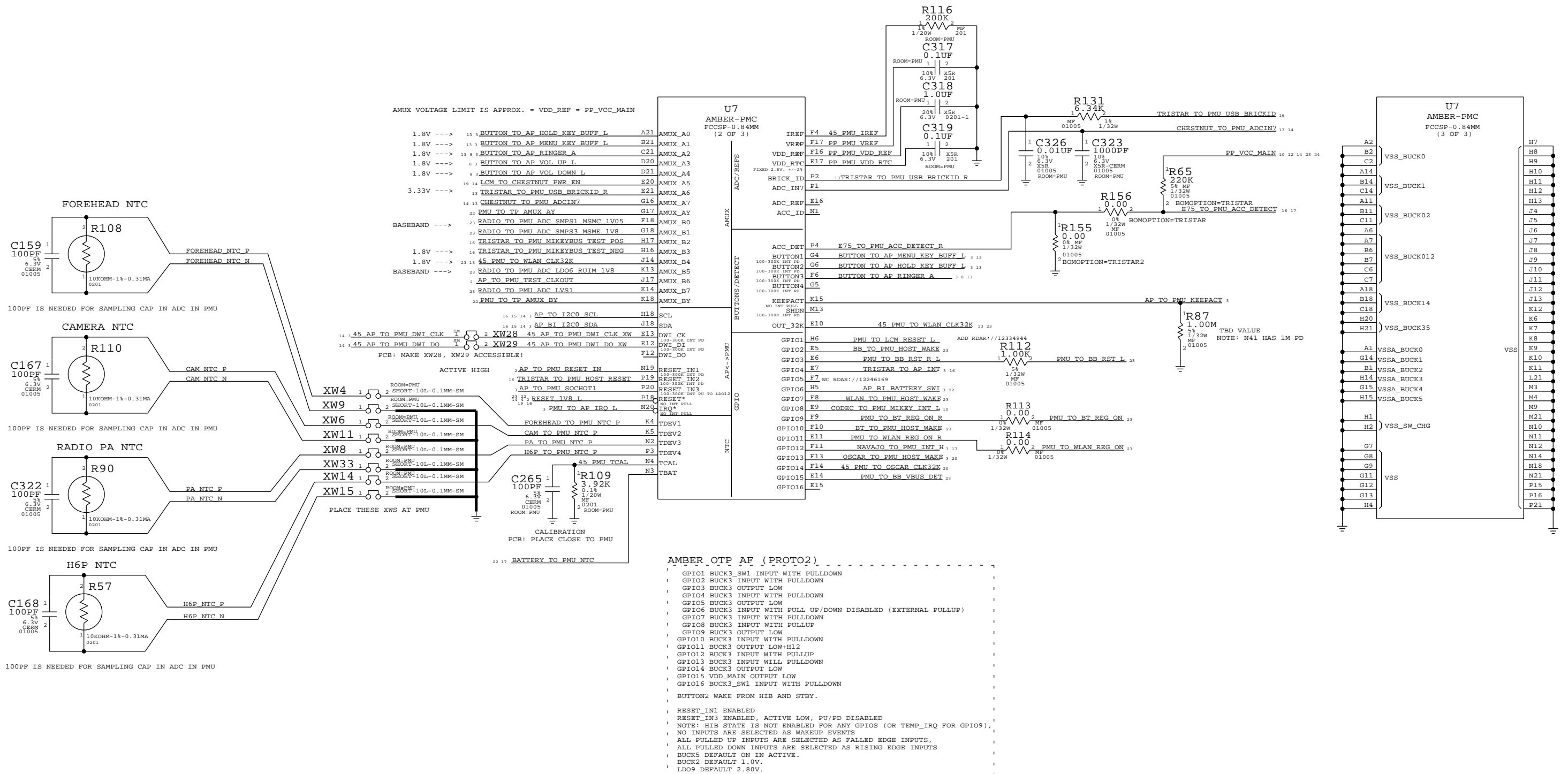
(AMUX, GPIO, BUTTONS, ADC, THERMISTORS, SYSTEM I/F, GND)

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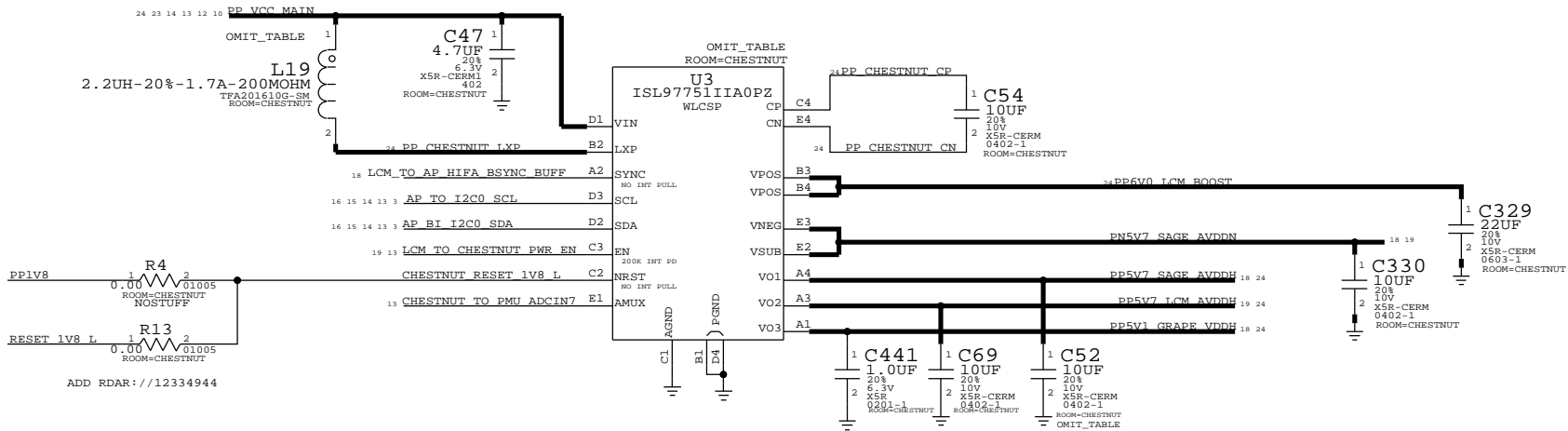
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CHESTNUT, BACKLIGHT DRIVER, MESA BOOST

CHESTNUT BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
338S1172	1	TI CHESTNUT	U3	Y	CHESTNUT_TI
152S1842	1	TI CHESTNUT IND - 1.5UH TAIYO	L19	Y	CHESTNUT_TI_TAIYO
152S1802	1	TI CHESTNUT IND - 1.5UH CYNTEC	L19	Y	CHESTNUT_TI_CYNTEC
338S1168	1	INTERSIL CHESTNUT	U3	Y	CHESTNUT_INTERSIL
152S1805	1	INTERSIL CHESTNUT IND - 2.2UH TFA-A	L19	Y	CHESTNUT_INTERSIL_TFA-A

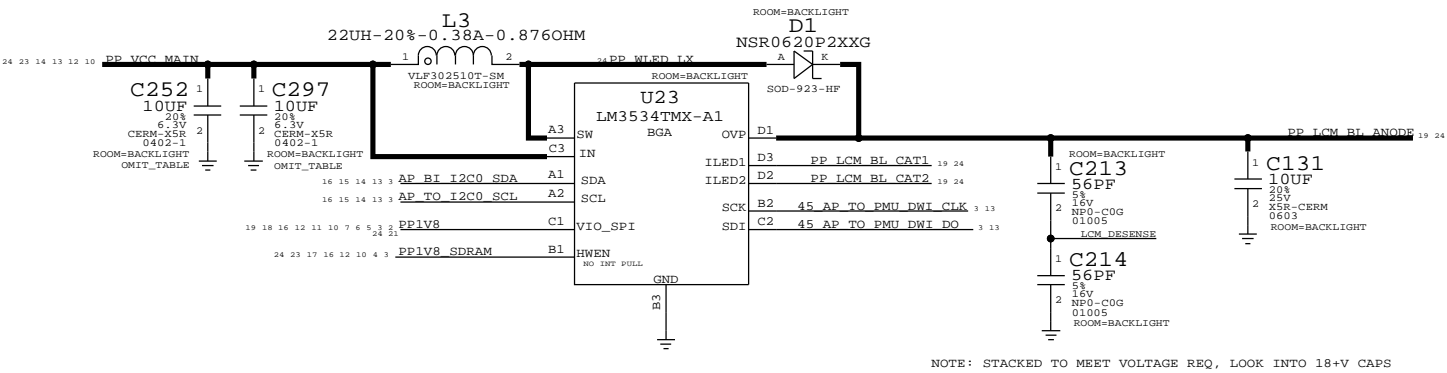
D403 DISPLAY PMU (INTERSIL CHESTNUT, 338S1148) (TI CHESTNUT, 338S1149)



SAGE NEG BOOST TIMING INFO:

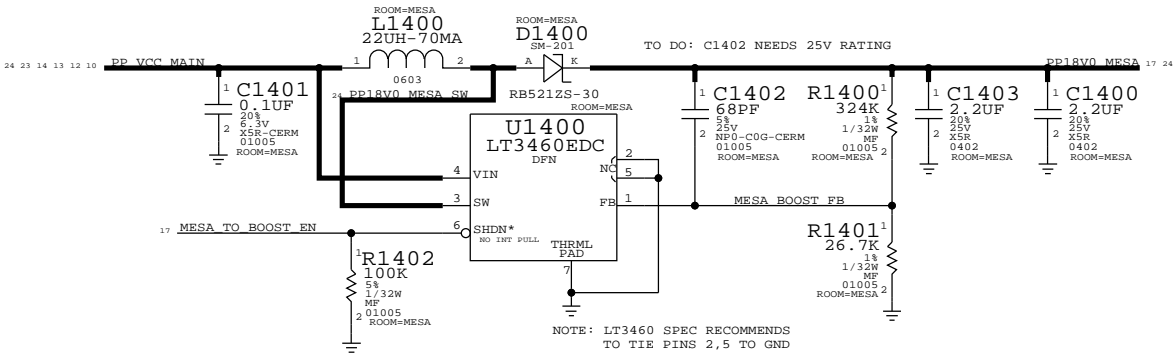
2 MS NOMIAL START UP DELAY FOR LCM POWER SEQUENCING
0 MS DELAY AT SHUTDOWN
ACTIVE DISCHARGE 2MS TO RAIL DOWN

D403 BACKLIGHT DRIVER



NOTE: STACKED TO MEET VOLTAGE REQ, LOOK INTO 18+V CAPS

MESA BOOST



NOTE: LT3460 SPEC RECOMMENDS TO TIE PINS 2,5 TO GND

SPEAKER AMP, LED DRIVER

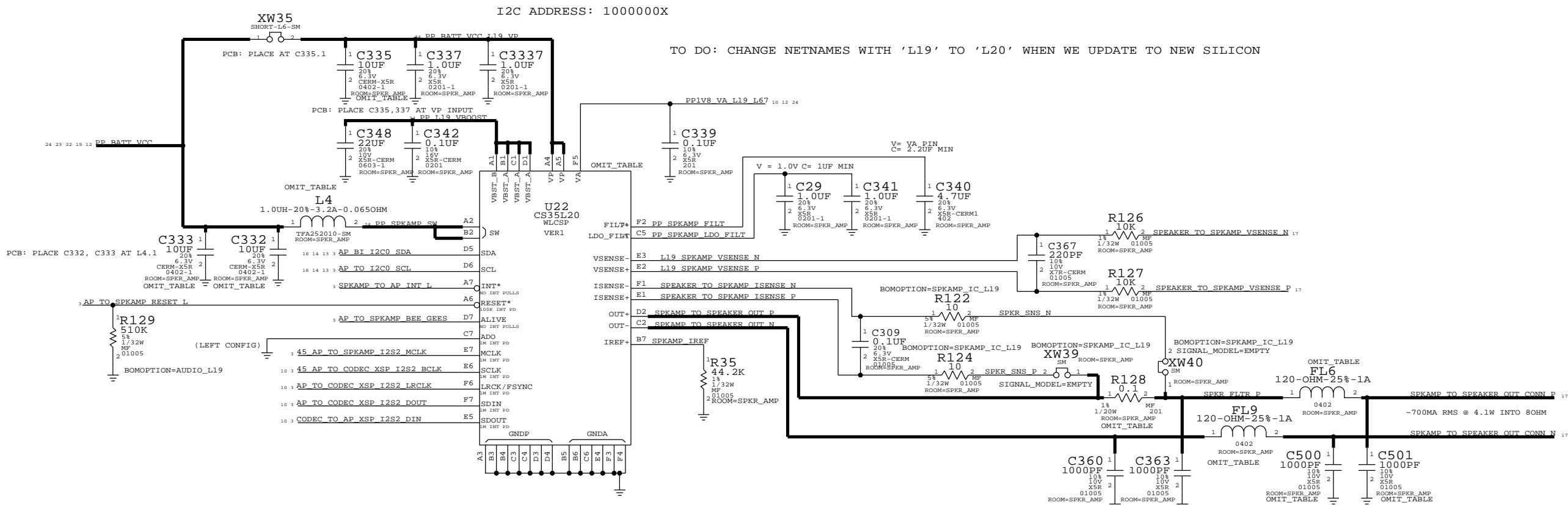
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QQ:499944468

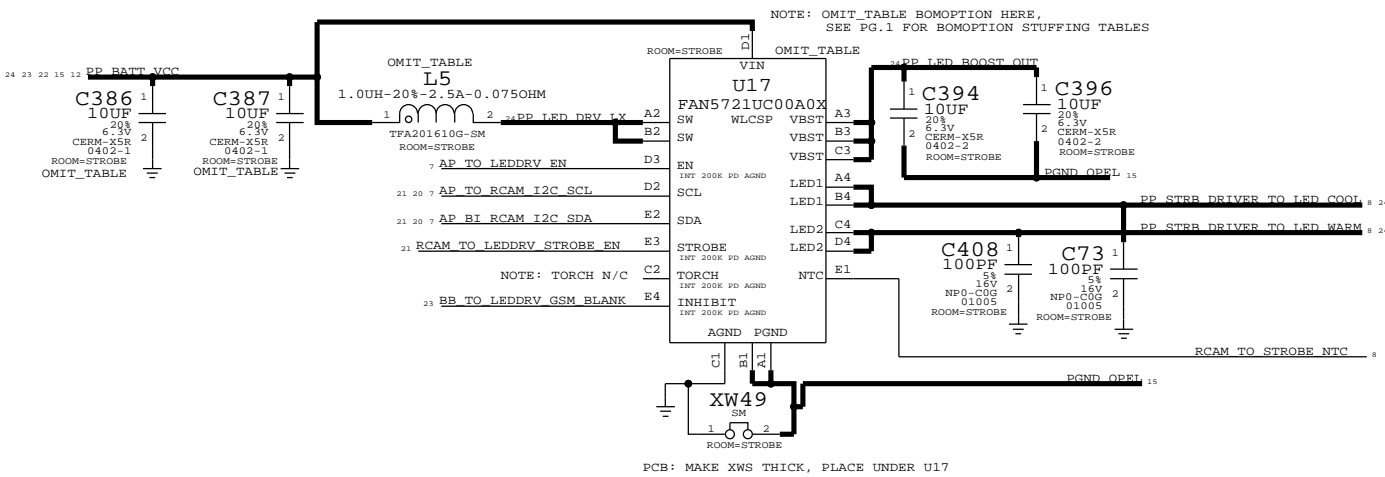
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SPEAKER AMP (TO BE REPLACED WITH L20)

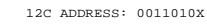


STROBE DRIVER (OPEL)

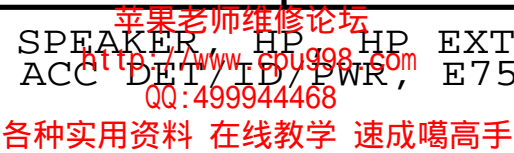
TI: APN 353S3899
FAIRCHILD: APN 353S3839



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EEPROM



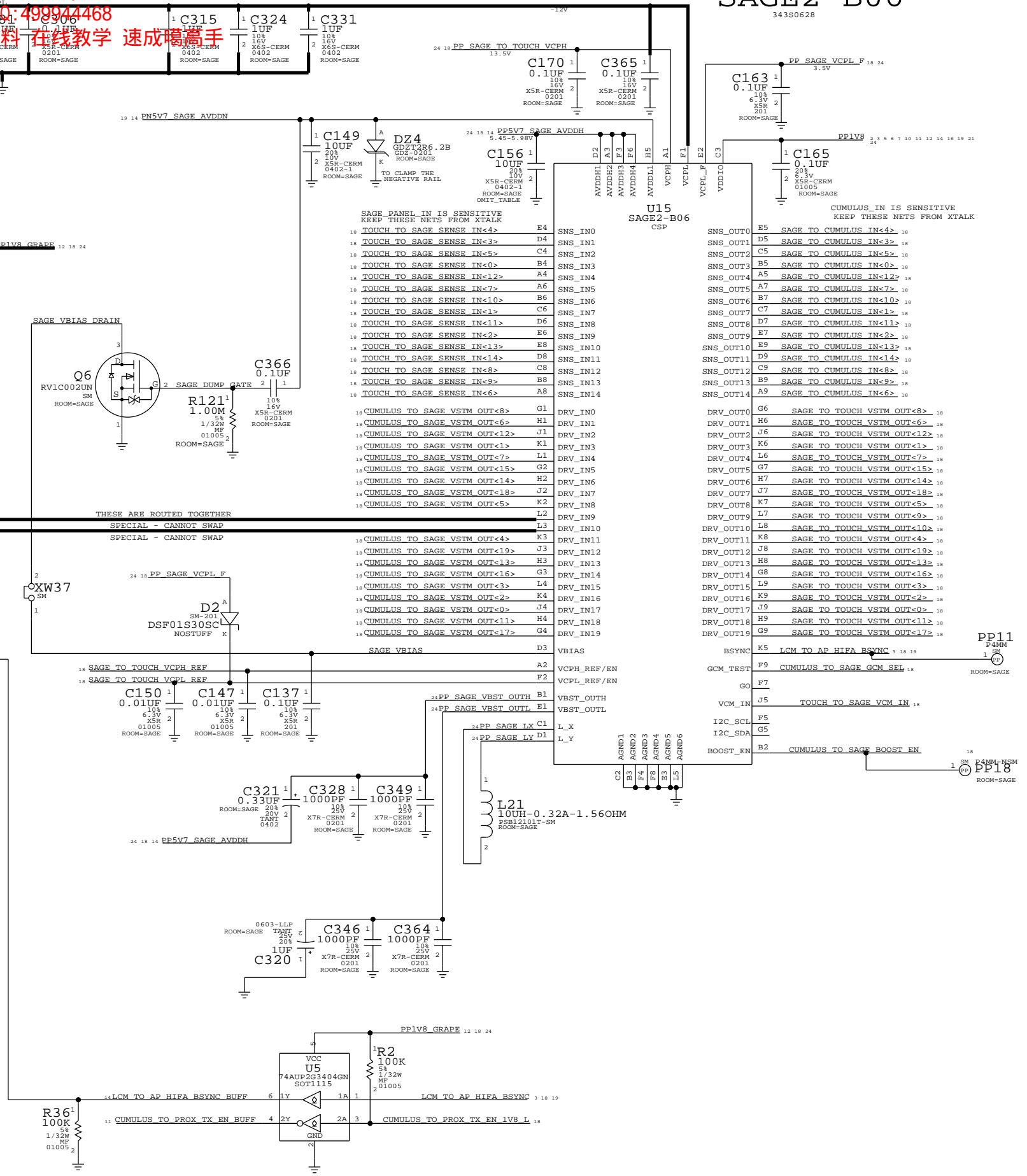
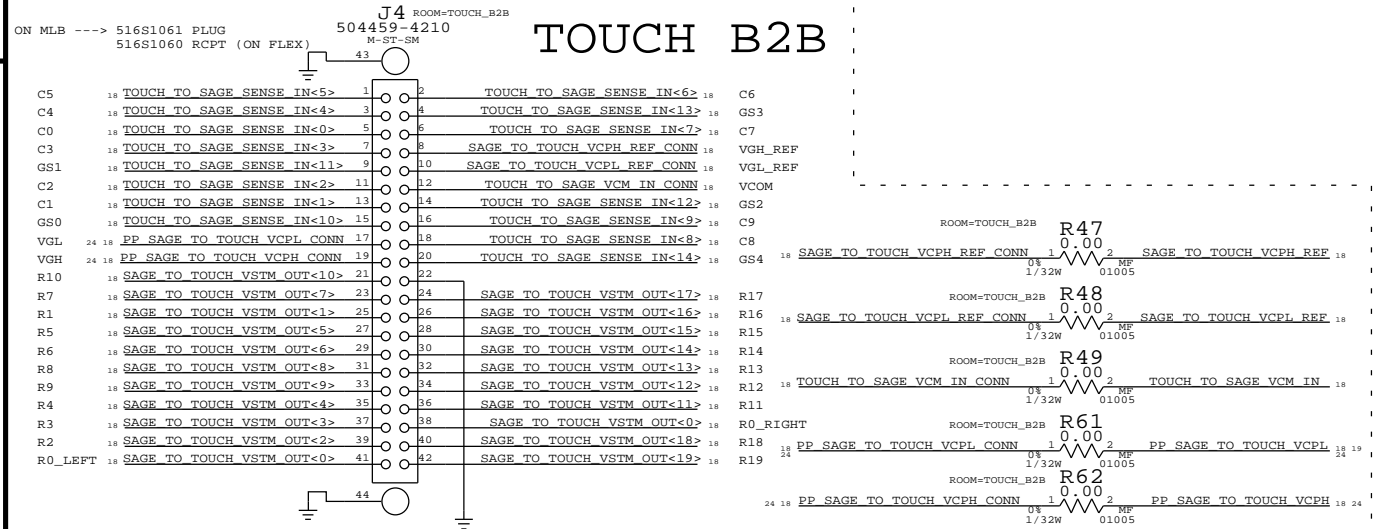
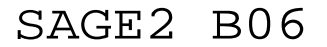
D403 (B2B, DRIVER ICS)

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LCM B2B

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LCM:
2-LANE MIPI

LCM:
POWER
(1.8V DVDD)
(+5.7V AVDD)
(-5.7V AVDD)

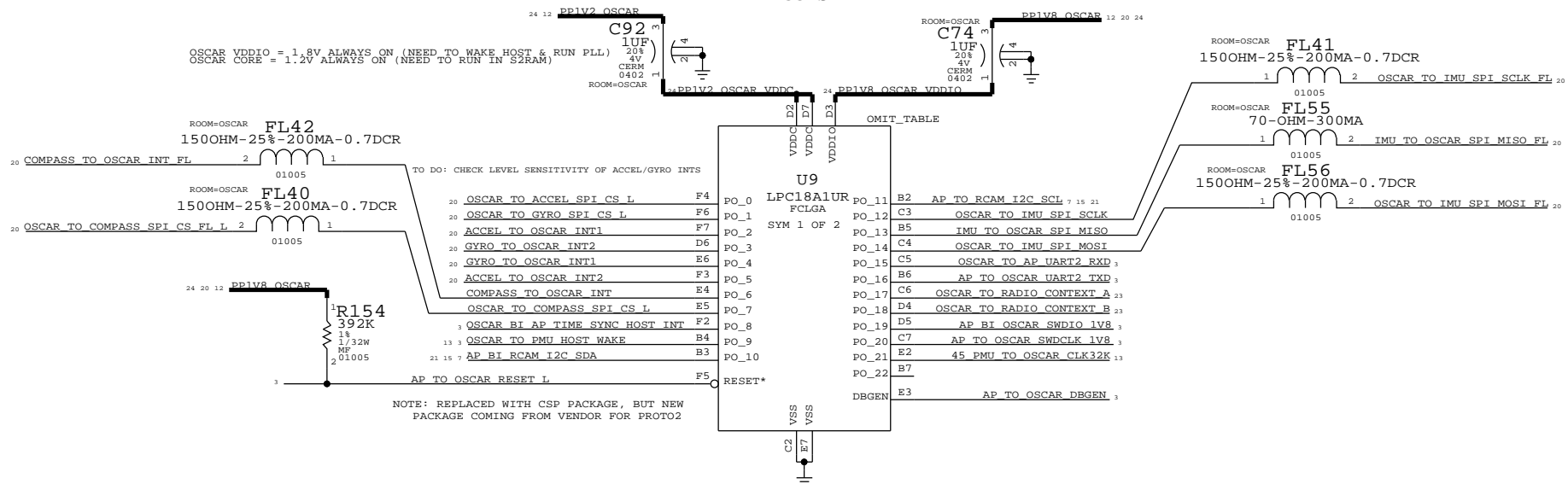
LCM:
DIGITAL I/F
(PWR_EN, RESET
PIFA, BSYNC)

LCM:
BACKLIGHT

PCB: ALL 56PF CAPS GO AT CONN

OSCAR + SENSORS

OSCAR MODULE (CONFORMAL COATED)

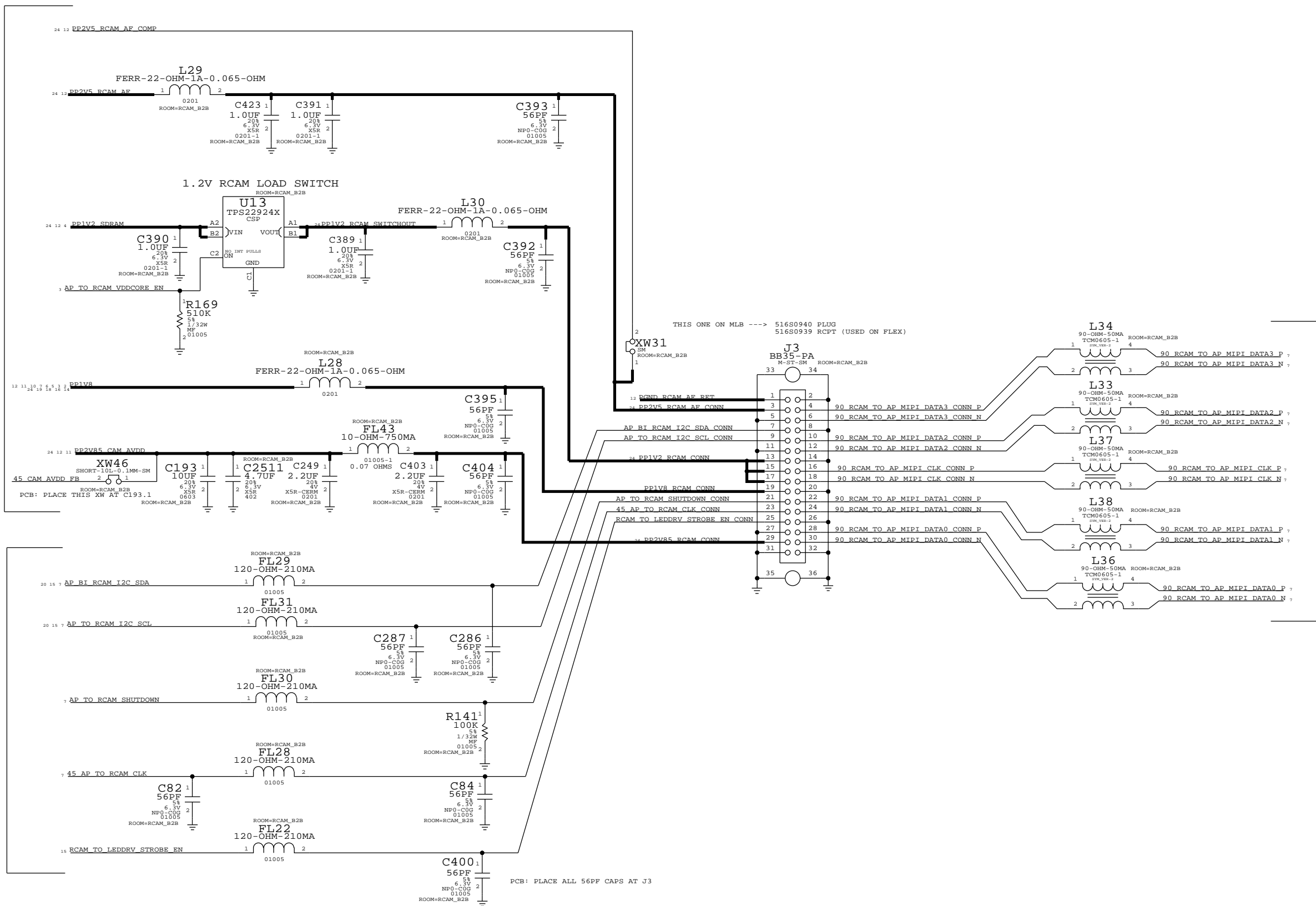


RCAM B2B (REAR CAMERA CONNECTOR)

苹果老师维修论坛
<http://www.cpu998.com>
QQ:499944468
各种实用资料 在线教学 速成噶高手

RCAM:
POWER:
(1.8V DVDD)
(2.8V AVDD)
(1.2V VCC)
(2.5V AF)

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



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VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<0>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<1>

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VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<2>

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VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<19>

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VOLTAGE=3.8V CODEC_TO_RCVR_P

VOLTAGE=3.8V CODEC_TO_RCVR_N

VOLTAGE=3.8V CODEC_TO_RCVR_CONN_P

VOLTAGE=3.8V CODEC_TO_RCVR_CONN_N

VOLTAGE=3.8V CODEC_TO_HAC_P

VOLTAGE=3.8V CODEC_TO_HAC_N

VOLTAGE=3.8V CODEC_TO_HAC_CONN_P

VOLTAGE=3.8V CODEC_TO_HAC_CONN_N

VOLTAGE=3.114V CODEC_TO_HPHONE_L

VOLTAGE=3.114V CODEC_TO_HPHONE_R

VOLTAGE=3.114V CODEC_TO_HPHONE_L_CONN

VOLTAGE=3.114V CODEC_TO_HPHONE_R_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3_REF

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_REF

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3_REF_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_REF_CONN

VOLTAGE=4.3V HPHONE_TO_CODEC_DET

VOLTAGE=4.3V HPHONE_TO_CODEC_DET_CONN

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_N

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_N

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_N

VOLTAGE=2.5V TRISTAR_TO_PMU_MIKEYBUS_TEST_POS

VOLTAGE=2.5V TRISTAR_TO_PMU_MIKEYBUS_TEST_NEG

VOLTAGE=1.8V MIC1_TO_CODEC_L67_P

VOLTAGE=1.8V MIC1_TO_CODEC_L67_N

VOLTAGE=1.8V MIC1_TO_CODEC_P

VOLTAGE=1.8V MIC1_TO_CODEC_N

VOLTAGE=1.8V MIC2_TO_CODEC_L67_P

VOLTAGE=1.8V MIC2_TO_CODEC_L67_N

VOLTAGE=1.8V MIC2_TO_CODEC_P

VOLTAGE=1.8V MIC2_TO_CODEC_N

VOLTAGE=1.8V MIC3_TO_CODEC_L67_P

VOLTAGE=1.8V MIC3_TO_CODEC_L67_N

VOLTAGE=1.8V MIC3_TO_CODEC_P

VOLTAGE=1.8V MIC3_TO_CODEC_N

VOLTAGE=3.8V RCVR_TO_CODEC_RCVR_TEST

VOLTAGE=3.114V HPHONE_TO_CODEC_HPHONE_TEST

VOLTAGE=3.114V HPHONE_TO_CODEC_HPHONE_TEST_L67

VOLTAGE=3.8V HAC_TO_CODEC_TEST

VOLTAGE=3.8V HAC_TO_CODEC_TEST_L67

VOLTAGE=2.85V 45_CAM_AVDD_FB

VOLTAGE=4.6V 45_PMU_VPUMP

VOLTAGE=4.3V PMU_ACT_DIO

VOLTAGE=3.6V TRISTAR_TO_PMU_OVP_SW_EN_L

VOLTAGE=3.2V USB_VBUS_DETECT

VOLTAGE=5.25V TRISTAR_TO_PMU_USB_BRICKID

VOLTAGE=5.25V TRISTAR_TO_PMU_USB_BRICKID_R

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VOLTAGE=2.5V BATTERY_TO_PMU_NTC

VOLTAGE=2.5V BATTERY_NTC_CONN

VOLTAGE=4.2V BATTERY_TO_PMU_SENSE

VOLTAGE=8V SPEAKER_TO_SPKAMP_VSENSE_P

VOLTAGE=8V SPEAKER_TO_SPKAMP_VSENSE_N

VOLTAGE=8V L19_SPKAMP_VSENSE_P

VOLTAGE=8V L19_SPKAMP_VSENSE_N

VOLTAGE=8V SPEAKER_TO_SPKAMP_ISENSE_P

VOLTAGE=8V SPEAKER_TO_SPKAMP_ISENSE_N

VOLTAGE=8V SPKR_SNS_P

VOLTAGE=8V SPKR_SNS_N

VOLTAGE=8V SPKR_FLTR_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_CONN_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_CONN_N

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_CONN_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_CONN_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_CONN_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_CONN_N

VOLTAGE=3.0V TRISTAR_BYPASS

VOLTAGE=-5.7V PN5V7_SAGE_AVDDN

VOLTAGE=-5.7V PN5V7_LCM_AVDDN

VOLTAGE=-5.7V SAGE_DUMP_GATE

VOLTAGE=2.5V SAGE_VBIAS

VOLTAGE=2.5V SAGE_VBIAS_DRAIN

VOLTAGE=-1.2V SAGE_TO_TOUCH_VCPL_LCM_CONN

VOLTAGE=11V GYRO_PUMP

VOLTAGE=XV SAGE_TO_CUMULUS_IN<0>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<1>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<2>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<3>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<4>

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VOLTAGE=XV SAGE_TO_CUMULUS_IN<6>

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VOLTAGE=XV SAGE_TO_CUMULUS_IN<8>

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VOLTAGE=XV SAGE_TO_CUMULUS_IN<10>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<11>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<12>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<13>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<14>

VOLTAGE=18.0V PP16V5_MESA

VOLTAGE=18.0V PP16V5_MESA_DOCK_CONN

VOLTAGE=18.0V PP16V5_MESA_SW

VOLTAGE=1.0V PP1V0

VOLTAGE=1.0V PP1V0_SOC

VOLTAGE=1.0V PP1V0_SRAM

VOLTAGE=1.1V PP1V1_CPU

VOLTAGE=1.1V PP1V1_GPU

VOLTAGE=1.2V PP1V2

VOLTAGE=1.2V PP1V2_NAND_VDDI

VOLTAGE=1.2V PP1V2_OSCAR

VOLTAGE=1.2V PP1V2_OSCAR_VDDC

VOLTAGE=1.2V PP1V2_RCAM_CONN

VOLTAGE=1.2V PP1V2_RCAM_SWITCHOUT

VOLTAGE=1.2V PP1V2_SDRAM

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VOLTAGE=1.8V PP1V8

VOLTAGE=1.8V PP1V8_ALWAYS

VOLTAGE=1.8V PP1V8_COMP

VOLTAGE=1.8V PP1V8_CUMULUS_VDDI_DO

VOLTAGE=1.8V PP1V8_FCAM_CONN

VOLTAGE=1.8V PP1V8_GRAPE

VOLTAGE=1.8V PP1V8_LCM_CONN

VOLTAGE=1.8V PP1V8_OLSCAR

VOLTAGE=1.8V PP1V8_OLSCAR_VDDIO

VOLTAGE=1.8V PP1V8_PLL

VOLTAGE=1.8V PP1V8_RCAM_CONN

VOLTAGE=1.8V PP1V8_SDRAM

VOLTAGE=1.8V PP1V8_SDRAM_DOCK_CONN

VOLTAGE=1.8V PP1V8_VA_L19_L67

VOLTAGE=1.8V PP1V8_XTAL

VOLTAGE=2.5V PP2V5_RCAM_AF

VOLTAGE=2.5V PP2V5_RCAM_AF_COMP

VOLTAGE=2.5V PP2V5_RCAM_AF_CONN

VOLTAGE=2.8V PP2V85_CAM_AVDD

VOLTAGE=2.8V PP2V85_FCAM_CONN

VOLTAGE=2.8V PP2V85_RCAM_CONN

VOLTAGE=3.0V PP3V0_ACC

VOLTAGE=3.0V PP3V0_ALS

VOLTAGE=3.0V PP3V0_COMP

VOLTAGE=3.0V PP3V0_IMU

VOLTAGE=3.0V PP3V0_NAND

VOLTAGE=3.0V PP3V0_NAND_XW

VOLTAGE=3.0V PP3V0_NAVAJ0

VOLTAGE=3.0V PP3V0_NAVAJ0_CONN

VOLTAGE=3.0V PP3V0_PROX

VOLTAGE=3.0V PP3V0_PROX_ALS

VOLTAGE=3.0V PP3V0_PROX_IRLED

VOLTAGE=3.0V PP3V0_SDRAM

VOLTAGE=3.0V PP3V0_SDRAM_CONN

VOLTAGE=3.3V PP3V3_USB

VOLTAGE=5.0V PP5V0_USB_CONN

VOLTAGE=5.0V PP5V0_USB_PROT

VOLTAGE=5.1V PP5V1_GRAPE_VDDH

VOLTAGE=5.7V PP5V7_LCM_AVDDH

VOLTAGE=5.7V PP5V7_LCM_AVDDH_CONN

VOLTAGE=5.7V PP5V7_SAGE_AVDDH

VOLTAGE=6V PP6V0_LCM_BOOST

VOLTAGE=4.3V PP_BATT_VCC

VOLTAGE=4.3V PP_BATT_VCC_L19_VP

VOLTAGE=4.3V PP_BUCK0_LX0

VOLTAGE=4.3V PP_BUCK0_LX1

VOLTAGE=4.3V PP_BUCK0_LX2

VOLTAGE=4.3V PP_BUCK0_LX3

VOLTAGE=4.3V PP_BUCK1_LX0

VOLTAGE=4.3V PP_BUCK1_LX1

VOLTAGE=4.3V PP_BUCK2_LX

VOLTAGE=4.3V PP_BUCK3_LX

VOLTAGE=4.3V PP_BUCK4_LX

VOLTAGE=4.3V PP_BUCK5_LX

VOLTAGE=-6V PP_CHESTNUT_CN

VOLTAGE=6V PP_CHESTNUT_CP

VOLTAGE=6V PP_CHESTNUT_LXP

VOLTAGE=1.8V PP_CODEC_FILT+

VOLTAGE=2.2V PP_CODEC_SPKR_VO

VOLTAGE=2.7V PP_CODEC_TO_MIC1_BIAS

VOLTAGE=2.7V PP_CODEC_TO_MIC1_BIAS_CONN

VOLTAGE=2.7V PP_CODEC_TO_MIC2_3_BIAS

VOLTAGE=2.7V PP_CODEC_TO_MIC3_BIAS_CONN

VOLTAGE=2.5V PP_CODEC_VCPL_FILT+

VOLTAGE=-2.5V PP_CODEC_VCPL_FILT-

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VOLTAGE=0.2V PP_CODEC_VHP_FLYC

VOLTAGE=-2.5V PP_CODEC_VHP_FLYN

VOLTAGE=2.5V PP_CODEC_VHP_FLYP

VOLTAGE=1.6V PP_CUMULUS_VDDANA

VOLTAGE=1.6V PP_CUMULUS_VDDCORE

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC1

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC1_CONN

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC2

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC2_CONN

VOLTAGE=2.7V PP_EXTMIC_BIAS

VOLTAGE=2.7V PP_EXTMIC_BIAS_FILT

VOLTAGE=2.7V PP_EXTMIC_BIAS_FILT_IN

VOLTAGE=2.7V PP_EXTMIC_BIAS_IN

VOLTAGE=8V PP_L19_VBOOST

VOLTAGE=22V PP_LCM_BL_ANODE

VOLTAGE=22V PP_LCM_BL_ANODE_CONN

VOLTAGE=0.2V PP_LCM_BL_CAT1

VOLTAGE=0.2V PP_LCM_BL_CAT1_CONN

VOLTAGE=0.2V PP_LCM_BL_CAT2

VOLTAGE=0.2V PP_LCM_BL_CAT2_CONN

VOLTAGE=2.65V PP_LD014_2P65

VOLTAGE=2.5V CHESTNUT_TO_PMU_ADCIN7

VOLTAGE=5V E75_TO_PMU_ACC_DETECT

VOLTAGE=5V E75_TO_PMU_ACC_DETECT_R

VOLTAGE=5V PMU_TO_TP_AMUX_AY

VOLTAGE=5V PMU_TO_TP_AMUX_BY

VOLTAGE=2.5V FOREHEAD_TO_PMU_NTC_P

VOLTAGE=2.5V CAM_TO_PMU_NTC_P

VOLTAGE=2.5V PA_TO_PMU_NTC_P

VOLTAGE=2.5V H6P_TO_PMU_NTC_P

VOLTAGE=2.5V 45_PMU_TCAL

VOLTAGE=5V PP_LED_BOOST_OUT

VOLTAGE=5V PP_LED_DRV_LX

VOLTAGE=0.4V PP_MIP10D_VREG

VOLTAGE=0.4V PP_MIP11D_VREG

VOLTAGE=3.4V PP_PMU_TO_VIBE

VOLTAGE=3.4V PP_PMU_TO_VIBE_CONN

VOLTAGE=5.25V PP_PMU_VCENTER

VOLTAGE=4.3V PP_PMU_VDD_REF

VOLTAGE=2.5V PP_PMU_VDD_RTC

VOLTAGE=1.2V PP_PMU_VREF

VOLTAGE=5.25V PP_PMU_VSW_CHG

VOLTAGE=5.7V PP_SAGE_LX

VOLTAGE=1.7V PP_SAGE_LY

VOLTAGE=13.5V PP_SAGE_TO_TOUCH_VCPH

VOLTAGE=13.5V PP_SAGE_TO_TOUCH_VCPH_CONN

VOLTAGE=-1.2V PP_SAGE_TO_TOUCH_VCPL

VOLTAGE=-1.2V PP_SAGE_TO_TOUCH_VCPL_CONN

VOLTAGE=18V PP_SAGE_VBST_OUTH

VOLTAGE=-1.4V PP_SAGE_VBST_OUTL

VOLTAGE=-1.2V PP_SAGE_VCPL_F

VOLTAGE=1.8V PP_SPKAMP_FILT

VOLTAGE=1V PP_SPKAMP_LDO_FILT

VOLTAGE=8V PP_SPKAMP_SW

VOLTAGE=5V PP_STRB_DRIVER_TO_LED_COOL

VOLTAGE=5V PP_STRB_DRIVER_TO_LED_WARM

VOLTAGE=4.3V PP_VCC_MAIN

VOLTAGE=4.3V PP_VCC_MAIN_CODEC

VOLTAGE=22V PP_WLED_LX

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12

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VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<0>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<1>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<2>

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VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<13>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<14>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<15>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<16>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<17>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<18>

VOLTAGE=4.55V CUMULUS_TO_SAGE_VSTM_OUT<19>

VOLTAGE=4.55V TOUCH_TO_SAGE_SENSE_IN<0>

VOLTAGE=4.55V TOUCH_TO_SAGE_SENSE_IN<1>

VOLTAGE=4.55V TOUCH_TO_SAGE_SENSE_IN<2>

VOLTAGE=4.55V TOUCH_TO_SAGE_SENSE_IN<3>

VOLTAGE=4.55V TOUCH_TO_SAGE_SENSE_IN<4>

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VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<2>

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VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<10>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<11>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<12>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<13>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<14>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<15>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<16>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<17>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<18>

VOLTAGE=4.55V SAGE_TO_TOUCH_VSTM_OUT<19>

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VOLTAGE=3.8V CODEC_TO_RCVR_P

VOLTAGE=3.8V CODEC_TO_RCVR_N

VOLTAGE=3.8V CODEC_TO_RCVR_CONN_P

VOLTAGE=3.8V CODEC_TO_RCVR_CONN_N

VOLTAGE=3.8V CODEC_TO_HAC_P

VOLTAGE=3.8V CODEC_TO_HAC_N

VOLTAGE=3.8V CODEC_TO_HAC_CONN_P

VOLTAGE=3.8V CODEC_TO_HAC_CONN_N

VOLTAGE=3.114V CODEC_TO_HPHONE_L

VOLTAGE=3.114V CODEC_TO_HPHONE_R

VOLTAGE=3.114V CODEC_TO_HPHONE_L_CONN

VOLTAGE=3.114V CODEC_TO_HPHONE_R_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3_REF

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_REF

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS3_REF_CONN

VOLTAGE=2.7V CODEC_TO_HPHONE_HS4_REF_CONN

VOLTAGE=4.3V HPHONE_TO_CODEC_DET

VOLTAGE=4.3V HPHONE_TO_CODEC_DET_CONN

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_L67_N

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_N

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_P

VOLTAGE=2.5V 90_CODEC_BI_TRISTAR_MIKEYBUS_DIG_N

VOLTAGE=2.5V TRISTAR_TO_PMU_MIKEYBUS_TEST_POS

VOLTAGE=2.5V TRISTAR_TO_PMU_MIKEYBUS_TEST_NEG

VOLTAGE=1.8V MIC1_TO_CODEC_L67_P

VOLTAGE=1.8V MIC1_TO_CODEC_L67_N

VOLTAGE=1.8V MIC1_TO_CODEC_P

VOLTAGE=1.8V MIC1_TO_CODEC_N

VOLTAGE=1.8V MIC2_TO_CODEC_L67_P

VOLTAGE=1.8V MIC2_TO_CODEC_L67_N

VOLTAGE=1.8V MIC2_TO_CODEC_P

VOLTAGE=1.8V MIC2_TO_CODEC_N

VOLTAGE=1.8V MIC3_TO_CODEC_L67_P

VOLTAGE=1.8V MIC3_TO_CODEC_L67_N

VOLTAGE=1.8V MIC3_TO_CODEC_P

VOLTAGE=1.8V MIC3_TO_CODEC_N

VOLTAGE=3.8V RCVR_TO_CODEC_RCVR_TEST

VOLTAGE=3.114V HPHONE_TO_CODEC_HPHONE_TEST

VOLTAGE=3.114V HPHONE_TO_CODEC_HPHONE_TEST_L67

VOLTAGE=3.8V HAC_TO_CODEC_TEST

VOLTAGE=3.8V HAC_TO_CODEC_TEST_L67

VOLTAGE=2.85V 45_CAM_AVDD_FB

VOLTAGE=4.6V 45_PMU_VPUMP

VOLTAGE=4.3V PMU_ACT_DIO

VOLTAGE=3.6V TRISTAR_TO_PMU_OVP_SW_EN_L

VOLTAGE=3.2V USB_VBUS_DETECT

VOLTAGE=5.25V TRISTAR_TO_PMU_USB_BRICKID

VOLTAGE=5.25V TRISTAR_TO_PMU_USB_BRICKID_R

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VOLTAGE=2.5V BATTERY_TO_PMU_NTC

VOLTAGE=2.5V BATTERY_NTC_CONN

VOLTAGE=4.2V BATTERY_TO_PMU_SENSE

VOLTAGE=8V SPEAKER_TO_SPKAMP_VSENSE_P

VOLTAGE=8V SPEAKER_TO_SPKAMP_VSENSE_N

VOLTAGE=8V L19_SPKAMP_VSENSE_P

VOLTAGE=8V L19_SPKAMP_VSENSE_N

VOLTAGE=8V SPEAKER_TO_SPKAMP_ISENSE_P

VOLTAGE=8V SPEAKER_TO_SPKAMP_ISENSE_N

VOLTAGE=8V SPKR_SNS_P

VOLTAGE=8V SPKR_SNS_N

VOLTAGE=8V SPKR_FLTR_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_CONN_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_CONN_N

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_P

VOLTAGE=8V SPKAMP_TO_SPEAKER_OUT_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_CONN_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR1_CONN_N

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_CONN_P

VOLTAGE=5.25V 90_TRISTAR_BI_E75_PAIR2_CONN_N

VOLTAGE=3.0V TRISTAR_BYPASS

VOLTAGE=-5.7V PN5V7_SAGE_AVDDN

VOLTAGE=-5.7V PN5V7_LCM_AVDDN

VOLTAGE=-5.7V SAGE_DUMP_GATE

VOLTAGE=2.5V SAGE_VBIAS

VOLTAGE=2.5V SAGE_VBIAS_DRAIN

VOLTAGE=-1.2V SAGE_TO_TOUCH_VCPL_LCM_CONN

VOLTAGE=11V GYRO_PUMP

VOLTAGE=XV SAGE_TO_CUMULUS_IN<0>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<1>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<2>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<3>

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VOLTAGE=XV SAGE_TO_CUMULUS_IN<11>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<12>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<13>

VOLTAGE=XV SAGE_TO_CUMULUS_IN<14>

VOLTAGE=18.0V PP16V5_MESA

VOLTAGE=18.0V PP16V5_MESA_DOCK_CONN

VOLTAGE=18.0V PP16V5_MESA_SW

VOLTAGE=1.0V PP1V0

VOLTAGE=1.0V PP1V0_SOC

VOLTAGE=1.0V PP1V0_SRAM

VOLTAGE=1.1V PP1V1_CPU

VOLTAGE=1.1V PP1V1_GPU

VOLTAGE=1.2V PP1V2

VOLTAGE=1.2V PP1V2_NAND_VDDI

VOLTAGE=1.2V PP1V2_OSCAR

VOLTAGE=1.2V PP1V2_OSCAR_VDDC

VOLTAGE=1.2V PP1V2_RCAM_CONN

VOLTAGE=1.2V PP1V2_RCAM_SWITCHOUT

VOLTAGE=1.2V PP1V2_SDRAM

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VOLTAGE=1.8V PP1V8

VOLTAGE=1.8V PP1V8_ALWAYS

VOLTAGE=1.8V PP1V8_COMP

VOLTAGE=1.8V PP1V8_CUMULUS_VDDI_DO

VOLTAGE=1.8V PP1V8_FCAM_CONN

VOLTAGE=1.8V PP1V8_GRAPE

VOLTAGE=1.8V PP1V8_LCM_CONN

VOLTAGE=1.8V PP1V8_OLSCAR

VOLTAGE=1.8V PP1V8_OLSCAR_VDDIO

VOLTAGE=1.8V PP1V8_PLL

VOLTAGE=1.8V PP1V8_RCAM_CONN

VOLTAGE=1.8V PP1V8_SDRAM

VOLTAGE=1.8V PP1V8_SDRAM_DOCK_CONN

VOLTAGE=1.8V PP1V8_VA_L19_L67

VOLTAGE=1.8V PP1V8_XTAL

VOLTAGE=2.5V PP2V5_RCAM_AF

VOLTAGE=2.5V PP2V5_RCAM_AF_COMP

VOLTAGE=2.5V PP2V5_RCAM_AF_CONN

VOLTAGE=2.8V PP2V85_CAM_AVDD

VOLTAGE=2.8V PP2V85_FCAM_CONN

VOLTAGE=2.8V PP2V85_RCAM_CONN

VOLTAGE=3.0V PP3V0_ACC

VOLTAGE=3.0V PP3V0_ALS

VOLTAGE=3.0V PP3V0_COMP

VOLTAGE=3.0V PP3V0_IMU

VOLTAGE=3.0V PP3V0_NAND

VOLTAGE=3.0V PP3V0_NAND_XW

VOLTAGE=3.0V PP3V0_NAVAJ0

VOLTAGE=3.0V PP3V0_NAVAJ0_CONN

VOLTAGE=3.0V PP3V0_PROX

VOLTAGE=3.0V PP3V0_PROX_ALS

VOLTAGE=3.0V PP3V0_PROX_IRLED

VOLTAGE=3.0V PP3V0_SDRAM

VOLTAGE=3.0V PP3V0_SDRAM_CONN

VOLTAGE=3.3V PP3V3_USB

VOLTAGE=5.0V PP5V0_USB_CONN

VOLTAGE=5.0V PP5V0_USB_PROT

VOLTAGE=5.1V PP5V1_GRAPE_VDDH

VOLTAGE=5.7V PP5V7_LCM_AVDDH

VOLTAGE=5.7V PP5V7_LCM_AVDDH_CONN

VOLTAGE=5.7V PP5V7_SAGE_AVDDH

VOLTAGE=6V PP6V0_LCM_BOOST

VOLTAGE=4.3V PP_BATT_VCC

VOLTAGE=4.3V PP_BATT_VCC_L19_VP

VOLTAGE=4.3V PP_BUCK0_LX0

VOLTAGE=4.3V PP_BUCK0_LX1

VOLTAGE=4.3V PP_BUCK0_LX2

VOLTAGE=4.3V PP_BUCK0_LX3

VOLTAGE=4.3V PP_BUCK1_LX0

VOLTAGE=4.3V PP_BUCK1_LX1

VOLTAGE=4.3V PP_BUCK2_LX

VOLTAGE=4.3V PP_BUCK3_LX

VOLTAGE=4.3V PP_BUCK4_LX

VOLTAGE=4.3V PP_BUCK5_LX

VOLTAGE=-6V PP_CHESTNUT_CN

VOLTAGE=6V PP_CHESTNUT_CP

VOLTAGE=6V PP_CHESTNUT_LXP

VOLTAGE=1.8V PP_CODEC_FILT+

VOLTAGE=2.2V PP_CODEC_SPKR_VO

VOLTAGE=2.7V PP_CODEC_TO_MIC1_BIAS

VOLTAGE=2.7V PP_CODEC_TO_MIC1_BIAS_CONN

VOLTAGE=2.7V PP_CODEC_TO_MIC2_3_BIAS

VOLTAGE=2.7V PP_CODEC_TO_MIC3_BIAS_CONN

VOLTAGE=2.5V PP_CODEC_VCPL_FILT+

VOLTAGE=-2.5V PP_CODEC_VCPL_FILT-

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VOLTAGE=0.2V PP_CODEC_VHP_FLYC

VOLTAGE=-2.5V PP_CODEC_VHP_FLYN

VOLTAGE=2.5V PP_CODEC_VHP_FLYP

VOLTAGE=1.6V PP_CUMULUS_VDDANA

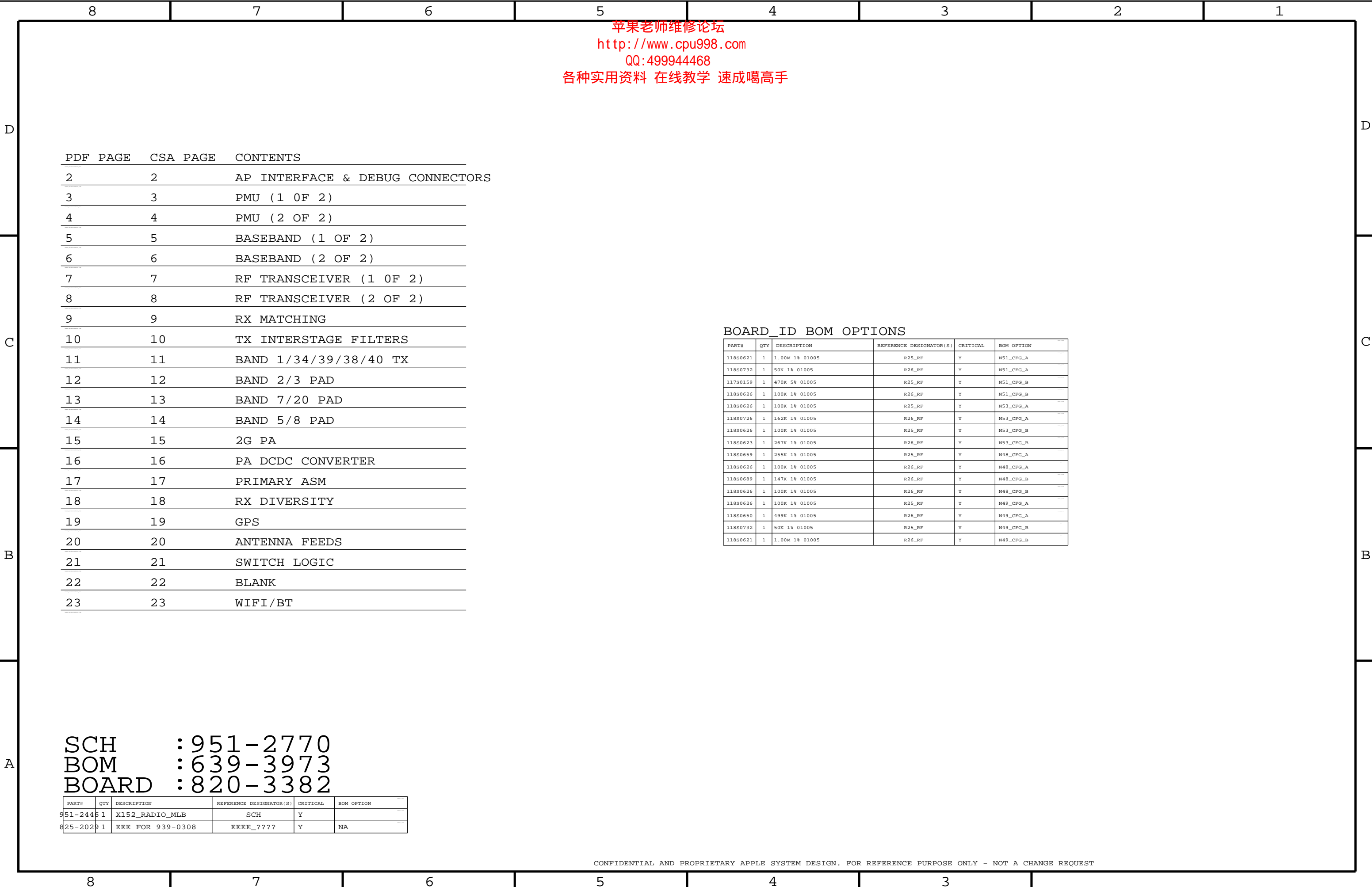
VOLTAGE=1.6V PP_CUMULUS_VDDCORE

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC1

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC1_CONN

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC2

VOLTAGE=4.3V PP_E75_TO_TRISTAR_ACC2_CONN



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18	18			RX DIVERSITY
19	19			GPS
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22	22			BLANK
23	23			WIFI/BT

SCH : 951-2770
BOM : 639-3973
BOARD : 820-3382

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
951-2445	1	X152_RADIO_MLB	SCH	Y	
825-2029	1	EEE FOR 939-0308	EEEE_???	Y	NA

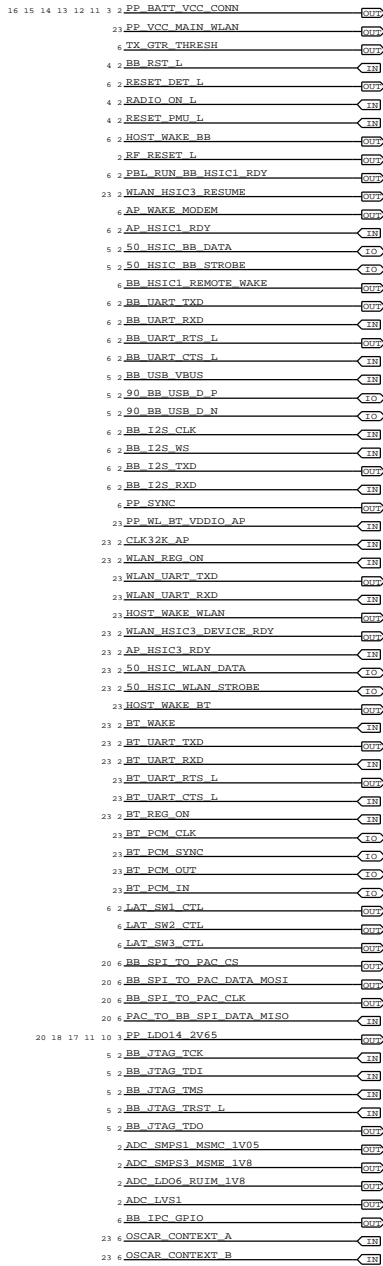
BOARD_ID BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
118S0621	1	1.00M 1% 01005	R25_RF	Y	N51_CFG_A
118S0732	1	50K 1% 01005	R26_RF	Y	N51_CFG_A
117S0159	1	470K 5% 01005	R25_RF	Y	N51_CFG_B
118S0626	1	100K 1% 01005	R26_RF	Y	N51_CFG_B
118S0626	1	100K 1% 01005	R25_RF	Y	N53_CFG_A
118S0726	1	162K 1% 01005	R26_RF	Y	N53_CFG_A
118S0626	1	100K 1% 01005	R25_RF	Y	N53_CFG_B
118S0623	1	267K 1% 01005	R26_RF	Y	N53_CFG_B
118S0659	1	255K 1% 01005	R25_RF	Y	N48_CFG_A
118S0626	1	100K 1% 01005	R26_RF	Y	N48_CFG_A
118S0689	1	147K 1% 01005	R26_RF	Y	N48_CFG_B
118S0626	1	100K 1% 01005	R26_RF	Y	N48_CFG_B
118S0626	1	100K 1% 01005	R25_RF	Y	N49_CFG_A
118S0650	1	499K 1% 01005	R26_RF	Y	N49_CFG_A
118S0732	1	50K 1% 01005	R25_RF	Y	N49_CFG_B
118S0621	1	1.00M 1% 01005	R26_RF	Y	N49_CFG_B

AP INTERFACE & DEBUG CONNECTORS

AP CONNECTIONS

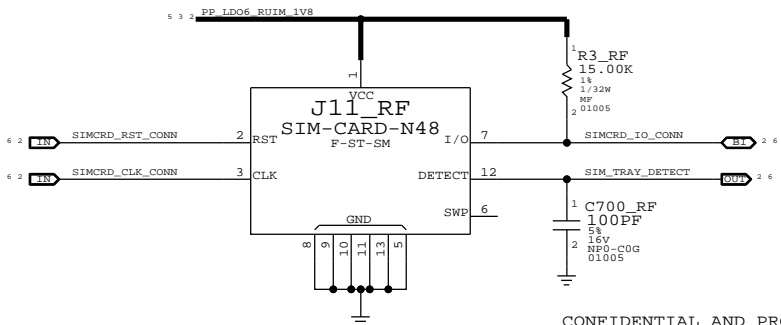
IN = FROM AP
OUT = TO AP



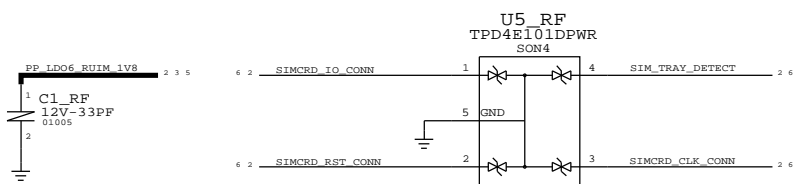
PROBE POINTS



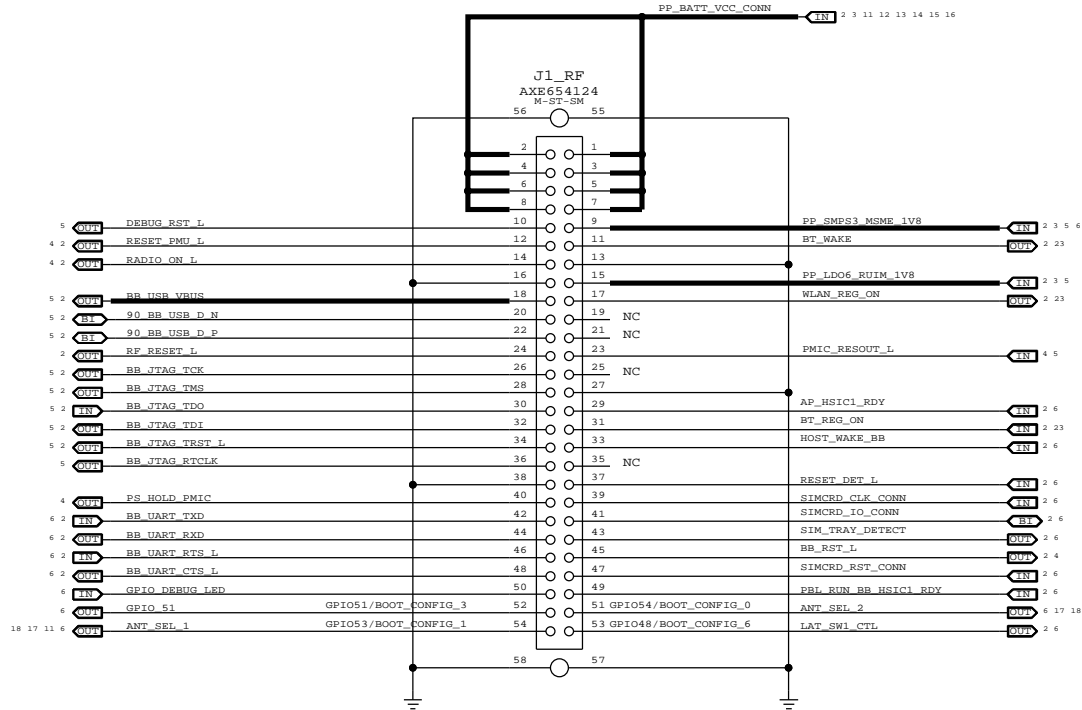
SIM CARD CONNECTOR



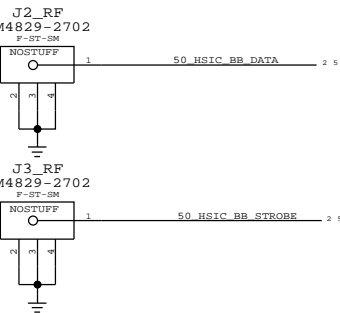
SIM CARD ESD PROTECTION



DEBUG CONNECTOR

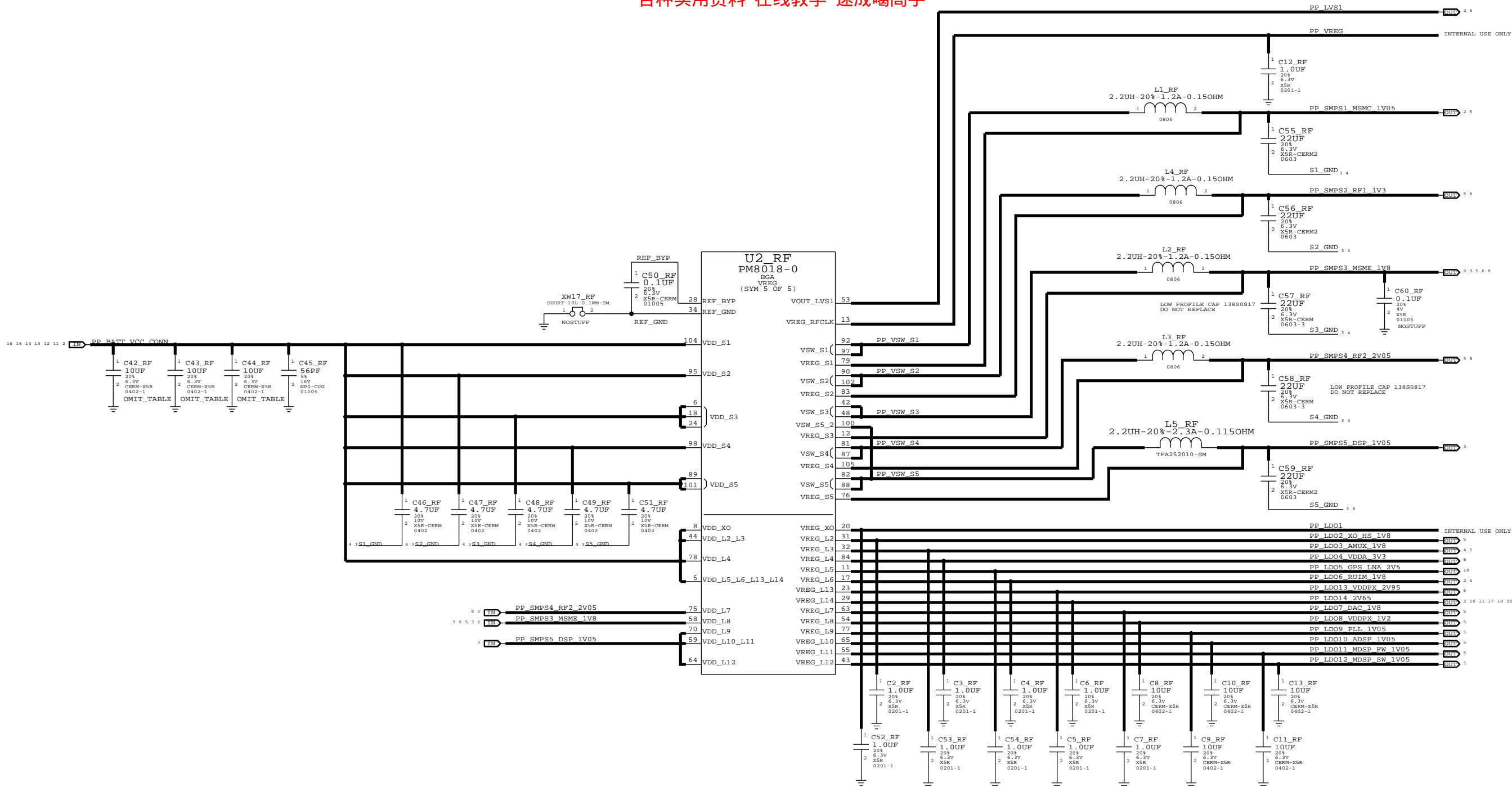


BOOT OPTIONS	BOOT_CONFIG SW REGISTER VALUE	GPIO/BOOT_CONFIG CONFIGURATION							
		6	5	4	3	2	1	0	
BOOT_DEFAULT_OPTION	0x00	X	0	0	0	0	0	0	X
BOOT_NAND_OPTION	0x01	X	1	0	0	0	0	0	1
BOOT_HSIC_OPTION	0x02	X	1	0	0	0	0	1	0
BOOT_USB_OPTION	0x03	X	1	0	0	0	0	1	1
ENABLE_SAHARA_PROTOCOL	0x08	X	1	0	0	1	0	X	X



PMU (1 OF 2)

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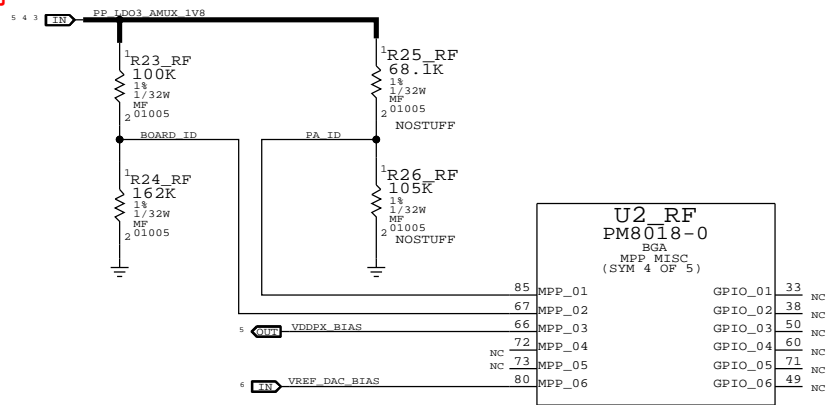


PMU (2 OF 2)

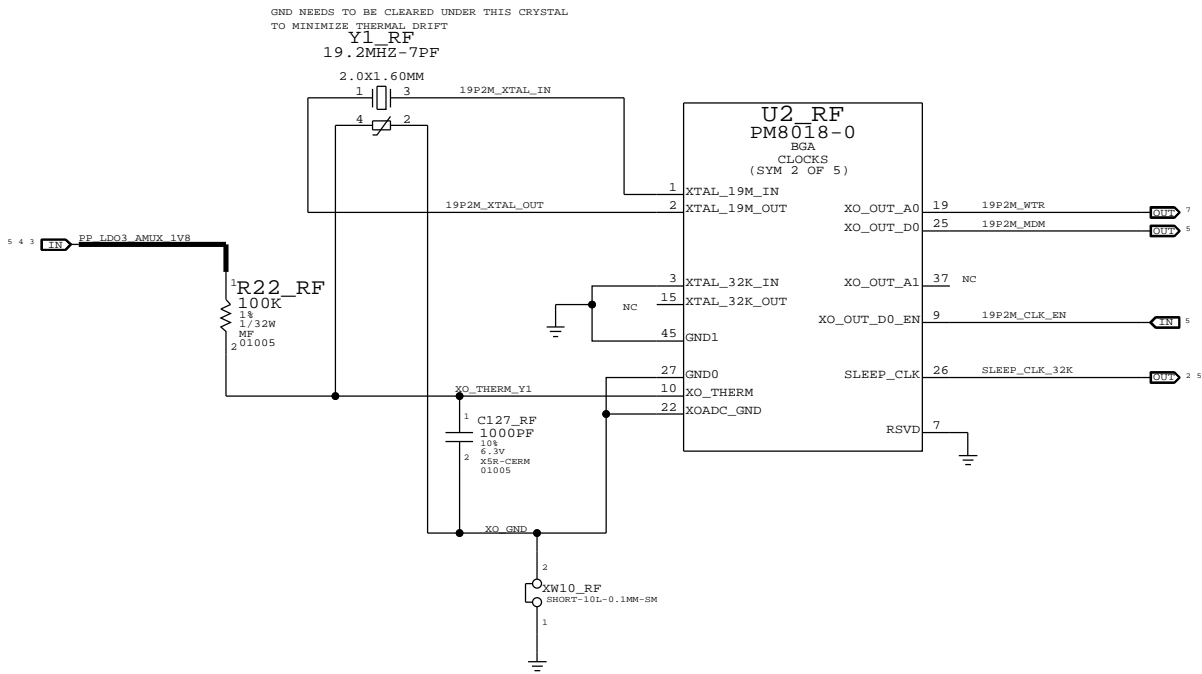
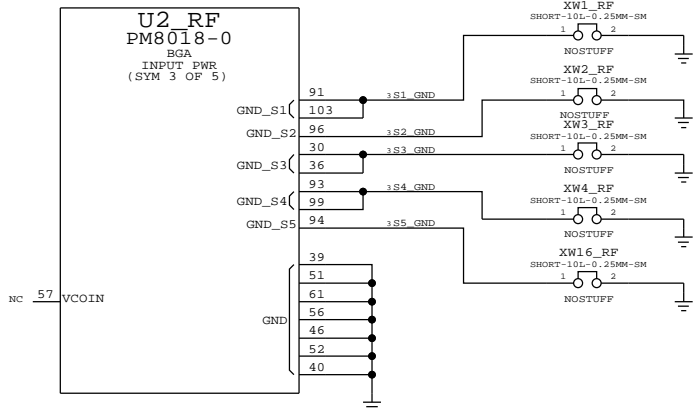
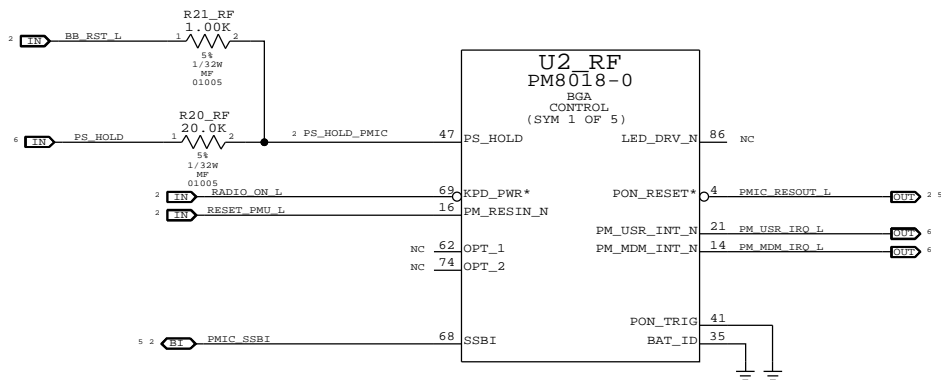
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PA_ID	CONFIG
1.1V	CONFIG A
1.3V	CONFIG B
1.5V	CONFIG C
1.7V	CONFIG D

BOARD_ID	REVISION
0.7V	PROTO1
0.9V	PROTO2
1.1V	EVT1
1.3V	EVT2
1.5V	DVT
1.7V	PVT

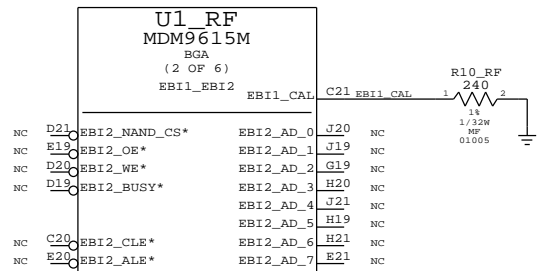
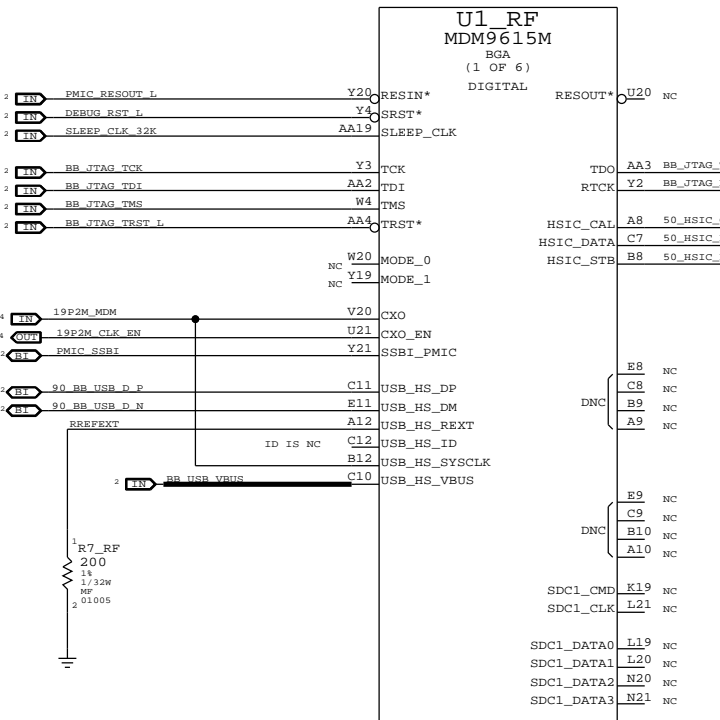
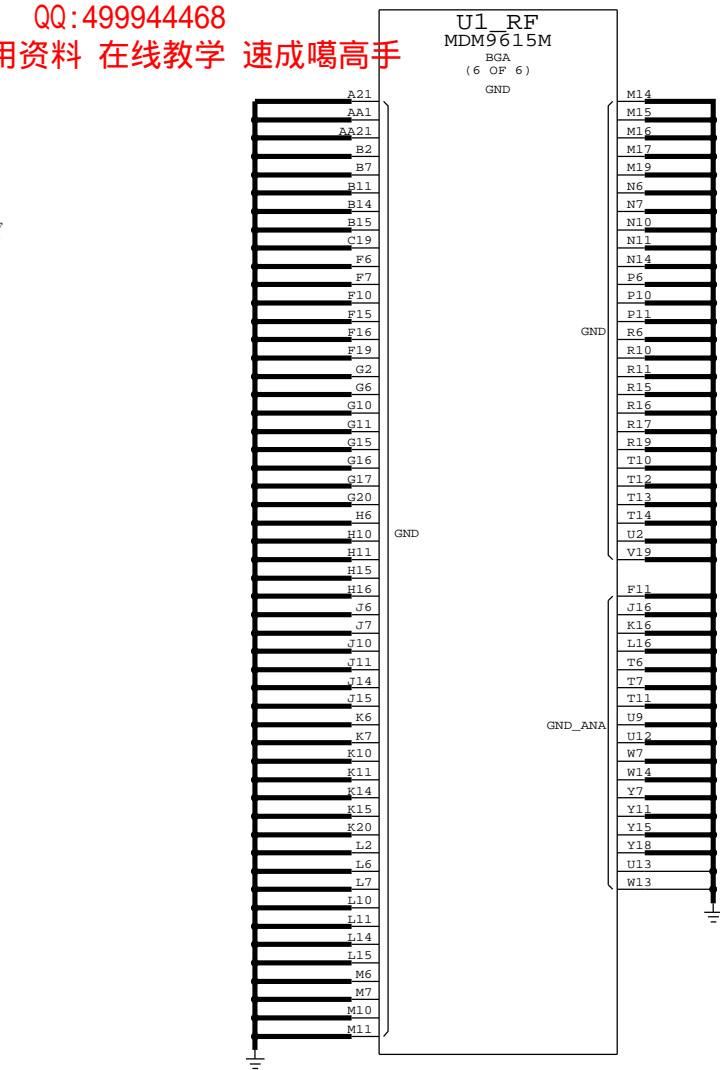
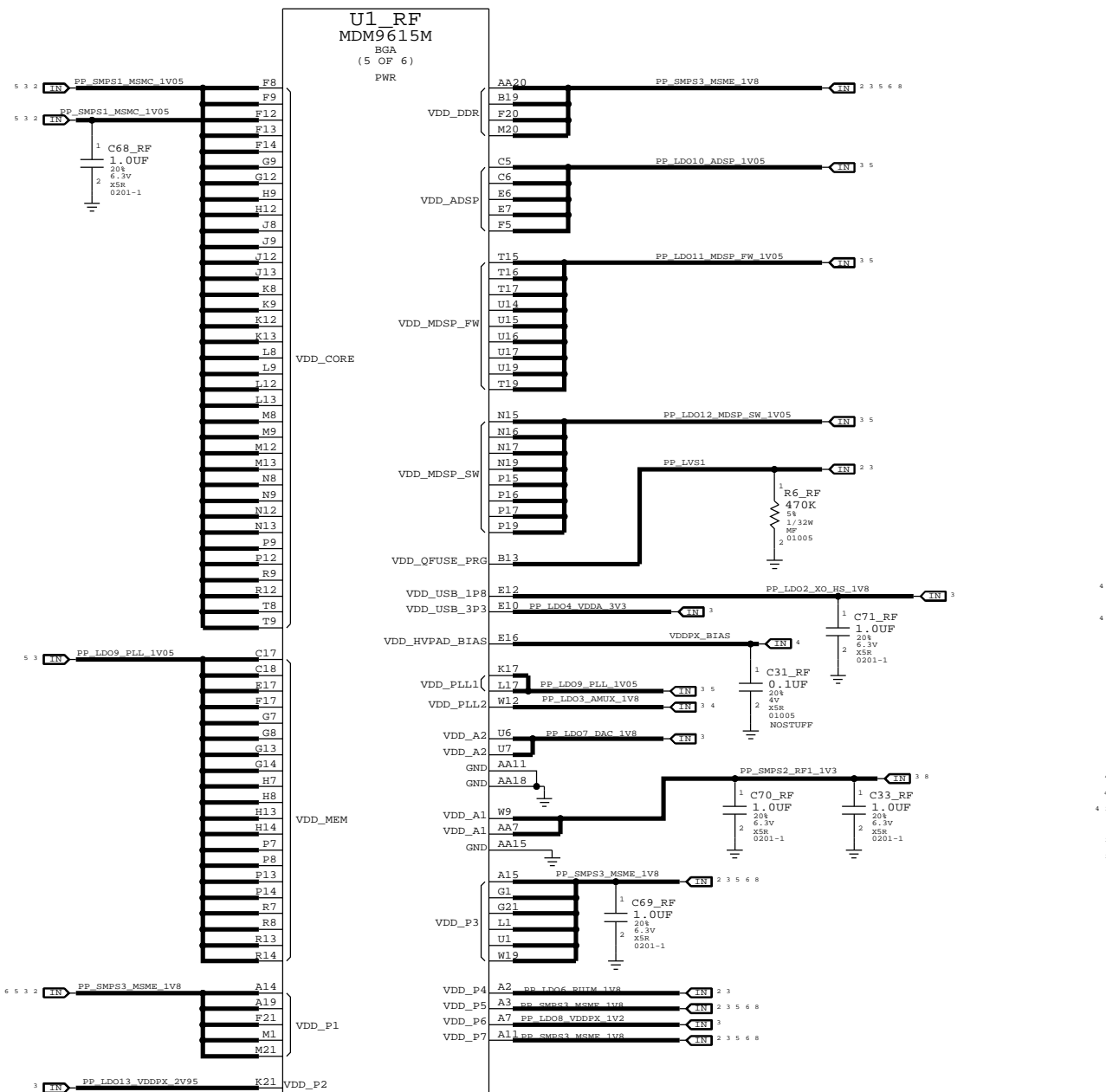
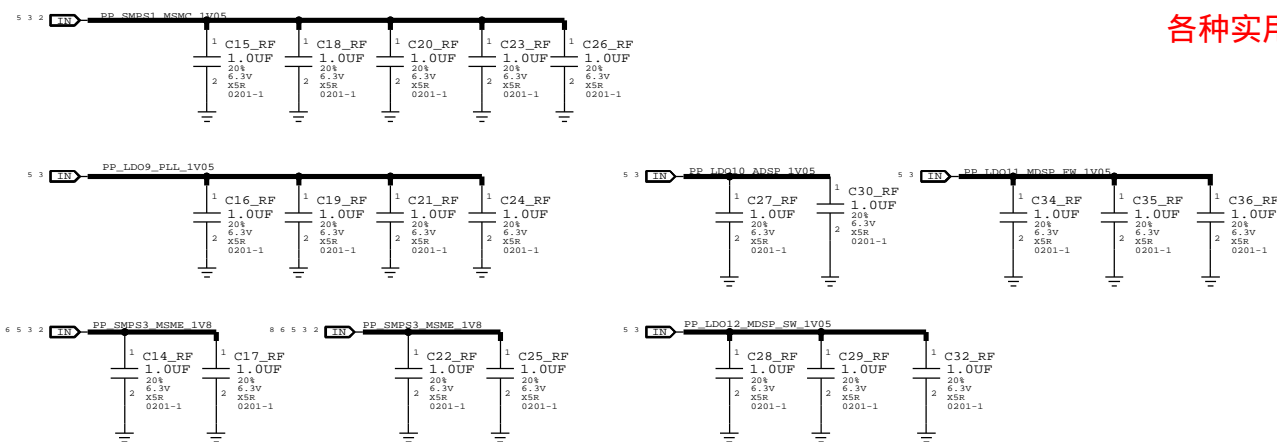


AP SECTION NEEDS ITS OWN THERMISTOR PLACED NEAR THE PA'S.



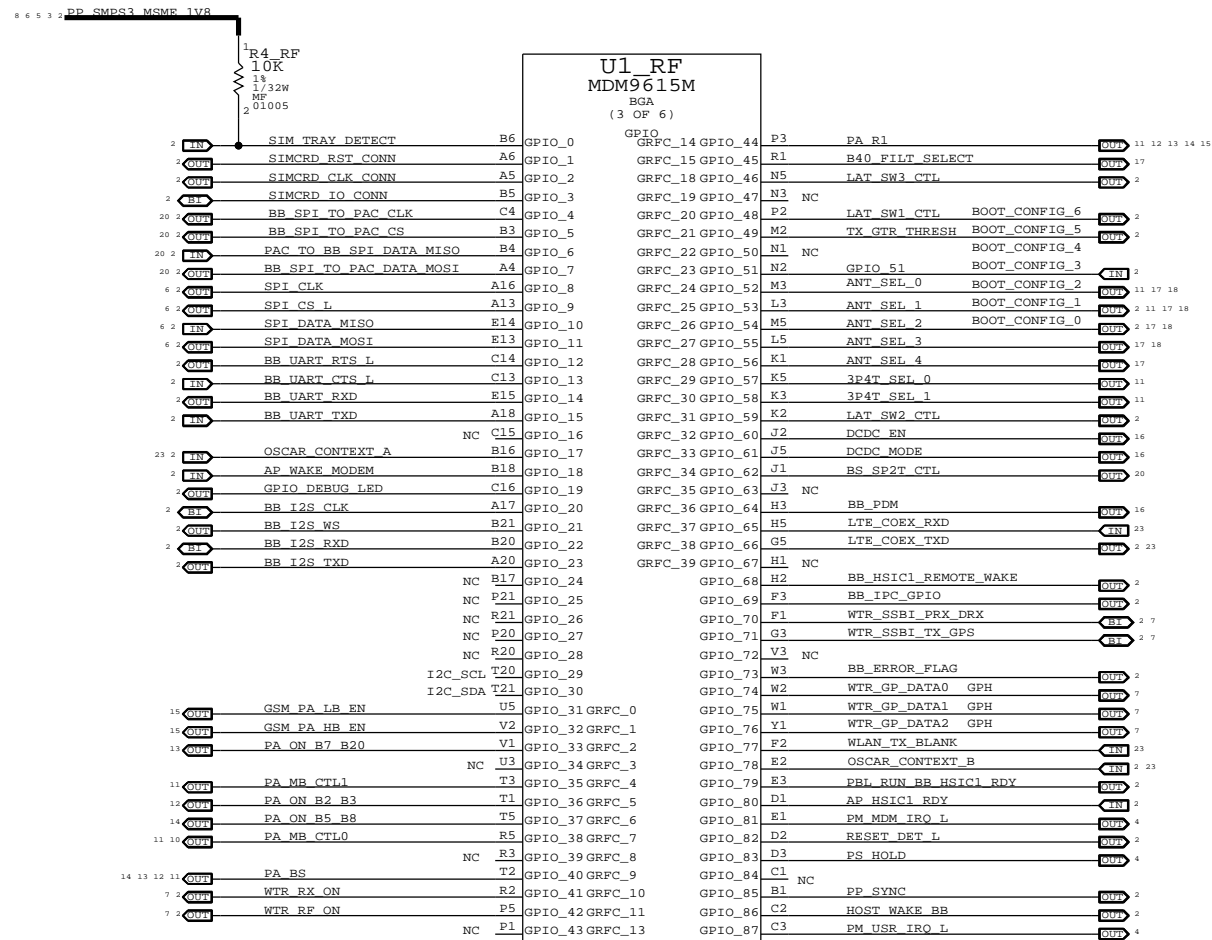
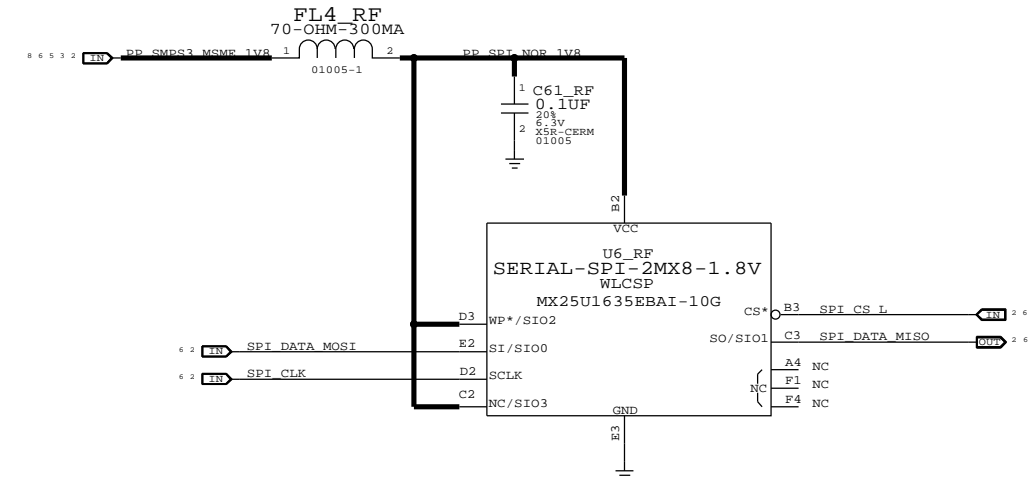
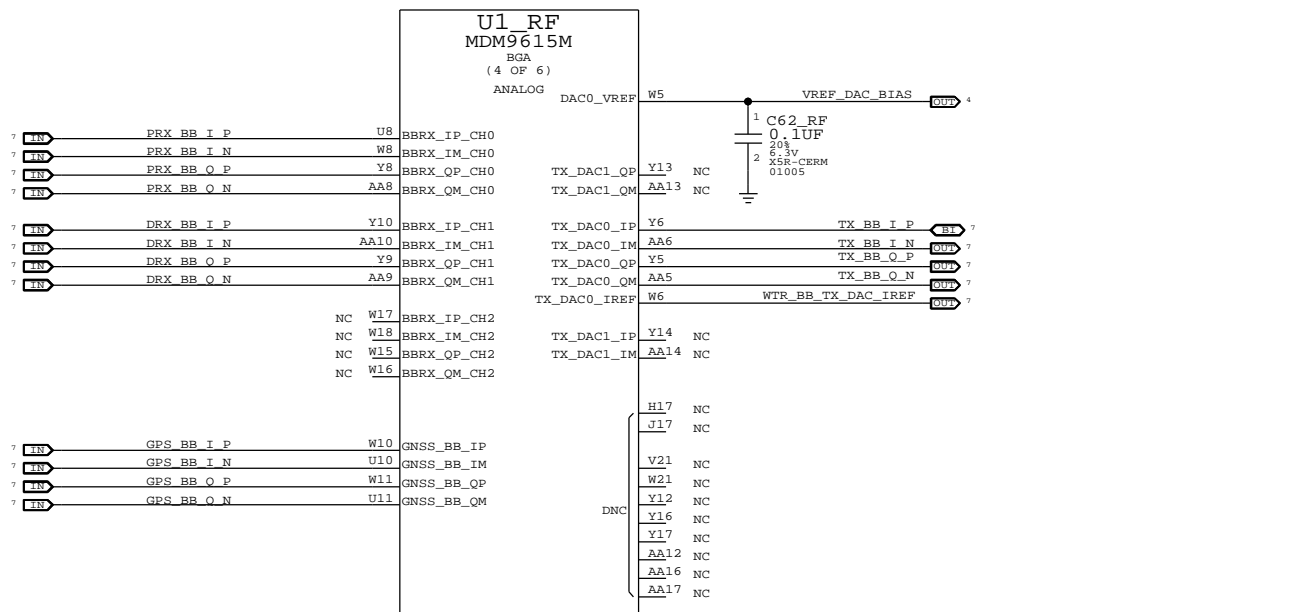
BASEBAND (1 OF 2)

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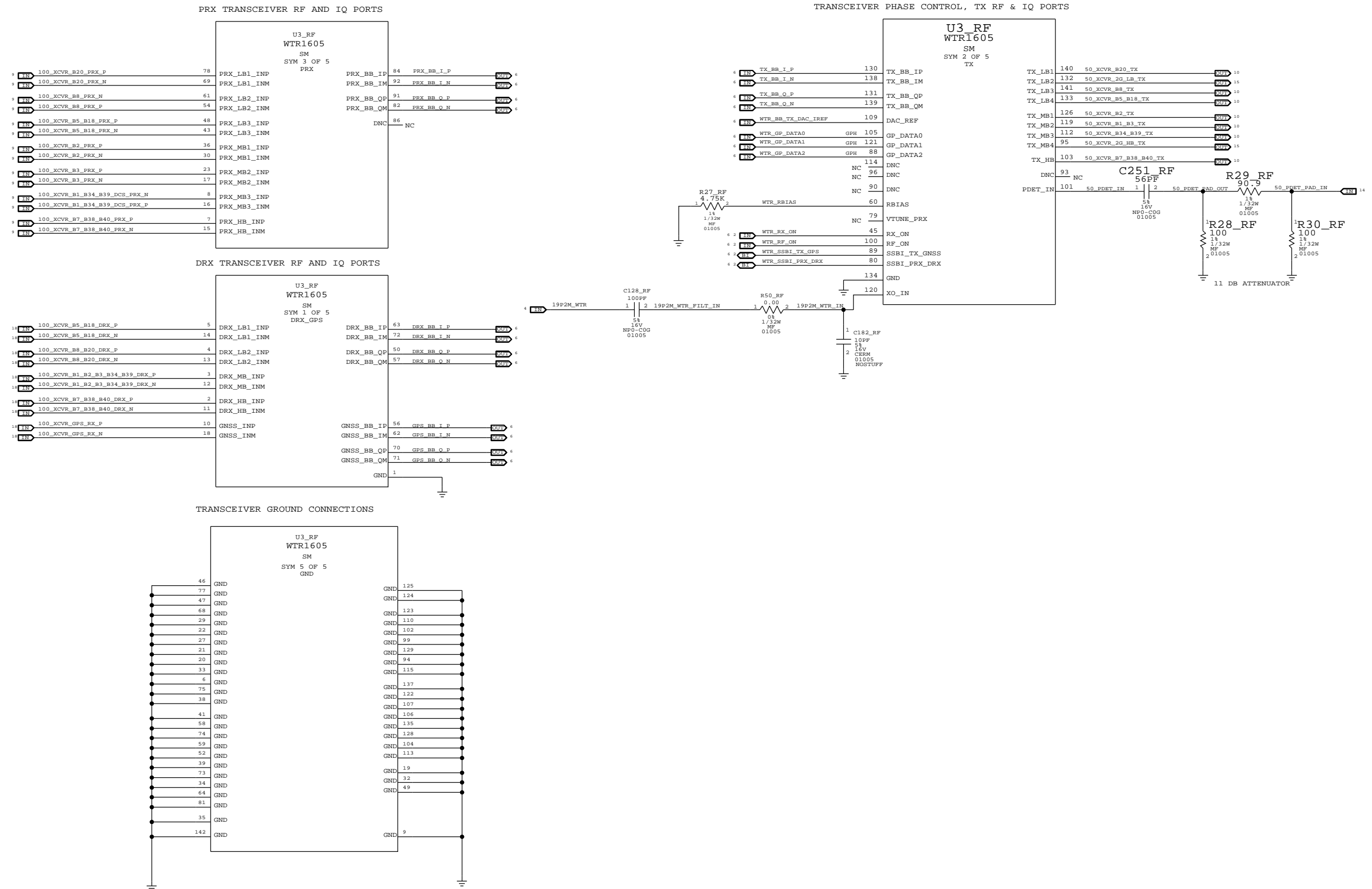
BASEBAND (2 OF 2)

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RF TRANSCEIVER (1 OF 2)

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RF TRANSCEIVER (2 OF 2)

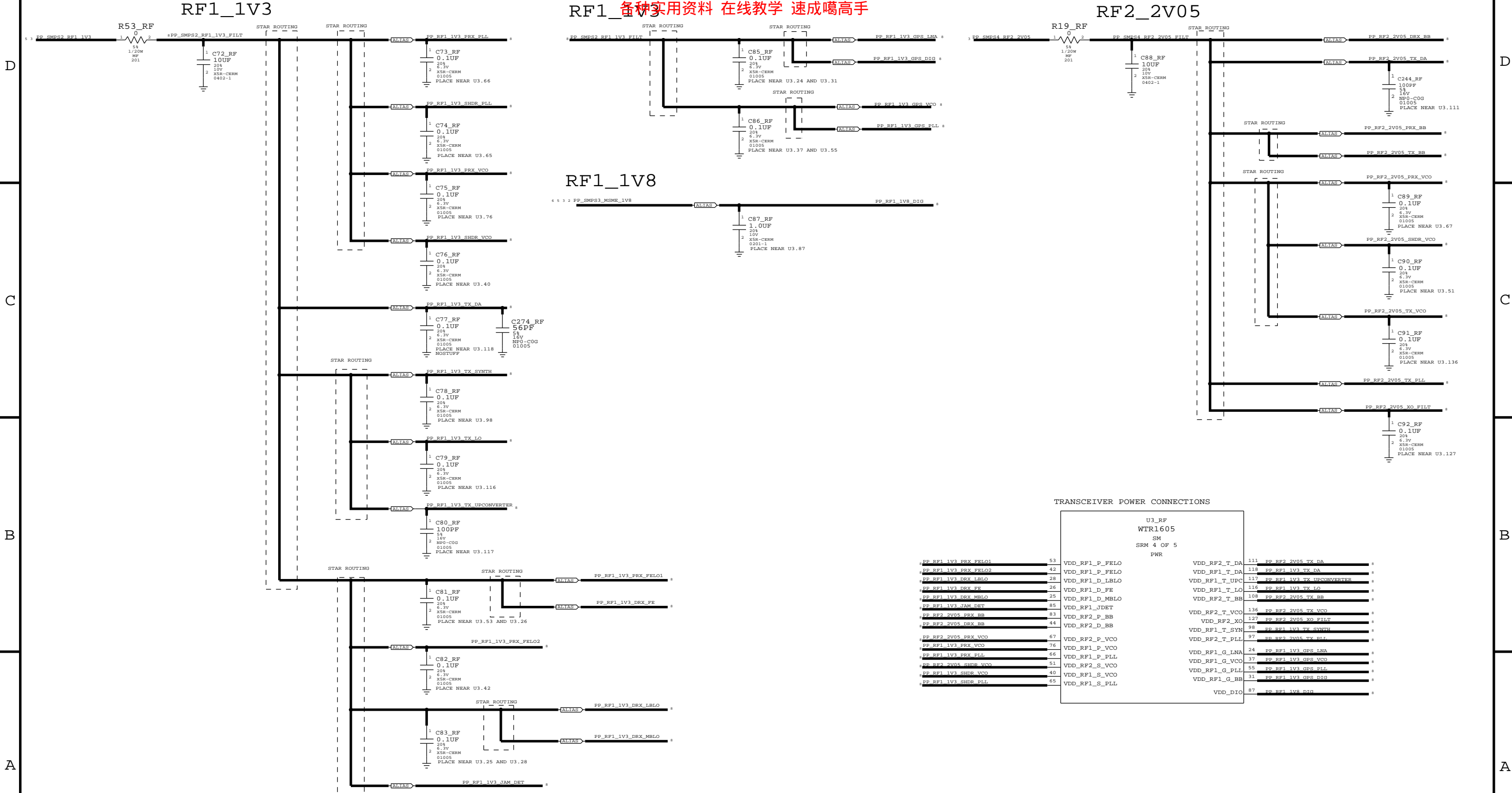
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RF1_1V3

RF1_1V3

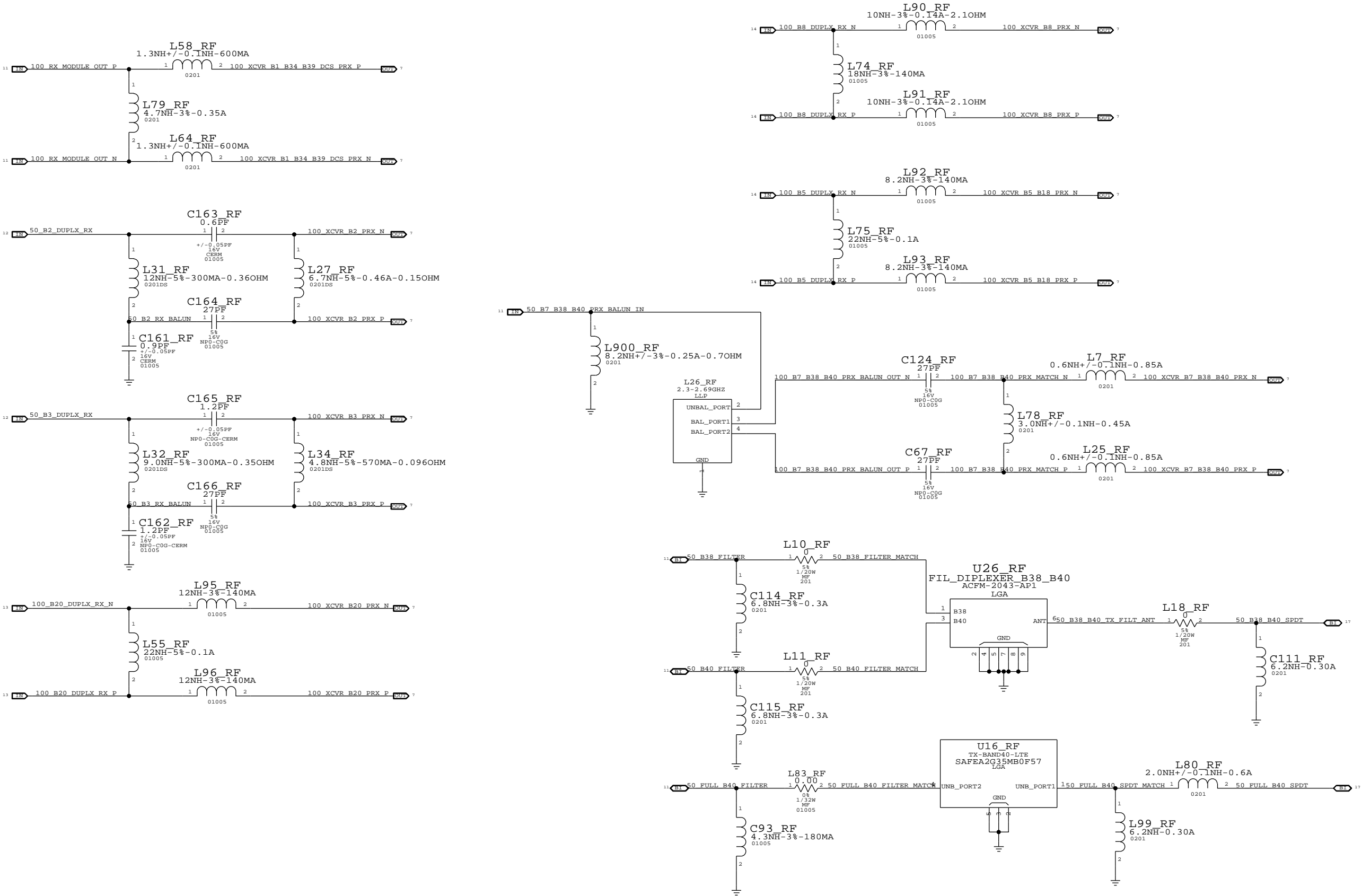
RF2_2V05



TRANSCEIVER POWER CONNECTIONS

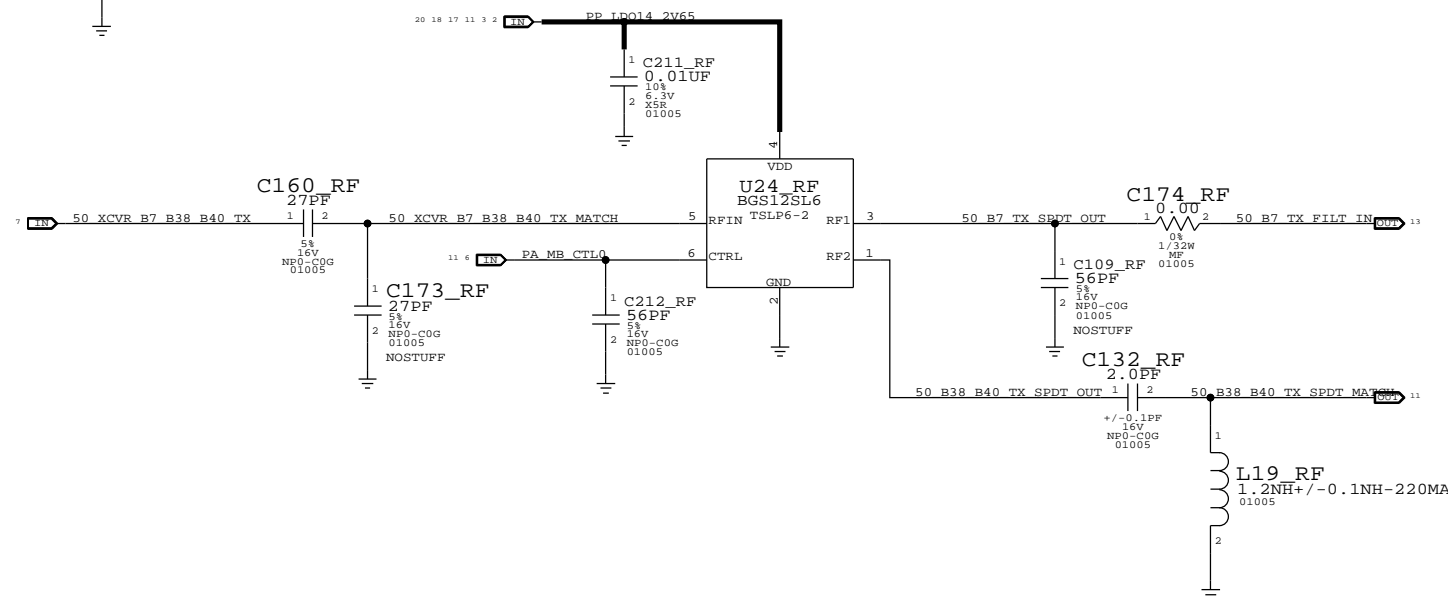
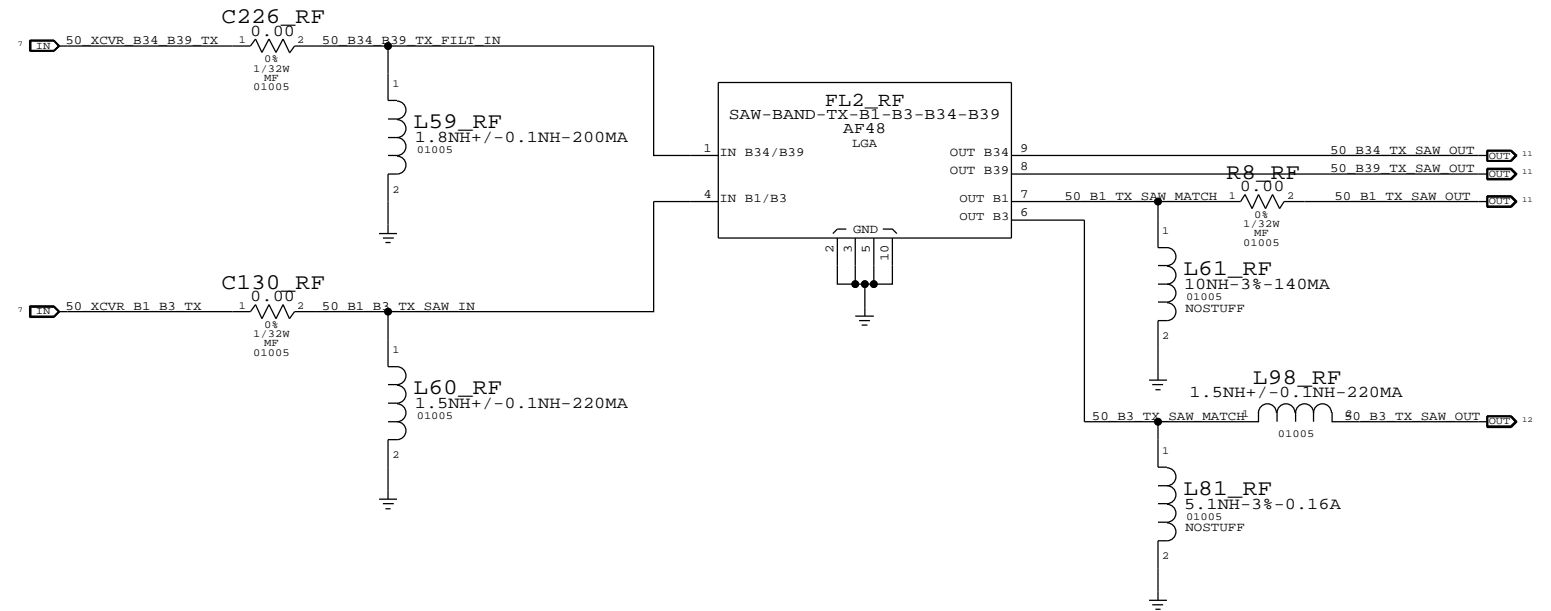
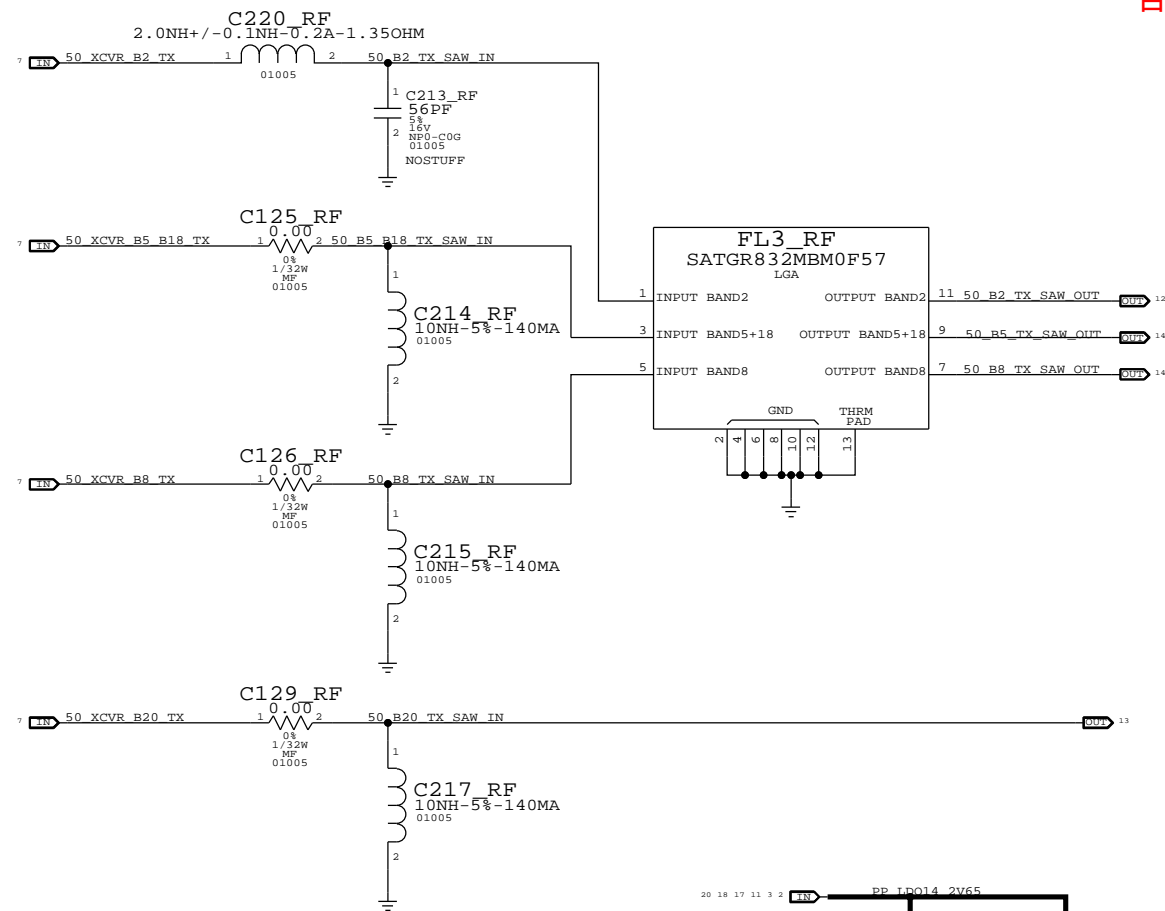
U3_RF WTR1605 SM SRM 4 OF 5 PWR			
PP RF1_1V3 PRX FELO1	53	VDD_RF1_P_FELO	
PP RF1_1V3 PRX FELO2	42	VDD_RF1_P_FELO	
PP RF1_1V3 DRX_LBLO	28	VDD_RF1_D_LBLO	
PP RF1_1V3 DRX_FE	26	VDD_RF1_D_FE	
PP RF1_1V3 DRX_MBLO	25	VDD_RF1_D_MBLO	
PP RF1_1V3 JAM_DET	85	VDD_RF1_JDET	
PP RF2_2V05 PRX_BB	83	VDD_RF2_P_BB	
PP RF2_2V05 DRX_BB	44	VDD_RF2_D_BB	
PP RF2_2V05 PRX_VCO	67	VDD_RF2_P_VCO	
PP RF1_1V3 PRX_VCO	76	VDD_RF1_P_VCO	
PP RF1_1V3 PRX_PLL	66	VDD_RF1_P_PLL	
PP RF2_2V05 SHDR_VCO	51	VDD_RF2_S_VCO	
PP RF1_1V3 SHDR_VCO	40	VDD_RF1_S_VCO	
PP RF1_1V3 SHDR_PLL	55	VDD_RF1_S_PLL	
		VDD_RF2_T_DA	111
		VDD_RF1_T_DA	118
		VDD_RF1_T_UPC	117
		VDD_RF1_T_LO	116
		VDD_RF2_T_BB	108
		VDD_RF2_T_VCO	136
		VDD_RF2_XO	127
		VDD_RF1_T_SYN	98
		VDD_RF2_T_PLL	97
		VDD_RF1_G_LNA	24
		VDD_RF1_G_VCO	37
		VDD_RF1_G_PLL	55
		VDD_RF1_G_BB	31
		VDD_DIO	87

RX MATCHING



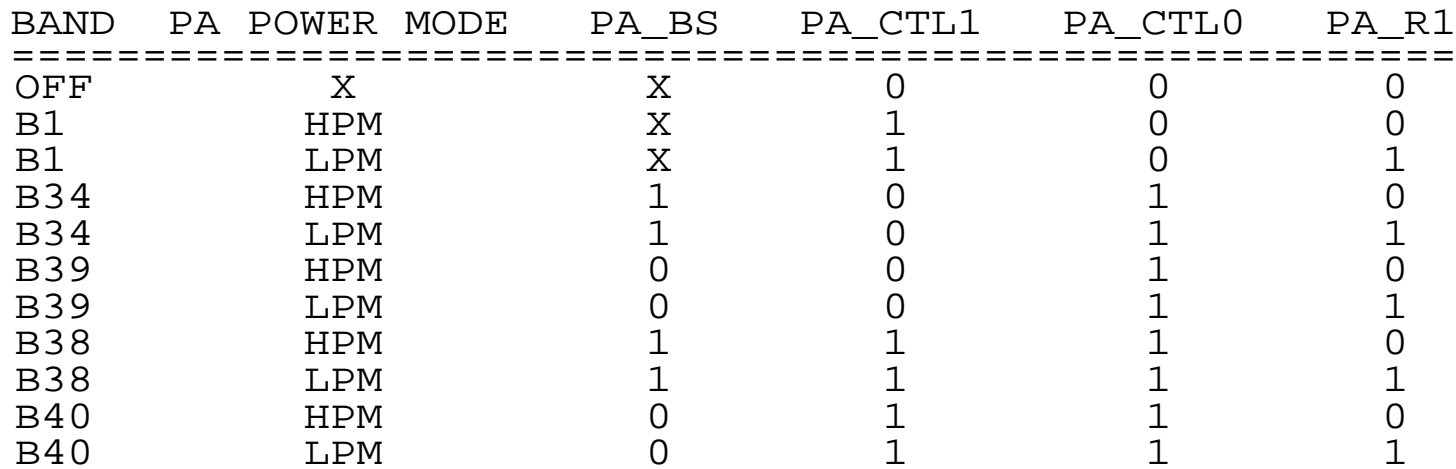
TX INTERSTAGE FILTERS

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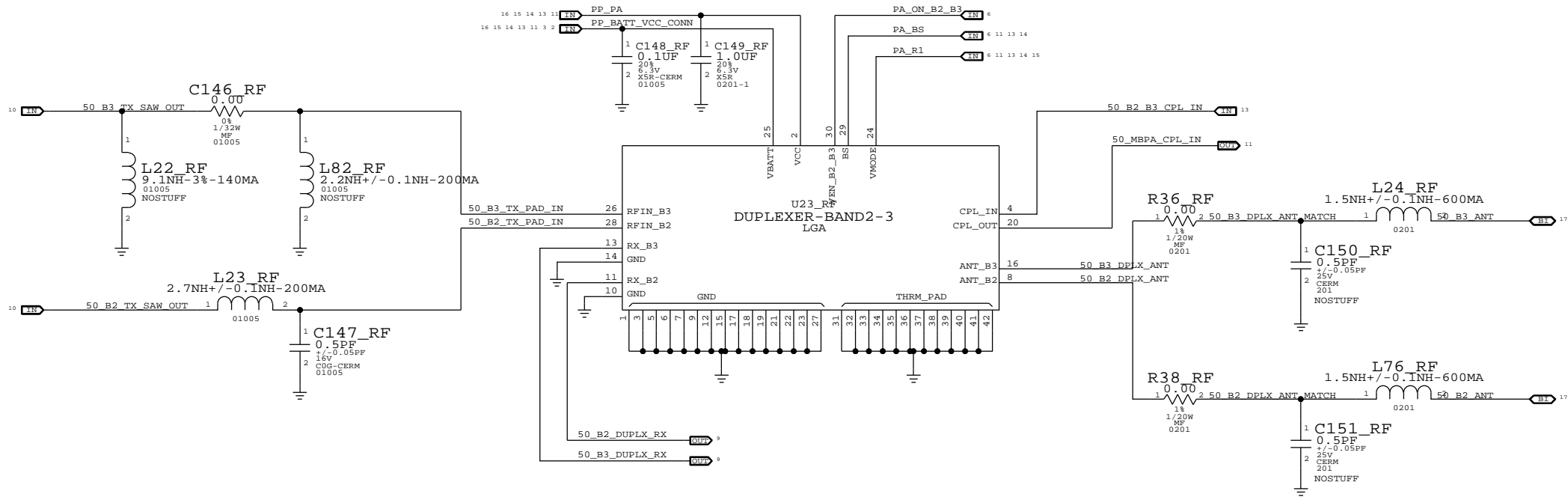
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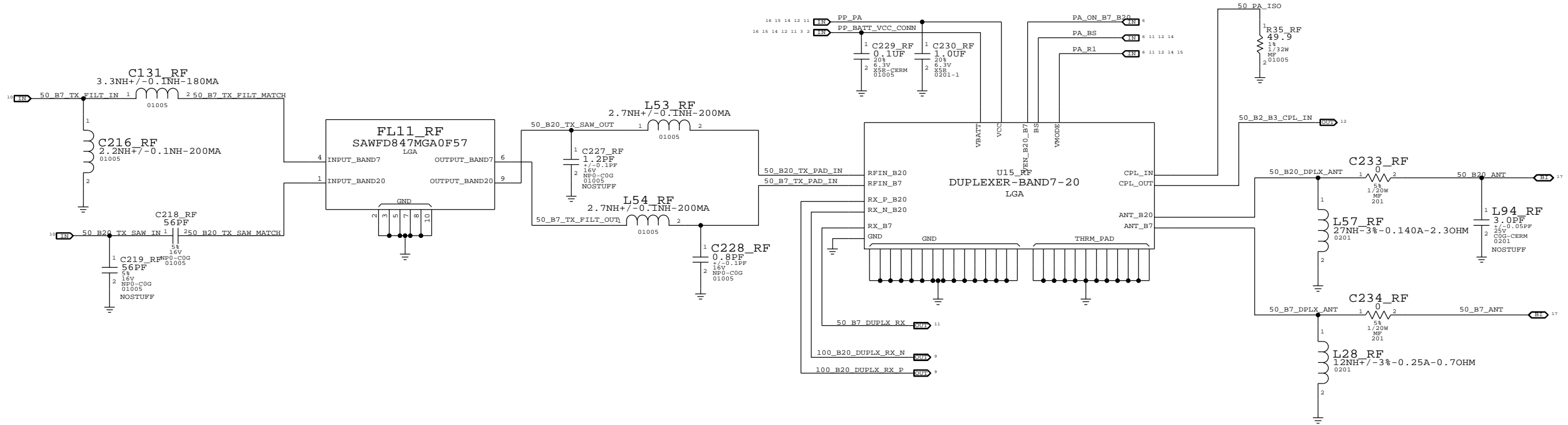
BAND 2 / 3 PAD

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BAND	PA	POWER	MODE	PA_BS	PA_ON_B2_B3	PA_R1
=====	=====	=====	=====	=====	=====	=====
OFF		X		X	0	X
B3		HPM		0	1	0
B3		LPM		0	1	1
B2		HPM		1	1	0
B2		LPM		1	1	1

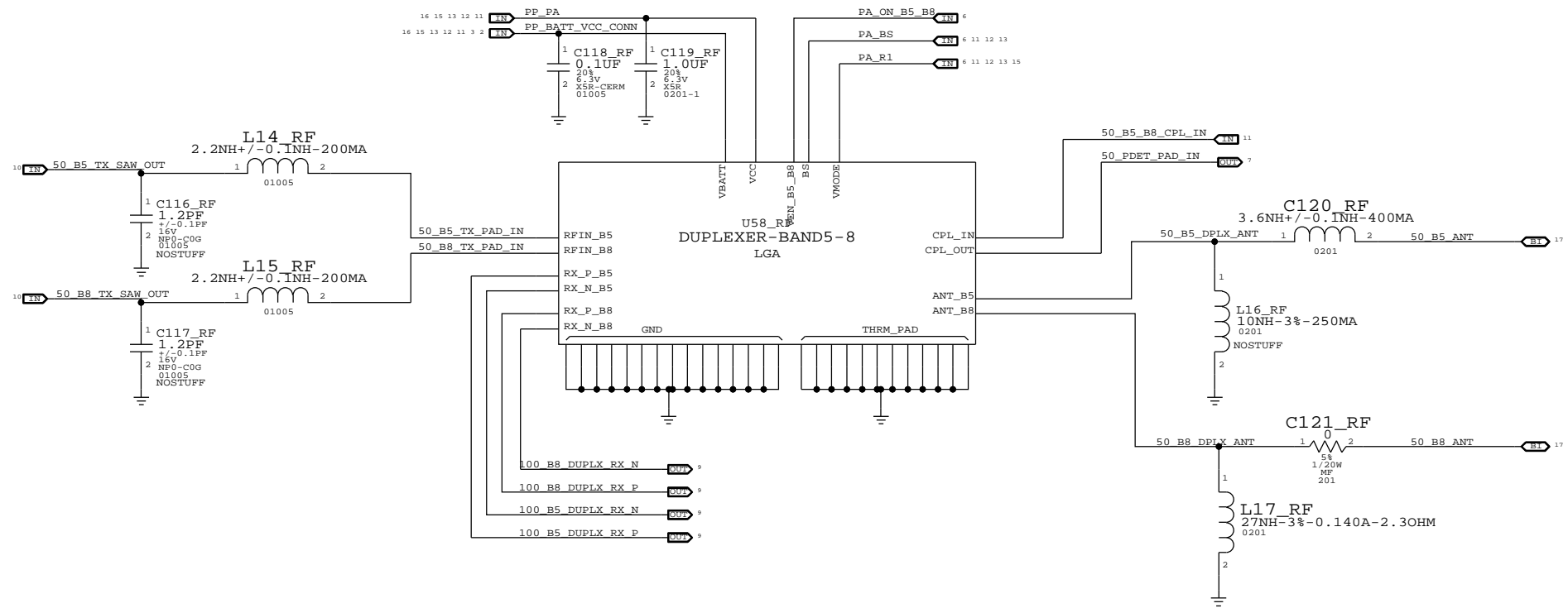
BAND 20/7 PAD



BAND	PA	POWER	MODE	PA_BS	PA_ON_B20_B7	PA_R1
=====	=====	=====	=====	=====	=====	=====
OFF		X		X	0	X
B20		HPM		0	1	0
B20		LPM		0	1	1
B7		HPM		1	1	0
B7		LPM		1	1	1

BAND 5 / 8 PAD

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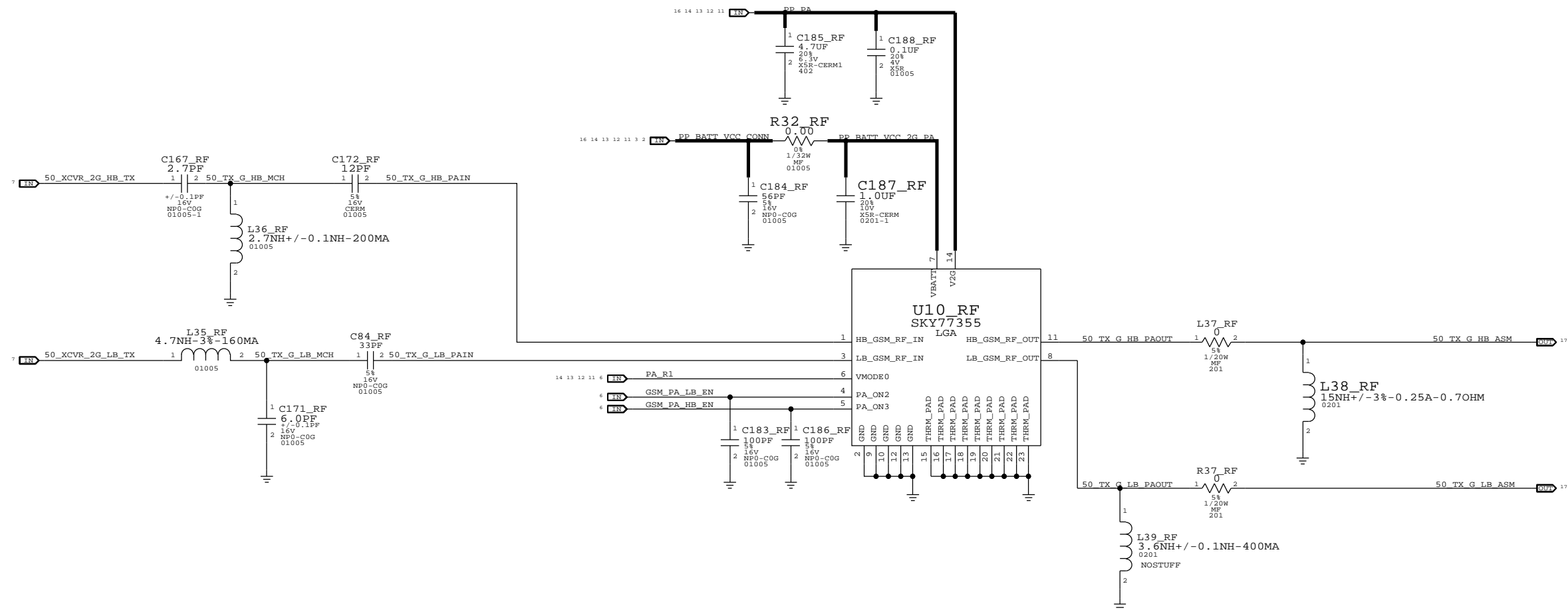
BAND	PA	POWER	MODE	PA_BS	PA_ON_B5_B8	PA_R1
=====	=====	=====	=====	=====	=====	=====
OFF		X		X	0	X
B5		HPM		0	1	0
B5		LPM		0	1	1
B8		HPM		1	1	0
B8		LPM		1	1	1

2G PA

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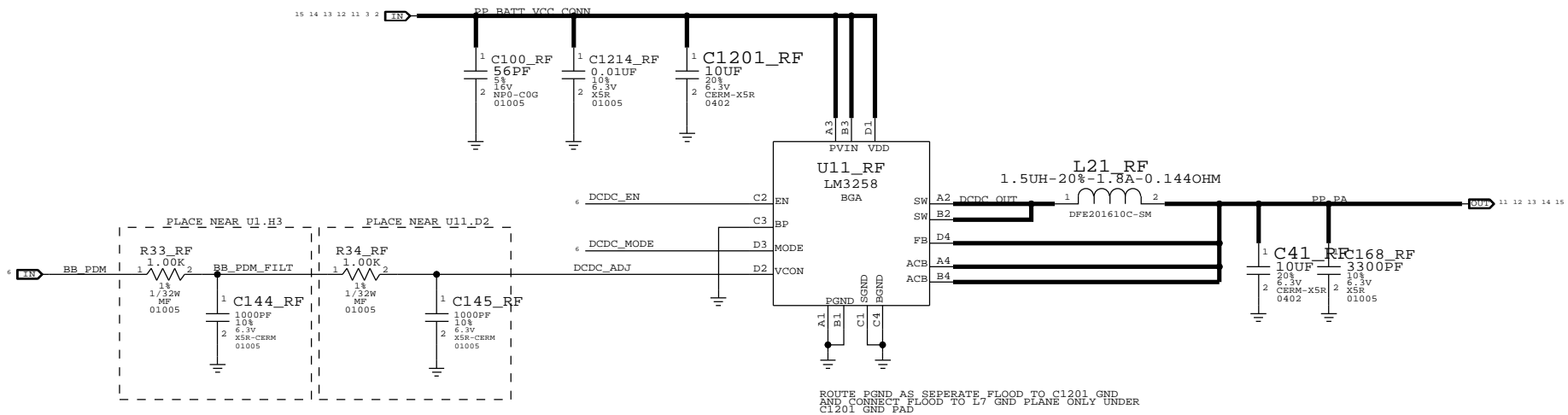
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2G PA GAIN MODES				
BAND	MODE	GAIN MODE	PA_R1	PCL RANGE
LOW BAND	GSM	ULTRA LOW	HIGH	16 TO 19
LOW BAND	GSM	LOW	HIGH	14 TO 15
LOW BAND	GSM	MEDIUM	LOW	10 TO 13
LOW BAND	GSM	HIGH	LOW	5 TO 6
HIGH BAND	GSM	ULTRA LOW	HIGH	10 TO 15
HIGH BAND	GSM	LOW	HIGH	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



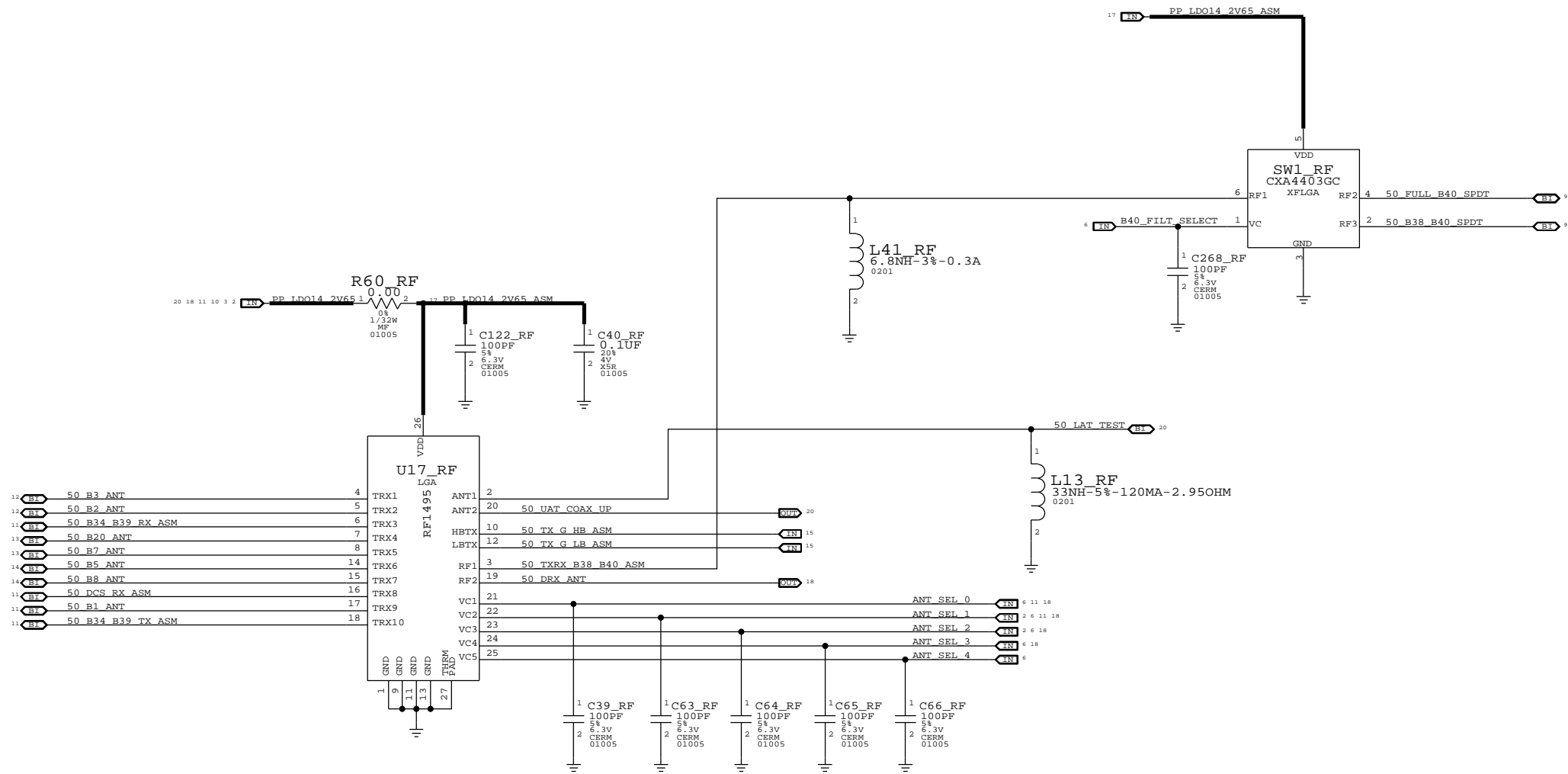
PA DC/DC CONVERTER

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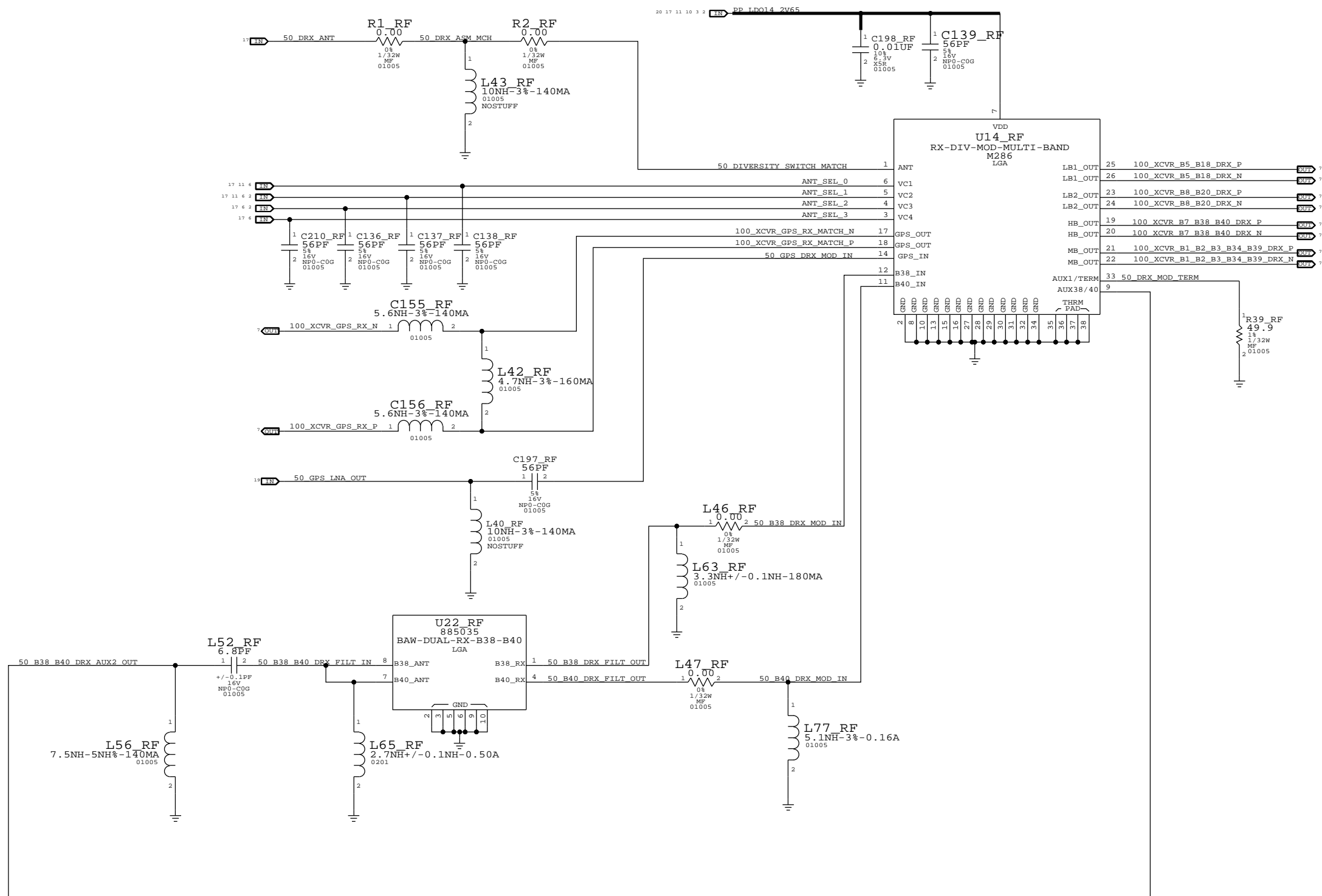
PRIMARY ASM

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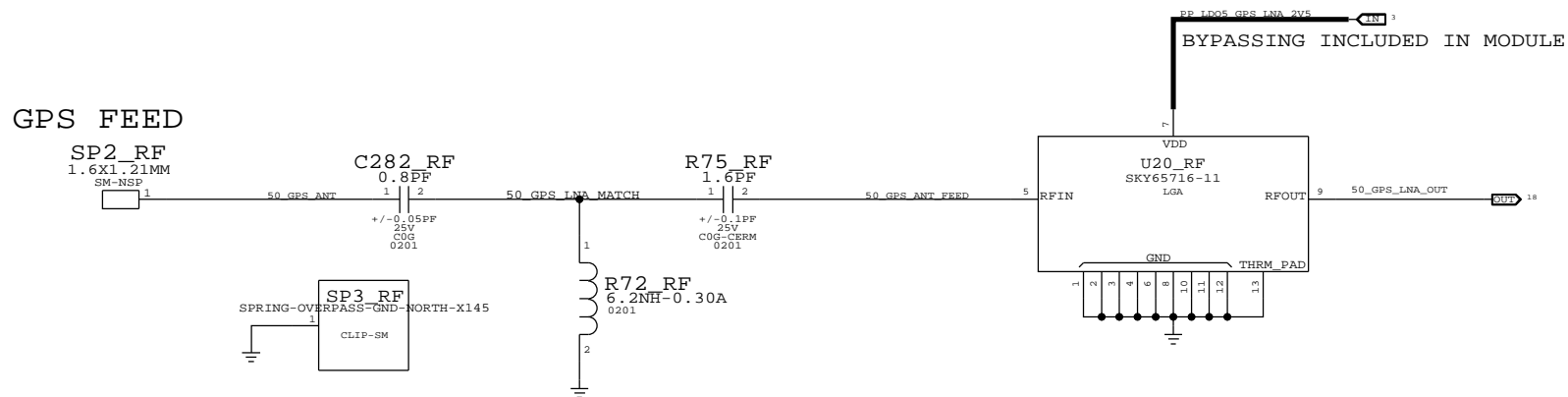
RX DIVERSITY

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GPS

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ANTENNA FEEDS

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SPI_RF
1.6X1.21MM
SM-NSP

UAT1

UAT2

UAT1 COAX

LAT

J10_RF
MM5829-2700
F-ST-SM

DPX165950DT-8030C1

U7_RF
RF1112
WLCSP

U9_RF
885041
DIPLEXER-CELL-WIFI
LGA

U18_RF
0.3-2170MHZ
LLP

U13_RF
CXA4011GC
XFLGA

J4_RF
MM5829-2700
F-ST-SM

J9_RF
MM8930-2600B
F-RT-SM

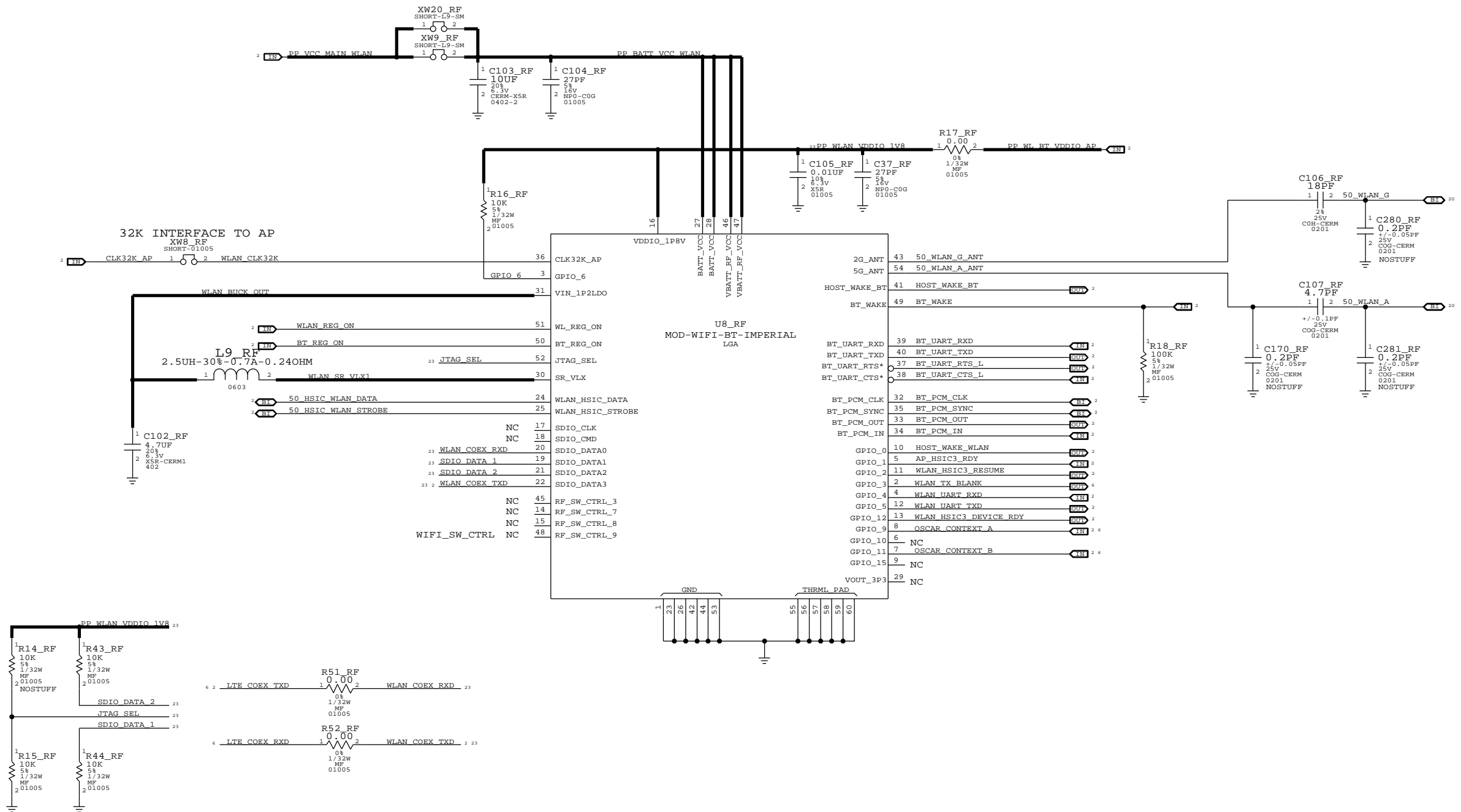
WLAN / BT

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PULL-UP ON GPIO6, SDIO_DATA_2 & PULL-DOWN ON SDIO_DATA_1 REQUIRED FOR HSIC BOOTSTRAPPING

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