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
A	0004600844	PRODUCTION RELEASED	2015-07-30

N66 MLB - PVT

LAST_MODIFICATION=Thu Jul 30 15:54:57 2015

SCH 051-00094
BRD 820-00040
MCO 056-00472

BOM 639-00299 (BETTER, DB30)
BOM 639-00301 (ULTRA, DB30)
BOM 639-00302 (SUPREME, DB30)
BOM 639-01063 (BETTER, B30)
BOM 639-01064 (ULTRA, B30)
BOM 639-01065 (SUPREME, B30)

Active Diode Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
376S00106	376S00047	ALTERNATE	Q2300	DIODES INC. ACT DIODE

NAND BOM Options

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
335S00039	1	NAND,1YNM,16GX8,S3E,64G,T,SLGA70	U1500	CRITICAL	NAND_16G
335S00075	1	NAND,1YNM,64GX8,S3E,MLB,64G,H,SLGA70	U1500	CRITICAL	NAND_64G
335S00079	1	NAND,1YNM,64GX8,S3E,128G,H,SLGA70	U1500	CRITICAL	NAND_128G

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00074	335S00039	NAND_16G	U1500	HYNIX 16G SLGA70 C DIE
335S00078	335S00075	NAND_64G	U1500	HYNIX 64G SLGA70
335S00064	335S00075	NAND_64G	U1500	SANDISK 64G SLGA70 1Z
335S00065	335S00079	NAND_128G	U1500	SANDISK 128G SLGA70

Carbon BOM Options

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
338S1163	1	DISCRETE ACCEL, BOSCH	U3030	CRITICAL	NOSTUFF
338S1163	1	DISCRETE ACCEL, BOSCH	U3030	CRITICAL	CARBON_INVENSENSE
338S00017	1	CARBON, INVENSENSE	U3010	CRITICAL	CARBON_INVENSENSE
338S00087	1	CARBON, INVENSENSE MPU-6800	U3010	CRITICAL	CARBON_INVENSENSE_6800

Power Inductor Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S00118	152S00075	ALTERNATE	$?	IND,PWR,SHLD,1.2`UH,3.0A,0.080`OHM,2016
152S00120	152S00077	ALTERNATE	$?	IND,PWR,SHLD,1.0`UH,2.25A,0.150`OHM,2016
152S2052	152S1929	ALTERNATE	$?	IND,MULT,1UH,1.2A,0.320`OHM,0603

DDR PLL Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
155S00095	155S00068	ALTERNATE	FL1280	FERR 8D,1800OHM,25%,100MA,2OHM,01005

SEP EEPROM Alternate

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
335S00066	335S0946	ALTERNATE	U0900	IC,EEPROM,16KX8,1.8V,I2C,WLCSP4,ON6EM7

Low Noise Caps

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
138S0867	3	CAP,X5R,10UF,20%,6.3V,0.65MM,HRZTL,0402	C2085, C2086, C2087	CAPS_NORMAL
998-01223	3	CAP,X5R,10UF,20%,6.3V,0.65MM,0402,INTPOSER	C2085, C2086, C2087	CAPS_LOW_NOISE

Schematic & PCB Callouts

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
051-00094	1	SCH,SINGLE_BRD,N66	SCH	CRITICAL	?
820-00040	1	PCBF,SINGLE_BRD,N66	PCB	CRITICAL	?
825-6838	1	EEEE CODE FOR 639-00299	EEEE_G360	CRITICAL	EEEE_BETTER_DB30
825-6838	1	EEEE CODE FOR 639-00301	EEEE_G35W	CRITICAL	EEEE_ULTRA_DB30
825-6838	1	EEEE CODE FOR 639-00302	EEEE_G35V	CRITICAL	EEEE_SUPREME_DB30
825-6838	1	EEEE CODE FOR 639-01063	EEEE_GKKY	CRITICAL	EEEE_BETTER_B30
825-6838	1	EEEE CODE FOR 639-01064	EEEE_GKL0	CRITICAL	EEEE_ULTRA_B30
825-6838	1	EEEE CODE FOR 639-01065	EEEE_GKL1	CRITICAL	EEEE_SUPREME_B30
825-6838	1	EEEE CODE FOR 939-01539	EEEE_GPMW	CRITICAL	EEEE_BETTER_DARWIN

Global Capacitor Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
118S0764	118S0717	ALTERNATE	?	RES, 3.92K, 0.1%, 0201
138S0702	138S0657	ALTERNATE	?	CAP, X5R, 4.3UF, 4V, 0610
138S00006	138S0835	ALTERNATE	?	CAP, 3-TERM, 4.3UF, 4V, 0402
138S00005	138S00003	ALTERNATE	?	CAP,X5R,15UF,6.3V,0.65MM,0402,TAIYO
138S00048	138S00003	ALTERNATE	?	CAP,X5R,15UF,6.3V,0.65MM,0402,KYOCERA
138S0648	138S0652	ALTERNATE	?	CAP,X5R,4.7UF,6.3V,0.65MM,0402,TAIYO
132S0400	132S0436	ALTERNATE	?	CAP,X5R,0.22UF,6.3V,01005,TDK
138S00032	138S0831	ALTERNATE	?	CAP,X5R,2.2UF,6.3V,0201,TAIYO
138S00049	138S0831	ALTERNATE	?	CAP,X5R,2.2UF,6.3V,0201,KYOCERA
138S00024	138S0986	ALTERNATE	?	CAP,C0G,3-TERM,7.5UF,20%,4V,0402,TAIYO/TDK
138S0706	138S0739	ALTERNATE	?	CAP,CER,1UF,20%,10V,X5R,0201,MURATA
138S0945	138S0739	ALTERNATE	?	CAP,CER,1UF,20%,10V,X5R,0201,KYOCERA

Global Ferrite Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
152S2052	152S1929	ALTERNATE	?	IND, 1UH, 1.2A, 0603
155S0773	155S0453	ALTERNATE	?	FERR, 120OHM, 0.8OHM DCR, 01005
155S0653	155S0511	ALTERNATE	?	FERR, 33OHM, 0.09OHM DCR, 0201
155S00067	155S0581	ALTERNATE	?	FERR, 240OHM, 0.38OHM DCR, 0201
155S00012	155S00009	ALTERNATE	?	FLTR, 65 OHMS, 0605
155S0960	155S0941	ALTERNATE	?	FERR, 70 OHMS, 01005
155S0660	155S0513	ALTERNATE	?	FERR, 22 OHMS, 0201

Global Varistor Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
377S0168	377S0140	ALTERNATE	?	VARISTOR, 6.8V, 100PF, 01005

Inductor Sub BOMs

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
685-00083	1	SUBBOM,SINGLE,BRD,CYNTEC,N66	SUBBOM_IND	COMMON
152S00074	12	IND,PWR,SHLD,1.0UH,3.6A,0.0600 HM,2016	L2001,L2003,L2010,L2012,L2020,L2030,L2040,L2042,L2100,L2102,L2021,L2031	CYNTEC
152S00081	6	IND,PWR,SHLD,0.47UH,3.8A,0.048 OHM,2012	L2001,L2003,L2011,L2013,L2021,L2041	CYNTEC

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
152S00117	12	IND,PWR,SHLD,1.0UH,3.6A,0.0600 HM,2016	L2001,L2003,L2010,L2012,L2020,L2030,L2040,L2042,L2100,L2102,L2021,L2031	TAIYO
152S00121	6	IND,PWR,SHLD,0.47UH,3.8A,0.048 OHM,2012	L2001,L2003,L2011,L2013,L2021,L2041	TAIYO

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
685-00082	685-00083	ALTERNATE	SUBBOM_IND	SUBBOM,SINGLE,BRD,TAIYO,N66

SOC/PMU SUB BOMS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
685-00071	1	SUBBOM,MLB,MAUI,N66	SUBBOM_SOC	COMMON
338S00120	1	IC,PMU,ANTIGUA,A1,AL,WLCSP380	U2000	MAUI
118S0631	1	RES,MF,100 OHM,1%,1/32W,01005	R0730	MAUI
131S0307	1	CAP,CER,NP0/C0G,100PF,5%,16V,01005	C0730	MAUI
339S00112	1	PROD FUSED, M DRAM	U0600	MAUI
117S0161	1	RES, MF, 0 OHM, 01005	R0651	MAUI

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
338S00122	1	IC,PMU,ANTIGUA,A1,ZL,WLCSP380	U2000	MALTA
118S00009	1	RES,MF,3.01KOHM,1%,1/32W,01005	R0730	MALTA
131S0307	1	CAP,CER,NP0/C0G,100PF,5%,16V,01005	C0730	NOSTUFF
339S00124	1	M PROD FUSED, M DRAM	U0600	MALTA
118S00025	1	RES, MF, 330 OHM, 1%, 1/32W, 01005	R0651	MALTA

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
685-00072	685-00071	ALTERNATE	SUBBOM_SOC	SUBBOM,MLB,MALTA,N66

AP Alternates

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S00113	339S00112	MAUI	U0600	PROD FUSED, M DRAM
339S00114	339S00112	MAUI	U0600	PROD FUSED, S DRAM

339S00125	339S00124	MALTA	U0600	M PROD FUSED, H DRAM, ATK
339S00126	339S00124	MALTA	U0600	M PROD FUSED, S DRAM, ATK
339S00127	339S00124	MALTA	U0600	M PROD FUSED, M DRAM, SCK
339S00128	339S00124	MALTA	U0600	M PROD FUSED, H DRAM, SCK
339S00129	339S00124	MALTA	U0600	M PROD FUSED, S DRAM, SCK

Shield Callouts

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
806-04265	1	LOWER FRONT SHIELD	SH0501	CRITICAL	COMMON

SIM Callouts

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
512S00013	1	SIM, Integrated Eject, N66	J3001_RF	CRITICAL	COMMON

TESTPOINTS

POWER

VOLTAGE=0V — TP00 (TP-P5, ROOM=TEST) — POWER GROUND

32 31 17 PP5V0_USB — TP01 (TP-P55, ROOM=TEST) — VBUS

18 17 PP_BATT_VCC — TP02 (TP-P5, ROOM=TEST) — VBATT

TP03 (TP-P5, ROOM=TEST)

TP04 (TP-P5, ROOM=TEST) — POWER GROUND

RESET

34 16 9 5 PMU_TO_SYSTEM_COLD_RESET_L — PP06 (P4MM-NSM, SM, PP, ROOM=TEST) — SOC & BB RESET

DFU

34 8 FORCE_DFU — TP07 (TP-P55, ROOM=TEST) — FORCE DFU

21 20 17 14 13 12 9 8 7 6 5 3 34 30 PP1V8 — PP07 (P4MM-NSM, SM, PP, ROOM=TEST)

34 8 DFU_STATUS — PP08 (P4MM-NSM, SM, PP, ROOM=TEST)

AMUX

16 PMU_AMUX_AY — TP16 (TP-P55, ROOM=TEST) — ANALOG MUX A OUTPUT

16 PMU_AMUX_BY — TP17 (TP-P55, ROOM=TEST) — ANALOG MUX B OUTPUT

MOJAVE

29 28 MESA_TO_BOOST_EN — TP18 (TP-P55, ROOM=TEST)

29 28 PP16V5_MESA — TP19 (TP-P55, ROOM=TEST)

LCM

30 PP_LCM_BL_CAT1_CONN — TP20 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SINK1

30 PP_LCM_BL_CAT2_CONN — TP21 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SINK2

30 PP_LCM_BL_ANODE_CONN — TP22 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SOURCE

30 PP_LCM_BL_CAT3_CONN — TP23 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SINK3

30 PP_LCM_BL_CAT4_CONN — TP24 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SINK4

30 PP_LCM_BL34_ANODE_CONN — TP25 (TP-P55, ROOM=TEST) — LCM BACKLIGHT SOURCE (3/4)

UAT GND Ring Opening

GND — PP09 (0.50MM, SM, PP, ROOM=TEST)

N66 I2C DEVICE MAP

I2C BUS	DEVICE	BINARY	7-BIT HEX	8-BIT HEX
I2C0	ANTIGUA PMU	1110100X	0X74	0XE8
	CHESTNUT	0100111X	0X27	0X4E
	BACKLIGHT 1	1100011X	0X62	0XC4
I2C1	TIGRIS	1110101X	0X75	0XEA
	ARC DRIVER	1000001X	0X41	0X82
	SPEAKER AMP	1000000X	0X40	0X80
	TRISTAR	0011010X	0X1A	0X34
I2C2	ALS	0101001X	0X29	0X52
	DISP EEPROM	1010001X	0X51	0XA2
	BACKLIGHT 2	1100011X	0X62	0XC4
OWL	UNUSED	N/A	N/A	N/A
ISP I2C0	REAR CAM	TBD	TBD	TBD
	LED DRIVER	1100011X	0X63	0XC6
ISP I2C1	FRONT CAM	0010000X	0X10	0X20
TOUCH I2C	MESON	1000000X	0x40	0x80
	MAMBA	1100000X	0x60	0xC0
	DOPPLER	1011000X	0x58	0xB0
SEP I2C	SEP EEPROM	1010001X	0x51	0xA2

BOOTSTRAPPING:BOARD REV
BOARD ID
BOOT CONFIG

8 BOARD_REV3 — R0400 (ROOM=SOC, 01005 MF 5% 1/32W, 1.00K) — PP1V8 (1 5 6 7 8 9 12 13 14 17 20 21 30 34)

NOSTUFF R0401 — 8 BOARD_REV2

NOSTUFF R0402 — 8 BOARD_REV1

R0403 — 8 BOARD_REV0 — SELECTED -->

BOARD_REV[3:0]
FLOAT=LOW, PULLUP=HIGH

1111	PROTO1
1110	PROTO2
1101	EVT
1100	EVT-MD
1011	CARRIER
1010	DVT
1001	PVT

NOSTUFF R0404 — 8 BOARD_ID4

NOSTUFF R0405 — 8 BOARD_ID3

R0406 — 8 BOARD_ID2

R0407 — 8 BOARD_ID1 — SELECTED -->

NOSTUFF R0408 — 8 BOARD_ID0

BOARD_ID[4:0]
FLOAT=LOW, PULLUP=HIGH

00100	N71 MLB
00101	N71 DEV
00110	N66 MLB
00111	N66 DEV

NOSTUFF R0409 — 8 BOOT_CONFIG2

R0410 — 8 BOOT_CONFIG1 — SELECTED -->

NOSTUFF R0411 — 8 BOOT_CONFIG0

BOOT_CONFIG[2:0]
FLOAT=LOW, PULLUP=HIGH

000	SPI0
001	SPI0 TEST MODE
010	NVME0_X2
011	NVME0 X2 TEST
100	NVME0 X1
101	NVME0 X1 TEST
111	FAST SPI0

E75

32 31 TRISTAR_DP1_CONN_P — TP08 (TP-P5, ROOM=TEST)

32 31 TRISTAR_DP1_CONN_N — TP09 (TP-P5, ROOM=TEST)

32 31 TRISTAR_DP2_CONN_P — TP10 (TP-P5, ROOM=TEST)

32 31 TRISTAR_DP2_CONN_N — TP11 (TP-P5, ROOM=TEST)

32 31 PP_TRISTAR_ACC1 — TP12 (TP-P5, ROOM=TEST)

32 31 PP_TRISTAR_ACC2 — TP13 (TP-P5, ROOM=TEST) — ACCESSORY ID AND POWER

TP14 (TP-P55, ROOM=TEST) — TP IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

32 31 TRISTAR_CON_DETECT_L — TP15 (TP-P55, ROOM=TEST) — FOR DIAGS

TUBE STANDOFF
860-00177

ROOM=ASSEMBLY
BS0530
STDOFF-2.60D0.648H-TH
1

ROOM=ASSEMBLY
BS0531
STDOFF-2.60D0.648H-TH
1

33 4 NORTH_AC_GND_SCREW

TUBE STANDOFF: STOCKHOLM FEED
860-5189

34 AP_TO_STOCKHOLM_ANT 1

BS0520
STDOFF-2.490D1.4ID-1.25H-SM
ROOM=ASSEMBLY
1

TUBE STANDOFF
860-00176
BS0513
STDOFF-2.60D0.808H
ROOM=ASSEMBLY
1

THREADED STANDOFF
860-00175
BS0510
STDOFF-2.90D0.888H-SM
1
ROOM=ASSEMBLY

THREADED STANDOFF
860-00175
BS0511
STDOFF-2.90D0.888H-SM
1
ROOM=ASSEMBLY

THREADED STANDOFF
860-00175
BS0512
STDOFF-2.90D0.888H-SM
1
ROOM=ASSEMBLY

PLATED SLOTTED THRU-HOLE
998-00099
CL0502
TH-NSP
1
SL-1.20X0.40-1.50X0.70-NSP

806-02349
SHLD-EMI-UPPER-FRONT-N66
1
SH0500
SM
ROOM=ASSEMBLY

TOP SIDE

MLB NORTH PENINSULA AC CHASSIS SHORT
(BLOCKS DC CURRENT THROUGH COMPASS REGION)

33 4 NORTH_AC_GND_SCREW

C0550
220PF
10%
16V
X7R-CERM
01005
1 2
ROOM=ASSEMBLY

C0551
100PF
5%
16V
NP0-C0G
01005
1 2
ROOM=ASSEMBLY

C0552
100PF
5%
16V
NP0-C0G
01005
1 2
ROOM=ASSEMBLY

C0553
4.7PF
+/-0.1PF
16V
NP0-C0G
01005
1 2
ROOM=ASSEMBLY

TODO: TUNE AC CAPS FOR ANTENNA RF GND

CL0501
SM
1 2 3 4 5

COAX CLIP BRACE
806-02354
CLIP-BRACE-COAX-N66

BOTTOM SIDE

806-02352
SHLD-EMI-UPPER-BACK-N66
1
SH0503
SM
ROOM=ASSEMBLY

DOUBLE COAX CLIP
806-01802
CLIP-RETENTION-COAX-DOUBLE
1
CL0500
SM

806-02353
SHLD-EMI-LOWER-BACK-N66
1
SH0504
SM
ROOM=ASSEMBLY

FIDUCIALS

FD0501
FID
0P5SM1P0SQ-NSP
1
ROOM=ASSEMBLY

FD0503
FID
0P5SM1P0SQ-NSP
1
ROOM=ASSEMBLY

FD0504
FID
0P5SM1P0SQ-NSP
1
ROOM=ASSEMBLY

FD0505
FID
0P5SM1P0SQ-NSP
1
ROOM=ASSEMBLY

FD0510
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0511
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0512
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0513
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0514
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0515
FID
0P5SQ-SMP3SQ-NSP
1
ROOM=ASSEMBLY

FD0502
FID
0P5SM1P0SQ-NSP
28 27 26 25 23 22 21 17 15 14 14 29 PP_VCC_MAIN
1
ROOM=ASSEMBLY

806-04265
SHLD-EMI-LOWER-FRONT-CLOSE-N66
1
OMIT_TABLE
SH0501
SM
ROOM=ASSEMBLY

TIGRIS/SPKR INDUCTOR SHIELD

806-04068
SHLD-EMI-SA-OPEN-N66
1
SH0502
SM
ROOM=ASSEMBLY

SOUTH TUBE STANDOFF
860-00176

BS0500
STDOFF-2.60D0.808H
1
ROOM=ASSEMBLY

MAUI - USB, JTAG, XTAL

VDD12_PLL_LPDP:1.14-1.26V @2mA MAX
VDD12_PLL_SOC: 1.14-1.26V @12mA MAX
VDD12_PLL_CPU: 1.14-1.26V @2mA MAX

VDD18_USB: 1.71-1.89V @20mA MAX
VDD18_XTAL:1.62-1.98V @2mA MAX

PP1V2 — R0600 0.00 5% 1/32W MF 01005 ROOM=SOC — PP1V2_PLL VOLTAGE=1.2V

C0600 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0601 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0602 0.01UF 10% 6.3V X5R 01005 ROOM=SOC
C0603 0.01UF 10% 6.3V X5R 01005 ROOM=SOC
C0612 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC

PP1V8 — FL0610 1KOHM-25%-0.2A 0201 ROOM=SOC

PP1V8_XTAL VOLTAGE=1.8V
C0611 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0610 2.2UF 20% 6.3V X5R-CERM 01005 ROOM=SOC

PP3V3_USB
C0620 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
3.14-3.46V @5mA MAX

OMIT_TABLE
CRITICAL
U0600
MAUI-2GB-25NM-DDR-H
FCMSP
SC58980B0B-A040
SYM 1 OF 14
ROOM=SOC

AP21	VDD12_UH1_HSIC0		
C15	VDD12_UH2_HSIC1		
F22	VDD12_PLL_LPDP		
U20	VDD12_PLL_SOC		
T19			
W19			
AF13	VDD12_PLL_CPU		
AL21	VDD18_USB		
AN20	VDD33_USB		
AL34	VDD18_XTAL		
AN22	NC	UH1_HSIC0_DATA	
AN21	NC	UH1_HSIC0_STB	
C16	NC	UH2_HSIC1_DATA	
D15	NC	UH2_HSIC1_STB	
Y32		JTAG_SEL	
AC32	NC	JTAG_TRST*	
AB31	NC	JTAG_TDO	
AA32	NC	JTAG_TDI	
AB32		JTAG_TMS	SWD_DOCK_BI_AP_SWDIO
AA31		JTAG_TCK	SWD_DOCK_TO_AP_SWCLK
AC31		COLD_RESET*	PMU_TO_SYSTEM_COLD_RESET_L
H33		CFSB	PMU_TO_OWL_ACTIVE_READY
AR23		TST_CLKOUT	AP_TO_PMU_TEST_CLKOUT
AN23		S3E_RESET*	AP_TO_NAND_RESET_L
H32		HOLD_RESET	
AF6		TESTMODE	
AL22		FUSE1_FSRC	
AG25		FUSE2_FSRC	
AP24	ANALOGMUX_OUT		AP_TO_PMU_AMUX_OUT
AT20	USB_D_P		USB_AP_DATA_P
AT19	USB_D_N		USB_AP_DATA_N
AP19	USB_VBUS		USB_VBUS_DETECT
AR19	USB_ID	NC	
AP18	USB_REXT		USB_REXT
Y33	WDOG		AP_TO_PMU_WDOG_RESET
AK35	XI0		XTAL_AP_24M_IN
AL35	XO0		XTAL_AP_24M_OUT

R0640 200 1% 1/32W MF 01005 ROOM=SOC

R0650 511K 1% 1/32W MF 01005 ROOM=SOC

OMIT_TABLE
R0651 0.00 5% 1/32W MF 01005 ROOM=SOC

CRITICAL
ROOM=SOC
Y0600 1.60X1.20MM-SM 24.000MHZ-30PPM-9.5PF-60OHM
SOC_24M_O

C0650 12PF 5% 16V CERM 01005 ROOM=SOC
C0651 12PF 5% 16V CERM 01005 ROOM=SOC
VOLTAGE=0V

PCB: PLACE THIS XW AT U1, NEAR XI/XO
XW0650 SHORT-10L-0.1MM-SM ROOM=SOC

PROBE POINTS

USB_AP_DATA_P	PP0600	P3MM-NSM ROOM=SOC
USB_AP_DATA_N	PP0601	P3MM-NSM ROOM=SOC
AP_TO_PMU_TEST_CLKOUT	PP0610	P3MM-NSM ROOM=SOC

MAUI - PCIE INTERFACES

VDD12_PCIE_REFBUF:1.08-1.26V @50mA MAX
VDD12_PCIE_TXPLL: 1.08-1.32V @10mA MAX
VDD12_PCIE: 1.14-1.26V @115mA MAX
PP1V2

VDD085_PCIE:0.802-TBDV @TBDmA MAX
PP_FIXED

C0740 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C0741 1.0UF 20% 6.3V X5R 0201-1 ROOM=SOC
C0742 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0743 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0731 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0752 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0751 1.0UF 20% 6.3V X5R 0201-1 ROOM=SOC
C0750 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC

AK28 VDD12_PCIE
AK25 VDD12_PCIE
AL24 VDD12_PCIE
AL27 VDD12_PCIE
AL26 VDD12_PCIE_TXPLL
AA26 VDD12_PCIE_REFBUF
AH28 VDD085_PCIE
AJ25 VDD085_PCIE
AL23 VDD085_PCIE
AL29 VDD085_PCIE
AL24 VDD085_PCIE
AK27 VDD085_PCIE
AJ27 VDD085_PCIE

PCIE EXT C — AP29 PCIE_EXT_C

OMIT_TABLE
CRITICAL
U0600
MAUI-2GB-25NM-DDR-H
FCMSP
SC58980B0B-A040
SYM 2 OF 14
ROOM=SOC

PCIE LINK 0

PCIE_NAND_TO_AP_RXD0_P	C0701 0.1UF X5R-CERM 01005	PCIE_NAND_TO_AP_RXD0_C_P	AM30 PCIE_RX0_P
PCIE_NAND_TO_AP_RXD0_N	C0702 0.1UF X5R-CERM 01005	PCIE_NAND_TO_AP_RXD0_C_N	AN30 PCIE_RX0_N
PCIE_AP_TO_NAND_TXD0_P	C0703 0.1UF X5R-CERM 01005	PCIE_AP_TO_NAND_TXD0_C_P	AT32 PCIE_TX0_P
PCIE_AP_TO_NAND_TXD0_N	C0704 0.1UF X5R-CERM 01005	PCIE_AP_TO_NAND_TXD0_C_N	AR32 PCIE_TX0_N
PCIE_NAND_TO_AP_RXD1_P	C0705 0.1UF X5R-CERM 01005	PCIE_NAND_TO_AP_RXD1_C_P	AM28 PCIE_RX1_P
PCIE_NAND_TO_AP_RXD1_N	C0706 0.1UF X5R-CERM 01005	PCIE_NAND_TO_AP_RXD1_C_N	AN28 PCIE_RX1_N
PCIE_AP_TO_NAND_TXD1_P	C0707 0.1UF X5R-CERM 01005	PCIE_AP_TO_NAND_TXD1_C_P	AT31 PCIE_TX1_P
PCIE_AP_TO_NAND_TXD1_N	C0708 0.1UF X5R-CERM 01005	PCIE_AP_TO_NAND_TXD1_C_N	AR31 PCIE_TX1_N

PCIE LINK 1

PCIE_WLAN_TO_AP_TX_P	C0709 0.1UF X5R-CERM 01005	PCIE_WLAN_TO_AP_RXD_C_P	AM27 PCIE_RX2_P
PCIE_WLAN_TO_AP_TX_N	C0710 0.1UF X5R-CERM 01005	PCIE_WLAN_TO_AP_RXD_C_N	AN27 PCIE_RX2_N
PCIE_AP_TO_WLAN_TX_P	C0711 0.1UF X5R-CERM 01005	PCIE_AP_TO_WLAN_TXD_C_P	AT28 PCIE_TX2_P
PCIE_AP_TO_WLAN_TX_N	C0712 0.1UF X5R-CERM 01005	PCIE_AP_TO_WLAN_TXD_C_N	AR28 PCIE_TX2_N

PCIE LINK 2

PCIE0_BB_TO_AP_TX_P	C0715 0.1UF X5R-CERM 01005	PCIE_BB_TO_AP_RXD_C_P	AM26 PCIE_RX3_P
PCIE0_BB_TO_AP_TX_N	C0716 0.1UF X5R-CERM 01005	PCIE_BB_TO_AP_RXD_C_N	AN26 PCIE_RX3_N
PCIE0_AP_TO_BB_TX_P	C0717 0.1UF X5R-CERM 01005	PCIE_AP_TO_BB_TXD_C_P	AT26 PCIE_TX3_P
PCIE0_AP_TO_BB_TX_N	C0718 0.1UF X5R-CERM 01005	PCIE_AP_TO_BB_TXD_C_N	AR26 PCIE_TX3_N

NC AM25 PCIE_RX4_P
NC AN25 PCIE_RX4_N
NC AR24 PCIE_TX4_P
NC AT24 PCIE_TX4_N

PCIE_REF_CLK0_P	AN35	PCIE_AP_TO_NAND_REFCLK_P
PCIE_REF_CLK0_N	AP35	PCIE_AP_TO_NAND_REFCLK_N
PCIE_REF_CLK1_P	AN34	PCIE_AP_TO_WLAN_REFCLK_P
PCIE_REF_CLK1_N	AP34	PCIE_AP_TO_WLAN_REFCLK_N
PCIE_REF_CLK2_P	AM32	PCIE0_AP_TO_BB_REFCLK_P
PCIE_REF_CLK2_N	AN32	PCIE0_AP_TO_BB_REFCLK_N
PCIE_REF_CLK3_P	AM31 NC	
PCIE_REF_CLK3_N	AN31 NC	

PP1V8

R0720 100K 5% 1/32W MF 01005 ROOM=SOC
R0721 100K 5% 1/32W MF 01005 ROOM=SOC
R0722 100K 5% 1/32W MF 01005 ROOM=SOC

PCIE_CLKREQ0*	AT11	PCIE_NAND_TO_AP_CLKREQ_L
PCIE_CLKREQ1*	AP12	PCIE_WLAN_TO_AP_CLKREQ_L
PCIE_CLKREQ2*	AR12	PCIE0_AP_TO_BB_CLKREQ_L
PCIE_CLKREQ3*	AT12 NC	

PCIE_PERST0*	AR10	PCIE_AP_TO_NAND_RESET_L
PCIE_PERST1*	AT10	PCIE_AP_TO_WLAN_RESET_L
PCIE_PERST2*	AP11	PCIE0_AP_TO_BB_PERST_L
PCIE_PERST3*	AR11 NC	

R0700 100K 5% 1/32W MF 01005 ROOM=SOC
R0701 100K 5% 1/32W MF 01005 ROOM=SOC
R0702 100K 5% 1/32W MF 01005 ROOM=SOC

PCIE_EXT_REF_CLK_P	AR33	
PCIE_EXT_REF_CLK_N	AT33	
PCIE_RX_TX_BYPASS_CLK_P	AT29	
PCIE_RX_TX_BYPASS_CLK_N	AR29	

PCIE_RCAL_P — AT30 PCIE_RCAL_P
PCIE_RCAL_N — AR30 PCIE_RCAL_N

OMIT_TABLE R0730 100 1% 1/32W MF 01005 ROOM=SOC
OMIT_TABLE C0730 100PF 5% 10V NP0-C0G 01005 ROOM=SOC

PROBE POINTS

PCIE RX CAPS ARE PLACED CLOSER TO TX DRIVERS
PROBE POINTS ADDED FOR MEASUREMENTS AT RX DRIVER

PCIE_BB_TO_AP_RXD_C_P — PP0706 P3MM-NSM ROOM=SOC
PCIE_BB_TO_AP_RXD_C_N — PP0707 P3MM-NSM ROOM=SOC

MAUI - CAMERA & DISPLAY INTERFACES

0.756-0.893V @11mA MAX
PP_FIXED
C0814 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0801 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
E10 E13 E8 D13 VDD085_MIPI
D10 E7 D8 E11 E14 VDD18_MIPI
1.62-1.98V @23mA MAX
PP1V8
C0802 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC
C0815 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SOC

CRITICAL
U0600
MAUI-2GB-25NM-DDR-H
FCMSP
SC58980B0B-A040
SYM 3 OF 14
ROOM=SOC
OMIT_TABLE

PP1V8
R0804 1.00K 5% 1/32W MF 01005 ROOM=SOC
R0805 1.00K 5% 1/32W MF 01005 ROOM=SOC
R0806 1.00K 5% 1/32W MF 01005 ROOM=SOC
R0807 1.00K 5% 1/32W MF 01005 ROOM=SOC

MIPI_RCAM_TO_AP_DATA0_CONN_P B8 MIPI0C_DATA0_P
MIPI_RCAM_TO_AP_DATA0_CONN_N A8 MIPI0C_DATA0_N
MIPI_RCAM_TO_AP_DATA1_CONN_P A9 MIPI0C_DATA1_P
MIPI_RCAM_TO_AP_DATA1_CONN_N B9 MIPI0C_DATA1_N
MIPI_RCAM_TO_AP_DATA2_CONN_P A13 MIPI0C_DATA2_P
MIPI_RCAM_TO_AP_DATA2_CONN_N B13 MIPI0C_DATA2_N
MIPI_RCAM_TO_AP_DATA3_CONN_P B14 MIPI0C_DATA3_P
MIPI_RCAM_TO_AP_DATA3_CONN_N A14 MIPI0C_DATA3_N
MIPI_RCAM_TO_AP_CLK_CONN_P A12 MIPI0C_CLK_P
MIPI_RCAM_TO_AP_CLK_CONN_N B12 MIPI0C_CLK_N
RCAM_REXT D12 MIPI0C_REXT

MIPI_AP_TO_LCM_DATA0_P A3 MIPID_DATA0_P
MIPI_AP_TO_LCM_DATA0_N B3 MIPID_DATA0_N
MIPI_AP_TO_LCM_DATA1_P B4 MIPID_DATA1_P
MIPI_AP_TO_LCM_DATA1_N A4 MIPID_DATA1_N
MIPI_AP_TO_LCM_DATA2_P B6 MIPID_DATA2_P
MIPI_AP_TO_LCM_DATA2_N A6 MIPID_DATA2_N
MIPI_AP_TO_LCM_DATA3_P A7 MIPID_DATA3_P
MIPI_AP_TO_LCM_DATA3_N B7 MIPID_DATA3_N
MIPI_AP_TO_LCM_CLK_P A5 MIPID_CLK_P
MIPI_AP_TO_LCM_CLK_N B5 MIPID_CLK_N
LCM_REXT D9 MIPID_REXT

R0801 4.02K 1% 1/32W MF 01005 ROOM=SOC
R0802 4.02K 1% 1/32W MF 01005 ROOM=SOC

ISP_I2C0_SCL G31 I2C_ISP_TO_RCAM_SCL
ISP_I2C0_SDA G32 I2C_ISP_BI_RCAM_SDA
ISP_I2C1_SCL F35 I2C_ISP_TO_FCAM_SCL
ISP_I2C1_SDA G34 I2C_ISP_BI_FCAM_SDA

SENSOR0_CLK D33 AP_TO_RCAM_CLK_R
R0808 33.2 1% MF 1/32W 01005 ROOM=SOC
AP_TO_RCAM_CLK
SENSOR0_RST D32 AP_TO_RCAM_SHUTDOWN_L
SENSOR1_CLK F33 AP_TO_FCAM_CLK_R
R0809 33.2 1% MF 1/32W 01005 ROOM=SOC
AP_TO_FCAM_CLK
SENSOR1_RST E34 AP_TO_FCAM_SHUTDOWN_L

SENSOR0_ISTRB D34 AP_TO_SPHERE_BUCK_EN
SENSOR0_XSHUTDOWN F32 AP_TO_STOCKHOLM_FW_DWLD_REQ
SENSOR1_ISTRB C35 NC
SENSOR1_XSHUTDOWN C34 AP_TO_MUON_BL_STROBE_EN
MIPICSI_MUXSEL G35 NC
MIPI1C_REXT D14 FCAM_REXT

MIPI1C_DATA0_P B17 MIPI_FCAM_TO_AP_DATA0_P
MIPI1C_DATA0_N A17 MIPI_FCAM_TO_AP_DATA0_N
MIPI1C_DATA1_P B19 MIPI_FCAM_TO_AP_DATA1_P
MIPI1C_DATA1_N A19 MIPI_FCAM_TO_AP_DATA1_N
MIPI1C_CLK_P A18 MIPI_FCAM_TO_AP_CLK_P
MIPI1C_CLK_N B18 MIPI_FCAM_TO_AP_CLK_N

R0803 4.02K 1% 1/32W MF 01005 ROOM=SOC

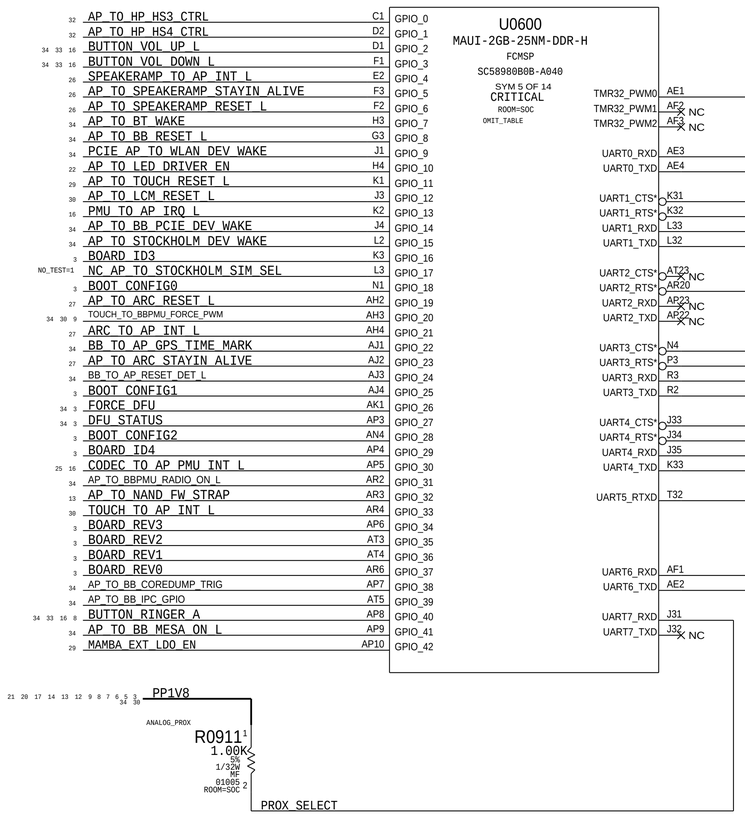
NOTE:VDD12_LPDP SHOULD BE POWERED
EVEN WHEN LPDP IS NOT USED

PP1V2
E23 E25 E27 F24 VDD12_LPDP

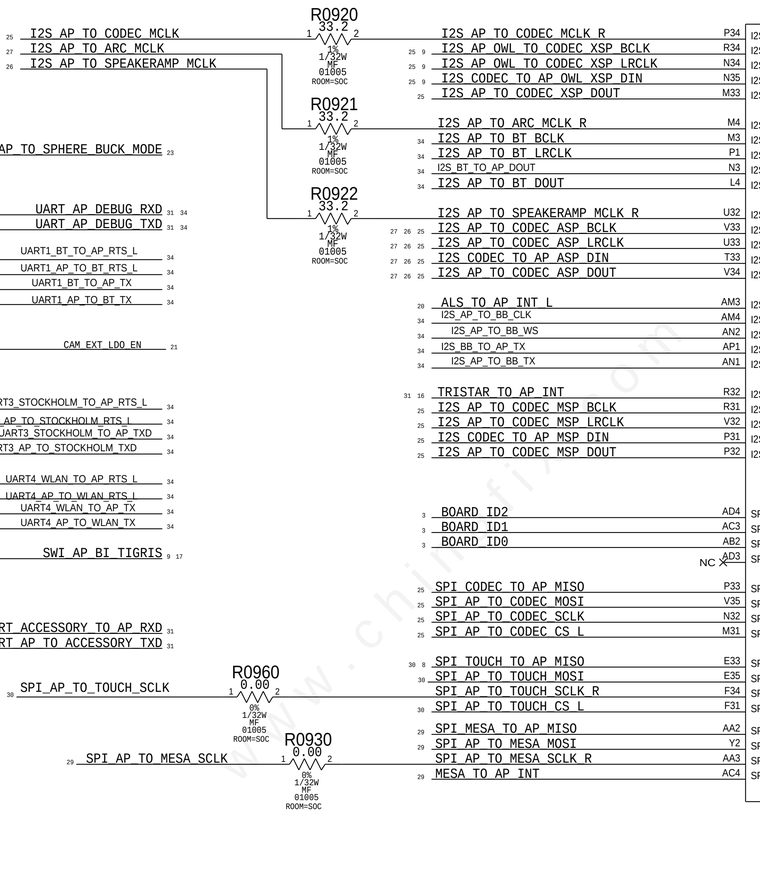
CRITICAL
U0600
MAUI-2GB-25NM-DDR-H
FCMSP
SC58980B0B-A040
SYM 4 OF 14
ROOM=SOC
OMIT_TABLE

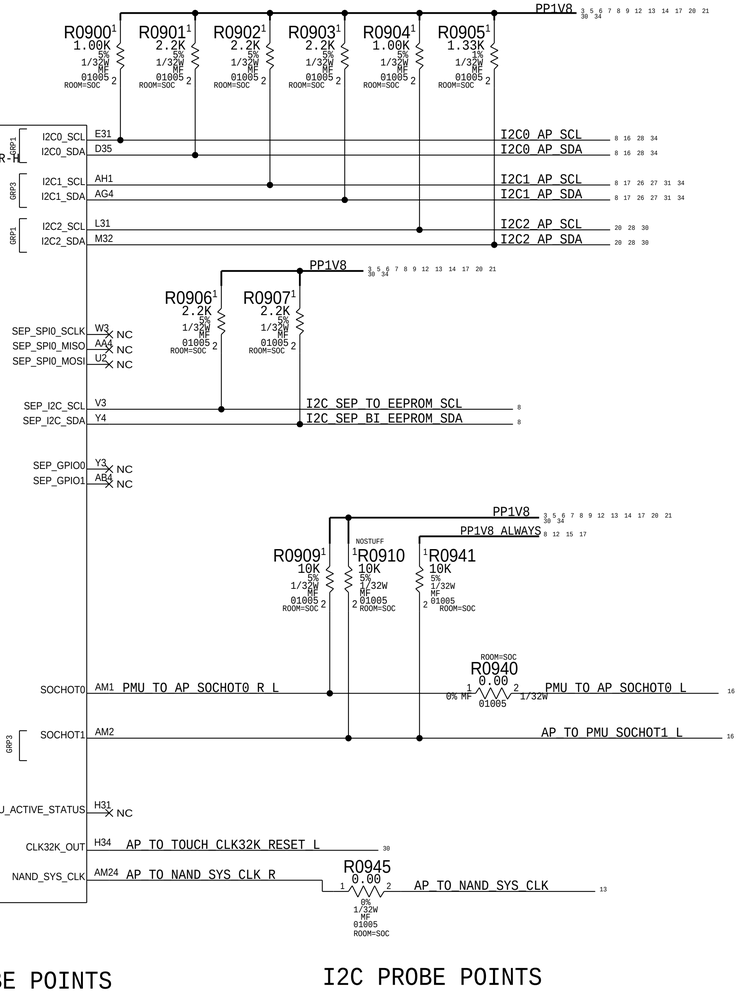
NC A29 LPDP_AUX_P
NC B29 LPDP_AUX_N
NC A33 LPDP_TX0_P
NC B33 LPDP_TX0_N
NC A32 LPDP_TX1_P
NC B32 LPDP_TX1_N
NC A31 LPDP_TX2_P
NC B31 LPDP_TX2_N
NC A30 LPDP_TX3_P
NC B30 LPDP_TX3_N
NC D24 LPDP_CAL_DRV_OUT
NC D25 LPDP_CAL_VSS_EXT
NC AL4 EDP_HPD
NC U35 DP_WAKEUP

MAUI - GPIO & SERIAL INTERFACES



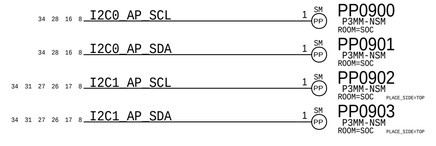
PIN J31 (UART7_RXD) SHOULD BE
SET TO INTERNAL PULL-DOWN.
STUFF R0911 FOR ANALOG PROX.
NOSTUFF R0911 FOR DOPPLER PROX.





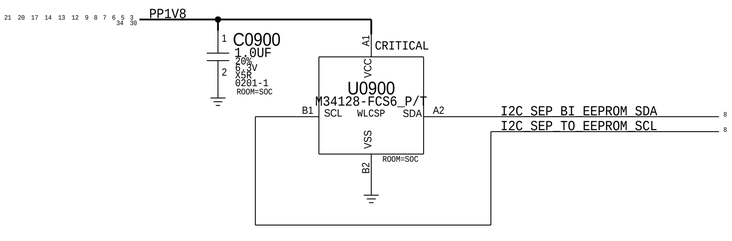
SPI PROBE POINTS

I2C PROBE POINTS

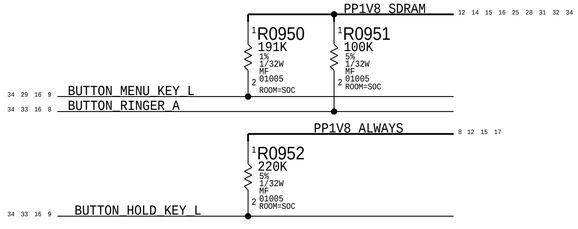


ANTI-ROLLBACK EEPROM

128kbit
APN:335S0946



BUTTON PULL-UP RESISTORS



MAUI - OWL

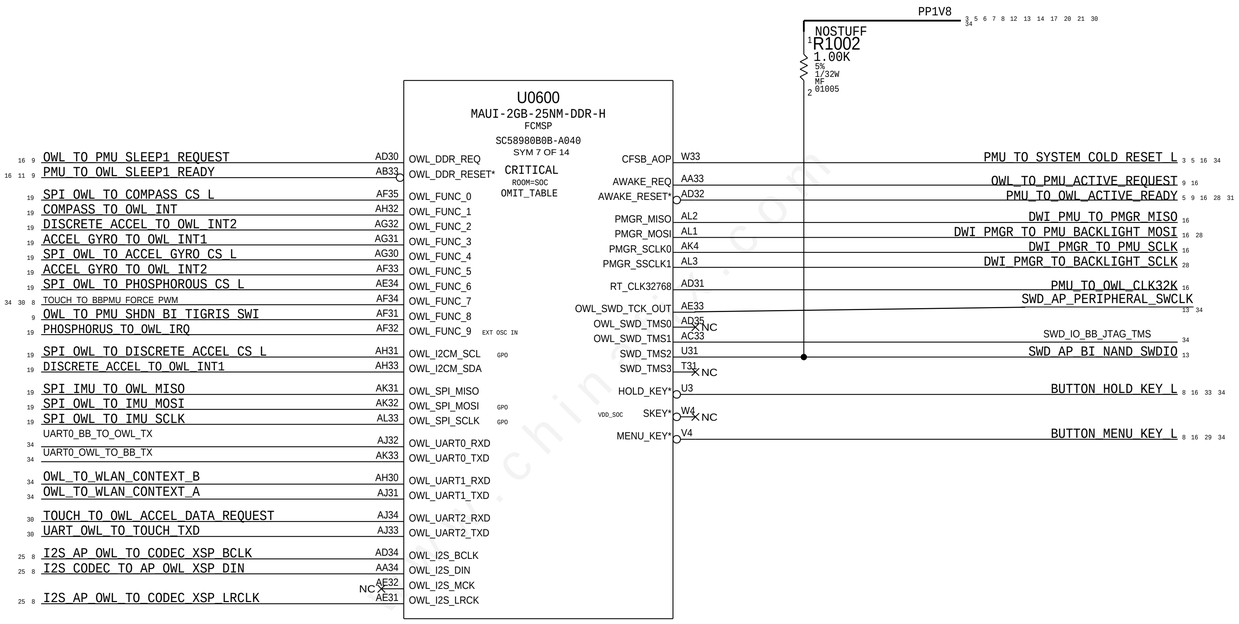
POWER STATE CONTROL PROBE POINTS

16 9 OWL_TO_PMU_ACTIVE_REQUEST — 1 SM PP — PP1020 P3MM-NSM ROOM=SOC

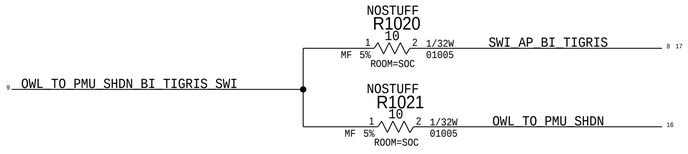
31 28 16 9 5 PMU_TO_OWL_ACTIVE_READY — 1 SM PP — PP1021 P3MM-NSM ROOM=SOC

16 9 OWL_TO_PMU_SLEEP1_REQUEST — 1 SM PP — PP1022 P3MM-NSM ROOM=SOC

16 11 9 PMU_TO_OWL_SLEEP1_READY — 1 SM PP — PP1023 P3MM-NSM ROOM=SOC



OWL SYSTEM SHUTDOWN OPTION



MAUI - CPU, GPU & SOC RAILS

PP_GPU
0.8V @10.5A MAX

TP1120 0.50MM SM
PP_GPU

C1101 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SOC
C1102 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SOC
C1103 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C1104 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C1105 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC

C1106 4.3UF 20% 4V CERM 0402
C1107 7.5UF 20% 4V CERM 0402
C1108 4.3UF 20% 4V CERM 0402
C1109 7.5UF 20% 4V CERM 0402
C1110 4.3UF 20% 4V CERM 0402
C1111 7.5UF 20% 4V CERM 0402

C1112 1UF 20% 4V CERM 0402
C1113 1UF 20% 4V CERM 0402
C1114 1UF 20% 4V CERM 0402
C1115 1UF 20% 4V CERM 0402
C1116 0.47UF 20% 6.3V CERM 0402
C1117 0.47UF 20% 6.3V CERM 0402

XW1110 SHORT-10L-0.1MM-SM ROOM=SOC

PP_CPU
0.625V @TBDA MAX
0.9V @10.5A MAX
1.0V @12.5A MAX

TP1100 0.50MM SM
PP_CPU

C1120 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SOC
C1121 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SOC
C1122 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C1123 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C1124 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C1125 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC

C1126 7.5UF 20% 4V CERM 0402
C1127 7.5UF 20% 4V CERM 0402
C1128 4.3UF 20% 4V CERM 0402
C1129 4.3UF 20% 4V CERM 0402
C1130 4.3UF 20% 4V CERM 0402
C1131 7.5UF 20% 4V CERM 0402

C1132 4.3UF 20% 4V CERM 0402
C1133 7.5UF 20% 4V CERM 0402
C1134 1UF 20% 4V CERM 0402
C1135 1UF 20% 4V CERM 0402
C1136 1UF 20% 4V CERM 0402
C1137 1UF 20% 4V CERM 0402

C1138 0.47UF 20% 6.3V CERM 0402
C1139 0.47UF 20% 6.3V CERM 0402
C1140 0.47UF 20% 6.3V CERM 0402
C1141 0.47UF 20% 6.3V CERM 0402

XW1100 SHORT-10L-0.1MM-SM ROOM=SOC

U0600
MAUI-2GB-25NM-DDR-H
FCMSP
SC58980B0B-A040
SYM 8 OF 14
CRITICAL
ROOM=SOC
OMIT_TABLE

VDD_CPU: AA7 AA9 AA11 AB6 AB10 AB12 AC13 AD6 AD8 AD10 AD12 AE7 AE9 AE11 AE13 AF8 AF10 AF12 AH6 AH8 AH10 AH12 AJ5 AJ7 AJ9 AJ11 AJ13 AK6 AK10 AL7 AL9 AL11 AM6 AM8 AM10 AN7 AN11 AL13 Y8 Y10 Y12 AM12

VDD_GPU: G15 W13 T12 M6 U9 V12 W9 M12 M18 N15 N21 N9 F10 H14 H16 H20 H22 H6 H8 J11 J13 J17 J19 J23 J7 K10 K14 K16 K20 K22 K6 K8 L11 L13 L15 L17 L19 L21 M24 L7 L9 F8 M8 N11 N13 N17 N19 P10 G11 P12 P14 P16 P20 R15 R19 G13 R9 T10 T14 T16 U11 V14 V16 G7 R23 G9 H10 T24 P22 W17 N23 G17 G21 T18 T20

VDD_SOC: W23 Y14 Y16 Y20 Y22 Y24 Y26 G29 AA27 F17 F20 L29 N29 V28

VDD_SOC: L22 L24 L26 L28 M1 M5 M7 M9 M11 M13 M17 M21 M23 M25 M27 M29 M35 N6 N10 N12 N14 N16 N18 G19 N22 N24 N26 N28 N30 N33 P9 P11 P13 P15 P17 P19 P21 P23 P25 P27 P29 P35 R4 R6 R8 R10 R12 R14 M19 R18 R20 R22 R24 R26 R28 R30 T1 T2 R33 T9 T11 T13 T15 T17 P7 T23 T25 T27 T30 T35 U6 U10 U12

VSS

VDD_SOC: AA17 AA19 AA23 AB14 AB16 AB20 AB22 AB24 AB26 AC17 AC19 AC23 AD16 AD20 AD22 AD24 AD26 AE5 AE15 AE17 AE19 AE23 AF14 AF16 AF20 AF22 AF24 AF26 AG17 AG19 AG23 AH16 AH20 AH22 AH24 AH26 AJ15 AJ17 AJ19 AJ23 AK14 J29 G23 AK22 F6 F14 AL15 AM5 G25 G27 H24 H26 H28 J27 K24 K26 K28 L27 L23 M26 M28 AL19 N7 N27 P24 P26 P28 R17 R27 R29 T22 T26 T7 T28 U17 V8 V20 V22 V24 V26 W7 W11 Y28

PP_SOC
0.825V @4.7A MAX
0.725V @TBDA MAX

C1151 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SOC

XW1120 SHORT-10L-0.1MM-SM ROOM=SOC

C1153 4.3UF 20% 4V CERM 0402
C1154 1UF 20% 4V CERM 0402
C1155 1UF 20% 4V CERM 0402
C1156 0.47UF 20% 6.3V CERM 0402
C1157 0.47UF 20% 6.3V CERM 0402

PP1105 P2MM-NSM AP_SOC_SENSE_P AJ20 VDD_SOC_SENSE
PP1104 P2MM-NSM AP_SOC_SENSE_N AK21 VSS_SOC_SENSE

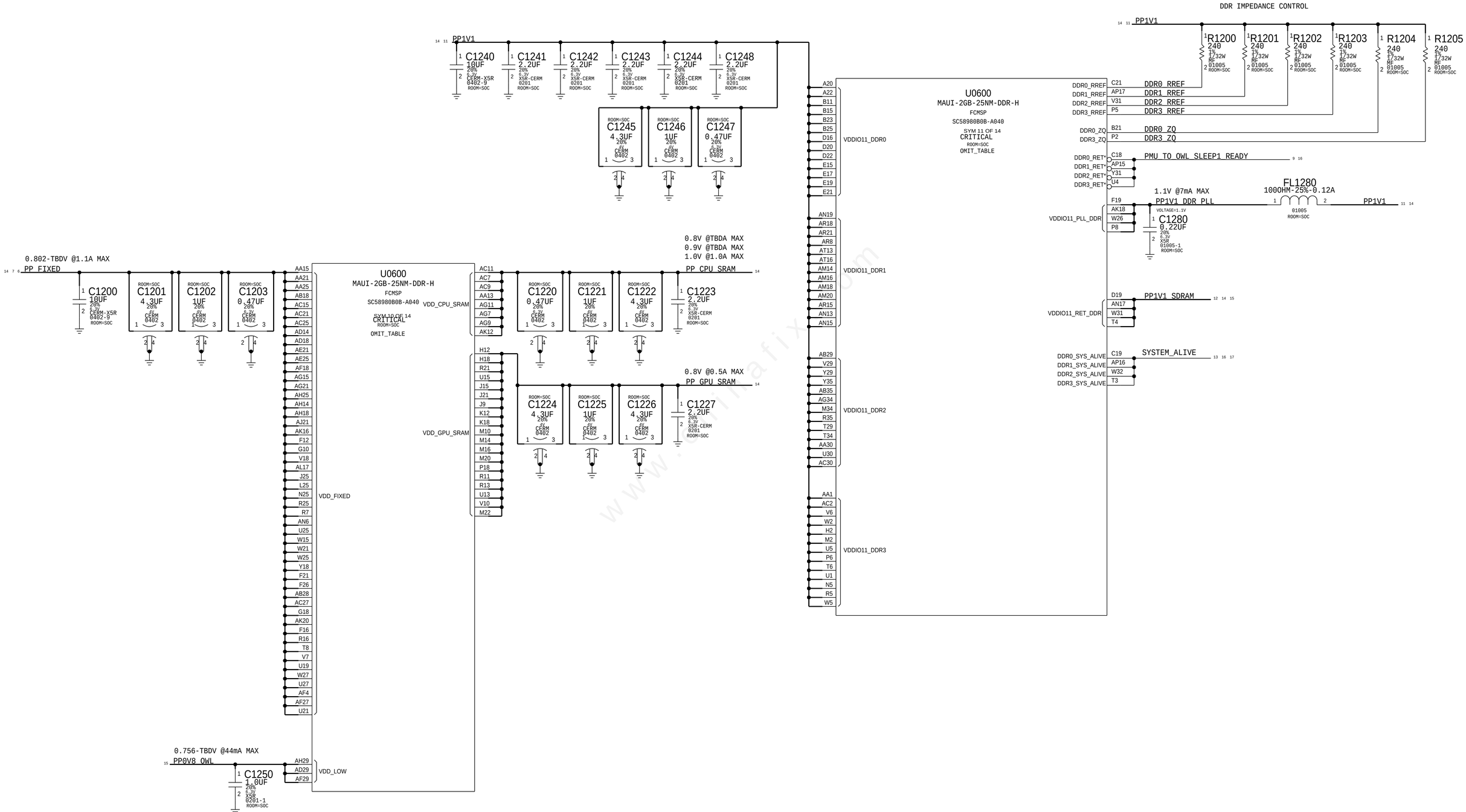
PP1100 P2MM-NSM AP_CPU_SENSE_P Y6 VDD_CPU_SENSE
PP1101 P2MM-NSM AP_CPU_SENSE_N Y7 VSS_CPU_SENSE

VDD_GPU_SENSE G20 AP_GPU_SENSE_P
VSS_GPU_SENSE H19 AP_GPU_SENSE_N
PP1102 P2MM-NSM

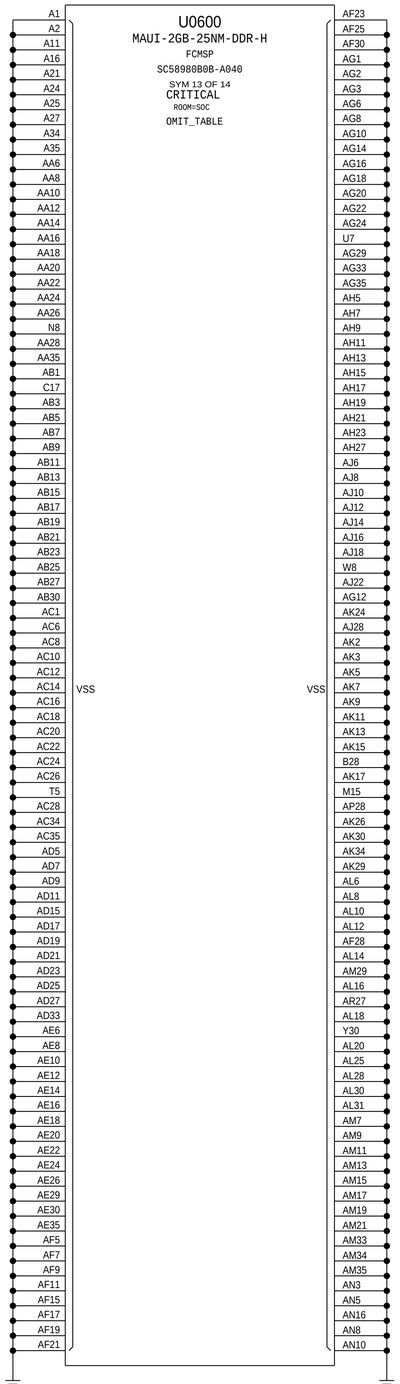
NOTE: AP_GPU_SENSE_P probe location @ R2205.2

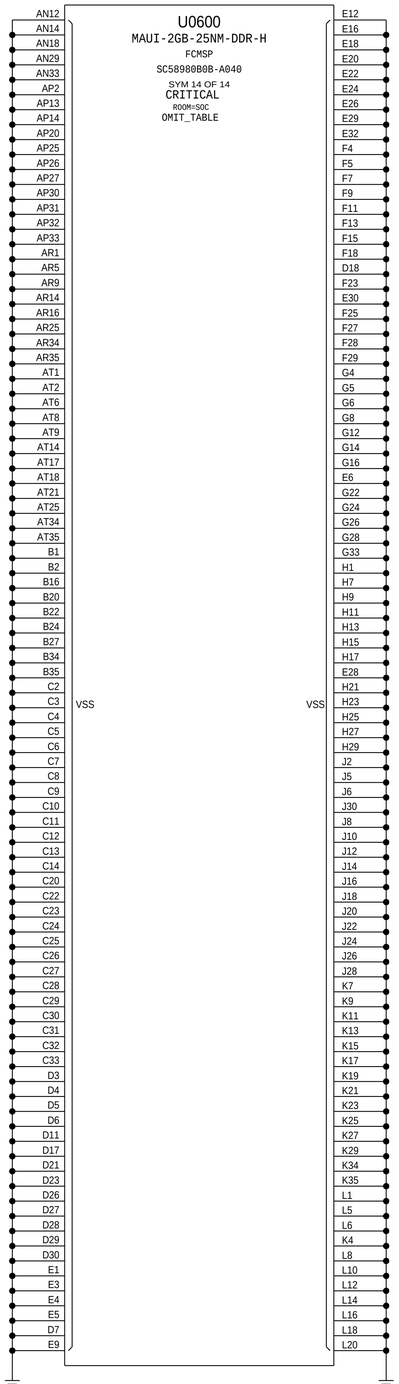
SYNC_DATE=05/29/2014

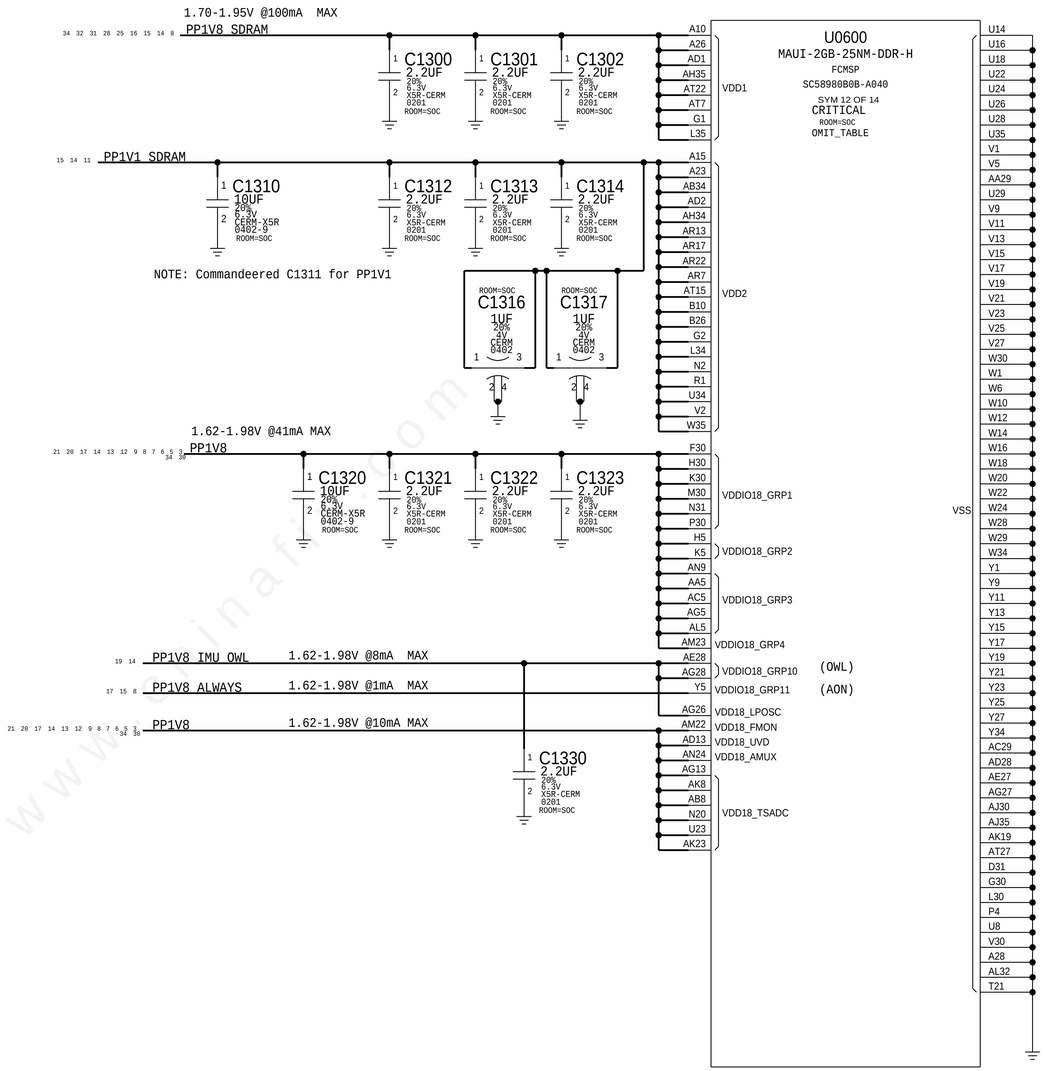
MAUI - POWER SUPPLIES



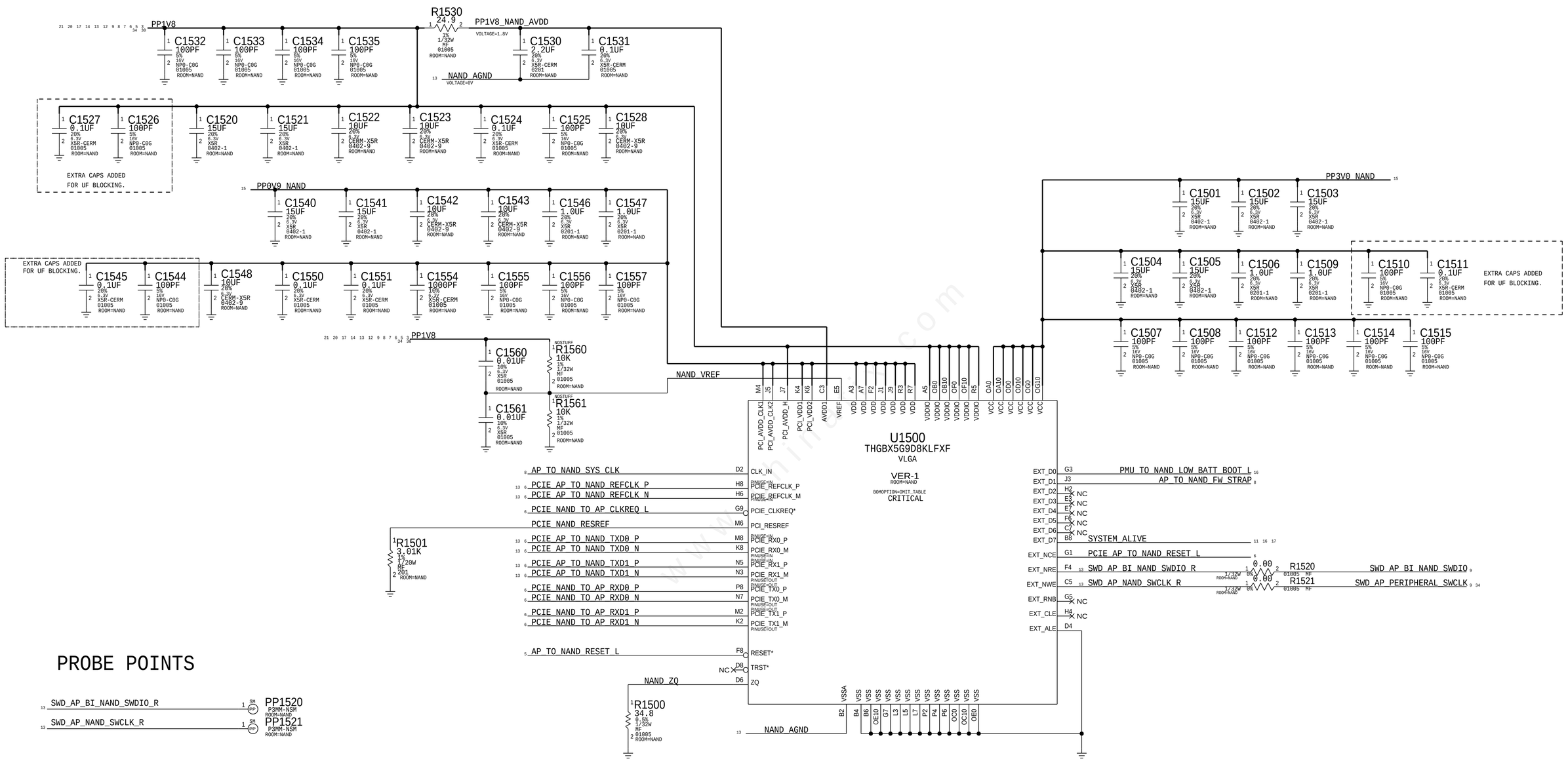
MAUI - POWER SUPPLIES



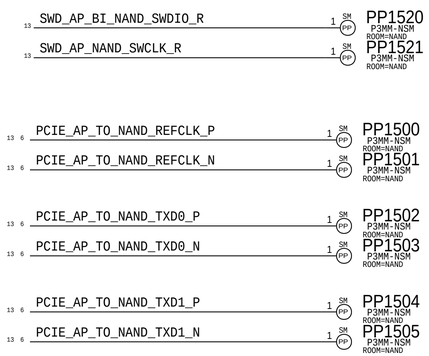




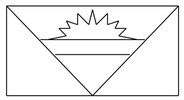
S3E NAND



PROBE POINTS



ANTIGUA PMU - Buck Supplies



PP_VCC_MAIN

C2085 10UF 20% 6.3V 0402 ROOM=PMU
C2086 10UF 20% 6.3V 0402 ROOM=PMU
C2087 10UF 20% 6.3V 0402 ROOM=PMU
C2088 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=PMU

C2089 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2090 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2091 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2092 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU

C2093 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2094 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2095 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2096 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU

C2097 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2098 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU
C2099 100PF 5% 16V NP0-C0G 01005 ROOM=PMU

U2000 D2255A080UXUVAI2 CSP ROOM=PMU SYM 2 OF 5 CRITICAL

VDD_MAIN_SNS V3
VDD_MAIN R6 F10 L13 L5 R8 L4
VDD_BUCK0_01 A4 B4 C4
VDD_BUCK0_23 A8 B8 C8
VDD_BUCK1_01 A16 B16 C16
VDD_BUCK1_23 A12 B12 C12
VDD_BUCK2 J17 J18 J19
VDD_BUCK3 T18 T19
VDD_BUCK4 V12 Y12 Z12
VDD_BUCK5 N17 N18 N19
VDD_BUCK6 J1 J2
VDD_BUCK7 E1 E2
VDD_BUCK8 E17 E18 E19

BAT/USB
BUCK INPUT

PP1V8 VOLTAGE=1.8 → V18 Y18 Z18 BUCK3_SW1
PP1V8_TOUCH VOLTAGE=1.8V → U16 BUCK3_SW2
PP1V8_IMU_OWL VOLTAGE=1.8V → U15 BUCK3_SW3
PP1V1 VOLTAGE=1.1V → V16 Y16 Z16 BUCK4_SW1

BUCK0 12.5A MAX

L2000 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2001 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
L2002 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2003 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
PIQA20161T-SM ROOM=PMU CRITICAL

BUCK0_LX0 A3 B3 C3 ← BUCK0 LX0
BUCK0_LX1 A5 B5 C5 ← BUCK0 LX1
BUCK0_LX2 A7 B7 C7 ← BUCK0 LX2
BUCK0_LX3 A9 B9 C9 ← BUCK0 LX3
BUCK0_FB F8 ← PP_CPU 10

C2000 C2001 C2002 C2003 C2004 C2005 15UF 20% 6.3V X5R 0402-1 ROOM=PMU
C2006 C2007 C2008 C2009 C2010 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

PP_CPU 10 VOLTAGE=1V 0.775V/0.95V/1.0V

BUCK1 10.5A MAX

L2010 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2011 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
L2012 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2013 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
PIQA20161T-SM ROOM=PMU CRITICAL

BUCK1_LX0 A17 B17 C17 ← BUCK1 LX0
BUCK1_LX1 A15 B15 C15 ← BUCK1 LX1
BUCK1_LX2 A13 B13 C13 ← BUCK1 LX2
BUCK1_LX3 A11 B11 C11 ← BUCK1 LX3
BUCK1_FB F12 ← PP_GPU 10

C2011 C2012 C2013 C2014 C2015 C2016 15UF 20% 6.3V X5R 0402-1 ROOM=PMU
C2017 C2018 C2019 C2020 C2021 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

PP_GPU 10 VOLTAGE=1V 0.80V/0.90V/1.0V

BUCK2 4.7A MAX

L2020 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2021 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
PIQA20161T-SM ROOM=PMU CRITICAL

BUCK2_LX0 H17 H18 H19 ← BUCK2 LX0
BUCK2_LX1 K17 K18 K19 ← BUCK2 LX1
BUCK2_FB J14 ← PP_SOC 10

C2022 C2023 C2024 C2025 C2026 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

PP_SOC 10 VOLTAGE=1.1V 0.725V/0.825V

BUCK3 1.5A MAX

L2030 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM ROOM=PMU CRITICAL
PIQA20161T-SM ROOM=PMU

BUCK3_LX0 R18 R19 ← BUCK3 LX0
BUCK3_FB V19 ← XW2030 SHORT-10L-0.1MM-SM ROOM=PMU
VBUCK3_SW U17 V17 Y17 Z17

C2030 C2031 15UF 20% 6.3V X5R 0402-1 ROOM=PMU
C2032 100PF 5% 16V NP0-C0G 01005 ROOM=PMU

PP1V8_SDRAM 8 12 15 16 25 28 31 32 34 VOLTAGE=1.8V

BUCK4 4.7A MAX

L2040 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM
L2041 OMIT_TABLE 0.47UH-20%-3.8A-0.048OHM
PIQA20161T-SM ROOM=PMU CRITICAL

BUCK4_LX0 V11 Y11 Z11 ← BUCK4 LX0
BUCK4_LX1 V13 Y13 Z13 ← BUCK4 LX1
BUCK4_FB T9 ← XW2040 SHORT-10L-0.1MM-SM ROOM=PMU
VBUCK4_SW V15 Y15 Z15

C2040 C2041 C2042 C2043 15UF 20% 6.3V X5R 0402-1 ROOM=PMU
C2044 100PF 5% 16V NP0-C0G 01005 ROOM=PMU

PP1V1_SDRAM 11 12 15 VOLTAGE=1.1V

BUCK5 1.1A MAX

PP_FIXED 11 7 6 VOLTAGE=0.85V

L2050 OMIT_TABLE 1.0UH-20%-3.6A-0.060OHM CRITICAL
PIQA20161T-SM ROOM=PMU
XW2050 SHORT-10L-0.1MM-SM ROOM=PMU

C2050 C2051 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

BUCK5_LX0 M17 M18 M19
BUCK5_FB M13

BUCK6 400mA MAX

PP1V2_CAMERA 21 20 VOLTAGE=1.2V

L2060 1UH-20%-1.2A-0.320OHM CRITICAL 0603 ROOM=PMU

C2060 C2061 15UF 20% 6.3V X5R 0402-1 ROOM=PMU
C2062 100PF 5% 16V NP0-C0G 01005 ROOM=PMU

BUCK6_LX0 H1 H2
BUCK6_FB 21 J5

BUCK7 1.1A MAX

PP_CPU_SRAM 11 VOLTAGE=1V 0.80V/0.90V/1.0V

L2070 1.0UH-20%-2.25A-0.150HM CRITICAL
PIXB2016FE-SM ROOM=PMU
XW2070 SHORT-10L-0.1MM-SM ROOM=PMU

C2070 C2071 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

BUCK7_LX0 F1 F2
BUCK7_FB C1

BUCK8 1.1A MAX

PP_GPU_SRAM 11 VOLTAGE=1V 0.80V/0.90V/1.0V

L2080 1.0UH-20%-2.25A-0.150HM CRITICAL
PIXB2016FE-SM ROOM=PMU
XW2080 SHORT-10L-0.1MM-SM ROOM=PMU

C2080 C2081 15UF 20% 6.3V X5R 0402-1 ROOM=PMU

BUCK8_LX0 F17 F18 F19
BUCK8_FB C19

ANTIGUA PMU - LDOs

ANTIGUA LDO SPECS

LDO#	ADJ.RANGE	ACCURACY	MAX.CURRENT
LDO1 (A)	2.5-3.3V	+/-1.4%	50mA
LDO2 (B)	1.2-2.0V	+/-2.5%	50mA
LDO3 (A)	2.5-3.3V	+/-1.4%	50mA
LDO4 (D)	0.7-1.2V	+/-2.5%	100mA
LDO5 (F)	2.5-3.3V	+/-2.5%	1000mA
LDO6 (C1)	1.2-3.6V	+/-2.5%	150mA
LDO7 (C)	2.5-3.3V	+/-25mV	250mA
LDO8 (C)	2.5-3.3V	+/-25mV	250mA
LDO9 (C)	2.5-3.3V	+/-25mV	250mA
LDO10 (G)	0.7-1.2V	+/-5.5%	1335mA
LDO11 (C)	2.5-3.3V	+/-25mV	250mA
LDO12 (E)	1.8V	+/-5%	10mA
LDO13 (C)	2.5-3.3V	+/-25mV	250mA
LDO14 (H)	0.8-1.5V	+/-2.5%	250mA
LDO15 (B)	1.2-2.0V	+/-2.5%	50mA

PP_VCC_MAIN

XW2105 SHORT-10L-0.1MM-SM ROOM=PMU PLACE_NEAR=U2000.V2:2MM

C2120–C2127 10UF 20% 6.3V X5R-CERM 0402-9 ROOM=PMU

PP1V1_SDRAM

C2130 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU

C2131 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU

PP1V8_SDRAM

C2132 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=PMU

OMIT_TABLE
U2000
D2255A080UXUVAI2
CSP
SYM 1 OF 5
CRITICAL
ROOM=PMU

LDO INPUT

M3	VDD_LDO1_3
V2	VDD_LDO2
M2	VDD_LDO4
U1	
U2	VDD_LDO5
L2	VDD_LDO6
Y6	VDD_LDO7
Y4	VDD_LDO8
Y3	VDD_LDO9
Y9	
Z9	VDD_LDO10
R3	VDD_LDO11
Y5	VDD_LDO13
Y7	VDD_LDO14
N2	VDD_LDO15
K3	VDD_BYPASS
P12	VPP_OTP

LDO

VLDO1	M1
VLDO2	V1
VLDO3	L1
VLDO4	N1
VLDO5	T1, T2
VLDO6	K1
VBYPASS	K2
VLDO7	Z6
VLDO8	Z4
VLDO9	Z3
VLDO9_FB	Y2
	Y8
VLDO10	Z8
VLDO11	R2
VLDO12	K6
VLDO13	Z5
VLDO14	Z7
VLDO15	P2
VPUMP	U19

XW2100 SHORT-10L-0.25MM-SM PLACE_NEAR=U2000.Y2:2mm ROOM=PMU

PMU_VPUMP

VPUMP:10nF min. @ 4.6V

C2100 47NF 20% 6.3V X5R-CERM 01005 ROOM=PMU

C2101–C2115 2.2UF / 4.3UF 20% 4V X5R-CERM 0201/0610 ROOM=PMU

VOLTAGE=3.3V	PP3V3_USB	5
VOLTAGE=1.8V	PP1V8_VA	25 26 27
VOLTAGE=3.0V	PP3V0_TRISTAR	19 28 31 32 34
VOLTAGE=0.8V	PP0V8_OWL	11
VOLTAGE=3.3V	PP3V3_NAND	13
VOLTAGE=3.3V	PP3V3_ACC	31
VOLTAGE=3.0V	PP3V0_PROX_ALS	20
VOLTAGE=2.75V	PMU_LDO8	
VOLTAGE=2.875V	PP2V85_CAM_AVDD_PMU	20
VOLTAGE=0.9V	PP0V9_NAND	13
VOLTAGE=3.0V	PP3V0_PROX_IRLED	20
VOLTAGE=1.8V	PP1V8_ALWAYS	8 12 17
VOLTAGE=3.0V	PP3V0_MESA	29
VOLTAGE=1.2V	PP1V2	5 6 7
VOLTAGE=1.8V	PP1V8_MESA	29

OMIT_TABLE
U2000
D2255A080UXUVAI2
CSP
SYM 2 OF 5
CRITICAL
ROOM=PMU

NC: D10, D11, D12, D13, D14, D15, D16, D17, D18, D2, D5, D6, D7, D8, D9, D3, E10, E11, E12, E13, D4, E15, E16, E3, E4, E5, E7, E8, E9, F14, F15, F16, F3, F4, G14, G15, G16, G3, G4, H15, H16, H3, H4

NC: J15, J16, J3, J4, K15, K16, L15, L16, M14, M15, M16, N14, N15, N16, P13, P14, P15, P16, P17, R13, R14, R15, R16, R17, T10, T11, T12, T13, T14, T15, T17, U10, U11, U12, U13, U14, U4, U5, U6, V4, V5, V6

OMIT_TABLE
U2000
D2255A080UXUVAI2
CSP
SYM 4 OF 5
CRITICAL
ROOM=PMU

VSS: A1, A10, A14, A18, A19, A2, A6, B1, B10, B14, B18, B19, B2, B6, C10, C14, C18, C2, C6, D1, D19, E14, G1, G17, G18, G19, G2, H7, J6, K12, K7, L17, L18, L19, L6, L7

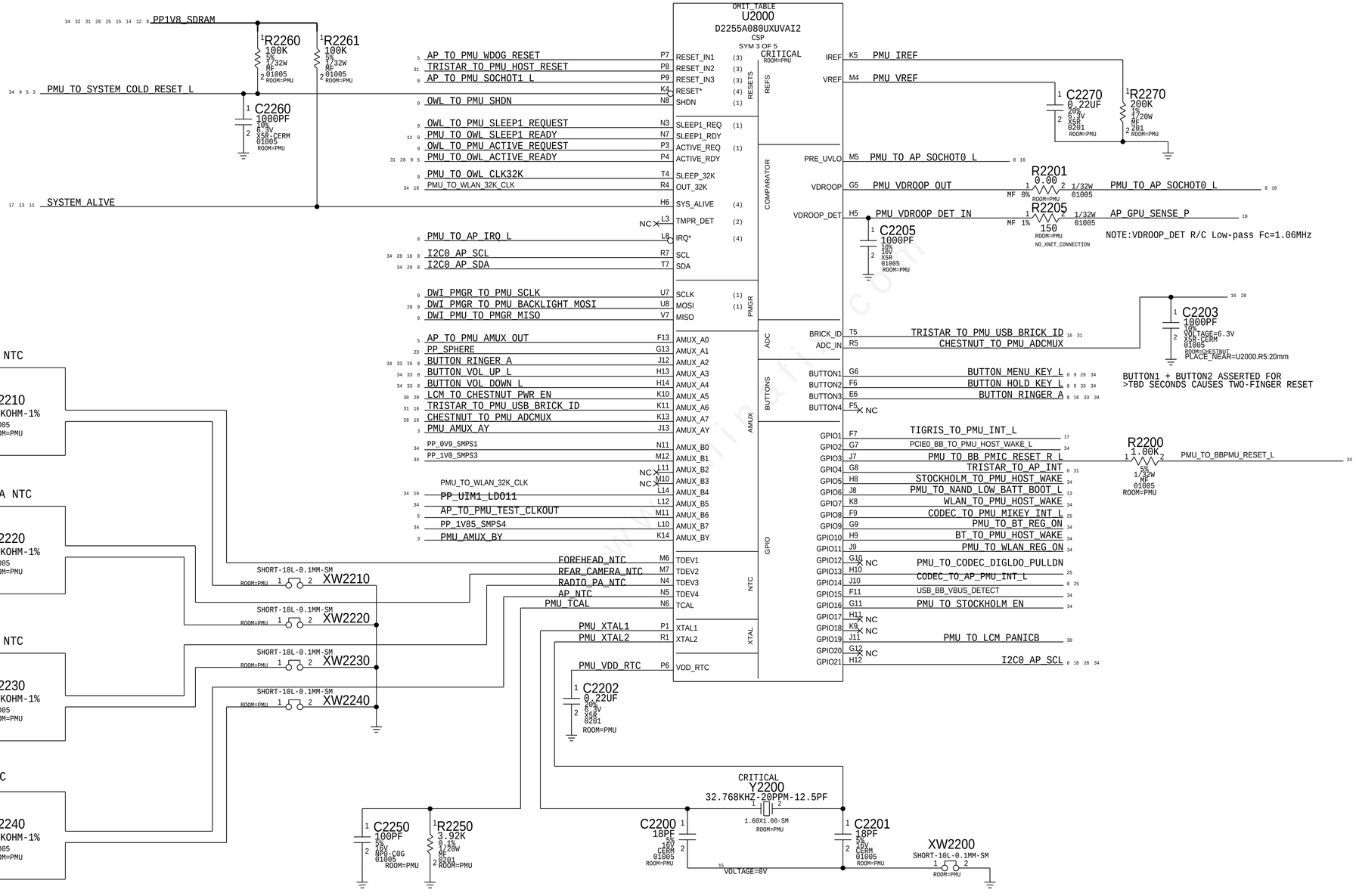
XTAL GND: L9, M8, M9, N10, N12, N13, N9, P10, P11, P18, P19, P5, R10, R11, R12, R9, T16, T3, T6, T8, U3, U9, V10, V14, V8, V9, Y1, Y10, Y14, Y19, Z1, Z10, Z14, Z19, Z2

GND 16

ANTIGUA PMU - GPIOs, NTCs

CONTROL PIN NOTES:

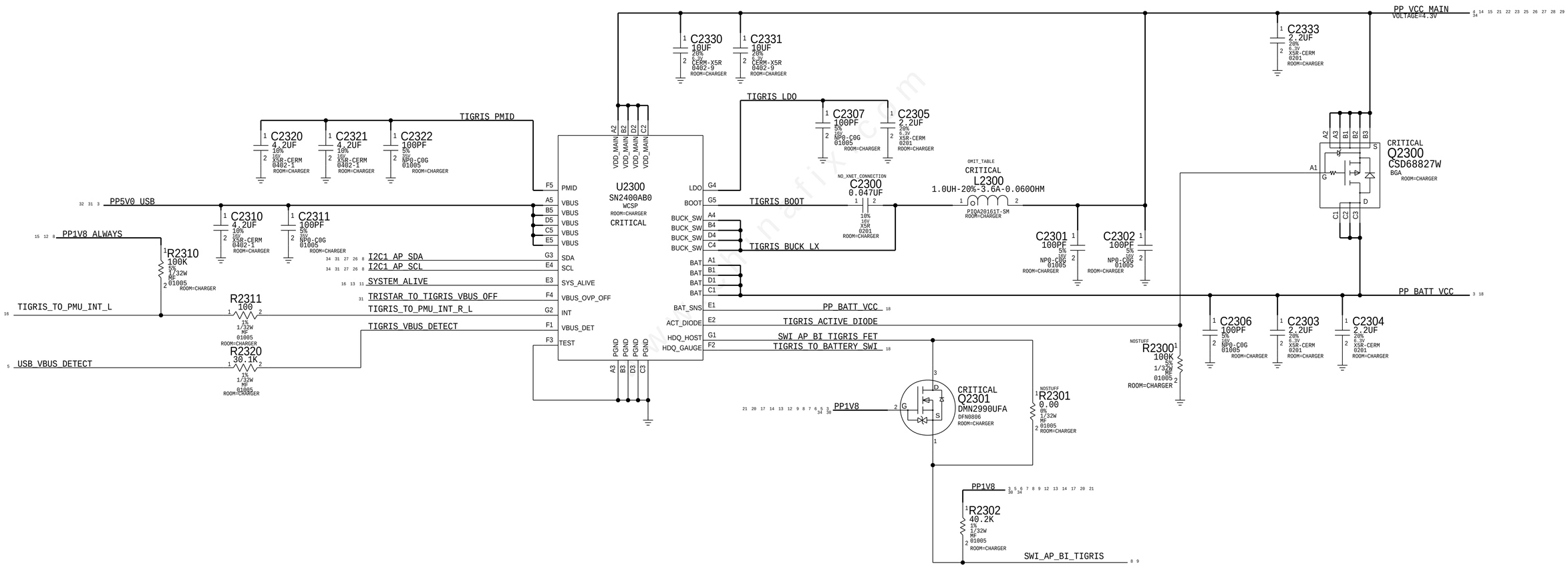
NOTE (1):INPUT PULL-DOWN 100-300k
NOTE (2):INPUT PULL-DOWN 1M
NOTE (3):INPUT PULL-UP OR DOWN 100k-300k
NOTE (4):OUTPUT OPEN-DRAIN, REQUIRES PULL-UP



NOTE:100PF CAPS ARE THE SAMPLING CAPS FOR PMU ADC

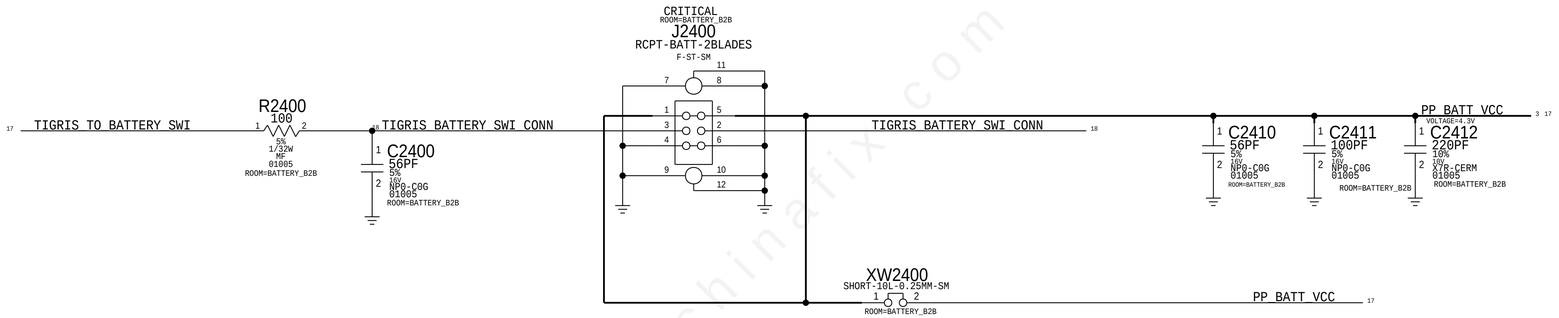
TIGRIS CHARGER

APN:343S00033



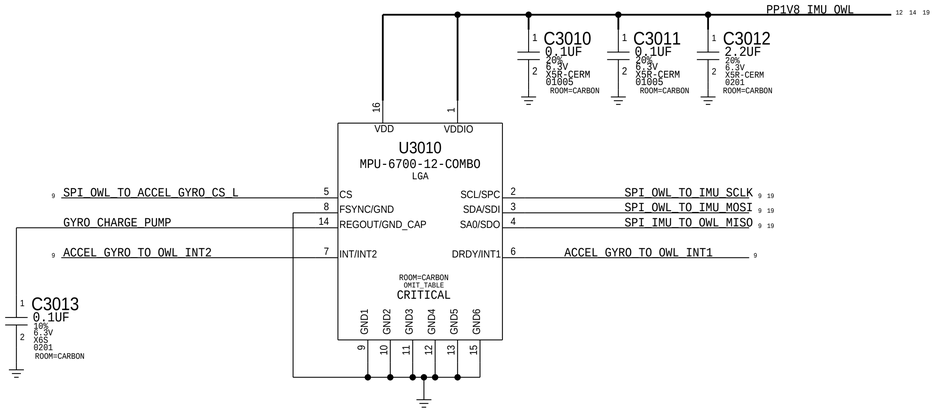
BATTERY CONNECTOR

THIS ONE ON MLB ---> 516S00104 (RCPT)
516????? (PLUG)



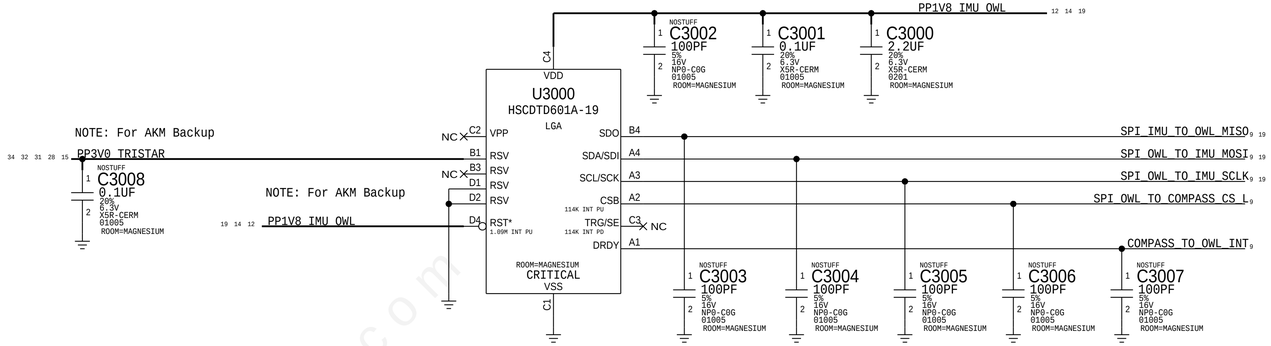
CARBON - ACCEL & GYRO

INVENSENSE, MPU-6700 (APN 338S00017): C3013=0.1UF
INVENSENSE, MPU-6800 (APN 338S00087): C3013=0.1UF



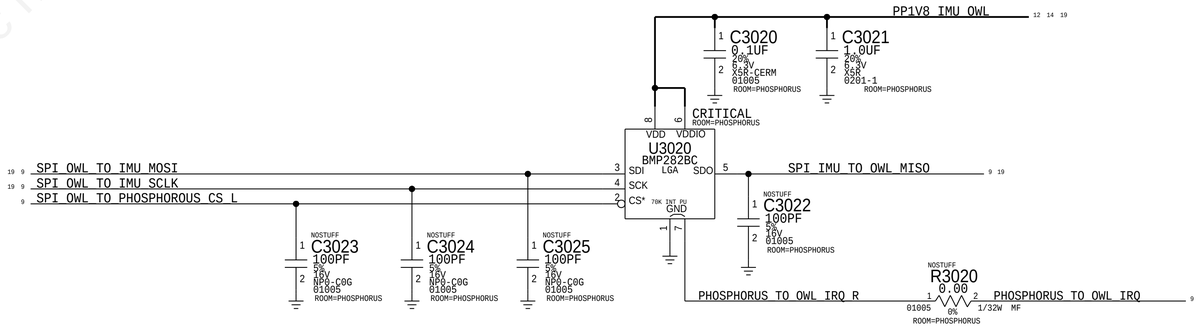
MAGNESIUM - COMPASS

APN:338S00084



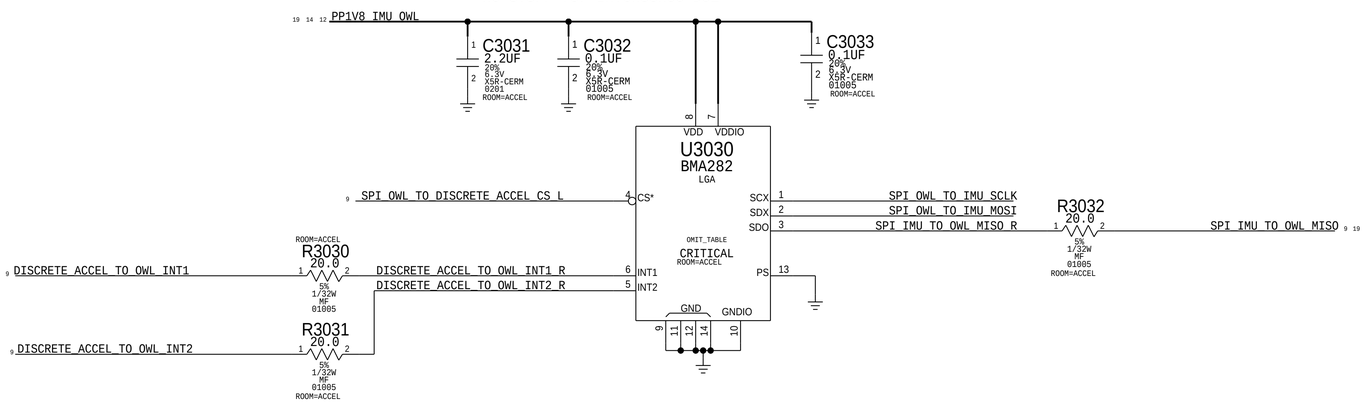
PHOSPHOROUS

BOSCH (APN:338S00044)



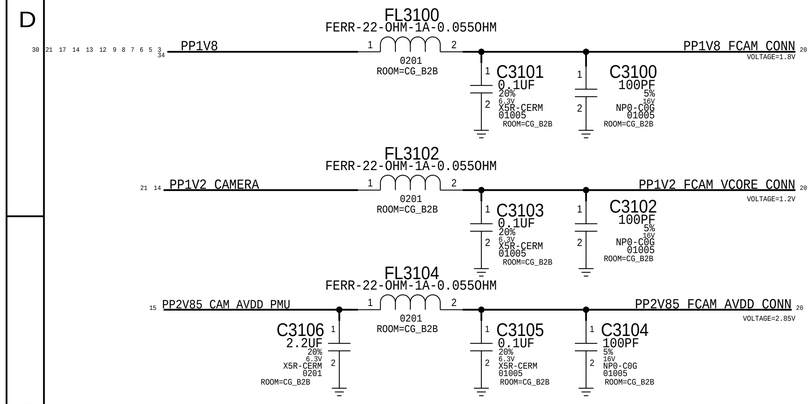
DISCRETE ACCEL

BOSCH APN 338S1163
NO-STUFF for Invensense DOE

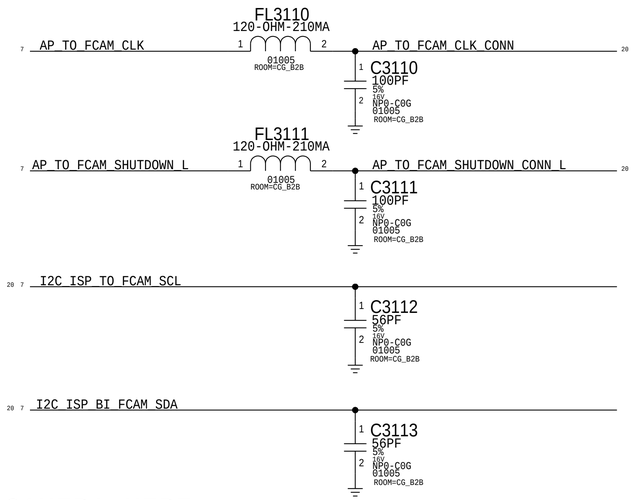


FRONT CAMERA FLEX

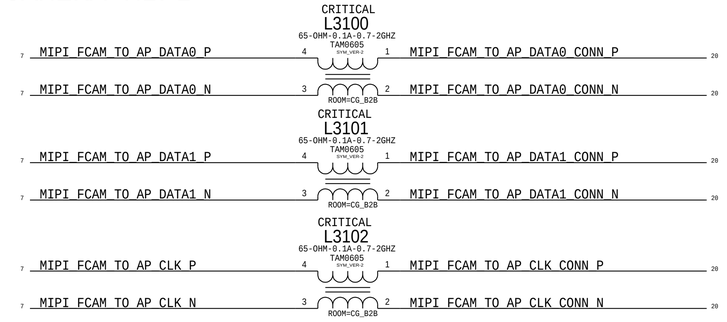
CAMERA POWER



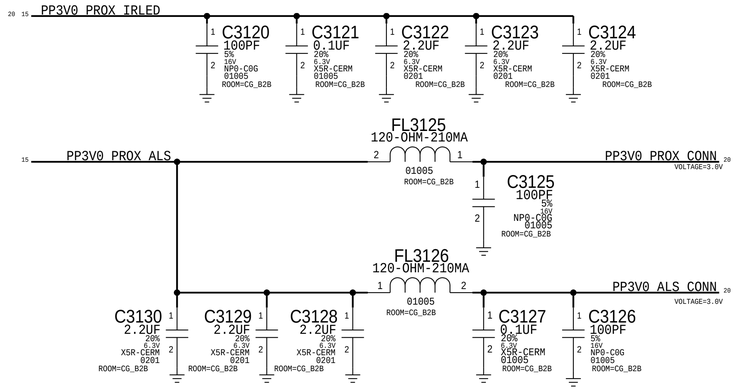
CAMERA I/O



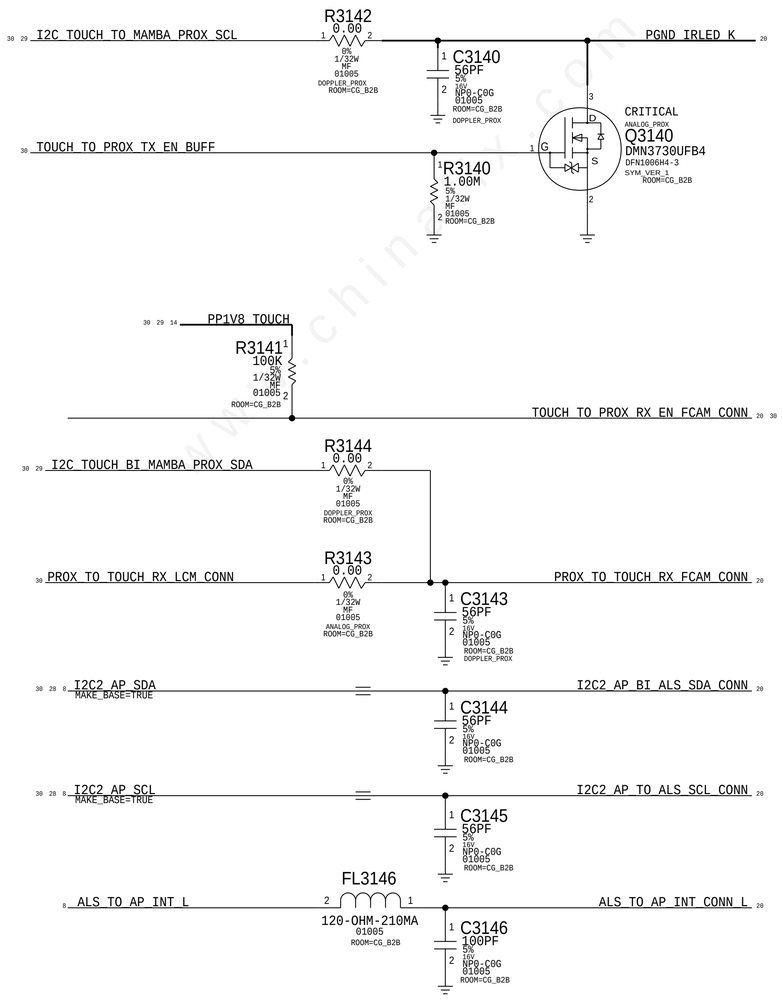
CAMERA MIPI



PROX & ALS POWER

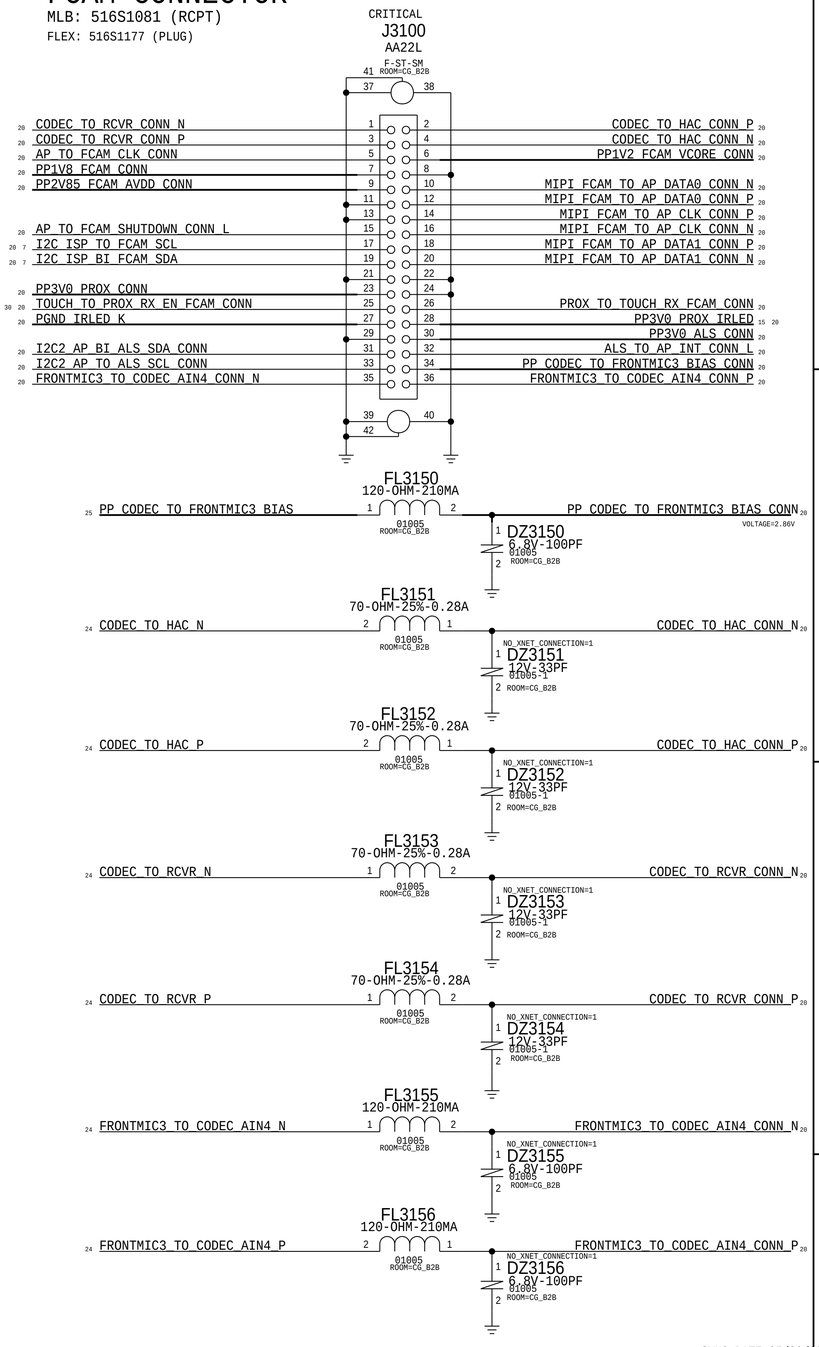


PROX & ALS INTERFACE



FCAM CONNECTOR

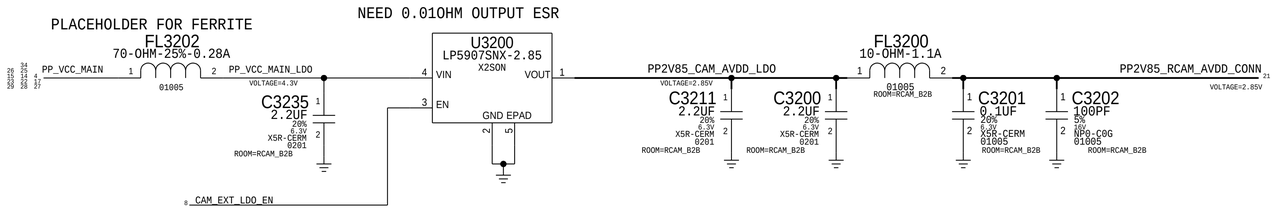
MLB: 516S1081 (RCPT)
FLEX: 516S1177 (PLUG)

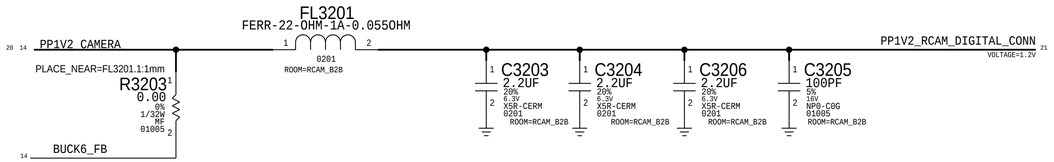


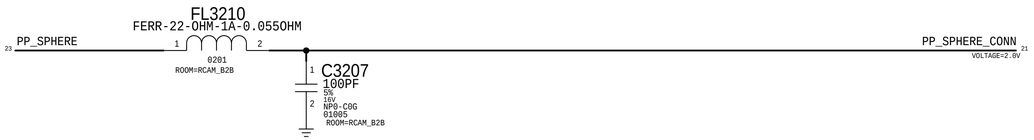
SYNC_DATE=05/29/2014

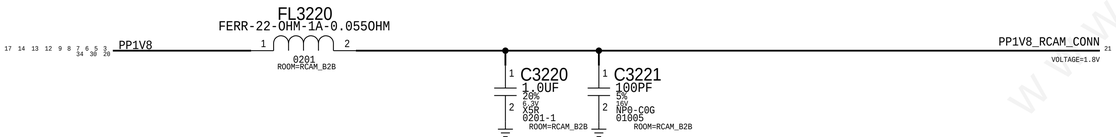
REAR CAMERA FLEX

CAMERA POWER/MAMBA LDO





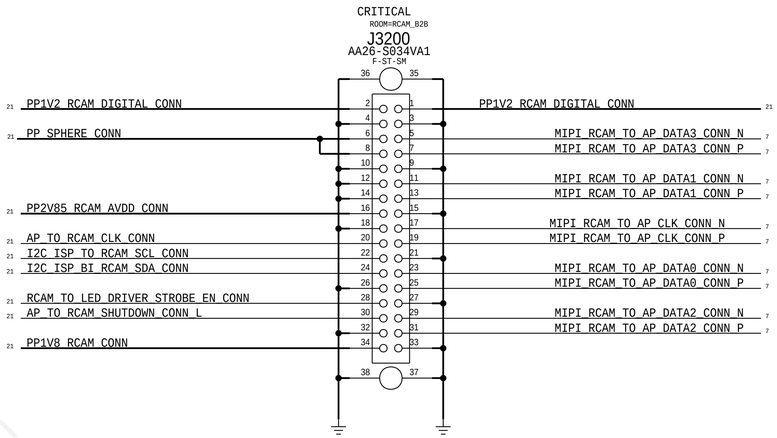




RCAM CONNECTOR

MLB: 516S00043 (RCPT)

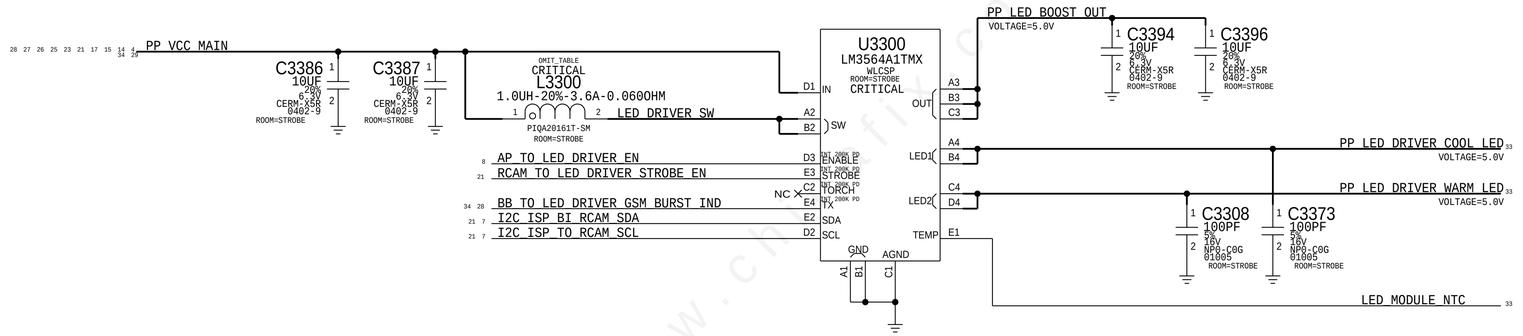
FLEX: 516S00042 (PLUG)



Digital I/O

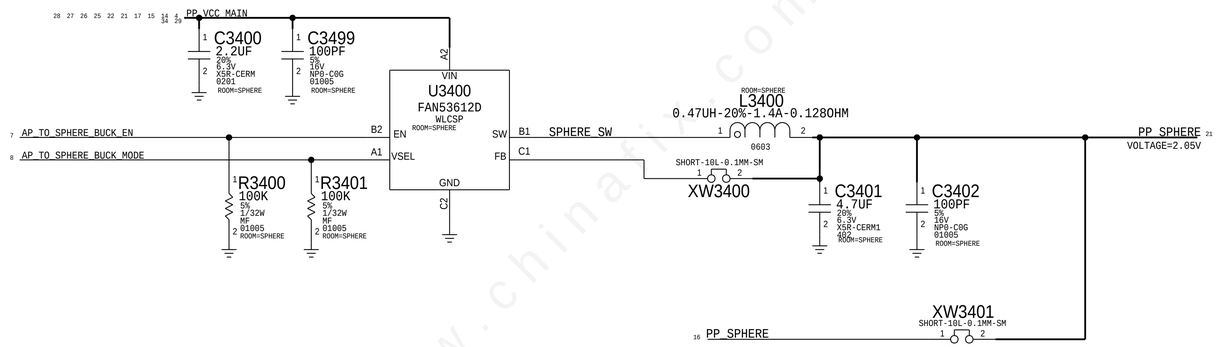
DUAL LED STROBE DRIVER

APN:353S3899



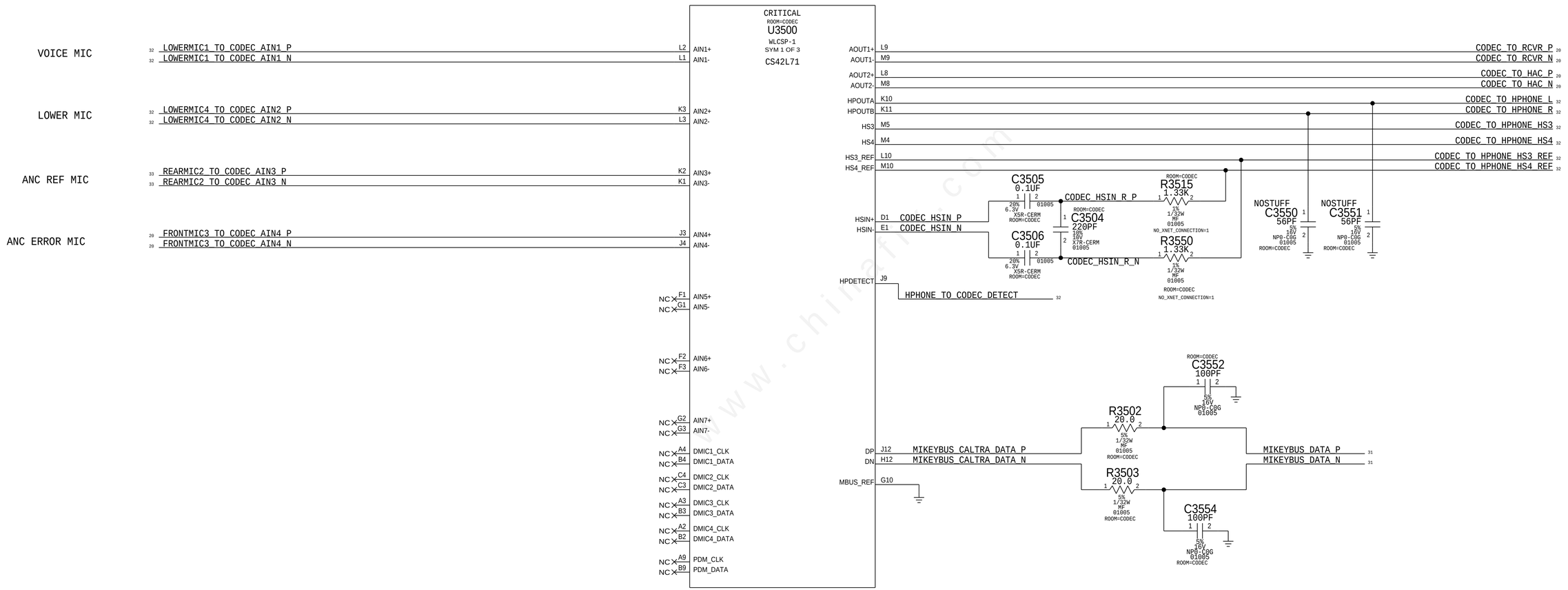
Sphere Driver

APN:353S00584

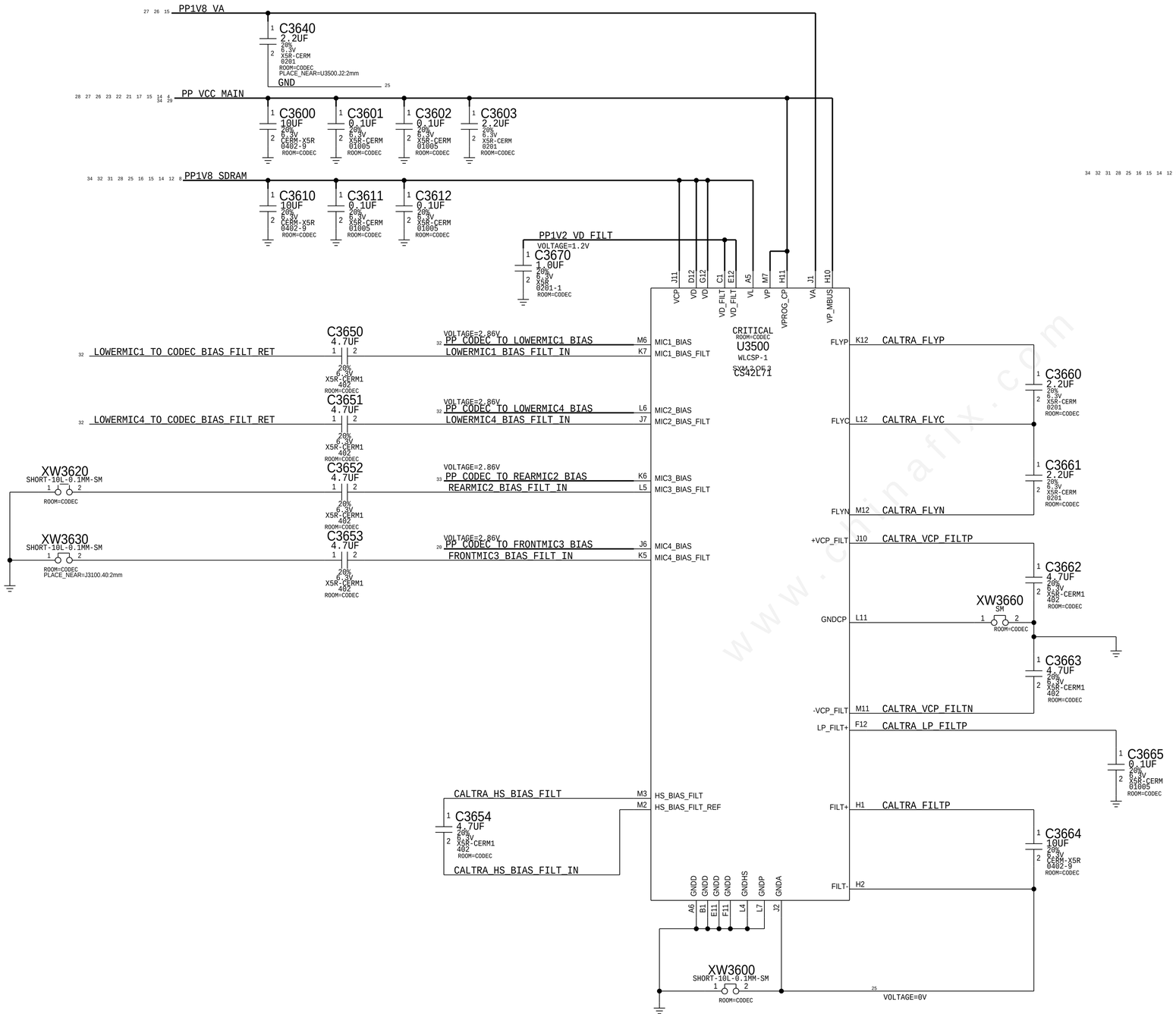


CALTRA AUDIO CODEC (ANALOG INPUTS & OUTPUTS)

APN:338S00105



CALTRA AUDIO CODEC (POWER & I/O)



SPEAKER AMPLIFIER

APN: 338S1285
I2C ADDRESS: 1000000

PP VCC MAIN
PP1V8_VA
C3795 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SPKR_AMP
C3732 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=SPKR_AMP
C3735 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SPKR_AMP
C3737 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SPKR_AMP
C3709 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SPKR_AMP
C3730 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SPKR_AMP
C3741 10UF 20% 10V X5R-CERM 0402-8 ROOM=SPKR_AMP
C3742 10UF 20% 10V X5R-CERM 0402-8 ROOM=SPKR_AMP
C3743 10UF 20% 10V X5R-CERM 0402-8 ROOM=SPKR_AMP
C3744 10UF 20% 10V X5R-CERM 0402-8 ROOM=SPKR_AMP
C3745 0.1UF 10% 16V X5R-CERM 0201 ROOM=SPKR_AMP
C3746 100PF 5% 16V C0G-CERM 01005 ROOM=SPKR_AMP
VOLTAGE=8.6V
PP_SPKR_VBOOST
CRITICAL
L3700 1.2UH-20%-3.0A-0.080OHM PIOA20161T-SM ROOM=SPKR_AMP
SPEAKERAMP_SW
U3700 CS35L21-XWZR WLCSP VER1 ROOM=SPKR_AMP CRITICAL
VBST
VP
VA
C3729 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SPKR_AMP
C3740 4.7UF 20% 6.3V CER-X5R 0402 ROOM=SPKR_AMP
FILT+ F2 SPEAKERAMP_FILT
LDO_FILT C5 SPEAKERAMP_LDO_FILT
VSENSE- E3 SPEAKER_TO_SPEAKERAMP_VSENSE_N
VSENSE+ E2 SPEAKER_TO_SPEAKERAMP_VSENSE_P
ISENSE- F1 SPEAKERAMP_ISENSE_N
ISENSE+ E1 SPEAKERAMP_ISENSE_P
OUT+ D2 SPEAKERAMP_OUT_POS
OUT- C2
IREF+ B7 SPEAKERAMP_IREF
R3735 44.2K 1% 1/32W MF 01005 ROOM=SPKR_AMP
C3704 220PF 5% 10V C0G-CERM 01005 ROOM=SPKR_AMP
C3701 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=SPKR_AMP
R3702 39.2 1% 1/32W MF 01005 ROOM=SPKR_AMP
R3701 39.2 1% 1/32W MF 01005 ROOM=SPKR_AMP
C3705 220PF 5% 10V C0G-CERM 01005 ROOM=SPKR_AMP
XW3702 SHORT-10L-0.1MM-SM ROOM=SPKR_AMP PLACE_NEAR=R3703.1:0.5mm
XW3701 SHORT-10L-0.1MM-SM ROOM=SPKR_AMP PLACE_NEAR=R3703.2:0.5mm
R3703 0.100 1% 1/4W MF 0402 ROOM=SPKR_AMP
SPEAKERAMP_TO_SPEAKER_OUT_POS
SPEAKERAMP_TO_SPEAKER_OUT_NEG
C3760 1000PF 10% 16V X5R 01005 ROOM=SPKR_AMP
C3763 1000PF 10% 16V X5R 01005 ROOM=SPKR_AMP
C3700 1000PF 10% 16V X5R 01005 ROOM=SPKR_AMP
C3702 1000PF 10% 16V X5R 01005 ROOM=SPKR_AMP
AP_TO_SPEAKERAMP_RESET_L
R3729 100K 5% 1/32W MF 01005 ROOM=SPKR_AMP
I2C1_AP_SDA
I2C1_AP_SCL
SPEAKERAMP_TO_AP_INT_L
AP_TO_SPEAKERAMP_STAYIN_ALIVE
I2S_AP_TO_SPEAKERAMP_MCLK
I2S_AP_TO_CODEC_ASP_BCLK
I2S_AP_TO_CODEC_ASP_LRCLK
I2S_AP_TO_CODEC_ASP_DOUT
I2S_CODEC_TO_AP_ASP_DIN
GNDP
GNDA
SYNC_DATE=05/29/2014

ARC DRIVER

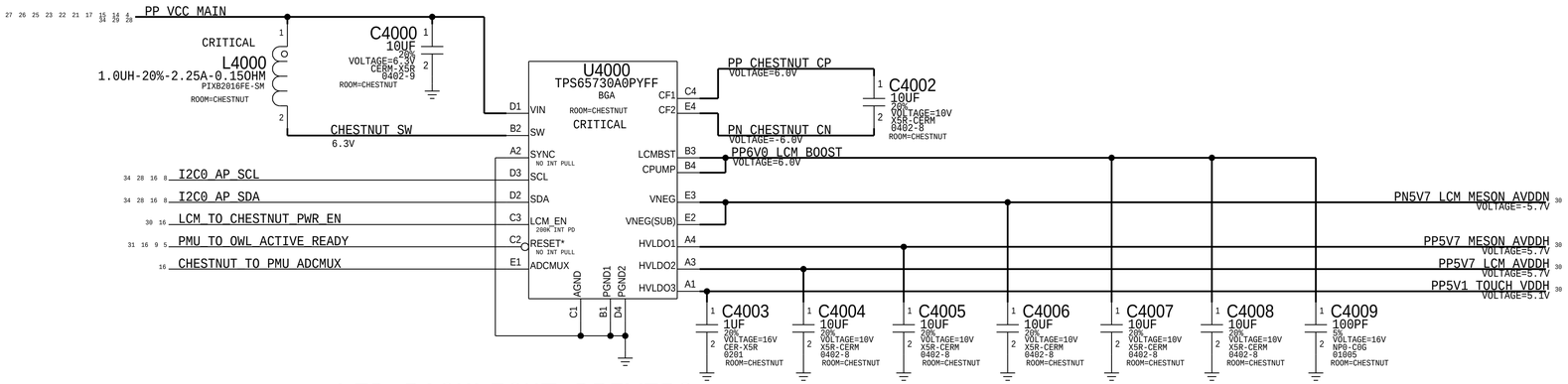
APN: 338S1285
I2C ADDRESS: 1000001

PP VCC MAIN
C3895 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=ARC
C3832 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=ARC
C3835 10UF 20% 6.3V CERM-X5R 0402-9 ROOM=ARC
C3837 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=ARC
PP1V8 VA
C3809 0.1UF 20% 6.3V X6S-CERM 01005 ROOM=ARC
C3830 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=ARC
VOLTAGE=8.0V
PP ARC VBOOST
C3803 10UF 20% 10V X5R-CERM 0402-8 ROOM=ARC
C3848 22UF 20% 10V X5R-CERM 0603-1 ROOM=ARC
C3842 0.1UF 10% 16V X6S-CERM 0201 ROOM=ARC
C3846 100PF 5% 16V NP0-C0G 01005 ROOM=ARC
CRITICAL
L3800 1.2UH-20%-3.0A-0.080OHM PIQA2016T-SM ROOM=ARC
ARC SW
U3800 CS35L21-XWZR WLCSP VER1 ROOM=ARC CRITICAL
A1 B1 C1 D1 VBST
A4 A5 VP
F5 VA
C3829 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=ARC
C3840 4.7UF 20% 6.3V X5R-CERM1 402 ROOM=ARC
FILT+ F2 ARC_DRIVER_FILT
LDO_FILT C5 ARC_DRIVER_LDO_FILT
VSENSE- E3 SOLENOID_TO_ARC_DRIVER_VSENSE_R_N
VSENSE+ E2 SOLENOID_TO_ARC_DRIVER_VSENSE_R_P
ISENSE- F1 ARC_ISENSE_N
ISENSE+ E1 ARC_ISENSE_P
OUT+ D2 ARC_DRIVER_OUT_POS
OUT- C2
IREF+ B7 ARC_IREF
R3811 0.00 0% 1/32W MF 01005 ROOM=ARC
SOLENOID_TO_ARC_DRIVER_VSENSE_N
R3810 0.00 0% 1/32W MF 01005 ROOM=ARC
SOLENOID_TO_ARC_DRIVER_VSENSE_P
NOSTUFF C3810 220PF 10% 10V X7R-CERM 01005 ROOM=ARC
NOSTUFF C3811 220PF 10% 10V X7R-CERM 01005 ROOM=ARC
AP_TO_ARC_RESET_L
R3829 100K 5% 1/32W MF 01005 ROOM=ARC
I2C1_AP_SDA
I2C1_AP_SCL
ARC_TO_AP_INT_L
AP_TO_ARC_STAYIN_ALIVE
PP1V8_VA
I2S_AP_TO_ARC_MCLK
I2S_AP_TO_CODEC_ASP_BCLK
I2S_AP_TO_CODEC_ASP_LRCLK
I2S_AP_TO_CODEC_ASP_DOUT
I2S_CODEC_TO_AP_ASP_DIN
SDA SCL INT* RESET* ALIVE ADO MCLK SCLK LRCK/FSYNC SDIN SDOUT
GNDP GNDA
A3 B3 B4 C3 C4 D3 D4 B5 B6 C6 E4 F3 F4
R3835 44.2K 1% 1/32W MF 01005 ROOM=ARC
NOSTUFF C3804 220PF 20% 10V C0G-CERM 01005 ROOM=ARC
R3802 39.2 1% 1/32W MF 01005 ROOM=ARC
C3801 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=ARC
R3801 39.2 1% 1/32W MF 01005 ROOM=ARC
NOSTUFF C3805 220PF 20% 10V C0G-CERM 01005 ROOM=ARC
XW3802 SHORT-10L-0.1MM-SM ROOM=ARC PLACE_NEAR=R3803.1:0.5mm
XW3801 SHORT-10L-0.1MM-SM ROOM=ARC PLACE_NEAR=R3803.2:0.5mm
R3803 0.100 1% 1/4W MF 0402 ROOM=ARC
XW3810 SHORT-10L-0.1MM-SM ROOM=ARC
NOSTUFF FL3803 120OHM-25%-1.8A-0.06DCR 0402 ROOM=ARC
FL3804 120OHM-25%-1.8A-0.06DCR 0402 NOSTUFF ROOM=ARC
XW3811 SHORT-10L-0.1MM-SM ROOM=ARC
ARC_DRIVER_TO_SOLENOID_OUT_POS
ARC_DRIVER_TO_SOLENOID_OUT_NEG
C3860 1000PF 10% 100V X5R 01005 ROOM=ARC
C3863 1000PF 10% 100V X5R 01005 ROOM=ARC
C3800 1000PF 10% 100V X5R 01005 ROOM=ARC
C3802 1000PF 10% 100V X5R 01005 ROOM=ARC

DISPLAY & TOUCH - POWER SUPPLIES

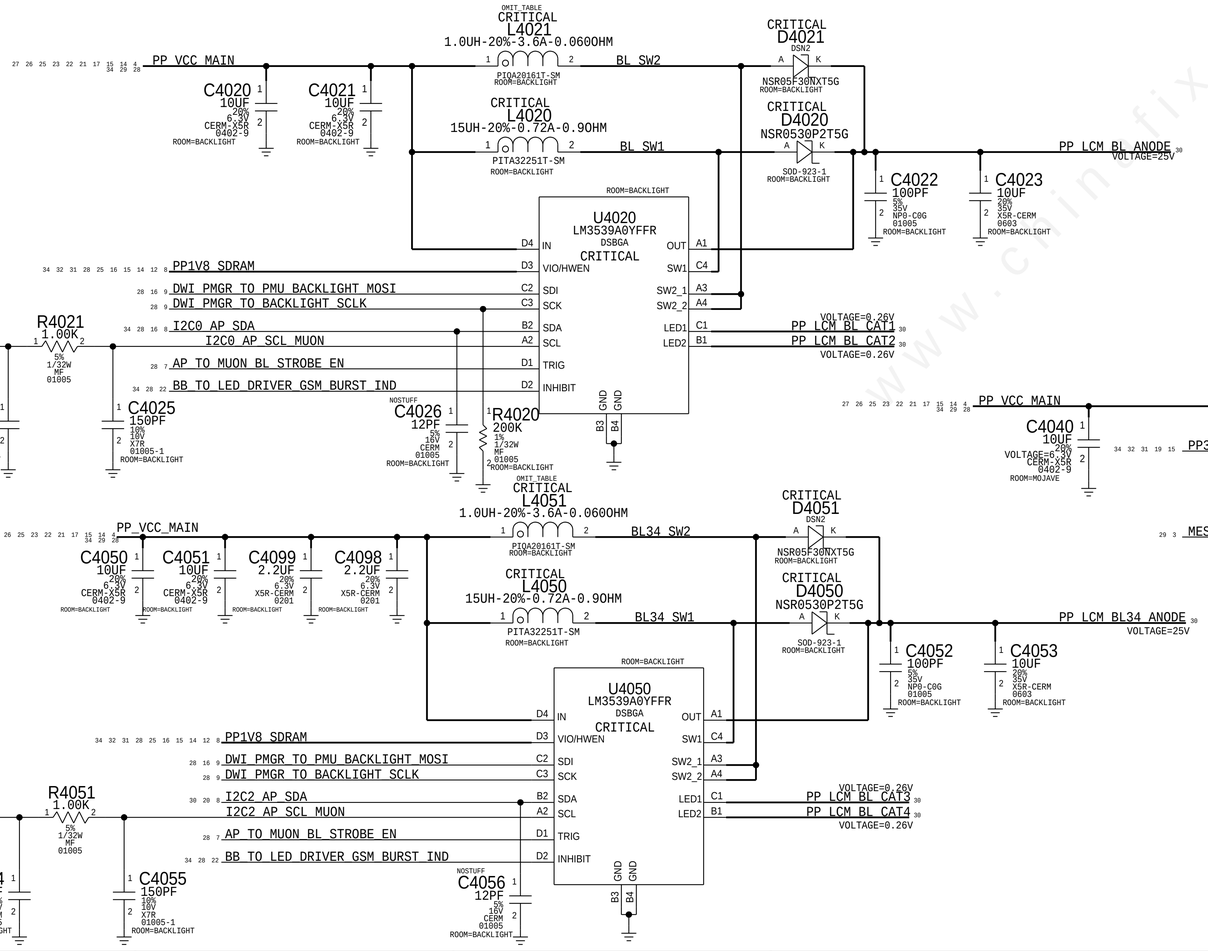
CHESTNUT DISPLAY PMU

APN:338S1172



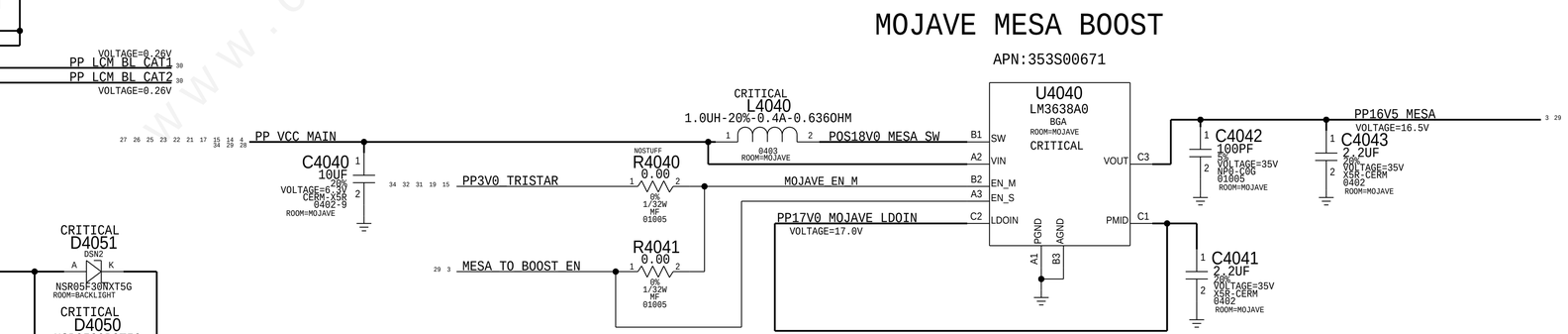
LED BACKLIGHT DRIVERS

APN:353S00407



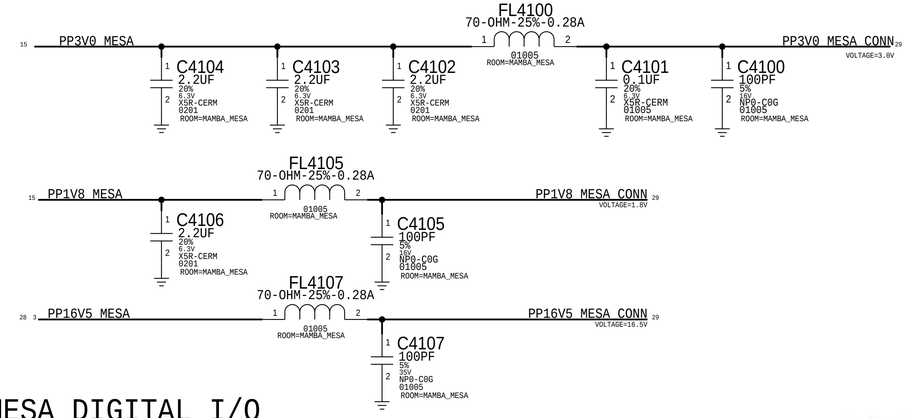
MOJAVE MESA BOOST

APN:353S00671

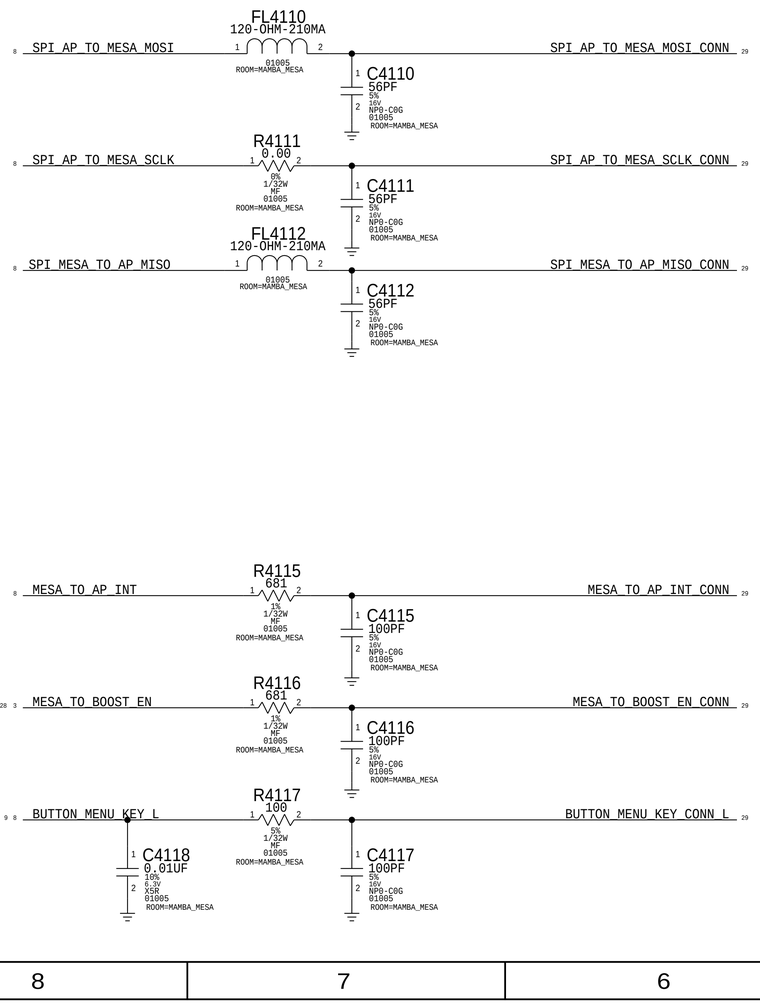


MAMBA & MESA FLEX

MESA POWER

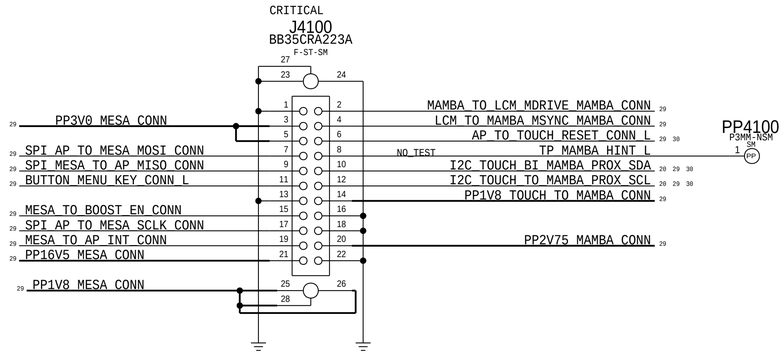


MESA DIGITAL I/O

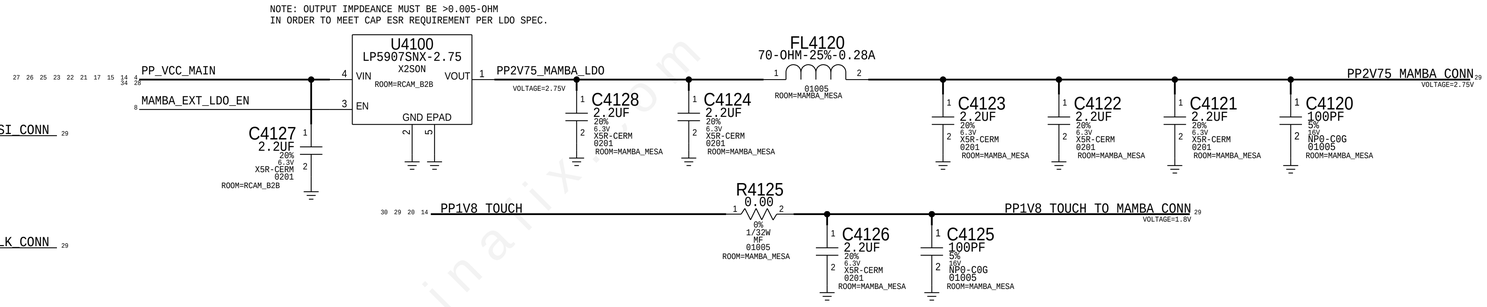


ORB & MESA CONNECTOR

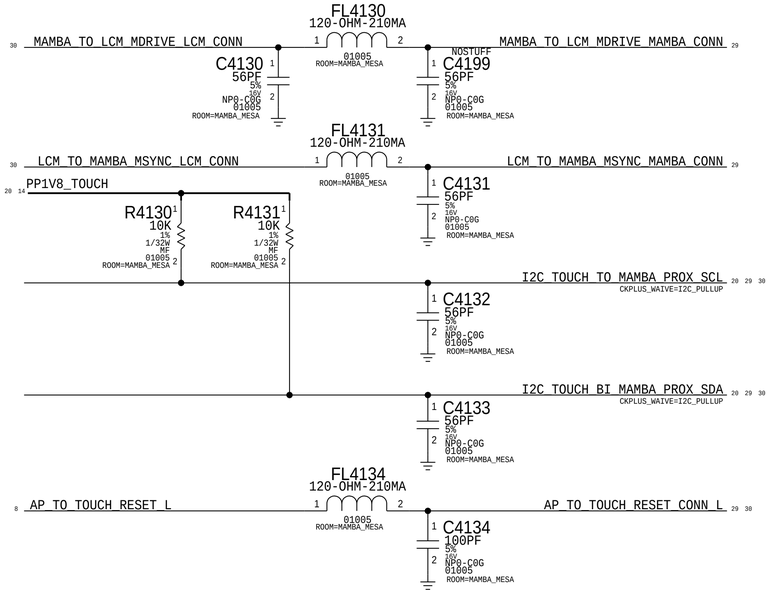
MLB: 516S00056 (RCPT)



MAMBA POWER



MAMBA DIGITAL I/O



NOTE:MAMBA I2C PULL-UPS TO PP1V8_TOUCH INSIDE KEPLER
ADDING R4130, R4131 AS OPTION FOR TWEAKING VALUE

SYNC_DATE=05/29/2014

DISPLAY POWER

PP5V7_LCM_AVDDH → FL4200 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP5V7_LCM_AVDDH_CONN VOLTAGE=5.7V
- C4200 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4201 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4202 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4203 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4204 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PP1V8 → FL4205 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP1V8_LCM_CONN VOLTAGE=1.8V
- C4205 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4206 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PN5V7_LCM_MESON_AVDDN → FL4207 70-OHM-25%-0.28A 01005 ROOM=KEPLER_B2B → PN5V7_LCM_MESON_AVDDN_CONN VOLTAGE=-5.7V
- C4207 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PP5V7_MESON_AVDDH → FL4208 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP5V7_MESON_AVDDH_CONN VOLTAGE=5.7V
- C4208 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PP1V8_TOUCH → FL4209 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP1V8_TOUCH_CONN VOLTAGE=1.8V
- C4215 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=KEPLER_B2B
- C4209 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PP5V1_TOUCH_VDDH → FL4210 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP5V1_TOUCH_VDDH_CONN VOLTAGE=5.1V
- C4210 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

BACKLIGHT

PP_LCM_BL_ANODE → FL4211 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL_ANODE_CONN VOLTAGE=25V
- C4211 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

PP_LCM_BL_CAT1 → FL4212 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL_CAT1_CONN VOLTAGE=0.26V
- C4212 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

PP_LCM_BL_CAT2 → FL4213 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL_CAT2_CONN VOLTAGE=0.26V
- C4213 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

PP_LCM_BL34_ANODE → FL4291 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL34_ANODE_CONN VOLTAGE=25V
- C4291 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

PP_LCM_BL_CAT3 → FL4292 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL_CAT3_CONN VOLTAGE=0.26V
- C4292 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

PP_LCM_BL_CAT4 → FL4293 2400HM-350MA 0201 ROOM=KEPLER_B2B → PP_LCM_BL_CAT4_CONN VOLTAGE=0.26V
- C4293 100PF 5% 35V NP0-C0G 01005 ROOM=KEPLER_B2B

DISPLAY EEPROM I2C

I2C2_AP_SDA
- C4223 56PF 5% 16V NP0-C0G 01005 NOSTUFF ROOM=KEPLER_B2B

I2C2_AP_SCL
- C4224 56PF 5% 16V NP0-C0G 01005 NOSTUFF ROOM=KEPLER_B2B

DISPLAY MIPI

- MIPI_AP_TO_LCM_CLK_P → L4200 CRITICAL 65-OHM-0.1A-0.7-2GHZ TAM0605 SYM_VER=2 ROOM=KEPLER_B2B → MIPI_AP_TO_LCM_CLK_CONN_P
- MIPI_AP_TO_LCM_CLK_N → L4200 → MIPI_AP_TO_LCM_CLK_CONN_N
- MIPI_AP_TO_LCM_DATA0_P → L4201 CRITICAL 65-OHM-0.1A-0.7-2GHZ TAM0605 SYM_VER=2 ROOM=KEPLER_B2B → MIPI_AP_TO_LCM_DATA0_CONN_P
- MIPI_AP_TO_LCM_DATA0_N → L4201 → MIPI_AP_TO_LCM_DATA0_CONN_N
- MIPI_AP_TO_LCM_DATA1_P → L4202 CRITICAL 65-OHM-0.1A-0.7-2GHZ TAM0605 SYM_VER=2 ROOM=KEPLER_B2B → MIPI_AP_TO_LCM_DATA1_CONN_P
- MIPI_AP_TO_LCM_DATA1_N → L4202 → MIPI_AP_TO_LCM_DATA1_CONN_N
- MIPI_AP_TO_LCM_DATA2_P → L4293 CRITICAL 65-OHM-0.1A-0.7-2GHZ TAM0605 SYM_VER=2 ROOM=KEPLER_B2B → MIPI_AP_TO_LCM_DATA2_CONN_P
- MIPI_AP_TO_LCM_DATA2_N → L4293 → MIPI_AP_TO_LCM_DATA2_CONN_N
- MIPI_AP_TO_LCM_DATA3_P → L4294 CRITICAL 65-OHM-0.1A-0.7-2GHZ TAM0605 SYM_VER=2 ROOM=KEPLER_B2B → MIPI_AP_TO_LCM_DATA3_CONN_P
- MIPI_AP_TO_LCM_DATA3_N → L4294 → MIPI_AP_TO_LCM_DATA3_CONN_N

DISPLAY CONTROL SIGNALS

- LCM_TO_CHESTNUT_PWR_EN → FL4220 120-OHM-210MA 01005 ROOM=KEPLER_B2B → LCM_TO_CHESTNUT_PWR_EN_CONN
  - C4220 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- AP_TO_LCM_RESET_L → FL4221 120-OHM-210MA 01005 ROOM=KEPLER_B2B → AP_TO_LCM_RESET_CONN_L
  - R4220 100K 5% 1/32W MF 01005 ROOM=KEPLER_B2B
  - C4221 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- PMU_TO_LCM_PANICB → R4222 10 5% 1/32W MF 01005 ROOM=KEPLER_B2B → PMU_TO_LCM_PANICB_CONN
  - C4222 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

OWL/TOUCH INTERFACE

- TOUCH_TO_BBPMU_FORCE_PWM → FL4230 120-OHM-210MA 01005 ROOM=KEPLER_B2B → LCM_TO_OWL_BSYNC_CONN
  - C4230 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- UART_OWL_TO_TOUCH_TXD → FL4231 120-OHM-210MA 01005 ROOM=KEPLER_B2B → UART_OWL_TO_TOUCH_TXD_CONN
  - C4231 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- TOUCH_TO_OWL_ACCEL_DATA_REQUEST → FL4232 120-OHM-210MA 01005 ROOM=KEPLER_B2B → TOUCH_TO_OWL_ACCEL_DATA_REQUEST_CONN
  - C4232 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

PROX/TOUCH INTERFACE

PP1V8_TOUCH
- R4240 100K 5% 1/32W MF 01005 ROOM=KEPLER_B2B
- C4240 0.22UF 20% 6.3V X5R 01005-1 ROOM=KEPLER_B2B

TOUCH_TO_PROX_TX_EN_CONN_L → U4240 CRITICAL 74AUP1G04GX SOT1226 ROOM=KEPLER_B2B → TOUCH_TO_PROX_TX_EN_BUFF
- NC

TOUCH_TO_PROX_RX_EN_FCAM_CONN → FL4241 120-OHM-210MA 01005 ROOM=KEPLER_B2B → TOUCH_TO_PROX_RX_EN_LCM_CONN
- C4241 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

KEPLER CONNECTOR

MLB: 516S00051 (RCPT)
FLEX: 516S00050 (PLUG)

CRITICAL J4200 AA27-S054VA1 F-ST-SM ROOM=DISPLAY

PP_LCM_BL_CAT3_CONN	1	2	PP_LCM_BL_CAT2_CONN
PP_LCM_BL_CAT4_CONN	3	4	PP_LCM_BL_CAT1_CONN
PP_LCM_BL34_ANODE_CONN	5	6	PP_LCM_BL_ANODE_CONN
	7	8	NC_KEPLER_MESON_TEST2_MUX_CONN
MIPI_AP_TO_LCM_DATA3_CONN_N	9	10	NC_KEPLER_MESON_TEST0_MUX_CONN
MIPI_AP_TO_LCM_DATA3_CONN_P	11	12	SPI_AP_TO_TOUCH_CS_CONN_L
	13	14	I2C2_AP_SDA
MIPI_AP_TO_LCM_DATA2_CONN_N	15	16	
MIPI_AP_TO_LCM_DATA2_CONN_P	17	18	TOUCH_TO_OWL_ACCEL_DATA_REQUEST_CONN
	19	20	I2C_TOUCH_BI_MAMBA_PROX_SDA
MIPI_AP_TO_LCM_CLK_CONN_N	21	22	SPI_AP_TO_TOUCH_SCLK_CONN
MIPI_AP_TO_LCM_CLK_CONN_P	23	24	TOUCH_TO_PROX_RX_EN_LCM_CONN
	25	26	AP_TO_TOUCH_RESET_CONN_L
MIPI_AP_TO_LCM_DATA1_CONN_N	27	28	TOUCH_TO_PROX_TX_EN_CONN_L
MIPI_AP_TO_LCM_DATA1_CONN_P	29	30	PROX_TO_TOUCH_RX_LCM_CONN
	31	32	SPI_TOUCH_TO_AP_MISO_CONN
MIPI_AP_TO_LCM_DATA0_CONN_N	33	34	SPI_AP_TO_TOUCH_MOSI_CONN
MIPI_AP_TO_LCM_DATA0_CONN_P	35	36	LCM_TO_OWL_BSYNC_CONN
	37	38	I2C2_AP_SCL
MAMBA_TO_LCM_MDRIVE_LCM_CONN	39	40	I2C_TOUCH_TO_MAMBA_PROX_SCL
LCM_TO_MAMBA_MSYNC_LCM_CONN	41	42	UART_OWL_TO_TOUCH_TXD_CONN
PP5V1_TOUCH_VDDH_CONN	43	44	NC_KEPLER_PHOTON_PIFA_CONN
PP5V7_MESON_AVDDH_CONN	45	46	PMU_TO_LCM_PANICB_CONN
PP1V8_LCM_CONN	47	48	AP_TO_LCM_RESET_CONN_L
PP5V7_LCM_AVDDH_CONN	49	50	LCM_TO_CHESTNUT_PWR_EN_CONN
PN5V7_LCM_MESON_AVDDN_CONN	51	52	TOUCH_TO_AP_INT_L_CONN
PP1V8_TOUCH_CONN	53	54	AP_TO_TOUCH_CLK32K_RESET_CONN_L
	57	58	

AP/TOUCH INTERFACE

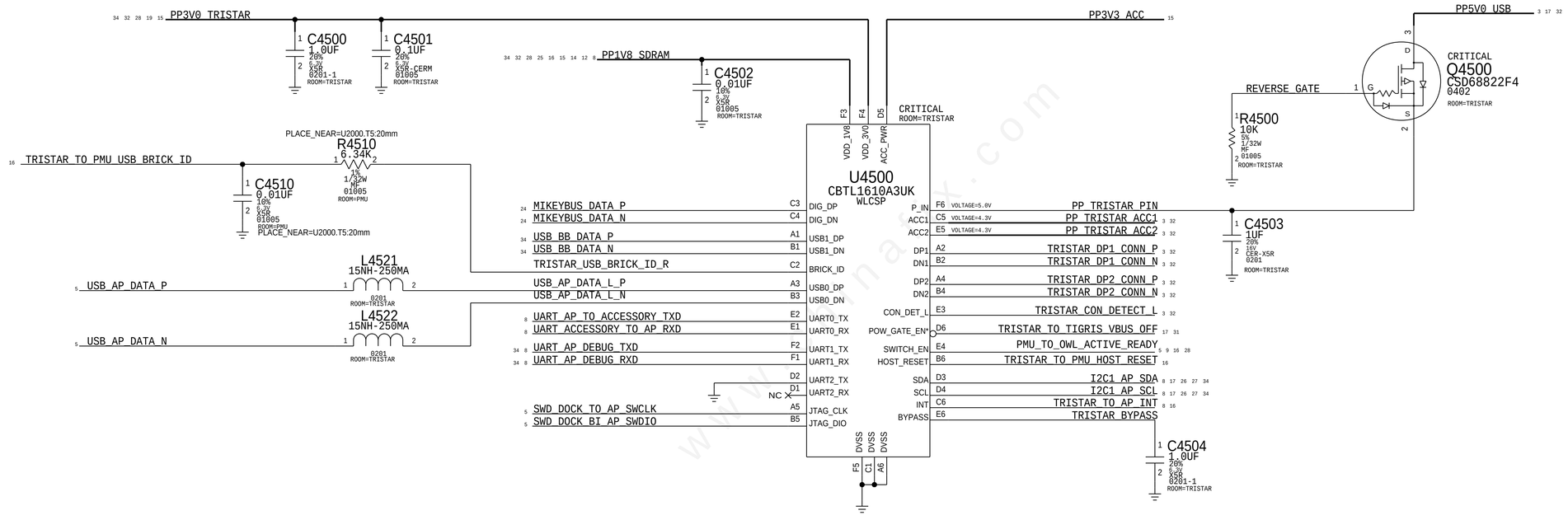
- SPI_AP_TO_TOUCH_CS_L → FL4250 120-OHM-210MA 01005 ROOM=KEPLER_B2B → SPI_AP_TO_TOUCH_CS_CONN_L
  - C4250 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- SPI_AP_TO_TOUCH_SCLK → FL4251 120-OHM-210MA 01005 ROOM=KEPLER_B2B → SPI_AP_TO_TOUCH_SCLK_CONN
  - C4251 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
  - C4299 56PF 5% 16V NP0-C0G 01005 NOSTUFF ROOM=KEPLER_B2B
- SPI_AP_TO_TOUCH_MOSI → FL4252 120-OHM-210MA 01005 ROOM=KEPLER_B2B → SPI_AP_TO_TOUCH_MOSI_CONN
  - C4252 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- SPI_TOUCH_TO_AP_MISO → FL4253 120-OHM-210MA 01005 ROOM=KEPLER_B2B → SPI_TOUCH_TO_AP_MISO_CONN
  - C4253 56PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- TOUCH_TO_AP_INT_L → FL4254 120-OHM-210MA 01005 ROOM=KEPLER_B2B → TOUCH_TO_AP_INT_L_CONN
  - C4254 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B
- AP_TO_TOUCH_CLK32K_RESET_L → FL4255 120-OHM-210MA 01005 ROOM=KEPLER_B2B → AP_TO_TOUCH_CLK32K_RESET_CONN_L
  - C4255 100PF 5% 16V NP0-C0G 01005 ROOM=KEPLER_B2B

I2C_TOUCH_BI_MAMBA_PROX_SDA
- C4260 56PF 5% 16V NP0-C0G 01005 NOSTUFF ROOM=KEPLER_B2B

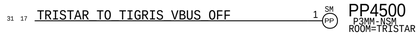
I2C_TOUCH_TO_MAMBA_PROX_SCL
- C4261 56PF 5% 16V NP0-C0G 01005 NOSTUFF ROOM=KEPLER_B2B

TRISTAR 2

APN:343S0695



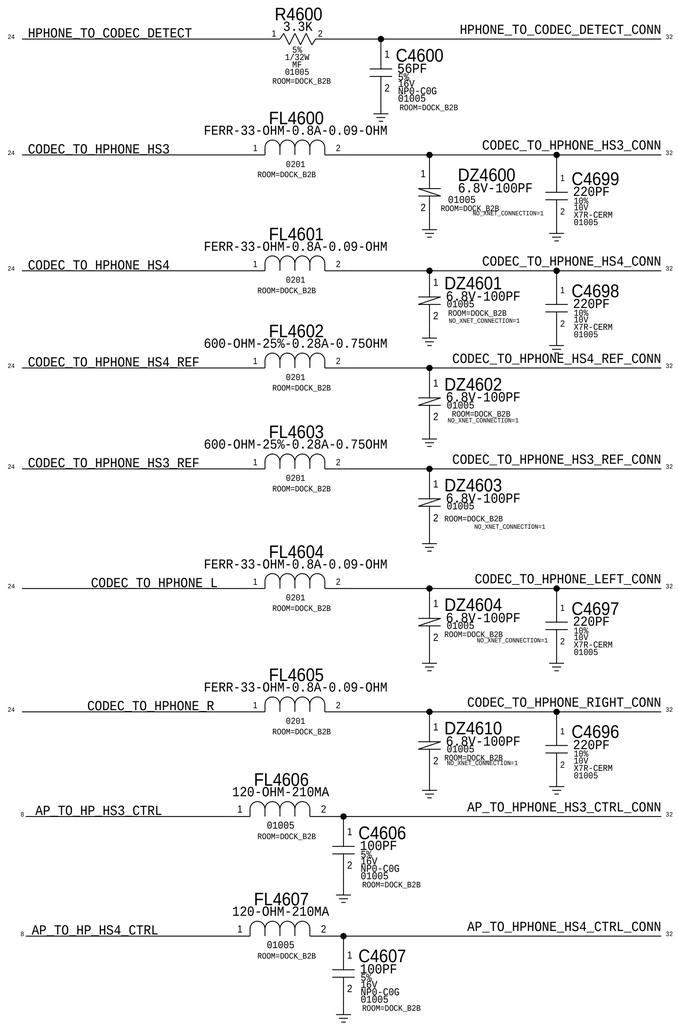
PROBE POINTS



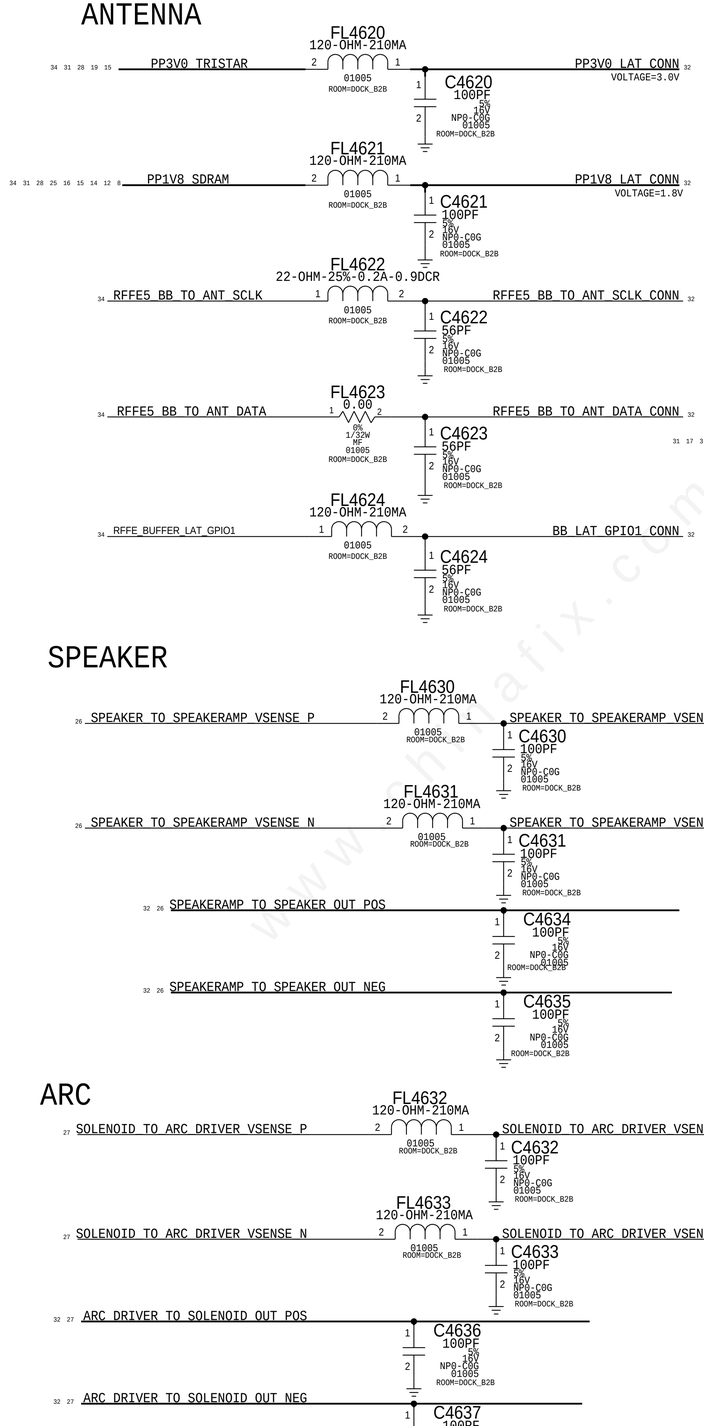
SYNC_DATE=05/29/2014

DOCK FLEX CONNECTOR

AUDIO JACK

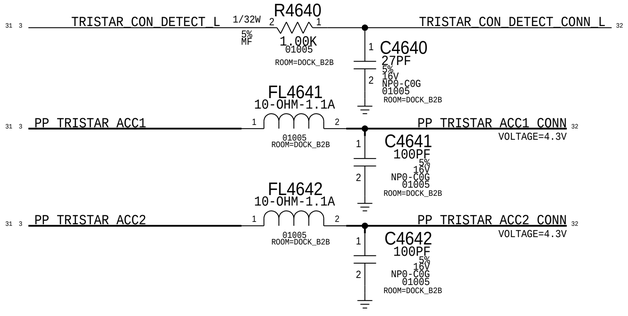


ANTENNA



SPEAKER

TRISTAR

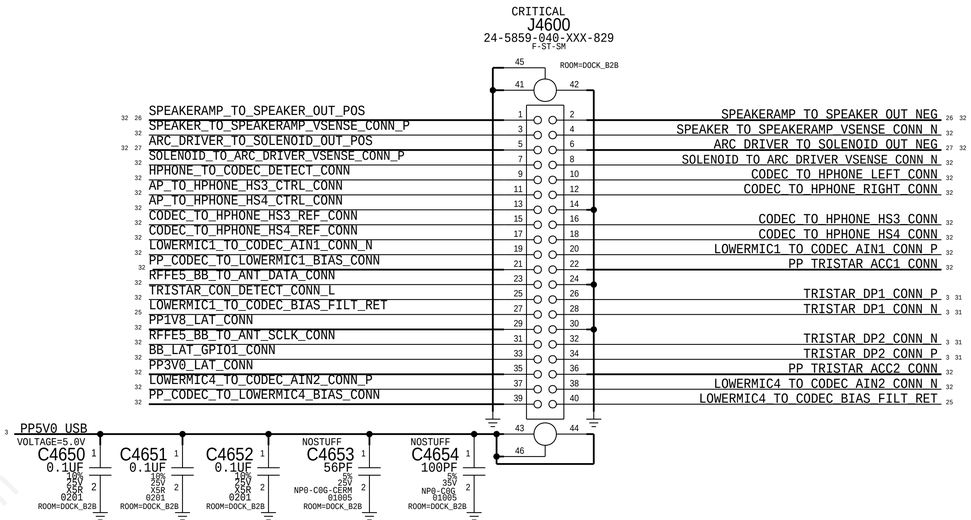


ARC

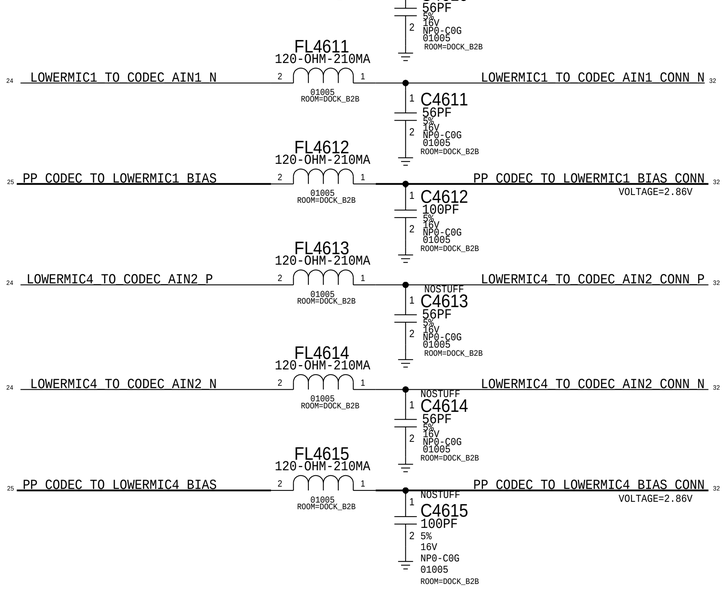
DOCK FLEX CONNECTOR

MLB: 516S00033 (RCPT)

FLEX: 516S00034 (PLUG)



LOWER MIC1/4



SYNC_DATE=05/29/2014

BUTTON FLEX

MIC2
ANC REF MIC

FL4700
120-OHM-210MA
01005
ROOM=BUTTON_B2B

25 PP_CODEC_TO_REARMIC2_BIAS

PP_CODEC_TO_REARMIC2_BIAS_CONN 33
VOLTAGE=2.86V

C4700
100PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

FL4701
120-OHM-210MA
01005
ROOM=BUTTON_B2B

REARMIC2_TO_CODEC_AIN3_P

REARMIC2_TO_CODEC_AIN3_CONN_P 33

C4701
56PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

FL4702
120-OHM-210MA
01005
ROOM=BUTTON_B2B

24 REARMIC2_TO_CODEC_AIN3_N

REARMIC2_TO_CODEC_AIN3_CONN_N 33

C4702
56PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

R4710
0.00
0%
1/32W
MF
01005
ROOM=BUTTON_B2B

34 16 9 8 BUTTON_HOLD_KEY_L

BUTTON_HOLD_KEY_CONN_L 33

C4710
27PF
5%
6.3V
NP0-C0G
0201
ROOM=BUTTON_B2B

DZ4710
5.5V-6.2PF
0201
ROOM=BUTTON_B2B

FL4711
120-OHM-210MA
01005
ROOM=L_BUTTON_B2B

34 16 8 BUTTON_RINGER_A

BUTTON_RINGER_A_CONN 33

C4711
27PF
5%
6.3V
NP0-C0G
0201
ROOM=L_BUTTON_B2B

DZ4711
5.5V-6.2PF
0201
ROOM=L_BUTTON_B2B

NORTH_AC_GND_SCREW 4 33

FL4712
120-OHM-210MA
01005
ROOM=L_BUTTON_B2B

34 16 8 BUTTON_VOL_DOWN_L

BUTTON_VOL_DOWN_CONN_L 33

C4712
100PF
5%
16V
NP0-C0G
01005
ROOM=L_BUTTON_B2B

DZ4712
12V-33PF
01005-1
ROOM=L_BUTTON_B2B

NORTH_AC_GND_SCREW 4 33

FL4713
120-OHM-210MA
01005
ROOM=L_BUTTON_B2B

34 16 8 BUTTON_VOL_UP_L

BUTTON_VOL_UP_CONN_L 33

C4713
100PF
5%
16V
NP0-C0G
01005
ROOM=L_BUTTON_B2B

DZ4713
12V-33PF
01005-1
ROOM=L_BUTTON_B2B

NORTH_AC_GND_SCREW 4 33

BUTTONS:
HOLD
RINGER
VOL UP/DOWN

RIGHT BUTTON FLEX CONNECTOR

MLB: 516S00047 (RCPT)
FLEX: 516S00046 (PLUG)
CRITICAL
ROOM=BUTTON_B2B

J4700
BM28P0.6-10DS-0.35V
F-ST-SM

11 12 PP_LED_DRIVER_COOL_LED 22 33

1 2 BUTTON_HOLD_KEY_CONN_L 33
3 4 REARMIC2_TO_CODEC_AIN3_CONN_P 33
5 6 REARMIC2_TO_CODEC_AIN3_CONN_N 33
7 8 PP_CODEC_TO_REARMIC2_BIAS_CONN 33
9 10 LED_MODULE_NTC_CONN 33

13 14 PP_LED_DRIVER_WARM_LED 22 33

LEFT BUTTON FLEX CONNECTOR

MLB: 516S1317
CRITICAL
ROOM=L_BUTTON_B2B

J4701
505066-0610
F-ST-SM

7 8

NC 1 2 BUTTON_VOL_DOWN_CONN_L 33
NC 3 4 BUTTON_VOL_UP_CONN_L 33
5 6

33 BUTTON_RINGER_A_CONN 9 10

XW4701
SHORT-10L-0.1MM-SM
1 2

STROBE:
WARM LED
COOL LED
MODULE NTC

PP_LED_DRIVER_WARM_LED 22 33

C4723
100PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

C4724
27PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

PP_LED_DRIVER_COOL_LED 22 33

C4721
100PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

C4722
27PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

FL4720
120-OHM-210MA
01005
ROOM=BUTTON_B2B

22 LED_MODULE_NTC

LED_MODULE_NTC_CONN 33

R4720
51.1K
1%
1/32W
MF
01005
ROOM=BUTTON_B2B

C4720
100PF
5%
16V
NP0-C0G
01005
ROOM=BUTTON_B2B

SYNC_DATE=05/29/2014

BASEBAND, WLAN, BT & STOCKHOLM

SUBDESIGN_SUFFIX=RF

RADIO_MLB_MIMO

SHARED POWER

PP_VCC_MAIN
PP3V0_TRISTAR
PP1V8_SDRAM

BASEBAND

PCIE0_AP_TO_BB_TX_P
PCIE0_AP_TO_BB_TX_N
PCIE0_BB_TO_AP_TX_P
PCIE0_BB_TO_AP_TX_N
PCIE0_AP_TO_BB_REFCLK_P
PCIE0_AP_TO_BB_REFCLK_N
PCIE0_AP_TO_BB_PERST_L
PCIE0_AP_TO_BB_CLKREQ_L
PCIE0_BB_TO_PMU_HOST_WAKE_L
PCIE0_AP_TO_BB_DEV_WAKE
I2S_AP_TO_BB_WS
I2S_AP_TO_BB_CLK
I2S_AP_TO_BB_TX
I2S_BB_TO_AP_TX
AP_TO_BBPMU_RADIO_ON_L
PMU_TO_BBPMU_RESET_L
AP_TO_BB_RESET_L
BB_TO_AP_RESET_DET_L
BB_TO_LED_DRIVER_GSM_BURST_IND
AP_TO_BB_MESA_ON_L
BB_TO_AP_GPS_TIME_MARK
AP_TO_BB_COREDUMP_TRIG
AP_TO_BB_IPC_GPIO
TOUCH_TO_BBPMU_FORCE_PWM
UART0_OWL_TO_BB_TX
UART0_BB_TO_OWL_TX
USB_BB_DATA_P
USB_BB_DATA_N
USB_BB_VBUS_DETECT
SWD_AP_PERIPHERAL_SWCLK
SWD_IO_BB_JTAG_TMS
RFFE5_BB_TO_ANT_SCLK
RFFE5_BB_TO_ANT_DATA
RFFE_BUFFER_LAT_GPIO1
BB_TO_PMU_AMUX_LDO11_SIM1
BB_TO_PMU_AMUX_SMPS1
BB_TO_PMU_AMUX_SMPS3
BB_TO_PMU_AMUX_SMPS4

WLAN

PCIE_AP_TO_WLAN_TX_P
PCIE_AP_TO_WLAN_TX_N
PCIE_WLAN_TO_AP_TX_P
PCIE_WLAN_TO_AP_TX_N
PCIE_AP_TO_WLAN_REFCLK_P
PCIE_AP_TO_WLAN_REFCLK_N
PCIE_AP_TO_WLAN_PERST_L
PCIE_AP_TO_WLAN_DEV_WAKE
PCIE_WLAN_TO_AP_CLKREQ_L
UART4_AP_TO_WLAN_TX
UART4_AP_TO_WLAN_RTS_L
UART4_WLAN_TO_AP_TX
UART4_WLAN_TO_AP_RTS_L
PMU_TO_WLAN_32K_CLK
PMU_TO_WLAN_REG_ON
WLAN_TO_PMU_HOST_WAKE
OWL_TO_WLAN_CONTEXT_A
OWL_TO_WLAN_CONTEXT_B

BLUETOOTH

I2S_AP_TO_BT_LRCK
I2S_AP_TO_BT_BCLK
I2S_AP_TO_BT_DOUT
I2S_BT_TO_AP_DOUT
UART1_AP_TO_BT_TX
UART1_AP_TO_BT_RTS_L
UART1_BT_TO_AP_TX
UART1_BT_TO_AP_RTS_L
PMU_TO_BT_REG_ON
BT_TO_PMU_HOST_WAKE
AP_TO_BT_WAKE

STOCKHOLM

UART3_AP_TO_STOCKHOLM_TXD
UART3_AP_TO_STOCKHOLM_RTS_L
UART3_STOCKHOLM_TO_AP_TXD
UART3_STOCKHOLM_TO_AP_RTS_L
PMU_TO_STOCKHOLM_EN
STOCKHOLM_TO_PMU_HOST_WAKE
AP_TO_STOCKHOLM_DEV_WAKE
AP_TO_STOCKHOLM_FW_DWLD_REQ

ANT

AP_TO_STOCKHOLM_ANT

AP DEBUG

PP1V8
DFU_STATUS
FORCE_DFU
PMU_TO_SYSTEM_COLD_RESET_L
I2C0_AP_SCL
I2C0_AP_SDA
I2C1_AP_SCL
I2C1_AP_SDA
BUTTON_HOLD_KEY_L
BUTTON_MENU_KEY_L
BUTTON_RINGER_A
BUTTON_VOL_DOWN_L
BUTTON_VOL_UP_L
PMU_GPIO20
PMU_GPIO21
OWL_FUNC2
AP_RESERVED2
AP_RESERVED1
AP_RESERVED0
PMU_AMUX_AY
PMU_AMUX_BY

PP_VCC_MAIN
PP3V0_TRISTAR
PP1V8_SDRAM
PCIE0_AP_TO_BB_TX_P
PCIE0_AP_TO_BB_TX_N
PCIE0_BB_TO_AP_TX_P
PCIE0_BB_TO_AP_TX_N
PCIE0_AP_TO_BB_REFCLK_P
PCIE0_AP_TO_BB_REFCLK_N
PCIE0_AP_TO_BB_PERST_L
PCIE0_AP_TO_BB_CLKREQ_L
PCIE0_BB_TO_PMU_HOST_WAKE_L
AP_TO_BB_PCIE_DEV_WAKE
I2S_AP_TO_BB_WS
I2S_AP_TO_BB_CLK
I2S_AP_TO_BB_TX
I2S_BB_TO_AP_TX
AP_TO_BBPMU_RADIO_ON_L
PMU_TO_BBPMU_RESET_L
AP_TO_BB_RESET_L
BB_TO_AP_RESET_DET_L
BB_TO_LED_DRIVER_GSM_BURST_IND
AP_TO_BB_MESA_ON_L
BB_TO_AP_GPS_TIME_MARK
AP_TO_BB_COREDUMP_TRIG
AP_TO_BB_IPC_GPIO
TOUCH_TO_BBPMU_FORCE_PWM
UART0_OWL_TO_BB_TX
UART0_BB_TO_OWL_TX
USB_BB_DATA_P
USB_BB_DATA_N
USB_BB_VBUS_DETECT
SWD_AP_PERIPHERAL_SWCLK
SWD_IO_BB_JTAG_TMS
RFFE5_BB_TO_ANT_SCLK
RFFE5_BB_TO_ANT_DATA
RFFE_BUFFER_LAT_GPIO1
PP_UIM1_LDO11
PP_0V9_SMPS1
PP_1V0_SMPS3
PP_1V85_SMPS4
AP_TO_STOCKHOLM_ANT
PP1V8
DFU_STATUS
FORCE_DFU
PMU_TO_SYSTEM_COLD_RESET_L
I2C0_AP_SCL
I2C0_AP_SDA
I2C1_AP_SCL
I2C1_AP_SDA
BUTTON_HOLD_KEY_L
BUTTON_MENU_KEY_L
BUTTON_RINGER_A
BUTTON_VOL_DOWN_L
BUTTON_VOL_UP_L
NC_PMU_GPIO20 (NO_TEST)
NC_PMU_GPIO21 (NO_TEST)
NC_OWL_FUNC2 (NO_TEST)
NC_AP_RESERVED2 (NO_TEST)
UART_AP_DEBUG_RXD
UART_AP_DEBUG_TXD
NC_PMU_AMUX_AY (NO_TEST)
NC_PMU_AMUX_BY (NO_TEST)

PCIE_AP_TO_WLAN_TX_P
PCIE_AP_TO_WLAN_TX_N
PCIE_WLAN_TO_AP_TX_P
PCIE_WLAN_TO_AP_TX_N
PCIE_AP_TO_WLAN_REFCLK_P
PCIE_AP_TO_WLAN_REFCLK_N
PCIE_AP_TO_WLAN_RESET_L
PCIE_AP_TO_WLAN_DEV_WAKE
PCIE_WLAN_TO_AP_CLKREQ_L
UART4_AP_TO_WLAN_TX
UART4_AP_TO_WLAN_RTS_L
UART4_WLAN_TO_AP_TX
UART4_WLAN_TO_AP_RTS_L
PMU_TO_WLAN_32K_CLK
PMU_TO_WLAN_REG_ON
WLAN_TO_PMU_HOST_WAKE
OWL_TO_WLAN_CONTEXT_A
OWL_TO_WLAN_CONTEXT_B
I2S_AP_TO_BT_LRCLK
I2S_AP_TO_BT_BCLK
I2S_AP_TO_BT_DOUT
I2S_BT_TO_AP_DOUT
UART1_AP_TO_BT_TX
UART1_AP_TO_BT_RTS_L
UART1_BT_TO_AP_TX
UART1_BT_TO_AP_RTS_L
PMU_TO_BT_REG_ON
BT_TO_PMU_HOST_WAKE
AP_TO_BT_WAKE
UART3_AP_TO_STOCKHOLM_TXD
UART3_AP_TO_STOCKHOLM_RTS_L
UART3_STOCKHOLM_TO_AP_TXD
UART3_STOCKHOLM_TO_AP_RTS_L
PMU_TO_STOCKHOLM_EN
STOCKHOLM_TO_PMU_HOST_WAKE
AP_TO_STOCKHOLM_DEV_WAKE
AP_TO_STOCKHOLM_FW_DWLD_REQ

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
A	0004600844	PRODUCTION RELEASED	2015-07-30

N66 RADIO_MLB_MIMO - PVT
JULY 30, 2015

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2	2	ELNA & UAT ANT FEED
3	3	FE: ANT CONNECTORS AND UAT TUNER
4	30	DEBUG CONN & TEST POINTS
5	31	CELLULAR BASEBAND: POWER1
6	32	CELLULAR BASEBAND: POWER2
7	33	CELLULAR BASEBAND: CONTROL AND INTERFACES
8	34	CELLULAR BASEBAND: GPIOS
9	35	CELLULAR PMU: CONTROL AND CLOCKS
10	36	CELLULAR PMU: SWITCHERS AND LDOS
11	37	CELLULAR PMU: ET MODULATOR
12	38	CELLULAR TRANSCEIVER: POWER
13	39	CELLULAR TRANSCEIVER: PRX PORTS
14	40	CELLULAR TRANSCEIVER: DRX/GPS PORTS
15	41	CELLULAR TRANSCEIVER: TX PORTS
16	42	CELLULAR FRONT END: LB PAD
17	43	CELLULAR FRONT END: MB PAD
18	44	CELLULAR FRONT END: HB PAD
19	45	CELLULAR FRONT END: 2G PA
20	46	CELLULAR FRONT END: LB ASM
21	47	CELLULAR FRONT END: MB-HB ASM
22	48	CELLULAR FRONT END: DIVERSITY
23	49	SIM
24	50	WIFI/BT: WIFI/BT MODULE
25	51	STOCKHOLM

SIM ESD DIODE ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
377S0163	377S00042	ALTERNATE	VR301_RF	ST ESD DIODE

19.2MHZ XTAL ALTERNATE

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
197S0565	197S0593	ALTERNATE	Y_XO_RF	XTAL, 19.2MHZ
197S0598	197S0593	ALTERNATE	Y_XO_RF	XTAL, 19.2MHZ

ROW HB PAD MATCHING BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
152S1907	1	3.3NH, INDUCTOR	L4105_RF	ROW
152S2007	1	8.2NH, INDUCTOR	L4401_RF	ROW
131S0426	1	22PF, CAPACITOR	C4405_RF	ROW
152S2042	1	1.8NH, INDUCTOR	C4406_RF	ROW
131S0425	1	0.5PF, CAPACITOR	L4407_RF	ROW
152S2041	1	10.0NH, INDUCTOR	L4403_RF	ROW
131S00071	1	33PF, CAPACITOR	C4407_RF	ROW
152S00143	1	15NH, INDUCTOR	L4404_RF	ROW
131S00071	1	33PF, CAPACITOR	C4408_RF	ROW
117S0108	1	51 OHM, RESISTOR	L4410_RF	ROW
131S0599	1	1.5PF, CAPACITOR	C3921_RF	ROW
152S00052	1	3.4NH, INDUCTOR	L3910_RF	ROW
117S0201	1	0 OHM, RESISTOR	L3911_RF	ROW
152S2039	1	3.8NH, INDUCTOR	L3919_RF	ROW
131S0414	1	5.0PF, CAPACITOR	C4410_RF	ROW

ROW LB PAD MATCHING BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
131S0555	1	1.0PF, CAPACITOR	L4203_RF	ROW
152S00158	1	4.1NH, INDUCTOR	C4205_RF	ROW
131S0425	1	0.5PF, CAPACITOR	L4204_RF	ROW
152S2053	1	4.7NH, INDUCTOR	C4206_RF	ROW
131S0555	1	1.0PF, CAPACITOR	L4205_RF	ROW
152S00027	1	3.7NH, INDUCTOR	C4207_RF	ROW
131S0557	1	0.7PF, CAPACITOR	L4206_RF	ROW
152S2001	1	2.4NH, INDUCTOR	C4208_RF	ROW
131S0351	1	0.4PF, CAPACITOR	L4207_RF	ROW
152S2002	1	2.7NH, INDUCTOR	C4209_RF	ROW
152S2002	1	2.7NH, INDUCTOR	C4211_RF	ROW
152S2056	1	5.6NH, INDUCTOR	C4212_RF	ROW
131S0340	1	2.0PF, CAPACITOR	L4219_RF	ROW
152S2021	1	1.5NH, INDUCTOR	C4213_RF	ROW
118S0724	1	0 OHM, RESISTOR	R4201_RF	ROW
131S0551	1	1.2PF, CAPACITOR	L4601_RF	ROW
152S1342	1	15NH, INDUCTOR	L3902_RF	ROW
131S0630	1	27PF, CAPACITOR	C3902_RF	ROW

RF2 HB PAD MATCHING BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
152S1990	1	3.0NH, INDUCTOR	L4105_RF	RF2
131S0377	1	1.2PF, CAPACITOR	C4108_RF	RF2
131S0631	1	0.3PF, CAPACITOR	L4401_RF	RF2
152S2042	1	1.8NH, INDUCTOR	C4405_RF	RF2
152S2042	1	1.8NH, INDUCTOR	C4406_RF	RF2
131S0631	1	0.3PF, CAPACITOR	L4407_RF	RF2
131S00001	1	0.1PF, CAPACITOR	L4403_RF	RF2
152S2051	1	1.3NH, INDUCTOR	C4407_RF	RF2
152S2051	1	1.3NH, INDUCTOR	C4408_RF	RF2
131S0805	1	100PF, CAPACITOR	C4409_RF	RF2
131S0431	1	0.2PF, CAPACITOR	L4410_RF	RF2
131S0381	1	1.6PF, CAPACITOR	C3921_RF	RF2
152S00027	1	3.7NH, INDUCTOR	L3910_RF	RF2
117S0201	1	0 OHM, RESISTOR	L3911_RF	RF2
152S2045	1	3.0NH, INDUCTOR	L3919_RF	RF2
152S00052	1	3.4NH, INDUCTOR	L3912_RF	RF2
131S0599	1	1.5PF, CAPACITOR	C3922_RF	RF2
131S0630	1	27PF, CAPACITOR	C3911_RF	RF2
131S0414	1	5.0PF, CAPACITOR	C4410_RF	RF2

RF2 LB PAD MATCHING BOM OPTIONS

PART#	TRUE QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
131S0555	TRUE	1.0PF, CAPACITOR	L4203_RF	RF2
152S00158	TRUE	4.1NH, INDUCTOR	C4205_RF	RF2
131S0425	TRUE	0.5PF, CAPACITOR	L4204_RF	RF2
152S2053	TRUE	4.7NH, INDUCTOR	C4206_RF	RF2
131S0555	TRUE	1.0PF, CAPACITOR	L4205_RF	RF2
152S00027	TRUE	3.7NH, INDUCTOR	C4207_RF	RF2
131S0557	TRUE	0.7PF, CAPACITOR	L4206_RF	RF2
152S2001	TRUE	2.4NH, INDUCTOR	C4208_RF	RF2
131S0351	TRUE	0.4PF, CAPACITOR	L4207_RF	RF2
152S2002	TRUE	2.7NH, INDUCTOR	C4209_RF	RF2
152S2002	TRUE	2.7NH, INDUCTOR	C4211_RF	RF2
152S2056	TRUE	5.6NH, INDUCTOR	C4212_RF	RF2
131S0340	TRUE	2.0PF, CAPACITOR	L4219_RF	RF2
152S2021	TRUE	1.5NH, INDUCTOR	C4213_RF	RF2
118S0724	TRUE	0 OHM, RESISTOR	R4201_RF	RF2
131S0551	TRUE	1.2PF, CAPACITOR	L4601_RF	RF2
152S1342	TRUE	15NH, INDUCTOR	L3902_RF	RF2
131S0630	1	27PF, CAPACITOR	C3902_RF	RF2

HB PAD

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
353S00376	1	IC,PWR AMP,HB_PAD,TQS	UHBPA_RF	ROW
353S4494	1	IC,PWR AMP,HB_PAD,AVAGO	UHBPA_RF	RF2
353S00478	1	IC,PWR AMP,HB_PAD,PT	UHBPA_RF	DARWIN

LB PAD

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
353S00461	1	IC,PWR AMP,LB_PAD,SKWS	ULBPA_RF	ROW
353S00461	1	IC,PWR AMP,LB_PAD,SKWS	ULBPA_RF	RF2
353S00541	1	IC,PWR AMP,LB_PAD,PT	ULBPA_RF	DARWIN

MB PAD

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
353S4495	1	IC,PWR AMP,MB_PAD	UMBPA_RF	ROW
353S4495	1	IC,PWR AMP,MB_PAD	UMBPA_RF	RF2
353S00477	1	IC,PWR AMP,MB_PAD, PT	UMBPA_RF	DARWIN

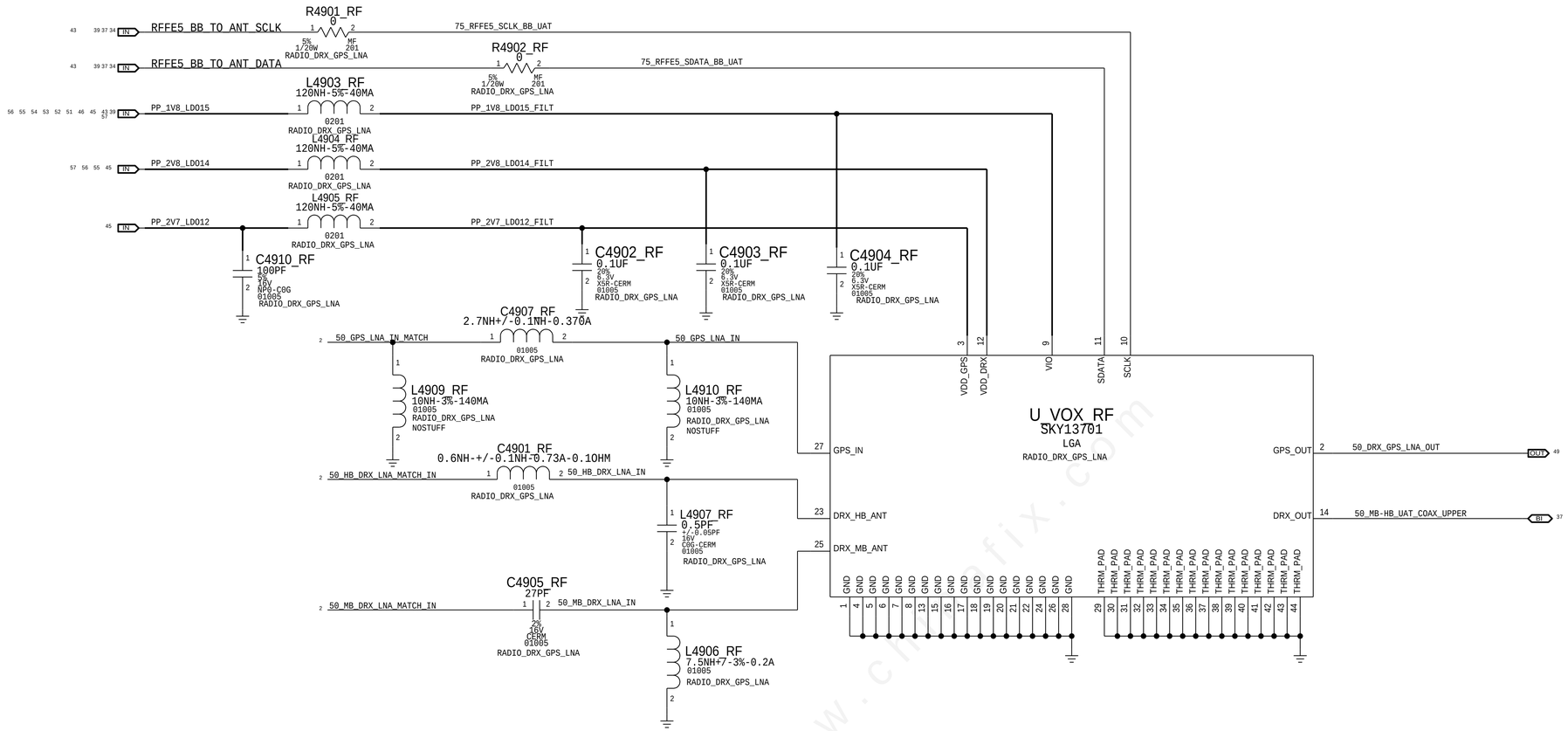
HW_REV1_ID RESISTOR

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
118S0646	1	51.1 KOHM, RESISTOR	R3503_RF	DARWIN

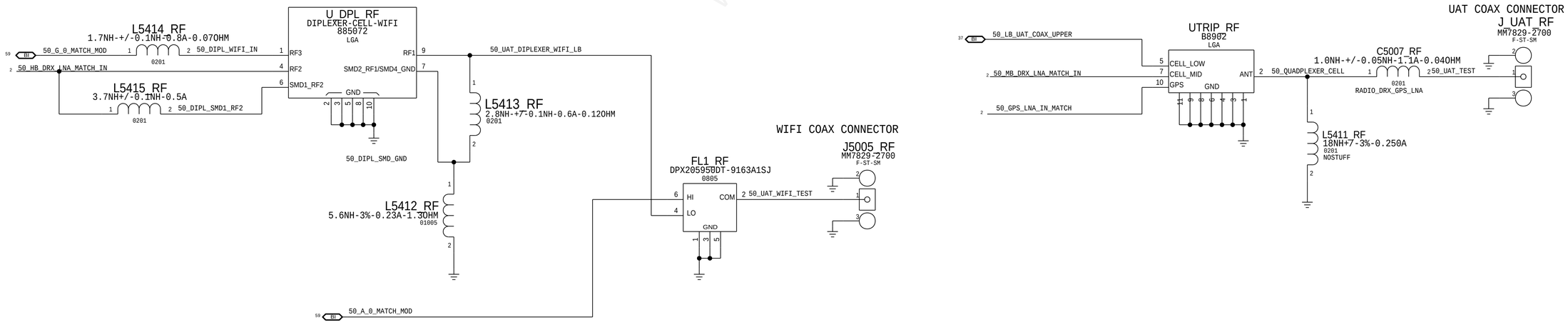
?

N66-SPECIFIC RADIO PAGE 2

DIVERSITY LNA

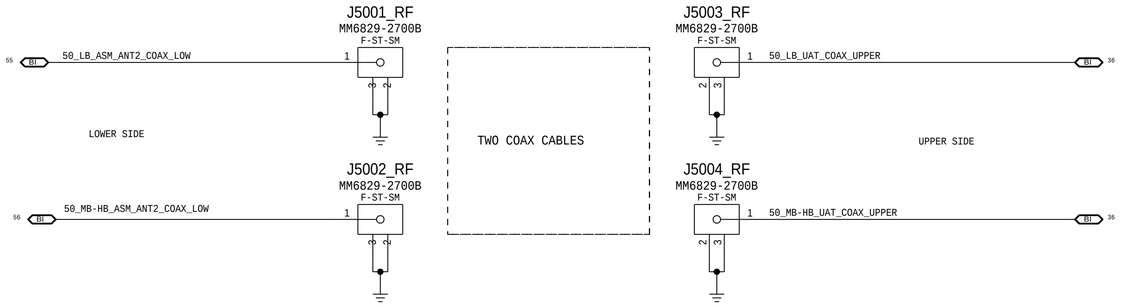


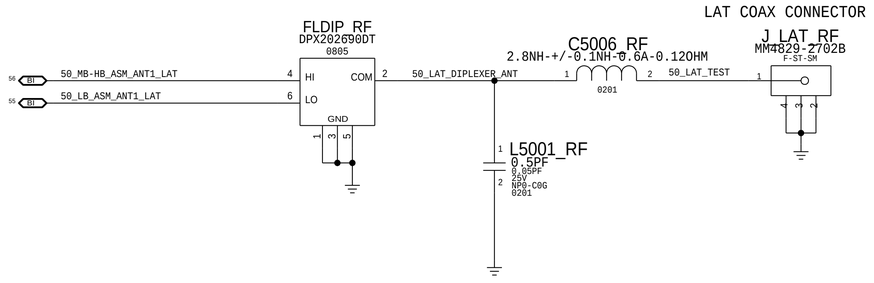
UAT ANT FEED



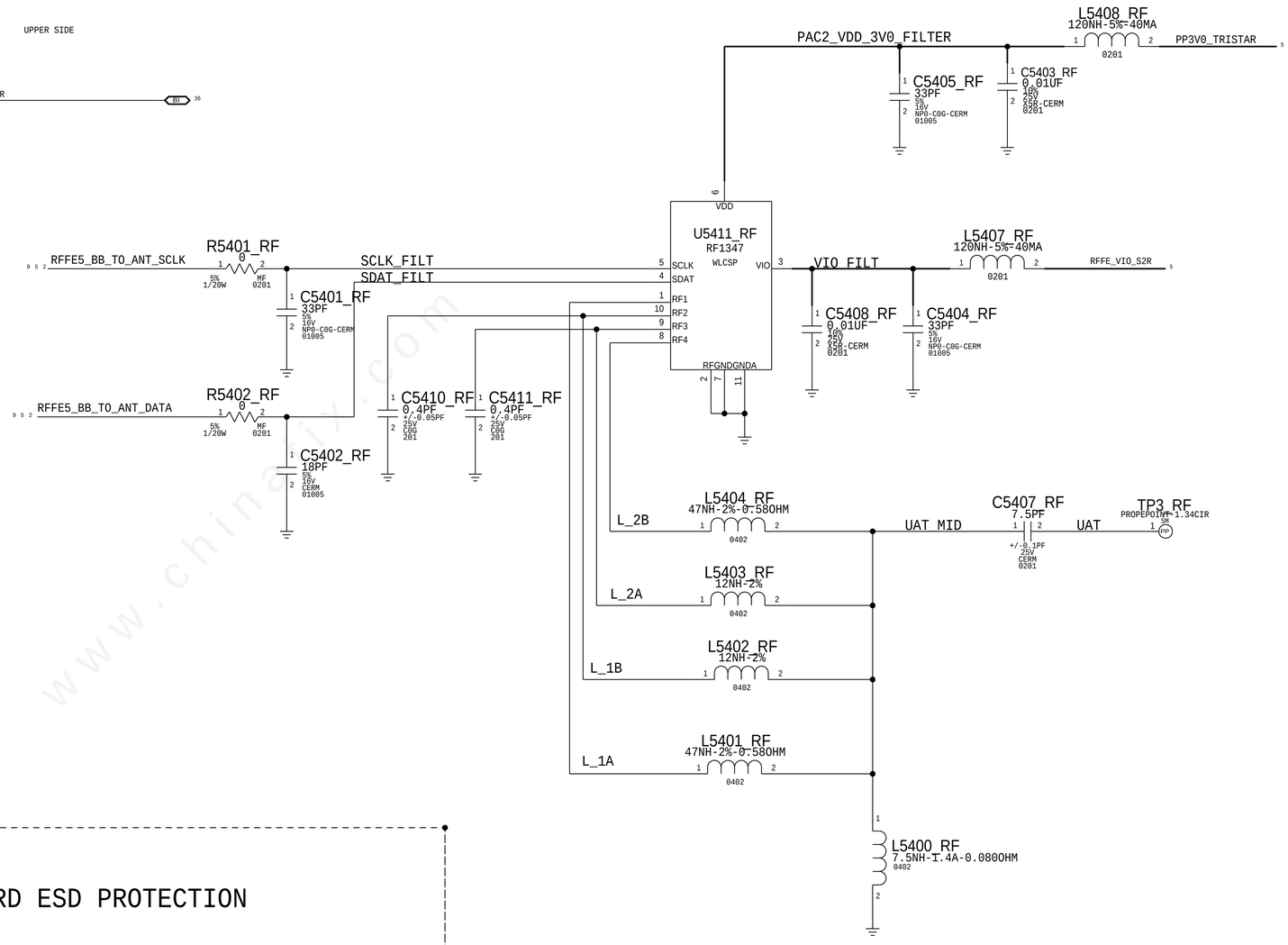
N66-SPECIFIC RADIO PAGE 3

ANTENNA FEEDS AND CONNECTORS

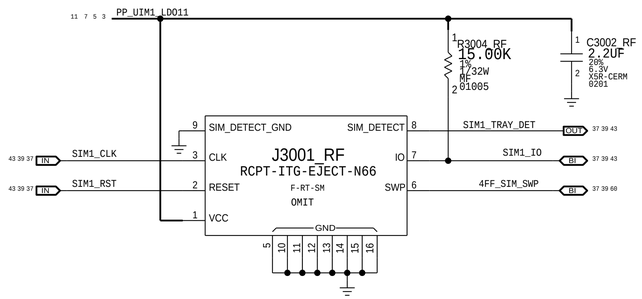




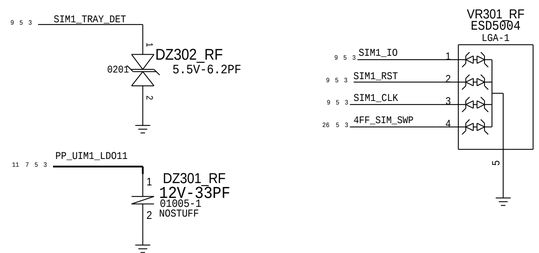
UAT TUNER



SIM CARD CONNECTOR

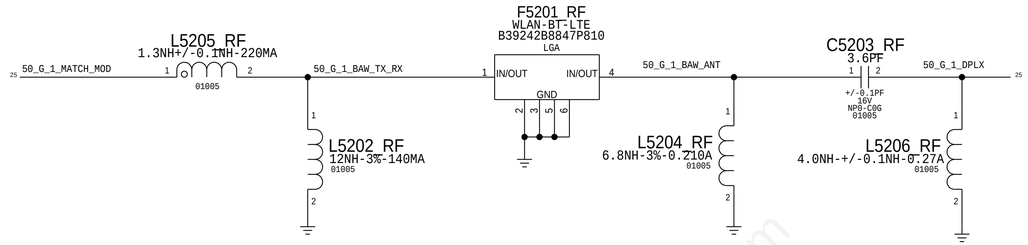


SIM CARD ESD PROTECTION



N66-SPECIFIC RADIO PAGE 4

WLAN LAT 2.4GHZ BAW BPF



DARWIN HB PAD MATCHING BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
152S1907	1	3.3NH, INDUCTOR	L4105_RF	DARWIN
152S2007	1	8.2NH, INDUCTOR	L4401_RF	DARWIN
131S0426	1	22PF, CAPACITOR	C4405_RF	DARWIN
152S2042	1	1.8NH, INDUCTOR	C4406_RF	DARWIN
131S0425	1	0.5PF, CAPACITOR	L4407_RF	DARWIN
152S2041	1	10.0NH, INDUCTOR	L4403_RF	DARWIN
131S00071	1	33PF, CAPACITOR	C4407_RF	DARWIN
152S00143	1	15NH, INDUCTOR	L4404_RF	DARWIN
131S00071	1	33PF, CAPACITOR	C4408_RF	DARWIN
117S0108	1	51 OHM, RESISTOR	L4410_RF	DARWIN
131S0599	1	1.5PF, CAPACITOR	C3921_RF	DARWIN
152S00052	1	3.4NH, INDUCTOR	L3910_RF	DARWIN
117S0201	1	0 OHM, RESISTOR	L3911_RF	DARWIN
152S2039	1	3.8NH, INDUCTOR	L3919_RF	DARWIN
131S0414	1	5.0PF, CAPACITOR	C4410_RF	DARWIN

DARWIN LB PAD MATCHING BOM OPTIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
131S0555	1	1.0PF, CAPACITOR	L4203_RF	DARWIN
152S00158	1	4.1NH, INDUCTOR	C4205_RF	DARWIN
131S0425	1	0.5PF, CAPACITOR	L4204_RF	DARWIN
152S2053	1	4.7NH, INDUCTOR	C4206_RF	DARWIN
131S0555	1	1.0PF, CAPACITOR	L4205_RF	DARWIN
152S00027	1	3.7NH, INDUCTOR	C4207_RF	DARWIN
131S0557	1	0.7PF, CAPACITOR	L4206_RF	DARWIN
152S2001	1	2.4NH, INDUCTOR	C4208_RF	DARWIN
131S0351	1	0.4PF, CAPACITOR	L4207_RF	DARWIN
152S2002	1	2.7NH, INDUCTOR	C4209_RF	DARWIN
152S2002	1	2.7NH, INDUCTOR	C4211_RF	DARWIN
152S2056	1	5.6NH, INDUCTOR	C4212_RF	DARWIN
131S0340	1	2.0PF, CAPACITOR	L4219_RF	DARWIN
152S2021	1	1.5NH, INDUCTOR	C4213_RF	DARWIN
118S0724	1	0 OHM, RESISTOR	R4201_RF	DARWIN
131S0551	1	1.2PF, CAPACITOR	L4601_RF	DARWIN
152S1342	1	15NH, INDUCTOR	L3902_RF	DARWIN
131S0630	1	27PF, CAPACITOR	C3902_RF	DARWIN

AP TO BB/WLAN/BT/SH CONNECTIONS

BASEBAND

PP_VCC_MAIN — IO
AP_TO_BBPMU_RADIO_ON_L — IN
PMU_TO_BBPMU_RESET_L — IN
AP_TO_BB_RESET_L — IN
BB_TO_AP_RESET_DET_L — OUT
BB_TO_AP_GSM_TXBURST_IND — OUT
AP_TO_BB_MESA_ON_L — IN
BB_TO_AP_GPS_TIME_MARK — OUT
AP_TO_BB_COREDUMP_TRIG — IN
AP_TO_BB_IPC_GPIO — IN
TOUCH_TO_BBPMU_FORCE_PWM — IN

SINGLE_NODENET

UART0_BB_TO_OWL_TX — OUT
UART0_OWL_TO_BB_TX — IN

PCIE0_AP_TO_BB_REFCLK_P — IN
PCIE0_AP_TO_BB_REFCLK_N — IN

PCIE0_AP_TO_BB_TX_P — IN
PCIE0_AP_TO_BB_TX_N — IN

PCIE0_BB_TO_AP_TX_P — OUT
PCIE0_BB_TO_AP_TX_N — OUT

PCIE0_AP_TO_BB_PERST_L — IN
PCIE0_AP_TO_BB_CLKREQ_L — IN
PCIE0_BB_TO_PMU_HOST_WAKE_L — OUT
PCIE0_AP_TO_BB_DEV_WAKE — IN

I2S_AP_TO_BB_WS — IN
I2S_AP_TO_BB_CLK — IN
I2S_AP_TO_BB_TX — IN
I2S_BB_TO_AP_TX — OUT

USB_BB_P — OUT
USB_BB_N — OUT
USB_BB_VBUS_DETECT — IN

SWD_CLK_BB_JTAG_TCK — IN
SWD_IO_BB_JTAG_TMS — IN

RFFE_BUFFER_LAT_GPIO1 — OUT
75_RFFE5_SDATA_BB — OUT
75_RFFE5_SCLK_BB — OUT
PP3V0_TRISTAR — IN

PP_0V9_SMPS1 — OUT
PP_1V0_SMPS3 — OUT
PP_1V85_SMPS4 — OUT
PP_UIM1_LDO11 — OUT

WLAN/BT

PMU_TO_WLAN_32K_CLK — IN
PMU_TO_WLAN_REG_ON — IN
PMU_TO_BT_REG_ON — IN
WLAN_TO_PMU_HOST_WAKE — OUT
BT_TO_PMU_HOST_WAKE — OUT
AP_TO_BT_WAKE — IN

UART1_AP_TO_BT_TX — IN
UART1_BT_TO_AP_TX — OUT
UART1_AP_TO_BT_RTS_L — IN
UART1_BT_TO_AP_RTS_L — OUT

I2S_AP_TO_BT_BCLK — IN
I2S_AP_TO_BT_LRCK — IN
I2S_BT_TO_AP_DOUT — OUT
I2S_AP_TO_BT_DOUT — IN

UART4_AP_TO_WLAN_TX — IN
UART4_WLAN_TO_AP_TX — OUT
UART4_WLAN_TO_AP_RTS_L — OUT
UART4_AP_TO_WLAN_RTS_L — IN

PCIE_WLAN_TO_AP_CLKREQ_L — OUT
PCIE_AP_TO_WLAN_PERST_L — IN
PCIE_AP_TO_WLAN_DEV_WAKE — IN
PCIE_AP_TO_WLAN_TX_P — IN
PCIE_AP_TO_WLAN_TX_N — IN
PCIE_AP_TO_WLAN_REFCLK_P — IN
PCIE_AP_TO_WLAN_REFCLK_N — IN
PCIE_WLAN_TO_AP_TX_P — OUT
PCIE_WLAN_TO_AP_TX_N — OUT

OWL_TO_WLAN_CONTEXT_A — IN
OWL_TO_WLAN_CONTEXT_B — IN

AP DEBUG

PP1V8 — IN
FORCE_DFU — OUT
DFU_STATUS — IN
PMU_AMUX_AY — IN
PMU_AMUX_BY — IN
PMU_TO_SYSTEM_COLD_RESET_L — IN
I2C0_AP_SDA — IO
I2C0_AP_SCL — IO
I2C1_AP_SDA — IO
I2C1_AP_SCL — IO
BUTTON_HOLD_KEY_L — OUT
BUTTON_MENU_KEY_L — OUT
BUTTON_VOL_DOWN_L — OUT
BUTTON_VOL_UP_L — OUT
BUTTON_RINGER_A — OUT
PMU_GPIO20 — IO
PMU_GPIO21 — IO
OWL_FUNC2 — IO
AP_RESERVED0 — IN
AP_RESERVED1 — IN
AP_RESERVED2 — IN

STOCKHOLM

PP1V8_SDRAM — IN
AP_TO_STOCKHOLM_SIM_SEL — OUT
STOCKHOLM_TO_PMU_HOST_WAKE — IN
AP_TO_STOCKHOLM_FW_DWLD_REQ — IN
PMU_TO_STOCKHOLM_EN — IN
AP_TO_STOCKHOLM_DEV_WAKE — IN
UART3_AP_TO_STOCKHOLM_TXD — IN
UART3_STOCKHOLM_TO_AP_TXD — OUT
UART3_AP_TO_STOCKHOLM_RTS_L — IN
UART3_STOCKHOLM_TO_AP_RTS_L — OUT

ANT

STOCKHOLM_ANT — IN

POWER

PP1V8_SDRAM — VOLTAGE=1.8V — MAKE_BASE=TRUE
→ PP_1V8_S2R_VDDIO_WLAN_BT — VOLTAGE=1.8V
→ PP_STOCKHOLM_1V8_S2R — VOLTAGE=1.8V
→ RFFE_VIO_S2R — VOLTAGE=1.8V

MLB PROBE POINTS

PCIE

PP3073_RF — P2MM-NSM — PCIE0_AP_TO_BB_PERST_L — RADIO_DEBUG
PP3074_RF — P2MM-NSM — PCIE0_BB_TO_PMU_HOST_WAKE_L — RADIO_DEBUG
PP3075_RF — P2MM-NSM — PCIE0_AP_TO_BB_CLKREQ_L — RADIO_DEBUG
PP3076_RF — P2MM-NSM — PCIE0_AP_TO_BB_DEV_WAKE — RADIO_DEBUG
PP3080_RF — P2MM-NSM — PCIE0_AP_TO_BB_REFCLK_P — RADIO_DEBUG
PP3081_RF — P2MM-NSM — PCIE0_AP_TO_BB_REFCLK_N — RADIO_DEBUG
PP3082_RF — P2MM — PCIE0_BB_TO_AP_TX_P — RADIO_DEBUG
PP3083_RF — P2MM — PCIE0_BB_TO_AP_TX_N — RADIO_DEBUG
PP3084_RF — P2MM-NSM — PCIE0_AP_TO_BB_TX_P — RADIO_DEBUG
PP3085_RF — P2MM-NSM — PCIE0_AP_TO_BB_TX_N — RADIO_DEBUG
PP3090_RF — P2MM-NSM — BB_JTAG_SRST_L — RADIO_DEBUG
PP3091_RF — P2MM-NSM — SWD_IO_BB_JTAG_TMS — RADIO_DEBUG

PMU

PP3032_RF — P2MM — PMIC_RESOUT_L — RADIO_DEBUG
PP3033_RF — P2MM — 50_SLEEP_CLK_32K — RADIO_DEBUG
PP3034_RF — P2MM — XO_OUT_D0_EN — RADIO_DEBUG
PP3036_RF — P2MM-NSM — SPMI_CLK — RADIO_DEBUG
PP3037_RF — P2MM-NSM — SPMI_DATA — RADIO_DEBUG

BASEBAND

PP3017_RF — P2MM-NSM — BB_DEBUG_ERROR
PP3018_RF — P2MM — 50_MDM_PCIE_CLK — RADIO_DEBUG
PP3019_RF — P2MM-NSM — 50_BBPMU_TO_STOCKHOLM_19P2M_CLK
PP3006_RF — P2MM-NSM — STOCKHOLM_TO_BBPMU_CLK_REQ — RADIO_DEBUG
PP3007_RF — P2MM — TOUCH_TO_BBPMU_FORCE_PWM — RADIO_DEBUG

DEBUG CONNECTOR

ESD CAPS

PCIE0_AP_TO_BB_PERST_L
BB_JTAG_SRST_L
PMU_TO_BBPMU_RESET_L
SIM2_RESET

C5101_RF 100PF 5% 16V NP0-C0G 01005
C3503_RF 100PF 5% 16V NP0-C0G 01005
C3312_RF 100PF 5% 16V NP0-C0G 01005 RADIO_BB
C3408_RF 100PF 5% 16V NP0-C0G 01005 RADIO_BB

NOSTUFF
J3000_RF
AXE550124
F-ST-SM

		SIM1_CLK	
		SIM1_RST	
UART_WLAN_TO_BB_COEX_TX		SIM1_IO	
I2C0_AP_SDA		PP_UIM1_LDO11	
I2C0_AP_SCL		SIM1_TRAY_DET	
BUTTON_VOL_DOWN_L		4FF_SIM_SWP	
BUTTON_VOL_UP_L		I2C1_AP_SDA	
BUTTON_RINGER_A		I2C1_AP_SCL	
SIM2_RESET		BUTTON_HOLD_KEY_L	
SIM2_DATA		BUTTON_MENU_KEY_L	
UART_BB_TO_WLAN_COEX_TX		PP1V8	
SIM2_DETECT		FORCE_DFU	
SIM2_DATA_R		SIM2_CLK	
		PP_UIM2_LDO13	

ANT TUNER

PP3001_RF — P2MM-NSM — RFFE5_BB_TO_ANT_DATA — RADIO_DEBUG
PP3002_RF — P2MM-NSM — RFFE5_BB_TO_ANT_SCLK — RADIO_DEBUG
PP3003_RF — P2MM-NSM — PP3V0_TRISTAR — RADIO_DEBUG
PP3004_RF — P2MM-NSM — PP1V8_SDRAM — RADIO_DEBUG
PP3005_RF — P2MM — PP_1V8_LDO15 — RADIO_DEBUG
PP3008_RF — P2MM — I2S_AP_TO_BB_WS — RADIO_DEBUG
PP3009_RF — P2MM — I2S_AP_TO_BB_CLK — RADIO_DEBUG
PP3010_RF — P2MM — I2S_AP_TO_BB_TX — RADIO_DEBUG
PP3011_RF — P2MM — I2S_BB_TO_AP_TX — RADIO_DEBUG
PP3012_RF — P2MM — AP_TO_BB_MESA_ON_L — RADIO_DEBUG
PP3013_RF — P2MM-NSM — BB_TO_LED_DRIVER_GSM_BURST_IND — RADIO_DEBUG
PP3014_RF — P2MM — BB_TO_AP_GPS_TIME_MARK — RADIO_DEBUG
PP3015_RF — P2MM — AP_TO_BB_COREDUMP_TRIG — RADIO_DEBUG
PP3016_RF — P2MM-NSM — UART0_BB_TO_OWL_TX — RADIO_DEBUG
PP3020_RF — P2MM-NSM — UART0_OWL_TO_BB_TX — RADIO_DEBUG

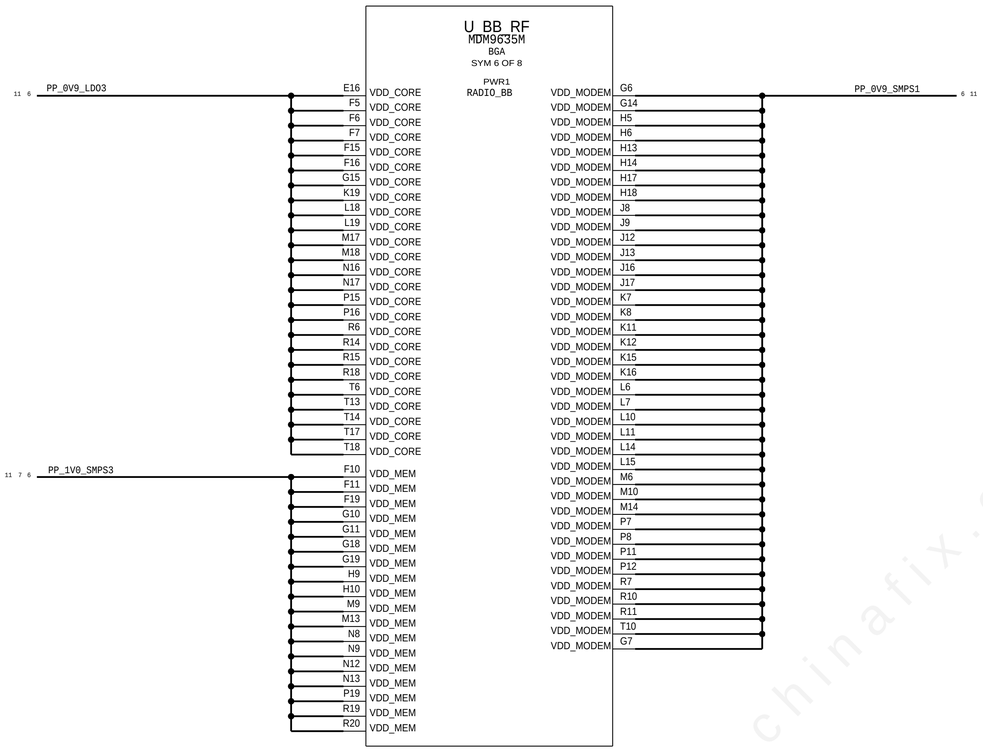
RFFE

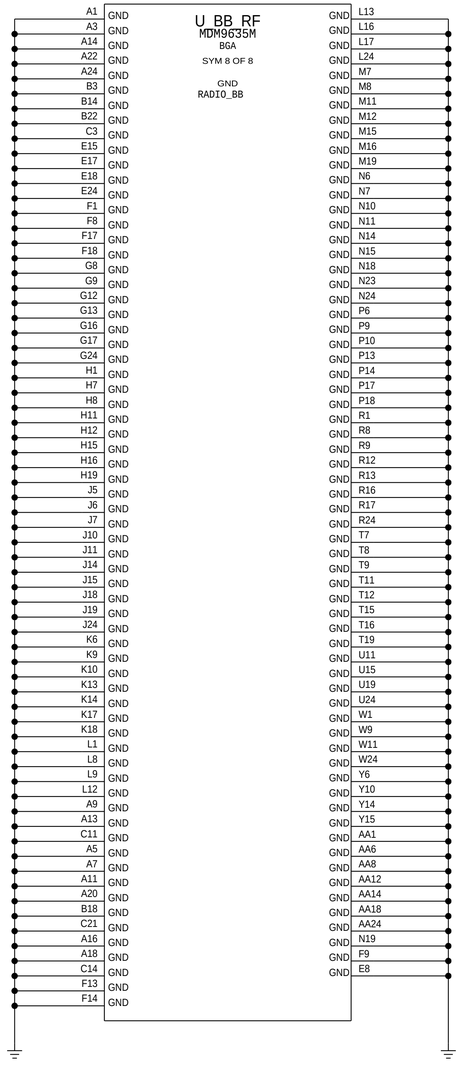
PP3056_RF — P2MM — 75_RFFE1_SDATA_BB — RADIO_DEBUG
PP3077_RF — P2MM — 75_RFFE4_SDATA_BB — RADIO_DEBUG
PP3051_RF — P2MM — 75_RFFE5_SCLK_BB_BUFFER — RADIO_DEBUG
PP3052_RF — P2MM-NSM — 75_RFFE5_SDATA_BB_BUFFER
PP3053_RF — P2MM — 75_RFFE2_SDATA_BB — RADIO_DEBUG
PP3054_RF — P2MM-NSM — 75_RFFE3_SDATA_BB

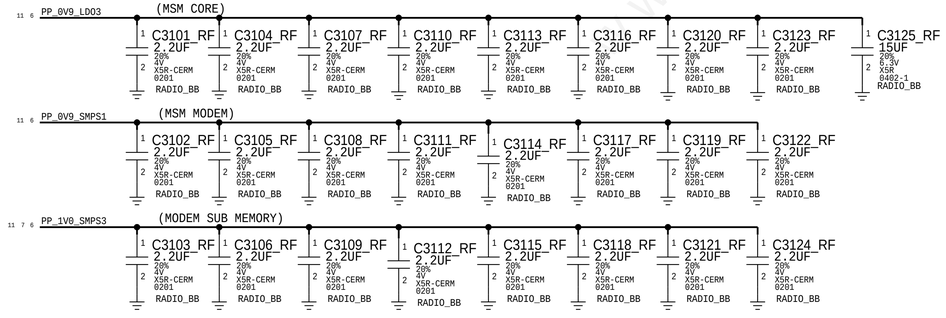
STOCKHOLM

PP3062_RF — P2MM-NSM — STOCKHOLM_DWPM_DBG
PP3063_RF — P2MM-NSM — STOCKHOLM_DWPS_DBG
PP3064_RF — P2MM-NSM — UART3_AP_TO_STOCKHOLM_TXD
PP3065_RF — P2MM-NSM — UART3_STOCKHOLM_TO_AP_TXD
PP3066_RF — P2MM-NSM — UART3_AP_TO_STOCKHOLM_RTS_L
PP3067_RF — P2MM-NSM — UART3_STOCKHOLM_TO_AP_RTS_L

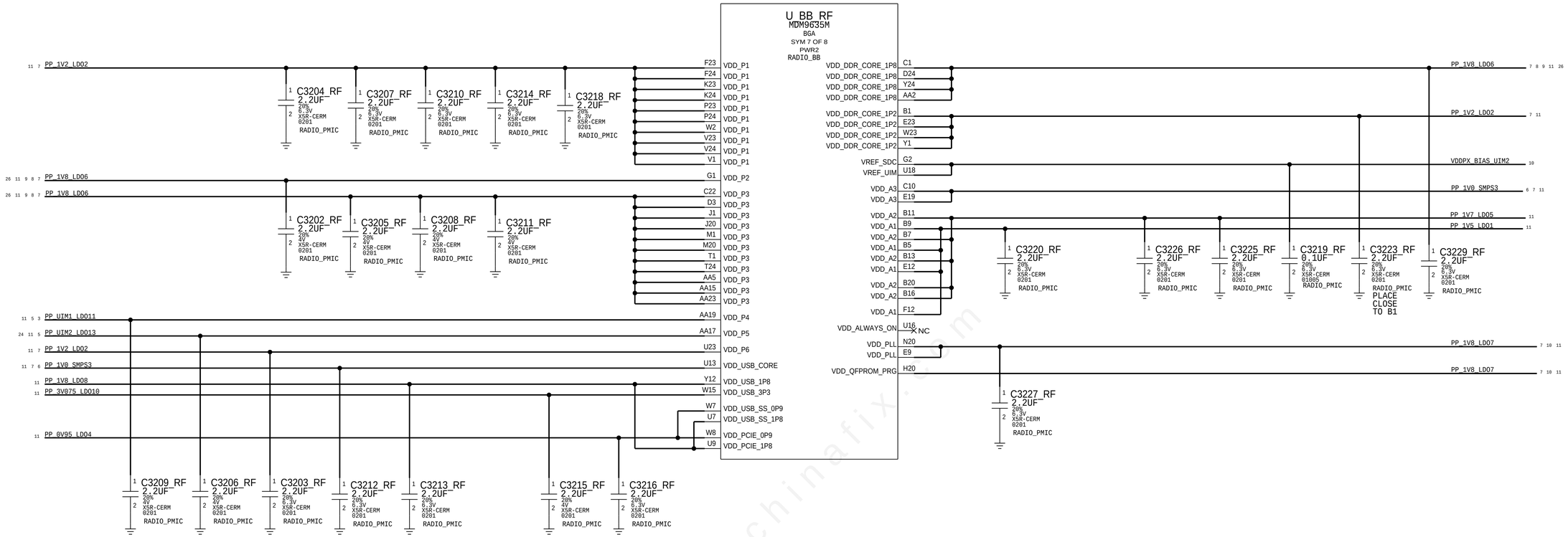
BASEBAND: POWER 1



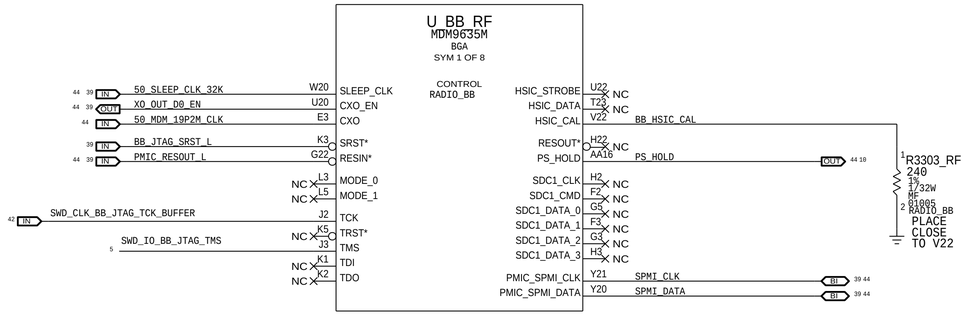


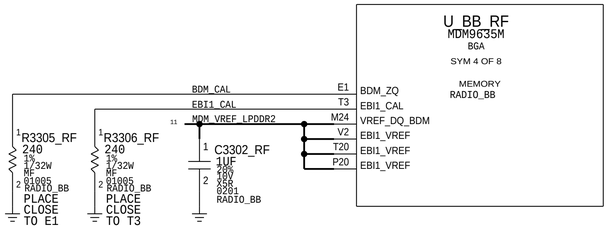


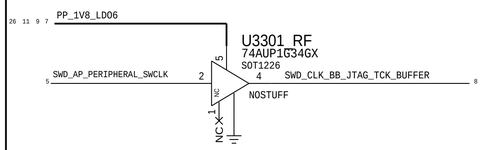
BASEBAND: POWER 2

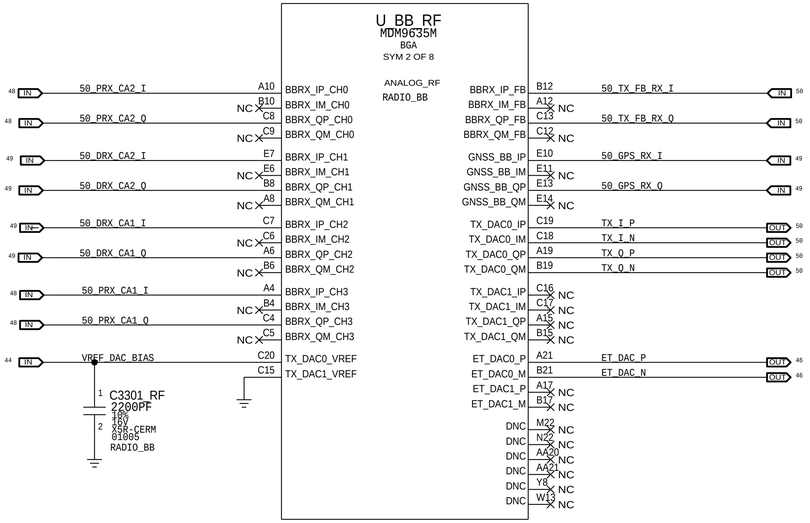


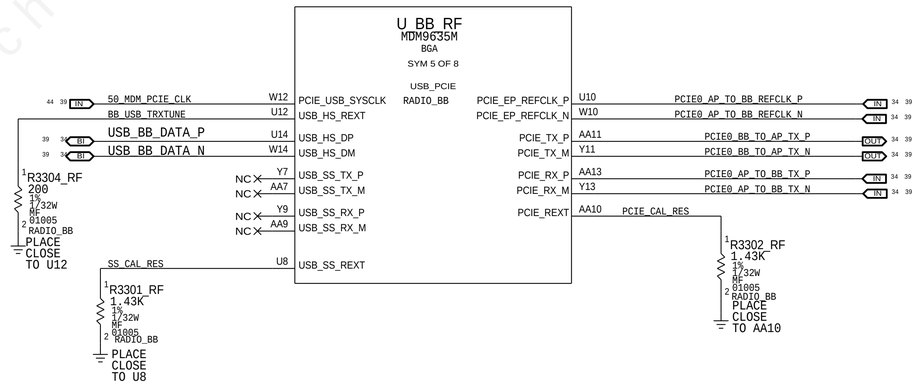
BASEBAND: CONTROL AND INTERFACES



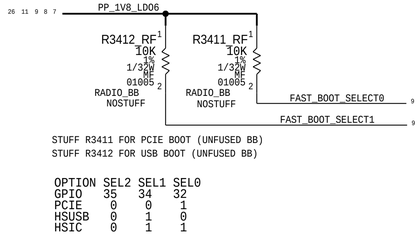






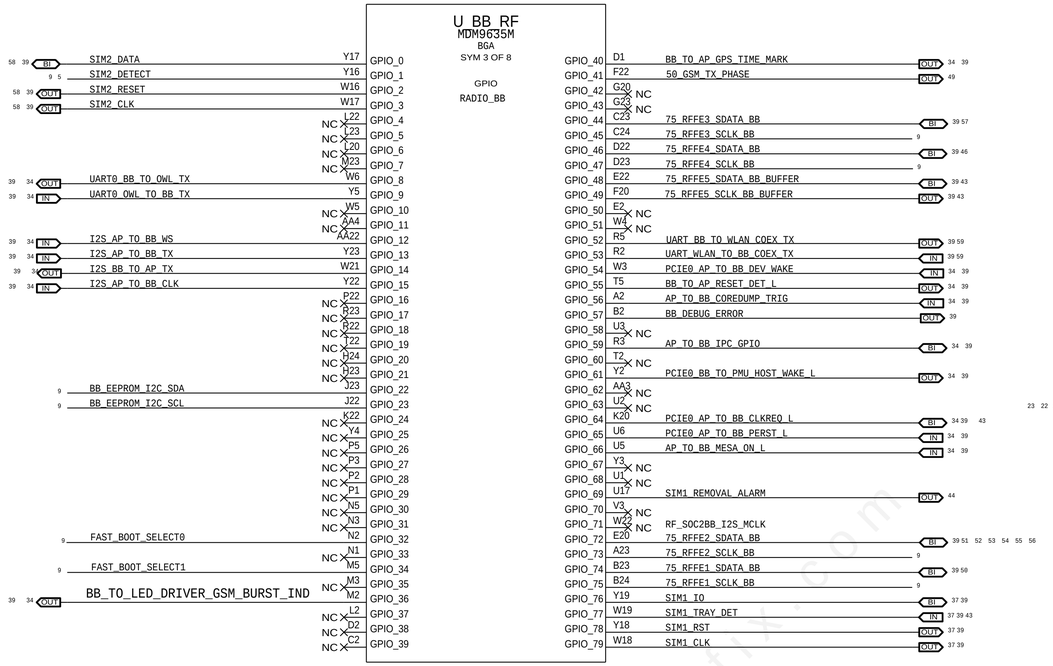


BASEBAND: GPIOS



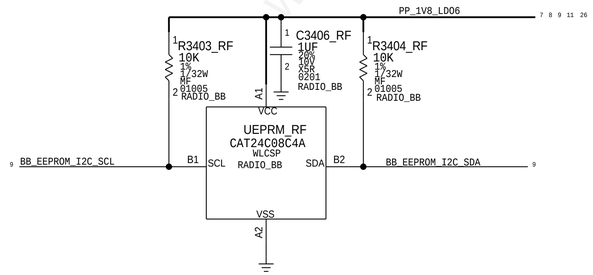
STUFF R3411 FOR PCIE BOOT (UNFUSED BB)
STUFF R3412 FOR USB BOOT (UNFUSED BB)

OPTION	SEL2	SEL1	SEL0
GPIO	35	34	32
PCIE	0	0	1
HSUSB	0	1	0
HSIC	0	1	1

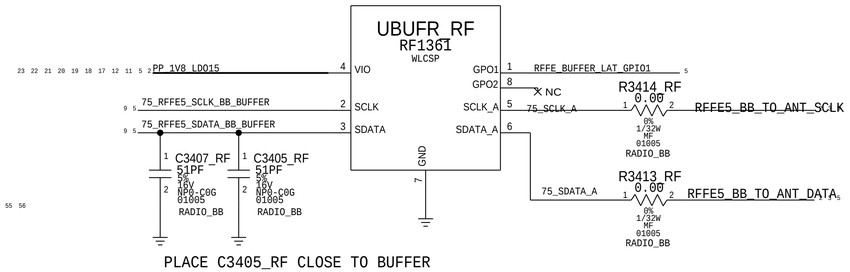


PCIE PULL-UPS TO BB RAIL

BB EEPROM

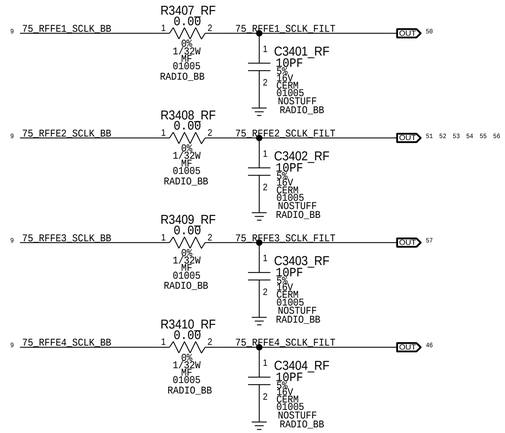


BUFFER ON RFFE5
SCLK/SDATA_A IS OUTPUT



PLACE C3405_RF CLOSE TO BUFFER
PLACE C3407_RF CLOSE TO MDM

RFFE CLOCK FILTERS



RFFE USAGE TABLE

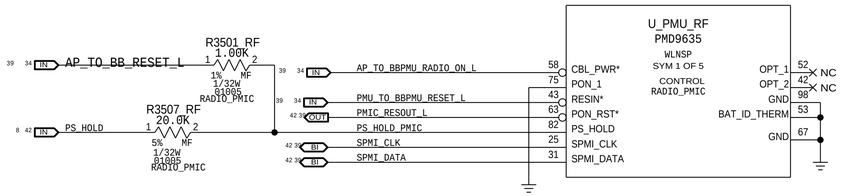
RFFE1 WTR
RFFE2 LB/MB/HB PAD, 2G PA, LB/MB/HB ASM
RFFE3 DIV ASM
RFFE4 QPOET
RFFE5 DIV LNA, ANT TUNERS

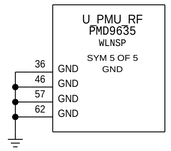
PMU: CONTROL AND CLOCKS

HW_REV1_ID	R3502	R3503	CONFIG
1.80V	698K	-	MLB
0.12V	698K	51.1K	SELF GEN

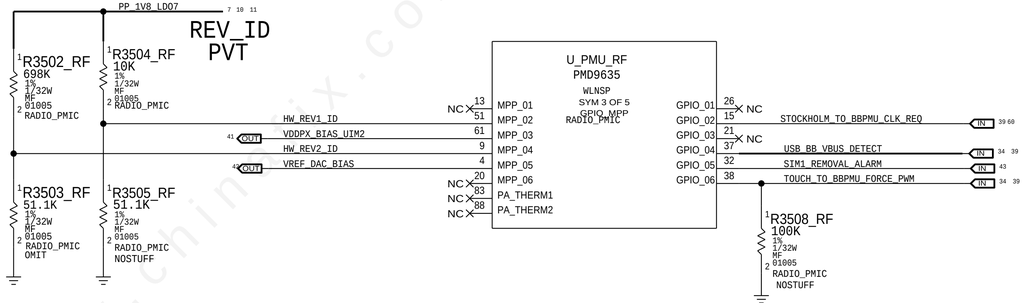
HW_REV_ID	R3504	R3505	REVISION
0.10V	887K	51.1K	DEV1
0.30V	255K	51.1K	DEV2
0.50V	124K	51.1K	DEV3
0.70V	82.5K	51.1K	DEV4/PROTOMLB1
0.90V	51.1K	51.1K	PROTOMLB2
1.10V	31.6K	51.1K	DEV5/PROTO1
1.20V	50K	100K	PROTO2
1.31V	39K	105K	EVT
1.43V	13.3K	51.1K	EVT_ALT
1.55V	8.25K	51.1K	CARRIER BUILD
1.67V	3.92K	51.1K	DVT
1.80V	10K	-	PVT

RESET AND CONTROL: PMU

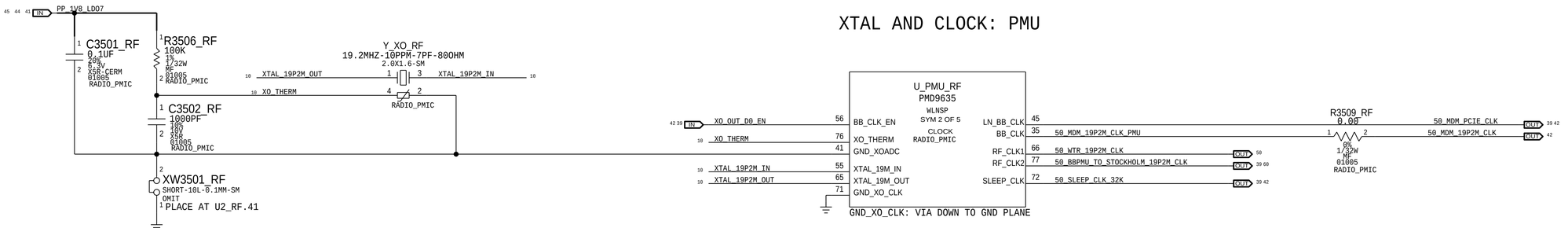




MPPS AND GPIOS: PMU



XTAL AND CLOCK: PMU



PMU: SWITCHERS AND LDOS

SWITCHERS BULK CAPS

I296
PP_VCC_MAIN
C3640_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
C3616_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
XW3601_RF SHORT-10L-0.25MM-SM OMIT
XW3602_RF SHORT-10L-0.25MM-SM OMIT
XW3603_RF SHORT-10L-0.25MM-SM OMIT
GND
I295
PP_VCC_MAIN
C3615_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
C3617_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
XW3604_RF SHORT-10L-0.25MM-SM OMIT
XW3605_RF SHORT-10L-0.25MM-SM OMIT
GND
I279
PP_VCC_MAIN
C3634_RF 4.7UF 20% 6.3V CER-X5R 0402 RADIO_PMIC
C3618_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
XW3606_RF SHORT-10L-0.25MM-SM OMIT
XW3607_RF SHORT-10L-0.25MM-SM OMIT
XW3608_RF SHORT-10L-0.25MM-SM OMIT
I275
PP_VCC_MAIN
C3619_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
XW3609_RF SHORT-10L-0.25MM-SM OMIT
XW3610_RF SHORT-10L-0.25MM-SM OMIT
I274
PP_VCC_MAIN
C3620_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
XW3611_RF SHORT-10L-0.25MM-SM OMIT
XW3612_RF SHORT-10L-0.25MM-SM OMIT

U_PMU_RF
PMD9635
WLNSP
SYM 4 OF 5
POWER

PP_VCC_MAIN	5	VDD_S1	VREG_S1 10
	16	VDD_S1	VSW_S1 11
	6	GND_S1	VSW_S1 22
	17	GND_S1	VSW_S1 27
	28	GND_S1	
	33	GND_S1	
PP_VCC_MAIN	92	VDD_S2	VREG_S2 91
	103	VDD_S2	VSW_S2 97
GND	102	GND_S2	
PP_VCC_MAIN	70	VDD_S3	VREG_S3 69
GND	49	GND_S3	VSW_S3 59
	54	GND_S3	VSW_S3 64
PP_VCC_MAIN	8	VDD_S4	VREG_S4 12
	1	GND_S4	VSW_S4 2
	7	GND_S4	
PP_VCC_MAIN	94	VDD_S5	VREG_S5 87
GND	93	GND_S5	VSW_S5 99
PP_1V225_SMPS2	86	VDD_L1_2_16	VREG_L1 80
PP_1V0_SMPS3	44	VDD_L3_4	VREG_L2 81
PP_1V85_SMPS4	14	VDD_L5_6_15	VREG_L3 39
	23	VDD_L7_8	VREG_L4_16 48
PP_1V0_SMPS5	89	VDD_L9	VREG_L5 19
PP_VCC_MAIN	90	VIN_VPH1	VREG_L6 3
	47	VIN_VPH2	VREG_L7 18
VDD_OTP	73	VDD_OTP	VREG_L8 29
MDM_VREF_LPDDR2	78	VREF_DDR	VREG_L9 100
AVDD_BYP	74	AVDD_BYP	VREG_L10 84
REF_BYP	79	REF_BYP	VREG_L11 95
	68	GND_REF	VREG_L12 85
	24	VDD_XO_RF	VREG_L13 96
			VREG_L14 101
			VREG_L15 30
			VREG_XO 34 VREG_XO
			GND_XO 40 GND
			VREG_RF 60 VREG_RF_CLK
			GND_RF_CLK 50 GND

C3621_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3622_RF 0.1UF 20% 6.3V X5R-CERM 01005 RADIO_PMIC
XW3613_RF SHORT-10L-0.1MM-SM OMIT
R3603_RF 0.00 0% 1/32W MF 01005
C3630_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3631_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
XW3614_RF SHORT-10L-0.1MM-SM OMIT
XW3615_RF SHORT-10L-0.1MM-SM OMIT

PLACE XW CLOSE TO PMU
VIA XW DOWN TO THE GND PLANE

L3601_RF 1UH-20%-0.054OHM-3.4A 2520 RADIO_PMIC
PP_VSW_S1 VOLTAGE=0.9V
L3602_RF 2.2UH-20%-0.14OHM-1.6A 0806 RADIO_PMIC
PP_VSW_S2 VOLTAGE=1.225V
L3603_RF 1.0UH-20%-2.7A-0.056OHM 0806 RADIO_PMIC
PP_VSW_S3 VOLTAGE=1.0V
L3604_RF 2.2UH-20%-0.14OHM-1.6A 0806 RADIO_PMIC
PP_VSW_S4 VOLTAGE=1.85V
L3605_RF 2.2UH-20%-0.14OHM-1.6A 0806 RADIO_PMIC
PP_VSW_S5 VOLTAGE=1.0V

C3609_RF 43UF 20% 4V X5R 0603 GND
C3614_RF 43UF 20% 4V X5R 0603 NOSTUFF
C3610_RF 43UF 20% 4V X5R 0603 GND
C3611_RF 43UF 20% 4V X5R 0603 GND
C3612_RF 43UF 20% 4V X5R 0603 GND
C3613_RF 43UF 20% 4V X5R 0603 GND

MDM MODEM	3400MA	VOLTAGE=0.9V	PP_0V9_SMPS1	OUT	40 45
LOW VOLTAGE LDOS	587MA	PP_1V225_SMPS2	VOLTAGE=1.225V	OUT	45
MDM MEMORY, MDM USB	2234MA	PP_1V0_SMPS3	VOLTAGE=1.0V	OUT	40 41 45
HIGH VOLTAGE LDOS	653MA	PP_1V85_SMPS4	VOLTAGE=1.85V	OUT	45 47
LDO9->WTR	700MA	PP_1V0_SMPS5	VOLTAGE=1.0V	OUT	45

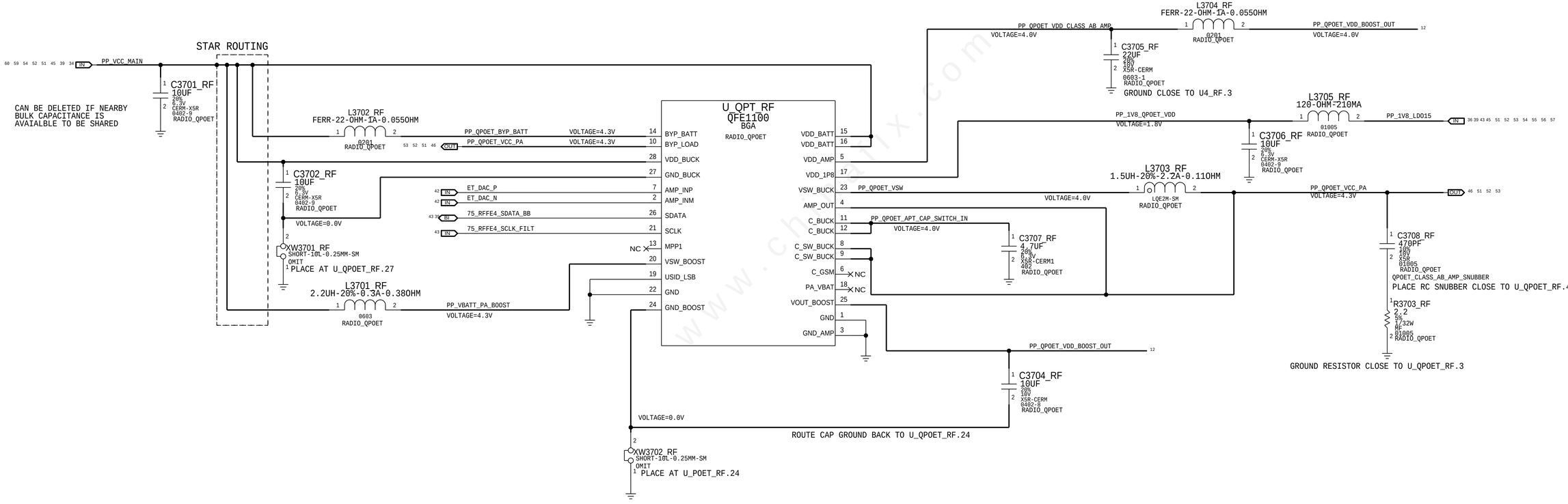
TCXO SHUTDOWN: ON

VOLTAGE=1.5V	MDM LOW VOLTAGE ANALOG	TCXO SHUTDOWN: ON	PP_1V5_LDO1	OUT 41
VOLTAGE=1.2V	MDM EBI1, DDR CORE	TCXO SHUTDOWN: ON	PP_1V2_LDO2	OUT 41
VOLTAGE=0.9V	MDM CORE	TCXO SHUTDOWN: ON	PP_0V9_LDO3	OUT 40
VOLTAGE=0.95V	MDM PCIE	TCXO SHUTDOWN: OFF	PP_0V95_LDO4	OUT 41
VOLTAGE=1.7V	MDM HIGH VOLTAGE ANALOG	TCXO SHUTDOWN: ON	PP_1V7_LDO5	OUT 41
VOLTAGE=1.8V	MDM 1.8V I/O, DDR, SHARED 1.8V VOLTAGE RAIL	TCXO SHUTDOWN: ON	PP_1V8_LDO6	OUT 41 42 43 60
VOLTAGE=1.8V	MDM PLL	TCXO SHUTDOWN: OFF	PP_1V8_LDO7	OUT 41 44
VOLTAGE=1.8V	MDM LOW VOLTAGE USB	TCXO SHUTDOWN: ON	PP_1V8_LDO8	OUT 41
VOLTAGE=1.0V	WTR	TCXO SHUTDOWN: OFF	PP_1V0_LDO9	OUT 47
VOLTAGE=3.075V	MDM HIGH VOLTAGE USB	TCXO SHUTDOWN: ON	PP_3V075_LDO10	OUT 41
VOLTAGE=1.8V	UIM1	TCXO SHUTDOWN: ON	PP_UIM1_LDO11	OUT 37 39 41 45
VOLTAGE=2.7V	GPS LNA	TCXO SHUTDOWN: OFF	PP_2V7_LDO12	OUT 36
VOLTAGE=1.8V	UIM2	TCXO SHUTDOWN: ON	PP_UIM2_LDO13	OUT 39 41 58
VOLTAGE=2.8V	FRONT END SUPPLY	TCXO SHUTDOWN: OFF	PP_2V8_LDO14	OUT 36 55 56 57
VOLTAGE=1.8V	RFFE VIO	TCXO SHUTDOWN: OFF	PP_1V8_LDO15	OUT 36 39 43 46 51 52 53 54 55 56 57

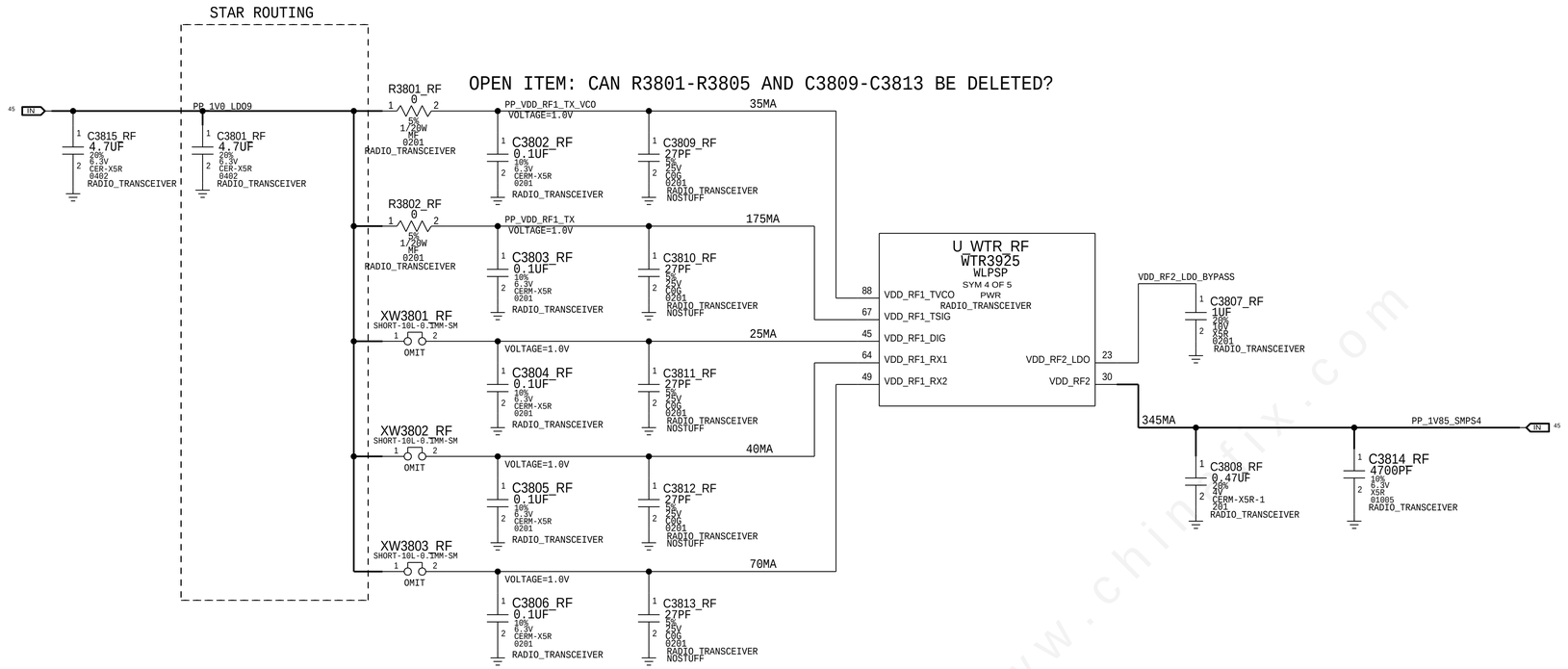
C3624_RF 1UF 20% 10V X5R 0201 RADIO_PMIC NOSTUFF
C3625_RF 10UF 20% 6.3V CERM-X5R 0402-9 RADIO_PMIC
C3632_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
C3635_RF 4.7UF 20% 6.3V CER-X5R 0402 RADIO_PMIC NOSTUFF
C3633_RF 15UF 20% 6.3V X5R 0402-1 RADIO_PMIC
C3636_RF 4.7UF 20% 6.3V CER-X5R 0402 RADIO_PMIC NOSTUFF
C3603_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3626_RF 4.7UF 20% 6.3V CER-X5R 0402 RADIO_PMIC
C3627_RF 10UF 20% 6.3V CERM-X5R 0402-9 RADIO_PMIC
C3605_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3606_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3629_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3608_RF 1UF 20% 10V X5R 0201 RADIO_PMIC
C3607_RF 1UF 20% 10V X5R 0201 RADIO_PMIC

XW3616_RF OMIT SHORT-10L-0.25MM-SM PP_0V9_SMPS1 → PP_0V9_SMPS1 OUT 34 39
XW3617_RF OMIT SHORT-10L-0.25MM-SM PP_1V0_SMPS3 → PP_1V0_SMPS3 OUT 34 39
XW3618_RF OMIT SHORT-10L-0.25MM-SM PP_1V85_SMPS4 → PP_1V85_SMPS4 OUT 34 39
XW3619_RF OMIT SHORT-10L-0.25MM-SM PP_UIM1_LDO11 → PP_UIM1_LDO11 OUT 34 39

PMU: ET MODULATOR

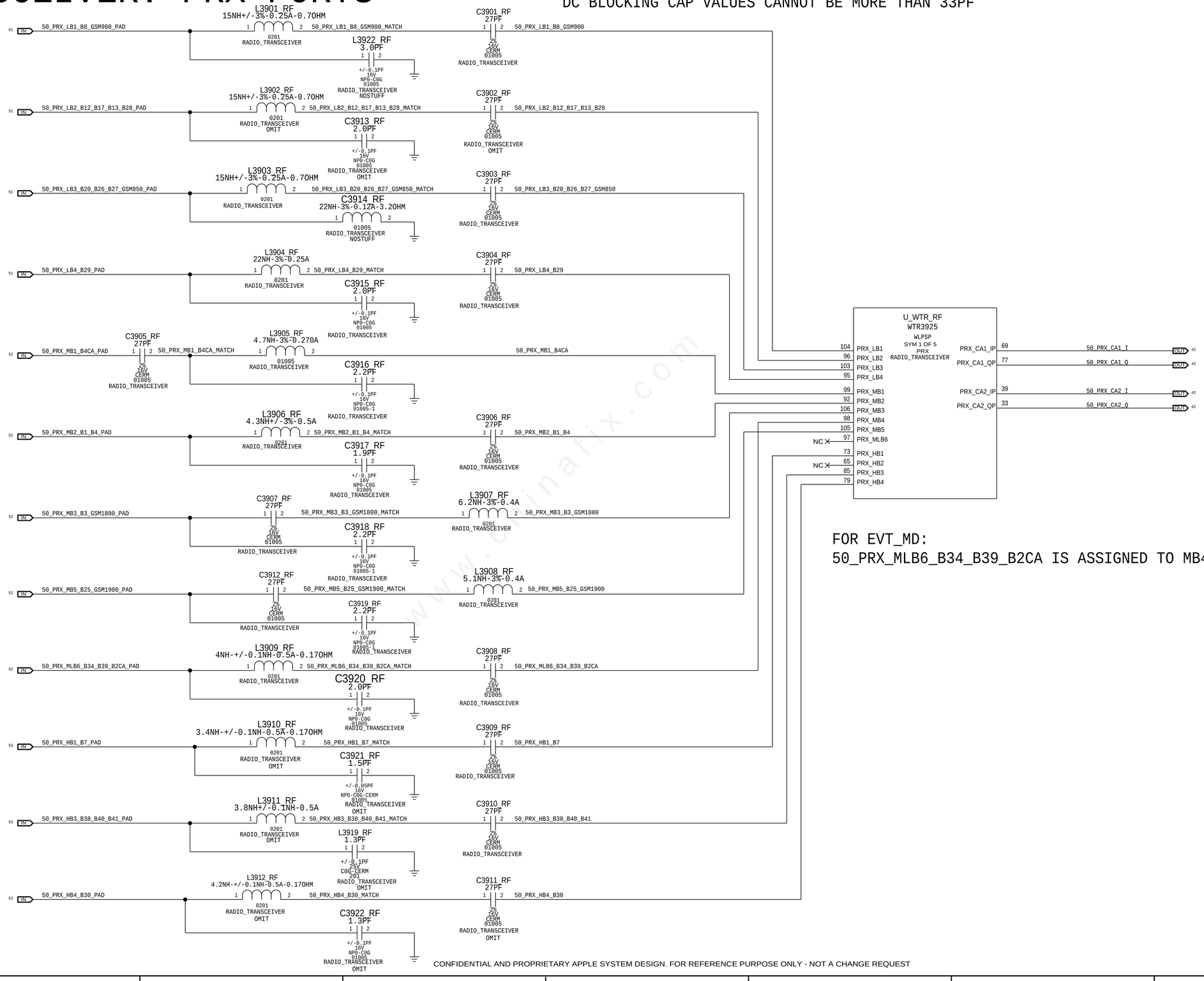


TRANSCEIVER: POWER



TRANSCEIVER: PRX PORTS

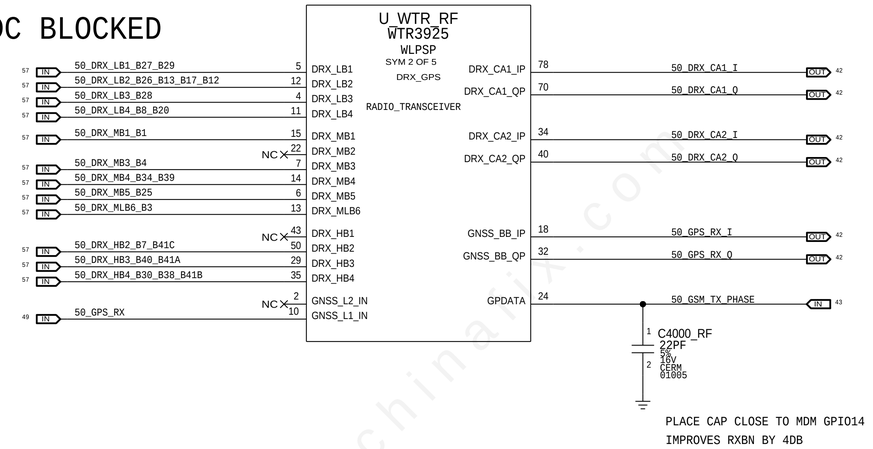
DC BLOCKING CAP VALUES CANNOT BE MORE THAN 33PF



FOR EVT_MD:
50_PRX_MLB6_B34_B39_B2CA IS ASSIGNED TO MB4

TRANSCEIVER: DRX/GPS PORTS

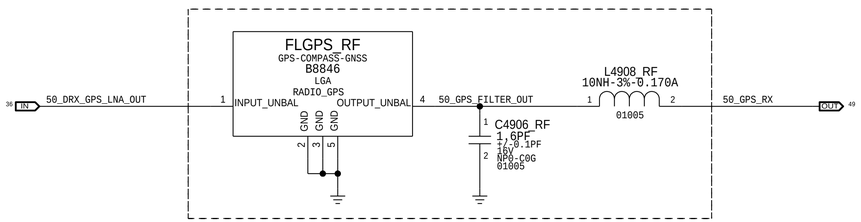
DRX MODULE PORTS ARE DC BLOCKED



PLACE CAP CLOSE TO MDM GPIO14
IMPROVES RXBN BY 4DB

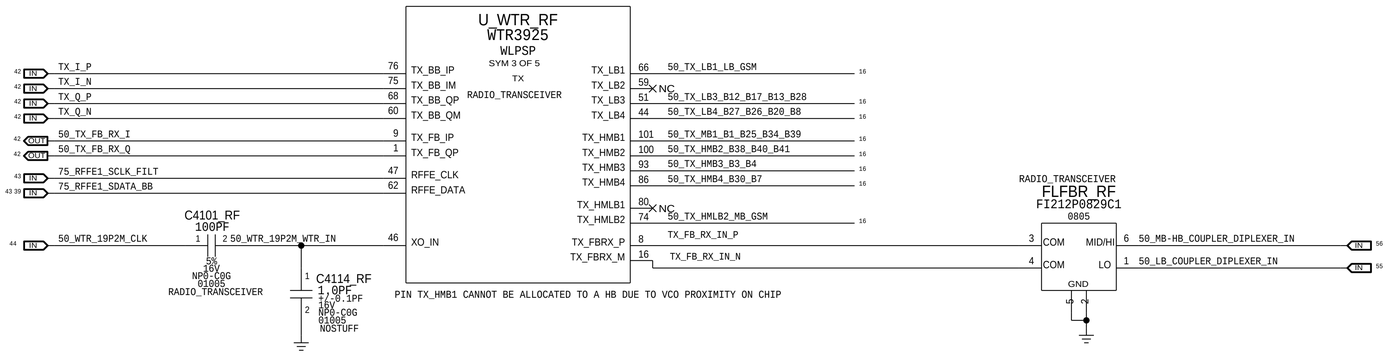
GPS FILTER

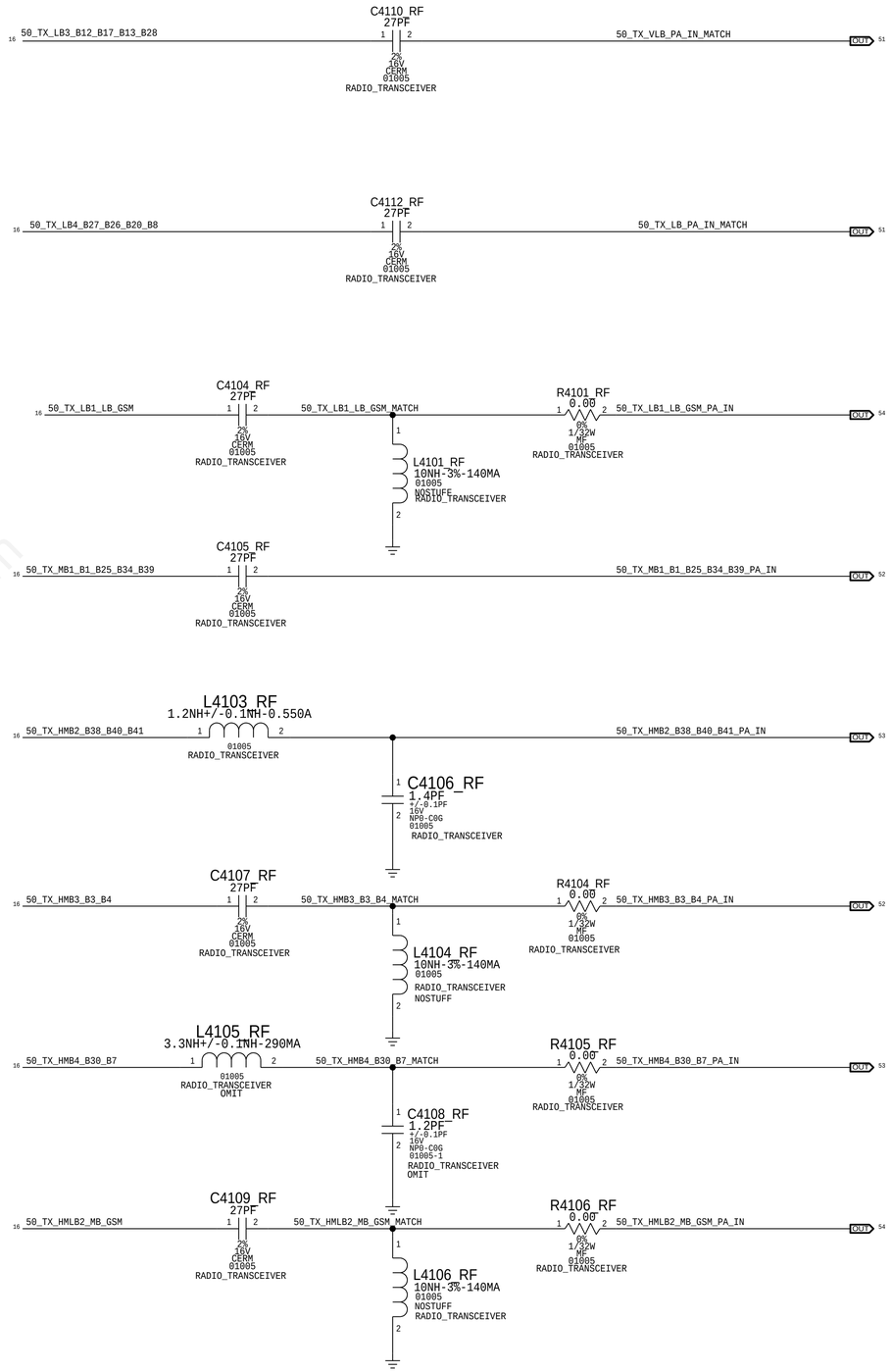
PLACE NEAR U_WTR



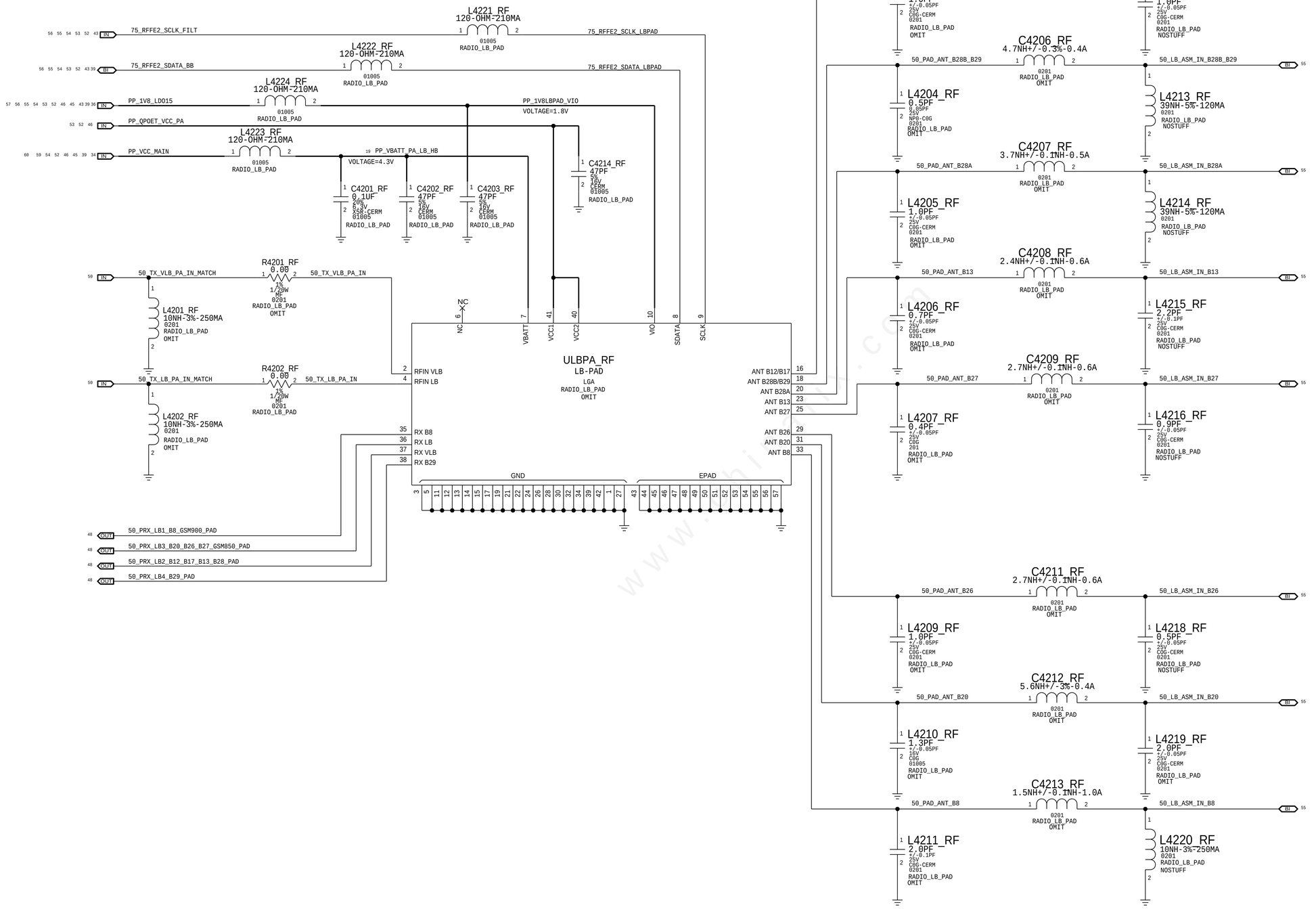
TRANSCEIVER: TX PORTS

B12/13 TX INTERSTAGE FILTER REMOVED

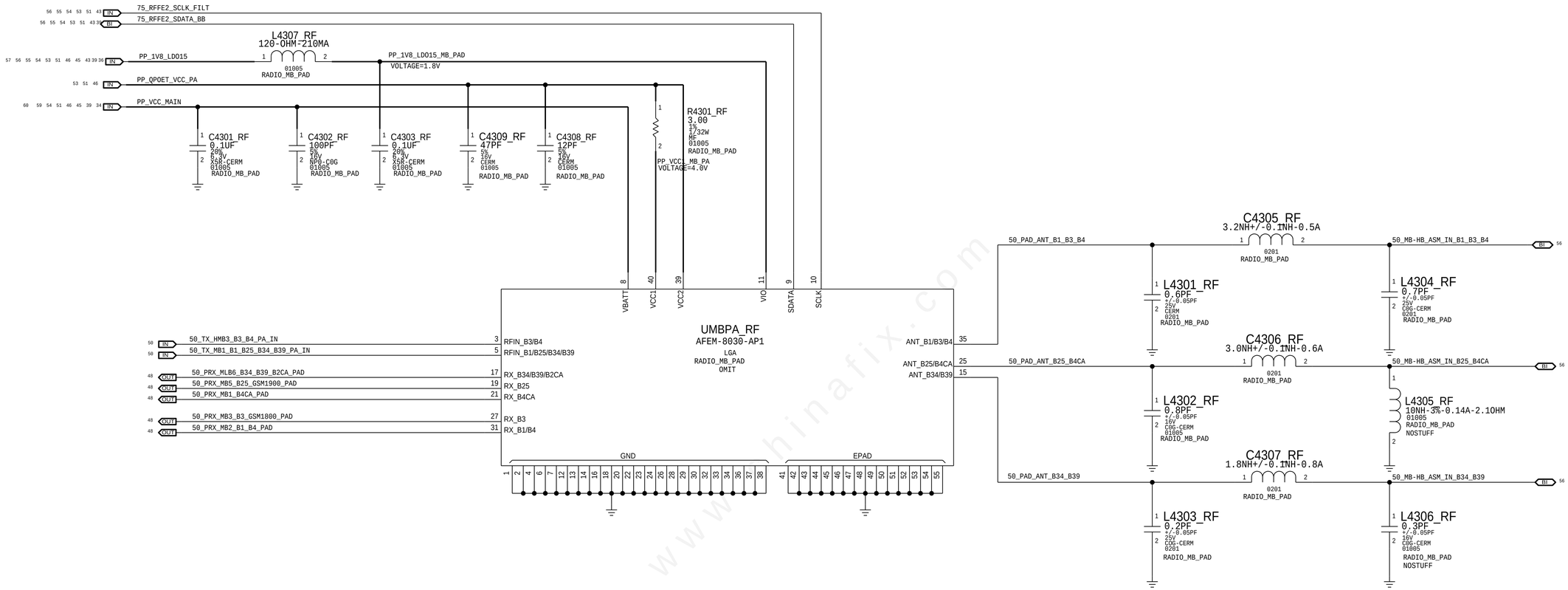




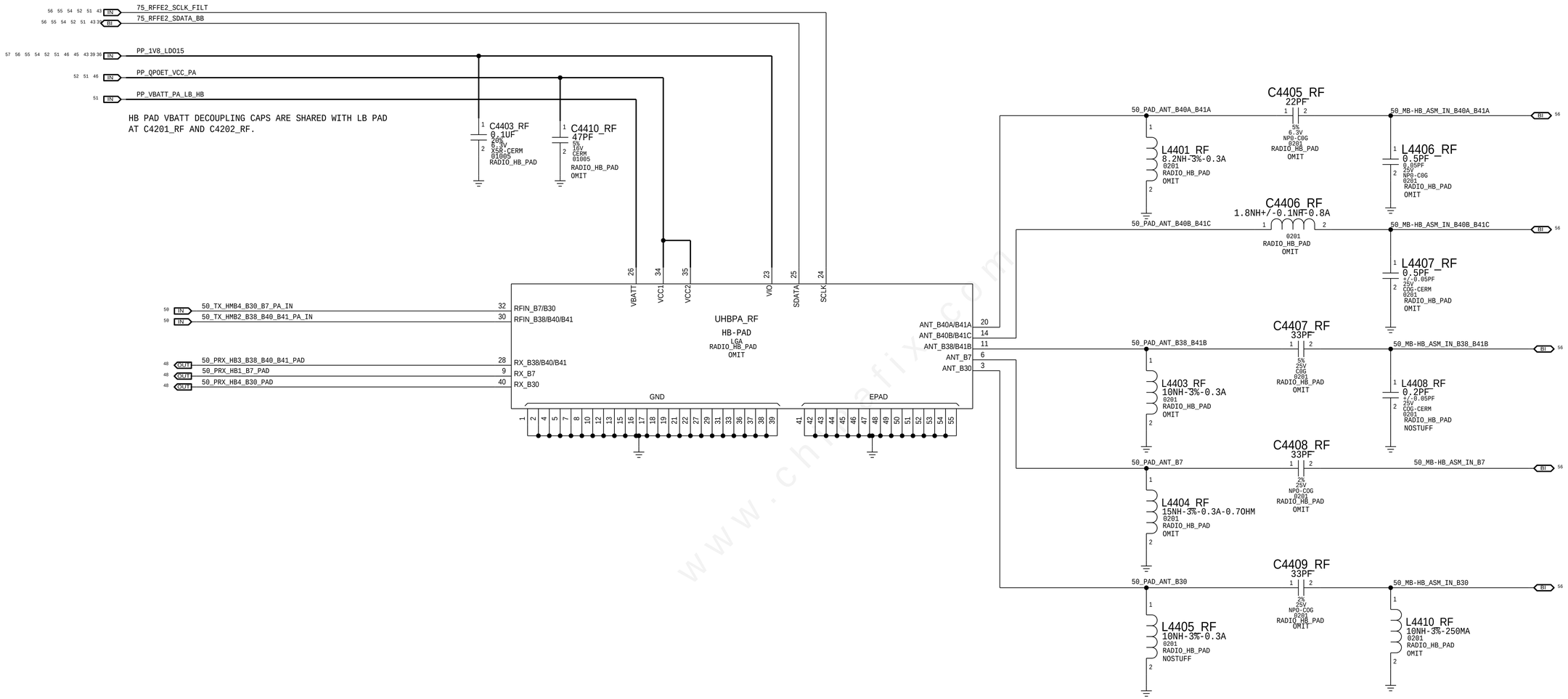
LOW BAND PA+DUPLEXERS



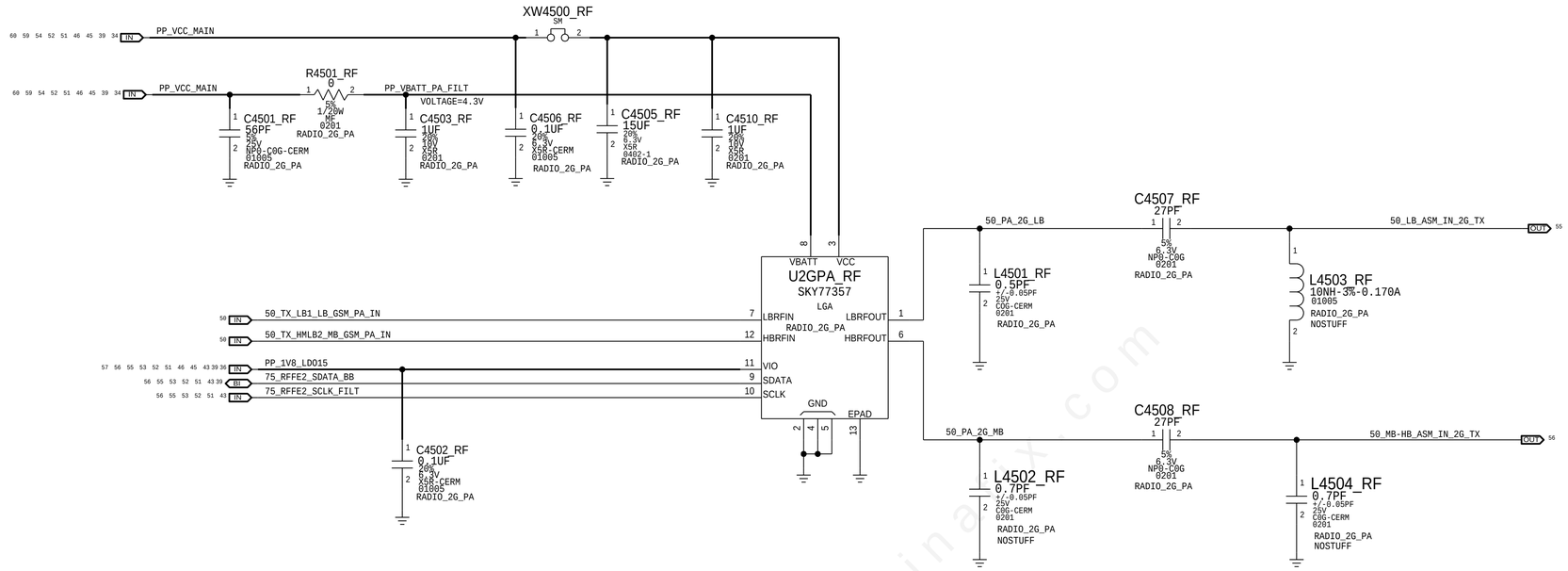
MID BAND PA+DUPLEXERS



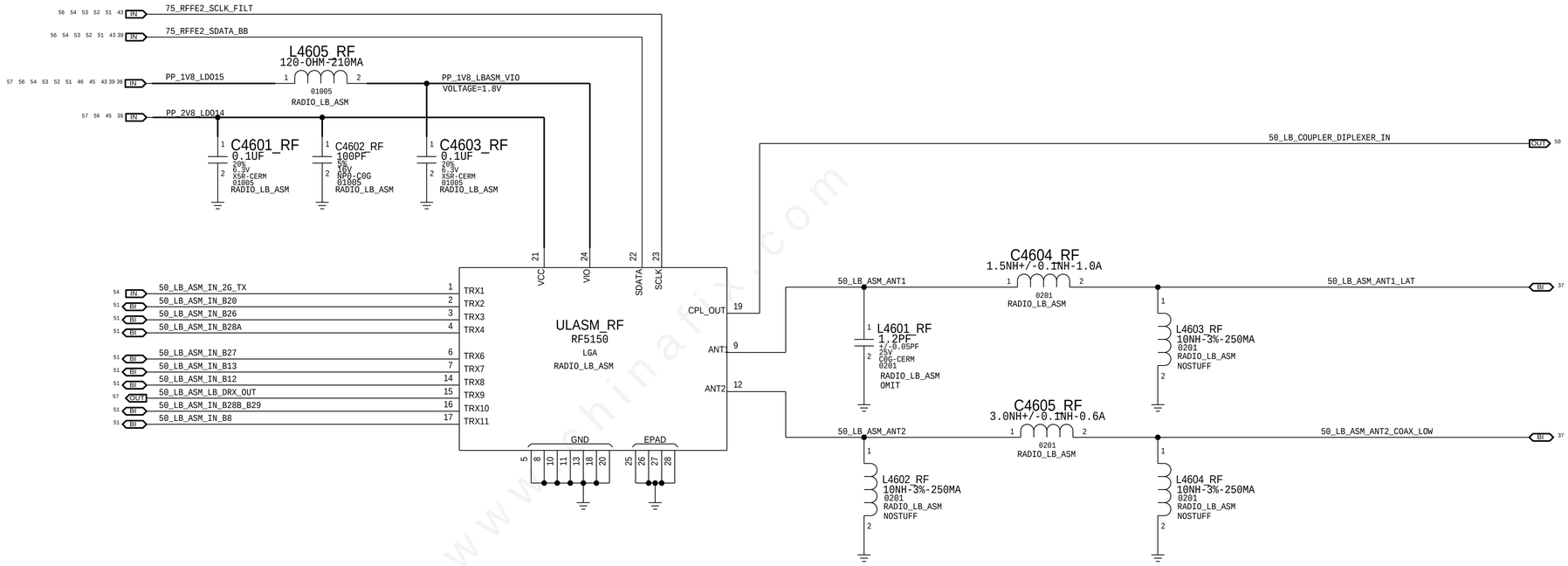
HIGH BAND PA+DUPLEXERS



2G PA

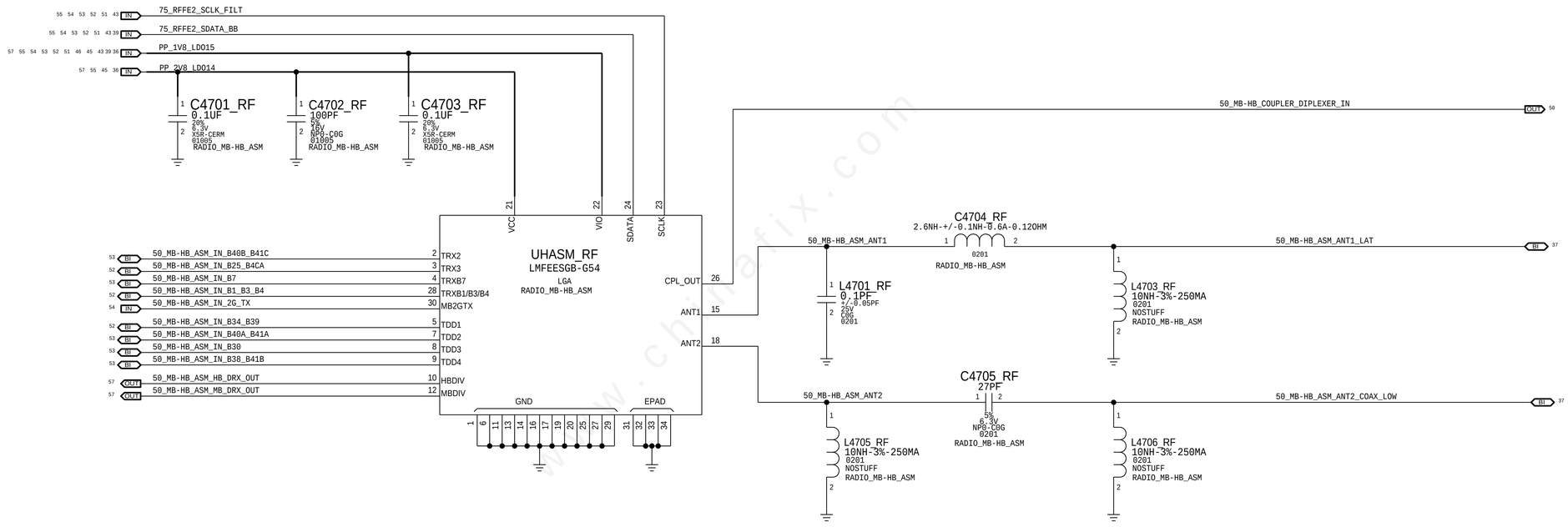


LOW BAND ANTENNA SWITCH MODULE

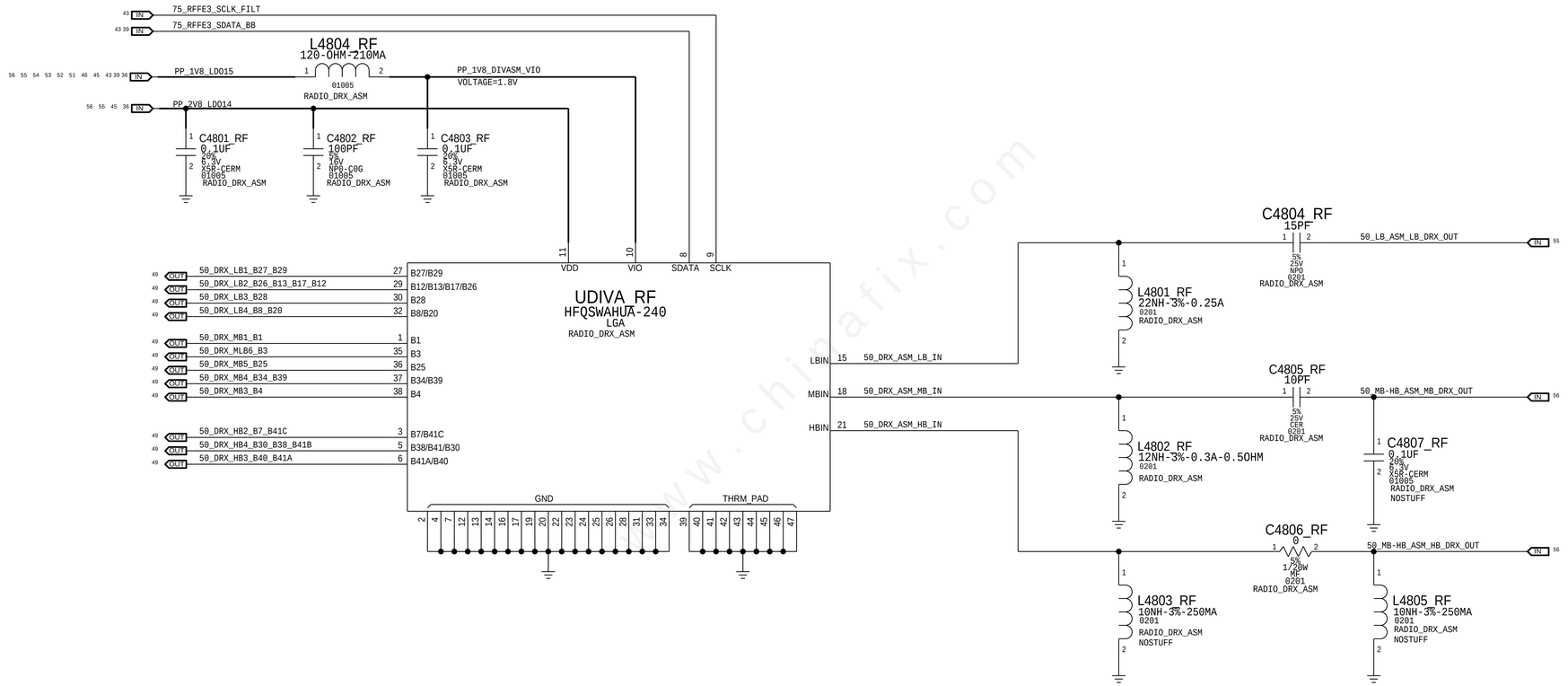


MID-HIGH BAND ANTENNA SWITCH MODULE

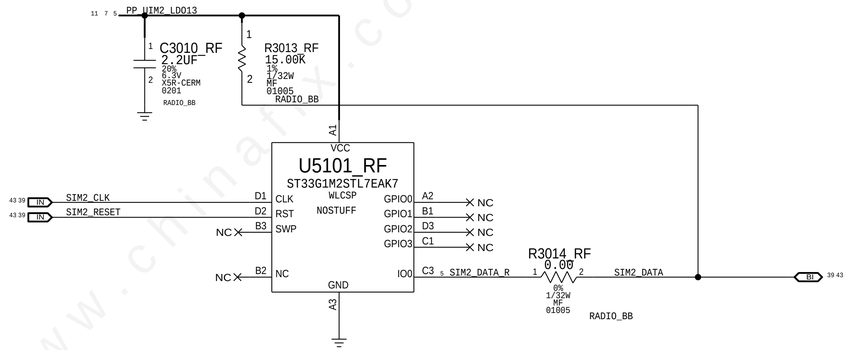
EVT ASM ASSIGNMENT:
B40B/B41C - TRX2
B30 - TDD3



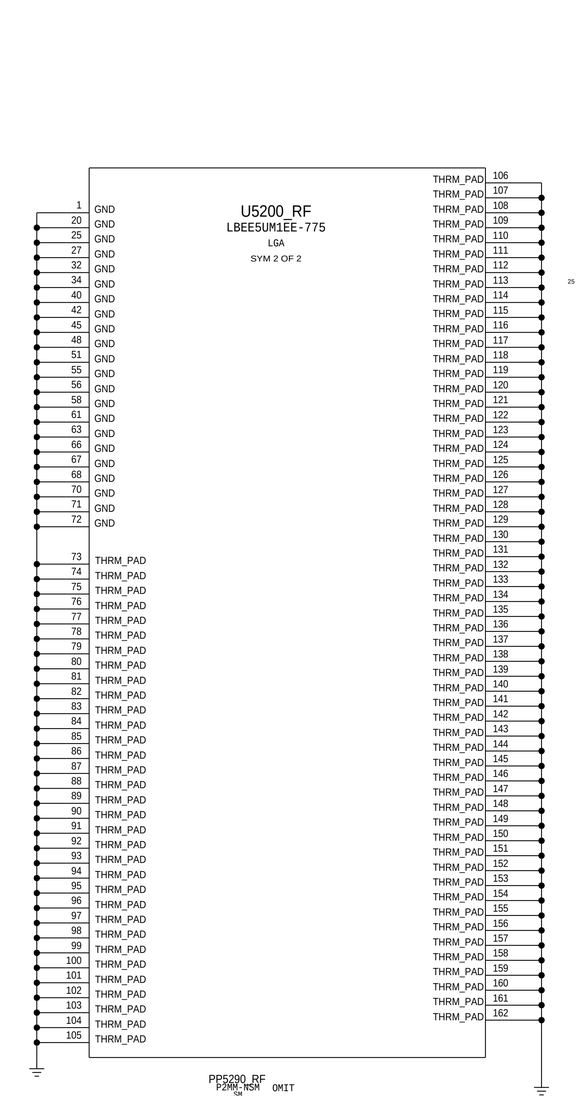
DIVERSITY MODULE

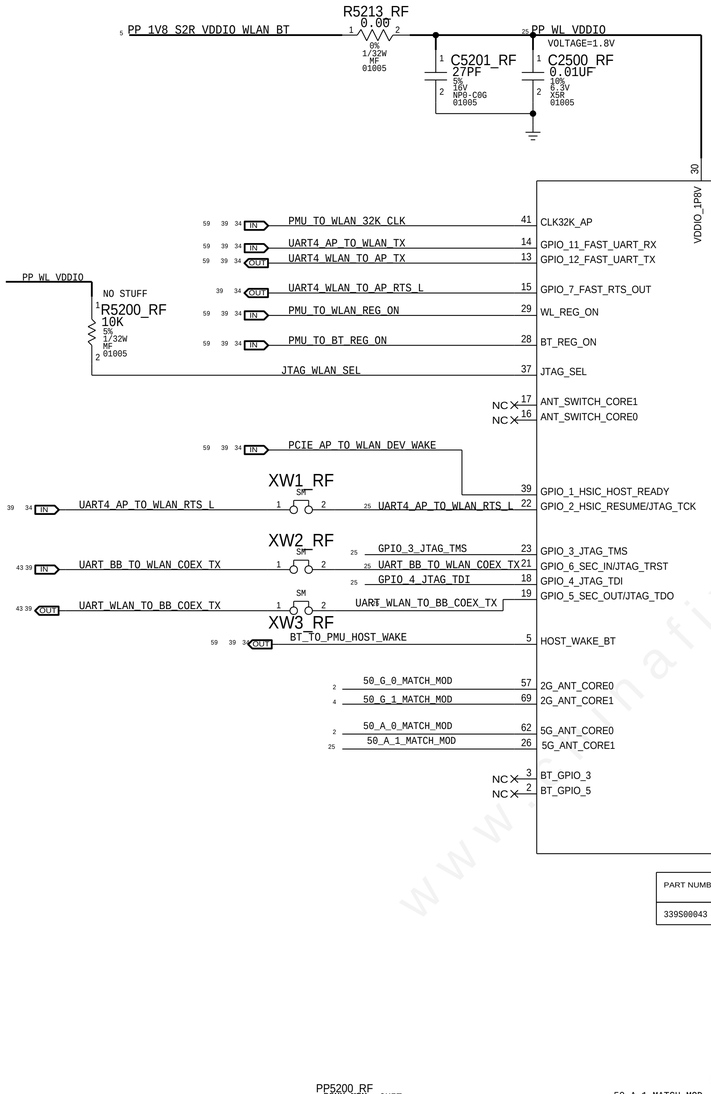


SIM



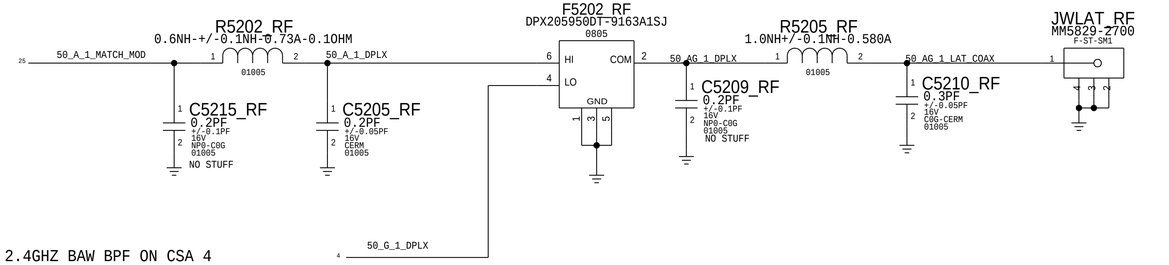
WIFI/BT



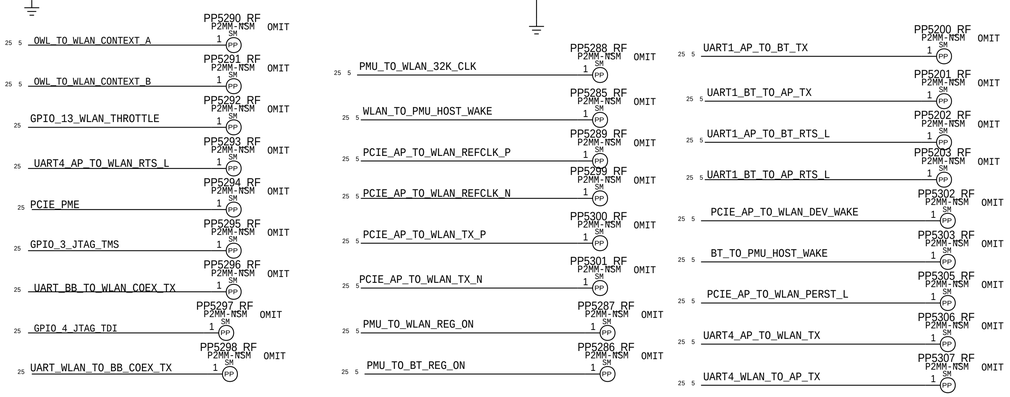


PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
339S00043	339S00033		U5200_RF	ALT WIFI/BT MODULE

WIFI LAT COAX CONNECTOR



WLAN LAT 2.4GHZ BAW BPF ON CSA 4



STOCKHOLM

ALL NETNAMES NEED TO BE CHECKED

INSTALL R5312 AND REMOVE R5311
WHEN VINYL PRESENT

PP_VCC_MAIN
PP_1V8_LDO6
C5320_RF 0.1UF 20% 6.3V X5R-CERM 01005
C5321_RF 15UF 20% 6.3V X5R 0402-1
L5303_RF 1.8UH-0.7A 0603 STOCKHOLM_BOOST_SW
U5302_RF WLCSP FAN48614BUC50X
VIN SW SW EN PGND PGND AGND VOUT VOUT
STOCKHOLM_5V
C5322_RF 15UF 20% 6.3V X5R 0402-1
C5323_RF 15UF 20% 6.3V X5R 0402-1
STOCKHOLM_DC_BOOST_EN

STOCKHOLM_5V
STOCKHOLM_TVDD
C5330_RF 1UF 20% 10V X5R 0201
PP_VCC_MAIN
C5324_RF 1UF 20% 10V X5R 0201
R5310_RF 0.00 0% 1/32W MF 01005
STOCKHOLM_AVDD
R5314_RF 0.00 0% 1/32W MF 01005 VOLTAGE=1.80V
PP_STOCKHOLM_ESE
VOLTAGE=1.80V
C5303_RF 0.22UF 20% 10V CERM-X5R 0201
C5304_RF 1UF 20% 10V X5R 0201
STOCKHOLM_DVDD
PP_STOCKHOLM_1V8_S2R
C5302_RF 1UF 20% 10V X5R 0201

U5301_RF
PN66VEU3-A101D010
UFLGA

STOCKHOLM_TO_PMU_HOST_WAKE	D1	IRQ	
	A5	SVDD_REQ	NC
AP_TO_STOCKHOLM_FW_DWLD_REQ	B2	DWL	
STOCKHOLM_TO_BBPMU_CLK_REQ	A2	CLK_REQ	
50_BBPMU_TO_STOCKHOLM_19P2M_CLK	A3	NFC_CLK_XTAL1	
UART3_AP_TO_STOCKHOLM_TXD	C1	RX	
UART3_STOCKHOLM_TO_AP_TXD	B1	TX	
UART3_AP_TO_STOCKHOLM_RTS_L	D2	CTS	
UART3_STOCKHOLM_TO_AP_RTS_L	A1	RTS	
PMU_TO_STOCKHOLM_EN	E1	VEN	
PP_STOCKHOLM_ESE	E3	SMX_RST*	
	E4	SMX_CLK	NC
	F4	ESE_IO1	NC
	B3	SPIM_MOSI	
	B4	SPIM_MISO	NC
	E6	SPIM_SCK	NC
	C3	XTAL2	NC
	F1	SPIM_IRQ	NC
	A4	SWIO	4FF_SIM_SWP
	A7	GPIO0	STOCKHOLM_SIM_PRES
	A6	SPIM_NSS	NC
	D5	TX_PWR_REQ	
ESE_DWPM_DBG	G7		STOCKHOLM_DWPM_DBG
ESE_DWPS_DBG	G6		STOCKHOLM_DWPS_DBG
RXP	F6		STOCKHOLM_RXP
RXN	F5		STOCKHOLM_RXN
TX1	G3		STOCKHOLM_TX1
TX2	G5		STOCKHOLM_TX2
WKUP_REQ	E5		AP_TO_STOCKHOLM_DEV_WAKE
VMID	F7		STOCKHOLM_VMID
SE2_PWR_REQ	F2		SE2_PWR_REQ
SE2_SVDD_IN	G1		SE2_SVDD_IN
VSS	E2		
AVSS	D4		
AVSS	D6		
AVSS	E3		
DVSS	B6		
DVSS	C4		
TVSS	G4		
PVSS	C2		

TP5301_RF TP-P55
R5316_RF 0.00 0% 1/32W MF 01005 NOSTUFF
STOCKHOLM_SPIM_MOSI
R5315_RF 0.00 0% 1/32W MF 01005
STOCKHOLM_SIM_PRES
C5317_RF 0.1UF 20% 6.3V X5R-CERM 01005
Q5301_RF DMP22D4UFA DFN0806 NOSTUFF
PP_STOCKHOLM_1V8_S2R

C5308_RF 1000PF 2% 25V C0G-NP0 0201
STOCKHOLM_RXP_CAP
R5303_RF 560 5% 1/20W MF 201
L5301_RF 160NH-10%-0.48A-0.330HM 0402
STOCKHOLM_BAL1
C5310_RF 820PF 2% 25V C0G-NP0 0201
T5301_RF ATB201206F-20011 0805
BAL1 UNBAL BAL0 GND
STOCKHOLM_ANT_MATCH
C5312_RF 220PF 2% 50V C0G 0201
C5313_RF 22PF 5% 50V C0G 0201 NOSTUFF
C5314_RF 22PF 5% 50V C0G 0201 NOSTUFF
AP_TO_STOCKHOLM_ANT
C5315_RF 1000PF 2% 50V C0G-NP0 0201
C5316_RF 1000PF 2% 25V C0G-NP0 0201 NOSTUFF
C5318_RF 560PF 2% 25V NP0-C0G 0201
C5319_RF 100PF 2% 50V C0G 0201 NOSTUFF
TP5303_RF TP-P55
TP5304_RF TP-P55

L5302_RF 160NH-10%-0.48A-0.330HM 0402
STOCKHOLM_BAL0
C5311_RF 820PF 2% 25V C0G-NP0 0201
C5309_RF 1000PF 2% 25V C0G-NP0 0201
STOCKHOLM_RXN_CAP
R5304_RF 560 5% 1/20W MF 201

PP_STOCKHOLM_1V8_S2R
R5301_RF 100K 5% 1/32W MF 01005 NOSTUFF
PMU_TO_STOCKHOLM_EN
AP_TO_STOCKHOLM_FW_DWLD_REQ
R5302_RF 100K 5% 1/32W MF 01005
AP_TO_STOCKHOLM_DEV_WAKE
R5305_RF 100K 5% 1/32W MF 01005