Apple iPhone XR (820-01209) Schematic Diagram

Apple

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HARDWARE

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

N84 MLB ICE

LAST_MODIFICATION=Fri Aug 17 14:33:55 2018

BOM APNs on Page 7; MCO APN on Page 4

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATORS	CRITICAL	BOM OPTION
051-03187	1	SCH,MLB_ICE,N84	SCH	CRITICAL	?
820-01209	1	PCB,MLB_ICE,N84	PCB	CRITICAL	?

Sub Designs

SOURCE PROJECT	SUB-DESIGN NAME	VERSION	HARD/SOFT	SYNC_DATE/TIME
N84	HIER_RADIO_ICE	0.151.0	S	2018_08_04_11:21:17
N84	HIER_NFC	0.23.0	S	2018_08_09_15:03:50

SCH,MLB,ICE,N84

PTH0401
2.30R1.60-NSP
PTH0401GND

AC Return Steering

UNDERFILLDAM RESISTORS/CAP

R0401
0.00
NC X 1 2 X NC
ROOM-SOC

PP_VDD_MAIN
C04E1
2.2UF

MCO: 056-05555

C04A1 220PF C04A2 220PF C04A3 100PF C04A4 56PF C04A5 18PF C04A6 4PF
C04B1 220PF C04B2 220PF C04B3 100PF C04B4 56PF C04B5 18PF C04B6 4PF
C04C1 220PF C04C2 220PF C04C3 100PF C04C4 56PF C04C5 18PF C04C6 4PF

SB0403
STDOFF-2.560D1.4ID.99H-SM

PTH0403
PTH0403GND

PTH0406
THNSP

SHIELDS

SHLD0401 SM
SHLD0403 SM
SHLD0402 SM
SHLD0404 SM

FIDUCIALS

PTH0402
THNSP

SB0401
SB0404

CROSS
FD0412 FID
FD0413 FID
FD0414 FID
FD0415 FID

SQUARE
FD0408 FID OP5SQ-SMP3SQ-NSP
FD0410 FID OP5SQ-SMP3SQ-NSP
FD0411 FID OP5SQ-SMP3SQ-NSP

PTH0404
THNSP
SB0402
PTH0405
2.5R1.8-NSP
PTH0405GND

BB PMU Shunt Caps

PP_VDD_MAIN
C04D1 220PF C04D2 220PF C04D3 220PF C04D4 220PF C04D5 220PF

AC STITCHING CAPS

QTY 10:
PP_VDD_MAIN
C0401 33PF C0402 33PF C0403 100PF C0404 220PF C0405 100PF C0406 33PF C0407 33PF C0408 33PF C0409 33PF C0410 220PF

QTY 10:
PP_VDD_MAIN
C0411 33PF C0412 33PF C0413 33PF C0414 33PF C0415 220PF C0165 220PF C0417 100PF C0418 100PF C0419 33PF C0420 33PF

QTY 10:
PP_VDD_MAIN
C0421 100PF C0422 100PF C0423 100PF C0424 100PF C0425 220PF C0426 100PF C0427 100PF C0428 100PF C0429 100PF C0430 33PF

QTY 10:
PP_VDD_MAIN
C0431 56PF C0432 100PF C0433 33PF C0434 220PF C0435 33PF C0436 33PF C0437 33PF C0438 56PF C0439 56PF C0440 56PF

QTY 4:
PP_VDD_MAIN
C0441 56PF C0442 56PF C0443 220PF C0444 220PF

QTY 8:
PP_VDD_MAIN
C0451 220PF C0452 220PF C0453 33PF C0454 33PF C0455 33PF C0456 56PF C0457 33PF C0458 100PF

Test/Probe Points

POWER

- TP0501
- PP_VBUS1_E75 — TP0502, TP0503
- PP_VBUS2_IKTARA — TP0504
- PP_BATT_VCC — TP0505, TP0506
- PP_VDD_MAIN_YANGTZE — TP0507, TP0508, TP0509
- PP_VDD_MAIN — TP0540, TP0541, TP0542
- PP_VDD_MAIN_OV_R — TP0543

GECKO

- GECKO_TO_AOP_IRO_L — PP0731

HYDRA

VBUS Valid
- HYDRA_TO_YANGTZE_VBUS1_VALID_L — PP0507

USB
- 90_HYDRA_DP1_CONN_P — TP0514
- 90_HYDRA_DP1_CONN_N — TP0515
- 90_HYDRA_DP2_CONN_P — TP0516
- 90_HYDRA_DP2_CONN_N — TP0517

ACC1/2
- PP_HYDRA_ACC1_CONN — TP0518
- PP_HYDRA_ACC2_CONN — TP0519
- TP0520
- HYDRA_CON_DETECT_CONN_L — TP0521

FOR DIAGS

PMU

AMUX
- PMU_AMUX_AY — TP0522
- PMU_AMUX_BY — TP0523

SPMI
- SPMI_PMU_BI_PMGR_SDATA — TP0522

COLD_RESET
- PMU_TO_SYSTEM_COLD_RESET_L — TP0534

Audio

- SPKAMP_TO_OTHERS_SYNC — PP0701
- SPKAMP_BOT_ARC_TO_AOP_INT_L — PP0702
- SPI_CODEC_TO_AP_MISO — PP0703
- SPI_AP_TO_CODEC_MOSI — PP0704

RIGEL

- RIGEL_TO_ISP_INT — PP0721
- CAMPMU_TO_RIGEL_ENABLE — PP0722

SENSORTP

- PHOSPHORUS_TO_AOP_INT — PP0504
- IMU_TO_AOP_DATARDY — PP0570

Sensor SPI

- SPI_AOP_TO_IMU_MOSI — PP0511
- SPI_IMU_TO_AOP_MOS0 — PP0512

CCG2

- CCG2_TO_SMC_INT_L — PP0508
- AP_BI_CCG2_SWDIO — PP0560
- AP_TO_CCG2_SWCLK — PP0561

SOC CPU/GPU/DDR

- AP_TO_PMU_TEST_CLKOUT — PP0513
- PMU_TO_AP_THROTTLE_GPU1_L — PP0514
- AP_TO_PMU_SOCHOT_L — PP0515

CPU PCORE LVCC
- PP_CPU_PCORE — XW0504 (SHORT-20L-0.05MM-SM) — PP_CPU_PCORE_LVCC — TP0526
- XW0501 (SHORT-20L-0.05MM-SM) — CPU_PCORE_GND — TP0510

GPU LVCC
- PP_GPU — XW0503 (SHORT-20L-0.05MM-SM) — PP_GPU_LVCC — TP0525
- XW0540 (SHORT-20L-0.05MM-SM) — GPU_GND — TP0524

SOC SENSE
- SOC_SENSE_POS — PP0518
- SOC_SENSE_NEG — PP0519

GPU SENSE
- GPU_SENSE_POS — PP0520
- GPU_SENSE_NEG — PP0521

CPU PCORE SENSE
- GPU_PCORE_SENSE_POS — PP0522
- CPU_PCORE_SENSE_NEG — PP0523

DCS and VDDQL SENSE
- DCS_SENSE_POS — PP0524
- VDDQL_DCS_SENSE_NEG — PP0527
- VDDQL_SENSE_POS — PP0525

SLEEP1 READY
- APO_TO_DDR_SLEEP1_READY_PROBE — PP0526

NAND Debug

- SWD_AP_BI_NAND_SWDIO — PP0528
- AP_TO_NAND_RESET_L — PP0580
- SPI_S4E_TO_AP_MISO_BOOT_CONFIG2 — PP0530
- NAND_ANI1_VREF — PP0531
- NAND_ANI0_VREF — PP0532

BACKLIGHTDebug

- DWI_PMGR_TO_BACKLIGHT_DATA — PP0533

- DISPLAY_TEST — PP0540

BACKLIGHTLED

- PP_DISPLAY_BL12_CAT1 — TP0527
- PP_DISPLAY_BL12_CAT2 — TP0528
- PP_DISPLAY_BL12_ANODE — TP0529
- PP_DISPLAY_BL34_CAT1 — TP0530
- PP_DISPLAY_BL34_CAT2 — TP0531
- PP_DISPLAY_BL34_ANODE — TP0532

PCIE Refclk

- 90_PCIE_AP_TO_NAND_REFCLK_P — PP0535
- 90_PCIE_AP_TO_NAND_REFCLK_N — PP0536

Hydra UART

- UART_ACCESSORY_TO_AP_RXD — PP0590
- UART_AP_TO_ACCESSORY_TXD — PP0591
- UART_AP_DEBUG_TXD — PP0592
- UART_AP_DEBUG_RXD — PP0593

SOC DEBUG

- SOC_DEBUG2 — PP0542
- SOC_DEBUG3 — PP0543
- PAD_MTR_ANALOG_TEST_P — PP0544
- PAD_MTR_ANALOG_TEST_N — PP0545
- BOARD_ID0 — PP0546

DFU

- HYDRA_TO_AP_FORCE_DFU — TP0513
- DFU_STATUS — PP0501

IKTARA

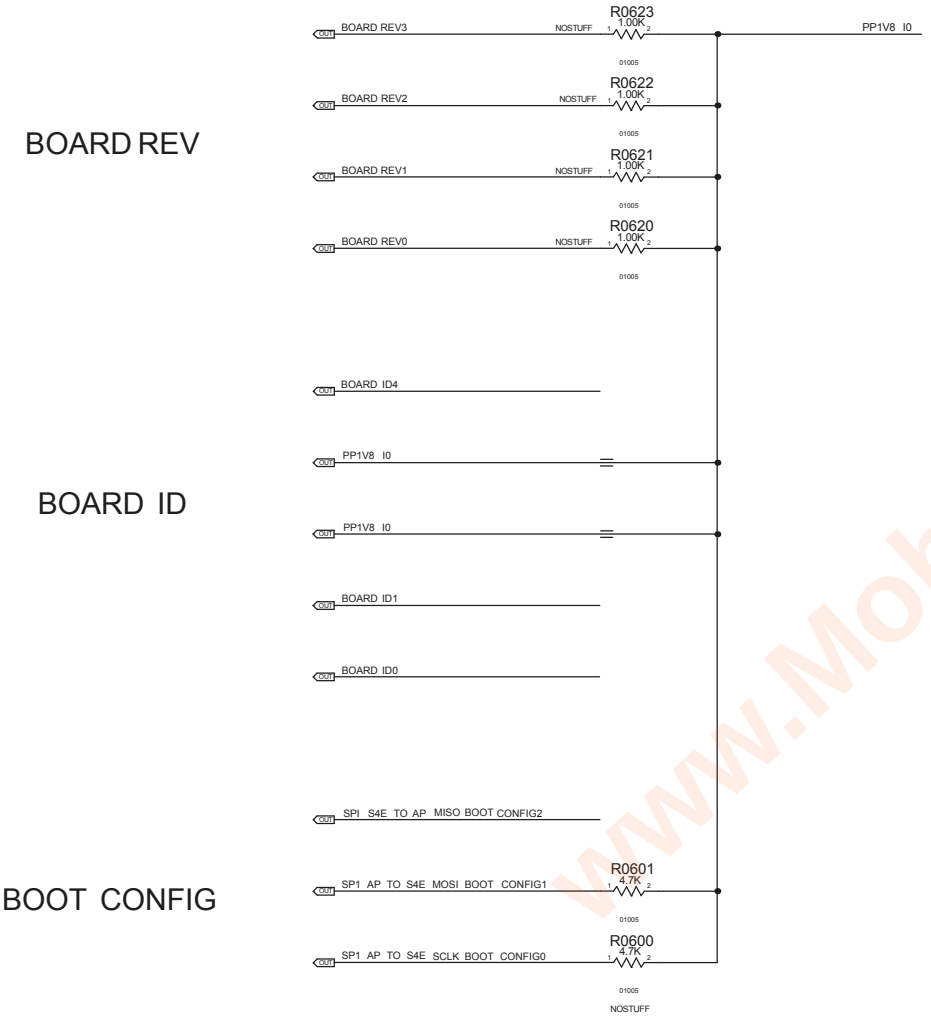
- IKTARA_ANA1 — PP0548
- IKTARA_GPIO3 — PP0549
- IKTARA_GPIO4 — PP0550
- IKTARA_TO_SMC_INT — PP0551

COIL
- IKTARA_COIL1 — TP0511
- IKTARA_COIL2 — TP0512

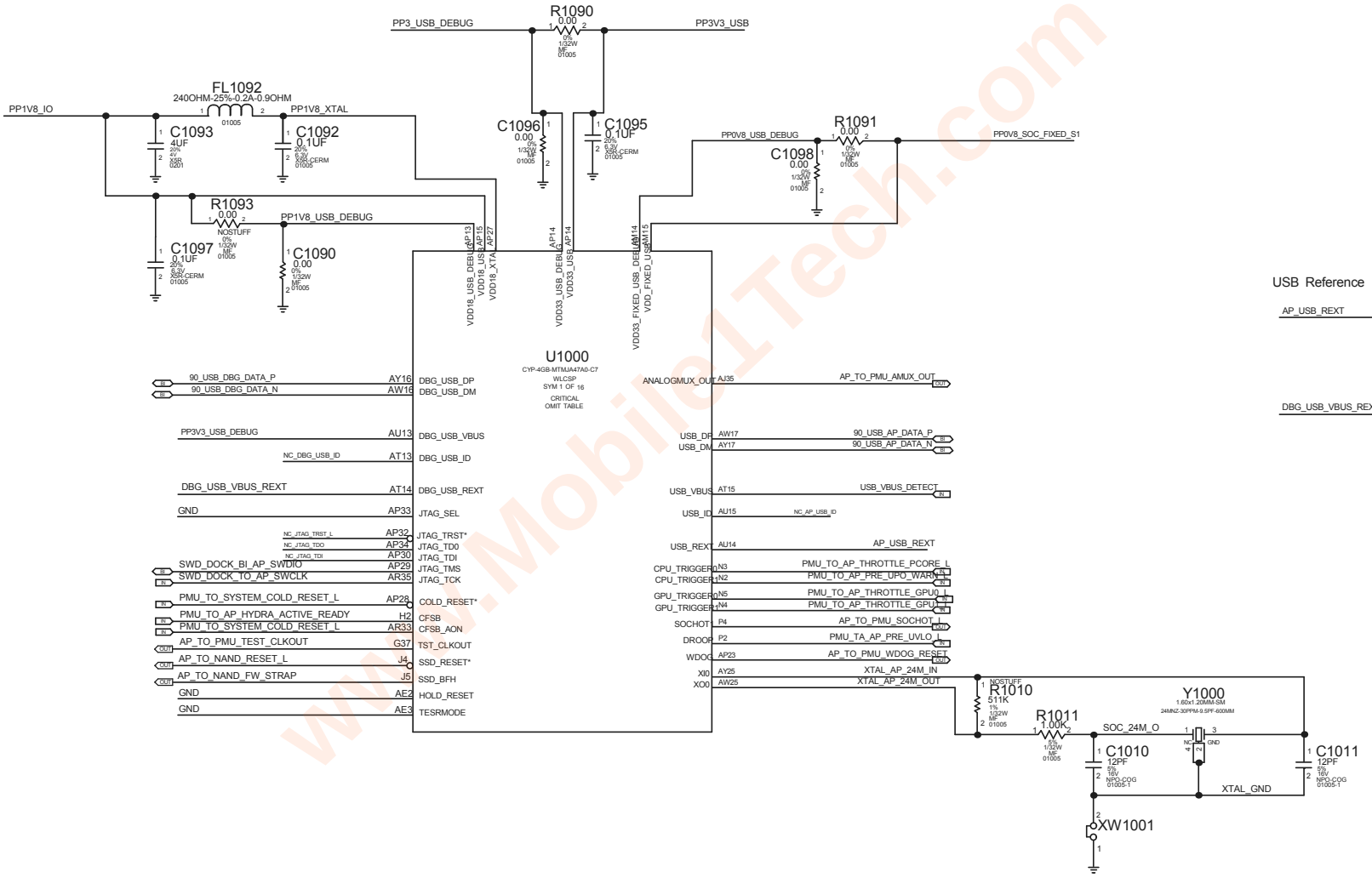
PMU

- PMU_TO_AP_PRE_UVLO_L — PP0711
- PMU_TO_AP_HYDRA_ACTIVE_READY — PP0712
- PMU_TO_AOP_CLK32K — PP0713
- BB_TO_PMU_PCIE_HOST_WAKE_L — PP0714

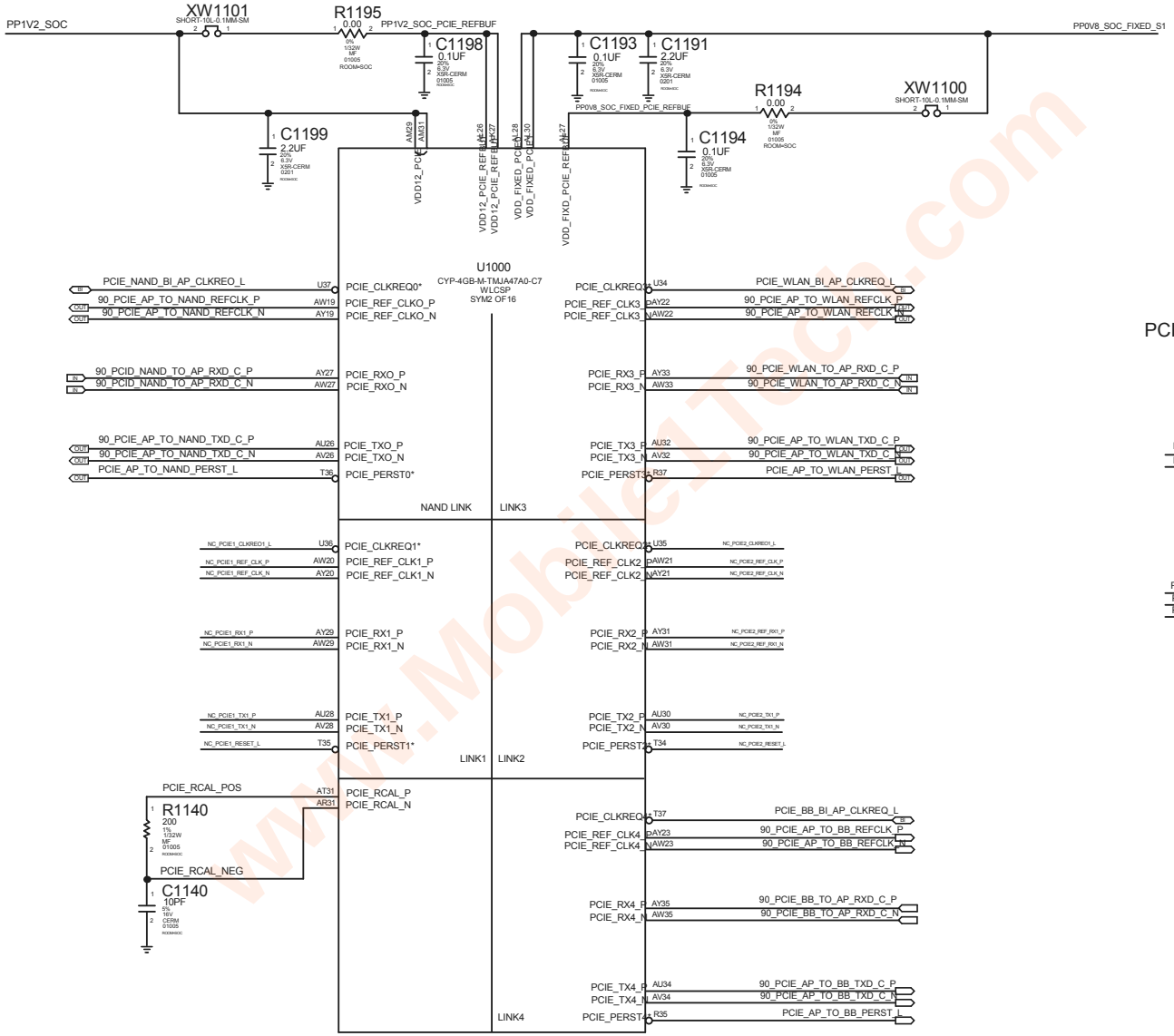
BOOTSTRAPPING



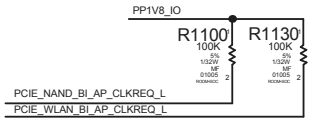
SOC - USB, JTAG, XTAL



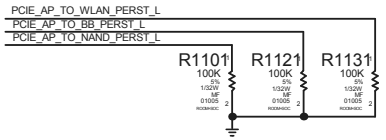
SOC-PCIE



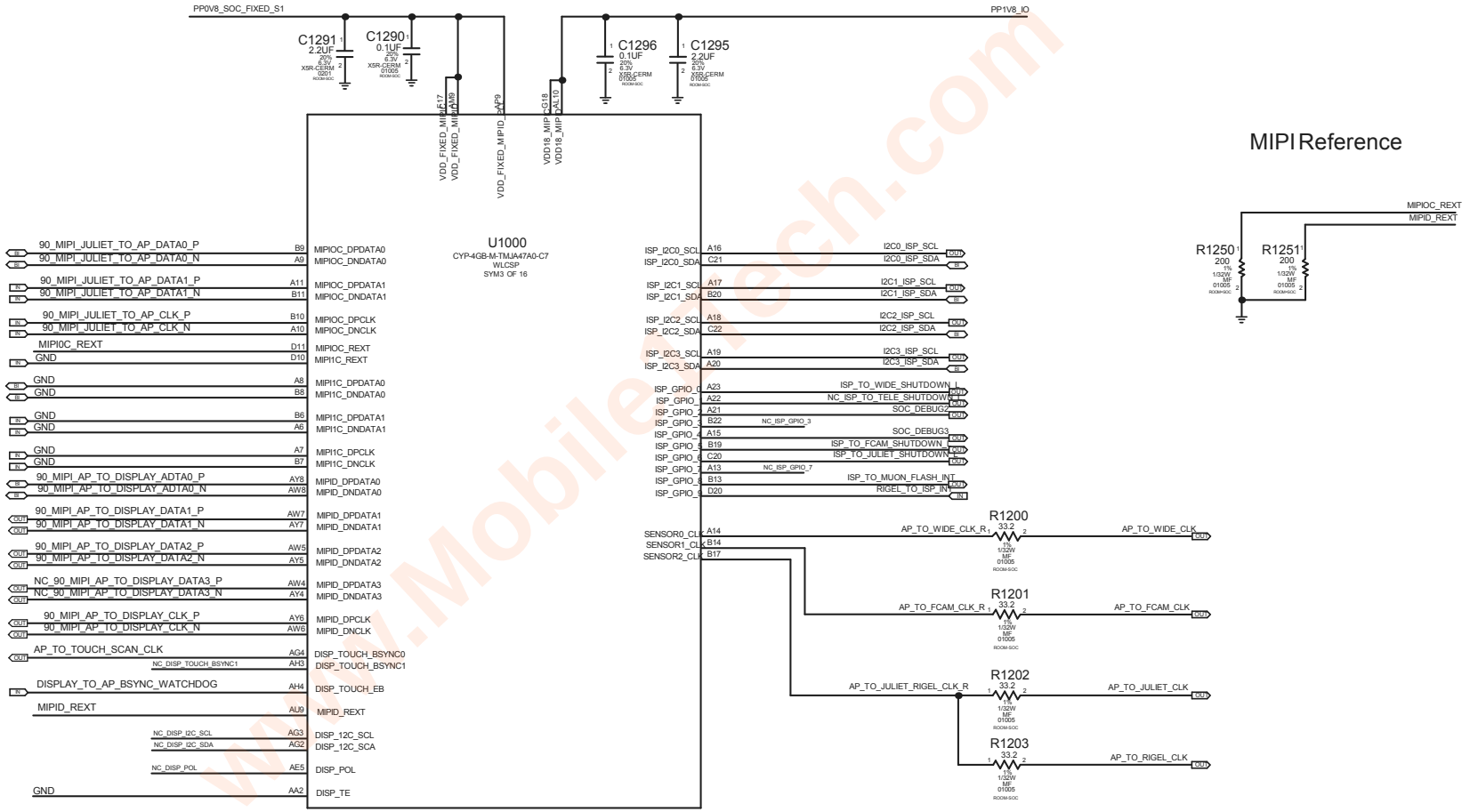
PCIe Clock Request Pull-Ups



PCIe Reset Pull-Uowns

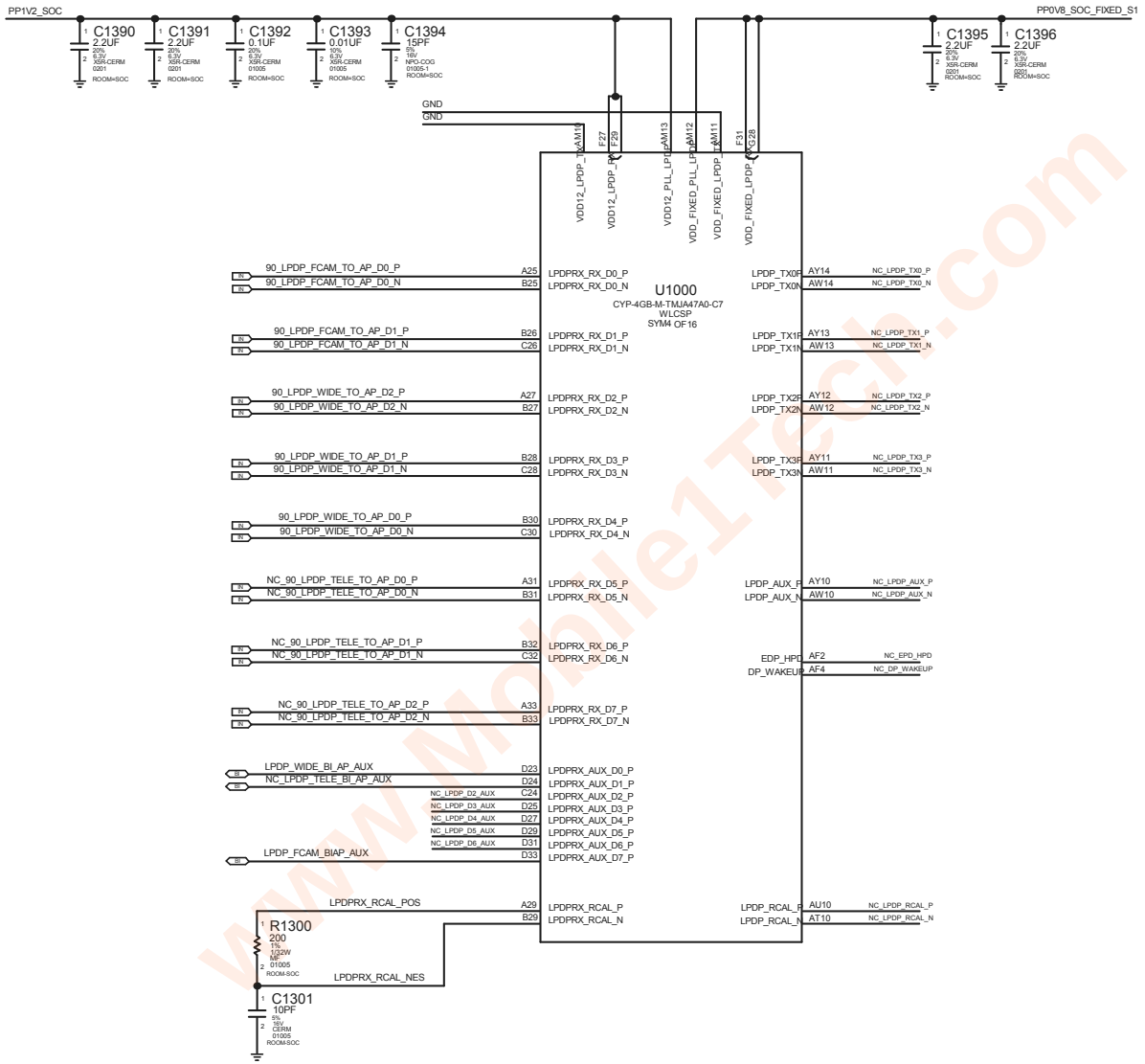


SOC-MIPI

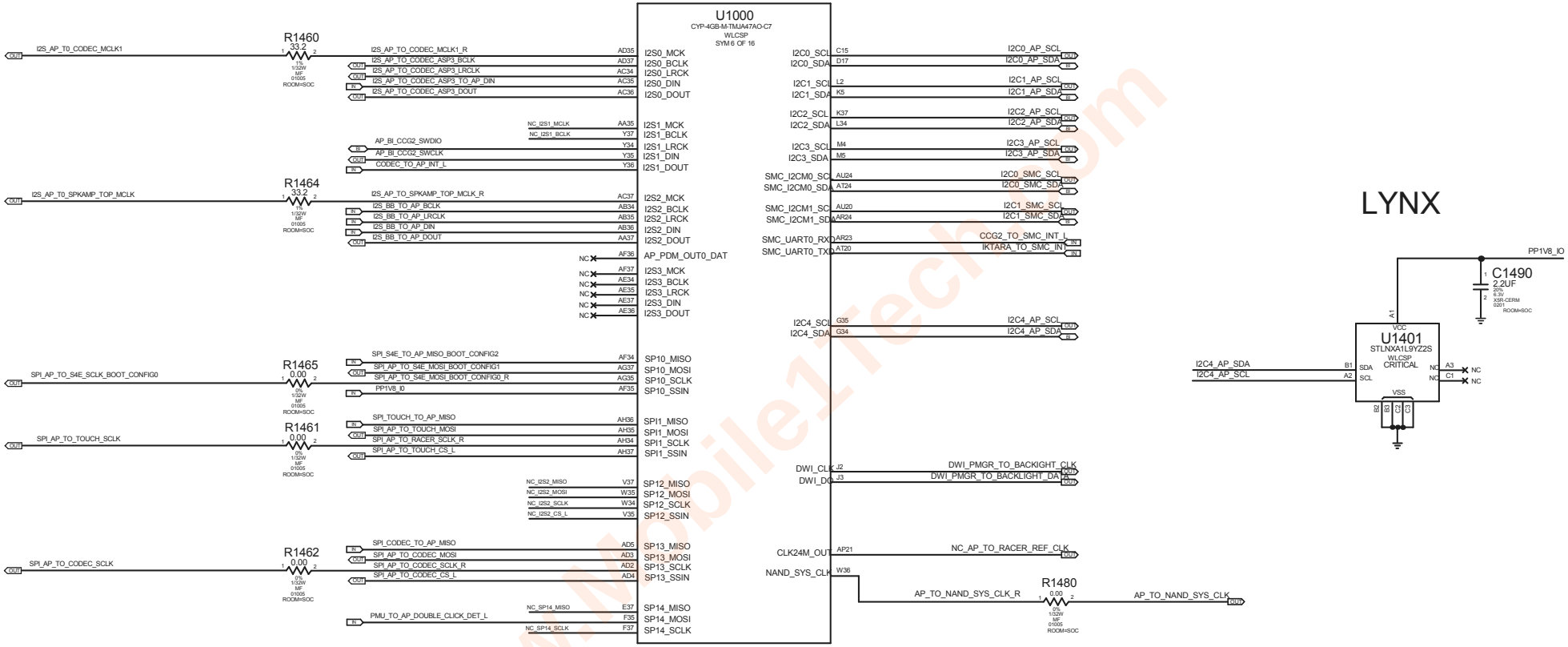


MIPI Reference

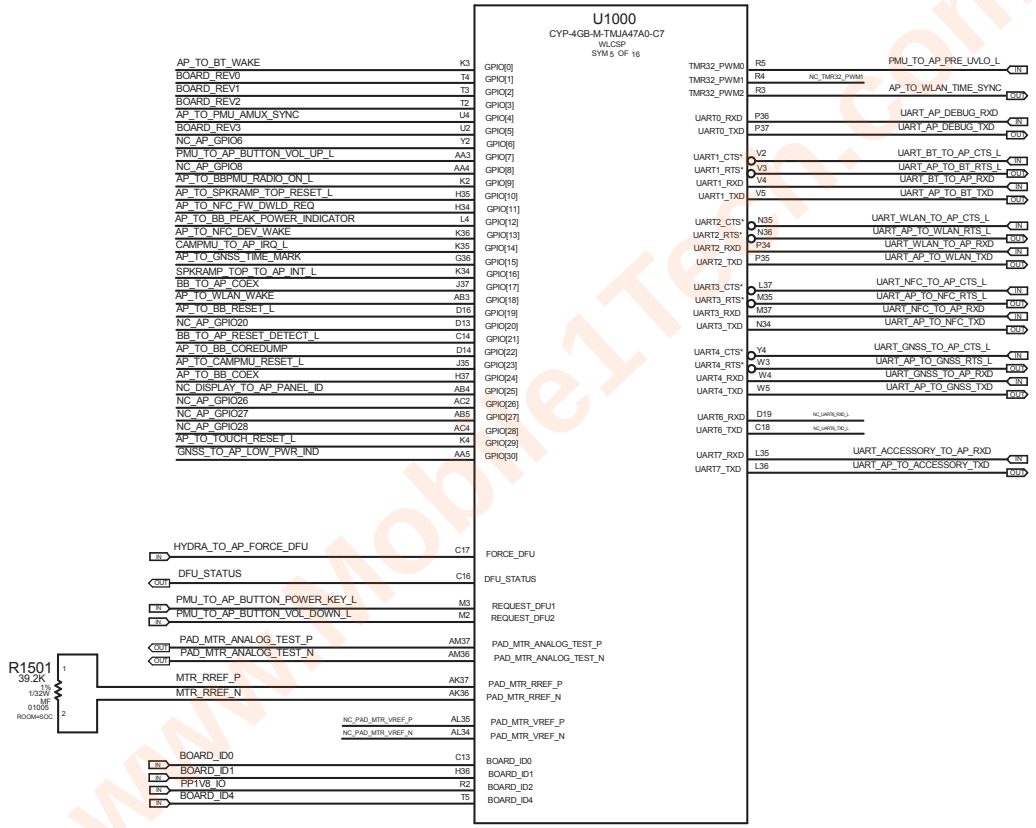
SOC-LPDP



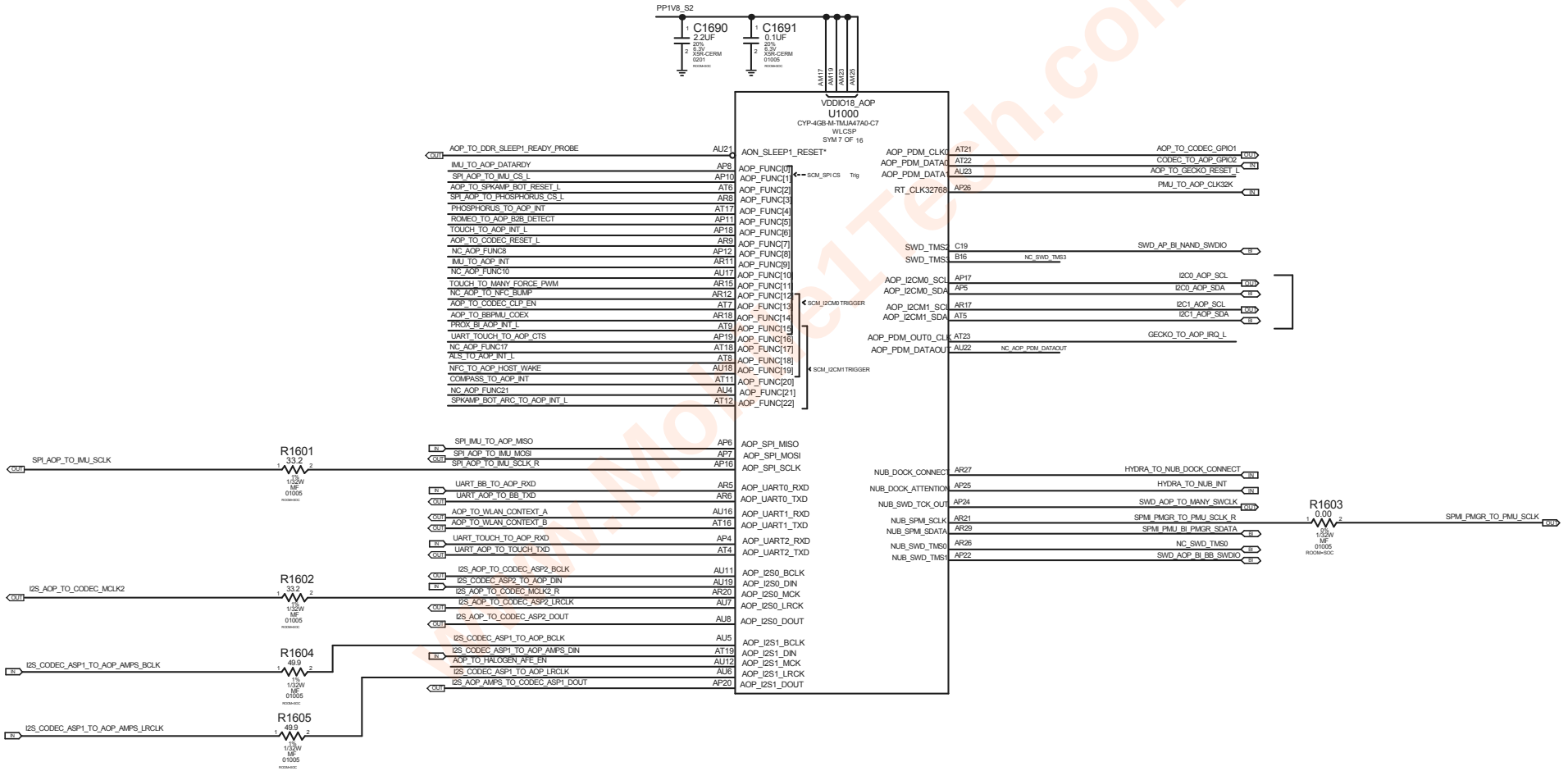
SOC-SERIAL INTERFACES



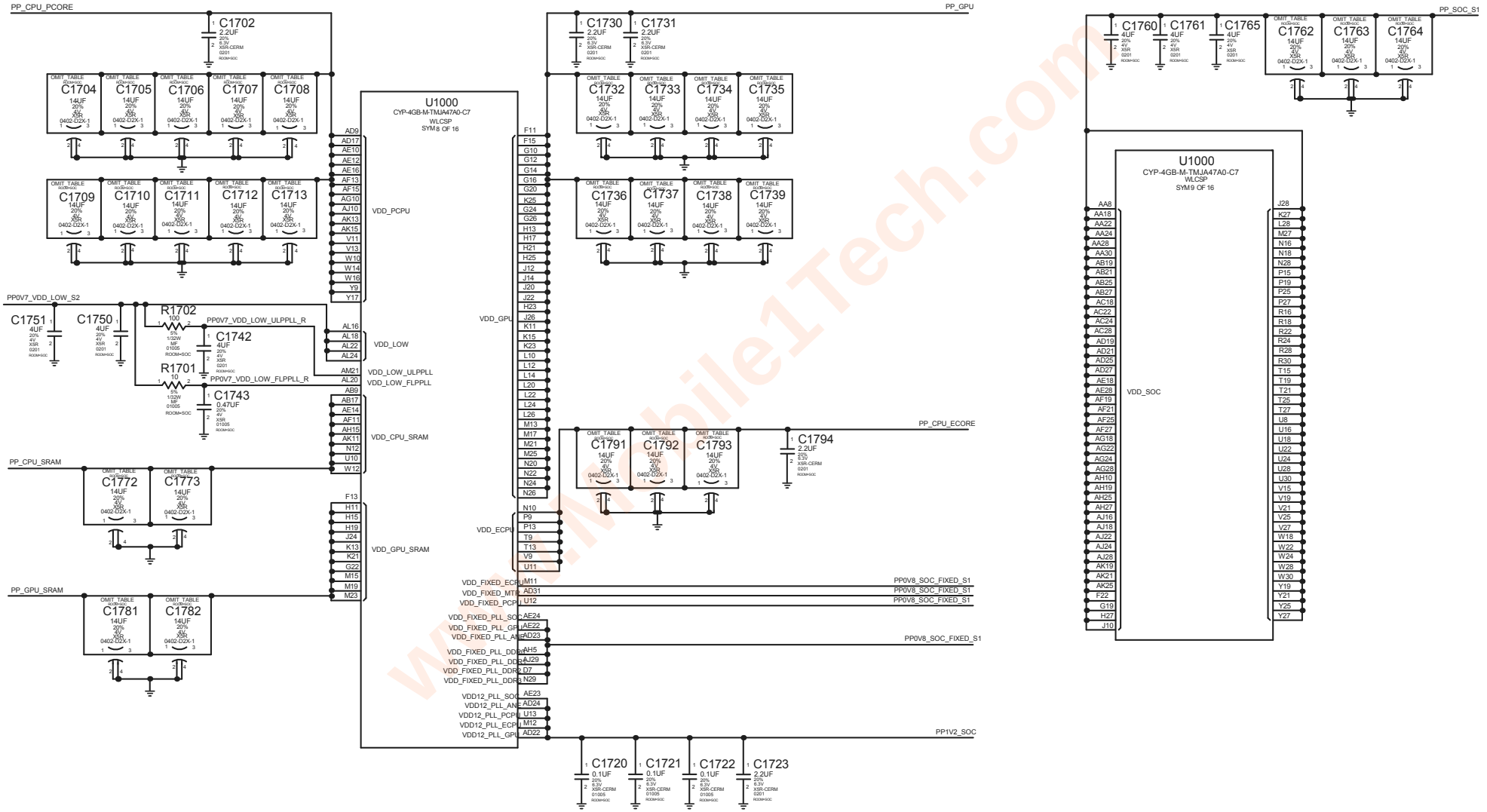
SOC-GPIO INTERFACES



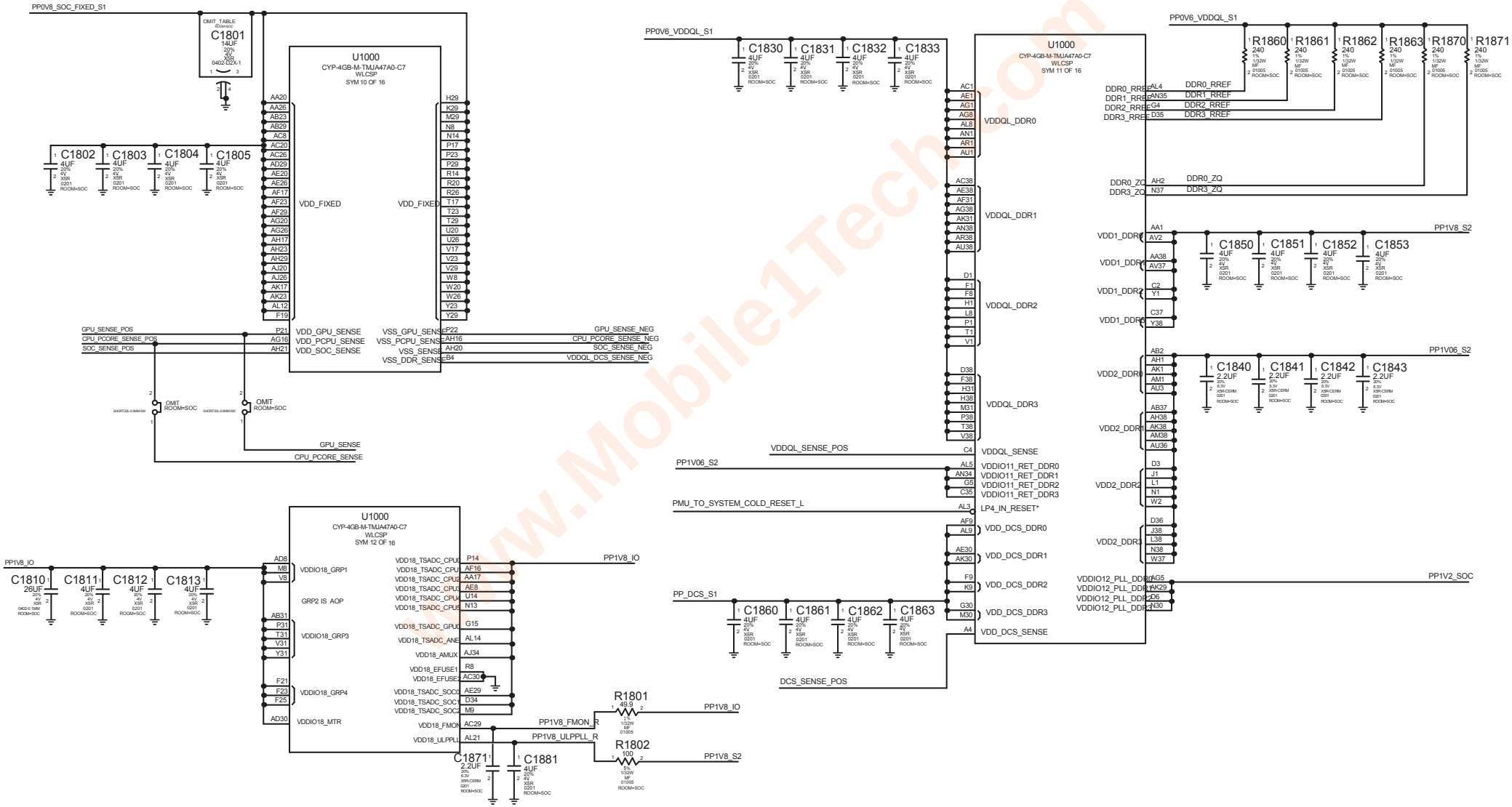
SOC-AOP



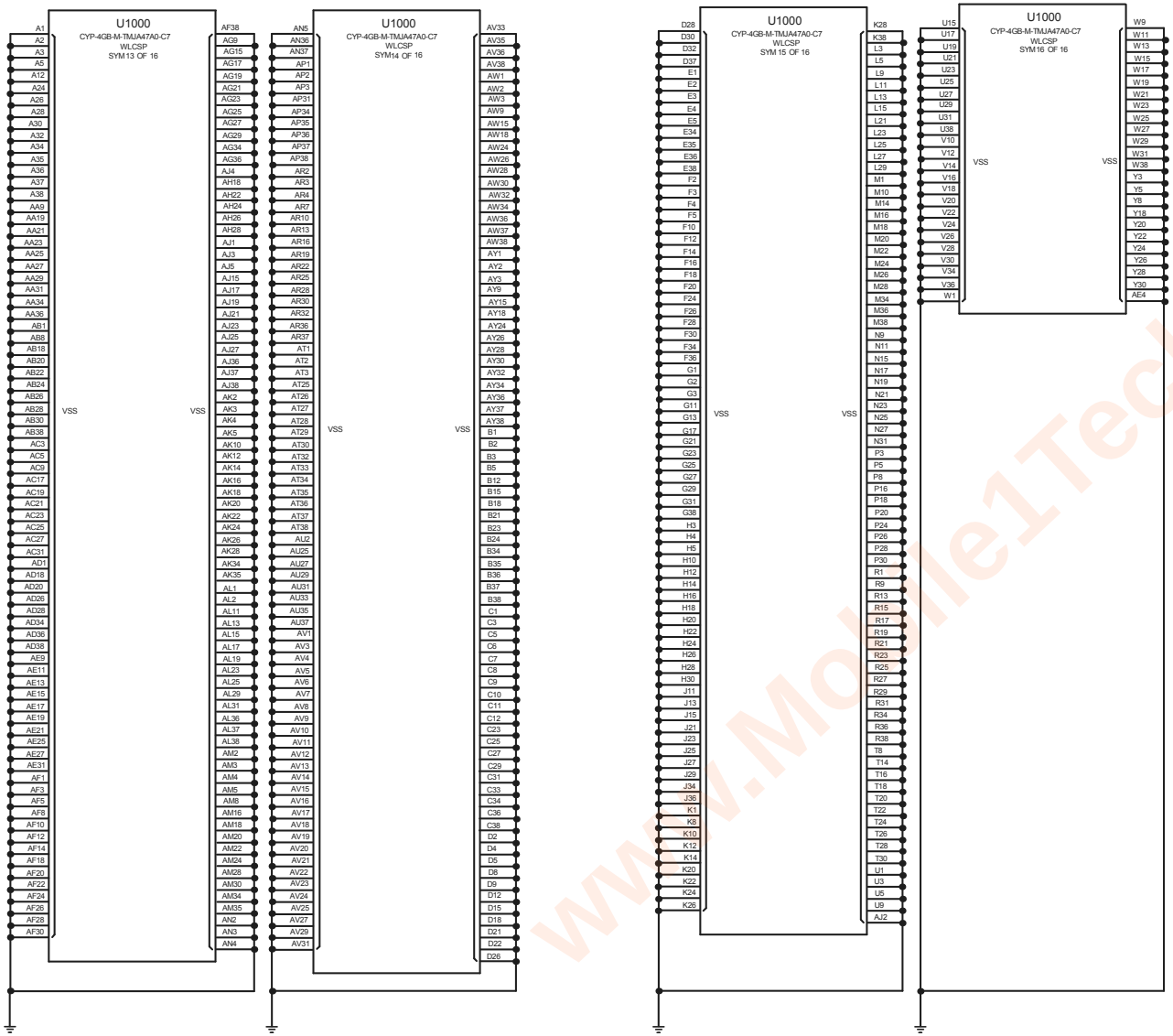
SOC-CPU, GPU & SOC RAILS



SOC-CPU, GPU & SOC RAILS



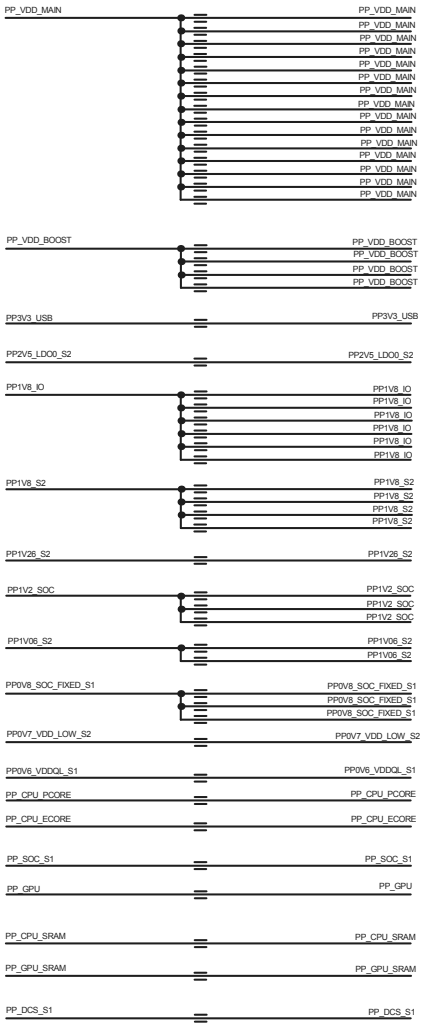
SOC-POWERSUPPLIES



ALIASES(1/2)

POWER

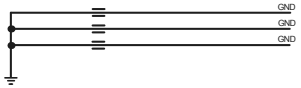
Dev Board Compatibility (Medusa)



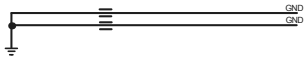
UNUSED LDOs

Outputs

Inputs

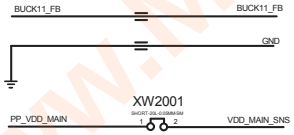


UNUSED LPDP VDD



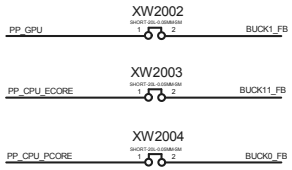
Dev Board Compatibility (Power)

Place Near PMU_LDO



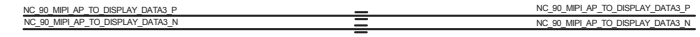
Dev Board Compatibility (Power)

Place Near SOC Balls

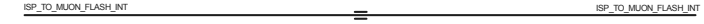


DISPLAY

MIPI N.C.

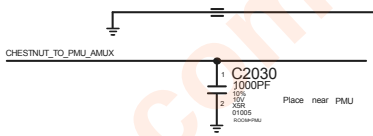


MUON NAME TRANSLATION



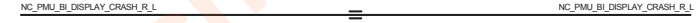
DISP_TE GND

CHESTNUT DESENSE



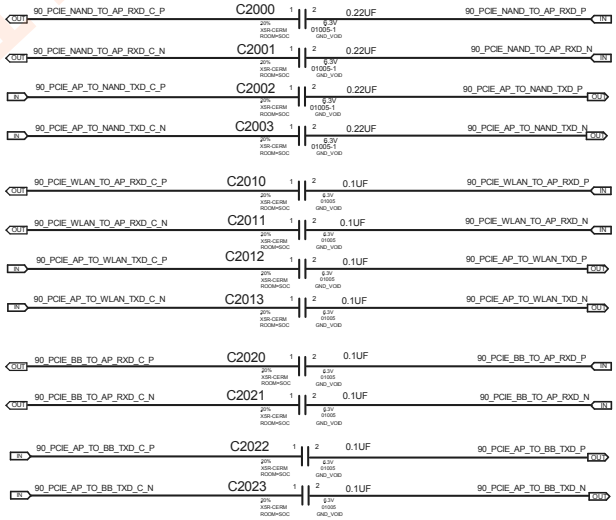
PMU

NC

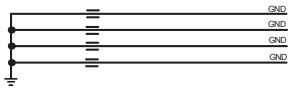


XTAL

PCIE



MISC. SOC GROUNDS



S4E NAND

391mA MAX
PP1V8_IO

C2626 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2610 0.1UF 20% 6.3V X5R-CERM 01005 ROOM=NAND
C2660 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2629 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2630 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2624 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2641 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2643 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2645 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2647 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2611 220PF 5% 25V C0G 01005 ROOM=NAND
C2612 220PF 5% 25V C0G 01005 ROOM=NAND
C2618 100PF 5% 25V C0G-CERM 01005 ROOM=NAND
C2614 68PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2615 47PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2617 22PF 5% 16V CERM 01005 ROOM=NAND

932mA MAX
PP0V9_NAND

C2661 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2662 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2602 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2605 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2600 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2601 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2622 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2627 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2640 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2642 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2644 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2646 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2603 220PF 5% 25V C0G 01005 ROOM=NAND
C2606 220PF 5% 25V C0G 01005 ROOM=NAND
C2609 100PF 5% 25V C0G-CERM 01005 ROOM=NAND
C2607 68PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2608 47PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2604 22PF 5% 16V CERM 01005 ROOM=NAND

1100mA MAX (1us peak power)
PP2V63_NAND

C2613 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2616 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2619 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2621 15UF 20% 6.3V X5R 0402-0.1MM-1 ROOM=NAND
C2649 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2650 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2651 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2652 2.2UF 20% 6.3V X5R-CERM 0201 ROOM=SOC
C2638 100PF 5% 25V C0G-CERM 01005 ROOM=NAND
C2639 68PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2634 47PF 5% 16V NP0-C0G 01005 ROOM=NAND
C2635 22PF 5% 16V CERM 01005 ROOM=NAND
C2636 220PF 5% 25V C0G 01005 ROOM=NAND
C2637

XW2600 SHORT-0R-0.1MM-SM
PP1V8_IO_PCI_AVDD

Place near C2629

NAND_ANI1_VREF
NAND_ANI0_VREF

U2600
THGBX7T1T83LGXF
VFLGA
ROOM=NAND
OMIT_TABLE
CRITICAL

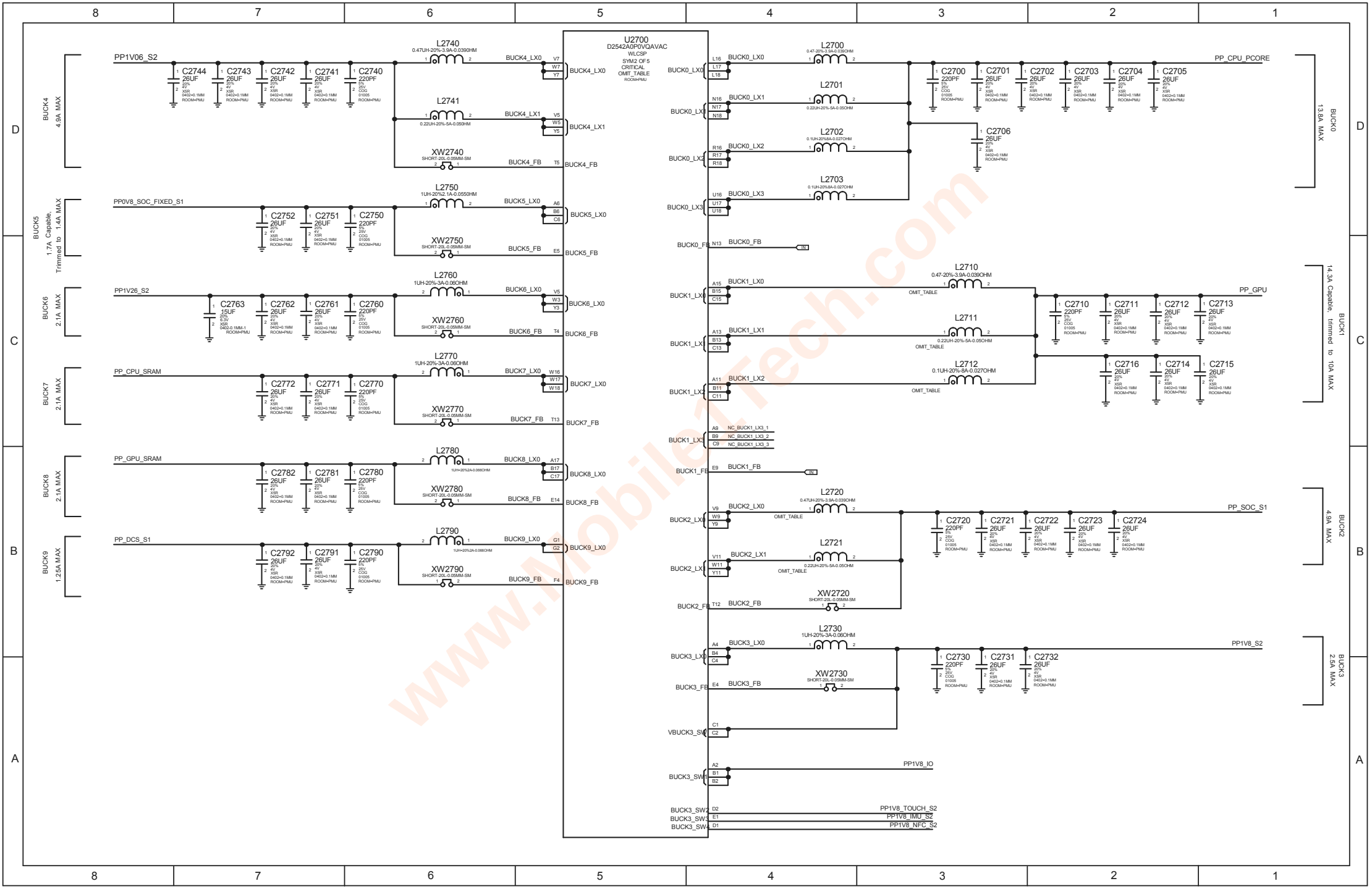
PCI_AVDD_CLK
PCI_AVDD_CLK
PCI_AVDD_1
PCI_VDD_1
PCI_VDD_2
AVDD18_PLL
ANI0_VREF
ANI1_VREF
VDDI
VDDIO
VCC
VDD_PLL
VPP
NC

AP_TO_NAND_SYS_CLK → CLK_IN
90_PCIE_AP_TO_NAND_REFCLK_P → PCIE_REFCLK_P
90_PCIE_AP_TO_NAND_REFCLK_N → PCIE_REFCLK_M
PCIE_NAND_BI_AP_CLKREQ_L → PCIE_CLKREQ_N
PCIE_NAND_RESREF → PCI_RESREF
R2604 3.01K 1% 1/32W MF 01005 ROOM=NAND
90_PCIE_AP_TO_NAND_TXD_P → PCIE_RX0_P
90_PCIE_AP_TO_NAND_TXD_N → PCIE_RX0_M
90_PCIE_NAND_TO_AP_RXD_P ← PCIE_TX0_P
90_PCIE_NAND_TO_AP_RXD_N ← PCIE_TX0_M
AP_TO_NAND_RESET_L → RESET*
TRST*
NAND_ZQ_ANI → ZQ_C
NAND_ZQ_NAND → ZQ_N
R2600 100 0.1% 1/32W MF 01005 ROOM=NAND
R2601 300 0.1% 1/32W MF 01005 ROOM=NAND

EXT_D0/BOOT0
EXT_D1/BOOT1
EXT_D2/BOOT2/SPINAND_SCLK
EXT_D3/SWD_UID0/SPINAND_MISO
EXT_D4/UART_RX
EXT_D5/SWD_UID1/SPINAND_MOSI
EXT_D6/UART_TX
EXT_D7/SPI
EXT_NCE/PERST*
EXT_NRE/JTAG_TMS
EXT_NWE/JTAG_TCK
EXT_RNB/JTAG_TDO
EXT_CLE/JTAG_TDI
EXT_ALE/JTAG_SEL
DROOP_N
WP_N

PMU_TO_NAND_LOW_BATT_BOOT_L
AP_TO_NAND_FW_STRAP
SPI_AP_TO_S4E_SCLK_BOOT_CONFIG
SPI_S4E_TO_AP_MISO_BOOT_CONFIG
SPI_AP_TO_S4E_MOSI_BOOT_CONFIG1
SYSTEM_ALIVE
PCIE_AP_TO_NAND_PERST_L
SWD_AP_BI_NAND_SWDIO
SWD_AOP_TO_MANY_SWCLK
PP1V8_IO

VSS


U2700
D2542A0P0VQAVAC
WLCSP
SYM2 OF 5
CRITICAL
OMIT_TABLE
ROOM=PMU
BUCK4
4.9A MAX
PP1V06_S2
L2740
0.47UH-20%-3.9A-0.039OHM
L2741
0.22UH-20%-5A-0.050HM
XW2740
SHORT-20L-0.05MM-SM
BUCK4_LX0
BUCK4_LX1
BUCK4_FB
BUCK5
1.7A Capable,
Trimmed to 1.4A MAX
PP0V8_SOC_FIXED_S1
L2750
1UH-20%2.1A-0.055OHM
XW2750
BUCK5_LX0
BUCK5_FB
BUCK6
2.1A MAX
PP1V26_S2
L2760
1UH-20%-3A-0.06OHM
XW2760
BUCK6_LX0
BUCK6_FB
BUCK7
2.1A MAX
PP_CPU_SRAM
L2770
1UH-20%-3A-0.06OHM
XW2770
BUCK7_LX0
BUCK7_FB
BUCK8
2.1A MAX
PP_GPU_SRAM
L2780
1UH-20%2A-0.068OHM
XW2780
BUCK8_LX0
BUCK8_FB
BUCK9
1.25A MAX
PP_DCS_S1
L2790
1UH-20%2A-0.068OHM
XW2790
BUCK9_LX0
BUCK9_FB
BUCK0
13.8A MAX
L2700
0.47-20%-3.9A-0.039OHM
L2701
0.22UH-20%-5A-0.05OHM
L2702
0.1UH-20%8A-0.027OHM
L2703
0.1UH-20%8A-0.027OHM
L2706
BUCK0_LX0
BUCK0_LX1
BUCK0_LX2
BUCK0_LX3
BUCK0_FB
PP_CPU_PCORE
BUCK1
14.3A Capable, trimmed to 10A MAX
L2710
0.47-20%-3.9A-0.039OHM
OMIT_TABLE
L2711
0.22UH-20%-5A-0.05OHM
OMIT_TABLE
L2712
0.1UH-20%8A-0.027OHM
OMIT_TABLE
BUCK1_LX0
BUCK1_LX1
BUCK1_LX2
BUCK1_LX3
BUCK1_FB
NC_BUCK1_LX3_1
NC_BUCK1_LX3_2
NC_BUCK1_LX3_3
PP_GPU
BUCK2
4.9A MAX
L2720
0.47UH-20%-3.9A-0.039OHM
OMIT_TABLE
L2721
0.22UH-20%-5A-0.05OHM
OMIT_TABLE
XW2720
SHORT-20L-0.05MM-SM
BUCK2_LX0
BUCK2_LX1
BUCK2_FB
PP_SOC_S1
BUCK3
2.5A MAX
L2730
1UH-20%-3A-0.06OHM
XW2730
SHORT-20L-0.05MM-SM
BUCK3_LX0
BUCK3_FB
VBUCK3_SW
BUCK3_SW1
BUCK3_SW2
BUCK3_SW3
PP1V8_S2
PP1V8_IO
PP1V8_TOUCH_S2
PP1V8_IMU_S2
PP1V8_NFC_S2
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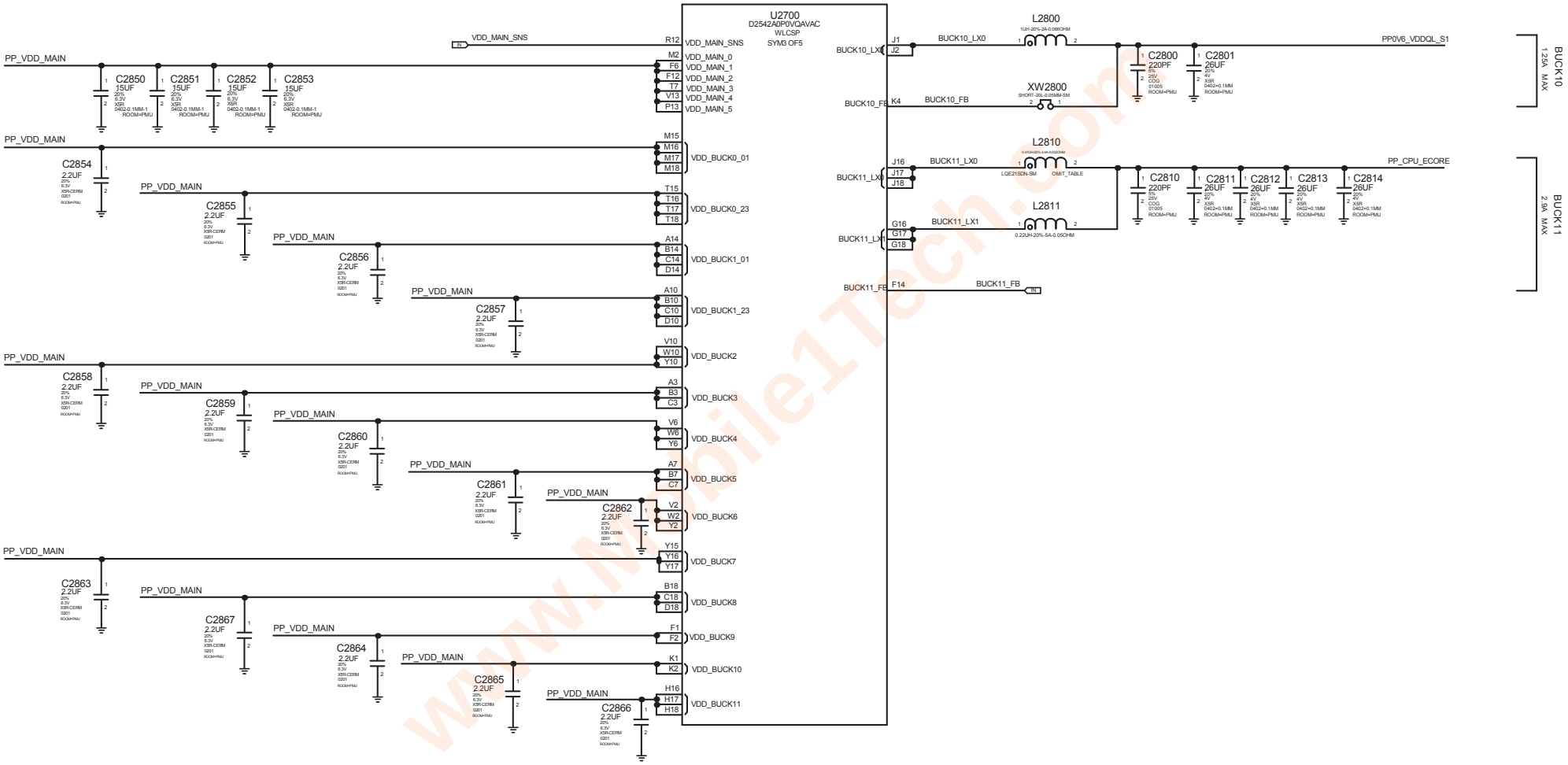
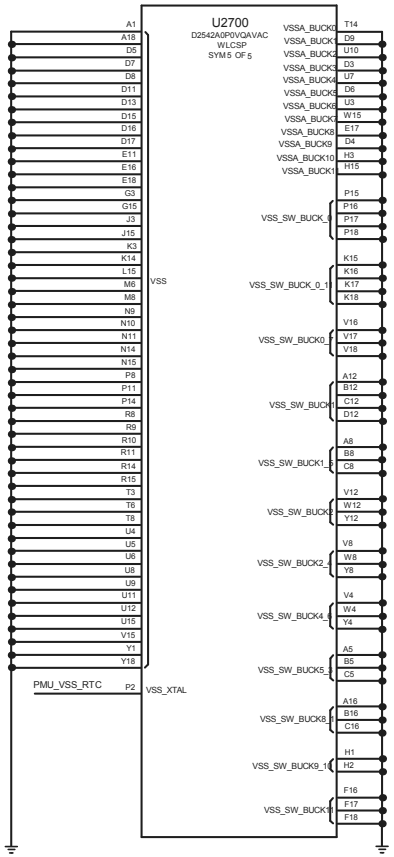
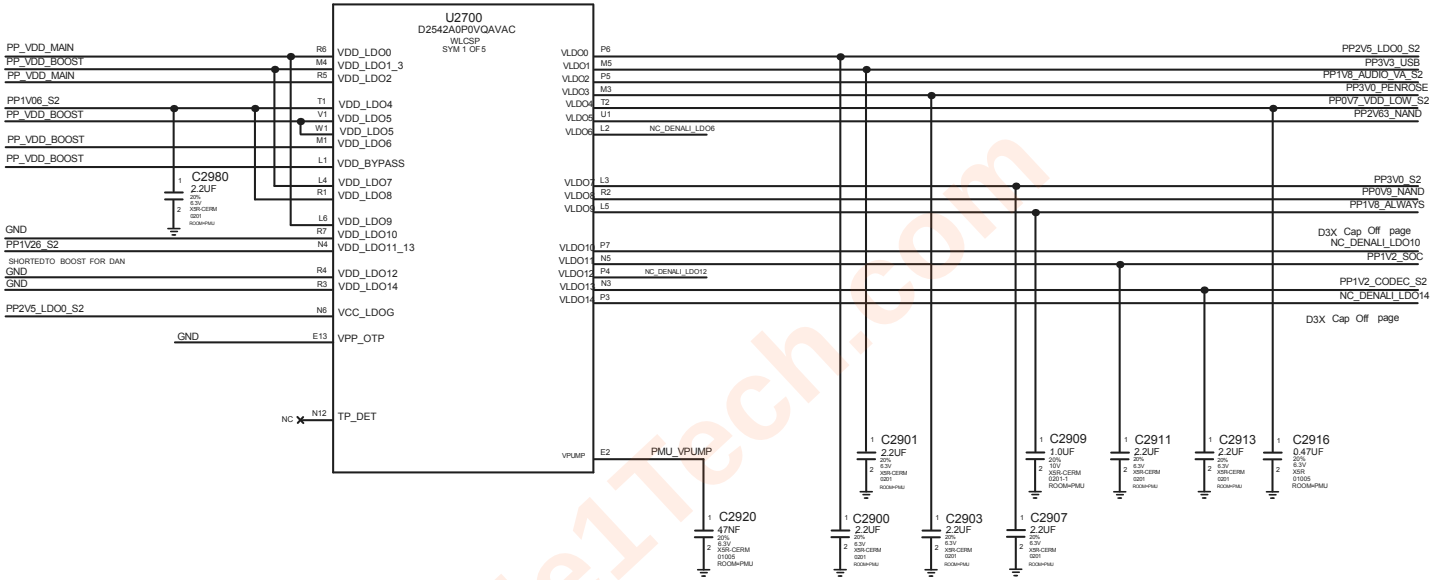
PMU-BUCKS

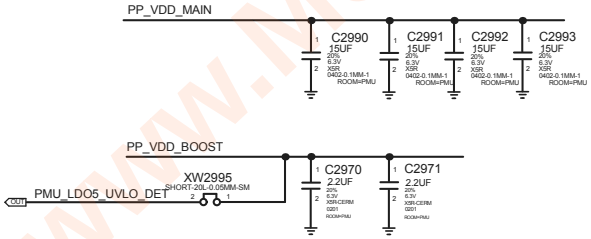


PMU-LDOs



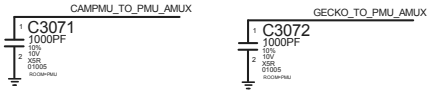


Desense & UVLO DET

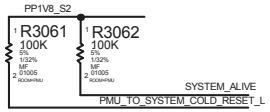


PMU-GPIOs

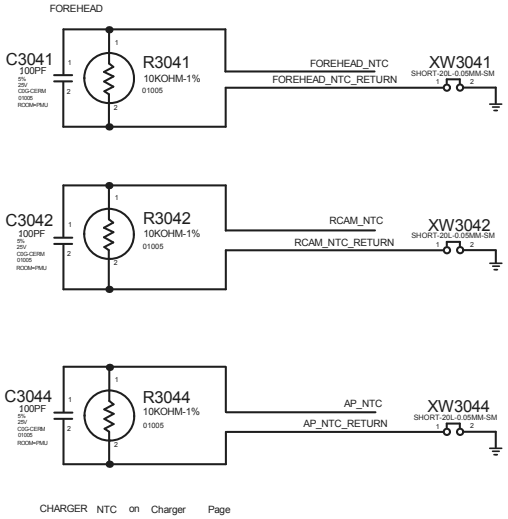
Ansel AMUX Caps



COLD_RESET & SYSTEM_ALIVE P.U.

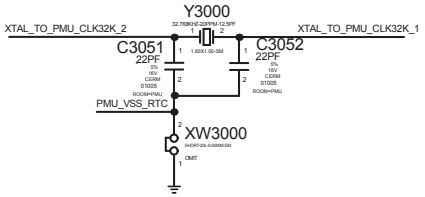


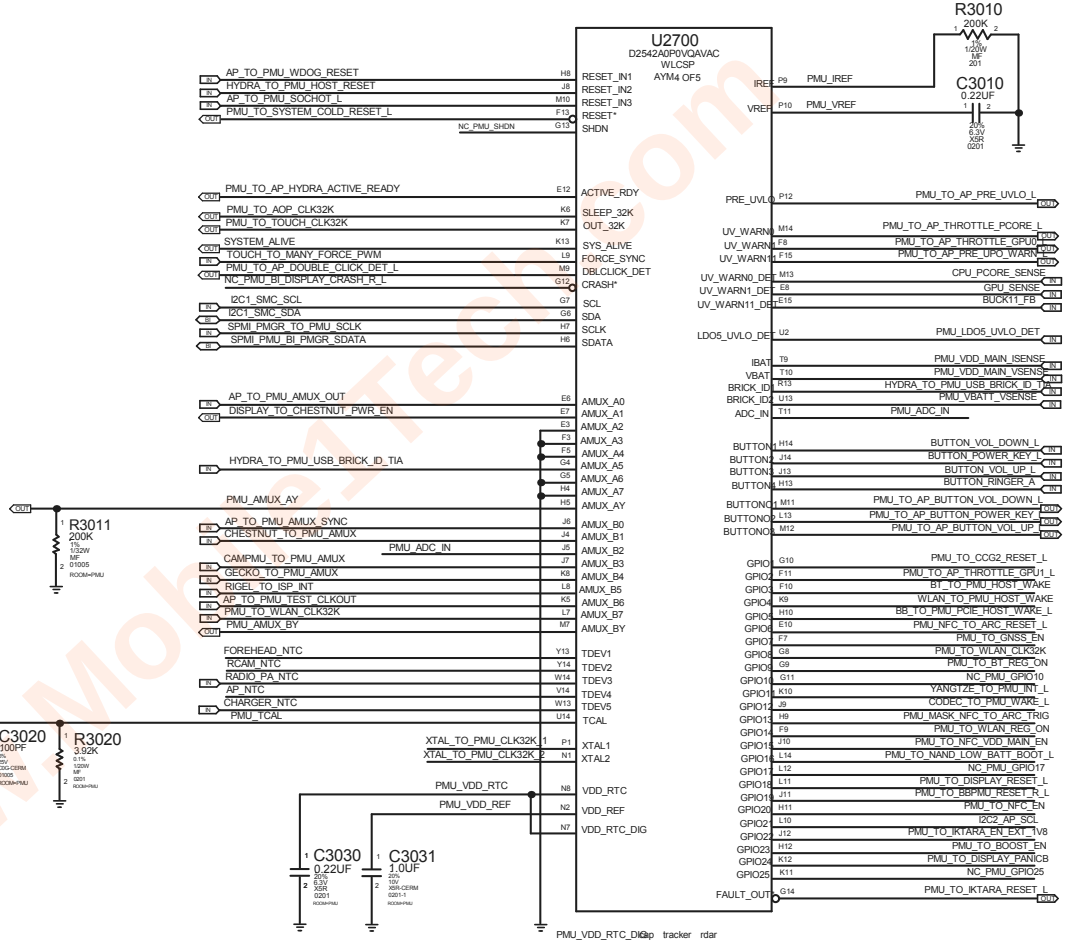
NTCs



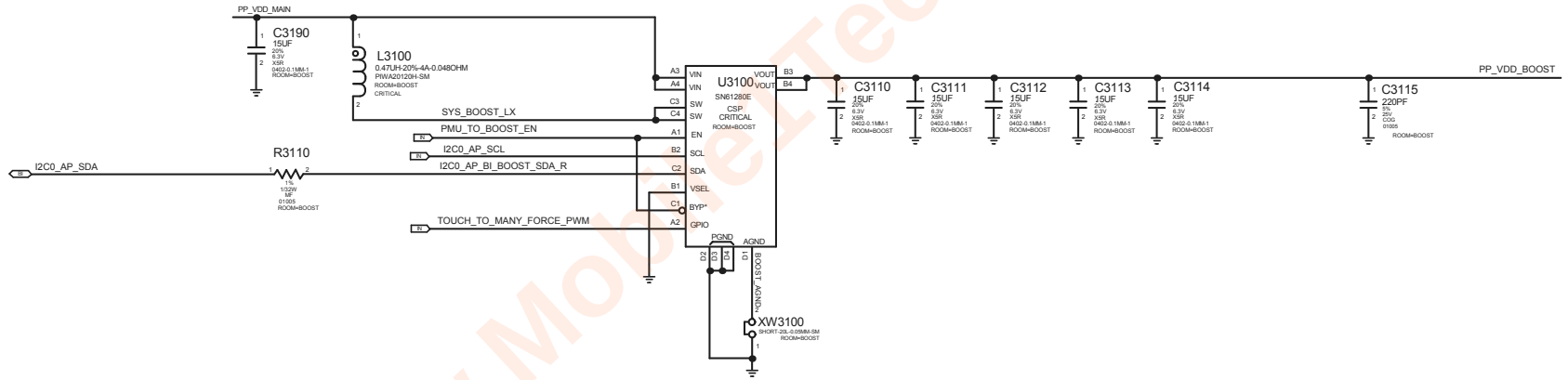
CHARGER NTC on Charger Page

PMU CRYSTAL

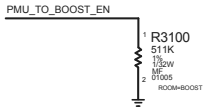




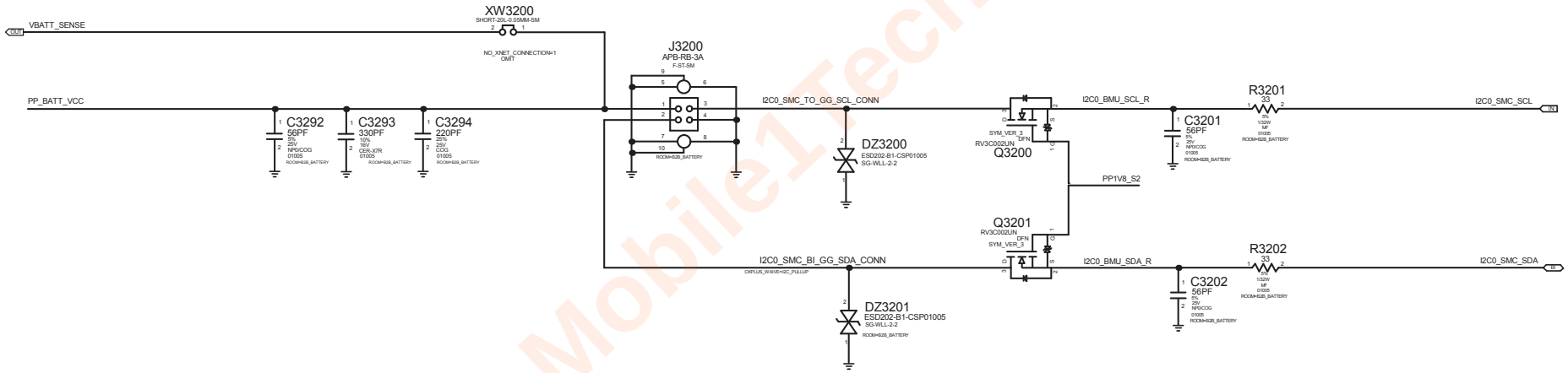
BOOST



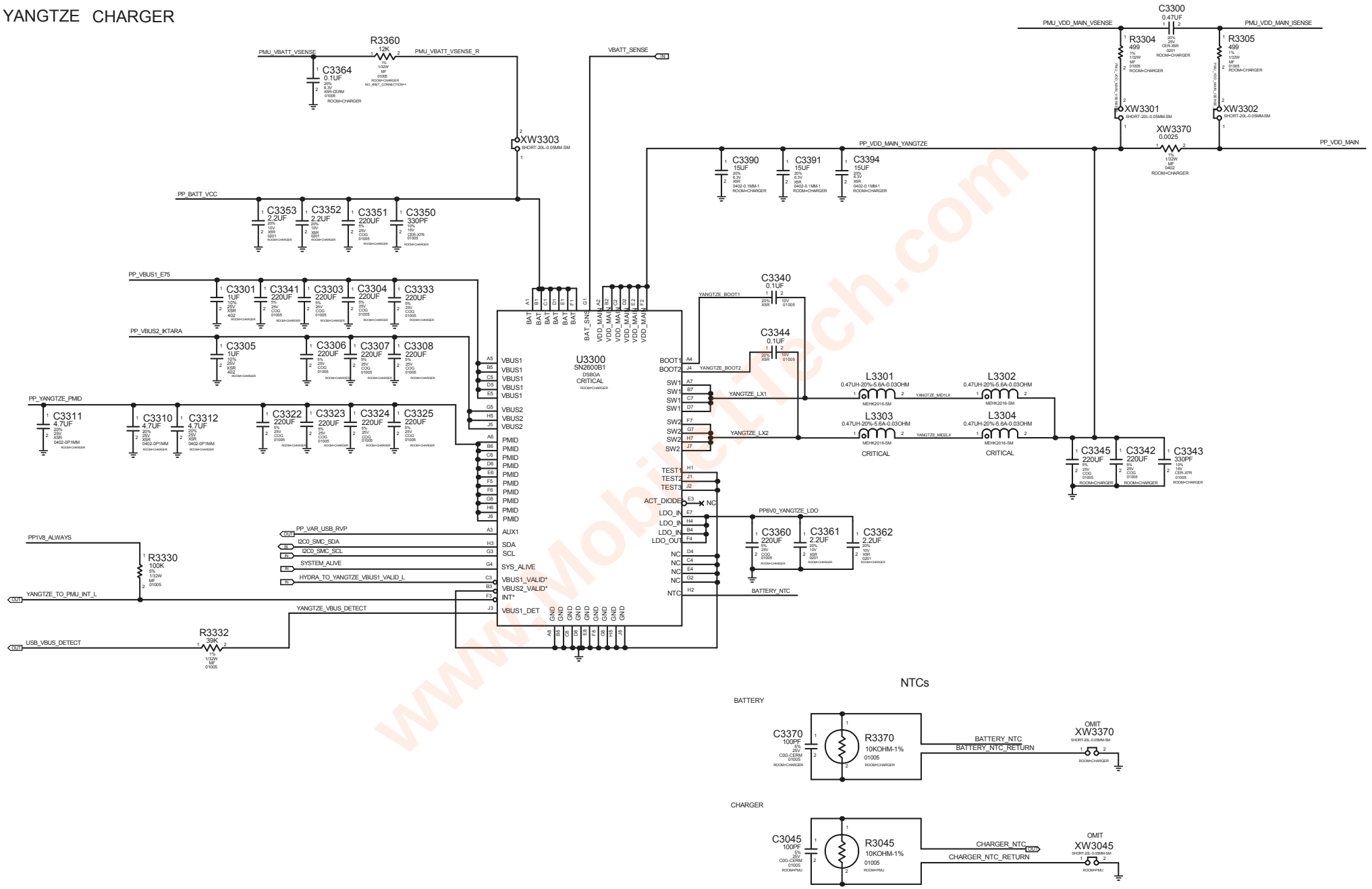
Boost Enable Pull



BATTERYCONNECTOR

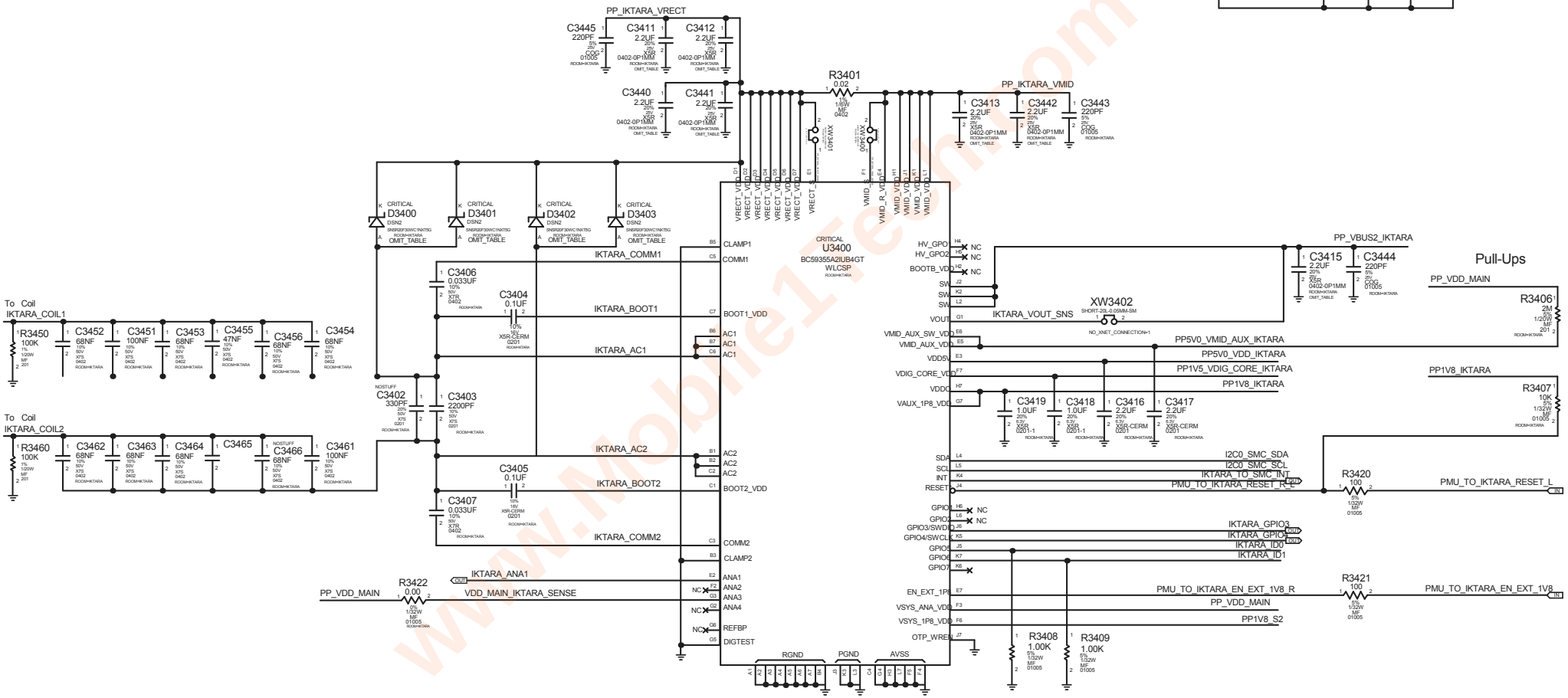


YANGTZE CHARGER



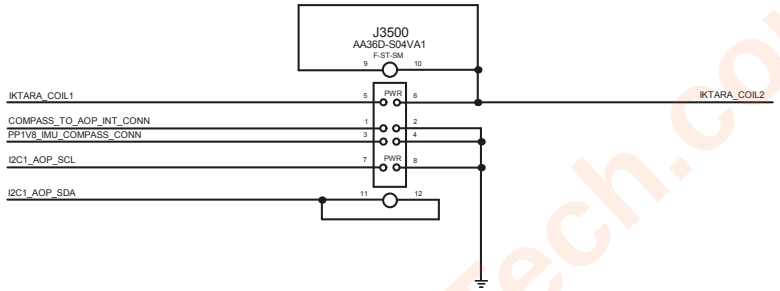
Iktara

MODE	ID0	ID1	ID2
N84	0	0	NC

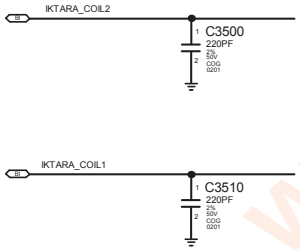


B2B CYCLONE

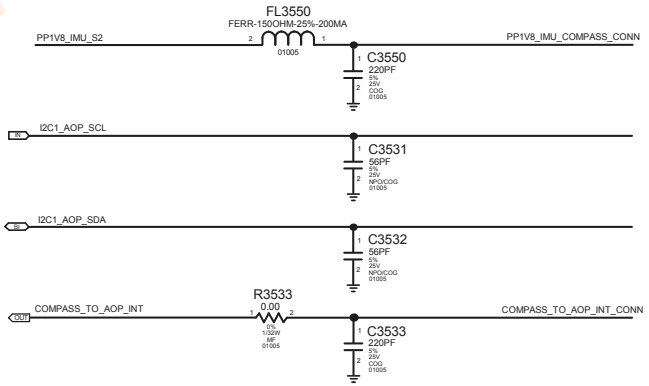
B2B Cyclone



COIL FILTER

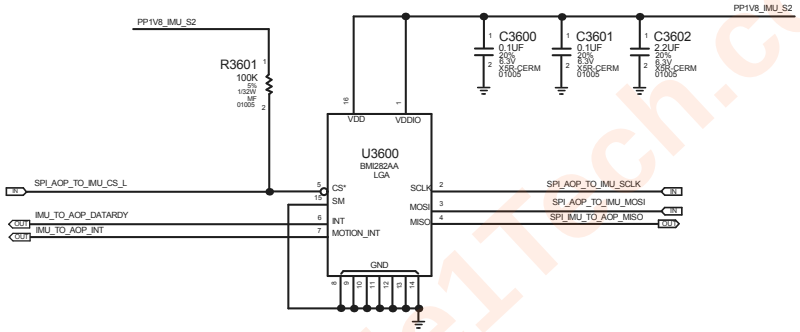


COMPASS

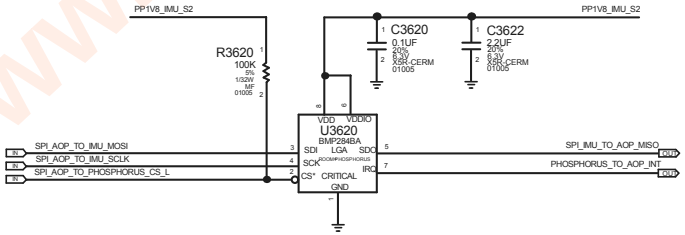


Sensors - Accel/Gyro/Pressure

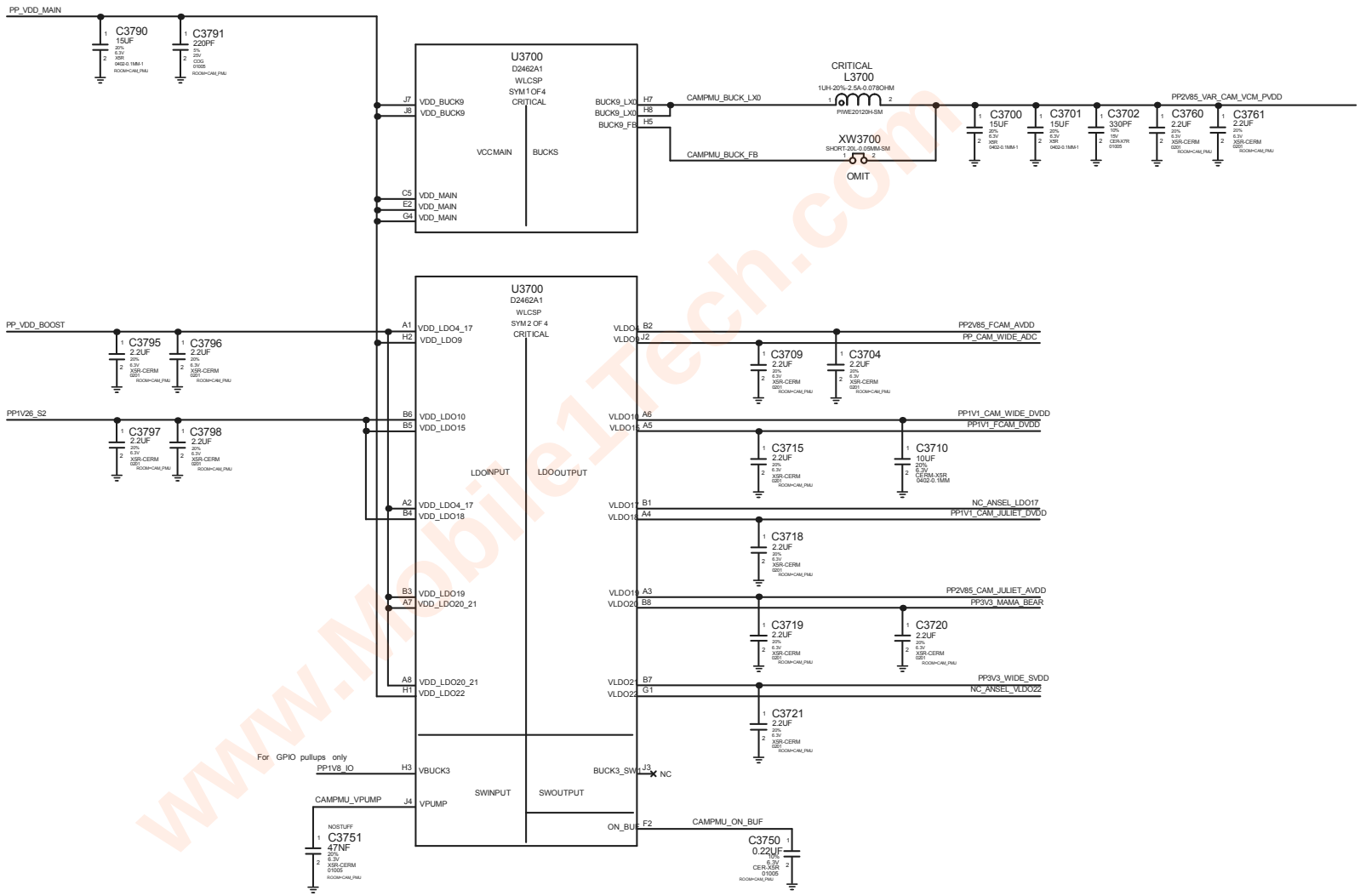
KOBOL-Accel&Gyro



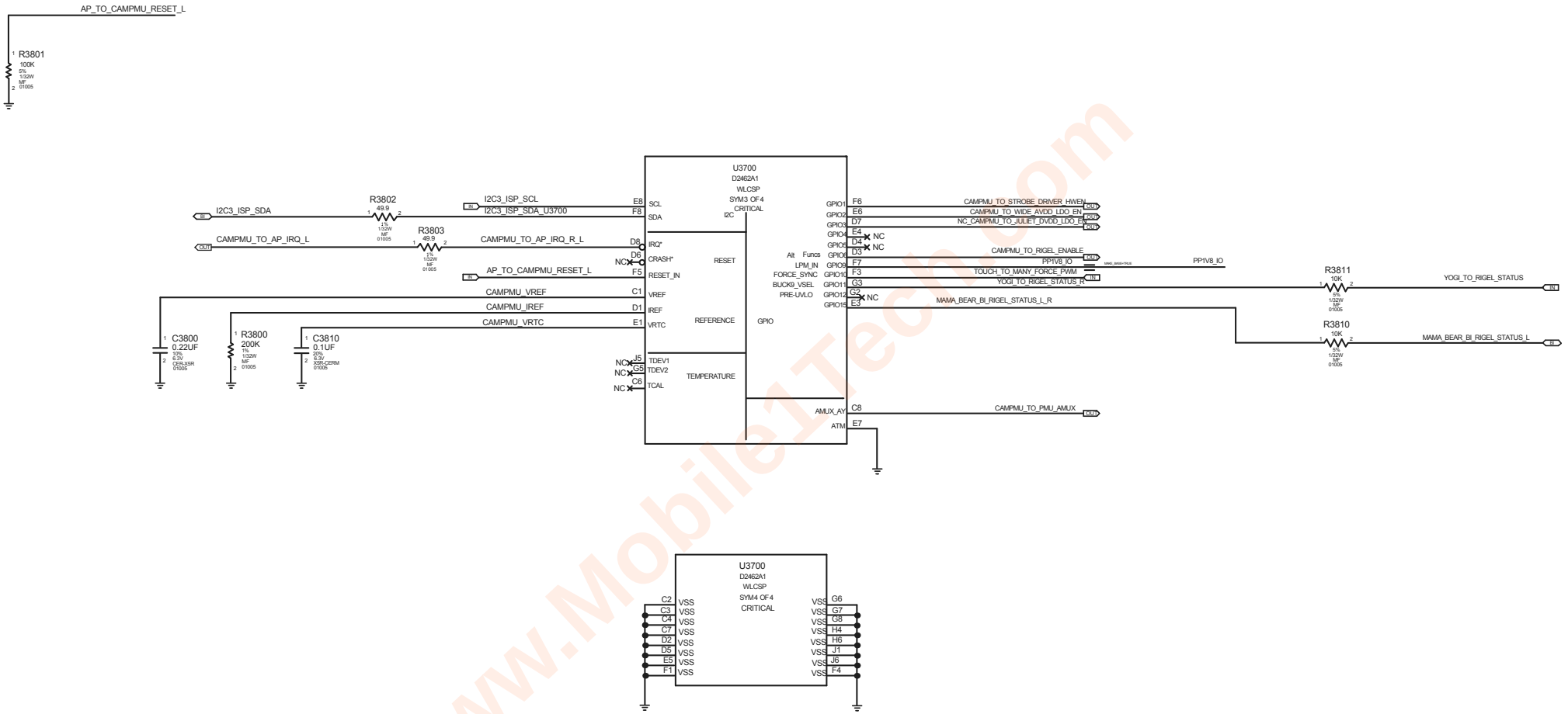
PHOSPHOROUS-Pressure



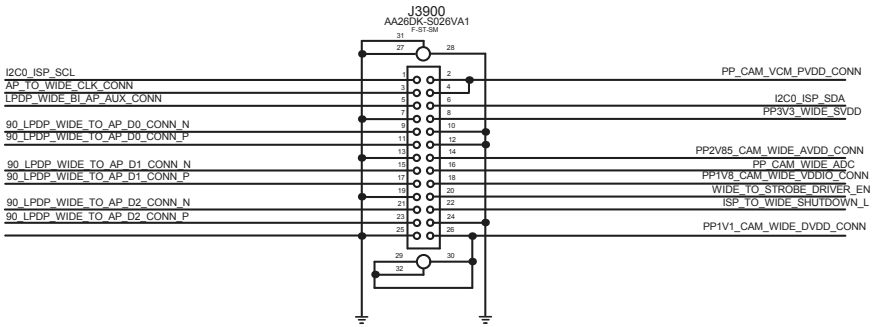
Camera PMU-Ansel



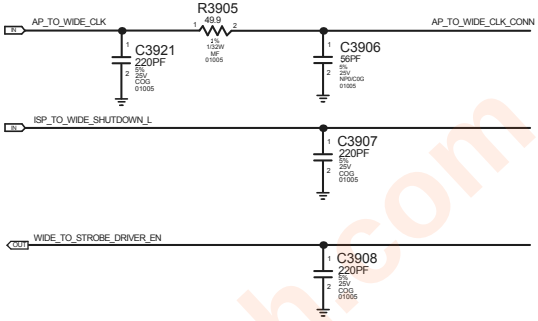
Pull Downs



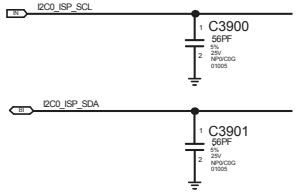
Wide Camera Connector



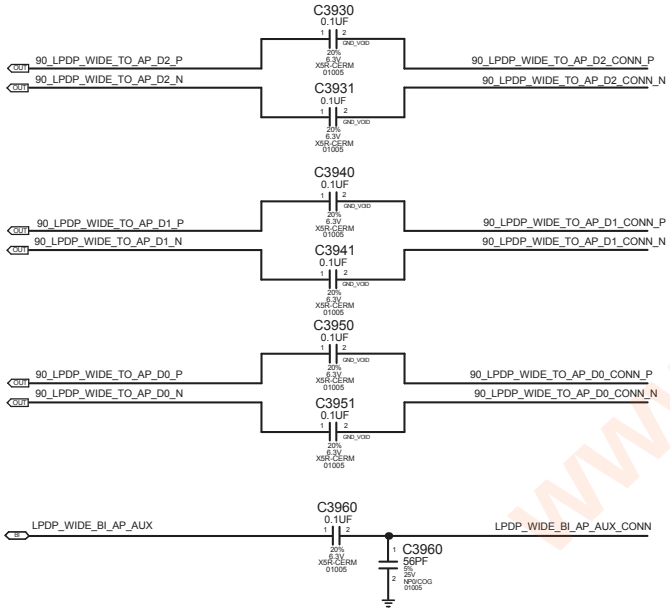
IO Filters



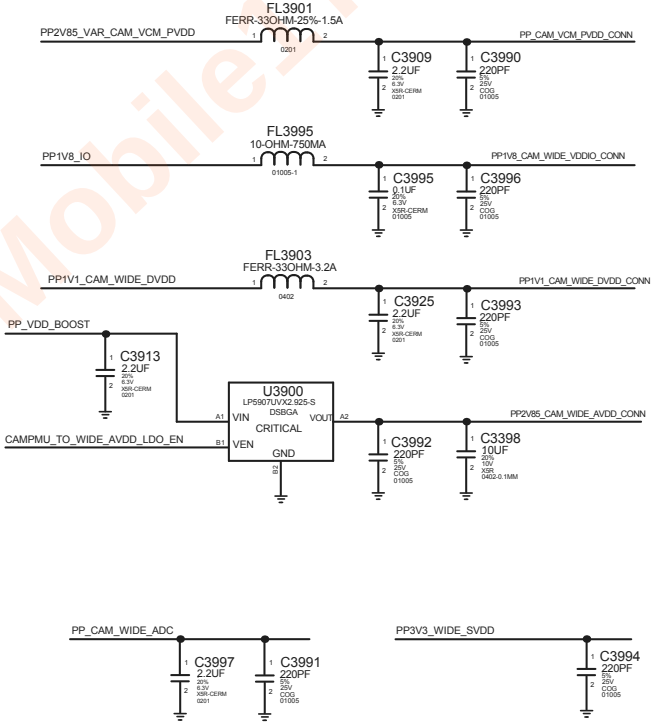
ISP I2C



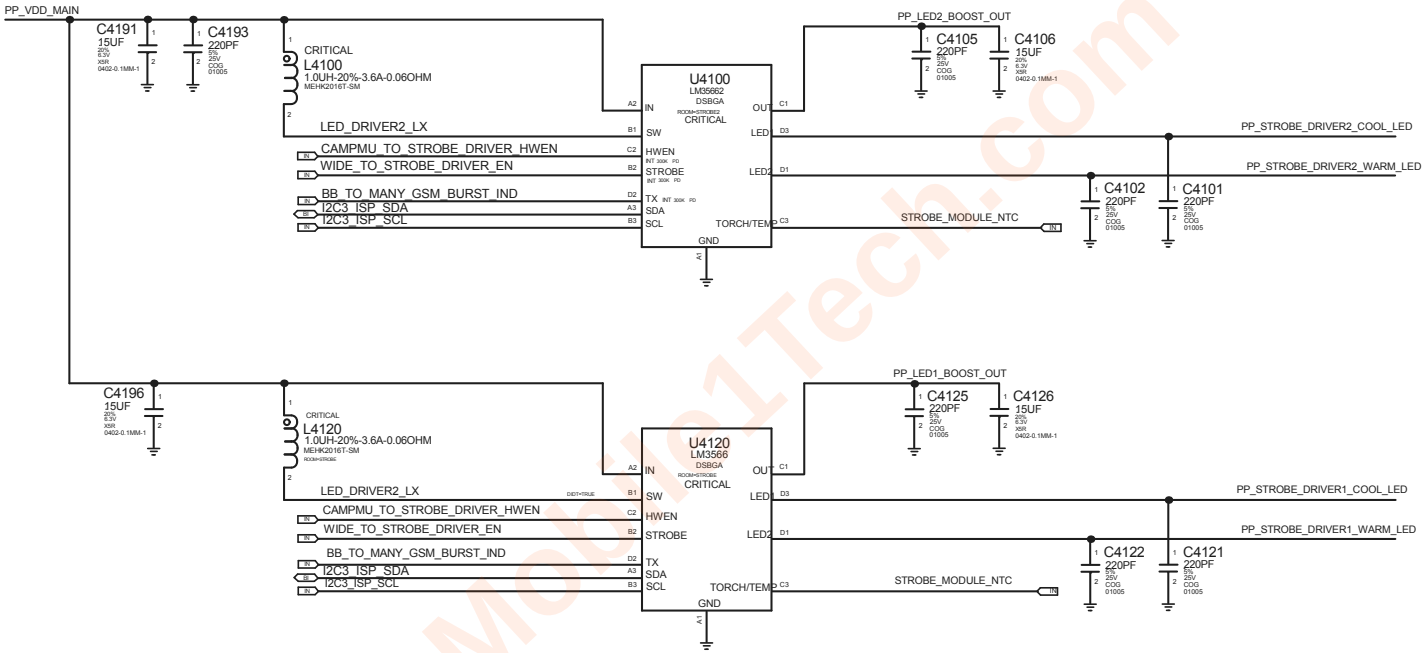
LPDP Filters



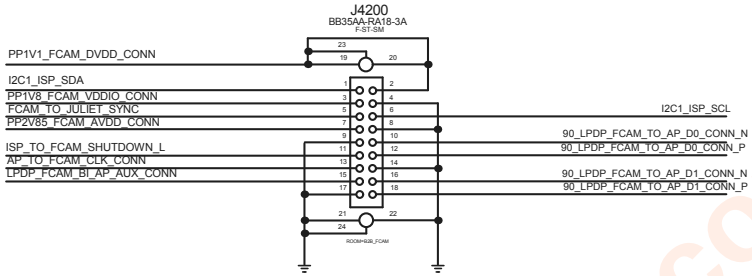
Power Filtering



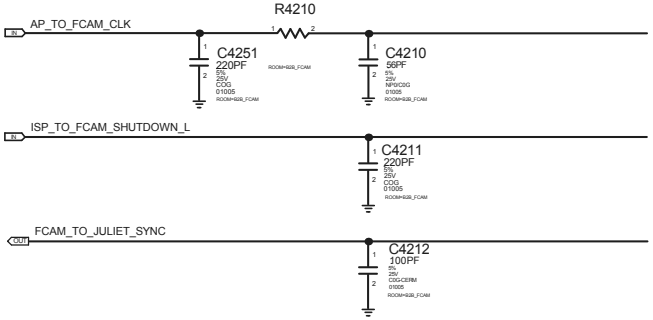
LED STROBE DRIVERS (NEON)



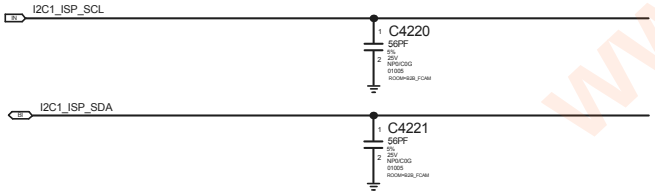
FCAM B2B



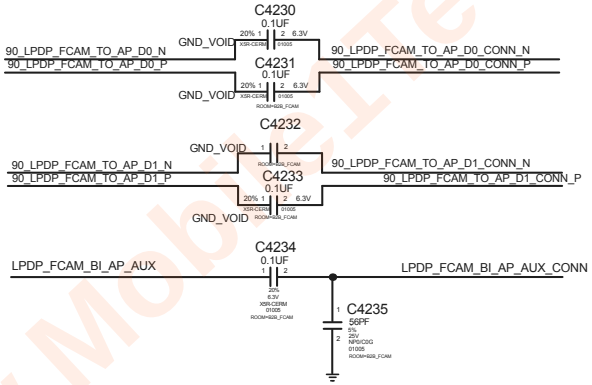
FCAM I/O



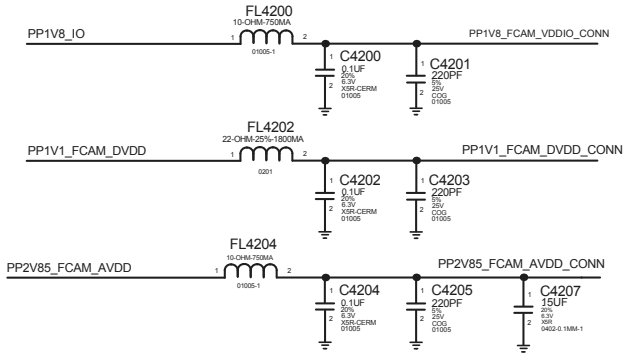
ISP I2C2



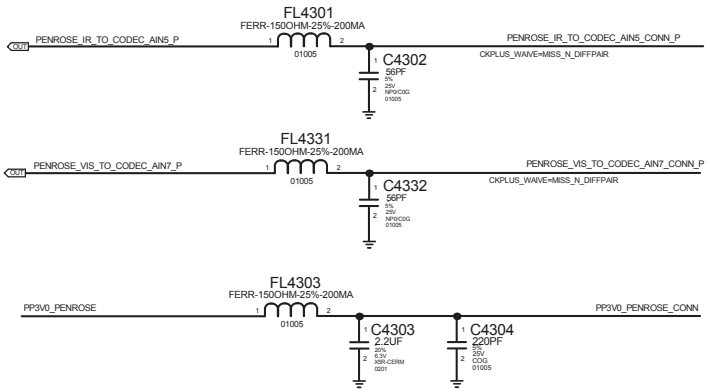
LPDP FILTERS



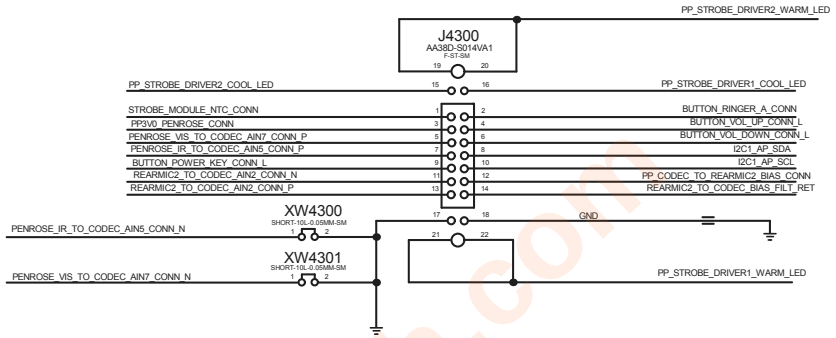
FCAM POWER



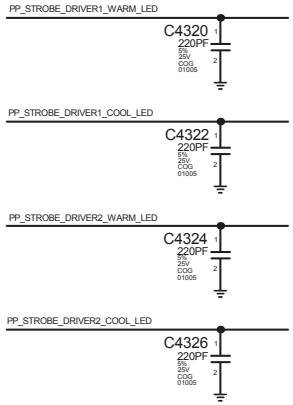
PENROSE CODEC



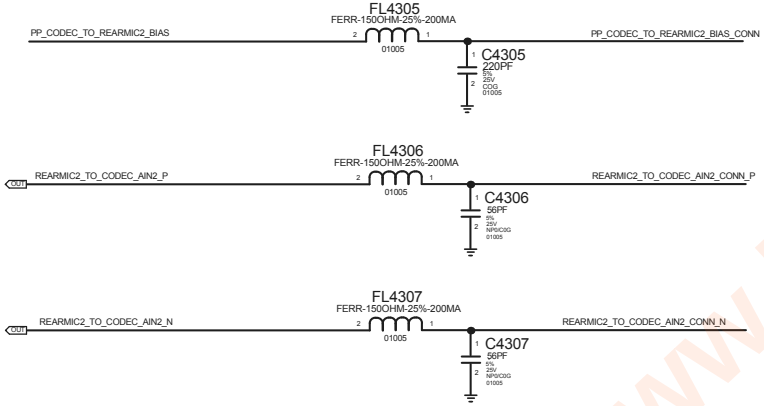
Strobe + Button Connector



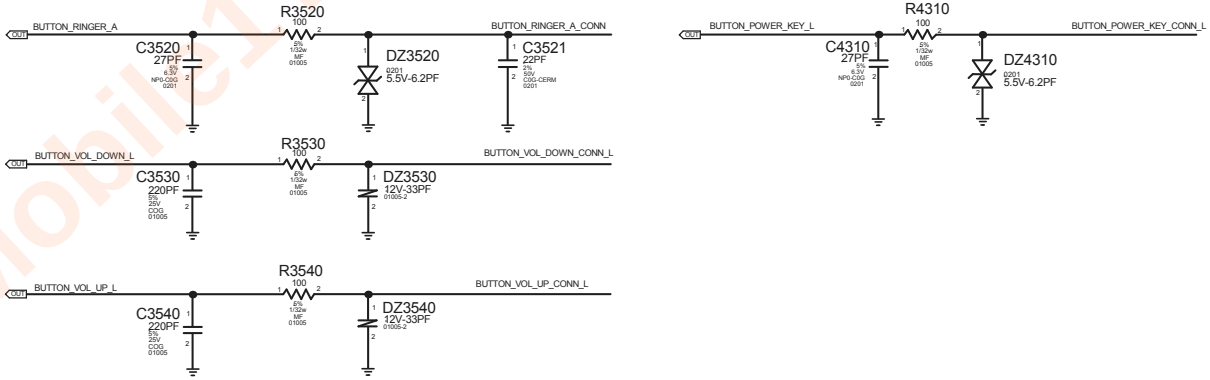
STROBE LED



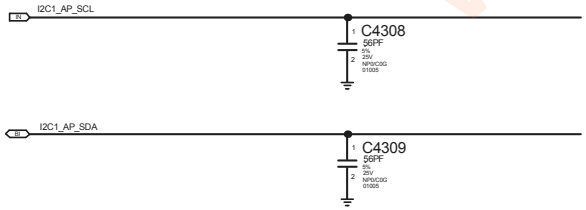
MIC2 (ANC REF)



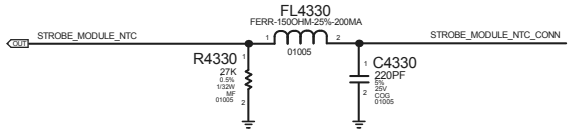
BUTTONS



MIC2 (I2C)

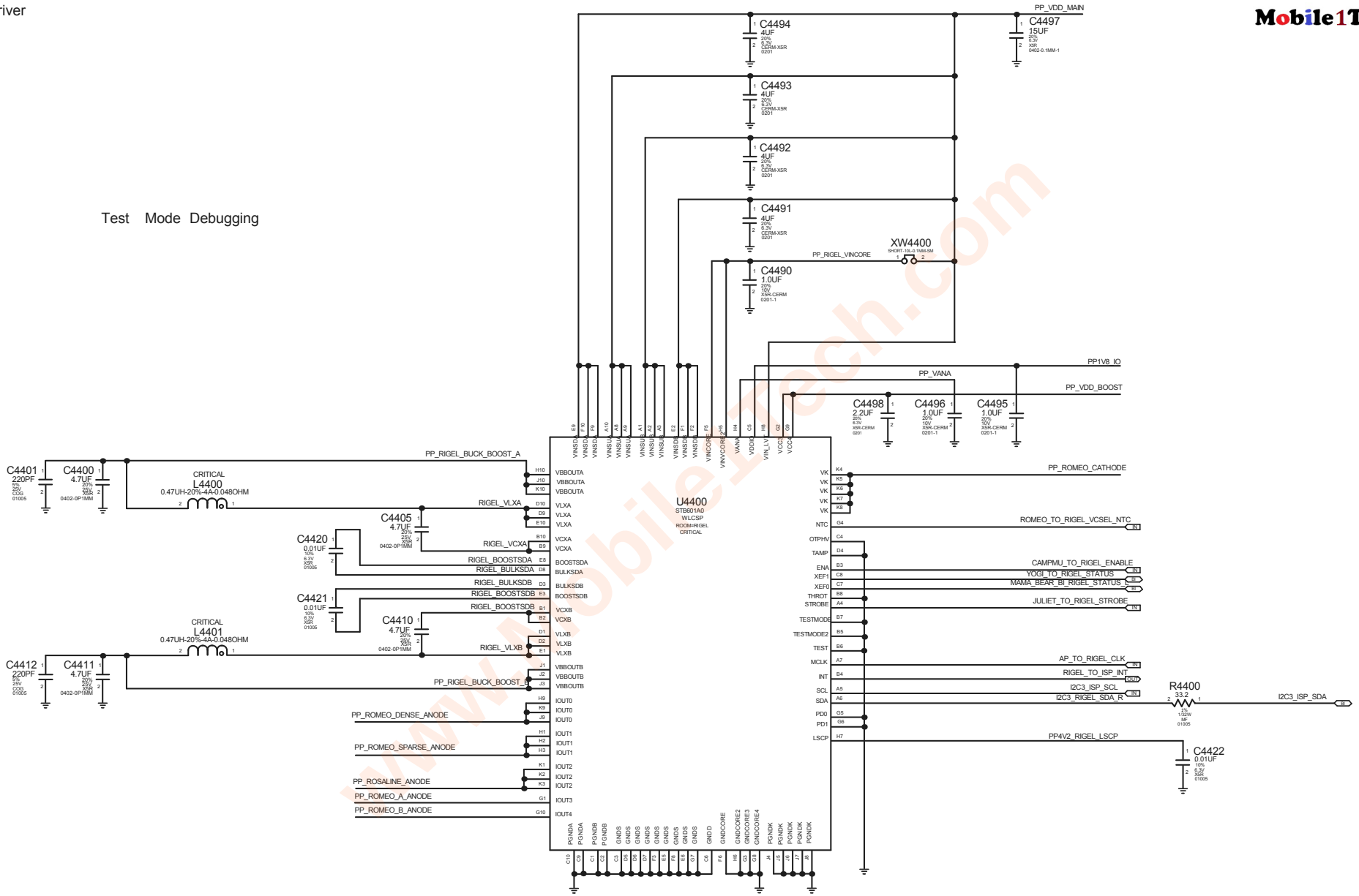


STROBE NTC

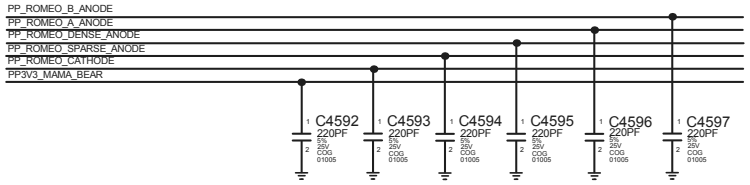


Rigel Driver

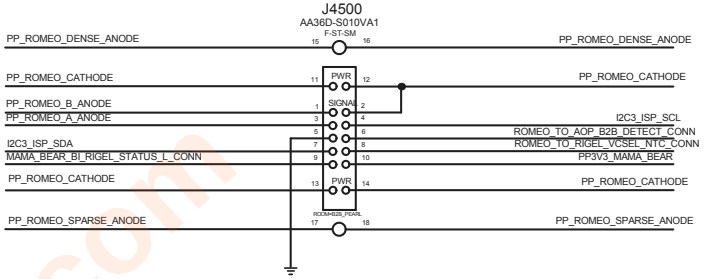
Test Mode Debugging



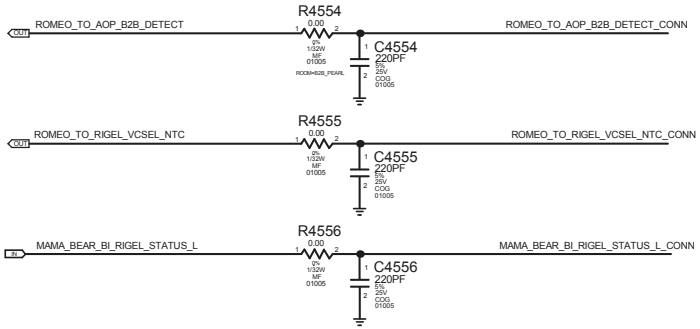
Romeo Power Filtering



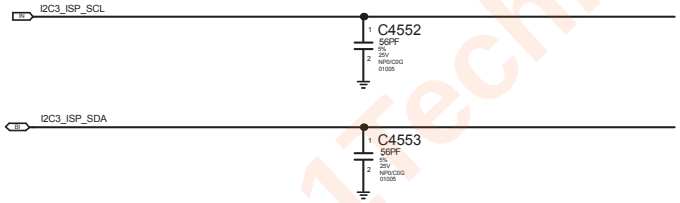
Romeo Connector



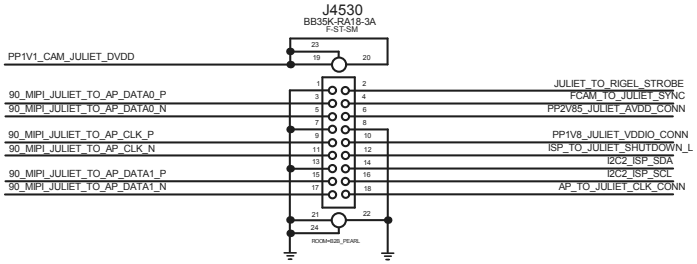
Romeo I/O



ISP I2C3

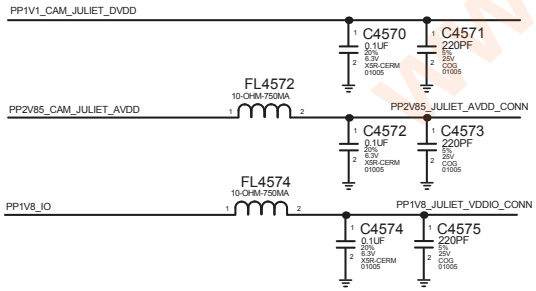


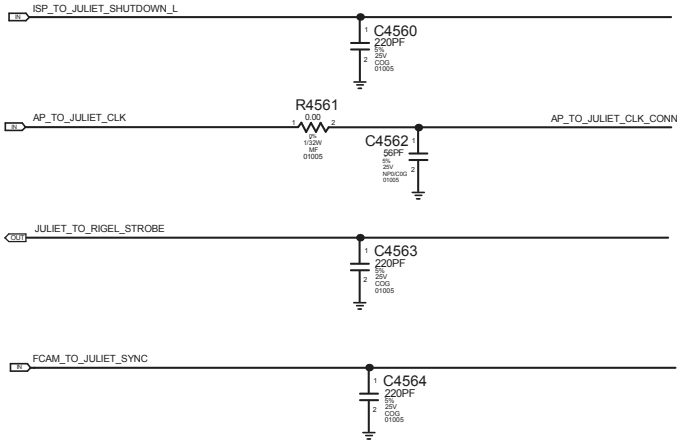
Juliet Connector



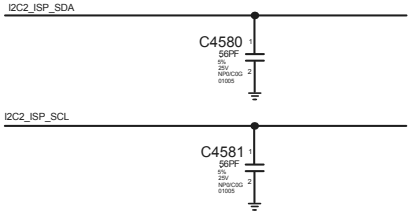
For D3X Juliet LDO lives off page

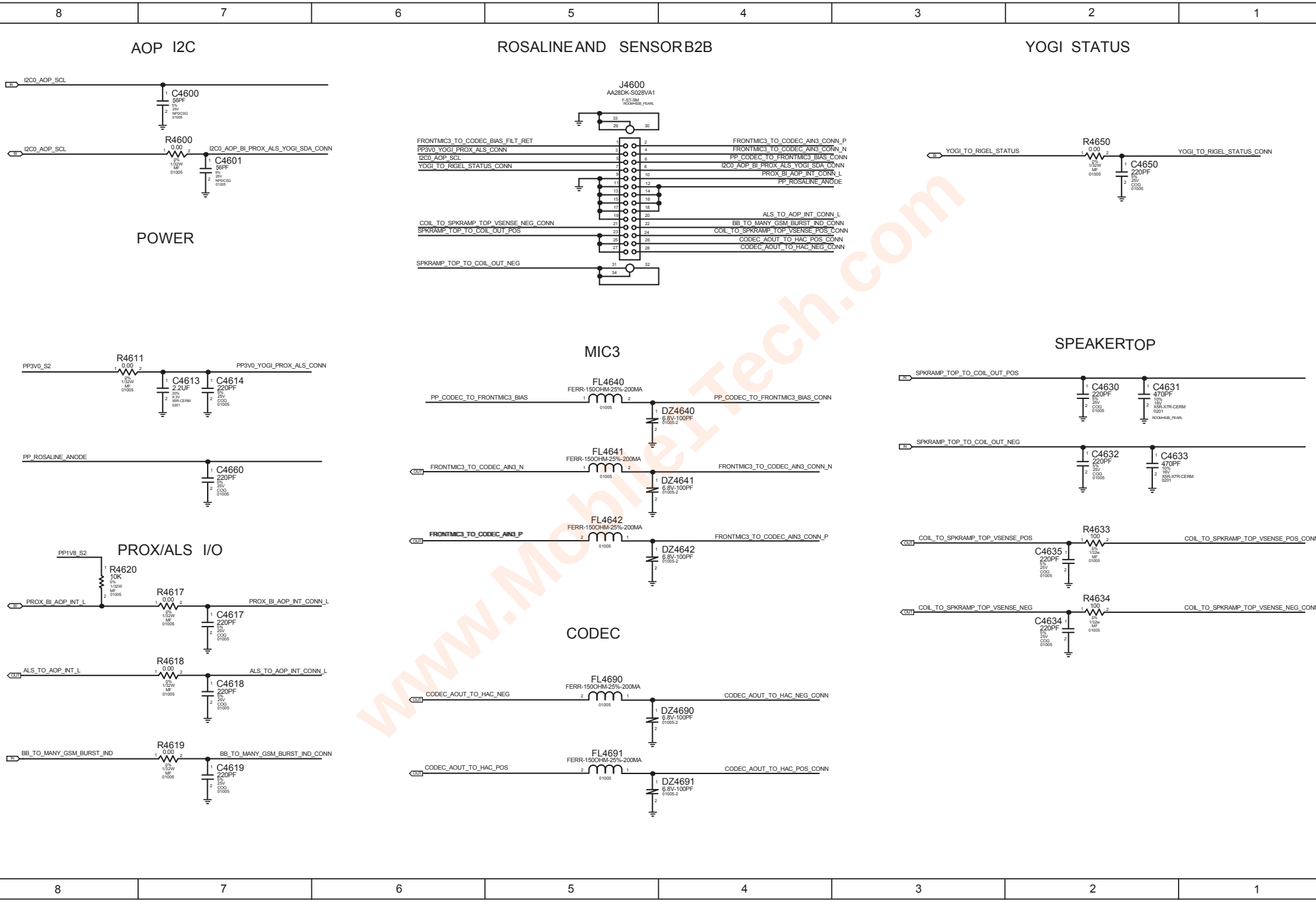
Juliet Power and I/O





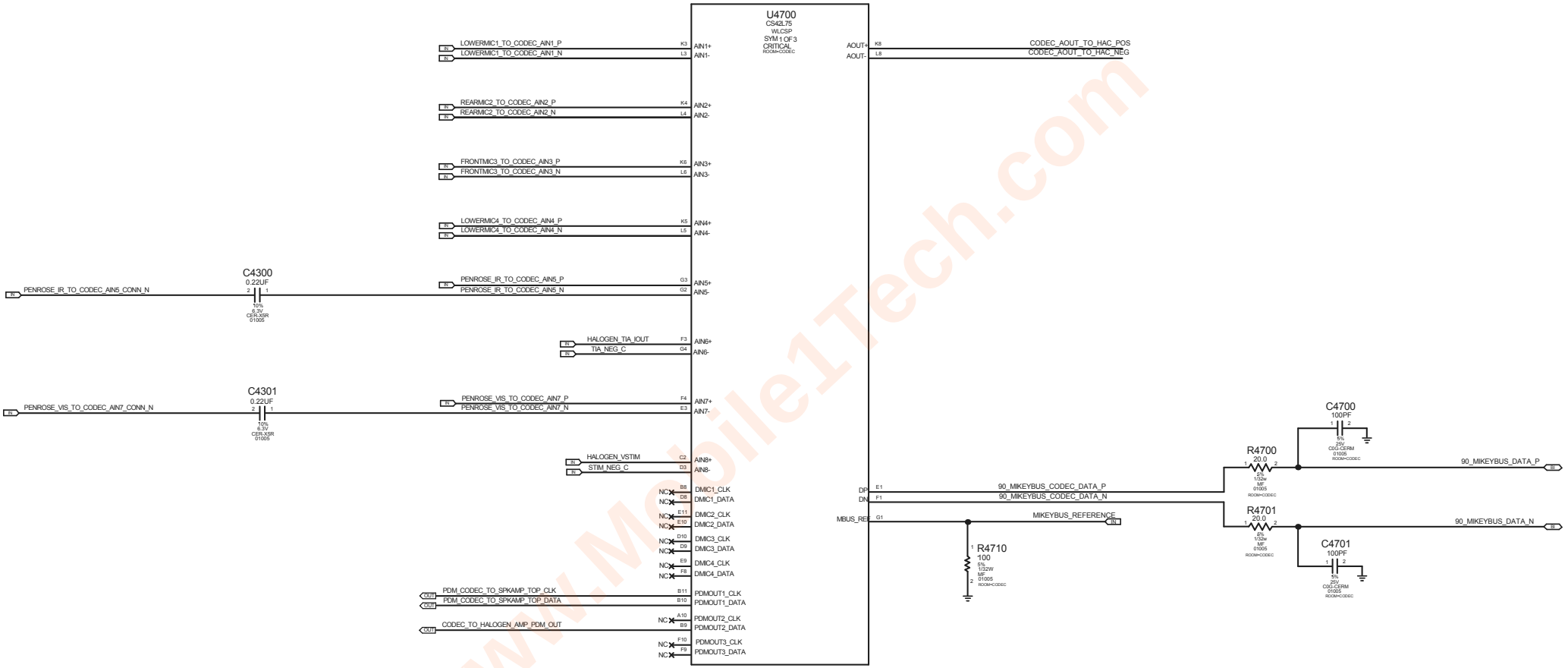
NOTE: SAME I2C as FCAM





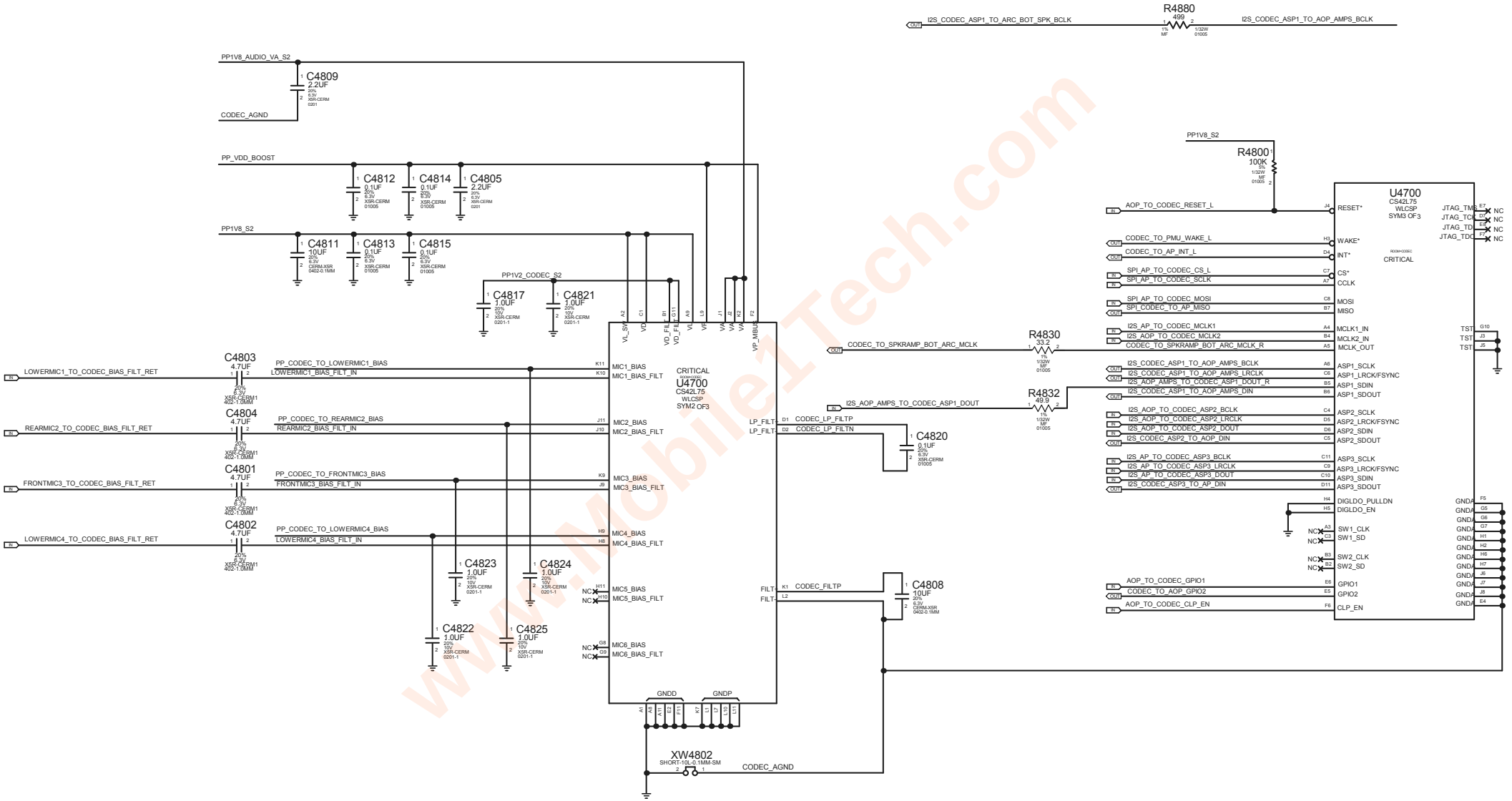
CALLAN AUDIO CODEC (ANALOG INPUTS & OUTPUTS)

Mobile1Tech.com

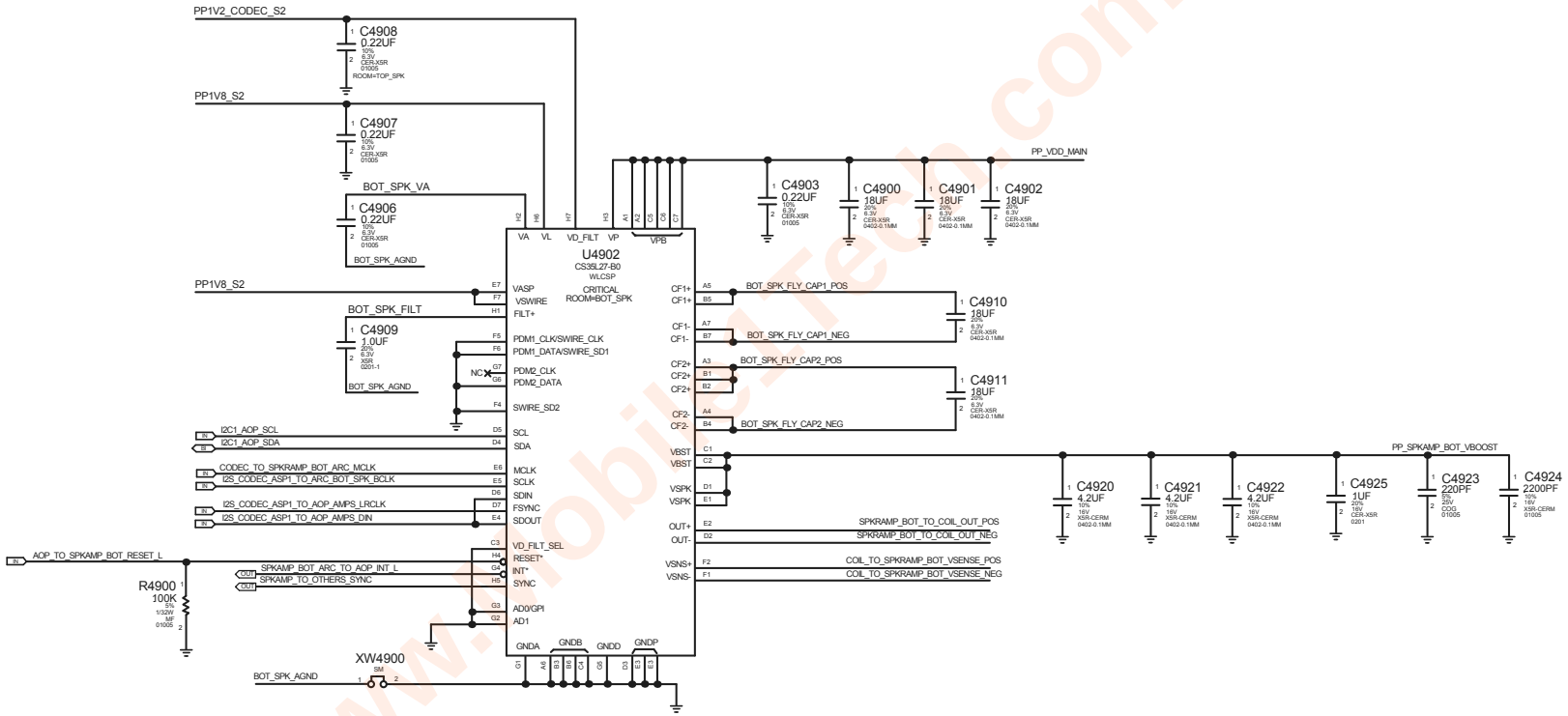


CALLAN AUDIO CODEC (POWER & I/O)

Series R for BCLK desense - To ARC Amp and BOTSPK Amp



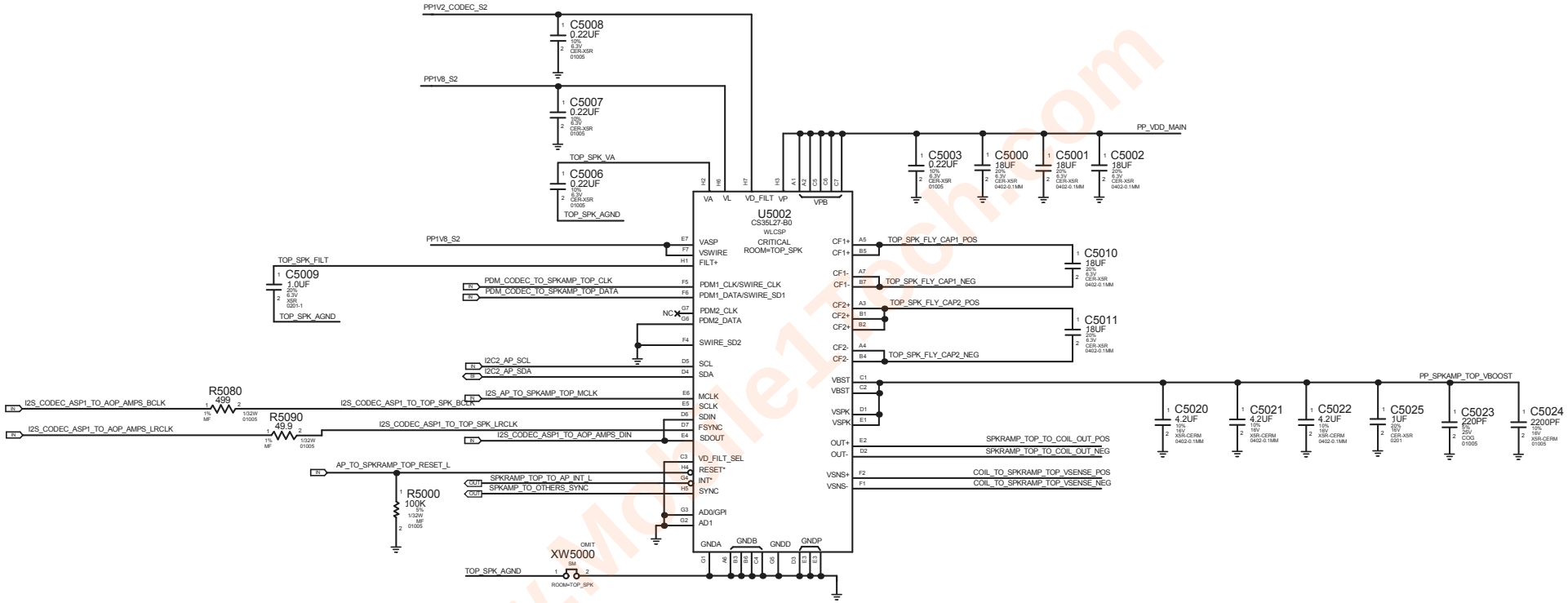
Bottom Speaker Amp



Audio Amplifier Addressing

AMP	AD0	AD1	
TOP	0	0	AP I2C2
BOT	0	0	AOP I2C1
ARC	0	1	AOP I2C1

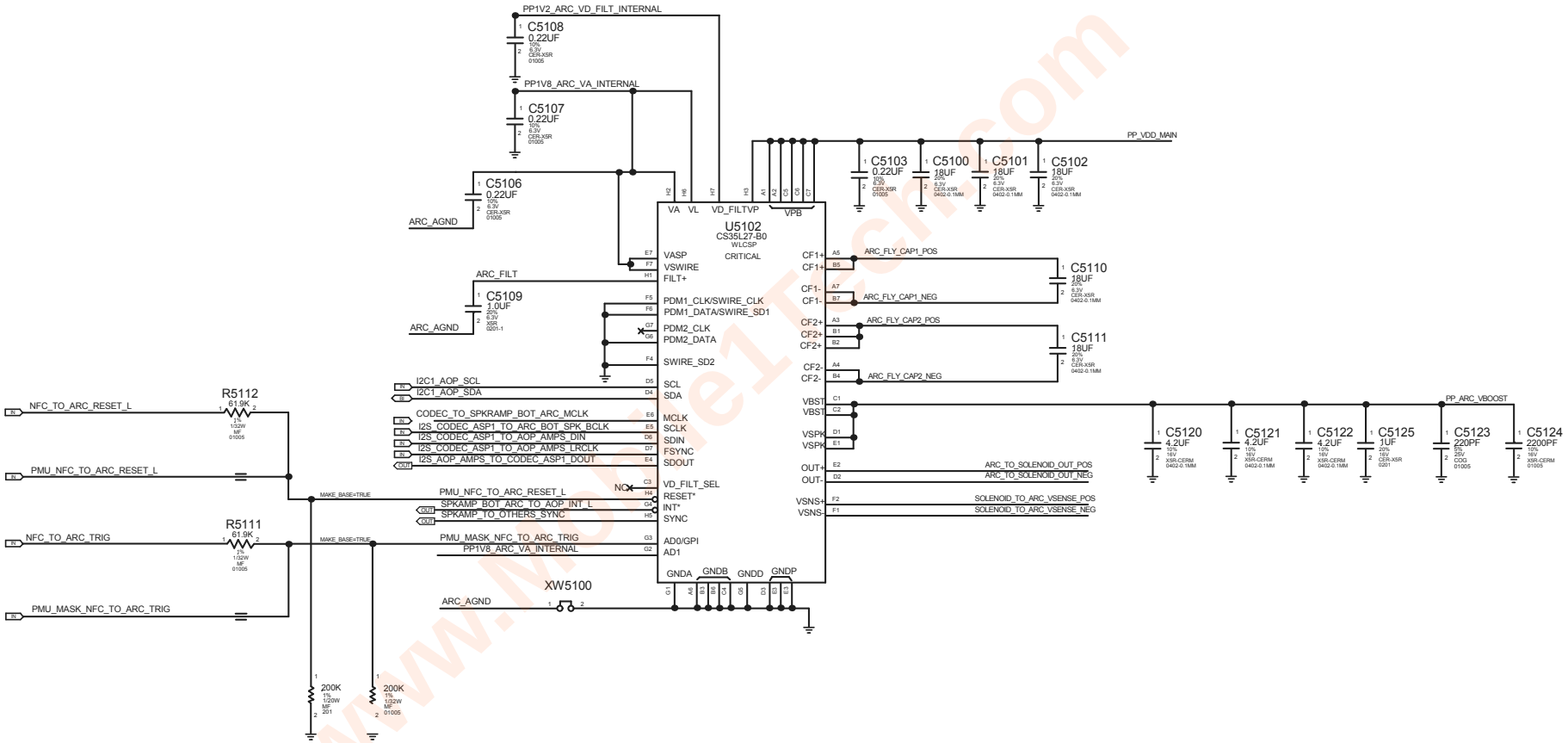
SELECTED-->



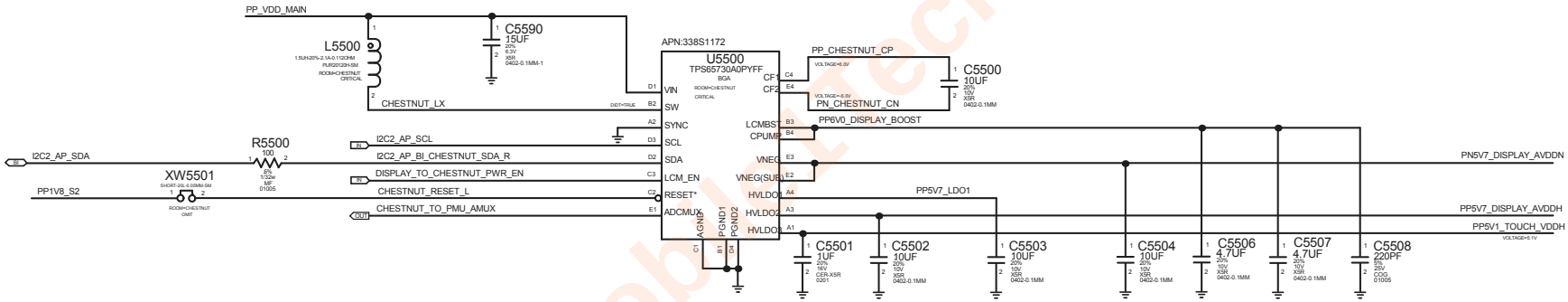
Audio Amplifier Addressing

SELECTED	AMP	AD0	AD1	
	TOP	0	0	AP I2C2
	BOT	0	0	AOP I2C1
	ARC	0	1	

ARC Speaker Amp

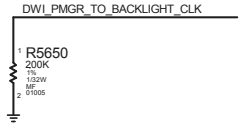


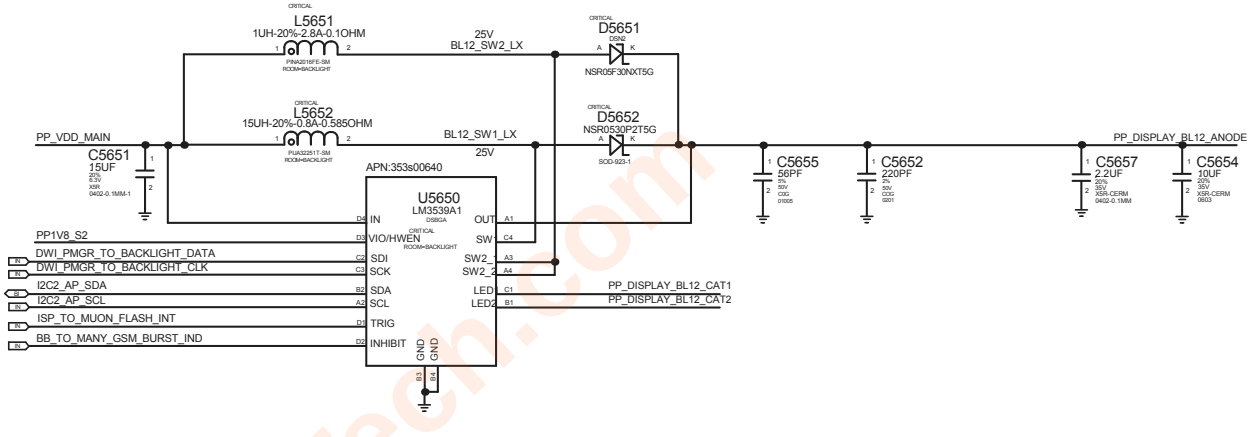
CHESTNUT DISPLAY PMU

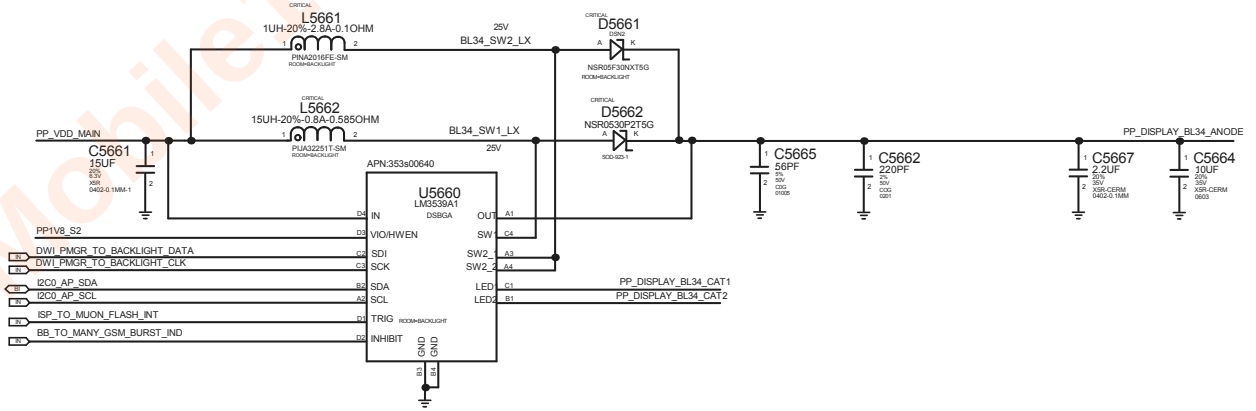


MUON- LED BACKLIGHT DRIVERS

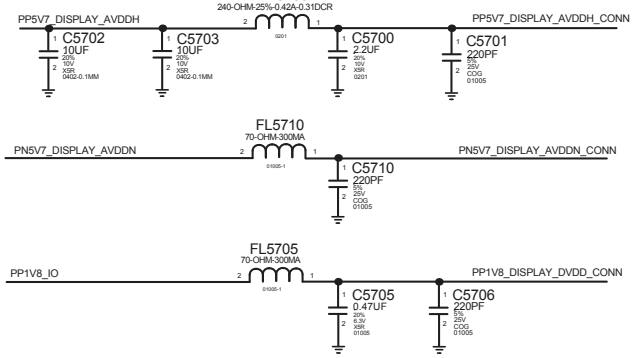
DWI Clock Pull



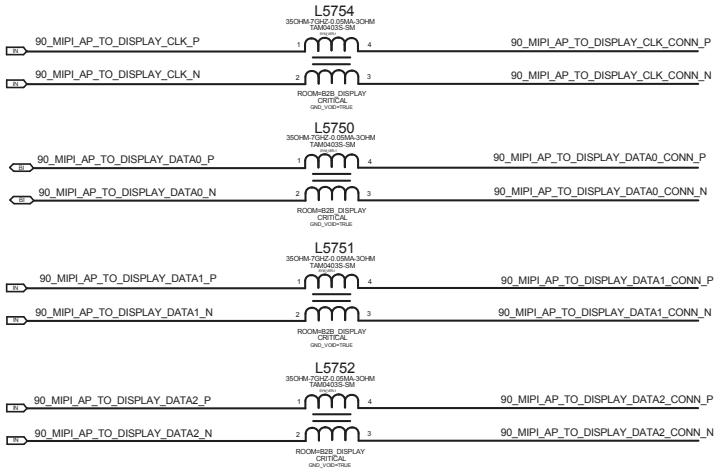




DISPLAY POWER FILTERS

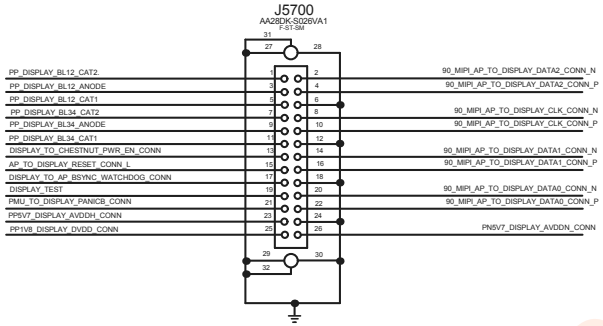


DISPLAY MIPI CHOKES

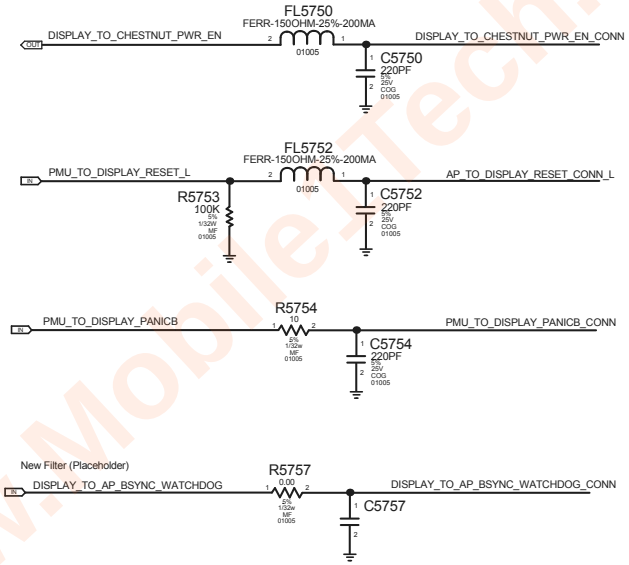


APN: 516S00402

DISPLAY CONNECTOR

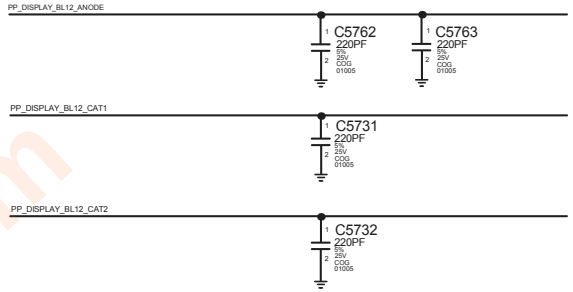


DISPLAY CONTROL SIGNAL FILTERS

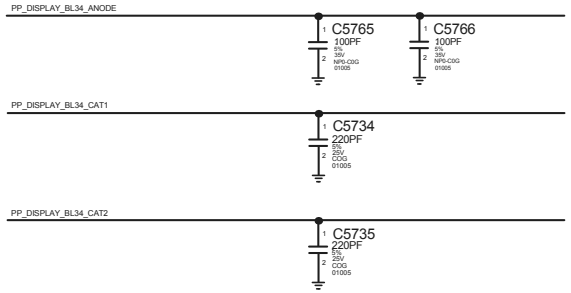


BACKLIGHT FILTERS

BL12



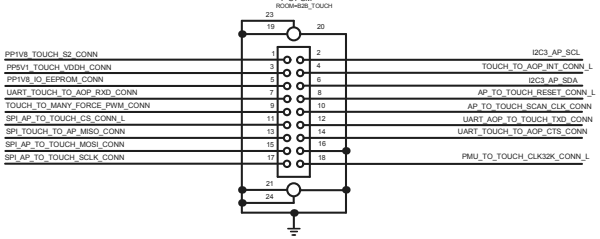
BL34



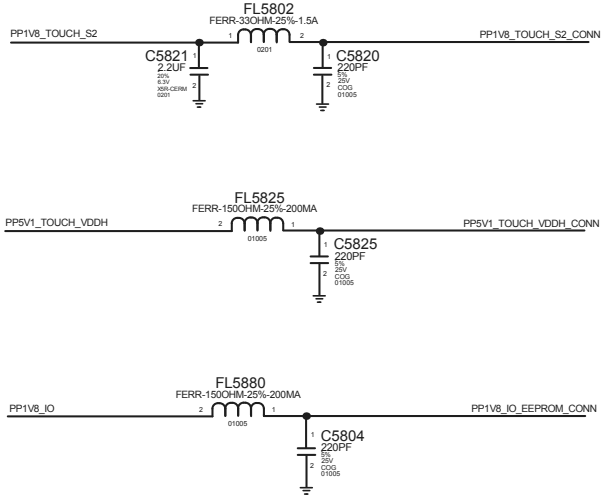
APN: 516S00395

TOUCH B2B

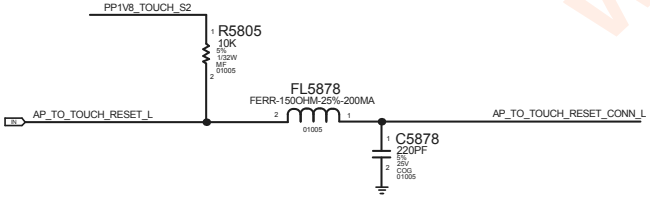
J5800
BB35AA-RA18-3A
F-ST-SM
ROOM=B2B_TOUCH



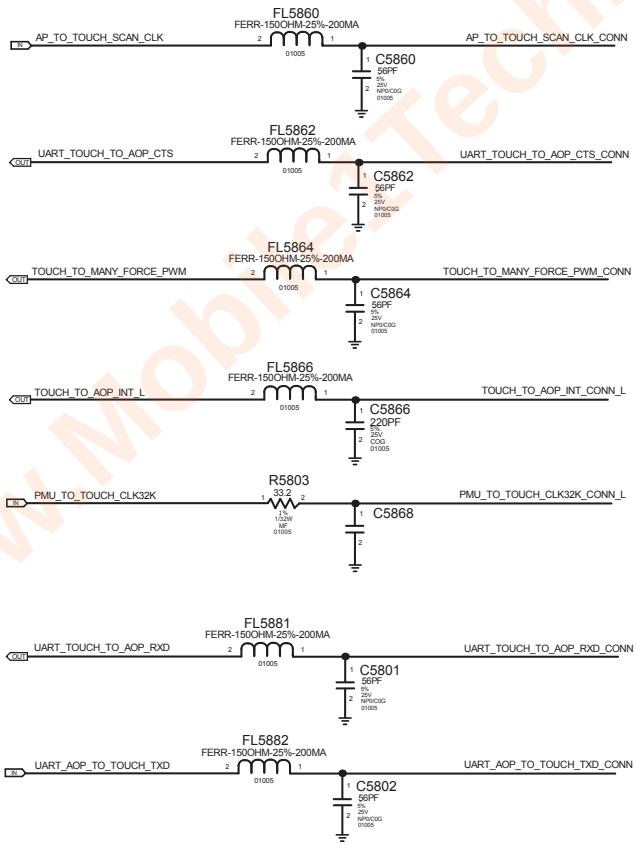
TOUCH POWER



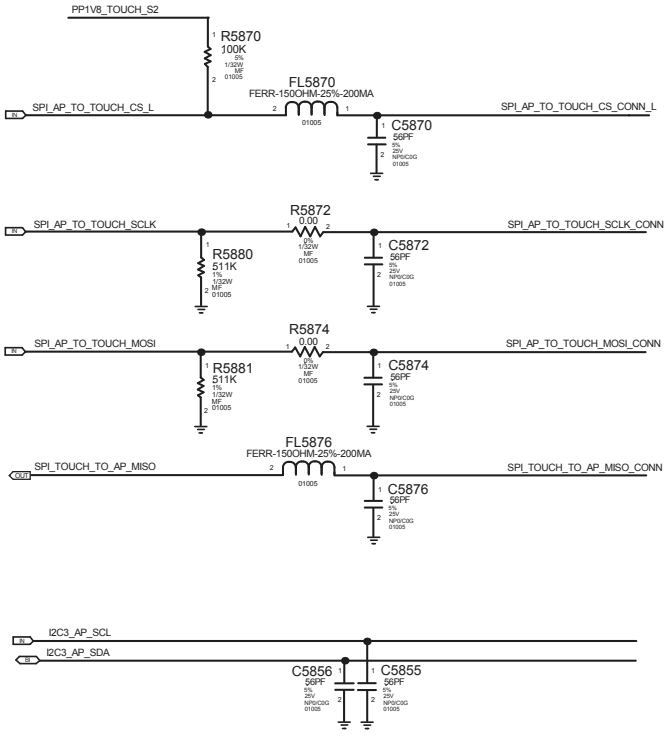
TOUCH RESET



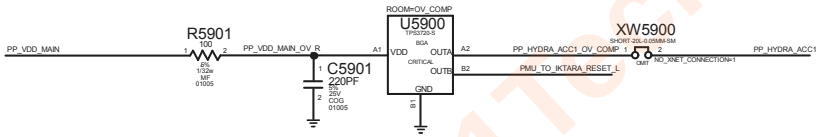
AOP/TOUCH INTERFACE



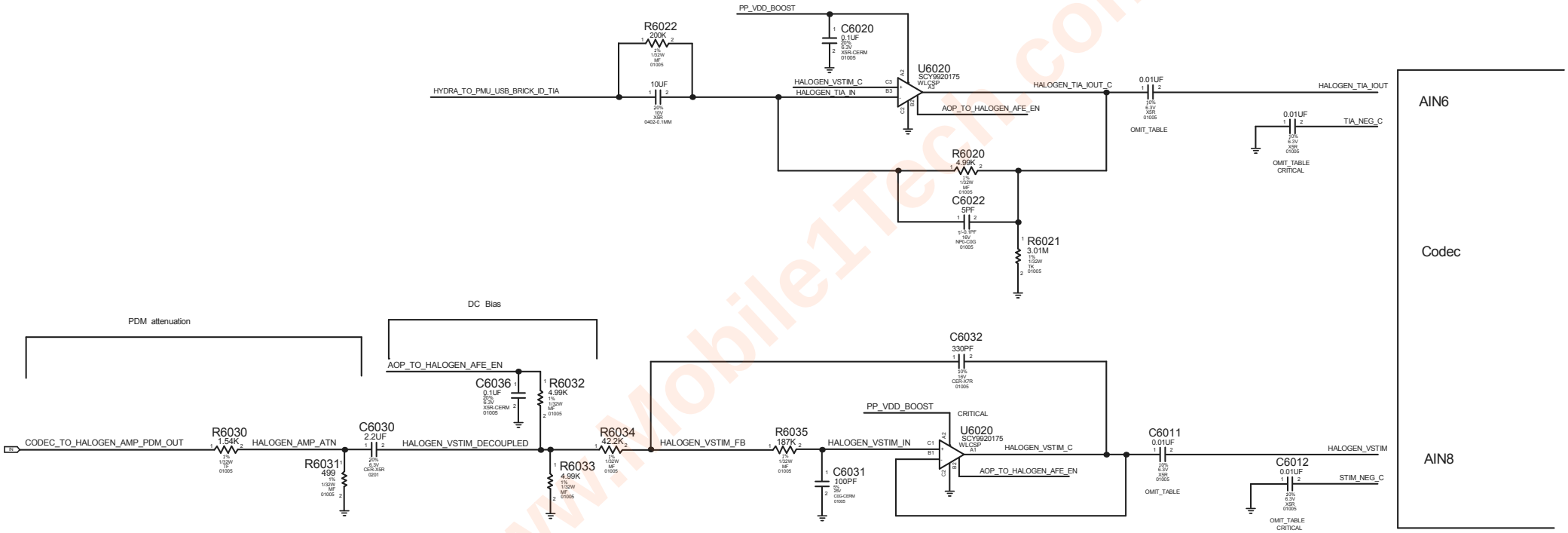
AP/TOUCH INTERFACE



VDD_MAIN OV CUT-OFF CIRCUIT

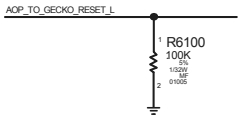


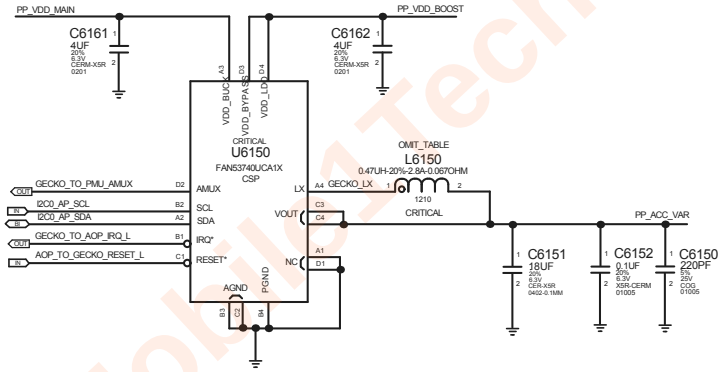
LDCM



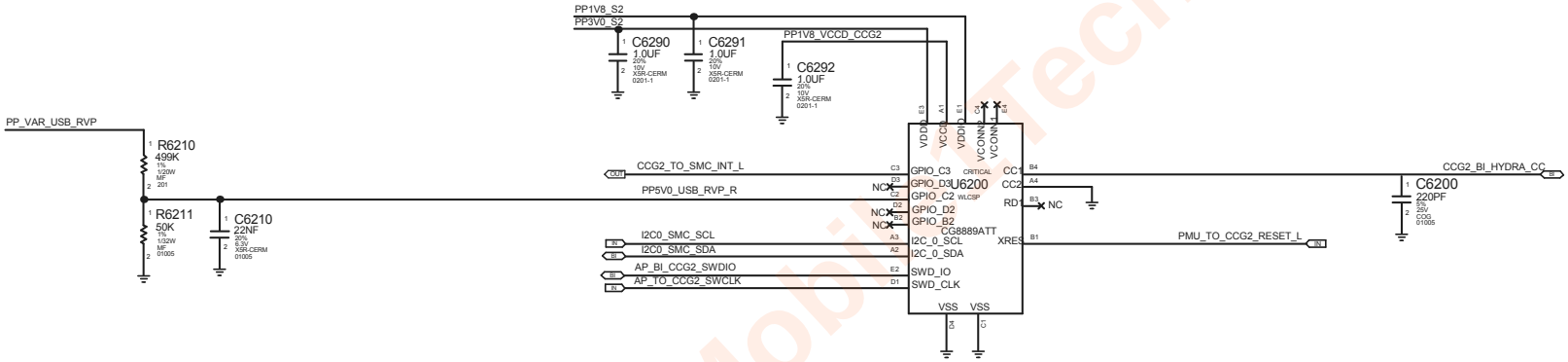
Gecko

GECKO Reset Pull Down

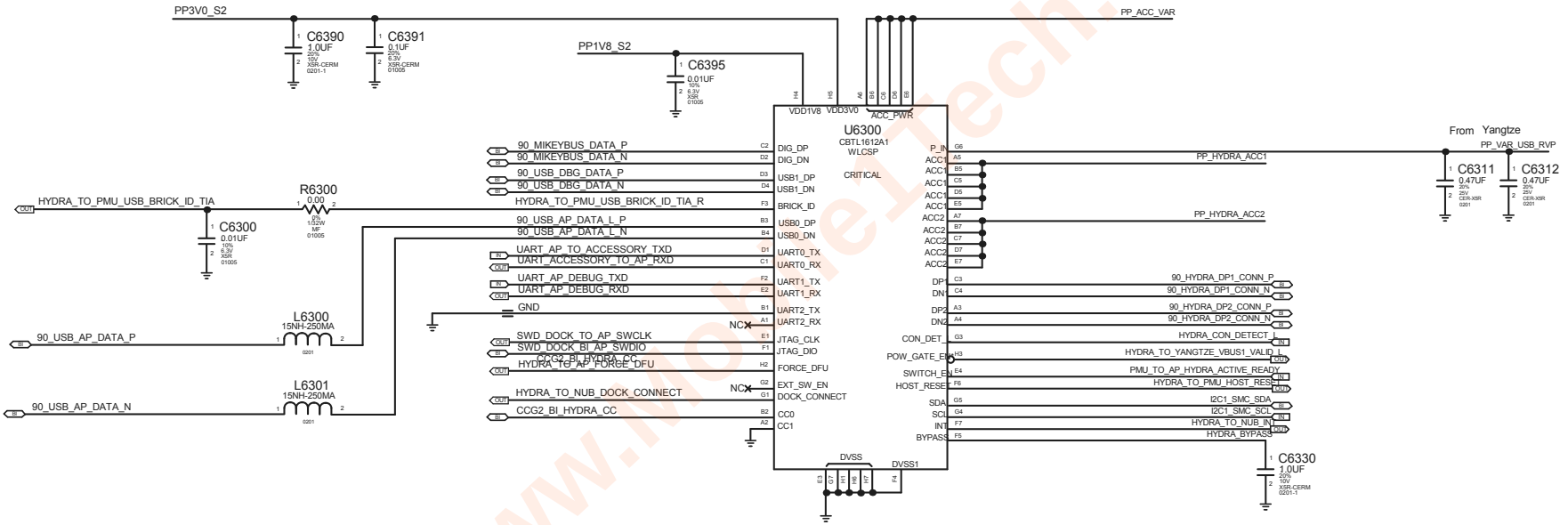




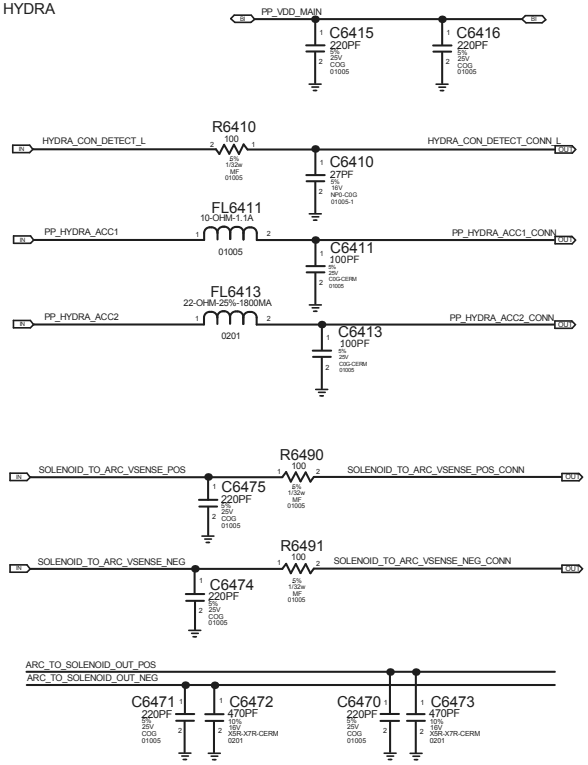
USB-PD



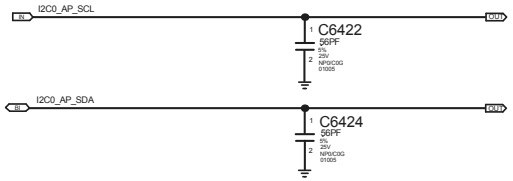
Hydra



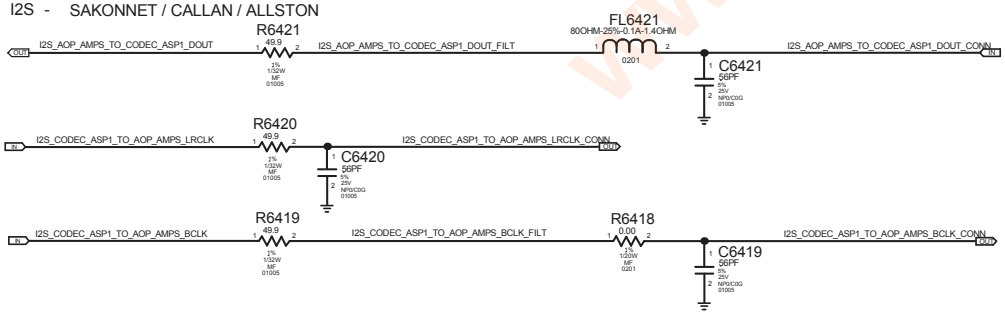
HYDRA



I2C - SAKONNET

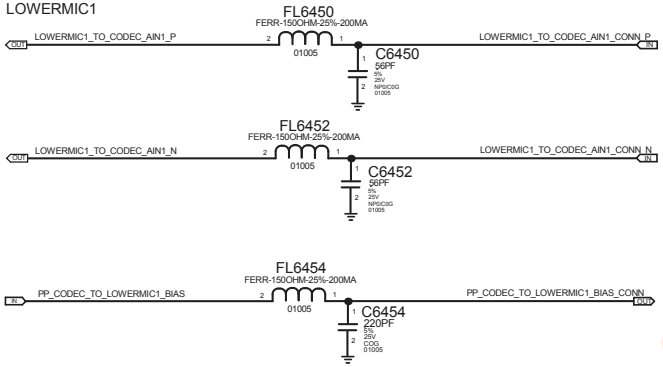


I2S - SAKONNET / CALLAN / ALLSTON

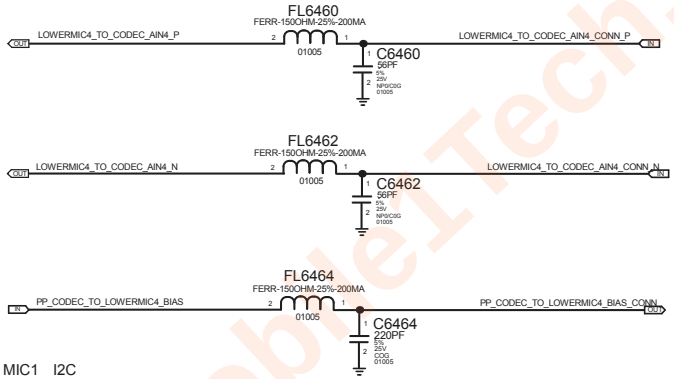


MICS

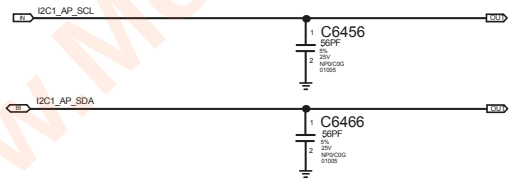
LOWERMIC1



LOWERMIC4

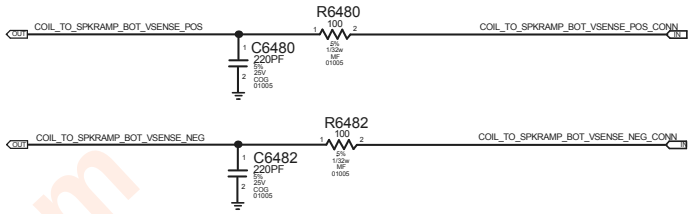


MIC1 I2C

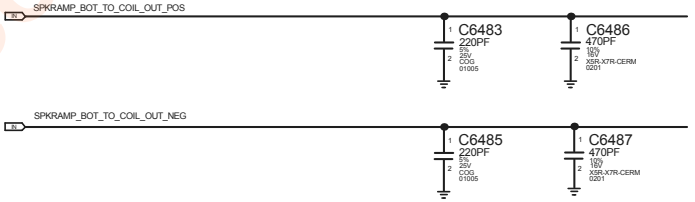


SOUTH SPEAKER

VSENSE



COIL

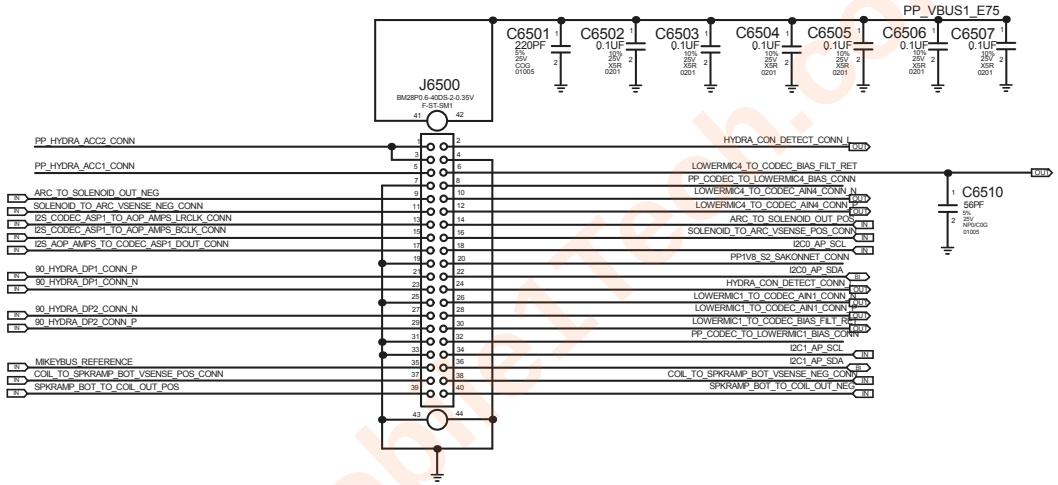


SAKONNET POWER

PHALANX

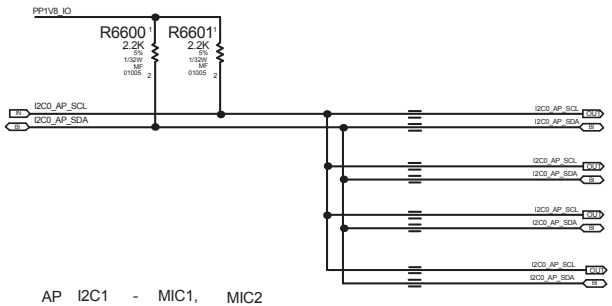
DOCK CONNECTOR

APN: 516S00404



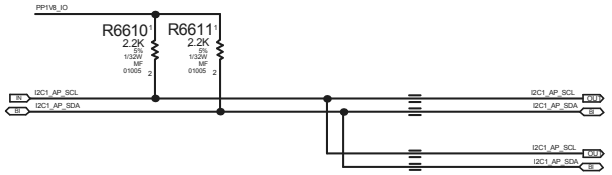
AP I2C

AP I2C0 - GECKO, BOOST, SAKONNET< ARC EEPROM, MUON



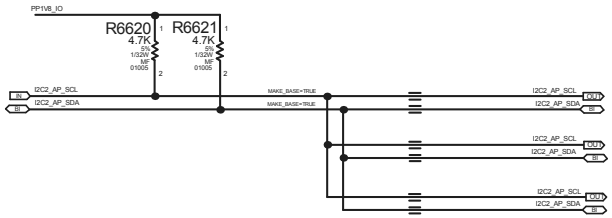
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr	Min Speed	Max Speed	Location
AP I2C0	PP1V8_IO	400 kHz	GECKO	0x52	1010 010X	0xA4, 0xA5	-	1 MHz	MLB
			BOOST	0x75	1110 101X	0xA4, 0xEB	-	400 kHz	MLB
			SAKONNET	0x08	0001 000X	0x10, 0x11	-	1 MHz	B2B - Dock
			ARC EEPROM	0x50	1010 000X	0xA0, 0xA1	-	400 kHz	B2B - Dock
			MUON (1)	0x62	1100 010X	0xC4, 0xC5	1 MHz		MLB

AP I2C1 - MIC1, MIC2



Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr	Min Speed	Max Speed	Location
AP I2C1	PP1V8_IO	100 kHz	MIC1-SABERTOOTH	0x54	1010 100X	0xA8, 0xA9	-	400 kHz	B2B - Dock
			MIC2-WOLVERINE	0x56	1010 100X	0xAC, 0xAD	-	400 kHz	B2B - Strobe

AP I2C2 - ALLSTON, CHESTNUT, MUON

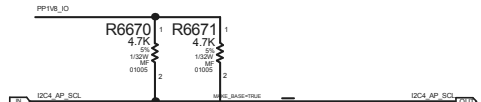


Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr	Min Speed	Max Speed	Location
AP I2C2	PP1V8_IO	400 kHz	ALLSTON	0x40	1000 000X	0x80, 0x81	-	1 MHz	MLB
			CHESTNUT	0x27	0100 111X	0x4E, 0x4F	-	400 kHz	MLB
			MUON (2)	0x62	1100 010X	0xC4, 0xC5	1 MHz	-	MLB

AP I2C3 - TOUCH (GAUSS)

Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr	Min Speed	Max Speed	Location
AP I2C3	PP1V8_IO	400 kHz	TOUCH - GAUSS	0x51	1010 001X	0xA2, 0xA3	-	400 kHz	B2B - TOUCH

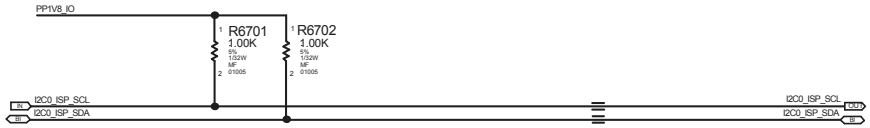
AP I2C4 - LYNX



Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
AP I2C4	PP1V8_IO	400 kHz	LYNX	0x71	1110 001X	0xE2, 0xE3	-	1 MHz	MLB

ISP I2C

ISP I2C0 - RCAM (TX)



Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
ISP I2C0	PP1V8_IO	1 MHz	TEXAS (Wide)	0x10	0010 000X	0x20, 0x21	-	1 MHz	B2B - RCAM
			RAMAN	0x3C	0111 100X	0x78, 0x29		1 MHz	B2B - RCAM

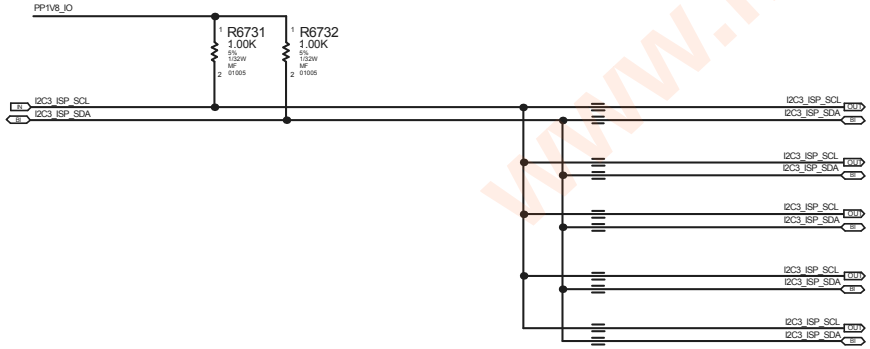
ISP I2C1 - FCAM (LI)

Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
ISP I2C1	PP1V8_IO	1 MHz	Yonkers (LI)	0x10	0010 000X	0x20, 0x21	-	1 MHz	B2B - FCAM

ISP I2C2 - JULIET

Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
ISP I2C2	PP1V8_IO	1 MHz	JULIET (SAVAGE)	0x18	0011 000X	0x30, 0x31	-	1 MHz	B2B - Juliet

ISP I2C3 - ANSEL, NEON(2), RIGEL, MAMABEAR



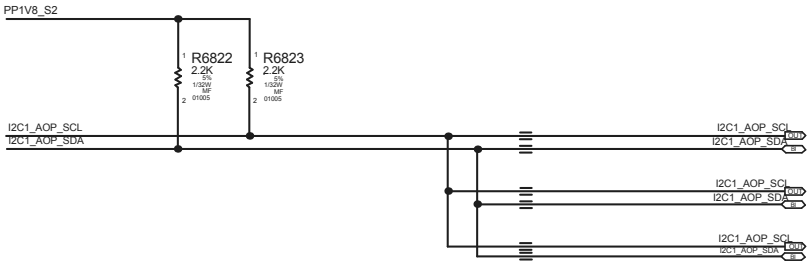
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
ISP I2C3	PP1V8_IO	1 MHz	ANSEL	0x40	1000 000X	0x80, 0x81	-	1 MHz	MLB
			NEON (1)	0x63	1100 011X	0xC6, 0xC7	-	1 MHz	MLB
			NEON (2)	0x67	1100 111X	0xCE, 0xCF	-	1 MHz	MLB
			RIGEL	0x55	1010 101X	0xAA, 0xAB	-	1 MHz	MLB
			MAMA BEAR	0x50	1010 000X	0xA0, 0xA1	-	1 MHz	B2B - ROMEO

AOP/SMC I2C

AOP I2C0 - DOPPLER,BLACKBIRD, YOGI

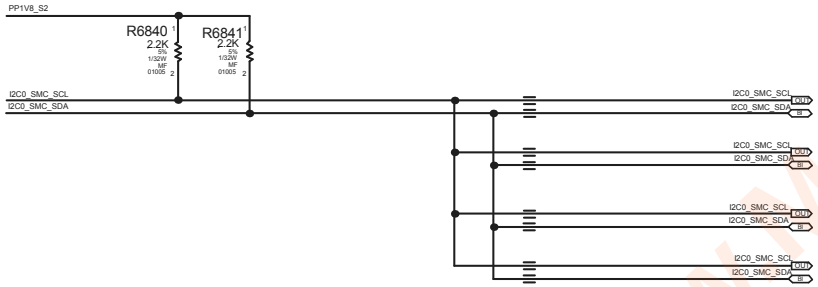
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
AOP I2C0	PP1V8_S2	1 MHz	DOPPLER(Prox)	0x58	1011 000X	0xB0, 0xB1	-	1 MHz	B2B - Sensor
			BLACKBIRD(ALS)	0x29	0101 001X	0x52, 0x53	-	1 MHz	B2B - Sensor
			YOGI	0x33	0110 011X	0x66, 0x67	-	1 MHz	B2B - Sensor

AOP I2C1 - ARC, ALLSTON, COMPASS



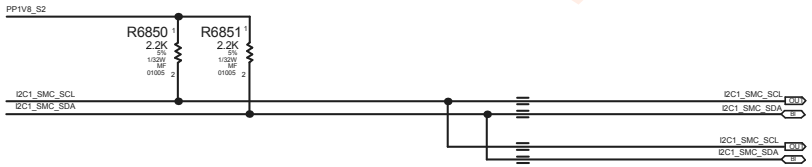
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
AOP I2C1	PP1V8_S2	400 kHz	ARC	0x42	1000 001X	0x84, 0x85	-	1 MHz	MLB
			ALLSTON	0x40	1000 000X	0x80, 0x81	-	1 MHz	MLB
			COMPASS	0x0E	0001 110X	0x1C, 0x1D	-	1 MHz	B2B - Cyclone

SMC I2C0 - BMU, YANGTZE, USB-PD, IKTARA, ROSWELL



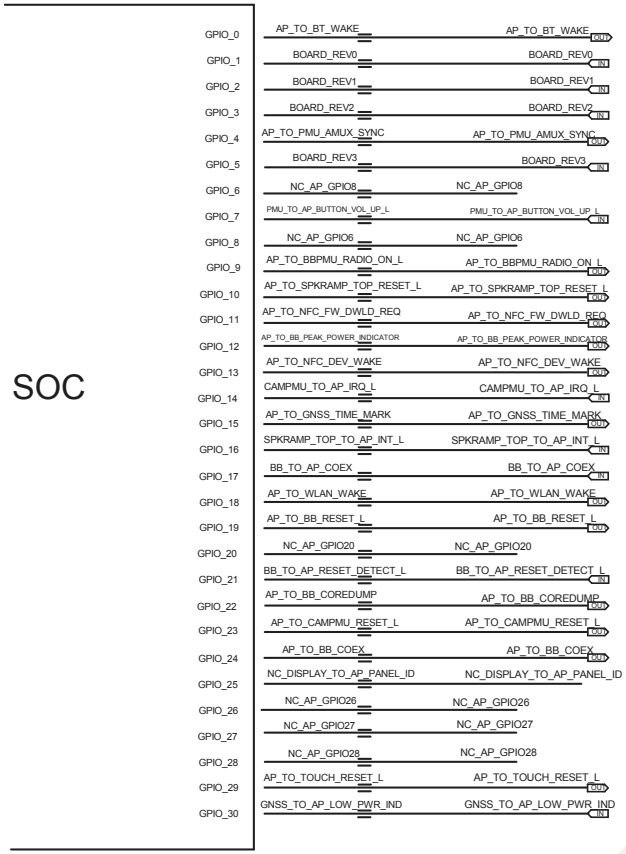
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
SMC I2C0	PP1V8_S2	400 kHz	GAS GAUGE	0x55	1010 101X	0xAA, 0xAB	-	400 kHz	B2B - Battery
			YANGTZE	0x71	1110 001X	0xE2, 0xE3	-	400 kHz	MLB
			USB-PD	0x12	0010 010X	0x24, 0x25	-	1 MHz	MLB
			IKTARA	0x39	0111 001X	0x72, 0x73	-	400 kHz	MLB
			ROSWELL	0x20	0100 000X	0x40, 0x41	-	400 kHz	B2B - Battery

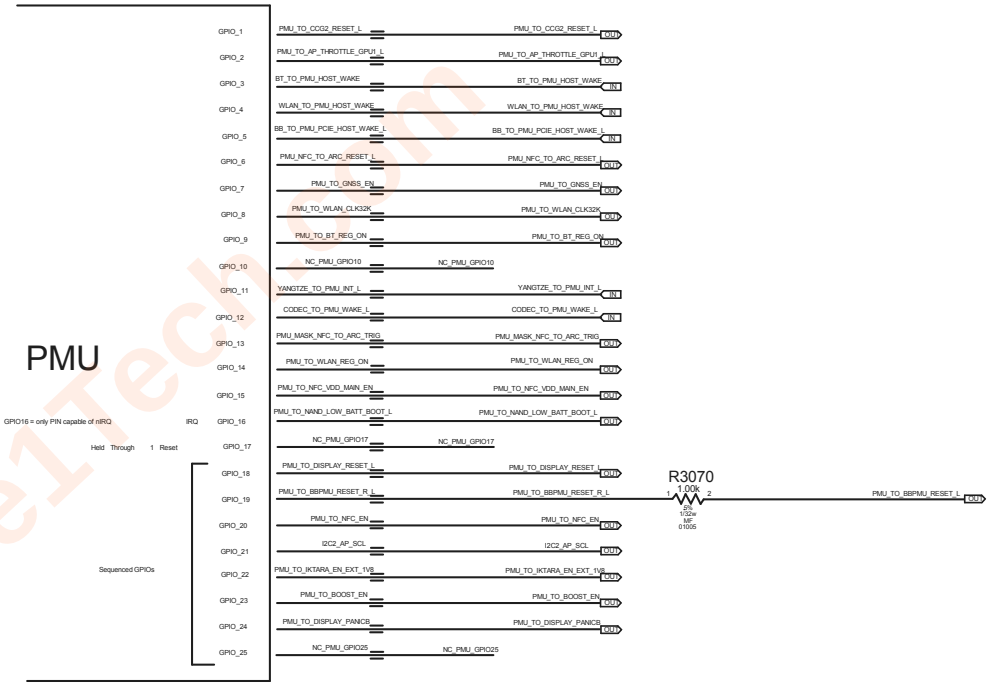
SMC I2C1 - HYDRA, DENALI

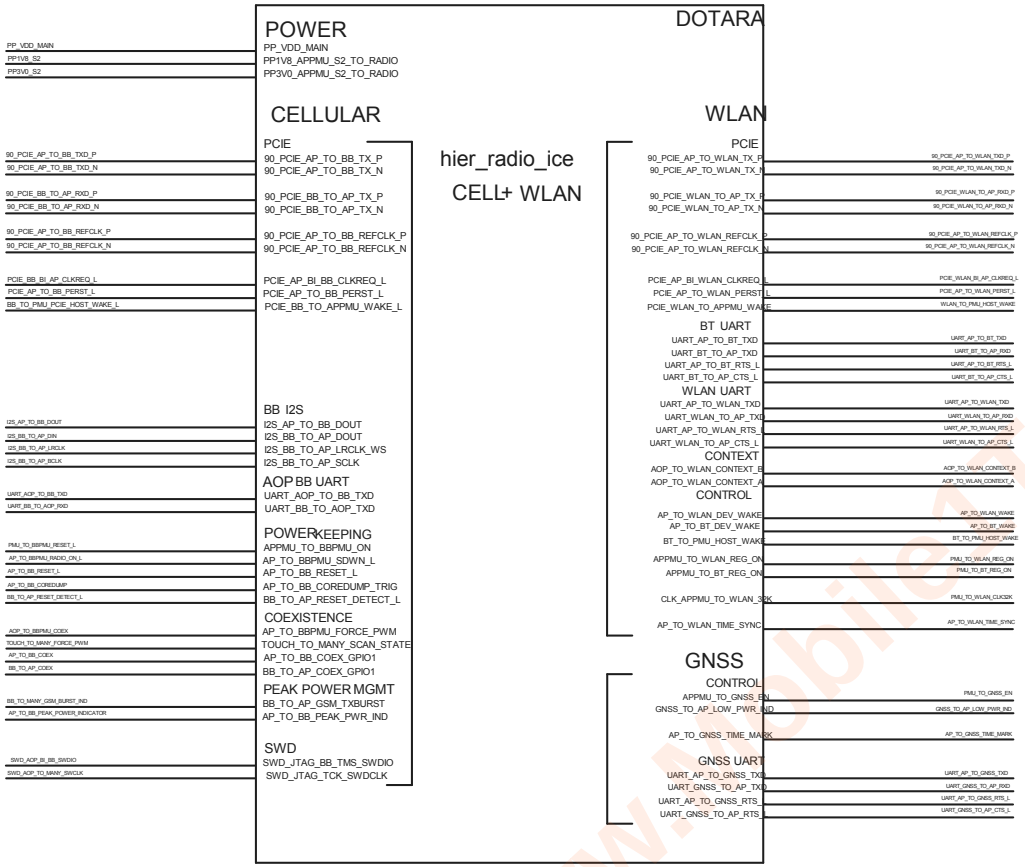


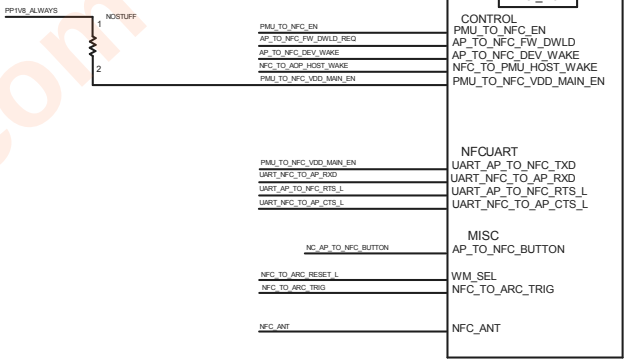
Bus Name	Bus Voltage	Bus Speed	Device	7-Bit Addr.	Binary	8-Bit Addr.	Min Speed	Max Speed	Location
SMC I2C1	PP1V8_S2	400 kHz	HYDRA	0x1A	0110 100X	0x34, 0x35	-	400 kHz	MLB
			DENALI	0x74	1110 100X	0xE8, 0xE9	-	400 kHz	MLB

AP/PMU GPIOs



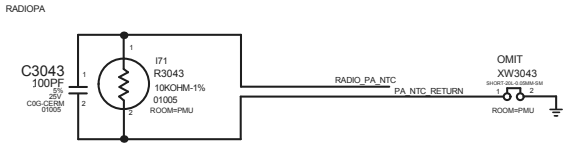






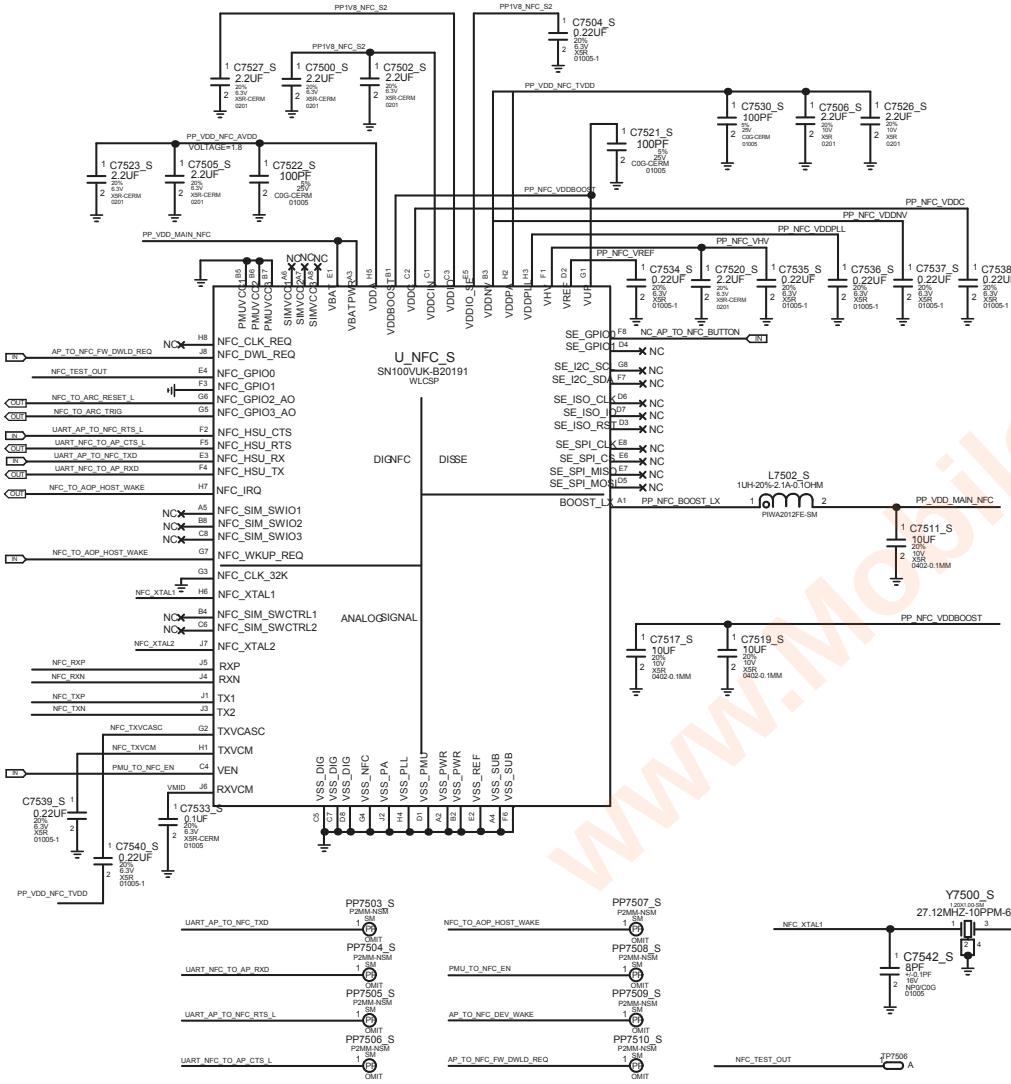
NFC ANTENNA FEED

NTCs

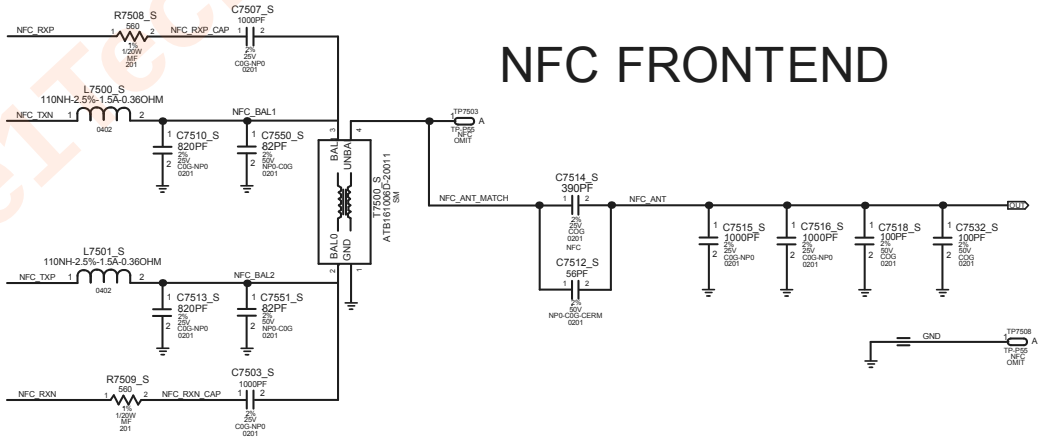


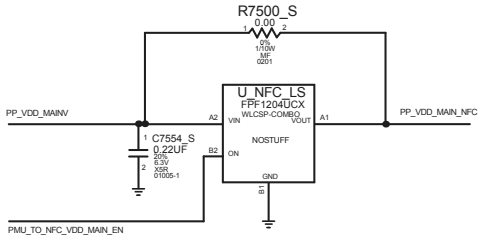
STOCKHOLM

NFC CONTROLLER



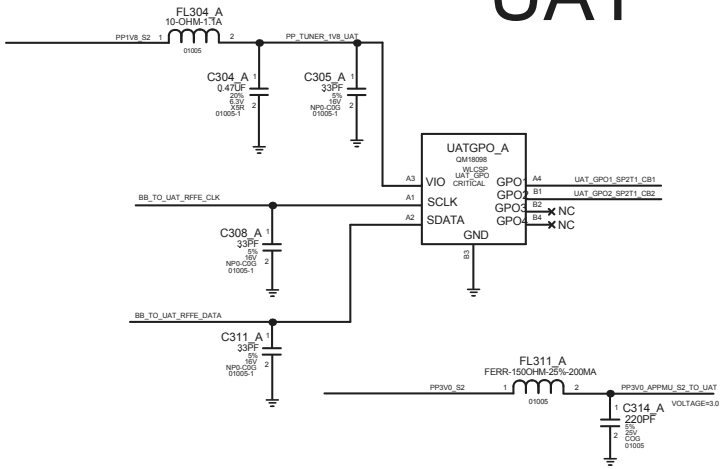
NFC FRONTEND





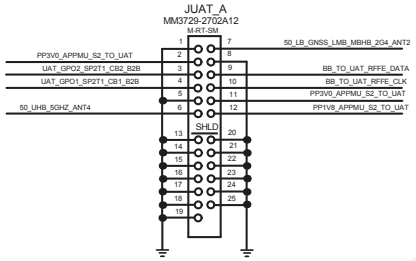
ANTENNA B2BS

UAT

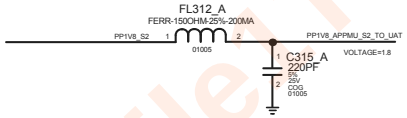


N84 UAT B2B

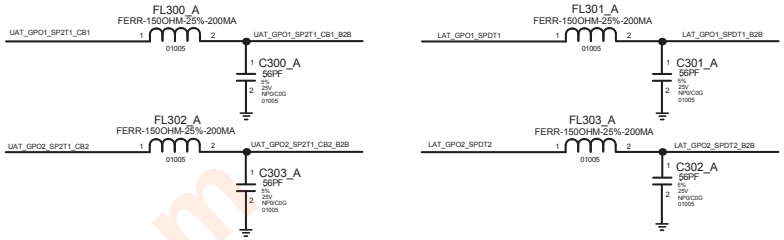
RCPT ON MLB (518S00123)
PLUG ON FLEX (518S00124)

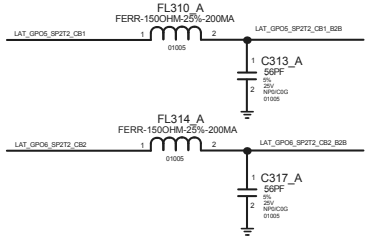


N84 ONLY

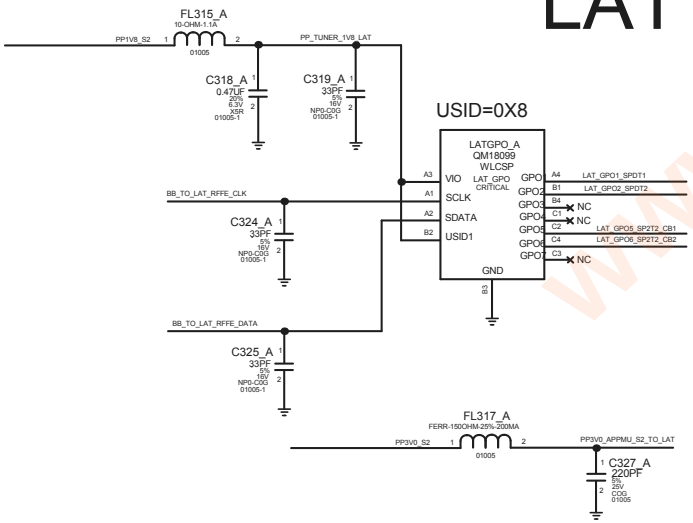


GPO FILTERS



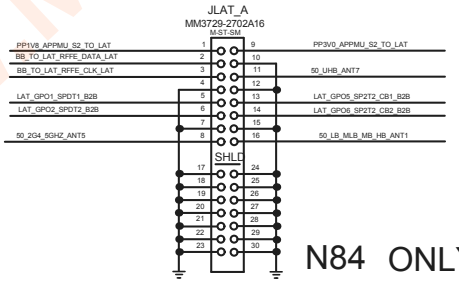


LAT

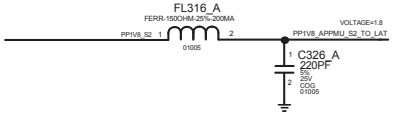


N84 LAT B2B

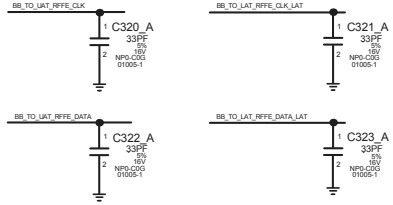
RCPT ON MLB (518S00125)
PLUG ON FLEX (518S00126)



N84 ONLY

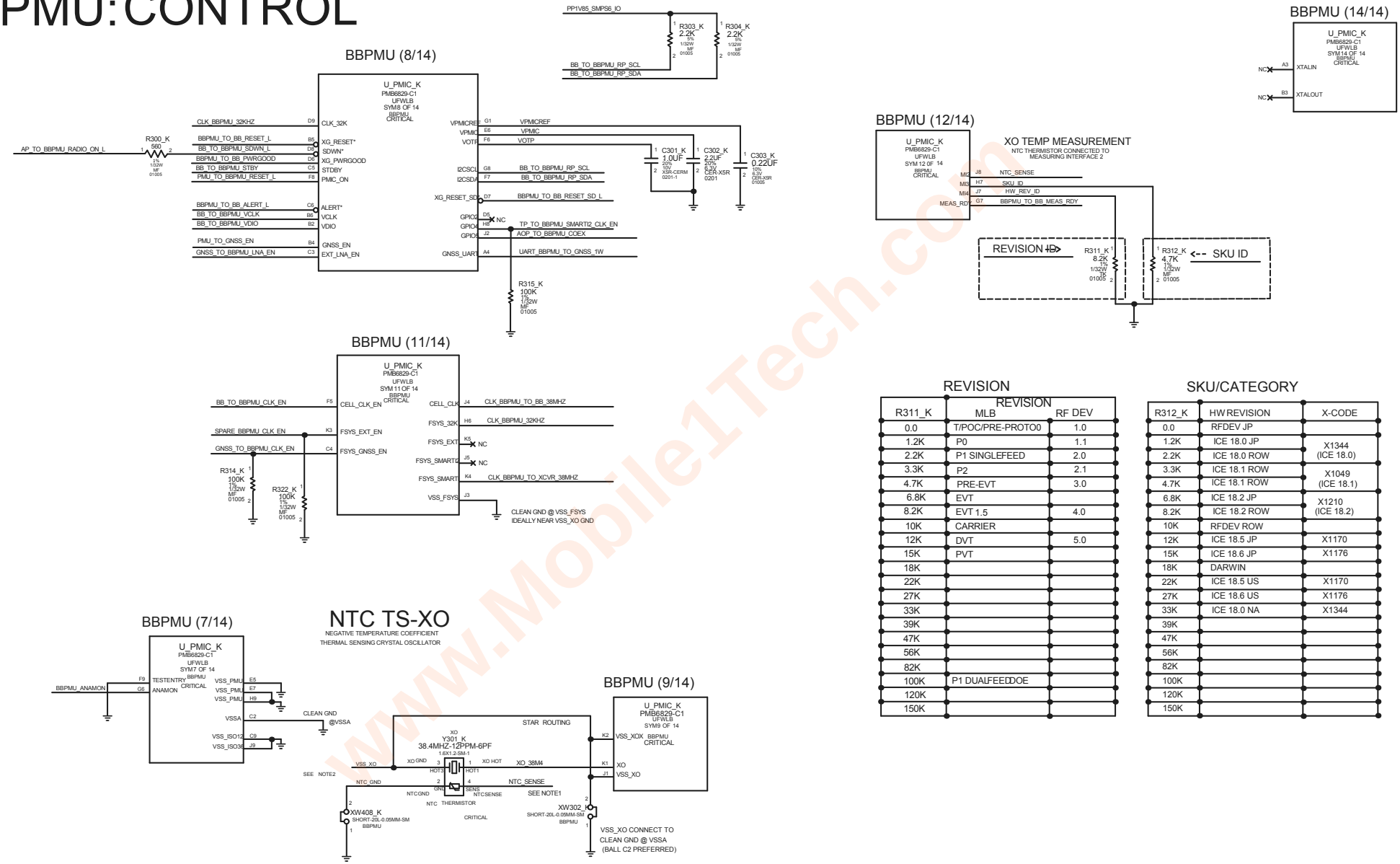


RFFE FILTERS



ANTENNACONNECTIONS

BBPMU:CONTROL



REVISION

R311_K	REVISION MLB	RF DEV
0.0	T/POC/PRE-PROTO0	1.0
1.2K	P0	1.1
2.2K	P1 SINGLEFEED	2.0
3.3K	P2	2.1
4.7K	PRE-EVT	3.0
6.8K	EVT	
8.2K	EVT 1.5	4.0
10K	CARRIER	
12K	DVT	5.0
15K	PVT	
18K		
22K		
27K		
33K		
39K		
47K		
56K		
82K		
100K	P1 DUALFEEDDOE	
120K		
150K		

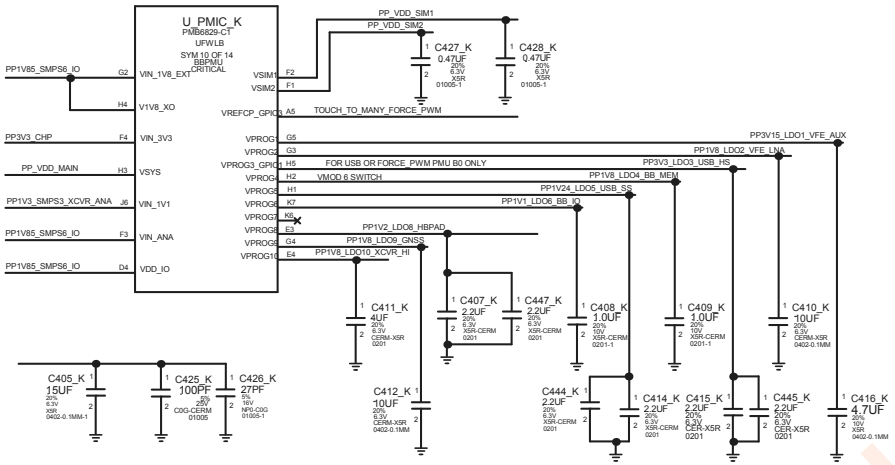
SKU/CATEGORY

R312_K	HW REVISION	X-CODE
0.0	RFDEV JP	
1.2K	ICE 18.0 JP	X1344 (ICE 18.0)
2.2K	ICE 18.0 ROW	
3.3K	ICE 18.1 ROW	X1049 (ICE 18.1)
4.7K	ICE 18.1 ROW	
6.8K	ICE 18.2 JP	X1210 (ICE 18.2)
8.2K	ICE 18.2 ROW	
10K	RFDEV ROW	
12K	ICE 18.5 JP	X1170
15K	ICE 18.6 JP	X1176
18K	DARWIN	
22K	ICE 18.5 US	X1170
27K	ICE 18.6 US	X1176
33K	ICE 18.0 NA	X1344
39K		
47K		
56K		
82K		
100K		
120K		
150K		

BBPMU:RAILS

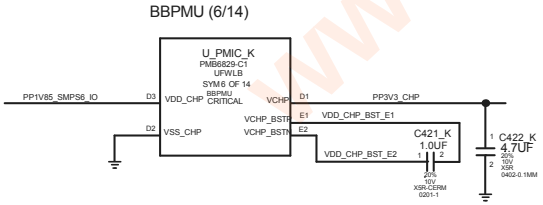
PROGRAMMABLE LDOS

BBPMU (10/14)



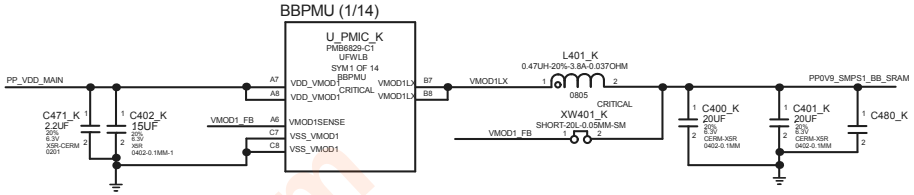
CHARGE PUMP

BBPMU (6/14)

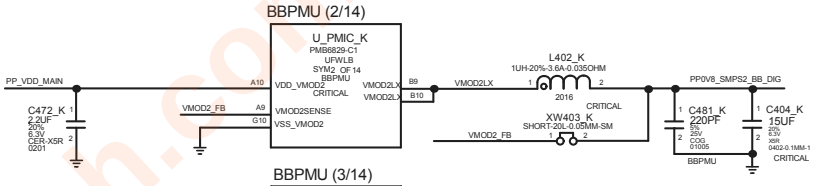


SWITCHERS

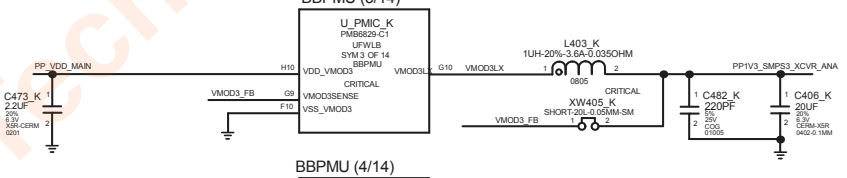
BBPMU (1/14)



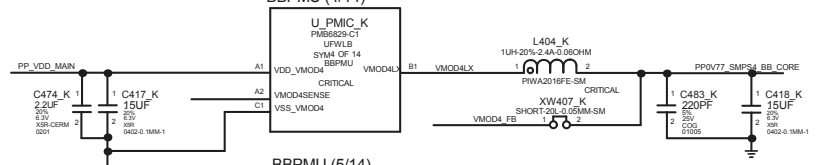
BBPMU (2/14)



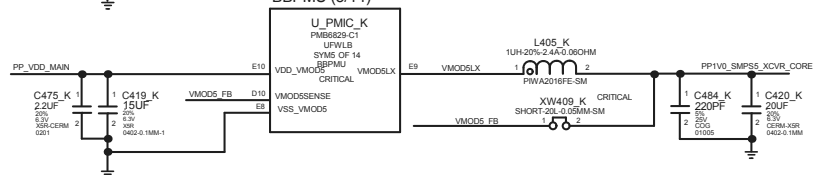
BBPMU (3/14)



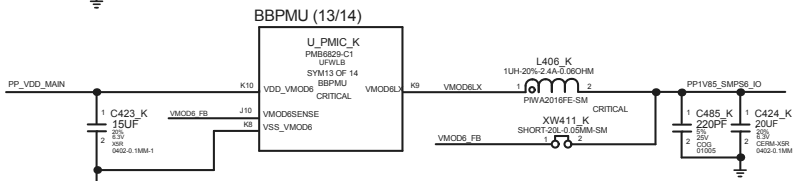
BBPMU (4/14)



BBPMU (5/14)



BBPMU (13/14)



BB: INTERFACE

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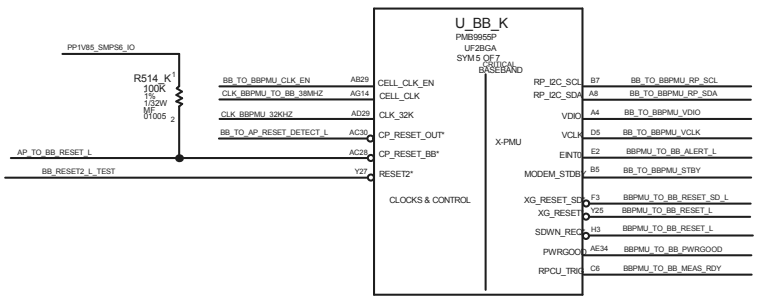
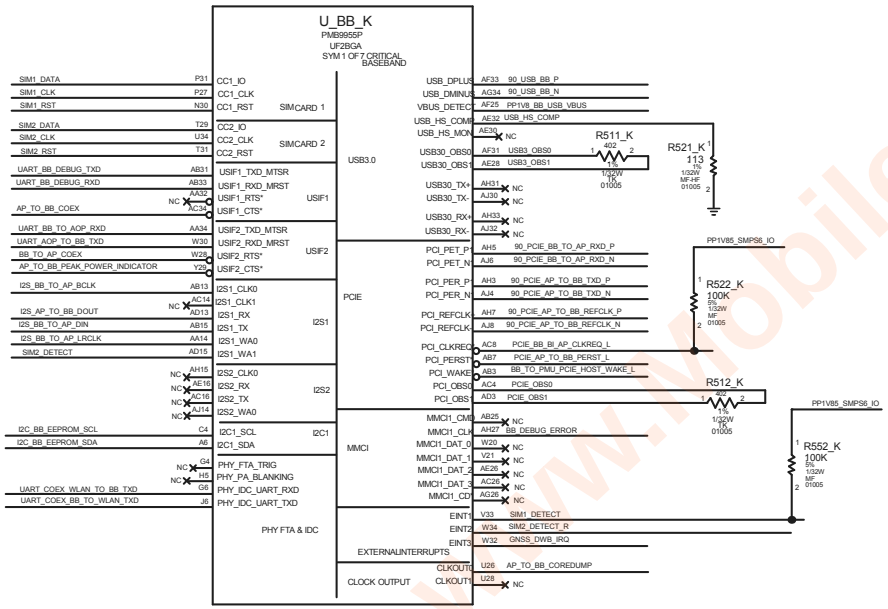
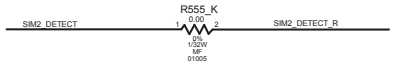
XG756 (5/7)



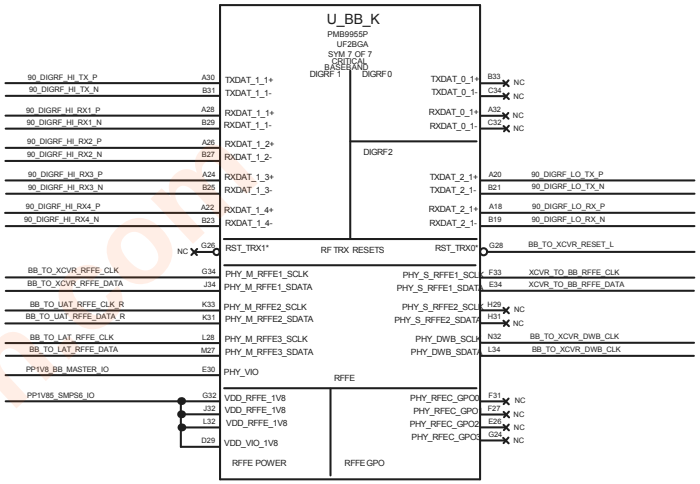
XG756 (1/7)



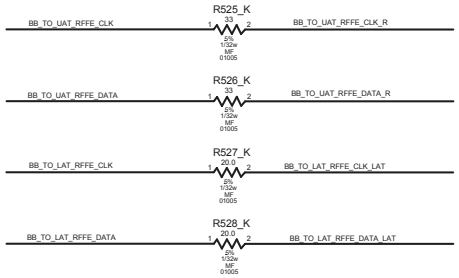
SIM2_DETECT TO EINT2



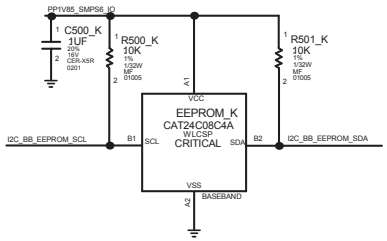
XG756 (7/7)



DAMPENING RESISTOR FOR RFFE LAT/UAT



BB EEPROM



BB: DDR PWR & JTAG

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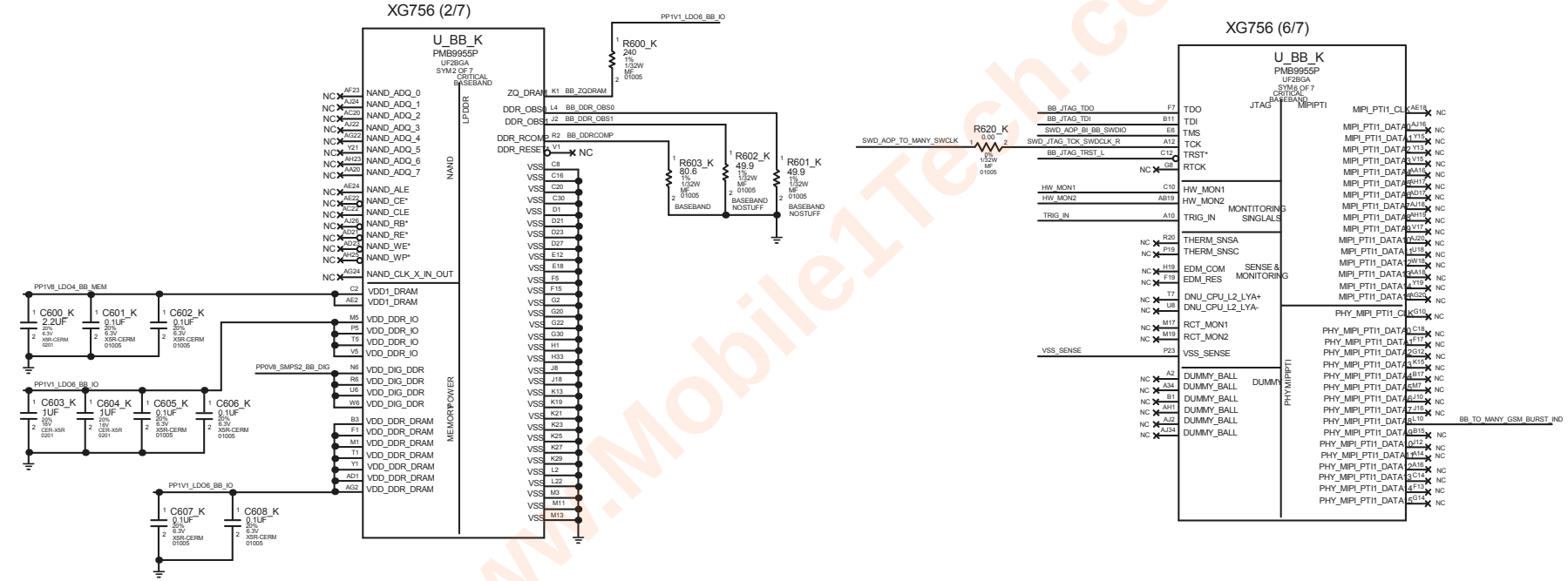
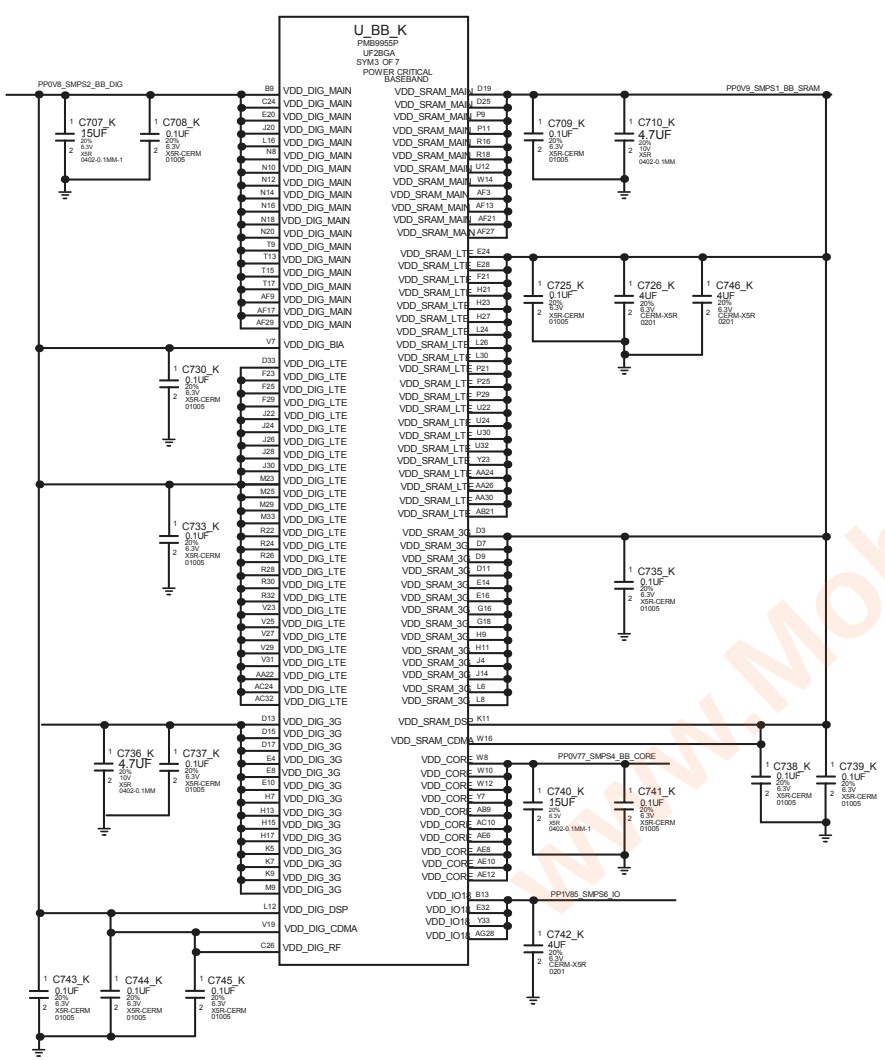
HOOKS FOR DDR4 TESTING/CAL

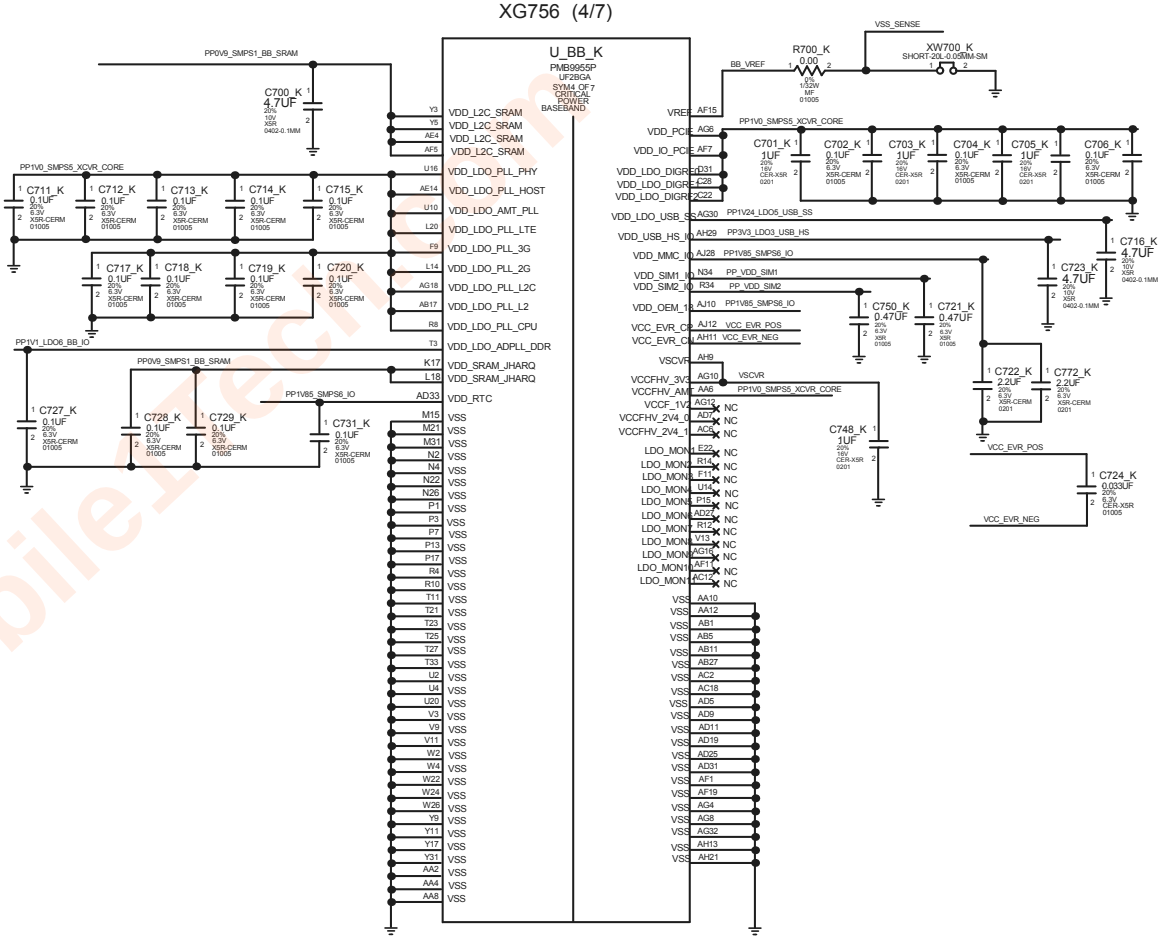


BB: DIGITAL PWR

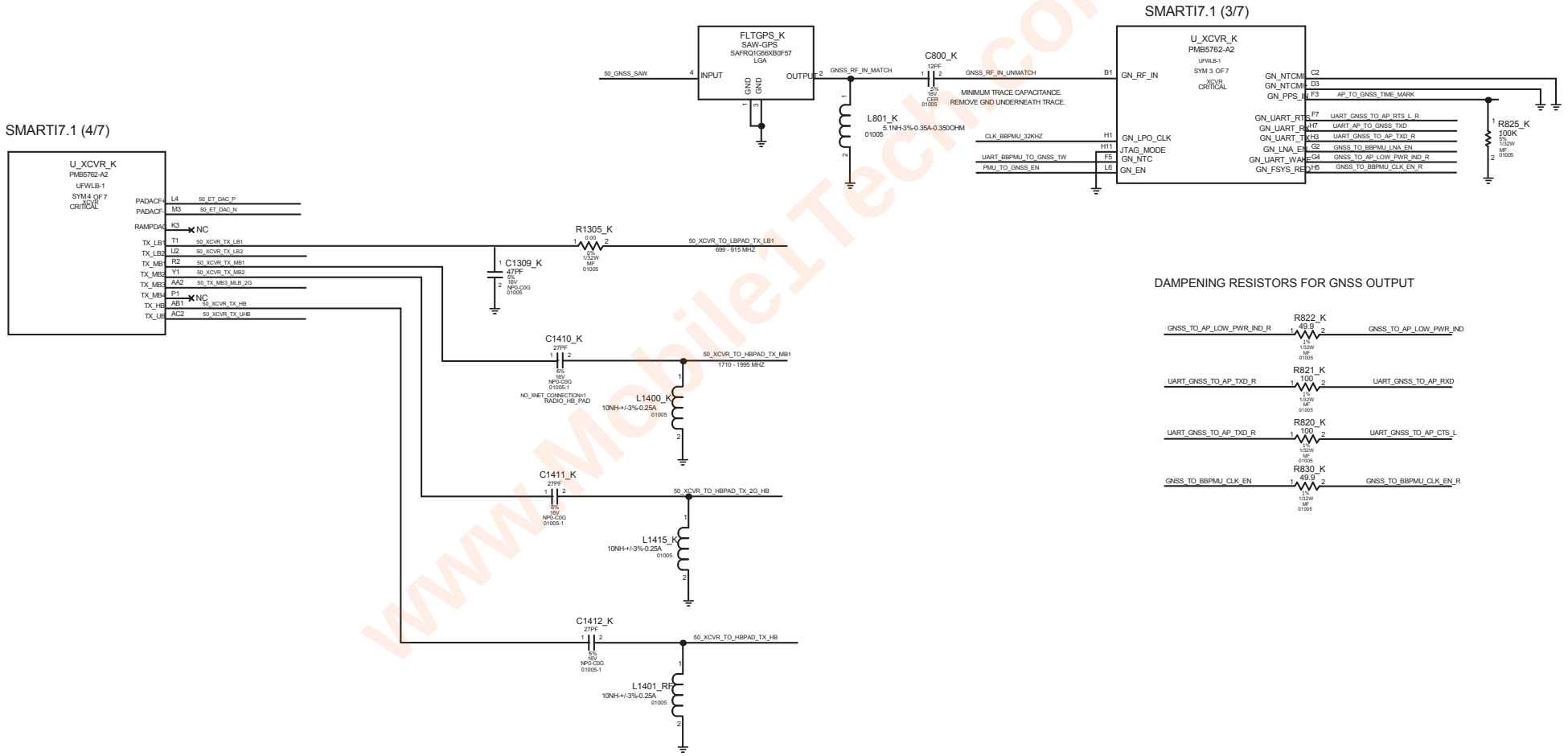
XG756 (3/7)



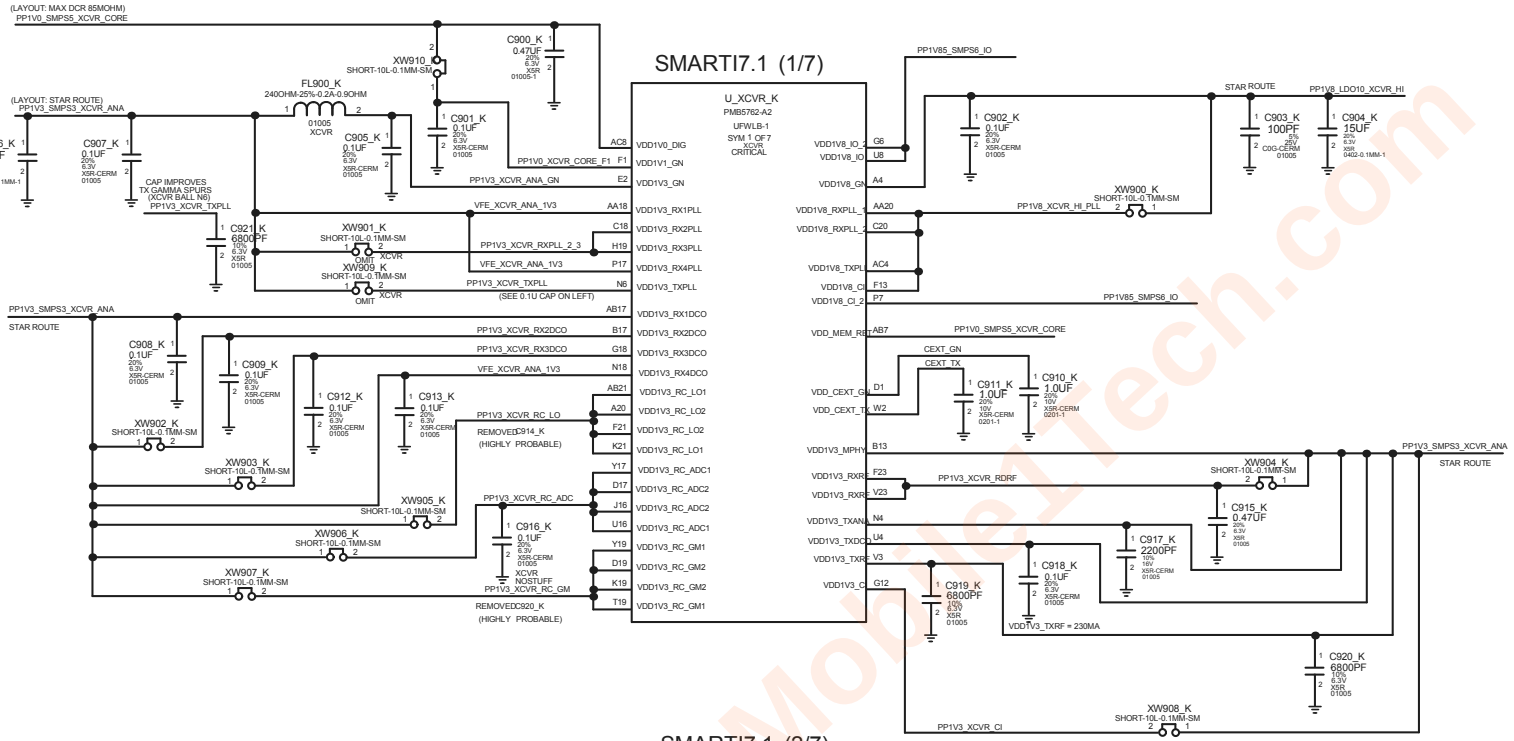
XG756 (4/7)

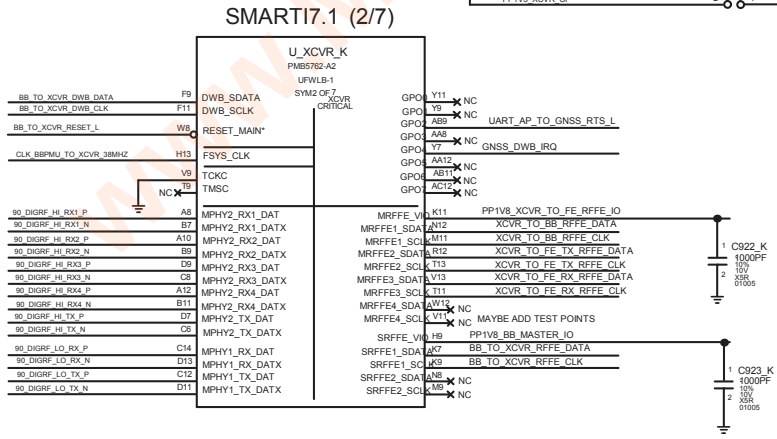


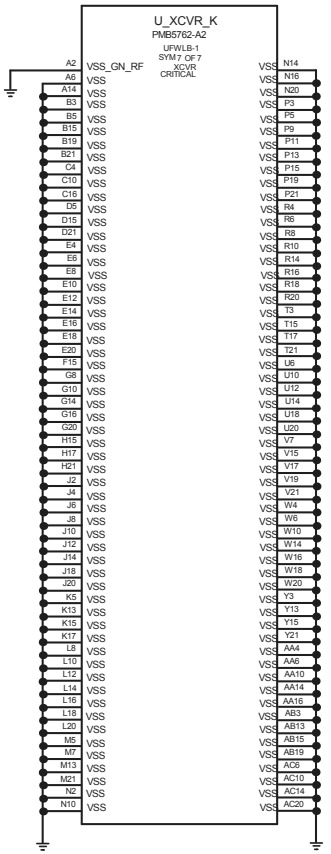
XCVR: TRANSMIT & GNSS



XCVR: INTERFACE & PWR







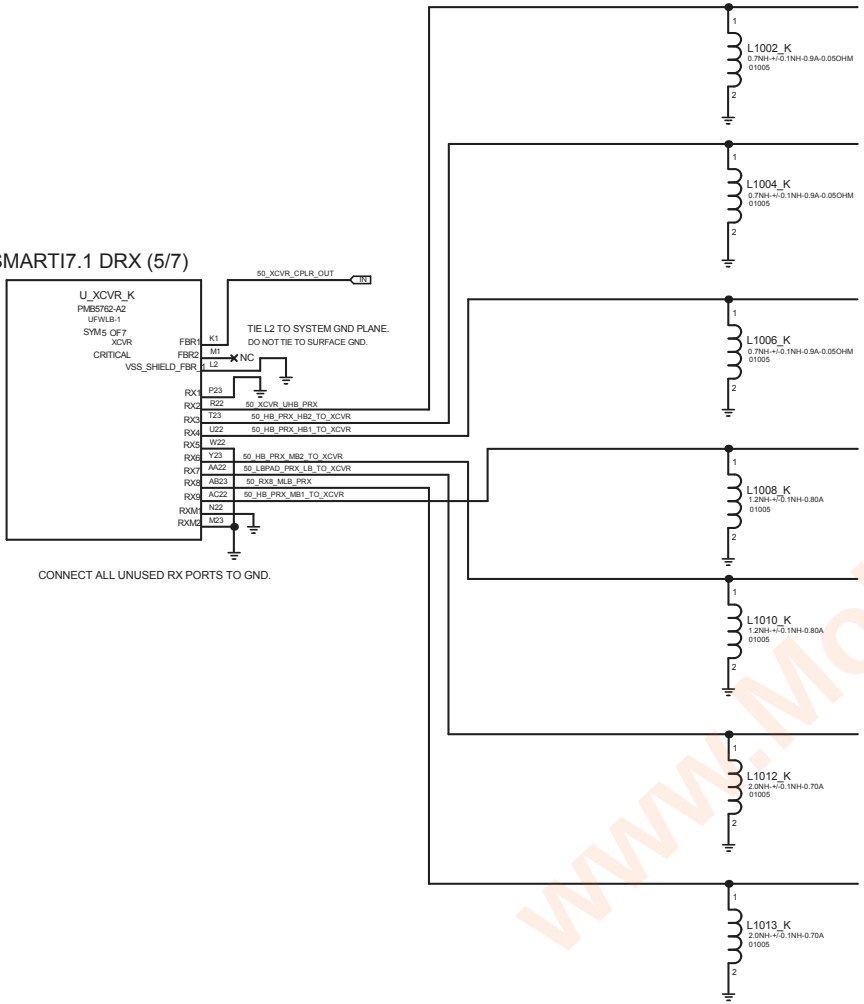
XCVR + FRONT END POWER DISTRIBUTION

CONFIGURATION 4

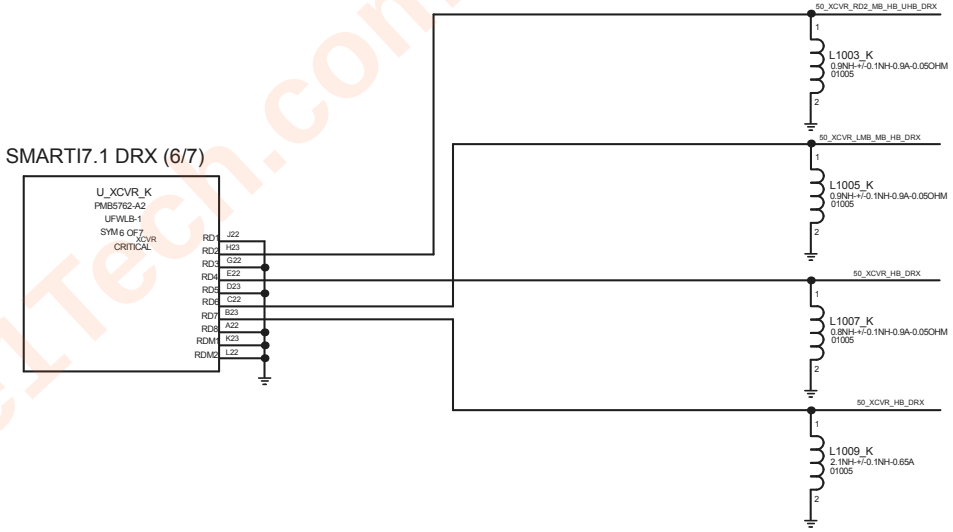
PP1V3_SMPS3_XCVR_ANA	PP1V3_SMPS3_XCVR_ANA
PP1V0_SMPS5_XCVR_CORE	PP1V0_SMPS5_XCVR_CORE
PP1V85_SMPS6_IO	PP1V85_SMPS6_IO
PP3V15_LDO1_VFE_AUX	PP3V15_LDO1_VFE_AUX
PP1V8_LDO2_VFE_LNA	PP1V8_LDO2_VFE_LNA
PP1V2_LDO8_HBPAD	PP1V2_LDO8_HBPAD
PP1V8_LDO9_GNSS	PP1V8_LDO9_GNSS
PP1V8_LDO10_XCVR_HI	PP1V8_LDO10_XCVR_HI

XCVR: PRIMARY/DIVERSITY RX

SMARTI7.1 DRX (5/7)



SMARTI7.1 DRX (6/7)

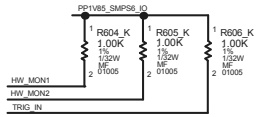


KAROO CONFIG

BOOTCFG

BOOTSTRAPS ARE INTERNALLY PULLED DOWN

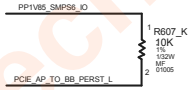
	HW_MON1	HW_MON2	TRIG_IN
NAND	0	0	1
FLASHLESS	1	0	1
FLASHLESS WDOG DIS	1	1	0
NAND (NON-SECURE)	1	1	1



THESE DON'T CHANGE FOR KAROO CONFIG MLBS, DEV ONLY

PERST_L

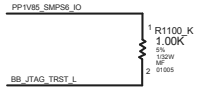
PERST_L SIGNAL LOW WILL KEEP BB IN RESET.



STUFF PU WHEN AP IS NOT CONNECTED
(KAROO CONFIG: USB BOOT)

DEFAULTS SET TO AP/FLASHLESS BOOT

JTAG_RESET_L



STUFF PU WHEN USING JTAG

ET MODULATOR

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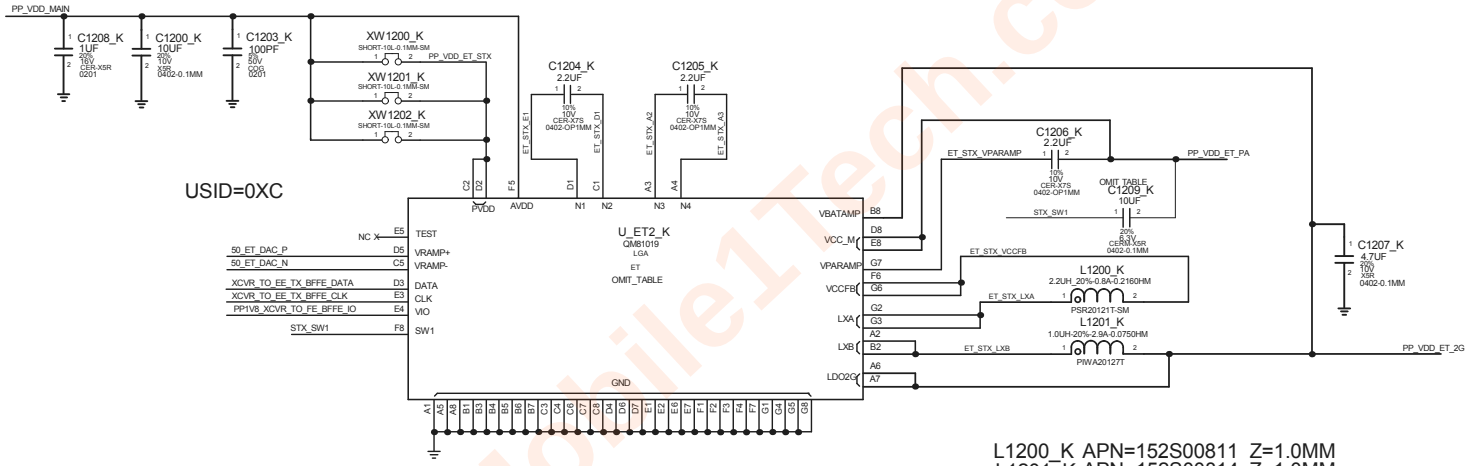
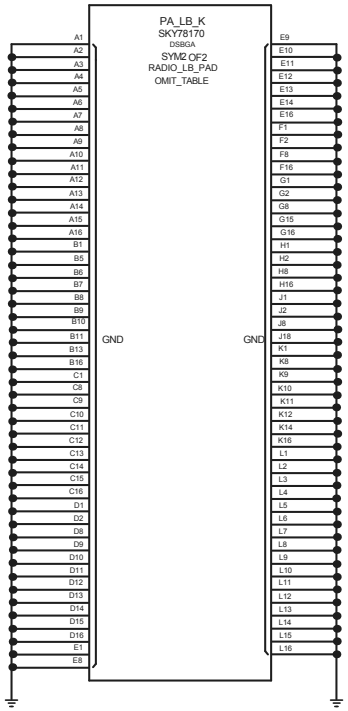
ALPES STX QM81019 MODULE

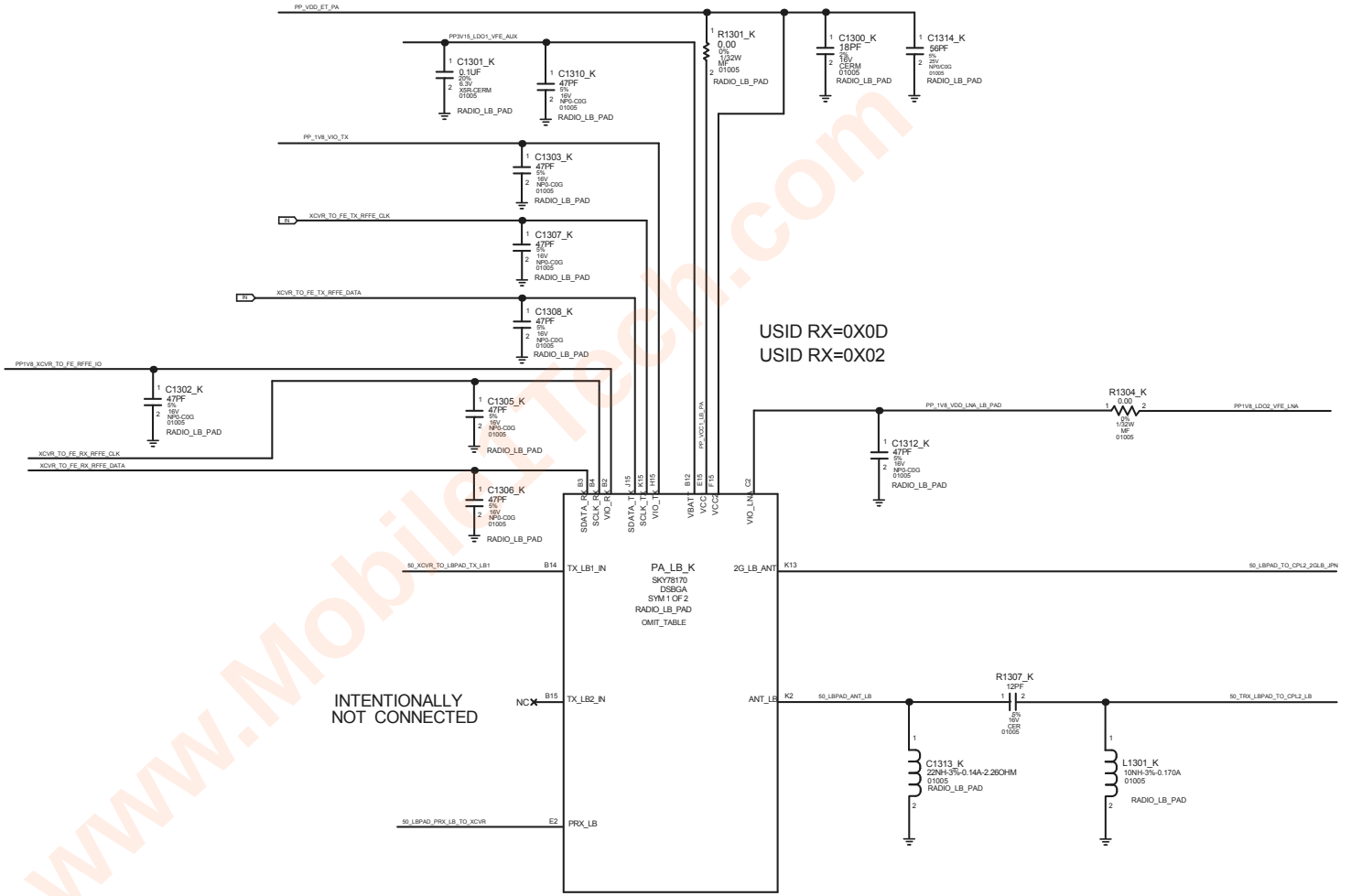


L1200_K APN=152S00811 Z=1.0MM
L1201_K APN=152S00814 Z=1.0MM

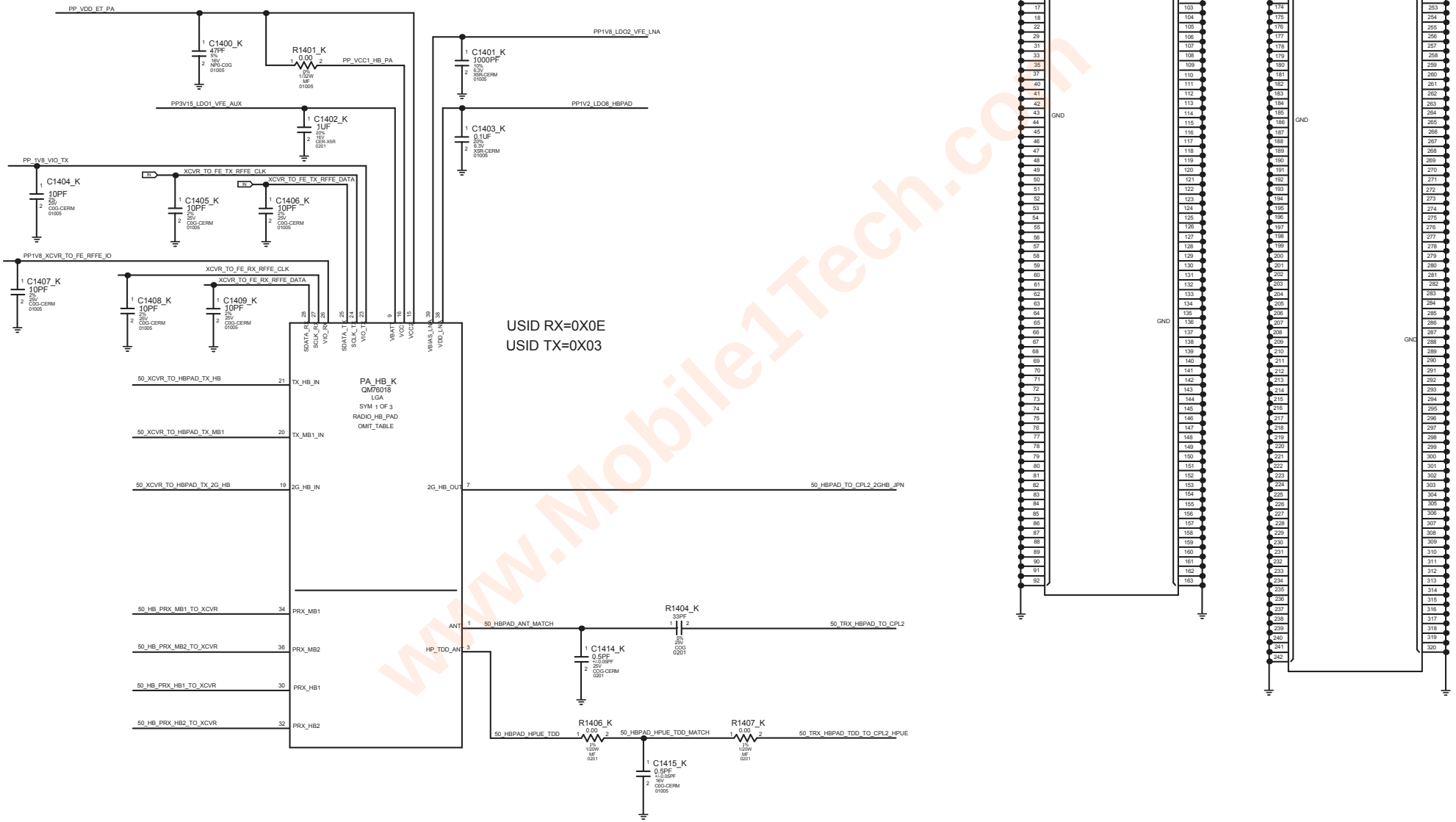
STUFFED:C1204_K, C1205_K, C1206_K: KYOCERAAPN=138S00167
ALTERNATE:C1204_K, C1205_K, C1206_K ALTERNATEMURATAAPN=138S00237

LB SPAD

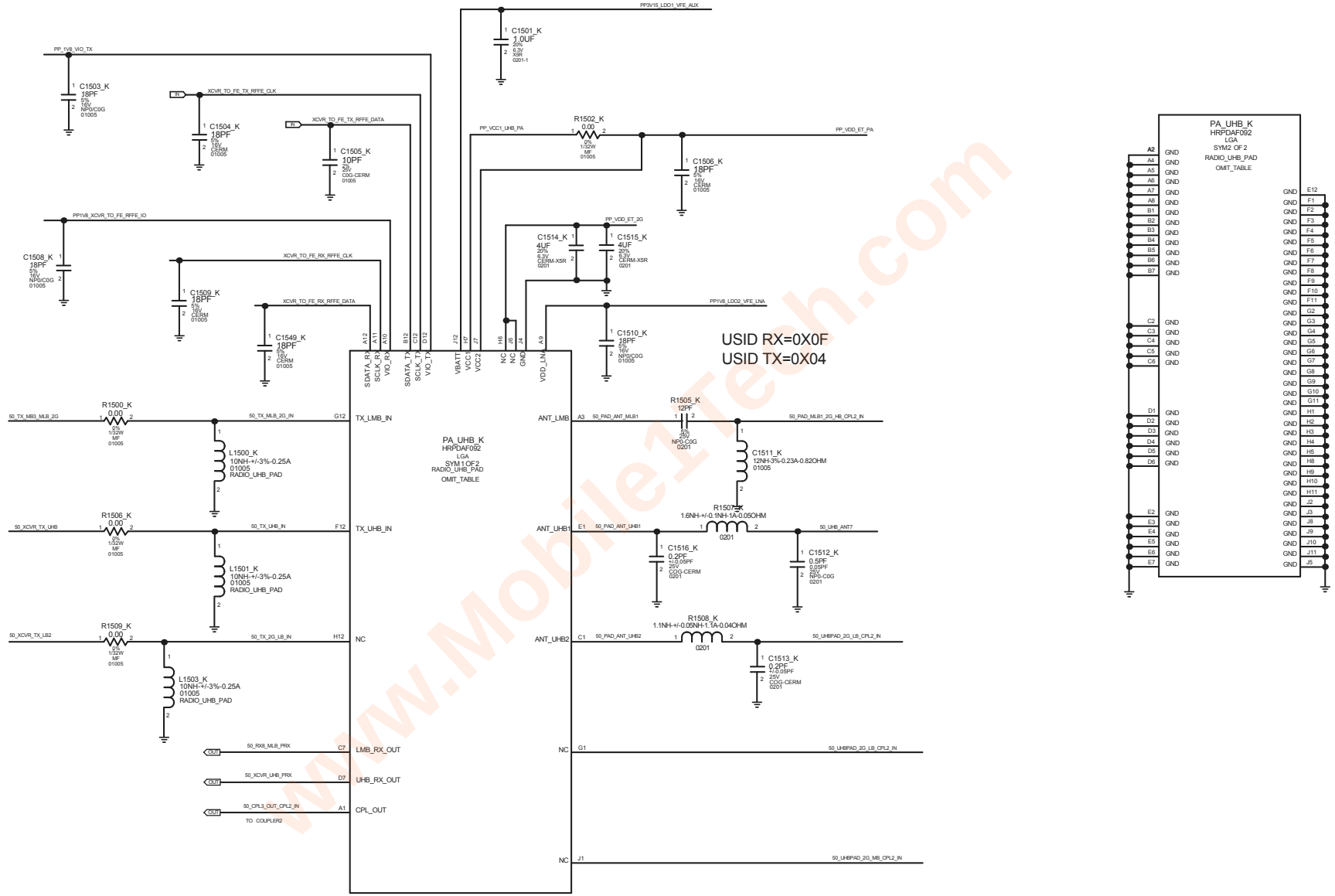




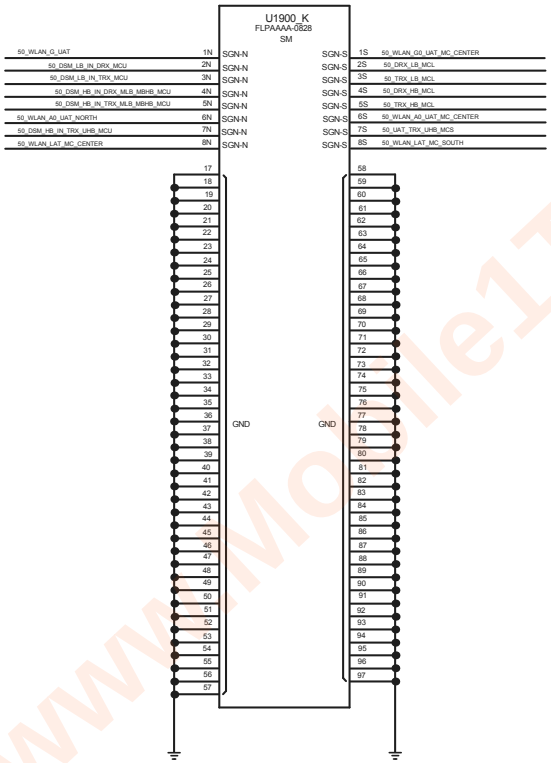
HB SPAD



UHB LMB SPAD

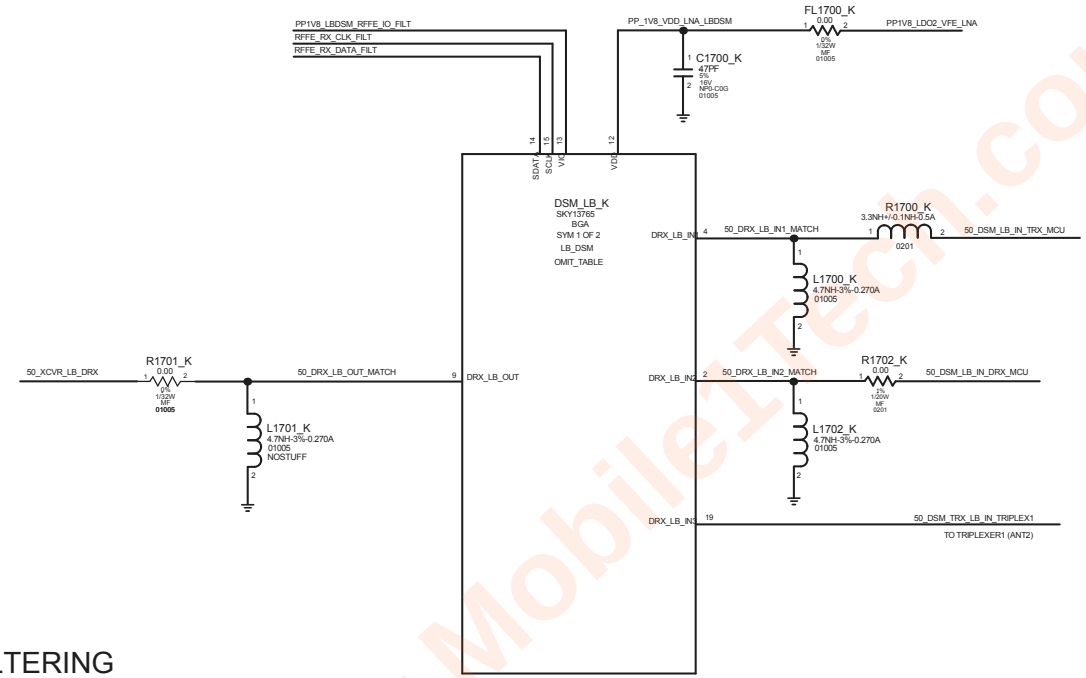


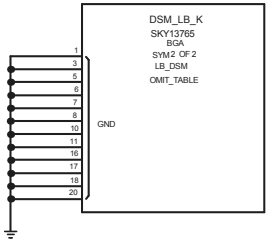
METROCIRC



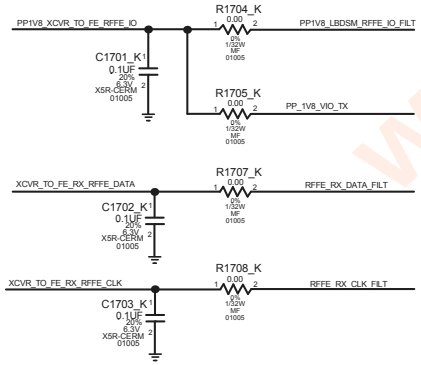
LB DIVERSITY RECEIVE LNA

USID RX=0X09

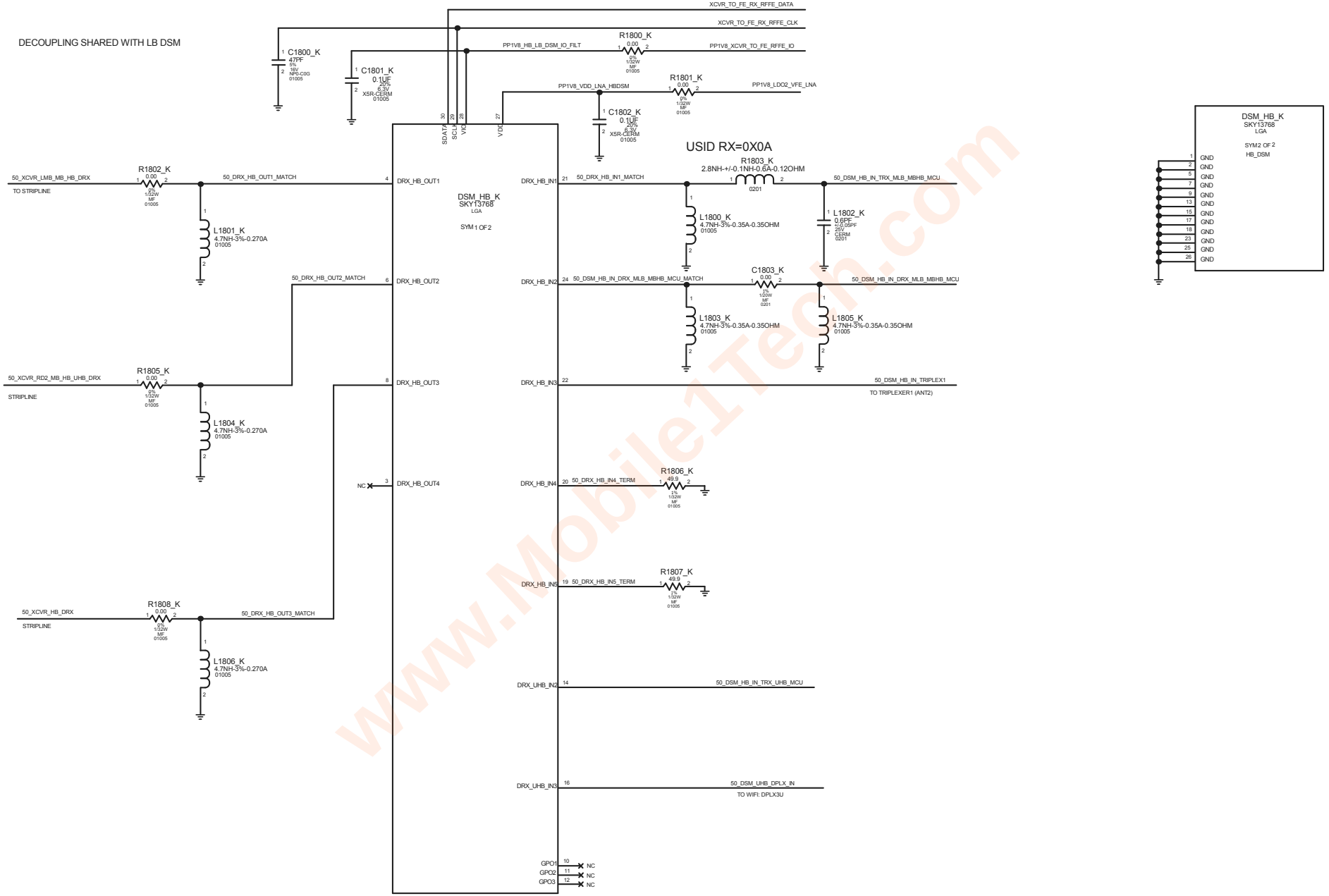




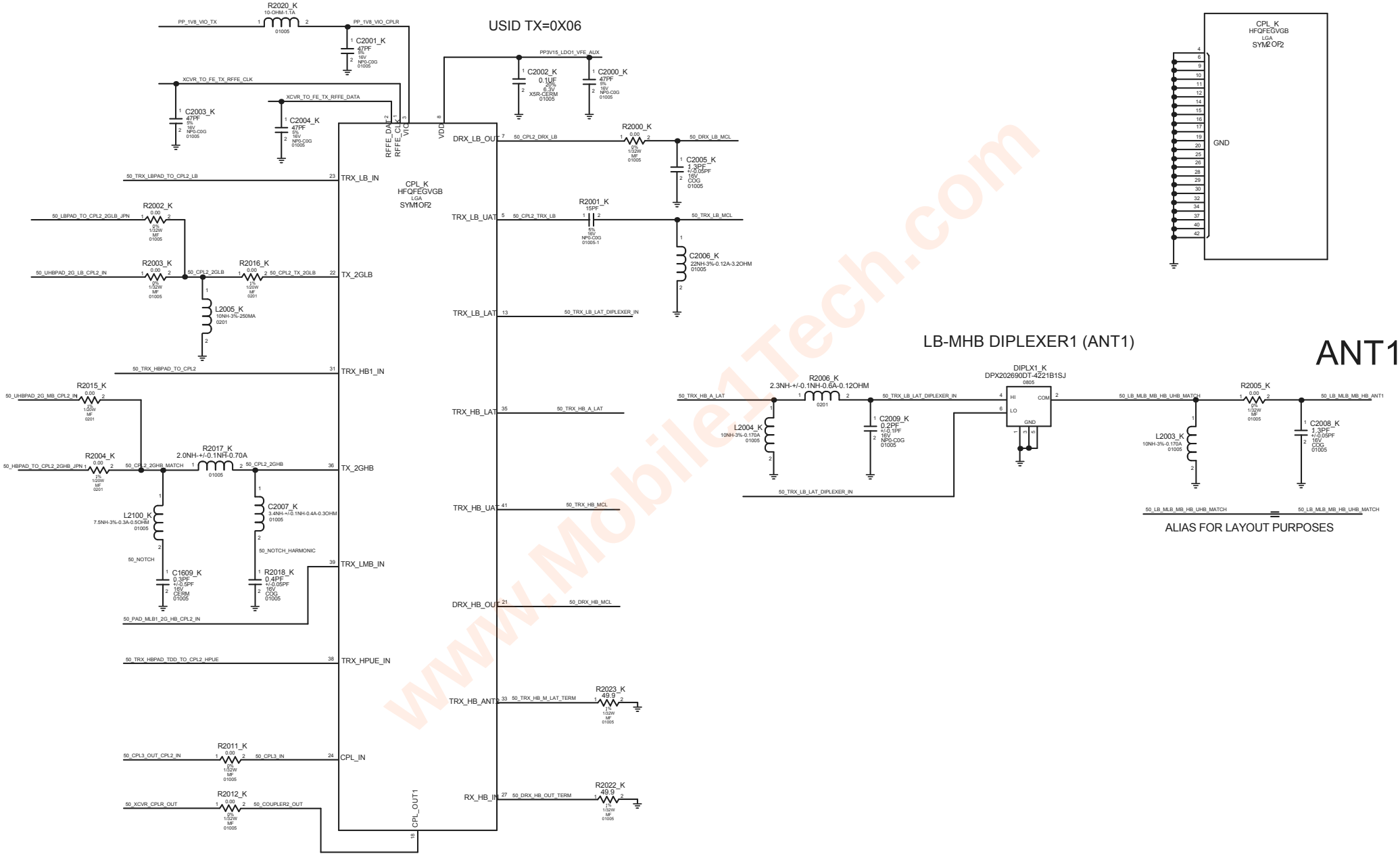
RFFE FILTERING



HB DIVERSITY RECEIVE LNA



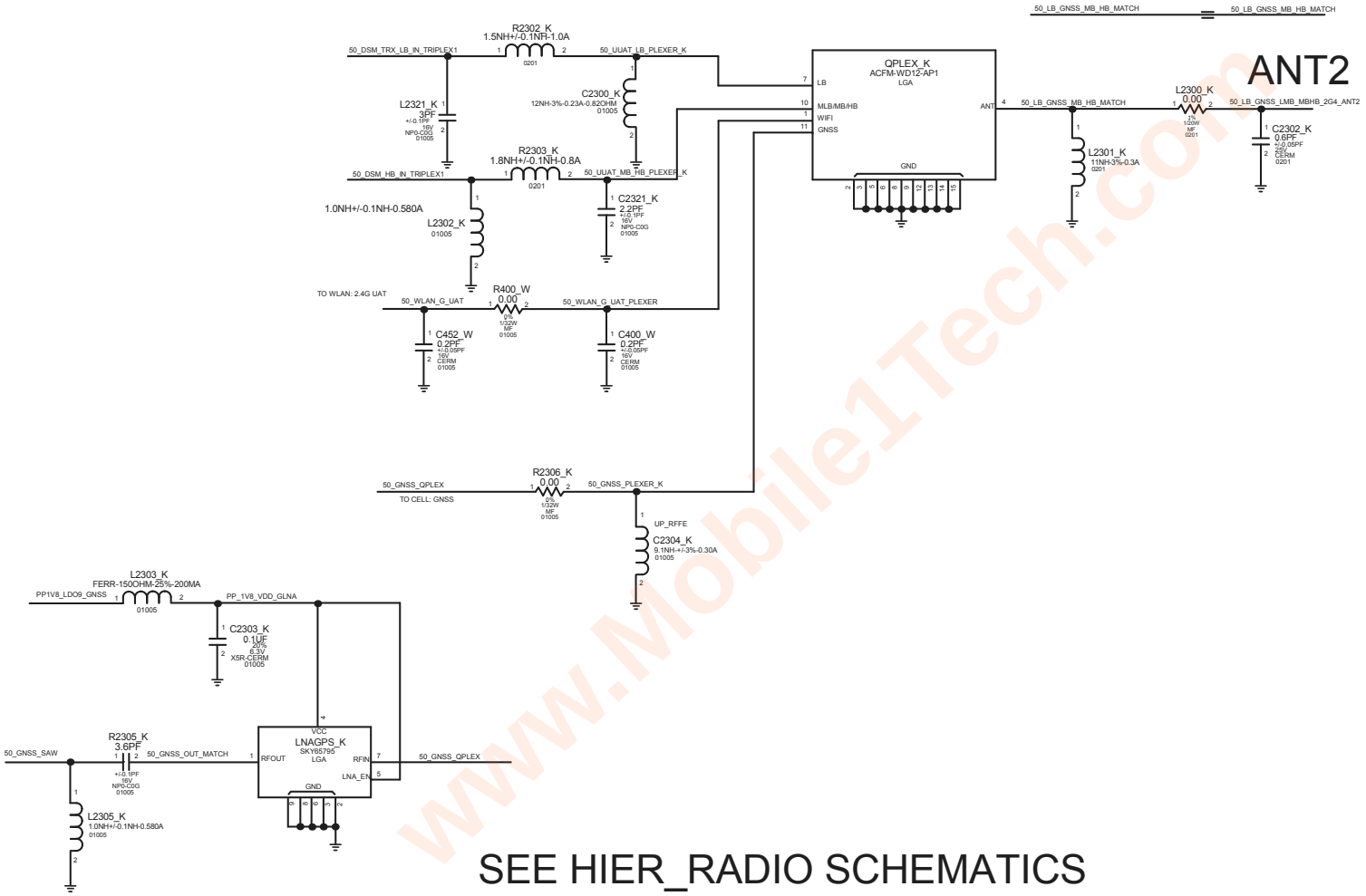
LOWER ANTENNA AND COUPLER



UPPER ANTENNA FEEDS

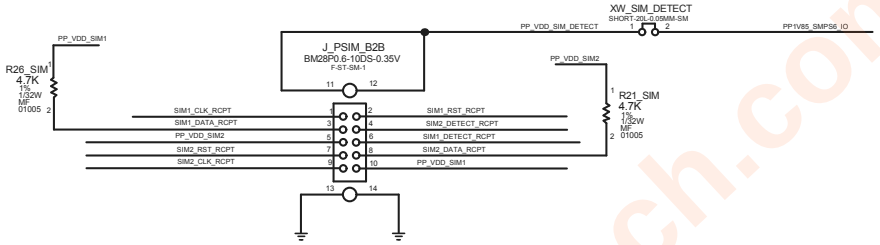
Mobile1Tech.com

LB/MHB/GPS/2.4G WLAN QUADPLEXER

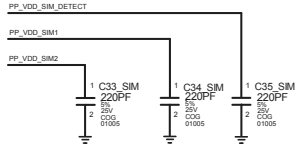


SEE HIER_RADIO SCHEMATICS

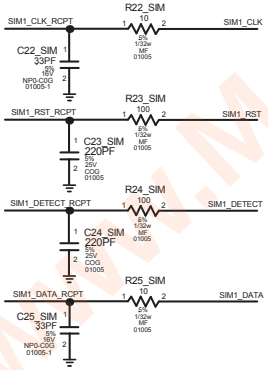
PSIM - REPLACED W/ B2B FOR SIM



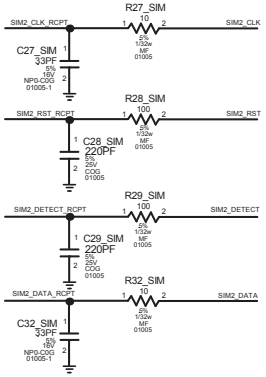
PLUG (FLEX) APN:516S00407
RCPT (MLB) APN:516S00406



EOS RESISTORS



EOS RESISTORS



DEBUG: TEST POINTS

DEBUG

PP2792 P2MM-NSM SM 1 PY — BB_TO_AP_RESET_DETECT_L
PP2712 P2MM-NSM SM 1 PY — BB_JTAG_TDO
PP2713 P2MM-NSM SM 1 PY — BB_JTAG_TDI
PP2714 P2MM-NSM SM 1 PY — BBPMU_TO_BB_MEAS_RDY

I2S

PP2717 P2MM-NSM SM 1 PY — I2S_BB_TO_AP_BCLK
PP2718 P2MM-NSM SM 1 PY — I2S_BB_TO_AP_LRCLK
PP2719 P2MM-NSM SM 1 PY — I2S_AP_TO_BB_DOUT
PP2720 P2MM-NSM SM 1 PY — I2S_BB_TO_AP_DIN

VDIO

PP2734 P2MM-NSM SM 1 PY — BBPMU_ANAMON
PP2735 P2MM-NSM SM 1 PY — BB_TO_BBPMU_VDIO
PP2736 P2MM-NSM SM 1 PY — BB_TO_BBPMU_VCLK
PP2737 P2MM-NSM SM 1 PY — BBPMU_TO_BB_ALERT_L

POWER-KEEPING

PP2790 P2MM-NSM SM 1 PY — BBPMU_TO_BB_PWRGOOD
PP2705 P2MM-NSM SM 1 PY — BB_TO_XCVR_RESET_L
PP2706 P2MM-NSM SM 1 PY — BB_TO_BBPMU_SDWN_L
PP2707 P2MM-NSM SM 1 PY — BBPMU_TO_BB_RESET_L

CLKS

PP2783 P2MM-NSM SM 1 PY — CLK_BBPMU_32KHZ
PP2723 P2MM-NSM SM 1 PY — CLK_BBPMU_TO_BB_38MHZ
PP2725 P2MM-NSM SM 1 PY — CLK_BBPMU_TO_XCVR_38MHZ

AOP UART

PP2738 P2MM-NSM SM 1 PY — UART_BB_TO_AOP_RXD
PP2739 P2MM-NSM SM 1 PY — UART_AOP_TO_BB_TXD
PP2740 P2MM-NSM SM 1 PY — UART_BBPMU_TO_GNSS_1W
PP2798 P2MM-NSM SM 1 PY — BB_RESET2_L_TEST

COEXISTENCE

PP2708 P2MM-NSM SM 1 PY — BB_TO_MANY_GSM_BURST_IND

GNSS

PP2726 P2MM-NSM SM 1 PY — GNSS_DWB_IRQ
PP2728 P2MM-NSM SM 1 PY — GNSS_TO_BBPMU_LNA_EN

AP COEX

PP2732 P2MM-NSM SM 1 PY — AP_TO_BB_COEX
PP2733 P2MM-NSM SM 1 PY — BB_TO_AP_COEX

PEAK-POWER

PP2702 P2MM-NSM SM 1 PY — AP_TO_BB_PEAK_POWER_INDICATOR

ET

PP2715 P2MM-NSM SM 1 PY — 50_ET_DAC_P
PP2716 P2MM-NSM SM 1 PY — 50_ET_DAC_N

DIGRF

PP2700 P2MM-NSM SM 1 PY — 90_DIGRF_LO_TX_P
PP2701 P2MM-NSM SM 1 PY — 90_DIGRF_LO_TX_N
PP2751 P2MM-NSM SM 1 PY — 90_DIGRF_LO_RX_P
PP2752 P2MM-NSM SM 1 PY — 90_DIGRF_LO_RX_N
PP2753 P2MM-NSM SM 1 PY — 90_DIGRF_HI_TX_P
PP2754 P2MM-NSM SM 1 PY — 90_DIGRF_HI_TX_N
PP2755 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX1_P
PP2756 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX1_N
PP2757 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX2_P
PP2758 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX2_N
PP2759 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX3_P
PP2760 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX3_N
PP2761 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX4_P
PP2762 P2MM-NSM SM 1 PY — 90_DIGRF_HI_RX4_N

LO

HI

DEBUGCONNECTOR

J_DEBUG
BM28P05-44DS-0.35V
F-ST-SM

NC	45	46	
PPVB_BB_USB_VBUS	1	2	90_USB_BB_P
PCIE_AP_TO_BB_PERST_L	3	4	90_USB_BB_N
	5	6	
NC	7	8	
PMU_TO_BBPMU_RESET_L	9	10	PP_VDD_MAIN
NC	11	12	
UART_GNSS_TO_AP_RXD	13	14	
UART_AP_TO_GNSS_TXD	15	16	
BB_JTAG_TRST_L	17	18	
AP_TO_BB_RESET_L	19	20	
SWD_JTAG_TCK_SWDCLK_R	21	22	
SWD_AOP_BI_BB_SWDIO	23	24	
NC	25	26	
PMU_TO_GNSS_EN	27	28	
UART_BB_DEBUG_RXD	29	30	
UART_BB_DEBUG_TXD	31	32	UART_COEX_BB_TO_WLAN_TXD
GNSS_TO_AP_LOW_PWR_IND	33	34	UART_COEX_WLAN_TO_BB_TXD
UART_GNSS_TO_AP_CTS_L	35	36	BB_DEBUG_ERROR
UART_AP_TO_GNSS_RTS_L	37	38	NC
NC	39	40	NC
NC	41	42	
	43	44	
	47	48	

NOSTUFF

XCVR RFFE

PP2764 P2MM-NSM SM 1 PY — BB_TO_XCVR_RFFE_DATA
PP2765 P2MM-NSM SM 1 PY — BB_TO_XCVR_RFFE_CLK
PP2766 P2MM-NSM SM 1 PY — XCVR_TO_BB_RFFE_DATA
PP2767 P2MM-NSM SM 1 PY — XCVR_TO_BB_RFFE_CLK
PP2768 P2MM-NSM SM 1 PY — XCVR_TO_FE_TX_RFFE_DATA
PP2769 P2MM-NSM SM 1 PY — XCVR_TO_FE_TX_RFFE_CLK
PP2770 P2MM-NSM SM 1 PY — XCVR_TO_FE_RX_RFFE_DATA
PP2771 P2MM-NSM SM 1 PY — XCVR_TO_FE_RX_RFFE_CLK

BB RFFE

PP2748 P2MM-NSM SM 1 PY — BB_TO_XCVR_DWB_CLK
PP2749 P2MM-NSM SM 1 PY — BB_TO_XCVR_DWB_DATA

BB PCIE

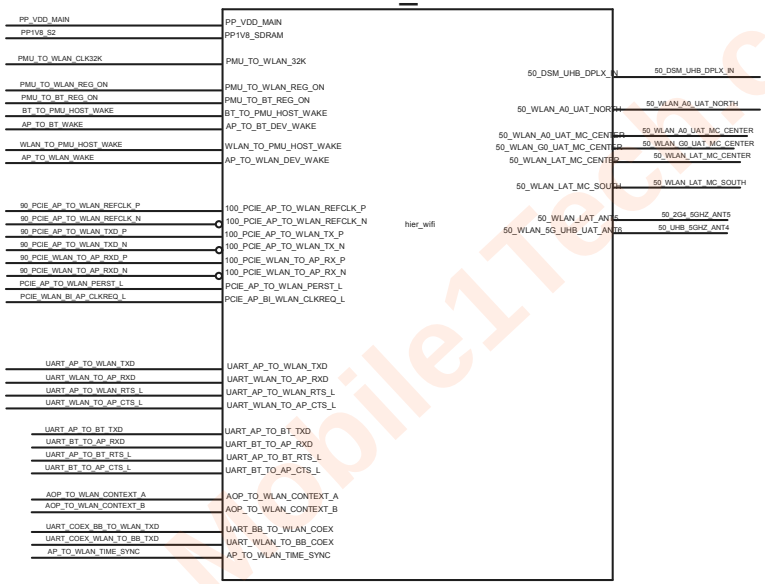
PP2784 P2MM-NSM SM 1 PY — 90_PCIE_BB_TO_AP_RXD_P
PP2785 P2MM-NSM SM 1 PY — 90_PCIE_BB_TO_AP_RXD_N
PP2786 P2MM-NSM SM 1 PY — 90_PCIE_AP_TO_BB_TXD_P
PP2787 P2MM-NSM SM 1 PY — 90_PCIE_AP_TO_BB_TXD_N
PP2788 P2MM-NSM SM 1 PY — 90_PCIE_AP_TO_BB_REFCLK_P
PP2789 P2MM-NSM SM 1 PY — SIG_NAME=90_PCIE_AP_TO_BB_REFCLK_N

SYMBOL: WIFI

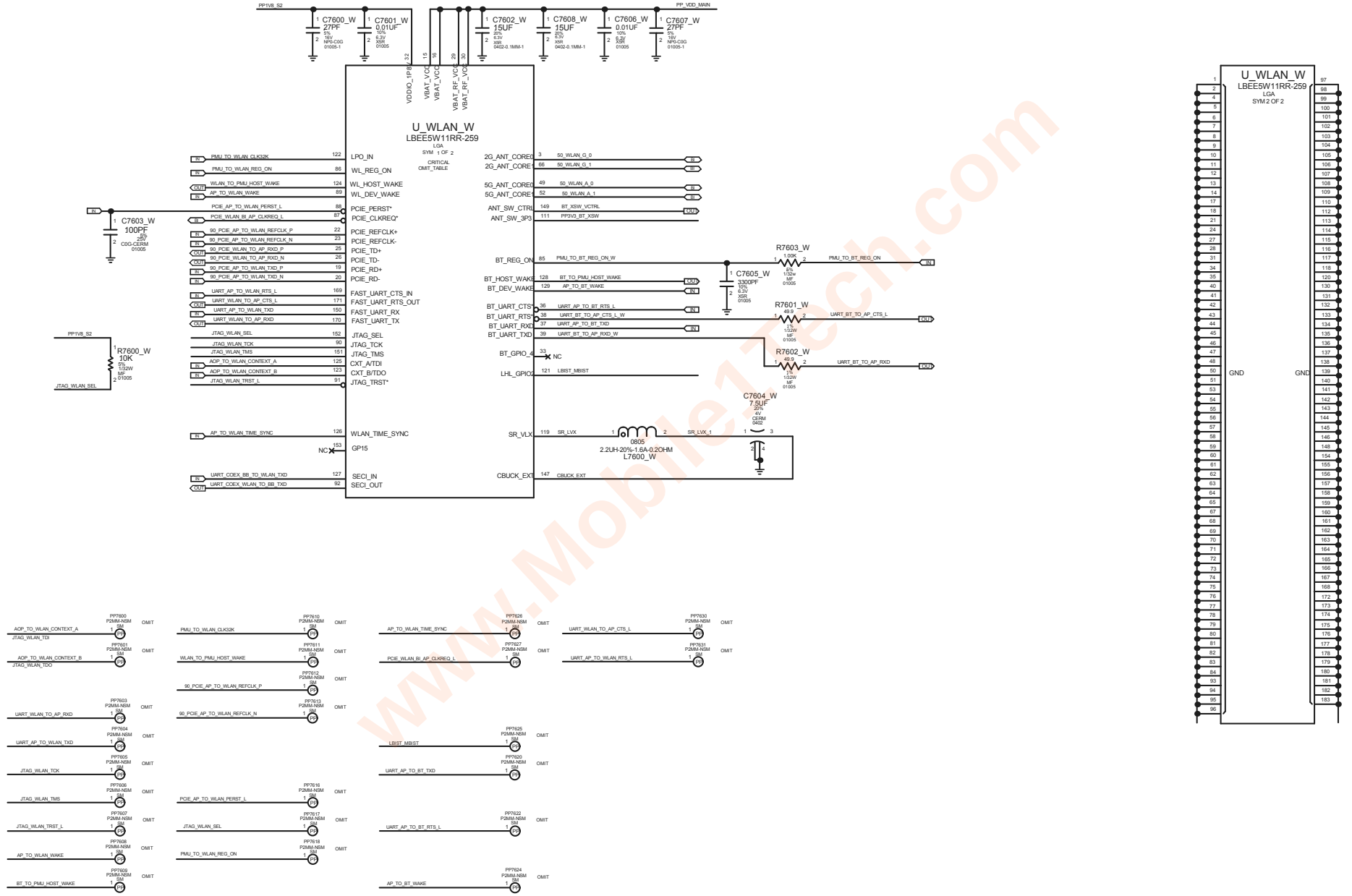
HIERARCHICAL SYMBOL FOR HIER_WIFI

DORADO

HIER_WIFI



WIFI/BT



WIFI FRONT-END ANTENNA FEEDS