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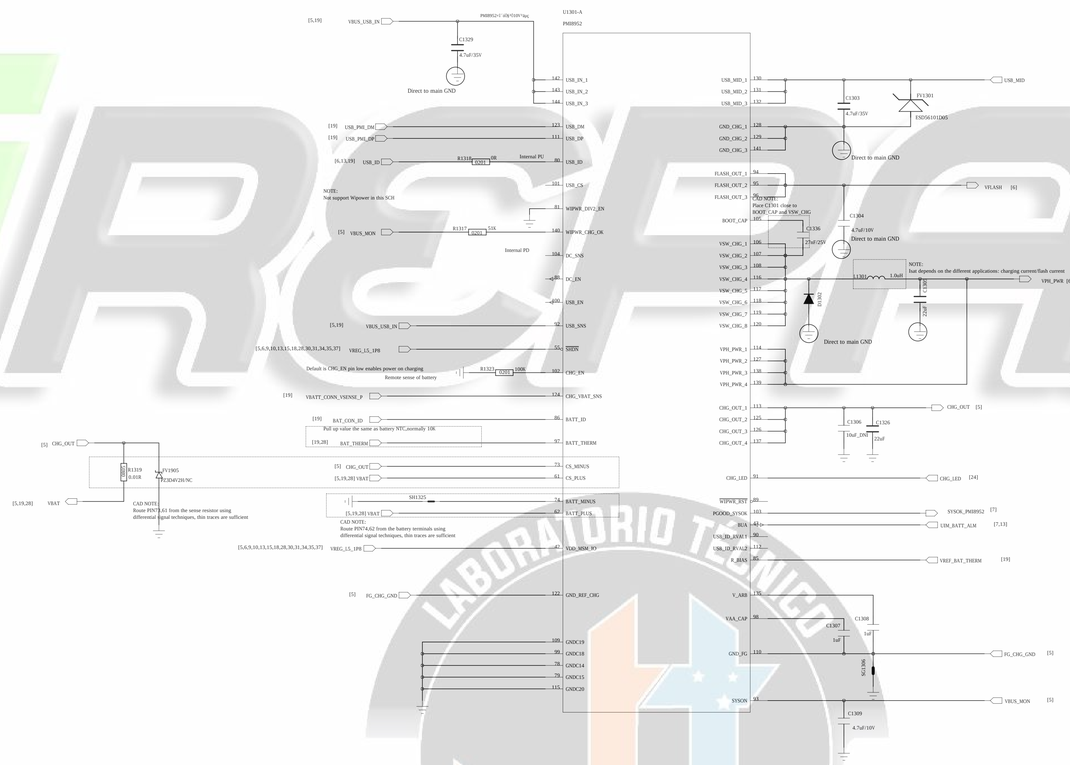

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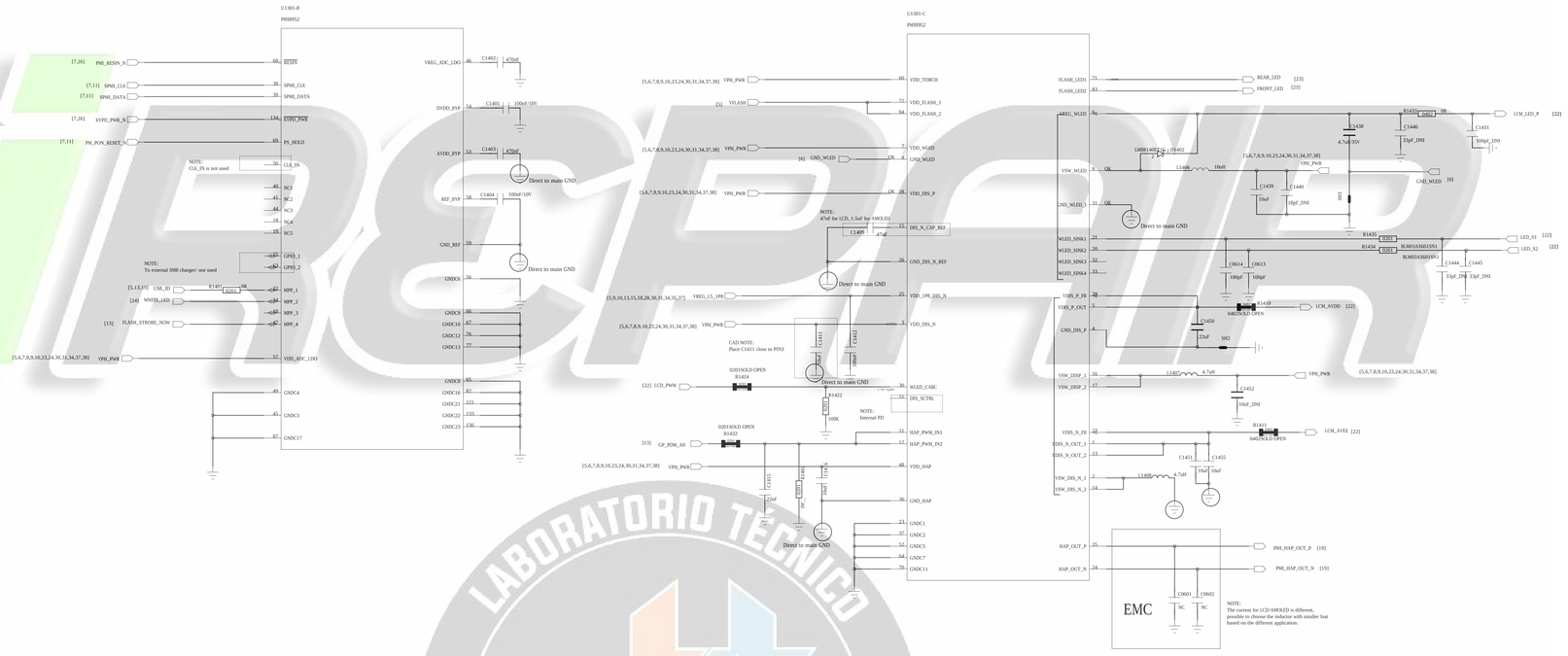

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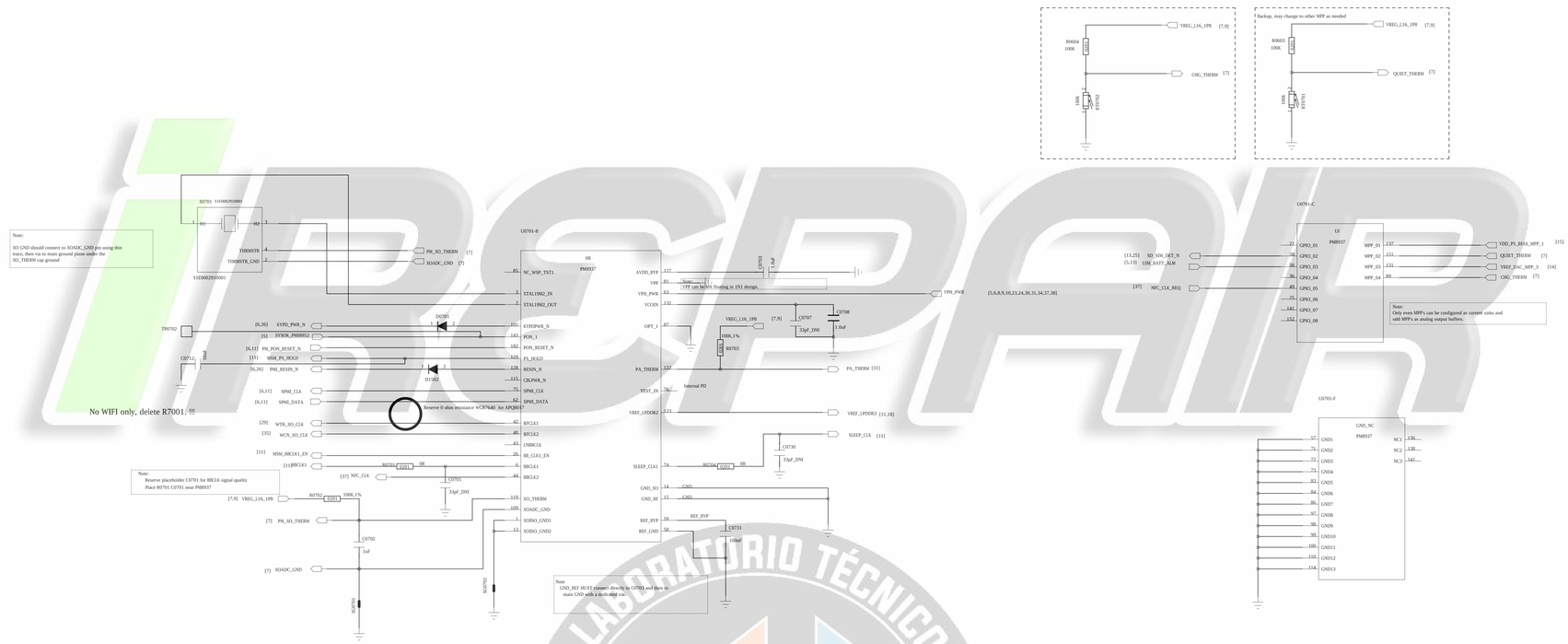

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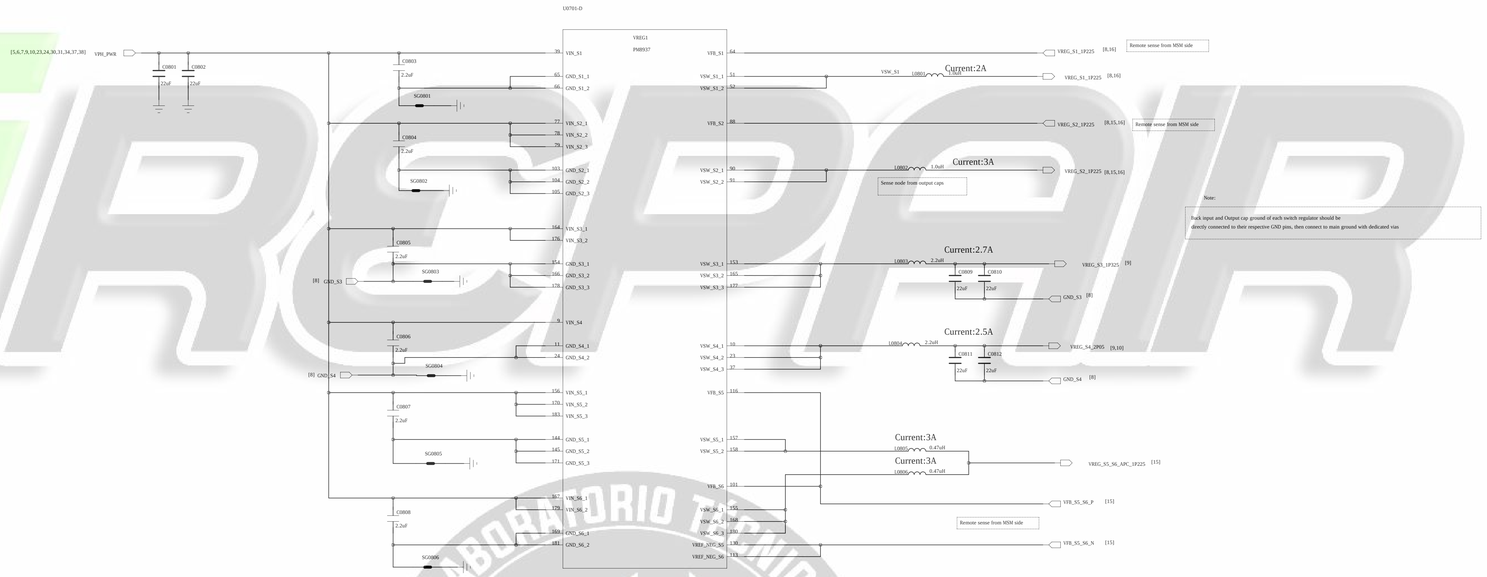

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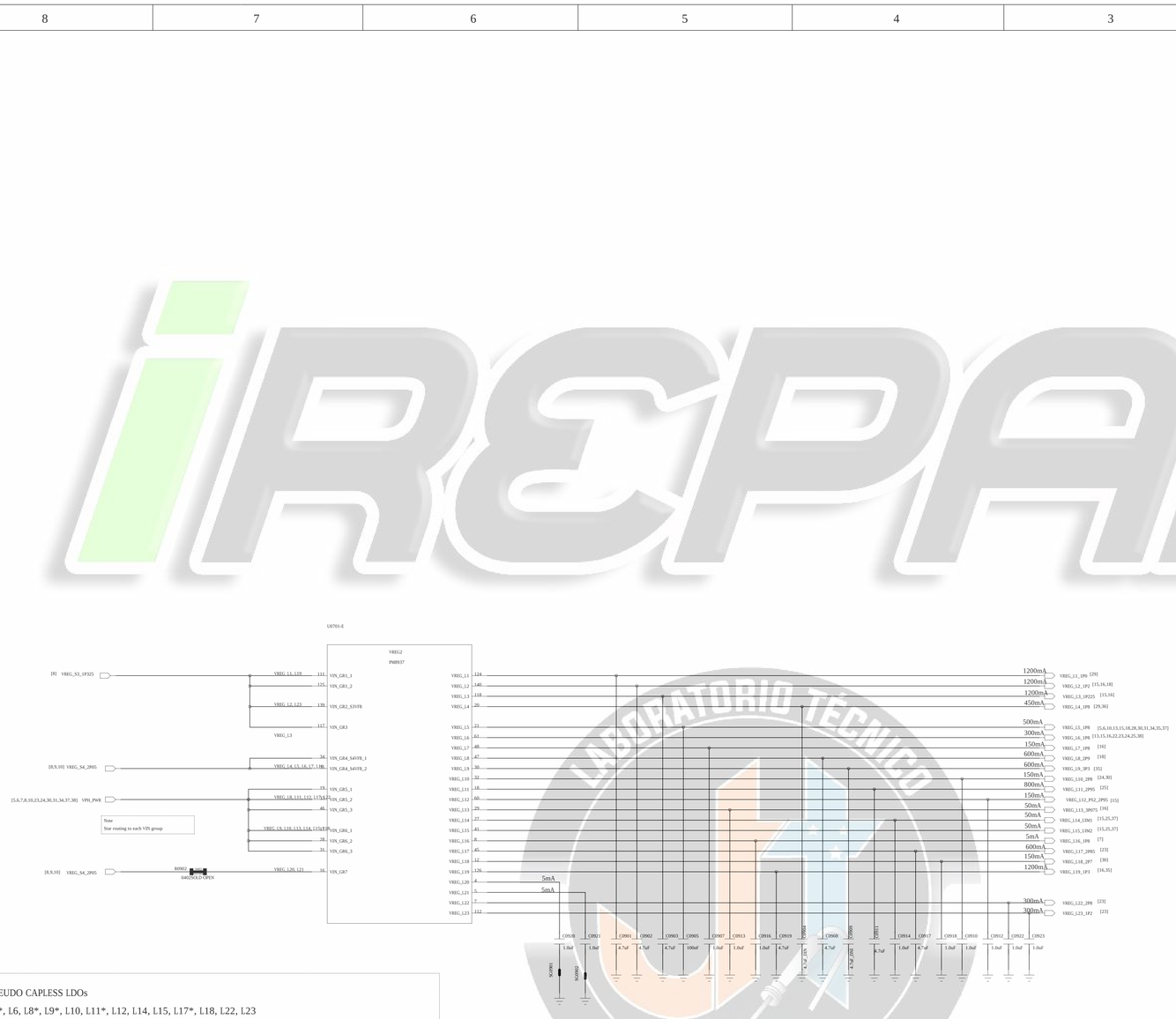

PSEUDO CAPLESS LDOs

L4*, L6, L8*, L9*, L10, L11*, L12, L14, L15, L17*, L18, L22, L23

L4*, L8*, L9*, L11*, L17*, still need validation as Pseudo-capless

L5, L7, L13, L16 have internal PMIC Loads and require local CAPs.

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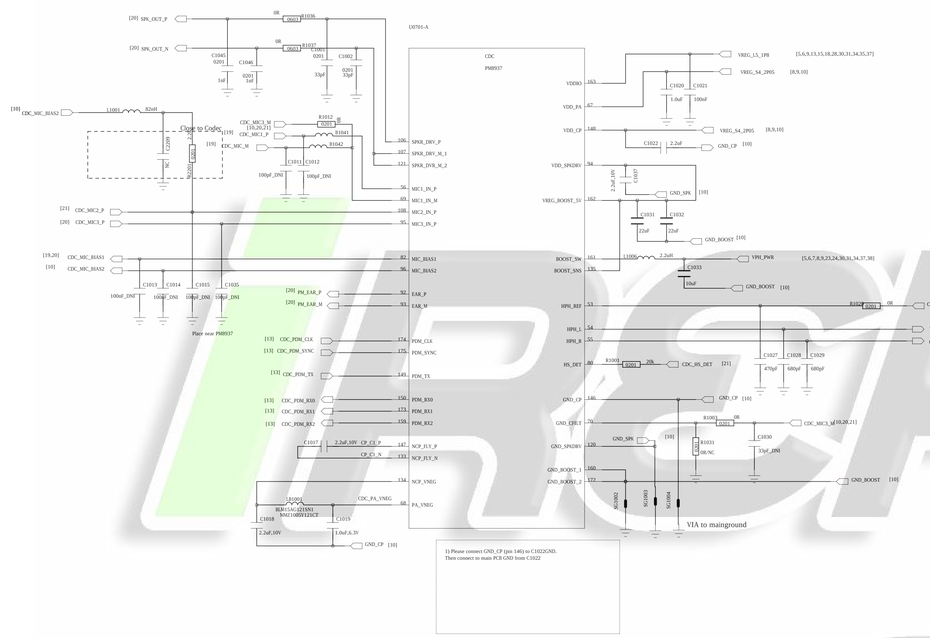

1) Please connect GND_CP (pin 146) to C1022GND.
Then connect to main PCB GND from C1022

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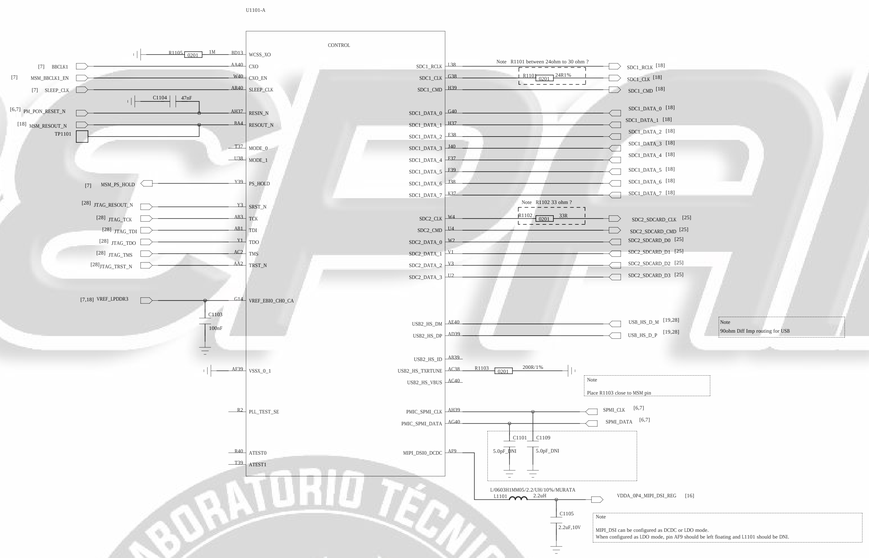

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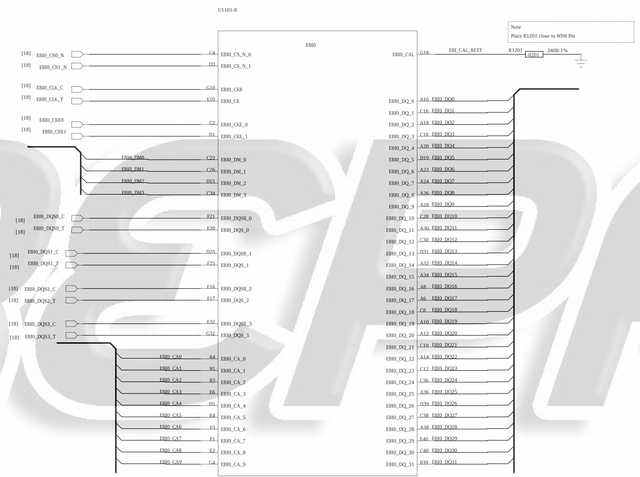

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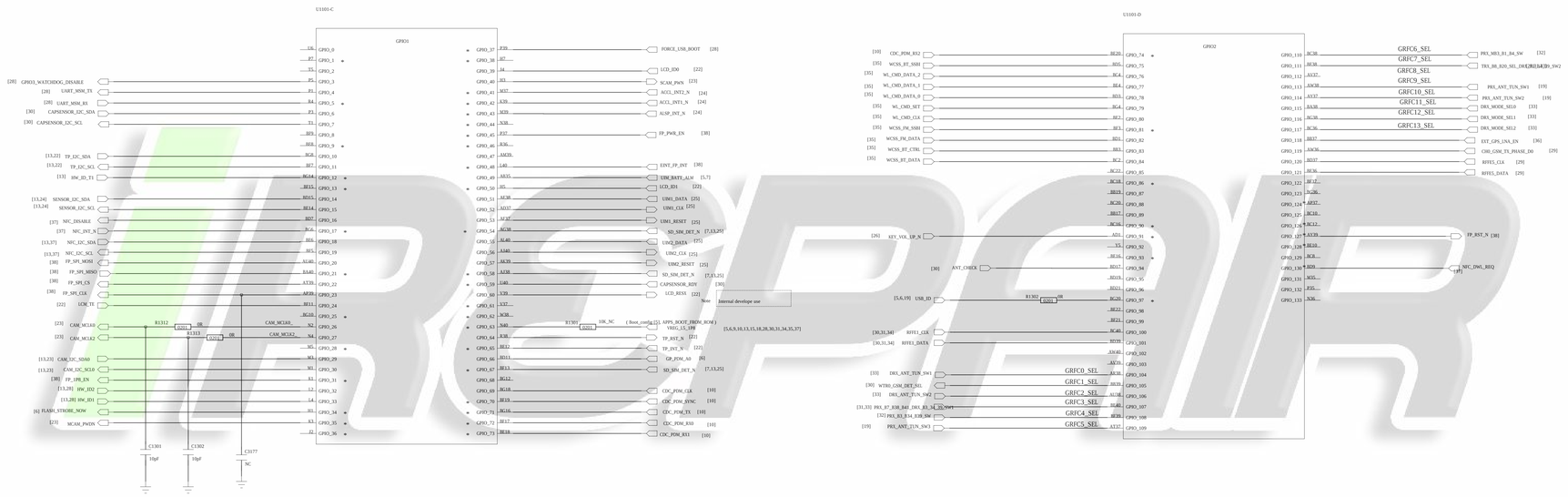
Note: Asterisks (*) indicate modem power management (MPM) wake-up pins

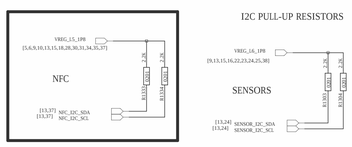


Note: Do not have pull-ups on the following GPIOs unless intend for boot or secure- boot related configurations:
GPIO_91, 107, 109

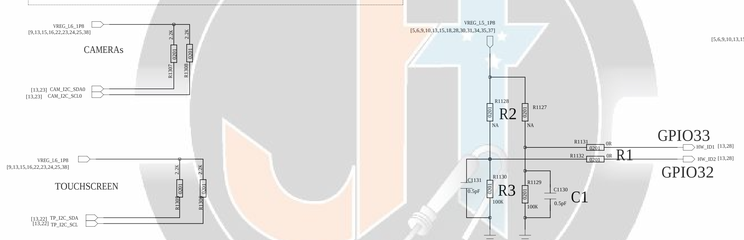
GPIO	BOOT_CONFIG
GPIO_3	BOOT_CONFIG[0]/WDOG_DISABLE
GPIO_111	BOOT_CONFIG[1]
GPIO_112	BOOT_CONFIG[2]
GPIO_88	BOOT_CONFIG[3]

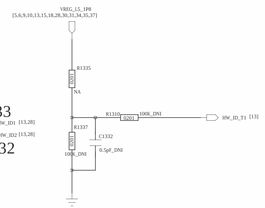
BOOT_CONFIG[3:1]	BOOT_CONFIG
0b000	SDC1 -> SDC2 -> USB2.0
0b010	SDC1
0b100	SDC2-> SDC1

Default Boot Config (0b000) is SDC1(eMMC)



Note: Ensure SW sets these GPIOs (Sensor, CTP and Camera I2C bus) to inout pull down when the peripherals are powered off to eliminate leakage.





number of Board ID not enough !!!

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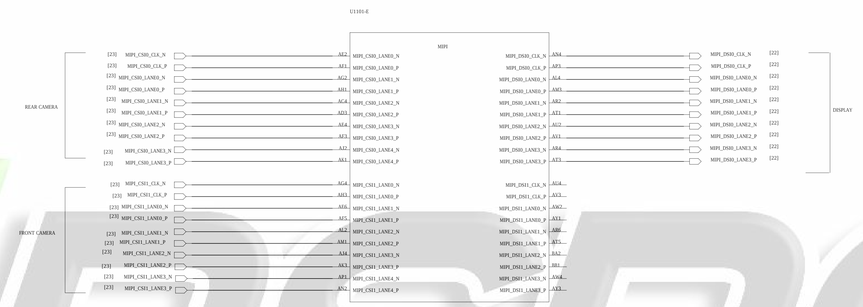
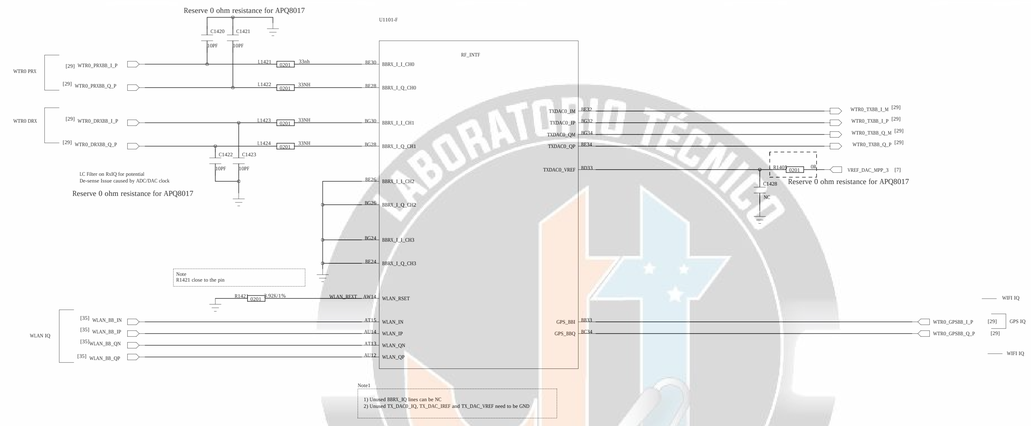


Note: If best EMI practices are followed for MIPI CSI/DSI signals, there is no need for common mode choke filters. You may choose to have placeholders for common mode depending upon your design constraints.
Extreme care must be taken that no stubs are created by doing so.



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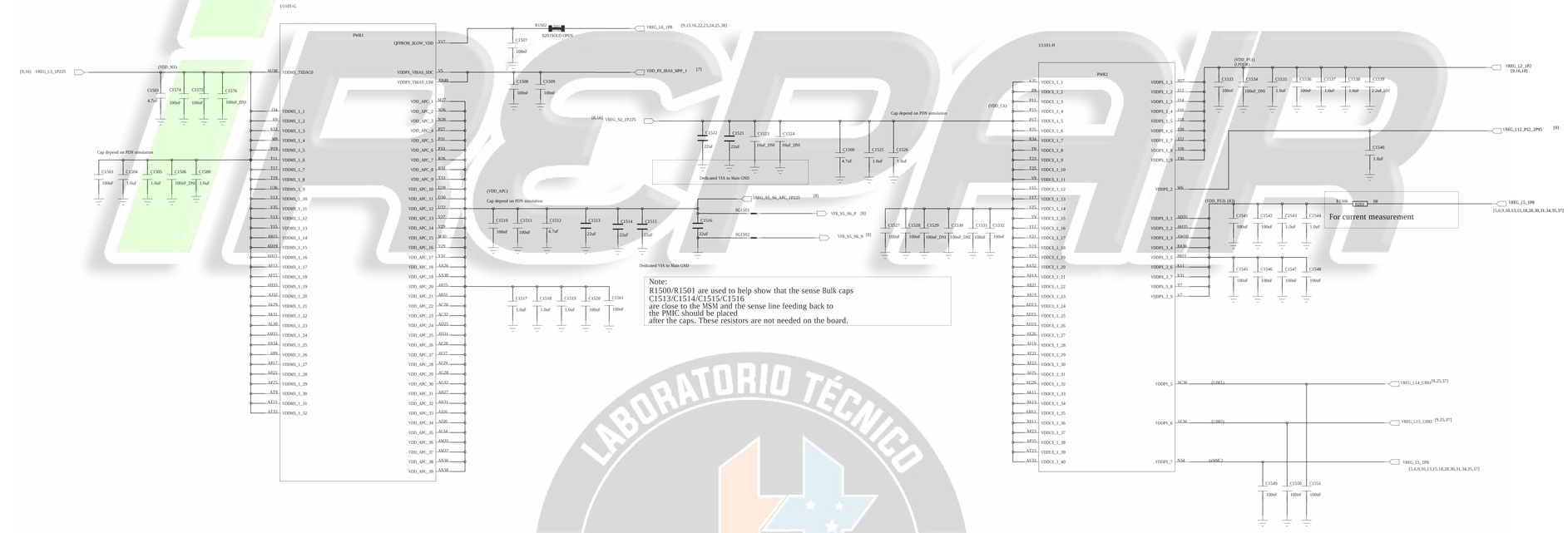

Note:
R1500/R1501 are used to help show that the sense Bulk caps
C1513/C1514/C1515/C1516
are close to the MSM and the sense line feeding back to
the PMIC should be placed
after the caps. These resistors are not needed on the board.

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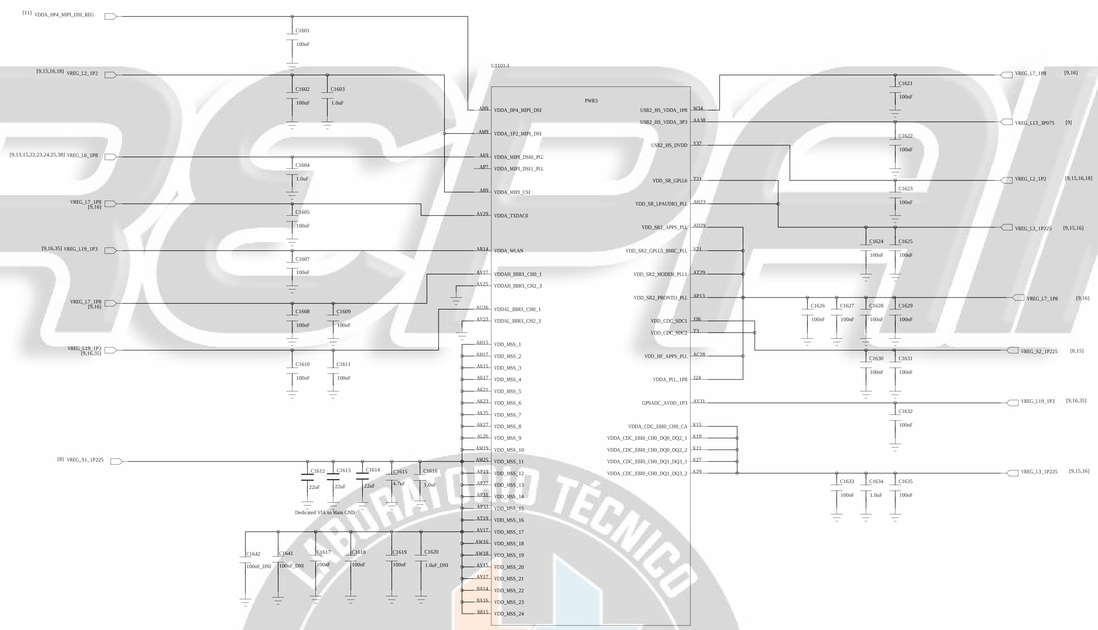

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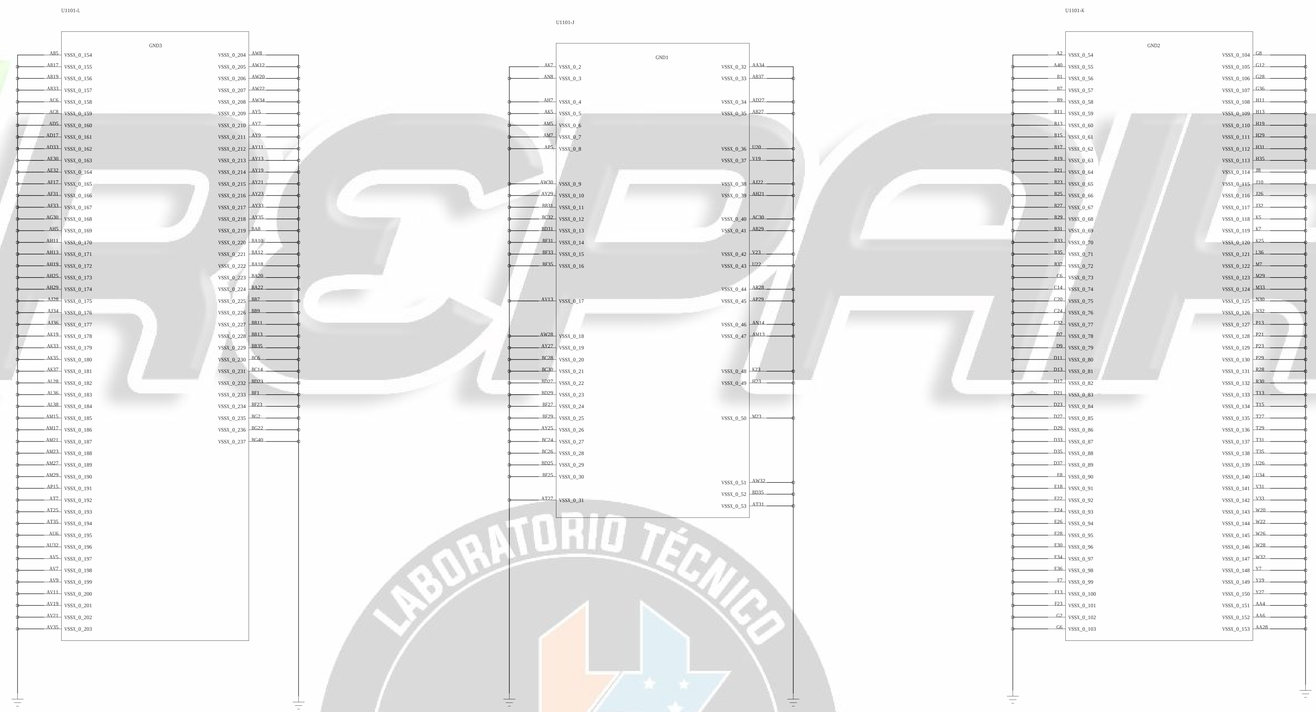

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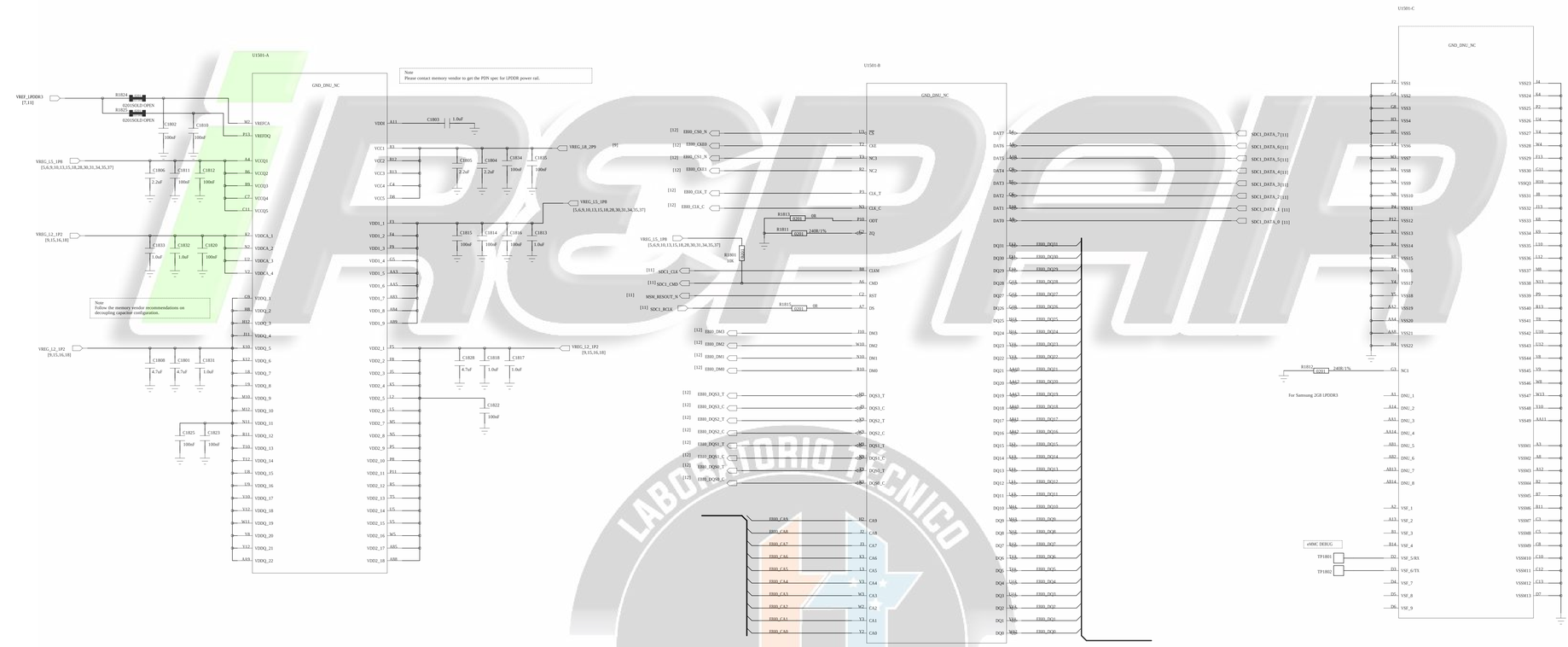

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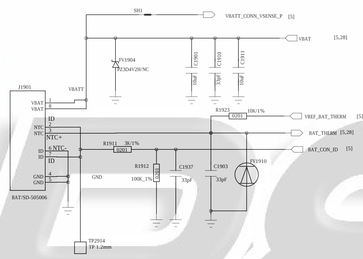
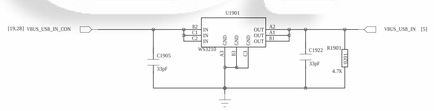
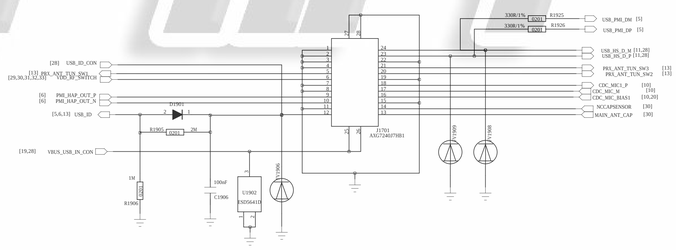
BAT CON







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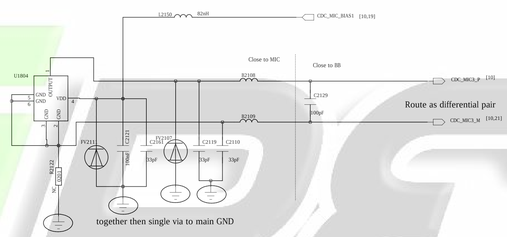
MainMIC



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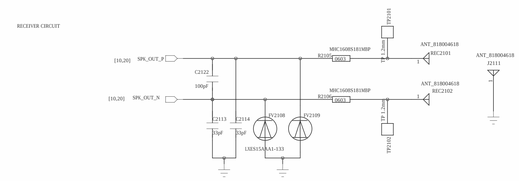

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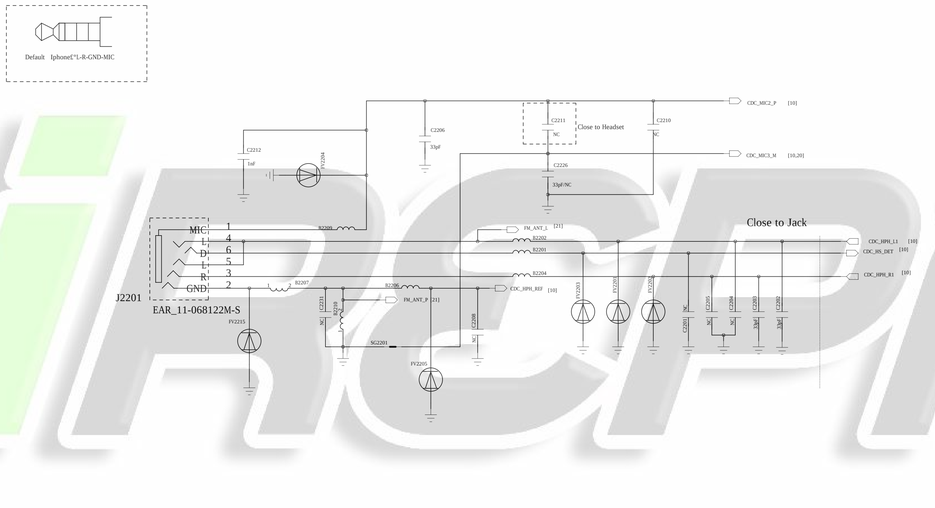
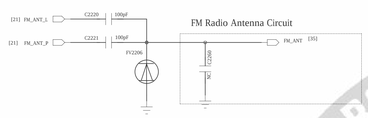
PRIMARY MIC

Earphone Audio





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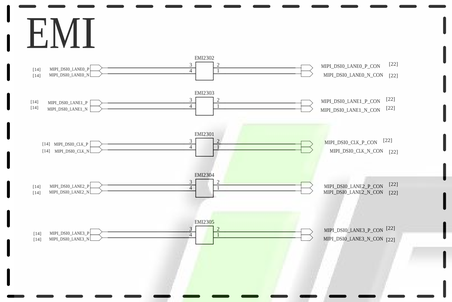
Note: If best EMI practices are followed for MIPI CSI/DSI signals, there is no need
for common mode choke filters. You may choose to have placeholders for
common mode depending upon your design constraints.
Extreme care must be taken that no stubs are created by doing so.

EMI



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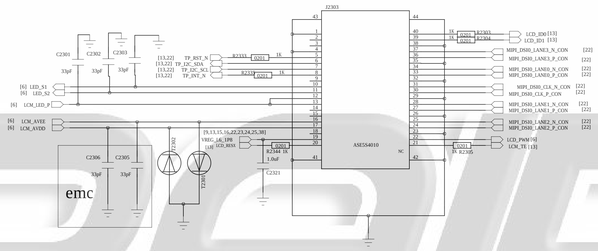
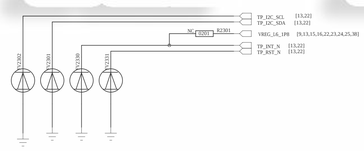


TP



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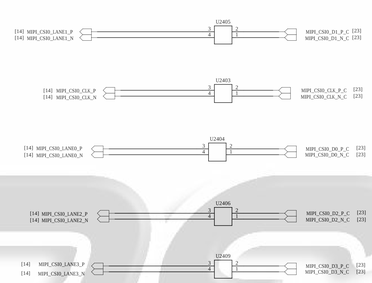
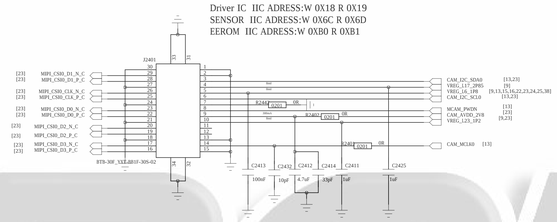
Main Camera

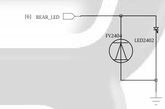


Driver IC IIC ADRESS:W 0X18 R 0X19
SENSOR IIC ADRESS:W 0X6C R 0X6D
EEROM IIC ADRESS:W 0XB0 R 0XB1

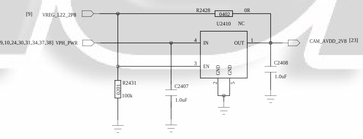


CAD Note
AGND PIN7 should connect directly to C2412 and then to mainground with dedicated via

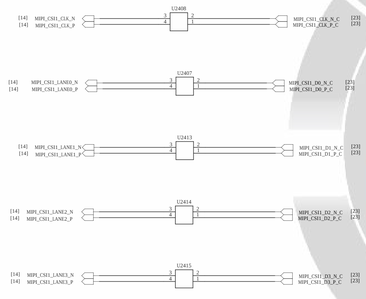
Rear Led:ELCH06-BJ4J6Z10-N0(YY)



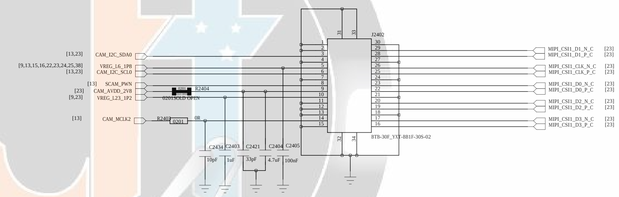
2.8V LDO



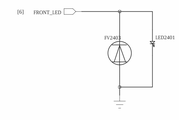
Front Camera



IIC ADRESS:W 0X20 R 0X21



Front LED: LP-CSF3218001B1



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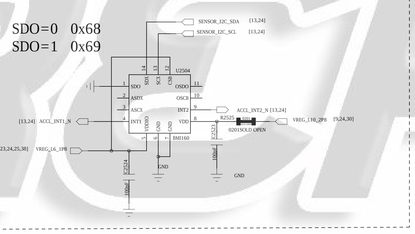
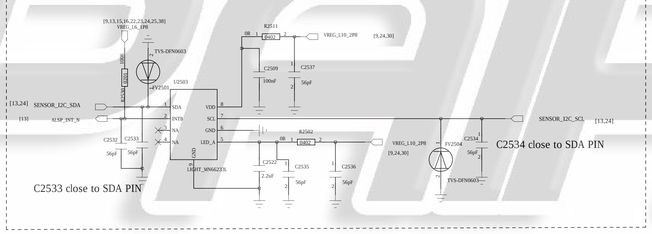
MN66233L 0x92 0x93

G+Gyro

BMI160 SDO=0 0x68
SDO=1 0x69

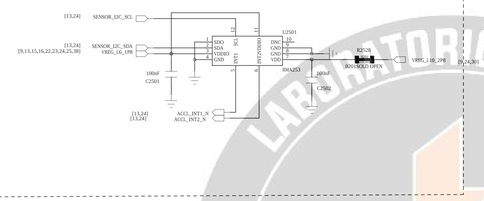


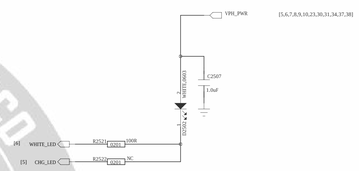
PL_SENSOR



Accelerometer Sensor

BMA253 SDO=0 0x18
SDO=1 0x19





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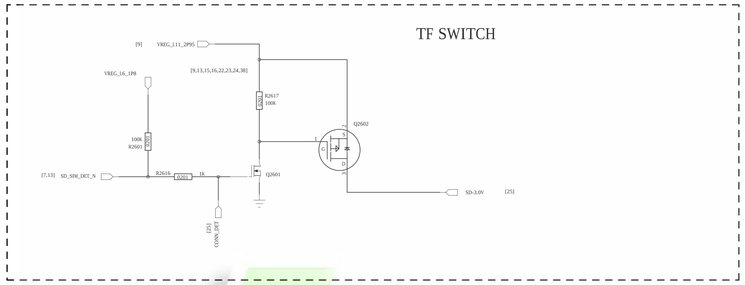

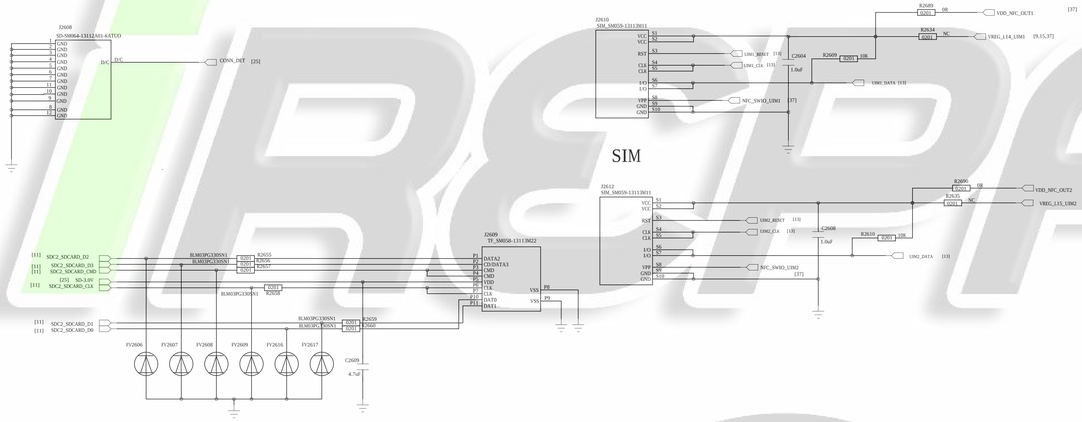

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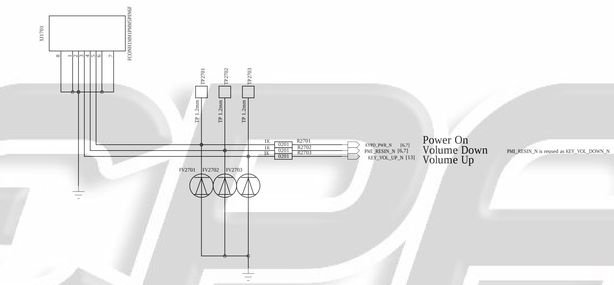
Keys



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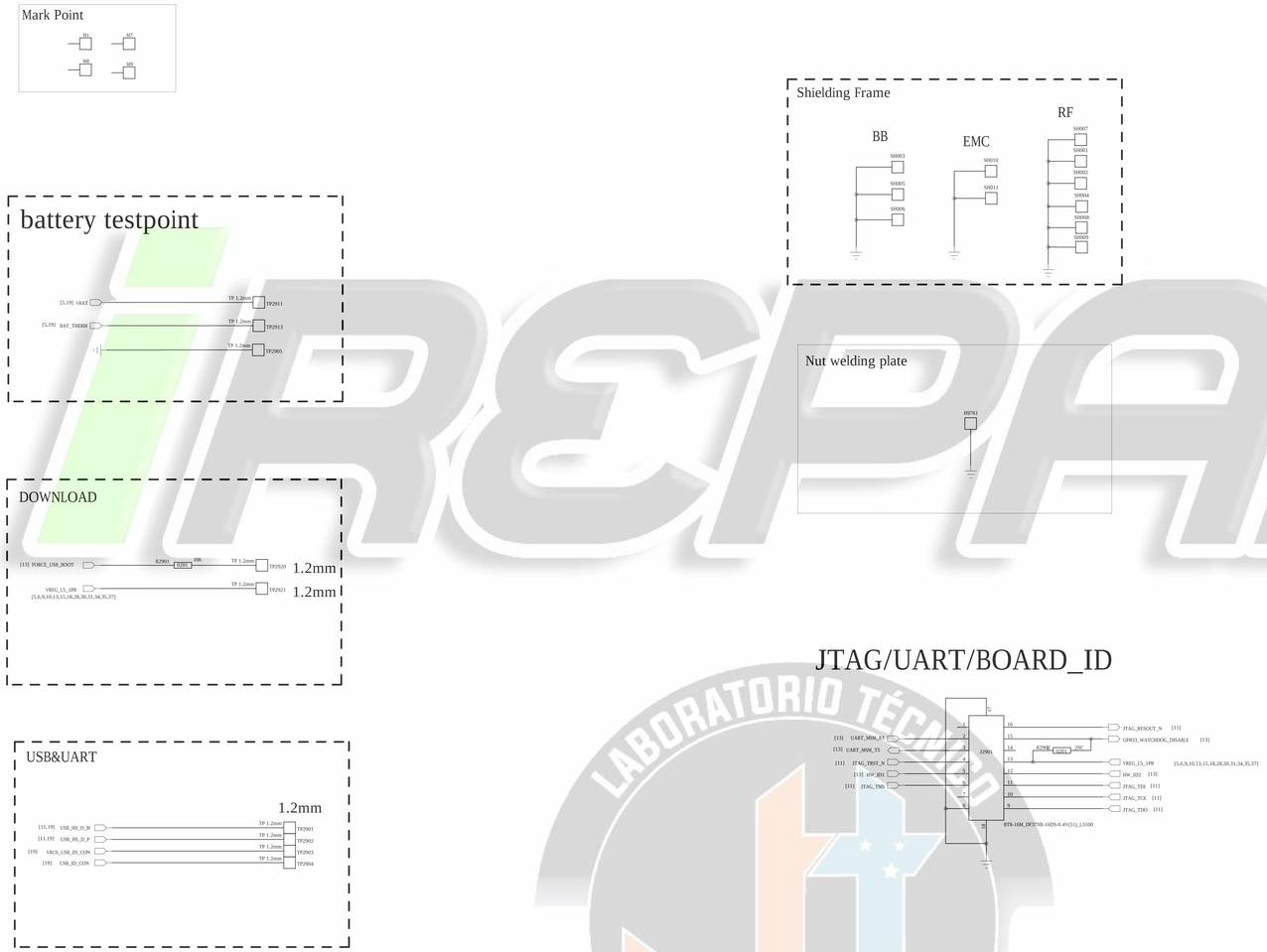

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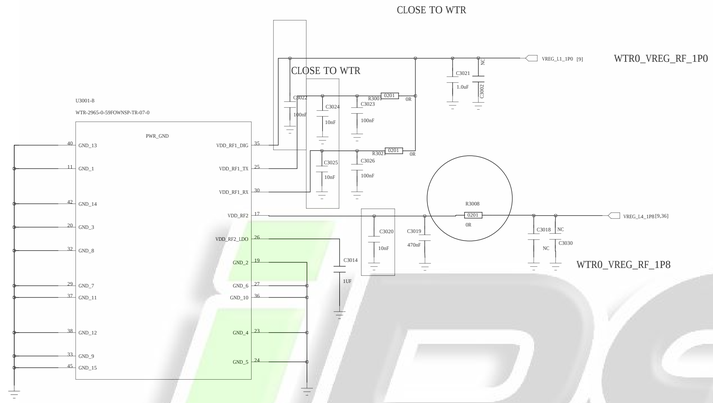
CLOSE TO WTR
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U3001-B
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PWR_GND
VREG_L1_1P0 [9]
WTR0_VREG_RF_1P0
VREG_L4_1P8[9,36]
WTR0_VREG_RF_1P8
VDD_RF1_DIG
VDD_RF1_TX
VDD_RF1_RX
VDD_RF2
VDD_RF2_LDO
GND_13
GND_1
GND_14
GND_3
GND_8
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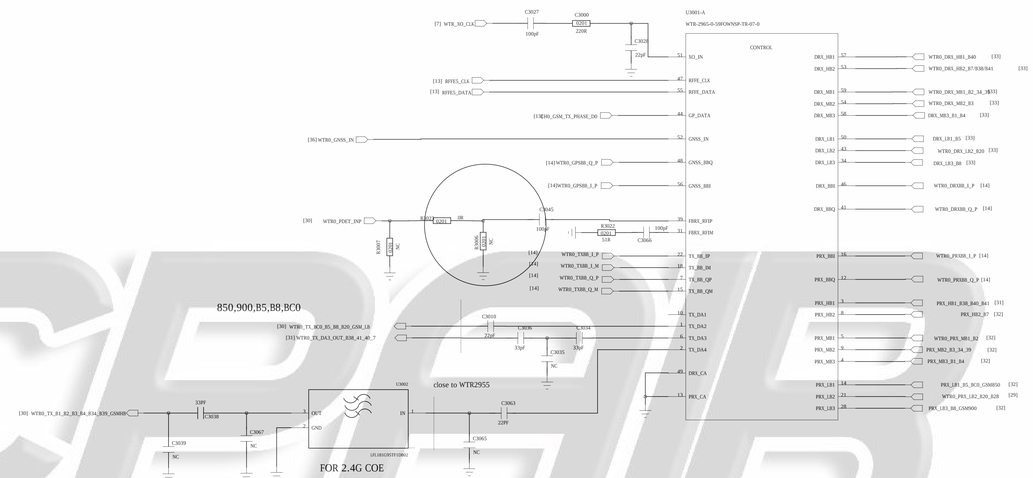
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WTR-2965-0-59FOWNSP-TR-07-0
CONTROL
[7] WTR_3G_CLK
[13] RFFES_CLK
[13] RFFES_DATA
[14]WTR0_GSM_TX_PHASE_D0
[36]WTR0_GNSS_IN
[14]WTR0_GPSBB_Q_P
[14]WTR0_GPSBB_I_P
[30] WTR0_PDET_INP
850,900,B5,B8,BC0
close to WTR2955
[30] WTR0_TX_B5_BC0_B5_B8_B20_GSM_LB
[31] WTR0_TX_DA3_OUT_B38_41_40_7
[30] WTR0_TX_B1_B2_B3_B4_B34_B39_GSMB8
FOR 2.4G COE
WTR0_DRX_HB1_B40
WTR0_DRX_HB2_B7/B38/B41
WTR0_DRX_MB1_B2_34_38
WTR0_DRX_MB2_B3
DRX_MB3_B1_B4
DRX_LB1_B5
WTR0_DRX_LB2_B20
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PRX_MB2_B3_34_39
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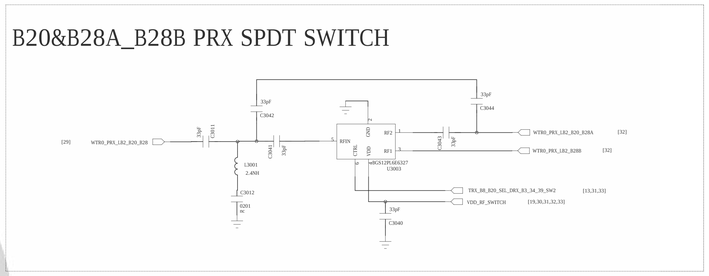
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[29] WTR0_PRX_LB2_B20_B28
WTR0_PRX_LB2_B20_B28A [32]
WTR0_PRX_LB2_B28B [32]
TRX_B8_B20_SEL_DRX_B3_34_39_SW2 [13,31,33]
VDD_RF_SWITCH [19,30,31,32,33]
RFIN
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VDD
GND
RF2
RF1
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U3003

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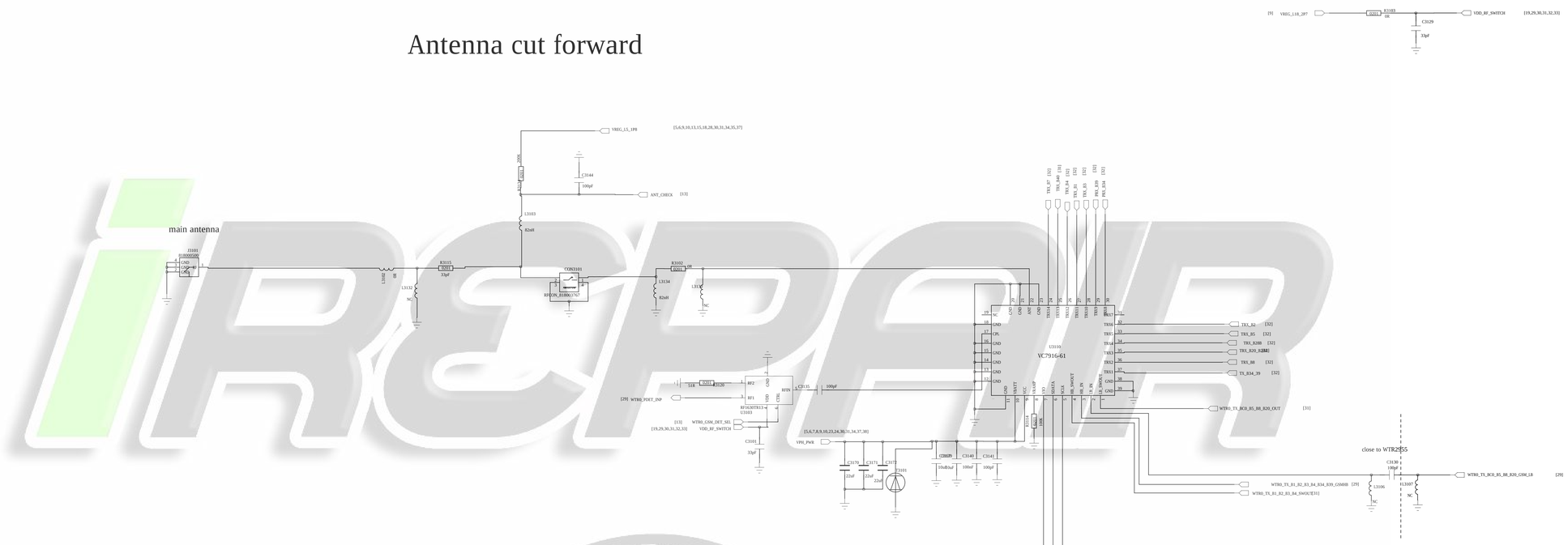

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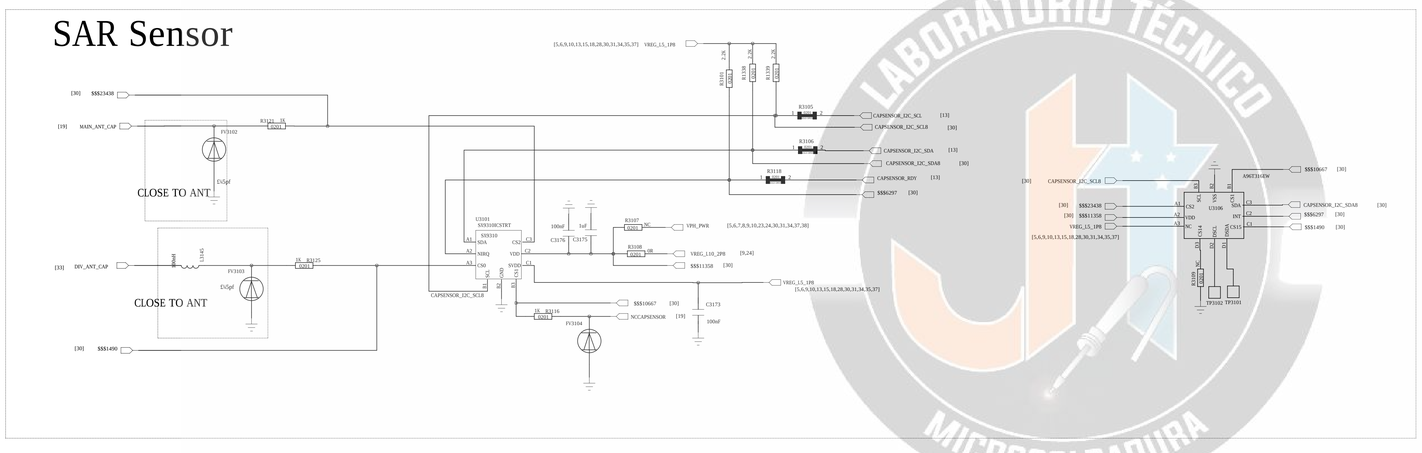

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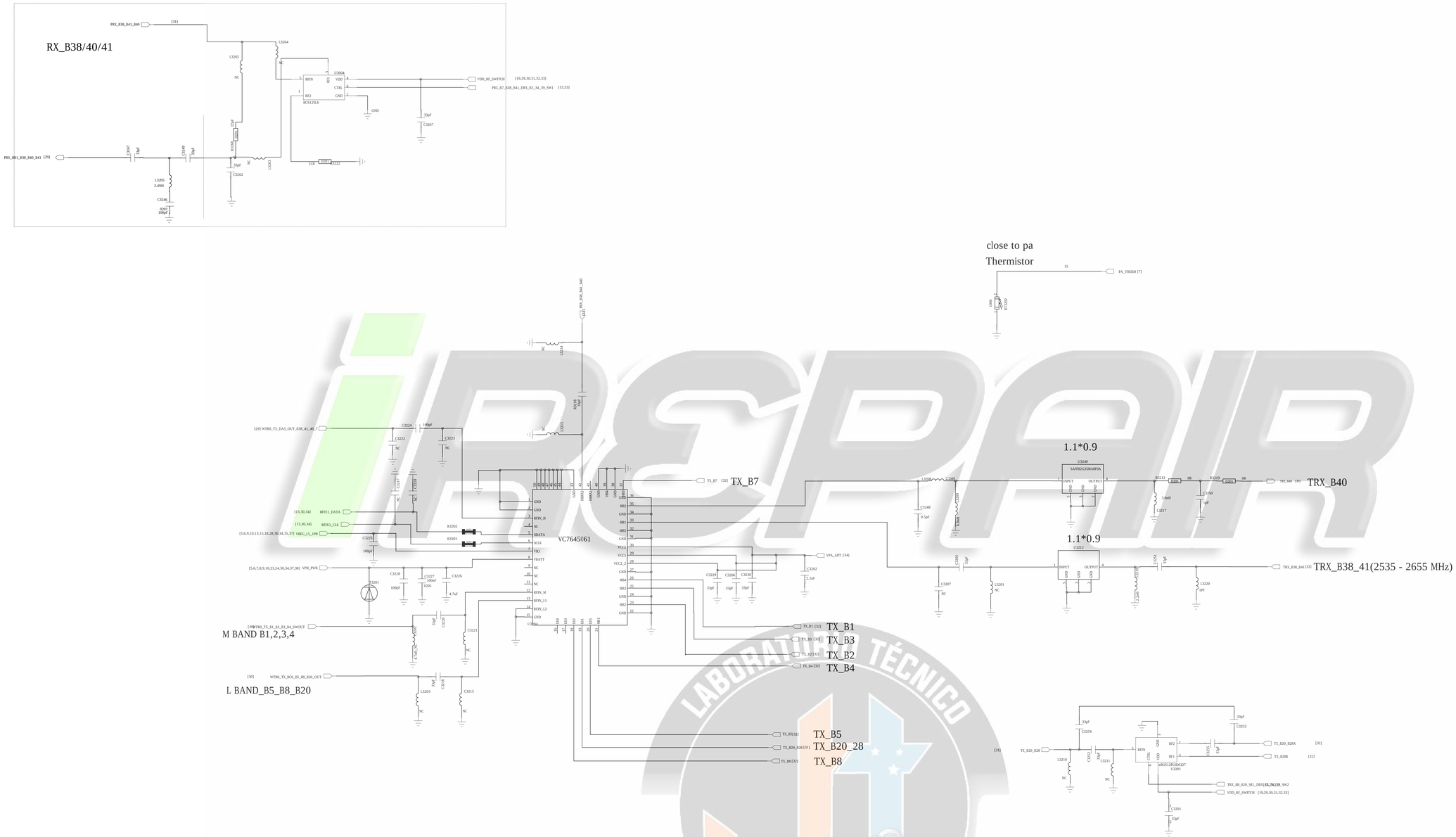

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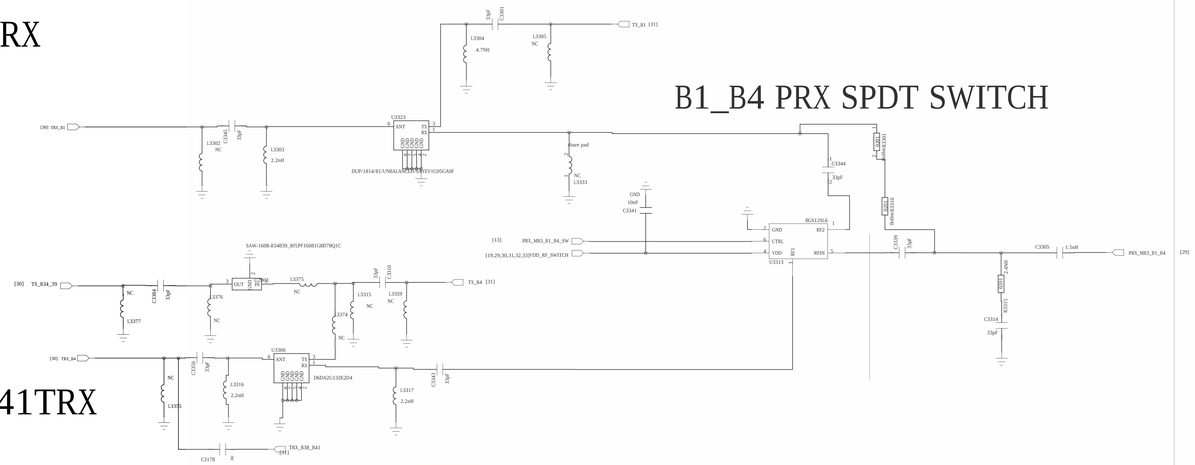

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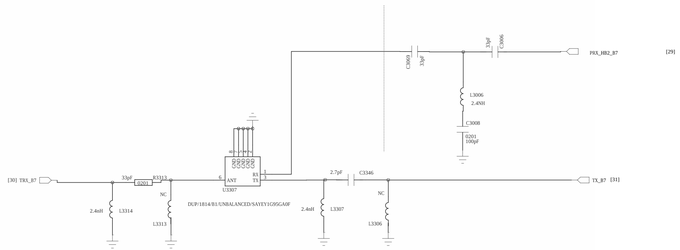

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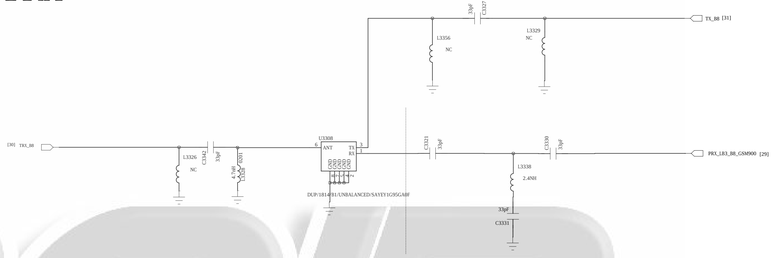

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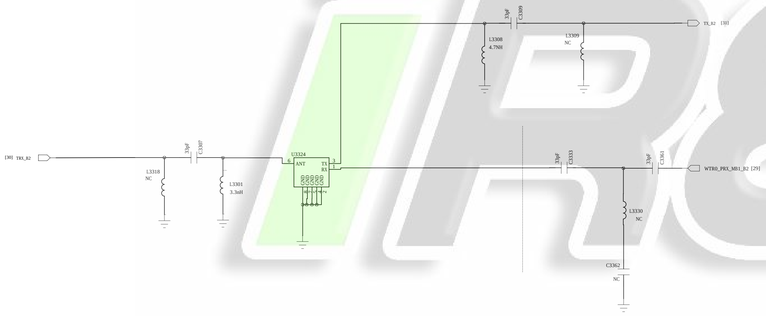

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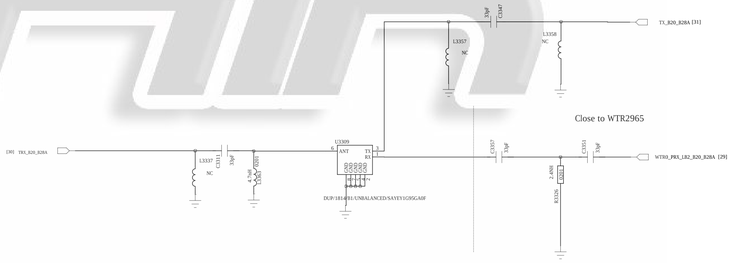

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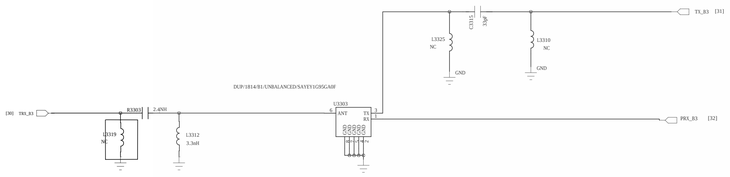
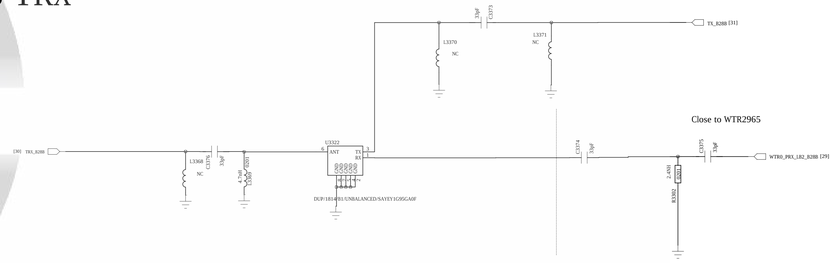


B28B TRX



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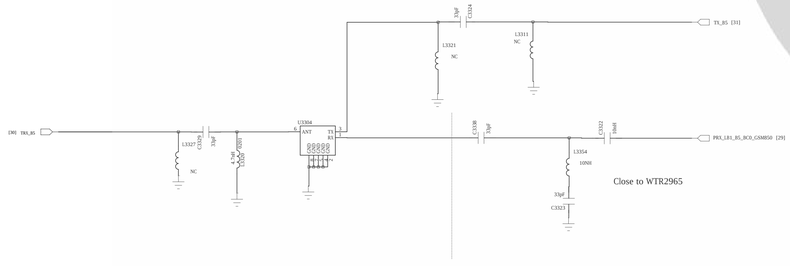
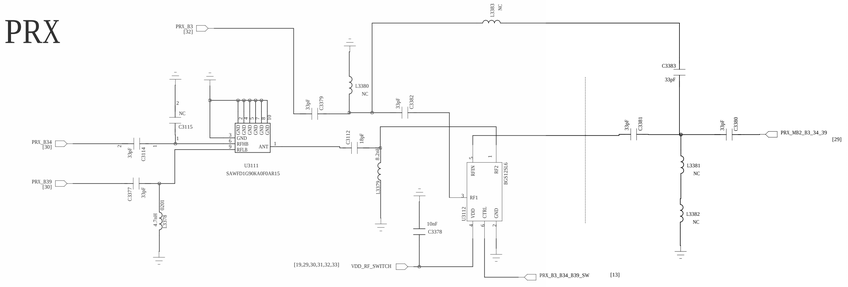


B3_B34_B39 PRX



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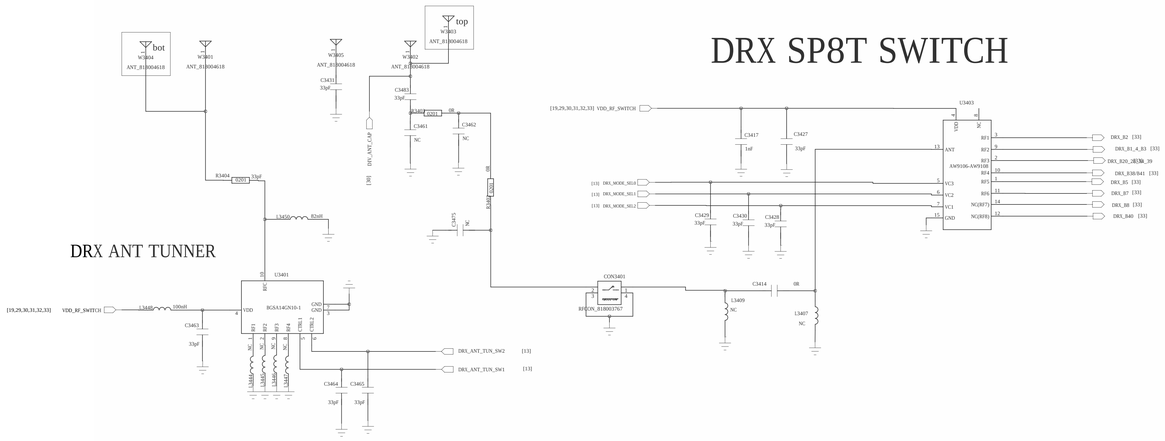
DIV Antenna



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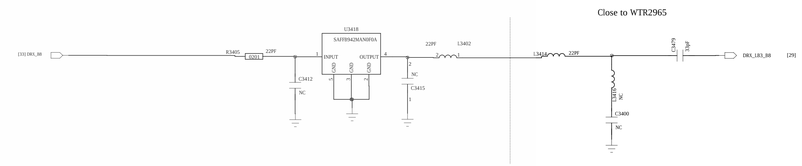

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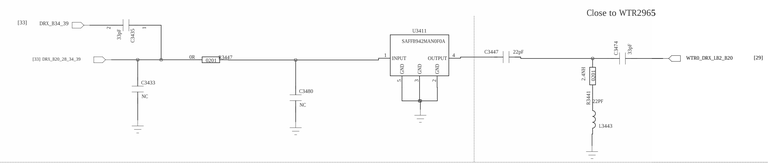

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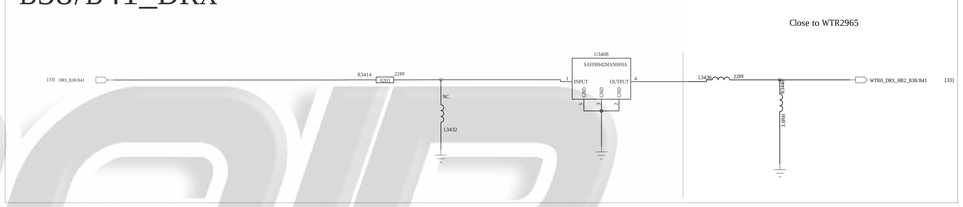

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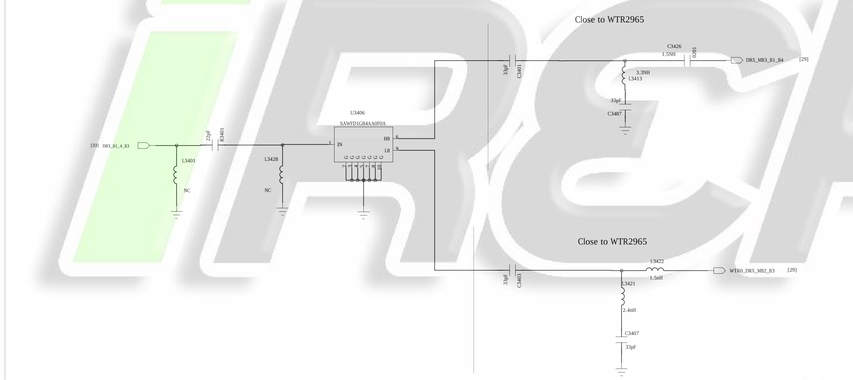

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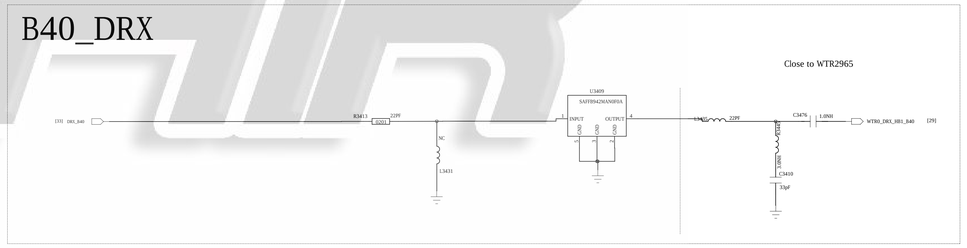

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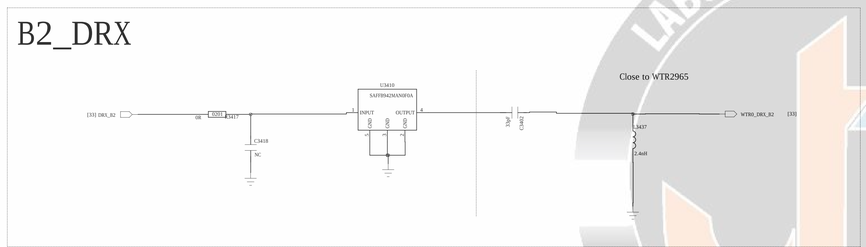

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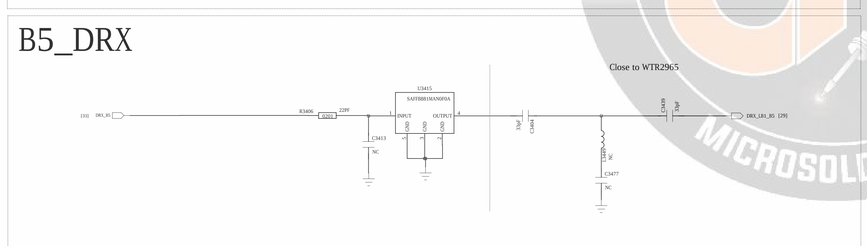

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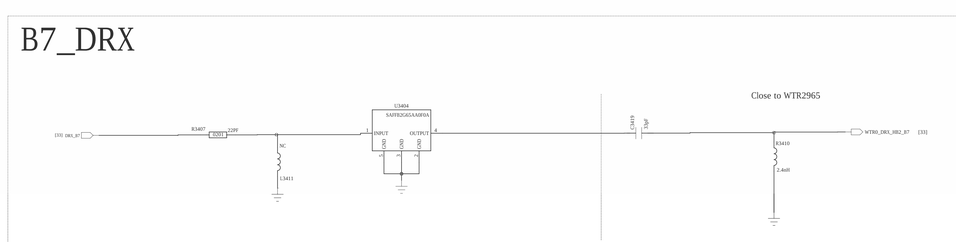

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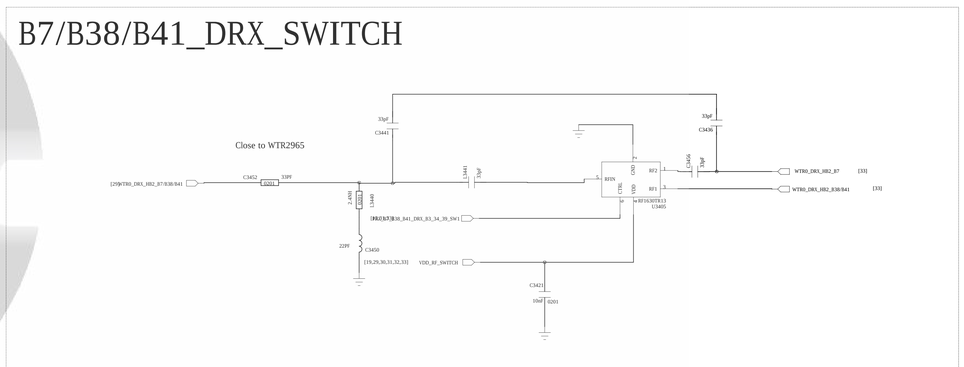
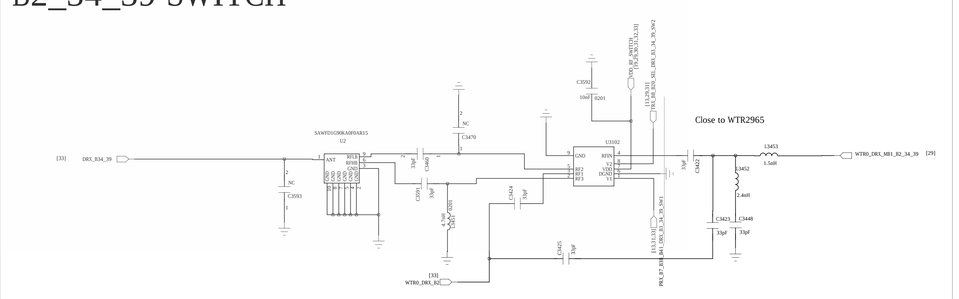


B2_34_39 SWITCH



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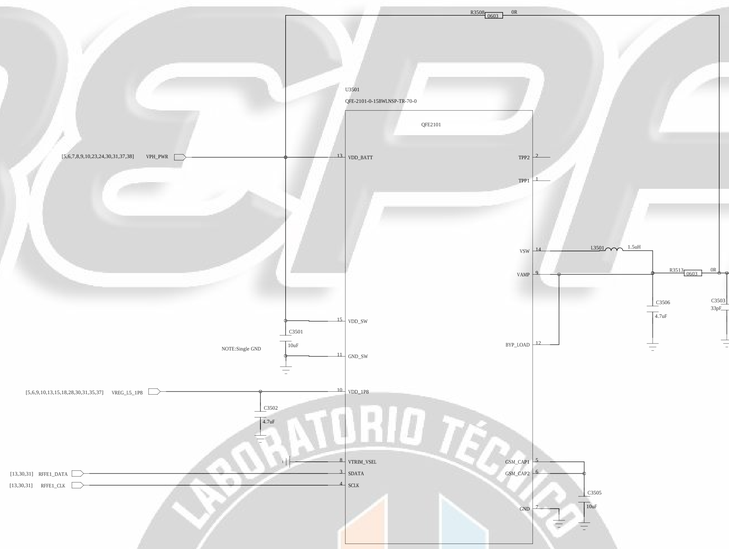
APT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VDD_BATT
TPP2
2
TPP1
1
VSW
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L3502
1.5uH
VAMP
9
R3513
0603
0R
VPA_APT
[31]
C3506
4.7uF
C3503
10pF
15
VDD_SW
C3501
10uF
NOTE:Single GND
11
GND_SW
BYP_LOAD
12
[5,6,9,10,13,15,18,28,30,31,35,37]
VREG_L5_1P8
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VTRIM_VSEL
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RFFE1_DATA
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SDATA
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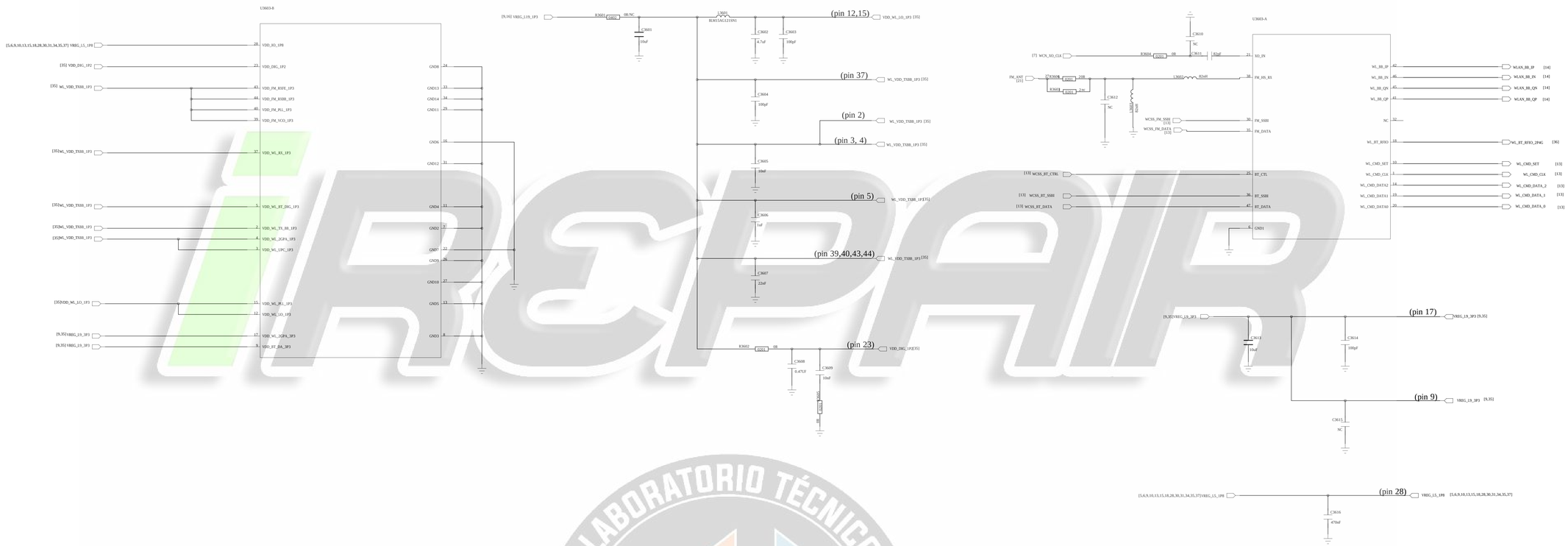

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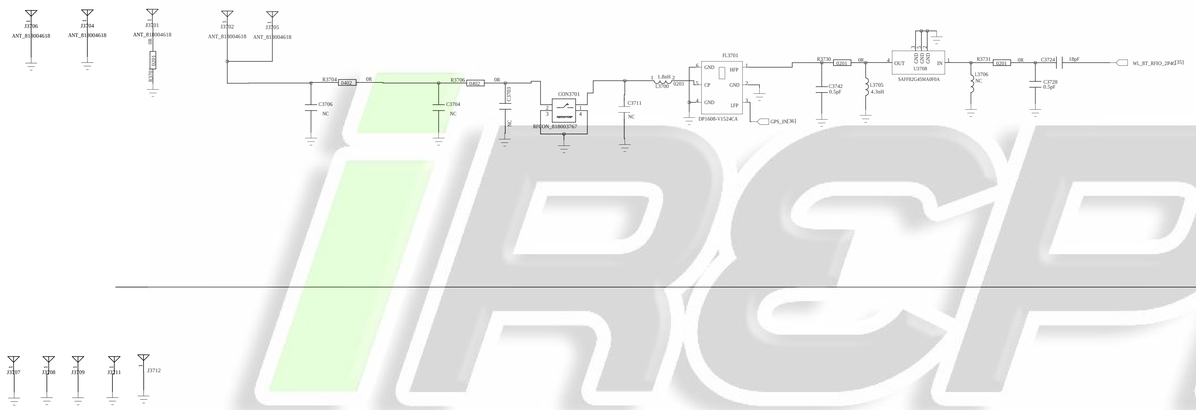
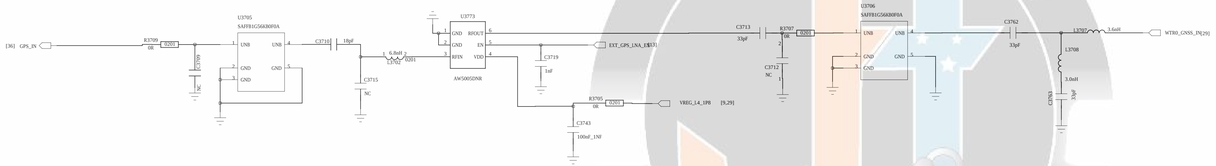
GPS WIFI 2.4G Ant





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LTR	ECO NO:

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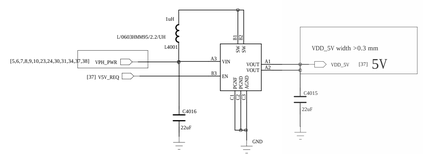
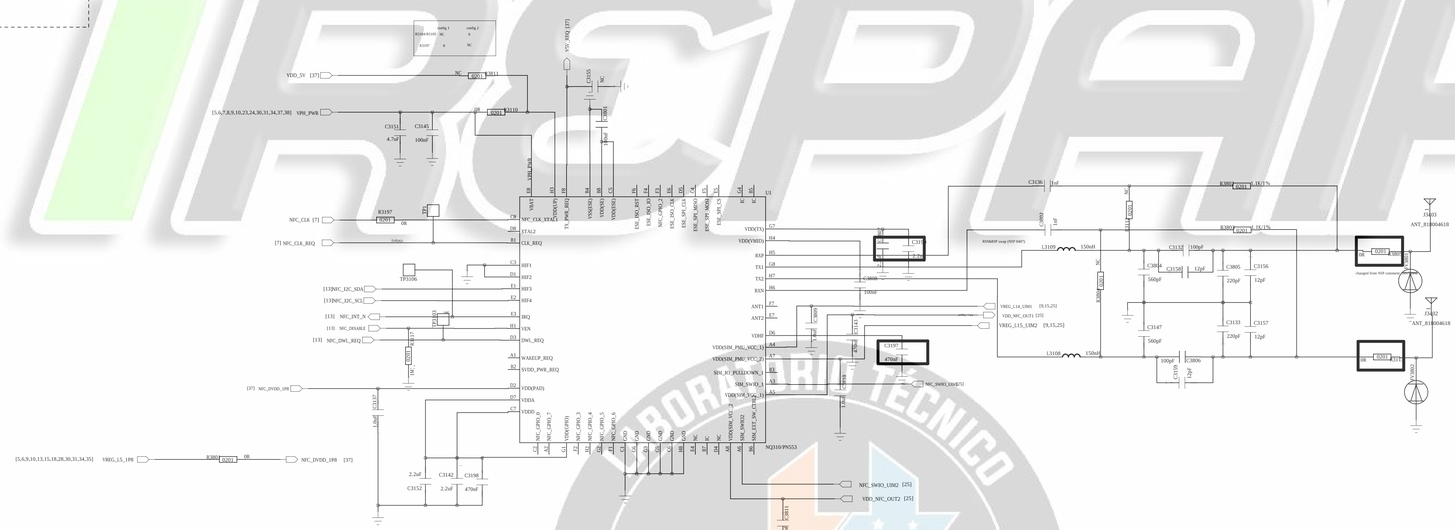
REVISION RECORD		
LTR	ECO NO:	APPROVED:

NFC DCDC

FAN48614BUC50X / FAN48619





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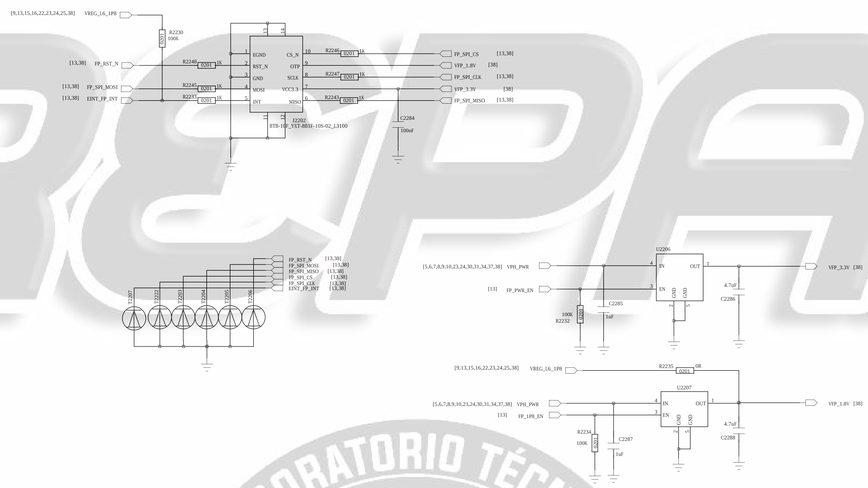

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