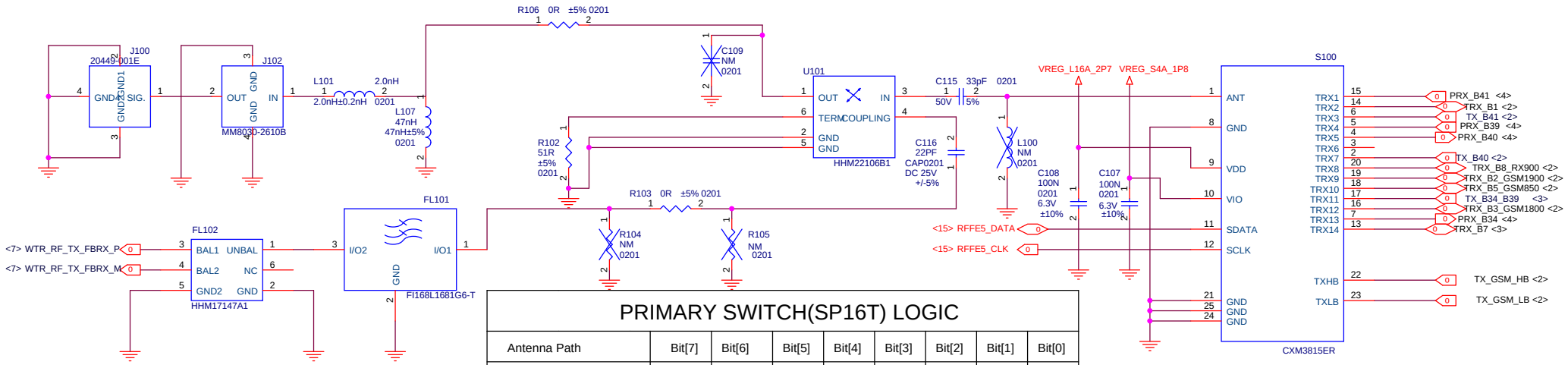

PRIMARY SWITCH(SP16T) LOGIC

Antenna Path	Bit[7]	Bit[6]	Bit[5]	Bit[4]	Bit[3]	Bit[2]	Bit[1]	Bit[0]
Sleep mode (standby)	X	0	0	0	0	0	0	0
2G transmit low band	X	0	0	0	1	0	1	0
2G transmit high band	X	0	0	0	1	0	0	0
TRX1	X	0	0	0	0	1	0	0
TRX2	X	0	0	0	0	1	0	1
TRX3	X	0	0	0	0	1	1	0
TRX4	X	0	0	0	0	1	1	1
TRX5	X	0	0	0	1	0	0	1
TRX6	X	0	0	0	1	0	1	1
TRX7	X	0	0	0	1	1	0	0
TRX8	X	0	0	0	0	0	0	1
TRX9	X	0	0	0	0	0	1	0
TRX10	X	0	0	0	0	0	1	1
TRX11	X	0	0	0	1	1	0	1
TRX12	X	0	0	0	1	1	1	0
TRX13	X	0	0	1	0	0	0	0
TRX14	X	0	0	1	0	0	0	1
Isolation mode (warm–up)	X	1	1	1	1	1	1	1

CXM3593

CTL 1	CTL 2	Active path
L	H	RF1-RF4 RF2-RF3
H	L	RF1-RF3 RF2-RF4

Primary Ant Connector, Coupler and Primary Switchplexer

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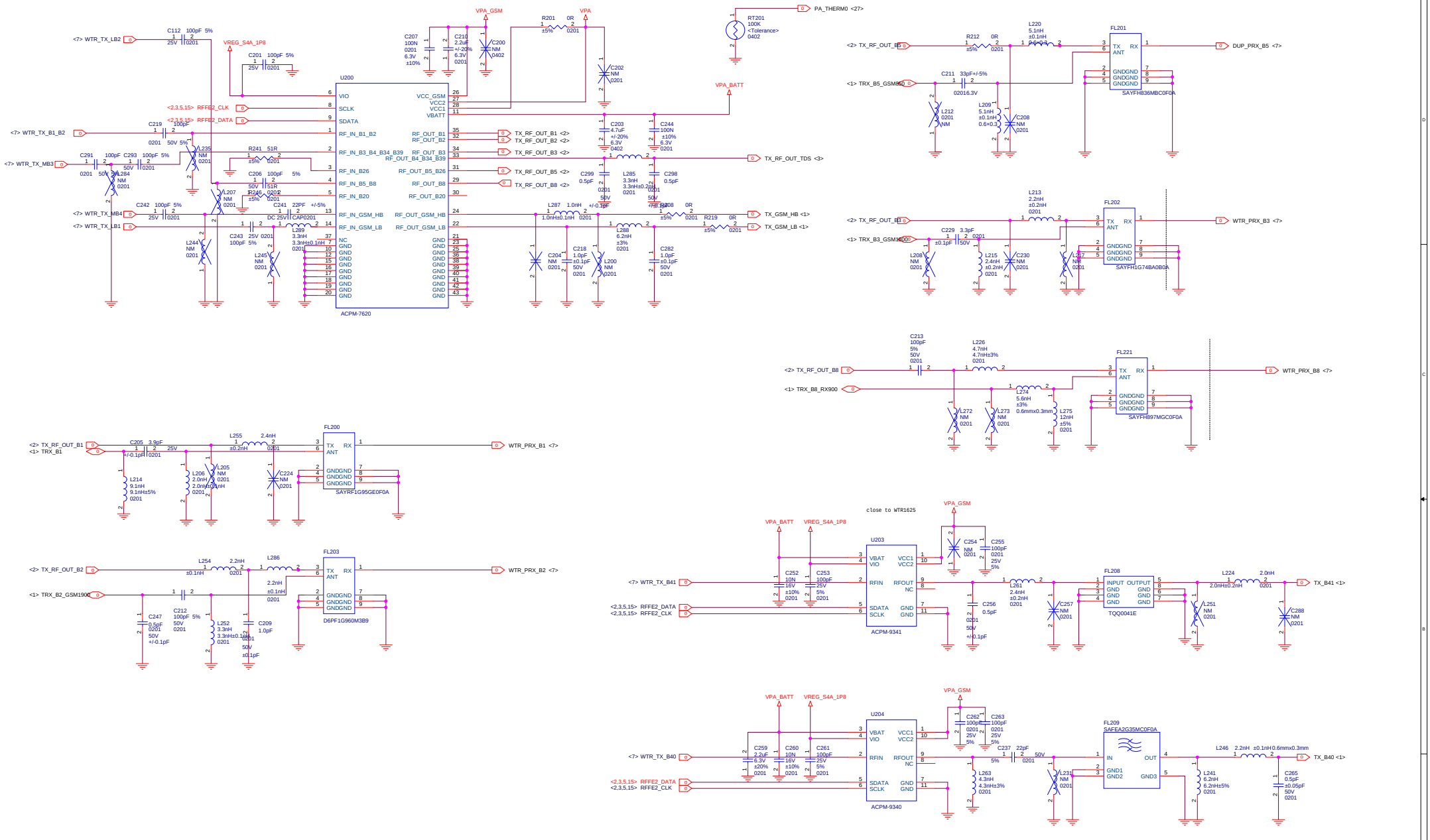

RF7301 LOGIC

POWER MODE	PA_ON3_B34_B39	TDS_PA0_R0	TDS_PA0_R1
POWER DOWN MODE	L	L	L
STANDBY MODE	L	X	X
HIGH POWER STATE	H	L	L
MEDIUM POWER STATE	H	H	L
LOW POWER STATE		H	H

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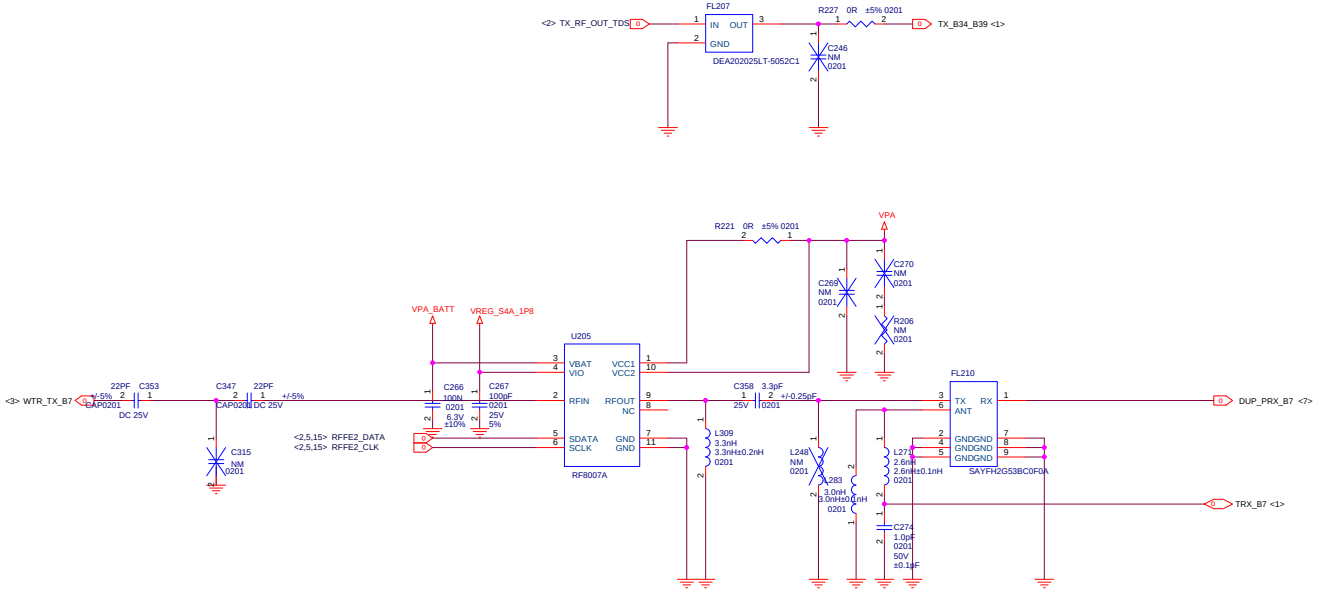

RF7301 LOGIC

POWER MODE	PA_ON3_B34_B39	TDS_PA0_R0	TDS_PA0_R1
POWER DOWN MODE	L	L	L
STANDBY MODE	L	X	X
HIGH POWER STATE	H	L	L
MEDIUM POWER STATE	H	H	L
LOW POWER STATE		H	H

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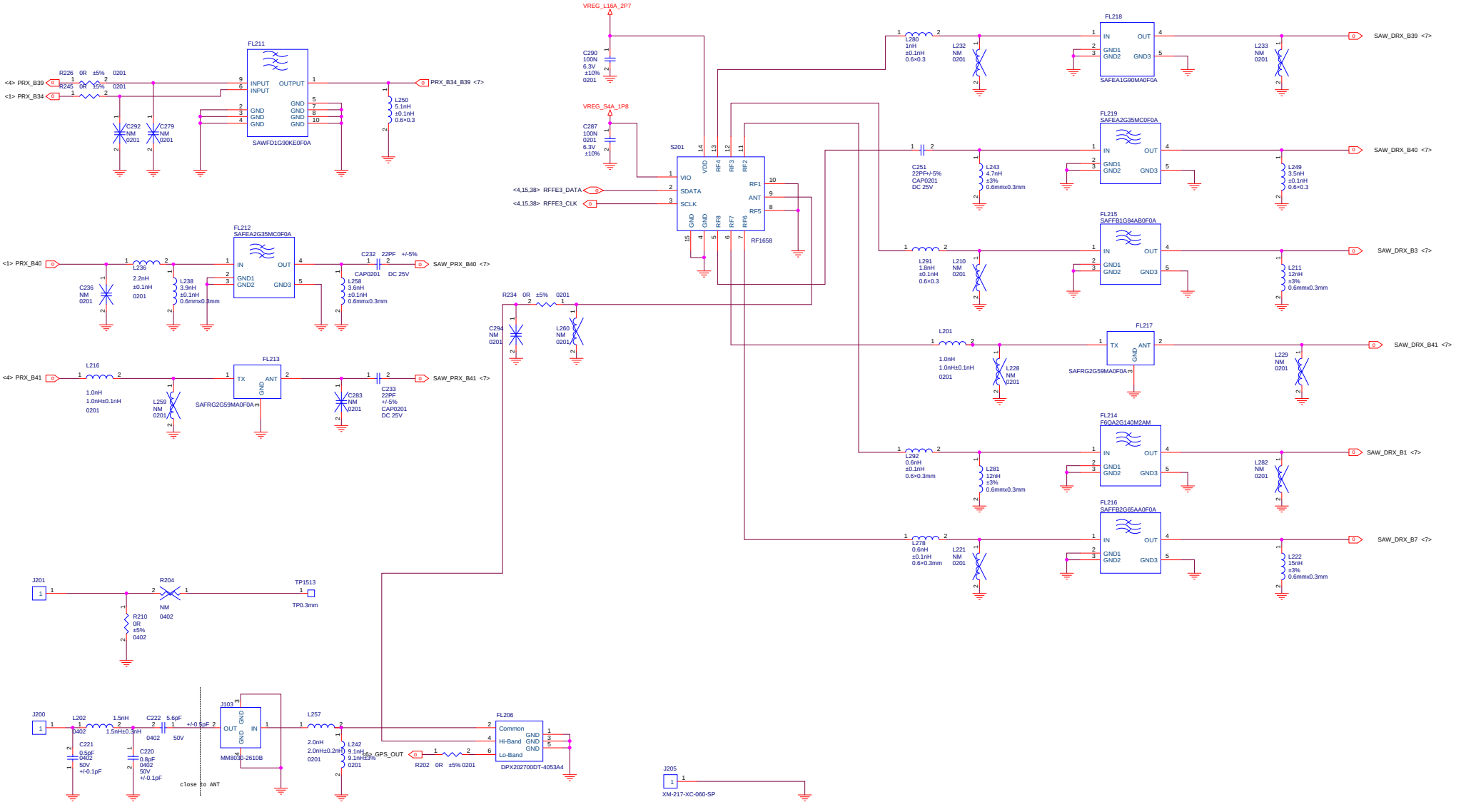

MMPA GSM/IMT/850

PRx and Drx	SP4T_CTRL_1	SP4T_CTRL_2
B2	H	L
B34	L	L
B1	L	H
B3	H	H

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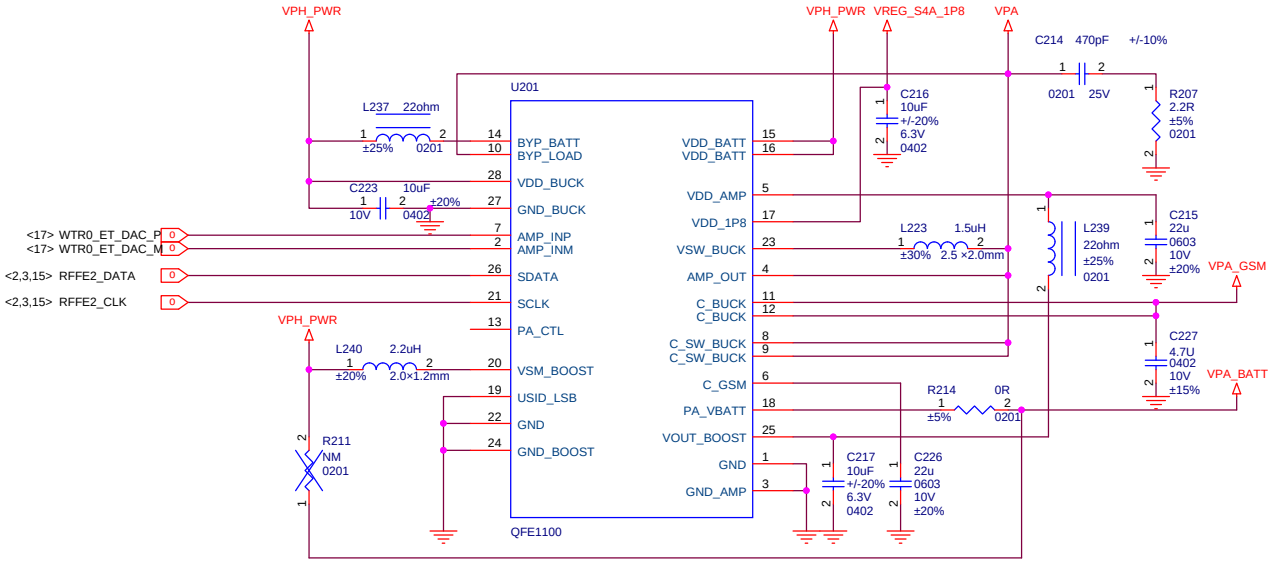

QFE1100

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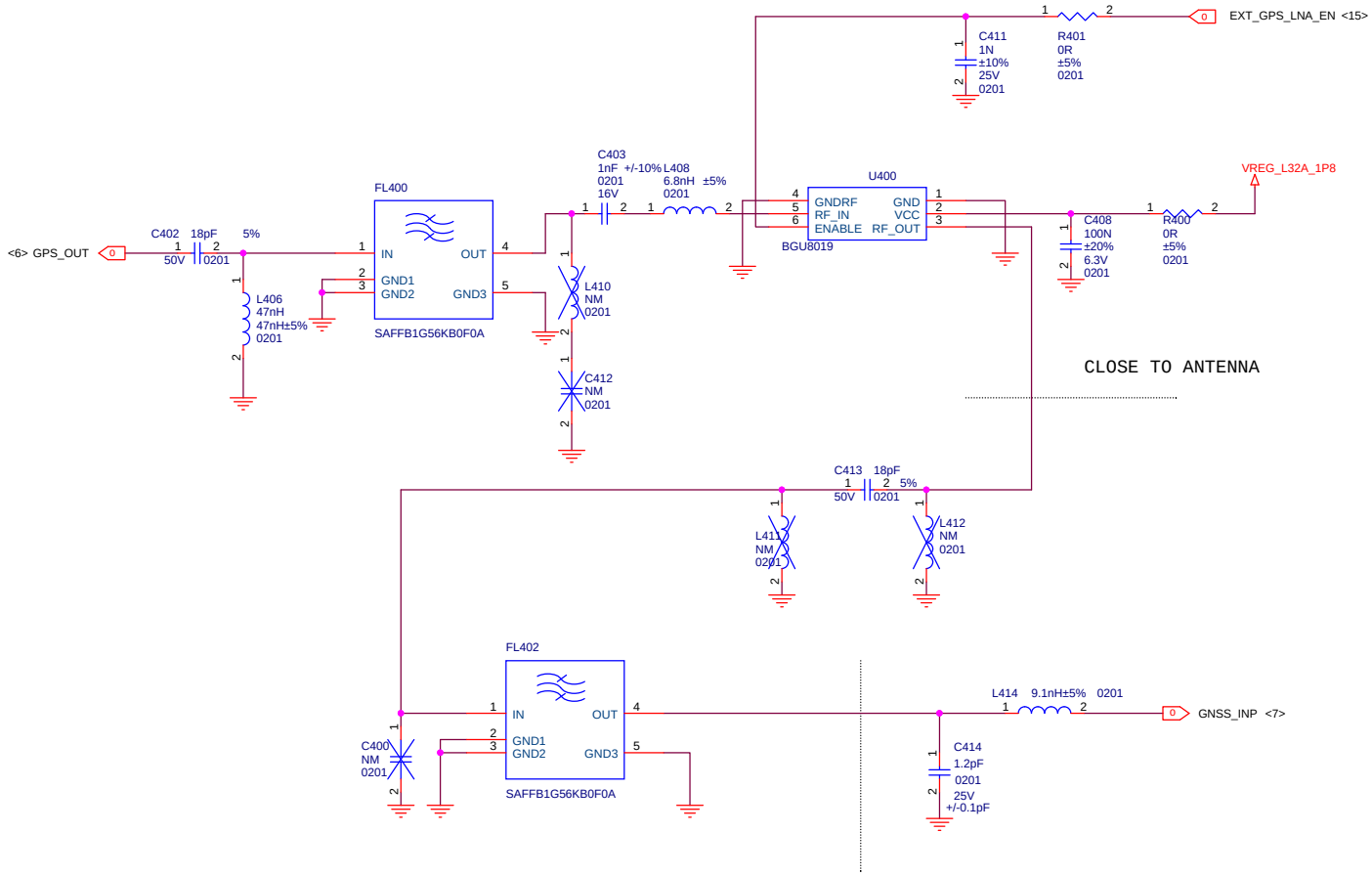

GPS

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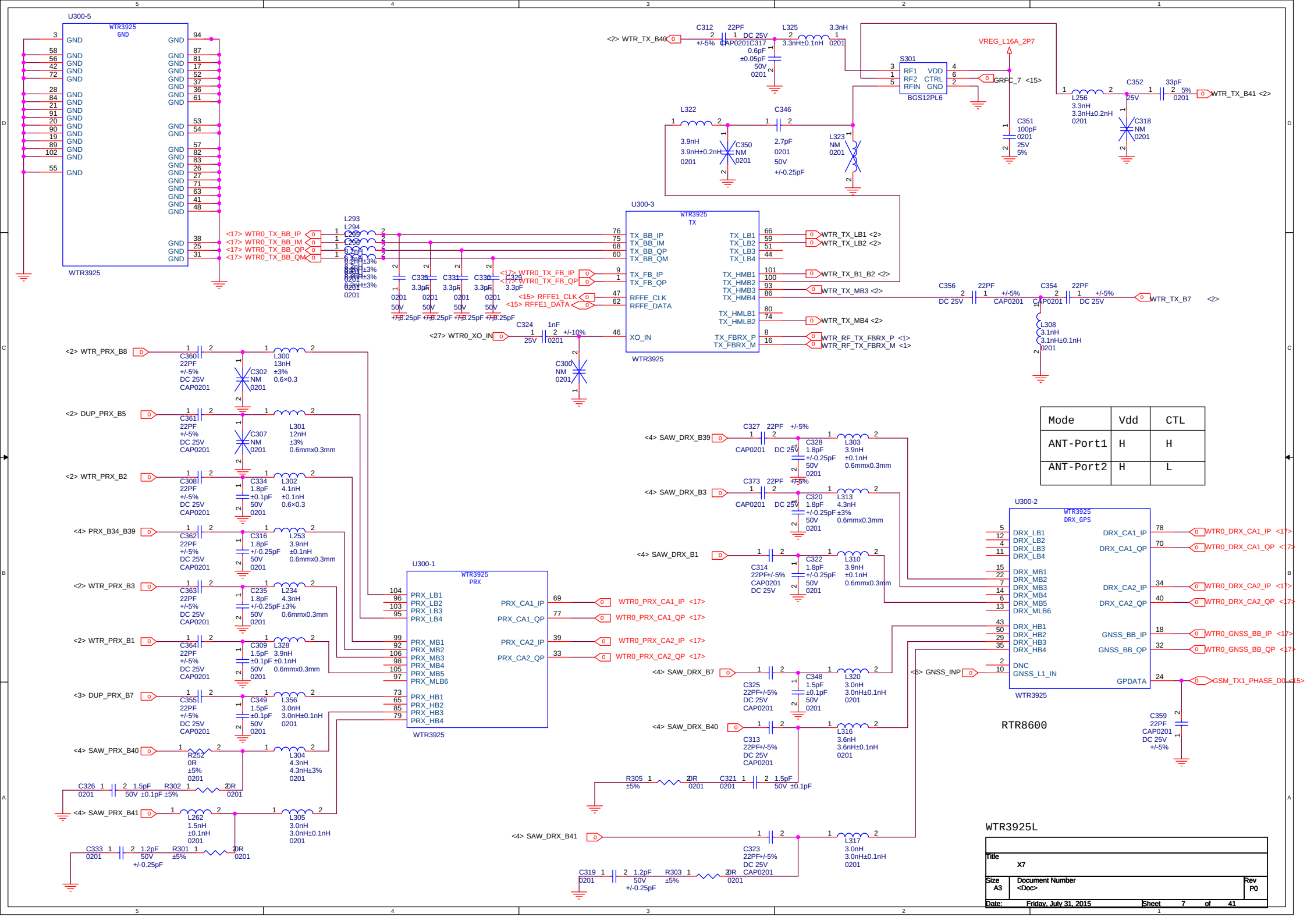
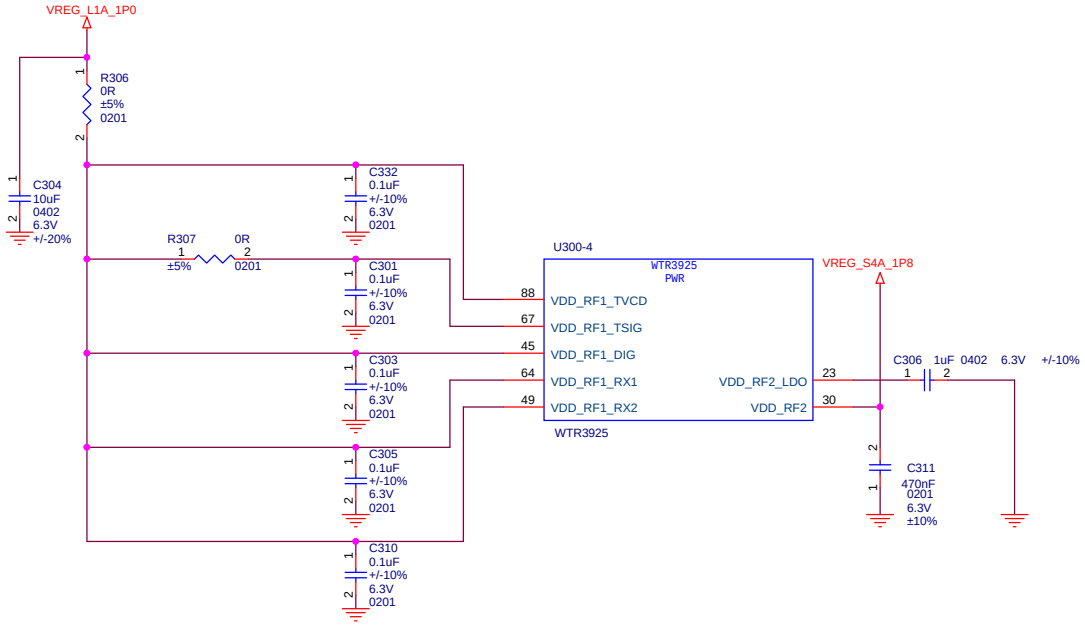


Mode	Vdd	CTL
ANT-Port1	H	H
ANT-Port2	H	L



RTR8600 BYPASS

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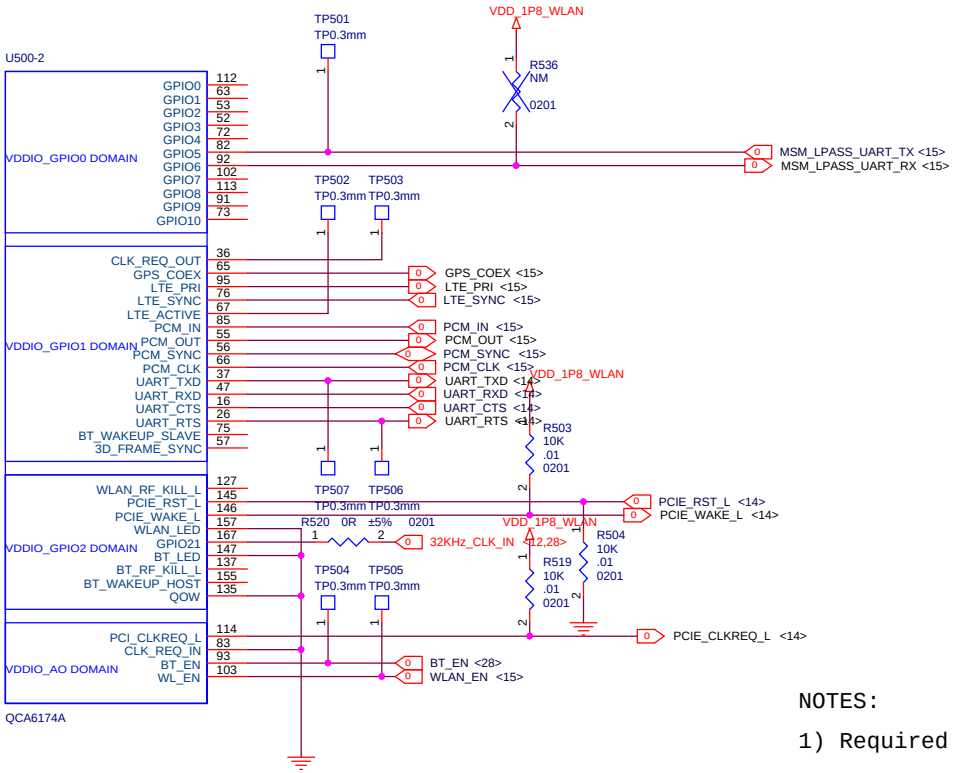

Note: Dedicated GND for pins 1, 11, 43, 32, 12, 2, and 34

NOTES:

1) Required pull-up and pull-down resistors at host for open drain signals

PIN#	NET NAME	TYPE	NOTES
146	PCIE_WAKE_L	OD	Ext. pull-up to VDDIO_GPIO2 at host side
114	PCIE_CLKREQ_L	OD	Ext. pull-up to VDDIO_AO at host side
145	PCIE_RST_L	OD	Ext. pull-down to GNDat host side
157	WLAN_LED	OD	Ext. pull-up to VDDIO_GPIO2 at host side; otherwise short to GND
147	BT_LED	OD	If used, ext. pull-up to VDDIO_GPIO2 at host side; otherwise short to GND
135	QOW	OD	If used, Ext. pull-up to VDDIO_GPIO2 at host side; otherwise short to GND

2) For PCIE_REFCLKN/P, place the series resistors and shunt capacitors close to QCA61x4A-1

3) For PCIE_TXN/P, place C501 and C502 close to QCA6164A

BI/WIFI

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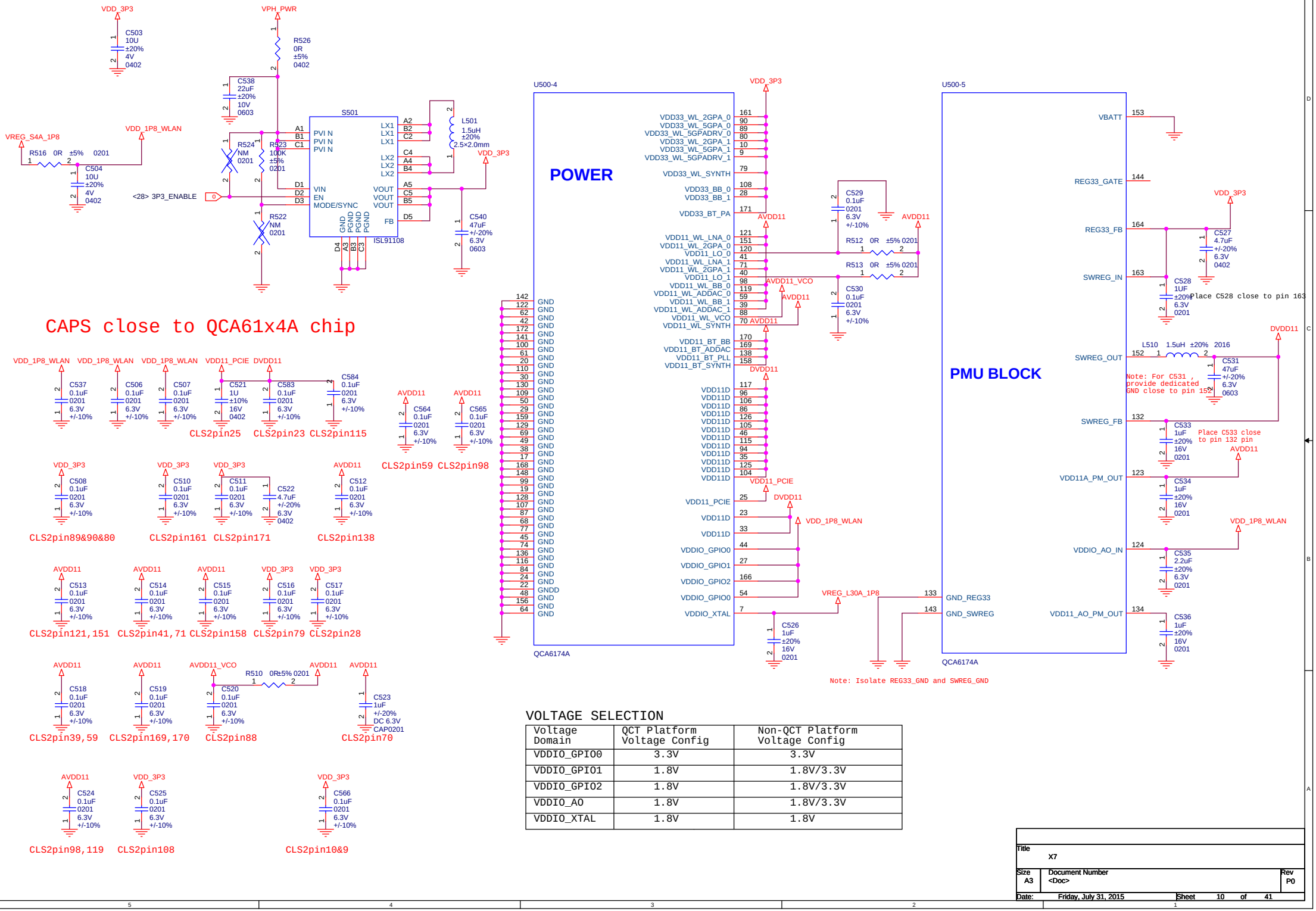

VOLTAGE SELECTION

Voltage Domain	QCT Platform Voltage Config	Non-QCT Platform Voltage Config
VDDIO_GPIO0	3.3V	3.3V
VDDIO_GPIO1	1.8V	1.8V/3.3V
VDDIO_GPIO2	1.8V	1.8V/3.3V
VDDIO_AO	1.8V	1.8V/3.3V
VDDIO_XTAL	1.8V	1.8V

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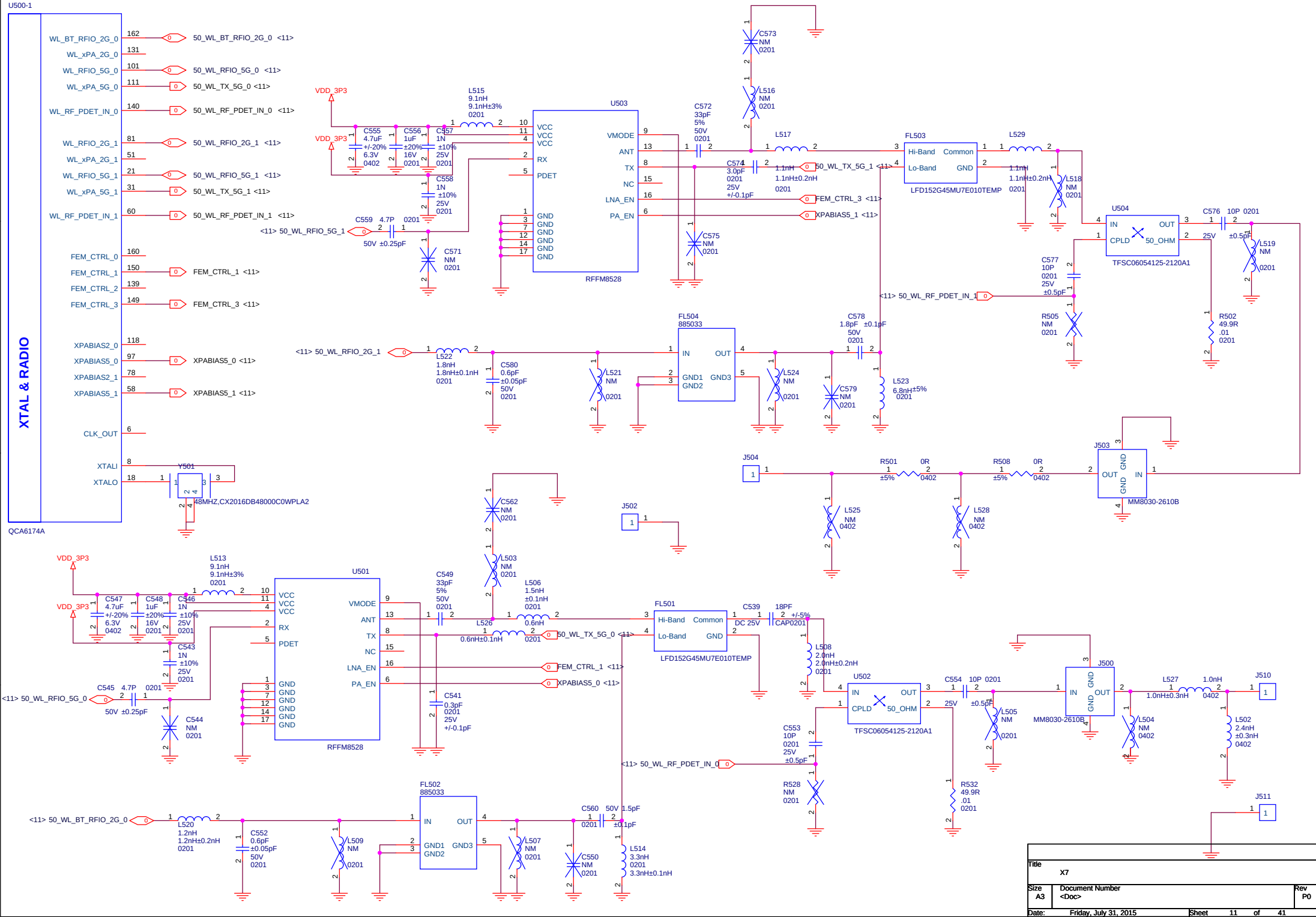
U500-1
XTAL & RADIO
QCA6174A
WL_BT_RFIO_2G_0
WL_xPA_2G_0
WL_RFIO_5G_0
WL_xPA_5G_0
WL_RF_PDET_IN_0
WL_RFIO_2G_1
WL_xPA_2G_1
WL_RFIO_5G_1
WL_xPA_5G_1
WL_RF_PDET_IN_1
FEM_CTRL_0
FEM_CTRL_1
FEM_CTRL_2
FEM_CTRL_3
XPABIAS2_0
XPABIAS5_0
XPABIAS2_1
XPABIAS5_1
CLK_OUT
XTALI
XTALO
50_WL_BT_RFIO_2G_0 <11>
50_WL_RFIO_5G_0 <11>
50_WL_TX_5G_0 <11>
50_WL_RF_PDET_IN_0 <11>
50_WL_RFIO_2G_1 <11>
50_WL_RFIO_5G_1 <11>
50_WL_TX_5G_1 <11>
50_WL_RF_PDET_IN_1 <11>
FEM_CTRL_1 <11>
FEM_CTRL_3 <11>
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XPABIAS5_1 <11>
Y501
48MHZ,CX2016DB48000C0WPLA2
U503
RFFM8528
VMODE
ANT
TX
NC
LNA_EN
PA_EN
VCC
RX
PDET
GND
FL503
Hi-Band
Lo-Band
Common
GND
LFD152G45MU7E010TEMP
U504
IN
OUT
CPLD
50_OHM
TFSC06054125-2120A1
FL504
885033
GND1
GND2
GND3
J502
J503
J504
MM8030-2610B
U501
FL501
U502
J500
FL502
J510
J511
VDD_3P3
<11> 50_WL_RFIO_5G_1
<11> 50_WL_RFIO_2G_1
<11> 50_WL_BT_RFIO_2G_0
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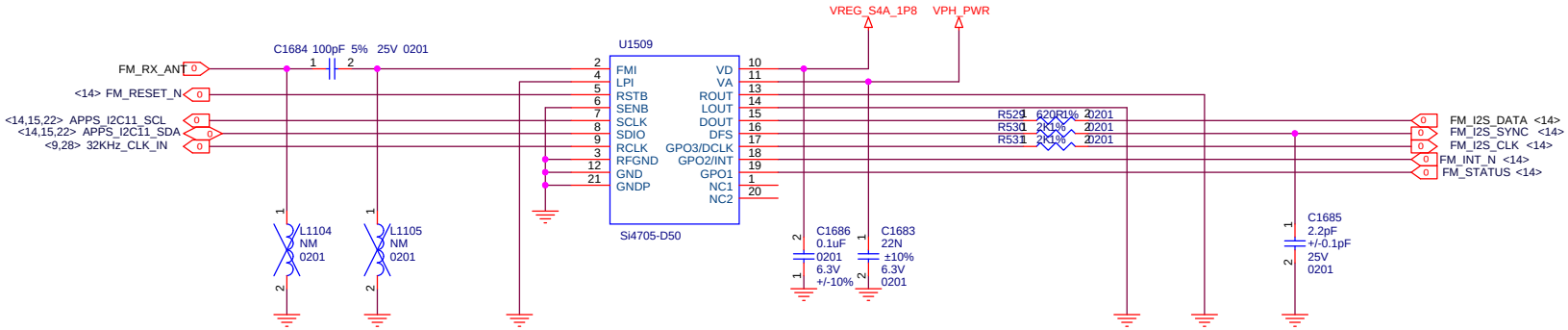

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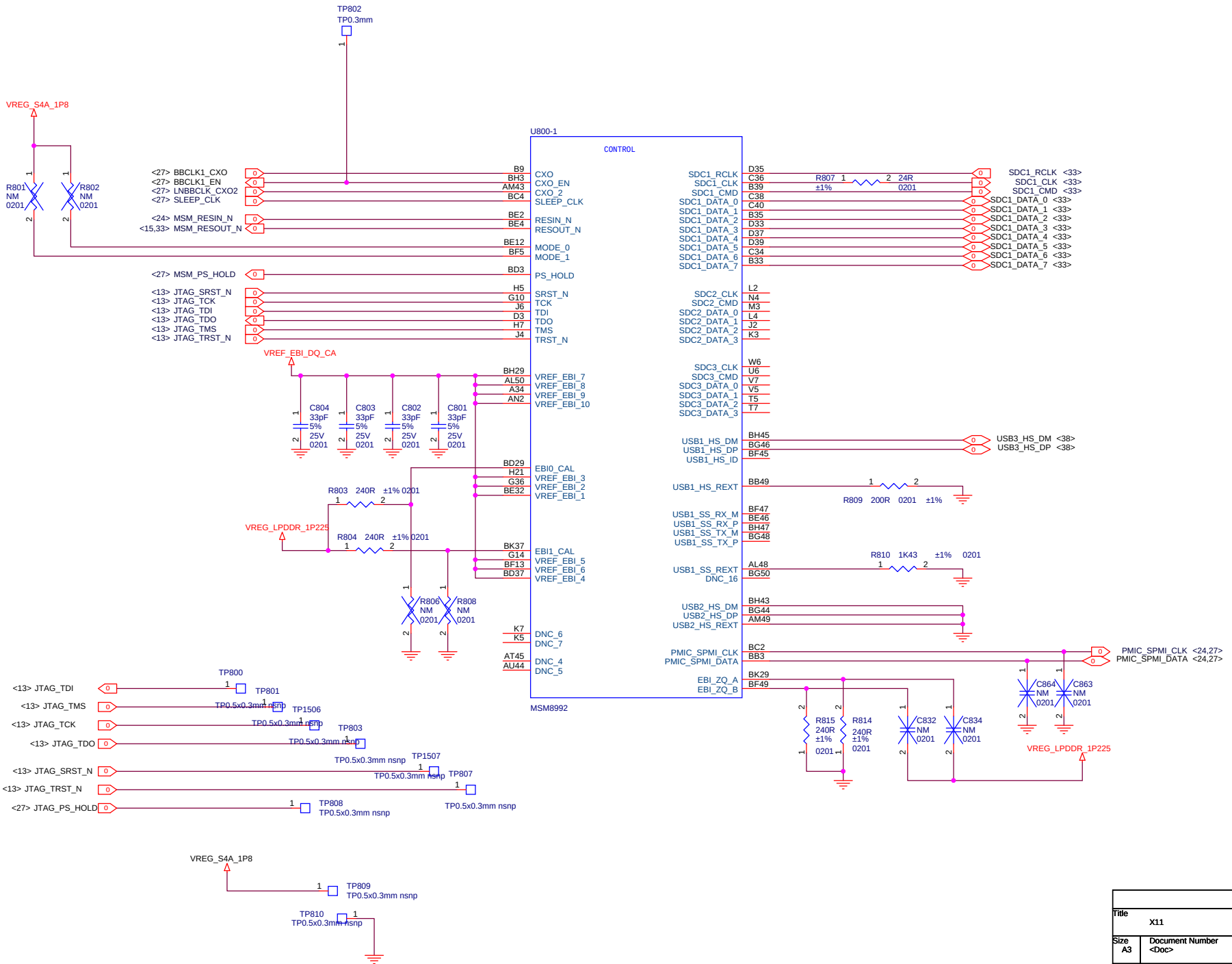

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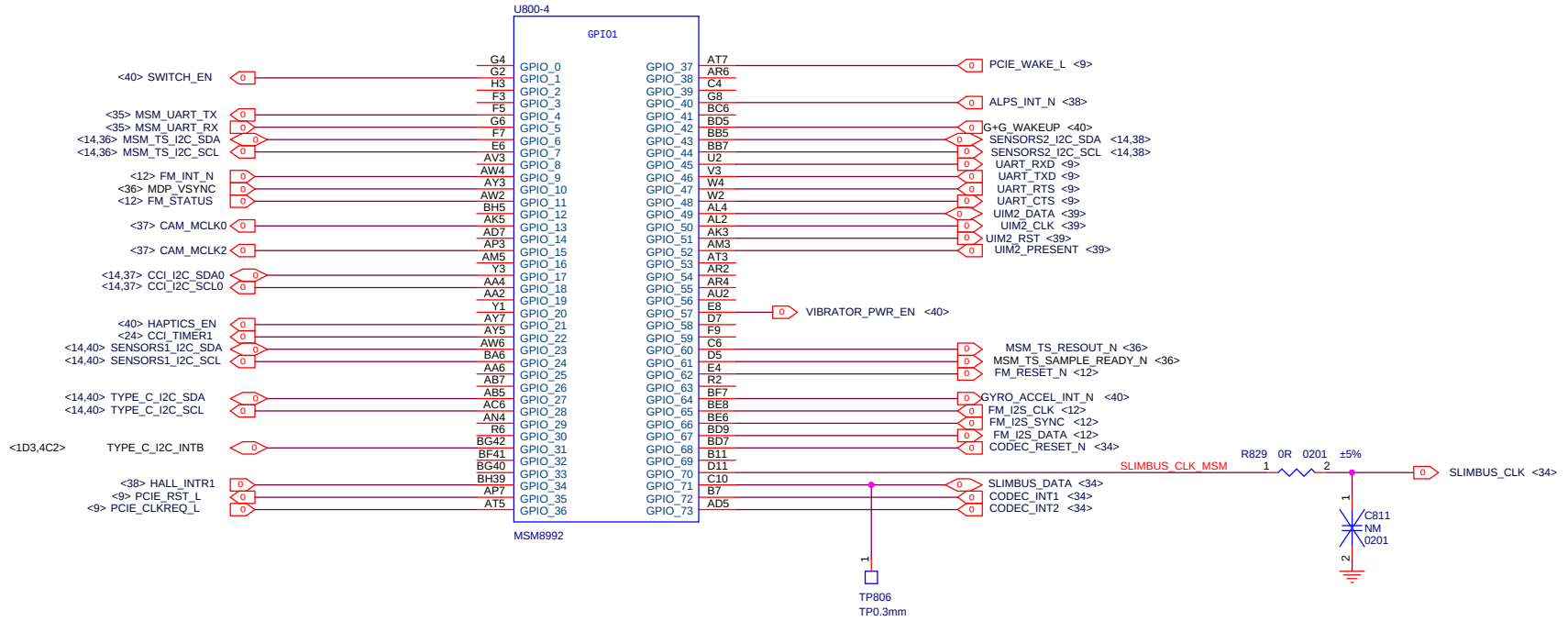

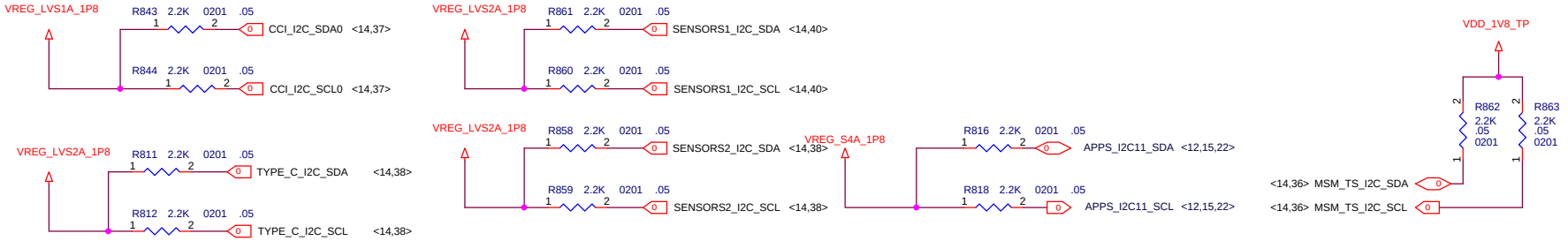

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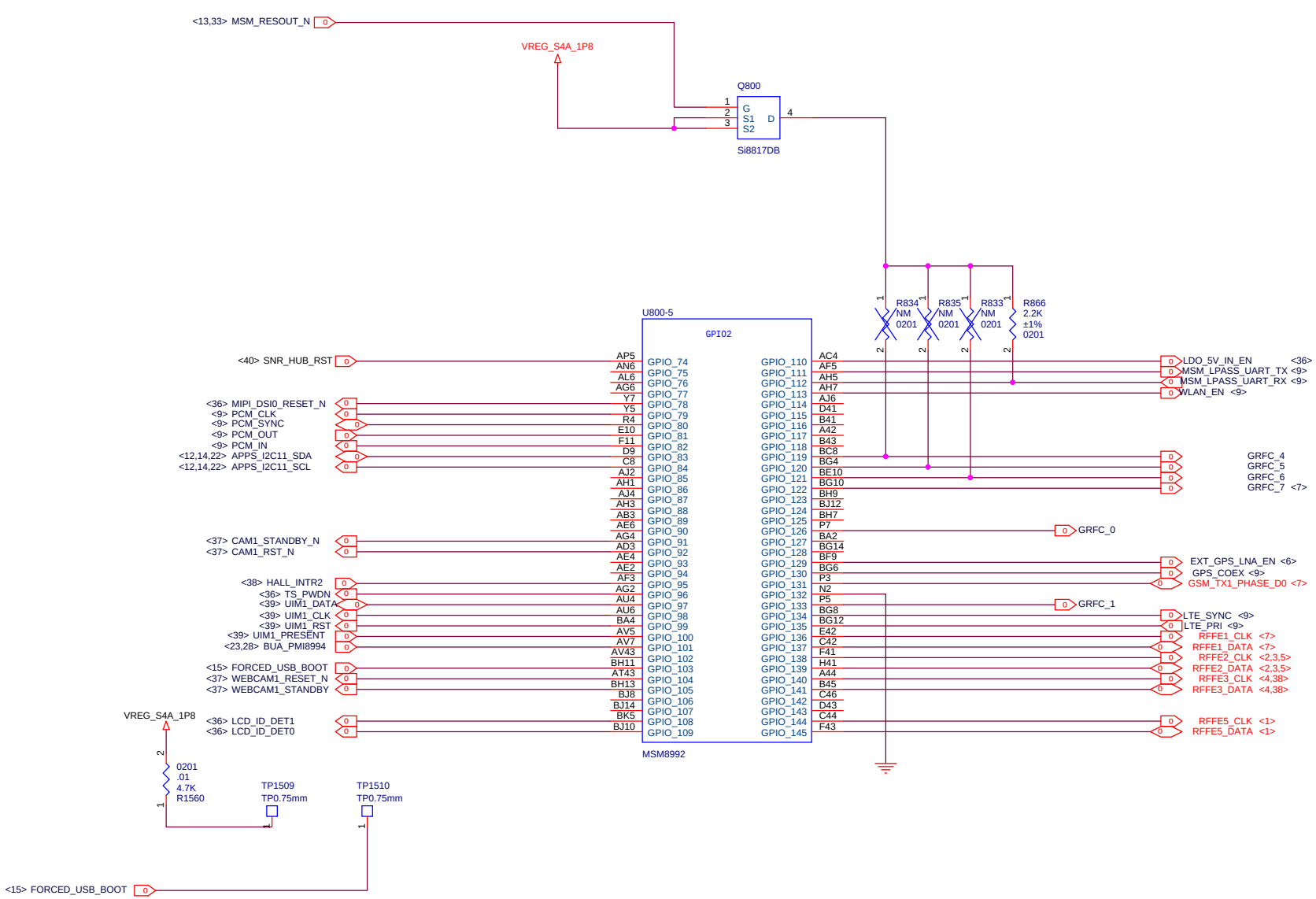

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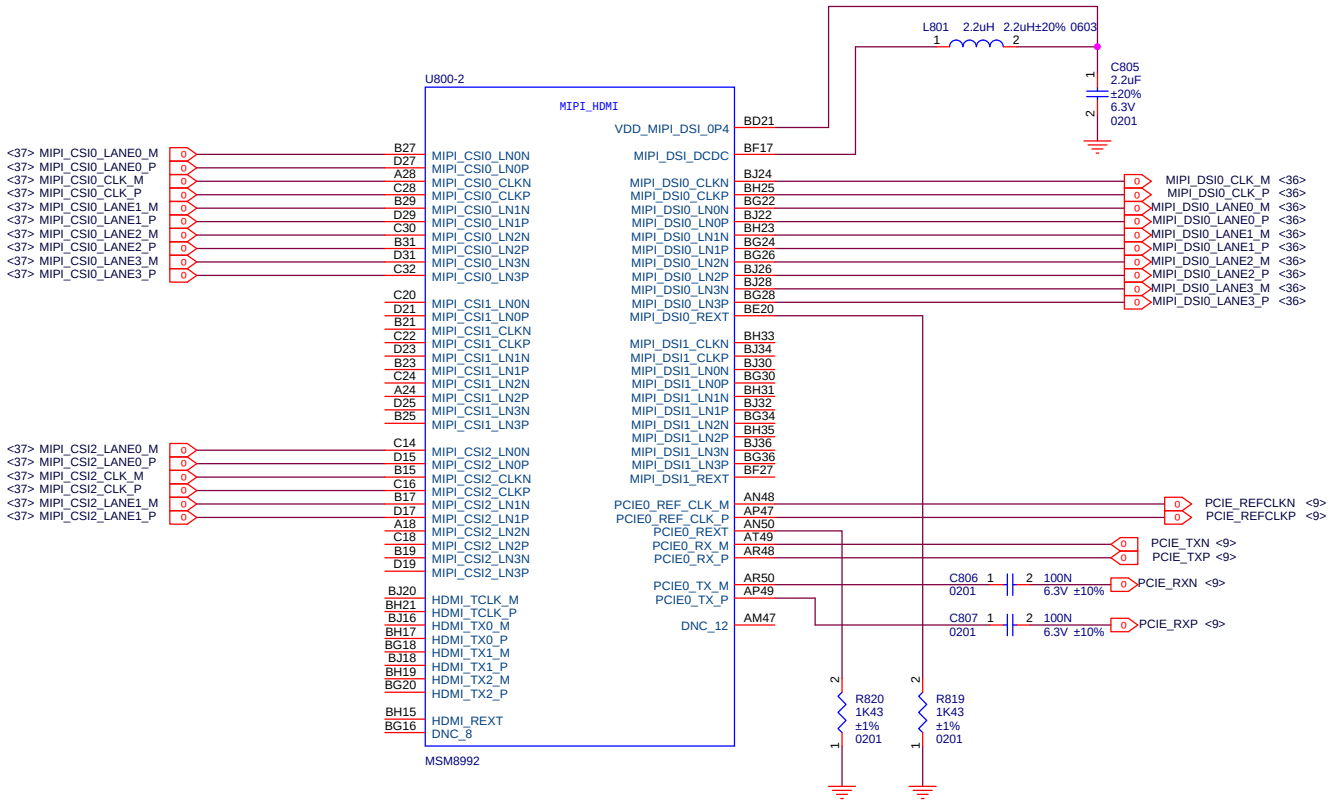

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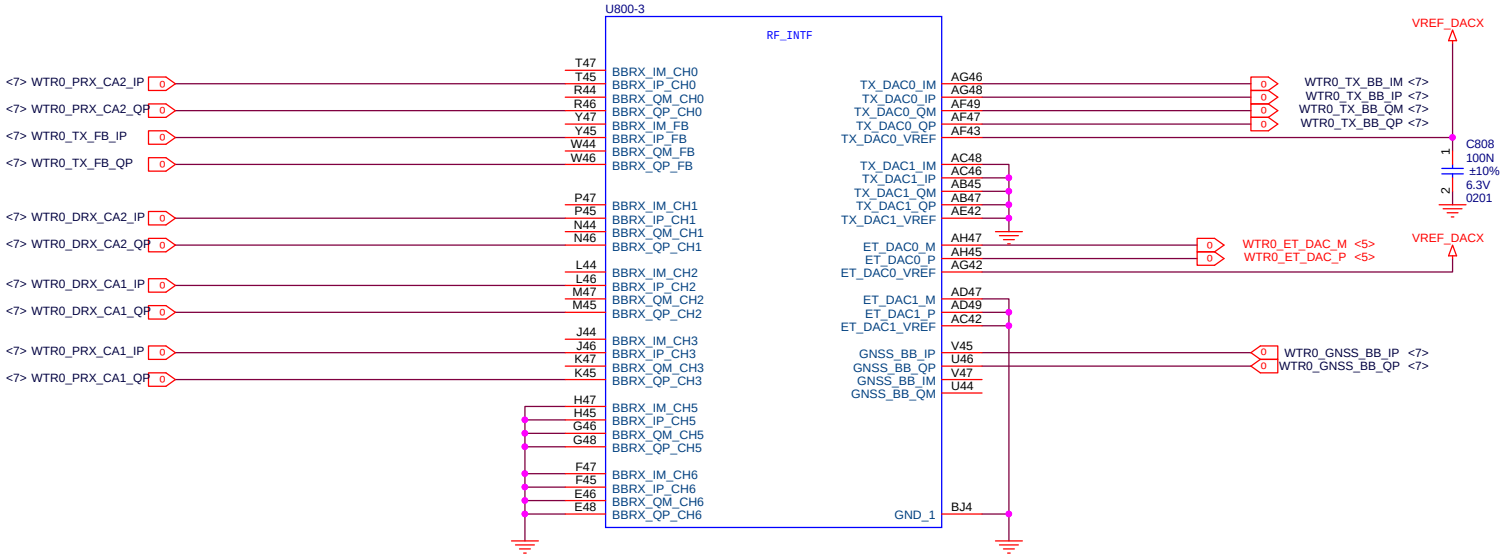

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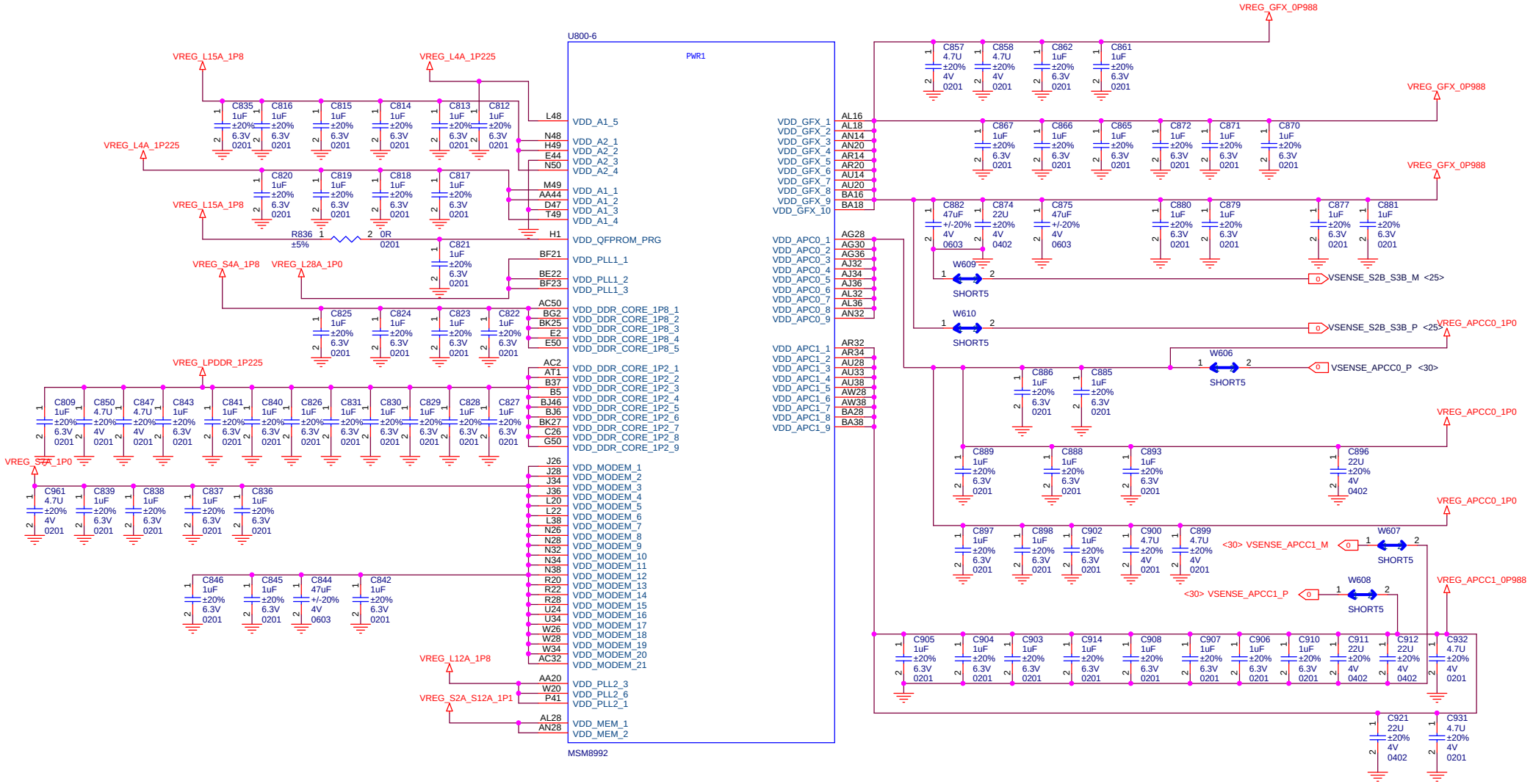

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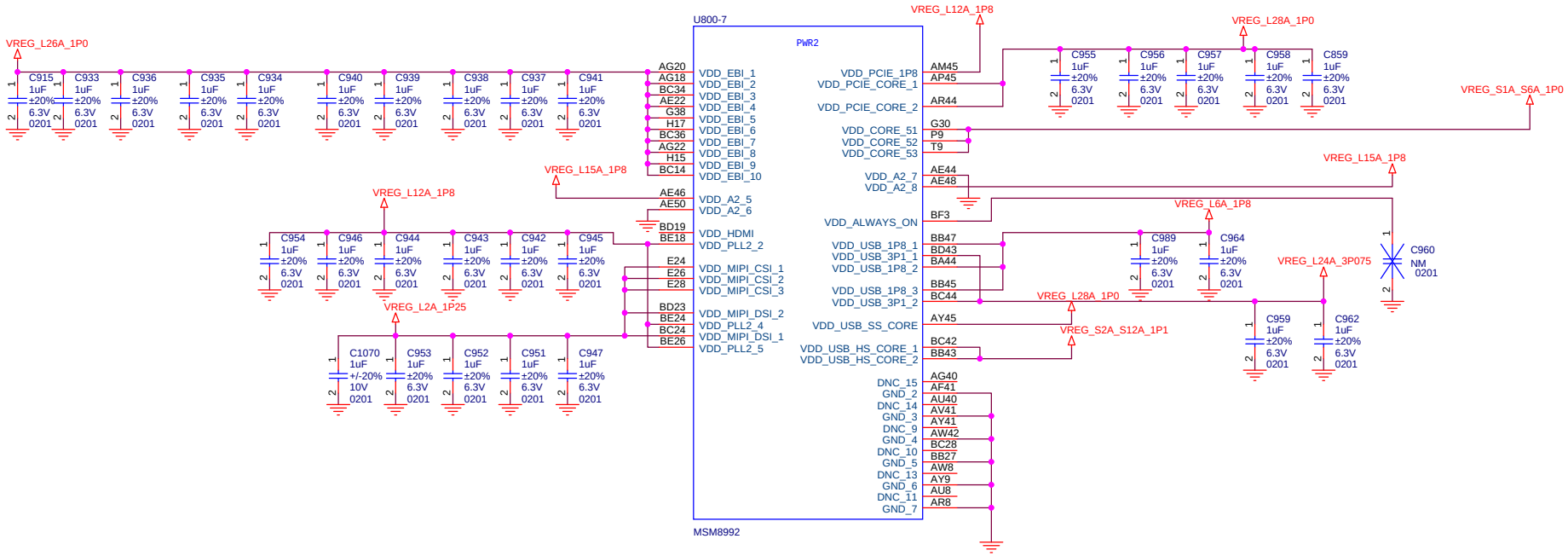

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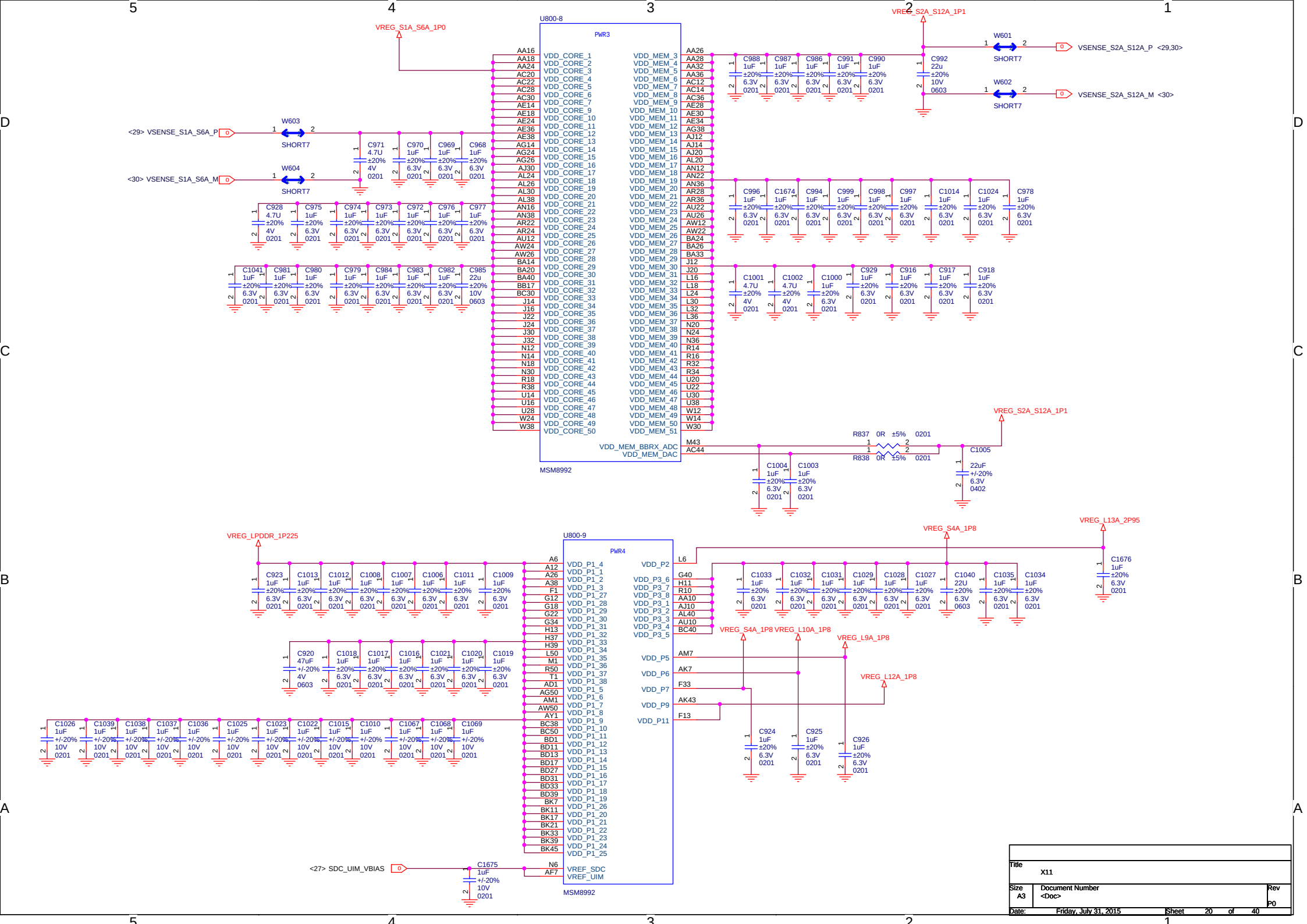
U800-8
PWR3
MSM8992
VREG_S1A_S6A_1P0
VREG_S2A_S12A_1P1
W601
SHORT7
VSENSE_S2A_S12A_P <29,30>
W602
SHORT7
VSENSE_S2A_S12A_M <30>
W603
SHORT7
<29> VSENSE_S1A_S6A_P
W604
SHORT7
<30> VSENSE_S1A_S6A_M
VDD_MEM_BBRX_ADC
VDD_MEM_DAC
R837 0R ±5% 0201
R838 0R ±5% 0201
C1005 22uF +/-20% 6.3V 0402
U800-9
PWR4
MSM8992
VREG_LPDDR_1P225
VREG_S4A_1P8
VREG_L13A_2P95
VREG_L10A_1P8
VREG_L9A_1P8
VREG_L12A_1P8
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C1675 1uF +/-20% 10V 0201
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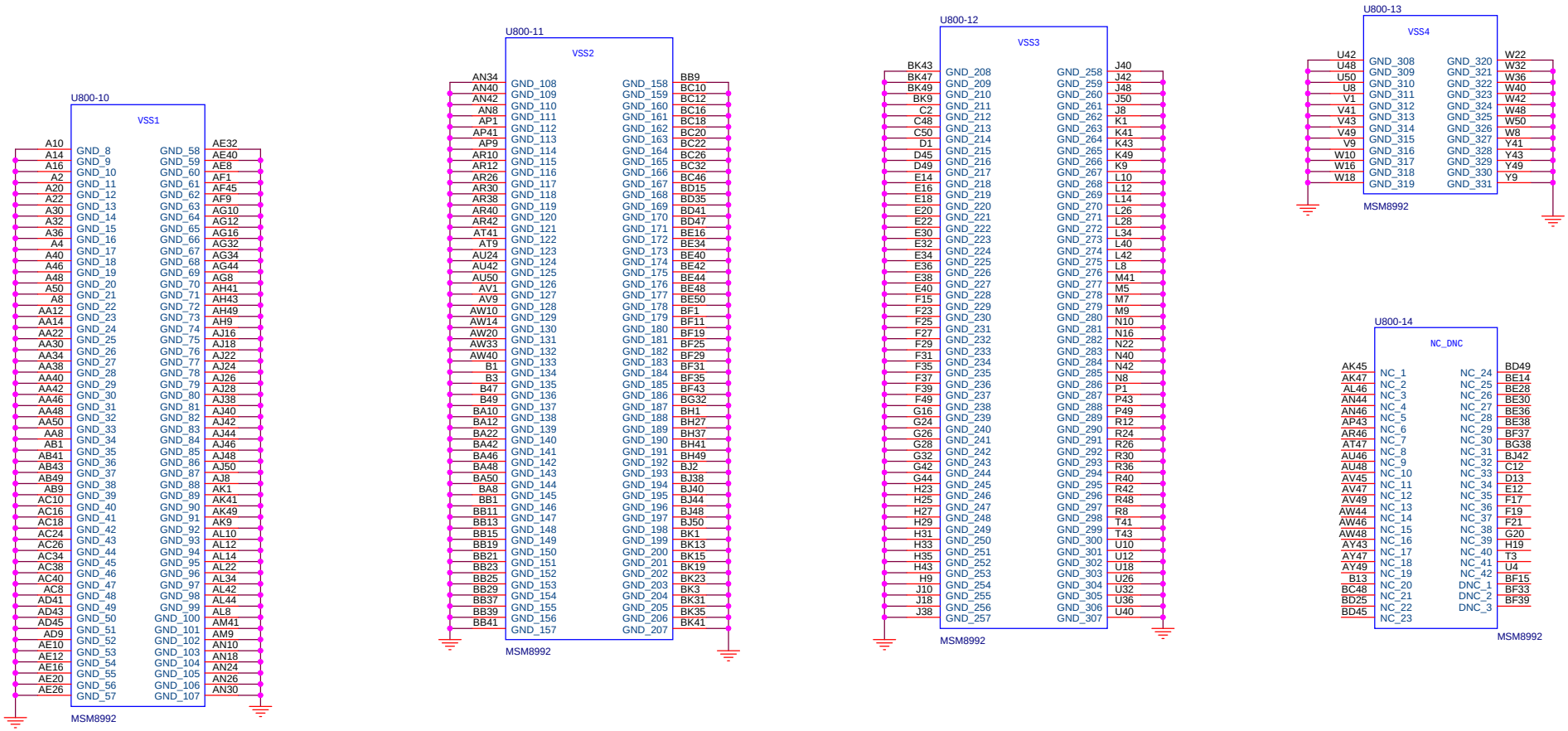

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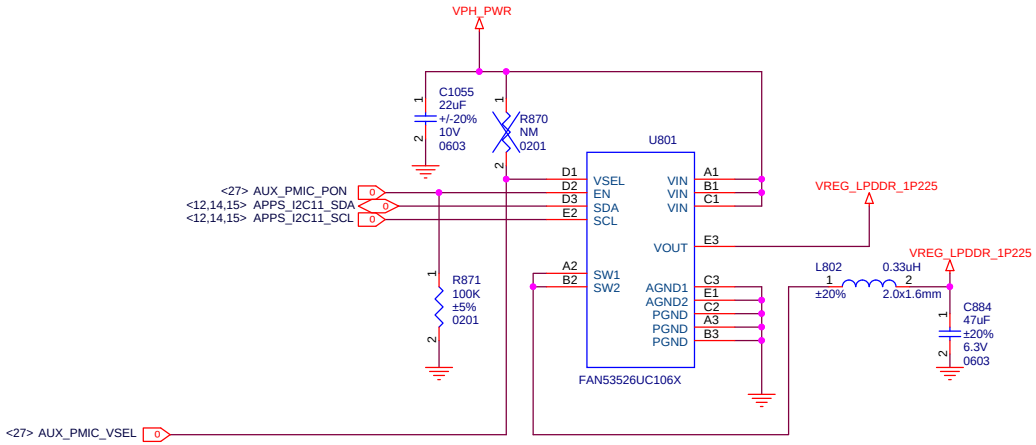

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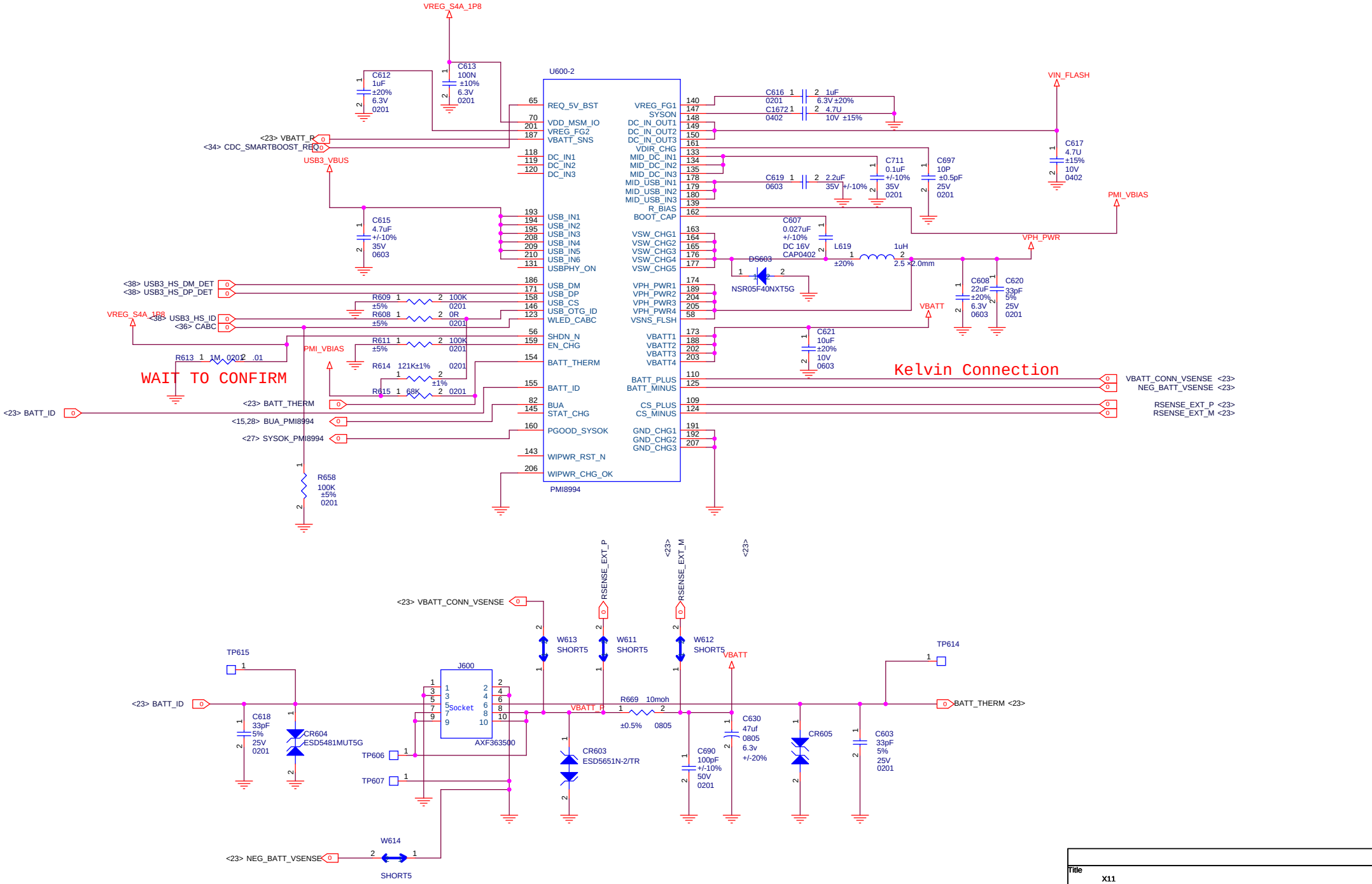

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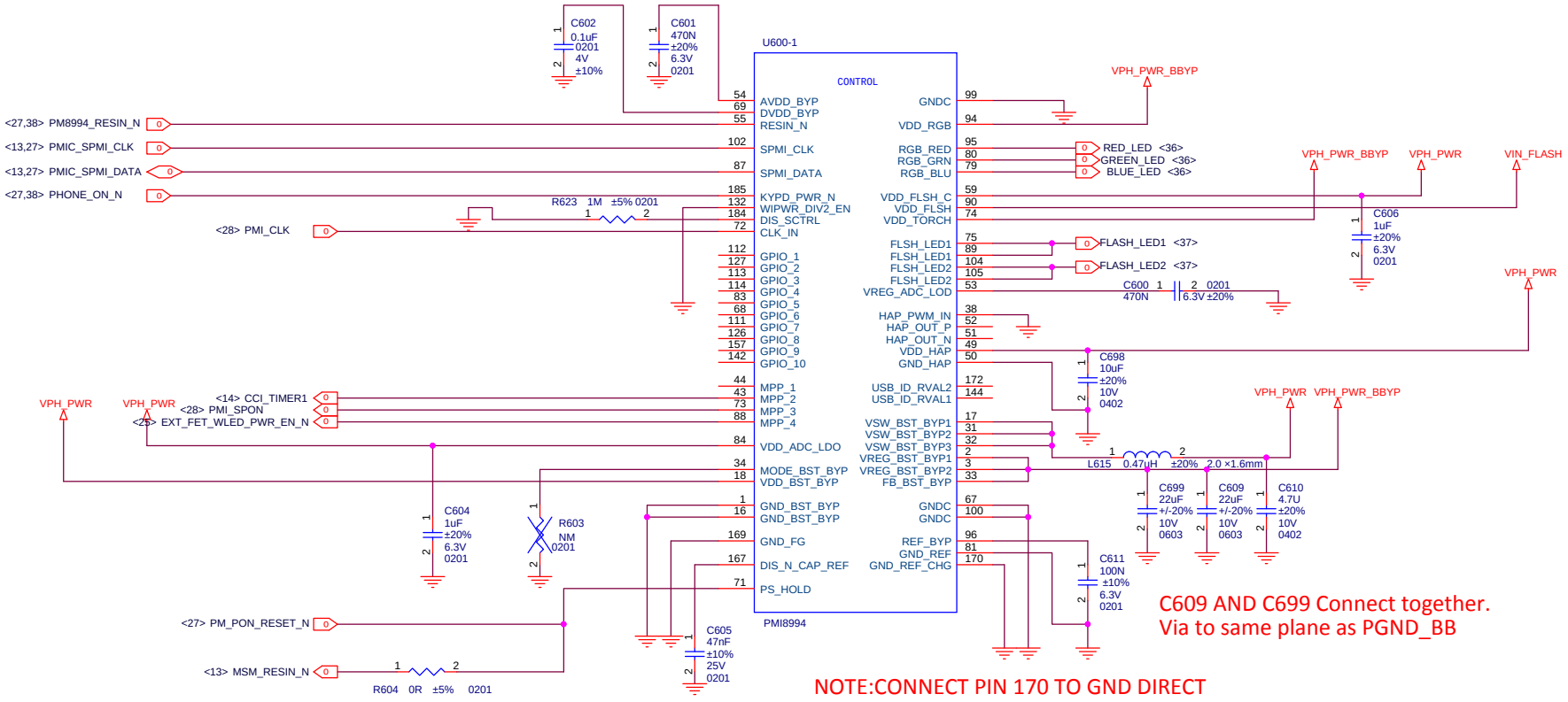

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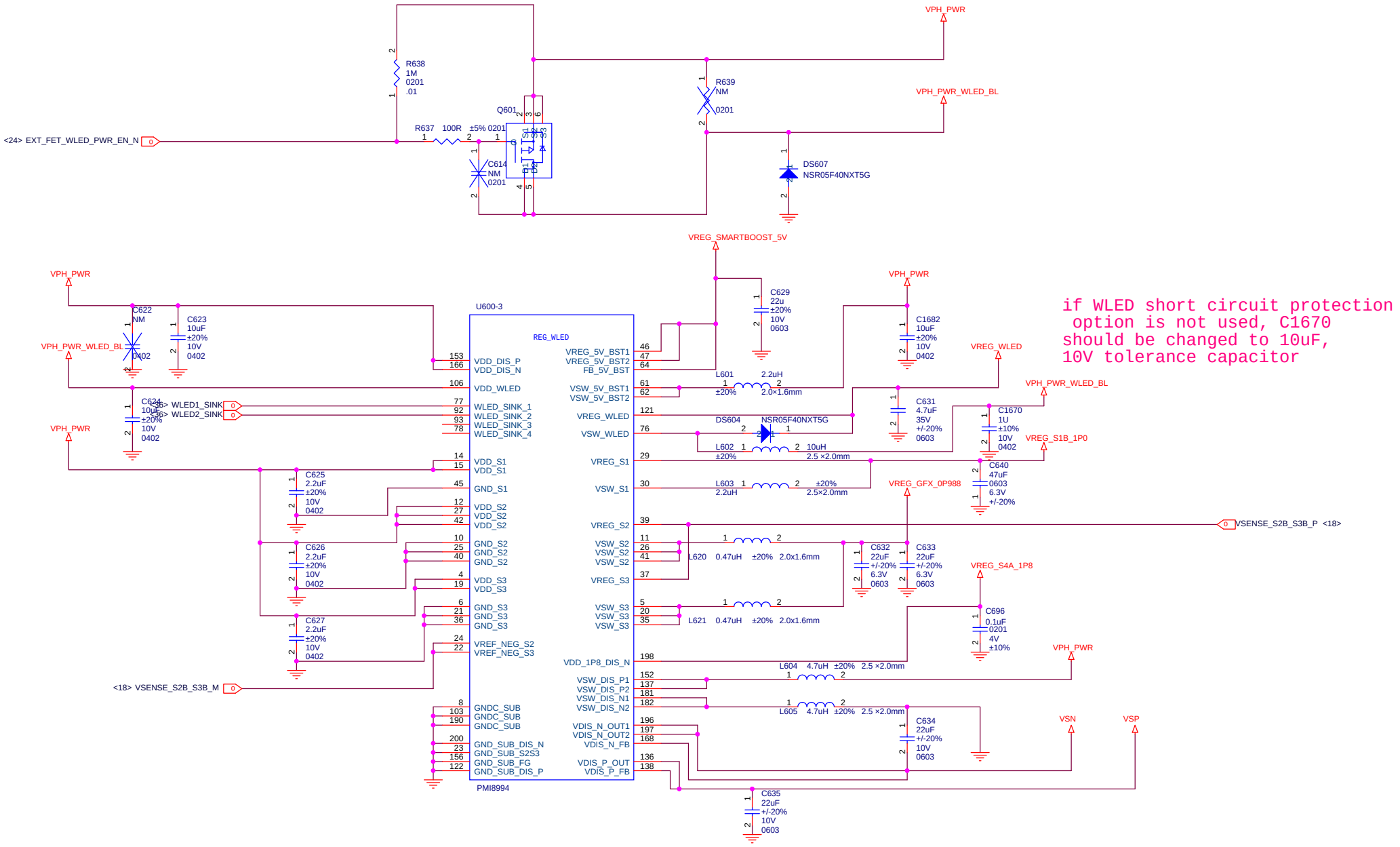

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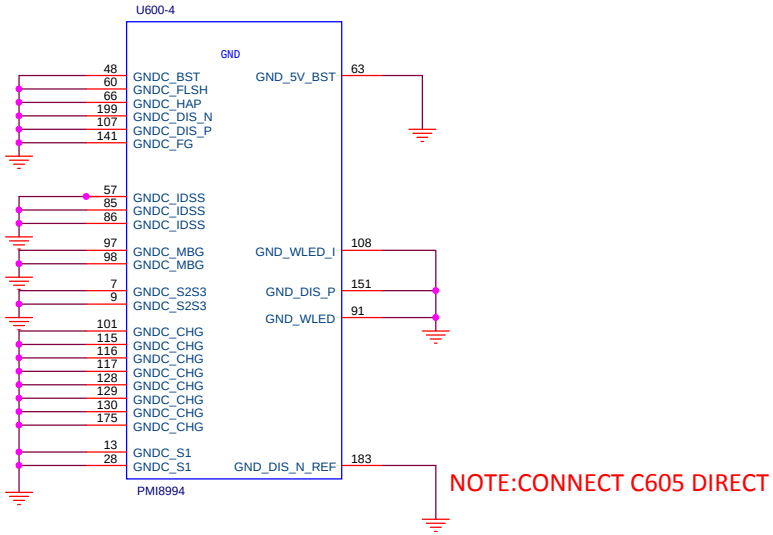

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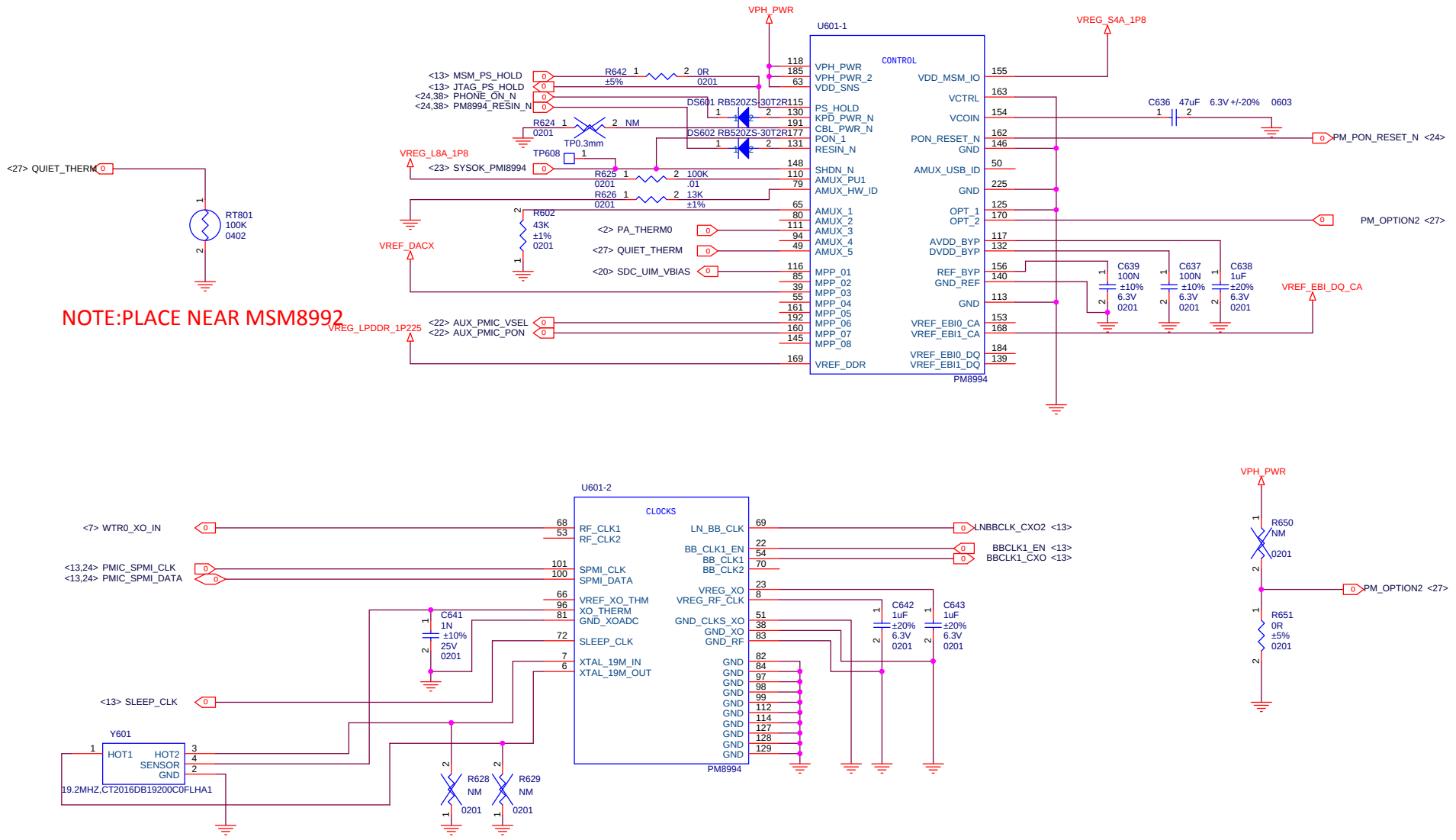

PM8941(5 OF 5) - LED&GND

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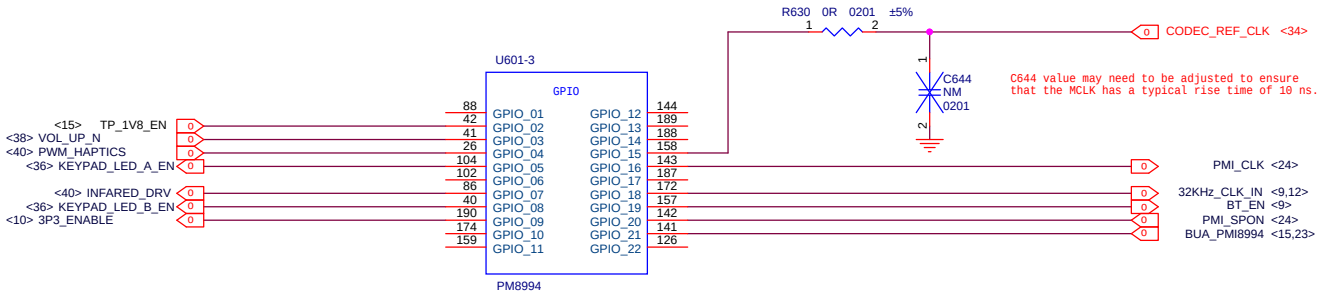

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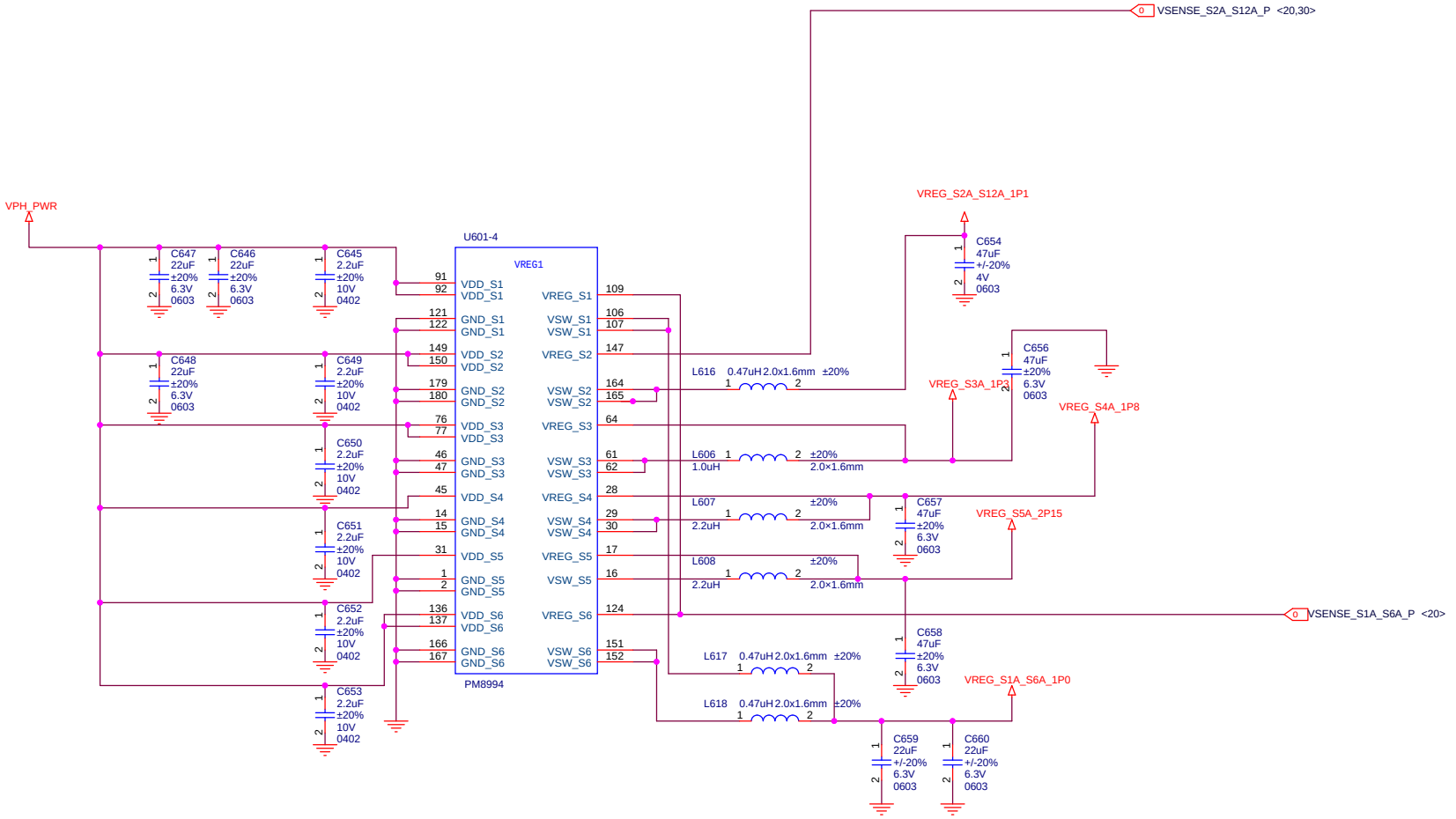

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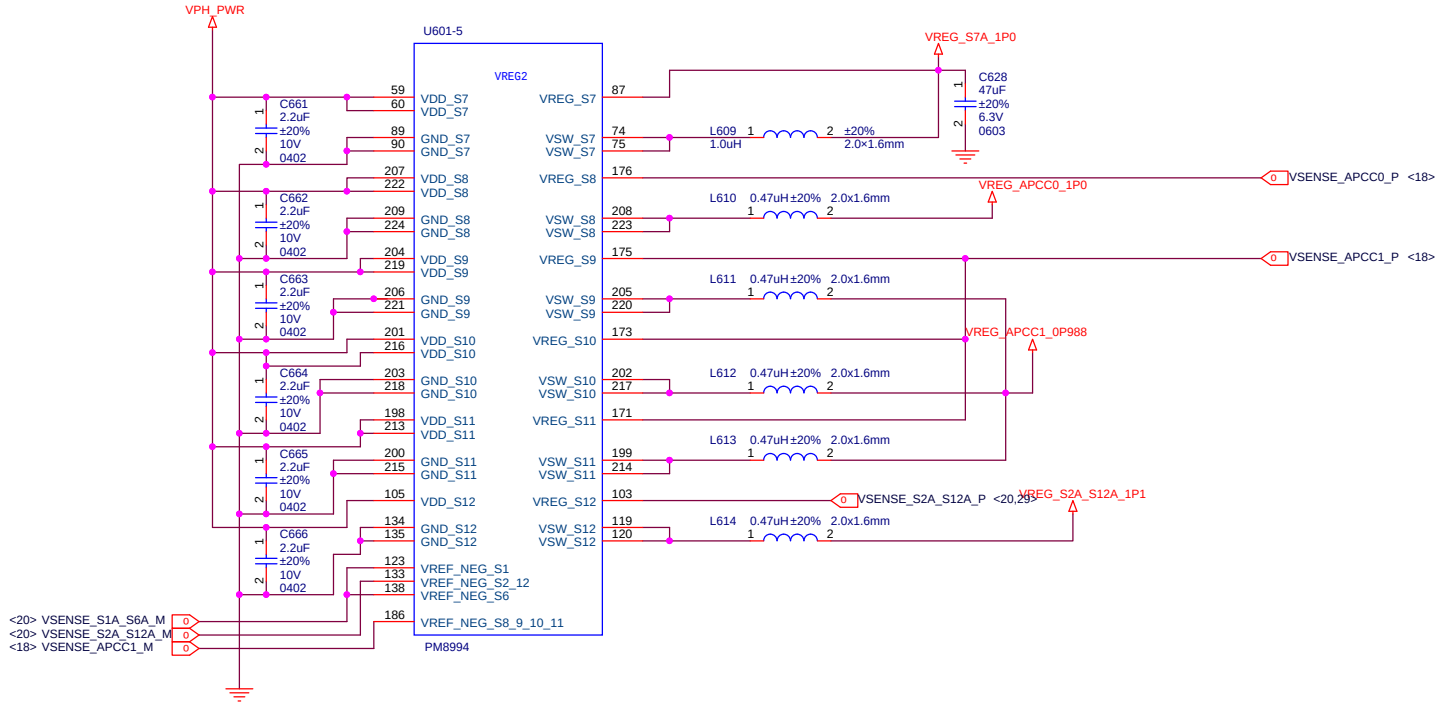

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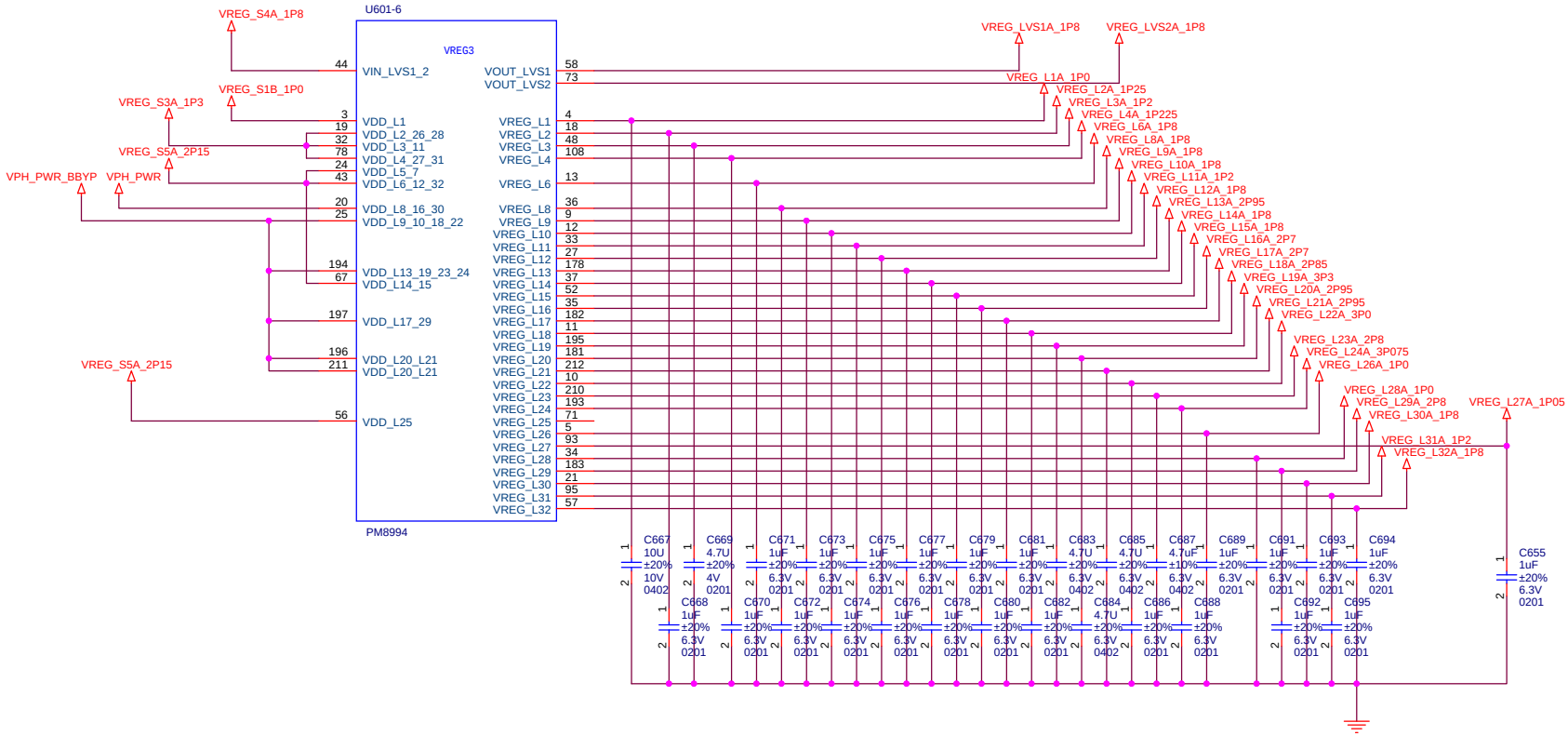

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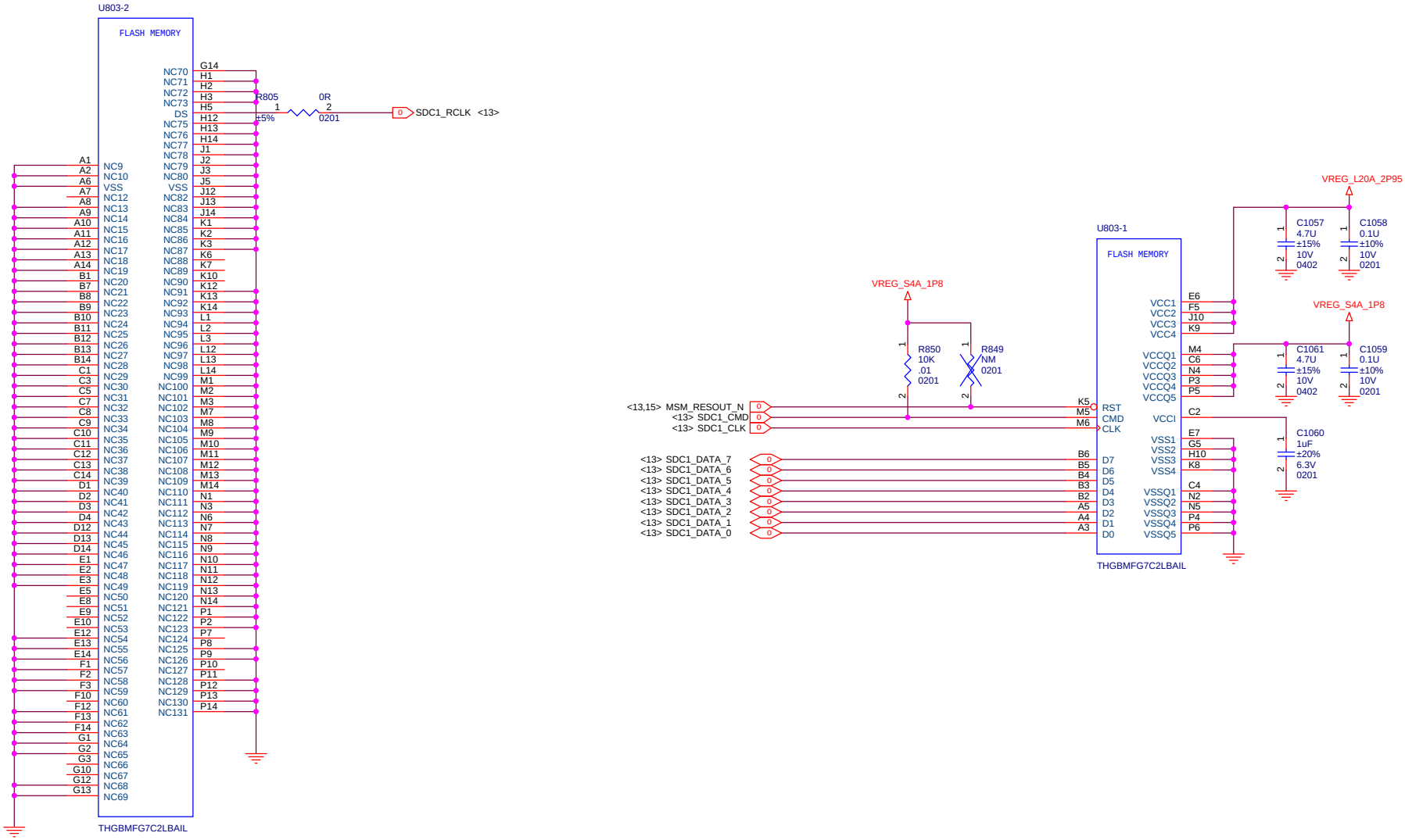

MEMORY

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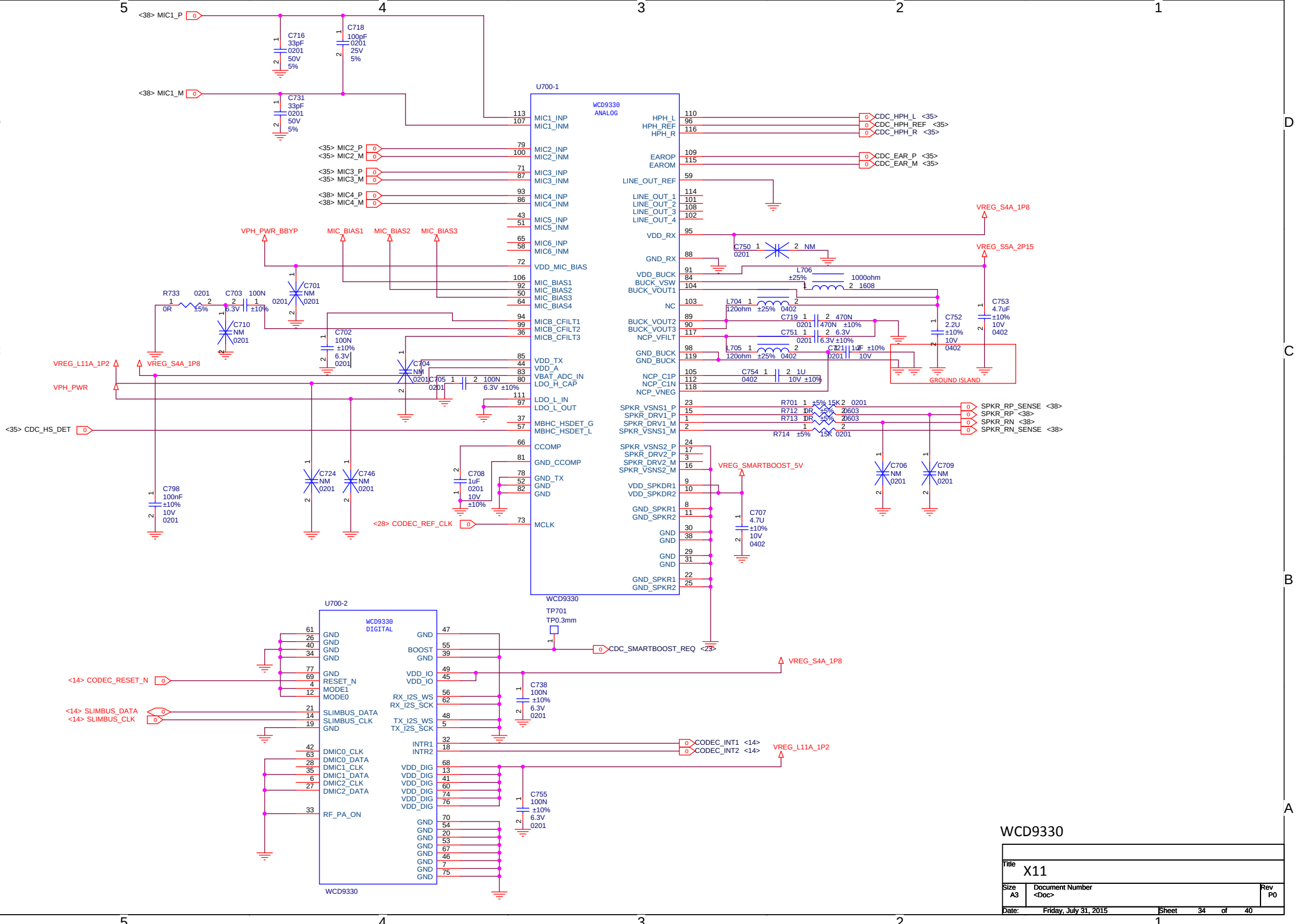

WCD9330

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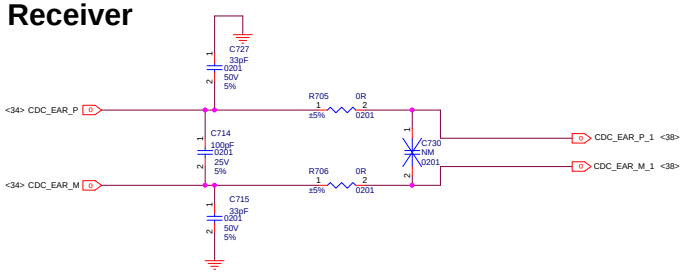
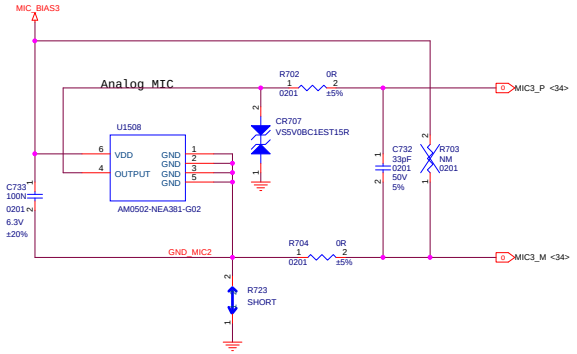
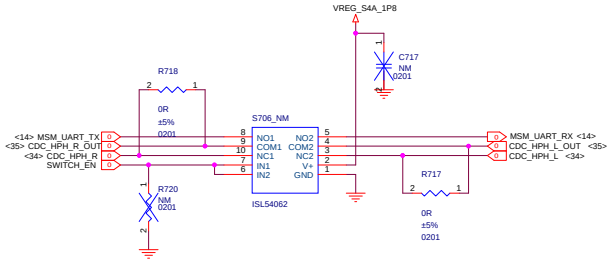
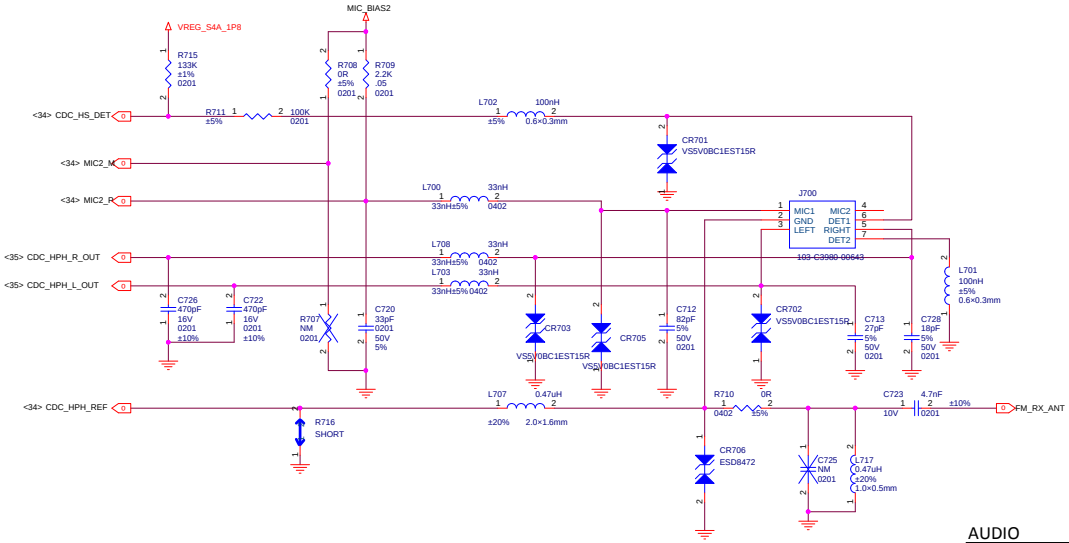
Receiver

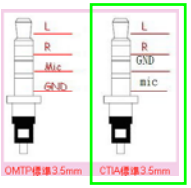




Earphone Audio







AUDIO

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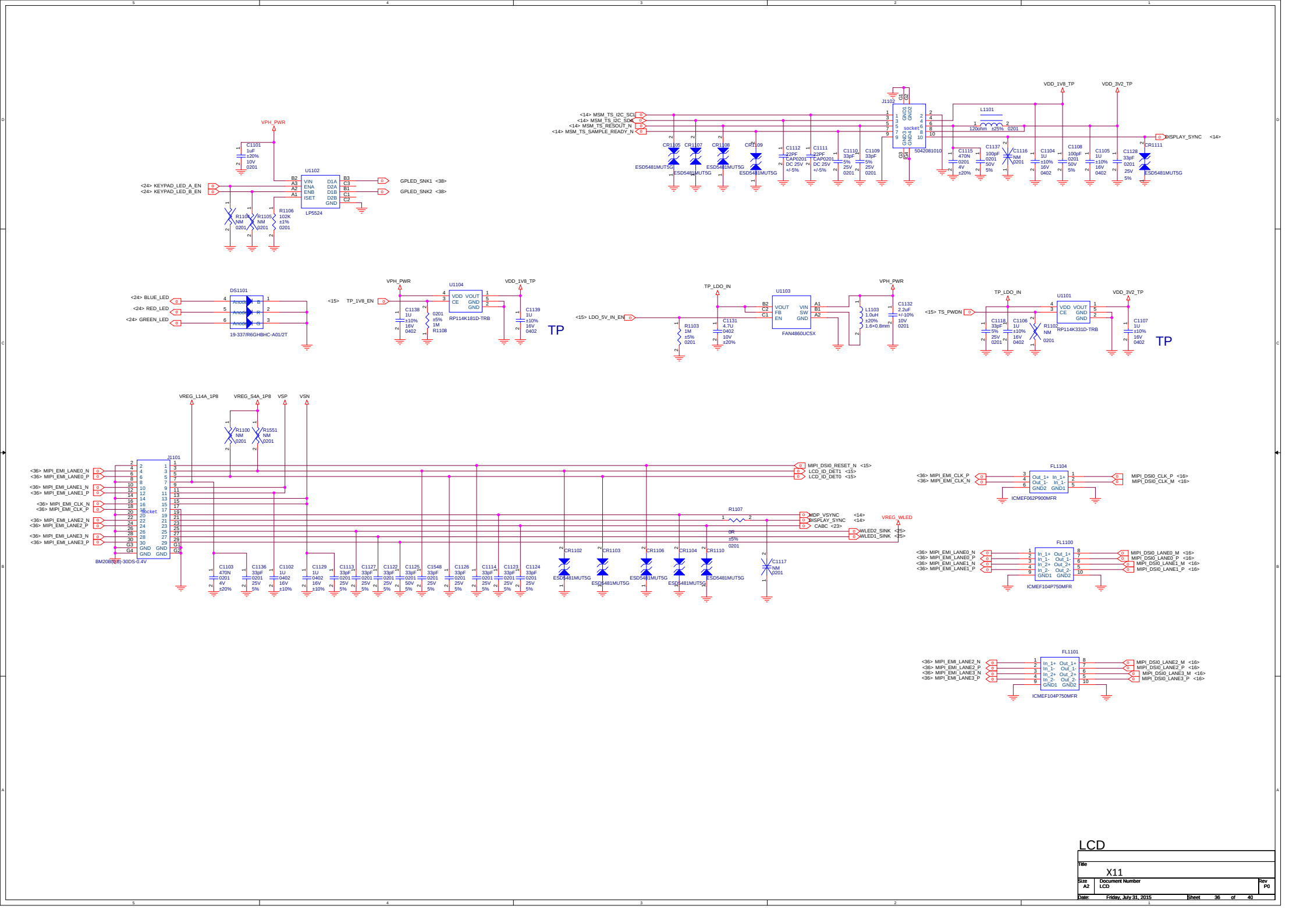

LCD

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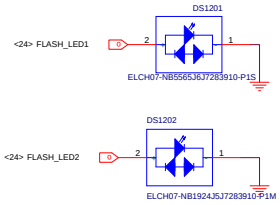
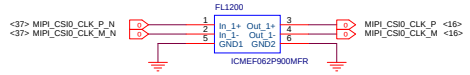
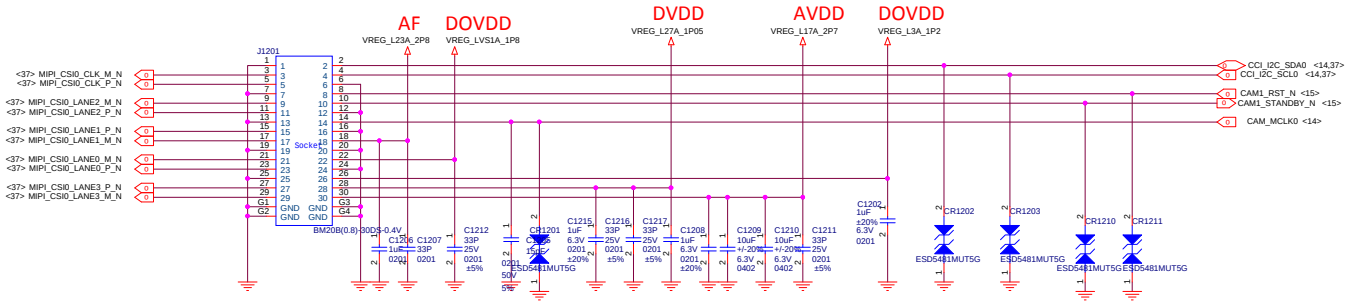
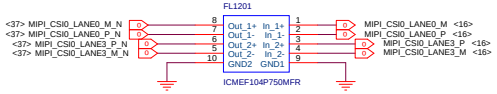
FlashLED

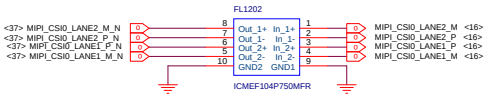




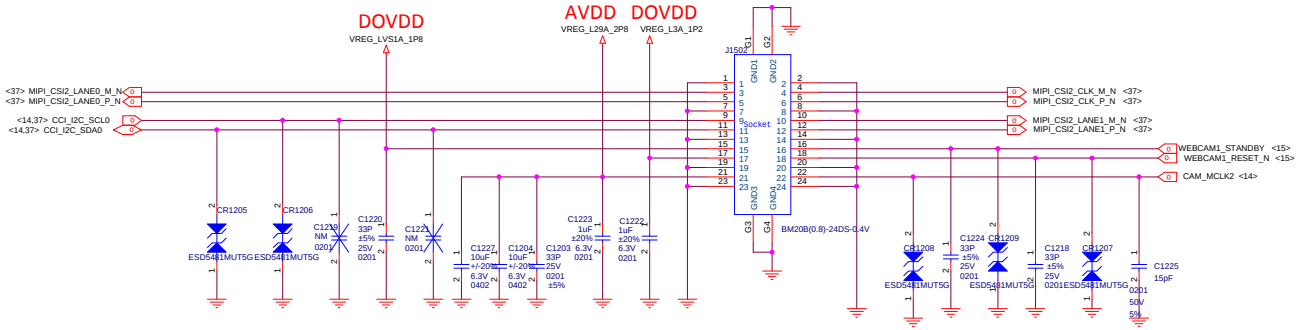
Rear Cam

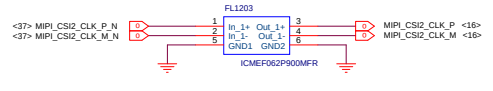


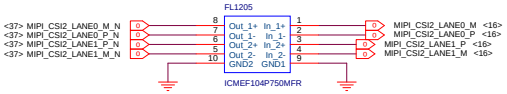




Front Cam







CAMERA

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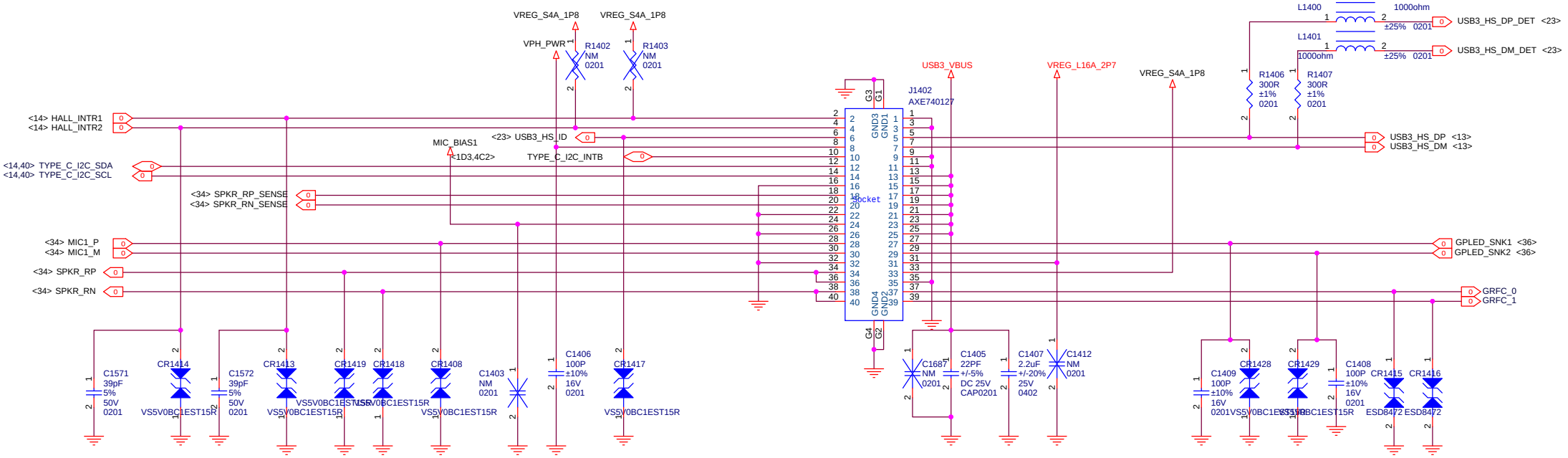
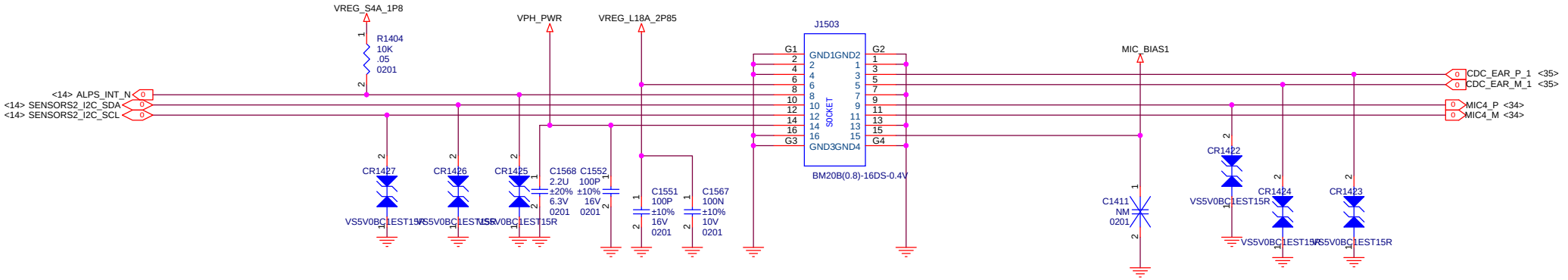
BOT CONNECTOR



RECEIVER CONNECTOR



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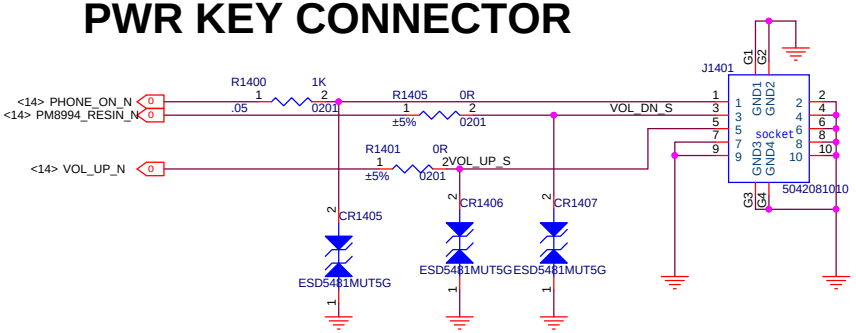

CONNECTOR

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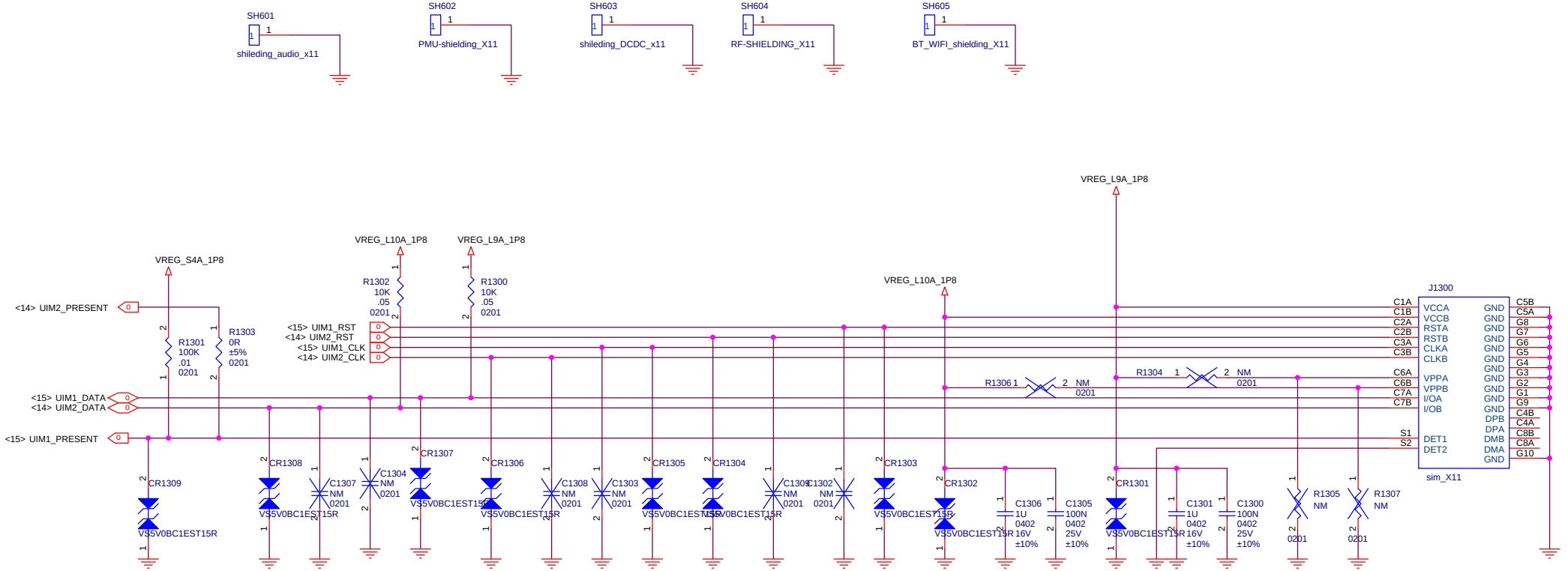

SIM CARD

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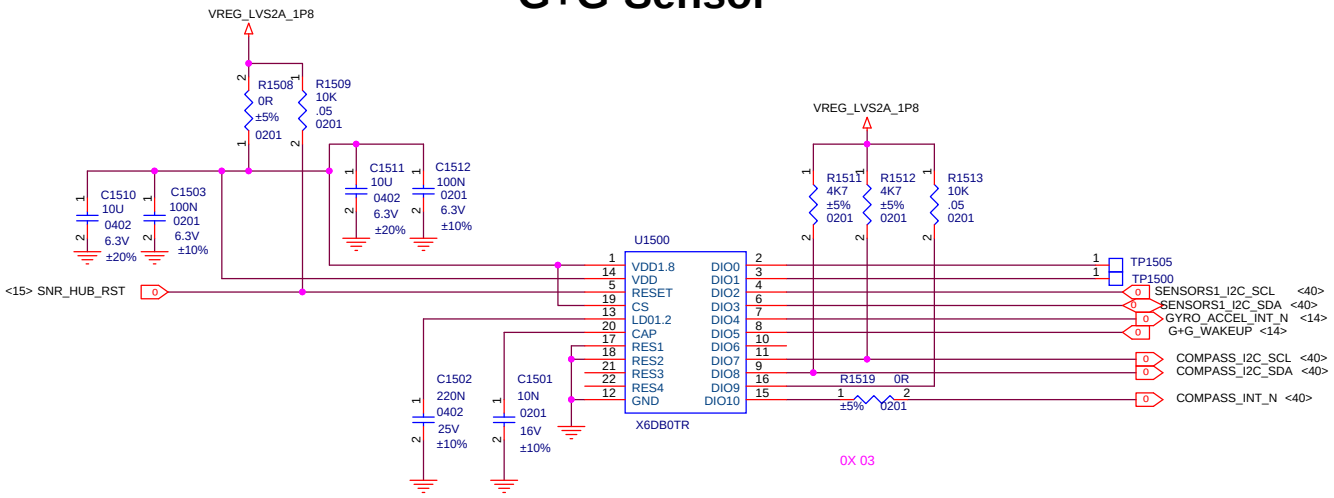
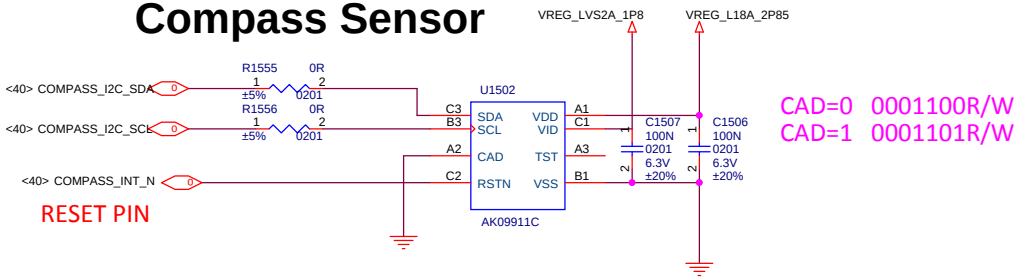
G+G-Sensor



Compass Sensor



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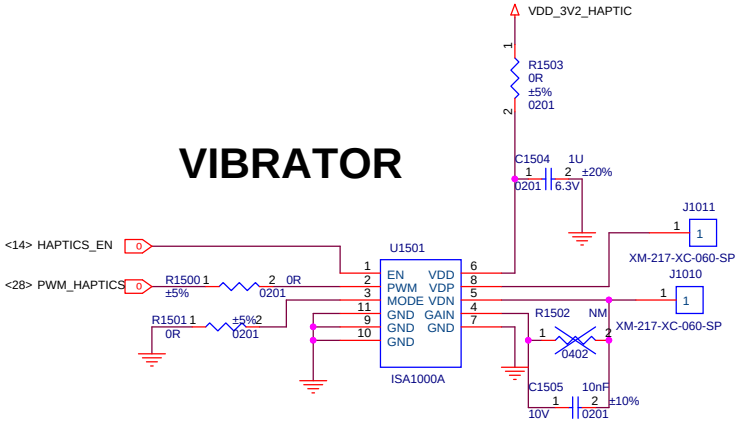
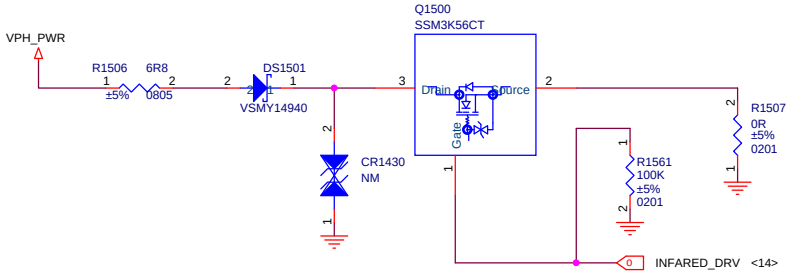
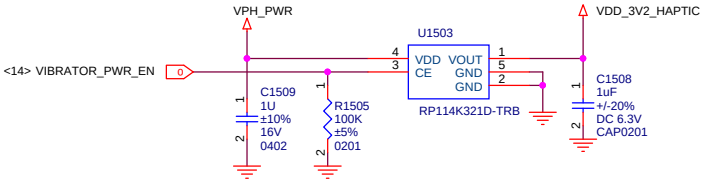
VIBRATOR







SENSOR

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