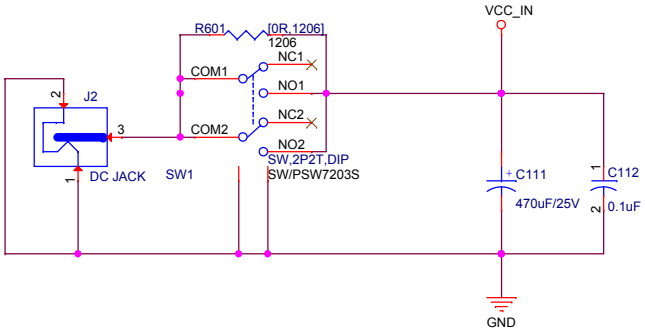
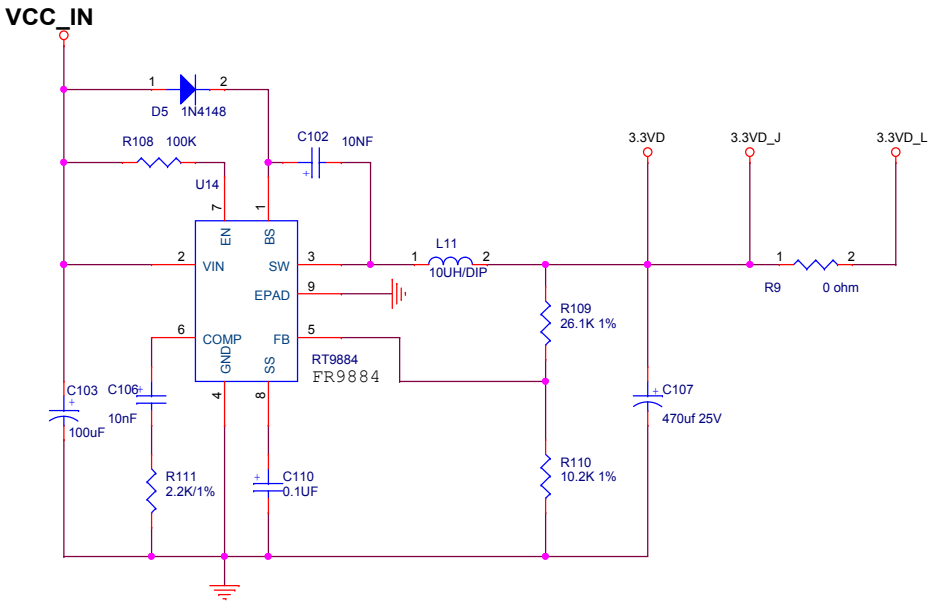
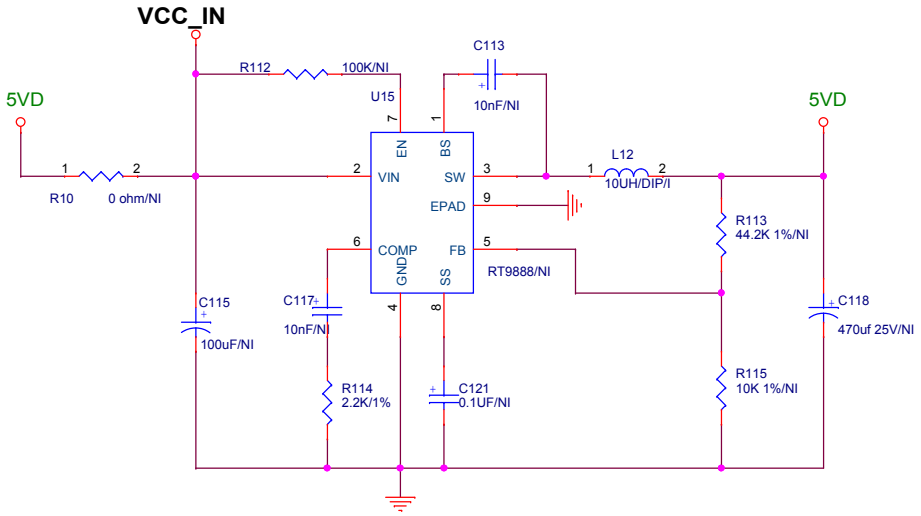
7.5V~~12V DC INPUT



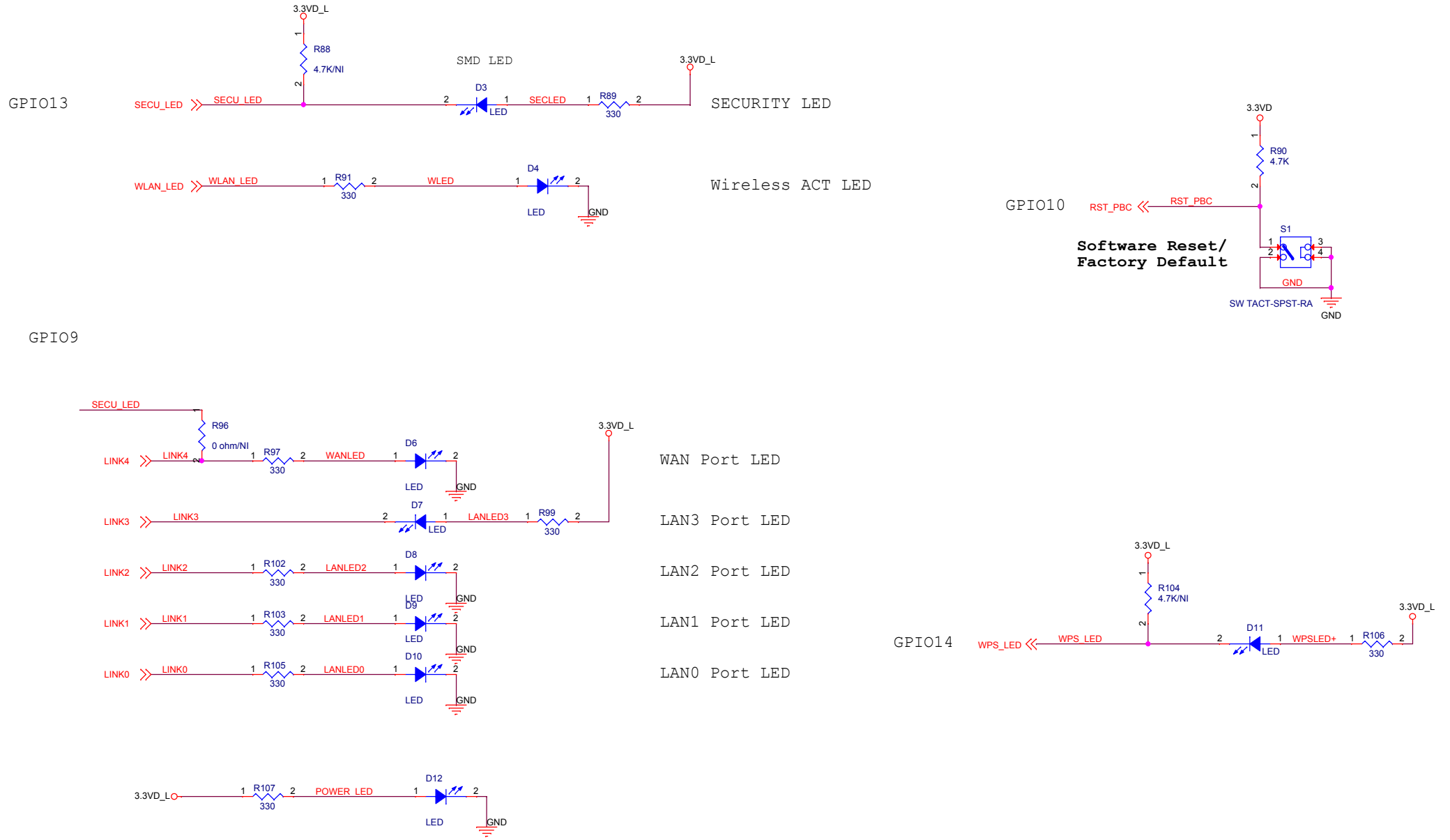
7.5V~~12V DC ADAPTER

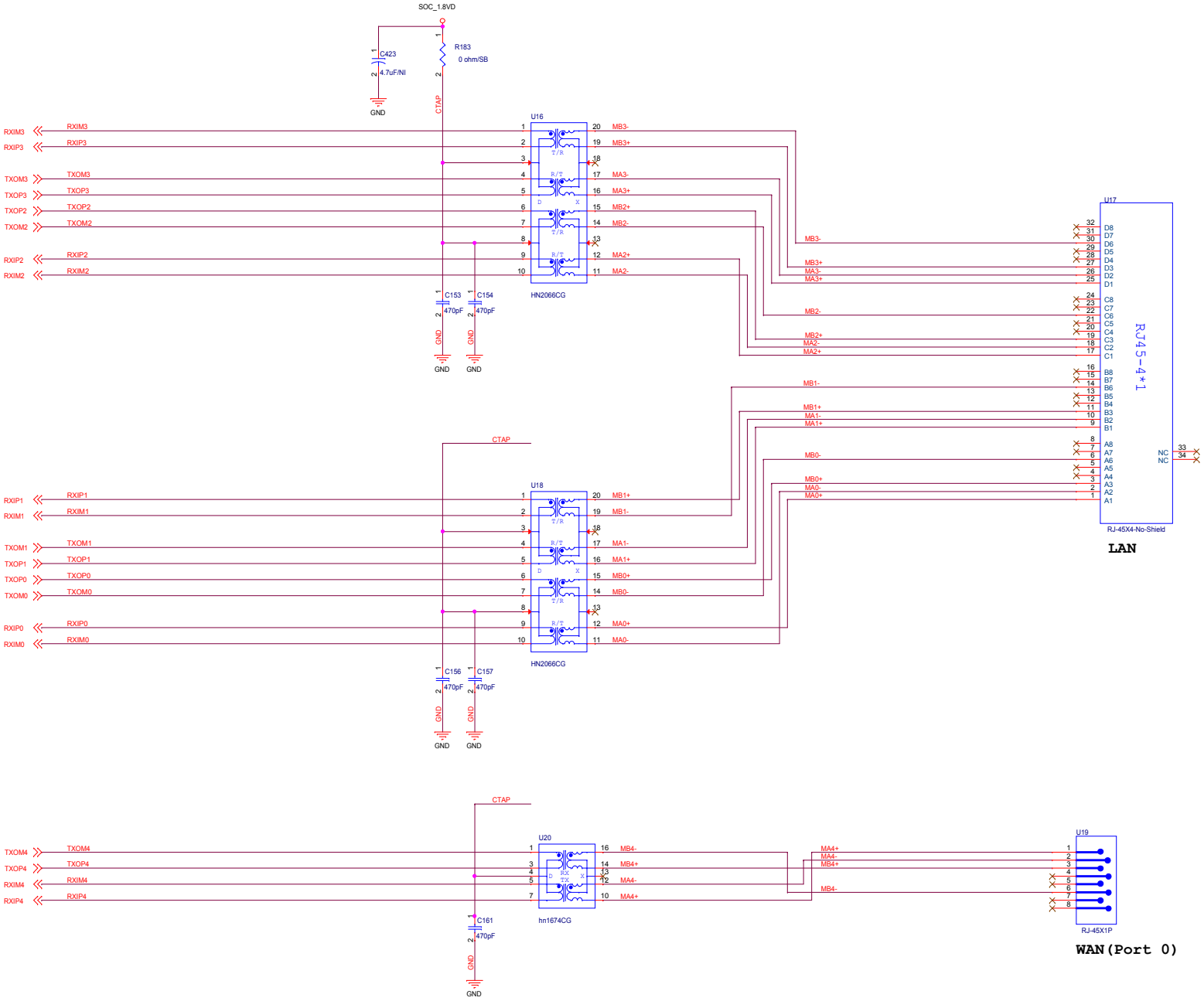


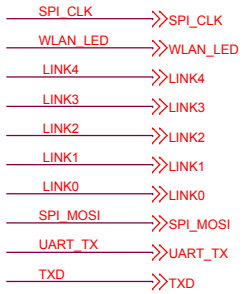
0.925V*(1+26.1/10.2)=3.3V

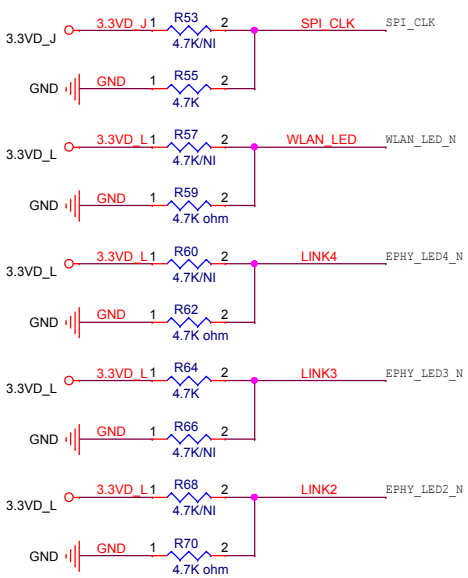


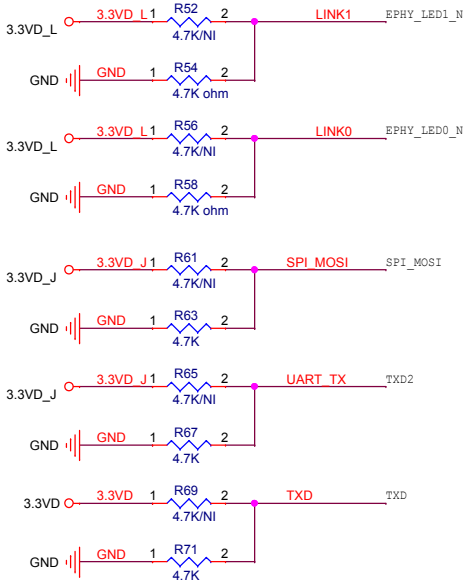
0.925V*(1+44.2/10)=5V


GPIO13
SECU_LED
SECU_LED
3.3VD_L
R88
4.7K/NI
SMD LED
D3
LED
SECLED
R89
330
3.3VD_L
SECURITY LED
WLAN_LED
WLAN_LED
R91
330
WLED
D4
LED
GND
Wireless ACT LED
GPIO10
RST_PBC
RST_PBC
3.3VD
R90
4.7K
S1
Software Reset/
Factory Default
GND
SW TACT-SPST-RA
GND
GPIO9
SECU_LED
R96
0 ohm/NI
LINK4
LINK4
R97
330
WANLED
D6
LED
GND
3.3VD_L
WAN Port LED
LINK3
LINK3
D7
LED
LANLED3
R99
330
LAN3 Port LED
LINK2
LINK2
R102
330
LANLED2
D8
LED
GND
LAN2 Port LED
LINK1
LINK1
R103
330
LANLED1
D9
LED
GND
LAN1 Port LED
LINK0
LINK0
R105
330
LANLED0
D10
LED
GND
LAN0 Port LED
3.3VD_L
R107
330
POWER_LED
D12
LED
GND
GPIO14
WPS_LED
WPS_LED
3.3VD_L
R104
4.7K/NI
D11
LED
WPSLED+
R106
330
3.3VD_L


SOC_1.8VD
R183
0 ohm/SB
C423
4.7uF/NI
GND
CTAP
U16
HN2066CG
C153
C154
470pF
RXIM3
RXIP3
TXOM3
TXOP3
TXOP2
TXOM2
RXIP2
RXIM2
MB3-
MB3+
MA3-
MA3+
MB2-
MB2+
MA2-
MA2+
U17
RJ45-4*1
RJ-45X4-No-Shield
LAN
MB1-
MB1+
MA1-
MA1+
MB0-
MB0+
MA0-
MA0+
NC
U18
HN2066CG
C156
C157
RXIP1
RXIM1
TXOM1
TXOP1
TXOP0
TXOM0
RXIP0
RXIM0
U20
hn1674CG
C161
TXOM4
TXOP4
RXIM4
RXIP4
MB4-
MB4+
MA4-
MA4+
U19
RJ-45X1P
WAN(Port 0)

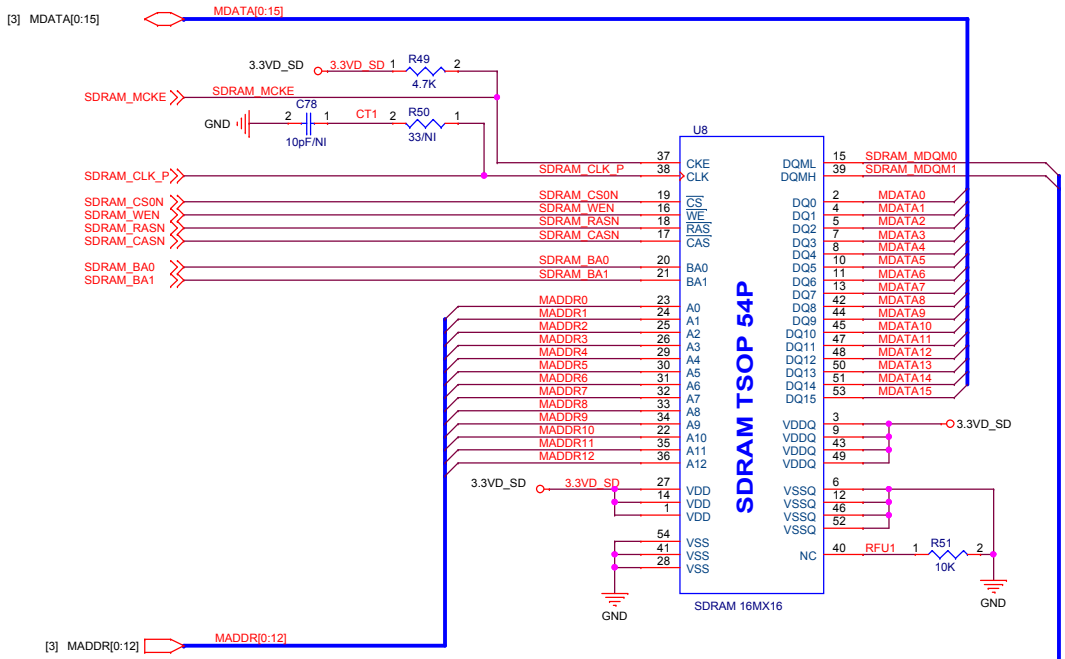


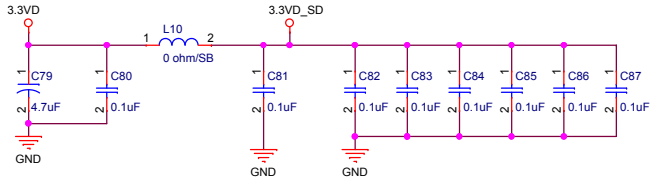


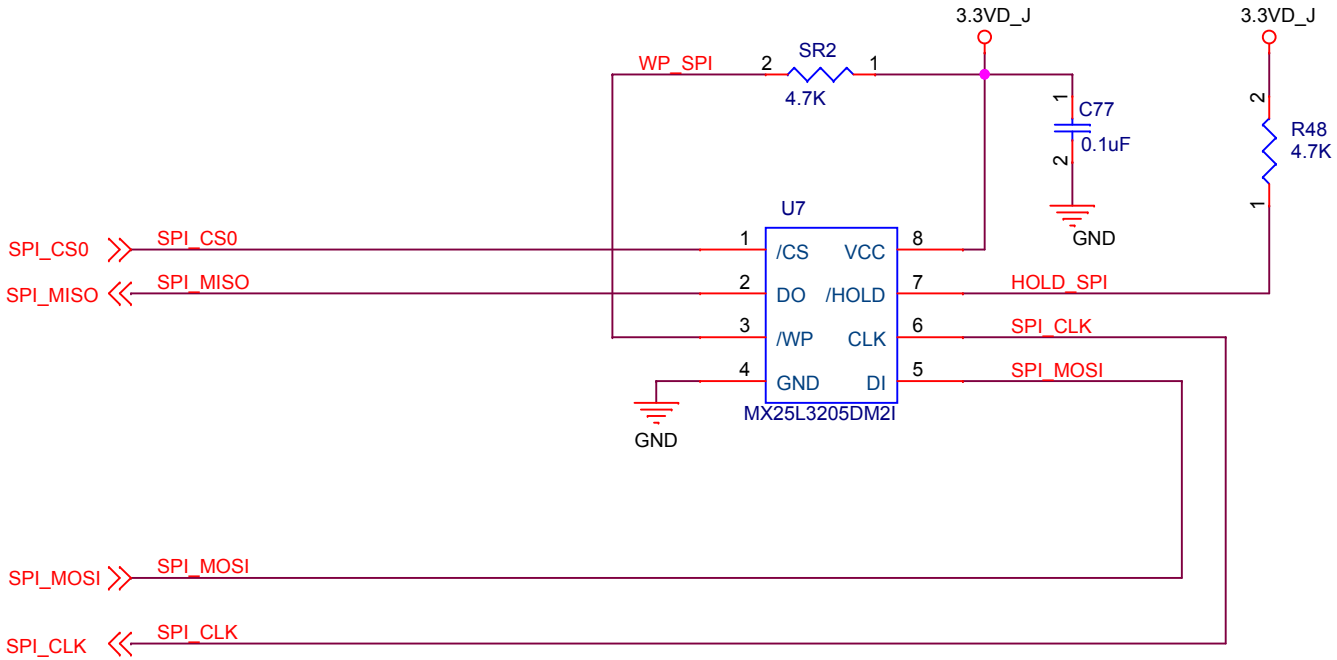


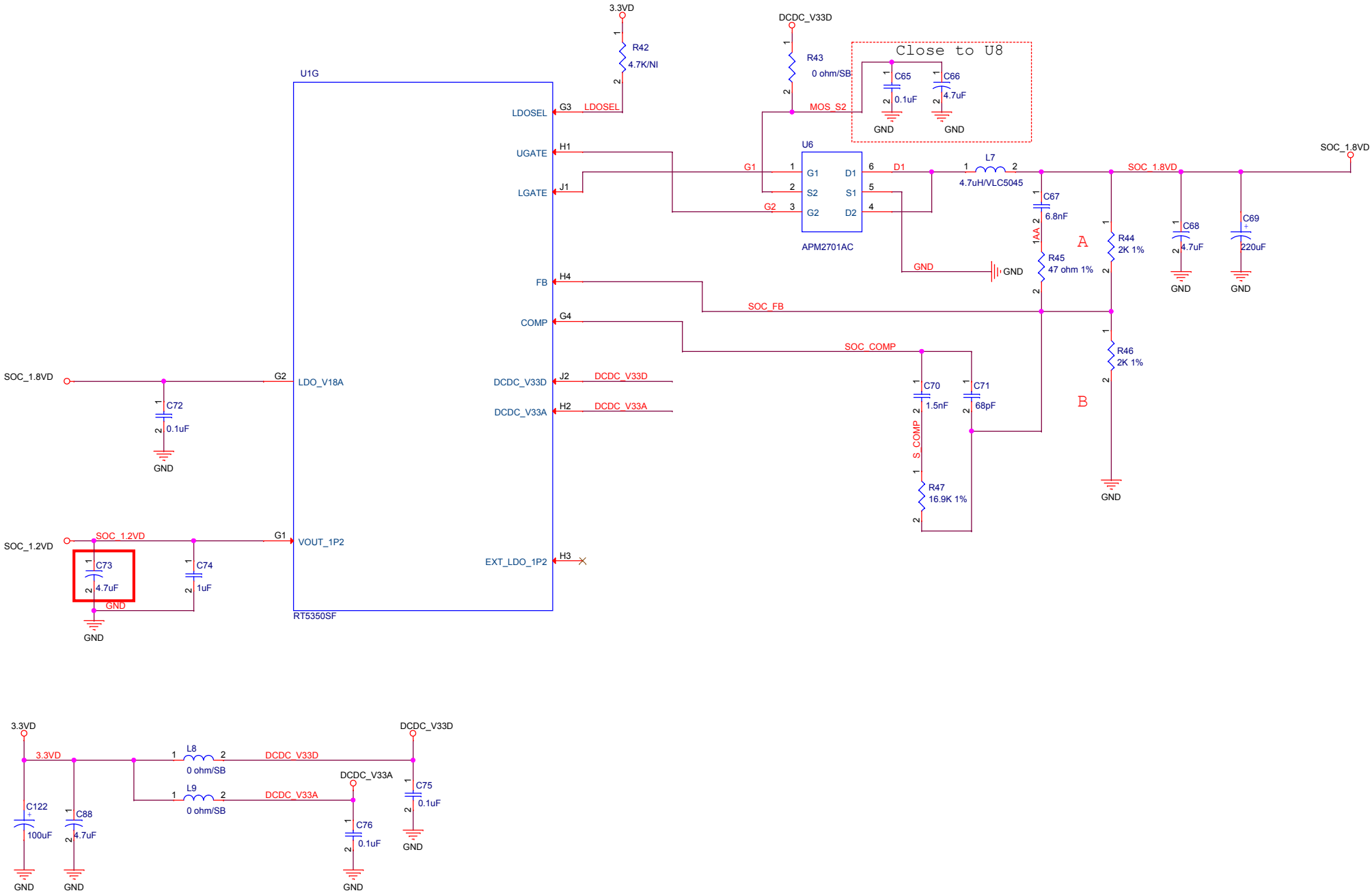
RT5350 Boot Up Strapping

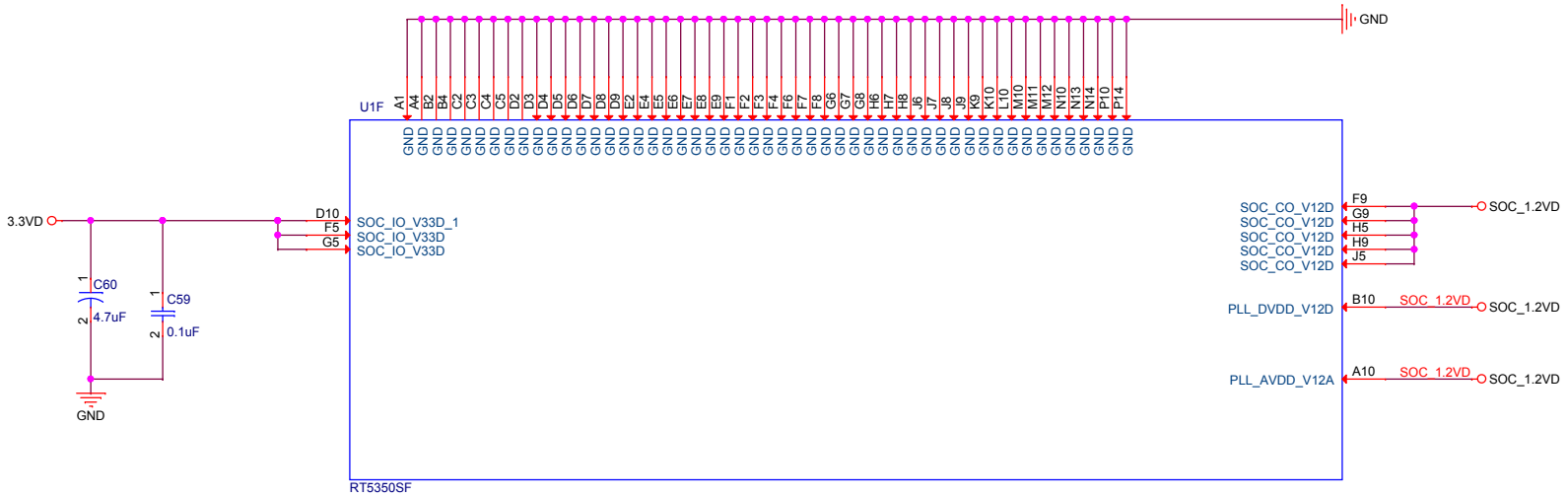
Pin Name	Description	Value=0	Value=1
SPI_CLK	XTAL_FREQ _HI	20MHz	40MHz
WLAN_LED_N	Big Endian	Little Endian	Big Endian
EPHY_LED4_N	DRAM_FROM _EE	from boot strapping	from EEPROM
{EPHY_LED3_N, EPHT_LED2_N}	DRAM_SIZE	INIC/AP(SDR) 0: 2MB/8MB 1: 8MB/16MB 2: 16MB/32MB 3: 32MB/64MB	
{EPHY_LED1_N, EPHT_LED0_N}	CPU_CLK _SEL	CPU clock select 0: 360MHz 1: Reserved 2: 320MHz 3: 300MHz	
{SPI_MOSI, TXD2, TXD}	CHIP MODE[2:0]	A vector to set chip function/test/debug modes 0 : Normal mode(boot fromSPI serial flash) 1 : iNIC-USB mode 2 : Reserved 3 : Reserved 4 : Reserved 5 : iNIC-PHY mode 6 : SCAN mode 7 : TEST/DEBUG mode	

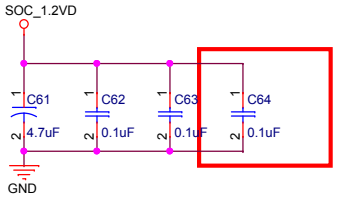

[3] MDATA[0:15]
MDATA[0:15]
3.3VD_SD
3.3VD_SD
R49
4.7K
SDRAM_MCKE
SDRAM_MCKE
C78
GND
10pF/NI
CT1
R50
33/NI
U8
SDRAM_CLK_P
SDRAM_CLK_P
SDRAM_CS0N
SDRAM_WEN
SDRAM_RASN
SDRAM_CASN
SDRAM_BA0
SDRAM_BA1
MADDR0
MADDR1
MADDR2
MADDR3
MADDR4
MADDR5
MADDR6
MADDR7
MADDR8
MADDR9
MADDR10
MADDR11
MADDR12
SDRAM TSOP 54P
SDRAM_MDQM0
SDRAM_MDQM1
MDATA0
MDATA1
MDATA2
MDATA3
MDATA4
MDATA5
MDATA6
MDATA7
MDATA8
MDATA9
MDATA10
MDATA11
MDATA12
MDATA13
MDATA14
MDATA15
3.3VD_SD
RFU1
R51
10K
GND
SDRAM 16MX16
[3] MADDR[0:12]
MADDR[0:12]
[3] SDRAM_MDQM[0:1]
SDRAM_MDQM[0:1]

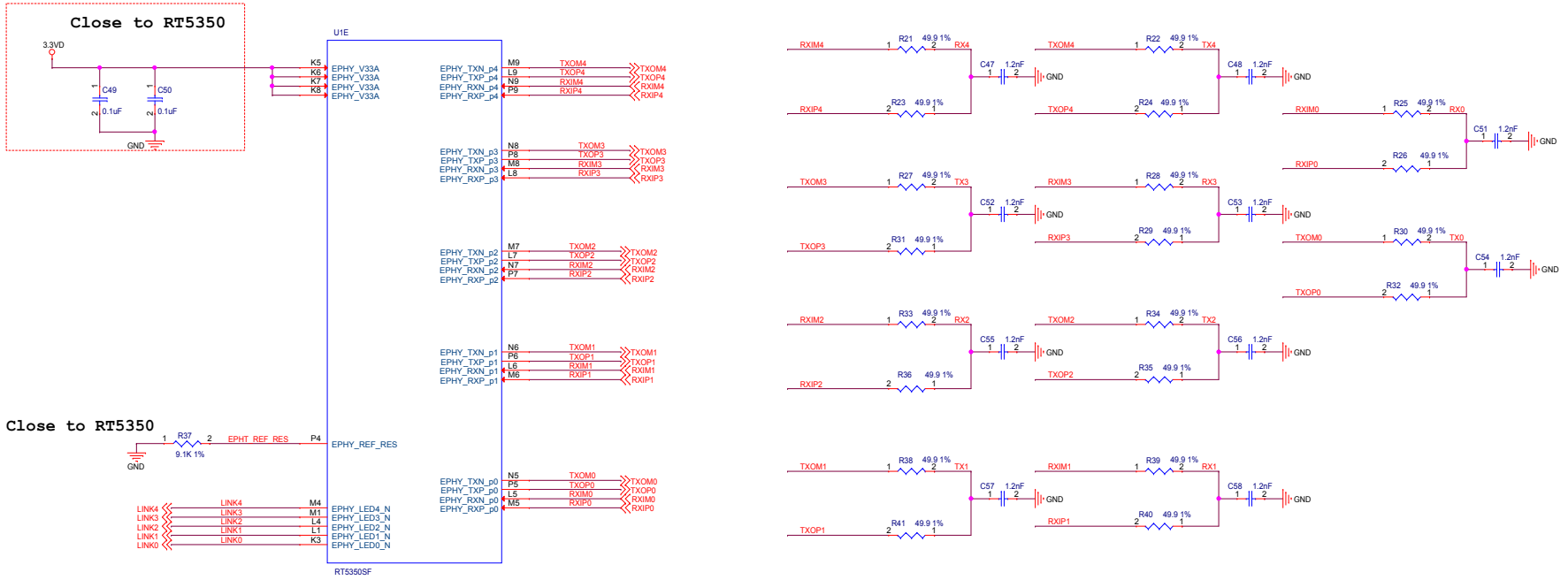

3.3VD
3.3VD_SD
L10
0 ohm/SB
C79
4.7uF
C80
0.1uF
C81
0.1uF
C82
0.1uF
C83
0.1uF
C84
0.1uF
C85
0.1uF
C86
0.1uF
C87
0.1uF
GND
GND
GND


3.3VD_J
3.3VD_J
WP_SPI
2
SR2
1
4.7K
1
C77
2
0.1uF
GND
2
R48
4.7K
1
U7
SPI_CS0
SPI_CS0
1
/CS
VCC
8
SPI_MISO
SPI_MISO
2
DO
/HOLD
7
HOLD_SPI
3
/WP
CLK
6
SPI_CLK
4
GND
DI
5
SPI_MOSI
GND
MX25L3205DM2I
SPI_MOSI
SPI_MOSI
SPI_CLK
SPI_CLK

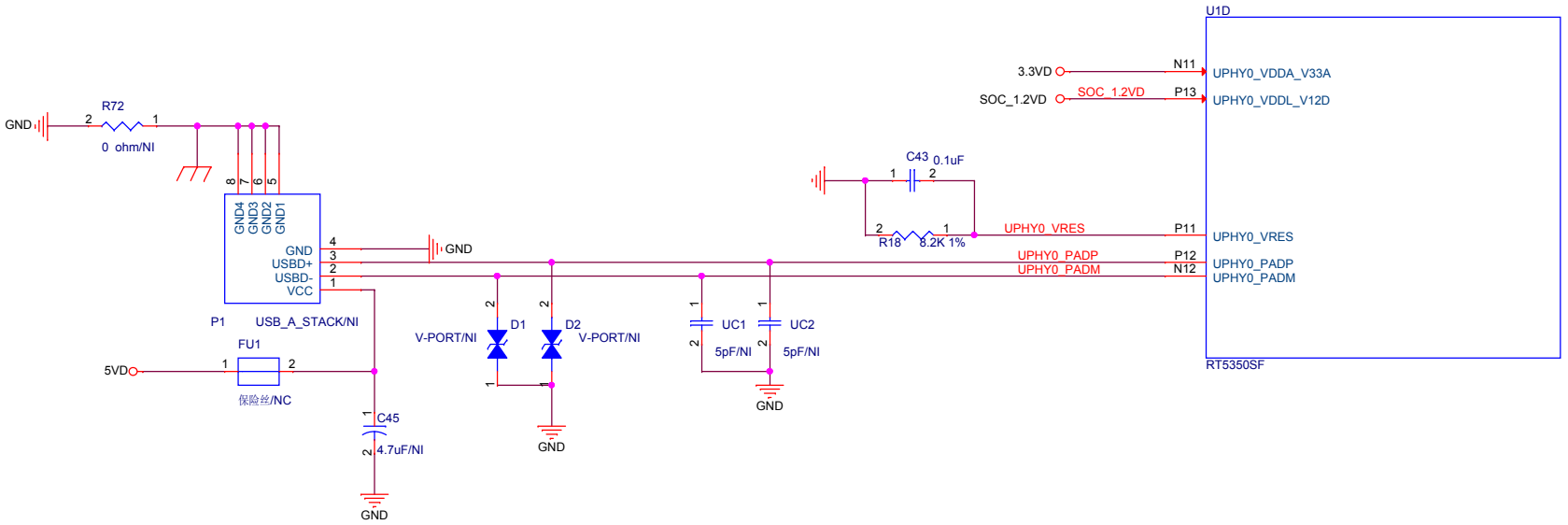

3.3VD
R42
4.7K/NI
U1G
LDOSEL
G3
LDOSEL
UGATE
H1
LGATE
J1
FB
H4
COMP
G4
DCDC_V33D
J2
DCDC_V33D
DCDC_V33A
H2
DCDC_V33A
EXT_LDO_1P2
H3
RT5350SF
DCDC_V33D
R43
0 ohm/SB
MOS_S2
Close to U8
C65
0.1uF
C66
4.7uF
GND
U6
G1
D1
S2
S1
G2
D2
APM2701AC
L7
4.7uH/VLC5045
SOC_1.8VD
C67
6.8nF
R45
47 ohm 1%
R44
2K 1%
C68
4.7uF
C69
220uF
SOC_FB
R46
2K 1%
SOC_COMP
C70
1.5nF
C71
68pF
S_COMP
R47
16.9K 1%
A
B
SOC_1.8VD
LDO_V18A
C72
0.1uF
SOC_1.2VD
VOUT_1P2
C73
4.7uF
C74
1uF
3.3VD
L8
0 ohm/SB
DCDC_V33D
L9
0 ohm/SB
DCDC_V33A
C122
100uF
C88
4.7uF
C75
0.1uF
C76
0.1uF

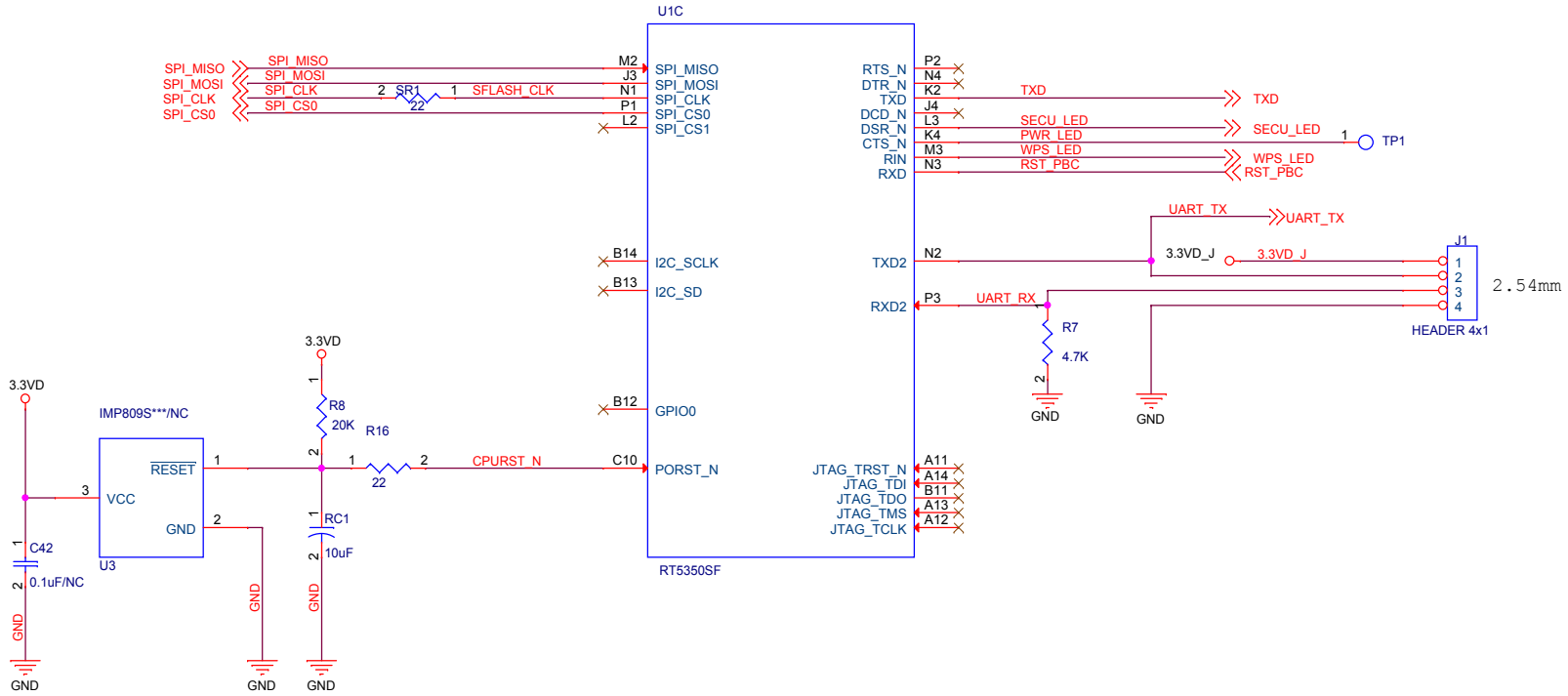

U1F
GND
3.3VD
C60
4.7uF
C59
0.1uF
GND
D10
F5
G5
SOC_IO_V33D_1
SOC_IO_V33D
SOC_IO_V33D
SOC_CO_V12D
SOC_CO_V12D
SOC_CO_V12D
SOC_CO_V12D
SOC_CO_V12D
F9
G9
H5
H9
J5
SOC_1.2VD
PLL_DVDD_V12D
B10
SOC_1.2VD
SOC_1.2VD
PLL_AVDD_V12A
A10
SOC_1.2VD
SOC_1.2VD
RT5350SF

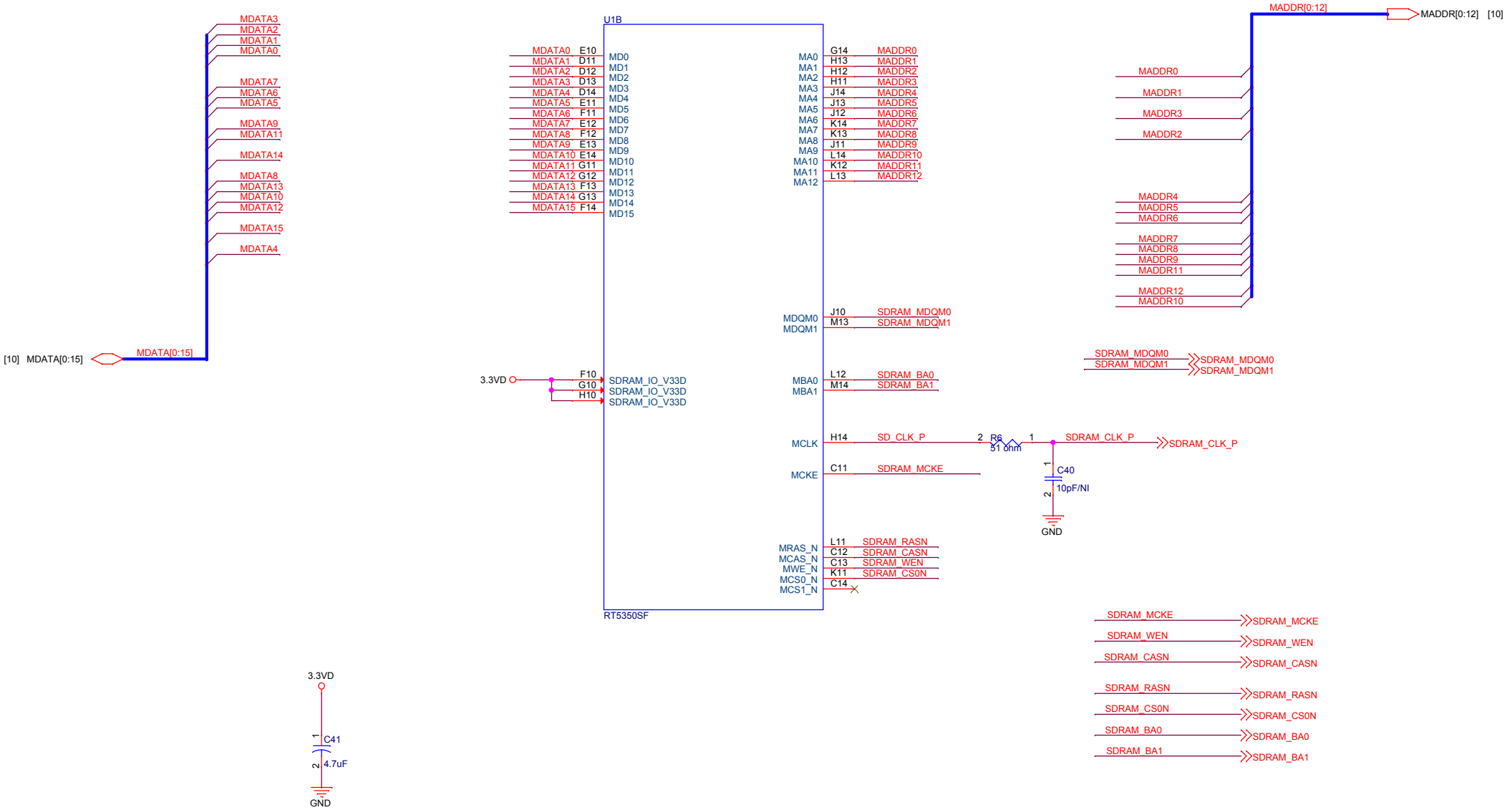

SOC_1.2VD
C61
4.7uF
C62
0.1uF
C63
0.1uF
C64
0.1uF
GND

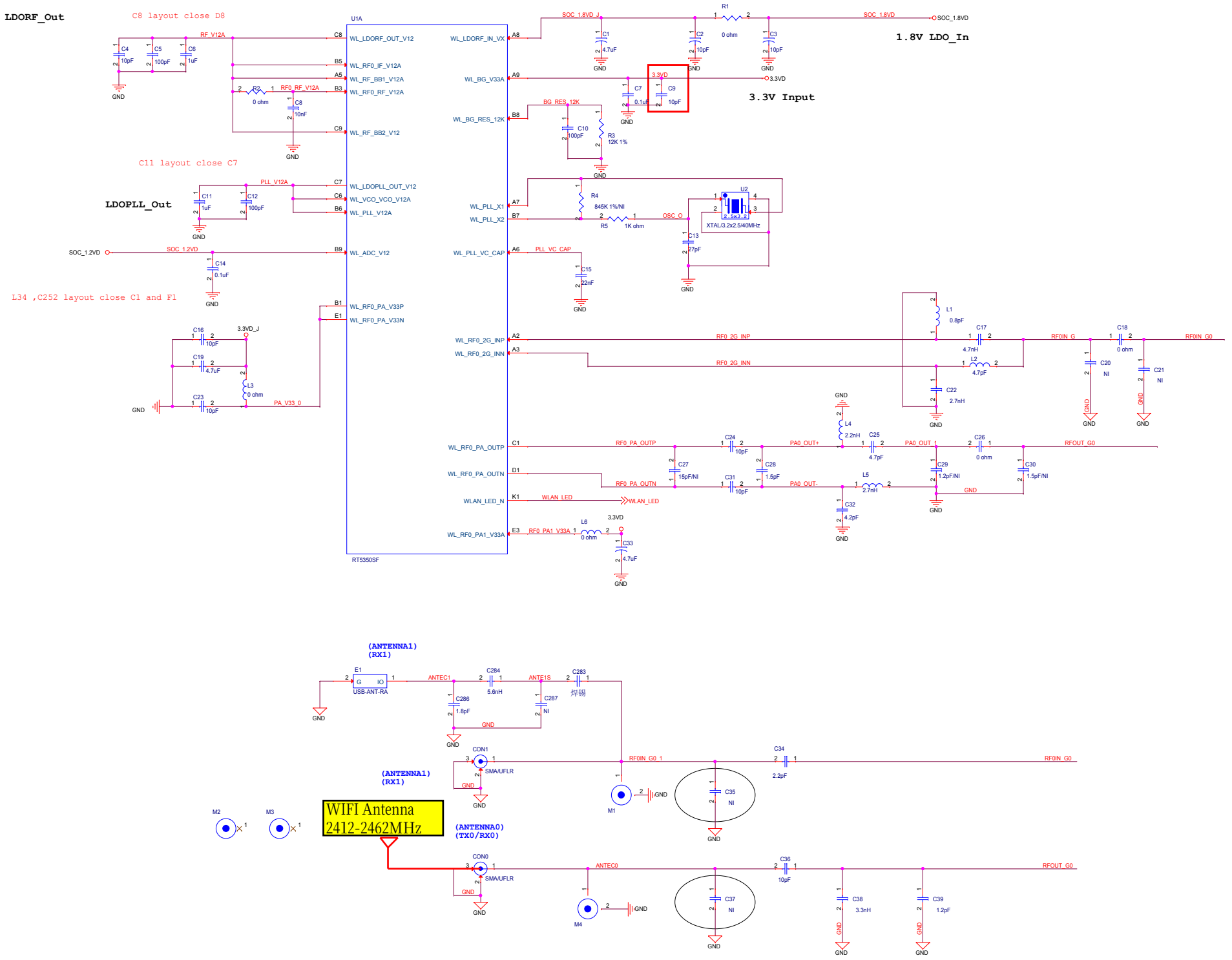


PHY address 5'd0 -> Internal PHY for port 0
PHY address 5'd1 -> Internal PHY for port 1
PHY address 5'd2 -> Internal PHY for port 2
PHY address 5'd3 -> Internal PHY for port 3
PHY address 5'd4 -> Internal PHY for port 4
PHY address 5'd5 -> default for the external Port 5
PHY address 5'd5 ~ 5'd31 are free for the external PHY.


U1D
3.3VD
N11
UPHY0_VDDA_V33A
SOC_1.2VD
SOC_1.2VD
P13
UPHY0_VDDL_V12D
C43 0.1uF
R72
GND
0 ohm/NI
GND4
GND3
GND2
GND1
GND
USBD+
USBD-
VCC
P1
USB_A_STACK/NI
GND
UPHY0_VRES
P11
UPHY0_VRES
R18 8.2K 1%
UPHY0_PADP
P12
UPHY0_PADP
UPHY0_PADM
N12
UPHY0_PADM
FU1
5VD
保险丝/NC
V-PORT/NI
D1
D2
V-PORT/NI
UC1
UC2
5pF/NI
5pF/NI
C45
4.7uF/NI
GND
GND
GND
RT5350SF


U1C
SPI_MISO
SPI_MOSI
SPI_CLK
SPI_CS0
SR1
22
SFLASH_CLK
M2
J3
N1
P1
L2
SPI_CS1
B14
I2C_SCLK
B13
I2C_SD
B12
GPIO0
C10
PORST_N
RT5350SF
RTS_N
DTR_N
TXD
DCD_N
DSR_N
CTS_N
RIN
RXD
P2
N4
K2
J4
L3
K4
M3
N3
TXD
SECU_LED
PWR_LED
WPS_LED
RST_PBC
TP1
UART_TX
TXD2
RXD2
N2
P3
UART_RX
3.3VD_J
J1
HEADER 4x1
2.54mm
R7
4.7K
JTAG_TRST_N
JTAG_TDI
JTAG_TDO
JTAG_TMS
JTAG_TCLK
A11
A14
B11
A13
A12
3.3VD
IMP809S***/NC
RESET
VCC
GND
U3
C42
0.1uF/NC
R8
20K
R16
CPURST_N
RC1
10uF
GND


U1B
RT5350SF
MDATA0 E10
MDATA1 D11
MDATA2 D12
MDATA3 D13
MDATA4 D14
MDATA5 E11
MDATA6 F11
MDATA7 E12
MDATA8 F12
MDATA9 E13
MDATA10 E14
MDATA11 G11
MDATA12 G12
MDATA13 F13
MDATA14 G13
MDATA15 F14
MD0
MD1
MD2
MD3
MD4
MD5
MD6
MD7
MD8
MD9
MD10
MD11
MD12
MD13
MD14
MD15
MA0 G14 MADDR0
MA1 H13 MADDR1
MA2 H12 MADDR2
MA3 H11 MADDR3
MA4 J14 MADDR4
MA5 J13 MADDR5
MA6 J12 MADDR6
MA7 K14 MADDR7
MA8 K13 MADDR8
MA9 J11 MADDR9
MA10 L14 MADDR10
MA11 K12 MADDR11
MA12 L13 MADDR12
MDQM0 J10 SDRAM_MDQM0
MDQM1 M13 SDRAM_MDQM1
MBA0 L12 SDRAM_BA0
MBA1 M14 SDRAM_BA1
MCLK H14 SD_CLK_P
MCKE C11 SDRAM_MCKE
MRAS_N L11 SDRAM_RASN
MCAS_N C12 SDRAM_CASN
MWE_N C13 SDRAM_WEN
MCS0_N K11 SDRAM_CS0N
MCS1_N C14
SDRAM_IO_V33D
F10
G10
H10
3.3VD
MADDR[0:12]
MADDR[0:12] [10]
MADDR0
MADDR1
MADDR3
MADDR2
MADDR4
MADDR5
MADDR6
MADDR7
MADDR8
MADDR9
MADDR11
MADDR12
MADDR10
SDRAM_MDQM0
SDRAM_MDQM1
SDRAM_CLK_P
R6
51 ohm
C40
10pF/NI
GND
SDRAM_MCKE
SDRAM_WEN
SDRAM_CASN
SDRAM_RASN
SDRAM_CS0N
SDRAM_BA0
SDRAM_BA1
[10] MDATA[0:15]
MDATA[0:15]
C41
4.7uF


LDORF_Out
C8 layout close D8
U1A
RF_V12A
C4 10pF
C5 100pF
C6 1uF
R2 0 ohm
C8 10nF
C9
WL_LDORF_OUT_V12
WL_RF0_IF_V12A
WL_RF_BB1_V12A
WL_RF0_RF_V12A
WL_RF_BB2_V12
C11 layout close C7
LDOPLL_Out
PLL_V12A
C11 1uF
C12 100pF
WL_LDOPLL_OUT_V12
WL_VCO_VCO_V12A
WL_PLL_V12A
SOC_1.2VD
C14 0.1uF
WL_ADC_V12
L34 ,C252 layout close C1 and F1
C16 10pF
C19 4.7uF
C23 10pF
3.3VD_J
L3 0 ohm
PA_V33_0
WL_RF0_PA_V33P
WL_RF0_PA_V33N
RT5350SF
WL_LDORF_IN_VX
WL_BG_V33A
WL_BG_RES_12K
WL_PLL_X1
WL_PLL_X2
WL_PLL_VC_CAP
WL_RF0_2G_INP
WL_RF0_2G_INN
WL_RF0_PA_OUTP
WL_RF0_PA_OUTN
WLAN_LED_N
WL_RF0_PA1_V33A
SOC_1.8VD_J
R1 0 ohm
SOC_1.8VD
1.8V LDO_In
C1 4.7uF
C2 10pF
C3 10pF
3.3VD
C7 0.1uF
C9 10pF
3.3V Input
BG_RES_12K
C10 100pF
R3 12K 1%
R4 845K 1%/NI
R5 1K ohm
U2
XTAL/3.2x2.5/40MHz
C13 27pF
PLL_VC_CAP
C15 22nF
L1 0.8pF
C17 4.7nH
L2 4.7pF
C22 2.7nH
RF0_2G_INP
RF0_2G_INN
RF0IN_G
C18 0 ohm
C20 NI
C21 NI
RF0IN_G0
L4 2.2nH
C24 10pF
C25 4.7pF
C26 0 ohm
RF0_PA_OUTP
PA0_OUT+
PA0_OUT_1
RFOUT_G0
C27 15pF/NI
C28 1.5pF
C29 1.2pF/NI
C30 1.5pF/NI
C31 10pF
L5 2.7nH
RF0_PA_OUTN
PA0_OUT-
C32 4.2pF
WLAN_LED
L6 0 ohm
C33 4.7uF
RF0_PA1_V33A
(ANTENNA1)
(RX1)
E1
USB-ANT-RA
ANTEC1
C284 5.6nH
ANTE1S
C283 焊锡
C286 1.8pF
C287 NI
CON1
SMA/UFLR
RF0IN_G0_1
C34 2.2pF
M1
C35 NI
WIFI Antenna
2412-2462MHz
M2
M3
(ANTENNA0)
(TX0/RX0)
CON0
ANTEC0
C36 10pF
M4
C37 NI
C38 3.3nH
C39 1.2pF
GND