

# Baseband Schematic

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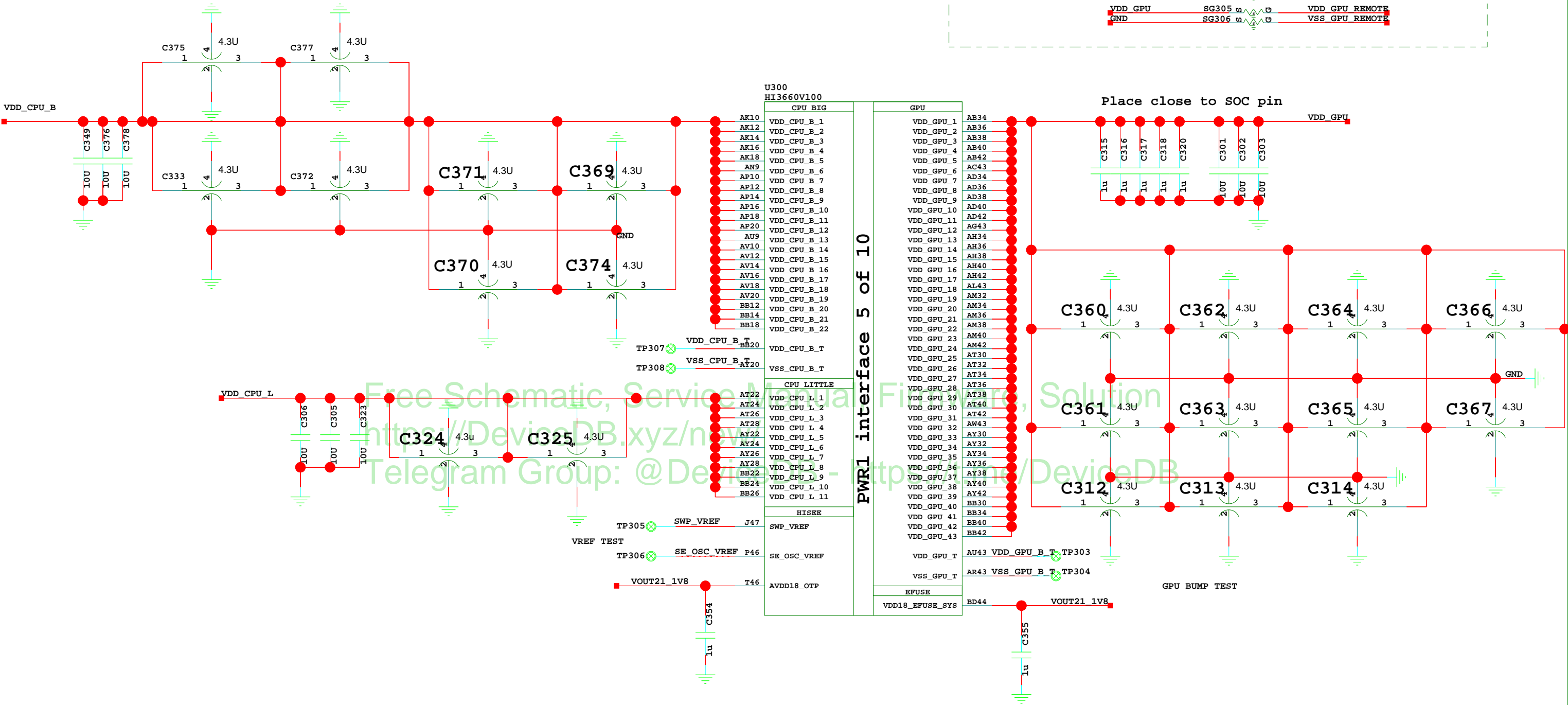
# MODEM Schematic

- 31. RF Interface
- 32. APT Power
- 33. RF Transceiver\_0
- 34. RF FRONT END HB
- 35. RF FRONT END B42
- 36. RF FRONT END MB
- 37. RF Front End LB
- 38. RF Front End Switch /Main ANT
- 39. RF Front End Diversity
- 40. RF Front End Diversity
- 41. Reserved for CDMA Modem
- 42. Reserved for CDMA Modem
- 43. Reserved for CDMA Modem
- 44. Reserved for CDMA Modem
- 45. Reserved for CDMA Modem
- 46. Reserved for CDMA Modem
- 47. Reserved for CDMA Modem
- 48. Reserved for CDMA Modem
- 49. Reserved
- 50. Reserved
- 51. BCM43455 BB
- 52. BCM43455 POWER
- 53. Reserved
- 54. WALN RF0
- 55. WLAN RF1
- 56. GPS
- 57. NFC
- 58. RF Transceiver2
- 59. Reserved
- 60. ANT Tuner

## 2. Block Diagramm

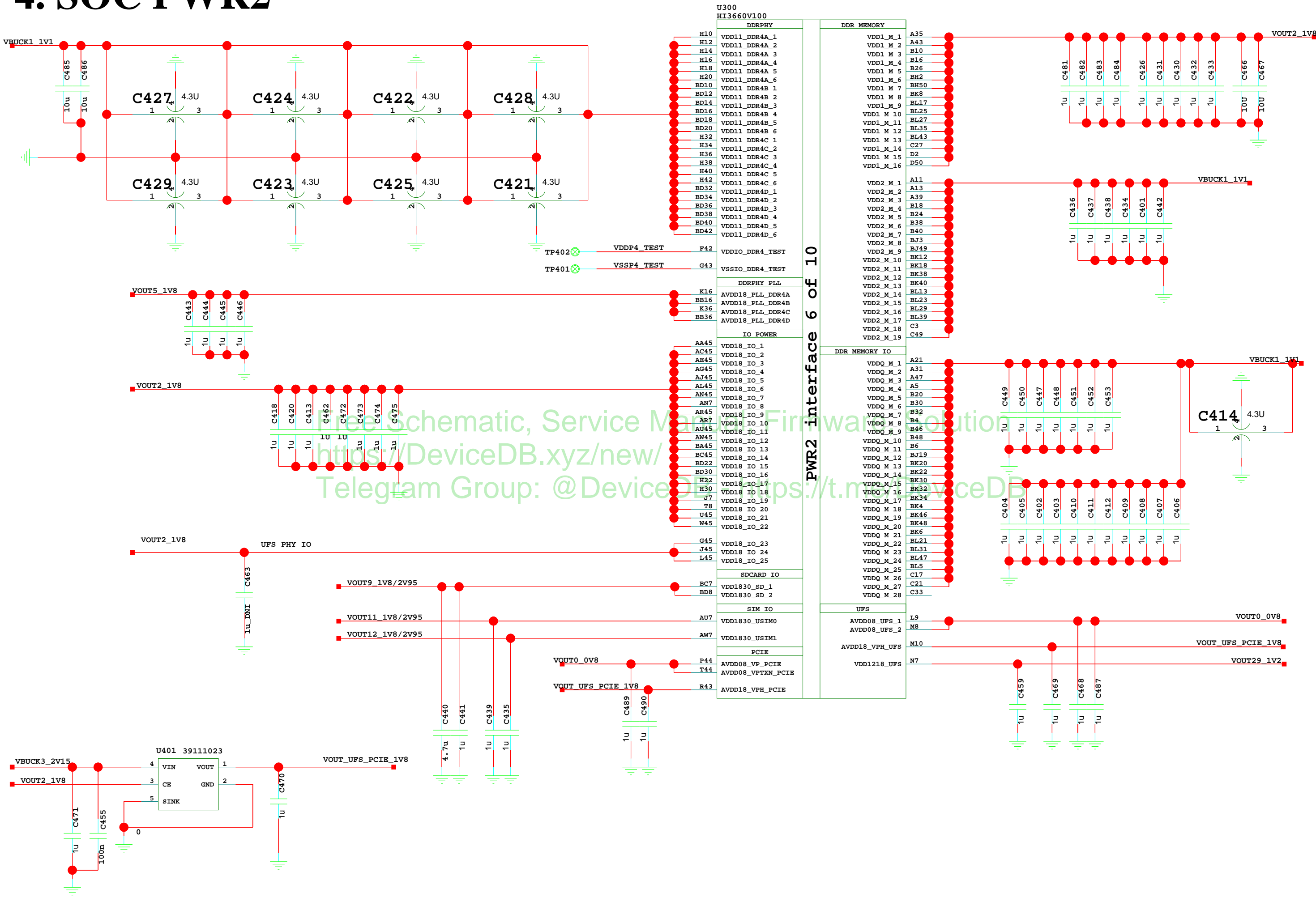
Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

3. SOC PWR1

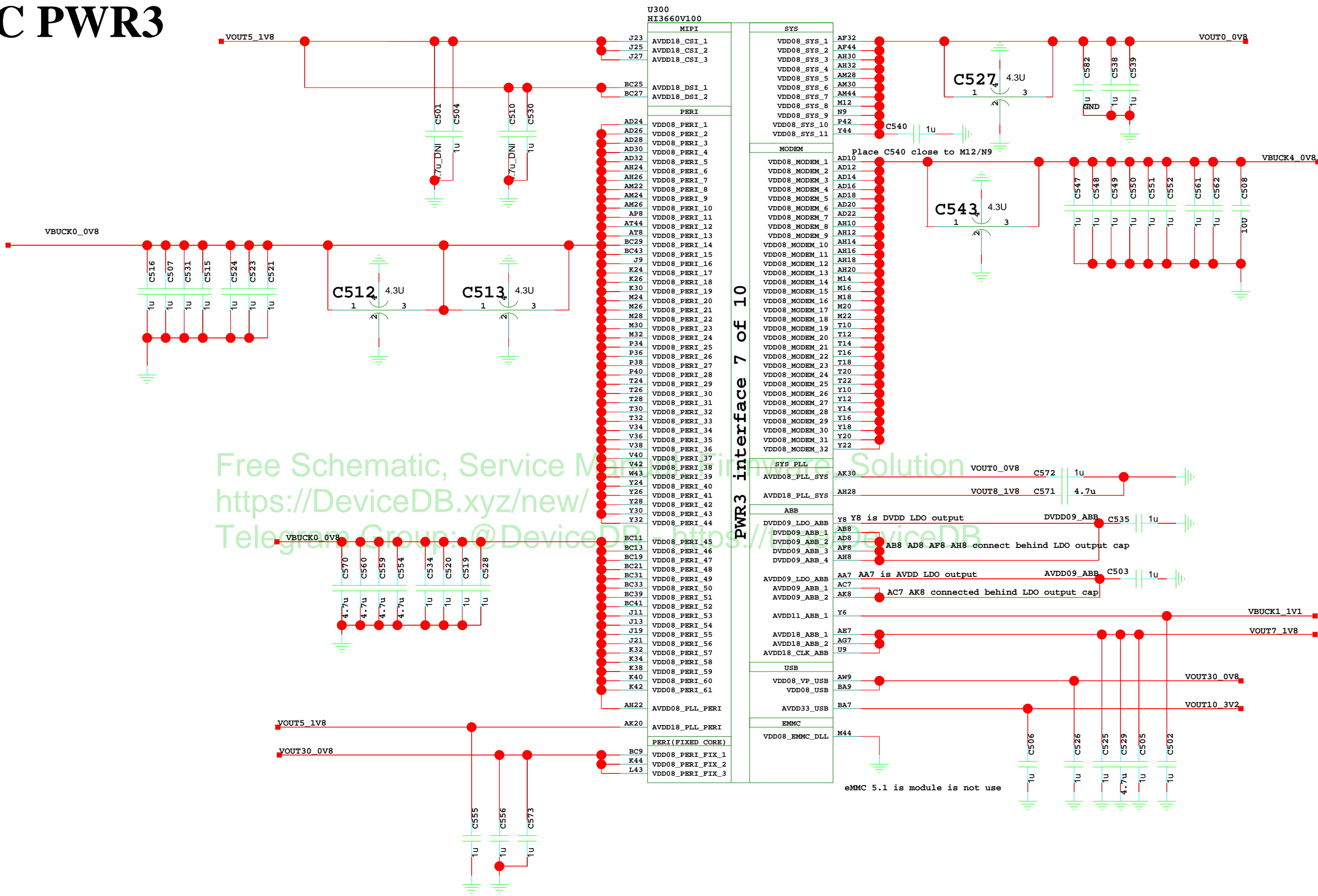


Free Schematic, Service Manual, Repair Solution  
https://DeviceDB.xyz/new/DeviceDB  
Telegram Group: @DeviceDB

# 4. SOC PWR2



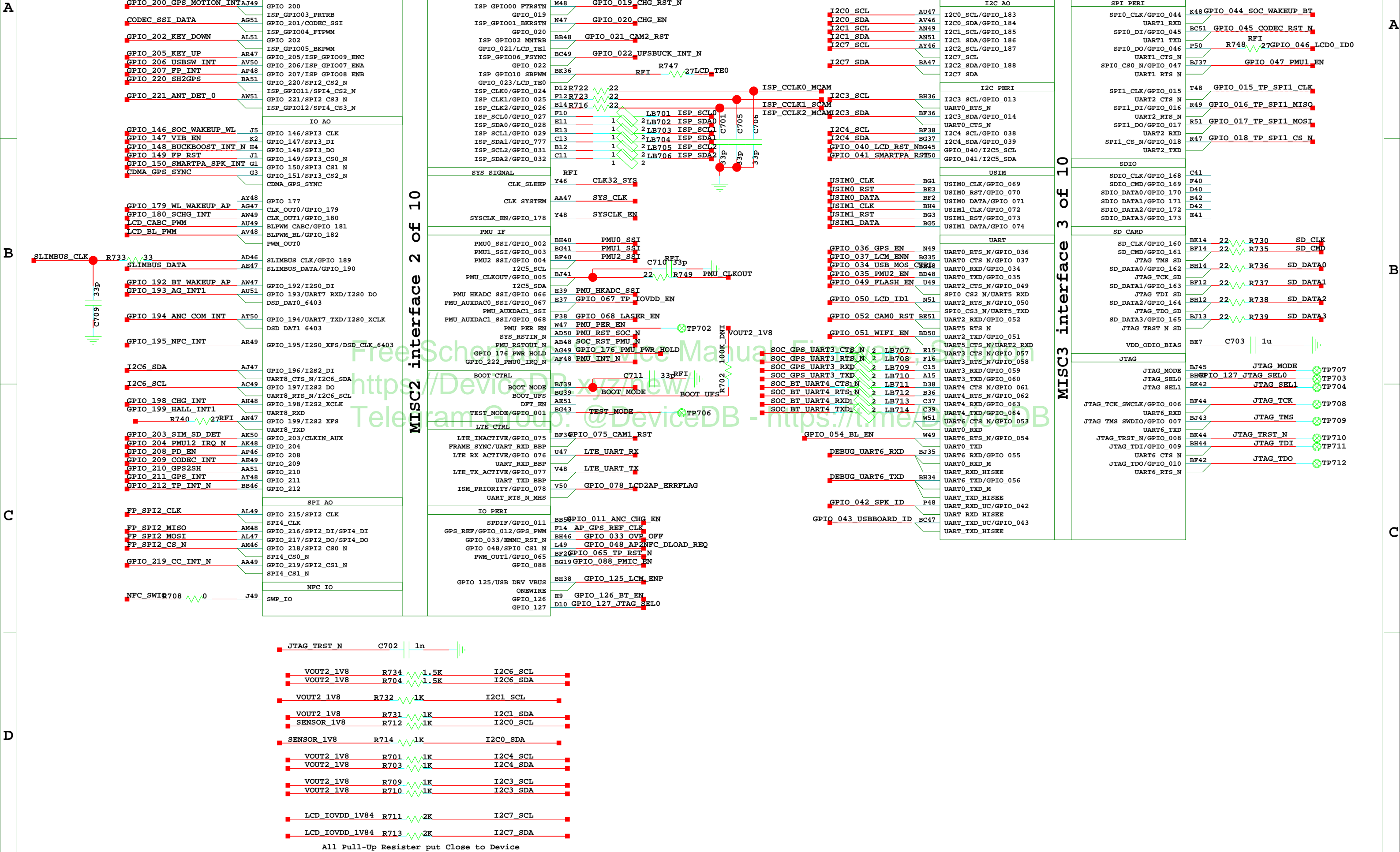
5. SOC PWR3



## 6. SOC HS



# 7. SOC GPIO



**A**



B

B

C

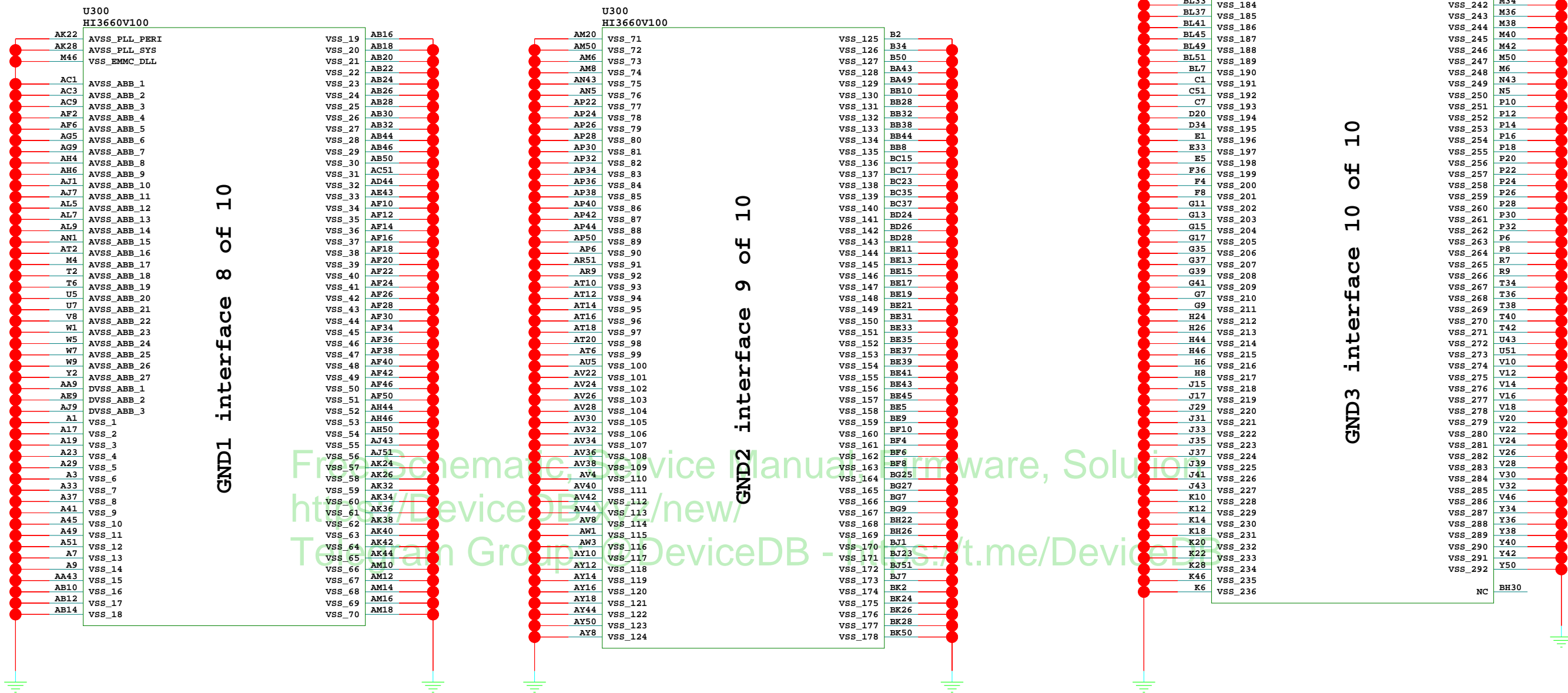
C

D

10

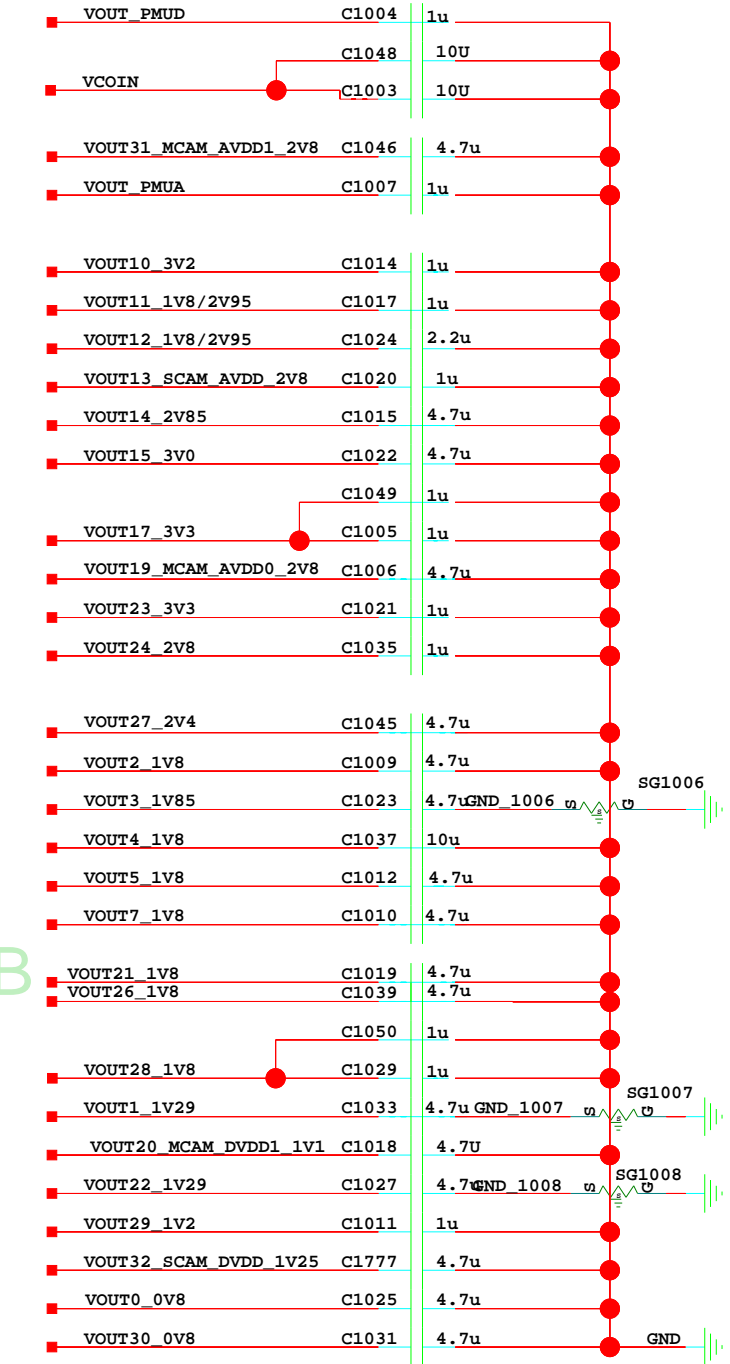
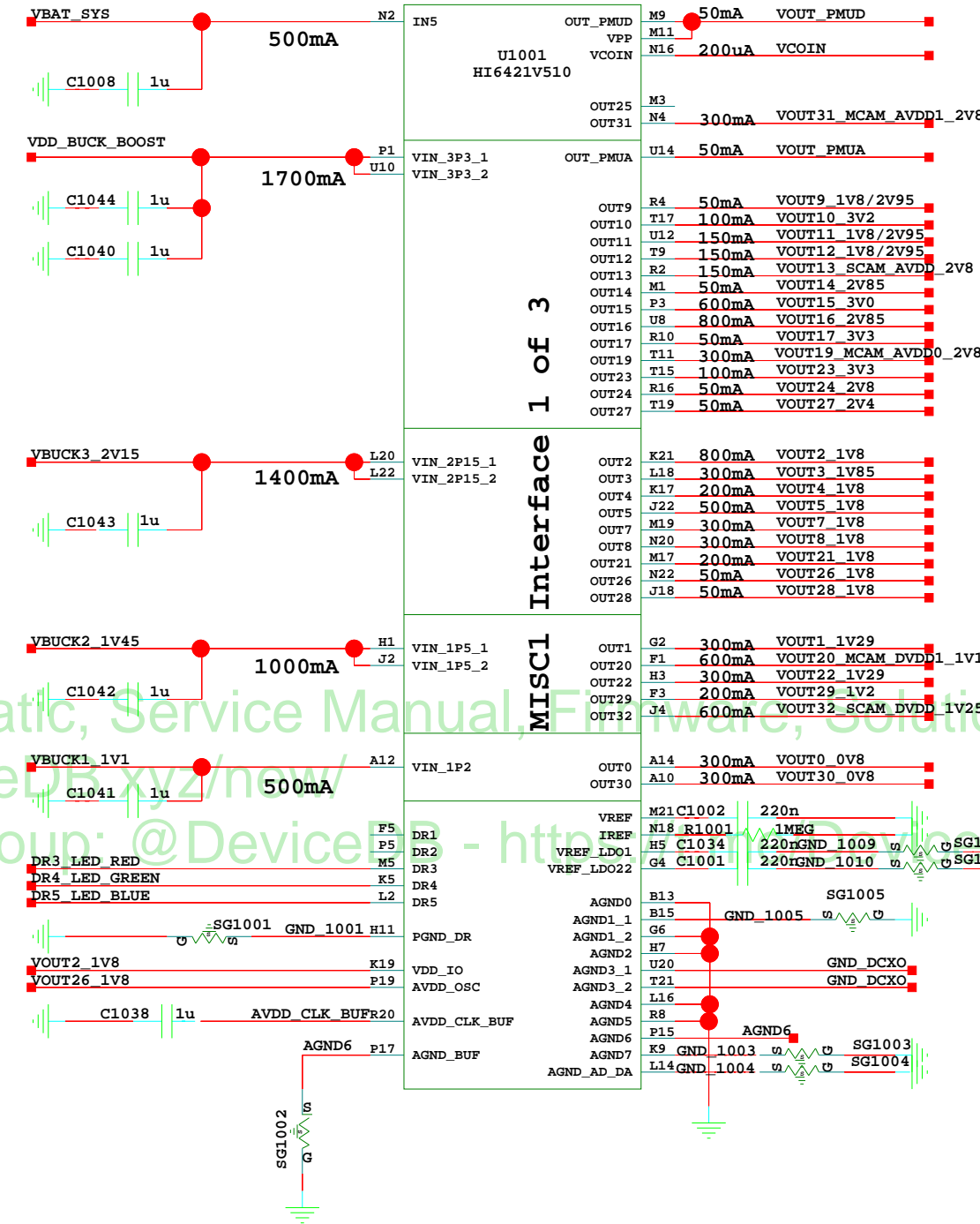


9. SOC GND & NC

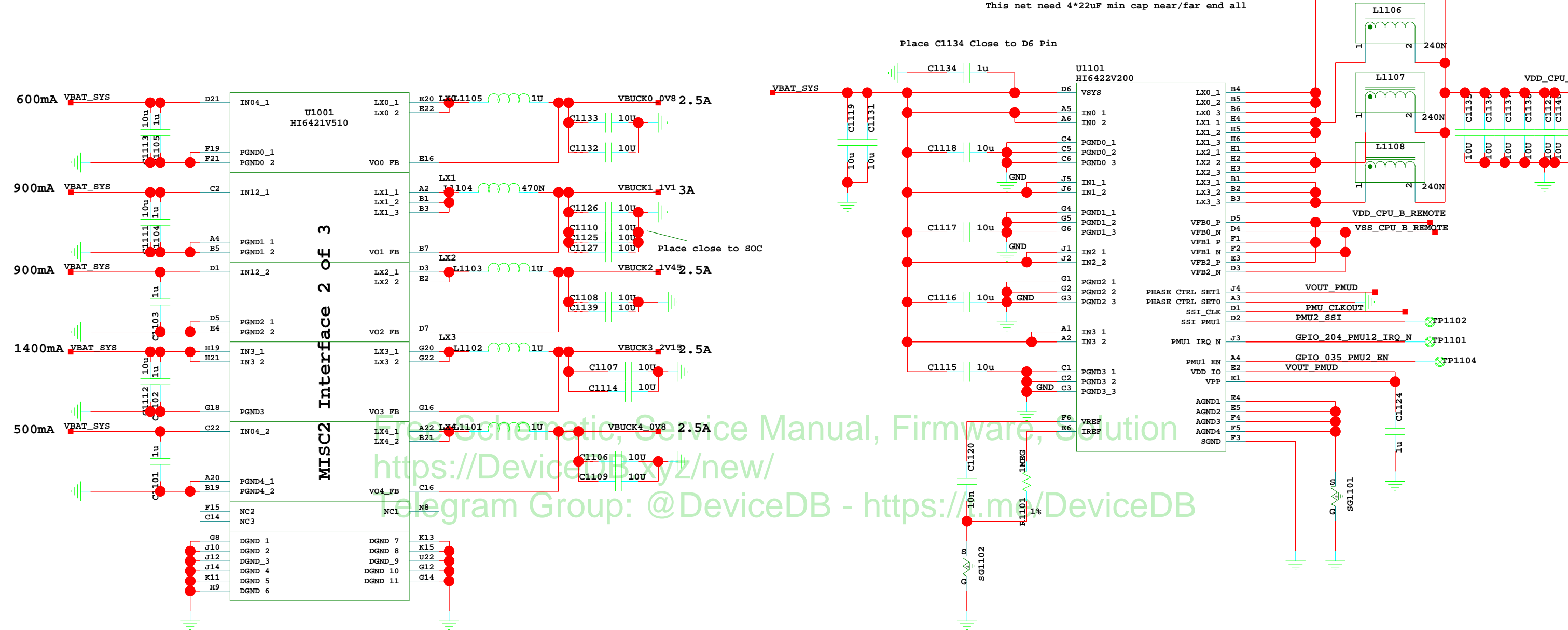


# 10. PMU LDO

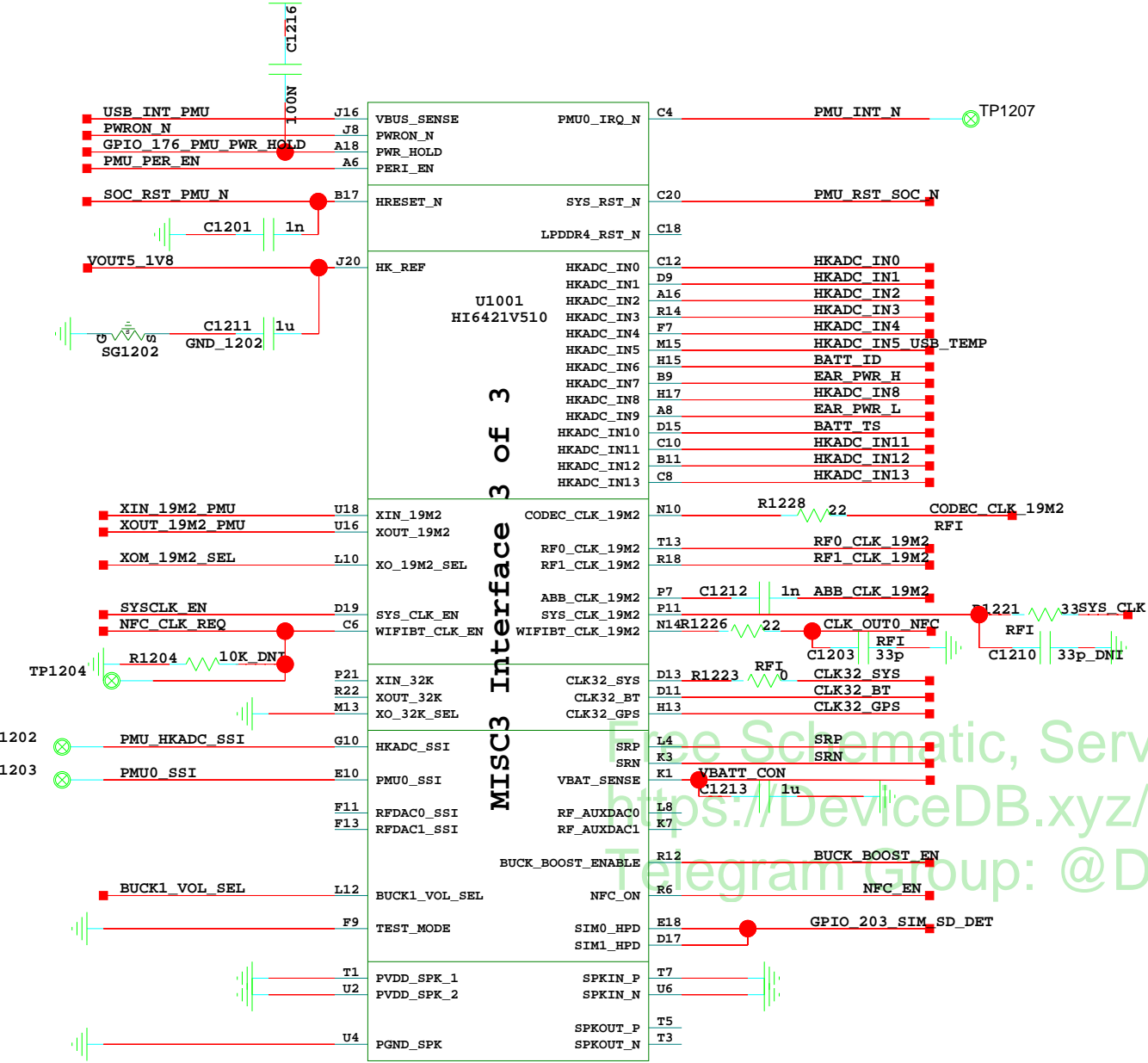
Name	Voltage	Current	Function
LDO0	0.8	300	SOC AO
LDO1	1.29	300	RFIC0 AVDD1 1.29V
LDO2	1.8	800	1V8 IO
LDO3	1.85	300	RFIC0&1 AVDD2 1.85V
LDO4	1.8	200	For LCD&TP 1.8V I/O
LDO5	1.8	500	MIPI PHY&DDR PHY
LDO7	1.8	300	ABB&PLL ANA_1V8
LDO8	1.8	300	Hi6402 ANA_1V8
LDO9	1.8/2.95	50	HI3650 SD IO
LDO10	3.2	100	USB PHY 3.3V
LDO11	1.8	150	SIM0
LDO12	1.8	150	SIM1
LDO13	2.85	150	SUB_CAM ANA_2V85
LDO14	2.85	50	TCXO1
LDO15	3	600	eMMC Flash VDDM
LDO16	2.95	800	SD
LDO17	2.8	50	LCD &TP AVDD
LDO19	2.8	300	Camera ANA_2V85
LDO20	1.2	600	M_Camera Core
LDO21	1.8	200	EFUSE_SYS
LDO22	1.29	300	RFIC1 AVDD1 1.29V
LDO23	3.3	100	PA BIAS
LDO24	2.8	50	X Sensor AVDD_2V8
LDO25	2.85	400	Camera OIS AVDD_2V85
LDO26	1.8	50	19M2 XO
LDO27	2.4	50	Hi6362 AVDD3
LDO28	1.8	50	PA Star
LDO29	1.2	200	Hi6402 1.2V
LDO30	0.8	300	emmc phy 0.8V Core
LDO31	2.8	300	Vibrator
LDO32	1.2	600	S_Camera Core



# 11. PMU BUCK & HI6422-1

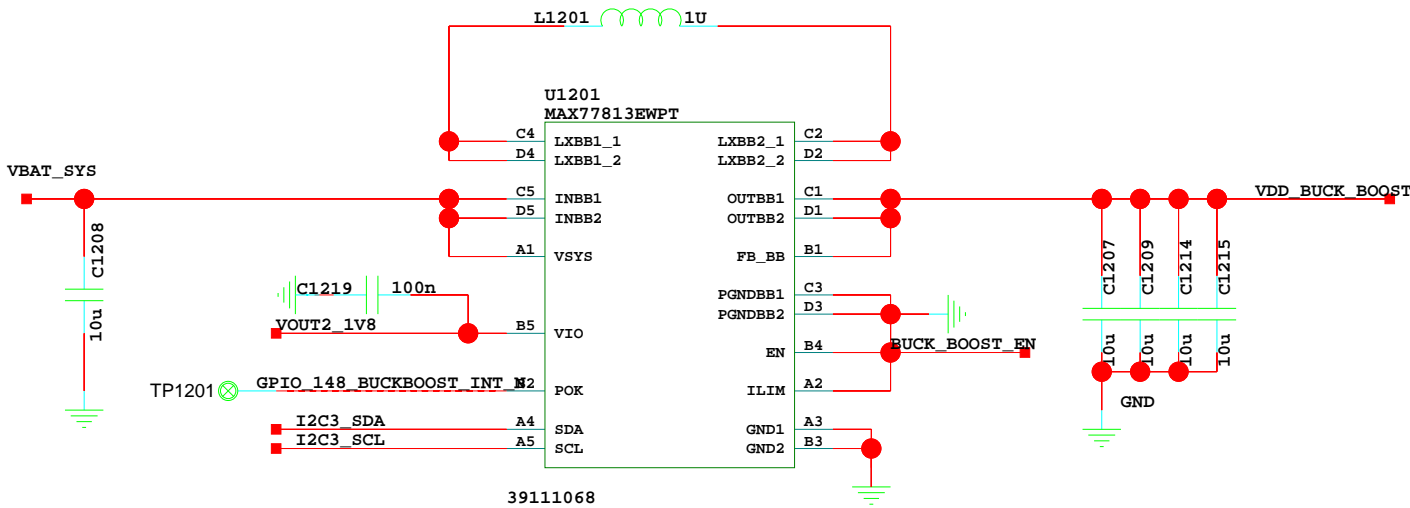


12. PMU MISC & BUCKBOOST



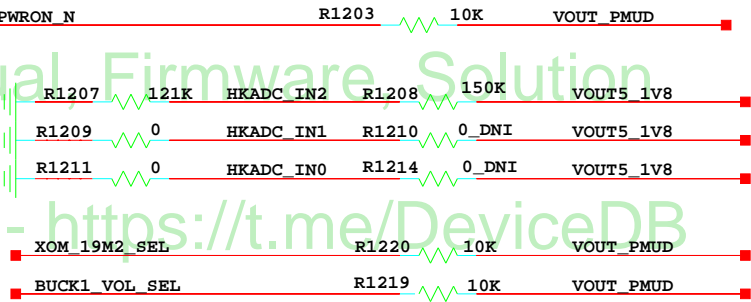
HKADC	Function	HKADC	Function
HKADC_IN0	Board ID	HKADC_IN7	EAR_PWR_H
HKADC_IN1	Board ID	HKADC_IN8	Power Detect
HKADC_IN2	Board ID	HKADC_IN9	EAR_PWR_L
HKADC_IN3	DCXO Temp	HKADC_IN10	BATT Temp
HKADC_IN4	Multiplex/FP_Press	HKADC_IN11	MMBPA Temp
HKADC_IN5	USB Temp	HKADC_IN12	AP Temp
HKADC_IN6	BATT ID	HKADC_IN13	Scharger Temp

BUCK BOOST  
Software set output voltage 3.46V  
I2C address=0011000(0x18)

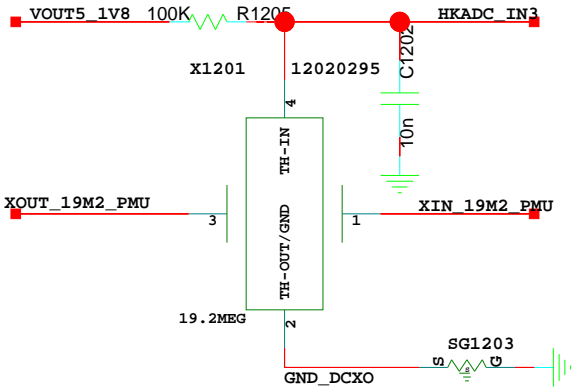


BOARD ID

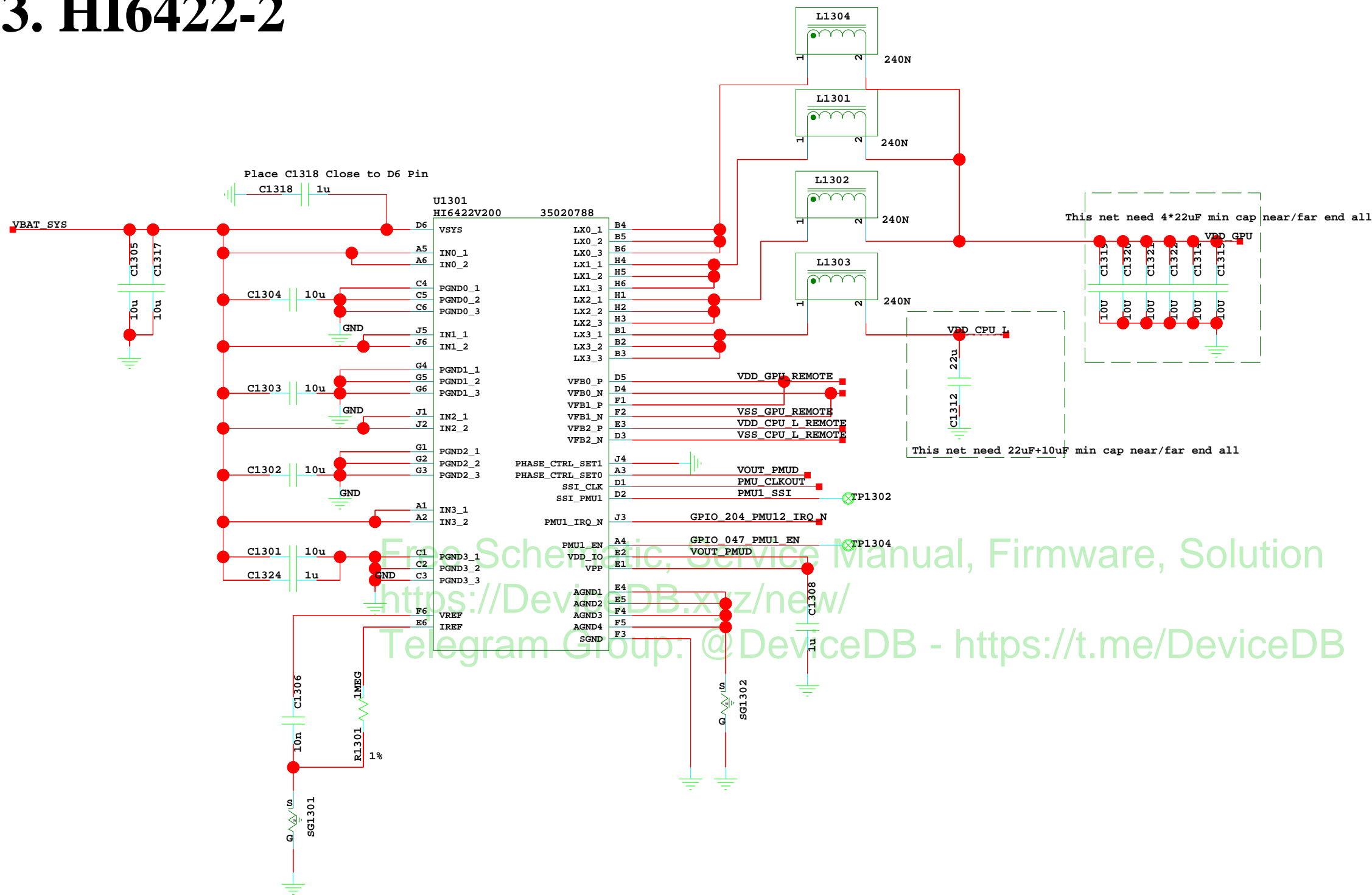
Board ID	HKADC2	HKADC1	HKADC0
AL00	4	0	0



	0	1
XO_32K_SEL	WITHOUT CRYSTAL	WITH CRYSTAL
XO_19M2_SEL	38M4	19M2
BUCK1_VOL_SEL	1V2	1V1



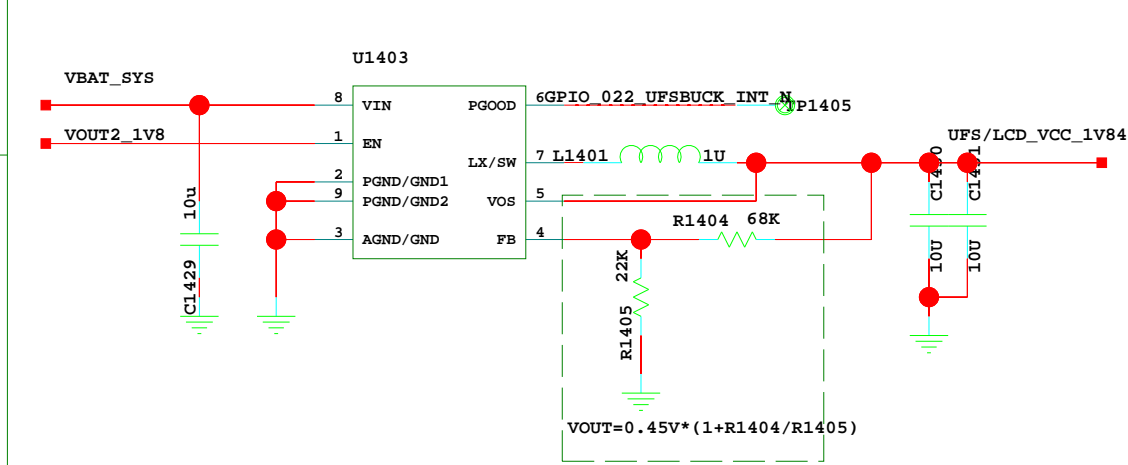
# 13. HI6422-2





# 14. UFS AND LPDDR4

## UFS BUCK



GND1 interface 8 of 10

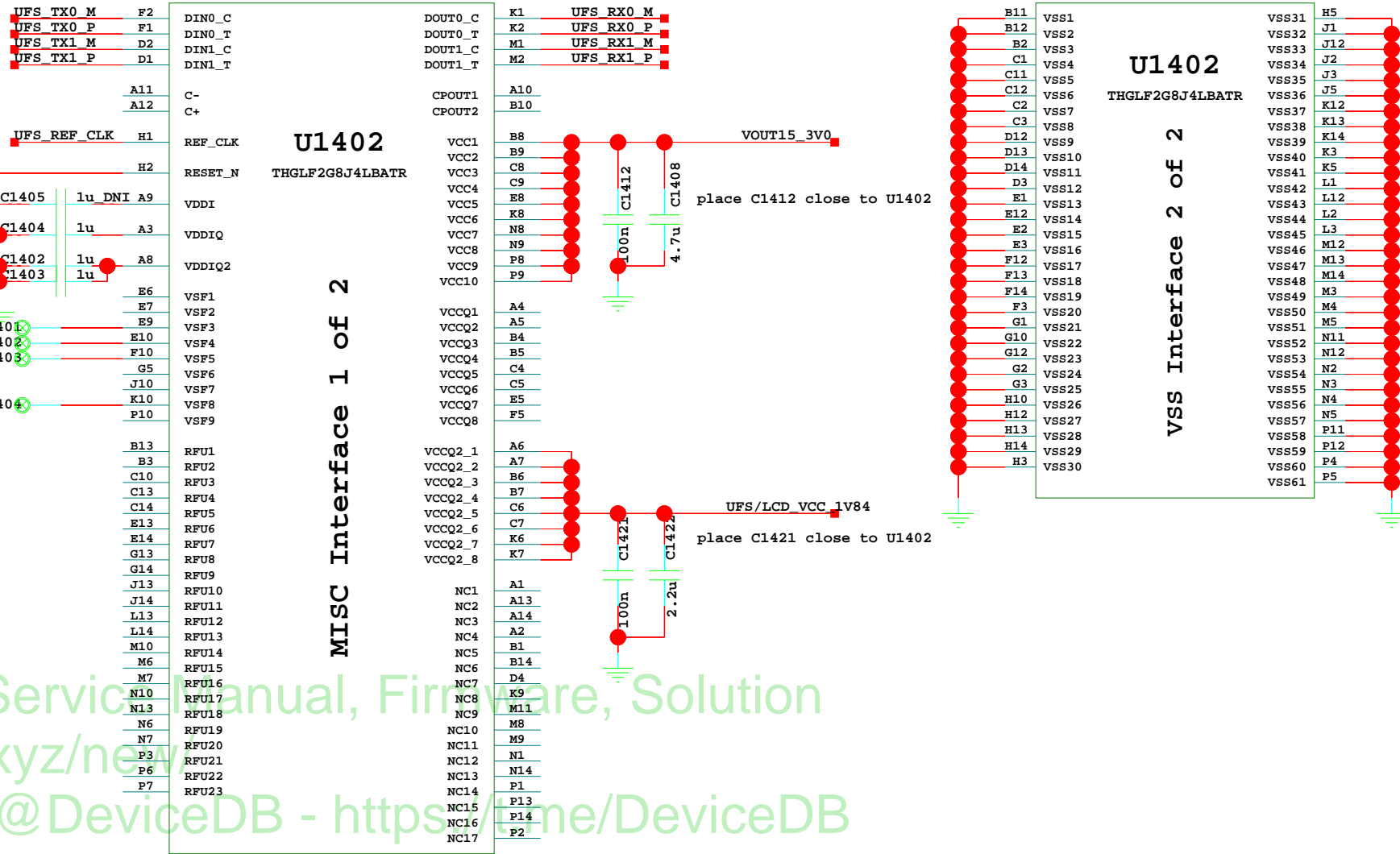
AK22	AVSS_PLL_PERI	VSS_19	AB16
AK28	AVSS_PLL_SYS	VSS_20	AB18
M46	VSS_EMMC_DLL	VSS_21	AB20
AC1	AVSS_ABB_1	VSS_22	AB22
AC3	AVSS_ABB_2	VSS_23	AB24
AC9	AVSS_ABB_3	VSS_24	AB26
AF2	AVSS_ABB_4	VSS_25	AB28
AF6	AVSS_ABB_5	VSS_26	AB30
AG5	AVSS_ABB_6	VSS_27	AB32
AG9	AVSS_ABB_7	VSS_28	AB44
AH4	AVSS_ABB_8	VSS_29	AB46
AH6	AVSS_ABB_9	VSS_30	AB50
AJ1	AVSS_ABB_10	VSS_31	AC51
AJ7	AVSS_ABB_11	VSS_32	AD44
AL5	AVSS_ABB_12	VSS_33	AE43
AL7	AVSS_ABB_13	VSS_34	AF10
AL9	AVSS_ABB_14	VSS_35	AF12
AN1	AVSS_ABB_15	VSS_36	AF14
AT2	AVSS_ABB_16	VSS_37	AF16
M4	AVSS_ABB_17	VSS_38	AF18
T2	AVSS_ABB_18	VSS_39	AF20
T6	AVSS_ABB_19	VSS_40	AF22
U5	AVSS_ABB_20	VSS_41	AF24
U7	AVSS_ABB_21	VSS_42	AF26
V8	AVSS_ABB_22	VSS_43	AF28
W1	AVSS_ABB_23	VSS_44	AF30
W5	AVSS_ABB_24	VSS_45	AF34
W7	AVSS_ABB_25	VSS_46	AF36
W9	AVSS_ABB_26	VSS_47	AF38
Y2	AVSS_ABB_27	VSS_48	AF40
AA9	DVSS_ABB_1	VSS_49	AF42
AE9	DVSS_ABB_2	VSS_50	AF46
AJ9	DVSS_ABB_3	VSS_51	AF50
A1	VSS_1	VSS_52	AH44
A17	VSS_2	VSS_53	AH46
A19	VSS_3	VSS_54	AH50
A23	VSS_4	VSS_55	AJ43
A29	VSS_5	VSS_56	AJ51
A3	VSS_6	VSS_57	AK24
A33	VSS_7	VSS_58	AK26
A37	VSS_8	VSS_59	AK32
A41	VSS_9	VSS_60	AK34
A45	VSS_10	VSS_61	AK36
A49	VSS_11	VSS_62	AK38
A51	VSS_12	VSS_63	AK40
A7	VSS_13	VSS_64	AK42
A9	VSS_14	VSS_65	AK44
AA43	VSS_15	VSS_66	AM10
AB10	VSS_16	VSS_67	AM12
AB12	VSS_17	VSS_68	AM14
AB14	VSS_18	VSS_69	AM16
		VSS_70	AM18

## LPDDR

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## U1402

MISC Interface 1 of 2

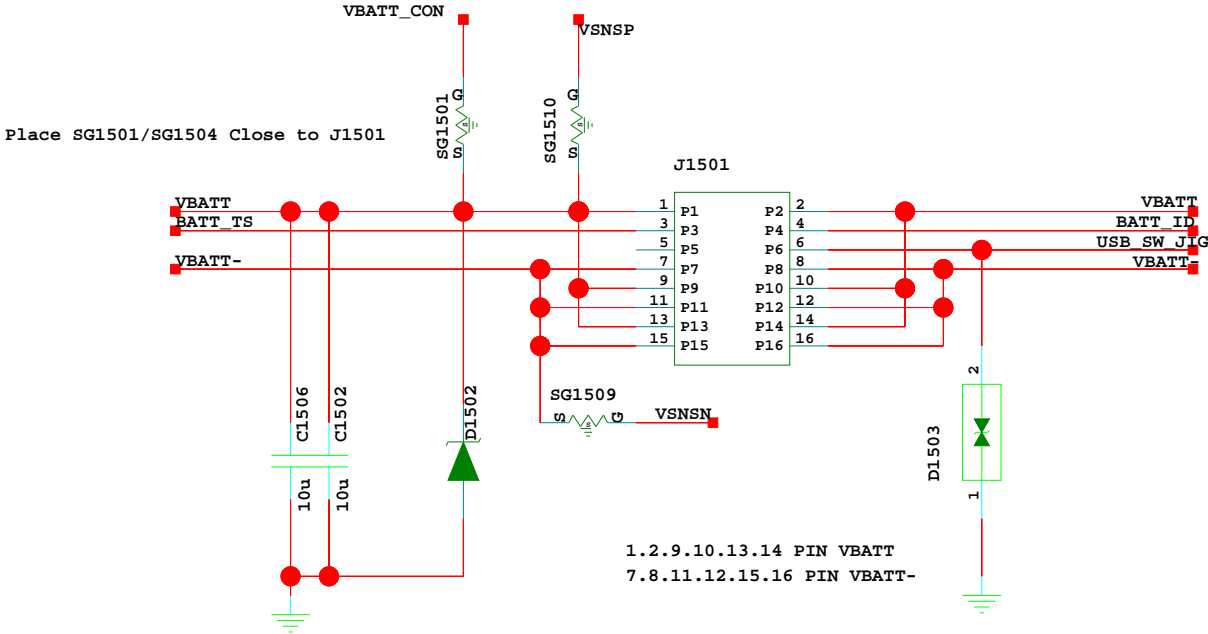


## U1402

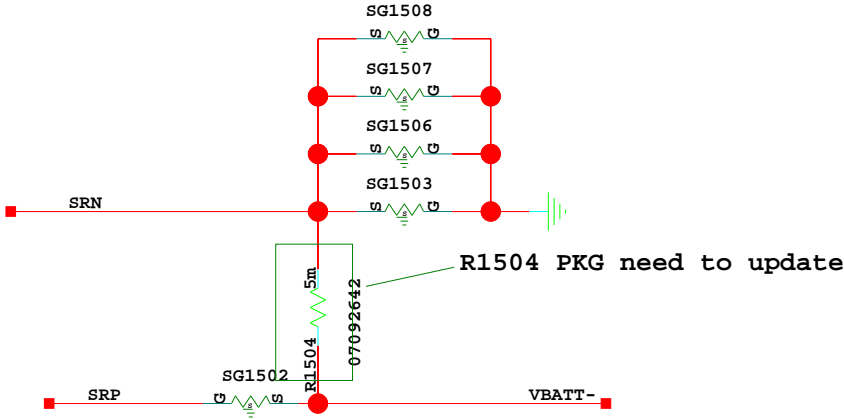
VSS Interface 2 of 2

# 15. Battery & Fuel guage

Battery Connector

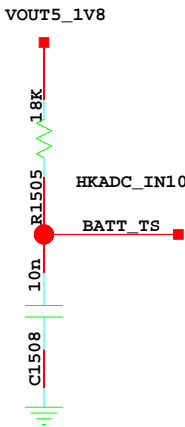


CAD note:1.Trace for 6A  
2.Differential trace

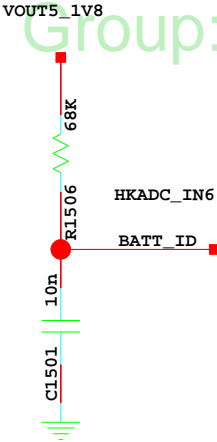


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<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

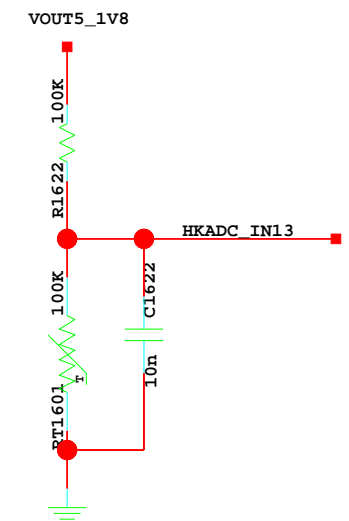
Battery Temperature



Battery ID



## D



TS SYS3 C2  
VDDIO D2  
DMINUS D2  
DPLUS SYS4 E2  
PGND1\_1 A10  
PGND1\_2 B10  
INT PGND1\_3 C10  
SCL PGND1\_4 D10  
SDA PGND1\_5 E10  
RST\_N GND  
SPM PGND2\_1 A4  
PGND2\_2 B4

CHG TEMP DECT

D2 A  
D1600

Place D1601 to the VBATT network routing junction of  
U1801 Load Switch and U1603 Scharger and U1601 9688C

**A**



1



## D



## 18. Direct Charge LoadSwitch

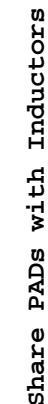
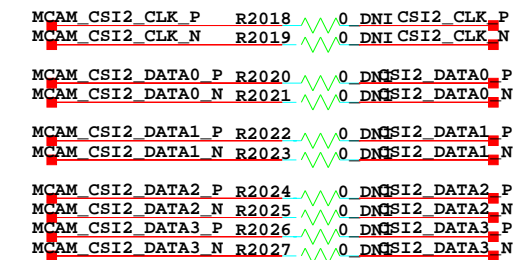
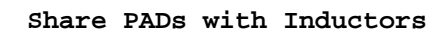




# B



Slave Camera Module Code is 23060207



123456

A

B

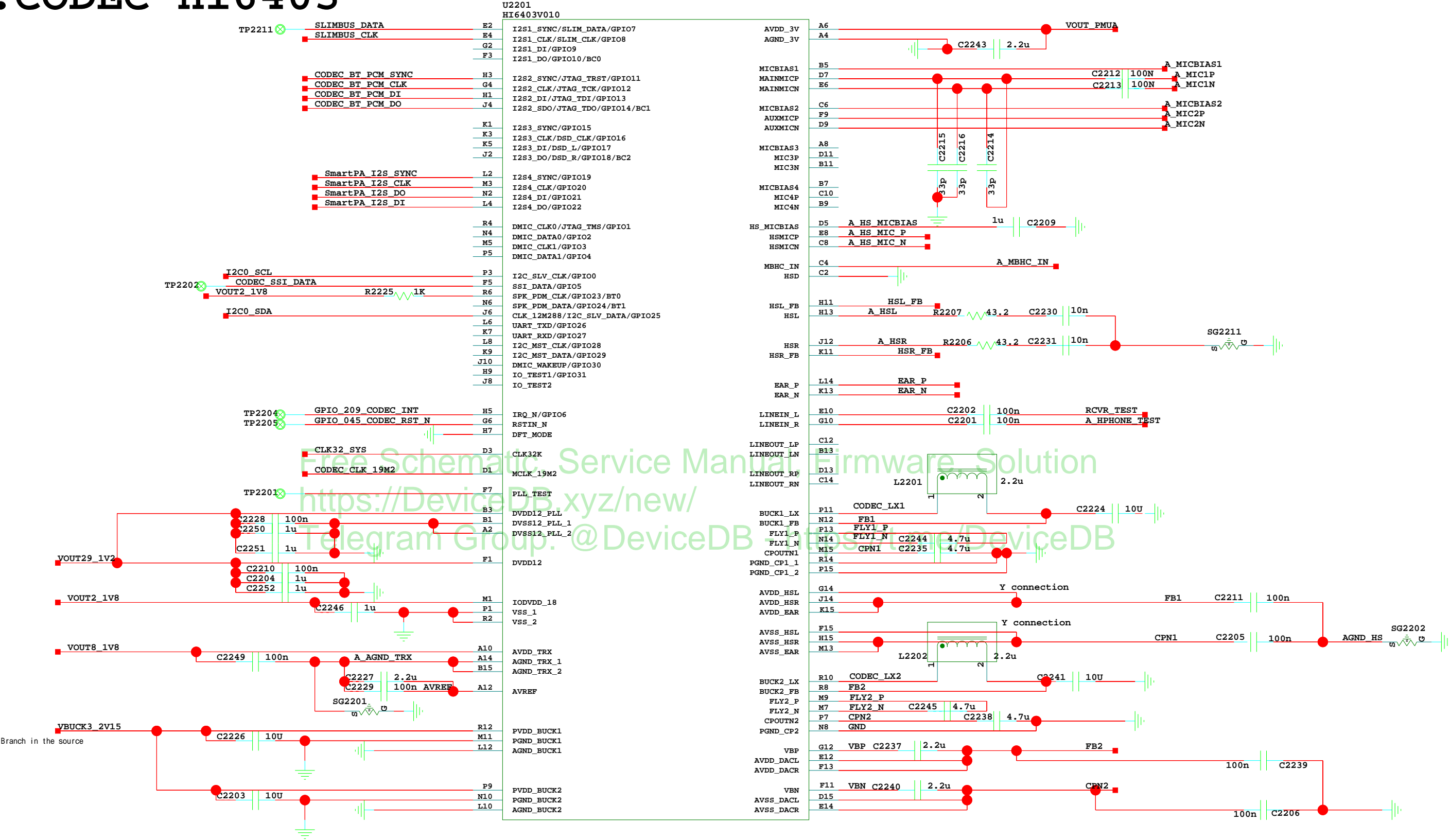
C

D

# 21. ISP Reserved

Free Schematic, Service Manual, Firmware, Solution  
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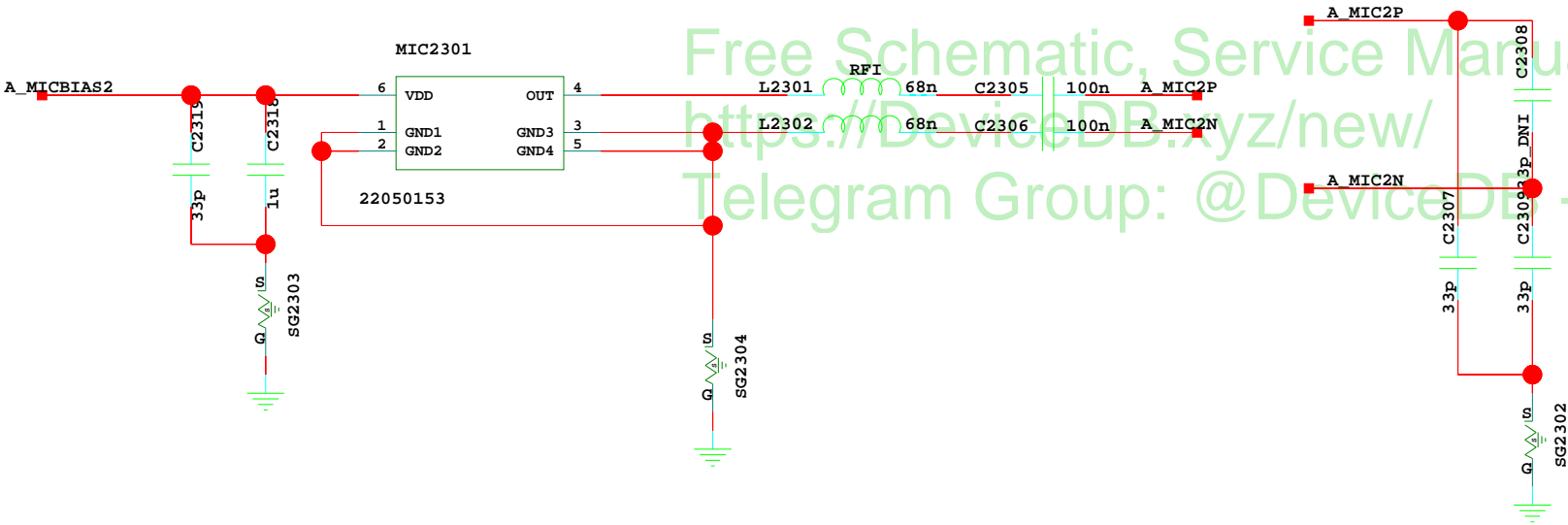
22.CODEC HI6403



BootMode0	BootMode1	Function(BootROM Start)
1	1	NA
1	0	SSI Start
0	1	I2C Start
0	0	SLIMBUS Start

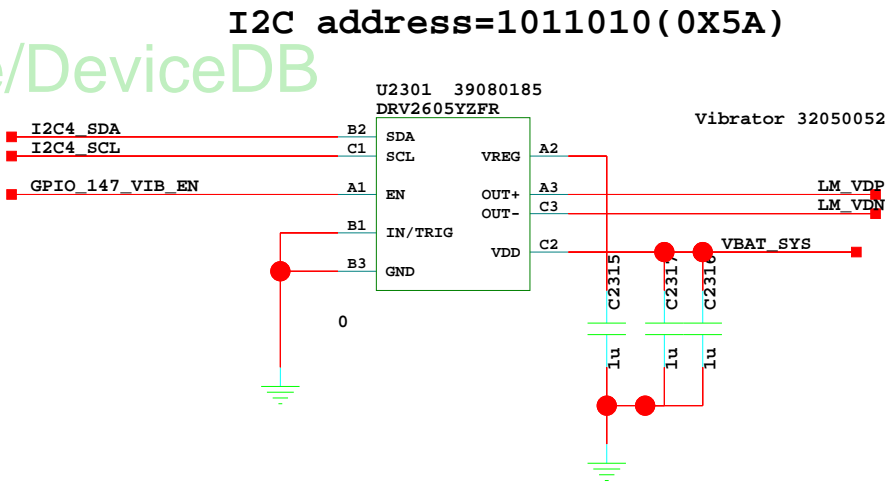
# 23. MIC/VIB

## Slave MIC



CAD note: MIC need differential trace

## Linear Vibrator Driver



I2C address=1011010(0X5A)



# 24. Headphone

default

Differential net demand :  
HSL\_TEST and HS\_SGNDL  
HSR\_TEST and HS\_SGNDR  
A\_HSR and HSR\_FB  
A\_HSL and HSL\_FB  
HS\_DET\_TEST place net like HSL\_TEST

Close Codec U2201

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15040467

D2401

15040469

D2403

D2404

SG2401

SG2402

SG2403

SG2404

R2416

LB2401

LB2402

LB2403

LB2404

LB2407

LB2408

LB2420

LB2421

C2401

C2402

C2403

C2404

C2405

C2406

C2408

C2411

C2412

C2413

C2416

C2417

C2418

C2419

C2420

C2421

R2401

R2402

R2403

R2404

R2406

R2407

A\_HSL

A\_HSR

A\_HPHONE\_TEST

A\_HS\_MIC/PWR

A\_HS\_MIC/N

A\_HS\_MIC/P

A\_HS\_MICBIAS

A\_MBHC\_IN

A\_AGND\_TRX

HSL\_TEST

HSR\_TEST

HS\_DET\_TEST

HS\_SGNDL

HS\_SGNDR

HS\_MIC\_TEST

HS\_GND\_TEST

15040467

D2401

15040469

D2403

D2404

SG2401

SG2402

SG2403

SG2404

R2416

LB2401

LB2402

LB2403

LB2404

LB2407

LB2408

LB2420

LB2421

C2401

C2402

C2403

C2404

C2405

C2406

C2408

C2411

C2412

C2413

C2416

C2417

C2418

C2419

C2420

C2421

R2401

R2402

R2403

R2404

R2406

R2407

A\_HSL

A\_HSR

A\_HPHONE\_TEST

A\_HS\_MIC/PWR

A\_HS\_MIC/N

A\_HS\_MIC/P

A\_HS\_MICBIAS

A\_MBHC\_IN

A\_AGND\_TRX

HSL\_TEST

HSR\_TEST

HS\_DET\_TEST

HS\_SGNDL

HS\_SGNDR

HS\_MIC\_TEST

HS\_GND\_TEST

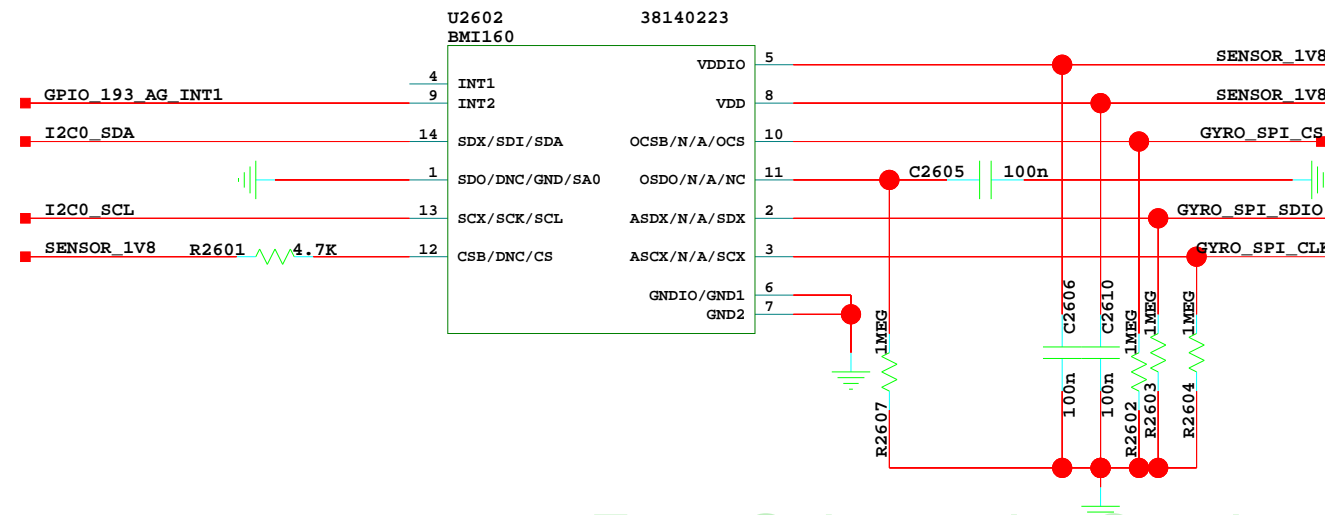


# 26. X-Sensor

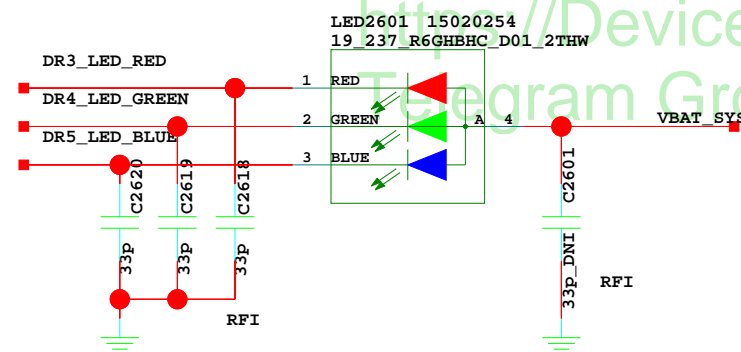
## Accelerometer and Gyroscope 6-AXIS SENSOR

SDO=1 ADDRESS=0X6B(ST)/0X69(INVENSENS)

SDO=0 ADDRESS=0X6A(ST)/0X68(INVENSENS)

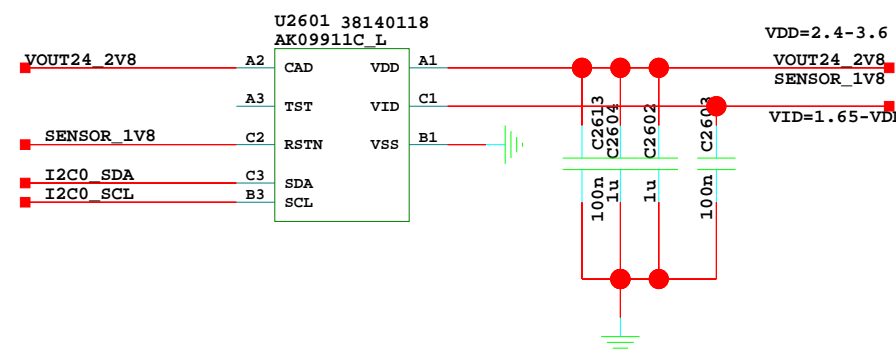


## RGB LED



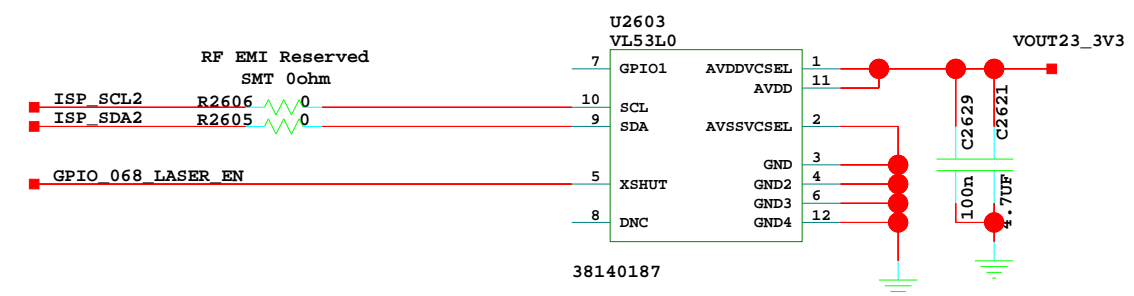
## Compass

I2C Address=0001101(0x0D)

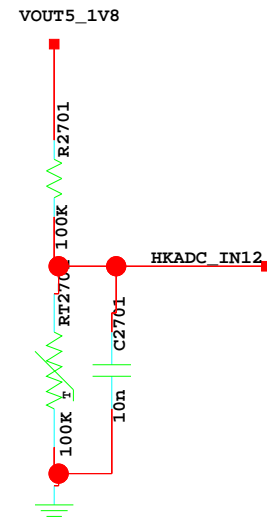


## LASER

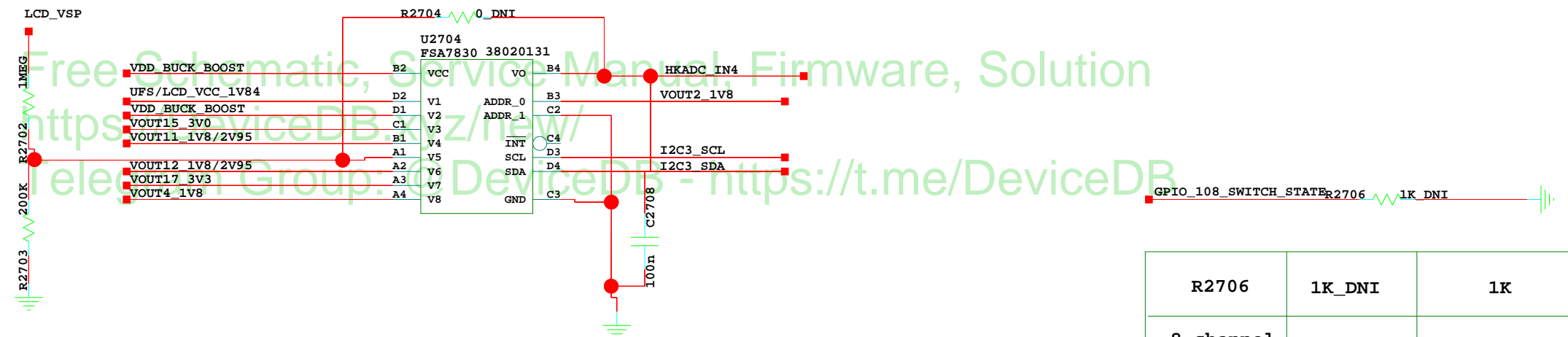
I2C Address=0x52



## 27. X-Sensor+IrDA



AP TEMP

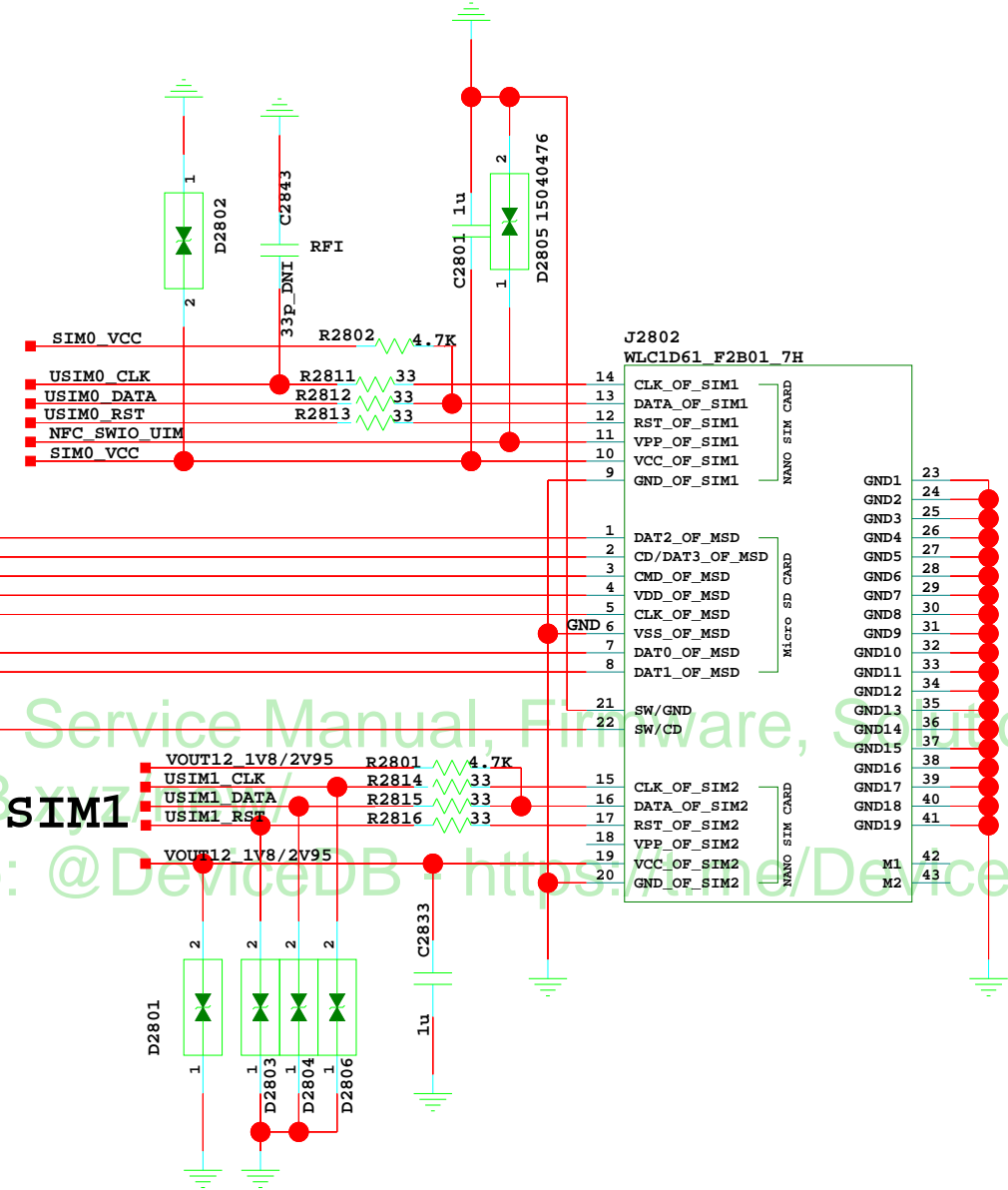


R2706	1K_DNI	1K
8 channel switch	SMT	NOT SMT

# 28.SIM/uSD Card

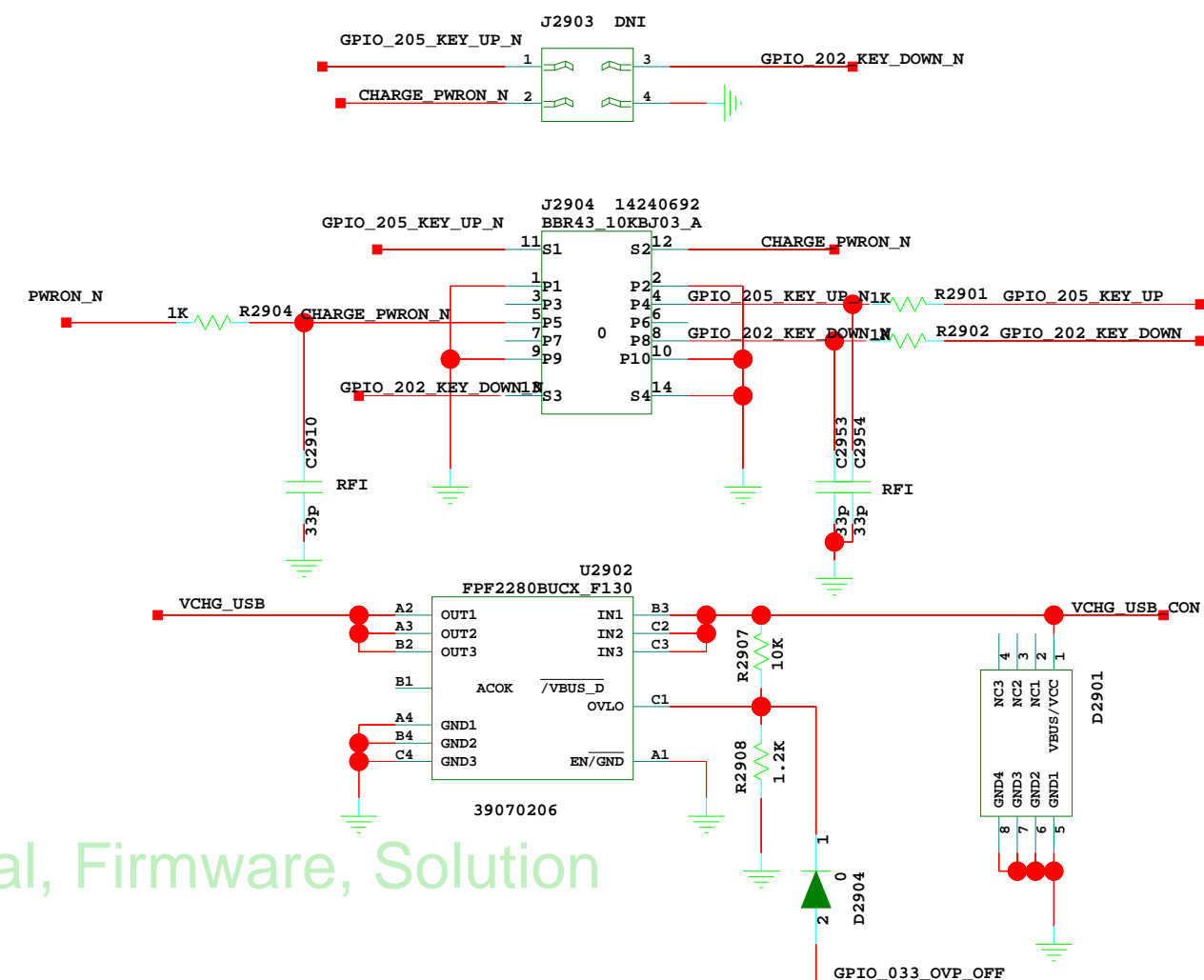
Micro SD

SIM0



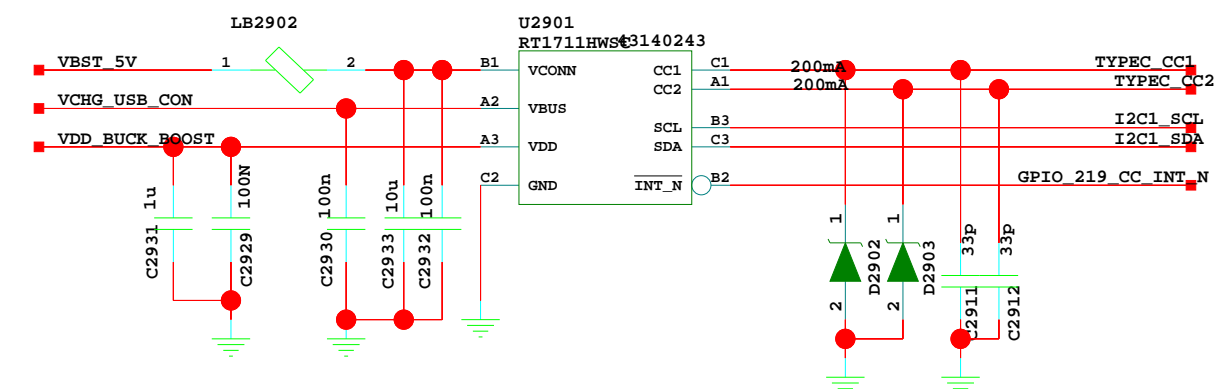


## D

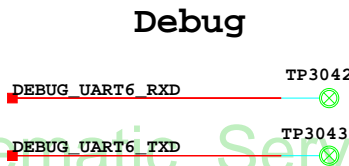
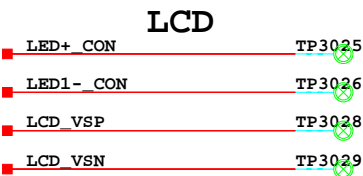
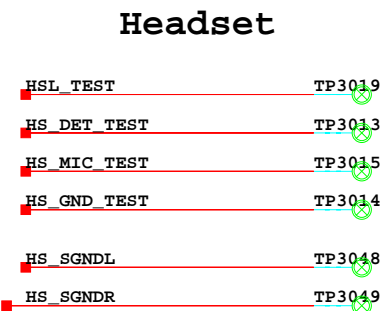
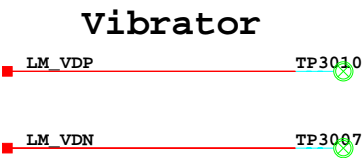
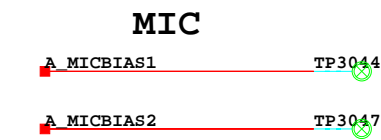
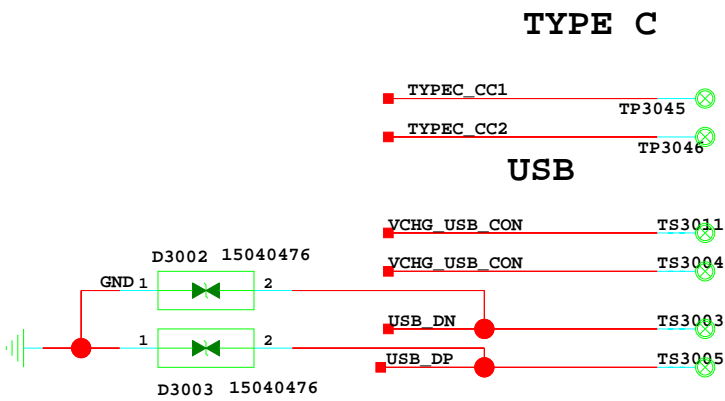
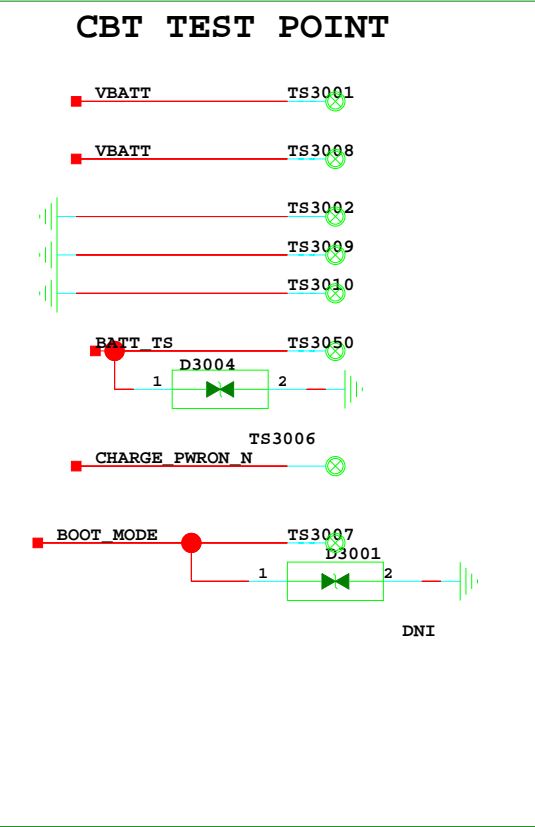


## TypeC PD

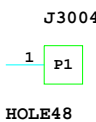
**I2C Address=0100010(0x22)**



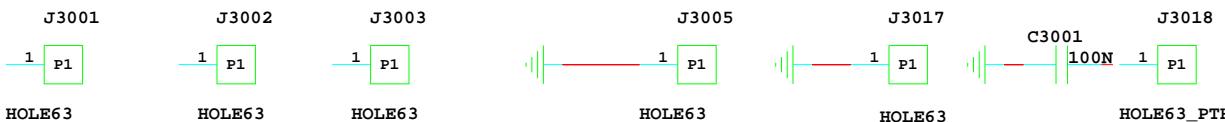
# 30. Test Points/Shields



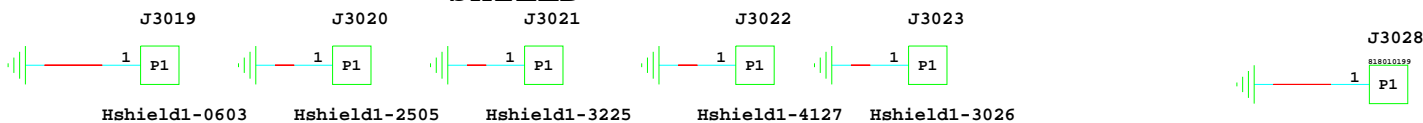
A+G SPI



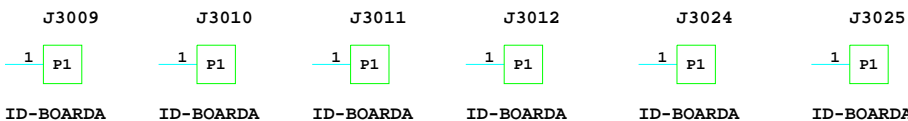
**HOLE**



**SHIELD**



**Mark Point**



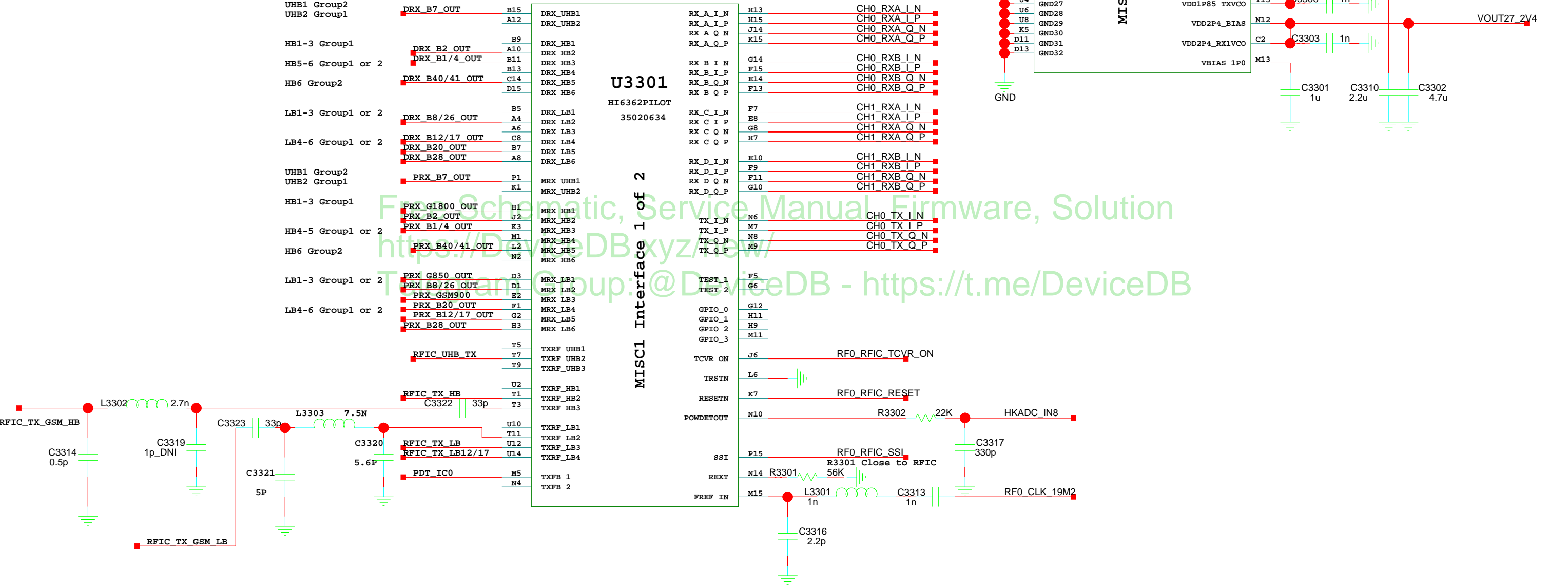
1	2	3	4	5	6
31. Reserved					

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Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

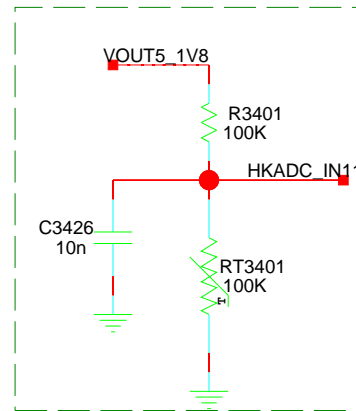
[illegible]

33. RF Transceiver\_0

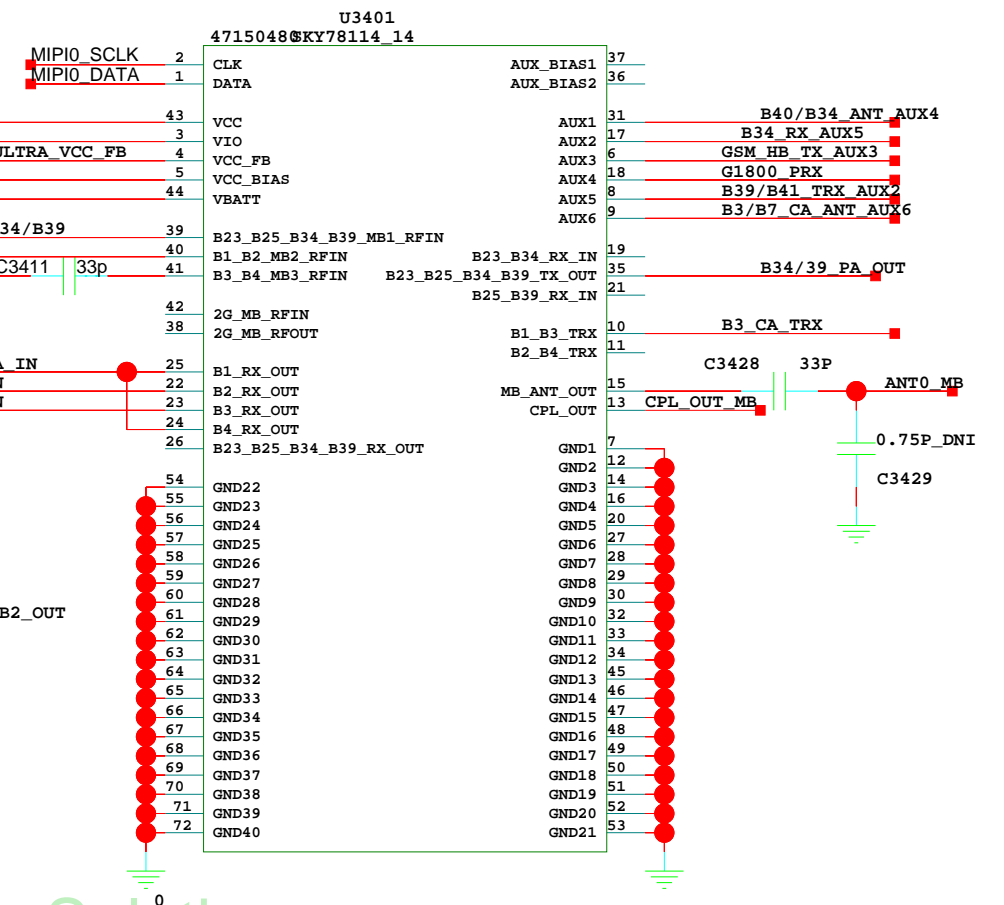
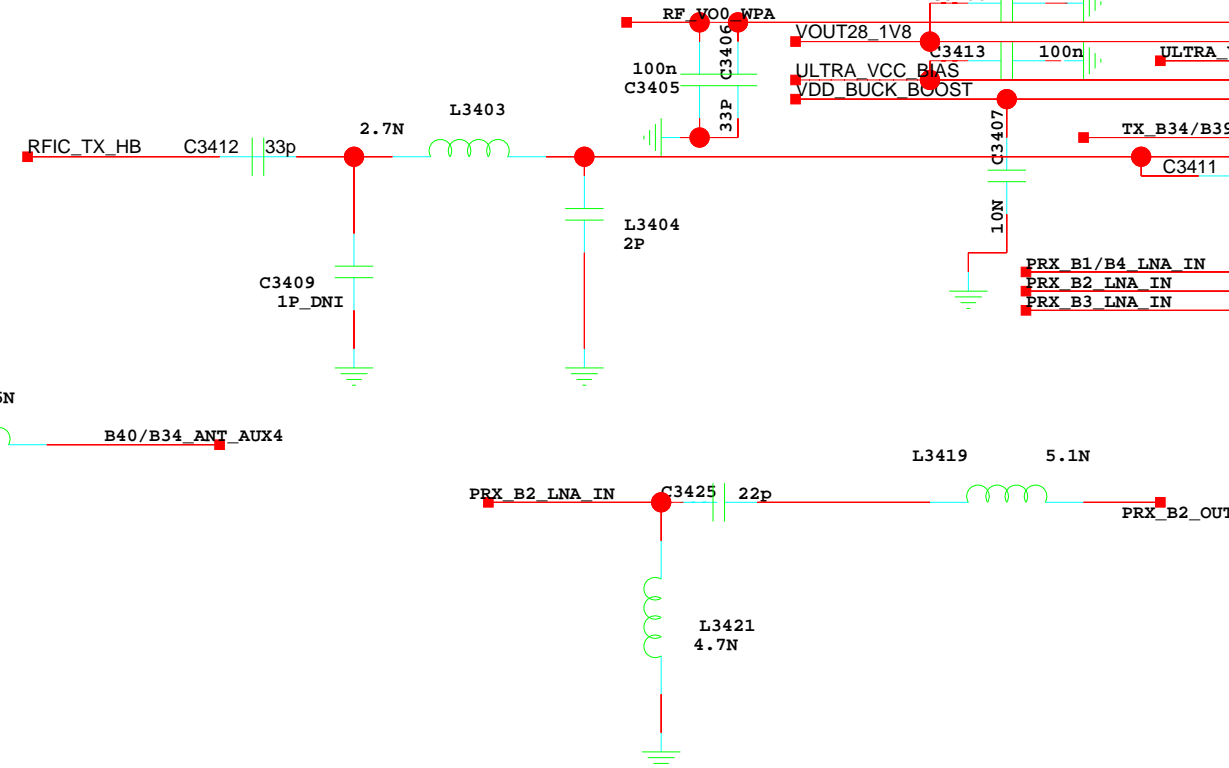
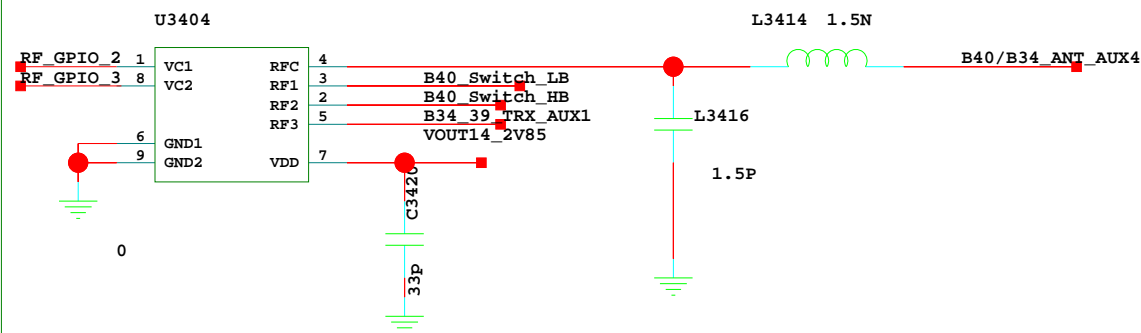
HB6 can't suport TDS div,HISI analysing



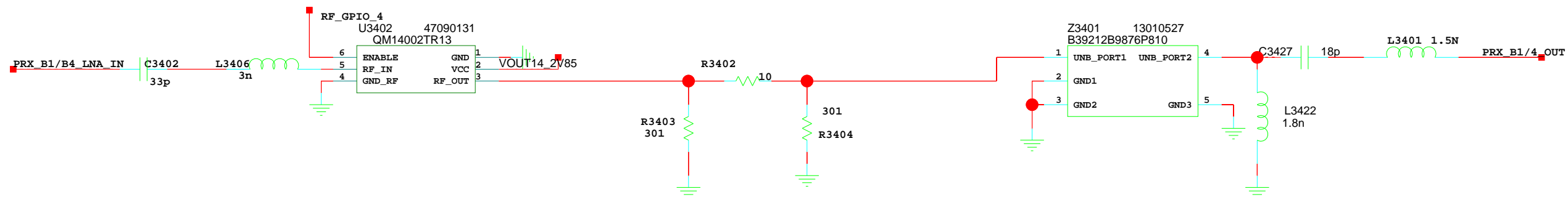
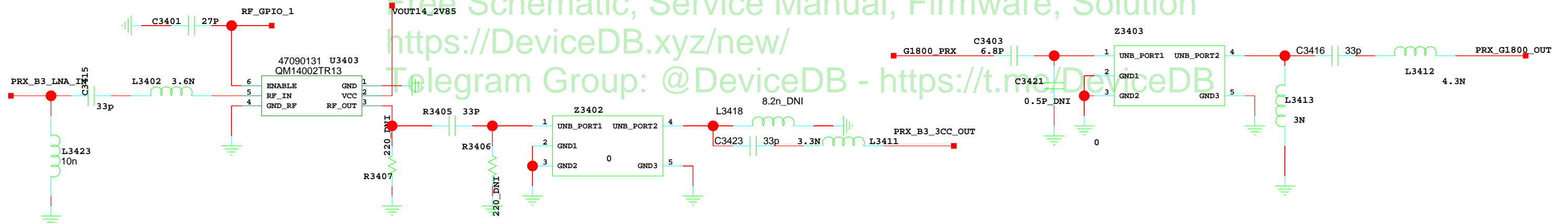
### 34.Ultra2.0\_MB\_78114\_B1/2/3/4/34/39



CLOSE TO MMBPA PA\_TEMP\_DECT

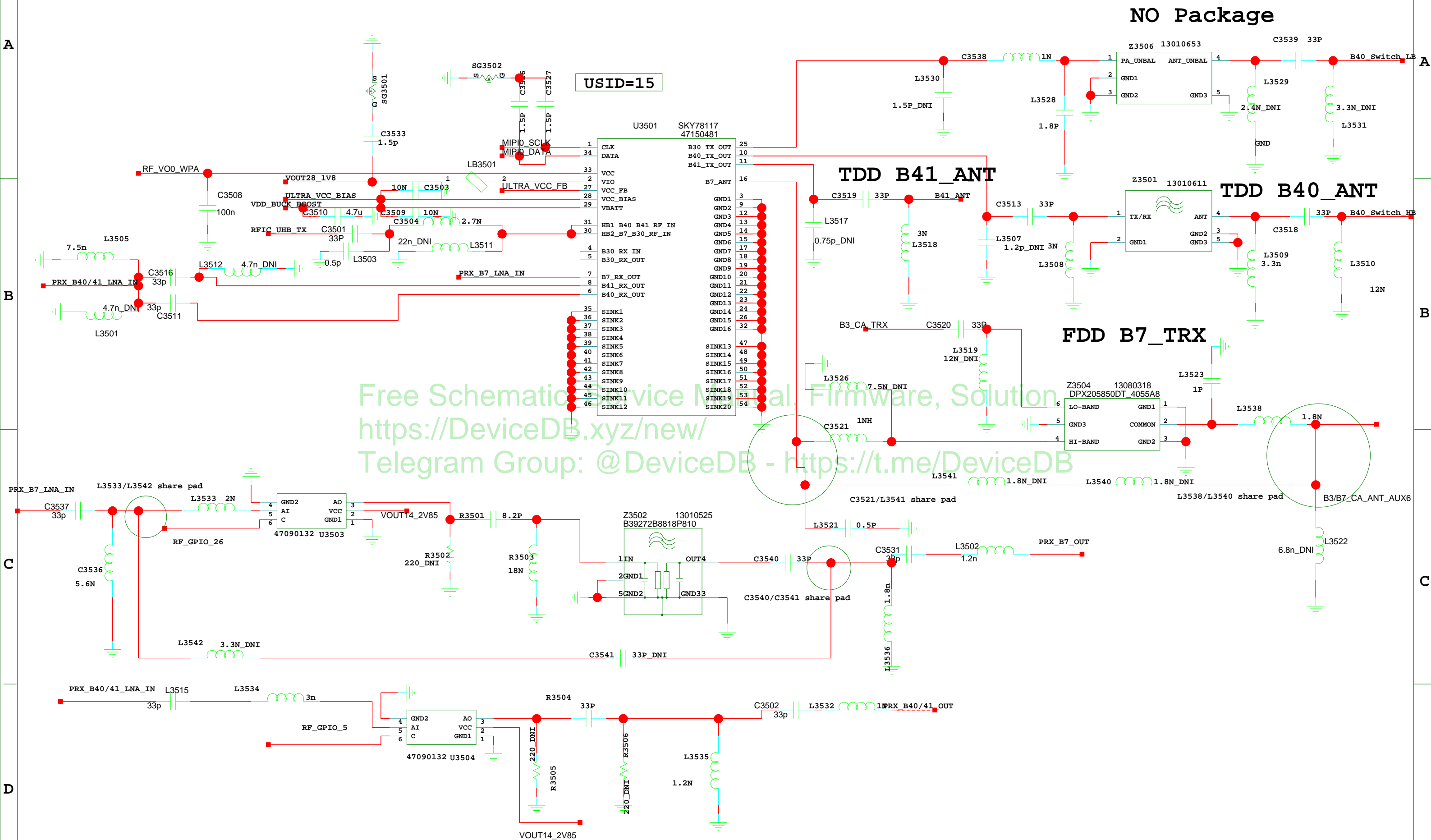


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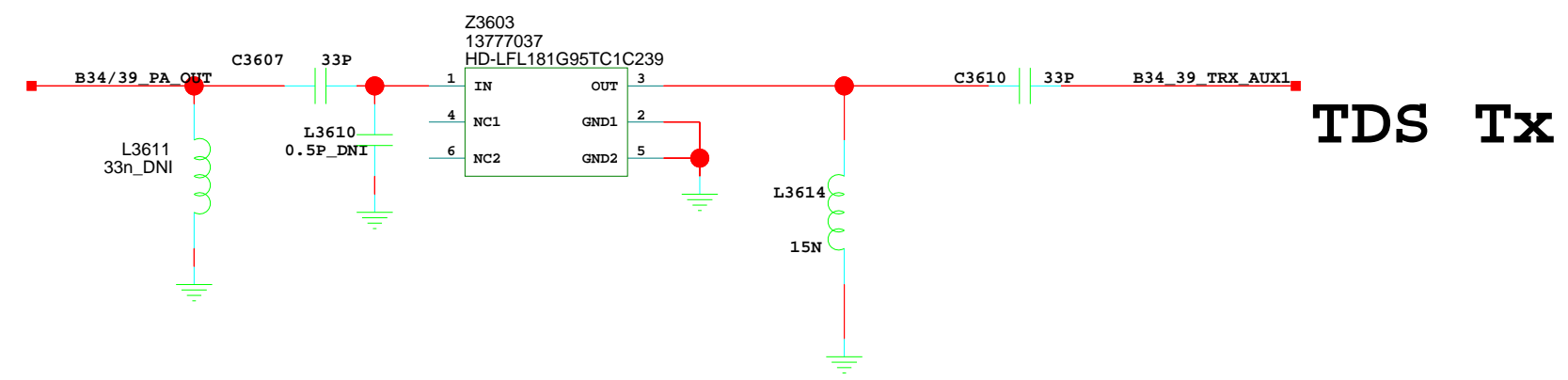




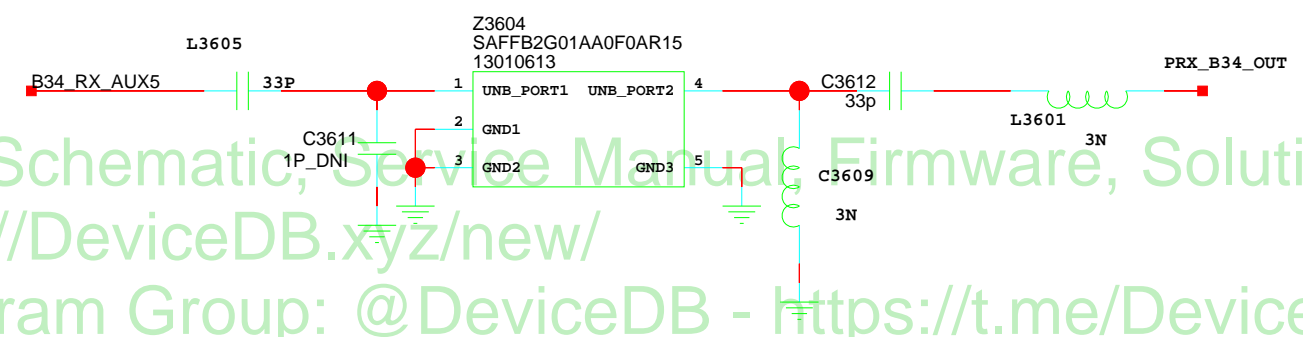
### 35. SKY78117\_B7/B38/B40/B41



# 36.B34/B39/41 TRX

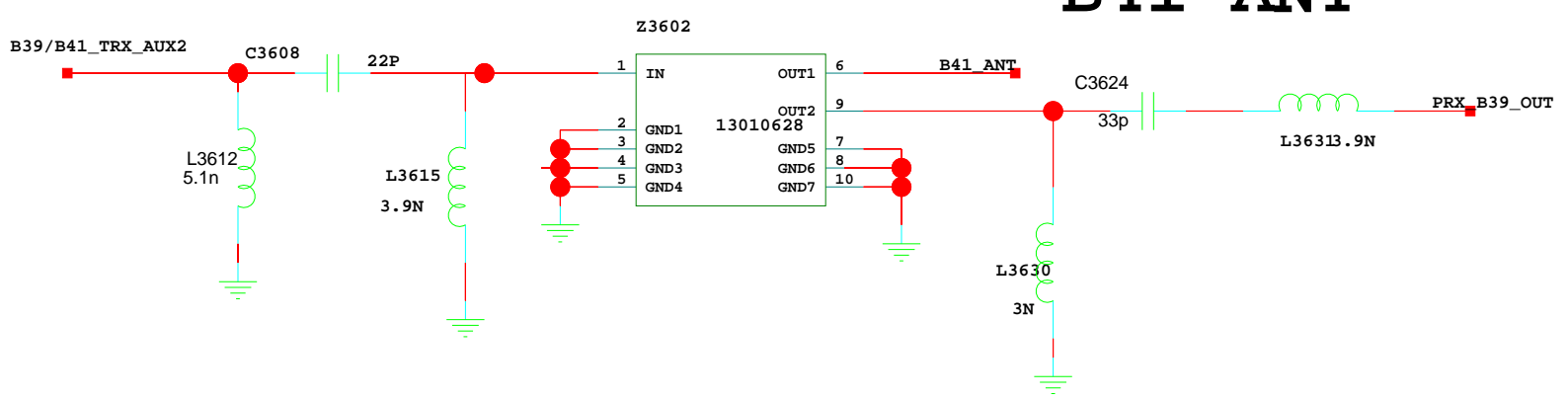


TDS Tx



B34 Rx

## B41 ANT



B39 PRx

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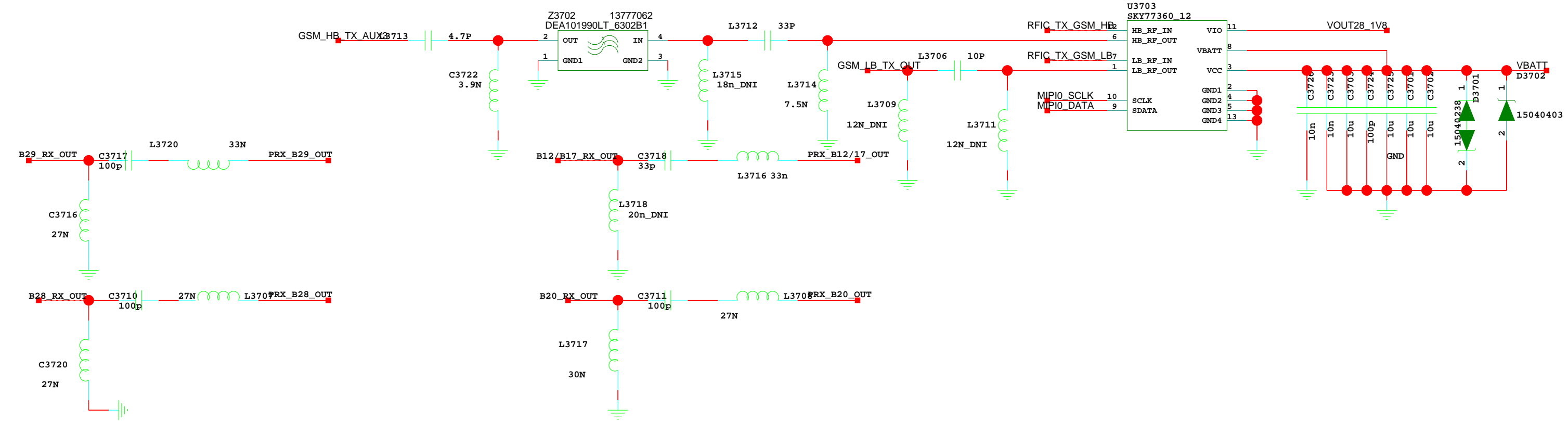
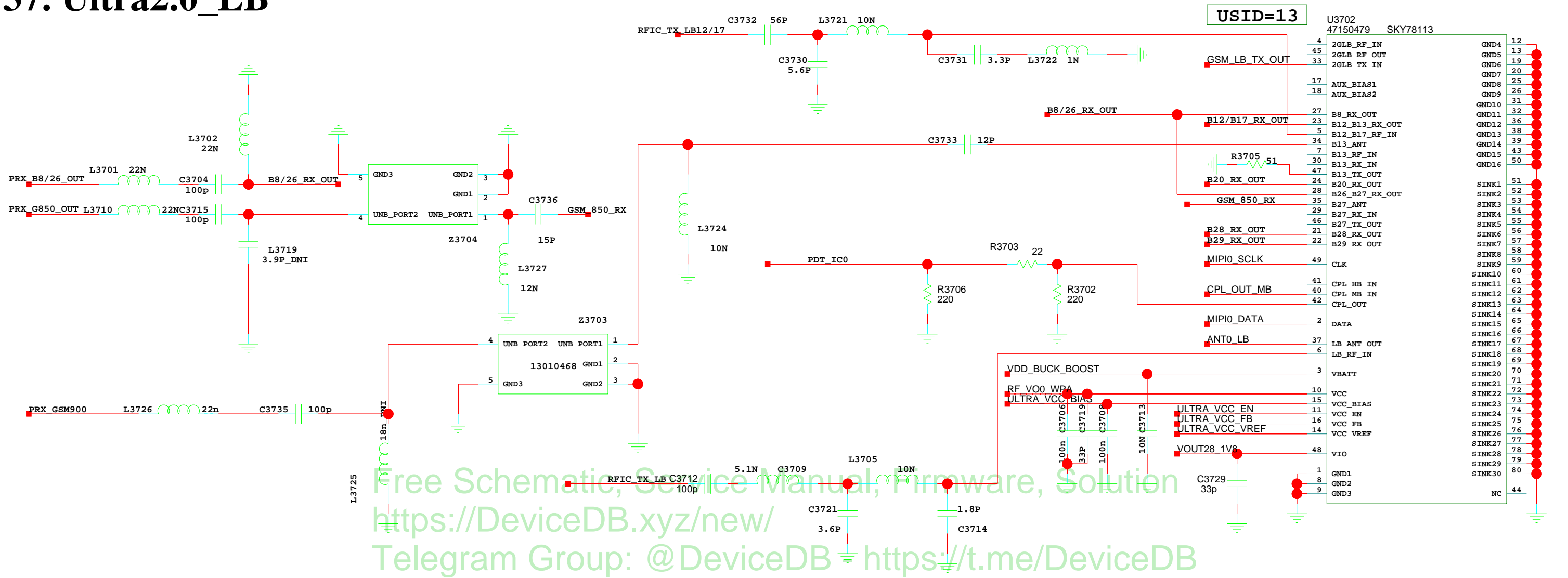
37. Ultra2.0\_LB

A

B

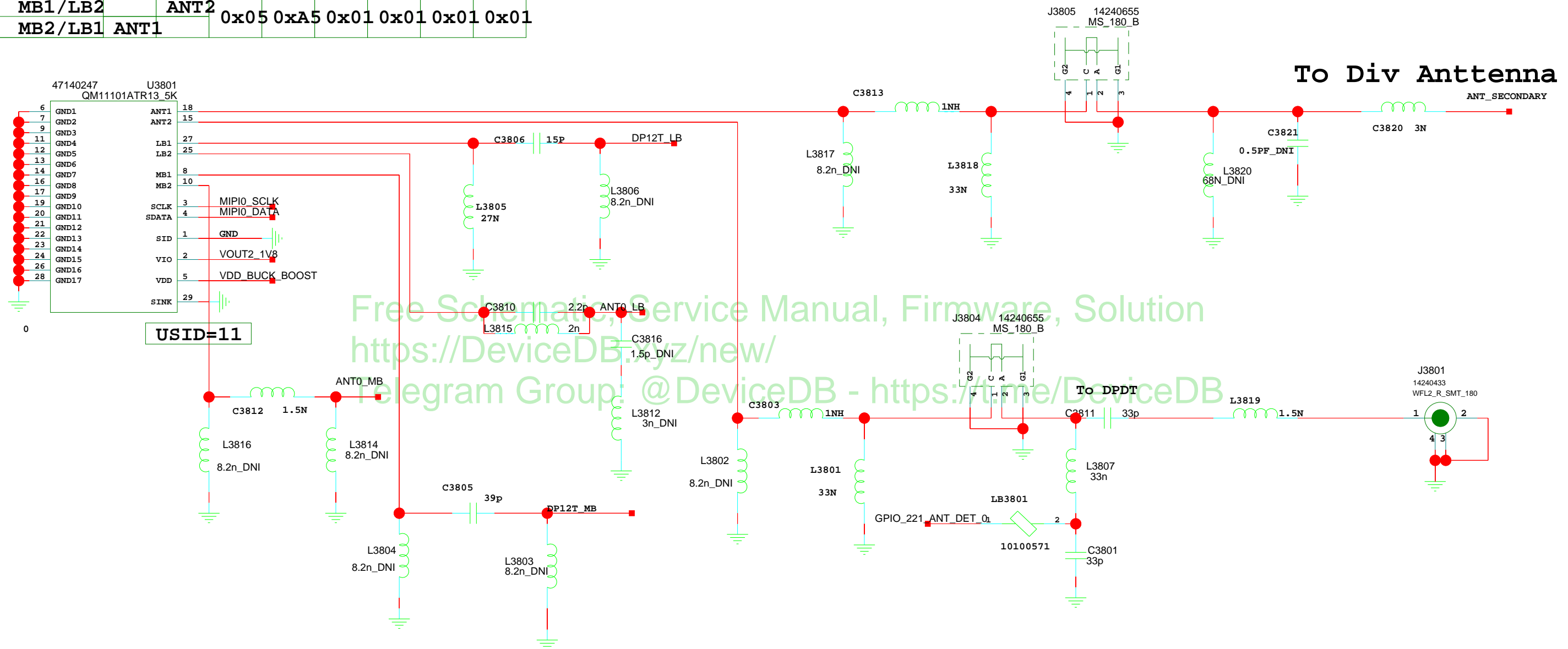
C

D



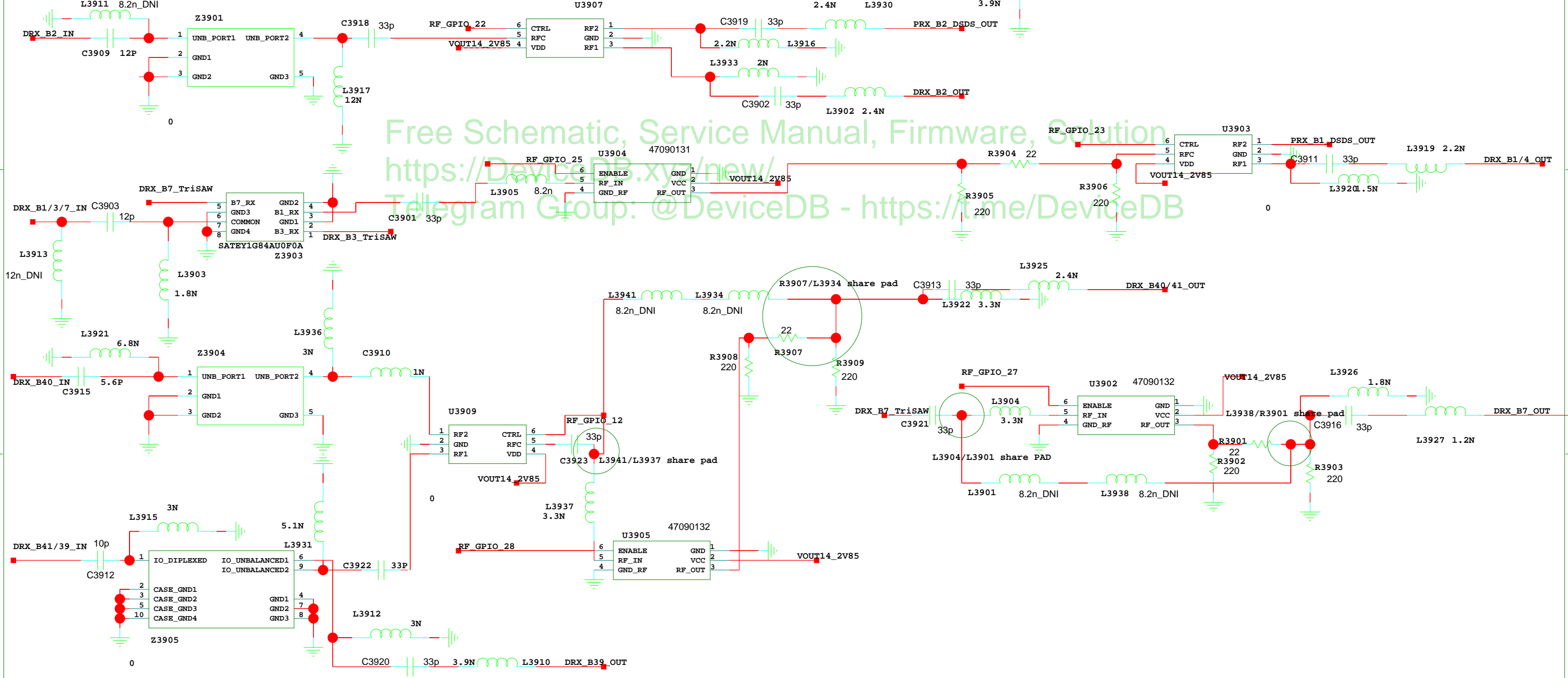
1	2	3
<b>38. RF Front End Switch /Main ANT</b>		

RF Path	ANT	00	01	02	03	04	05
MB1/LB1	ANT1	0x05	0x5A	0x01	0x01	0x01	0x01
MB2/LB2	ANT2	0x0A	0xA5	0x01	0x01	0x01	0x01
MB1/LB1	ANT2	0x0A	0xA5	0x01	0x01	0x01	0x01
MB2/LB2	ANT1	0x05	0x5A	0x01	0x01	0x01	0x01
MB1/LB2	ANT1	0x0A	0x5A	0x01	0x01	0x01	0x01
MB2/LB1	ANT2	0x05	0xA5	0x01	0x01	0x01	0x01
MB1/LB2	ANT2	0x05	0xA5	0x01	0x01	0x01	0x01
MB2/LB1	ANT1	0x05	0xA5	0x01	0x01	0x01	0x01



# 39. LTE Diversity

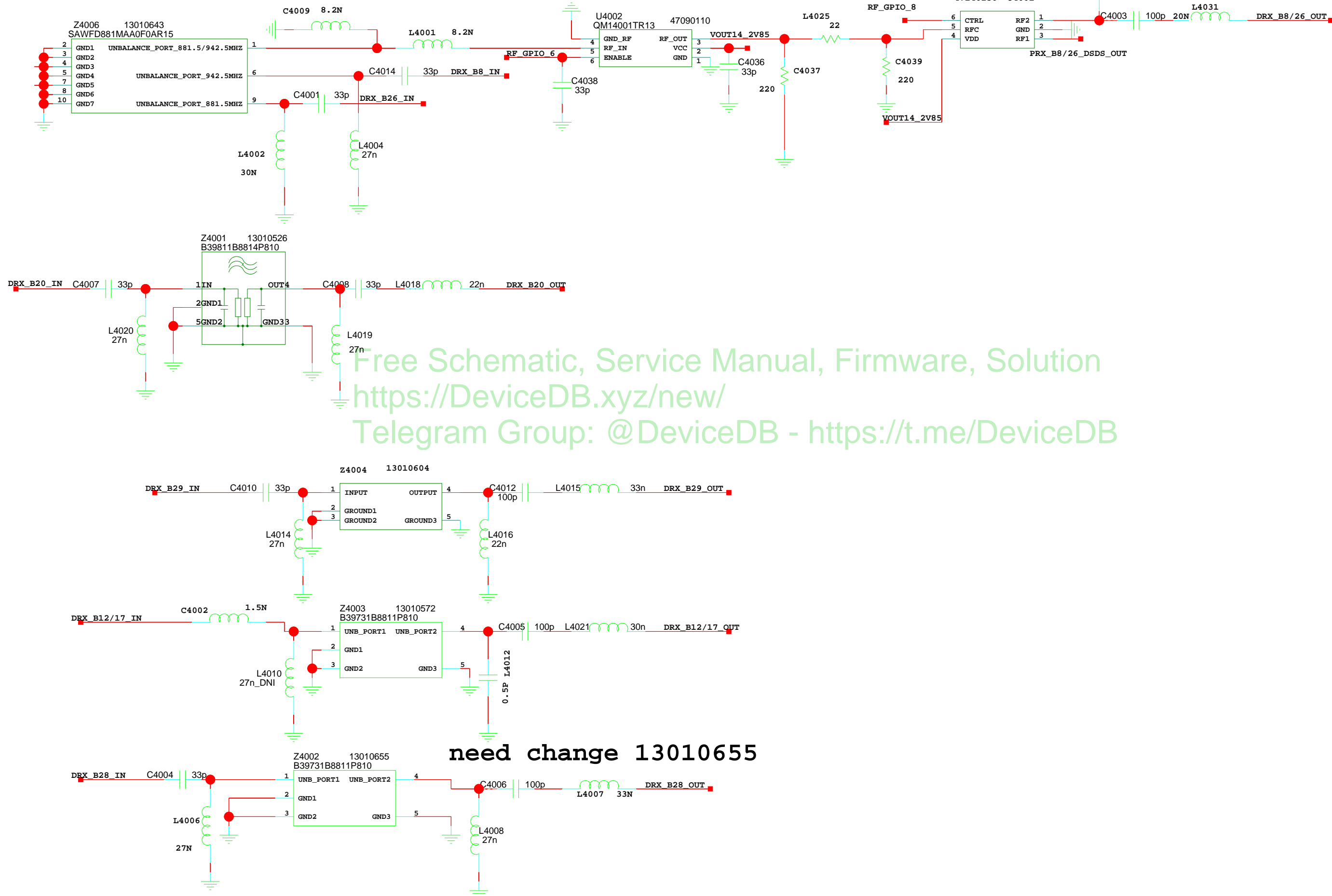
ANT_A	Mode	D7	D6	D5	D4	D3	D2	D1	D0
ANT_A	Isolation	0	0	0	0	0	0	0	0
	TRx1	0	0	0	0	0	0	0	1
	TRx2	0	0	0	0	0	0	1	0
	TRx3	0	0	0	0	0	0	1	1
	TRx4	0	0	0	0	0	1	0	0
	TRx5	0	0	0	0	0	1	0	1
	TRx4+5	0	0	0	0	1	1	0	0
ANT_B	Mode	D7	D6	D5	D4	D3	D2	D1	D0
	Isolation	0	0	0	0	0	0	0	0
	TRx1	0	0	0	0	0	0	0	1
	TRx2	0	0	0	0	0	0	1	0
	TRx3	0	0	0	0	0	0	1	1
	TRx4	0	0	0	0	0	1	0	0
	TRx5	0	0	0	0	0	1	0	1
	TRx6	0	0	0	0	0	1	1	0



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# 40. LTE Diversity-B5/B8/12/B20/B28

NEED change to B8/26 Dual SAW





# 41. Reserved for CDMA Modem

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1	2	3	4	5	6
---	---	---	---	---	---

# 42. Reserved for CDMA Modem

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<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

1	2	3	4	5	6
---	---	---	---	---	---

# 43. Reserved for CDMA Modem

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Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

1	2	3	4	5	6
<h1>44. Reserved for CDMA Modem</h1>					
A					
B					
C					
D					
1	2	3	4	5	6

Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

1	2	3	4	5	6
---	---	---	---	---	---

# 45. Reserved for CDMA Modem

Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

1	2	3	4	5	6
<h1>46. Reserved for CDMA Modem</h1>					
A					
B					
C					
D					
1	2	3	4	5	6

Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>



# 47. Reserved for CDMA Modem

Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

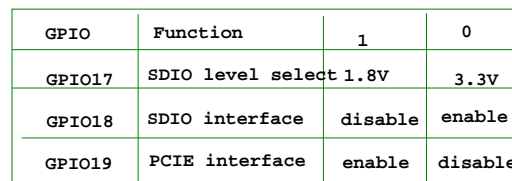
1	2	3	4	5	6	
<h1>48. Reserved</h1>						
A						A
B						B
Free Schematic, Service Manual, Firmware, Solution <a href="https://DeviceDB.xyz/new/">https://DeviceDB.xyz/new/</a> Telegram Group: @DeviceDB - <a href="https://t.me/DeviceDB">https://t.me/DeviceDB</a>						
C						C
D						
1	2	3	4	5	6	

1	2	3	4	5	6	
49. Reserved						
A						A
B						B
C						C
D						
1	2	3	4	5	6	

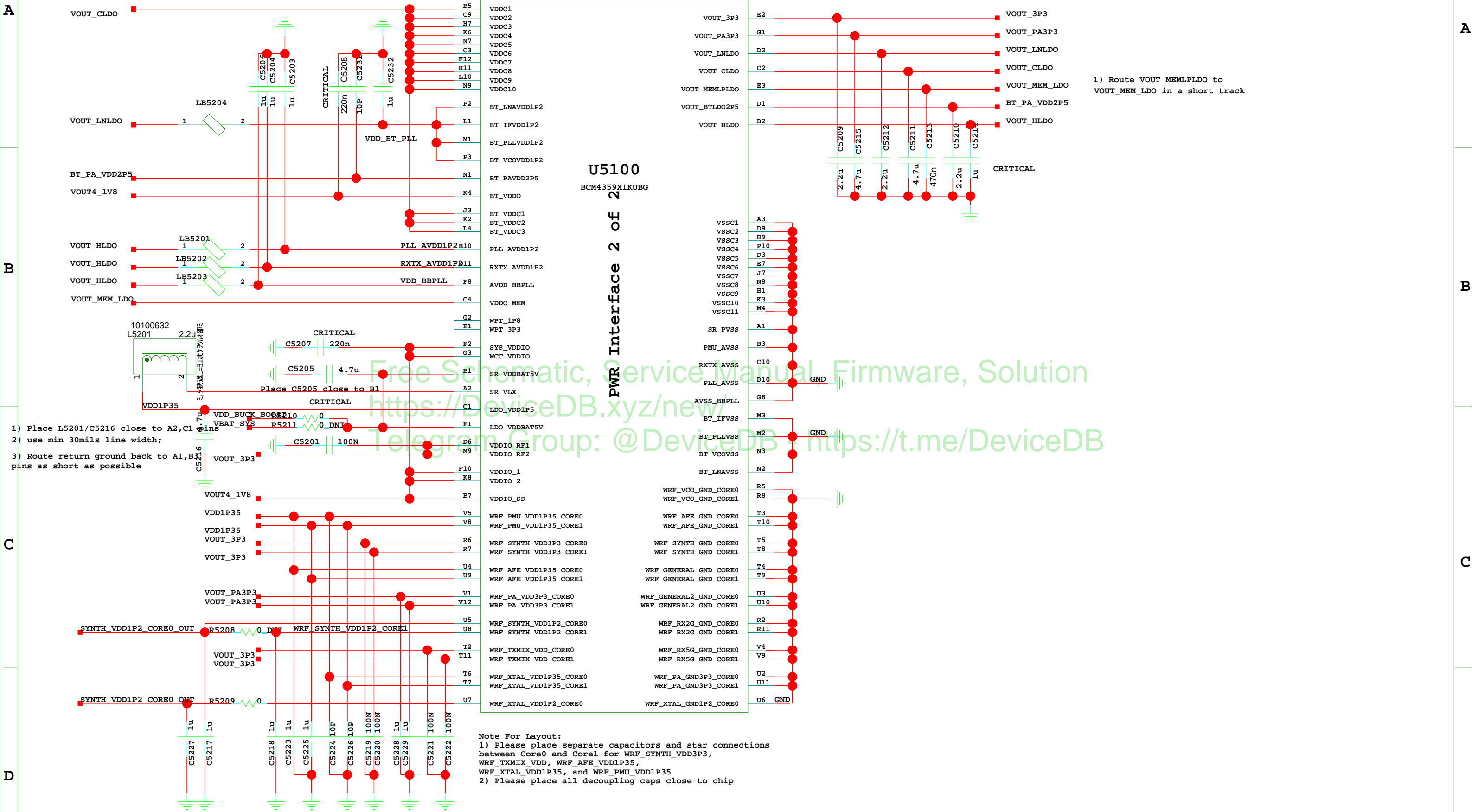
Free Schematic, Service Manual, Firmware, Solution  
<https://DeviceDB.xyz/new/>  
Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

1	2	3	4	5	6
<h1>50. Reserved</h1>					
<div>Free Schematic, Service Manual, Firmware, Solution <a href="https://DeviceDB.xyz/new/">https://DeviceDB.xyz/new/</a> Telegram Group: @DeviceDB - <a href="https://t.me/DeviceDB">https://t.me/DeviceDB</a></div>					

## D



# 52 BCM4359 PWR



Note For Layout:  
1) Please place separate capacitors and star connections between Core0 and Core1 for WRF\_SYNTH\_VDD3P3, WRF\_TXMIX\_VDD, WRF\_AFE\_VDD1P35, WRF\_XTAL\_VDD1P35, and WRF\_PMU\_VDD1P35  
2) Please place all decoupling caps close to chip

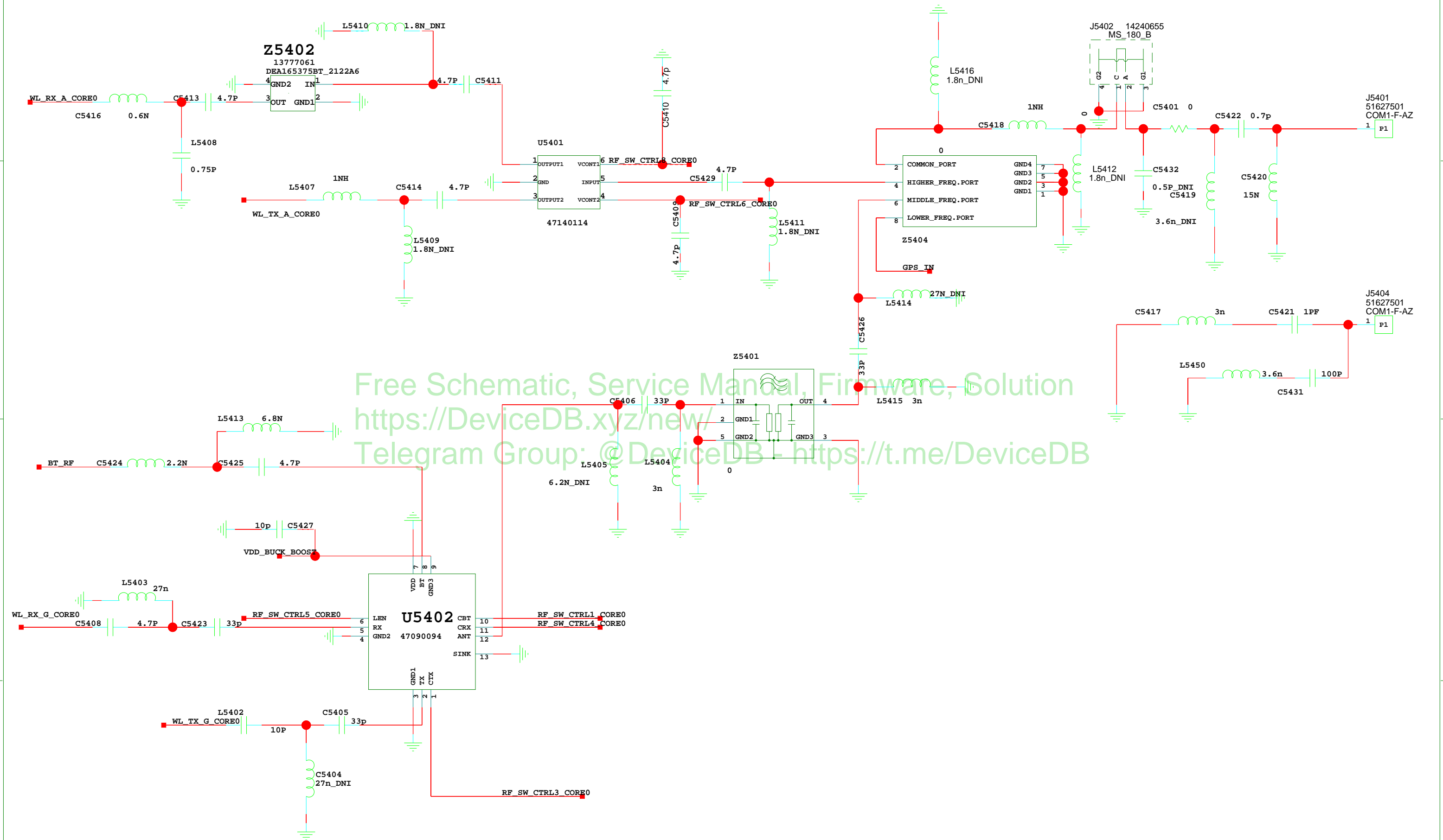
Place C5224 close to T6  
Place C5226 close to T7  
Use star connection for WRF\_XTAL\_VDD1P35, WRF\_PMU\_VDD1P35, & WRF\_AFE\_VDD1P35  
Star connection for SYNTH\_VDD



53 Reserved

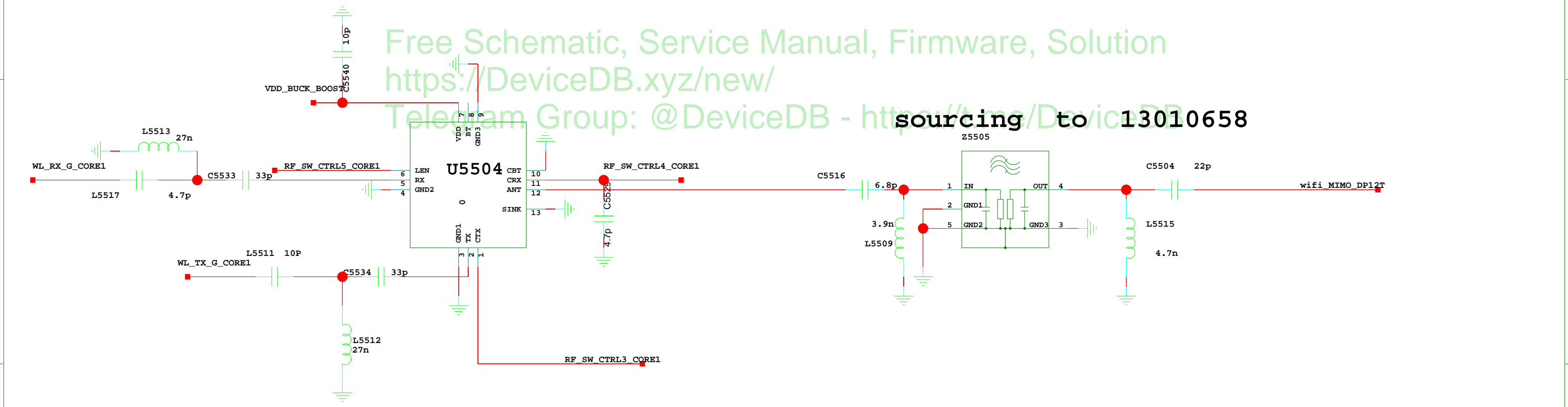
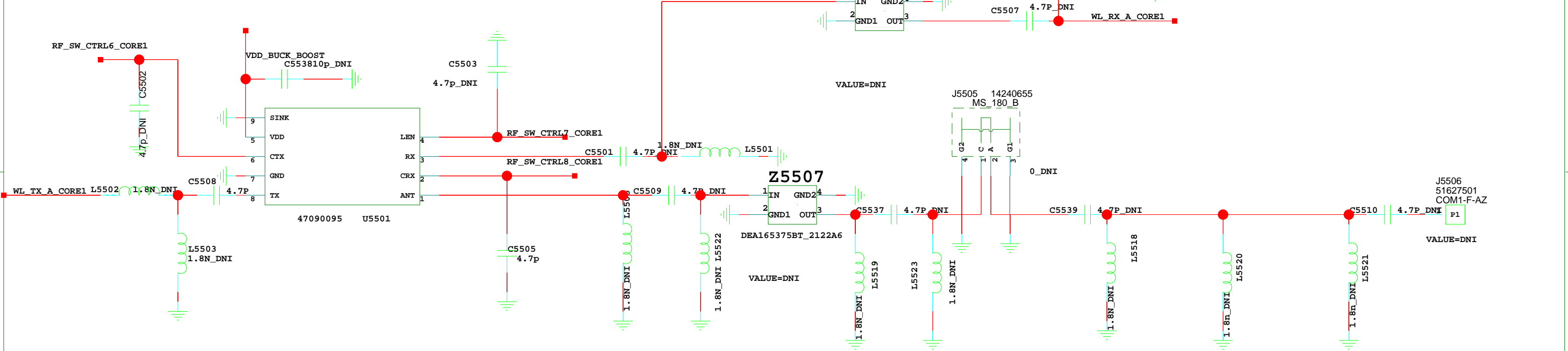
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# 54. WLAN RF0/LTE MIMO3



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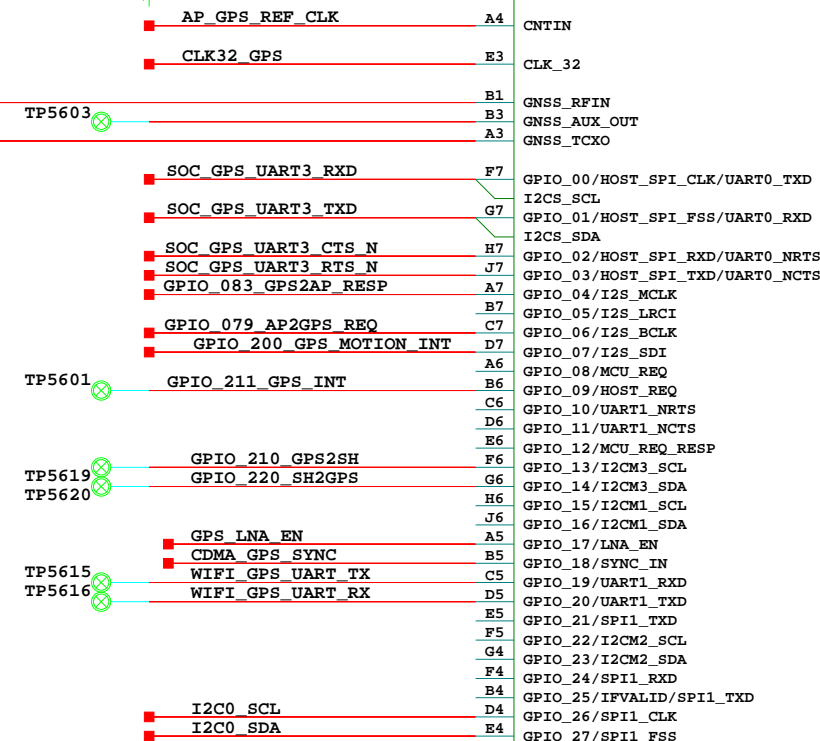
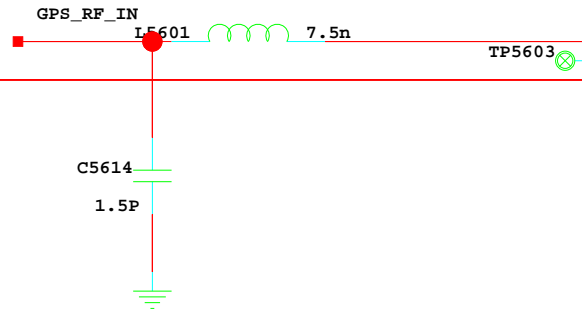
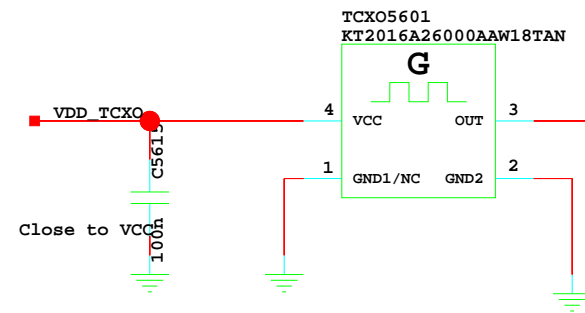
# 55. WIFI\_RF1/LTE MIMO4



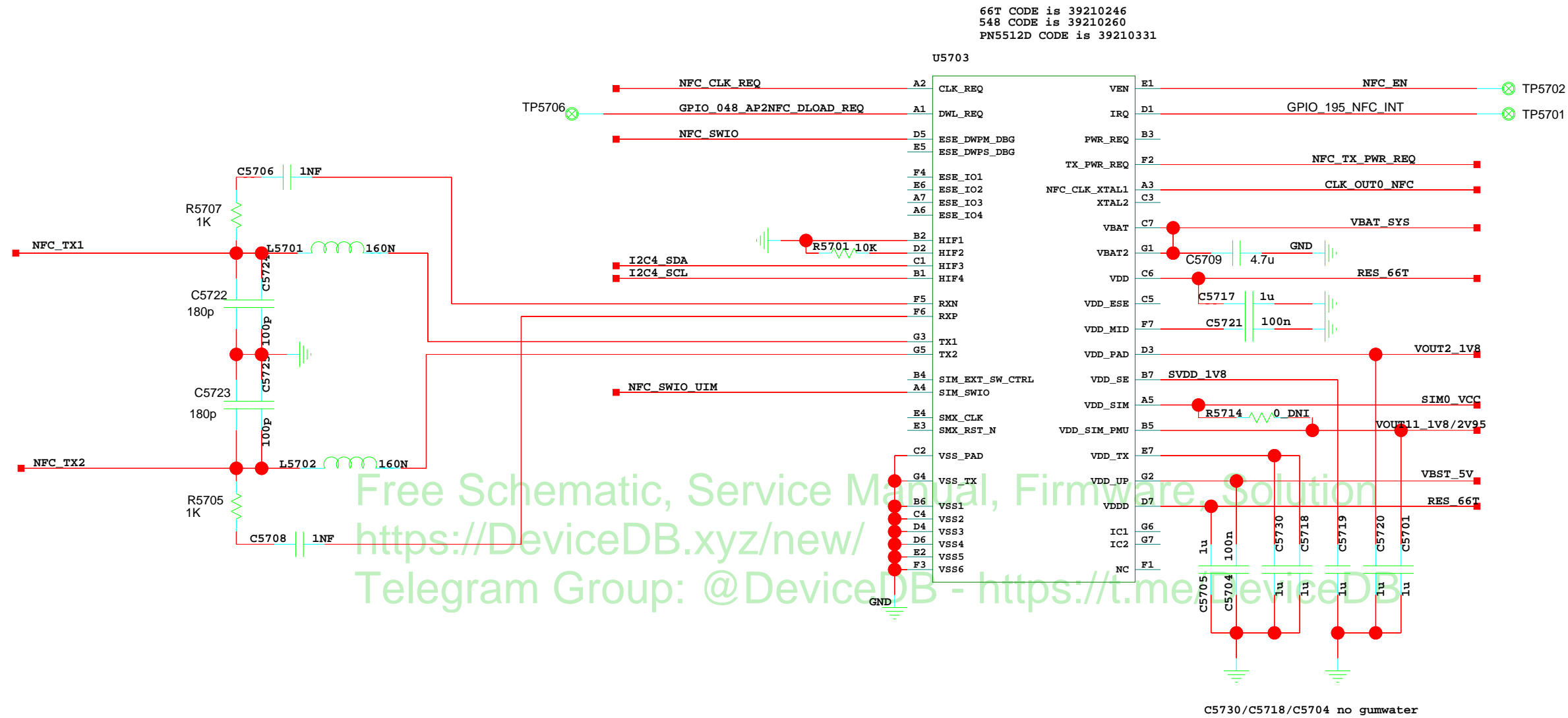
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Telegram Group: @DeviceDB - <https://t.me/DeviceDB> sourcing to 13010658

# 56. GPS

I2C Address=1101001(0x69)



# 57. NFC



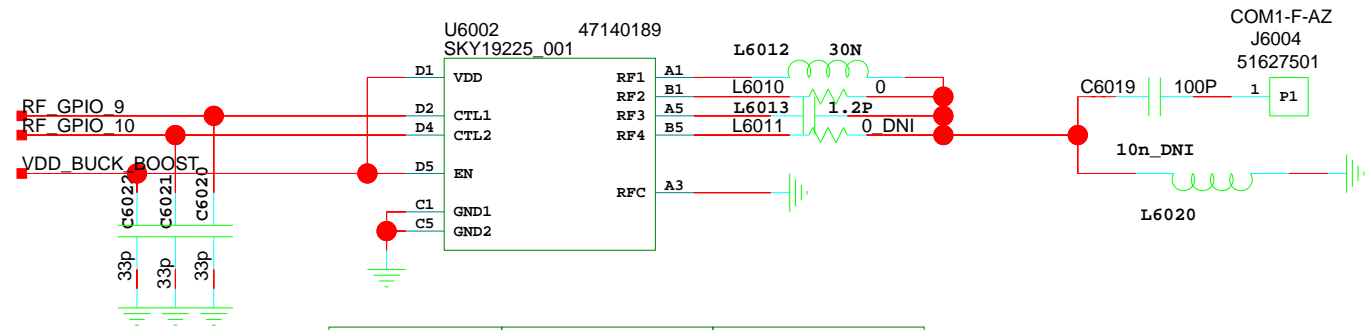
## 58. RF Transceiver2

1	2	3	4	5	6
<h1>59. B7/B41 4*4 MIMO</h1>					
A					
B					
C					
D					
1	2	3	4	5	6

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Telegram Group: @DeviceDB - <https://t.me/DeviceDB>

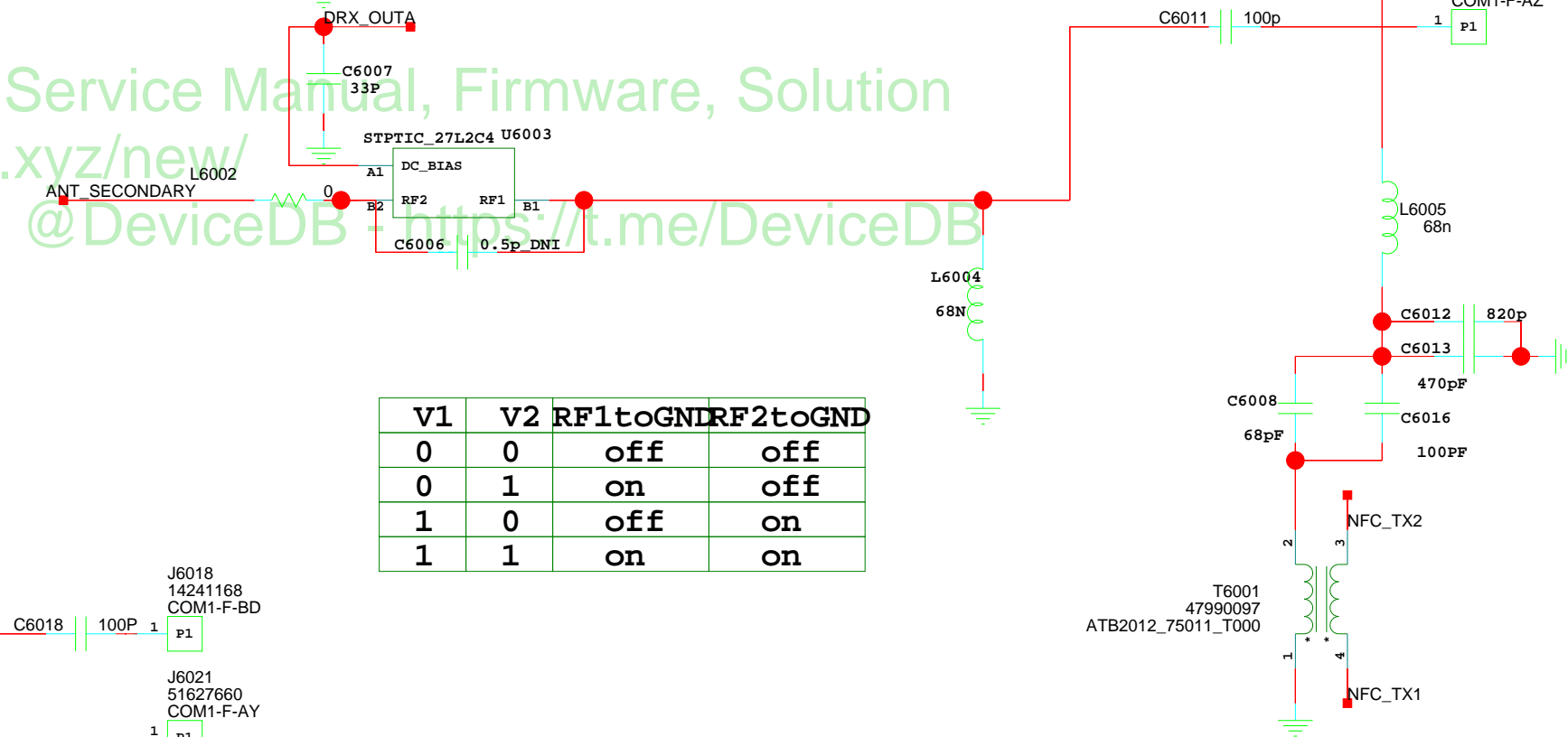
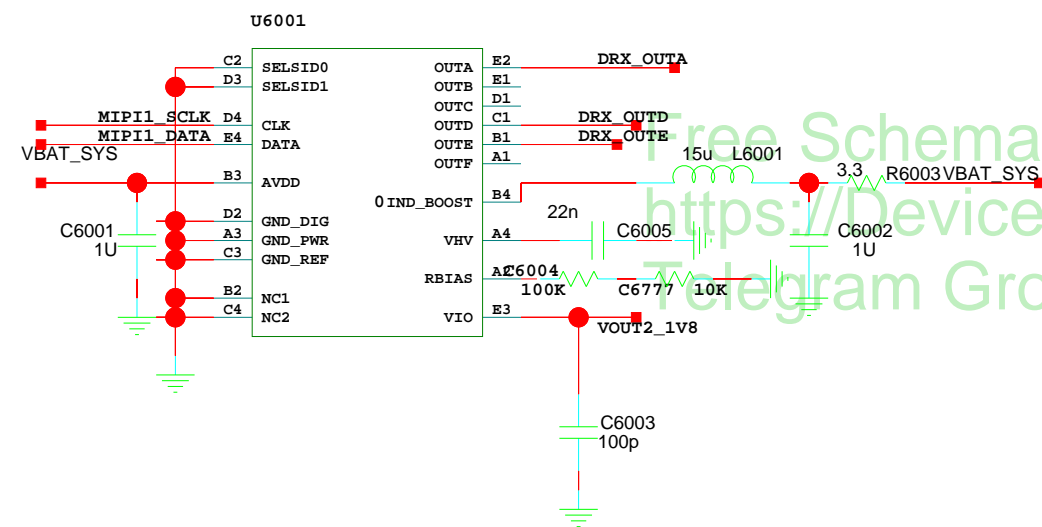
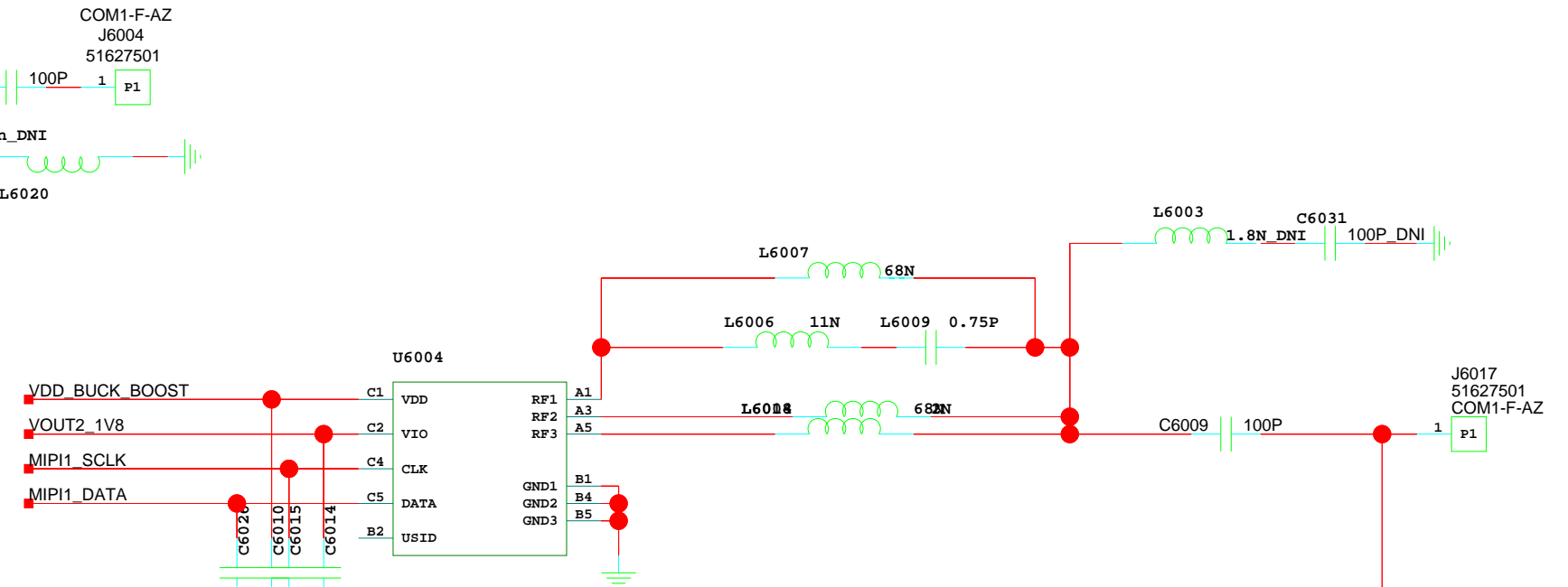


## 60. Antenna Tunner



	CTL1	CTL2
RF1-RFC	0	0
RF2-RFC	0	1
RF3-RFC	1	0
RF4-RFC	1	1

USID=7



V1	V2	RF1toGND	RF2toGND
0	0	off	off
0	1	on	off
1	0	off	on
1	1	on	on

