FAIRPHONE

Repairability and recyclers information on Fairphone 4

FAIRPHONE

1. Product Identification

This document refers to Fairphone 4 5G a product by Fairphone, that was launched in the market on the 25th of October 2021.

This device comes in different configurations:

Grey

6 GB RAM, **128 GB** Internal Memory
579 EUR RRP

Grey, Green and Green speckled

8 GB RAM, **256 GB** Internal Memory
649 EUR RRP

The main technical specifications are as follows:

5G European operator ready

Dual SIM (NanoSIM and eSIM)

Cameras
48MP wide OIS with laser AF
48MP ultra-wide / macro
Color sensor & 1D TOF sensor (low-light assist)
25MP FF (Selfie)

Qualcomm 750G (7225) Chipset

3905 mAh Battery (50% charge in 30min)
Qualcomm 4.1 Quick Charge

6.3 inches Full HD+ Display

1080 x 2340 resolution
Pixelworks Technology
Corning Gorilla Glass 5

IP 54 Rating
Side Mounted Fingerprint Sensor

Expandable SD card slot (up to 2TB)

2. Electronic board, wiring and connection diagrams

At the moment of writing this document we are still early in the product lifecycle and very few repairs have been necessary. Once we have a larger pool of devices that can be investigated for board repairs, we will publish the necessary electronic board, wiring and connection diagram.

If you need any information to facilitate your repair, please email product.management@fairphone.com and we will be happy to share more information.

3. List of repair and test equipment needed

Repairing FP5 is very simple and the list of required tools is short. Most of the repairs will only need 1 and 2 below. For more complex repairs you will need tools 3 to 7.

1. Phillips screwdriver PH00 (for most of the repairs)
2. Torx screwdriver T5 (only for PCBA repairs)
3. USB-C cable (to test charging)
4. Battery Discharge Power measurement equipment
5. ESD protection gear
6. Soldering gun and solder tin
7. Software flashing tool, but can also be done using a computer. You can find the instructions here.

4. Technical manual

Any person can access our technical manual online. There are tens of different guides depending on the needs. See below for a selection of the 10 most important articles.

1. FP4. Charge your phone
2. FP4. Set up SIM card
3. FP4. Set up eSIM card (embedded SIM)
4. FP4. Connect to Mobile data
5. FP4. Connect to Bluetooth
6. FP4. Connect to a Wi-Fi
7. FP4. Migrate data from another phone
8. FP4. Update to the latest Fairphone OS
9. FP4. Maximize battery lifespan
10. FP4. Replace a spare part

You can access all the rest here

5. Diagnostic fault and error codes

- We make use of Android's (AOSP) default logging and tracing mechanisms, which mostly means Android *logcat* messages generated by the Android framework, apps and HAL implementations, as well as kernel logs.
- Additionally, we use logging and diagnostics in components of third party suppliers, most of which comes from Qualcomm. These components use the same technical mechanisms as AOSP code: Android *logcat* and kernel logs.
- For modem and low-level implementations, we fully rely on logging and diagnostics implemented by our chipset vendor Qualcomm and their proprietary tooling.
- We currently mostly use a "pure-AOSP" approach -- keeping customization compared to AOSP to a minimum -- which facilitates maintenance and longevity
- For any customization we add on top of AOSP and device-specific code (from Qualcomm and other suppliers), we again make use of Android *logcat* and kernel log.
- If you encounter a pop-up with an error code "There has been an error" then you can use usb debugging https://developer.android.com/studio/debug/dev-options and the "adb logcat" tool to get the full log that contains all the strings to help you figure out what the error code is.

In summary, our failure analysis relies on analyzing Android logcat, Linux kernel logs, and additionally Qualcomm modem logs where applicable, making use of existing tagging mechanisms from Android and Linux to identify failing components. Within the scope of Android and Linux kernel, we currently do not have any proprietary formal error/fault codes (e.g., numerical error codes that follow certain specifications to identify which code would be related to what fault state). Our fault analysis relies on the mostly text-based analysis of Android and Linux logs.

6. Component and diagnosis information

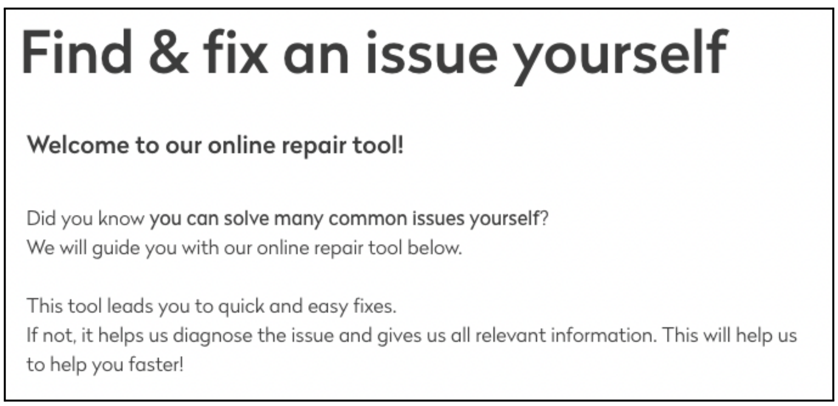
For any question on this chapter please contact product.management@fairphone.com.

Fairphone 4 contains the following key components with the following key data points:

Component	Part details	Vendor	Key specs
Battery	Model: F4AC1	Kayo	Capacity : 3905 mAh Nominal Voltage: 3.85 V Cut off Voltage: 3.0 V Charging Voltage: 4.4 V Dimensions: 91.3 x 46.8 x 6.5 mm Internal Impedance < 120 mΩ Standard discharge: Continuous 0.2C to 3.0V Operational Charging Temperature Range: 0-60℃ Operational Discharge Temperature Range: -20℃ - 60℃ Recommend full charge & discharge cycle once every 3-6 months.
Chipset	SM7225	Qualcomm	64 bit application processor Dual DSP Always on sub system & processor Supports: GNSS, WLAN/BT, LTE, TD-SCDMA, WCDMA, GSM and 5G NR. Support camera interfaces: 3 x ISP, 1 x ISP-lite, 16+16+16MP ZSL, MCTF. Adreno 619 GPU 14 QUP (Qualcomm Universal Ports): multiplexed serial interface functions (eights ports on GPIO and six ports on LPI GPIO)
Display	Model: 9A-3R063-11 02B LTPS & incell	DJN	6.3” Outline: 71.00(W)*157.4(H)*2.09(T) Viewing area: 67.47(W)*145.71(H) Active Area: 67.068(W)* 145.314(H) Viewing Direction: all directions MIPI Interface LCM Input voltage: IOVCC=+1.8V(+1.95V Max) AVDD=+5.5V(6VMax) AVEE=-5.5V(-6V Max) Storage Temp: -40 to 80℃
Board to Board Camera Connector	Model: BM24-30DP /2-0.35V(51)	Tohoku Hirose Electric Co.	Voltage 30V A/DC Signal contact 0.25 A Power Contact 5.0 A Op Temperature: -40℃ to 85℃ Storage Temperature -10℃ to 60℃ Electrical Contact Resistance: 20 mV AC or less 1kHz, 1mA Electrical Insulation Resistance 100 V DC Electrical Voltage Proof 150V AC for max 1 minute
Speaker	Dynamic	AAC	Dimensions: 11 x 15 x 2.5 mm 8 Ω @ 2 kHz, 1 Vrms input

	Miniature Speaker SLS1115D-01		1 W rated noise (1.5W Max) in 0.7cc 200-20kHz Frequency range Operating Temperature: -20℃ to +70℃ Storage Temperature: -40℃ to 85℃
Microphone	Part Number: SM0103B-RIS421-M02	AAC	AOP 134 dB SPL Power Supply Rejection (@10%THD @ 1kHz) 134 dB SPL Min Load Resistor 5kΩ Operating Temperature: -40℃ to +100℃ Storage Temperature: -40℃ to 100℃ Soldering Information: Preheat 150-180℃ for a maximum of 120 secs. Soldering Above 220℃ for a maximum of 90 secs. Peak 260℃ for a maximum of 30 seconds. Do not reflow more than 2 times.

There are several components in your device that can be diagnosed. We advise you to follow our diagnosis tree in our website.



Welcome message of our diagnostics tool

Nevertheless you can also test one of the phone functions or components directly. To do so, please go to **My Fairphone App** on your phone. Please only do this under the instruction of our customer support :

- In the My Fairphone App, Click on "phone" menu
- Click on Test and Troubleshoot
- Click on "Open Internal Test App"

To exit the test mode, scroll down and press exit.

Diagnostic tests you can perform:

a. Traceability test
b. Fingerprint sensor (raw data)
c. Touch panel (raw data)
d. Psensor (raw data)

e. SD Memory card
f. SIM
g. eSIM
h. Earpiece (top speaker)
i. Speaker (bottom speaker)
j. Bluetooth
k. Wifi 2.4G
l. WIfi 5G
m. GPS
n. Fingerprint enroll (image capture)
o. Touch panel
p. LCD
q. LCD Backlight LEDs
r. Keyboard
s. E-compass
t. G-Sensor
u. Gyroscope
v. Front Camera
w. Main Camera
x. Ultra Wide Camera
y. Camera LED
z. Audio
aa. Vibration sensor
bb. NFC
cc. Proximity sensor
dd. Light sensor
ee. Back Light Sensor
ff. USB / Charger
gg. USB Type-C
hh. Accessory
ii. USB 3.0
jj. DP (video output)
kk. USB NTC (for temperature)
ll. Camera OTP
mm. Attestation Key Check (tests public and private keys to validate SW in the device)
nn. Calling

7. Instructions for software updates.

Fairphone OS releases for Fairphone 4 5G (FP4), based on Android 11 (A11), and we provide regular software updates.

Instructions on how to download and **install** these updates **directly on your phone** here.

Instructions on how to download and **install** these updates **using your computer** can be found here.

Instructions on how to make a factory reset can be found here.

8. Data records of reported failure incidents

Fairphone maintains data records of failure incidents in accordance with GDPR regulations, when customers contact us about a reported failure it is necessary for us to hold a certain amount of data to be able to process this failure and potential return of the product to our repair center. We also maintain records of reported failures in an anonymised way where no customer data is required for varied business related purposes such as cost management and future warranty provisioning. We do not make this information available publicly. We do make information available about certain known failures on our products on a case by case basis. For any question on this chapter please contact product.management@fairphone.com.

9. Technical bulletins

Fairphone OS releases for Fairphone 4 5G (FP4), based on Android 11 (A11), available for the open market. Here you will also find the updated list of new features, bug fixes, and security patches of each release. The date and availability of system updates may vary by network carriers or country.

To take advantage of the latest improvements and security fixes, make sure to update to the latest Fairphone OS. In case you need to manually download the latest software version, please go to FP4. Install Fairphone OS offline.

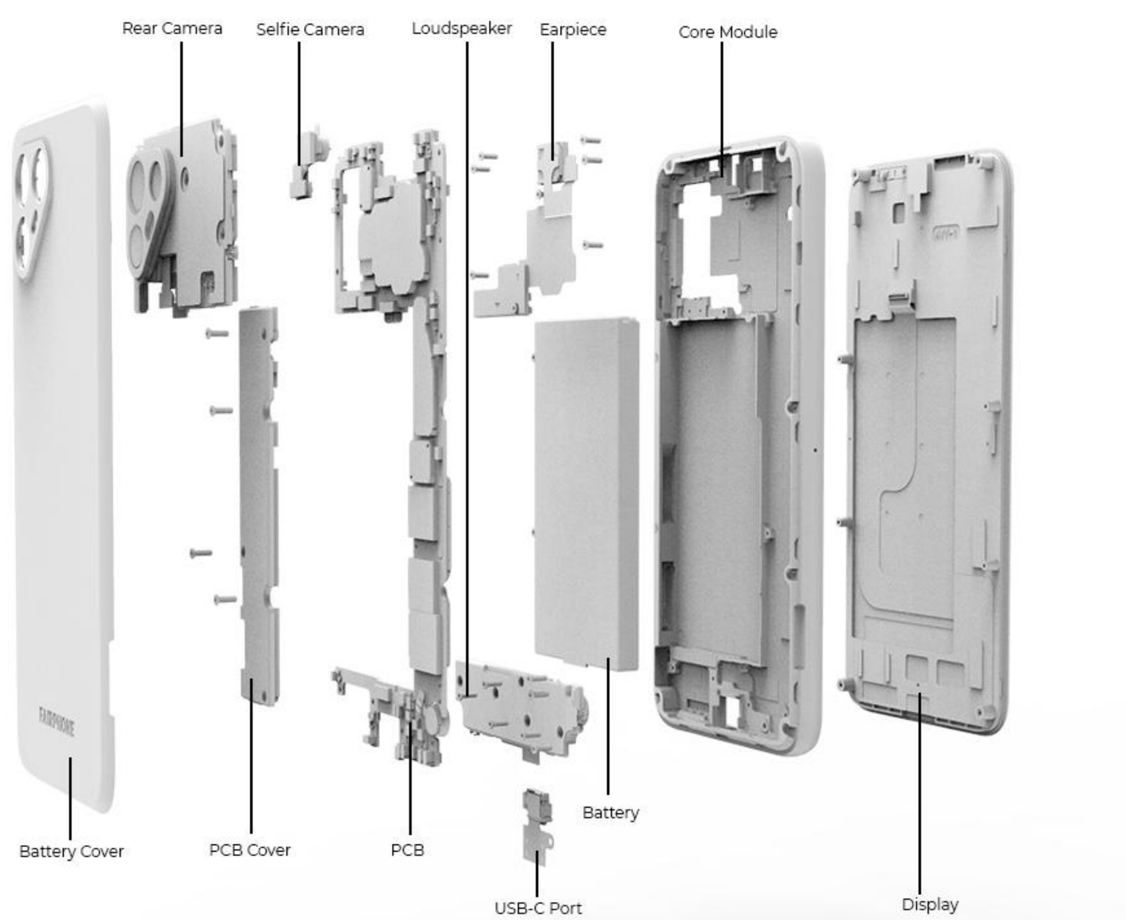
10. Guidance for self-repair and technical manual.

Repairing the Fairphone 4 is very easy. Any of the actions contained in this chapter have any consequence for your warranty.

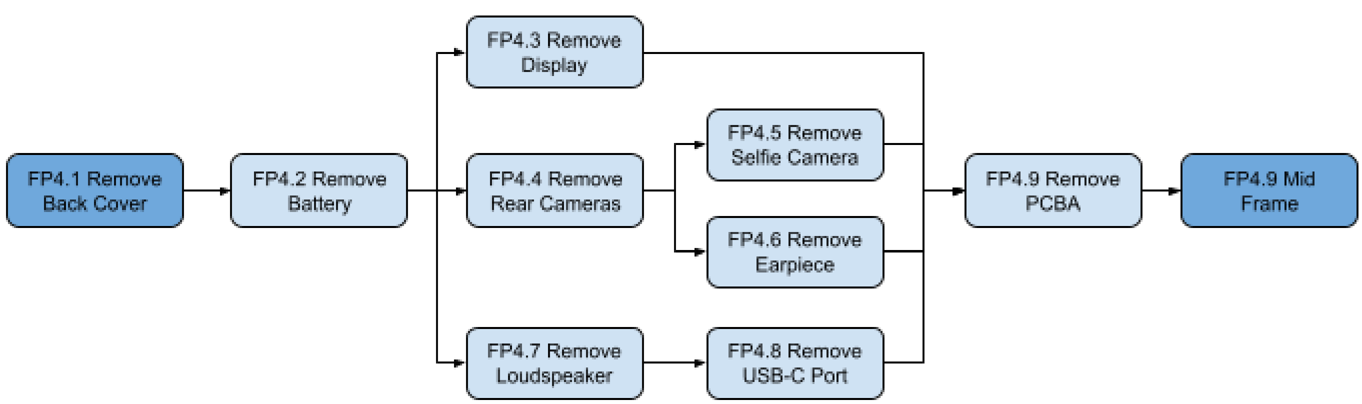
You can find any of our video self repair videos and a simple self-repair guide in this link.

In this document you can also find a printed version of our repair manuals.

a. Spare Parts Overview and disassembly map



b. Disassembly Flow



c. Cautions Before Disassembly

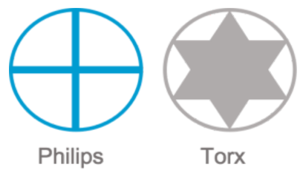
i. **Power off the device:** Before disassembly please power off the device and take out the battery.

ii. **Press the power button** more than 5s after the battery is removed, to release the electricity residual in capacitors.

iii. **ESD Protection:** Electronic sensitive components inside, (esp. in winter) suggest to release the static electricity on the body (e.g. finger touch metal objects).

iv. Pay attention to the three different types of screws:

1. Black Phillips head (M1.4) (for display repairs)
2. Silver Phillips head (M1.4) (for other repairs, not involving PCB)
3. Torx head (for repairs involving accessing the PCB)



v. Prepare your tools:

1. Phillips screwdriver PH00.
2. Torx screwdriver T5.

vi. **If you are a professional repairer, consider the torque force** needed for screw/unscrew operation:

1. Torque Force for Philips screws: 0.8±0.15KGF
2. Torque Force for Torx screws: 0.4±0.05KGF

d. Check for water ingress

Step 1: Lift up back cover and remove back cover.
Step 2: Remove the battery lifting up from the tab at the bottom of the battery
Step 3: Follow the steps to remove the camera explained in section g.
Step 4: Remove PCBA Cover Torx Screws with a T5 screwdriver
Step 5: Check Rear Water Marker

Screw type: Torx Head screws (black) M1.4
Screwdriver type: PH00, T5
Disassembly direction: Counterclockwise (CCW)

e. Replacing Back Cover (NFC Antenna) and Battery

Step 1: Lift up back cover and remove back cover. This part contains the NFC antenna.
Step 2: Remove the battery lifting up from the tab at the bottom of the battery.

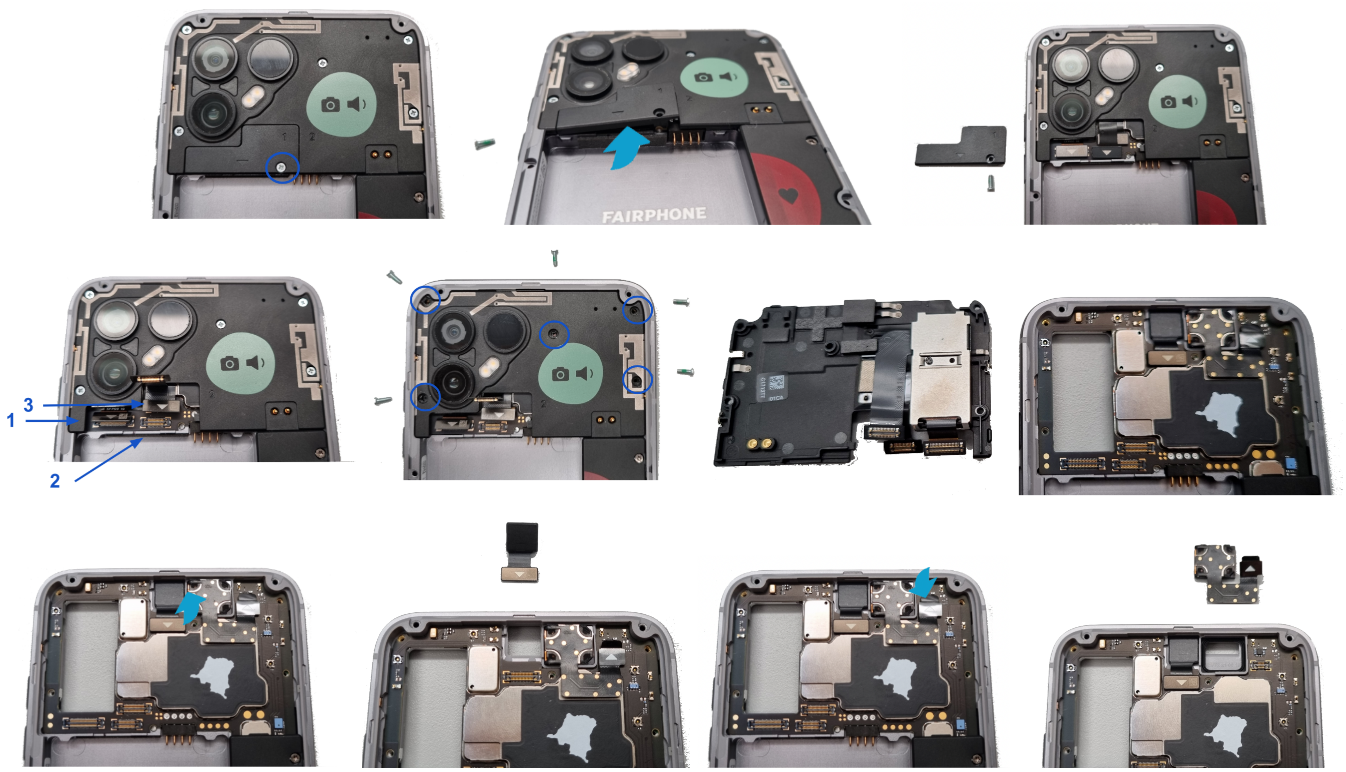
f. Replacing Display

Step 1: Follow previous steps to remove the back cover and the battery
Step 2: Remove the 8 Phillips Black screws indicated in the picture below.
Step 3: Lift the display and disconnect the cable behind.
Step 4: Connect the new display by first connecting the cable back. Simply push the connector in until you hear a click.
Step 5: repeat actions in step 3, 2 and 1 in reverse order.

Screw quantity: 8 pcs
Screw type: Phillips-head screws (black) M1.4
Screwdriver type: PH00
Disassembly direction: Counterclockwise (CCW)

g. Replacing Rear Cameras, Selfie Camera or Earpiece

Step 1: Follow instructions to replacing Back Cover (NFC Antenna) and Battery (e)
Step 2: Remove Camera Connectors Lid Screw
Step 3: Lift up and remove Camera Connectors Lid
Step 4: Lift up 3 Connectors
Step 5: Remove 5 Rear Cameras Screws (Silver)
Additional step *if you are replacing the selfie camera or the earpiece, change at this point any of the two.*
Step 6: Put new camera on the right position and click it in
Step 7: Connect back the 3 connectors (pay special attention to the first connector is hidden behind a cable).
Step 8: Screw all the screws back
Step 9: Place the Camera Connectors Lid back, by introducing first the small lip on the left side and then placing back the screw.



Selfie camera

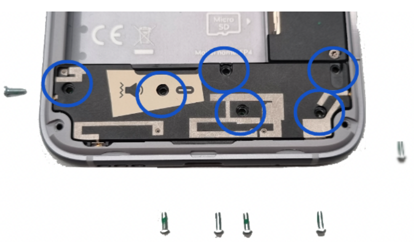
Earpiece

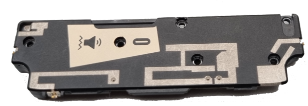
h. Replacing Loudspeaker, Vibration Motor or USB-C Port

Step 1: Follow the steps in e.
Step 2: Remove Loudspeaker 6 Phillips Screws (Silver)
Step 3: Lift up Loudspeaker lifting the central lip and remove it. This part also contains the vibration mechanism.

Aditional step: *if you are replacing the USB-C port, you can now access it. Please mind that there is not screw holding the USB-C port at this point. You have already removed it when removing the Loudspeaker Screws. Place the new USB-C back in place and push the connector until to feel a click.*

Step4: Put the new Louspeaker in place. Click it in and place back the 6 screws





i. Replacing PCB and Mid-frame

j. Step 1: Follow the steps in **e** to remove back cover and battery.
k. Step 3: Follow the steps in **f** to remove display
l. Step 4: Follow steps in **g** to remove cameras and earpiece
m. Step 7: Follow steps in **h** to remove loudspeaker and USB-C port
n. Step 9: Remove PCBA Cover Torx Screws

o. ***Attention:*** *The PCBA will include 2 copies of the IMEI sticker. Everytime there is a PCBA or Mid Frame swap, please make sure the IMEI on the PCBA matches the IMEI label on the mid frame.*

p. Aditional resources

[Fairphone Website] (where you can find our spare parts)
[Fairphone Support Page] (where you can ask us questions)
[Fairphone Youtube channel] (with all video repair guides)

11. Electronic board diagrams and wiring/connection diagrams.

In the next pages you can find how to identify any other component that has not been identified in section 10. For the repair of these components you will need to be a highly skilled repair professional, and our customer support team can not help you out in this case. If you have any questions, please contact product.management@fairphone.com.

Component placing and Schematics for Fairphone 4

For any question about this document please mail product.management@fairphone.com

The PCB Placement code can be used to locate a specific component on the PCB of Fairphone 4

#	Part Numb	Manufacturer part	Description	QTY	PCB placement code
1	BAB39M000ECX	Customer made	PCB	1	Base PCB
2	AAA0000JA8CX	RC0201JR-070RL,RC-01000JT	Resistor,0 ohm,±5 %,1/20 W,0201,	157	C6901,C6910,L5801,L5802,L5806,L5811,L5816,L5817,L6039,L6112,L6154,L6401,L6410,L6502,L6505,L6509,L6514,L6515,L6516,L6519, L6918,L6953,R1902,R1906,R1907,R1908,R1909,R1910,R1923,R3601,R3602,R3604,R4305,R4308,R4309,R4312,R4313,R4314,R4315, R4316, R4416,R4505,R5001,R5007,R5008,R5012,R5401,R5701,R5703,R5704,R5705,R5709,R5801,R5802,R5805,R5809,R5812,R5817, R5819, R5824,R5826,R5901,R5905,R5906,R5907,R5909,R5910,R5915,R5916,R5917,R5918,R6002,R6003,R6007,R6010,R6011,R6012, R6013, R6014,R6029,R6030,R6052,R6101,R6103,R6104,R6105,R6106,R6107,R6108,R6109,R6110,R6111,R6112,R6113,R6114,R6115,R6116, R6117, R6118,R6122,R6123,R6124,R6125,R6126,R6127,R6130,R6203,R6204,R6205,R6206,R6207,R6209,R6210,R6212,R6216,R6218, R6220,R6222, R6226,R6230,R6303,R6304,R6306,R6307,R6309,R6314,R6322,R6323,R6324,R6408,R6501,R6503,R6504,R6505, R6601,R6602,R6603, R6604,R6608,R6609,R6611,R6708,R6717,R6901,R6904,R6906,R6908,R6910,R6913,R6914,R6917,R7002,R7032, R7204,R7206,R7208, R7210
3	AAA0000JB7CX	RC0402JR-070RL,RC-02000JT	Resistor,0 ohm,±5 %,1/16 W,0402	4	R4918,R5017,R5018,R6918
5	AAA0000JT9CX	MCR004YZPJ000	Resistor,0 ohm,±5 %,1/32 W,01005	2	B5601,B5602
6	AAA0010FA8CX	RC-01U1R0FT	Resistor,1 ohm,±1 %,1/20 W,0201,	2	R5601,R5603
7	AAA0100JA8CX	RC-01W100JT	Resistor,10 ohm,¡À5 %,1/20 W,0201,	2	R7001,R7025
9	AAA0101FA8CX	RC-01W101FT	Resistor,100 ohm,¡À1 %,1/20 W,0201,	2	R0703,R0704
10	AAA0102JA8CX	RC0201JR-071KL,RC-01W102JT	Resistor,1K ohm,±5 %,1/20 W,0201,	10	R1106,R4605,R4609,R4701,R4702,R4703,R4704,R4706,R5009,R5011
12	AAA0103JA8CX	RC0201JR-0710KL,RC-01W103JT	Resistor,10K ohm,±5 %,1/20 W,0201,	16	R1108,R1118,R1119,R1128,R1951,R4404,R4405,R4408,R4411,R4507,R4520,R4521,R4595,R4596,R4597,R4599
15	AAA0104FA8CX	RC-01W1003FT	Resistor,100K ohm,±1 %,1/20 W,0201	2	R4713,R4714
16	AAA0104JA8CX	RC0201JR-07100KL,RC-01W104JT	Resistor,100K ohm,±5 %,1/20 W,0201,	11	R1121,R1122,R1125,R4306,R4410,R4412,R4418,R4419,R4501,R4604,R4608
18	AAA0105JA8CX	RC0201JR-071ML,RC-01W105JT	Resistor,1M ohm,±5 %,1/20 W,0201,	5	R3002,R4503,R4506,R4509,R4510
20	AAA0201JA8CX	RC-01W201JT	Resistor,200 ohm,¡À5 %,1/20 W,0201, Resistor,200 ohm,±5 %,1/20 W,0201,	3	R3302,R3303,R3305
21	AAA0203JA8CX	RC-01W203JT	Resistor,20K ohm,±5 %,1/20 W,0201,	1	R4602
23	AAA0220JA8CX	RC-01W220JT	Resistor,22 ohm,¡À5 %,1/20 W,0201,	3	R0709,R4504,R4522
24	AAA0222JA8CX	RC0201JR-072K2L	Resistor,2.2K ohm,±5 %,1/20 W,0201,	17	R1101,R1102,R1103,R1104,R1105,R1107,R1109,R1110,R1111,R1112,R1113,R1115,R1116,R1117,R1123,R1124,R4755
26	AAA0241FA8CX	RC-01W241FT	Resistor,240 ohm,±1 %,1/20 W,0201,	3	R0801,R4101,R4102
29	AAA0304JA8CX	RC-01W304JT	Resistor,300K ohm,±5 %,1/20 W,0201	1	R4450
30	AAA0330JA8CX	RC-01W330JT	Resistor,33 ohm,±5 %,1/20 W,0201,	1	R1901
31	AAA0334FA8CX	RC-01W3303FT	Resistor,330K ohm,±1 %,1/20 W,0201	1	R4417
32	AAA0472JA8CX	RC-01W472JT	Resistor,4.7K ohm,±5 %,1/20 W,0201,	4	R5002,R5003,R5013,R5014
34	AAA0510JA8CX	RC-01W510JT	Resistor,51 ohm,¡À5 %,1/20 W,0201,	3	R5823,R5834,R5836
36	AAA0513FT9CX	RC-005L5102FT	Resistor,51k ohm,±1 %,1/32 W,01005	1	R1922
37	AAA0513JA8CX	RC-01W513JT	Resistor,51K ohm,±5 %,1/20 W,0201,	1	R7115
38	AAA0824FA8CX	RC-01W824FT	Resistor,820k ohm,¡À1 %,1/20 W,0201	1	R3102
39	AAA3011FA8CX	RC-01W3011FT	Resistor,3.01K ohm,±1 %,1/20 W,0201	1	R1001
40	AAA4022FA8CX	RC-01W4022FT	Resistor,40.2K ohm,±1 %,1/20 W,0201	1	R3103
41	AAA4991FA8CX	RC-01W4991FT	Resistor,4.99K ohm,±1 %,1/20 W,0201, 0.63×0.33×0.26 mm	1	R3101
42	AAA6041FA8CX	RC-01W6041FT	Resistor,6.04K ohm,±1 %,1/20 W,0201,	2	R1002,R1003
43	AAC0104FA6CX	NCP03WF104F05RL	Thermistor,100K ohm,±1 %,1/10 W, 0201	7	RT0701,RT0702,RT3401,RT4101,RT4401,RT5901,RT6101
47	ABA05FAJACCX	C0201C0G0R5A500NTA	Capacitor,0.5 pF,±0.05 pF,50 V,C0G, 0201	2	C6912,L6951

49	ABA05FAJACEDX	V0R5A0201C0G500NAT	Capacitor,0.5 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	1	L5804
51	ABA08FAJACEDX	V0R8A0201C0G500NAT	Capacitor,0.8 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	3	C6930,L5910,R6912
53	ABA12FAJACFDX	V1R2A0201C0G500NAT	Capacitor,1.2 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	1	C6715
54	ABA15FAJACDDX	V1R5A0201C0G500NAT	Capacitor,1.5 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	4	C6716,C6911,L5901,R6716
57	ABA56FBJACDDX	V5R6B0201C0G500NAT	Capacitor,5.6 pF,±0.1 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	3	C7209,C7211,L7208
58	ABA68FBJACDDX	V6R8B0201C0G500NAT	Capacitor,6.8 pF,±0.1 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	1	C7204
60	ABA75SBJACDDX	VR75B0201C0G500NAT	Capacitor,0.75 pF,±0.1 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	2	C5818,C5819
61	ABA82FBJACDDX	V8R2B0201C0G500NAT	Capacitor,8.2 pF,±0.1 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	3	C4407,C4422,C4453
63	ABA010AJACDDX	V1R0A0201C0G500NAT	Capacitor,1 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	2	C6712,C6903
64	ABA020BJACDDX	V2R0B0201C0G500NAT	Capacitor,2 pF,±0.1 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	2	L5903,L6609
65	ABA050AJACDDX	V5R0A0201C0G500NAT	Capacitor,5 pF,±0.05 pF,50 V,C0G, 0201, 0.63×0.33×0.33 mm	1	C7205
67	ABA100JJACDDX	V100J0201C0G500NAT	Capacitor,10 pF,±5 %,50 V,C0G,0201, 0.63×0.33×0.33 mm	6	C6414,C6416,C6418,C6419,C6502,C6513
68	ABA101GJACCX	GRM0335C1H101GD01D	Capacitor,100 pF,¡À2 %,50 V,C0G, 0201,Capacitor,100 pF,±2 %,50 V, C0G,0201	69	C3601,C3602,C3603,C3604,C3605,C3606,C3610,C3611,C3612,C4327,C4328,C4329,C4330,C4331,C4710,C5013,C5014,C5028,C5030, C5031,C5032,C5701,C5703,C5706,C5707,C5812,C5813,C5816,C5901,C5902,C5906,C5911,C5917,C6002,C6011,C6102,C6105,C6110,C6113, C6115,C6117,C6214,C6216,C6220,C6222,C6226,C6314,C6316,C6320,C6322,C6326,C6521,C6602,C6603,C6606,C6608,C6616,C6618, C6619, C6620,C6621,C6622,C6717,C6719,C6724,C6726,C7104,C7202,C7206
70	ABA101JJACCX	V101J0201C0G500NAT	Capacitor,100 pF,±5 %,50 V,C0G, 0201, 0.63×0.33×0.33 mm	3	C3344,C3351,C7117
72	ABA102KGAWCX	GRM033R71E102KA01D	Capacitor,1 nF,±10 %,25 V,X7R,0201	15	C1101,C1904,C4601,C4709,C5801,C5814,C5815,C6227,C6325,C6402,C6403,C6514,C6516,C6517,C7203
74	ABA102KJAWCX	C0201X7R102K500N	Capacitor,1 nF,±10 %,50 V,X7R,0201	2	C5702,C5708
76	ABA103KDAXCX	GRM033R61A103KA01D	Capacitor,10 nF,±10 %,10 V,X5R,0201	1	C3325
77	ABA103KGAXCX	C0201X5R103K250N	Capacitor,10 nF,±10 %,25 V,X5R,0201	10	C3337,C4505,C6111,C7110,C7112,C7116,C7120,C7121,C7122,C7124
78	ABA104KCAXCX	GRM033R60J104KE19D	Capacitor,100 nF,¡À10 %,6.3 V,X5R, 0201,Capacitor,100 nF,±10 %,6.3 V, X5R,0201	30	C2010,C2503,C3003,C3113,C3117,C3613,C3614,C3616,C3624,C3626,C4109,C4113,C4309,C4318,C4319,C4320,C4324,C4325,C4507,C4513, C4514,C4707,C4708,C4905,C4911,C4920,C5002,C5004,C5016,C5019
79	ABA104KDAXCX	GRM033R61A104KE15D	Capacitor,100 nF,±10 %,10 V,X5R,0201	1	C3330
80	ABA104KGAXCX	C0201X5R104K250NTJ, GRM033R61E104KE14	Capacitor,100 nF,¡À10 %,25 V,X5R, 0201,Capacitor,100 nF,±10 %,25 V, X5R,0201	4	C3318,C3340,C5008,C5023
81	ABA104MCAXCX	C0201X5R104M6R3NTAT, CL03A104KQ3NNNC	Capacitor,100 nF,?¨¤20 %,6.3 V,X5R, 0201,Capacitor,100 nF,¡À20 %,6.3 V, X5R,0201,Capacitor,100 nF,±20 %,6.3 V,X5R,0201,Capacitor,100 nF,±20 %, 6.3 V,X5R,0201, 0.63×0.33×0.33 mm	90	C1501,C1502,C1503,C1504,C1506,C1509,C1523,C1532,C1535,C1540,C1541,C1705,C1706,C1707,C1708,C1709,C1710,C3319,C3321,C3333, C3335,C3380,C4427,C4508,C4512,C5005,C5021,C5502,C5505,C5506,C5507,C5508,C5510,C5511,C5512,C5513,C5514,C5515,C5516,C5517, C5518,C5520,C5521,C5522,C5523,C5524,C5525,C5526,C5527,C5528,C5529,C5530,C5531,C5532,C5533,C5535,C5536,C5537,C5538, C5539,C5540,C5541,C5542,C5543,C5544,C5545,C5546,C5547,C5548,C5549,C6215,C6217,C6221,C6223,C6315,C6317,C6321,C6323, C6601,C6604,C6605,C6607,C6615,C6617,C6718,C6720,C6723,C6725,C7001,C7026
83	ABA105KDBXCX	C0402X5R105K100NTB, GRM155R61A105KE15D	Capacitor,1 uF,¡À10 %,10 V,X5R,0402, Capacitor,1 uF,±10 %,10 V,X5R,0402	4	C3615,C3617,C3620,C3623
84	ABA105KGBXCX	GRM155R61E105KA12	Capacitor,1 uF,¡À10 %,25 V,X5R,0402, Capacitor,1 uF,±10 %,25 V,X5R,0402, Capacitor,1 uF,±10 %,25 V,X5R, 0402,1.05×0.55×0.55 mm	4	C3105,C3331,C4711,C5916

85	ABA105MCAXCX	GRM033R60J105M	Capacitor,1 uF,?0 %,6.3 V,X5R,0201, Capacitor,1 uF,?¨¤20 %,6.3 V,X5R, 0201,Capacitor,1 uF,±20 %,6.3 V,X5R, 0201	194	C1301,C1302,C1303,C1304,C1411,C1412,C1413,C1414,C1417,C1450,C1451,C1452,C1453,C1454,C1455,C1456,C1457,C1458,C1459,C1460, C1461, C1463,C1464,C1470,C1471,C1472,C1473,C1474,C1475,C1476,C1477,C1478,C1505,C1507,C1508,C1510,C1511,C1512,C1515,C1516, C1518,C1521, C1522,C1530,C1531,C1533,C1534,C1536,C1537,C1538,C1607,C1609,C1650,C1651,C1652,C1653,C1654,C1655,C1656,C1659, C1660,C1661,C1662, C1663,C1664,C1669,C1670,C1671,C1672,C1673,C1674,C1675,C1676,C1677,C1678,C1679,C1680,C1681,C1682,C1684, C1686,C1688,C1689, C1690,C1691,C1692,C1693,C1694,C1695,C1696,C1697,C1698,C1901,C1903,C1905,C1906,C1907,C1908,C1909,C2007, C2008,C2009,C2011, C2305,C2306,C2312,C2314,C2315,C2317,C2318,C2319,C2324,C2504,C2602,C2604,C2605,C2610,C2801,C2803, C2809,C3001,C3002, C3004,C3005,C3006,C3007,C3010,C3011,C3012,C3013,C3014,C3103,C3104,C3115,C3118,C3119,C3120,C3336, C4103,C4106,C4107,C4108, C4111,C4112,C4115,C4116,C4117,C4118,C4119,C4120,C4121,C4123,C4125,C4128,C4315,C4321,C4322,C4323, C4326,C4350,C4351,C4381, C4416,C4417,C4431,C4433,C4434,C4435,C4439,C4440,C4441,C4451,C4467,C4501,C4502,C4510,C4515, C4516,C4551,C4606,C4609, C4611,C4612,C4701,C4706,C5001,C5003,C5015,C5018,C5618,C5620,C6118,C7123,C7125
87	ABA105MDAXCX	C0201X5R105M100NTX	Capacitor,1 uF,¡À20 %,10 V,X5R,0201, Capacitor,1 uF,±20 %,10 V,X5R,0201	8	C2510,C2518,C3314,C5601,C5602,C5605,C5607,C6623
89	ABA106MCBXCX	GRM155R60J106ME44	Capacitor,10 uF,¡À20 %,6.3 V,X5R, 0402,Capacitor,10 uF,±20 %,6.3 V, X5R,0402	75	C1601,C1604,C1608,C1611,C1613,C1614,C1615,C1616,C1617,C1618,C1619,C1620,C1622,C1623,C1624,C1625,C1626,C1627,C1628,C1629,C1630, C1631,C1632,C1633,C1634,C1635,C1636,C1637,C1638,C1639,C1640,C1641,C1642,C1643,C1644,C1645,C1646,C1647,C1648,C1649,C2101, C2102,C2103,C2104,C2105,C2106,C2107,C2108,C2109,C2110,C2112,C2113,C2119,C2130,C2316,C2320,C2321,C2330,C2501,C2502,C2505, C2506,C2507,C2508,C2601,C2603,C2606,C2607,C2808,C2810,C3110,C4317,C4511,C4582,C7118
90	ABA106MDBXCX	C0402X5R106M100NTC	Capacitor,10 uF,?¨¤20 %,10 V,X5R, 0402,Capacitor,10 uF,¡À20 %,10 V, X5R,0402,Capacitor,10 uF,±20 %,10 V, X5R,0402	17	C2514,C2515,C2516,C2517,C2520,C2522,C2525,C2554,C2558,C3108,C3109,C3111,C3112,C3315,C3316,C3326,C3339
91	ABA106MECXCX	GRM188R61C106MA73D	Capacitor,10 uF,±20 %,16 V,X5R,0603	6	C5009,C5010,C5011,C5024,C5025,C5026
92	ABA106MGCXCX	CL10A106MA8NRNC	Capacitor,10 uF,±20 %,25 V,X5R,0603	2	C3307,C3308
93	ABA120GJACDDX	V120G0201C0G500NAT	Capacitor,12 pF,±2 %,50 V,C0G,0201, 0.63×0.33×0.33 mm	1	C7213
94	ABA120KGACC2X	C0201C0G120K250NTA	Capacitor,12 pF,±10 %,25 V,C0G,0201	2	C3345,C3350
95	ABA180JJACDDX	V180J0201C0G500NAT	Capacitor,18 pF,±5 %,50 V,C0G,0201, 0.63×0.33×0.33 mm	3	C6201,C6202,C6203
97	ABA220JJACCX	C0201C0G220J500NTA	Capacitor,22 pF,±5 %,50 V,C0G,0201	6	C1910,C4524,C4525,C4549,C4550,C4608
98	ABA220JJACDDX	V220J0201C0G500NAT	Capacitor,22 pF,±5 %,50 V,C0G,0201, 0.63×0.33×0.33 mm	1	C6106
99	ABA221KGAWCX	GRM033R71E221KA01D	Capacitor,220 pF,±10 %,25 V,X7R, 0201	2	C3101,C3102
100	ABA224KCAXCX	CL03A224KQ3NNNH	Capacitor,220 nF,±10 %,6.3 V,X5R, 0201	4	C4714,C4715,C4718,C4719
101	ABA224MCAXCX	GRM033R60J224ME15D	Capacitor,220 nF,±20 %,6.3 V,X5R, 0201	1	C3625
104	ABA225MCAXDX	CL03A225MQ3CRNC, GRM033R60J225ME47D	Capacitor,2.2 uF,¡À20 %,6.3 V,X5R, 0201,Capacitor,2.2 uF,±20 %,6.3 V, X5R,0201	26	C2013,C2313,C2322,C2323,C2802,C4102,C4105,C4122,C4124,C4313,C4409,C4410,C4411,C4420,C4421,C4432,C4442,C4447,C4449, C4452,C4456,C4457,C4509,C4530,C7101,C7129
105	ABA225MCBXCX	GRM155R60J225ME15D	Capacitor,2.2 uF,?¨¤20 %,6.3 V,X5R, 0402	2	C3334,C3338
106	ABA225MDBXCX	D0402X5R225M100N	Capacitor,2.2 uF,±20 %,10 V,X5R, 0402, 1.05×0.55×0.55 mm	4	C5603,C5604,C5609,C5611
107	ABA226MCBXCX	GRM155R60J226ME11D	Capacitor,22 uF,±20 %,6.3 V,X5R, 0402, 1.2×0.7×0.7 mm	7	C4316,C5006,C5020,C5610,C5612,C5613,C5615
109	ABA226MDCXCX	CL10A226MP8NUNE	Capacitor,22 uF,±20 %,10 V,X5R,0603,	6	C3303,C3304,C3305,C3309,C3310,C3311
110	ABA226MECXCX	CL10A226MO7JZNC	Capacitor,22 uF,±20 %,16 V,X5R,0603	1	C4503
112	ABA270KJACCX	C0201C0G270K500NTA	Capacitor,27 pF,±10 %,50 V,C0G,0201	2	C3343,C3352
113	ABA273KEAXCX	C0201X5R273K160NTA	Capacitor,27 nF,±10 %,16 V,X5R,0201	1	C3106
115	ABA330JJACCX	C0201C0G330J500NTA, GRM0335C1H330JA01	Capacitor,33 pF,¡À5 %,50 V,C0G,0201, Capacitor,33 pF,±5 %,50 V,C0G,0201, Capacitor,33 pF,±5 %,50 V,C0G, 0201,0.63×0.33×0.33 mm	41	C4907,C4908,C4916,C4918,C4922,C4923,C5029,C5034,C5903,C5918,C6109,C6204,C6205,C6206,C6207,C6208,C6209,C6210,C6211, C6212,C6213,C6218,C6219,C6225,C6301,C6302,C6303,C6304,C6305,C6306,C6307,C6308,C6309,C6310,C6311,C6312,C6318,C6319, C6340,C7208,C7210

117	ABA334MCAXCX	V334M0201X5R6R3NJT	Capacitor,330 nF,±20 %,6.3 V,X5R, 0201,	4	C4712,C4713,C4716,C4717
118	ABA471KJAWCX	C0201X7R471K500N	Capacitor,470 pF,±10 %,50 V,X7R, 0201	2	C5606,C5608
119	ABA474KCAXYX	C0201X5R474K6R3NTJ	Capacitor,470 nF,¡À10 %,6.3 V,X5R, 0201	3	C3618,C3619,C3621
120	ABA474MCAXCX	CM03X5R474M06AH	Capacitor,470 nF,±20 %,6.3 V,X5R, 0201	3	C6103,C7130,C7131
121	ABA475KGCXCX	C0603X5R475K250N, CL10A475KA8NQNC	Capacitor,4.7 uF,¡À10 %,25 V,X5R, 0603,Capacitor,4.7 uF,±10 %,25 V, X5R,0603	4	C3107,C3114,C3301,C3302
122	ABA475MCBXCX	CL05A475MQ5NRNC, GRM155R60J475ME87D	Capacitor,4.7 uF,?¨¤20 %,6.3 V,X5R, 0402,Capacitor,4.7 uF,¡À20 %,6.3 V, X5R,0402,Capacitor,4.7 uF,±20 %,6.3 V,X5R,0402	29	C2303,C2310,C2311,C3008,C3009,C3332,C3341,C3622,C4101,C4104,C4110,C4126,C4127,C4412,C4443,C4444,C4445,C4454,C5501, C5503,C5504,C5509,C5519,C5534,C5904,C6104,C7109,C7111,C7128
124	ABA475MDBXCX	GRM155R61A475MEAA	Capacitor,4.7 uF,±20 %,10 V,X5R, 0402	5	C3320,C5614,C5616,C5617,C5619
125	ABA475MHCXCX	GRM188R6YA475ME15	Capacitor,4.7 uF,±20 %,35 V,X5R, 0603,1.8×1×1 mm	1	C2512
126	ABA476MCCXCX	JDK107BBJ476MA-RE	Capacitor,47 uF,±20 %,6.3 V,X5R, 0603	1	C2006
127	ABA560JJACCX	GRM0335C1H560JA01D	Capacitor,56 pF,±5 %,50 V,C0G,0201	1	C3329
128	ABA561JJAWCX	C0201X5R561J500N	Capacitor,560 pF,±5 %,50 V,X7R,0201	2	C3347,C3348
130	ABA680JJACCX	C0201C0G680J500NTA, GRM0335C1H680JA01	Capacitor,68 pF,¡À5 %,50 V,C0G,0201, Capacitor,68 pF,±5 %,50 V,C0G,0201, Capacitor,68 pF,±5 %,50 V,C0G, 0201,0.63×0.33×0.33 mm	29	C1610,C1612,C1621,C1701,C1702,C1703,C1704,C2115,C2117,C2118,C2511,C2513,C2609,C3342,C3346,C3353,C4333,C4521,C4523,C4545, C4546,C4547,C4548,C4583,C4598,C4610,C4924,C4925,C4926
132	ACA01TBAA7C4X	SDCL0603Q1N0BT02B03	Inductor,1.0 nH,±0.1 nH,520 mA,0201, MultiLayer, 0.63×0.33×0.33 mm	12	L6031,L6409,R5831,R5838,R6001,R6006,R6008,R6128,R6214,R6405,R7202,R7207
134	ACA02TBAA8C4X	SDCL0603Q2N0BT02B03	Inductor,2.0 nH,±0.1 nH,600 mA, 0201,MultiLayer, 0.63×0.33×0.33 mm	4	L6113,L6118,L6408,R7209
136	ACA03TBAC2CJX	VHF060303HQ3N0BT02	Inductor,3 nH,±0.1 nH,0.26 ohm,300 mA,0201,Film, 0.6×0.3×0.3 mm	7	L6119,L6412,L6419,L6420,L6510,L6512,R6018
137	ACA06HBAA5C4X	SDCL0603Q0N6BT02B03	Inductor,0.6 nH,±0.1 nH,850 mA, 0201,MultiLayer, 0.63×0.33×0.33 mm	2	L6402,L6403
138	ACA08HBAC0CX	LQP03TG0N8B02D	Inductor,0.8 nH,±0.1 nH,0201,Film	2	L5830,L5832
141	ACA10TJAC2CJX	VHF060303HQ10NJT02	Inductor,10 nH,±5 %,0.8 ohm,200 mA,0201,Film, 0.6×0.3×0.3 mm	5	L6034,L6040,L6150,L6155,R6016
142	ACA10TJBB4C4X	MWSD1005C10NJTM01	Inductor,10 nH,±5 %,0.17 ohm,500 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	1	L7028
143	ACA12HBAA5C4X	SDCL0603Q1N2BT02B03	Inductor,1.2 nH,±0.1 nH,750 mA,0201, MultiLayer, 0.63×0.33×0.33 mm	4	L6910,L7204,R6004,R6401
147	ACA12TJAA6CJX	VHF060303HQ12NJT02	Inductor, 0.63×0.33×0.33 mm	6	L6013,L6035,L6135,L7001,L7220,R7212
149	ACA15HBAA5C4X	SDCL0603Q1N5BT02B03	Inductor,1.5 nH,±0.1 nH,600 mA,0201, MultiLayer, 0.63×0.33×0.33 mm	6	L6156,L6607,L6909,R6005,R6610,R6909
152	ACA15TJAC3CJX	VHF060303HQ15NJT02	Inductor,15 nH,±5 %,0.85 ohm,180 mA,0201,Film, 0.6×0.3×0.3 mm	4	L6131,L6235,L6325,L6331
154	ACA18HBAA8C4X	SDCL0603Q1N8BT02B03	Inductor,1.8 nH,±0.1 nH,600 mA,0201, MultiLayer, 0.63×0.33×0.33 mm	6	L6413,L6416,L6706,L6707,L6902,L6908
156	ACA18TJAC3CJX	VHF060303HQ18NJT02	Inductor,18 nH,±5 %,1.0 ohm,150 mA, 0201,Film, 0.6×0.3×0.3 mm	12	L6005,L6029,L6208,L6231,L6236,L6237,L6308,L6328,L6332,L6333,L7213,L7215

157	ACA18TJBB3C4X	MWSD1005C18NJT	Inductor,18 nH,±5 %,0.28 ohm,370 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	1	L7004
159	ACA22HBAA8C4X	SDCL0603Q2N2BT02B03	Inductor,2.2 nH,±0.1 nH,600 mA, 0201,MultiLayer, 0.63×0.33×0.33 mm	1	L6417
163	ACA22THBB1CX	MWSD1005C22NHTM01	Inductor,22 nH,±3 %,0.3 ohm,310 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	1	FL7035
164	ACA22TJAC0CX	VHF060303HQ22NJT02	Inductor,22 nH,±5 %,1.2 ohm,150 mA, 0201,Film, 0.6×0.3×0.3 mm	1	L6511
165	ACA22TJBB5CX	MWSD1005C22NJT	Inductor,22 nH,±5 %,0.36 ohm,330 mA,0402,Wire-Wound,	1	L7003
166	ACA24HBAC1CJX	VHF060303HQ2N4BT02	Inductor,2.4 nH,±0.1 nH,0.25 ohm, 450 mA,0201,Film,	2	L6107,L6506
167	ACA27HBAC0CJX	VHF060303HQ2N7BT02	Inductor,2.7 nH,±0.1 nH,0.25 ohm, 450 mA,0201,Film,	7	L5812,L5828,L5829,L5831,L6115,L6315,R6907
170	ACA27TJAA4CX	SDCL0603Q27NJT02B03	Inductor,27 nH,±5 %,140 mA,0201, MultiLayer, 0.63×0.33×0.33 mm	1	L7029
171	ACA27TJAC4CX	VHF060303HQ27NJT02	Inductor,27 nH,±5 %,1.6 ohm,120 mA, 0201,Film, 0.6×0.3×0.3 mm	2	L6011,L6134
172	ACA33HBAC0CJX	VHF060303HQ3N3BT02	Inductor,3.3 nH,±0.1 nH,0.3 ohm,300 mA,0201,Film, 0.6×0.3×0.3 mm	5	L6140,L6216,L6316,R5904,R6915
174	ACA33TJAC8CX	VHF060303HQ33NJT02	Inductor,33 nH,±5 %,2.2 ohm,110 mA, 0201,Film, 0.6×0.3×0.3 mm	1	L6525
176	ACA36HBAC0CJX	VHF060303HQ3N6BT02	Inductor,3.6 nH,±0.1 nH,0.38 ohm, 300 mA,0201,Film, 0.6×0.3×0.3 mm	4	C6411,L6220,L6320,L6523
180	ACA39HBAC1CJX	VHF060303HQ3N9BT02	Inductor,3.9 nH,±0.1 nH,0.44 ohm, 300 mA,0201,Film, 0.6×0.3×0.3 mm	4	L6212,L6218,L6239,L6334
183	ACA43HBAC0CJX	VHF060303HQ4N3BT02	Inductor,4.3 nH,±0.1 nH,0.44 ohm, 300 mA,0201,Film, 0.6×0.3×0.3 mm	6	C6410,L6203,L6303,R5902,R5908,R6050
184	ACA47HBAC0CJX	VHF060303HQ4N7BT02	Inductor,4.7 nH,±0.1 nH,0.45 ohm, 300 mA,0201,Film, 0.6×0.3×0.3 mm	1	L7002
186	ACA47TJBB3CX	MWSD1005C47NJTM01	Inductor,47 nH,±5 %,1.08 ohm,210 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	2	FL7001,L7027
189	ACA56HBAC0CJX	VHF060303HQ5N6BT02	Inductor,5.6 nH,±0.1 nH,0.46 ohm, 250 mA,0201,Film, 0.6×0.3×0.3 mm	8	C6505,L6025,L6152,L6202,L6302,L6513,L6936,L6950
190	ACA68HHAC0CX	LQP03TG6N8H02D	Inductor,6.8 nH,¡À3 %,0201,Film	1	L6933
193	ACA68HJAC1CJX	VHF060303HQ6N8JT02	Inductor,6.8 nH,±5 %,0.5 ohm,250 mA,0201,Film, 0.6×0.3×0.3 mm	9	L6002,L6016,L6018,L6108,L6110,L6201,L6204,L6301,L6304
194	ACA68HJBB0C4X	MWSD1005C6N8JT	Inductor,6.8 nH,±5 %,0.105 ohm,610 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	1	L7030
198	ACA75HJAC2CJX	VHF060303HQ7N5JT02	Inductor,7.5 nH,±5 %,0.5 ohm,200 mA,0201,Film, 0.6×0.3×0.3 mm	2	L6050,L7219
199	ACA77TJBB2CX	MWSD1005F77NJTM01	Inductor,77 nH,±5 %,0.09 ohm,1100 mA,0402,Wire-Wound, 1.2×0.7×0.65 mm	2	L3301,L3302
200	ACA82HJAC7CJX	VHF060303HQ8N2JT02	Inductor,8.2 nH,±5 %,0.56 ohm,200 mA,0201,Film, 0.6×0.3×0.3 mm	3	L6022,L6024,L7202
203	ACA91HJAC1CJX	VHF060303HQ9N1JT02	Inductor,9.1 nH,±5 %,0.72 ohm,200 mA,0201,Film, 0.6×0.3×0.3 mm	2	L7201,R6051

204	ACB16SJCA0CX	MLJ1608WR16J	Power Inductor,160 nH,±5%,DCR=0.12 ohm,750 mA,450 MHz,700 mA, MultiLayer,0603	2	R5005,R5006
205	ACB47FM9A2CX	DFE252010F-4R7M=P2	Power Inductor,4.7 uH,±20 %, DCR=0.2 ohm,2200 mA, 1600 mA, MultiLayer,	2	L2502,L2503
206	ACB47SM9A6CX	MP201208ER47BMFR	Power Inductor,470 nH,±20%,0.03 ohm,SMD,5000 mA,1 MHz,4000 mA, Thin Film, 2.0×1.2×0.8 mm	6	L2602,L2603,L2604,L2605,L2606,L2607
207	ACB47SM9B7CX	WPN201610HR47MTY01	Power Inductor,0.47 uH,±20 %, DCR=0.029 ohm,4900 mA,102 MHz, 4200 mA,Wire-Wound,	1	L2501
208	ACB47SM9BFCX	MPIM201610HR47M10-LF	Power Inductor,0.47 uH,±20 %, DCR=0.027 ohm,5700 mA, 4600 mA,Wire-Wound,	8	L2101,L2102,L2103,L2104,L2105,L2106,L2601,L2608
209	ACB56SMQA0CX	MCHK1608TR56MKN	Power Inductor,0.56 uH,±20%,0.055 ohm,1608,2700 mA,0 Hz,2600 mA, MultiLayer, 1.8×1.0×0.8 mm	2	R5602,R5604
210	ACB010M9B0DX	MPIM201610E1R0M-LF	Power Inductor,1 uH,±20%,0.045 ohm,SMD,4000 mA,3500 mA,Wire-Wound,2.2×1.8×1 mm	2	L4301,L4501
211	ACB010M9B1DX	WPN252010U1R0MT	Power Inductor,1 uH,¡À20%,0.042 ohm,4600 mA,54 MHz,3600 mA, Wire-Wound,SMD,2.7¡Á2.2¡Á1 mm	1	L3101
212	ACB010M9BQCX	WPN201610H1R0MT	Power Inductor,1 uH,±20 %,DCR=0.075 ohm,3850 mA,70 MHz,2350 mA, Wire-Wound,	2	L5601,L5602
213	ACB010MKB2CX	MPIM252010E1R0M-LF	Power Inductor,1 uH,±20%,0.041 ohm,4510 mA,3400 mA,Wire-Wound,1008	2	L5001,L5002
215	ADA1020019CX	MPZ1608S102A	Chip Ferrite Beads,1000 ohm,¡À25 %, DCR=0.3 ohm,800 mA,0603	2	B3602,L3601
216	ADA1020023CX	BLM15AX102SN1D	Chip Ferrite Beads,1000 ohm,±25 %, DCR=0.49 ohm,350 mA,0402	6	B4902,B4903,B4906,B4907,B4920,B4921
217	ADA1210014CX	UPZ1005D121-1R2TF	Chip Ferrite Bead,120 ohm,±25 %, DCR=0.09 ohm,1200 mA,0402,	4	B5001,B5002,B5003,B5004
218	ADA1210027CX	MMZ1005Y121CT	Chip Ferrite Beads,120 ohm,¡À25 %, DCR=0.18 ohm,400 mA,0402	2	B3601,B3603
219	ADA1210028CX	GZ0603D121TF	Chip Ferrite Beads,120 ohm,±25 %, DCR=0.8 ohm,200 mA,0201	3	R4402,R4407,R4409
220	ADA6010001CX	BLM15HD601SN1D	Chip Ferrite Bead,600 ohm,±25 %, DCR=0.85 ohm,300 mA,0402,	1	B2501
222	AEA0000264CX	SAFFB1G96AB0F0AR15	Saw Filter,For Band2/Unbalanced, 1960 MHz,1.1×0.9×0.5 mm,5 PINs	1	FL6401
223	AEA0000266CX	SAFFB876MAA0F0A	SAW Single Filter,for Band26 / Unbalanced,876.5 MHz,1.1×0.9×0.5 mm,5 PINs	1	FL6508
224	AEA0000273CX	SAFFB942MAN0F0A	Saw Filter,FOR GSM900/BAND8 Rx, 942.5 MHz,1.1×0.9×0.5 mm,5 PINs	1	FL6506
226	AEA0000307CX	SAFFB2G35AA0F0A	SAW Single Filter,for Band 40,2350 MHz,1.1×0.9×0.5 mm,5 PINs	1	FL6505
227	AEA0000418CX	SFHG89GA002	Saw Filter,COMPASS/GPS/GLONASS Rx,1561.1 MHz/1575.42 MHz,1.1×0.9×0.5 mm,5 PINs	1	FL7202

228	AEA0000419CX	SFHG56BA002	Saw Filter,LTE Band 7 Rx,2655 MHz, 1.1×0.9×0.5 mm,5 PINs	1	FL6501
230	AEA0000468CX	SAFFB2G35MA0F0A	Saw Filter,for Band40/Unbalanced, 2350 MHz,1.1?.9?.5 mm,5 PINs	1	FL6102
232	AEA0000516CX	SAFFB1G47AA0F0A	Saw Filter,for Band32/Unbalanced, 1474 MHz,1.1×0.9×0.5 mm,5 PINs	2	FL6010,FL6408
233	AEA0000521CX	SAFEY634MAA0F0A	SAW Filter,B71,634.5 MHz,1.8×1.4×0.6 mm,8 PINs	1	FL6504
234	AEA0000558CX	SAFFB2G59AA1F0A	Saw Filter,Band41/Unbalanced, 2593MHz,1.1×0.9×0.5 mm,5 PINs	3	FL6406,FL6407,FL6503
236	AEA0000565CX	SFDG45EA402	SAW Filter,Wi-Fi B7/B40 Co-existence,2442 MHz,1.1×0.9×0.5 mm, 5 PINs,Wave Filter	1	FL7204
237	AEA0000578CX	SFDG76AA402	Saw Filter,GPS L5 Rx filter,1176.5 MHz,1.1×0.9×0.5 mm,5 PINs,	1	FL7201
238	AEA0000582CX	RFBPF1608060K88Q1C	LTCC Filter,WIFI 5G filter,5150-5950 MHz,1.6×0.8×0.6 mm,3 PINs,	1	FL7207
239	AEA0000591CX	B39262B8894L210	Saw Filter,B41,2593 MHz,1.4×1.1×0.7 mm,5 PINs,TD-LTE band 41	1	FL6103
240	AEA0000595CX	B39781B8369P810	Saw Filter,Band 28+20 Rx filter,1.4×1. 1×0.45 mm,5 PINs,	1	FL6502
241	AEA0000599CX	SFYG42BY802	Saw Filter,Band1,3,7/1in3out Unbalanced,1842.5 /2140/2655 MHz, 1.8×1.4×0.6 mm,8 PINs,	2	FL6402,FL6403
242	AEA0000610CX	SFH742AA402	Saw Filter,for LTE Band 12+13 Rx, 742MHz (729~756MHz),1.1×0.9×0.5 mm,5 PINs,	1	FL6510
243	AEB0000289CX	SAYEY1G88BA0B0A	SAW Duplexer,B2 Unbalanced,1880 MHz/1960 MHz,1.8×1.4×0.6 mm,8 PINs	1	FL6108
245	AEB0000368CX	SAYEY897MBG0F0A	SAW Duplexer,for Band8/Unbalanced/LR/1814,897.5 MHz/942.5 MHz,1.8×1.4×0.6 mm,8 PINs	2	FL6001,FL6006
247	AEB0000440CX	SFX707BYJ02	SAW Duplexer,B12 DPX,707.5 MHz/737.5 MHz,1.8×1.4×0.58 mm,8 PINs	1	FL6005
248	AEB0000449CX	SFX733EYJ02	SAW Duplexer,B28B,Tx 733 Mhz/Rx 788 Mhz,1.8×1.4×0.52 mm,8 PINs,	1	FL6012
249	AEB0000455CX	SFX718EYJ02¿	SAW Duplexer,LTE Band 28A,TX 718MHz/RX773MHz,1.9×1.5×0.62 mm, 8 PINs,	1	FL6007
250	AEB0001665CX	B39681B1266P810	SAW Duplexer,for 4G and 5G band 71,680.5/634.5 MHz,1.8×1.4×0.475 mm,8 PINs,	1	FL6002
251	AEB0001667CX	SFX806CYH02	SAW Duplexer,B20 Duplexe, 847/806 MHz,1.80×1.40×0.50 mm,8 PINs, 30dbm	2	FL6004,FL6106
252	AEB0001672CX	SAYRH725MBC0B0A	SAW Duplexer,for Band28 / Unbalanced / LR,725/780 MHz,1.8×1. 4×0.6 mm,8 PINs,	1	FL6011
253	AEB0001673CX	SAYRV2G53BA0E0A	SAW Duplexer,for Band07 / Unbalanced / LR,2535/2655 MHz,1.6 ×1.2×0.6 mm,8 PINs,	1	FL6104

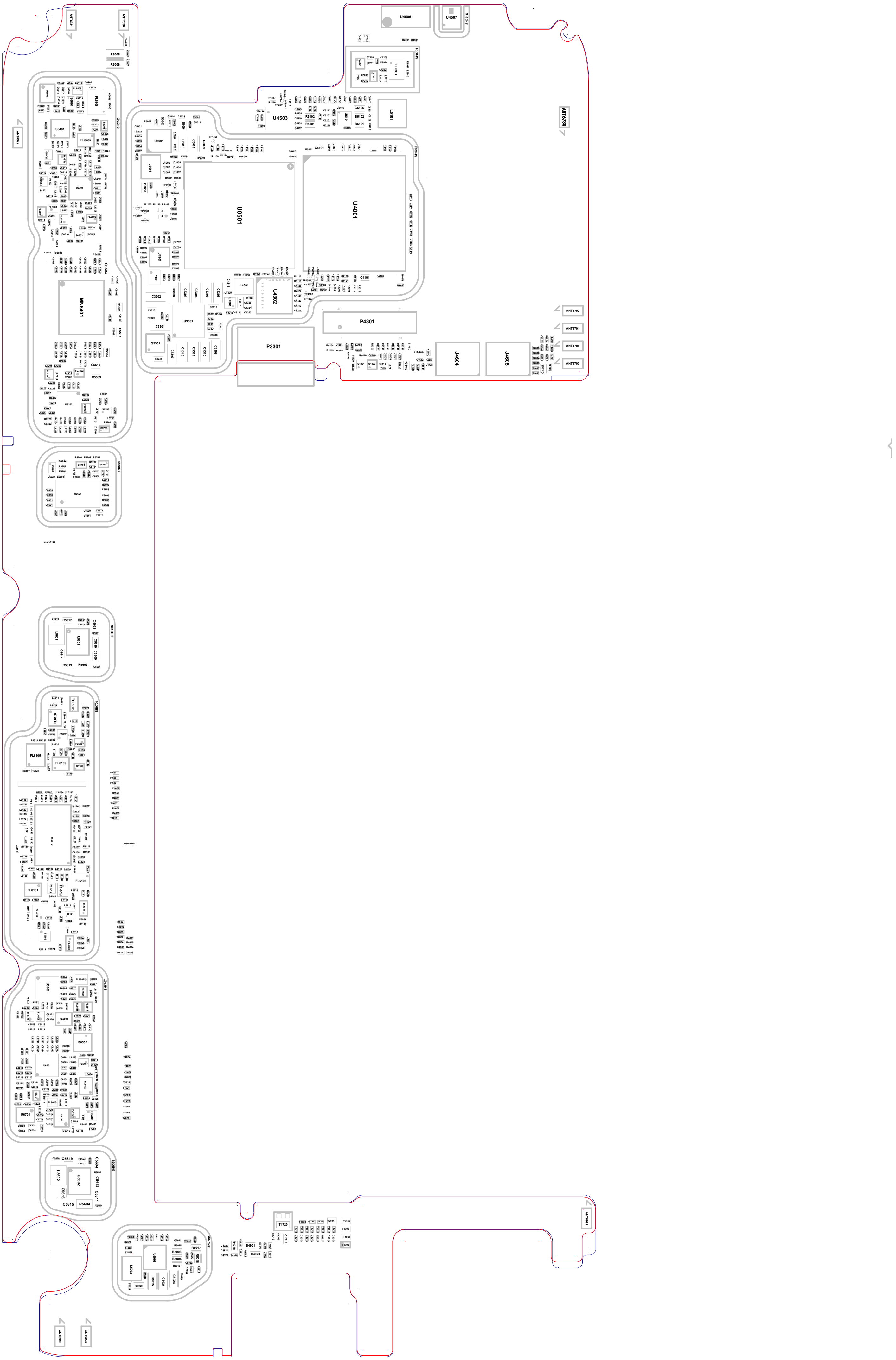
254	AEB0001908CX	B39871B1268L210	SAW Duplexer,B26,831.5/876.5 MHZ, 1.6×1.2×0.6 mm,8 PINs,RoHS+REACH	1	FL6009
256	AED0000572CX	SAHQV1G74BA0H0A	SAW Quadplexer,B1+B3, 1950/2140/1747.5/1842.5 MHz,2.5×2×0.7 mm,5 PINs, Band1_Band3/Unbalanced/2520	2	FL6003,FL6105
257	AED0000584CX	RFDIP2506L11AT	DIPLEXER,MULTILAYER CERAMIC, 617~2690 MHz/ 3300~5925 MHz,2.5 ×2.0×0.65 mm,9 PINs,	3	FL6904,FL6906,FL6909
258	AED0000606CX	RFLPF10051G8DAT	low pass filter,MULTILAYER CERAMIC,1710 ~ 2025 MHz,1×0.5×0.4 mm,4 PINs, 0402	1	FL5803
259	AED0000608CX	SADAG1G17AA0C0A	SAW Extractor,for GPS L1_GPS L5_Cellular,1561.1/1176.5 Mhz,2.1×1.7×0.65 mm,9 PINs,	1	FL6901
260	AED0000614CX	RFDIP2012090GKT	DIPLEXER,MULTILAYER CERAMIC, 829 MHz & 2025 MHz,2.15×1.4×1 mm, 6 PINs,	2	FL6902,FL6903
261	AEE0000065CX	SLCP18-2R700G-01T	Coupler,Multilayer Chip,2700.0 MHz, 1.6×0.8×0.65 mm,6 PINs,	5	FL5801,FL5804,FL5805,FL5808,FL5809
262	AEG0000027CX	RFTIP2007T10A8Q1C	Triplexer,LTCC Multi Layer Ceramic, 1.575GHz/ ISM 2.4GHz/5GHz,2.0×1.2×0.7 mm,8 PINs,	1	FL6908
263	AEG0000029CX	RFTIP2506T10A8Q1C	Triplexer,LTCC Multi Layer Ceramic, 500~960MHz / 1427~2690MHz / 3300~5925MHz,2.5¡Á2.0¡Á0.65 mm,9 PINs,	1	FL6905
264	AFA0000272CX	PSBD2FD40V1H	Schottky Barrier Diode,Vrm 45V,Vr 40V,DFN1006-2L,Uni-Directional	1	D2501
266	AFD0000066CX	PESD5V0H1BSF	Transient Voltage Suppressors, 0.15 pF/0.13 pF,5 V,DSN0603-2,Bi-Directional	10	T4710,T4711,T4712,T4713,T4714,T4715,T4716,T4717,T4718,T4719
267	AFD0000068CX	PESD18VF1BSF	Transient Voltage Suppressors,Ultra low capacitance,0.28 pF,18 V, DSN0603-2 (SOD962-2),Bi-Directional	4	T4501,T4502,T5001,T5002
270	AFD0000114CX	PTVSHC3N18VUH	Transient Voltage Suppressors,900 pF,18 V,DFN2×2-3L,Uni-Directional	1	T4720
271	AFD0000122CX	PESDHC2FD12VU	Transient Voltage Suppressors,High Capacitance,46 pF,12 V,DFN1006-2L, Uni-Directional,	5	T4705,T4706,T4708,T4709,T4801
272	AFD0000124CX	PESDNC2XD5VBL	TVS,17.5 pF,5.0 V,DFN0603-2L,Bi-Directional,	34	T3325,T3326,T4601,T4602,T4603,T4604,T4605,T4606,T4612,T4613,T4614,T4615,T4616,T4617,T4618,T4619,T4620,T4621,T4622,T4623, T4624,T4625,T4626,T4701,T4702,T4703,T4723,T4903,T4904,T4909,T4912,T4914,T4920,T4921
274	AFD0000127CX	PESD0402-05	1 Channel ESD,TVS,ESD Protection, 0.05 pF,5.0 V,0402,Bi-Directional,	1	T6906
276	AFD0000130CX	PTVSHC2EN4V8UF	TVS,ESD Protector,530 pF,4.8 V, DFN1610-2L,Uni-Directional, 1.65×1.05×0.6 mm	2	T3101,T3303
277	AHA0000235CX	WNM2030A-3/TR	MOSFET,N Channel,480 mW,0.36 ohm,sot-723,	1	Q1101
278	AHA0000241CX	PNM6N30V20MF	MOSFET,N Channel,2400 mW, 0.0038 ohm,DFN2X2-6L,	1	Q3301
279	AJA7680000CX	7CG07680A00	Crystal,76.8 MHz,-10+22 ppm,7.0 pF, 1.6×1.2×0.65 mm,200 uW,	1	Y1901

190	AMA0001149CX	SM-7225-0-PSP837-TR-00-0-AB	Baseband Chipset,837 PSP,837 Balls,12.4×12×0.91 mm,0.35 mm, SM-7225-0-PSP837-TR-00-0-AB	1	U0501
191	AMB0000146CX	ST21NFCDDBGARA9	NFC controller,NFC Forum,WFBGA 64-pin,4¡Á4¡Á0.8 mm,0.4 mm	1	U3302
192	AMY0001864CX	ST33G1M2LCL9EMM4	eSIM IC,WLCSP,2.539×2.735×0.6 mm,	1	U4601
283	AMB0001798CX	WCN-3988-0-82BWLPSP-TR-00-0	WLAN IC,WCN3988,BT+WIFI2. 4/5G+FM,82 ball WLPSP,3.79×3. 07×0.55 mm,0.55 mm,Security, 1x1 TEEE 802.11 a/b/g/ c	1	U7101
284	AMD0000678CX	KM2V8001CM-B707	Memory,TDP LPDDR4X SDRAM, 128GB OR 256GB UFS+48Gb (16Gb*3),254FBGA,11.5×13×1.2 mm,0.5 mm, 1.8V/3.3V	1	U4001
285	AMF0001666CX	VC7643-63	PA module,Multi-Mode Multi-Band, 42 Pad,4.0¡Á6.8¡Á0.704 mm,	1	MA6101
286	AMF0001668CX	QPA-5530-0-LGA52D+S-TR-00-0	RF MMPA,GSM/3G/4G/5G LMB MMPA,LGA,6.80×4.30×0.75 mm, 52 PINS	1	U5901
287	AMF0001864CX	QPM-5477-0-LGA36B+S-TR-00-0	RF PA+LNA+LPAF Module,N77/N78, LGA36B+S,5.00×3.00×0.80 mm,	1	U6601
288	AMM0001637CX	QDM-5677-0-LGA11G-TR-04-0	Front End Module,n77 LNAD module,LGA11,2.0¡Á1.6¡Á0.7 mm,	3	U6602,U6701,U6702
289	AMN0001601CX	PM-6150L-1-FOWPSP177-TR-03-0	PMU Chipset,177 FOWPSP,4.49×5. 46×0.55 mm,0.35 mm	1	U2501
290	AMN0001607CX	PM-8008-0-WLPSP20-MT-X0-0	PMU Chipset,WLPSP20,1.51¡Á1.84¡Á0. 55 mm,0.35 mm,	1	U3001
291	AMN0001608CX	PM-7250B-0-FOWPSP110-TR-00-0	PMU Chipset,FOWPSP110,3.51¡Á4. 40¡Á0.55 mm,0.35 mm	1	U3101
292	AMN0001776CX	PM-6350-0-FOWPSP121-TR-00-0	PMU Chipset,FOWPSP121,3.97 × 3.97 × 0.55 mm,0.35 mm,	1	U2001
294	AMR0000113CX	SDR-735-0-PSP219B-TR-01-0	Transceiver Chipset,PSP219B,6.00 × 5.01 × 0.60 mm,0.35 mm,	1	MN5401
295	AMY0000564CX	SGM2031-3.3YUDH4G/TR	Linear Regulator,1¡Á1¡Á0.55 mm, UTDFN-1¡Á1-4L,	1	U4505
296	AMY0000763CX	AW5015DNR	Ultra-Low Noise Amplifier,1.1×0.9×0. 45 mm,DFN-6L,	1	U7201
298	AMY0001351CX	AK09918	3-axis Electronic Compass,0.8×0. 8×0.5 mm,4-Pin WL-CSP(BGA),	1	U4502
299	AMY0001544CX	MXD8625C	SPDT Switch,1.1×0.7×0.45 mm,6-Lead DFN,for 3G/4G	3	S6001,S6101,S6503
301	AMY0001563CX	MXD8721	SPDT Switch,1×1×0.45 mm,QFN6-pin	1	S7201
302	AMY0001667CX	AW35743CSR	DPDT USB Switch,1.17×1.57×0.57 mm,WLCSP-12	1	U4701
303	AMY0001685CX	QLN-5020-0-41-PSP-MT-01-0	LNA,2.5×2.5×0.78 mm,41BGA,	2	U6202,U6302
304	AMY0001691CX	WCD-9380-0-FOWPSP60-TR-00-0	Audio Codec IC,3.12×3.00×0.55 mm, 60 FOWPSP, 0.35 mm pitch	1	U3601
305	AMY0001710CX	QLN5040-0-41PSP-MT-03-0	Low Noise Amplifier,2.5×2.5×0.78 mm,41-pin PSP,	2	U6201,U6301
306	AMY0001735CX	AW8695FCR	Tracking LRA Haptic Driver,3.0×2. 0×0.55 mm,FCQFN,	1	U4504
307	AMY0001745CX	MXD8621R	SPDT Switch,1.1×0.7×0.377 mm,6-Lead DFN, GSM/WCDMA/LTE receiving	2	S5701,S5703

308	AMY0001748CX	LD57100JR	low dropout LDO,1.175×0.775×0.315 mm,FlipChip6,	1	U4405
309	AMY0001750CX	TCS37013H	RGB lightsensor,2.0×2.5×0.5 mm, RGB,	1	U4507
310	AMY0001800CX	AW15045FDR	LNA for GNSS,1.1×0.7×0.37 mm, FCDFN-6L,	1	U7202
311	AMY0001805CX	LSM6DSOQTR	3D Gyroscope+3D Accelerometer,2.5×3×0.83 mm,LGA-14L,	1	U4503
312	AMY0001817CX	SGM2033-1.8XUDH4G/TR	LDO,1×1×0.55 mm,SGM2033-1.8 XUDH4G/TR, 250 mA,1.8 V	2	U4401,U4403
313	AMY0001820CX	SGM2038-1.8XUDY4G/TR	LDO,1.2×1.2×0.55 mm,UTDFN-1.2×1.2-4L, 1.8V	1	U4301
314	AMY0001855CX	SMB-1395-0-WLPSP100-TR-02-0	charge IC,WLPSP100,3.57 × 3.64 × 0.55 mm,	1	U3301
315	AMY0001857CX	LD56100DPU28R	LDO,2.8 V,DFN8,1.2×1.6×0.5 mm,	1	U4402
316	AMY0001866CX	QET-5100-0-40DWLNSP-TR-04-0	PA Envelope Tracking IC,40D WLNSP,2.92×2.43×0.57 mm,	2	U5601,U5602
317	AMY0001877CX	AW88264A	Audio PA,Smart K,WLCSP-36B,2.58×2.72 mm,	2	U5001,U5002
318	AMY0001878CX	STK33562-175	Ambient Light+Proximity Sensor, OLGA,5.4 ×2.3 ×1.75 mm,	1	U4506
319	AMY0001884CX	PX8618	mobile visual processor,64-pin UFBGA,4×4×0.6 mm,	1	U4302
320	ARC0100011CX	BM24-10DS/2-0.35V(51)	BTB Connector(Socket),Over PCB,10 PINs,0.35 mm,5.25×2.3×0.8 mm,W/O POST+W/O DIP	1	J4901
321	ARC0240027CX	BM24-24DS/2-0.35V(51)	BTB Connector(Socket),Over PCB, 24 PINs,0.35 mm,7.70¡Á2.3¡ÁWH0.80 mm,W/O POST+W/O DIP	2	J4501,J4701
322	ARC0300015CX	BM24-30DS/2-0.35V(51)	BTB Connector(Socket),Over PCB, 30 PINs,0.35 mm,8.75¡Á2.30¡ÁWH0.8 mm,W/O POST+W/O DIP,	2	P4402,P4403
323	ARC0400007CX	BM24-40DS/2-0.35V(51)	BTB Connector(Socket),Over PCB, 40 PINs,0.35 mm,10.5×2.3×0.8 mm, W/O POST+W/O DIP	2	P4301,P4401
324	ARD0060125CX	KP13B-SF-PEJ (855)	Nano SIM Card Connector,With Bridge,6 PINs,1.1 mm,13.6×11.5×1.18 mm,W/O POST+W/O DIP	1	J4601
327	ARE0060005CX	ECT	Battery Connector,Over PCB,4.80×3.60×1.60 mm,With POST+W/O DIP,	2	J4604,J4605
328	ARF0020009CX	MM8030-2630	RF Connector,Over PCB,2 PINs,1.9 mm,2.00¡Á2.00¡ÁH0.90 mm,W/O POST+W/O DIP	8	J6901,J6902,J6905,J6907,J6908,J6909,J6910,J6911
329	ARJ0080088CX	DM3ND-SF-PEJ(800)	Memory Card Connector,Push-Push,8 PINs,1.1 mm,15.30×13.40×H1.25 mm,W/O POST+W/O DIP,	1	J4603
330	ARM0000085CX	P-JT-TTD25	Antenna SPring,Over PCB,0. PINs,0. mm,3.0×1.5×WH2.0 mm,W/O POST+W/O DIP,	5	ANT6901,ANT6905,ANT6917,ANT6919,ANT7001
331	ARM0000114CX	KRF1S30501NR	Antenna Spring,Over PCB,1 PINs,0. mm,2.2×1.0×WH0.7 mm,W/O POST+W/O DIP,for IDOL5	6	ANT6922,ANT6930,P4501,P4502,TP5005,TP5006

332	ARM0000164CX	818012850	Antenna Spring,Over PCB,0. PINs,0. mm,3.0¡Á2.0¡Á1.55 mm,W/O POST+With DIP	2	ANT6906,ANT6918
333	ARM0010064CX	818011871	Antenna Spring,Over PCB,1 PINs,0. mm,2.20×1.00×WH0.7 mm,W/O POST+W/O DIP	17	ANT4701,ANT4702,ANT4703,ANT4704,ANT6902,ANT6907,ANT6909,ANT6910,ANT6911,ANT6914,ANT6915,ANT6916,ANT6920, ANT6921,ANT6931,ANT7036,ANT7037
334	AWC2718M06CX	SM0103B-RIS421-M02	MIC,MEMS,2.75×1.85×0.9 mm,42±1 dB,SMT,	3	M4901,M4902,M4904
335	AXA0000186CX	QAT3518-0-10BLGA-TR-01-0	Antenna Switch Module,SP4T Aperture Switch,1.65-1.95 V,1.6¡Á1. 2¡Á0.54 mm,High-voltage	2	S7001,S7002
336	AXA0001608CX	MXD8631	Antenna Switch Module,0.1-3 GHz SP3T Switch,2.8 V,1.15×1.15×0.55 mm	1	S6402
337	AXA0001703CX	MXD8625EH	Antenna Switch Module,SP2T,0~3.6 V,1.1×0.7×0.377 mm,	2	S6601,S6602
338	AXA0001704CX	QM12114	Antenna Switch Module,SP4T RFFE, 1.65~1.95 V,1.1×1.1×0.44 mm,	1	S5803
339	AXA0001863CX	AW13412DNR	RF switch,0.1-3GHz SP2T,0.5V~3.6V, 1.1×0.7×0.55 mm,	3	S5702,S6201,S6301
341	AXA0001866CX	MXD85A0F	Antenna switch,with MIPI,2.5 V~3 V, 2.45×2.45×0.5 mm,	1	S5801
342	AXA0001867CX	AW13414QNR	Antenna tuning,RF switch,0.1-3GHz SP4T,2.4~3.3 V,2.1×2.1×0.6 mm, 14pin	1	S6401
343	AXA0001868CX	MXD8686Q	Antenna tuning,RF switch,SP8T Switch with MIPI,2.8 V,2.05×2.05×0.6 mm, QFN-14	1	S6502
344	AXA0001869CX	MXD8648	Antenna tuning,RF switch,SP4T Switch for 3G/4G,2.5 to 3.3V,1.15×1. 15×0.45 mm, 9pin	2	S5802,S6501
251	BKC39M0008CX	FP4-WIFI1-SHIELDING	FP4-WIFI1-SHIELDING,T2M-FP4,洋白铜,0.2 mm,12.14×7.95×1.15 mm, Without Tape, T2M	1	SH0711
252	BKC39M0009CX	FP4-PMU-SHIELDING-FRAME	FP4-PMU-SHIELDING-FRAME,T2M-FP4,洋白铜,0.2 mm,38.16×27.5×1.4 mm,Without Tape, T2M	1	SH0712
253	BKC39M0000CX	FP4-PMU-SHIELDING-COVER	FP4-PMU-SHIELDING-COVER,T2M-FP4,洋白铜,0.15 mm,38.06×27.4×1. 3mm,Without Tape, T2M	1	SH0712A
254	BKC39M0001CX	FP4-WIFI2-SHIELDING	FP4-WIFI2-SHIELDING,T2M-FP4,洋白铜,0.2 mm,8.04×5.74×1.55 mm, Without Tape, T2M	1	SH0701
255	BKB39M0000CX	FP4-BB-SHIELDING-FRAME	FP4-BB-SHIELDING-FRAME,T2M-FP4,洋白铜,0.2 mm,33.48×30.1×1.75 mm,Without Tape,T2M,	1	SH0702
256	BKB39M0001CX	FP4-BB-SHIELDING-COVER	FP4-BB-SHIELDING-COVER,T2M-FP4,洋白铜,0.1 mm,33.28×29.9×1.55 mm,Without Tape,T2M,	1	SH0702A
257	BKA39M0000CX	FP4-RF1-SHIELDING	FP4-RF1-SHIELDING,T2M-FP4,洋白铜,0.2 mm,40.37×10.25×1.25 mm, Without Tape,T2M,	1	SH0703

258	BKA39M0001CX	FP4-RF2-SHIELDING	FP4-RF2-SHIELDING,T2M-FP4,洋白铜,0.2 mm,10.25×9.46×1.25 mm, Without Tape,T2M,	1	SH0704
259	BKA39M0005CX	FP4-RF3-SHIELDING-FRAME	FP4-RF3-SHIELDING-FRAME,T2M-FP4,洋白铜,0.2 mm,18.18×10.25×1.45 mm,Without Tape,T2M,	2	SH0708,SH0705
260	BKA39M0008CX	FP4-RF4-SHIELDING-FRAME	FP4-RF4-SHIELDING-FRAME,T2M-FP4,洋白铜,0.2 mm,30.88×10.45×1.3 mm,Without Tape,T2M,	1	SH0706
261	BKA39M0003CX	FP4-RF4-SHIELDING-COVER	FP4-RF4-SHIELDING-COVER,T2M-FP4,洋白铜,0.15 mm,30.78×10.35×1.3 mm,Without Tape,T2M,	1	SH0706A
262	BKA39M0004CX	FP4-RF5-SHIELDING	FP4-RF5-SHIELDING,T2M-FP4,洋白铜,0.2 mm,21.35×11.08×1.25 mm, Without Tape,T2M,	1	SH0707
263	BKA39M0002CX	FP4-RF6-SHIELDING-FRAME	FP4-RF6-SHIELDING-FRAME,T2M-FP4,洋白铜,0.2 mm,37.37×11.97×1.2 mm,Without Tape,T2M,	1	SH0713
264	BKA39M0007CX	FP4-RF6-SHIELDING-COVER	FP4-RF6-SHIELDING-COVER,T2M-FP4,洋白铜,0.15 mm,12×11.87×1.05 mm,Without Tape,T2M,	1	SH0713A
265	BKC39M0007CX	FP4-AUDIO1-SHIELDING	FP4-AUDIO1-SHIELDING,T2M-FP4,洋白铜,0.2 mm,15.67×10.78×1.4 mm, Without Tape, T2M	1	SH0710
266	BKC39M0002CX	FP4-AUDIO2-SHIELDING	FP4-AUDIO2-SHIELDING,T2M-FP4,洋白铜,0.2 mm,12.05×11.65×1.45 mm, Without Tape, T2M	1	SH0709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U4503
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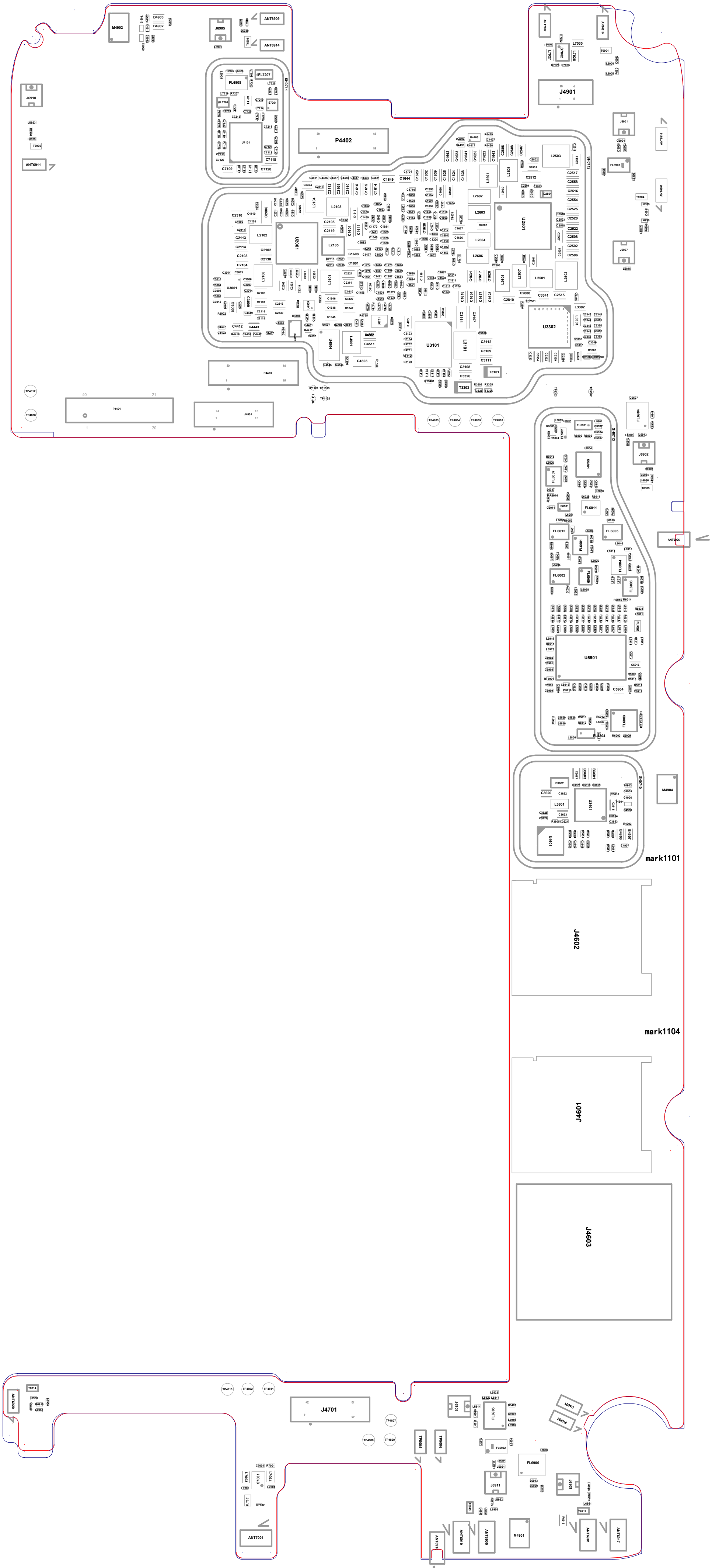
ANT4703



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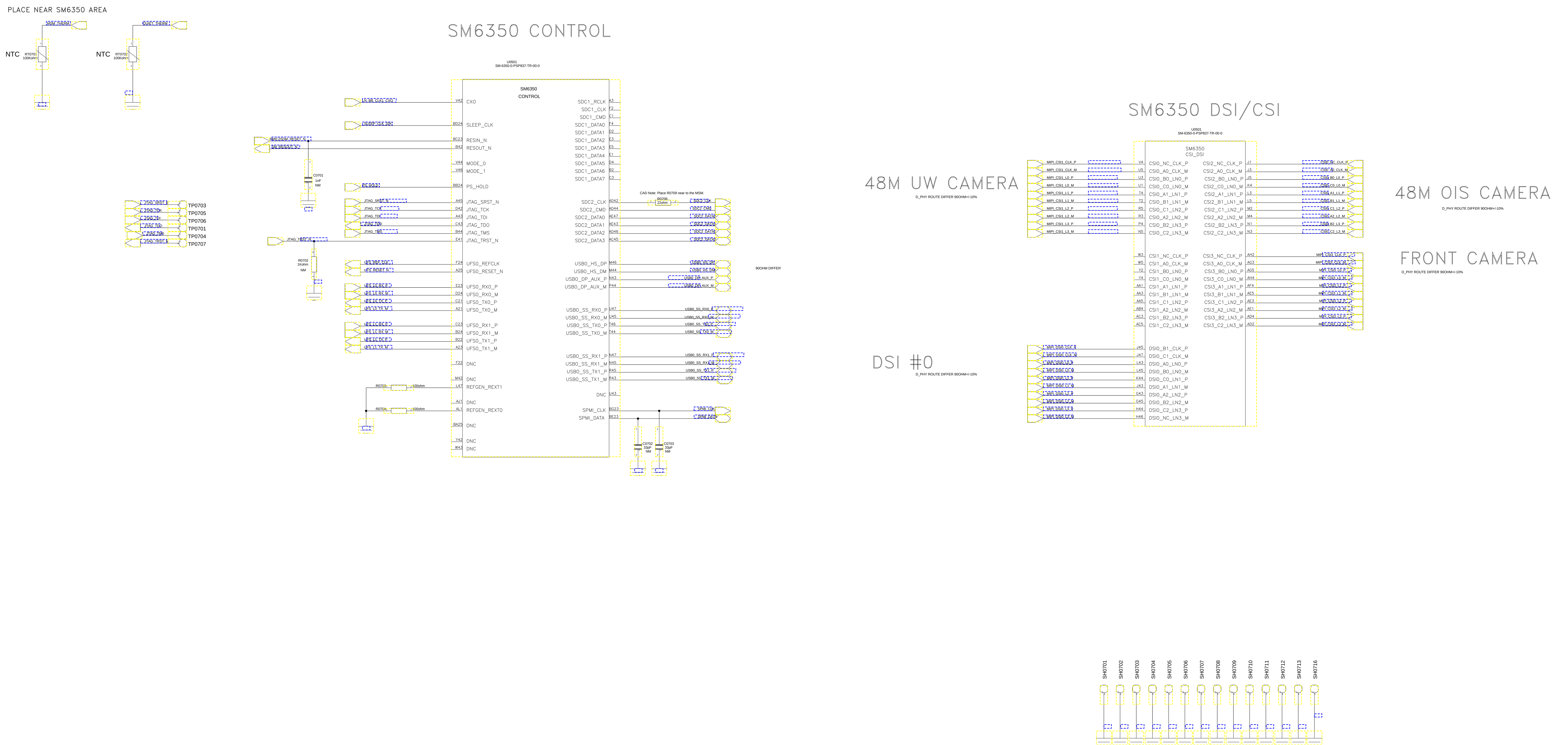
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NTC
SM6350 CONTROL
SM6350
CONTROL
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RESIN_N
RESOUT_N
MODE_0
MODE_1
PS_HOLD
JTAG_SRST_N
JTAG_TCK
JTAG_TDI
JTAG_TDO
JTAG_TMS
JTAG_TRST_N
UFS0_REFCLK
UFS0_RESET_N
UFS0_RX0_P
UFS0_RX0_M
UFS0_TX0_P
UFS0_TX0_M
UFS0_RX1_P
UFS0_RX1_M
UFS0_TX1_P
UFS0_TX1_M
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REFGEN_REXT0
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SDC1_CLK
SDC1_CMD
SDC1_DATA0
SDC1_DATA1
SDC1_DATA2
SDC1_DATA3
SDC1_DATA4
SDC1_DATA5
SDC1_DATA6
SDC1_DATA7
SDC2_CLK
SDC2_CMD
SDC2_DATA0
SDC2_DATA1
SDC2_DATA2
SDC2_DATA3
USB0_HS_DP
USB0_HS_DM
USB0_DP_AUX_P
USB0_DP_AUX_M
USB0_SS_RX0_P
USB0_SS_RX0_M
USB0_SS_TX0_P
USB0_SS_TX0_M
USB0_SS_RX1_P
USB0_SS_RX1_M
USB0_SS_TX1_P
USB0_SS_TX1_M
SPMI_CLK
SPMI_DATA
TP0703
TP0705
TP0706
TP0701
TP0704
TP0707
90OHM DIFFER
SM6350 DSI/CSI
SM6350
CSI_DSI
48M UW CAMERA
48M OIS CAMERA
FRONT CAMERA
DSI #0
CSI0_NC_CLK_P
CSI0_A0_CLK_M
CSI0_B0_LN0_P
CSI0_C0_LN0_M
CSI0_A1_LN1_P
CSI0_B1_LN1_M
CSI0_C1_LN2_P
CSI0_A2_LN2_M
CSI0_B2_LN3_P
CSI0_C2_LN3_M
CSI2_NC_CLK_P
CSI2_A0_CLK_M
CSI2_B0_LN0_P
CSI2_C0_LN0_M
CSI2_A1_LN1_P
CSI2_B1_LN1_M
CSI2_C1_LN2_P
CSI2_A2_LN2_M
CSI2_B2_LN3_P
CSI2_C2_LN3_M
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CSI1_C0_LN0_M
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CSI1_A2_LN2_M
CSI1_B2_LN3_P
CSI1_C2_LN3_M
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CSI3_A0_CLK_M
CSI3_B0_LN0_P
CSI3_C0_LN0_M
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CSI3_B1_LN1_M
CSI3_C1_LN2_P
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CSI3_B2_LN3_P
CSI3_C2_LN3_M
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DSI0_B0_LN0_M
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DSI0_C2_LN3_P
DSI0_NC_LN3_M
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SH0702
SH0703
SH0704
SH0705
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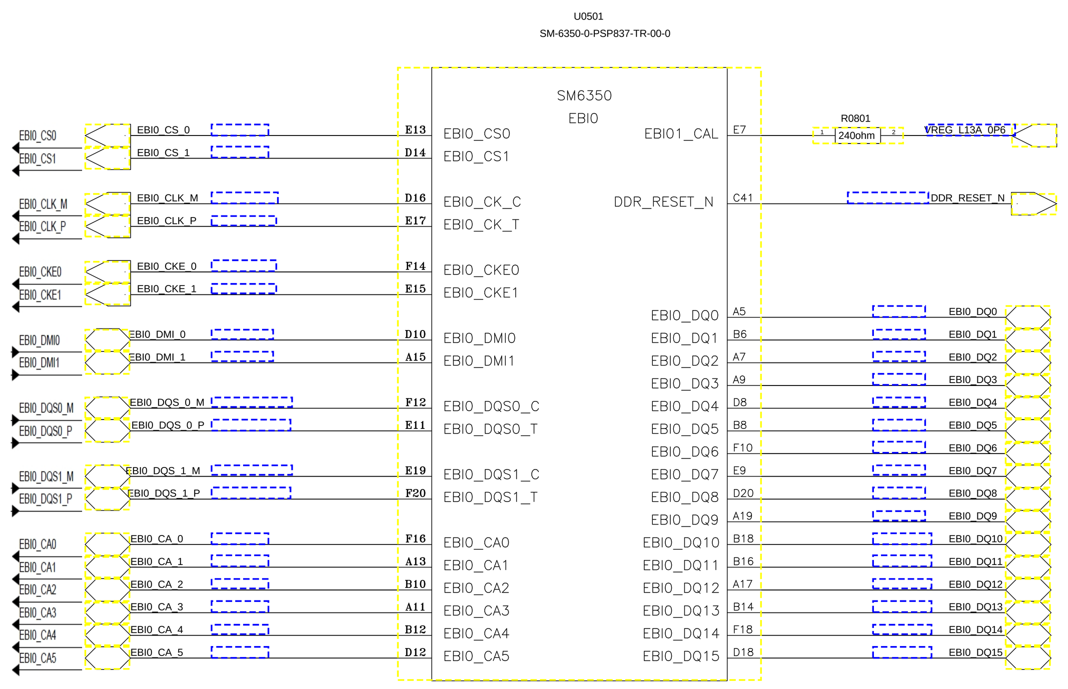
SH0716

SM6350 EBI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EBI0_CS1 D14 EBI0_CS_1
EBI0_CK_C D16 EBI0_CLK_M
EBI0_CK_T E17 EBI0_CLK_P
EBI0_CKE0 F14 EBI0_CKE_0
EBI0_CKE1 E15 EBI0_CKE_1
EBI0_DMI0 D10 EBI0_DMI_0
EBI0_DMI1 A15 EBI0_DMI_1
EBI0_DQS0_C F12 EBI0_DQS_0_M
EBI0_DQS0_T E11 EBI0_DQS_0_P
EBI0_DQS1_C E19 EBI0_DQS_1_M
EBI0_DQS1_T F20 EBI0_DQS_1_P
EBI0_CA0 F16 EBI0_CA_0
EBI0_CA1 A13 EBI0_CA_1
EBI0_CA2 B10 EBI0_CA_2
EBI0_CA3 A11 EBI0_CA_3
EBI0_CA4 B12 EBI0_CA_4
EBI0_CA5 D12 EBI0_CA_5
EBI01_CAL E7 R0801 240ohm VREG_L13A_0P6
DDR_RESET_N C41 DDR_RESET_N
EBI0_DQ0 A5
EBI0_DQ1 B6
EBI0_DQ2 A7
EBI0_DQ3 A9
EBI0_DQ4 D8
EBI0_DQ5 B8
EBI0_DQ6 F10
EBI0_DQ7 E9
EBI0_DQ8 D20
EBI0_DQ9 A19
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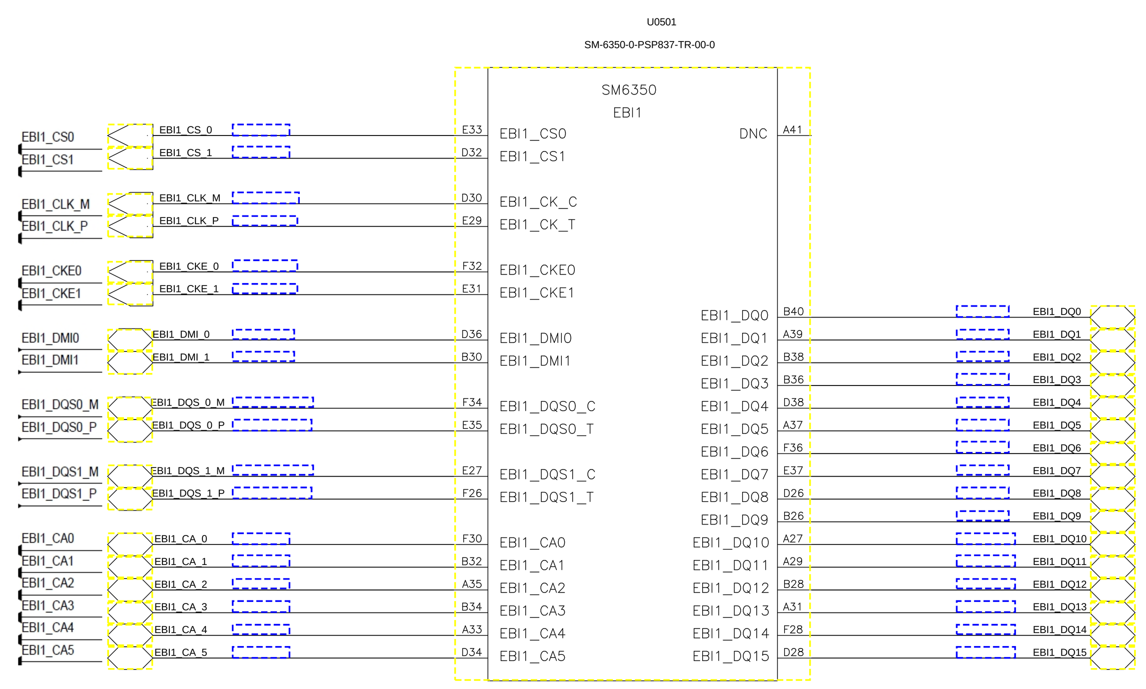
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SM6350
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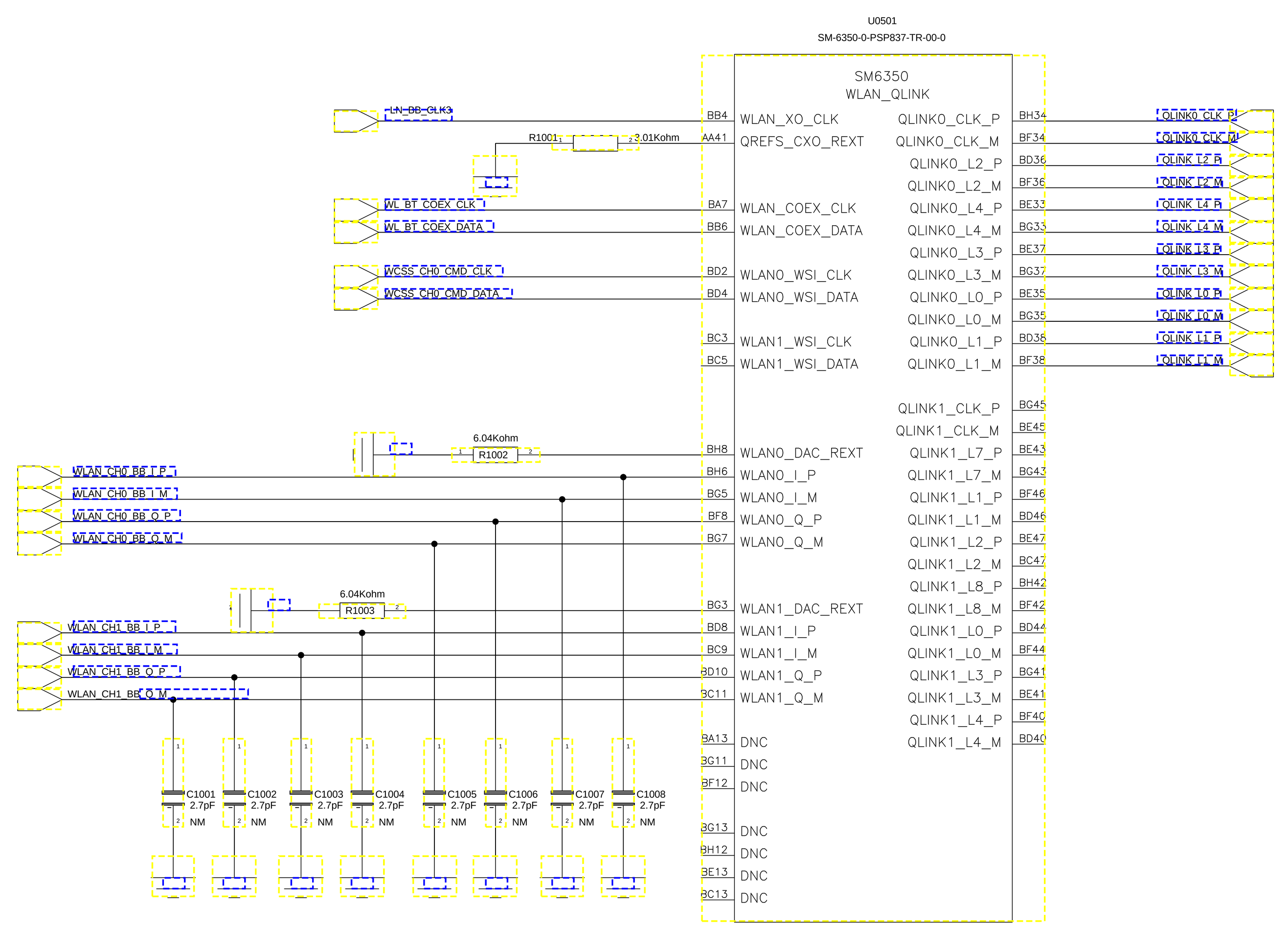
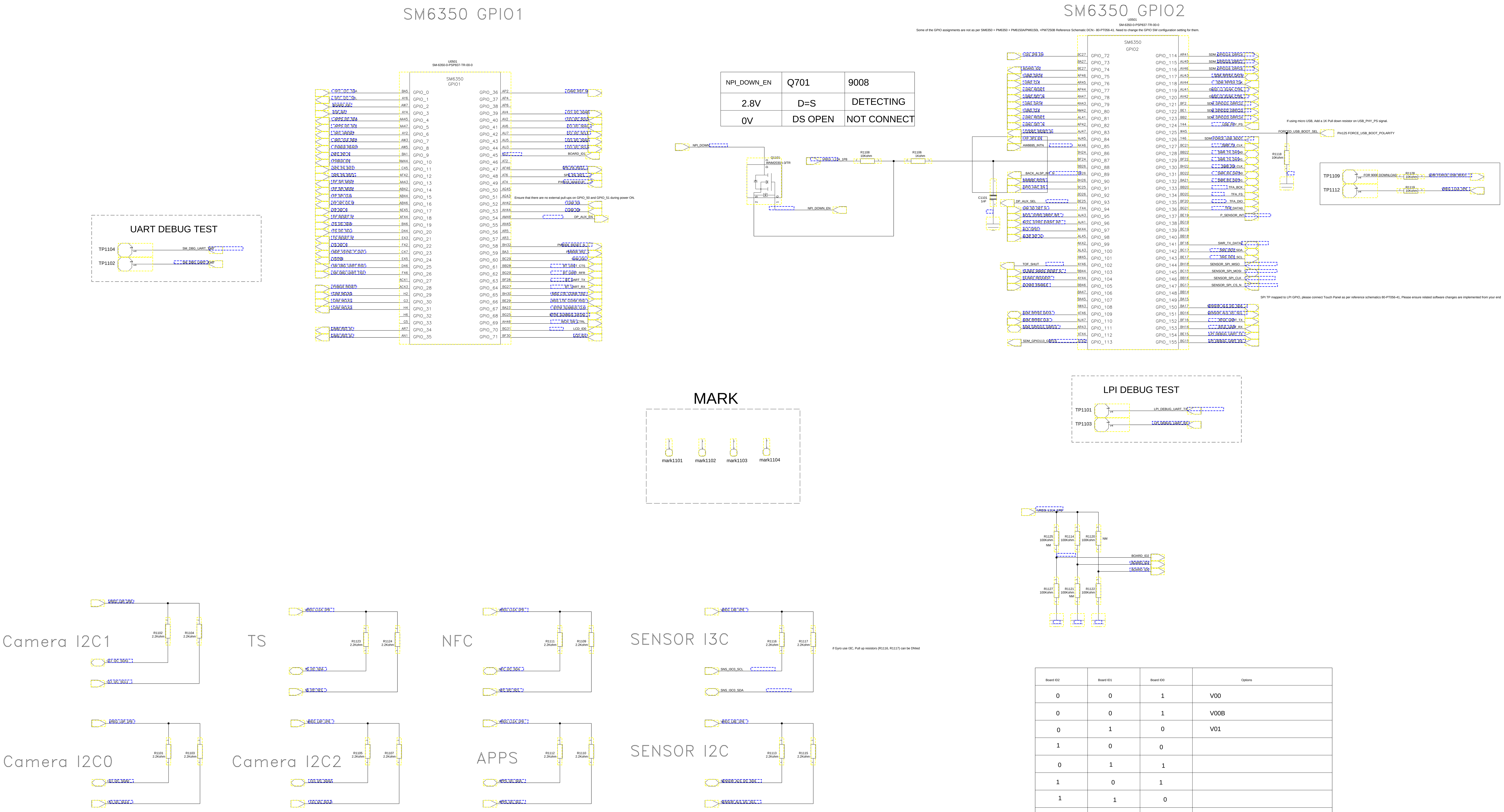
EBI1_CS1 D32 EBI1_CS_1
EBI1_CK_C D30 EBI1_CLK_M
EBI1_CK_T E29 EBI1_CLK_P
EBI1_CKE0 F32 EBI1_CKE_0
EBI1_CKE1 E31 EBI1_CKE_1
EBI1_DMI0 D36 EBI1_DMI_0
EBI1_DMI1 B30 EBI1_DMI_1
EBI1_DQS0_C F34 EBI1_DQS_0_M
EBI1_DQS0_T E35 EBI1_DQS_0_P
EBI1_DQS1_C E27 EBI1_DQS_1_M
EBI1_DQS1_T F26 EBI1_DQS_1_P
EBI1_CA0 F30 EBI1_CA_0
EBI1_CA1 B32 EBI1_CA_1
EBI1_CA2 A35 EBI1_CA_2
EBI1_CA3 B34 EBI1_CA_3
EBI1_CA4 A33 EBI1_CA_4
EBI1_CA5 D34 EBI1_CA_5
DNC A41
EBI1_DQ0 B40
EBI1_DQ1 A39
EBI1_DQ2 B38
EBI1_DQ3 B36
EBI1_DQ4 D38
EBI1_DQ5 A37
EBI1_DQ6 F36
EBI1_DQ7 E37
EBI1_DQ8 D26
EBI1_DQ9 B26
EBI1_DQ10 A27
EBI1_DQ11 A29
EBI1_DQ12 B28
EBI1_DQ13 A31
EBI1_DQ14 F28
EBI1_DQ15 D28

SM6350 RF AND WLAN





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0V	DS OPEN	NOT CONNECT

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0	0	1	V00B
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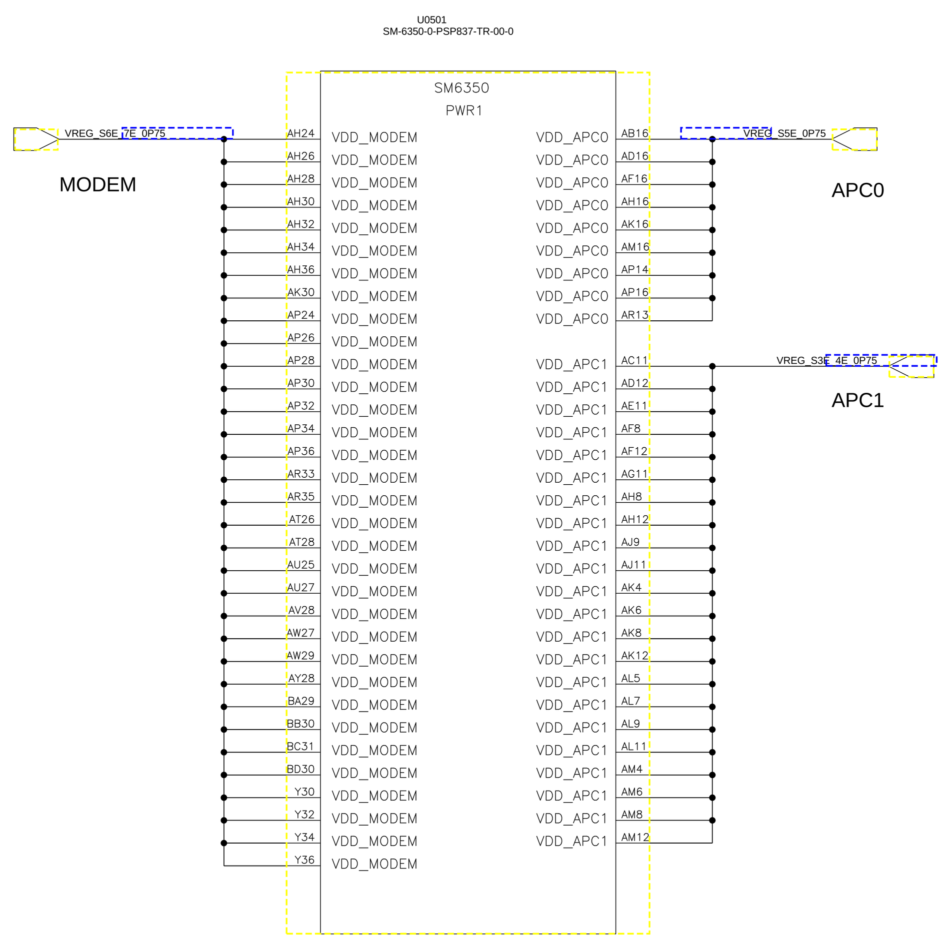
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MODEM
VREG_S5E_0P75
APC0
VREG_S3E_4E_0P75
APC1
AH24 VDD_MODEM
AH26 VDD_MODEM
AH28 VDD_MODEM
AH30 VDD_MODEM
AH32 VDD_MODEM
AH34 VDD_MODEM
AH36 VDD_MODEM
AK30 VDD_MODEM
AP24 VDD_MODEM
AP26 VDD_MODEM
AP28 VDD_MODEM
AP30 VDD_MODEM
AP32 VDD_MODEM
AP34 VDD_MODEM
AP36 VDD_MODEM
AR33 VDD_MODEM
AR35 VDD_MODEM
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AT28 VDD_MODEM
AU25 VDD_MODEM
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AW27 VDD_MODEM
AW29 VDD_MODEM
AY28 VDD_MODEM
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BB30 VDD_MODEM
BC31 VDD_MODEM
BD30 VDD_MODEM
Y30 VDD_MODEM
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Y34 VDD_MODEM
Y36 VDD_MODEM
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VDD_APC0 AD16
VDD_APC0 AF16
VDD_APC0 AH16
VDD_APC0 AK16
VDD_APC0 AM16
VDD_APC0 AP14
VDD_APC0 AP16
VDD_APC0 AR13
VDD_APC1 AC11
VDD_APC1 AD12
VDD_APC1 AE11
VDD_APC1 AF8
VDD_APC1 AF12
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VDD_APC1 AK6
VDD_APC1 AK8
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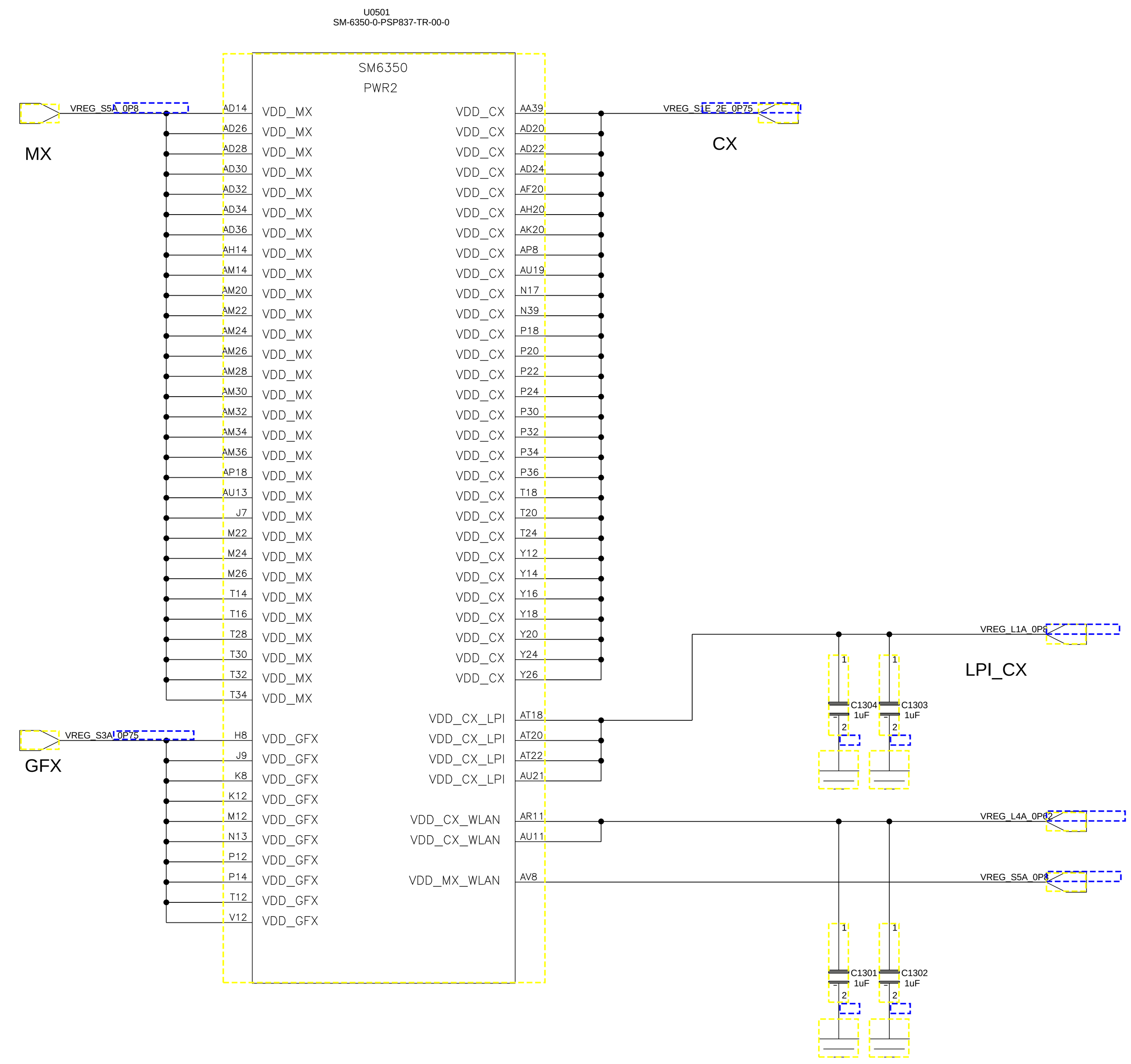
VDD_APC1 AM12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VREG_S5A_0P8
MX
VREG_S1E_2E_0P75
CX
VREG_S3A_0P75
GFX
VREG_L1A_0P8
LPI_CX
VREG_L4A_0P8
VREG_S5A_0P8
AD14 VDD_MX
AD26 VDD_MX
AD28 VDD_MX
AD30 VDD_MX
AD32 VDD_MX
AD34 VDD_MX
AD36 VDD_MX
AH14 VDD_MX
AM14 VDD_MX
AM20 VDD_MX
AM22 VDD_MX
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AM26 VDD_MX
AM28 VDD_MX
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AM32 VDD_MX
AM34 VDD_MX
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M26 VDD_MX
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T16 VDD_MX
T28 VDD_MX
T30 VDD_MX
T32 VDD_MX
T34 VDD_MX
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J9 VDD_GFX
K8 VDD_GFX
K12 VDD_GFX
M12 VDD_GFX
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P14 VDD_GFX
T12 VDD_GFX
V12 VDD_GFX
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VDD_CX AH20
VDD_CX AK20
VDD_CX AP8
VDD_CX AU19
VDD_CX N17
VDD_CX N39
VDD_CX P18
VDD_CX P20
VDD_CX P22
VDD_CX P24
VDD_CX P30
VDD_CX P32
VDD_CX P34
VDD_CX P36
VDD_CX T18
VDD_CX T20
VDD_CX T24
VDD_CX Y12
VDD_CX Y14
VDD_CX Y16
VDD_CX Y18
VDD_CX Y20
VDD_CX Y24
VDD_CX Y26
VDD_CX_LPI AT18
VDD_CX_LPI AT20
VDD_CX_LPI AT22
VDD_CX_LPI AU21
VDD_CX_WLAN AR11
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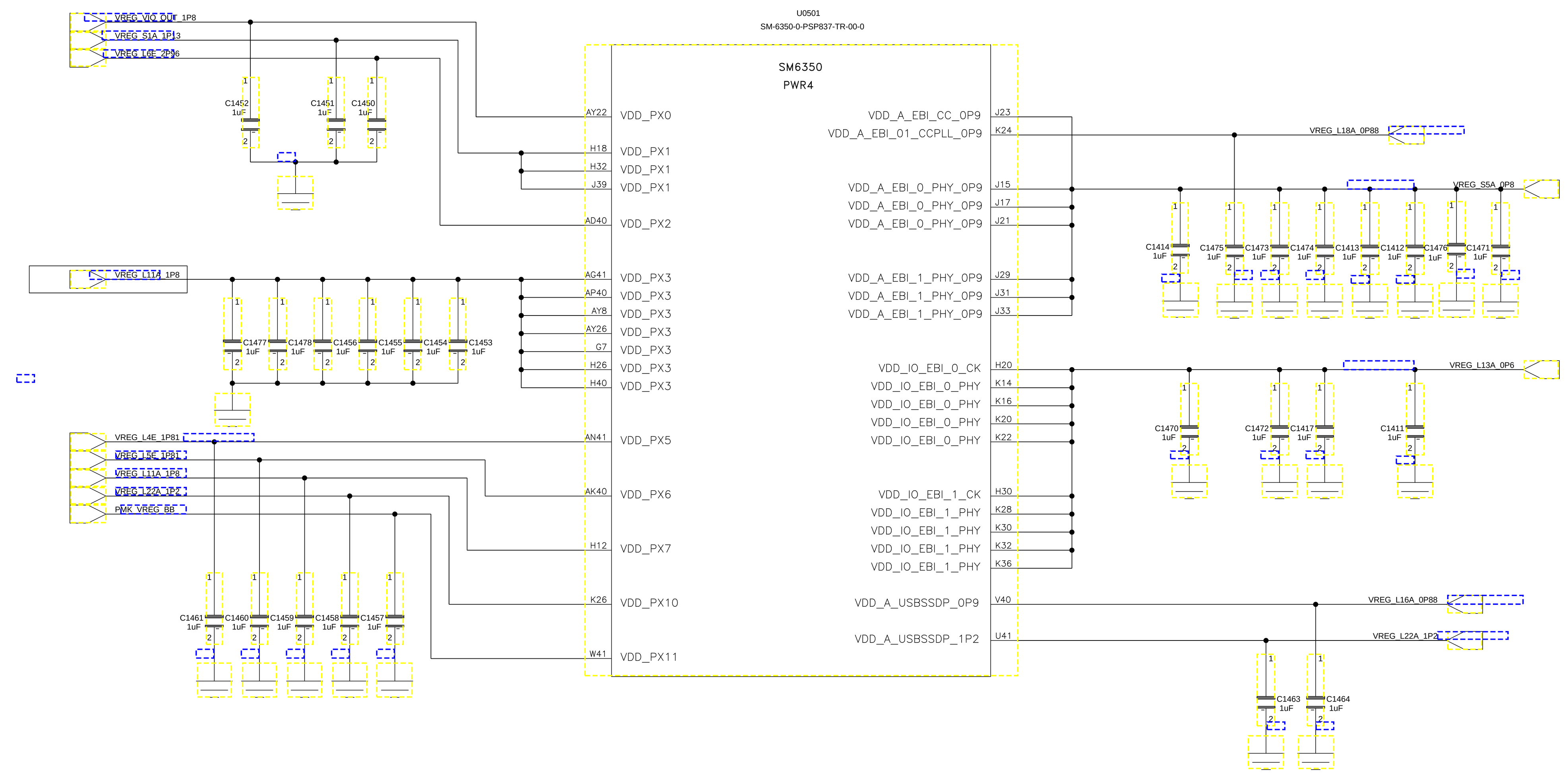
C1301 1uF
C1302 1uF



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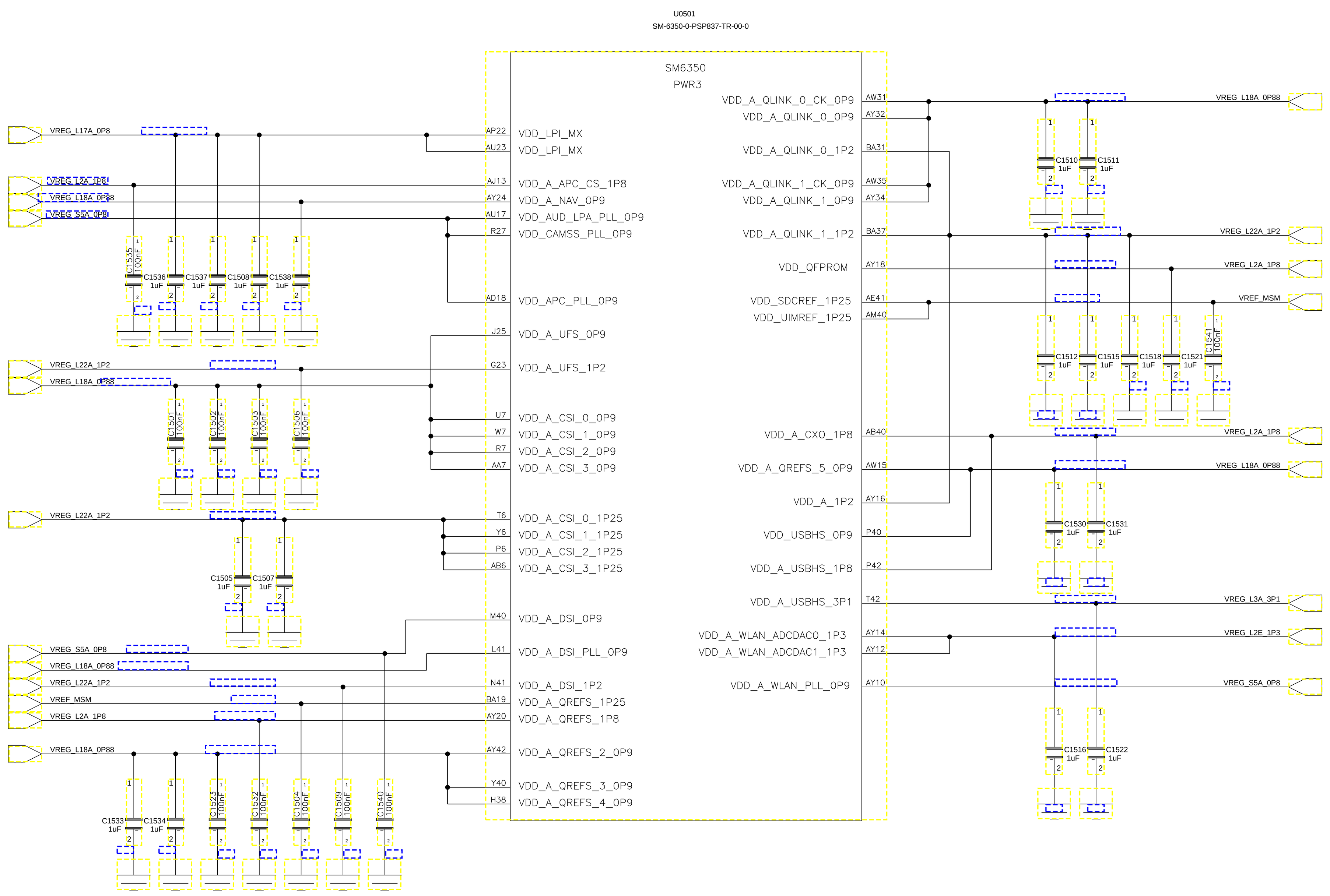
VDD_PX2
VDD_PX3
VDD_PX5
VDD_PX6
VDD_PX7
VDD_PX10
VDD_PX11
VDD_A_EBI_CC_0P9
VDD_A_EBI_01_CCPLL_0P9
VDD_A_EBI_0_PHY_0P9
VDD_A_EBI_1_PHY_0P9
VDD_IO_EBI_0_CK
VDD_IO_EBI_0_PHY
VDD_IO_EBI_1_CK
VDD_IO_EBI_1_PHY
VDD_A_USBSSDP_0P9
VDD_A_USBSSDP_1P2

SM6350 PWR



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VREG_L2A_1P8
VREG_L18A_0P88
VREG_S5A_0P8
VREG_L22A_1P2
VREF_MSM
VREG_L3A_3P1
VREG_L2E_1P3
AP22 VDD_LPI_MX
AU23 VDD_LPI_MX
AJ13 VDD_A_APC_CS_1P8
AY24 VDD_A_NAV_0P9
AU17 VDD_AUD_LPA_PLL_0P9
R27 VDD_CAMSS_PLL_0P9
AD18 VDD_APC_PLL_0P9
J25 VDD_A_UFS_0P9
G23 VDD_A_UFS_1P2
U7 VDD_A_CSI_0_0P9
W7 VDD_A_CSI_1_0P9
R7 VDD_A_CSI_2_0P9
AA7 VDD_A_CSI_3_0P9
T6 VDD_A_CSI_0_1P25
Y6 VDD_A_CSI_1_1P25
P6 VDD_A_CSI_2_1P25
AB6 VDD_A_CSI_3_1P25
M40 VDD_A_DSI_0P9
L41 VDD_A_DSI_PLL_0P9
N41 VDD_A_DSI_1P2
BA19 VDD_A_QREFS_1P25
AY20 VDD_A_QREFS_1P8
AY42 VDD_A_QREFS_2_0P9
Y40 VDD_A_QREFS_3_0P9
H38 VDD_A_QREFS_4_0P9
VDD_A_QLINK_0_CK_0P9 AW31
VDD_A_QLINK_0_0P9 AY32
VDD_A_QLINK_0_1P2 BA31
VDD_A_QLINK_1_CK_0P9 AW35
VDD_A_QLINK_1_0P9 AY34
VDD_A_QLINK_1_1P2 BA37
VDD_QFPROM AY18
VDD_SDCREF_1P25 AE41
VDD_UIMREF_1P25 AM40
VDD_A_CXO_1P8 AB40
VDD_A_QREFS_5_0P9 AW15
VDD_A_1P2 AY16
VDD_USBHS_0P9 P40
VDD_A_USBHS_1P8 P42
VDD_A_USBHS_3P1 T42
VDD_A_WLAN_ADCDAC0_1P3 AY14
VDD_A_WLAN_ADCDAC1_1P3 AY12
VDD_A_WLAN_PLL_0P9 AY10
C1535 100nF
C1536 1uF
C1537 1uF
C1508 1uF
C1538 1uF
C1501 100nF
C1502 100nF
C1503 100nF
C1506 100nF
C1505 1uF
C1507 1uF
C1533 1uF
C1534 1uF
C1523 100nF
C1532 100nF
C1504 100nF
C1509 100nF
C1540 100nF
C1510 1uF
C1511 1uF
C1512 1uF
C1515 1uF
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C1521 1uF
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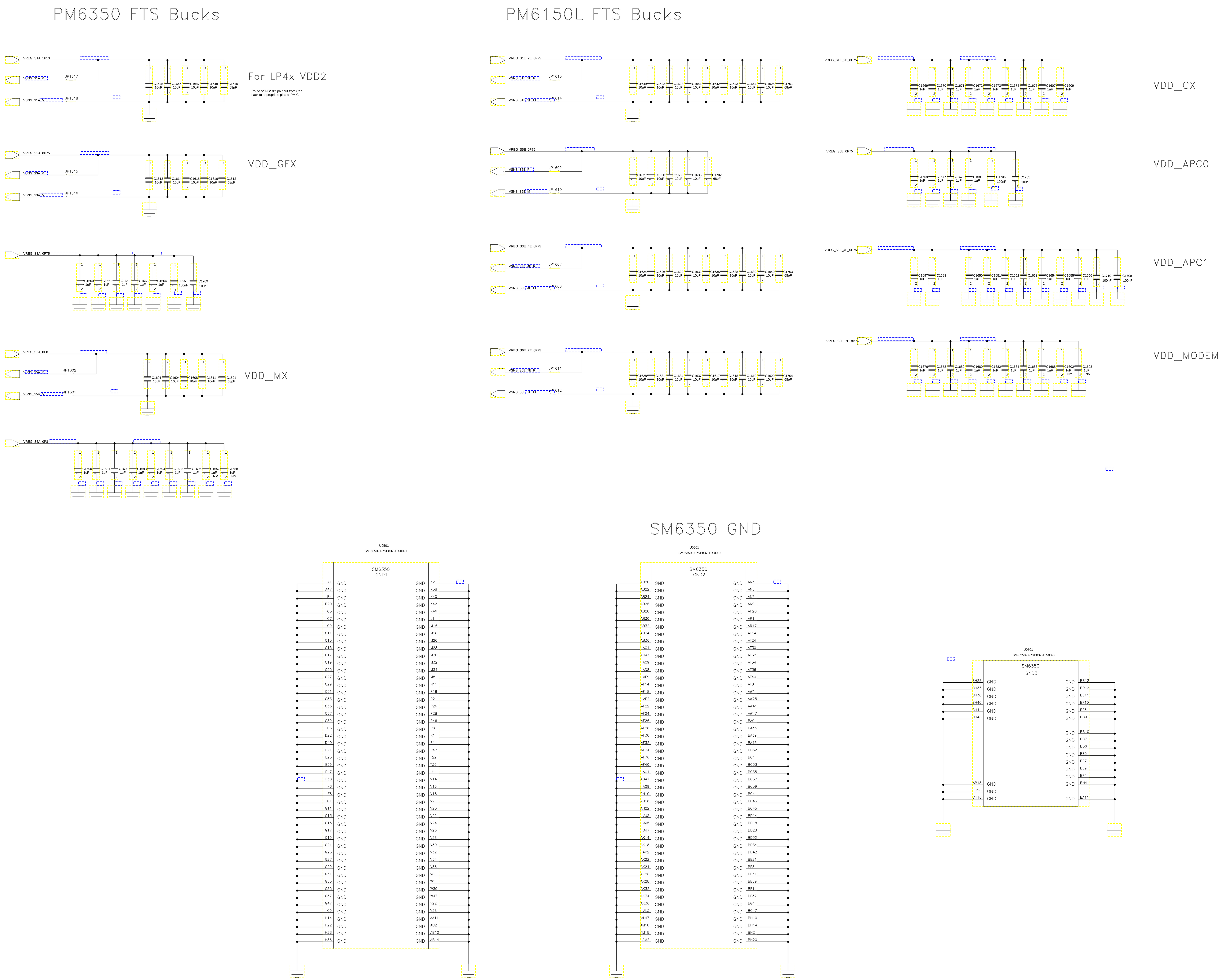
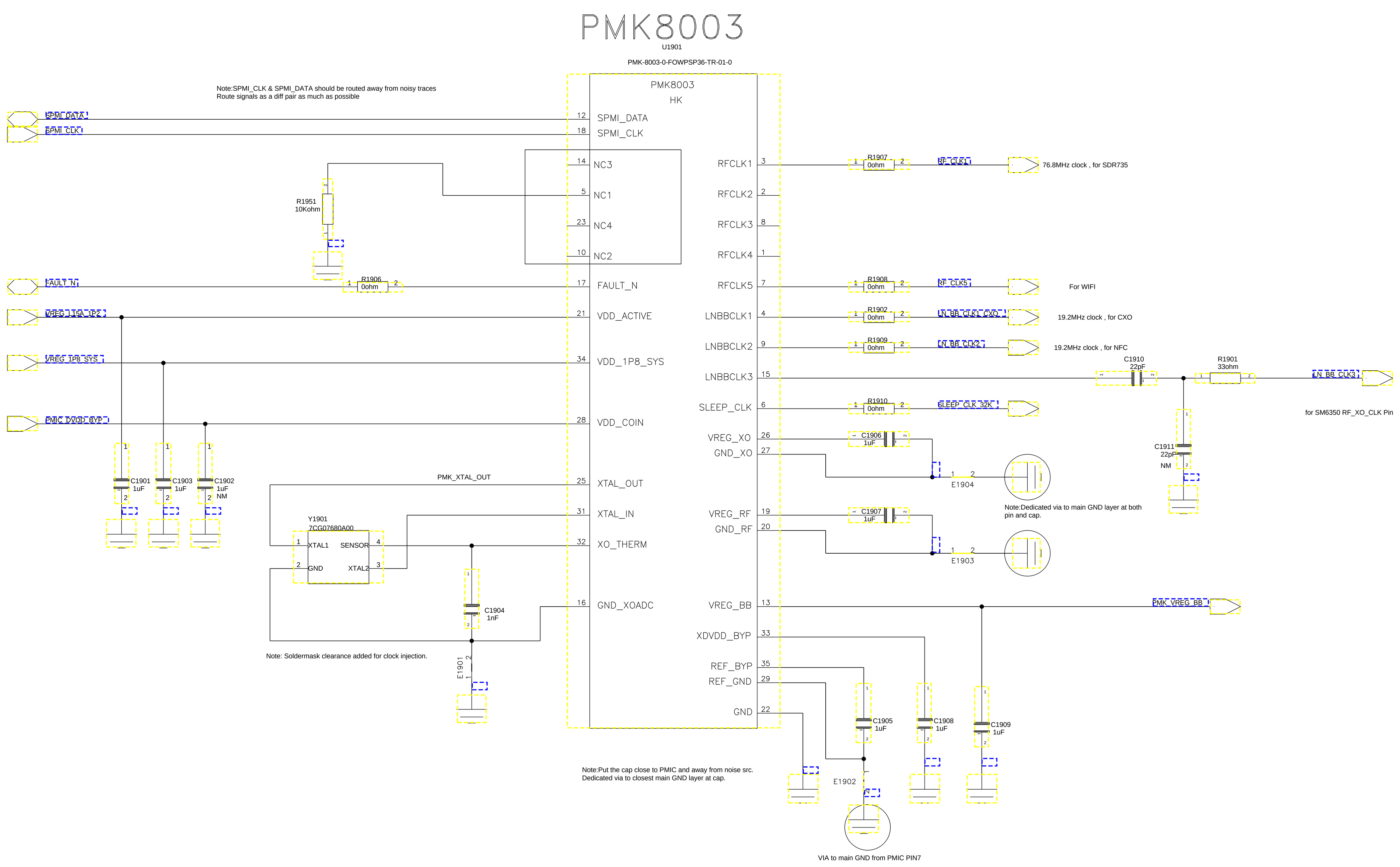
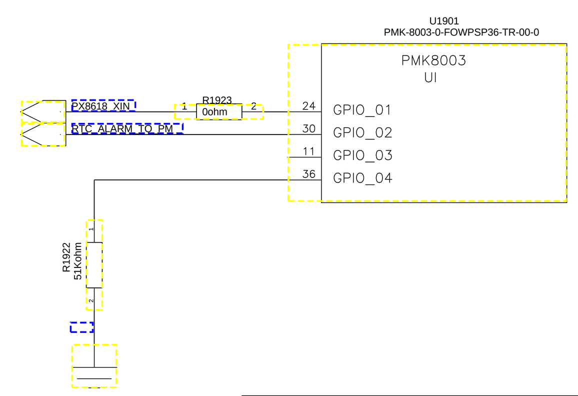
C1530 1uF
C1531 1uF
C1516 1uF
C1522 1uF



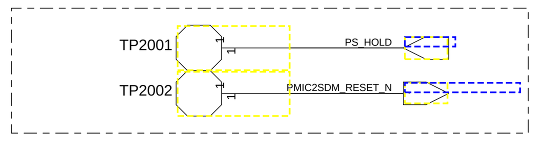
PM6350 FTS Bucks
PM6150L FTS Bucks
For LP4x VDD2
VDD_GFX
VDD_MX
VDD_CX
VDD_APC0
VDD_APC1
VDD_MODEM
SM6350 GND

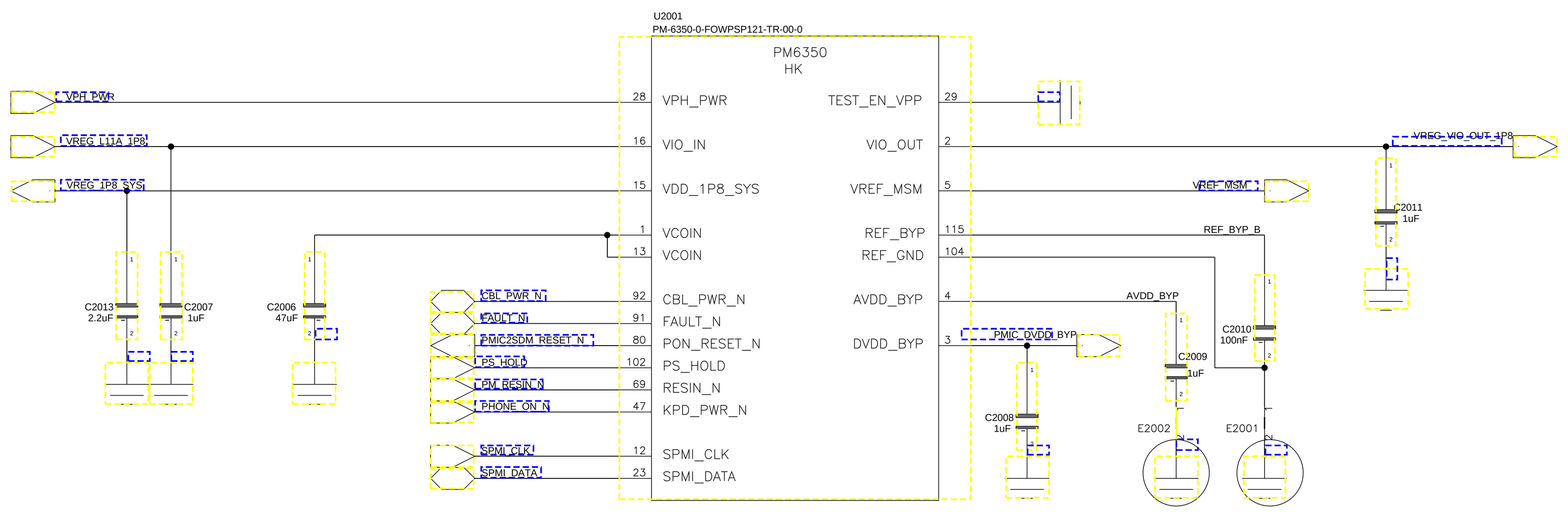




Boot Options	R1922	Acceptable Resitor Value
No SD_Card BOOT	52.3KOHM	50k-54k
SD_Card BOOT	88.7KOHM	85k-93k
Note:Option resitor must have +/-1% toletance		

For debuge

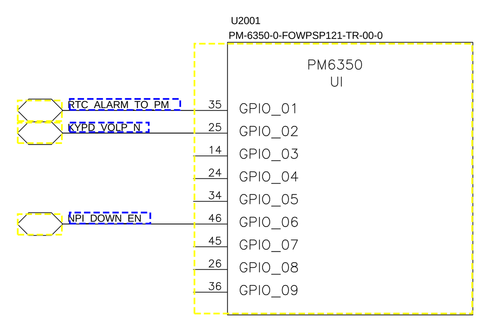




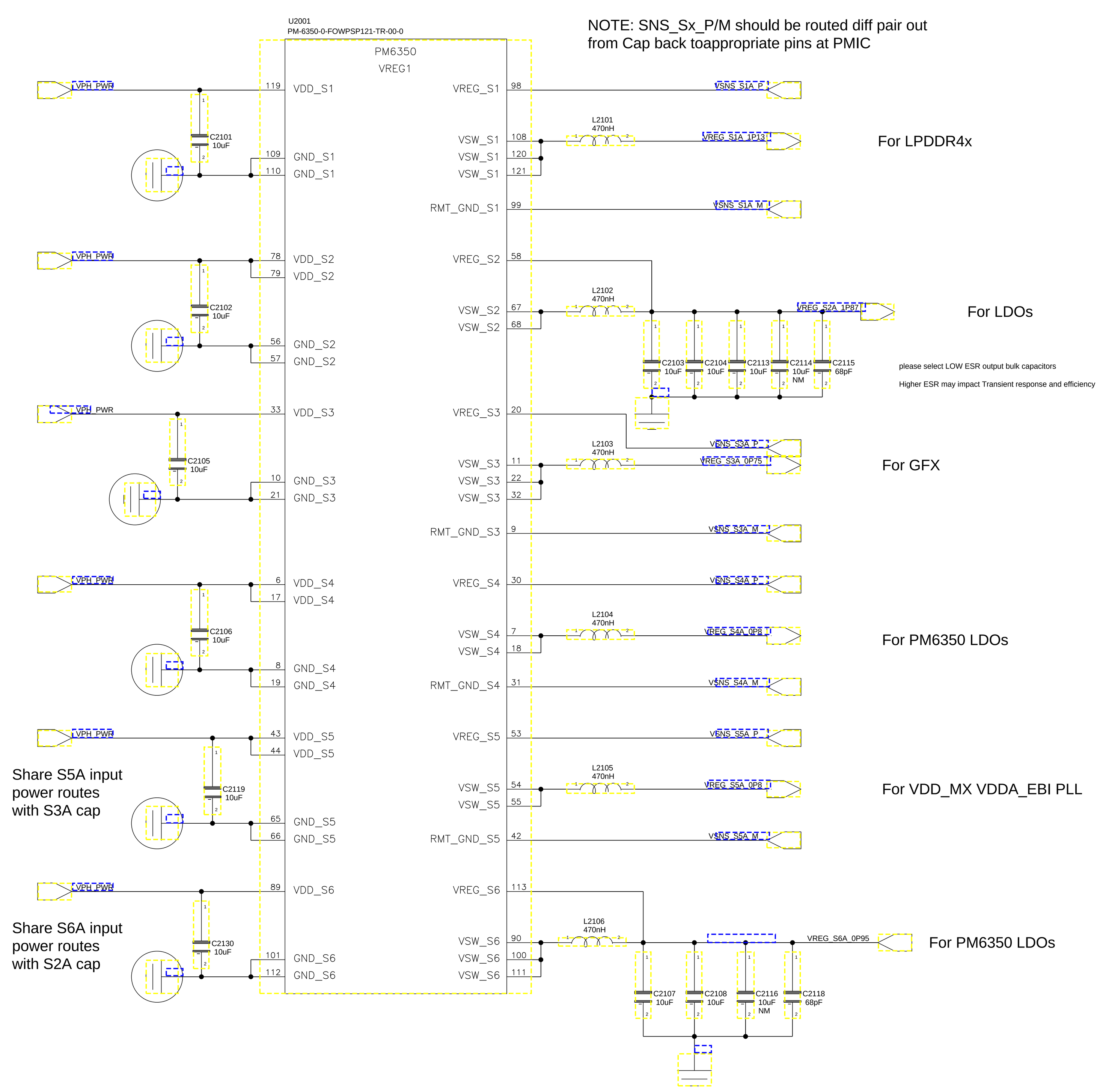
NOTE1:SPMI_CLK & SPMI_DATA should be routed away from noisy traces
Route signals as a diff pair as much as possible

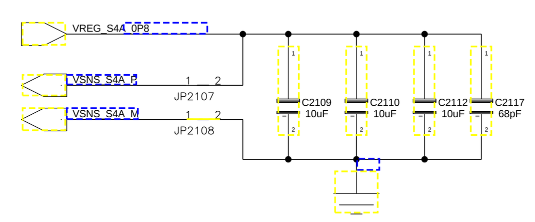
NOTE2:Dedicated trace from REF_BYP to cap.
Dedicated trace from REF_GND to cap.
Dedicated via to main ground plane right under PMIC pin (REF_GND)
or as close to the pin as possible.
Do NOT add via at cap.

NOTE3:REF_BYP and REF_GND should be
routed away from noisy traces

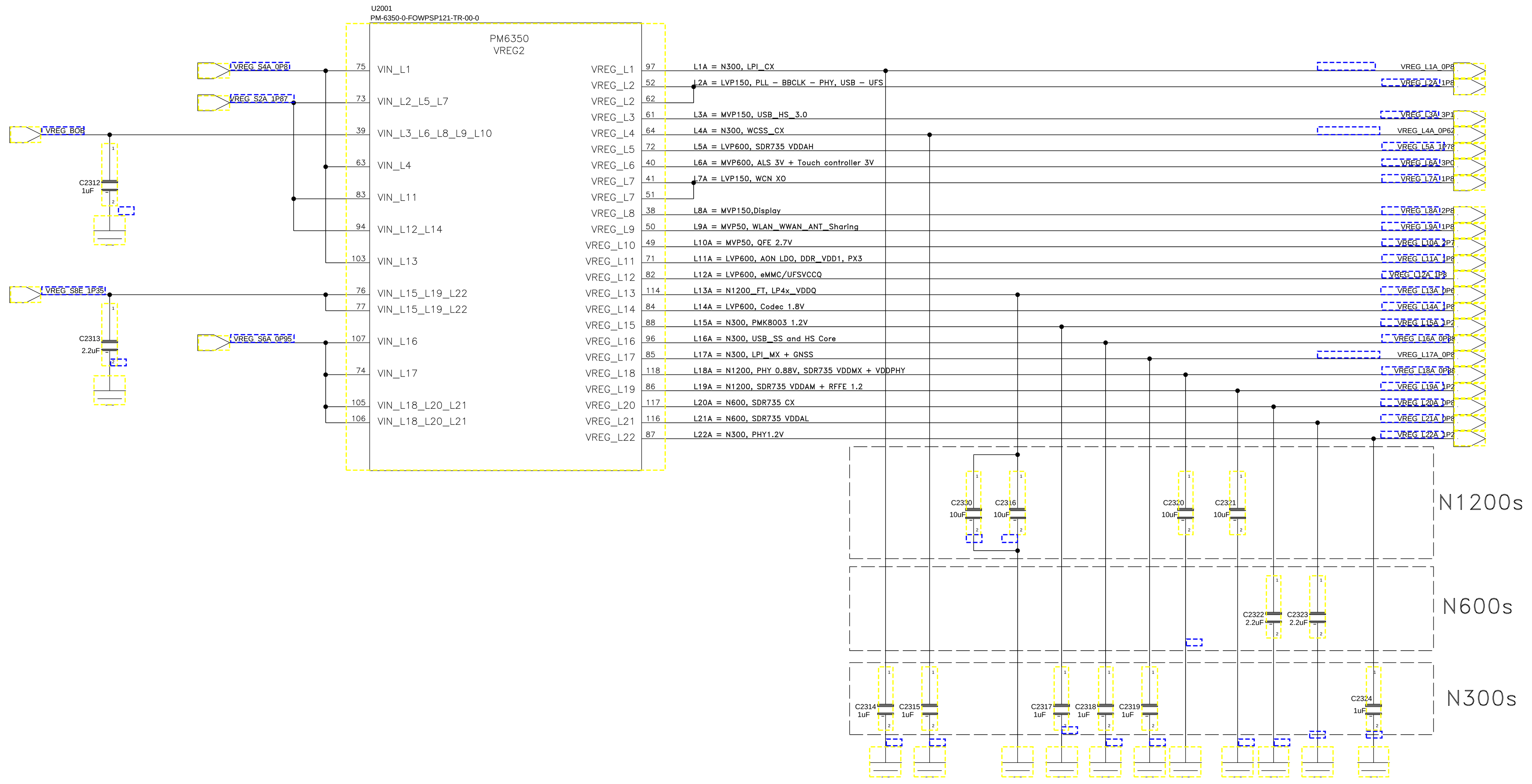


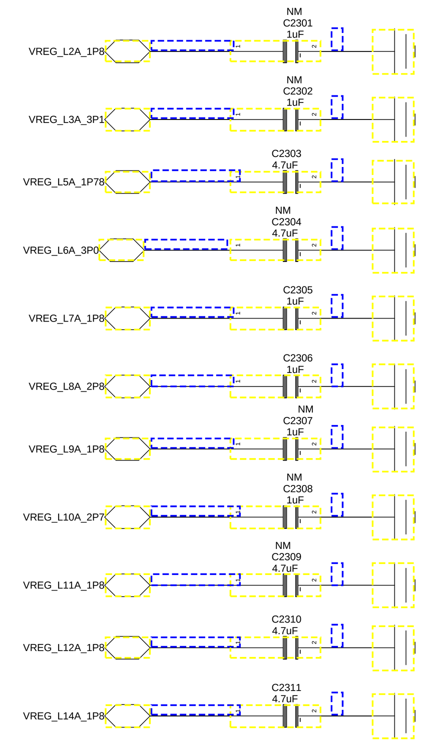
PM6350_Bucks



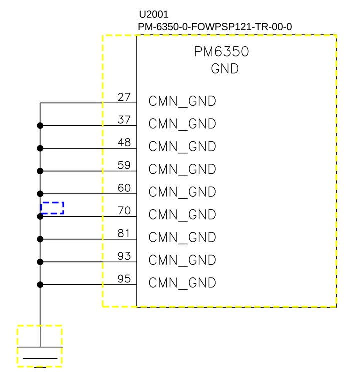


PM6350_LDOS

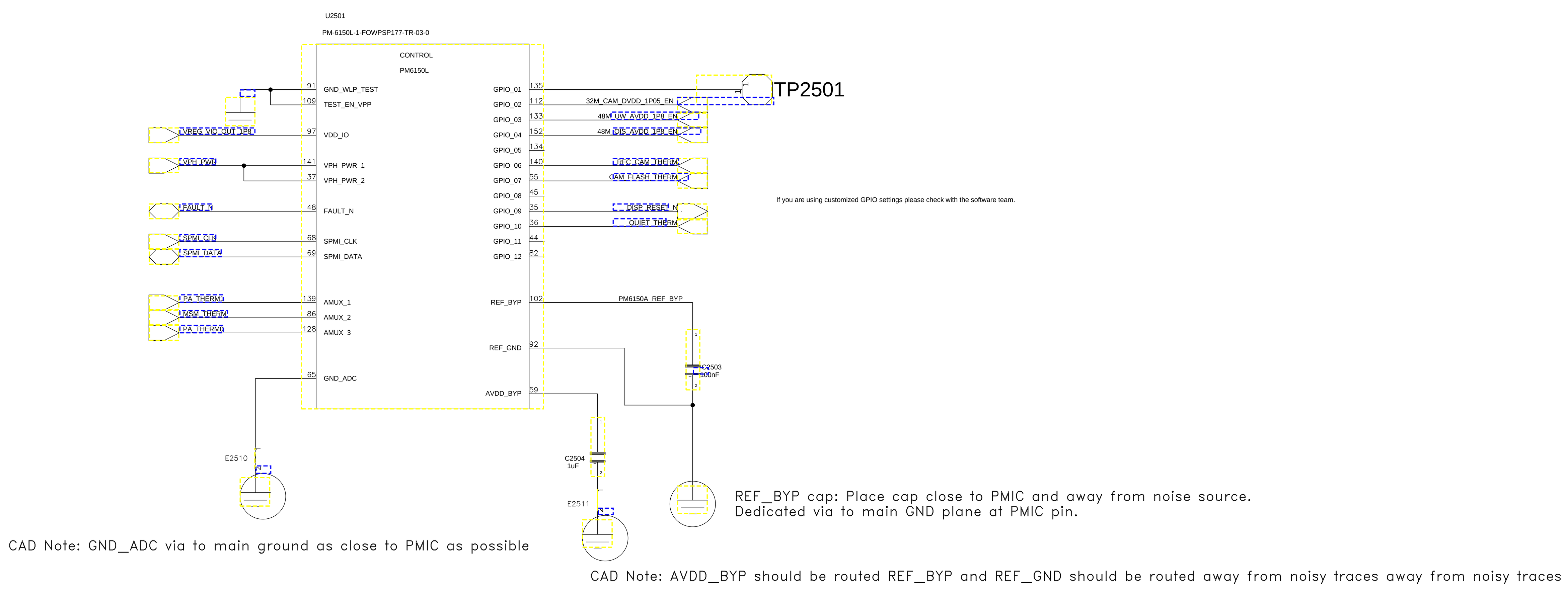


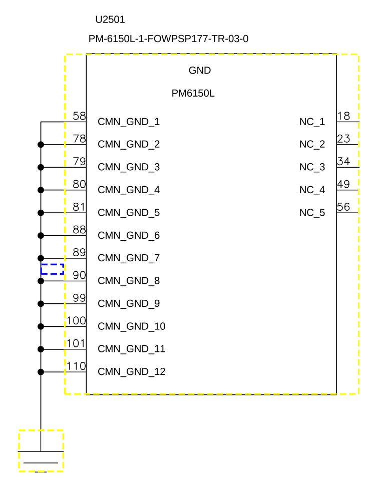


PM6350_GND

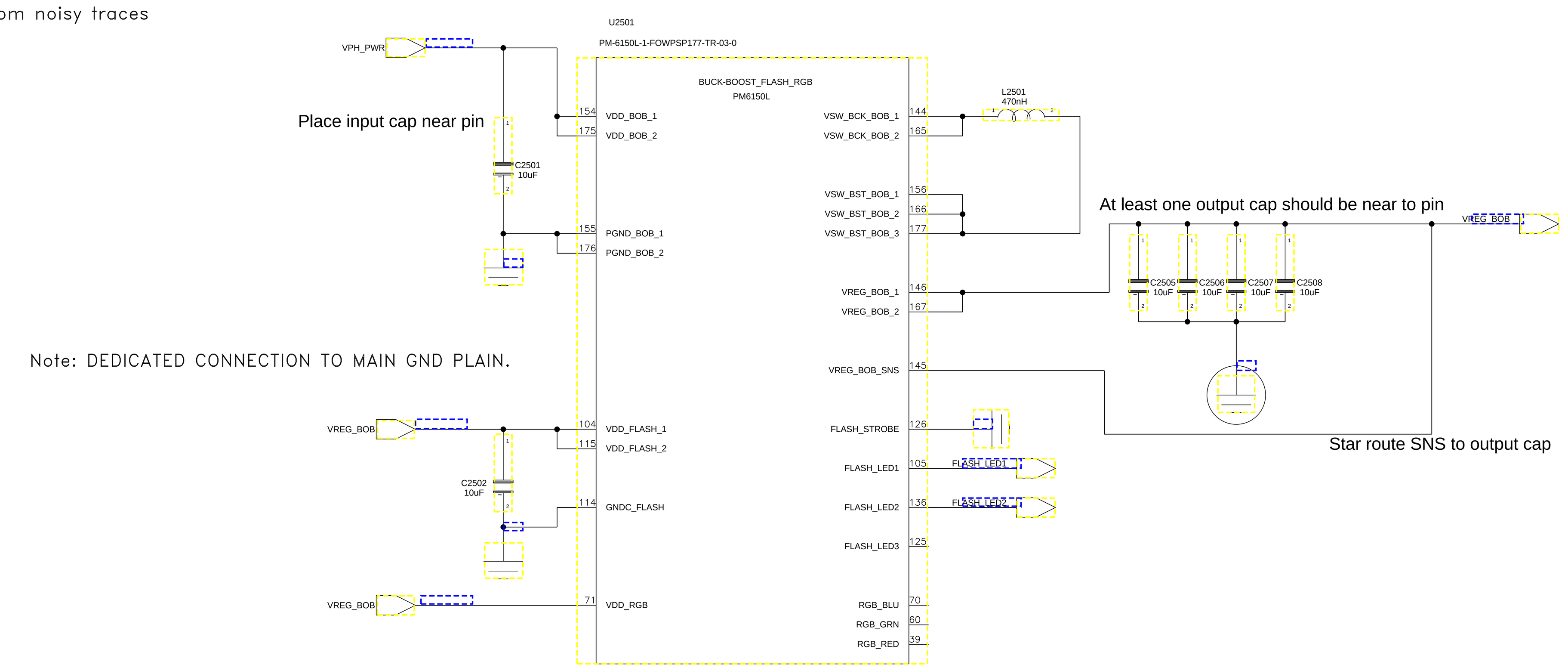


PM6150L CONTROL

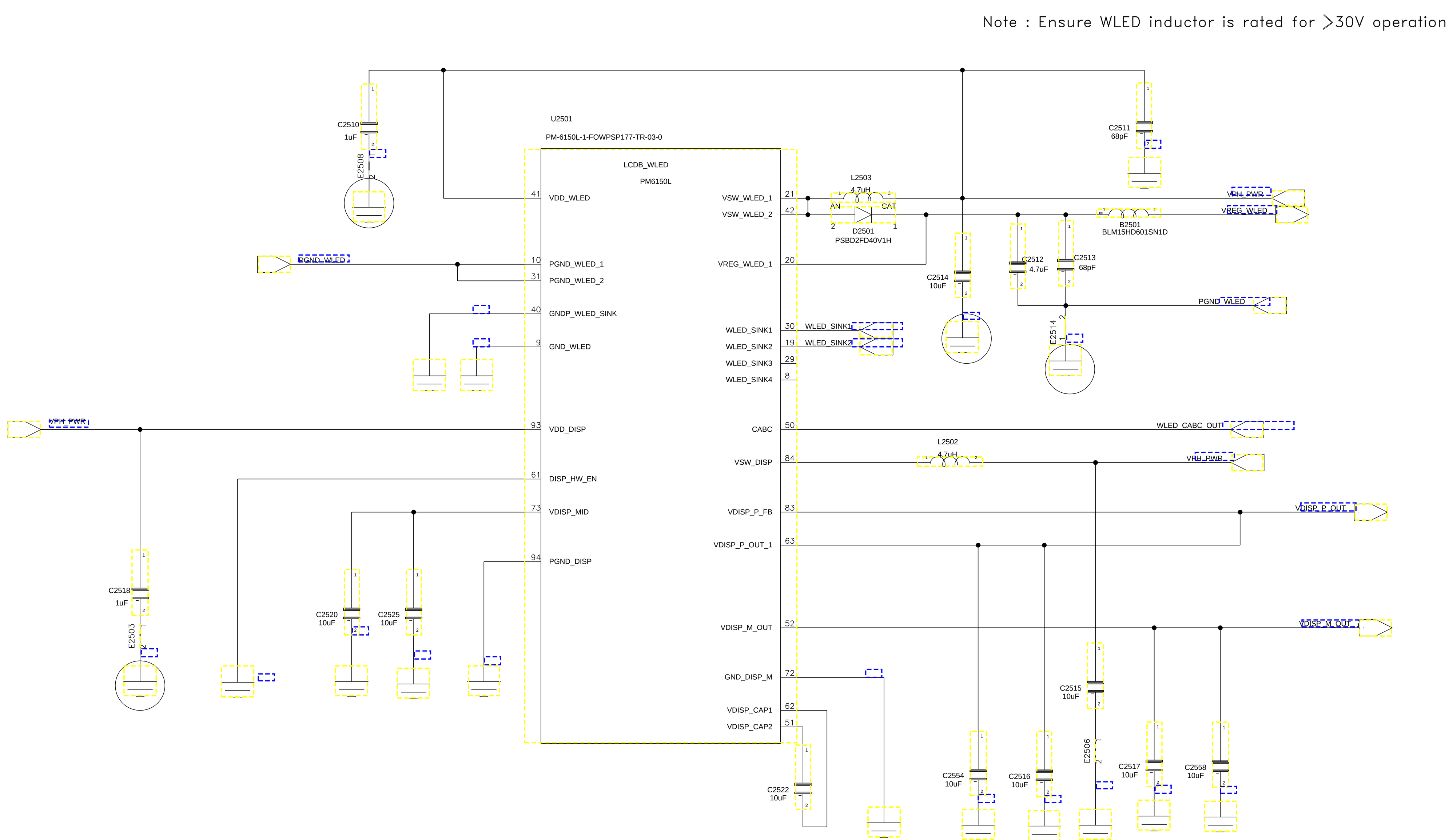




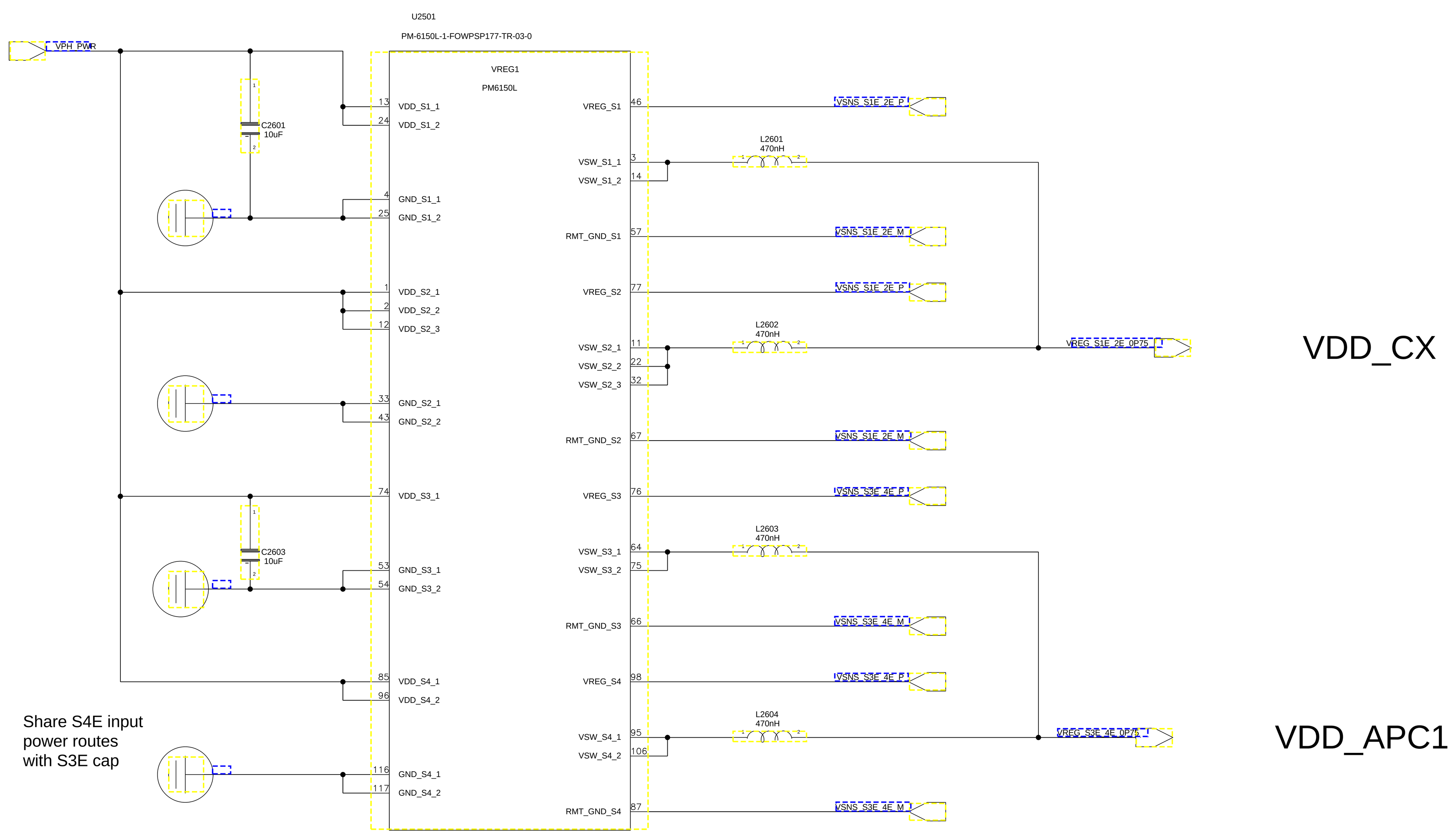
PM6150L BOB_FLASH



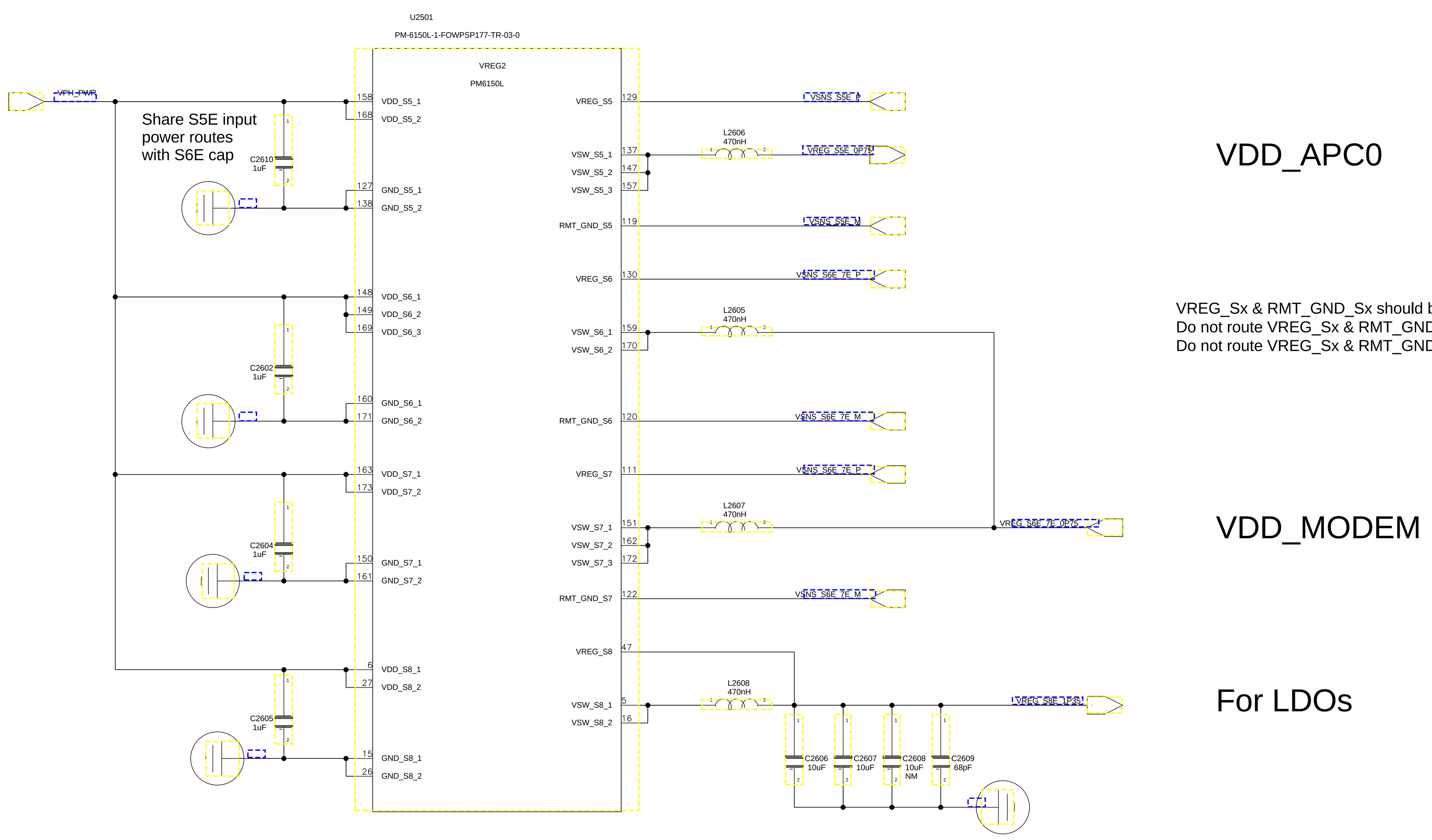
PM6150L WLED



PM6150L_BUCKS 1 of 2

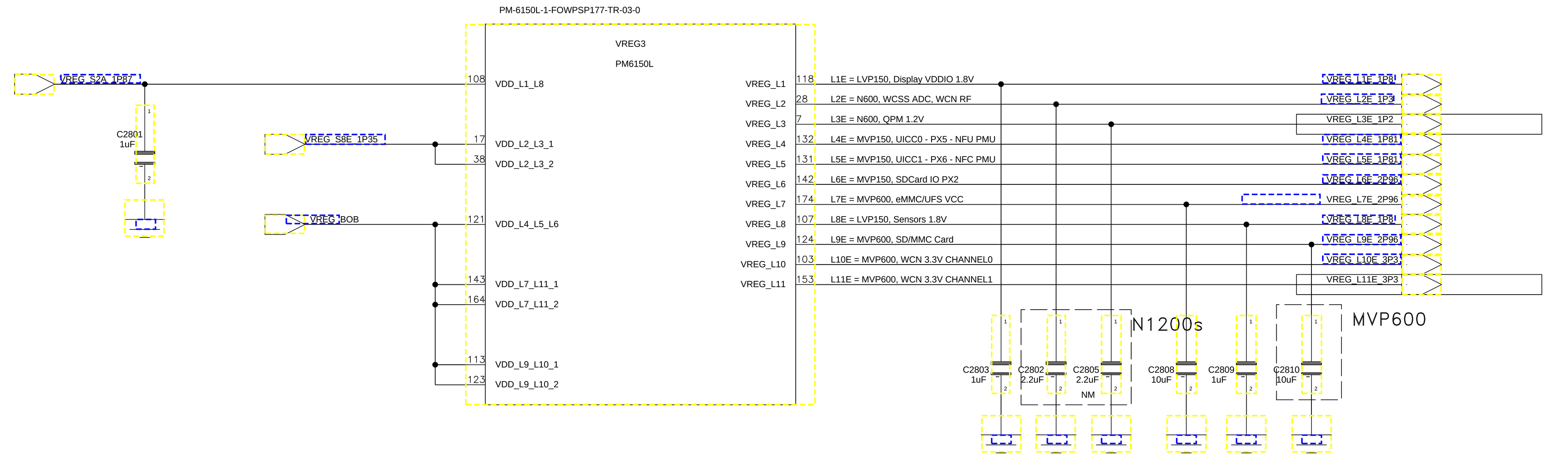


PM6150L_BUCKS 2 of 2



VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield

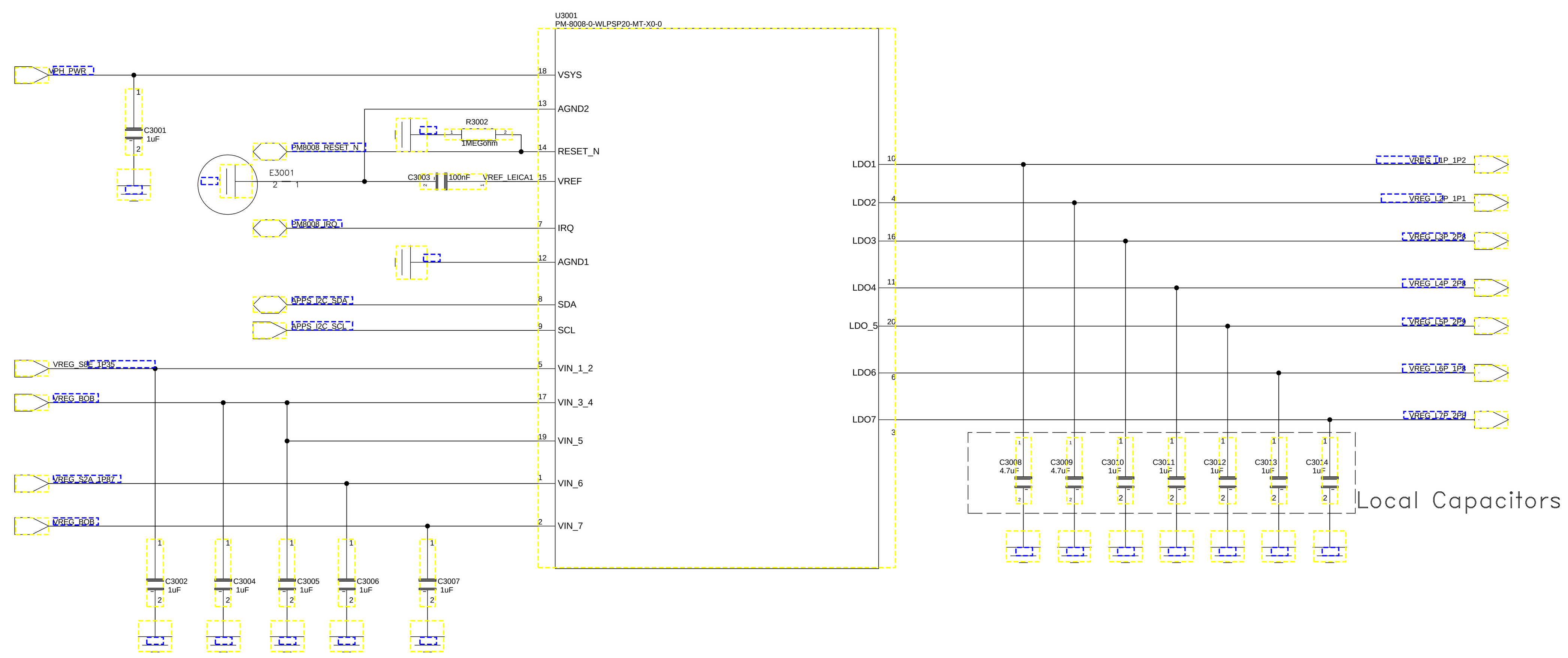
PM6150L LDOs



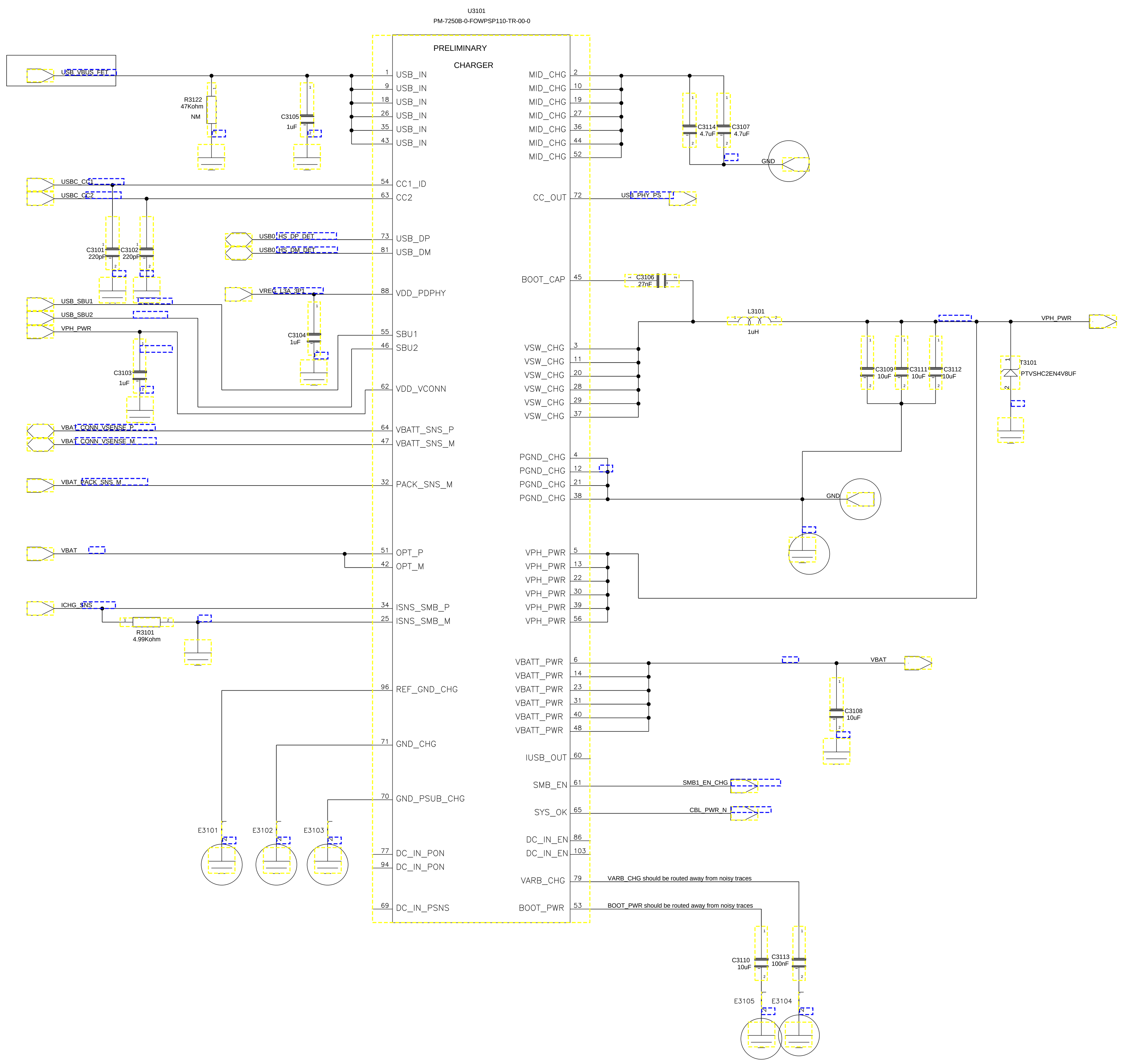
NOTE1:L4E,L5E,L6E,L10E and L11E are pseudo-capless
Add C2803,C2808 when L1E and L7E can not meet the output target.

CAM_PM8008

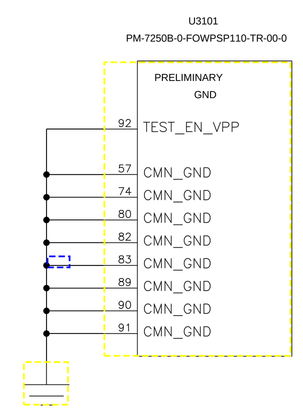
Address:0X09



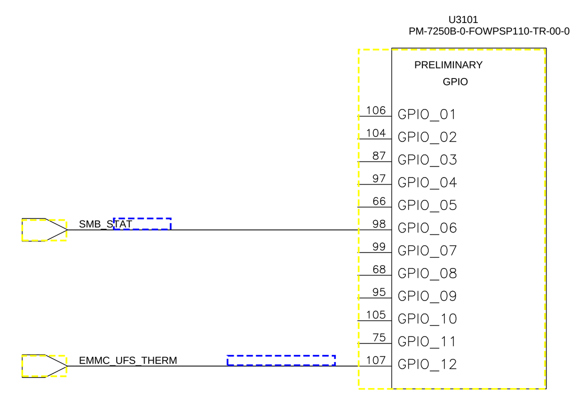
PM7250B_CHARGE/FG



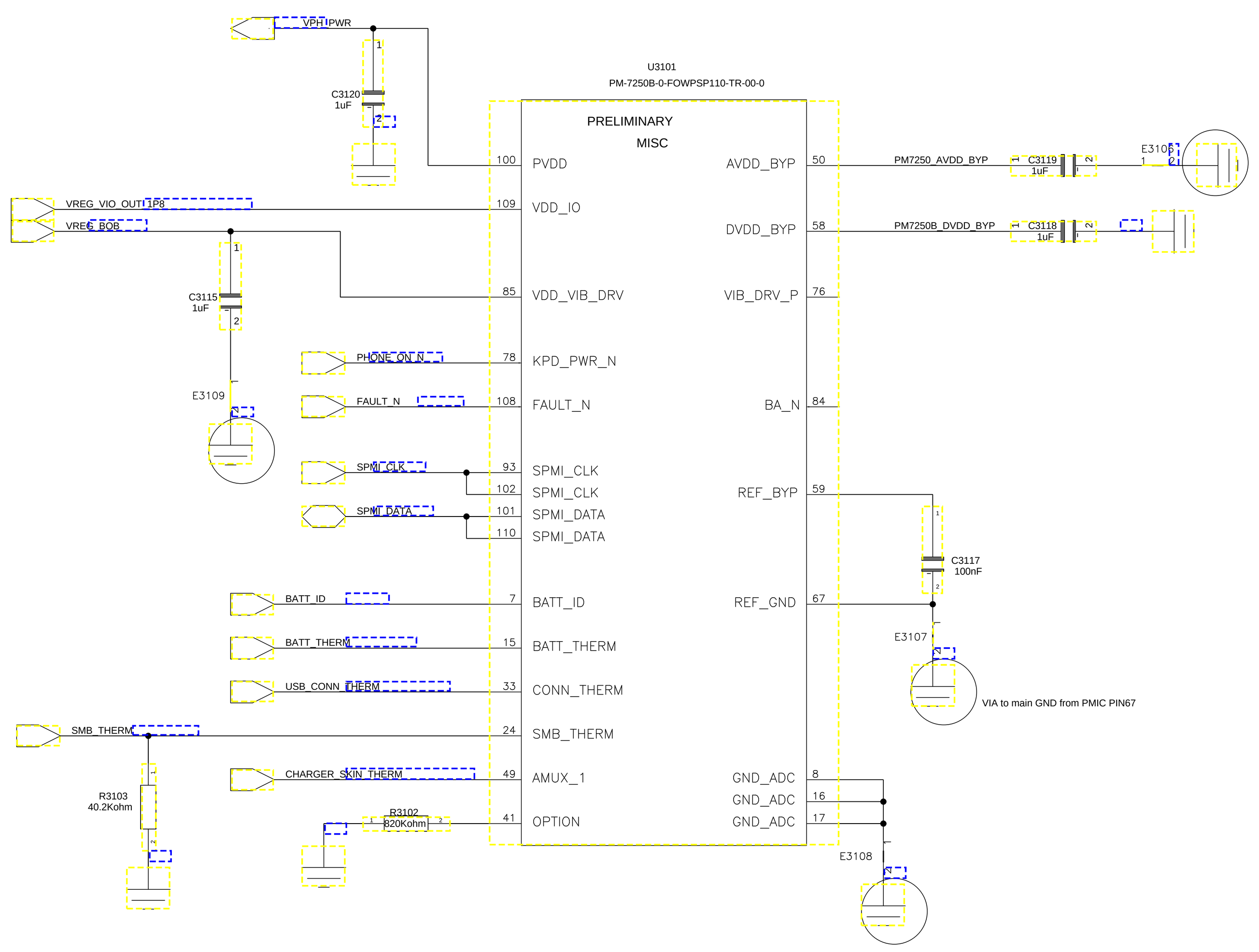
PM7250B_GND



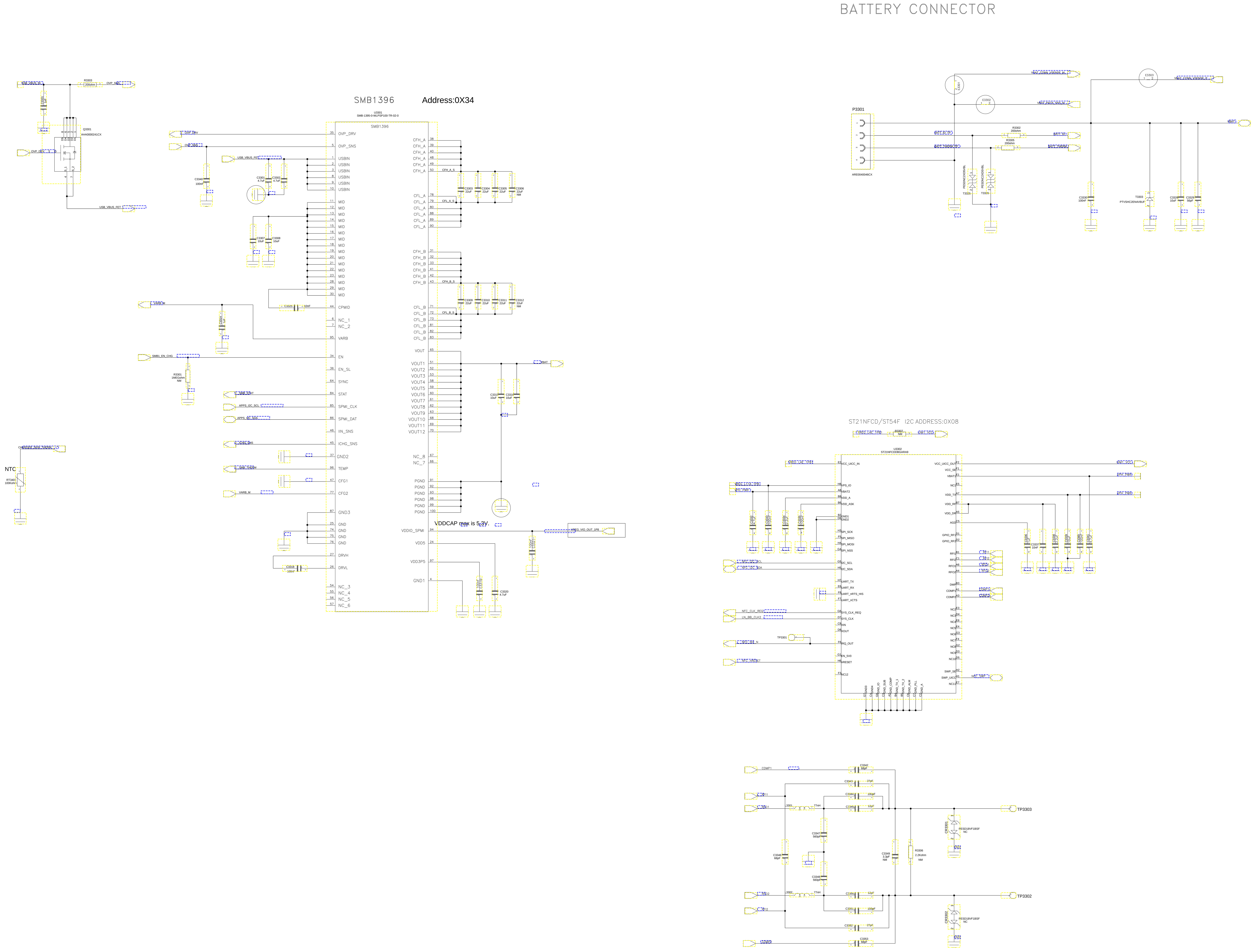
PM7250B_GPIO



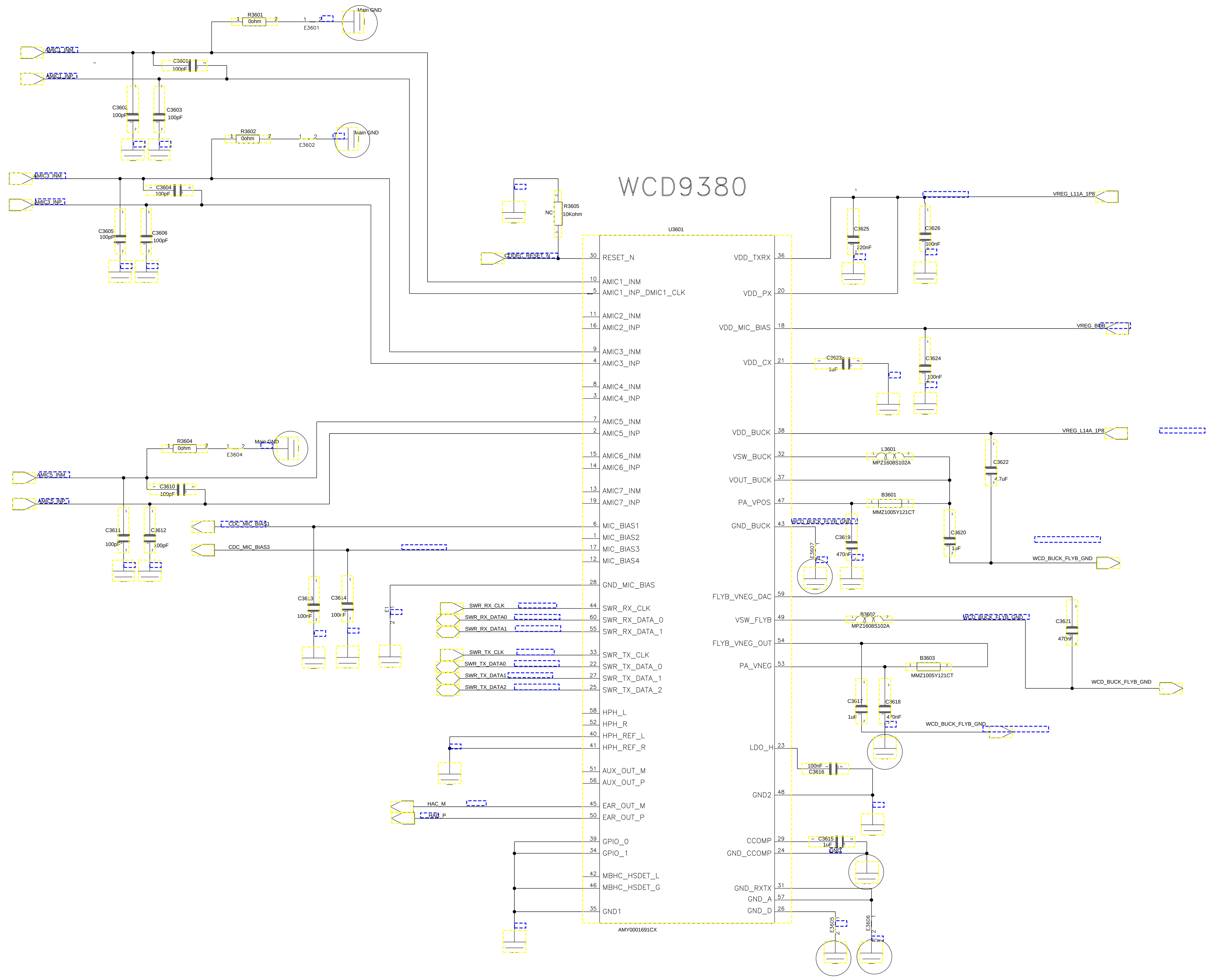
PM7250B_HK

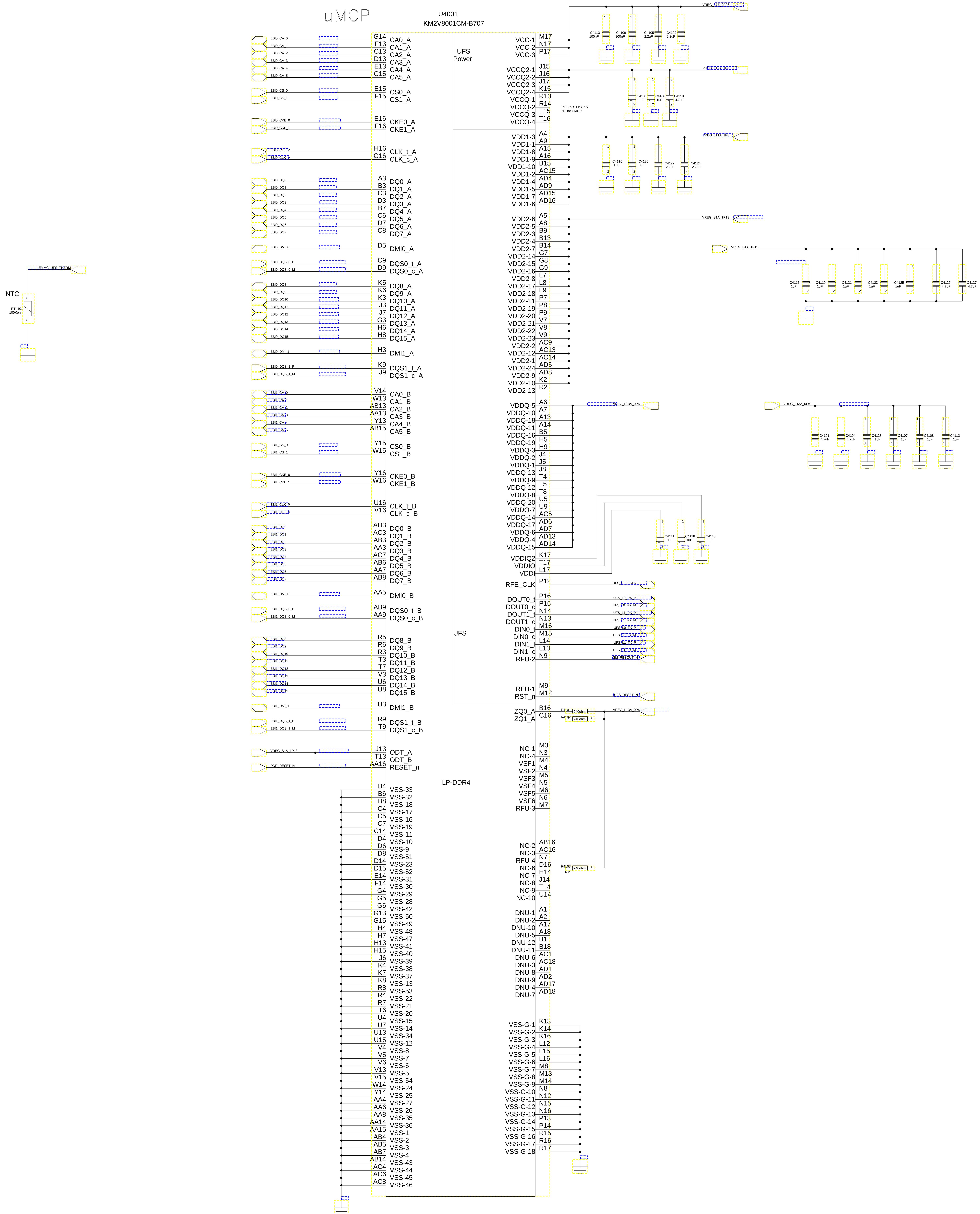


PON Configuration	R3102
Micro USB,SPMI,FMB_DISABLE	R=(GND,1K,1.2K,2.2K,2.4K)
Micro USB,SPMI,FMB_ENABLE	R=(3.3K,3.6K,5.1K,5.6K)
Micro USB,I2C,FMB_DISABLE	R=(8.2K,10K,15K,16K)
Micro USB,I2C,FMB_ENABLE	R=(22K,27K,36K,39K)
Type-C,I2C,FMB_DISABLE	R=(56K,68K,91K,100K)
Type-C,I2C,FMB_ENABLE	R=(130K,150K,220K,240K)
Type-C,SPMI,FMB_ENABLE	R=(300K,330K,470K,560K)
Type-C,SPMI,FMB_DISABLE	R=(820K,910K,1.2M,Open)


BATTERY CONNECTOR
SMB1396
Address:0X34
NTC
VDDCAP max is 5.3V.
P3301
ST21NFCD/ST54F I2C ADDRESS:0X08
TP3303
TP3302

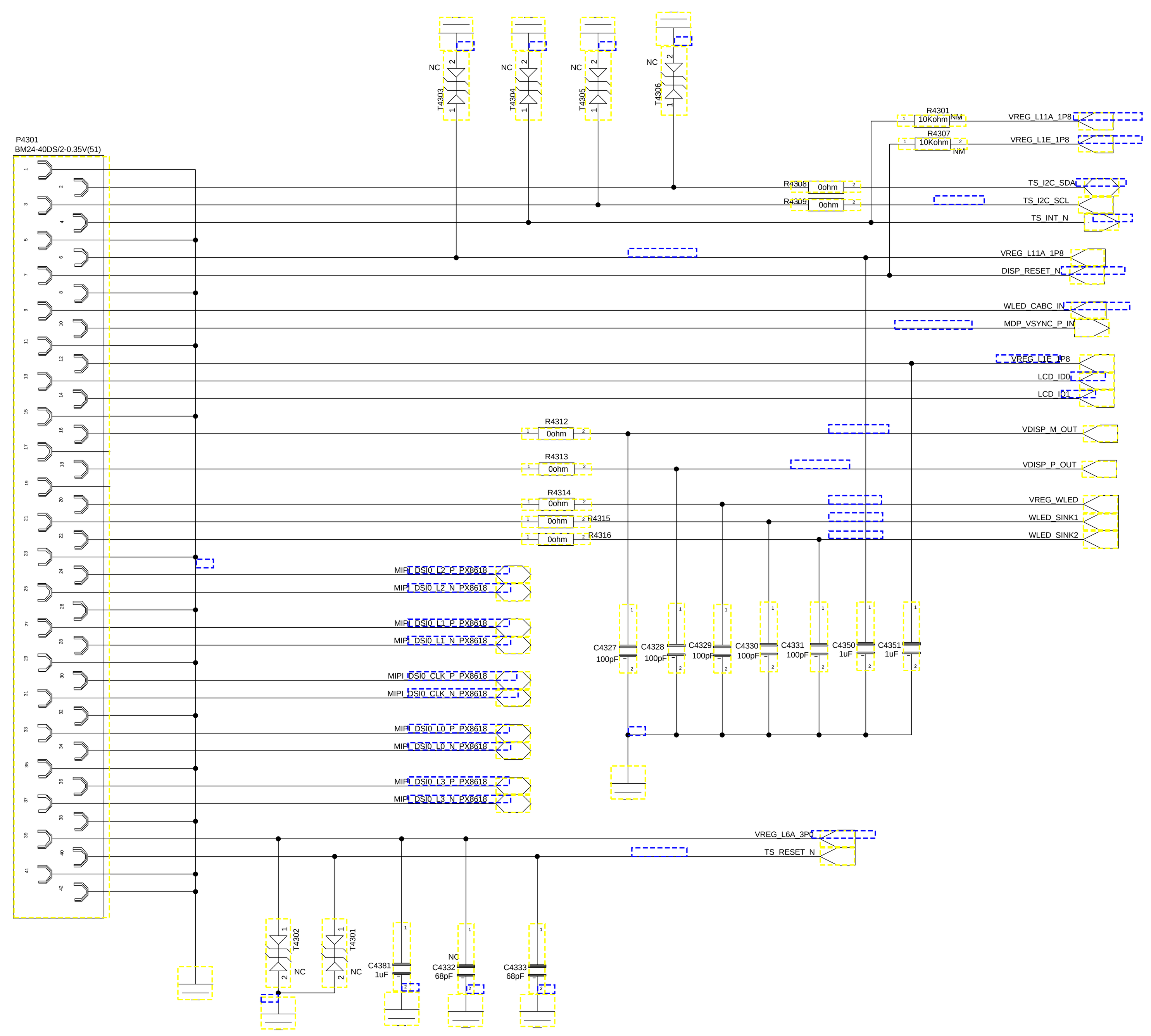
WCD9380


WCD9380
U3601
RESET_N
AMIC1_INM
AMIC1_INP_DMIC1_CLK
AMIC2_INM
AMIC2_INP
AMIC3_INM
AMIC3_INP
AMIC4_INM
AMIC4_INP
AMIC5_INM
AMIC5_INP
AMIC6_INM
AMIC6_INP
AMIC7_INM
AMIC7_INP
MIC_BIAS1
MIC_BIAS2
MIC_BIAS3
MIC_BIAS4
GND_MIC_BIAS
SWR_RX_CLK
SWR_RX_DATA_0
SWR_RX_DATA_1
SWR_TX_CLK
SWR_TX_DATA_0
SWR_TX_DATA_1
SWR_TX_DATA_2
HPH_L
HPH_R
HPH_REF_L
HPH_REF_R
AUX_OUT_M
AUX_OUT_P
EAR_OUT_M
EAR_OUT_P
GPIO_0
GPIO_1
MBHC_HSDET_L
MBHC_HSDET_G
GND1
VDD_TXRX
VDD_PX
VDD_MIC_BIAS
VDD_CX
VDD_BUCK
VSW_BUCK
VOUT_BUCK
PA_VPOS
GND_BUCK
FLYB_VNEG_DAC
VSW_FLYB
FLYB_VNEG_OUT
PA_VNEG
LDO_H
GND2
CCOMP
GND_CCOMP
GND_RXTX
GND_A
GND_D
VREG_L11A_1P8
VREG_L24A_1P8
WCD_BUCK_FLYB_GND
CDC_MIC_BIAS3
R3605
10Kohm
R3601
0ohm
R3602
0ohm
R3604
0ohm
L3601
MPZ1608S102A
L3602
MPZ1608S102A
B3601
MMZ1005Y121CT
B3603
MMZ1005Y121CT
C3625
220nF
C3626
100nF
C3624
100nF
C3622
2.7uF
C3620
2.2uF
C3621
470nF
C3616
470nF
C3617
1uF
C3618
470nF
C3602
100pF
C3603
100pF
C3605
100pF
C3606
100pF
C3611
100pF
C3612
100pF
C3613
100nF
C3614
100nF
C3604
100pF
C3610
100pF
AMY0001891CX

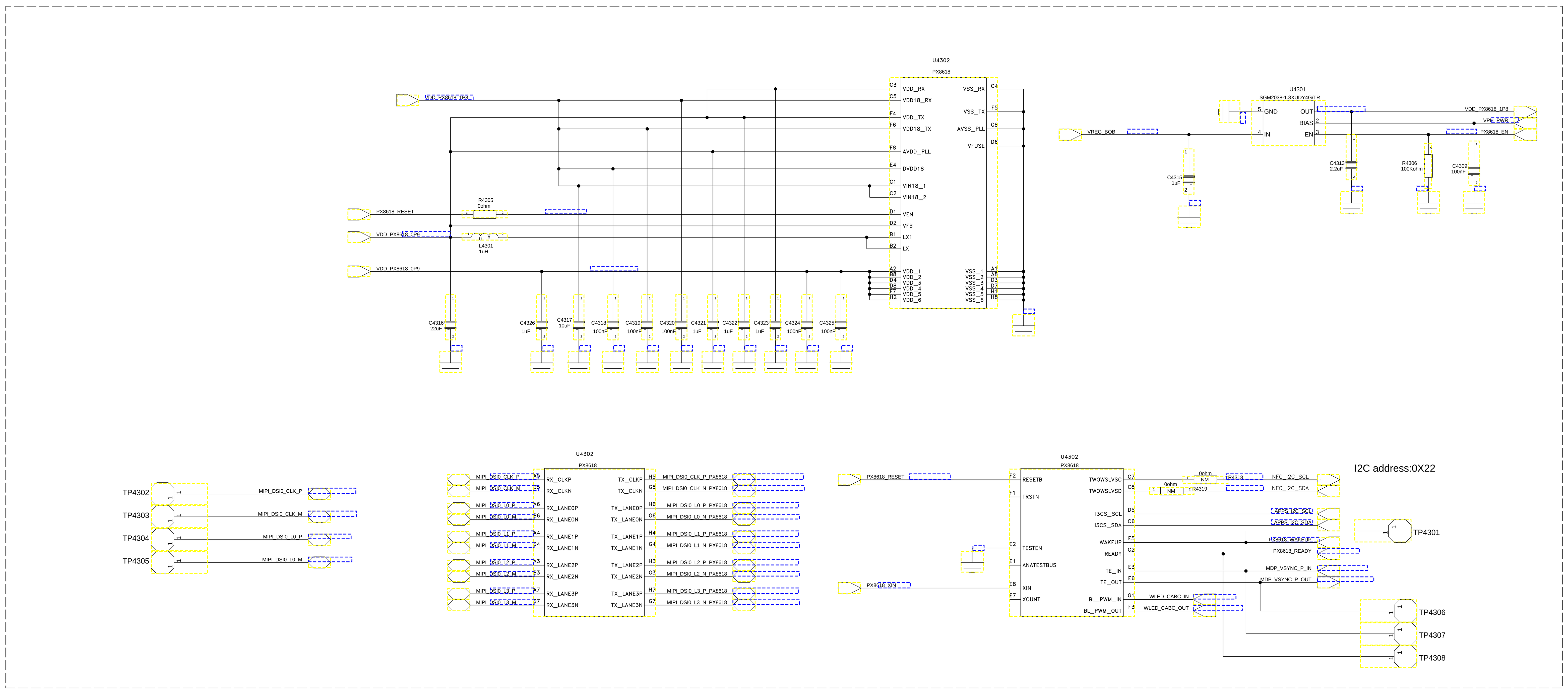

uMCP
U4001
KM2V8001CM-B707
UFS
Power
UFS
LP-DDR4
NTC

DISPLAY

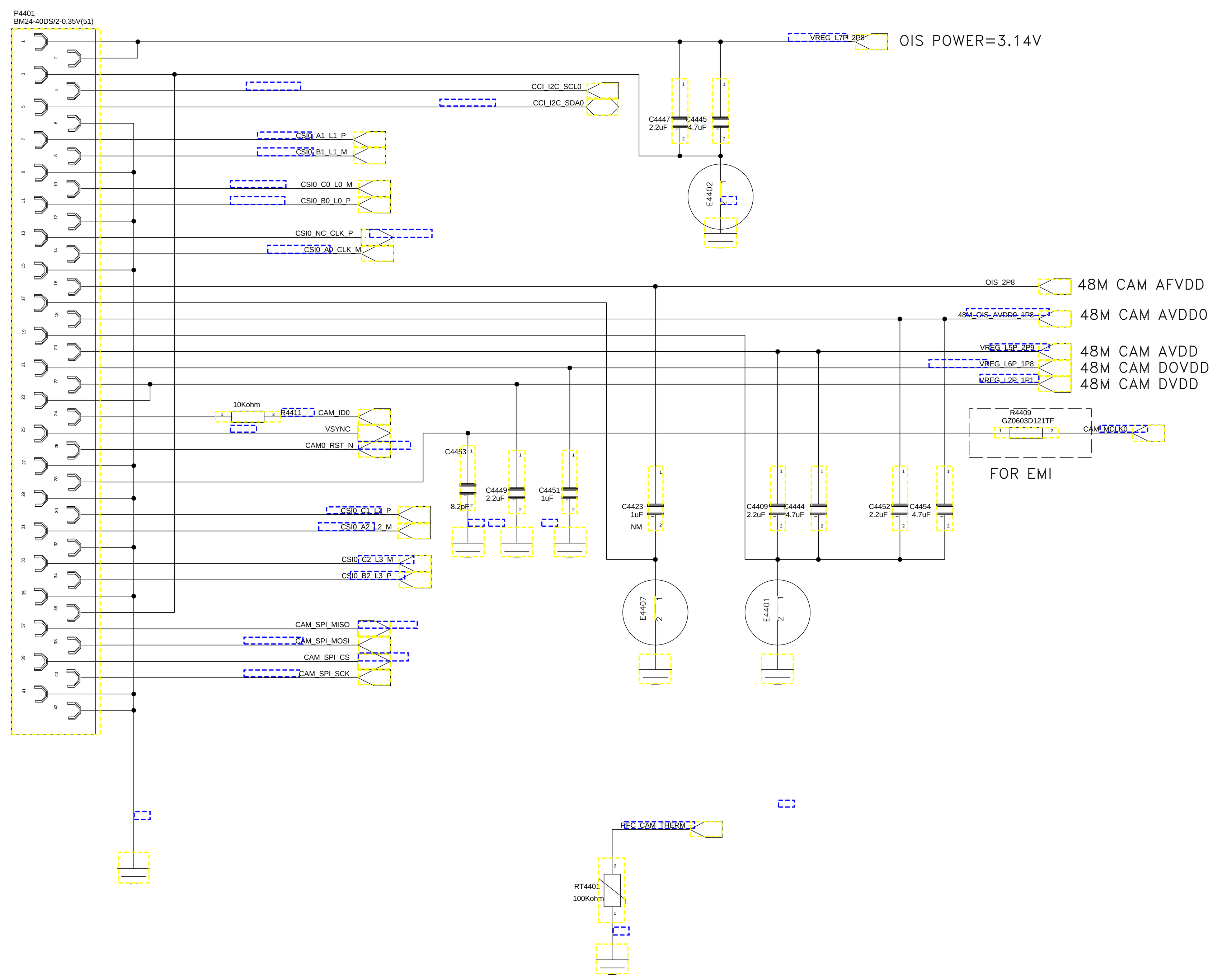
LCD_ID0=0
LCD_ID1=1



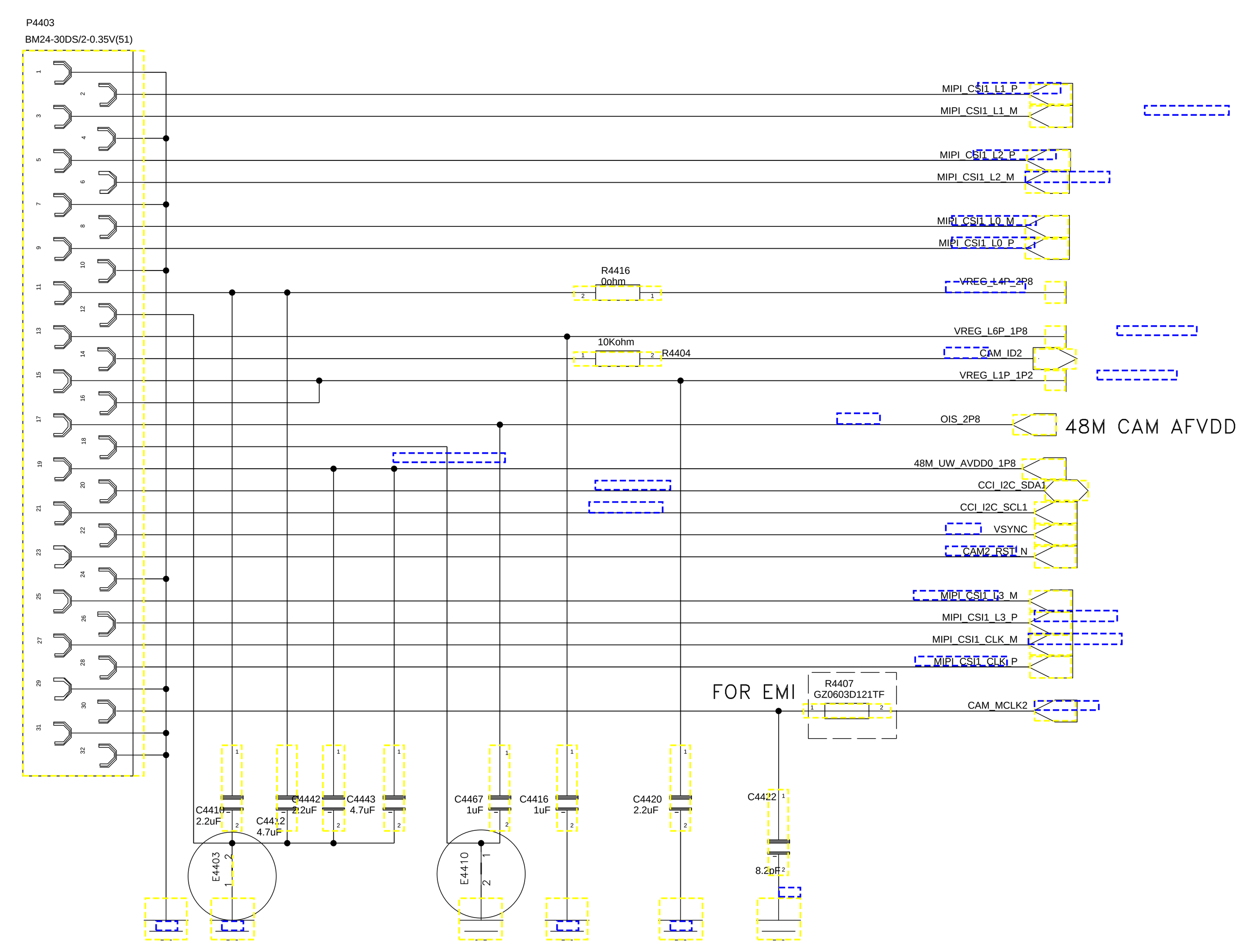
IRIS6

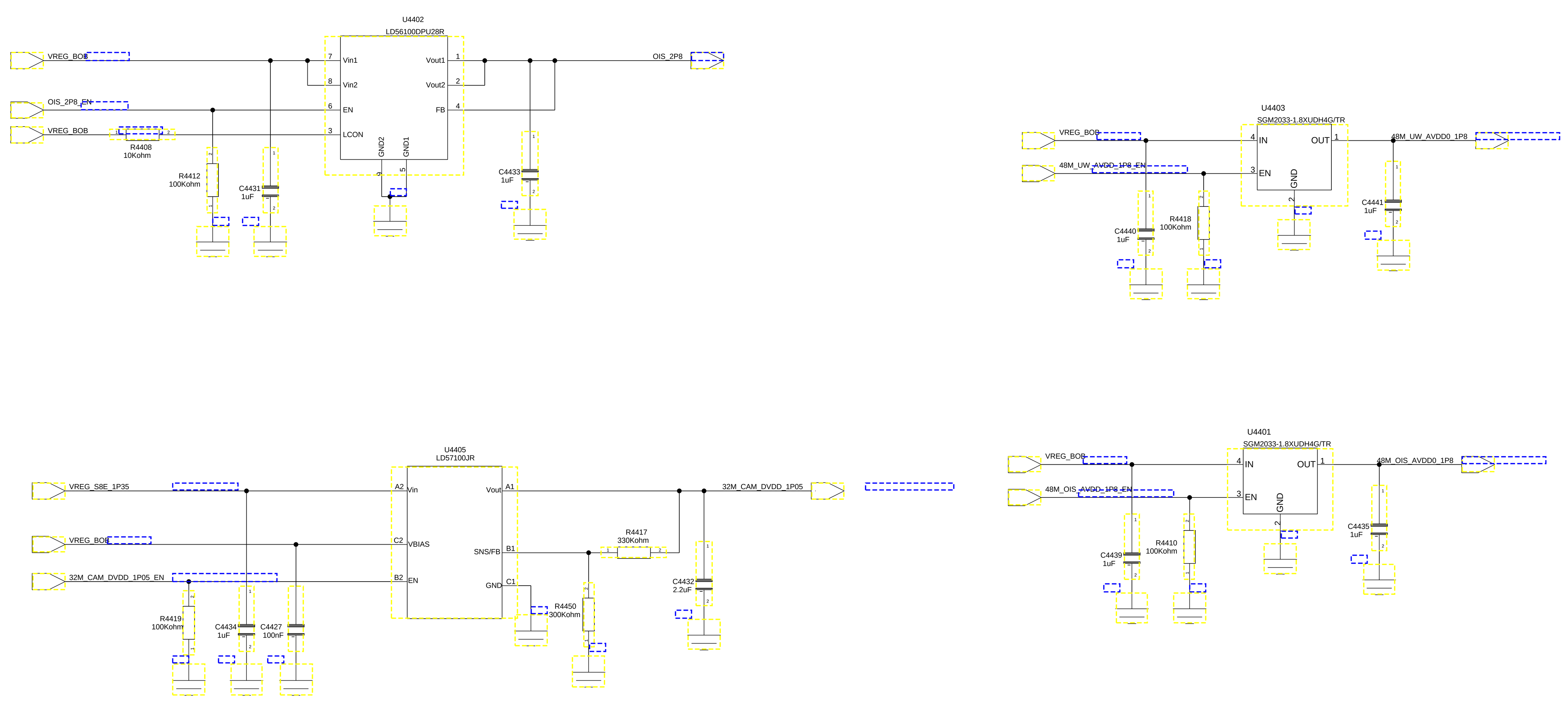


48M OIS CAMERA

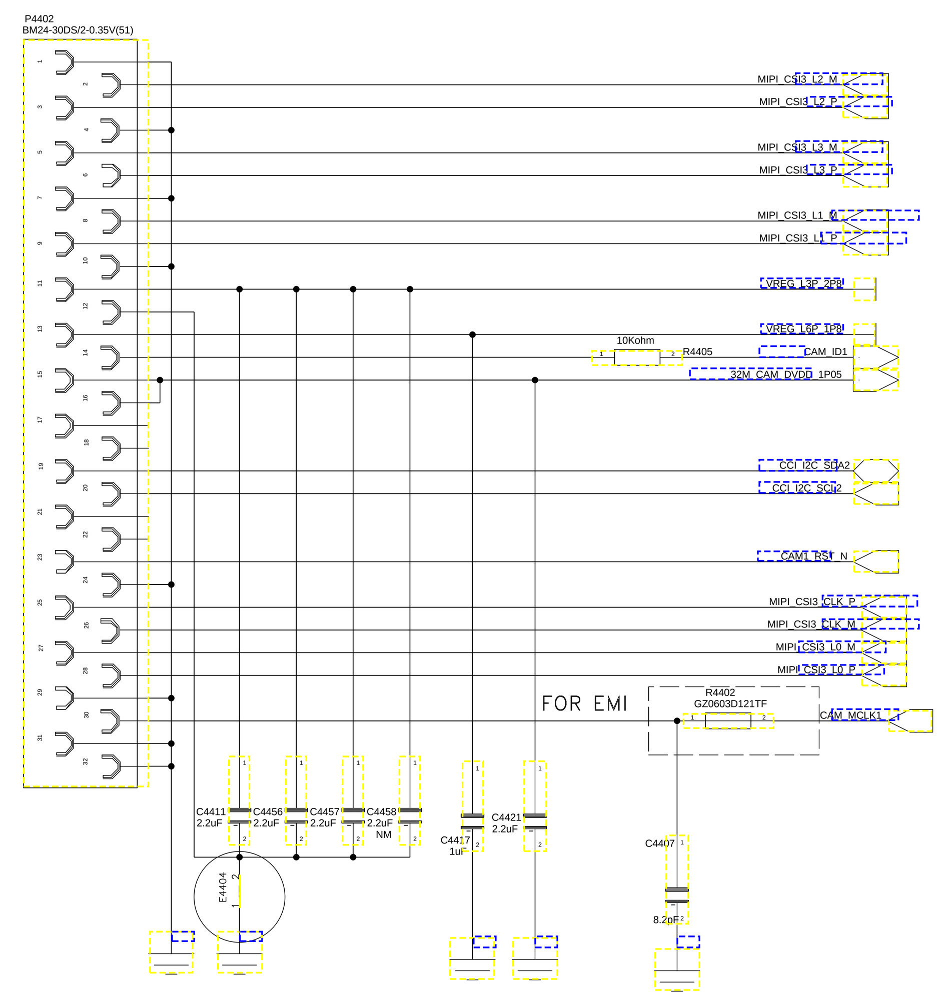


48M UW CAMERA

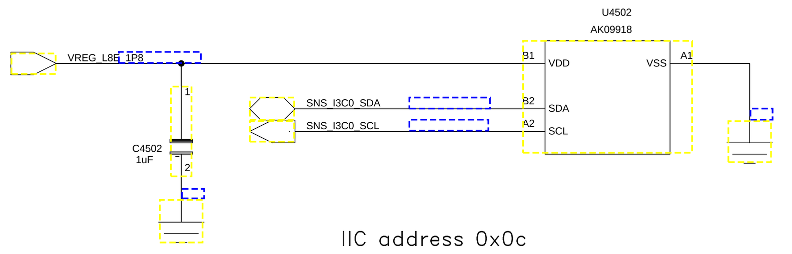




32M front camera

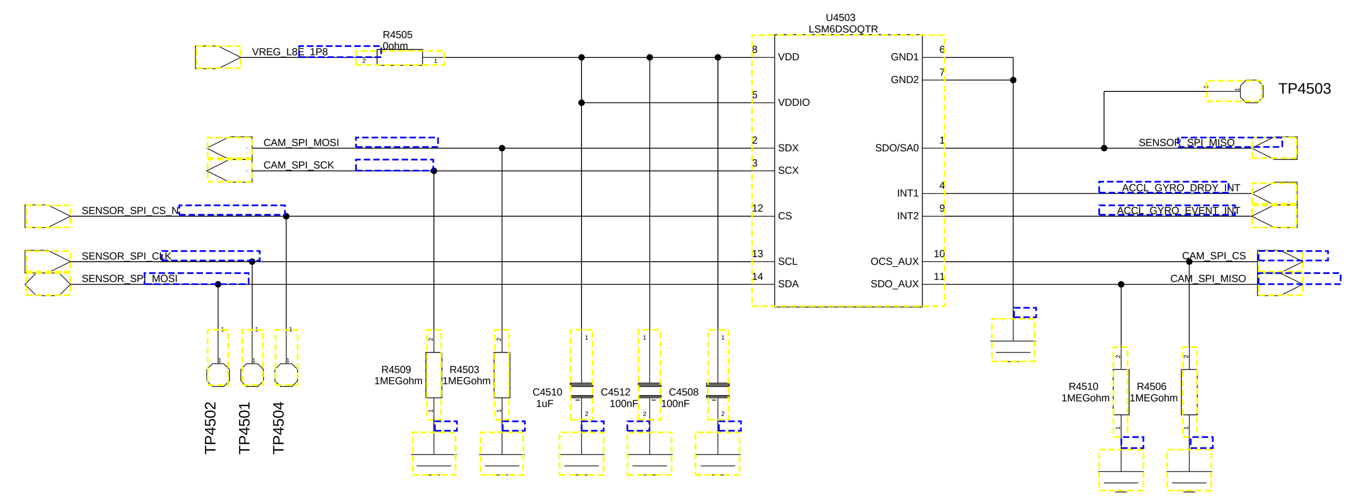


COMPASS

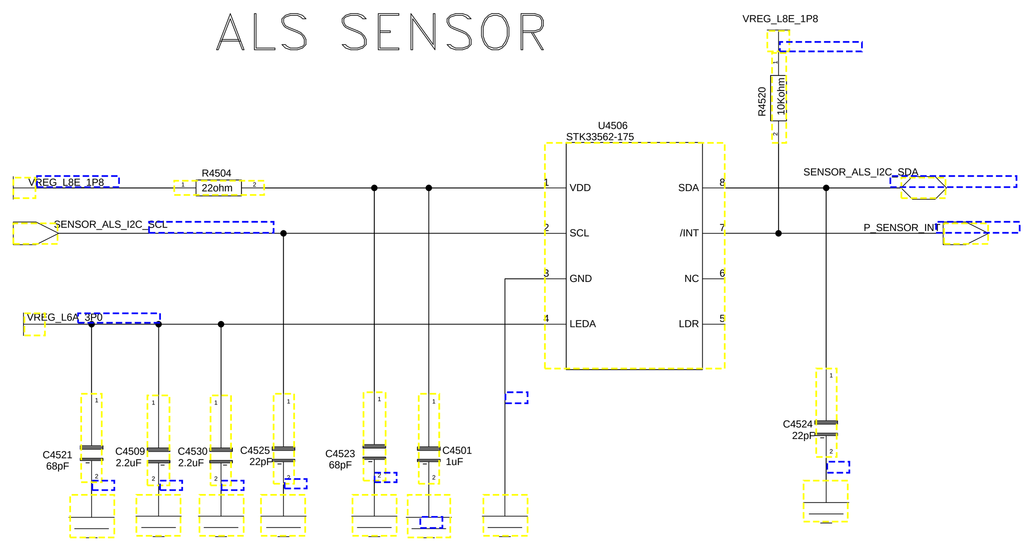


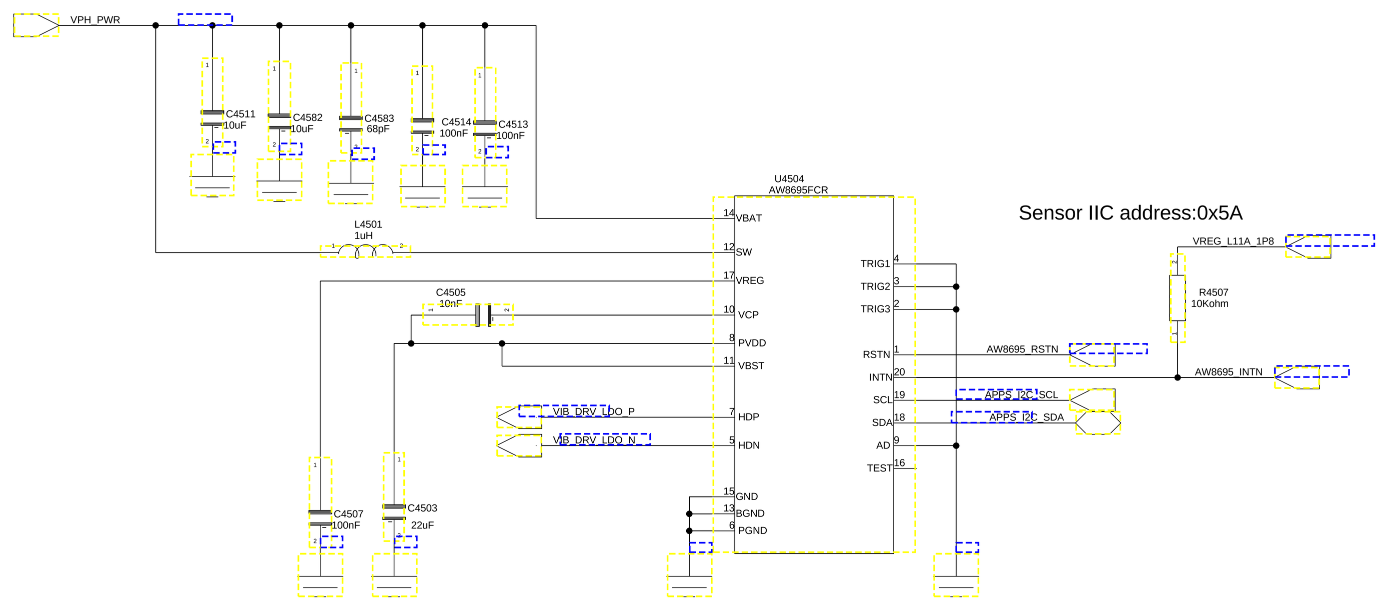
IIC address 0x0c

GYRO

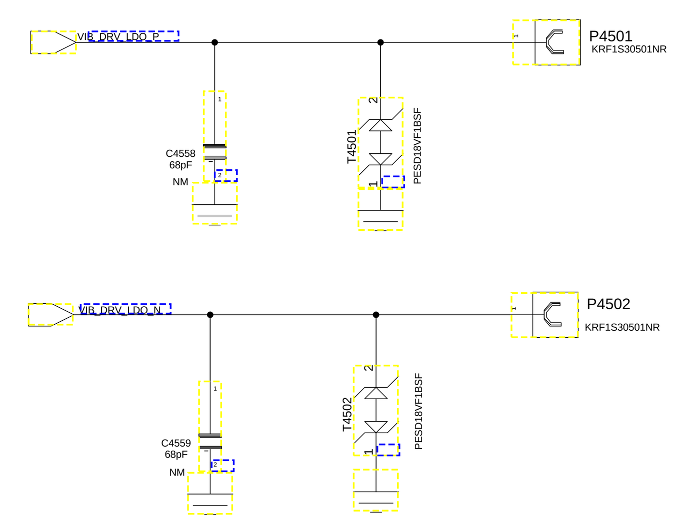


ALS SENSOR

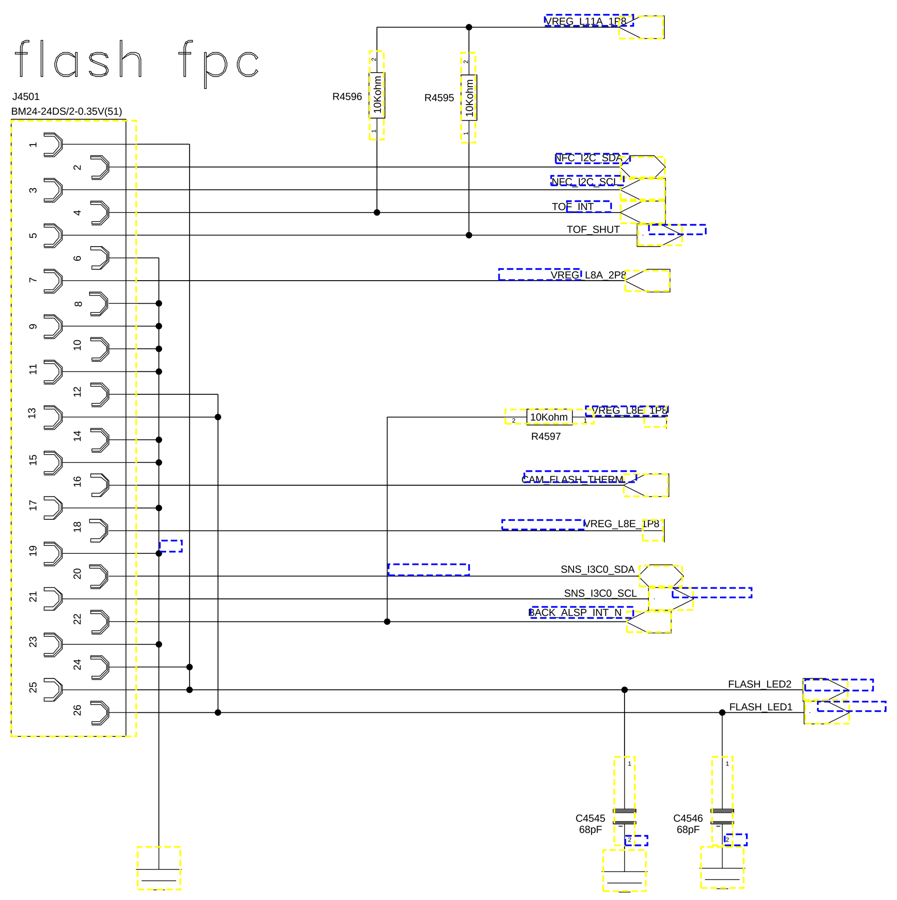




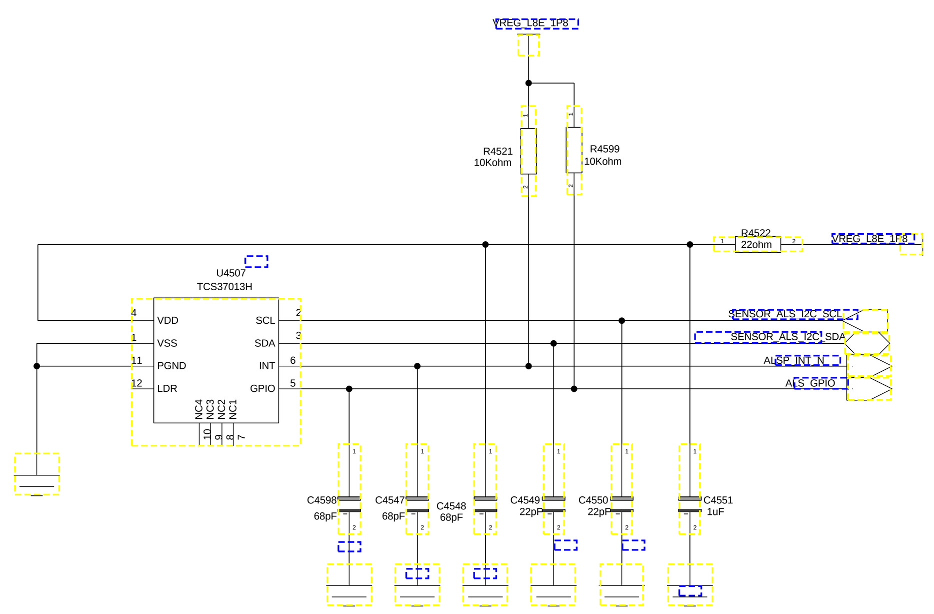
VIBRATOR

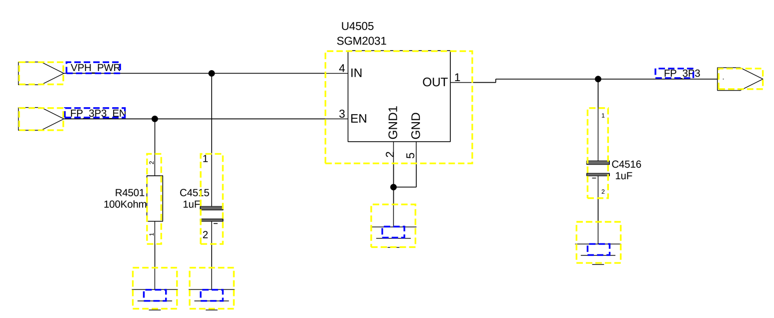


flash fpc

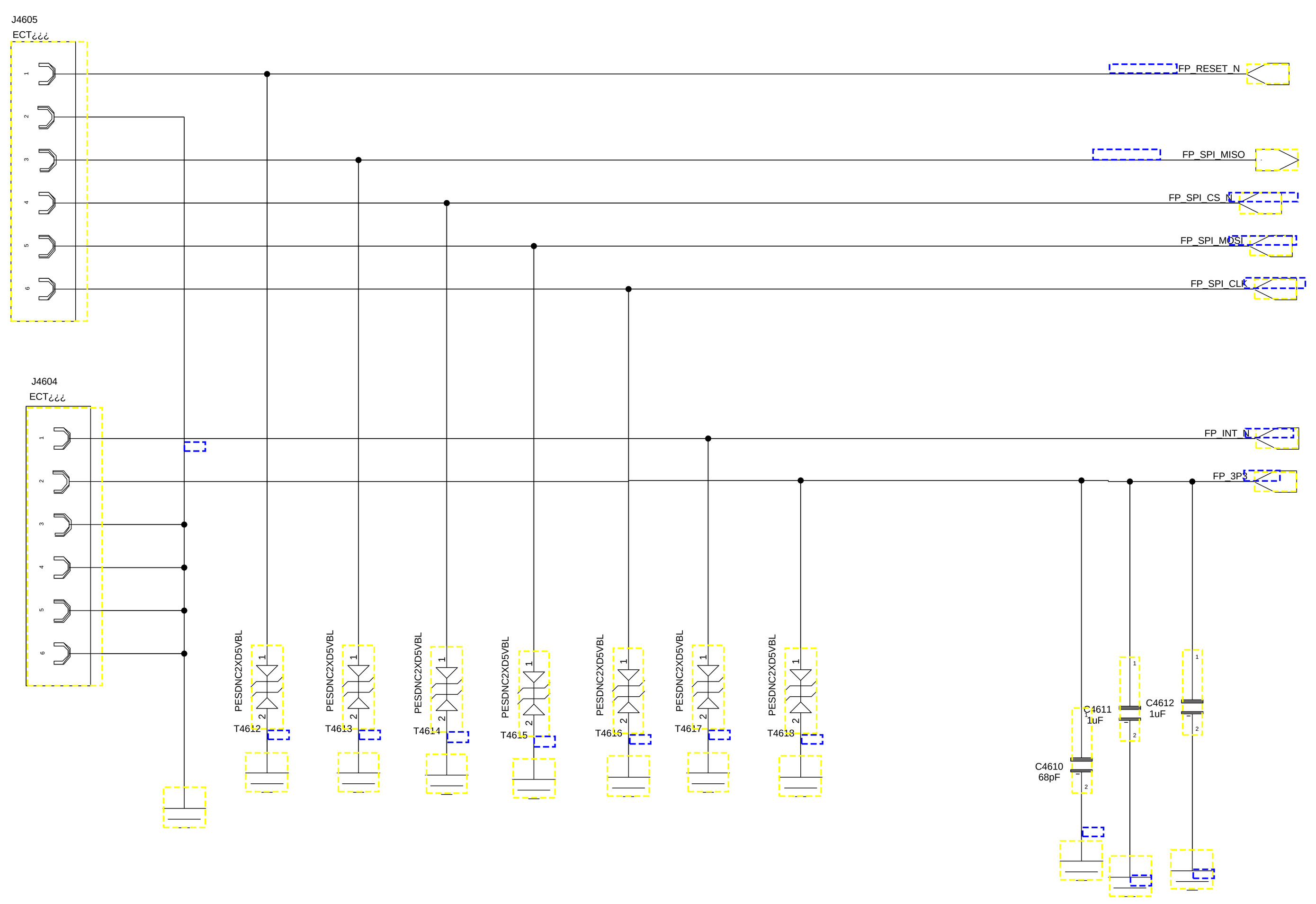


RGB SENSOR

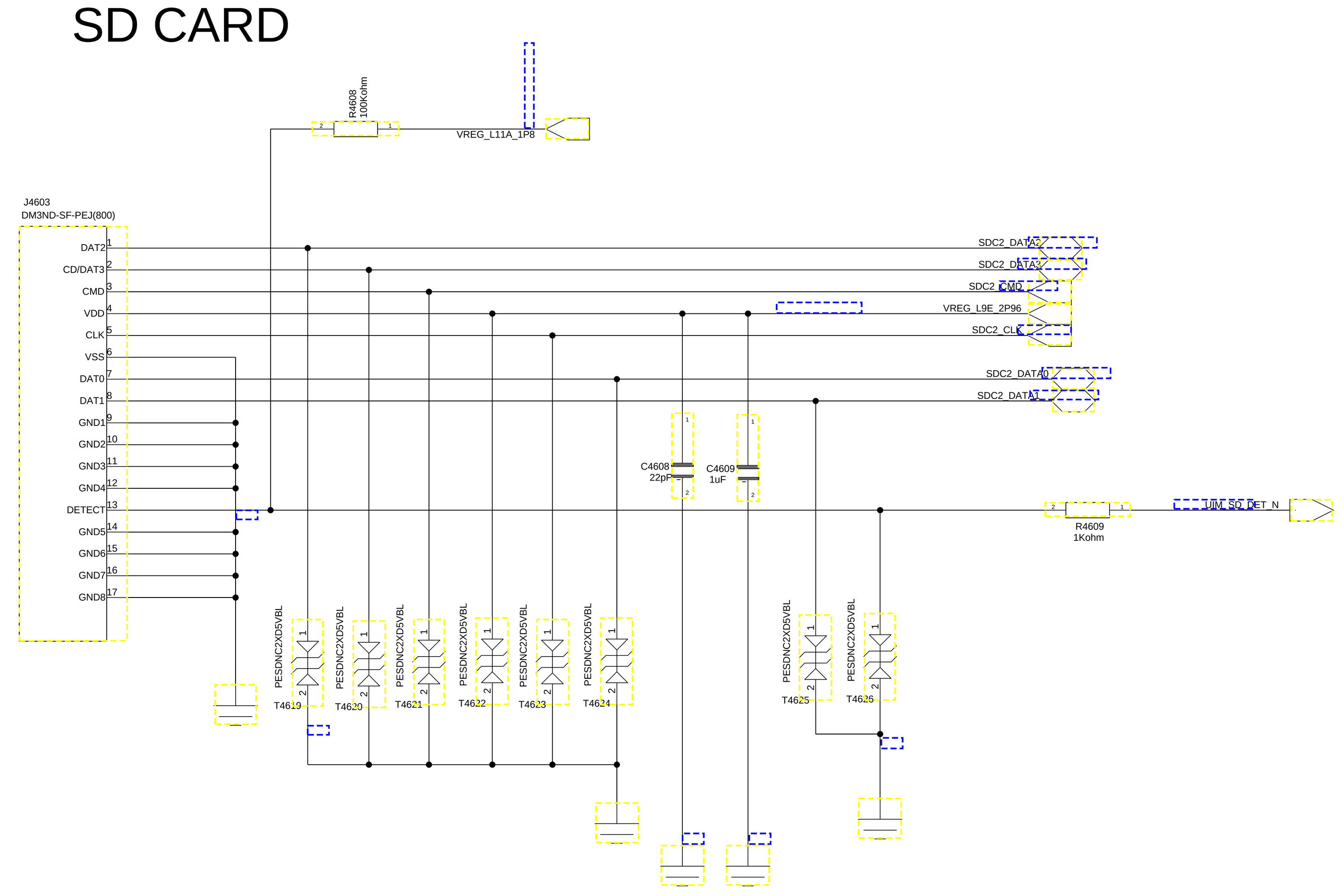




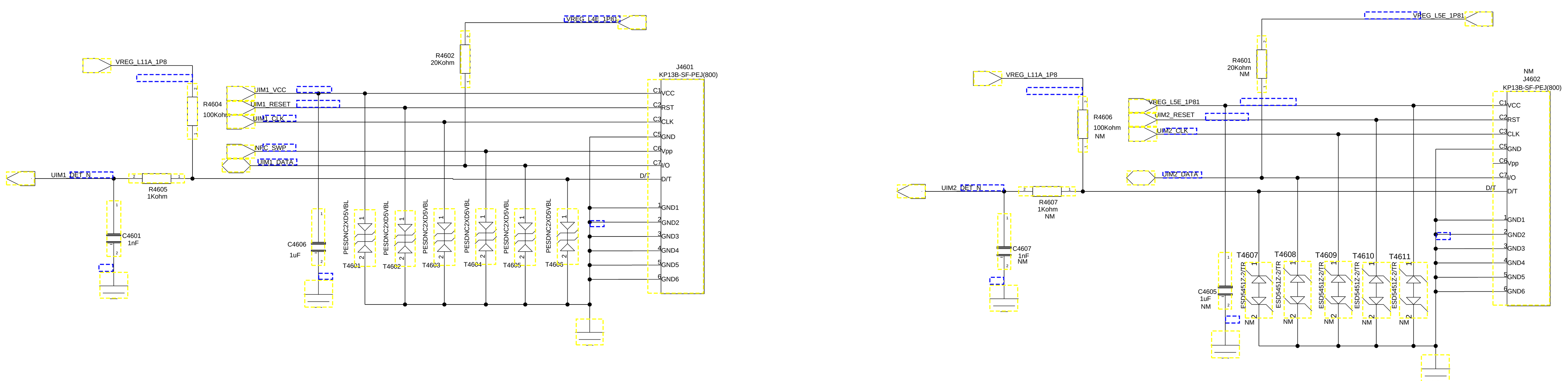
FP



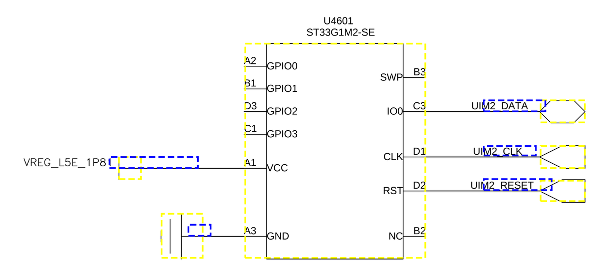
SD CARD



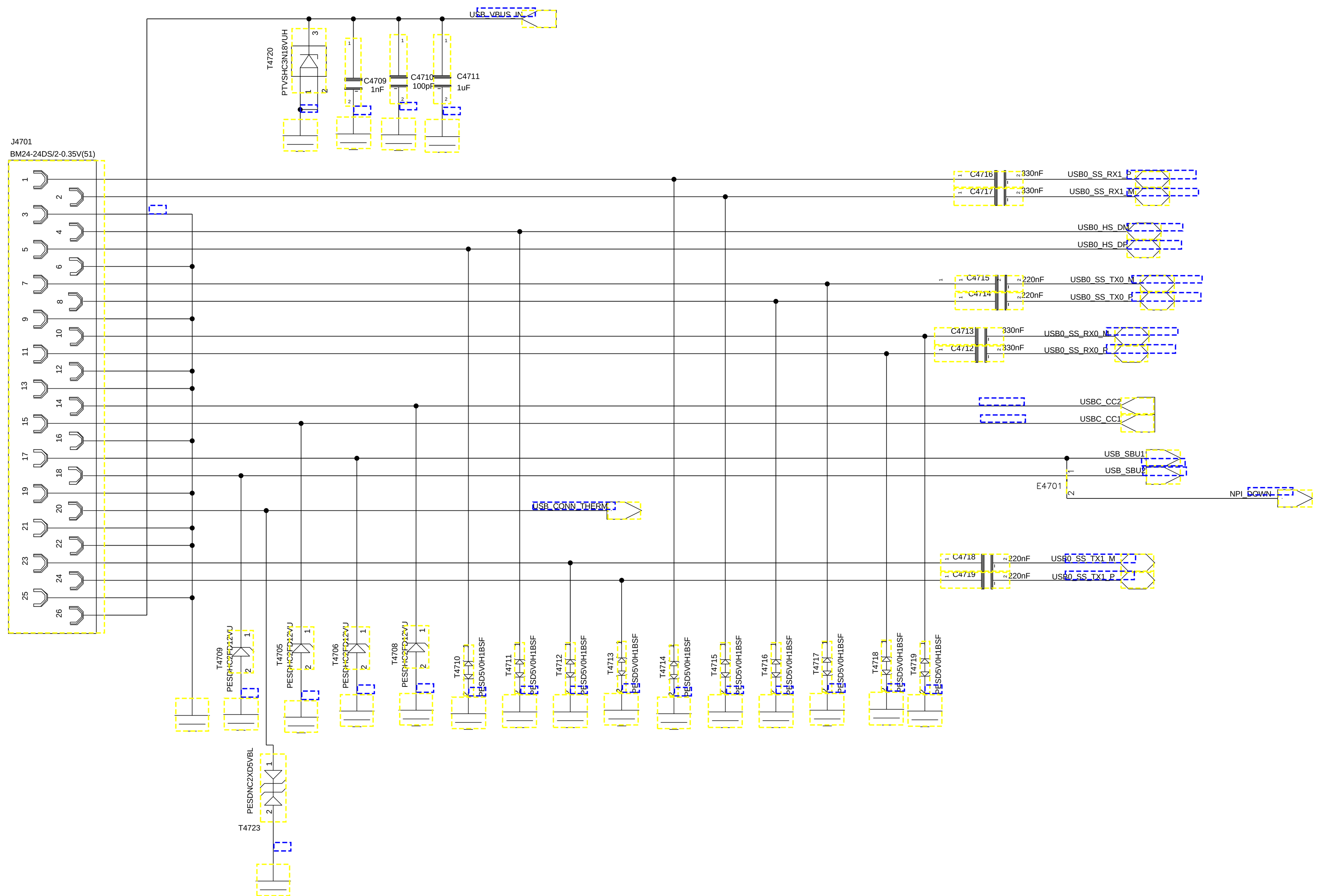
SIM CARD



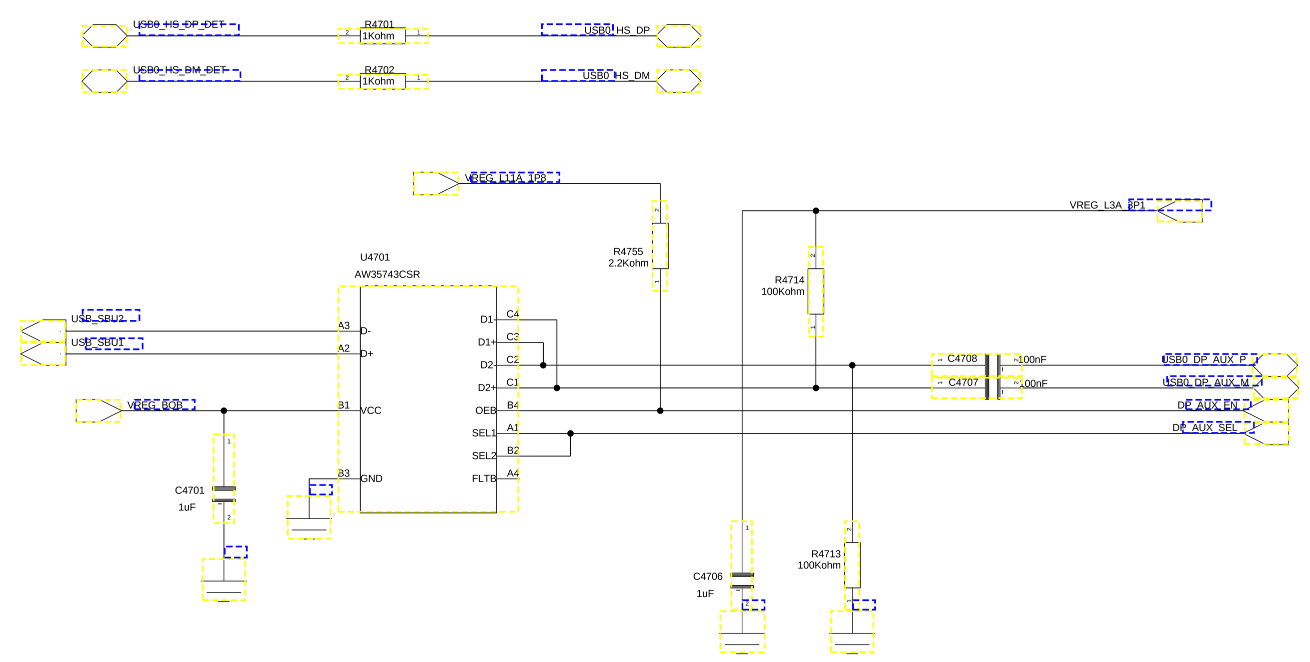
E-SIM2



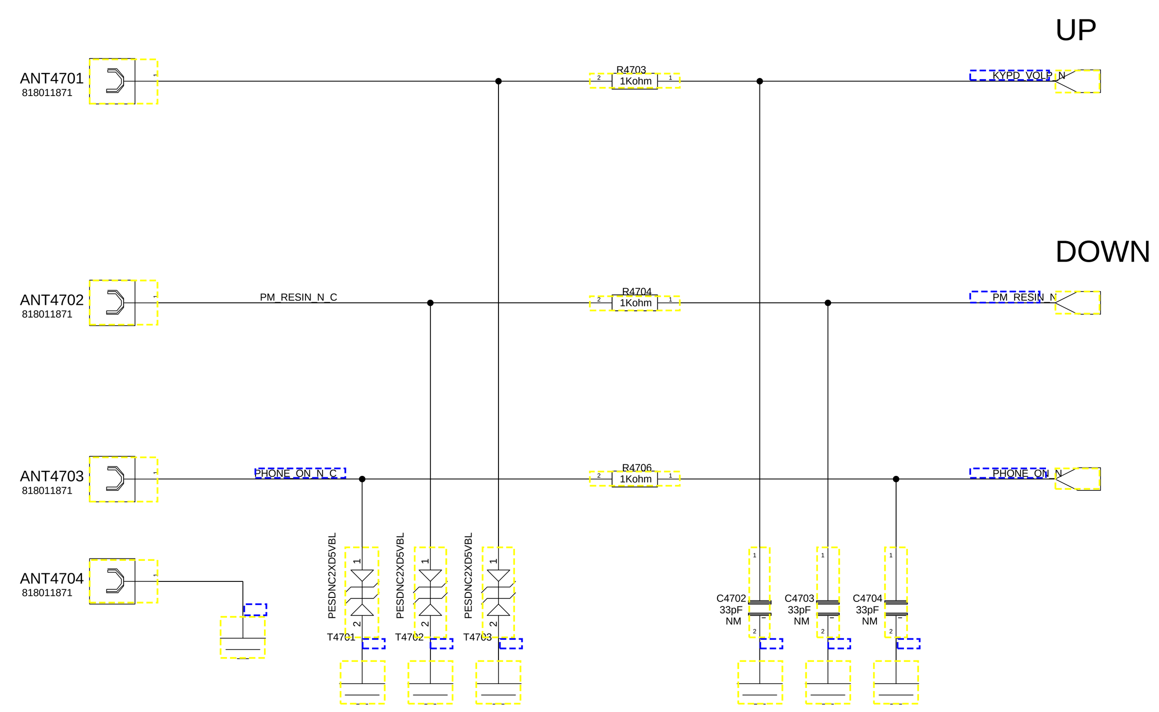
USB BTB



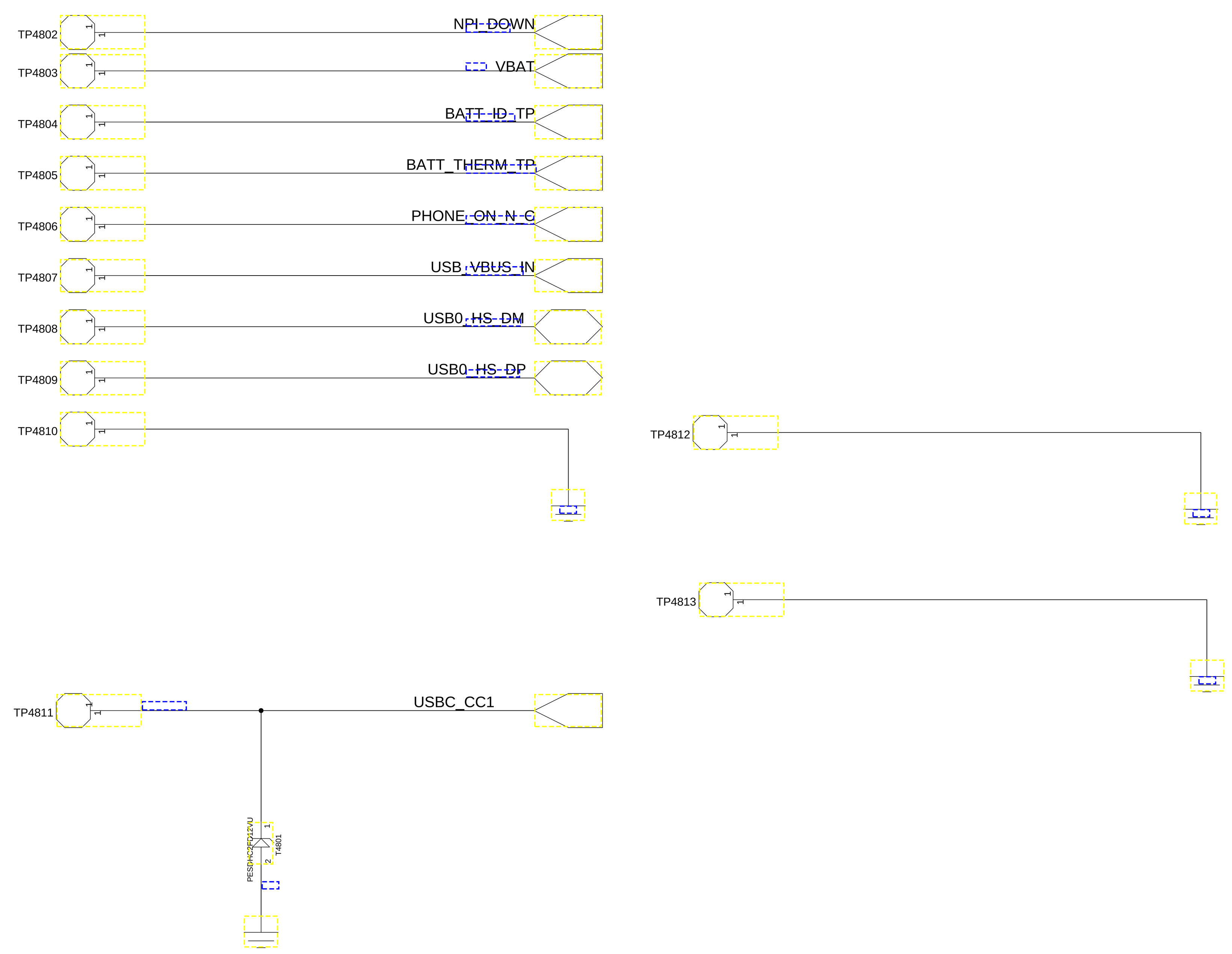
Place close to USB Connector.



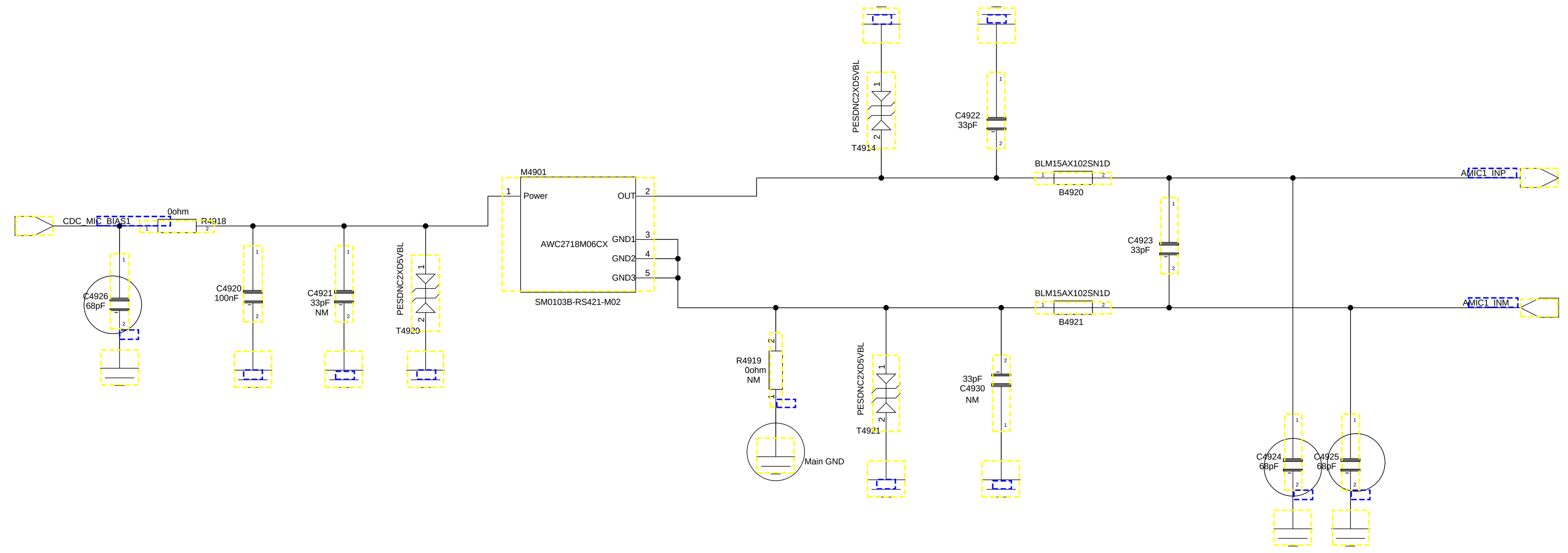
sidekey BTB



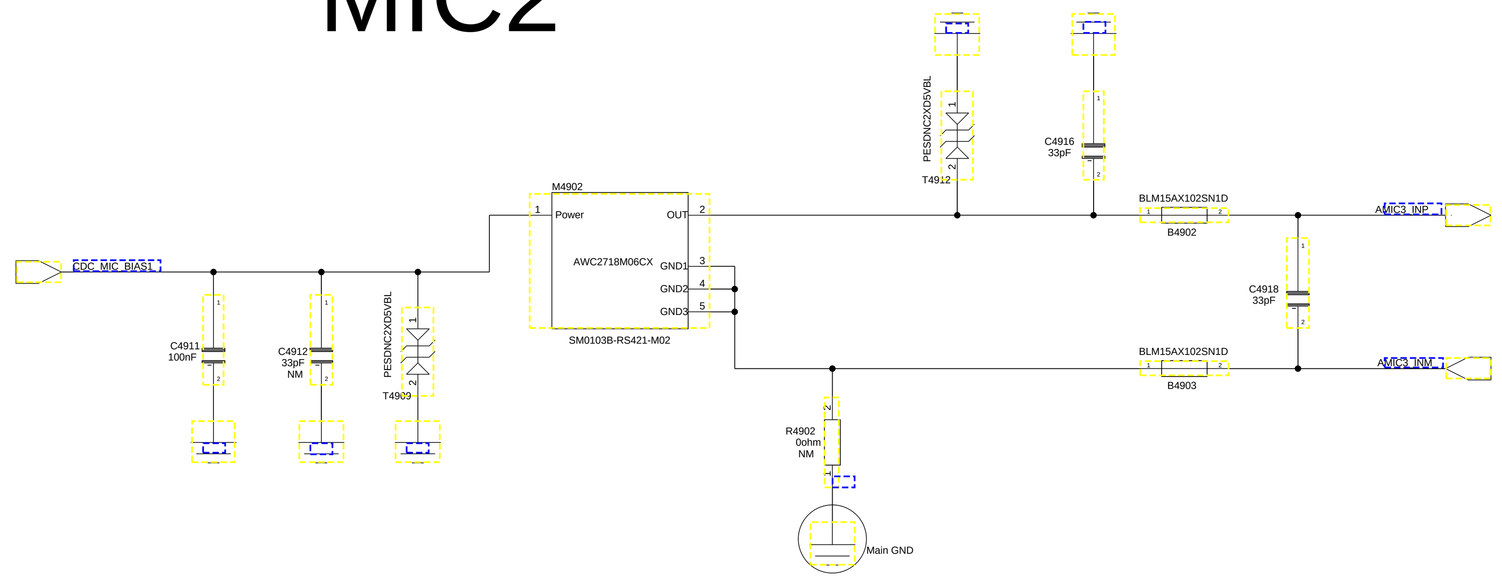
TP FOR NPI TEAM



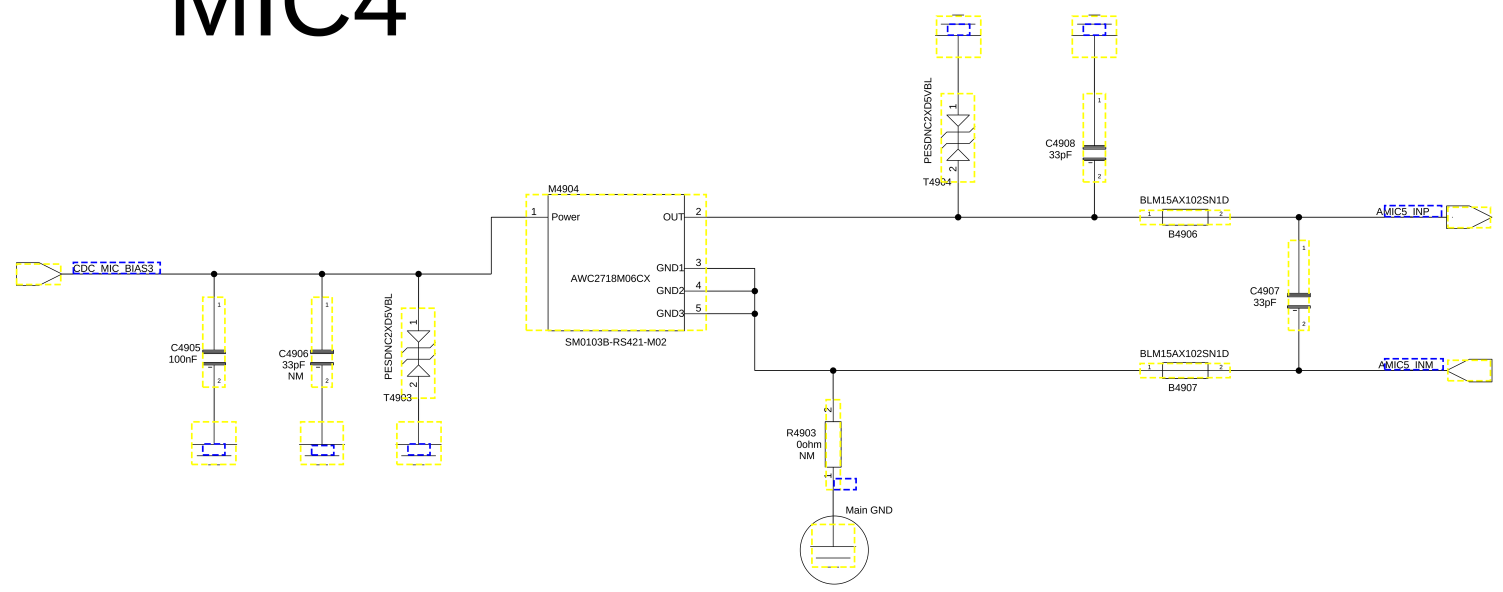
MIC1



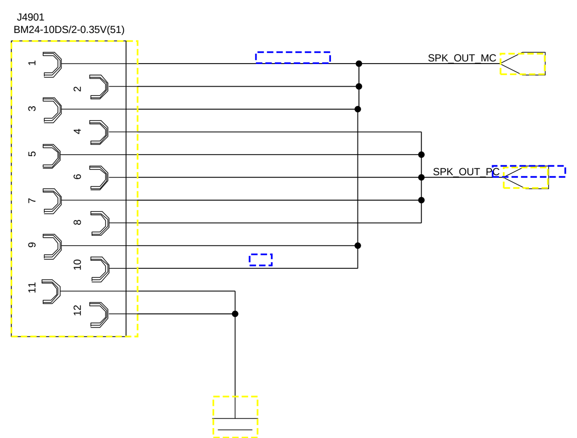
MIC2



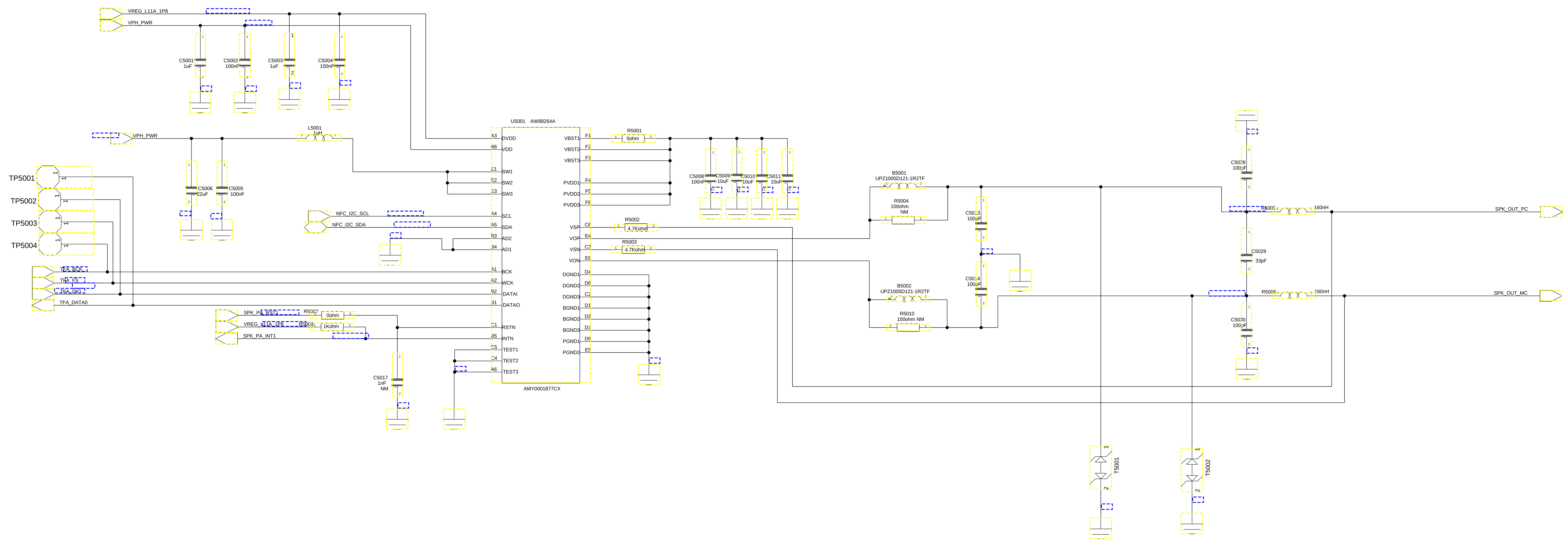
MIC4



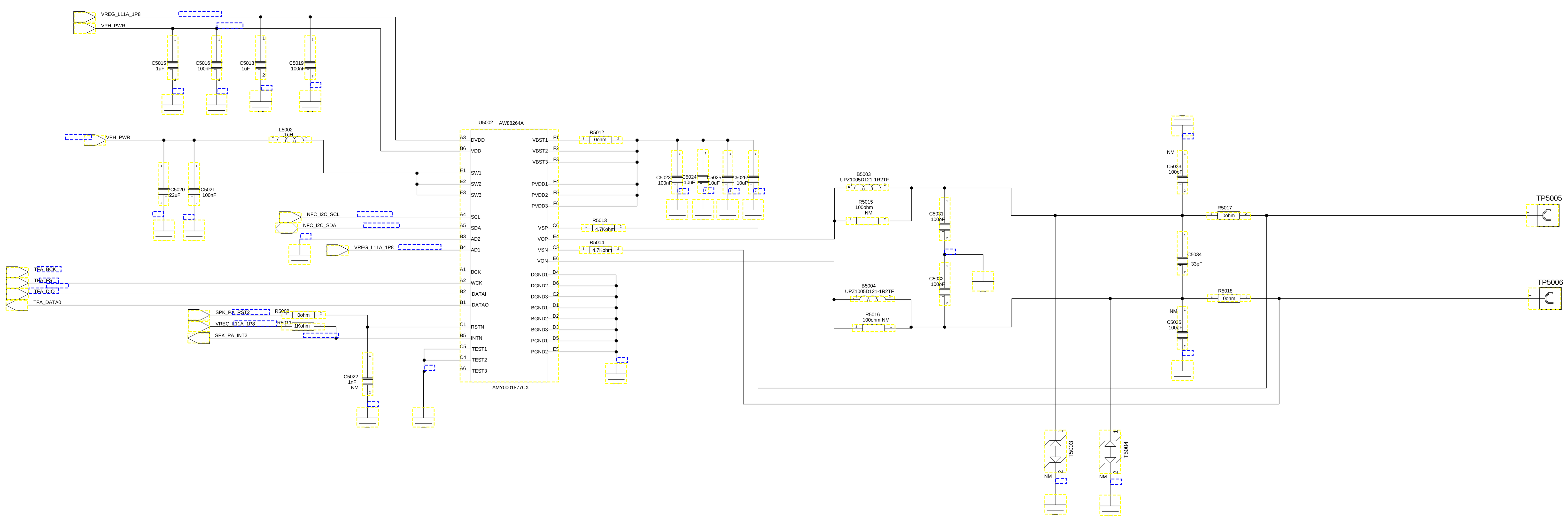
top speaker connector



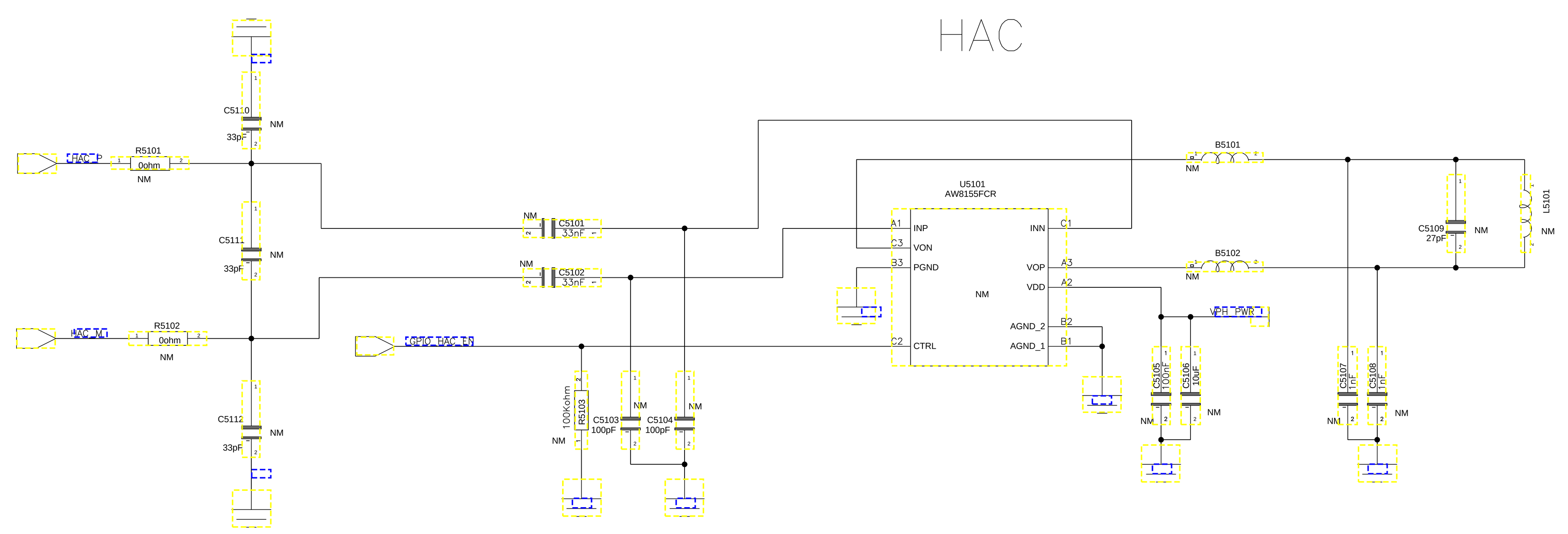
TOP RCV &SPEAKER SMART PA



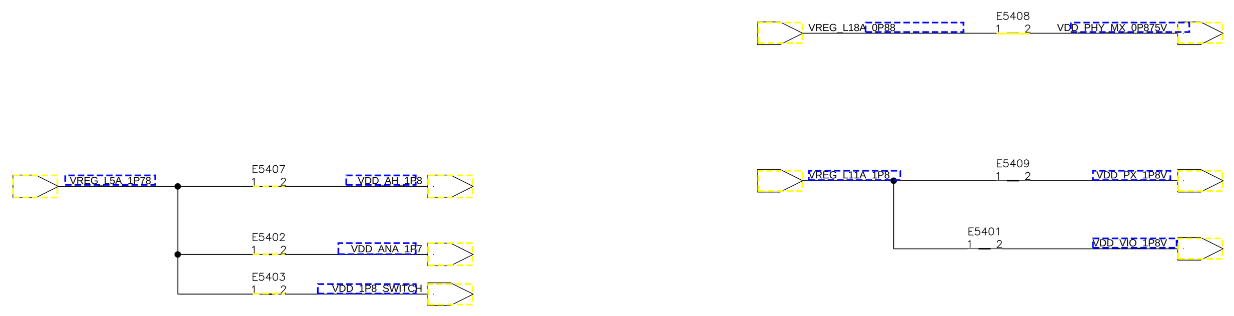
BOT SPEAKER SMART PA



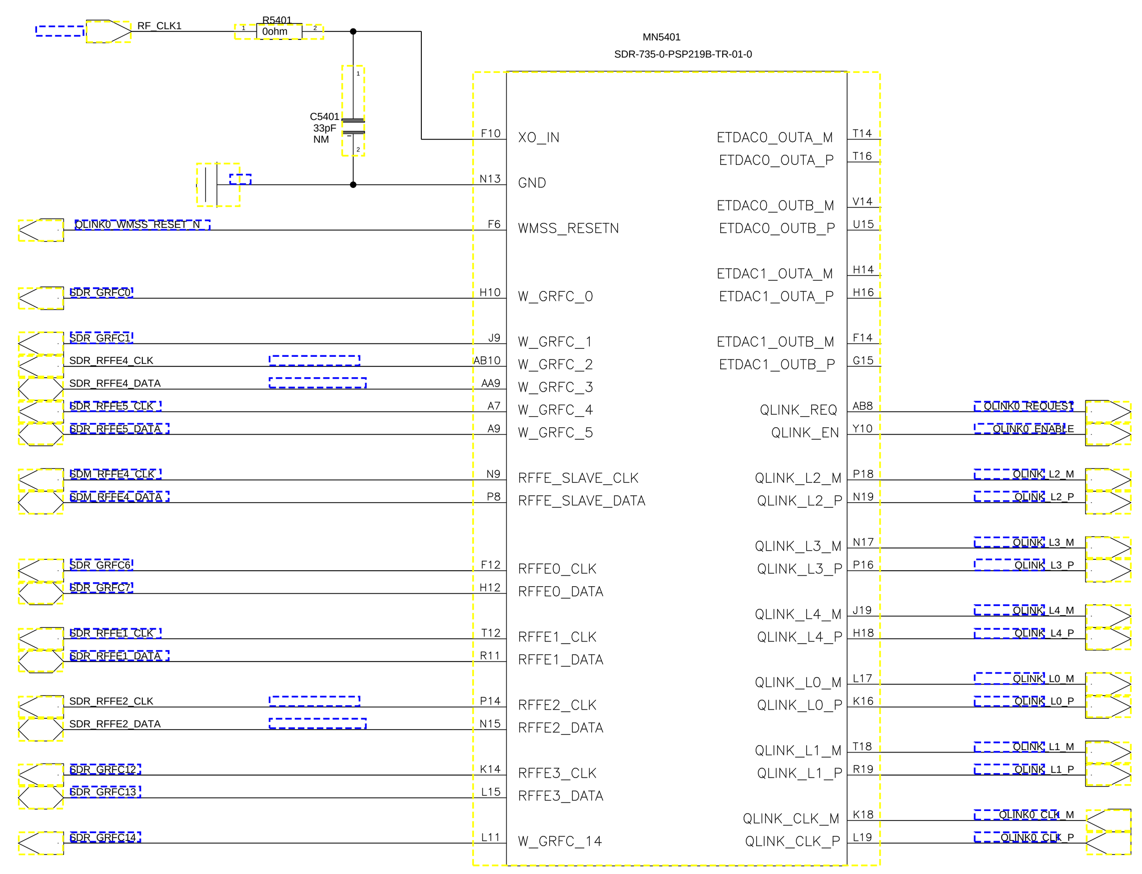
HAC

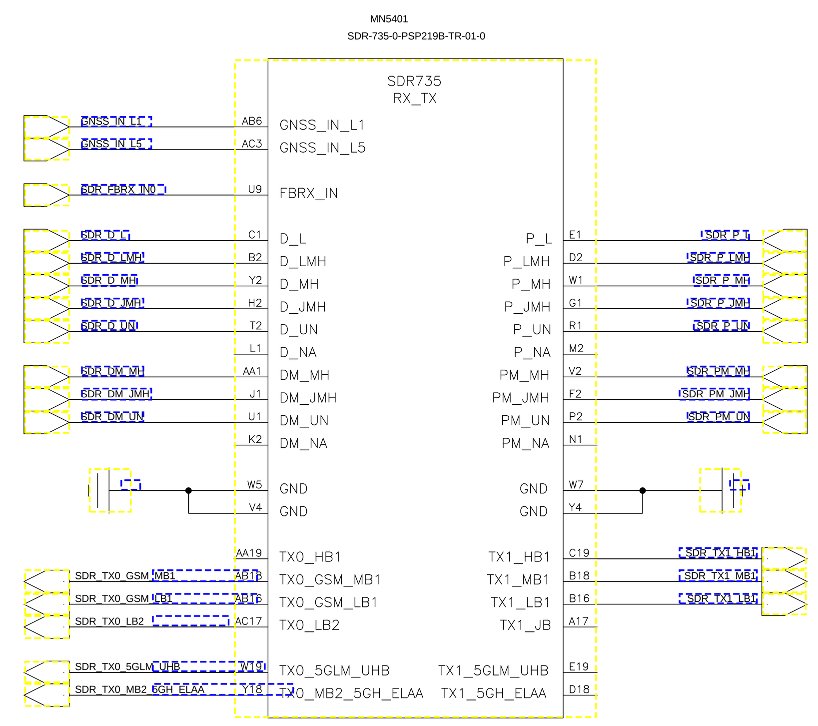


HAC_P
R5101
0ohm
NM
HAC_M
R5102
0ohm
NM
C5110
33pF
NM
C5111
33pF
NM
C5112
33pF
NM
C5101
33nF
NM
C5102
33nF
NM
GPIO_HAC_EN
R5103
100Kohm
NM
C5103
100pF
NM
C5104
100pF
NM
U5101
AW8155FCR
A1 INP
C3 VON
B3 PGND
C2 CTRL
C1 INN
A3 VOP
A2 VDD
B2 AGND_2
B1 AGND_1
NM
VPH_PWR
C5105
100nF
NM
C5106
10uF
NM
B5101
NM
B5102
NM
C5107
1nF
NM
C5108
1nF
NM
C5109
27pF
NM
L5101
NM

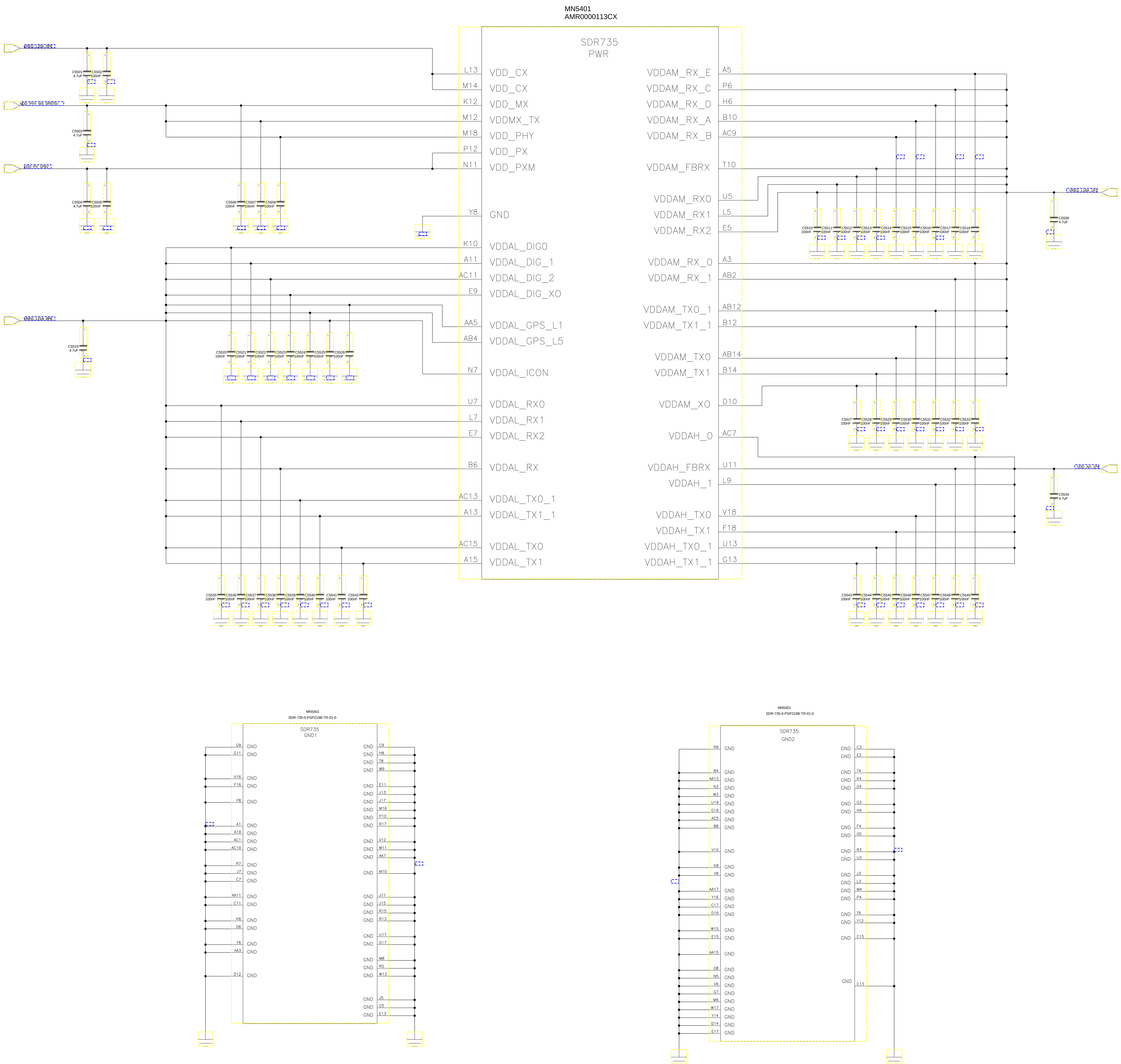


SDR735 CONTROL

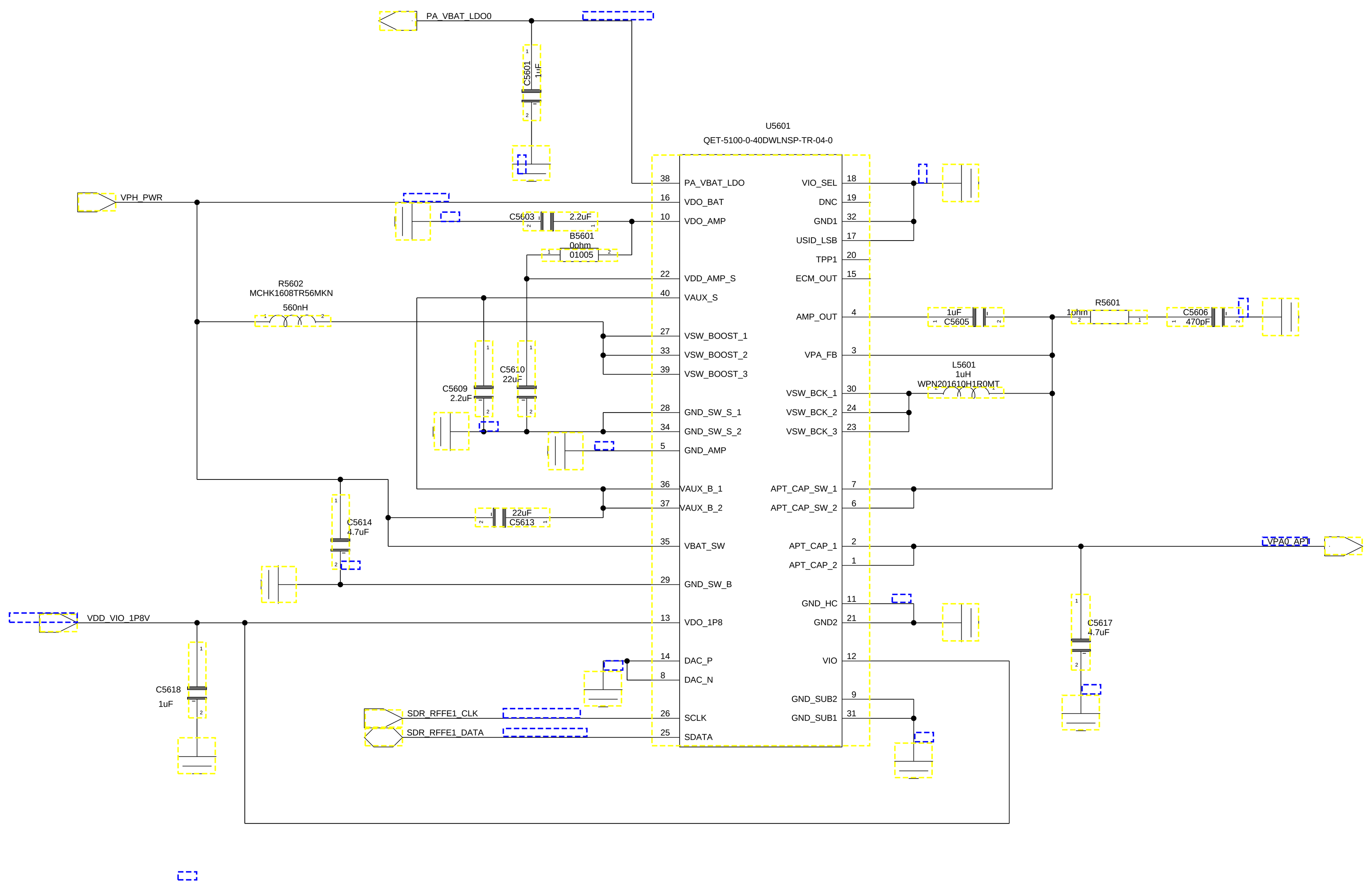




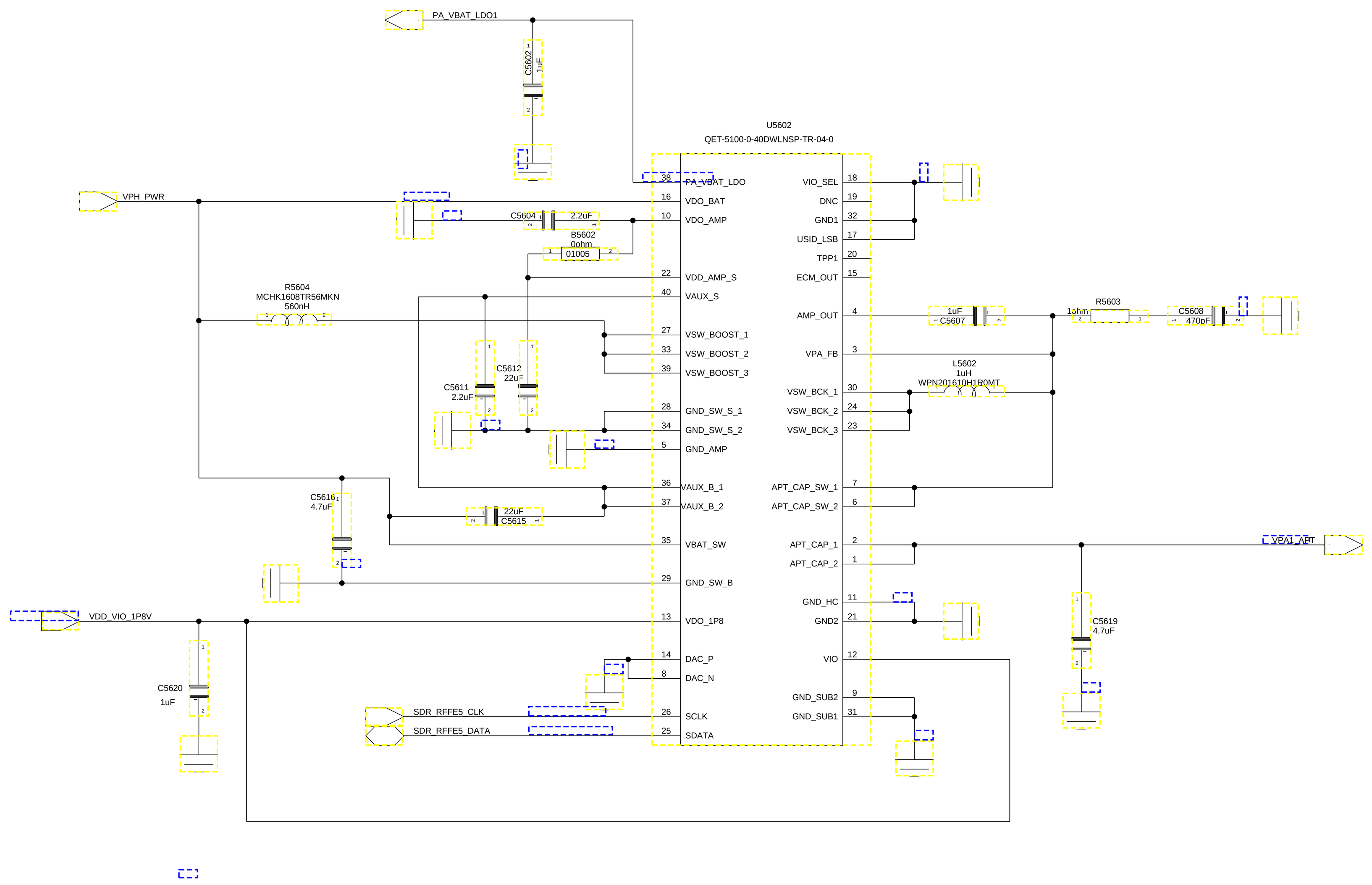
SDR735 POWER



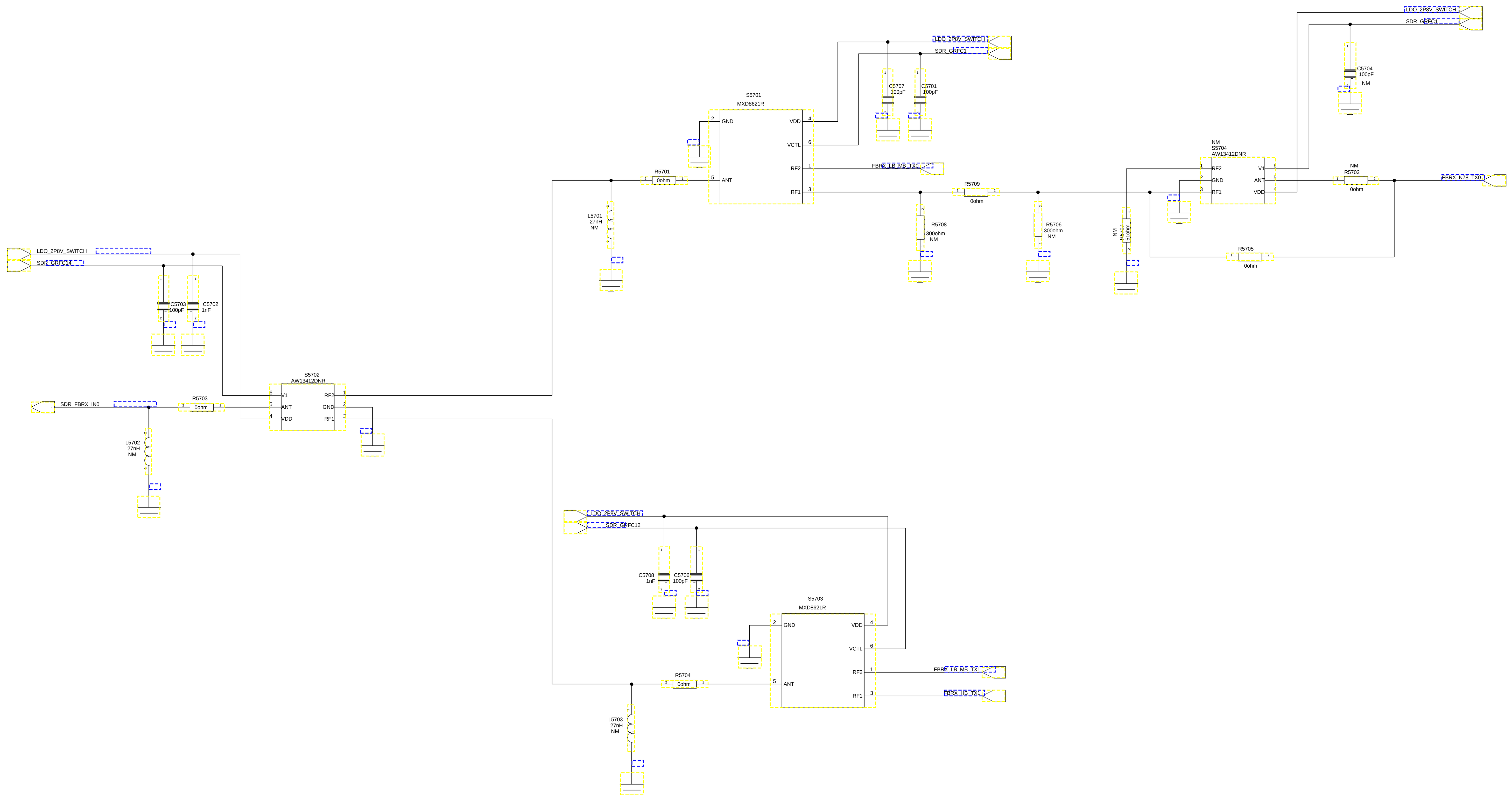
QET5100 0#



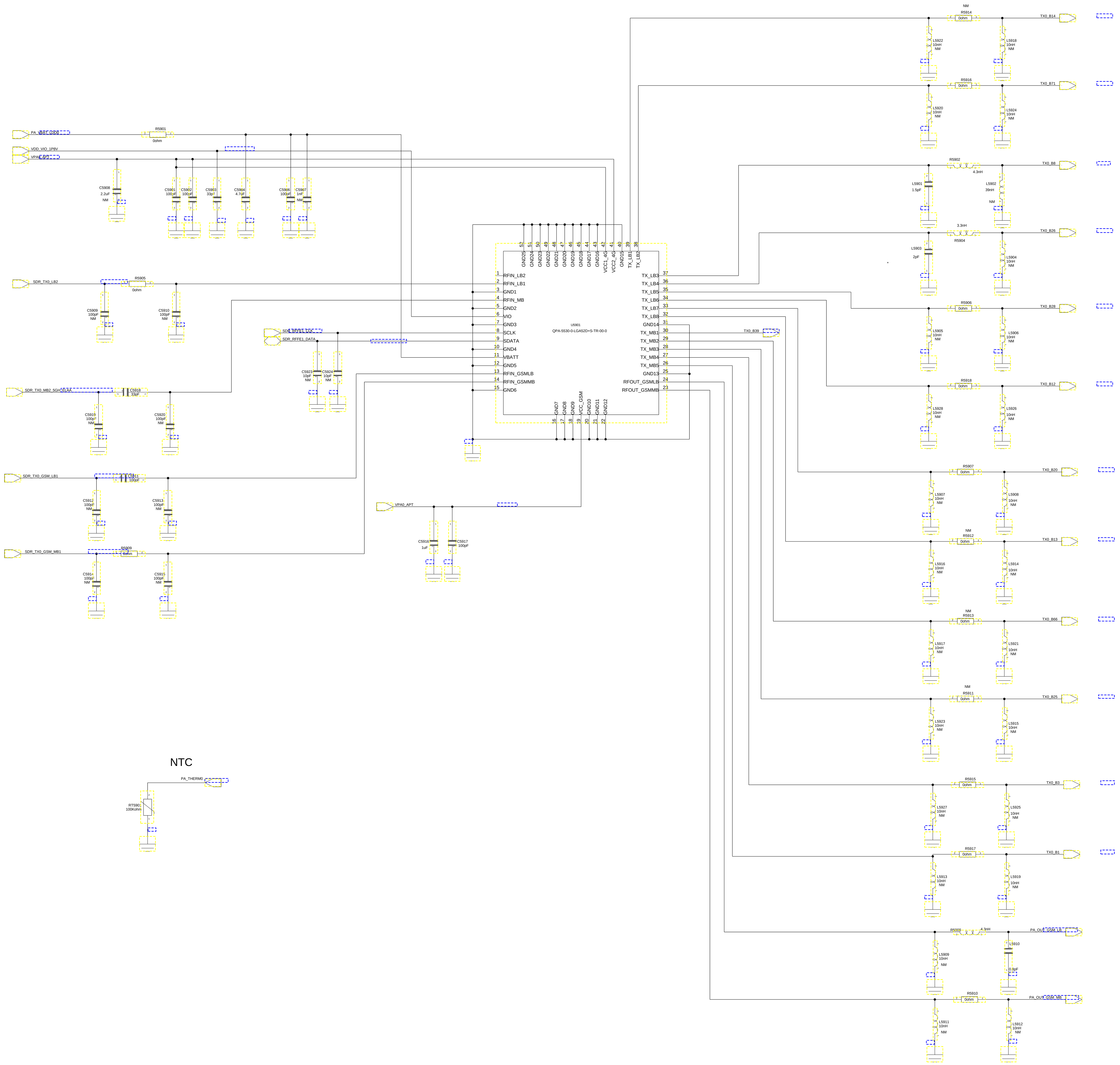
QET5100 1#

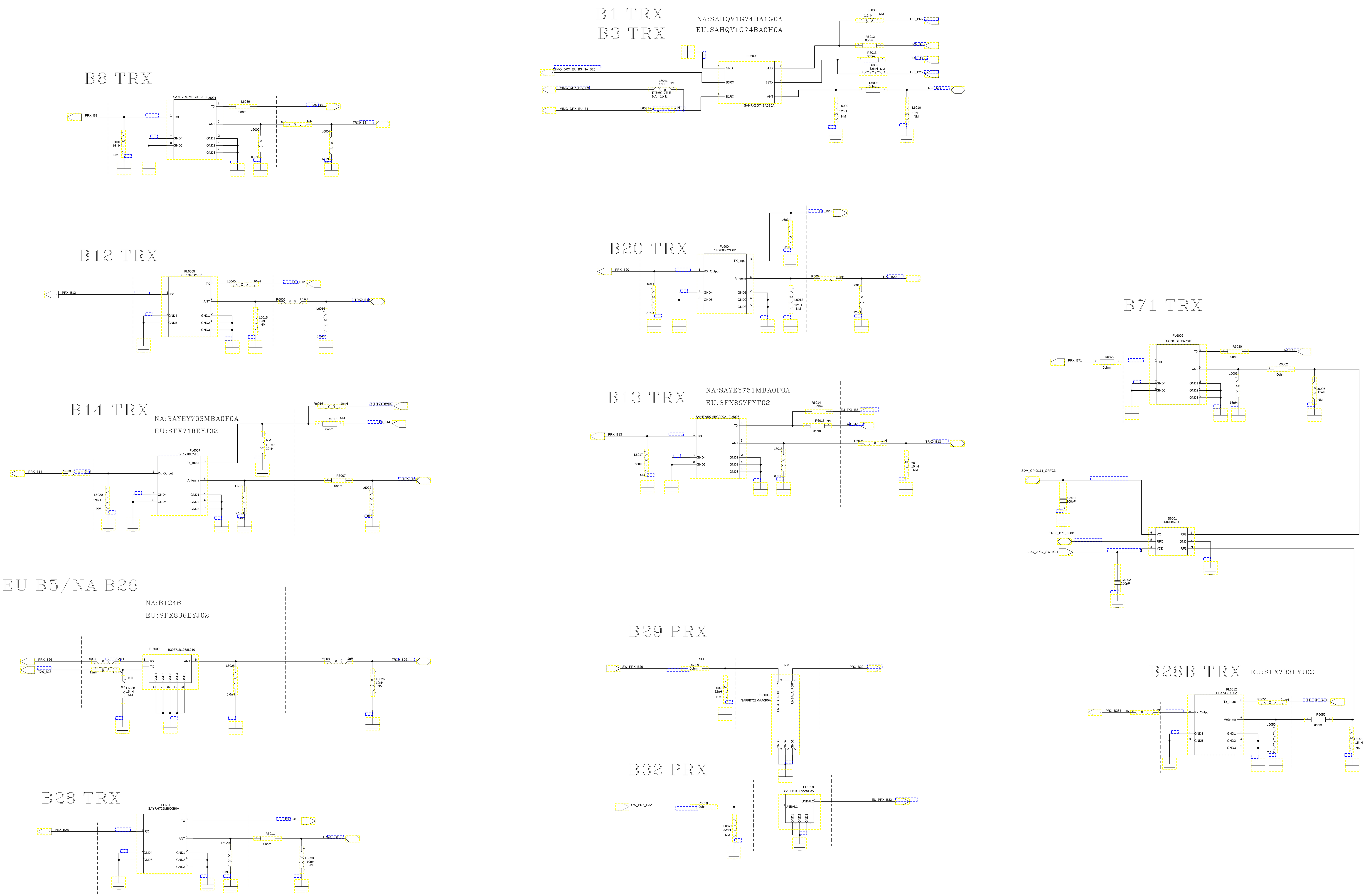


FBRX SWITCH

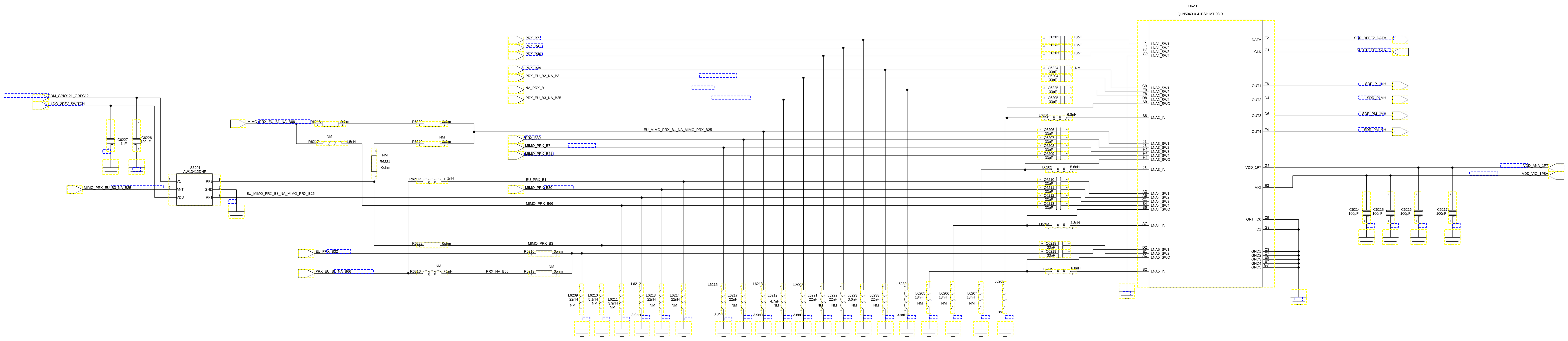


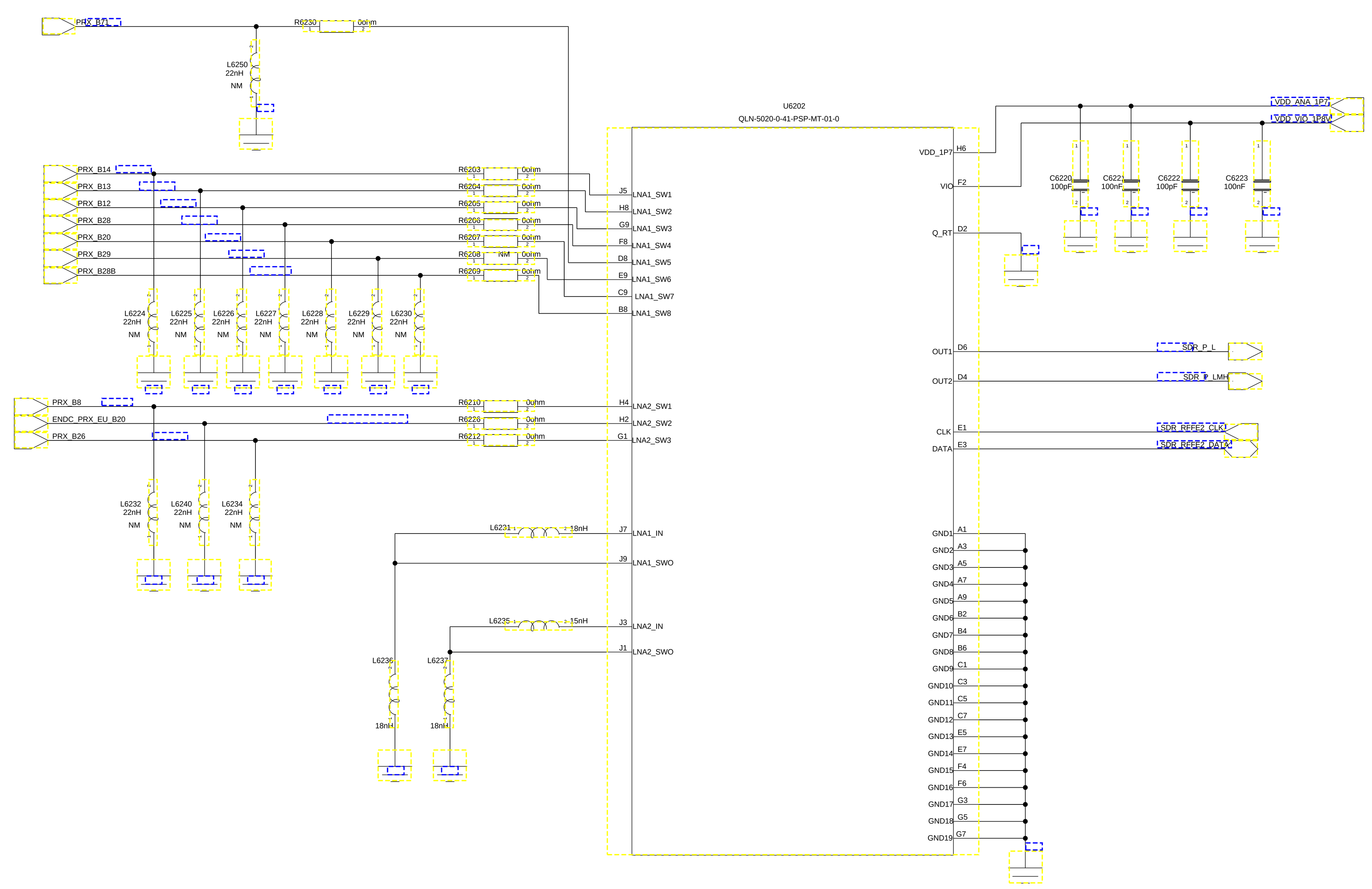

ANT_LB_TRX0
SLCP18-2R700G-01T
FBRX_LB_MB_TX0
FBRX_LB_MB_TX1
TRX1_LB

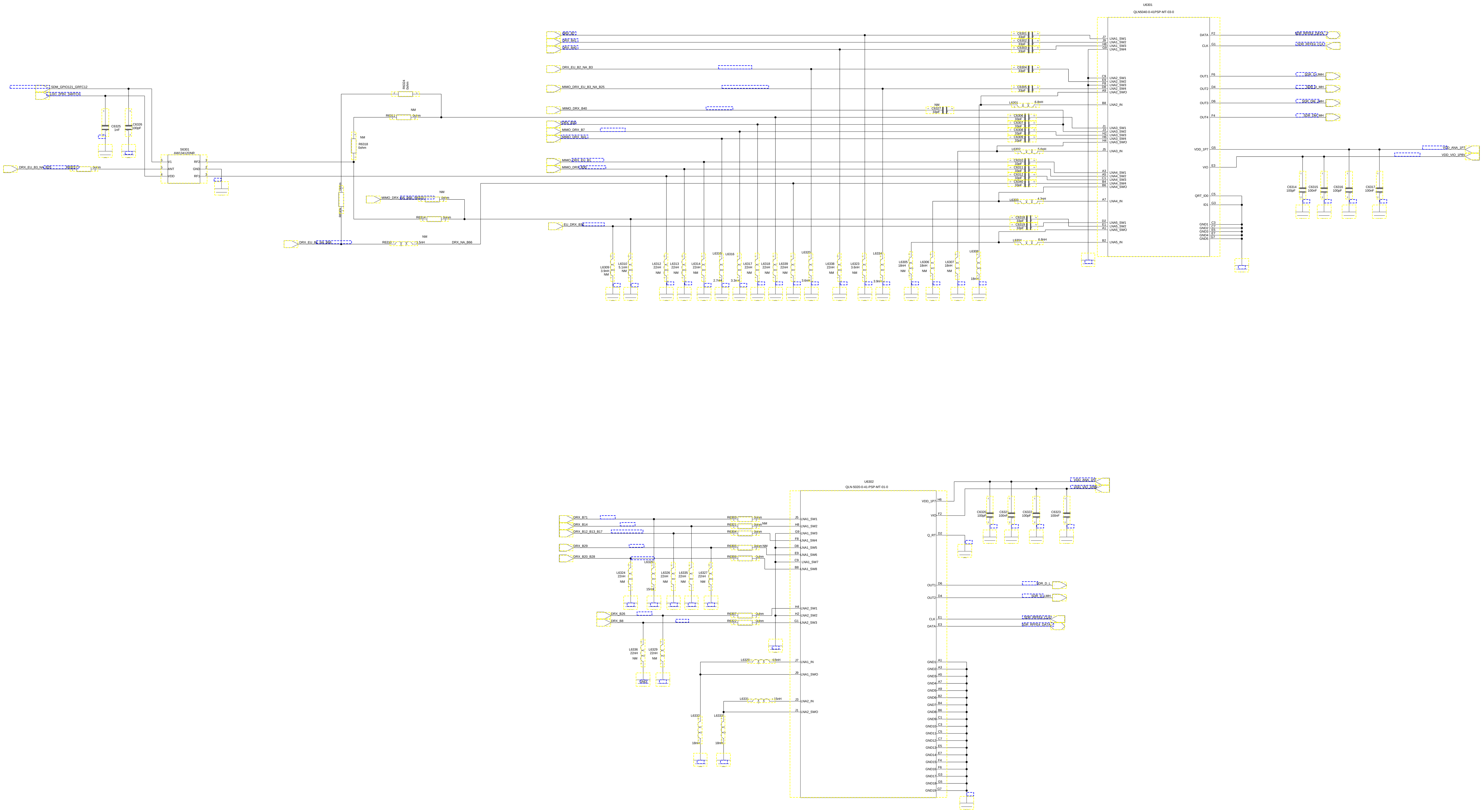

NTC


B1 TRX
B3 TRX
NA:SAHQV1G74BA1G0A
EU:SAHQV1G74BA0H0A
B8 TRX
B12 TRX
B20 TRX
B71 TRX
B14 TRX
NA:SAYEY763MBA0F0A
EU:SFX718EYJ02
B13 TRX
NA:SAYEY751MBA0F0A
EU:SFX897FYT02
EU B5/NA B26
NA:B1246
EU:SFX836EYJ02
B29 PRX
B28B TRX
EU:SFX733EYJ02
B32 PRX
B28 TRX

B41 TRX
FL6103
B40 TRX
B7 TRX
B30 TRX
EU_B1_B3_NA_B25_B66
NA:SAHQV1G74BA1G0A
EU:SAHQV1G74BA0H0A
ENDC_EU_B20_NA_B5
EU:B20:SFX806CYH02
NA:B5:SFX836EYJ02
B2 TRX
EU:B2:SAYEY1G88BA0B0A
B39 TRX
FL6107
B1 TRX
NA ONLY


U6201
QLN6040-0-41PSP-MT-03-0

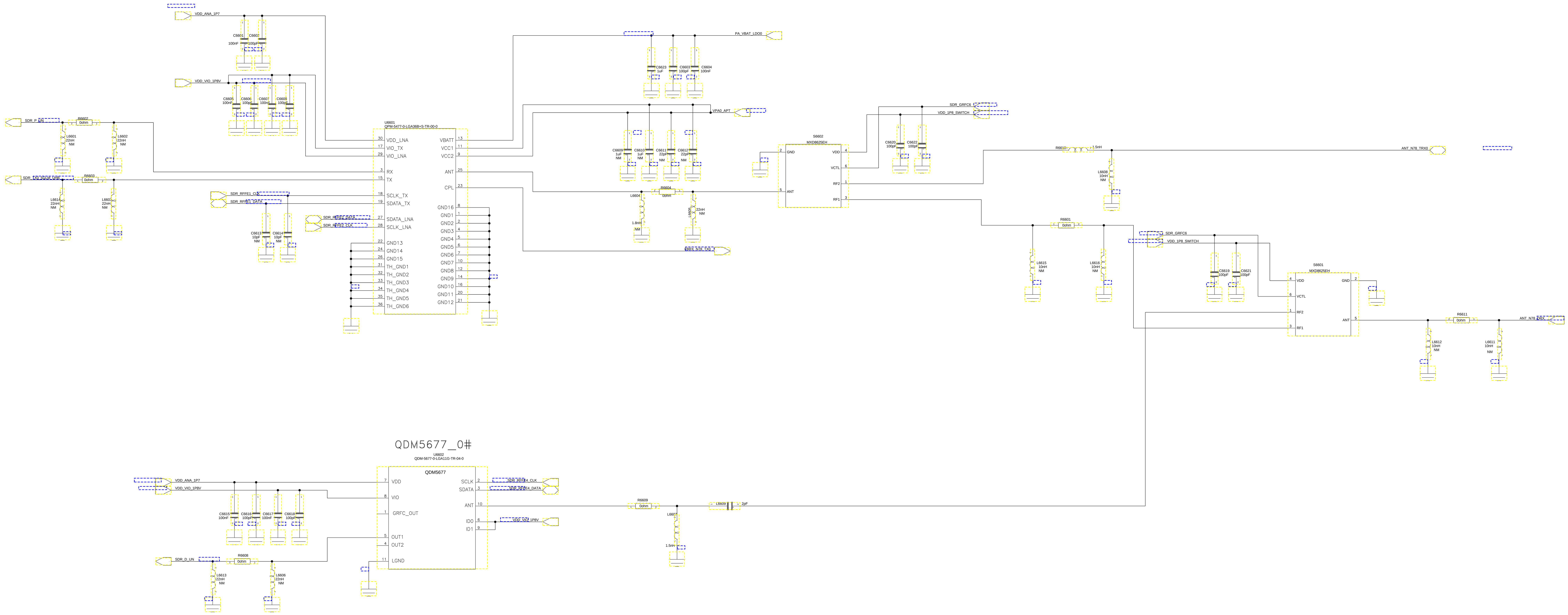

U6202
QLN-5020-0-41-PSP-MT-01-0


U6301
QLN5040-0-41PSP-MT-03-0
DRX_EU_B2_NA_B3
MIMO_DRX_EU_B3_NA_B25
MIMO_DRX_B40
MIMO_DRX_B7
U6302
QLN-5020-0-41-PSP-MT-01-0
DRX_B71
DRX_B14
DRX_B12_B13_B17
DRX_B29
DRX_B20_B28
DRX_B26
DRX_B8


EU_B2_NA_B3
EU:SAFFB1G96AB0F0A
NA:SFHG42CA002
MIMO DRX B7_DRX_1_3_25_66
EU:SFYG42BY802
NA:SATEY1G96AU4F0A
MIMO DRX B30
MIMO DRX B41
B32 DRX
MIMO PRX B7_1_3_25_66
EU:SFYG42BY802
NA:SATEY1G96AU4F0A
MIMO PRX B30
MIMO PRX B41
EU
EU

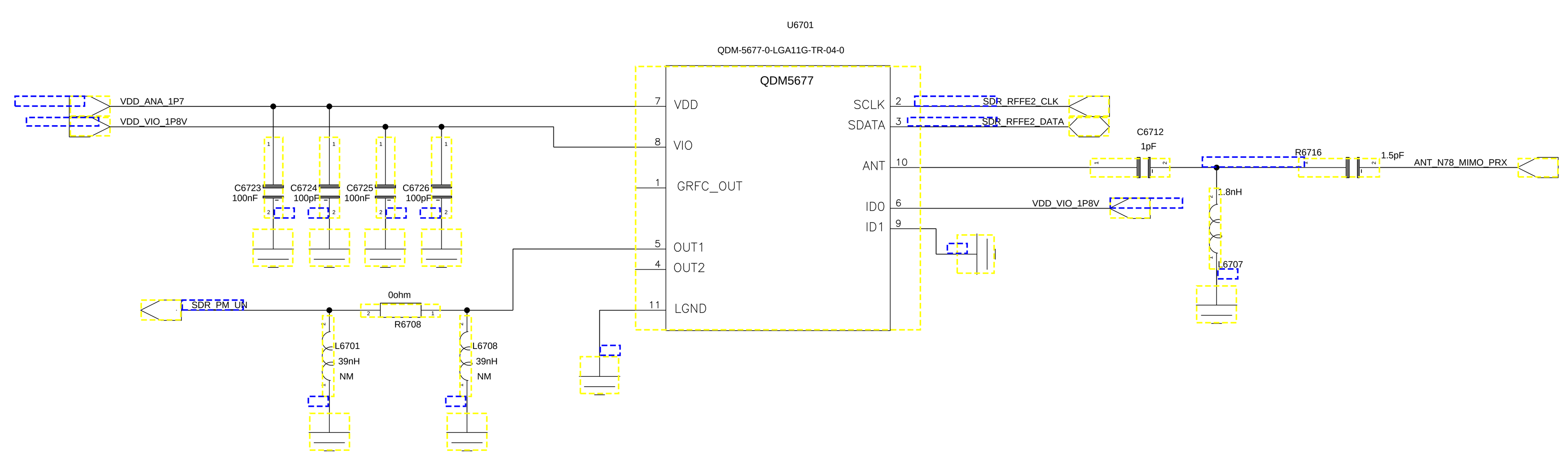
B7 DRX
B20_B28 DRX
B41 DRX
B71 DRX
B40 DRX
B8 DRX
B30 DRX
B26 DRX
EU:SAFFB881MAN0F0A
NA:SAFFB876MAA0F0A
B29 DRX
B12_B13_B17 DRX
B14 DRX

QPM5477

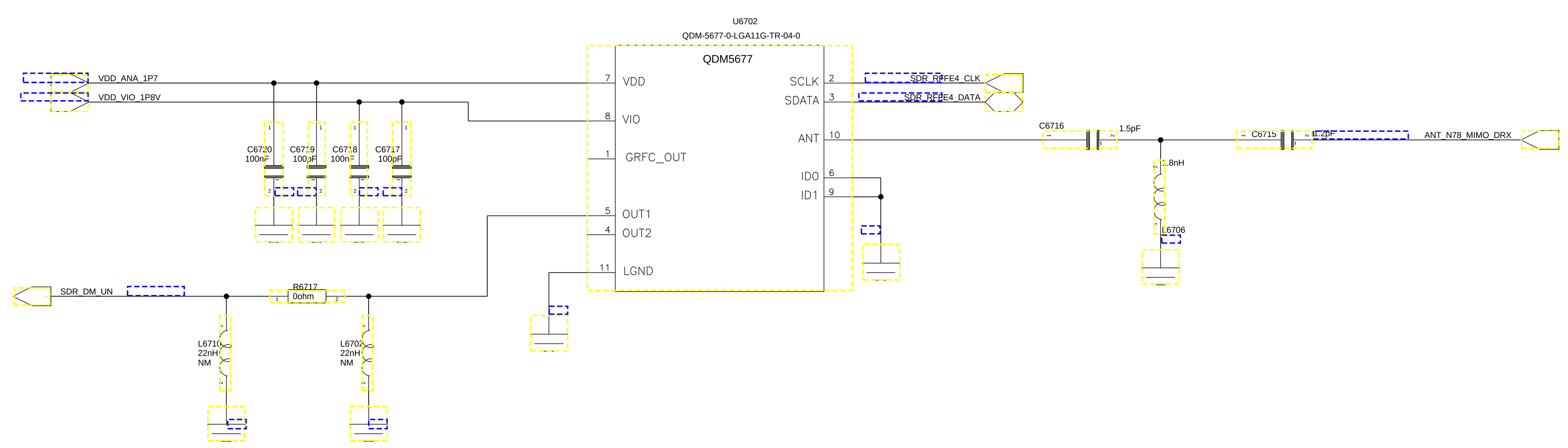


QDM5677_0#

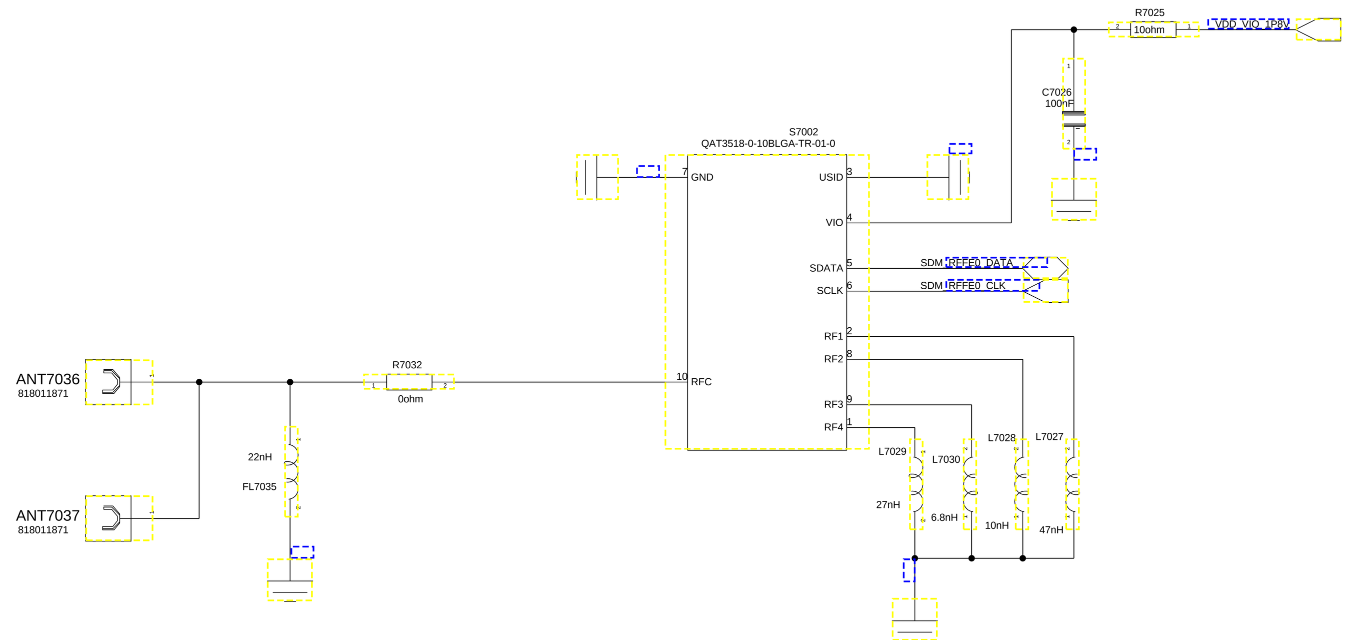
QDM5677_1#



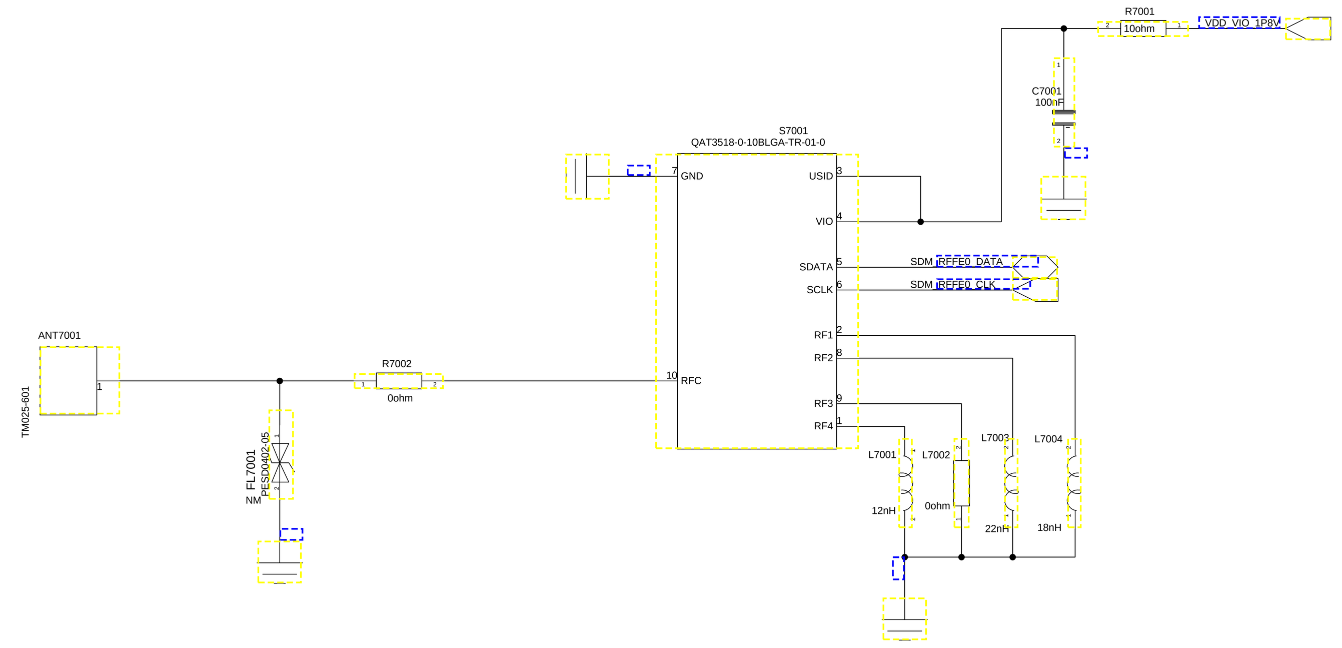
QDM5677_2#



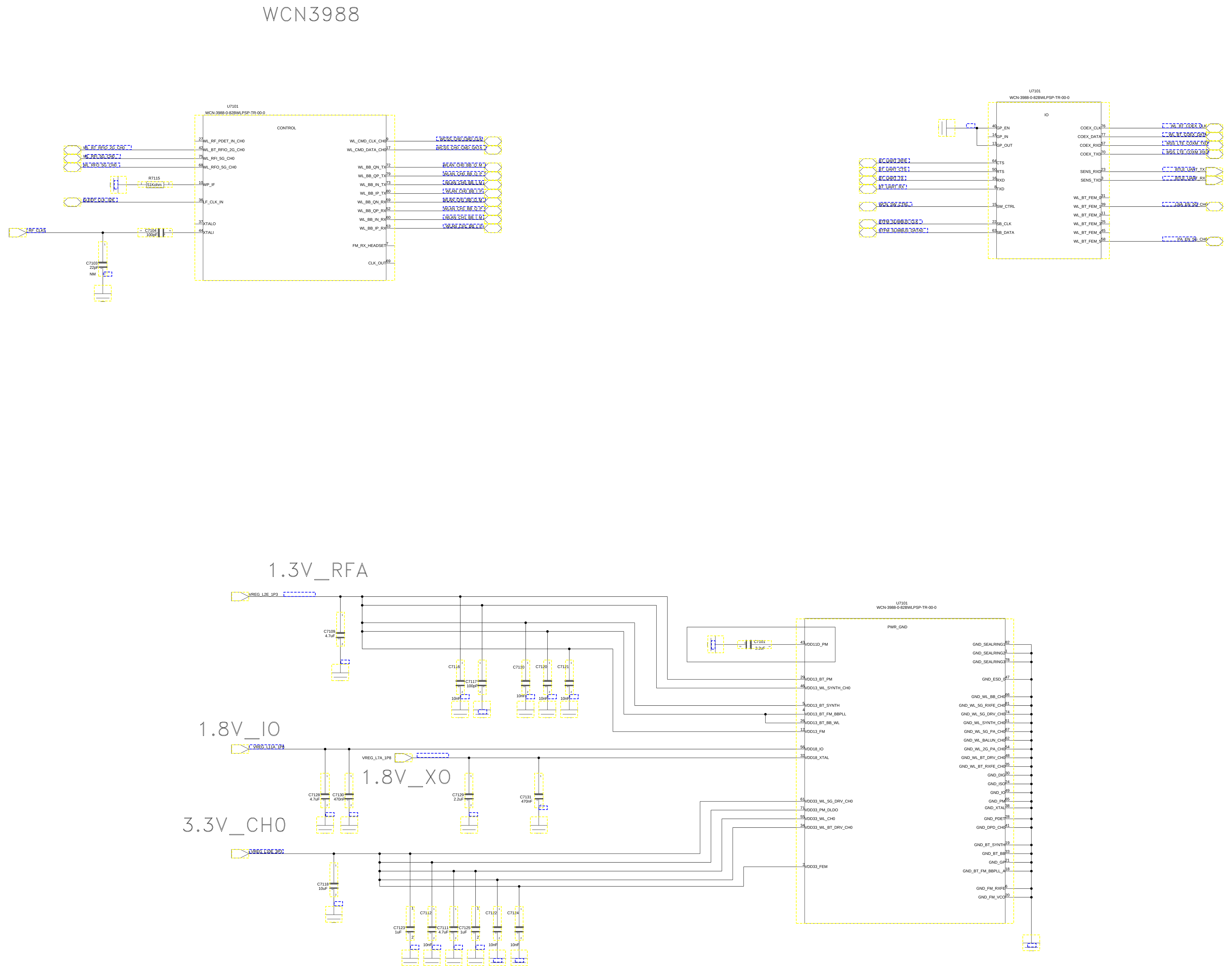

ANT0
ANT6910
ANT6931
ANT_LB_TRX0
50ohm
ANT1
ANT6916
FL6906
Low_Band_Port
High_Band_Port
Common_Port
ANT6902
ANT2
ANT6905
ANT6918
50ohm
ANT_DRX_LB
ANT_MB_TRX0
ANT3
ANT6915
ANT6907
ANT_MB_TRX1
ANT6922
ANT6930
ANT4
ANT6906
FL6904
Common_Port
Low_Band_Port
High_Band_Port
ANT5
ANT6920
ANT6921
ANT6
ANT6911
ANT7
ANT6909
ANT6914
FL6909
Common_Port
Low_Band_Port
High_Band_Port

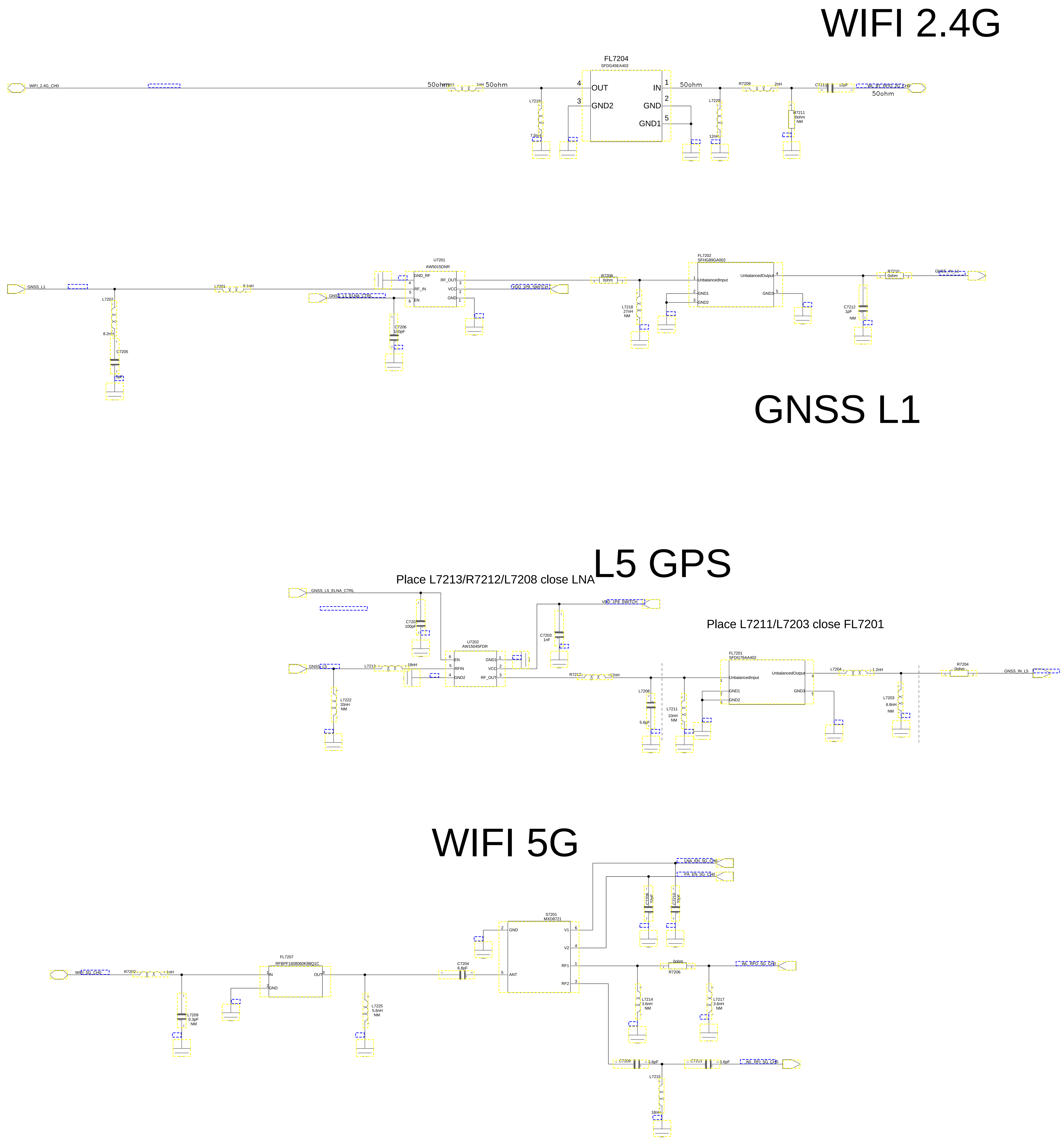


ANT7036
818011871
ANT7037
818011871
22nH
FL7035
R7032
0ohm
S7002
QAT3518-0-10BLGA-TR-01-0
GND
USID
VIO
SDATA
SCLK
RFC
RF1
RF2
RF3
RF4
SDM RFFE0_DATA
SDM RFFE0_CLK
R7025
10ohm
VDD_VIO_1P8V
C7026
100nF
L7029
27nH
L7030
6.8nH
L7028
10nH
L7027
47nH



ANT7001
TM025-601
FL7001
PESD0402-05
NM
R7002
0ohm
S7001
QAT3518-0-10BLGA-TR-01-0
GND
USID
VIO
SDATA
SCLK
RFC
RF1
RF2
RF3
RF4
SDM RFFE0_DATA
SDM RFFE0_CLK
R7001
10ohm
VDD_VIO_1P8V
C7001
100nF
L7001
12nH
L7002
0ohm
L7003
22nH
L7004
18nH


WCN3988
CONTROL
IO
PWR_GND
1.3V_RFA
1.8V_IO
1.8V_XO
3.3V_CH0


WIFI 2.4G
FL7204
OUT
GND2
IN
GND
GND1
50ohm
GNSS L1
L5 GPS
Place L7213/R7212/L7208 close LNA
Place L7211/L7203 close FL7201
WIFI 5G

12. Material information for recyclers

Below you can find materials information about the Fairphone 4. We have focussed on the materials that we think are most important for recyclers and indicated where they are mostly situated. This weight information is to give the idea for recyclers to estimate the value for recycling the phone. The exact weight for each material can vary, due to the calculation method and the limitation of the analytical techniques.

Material	CAS no.	Total mass in FP4 (g)	Components You can find mainly in these components	% of total mass in FP4	Modules The components belong to these modules
Tungsten	7440-10-0	0.75	Vibration Mechanism	99%	Loudspeaker (contains vibration motor)
Tin	7440-10-0	4.4	Solder paste in PCBA	51%	PCBA
			Solder paste in Battery	25%	Battery
Aluminum	7429-90-5	30.61	Mid frame	98%	Mid frame (includes buttons)
Rare Earth Elements**	see rare earth	0.16	Speaker, Vibration Mechanism	76%	Loudspeaker (contains vibration motor)
Nickel	7440-02-0		Shields Copper alloy	62%	PCBA
		2.44	Battery	12%	Battery
Zinc	7440-10-0	1.68	Shields Copper alloy	94%	PCBA
Copper	7440-50-8		Shields Copper alloy	23%	PCBA
			PCB	37%	PCBA
		23.06	Battery	30%	Battery
Magnesium	7439-95-4	7.89	LCD frame	57%	Display
Gold	7440-57-5		PCB	0.27%	PCBA
			Battery PCB	0.06%	PCBA
			Battery connector	0.10%	Battery
			Speaker	3.47%	Loudspeaker (contains vibration motor)
			BtB connectors	5.18%	Main cameras
		0.011	all other components	91.00%	N/A
Plastics:	polycarbonate (PC)	2.99	LCD Frame		Display

	polycarbonate (PC)	6.30	FP4-MIDDLE-HOUSING		Mid frame (includes buttons)
	polycarbonate (PC)	0.51	FP4-rear-cam-btb-cover		Main cameras
	polycarbonate (PC)	4.51	FP4-REAR-CAM-BACK		Main cameras
	polycarbonate (PC)	1.40	FP4-REAR-housing-SIM1		Main cameras
	polycarbonate (PC)		FP4-SPK-top-cover		N/A
	polycarbonate (PC)	2.20	FP4-SPK-bottom-cover		Loudspeaker (contains vibration motor)
	polycarbonate (PC)	13.65	FP4-BATTERY-COVER		Back cover (contains NFC antenna)
Indium	7440-74-6		LCD panel	40%	Display
		0.0000045	Solder paste	60%	PCBA
Cobalt	7440-48-4	12.25	battery	100%	Battery
Lithium	7439-93-2	23.14	battery	100%	Battery
Silver	7440-22-4		Solder paste	22%	PCBA
			battery package	14%	Battery
		0.033	passives	19%	PCBA
Mica	12001-26-2	0.03	camera	51%	Rear cameras
Palladium	7440-05-03	0.00115	Front End Module	60%	PCBA
Platinum	7440-06-04	0.00003	SAW Quadplexer	60%	PCBA

*Rare earth includes Neodymium, Praseodymium, Dysprosium