

# MangOH Red Platform

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## Project Variants

|          |         |  |  |
|----------|---------|--|--|
|          | 1600643 |  |  |
| DNI      | N       |  |  |
| MIC_OMTP | N       |  |  |
| MIC_CTIA | Y       |  |  |

## Variants description

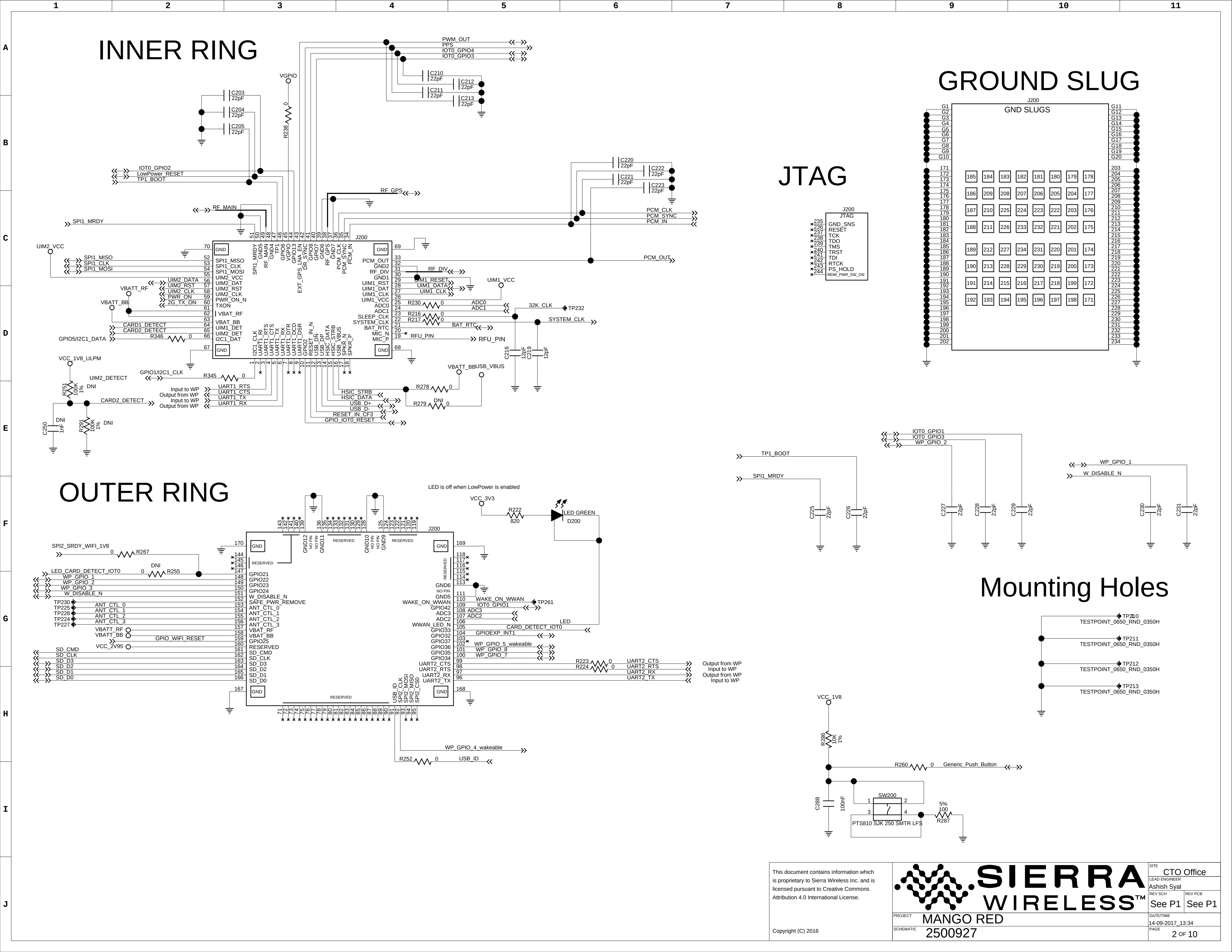
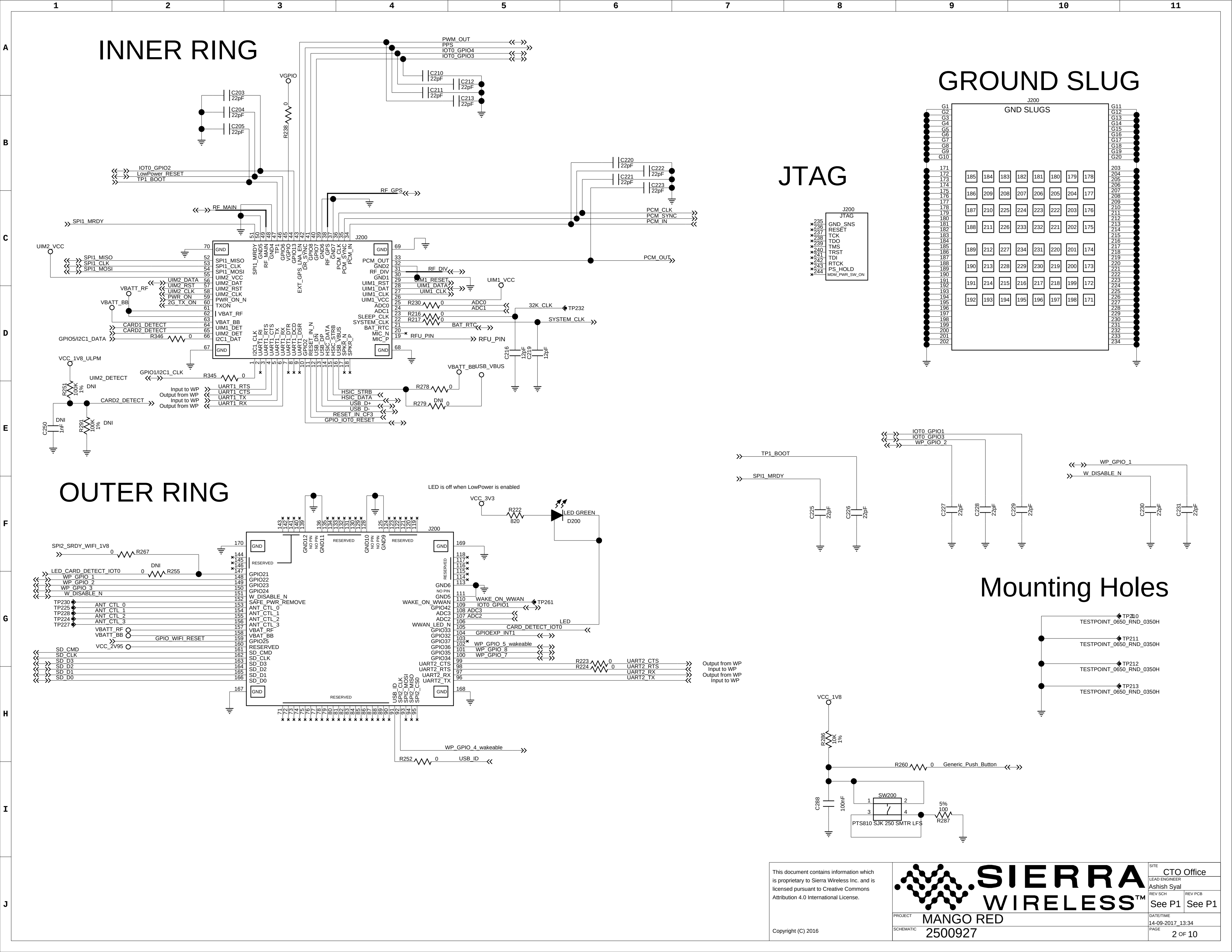
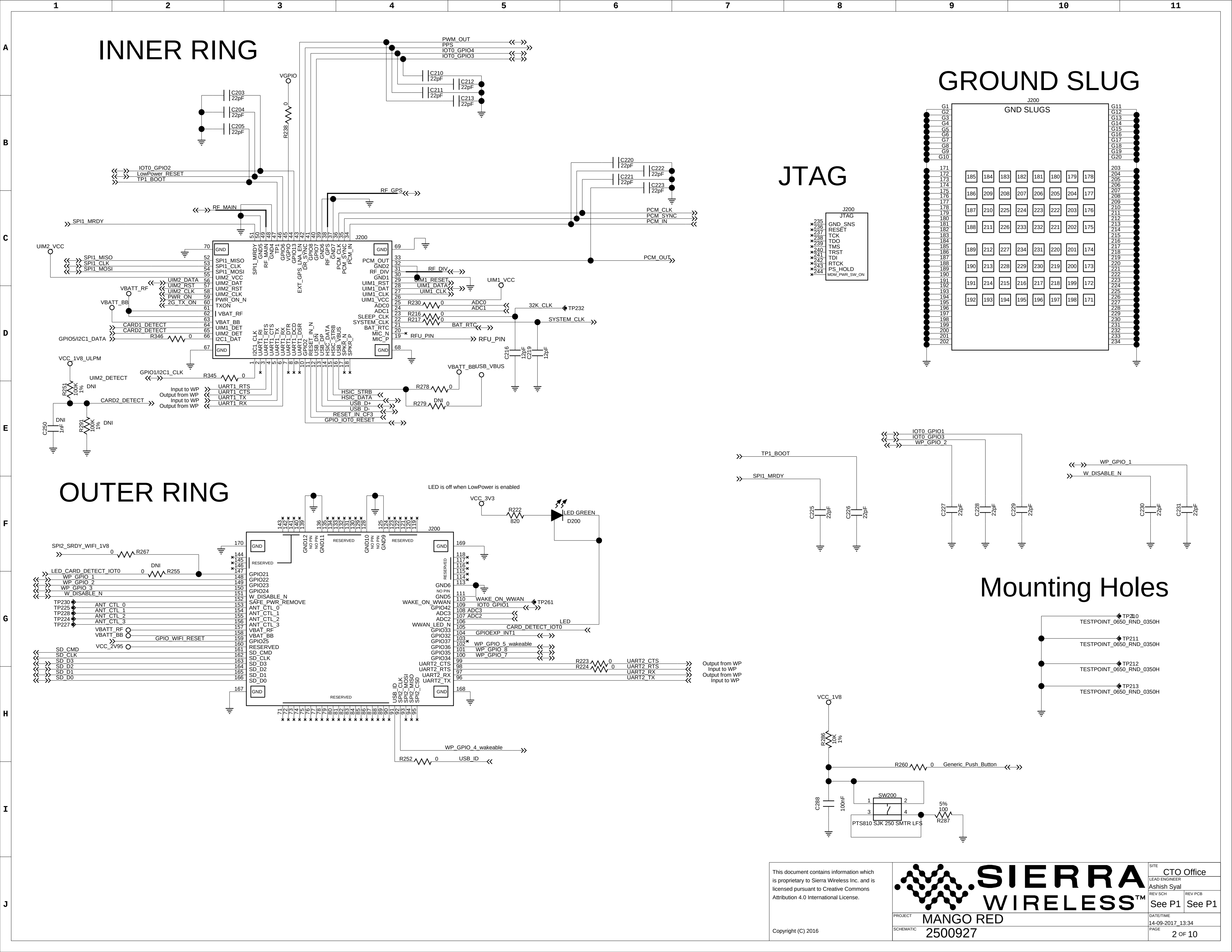
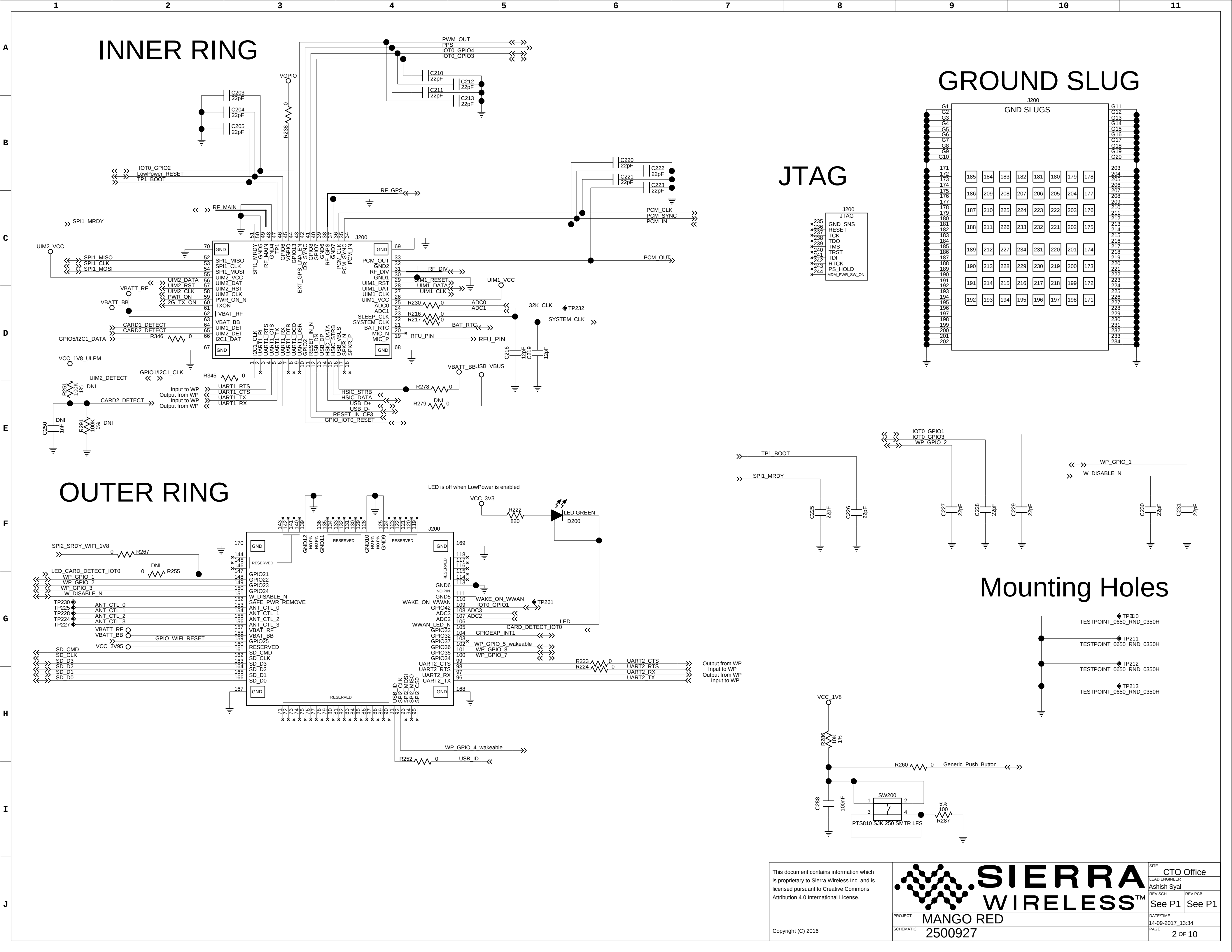
DNI = Do Not Install  
MIC\_OMTP = OMTP headphones config (do not define MIC\_CTIA)  
MIC\_CTIA = CTIA/AHJ headphones config (do not define MIC\_OMTP)

## I2C address list

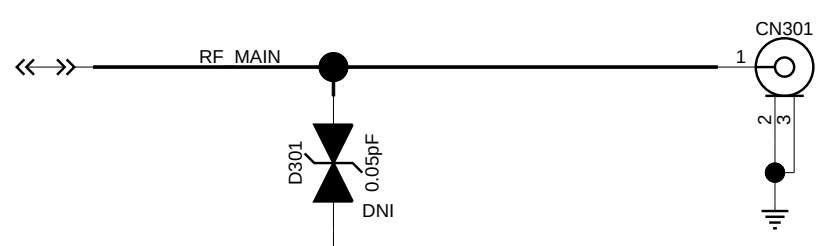
08h = 3503 USB hub  
3Eh = I/O expander  
51h = EEPROM with Board ID  
64h = Battery gauge  
68h = 6 Axis IMU  
6Bh = Buck+batt charger  
71h = I2C Hub  
76h = Pressure Sensor

## REFERENCE

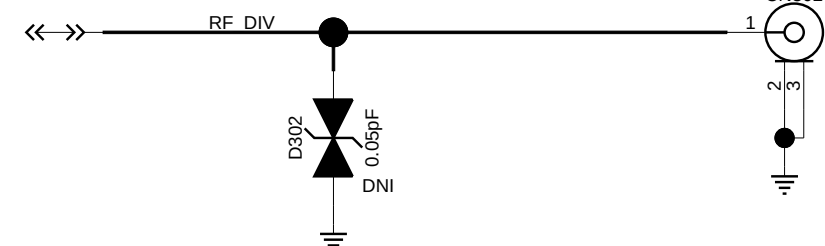
1600674 PCA, MANGO H  
5302303 PCB, MANGO H

[illegible][illegible][illegible][illegible][illegible][illegible]

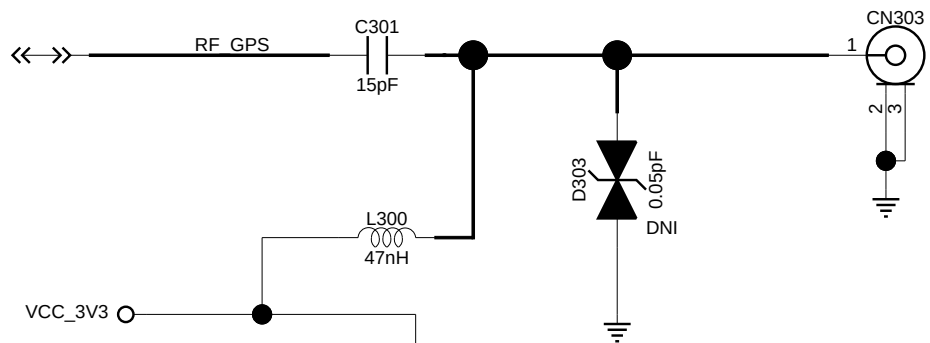
# MAIN CF3 Socket Main Antenna



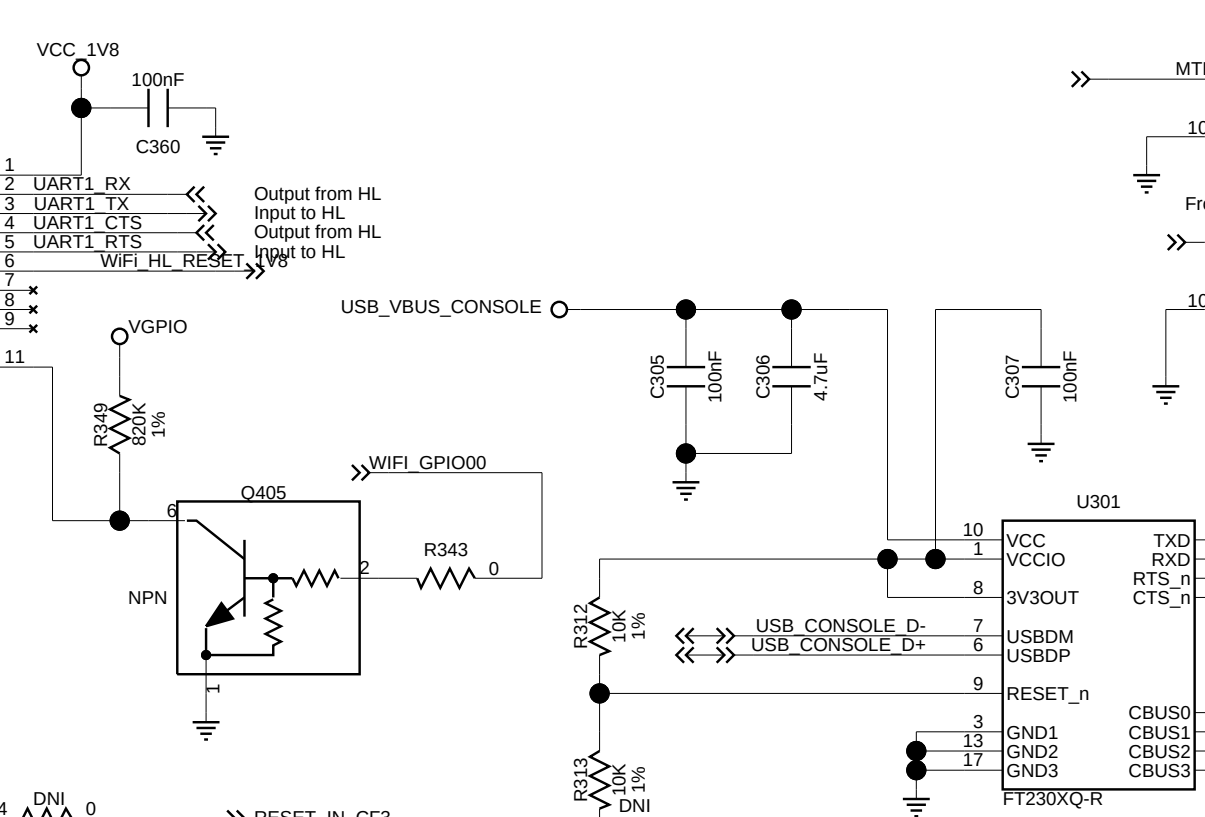
# Diversity



# GPS Active Antenna Supply

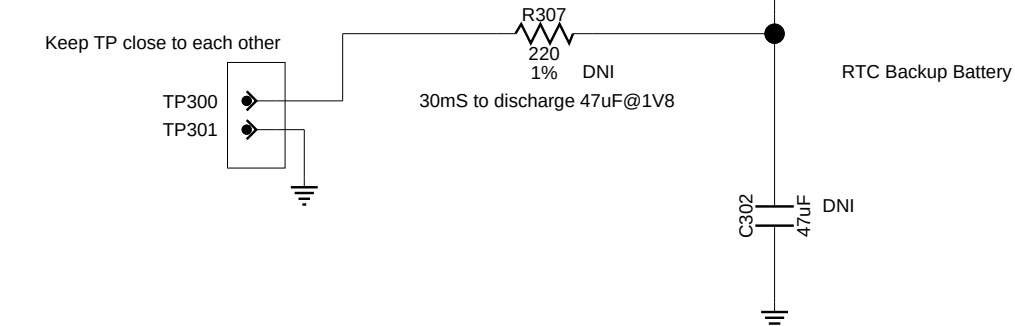


# FTDI to Serial

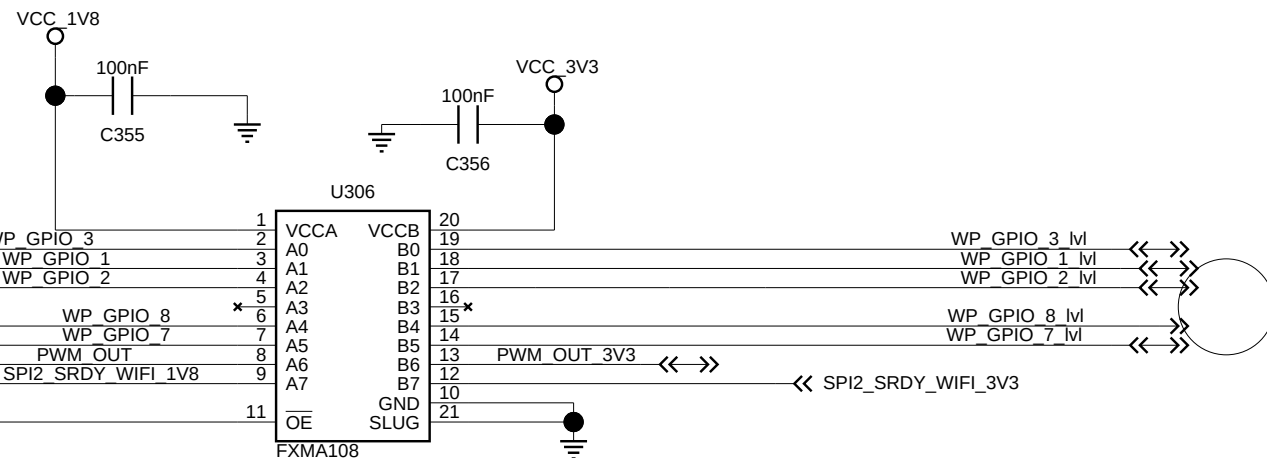
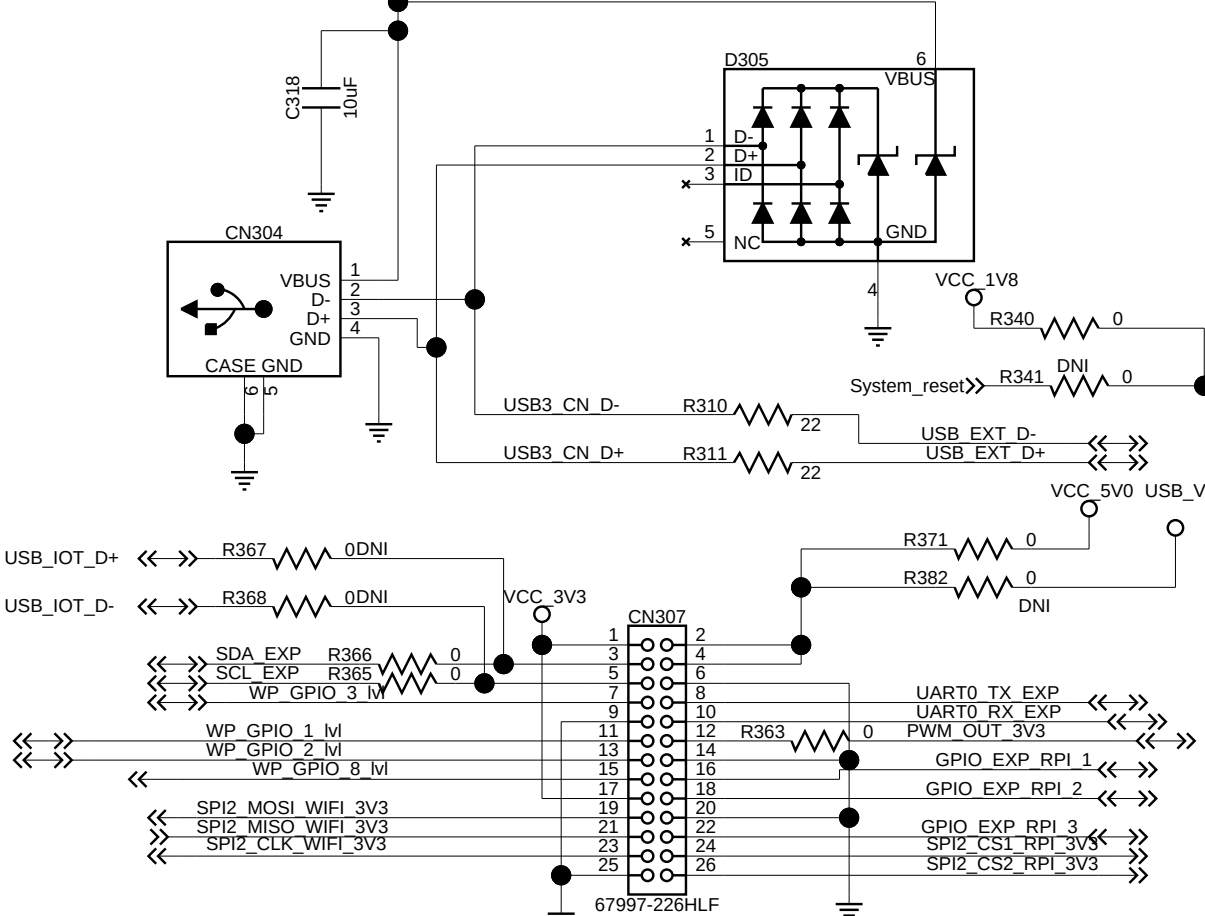


| MTK_TO_WP_UART_EN | CONS_DIR | STATUS                |
|-------------------|----------|-----------------------|
| L                 | L        | UART <--> WP CONS     |
| L                 | H        | UART <--> MTK CONS    |
| H                 | X        | WP CONS <--> MTK CONS |

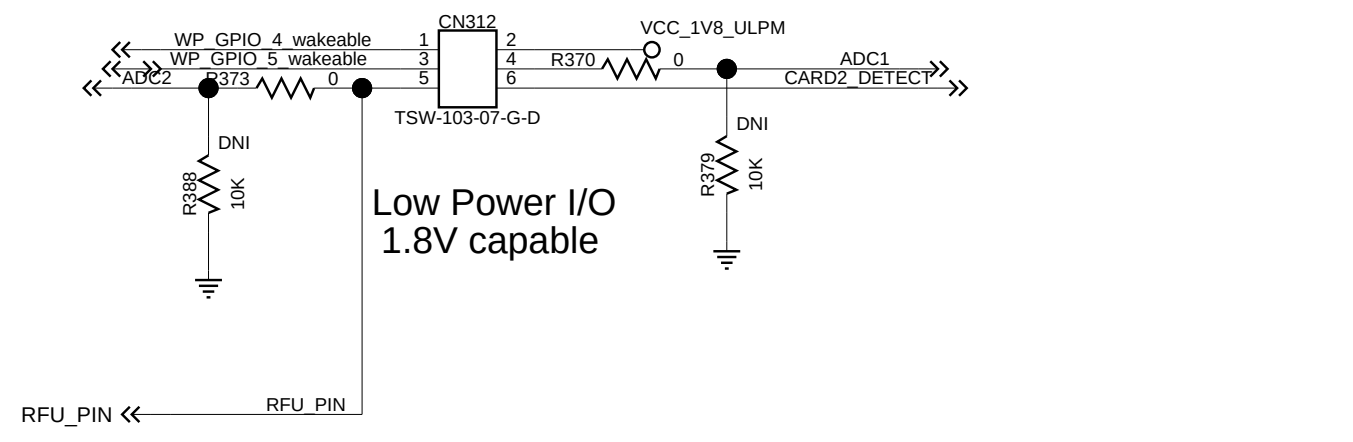
# VBACKUP/DISCHARGE



# USB HOST

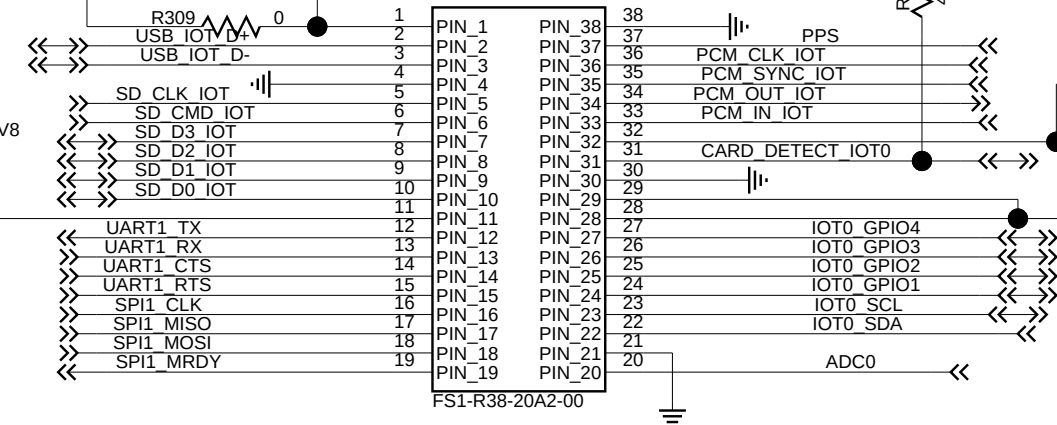


# Real Time IO 3.3V capable, multi function configurable



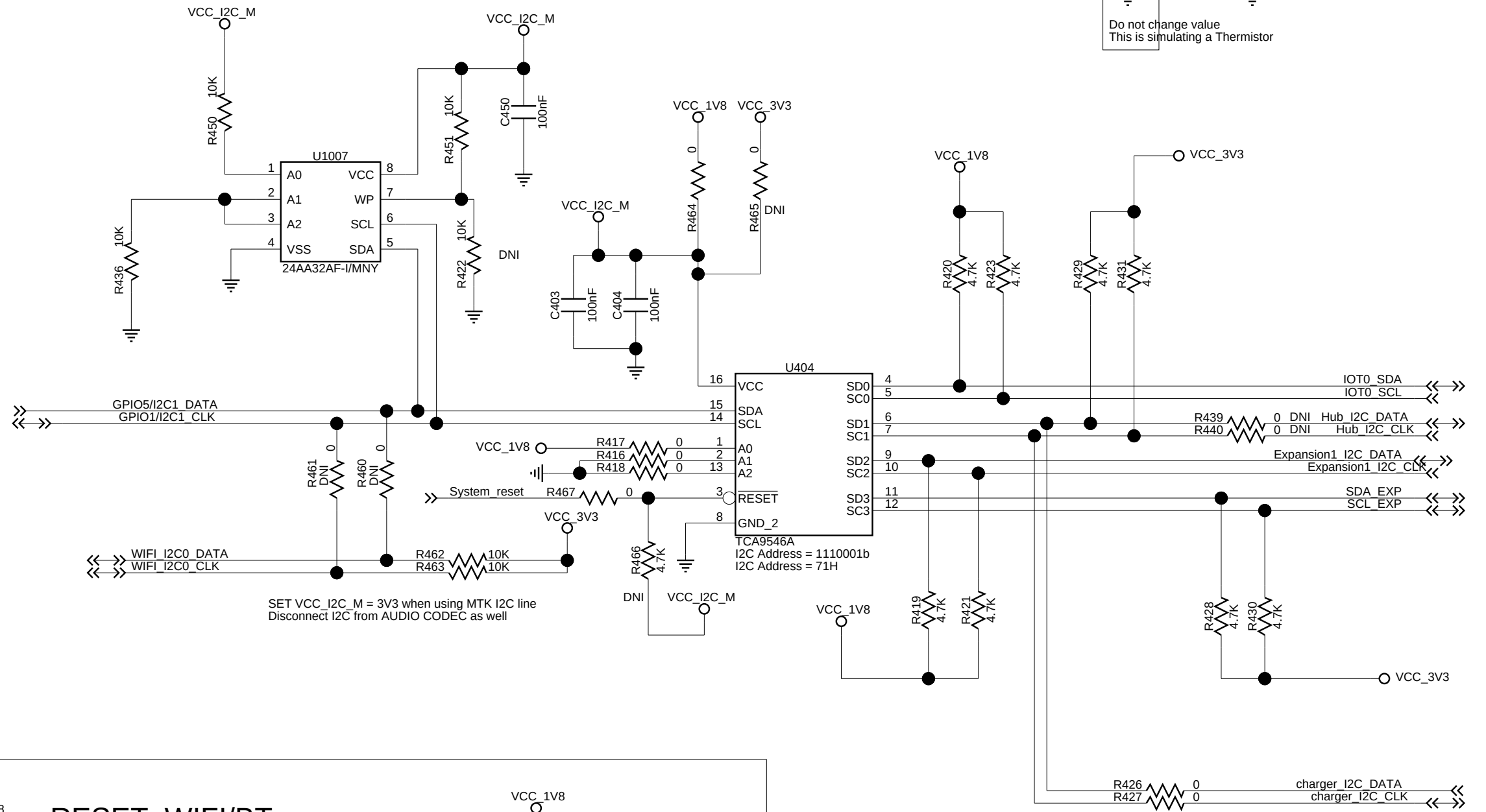
# Low Power I/O 1.8V capable

# IoT Connector 1.8V capable IOT#0

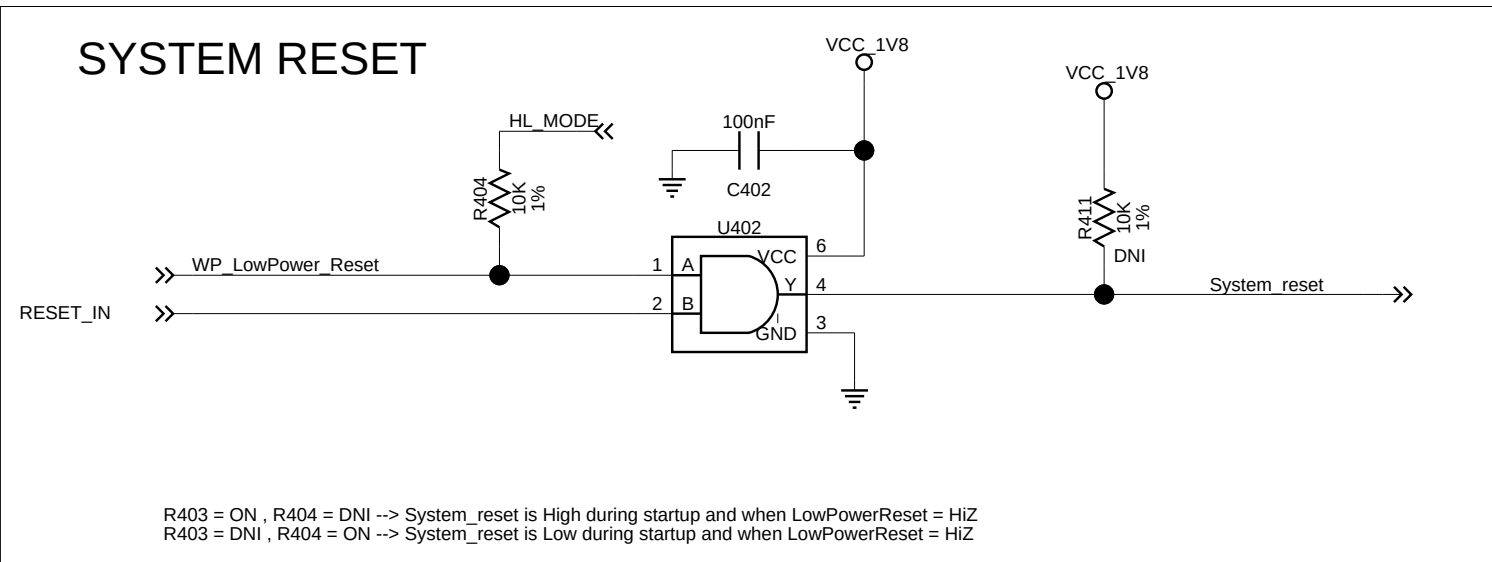




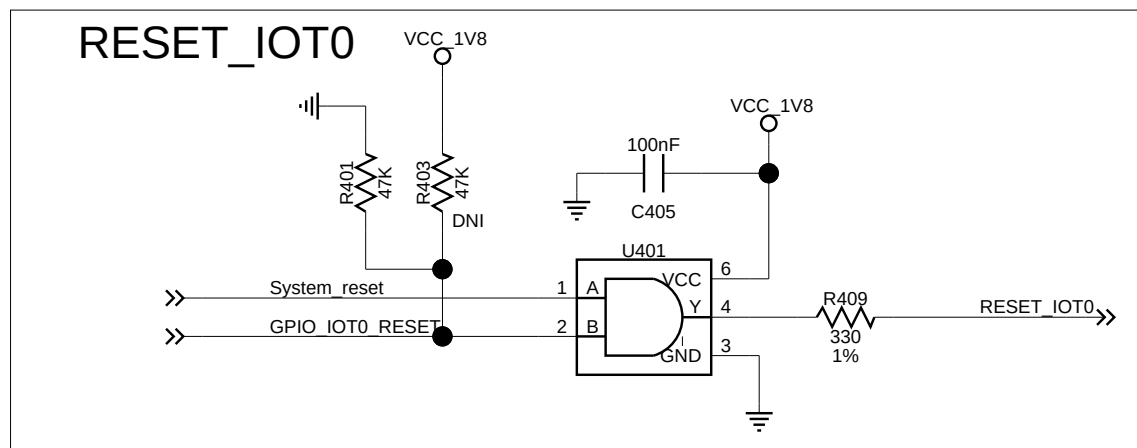
## OPHW Platform RESET



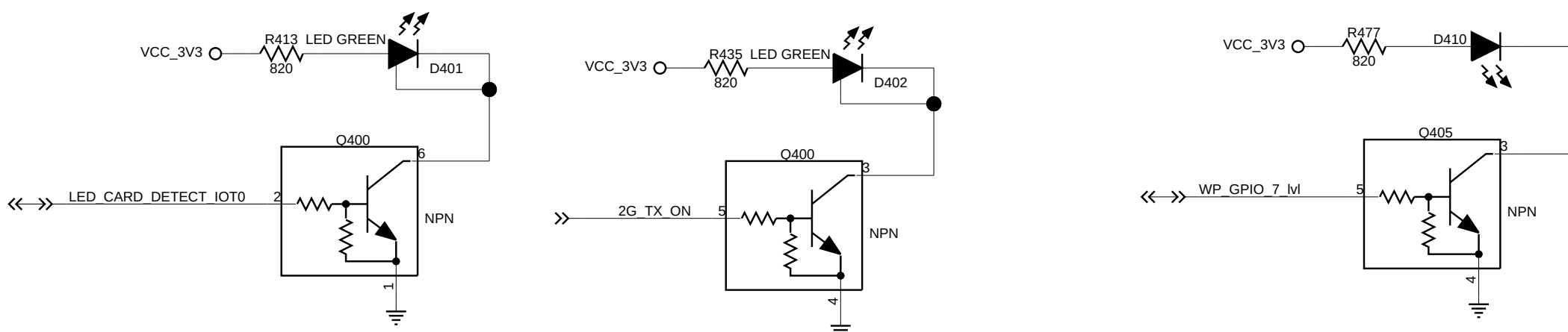
## SYSTEM RESET



## RESET\_IOT0



# LEDs



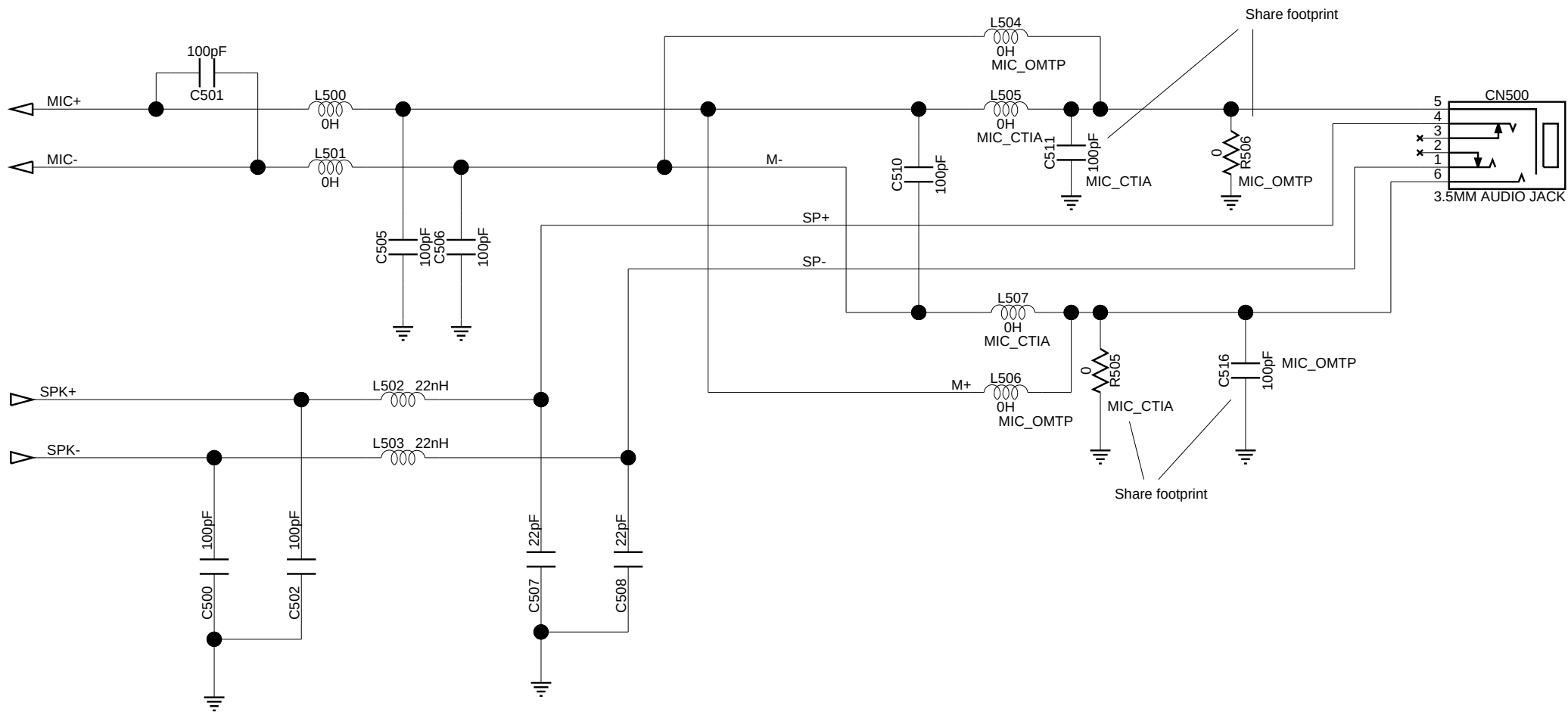
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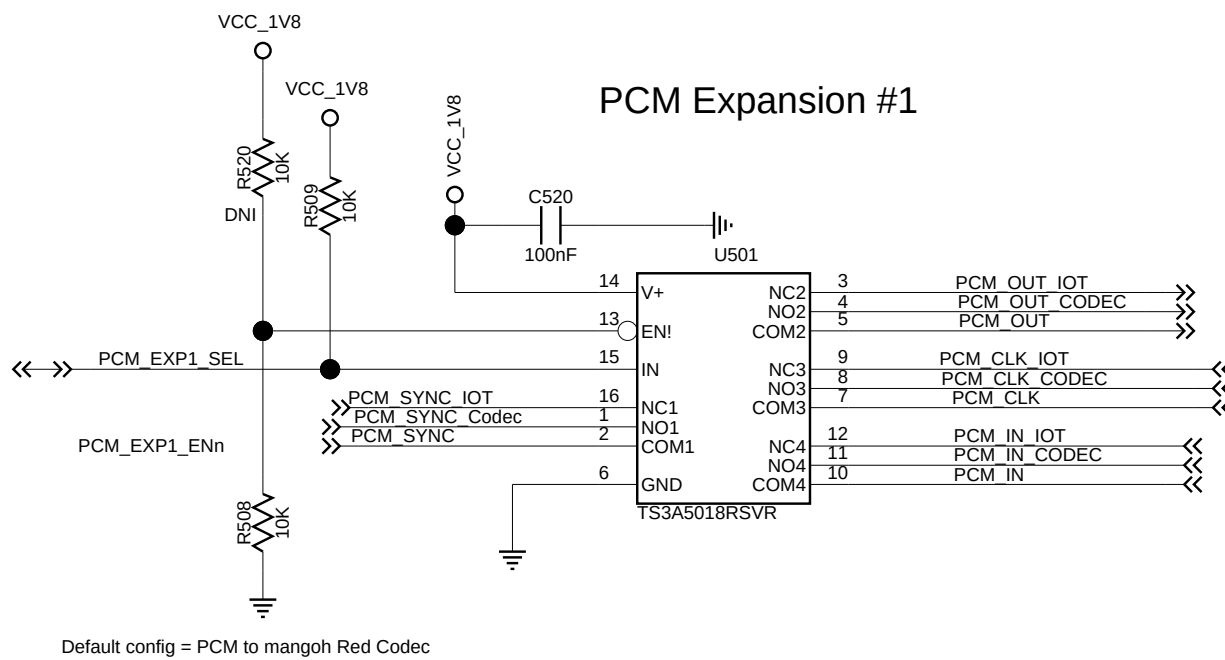
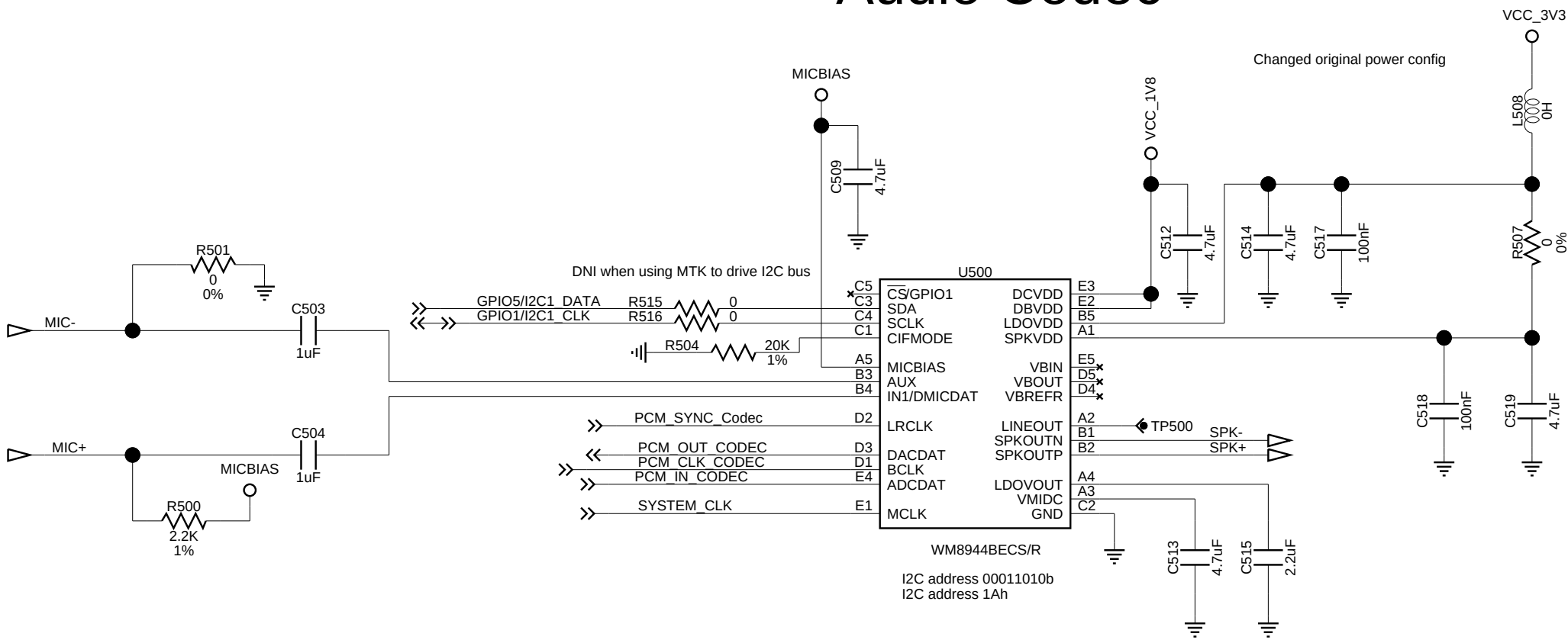
|           |           |
|-----------|-----------|
| PROJECT   | MANGO RED |
| SCHEMATIC | 2500927   |

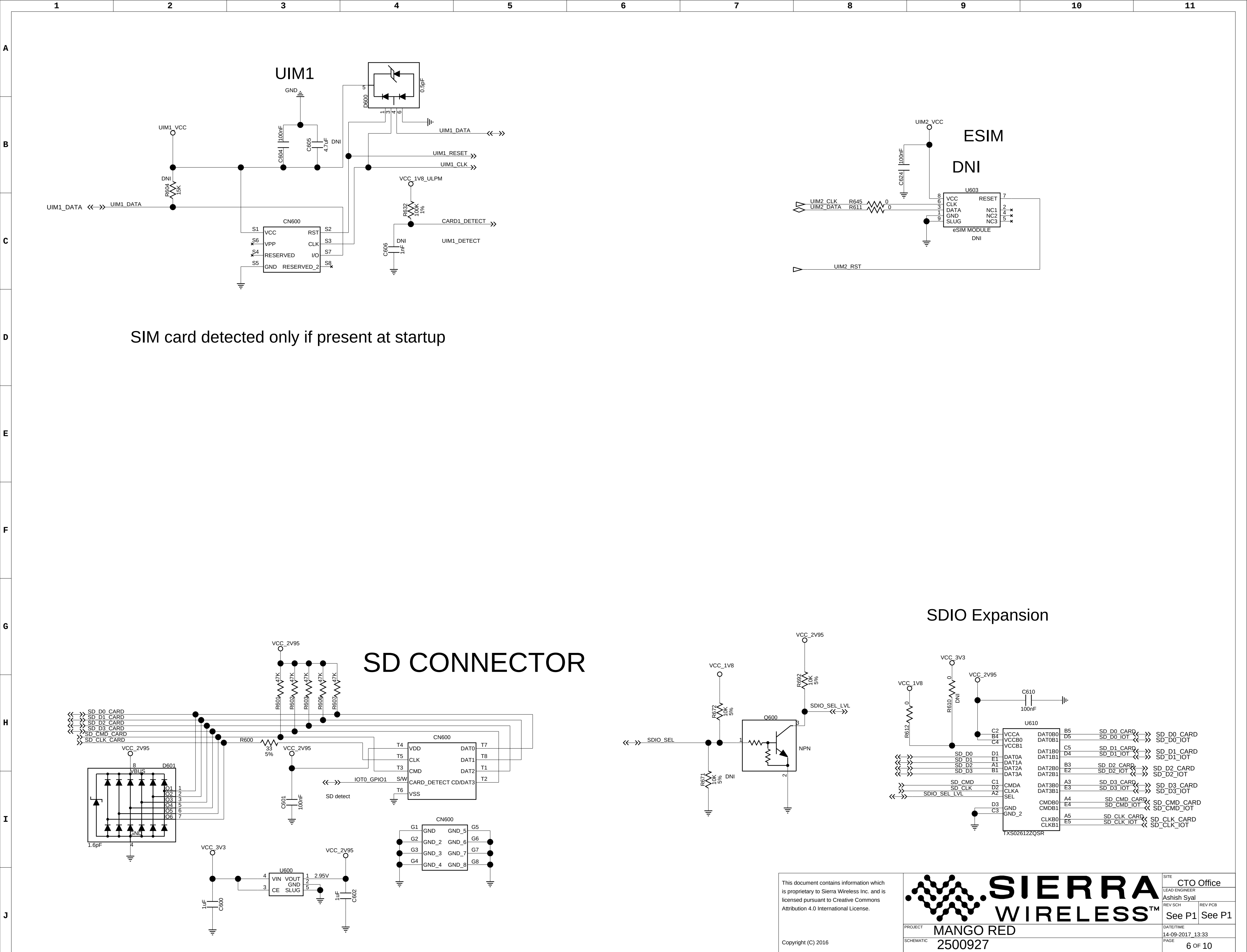
|                 |         |
|-----------------|---------|
| CTO Office      |         |
| SENIOR ENGINEER |         |
| Shish Syal      |         |
| REV SCH         | REV PCB |
| See P1          | See P1  |
| DATE/TIME       |         |
| 06-2017 14:16   |         |
| PAGE            |         |
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# Audio Source Selection



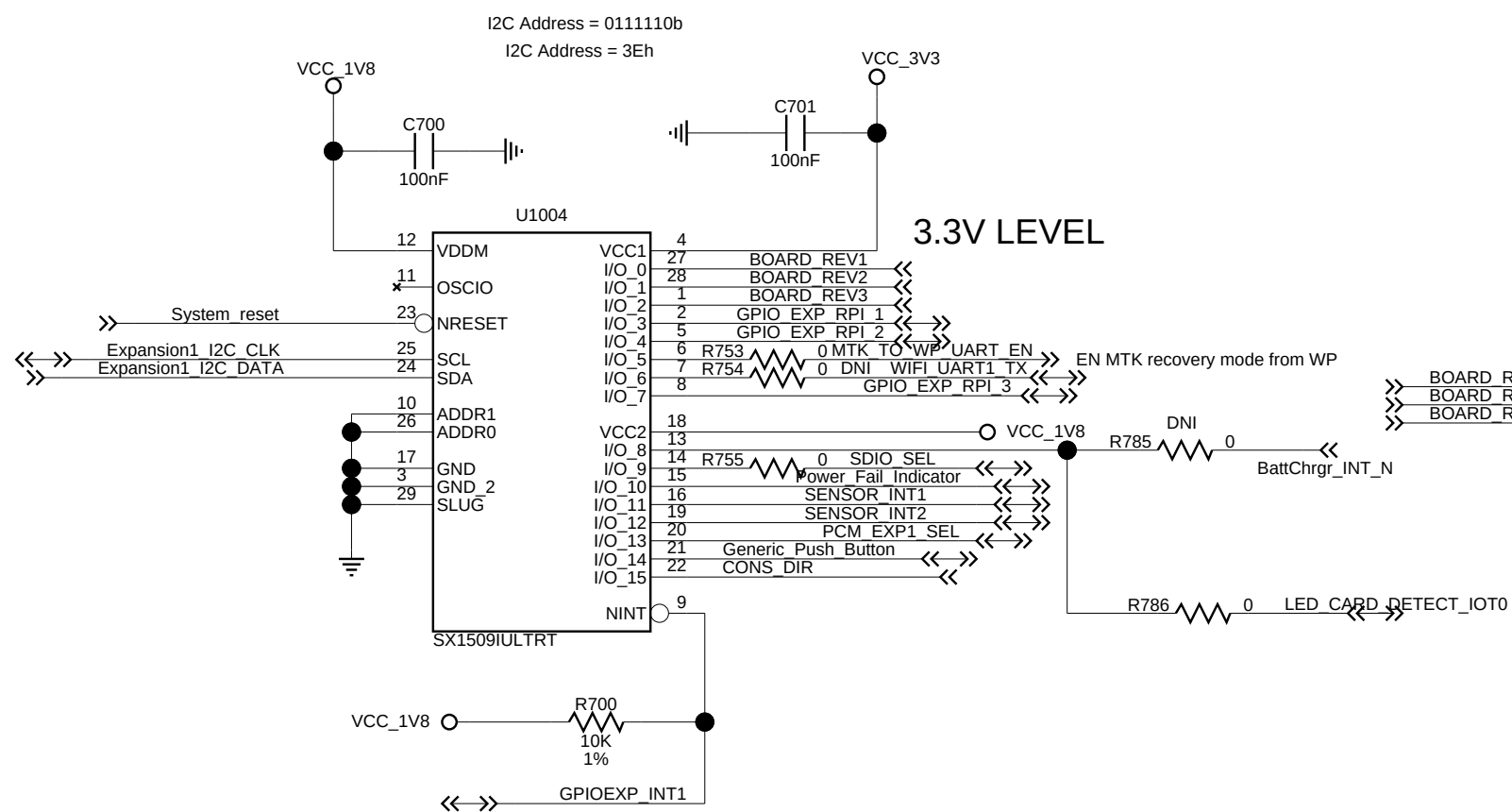
# Audio Codec



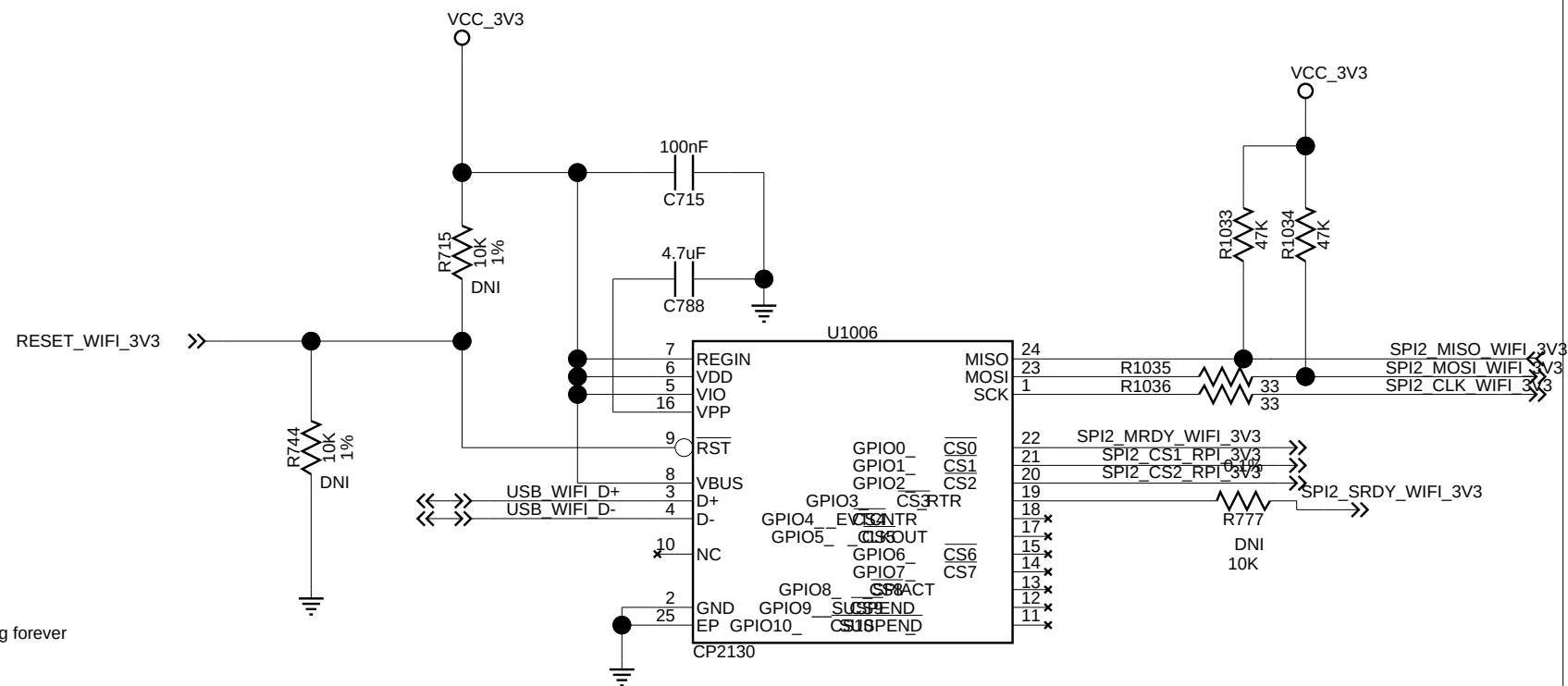
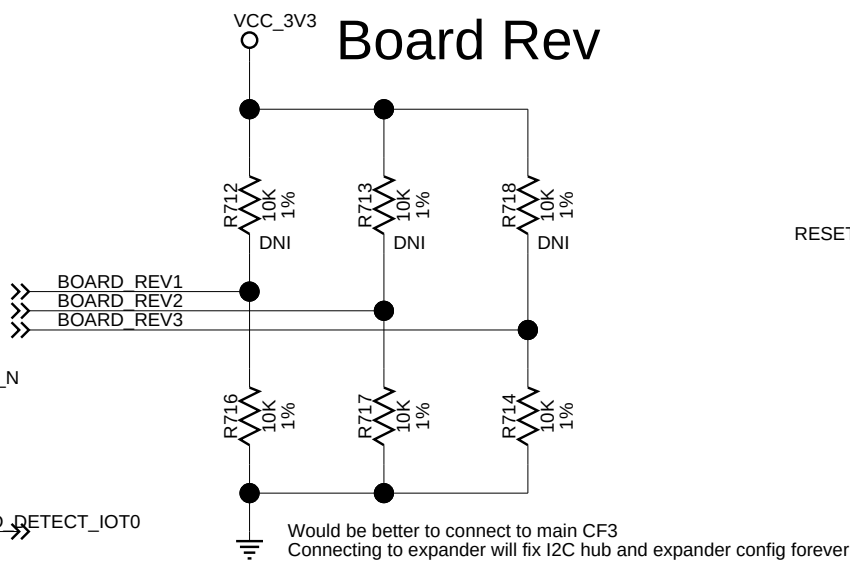




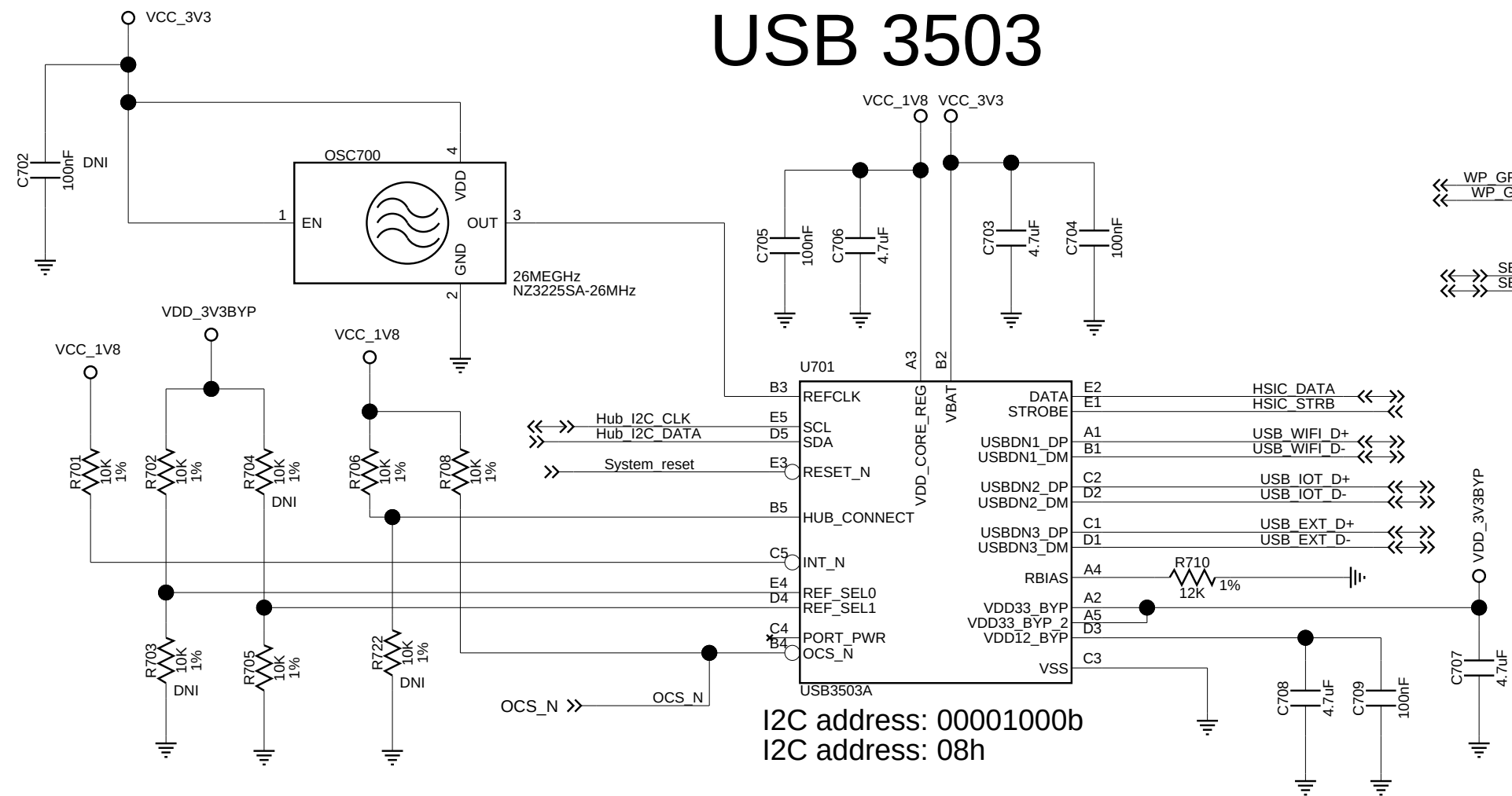
## GPIO Expander#1



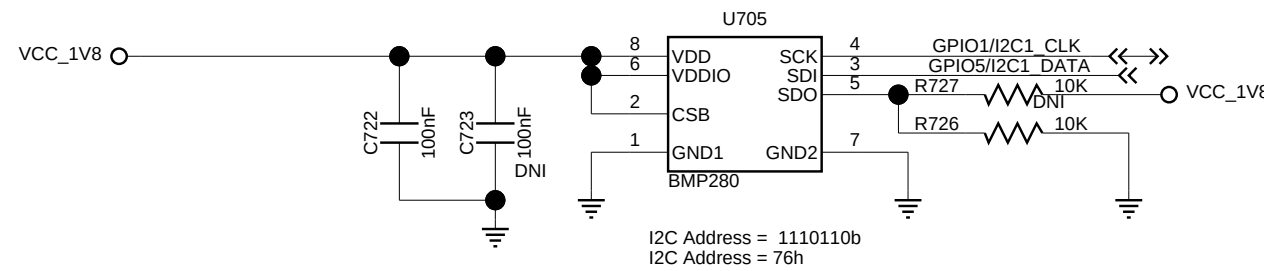
## Board Rev



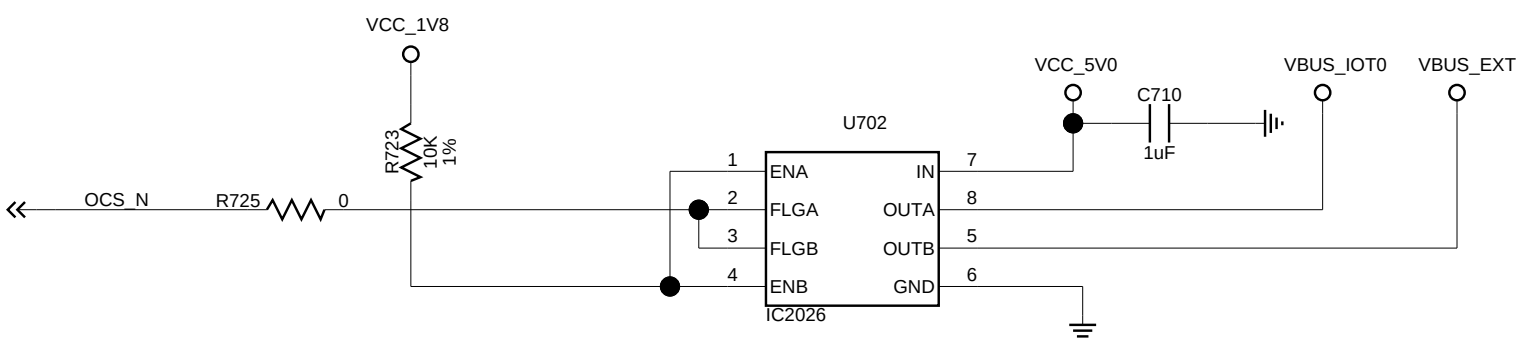
## USB 3503



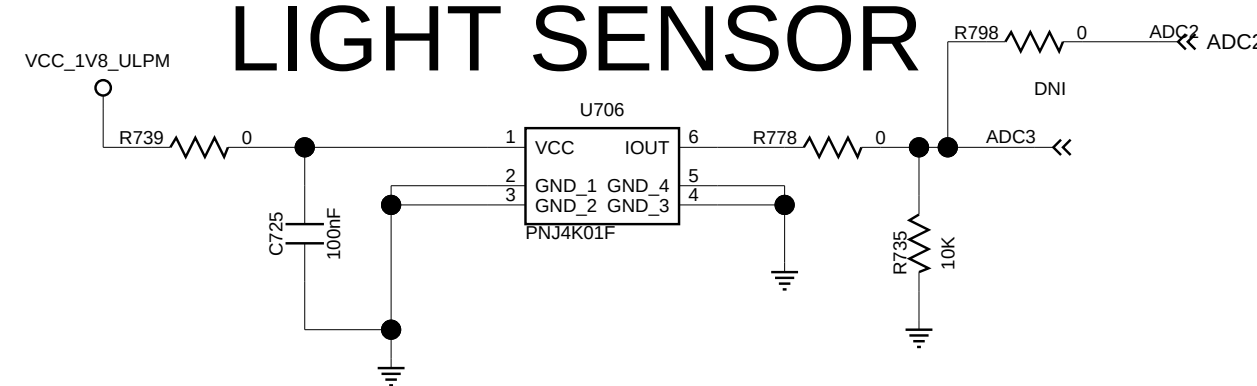
## ACCELEROMETER AND GYROSCOPE PRESSURE SENSOR



## USB Downstream Power

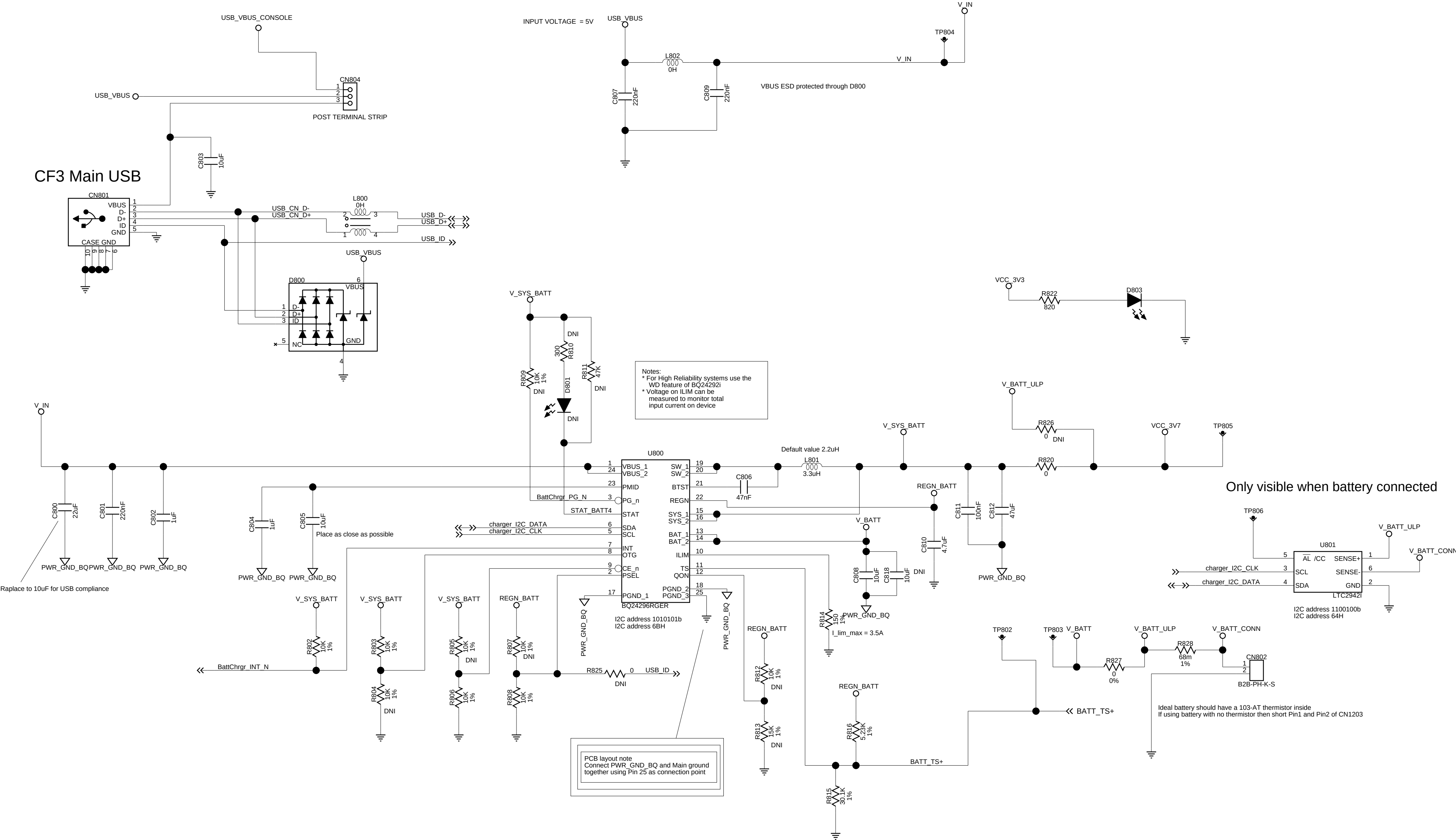


## LIGHT SENSOR



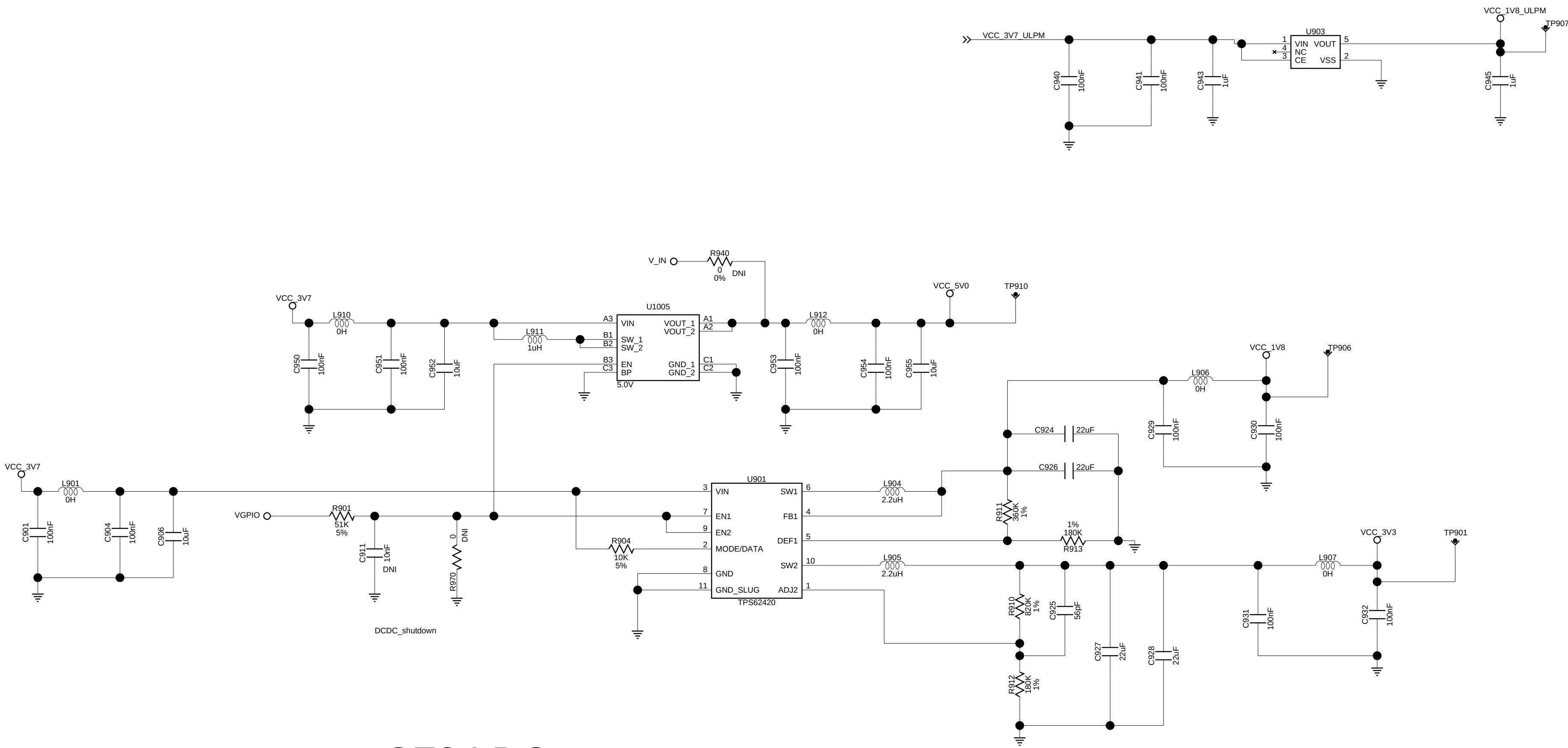
Power can come from either Main or uUSB-Power connectors

# PSU Front End and 3.7V DC/DC converter

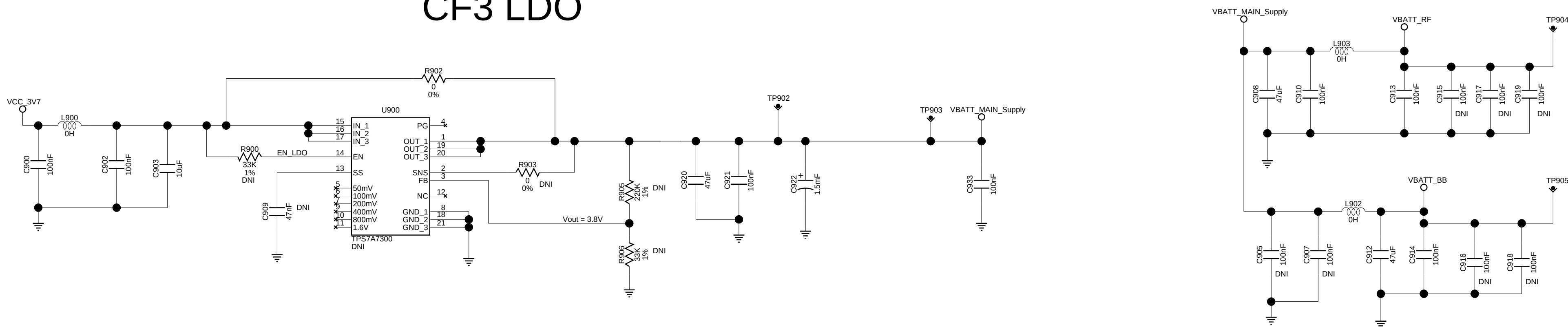




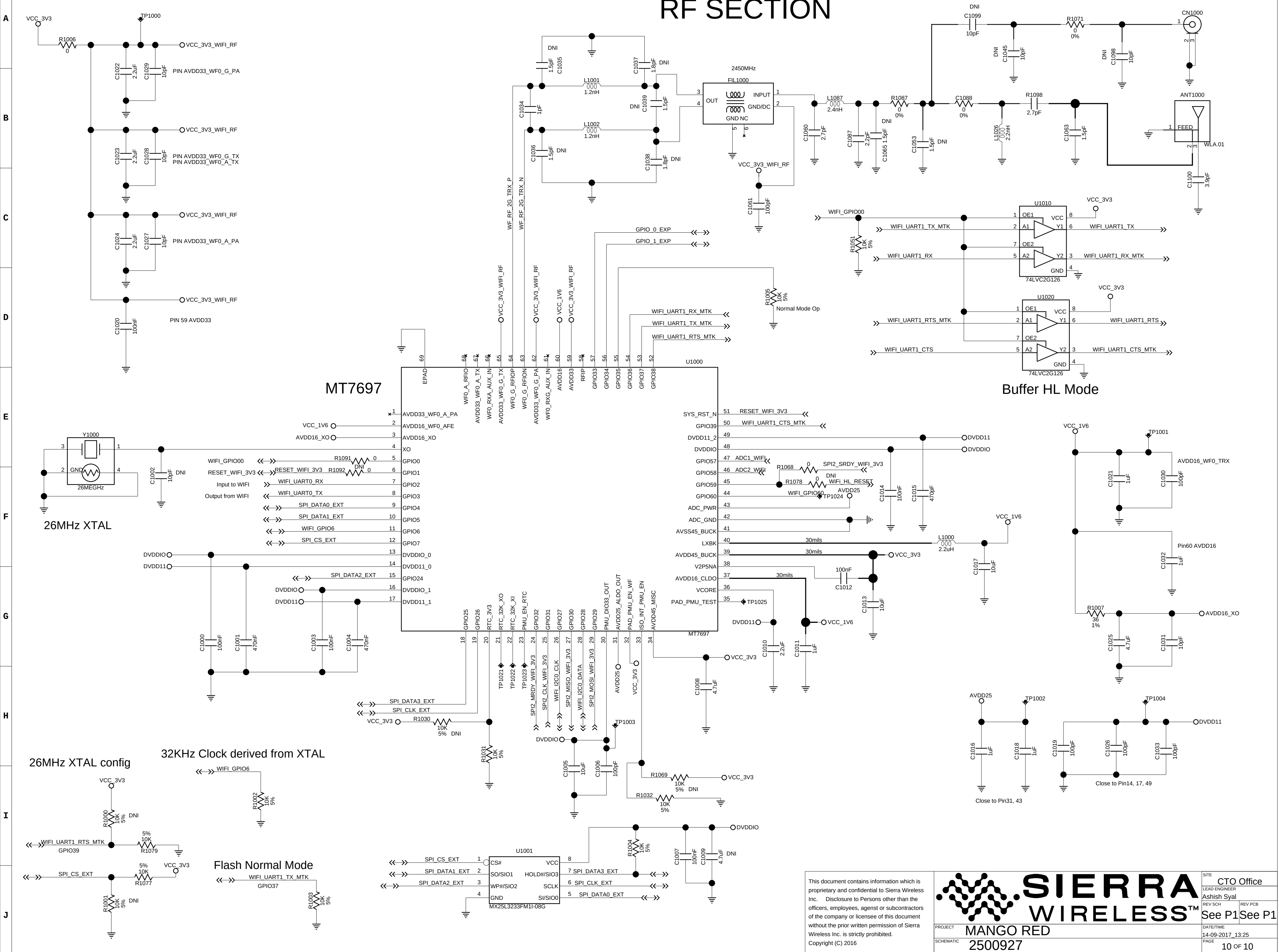
# 3V3 and 1V8 Buck \* 5V0 Boost



# CF3 LDO



# RF SECTION



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