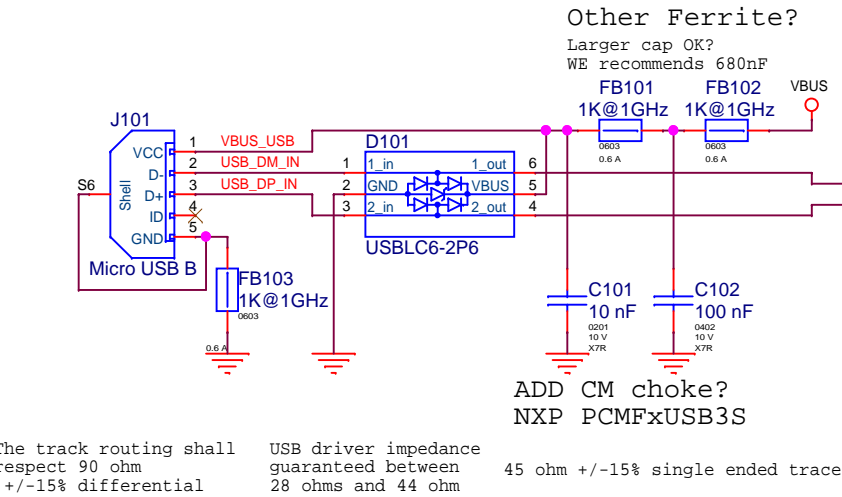
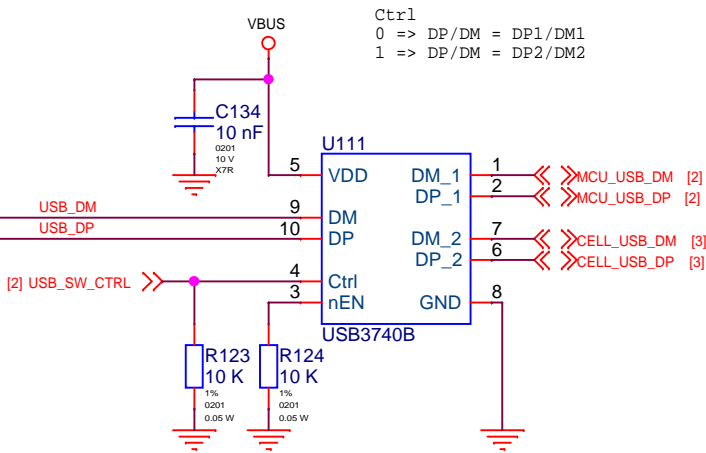


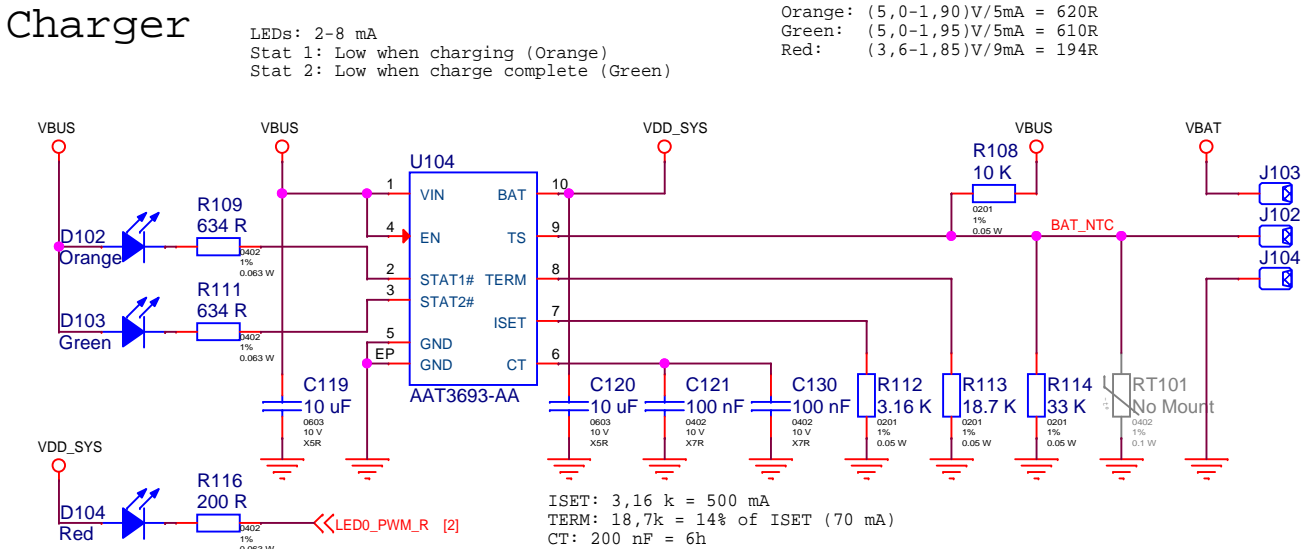
Micro USB  
TE 2173157-2



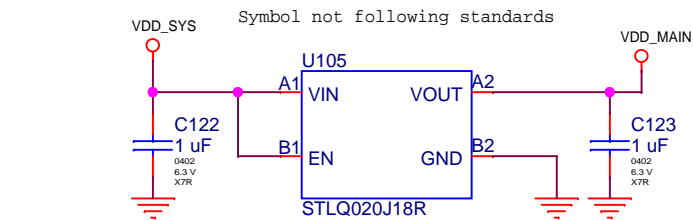
USB Switch



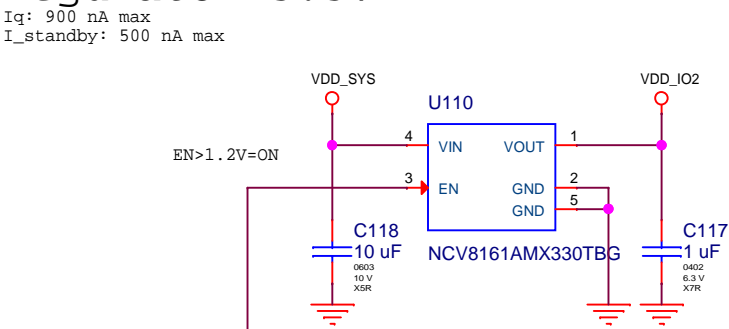
Charger



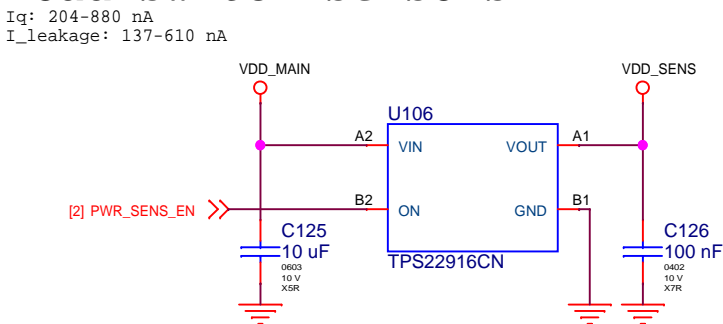
Regulator 1.8V



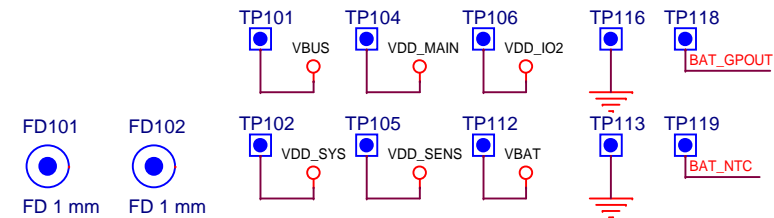
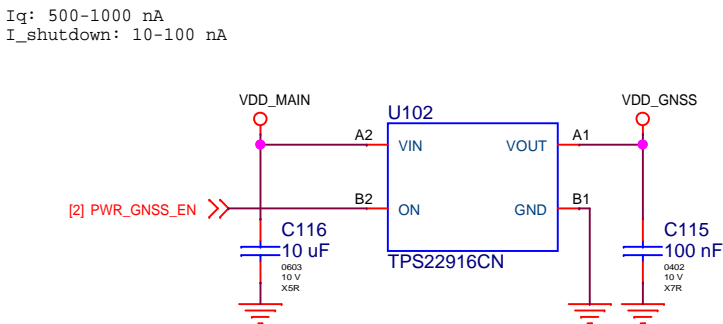
Regulator 3.3V



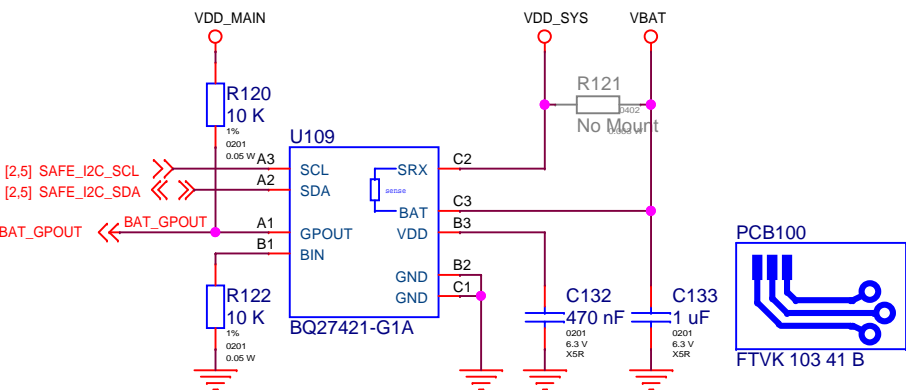
Load switch sensors



Load switch GNSS



Fuel Gauge



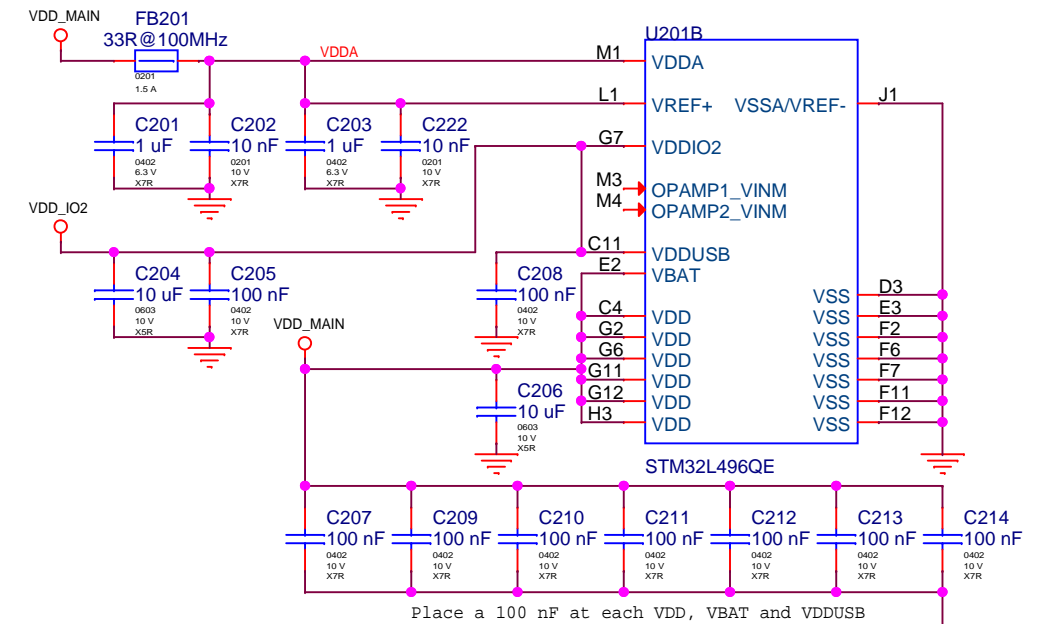
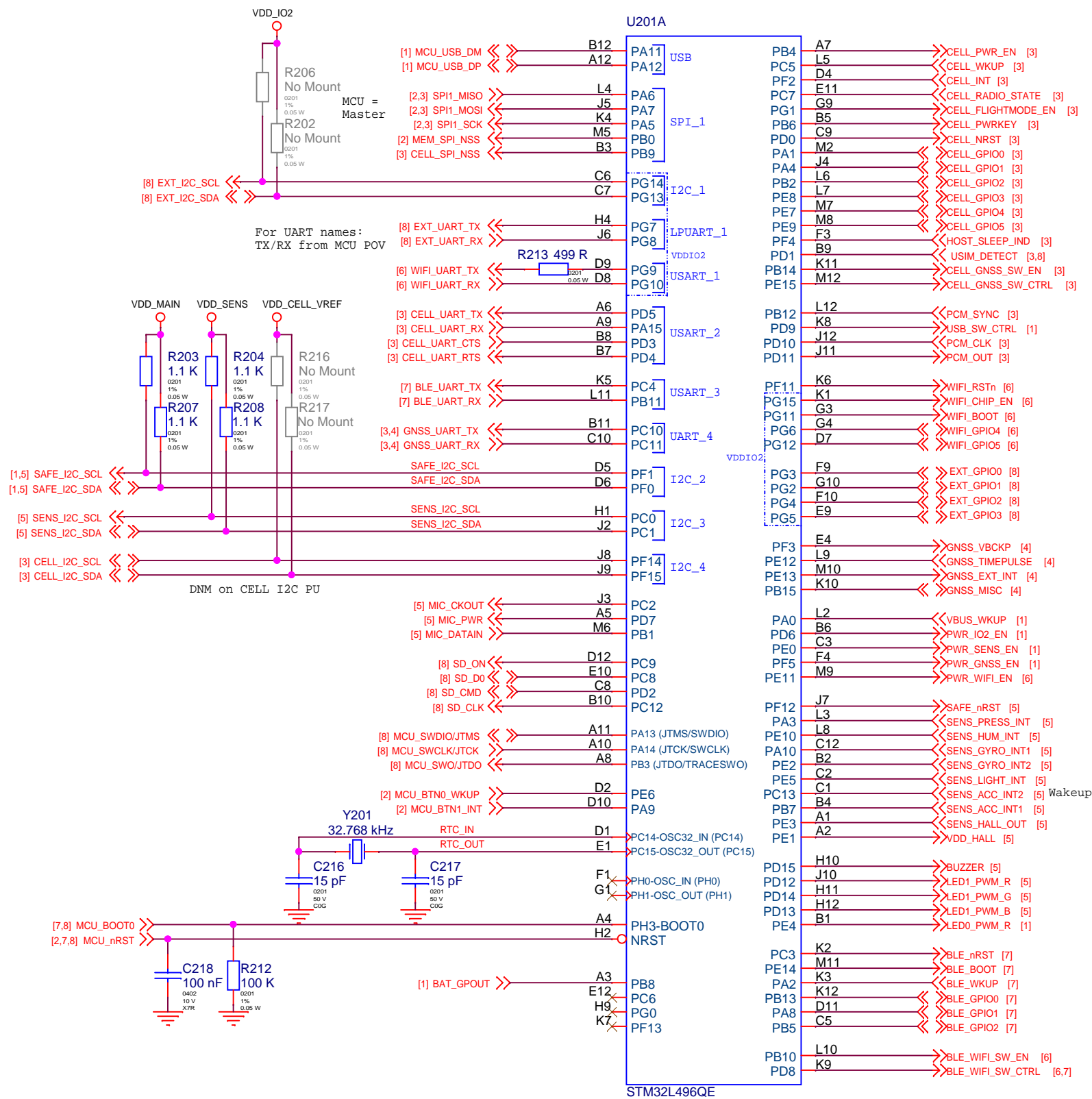
flex

Entei  
1 Power

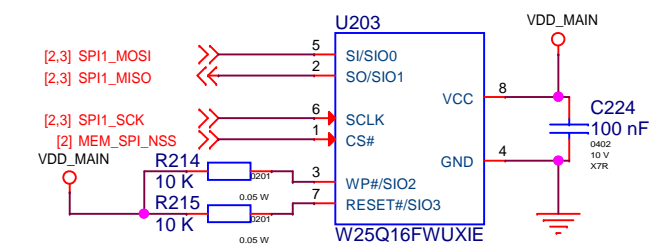
Flex  
Datalinjen 3A  
583 30 Linköping  
Sweden

|                               |                                   |                            |
|-------------------------------|-----------------------------------|----------------------------|
| Product Number<br>FROA 103 41 | Revision<br>C                     | Variant<br>1 Entei + Ditto |
| Designer<br>LKPLKIH           | Date<br>Monday, February 25, 2019 | Page<br>1 of 8             |
| Size<br>A3                    |                                   |                            |

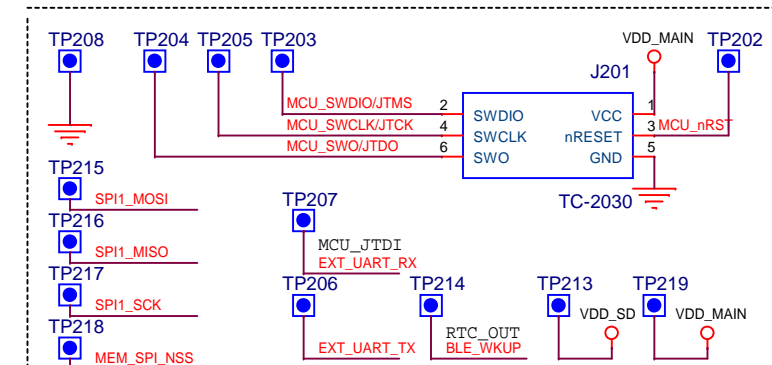
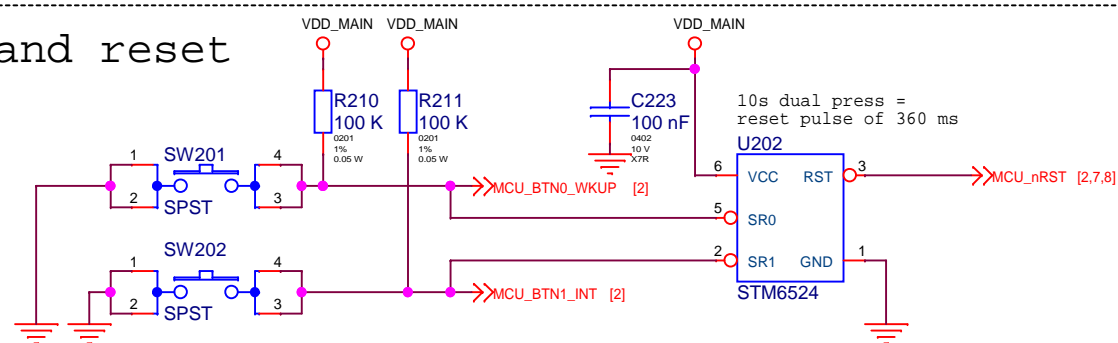
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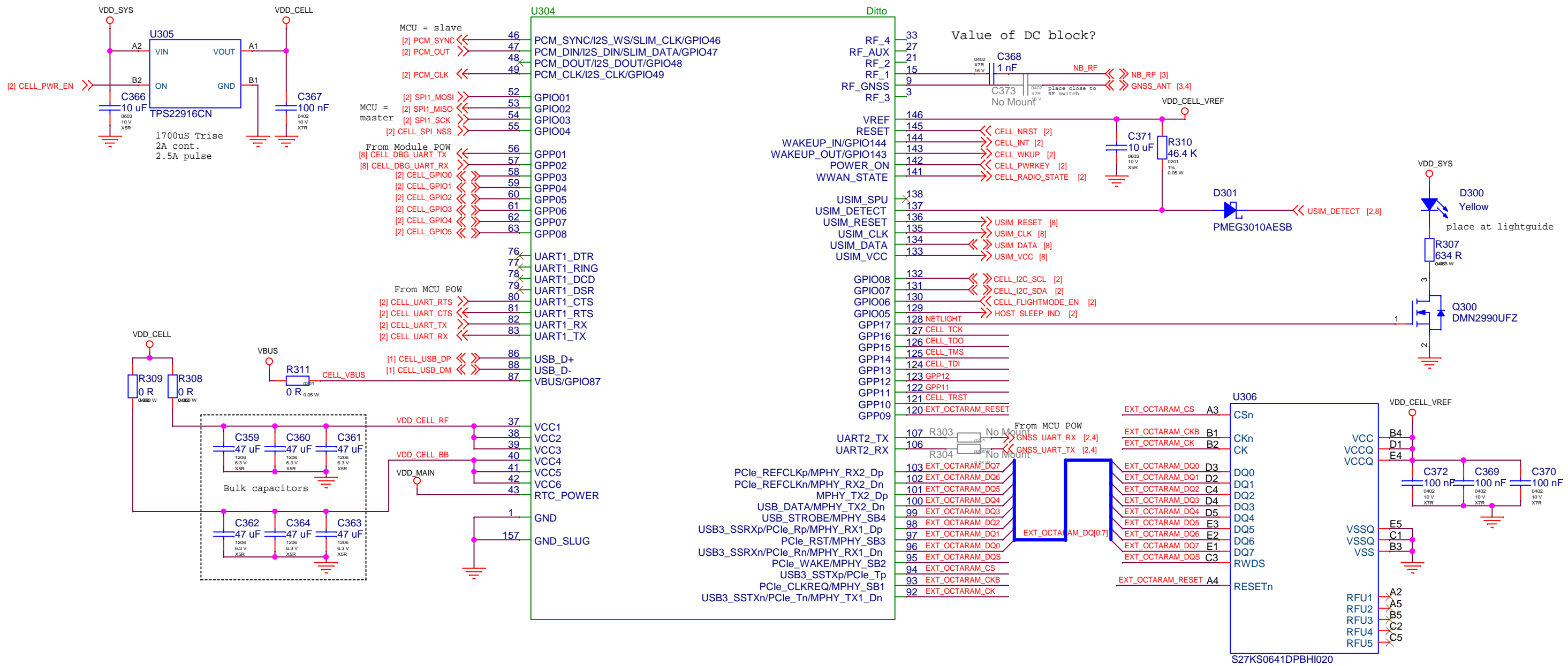
## Flash memory



## Buttons and reset



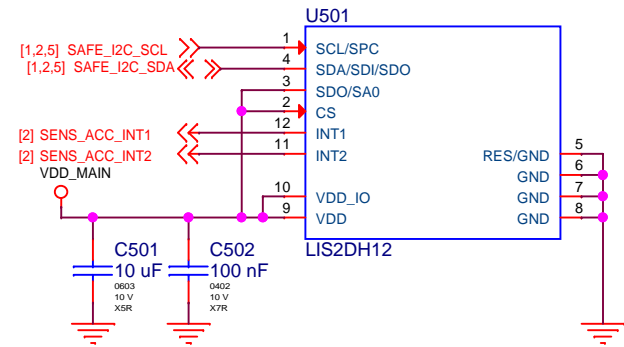
|   |                                   |                            |            |
|---|-----------------------------------|----------------------------|------------|
| <b>flex</b>   |                                   | <b>Entei</b><br>2 MCU      |            |
| Flex<br>Datalinjen 3A<br>583 30 Linköping<br>Sweden   |                                   |                            |            |
| Product Number<br>FROA 103 41   | Revision<br>C                     | Variant<br>1 Entei + Ditto |            |
| Designer<br>LKPLKIH   | Date<br>Monday, February 25, 2019 | Page<br>2 of 8             | Size<br>A3 |
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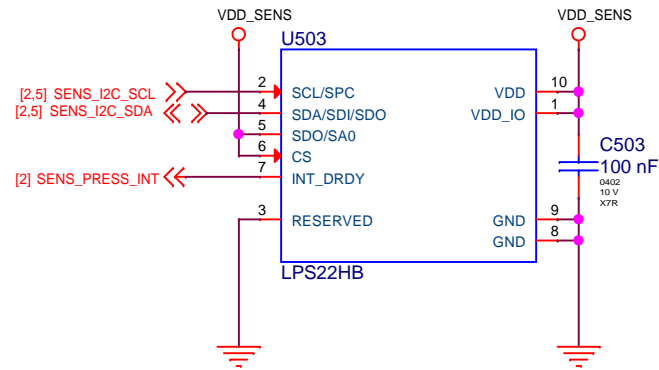
3-axis accelerometer

I2C address: 001 100[1]  
Connecting SDO/SA0 pin to ground will induce 130uA@3.3V current. The SA0 has an internal pull up.  
Data:  
Vin 1,7-3,6  
2 uA @ 1 Hz ODR  
6 uA @ 50 Hz ODR  
0.5 uA @ power down



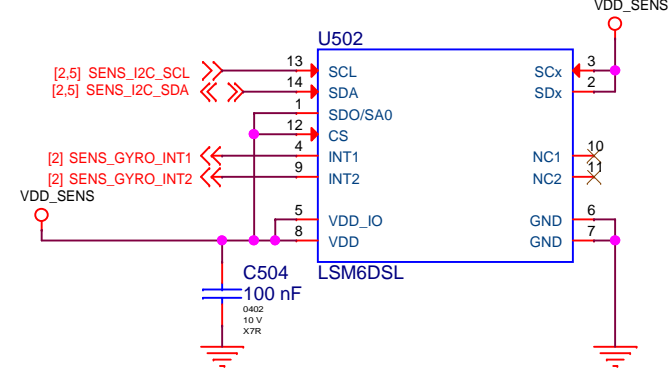
Pressure sensor

I2C address: 101 110[1]  
Data:  
Vin 1,7-3,6  
3 uA @ 1 Hz ODR (LC\_EN=0)  
12 uA @ 1 Hz ODR (LC\_EN=1)  
1 uA @ power down



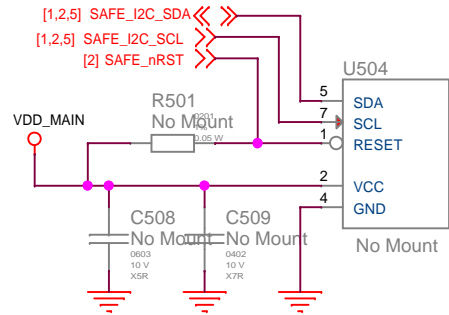
3D Gyroscope and Accelerometer

I2C address: 110 101[1]  
Data:  
Vin 1,71-3,6  
650 uA @ 1.6 kHz ODR  
290 uA @ 52 Hz ODR  
3 uA @ power down



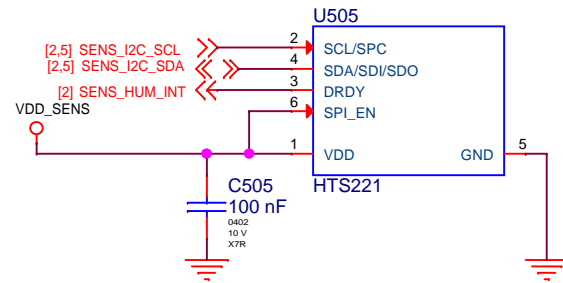
Security

I2C address: 010 0000 [programmable]  
Data:  
Vin 1,6-5,5  
1.1 uA @ Hibernate  
0.25 mA @ Standby  
0.5 mA @ Reset  
18 mA @ Processing



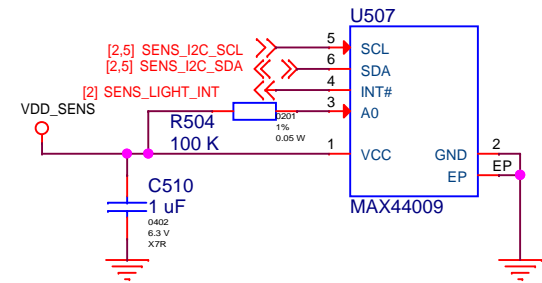
Humidity sensor

I2C address: 101 1111  
Data:  
Vin 1,7-3,6  
2.1 uA @ 1 Hz ODR, 16/32 AVR  
22.5 uA @ 1 Hz ODR, 256/512 AVR  
0.5 uA @ power down



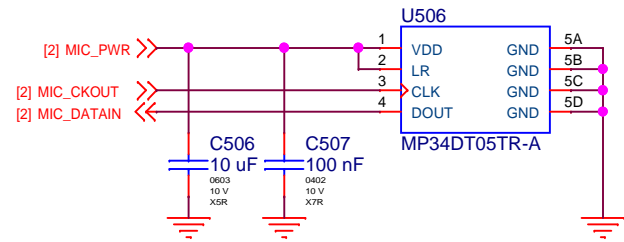
Ambient Light Sensor

I2C address: 100 101[1]  
INT# is active low and Open Drain  
Data:  
Vin 1,7-3,6  
Current if 1,8V  
0,5 uA if < 1k lux  
1 uA if < 10k lux  
3 uA if > 100k lux

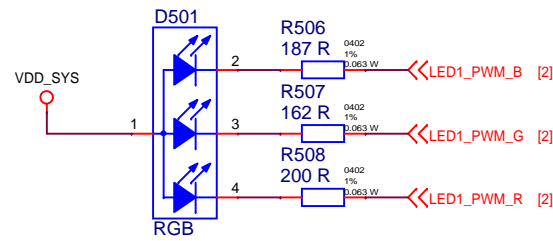


MIC

PDM output  
Data:  
Vin 1,64-3,6  
600 uA @ normal mode  
20 uA @ power-down

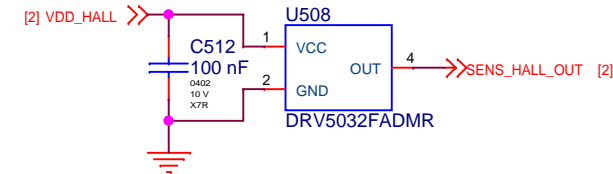


RGB LED1

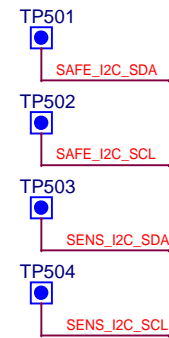
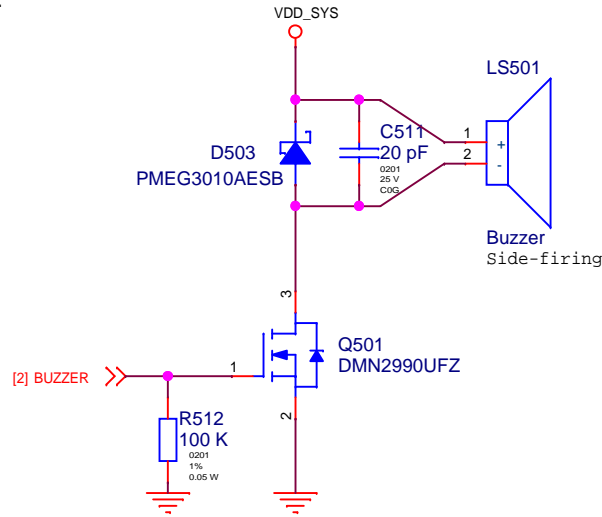


Blue: (3,7-2,75)V/5mA = 190R  
Green: (3,7-2,90)V/5mA = 160R  
Red: (3,7-1,9)V/9mA = 200R

Hall Effect Sensor

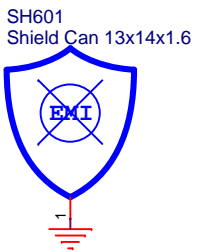
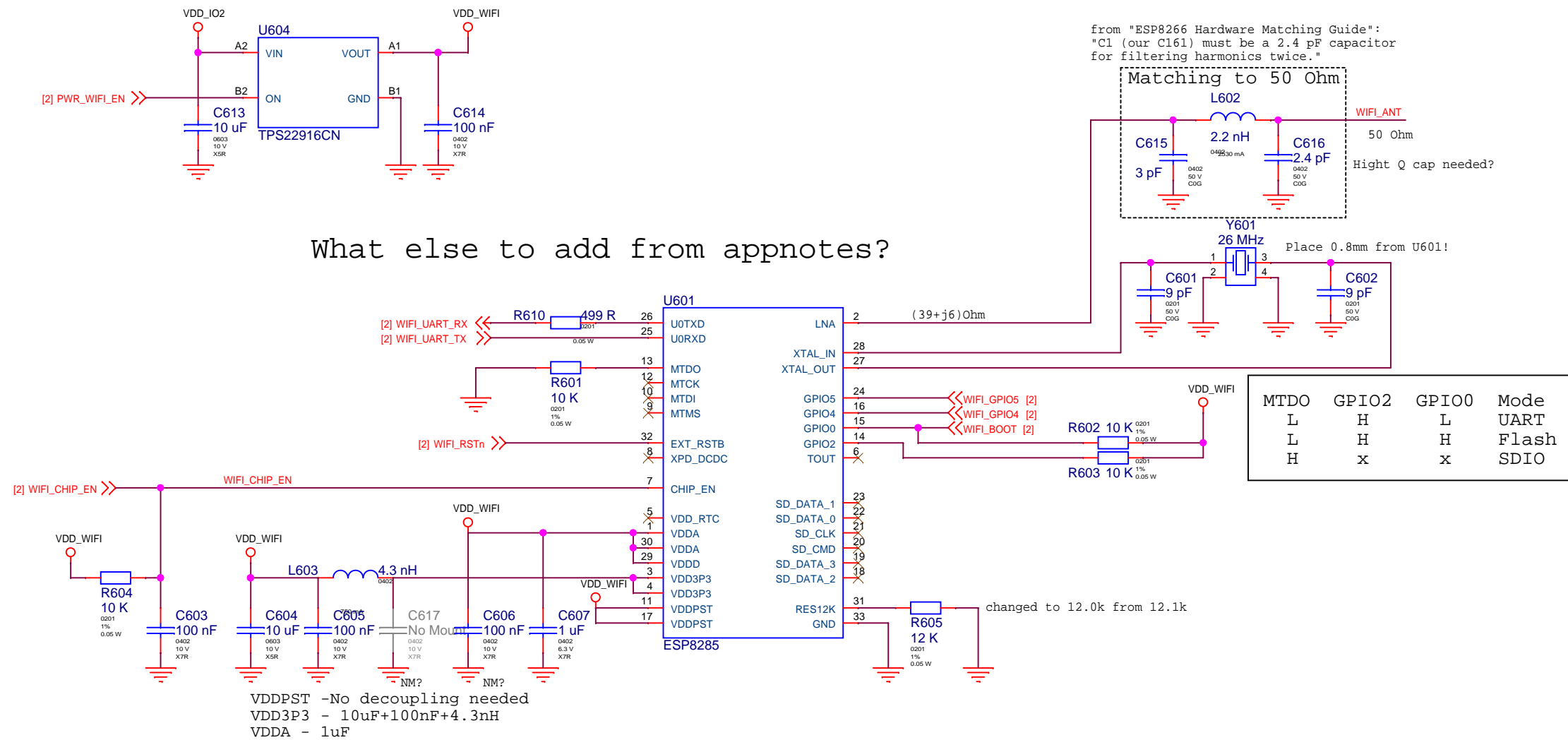


Buzzer

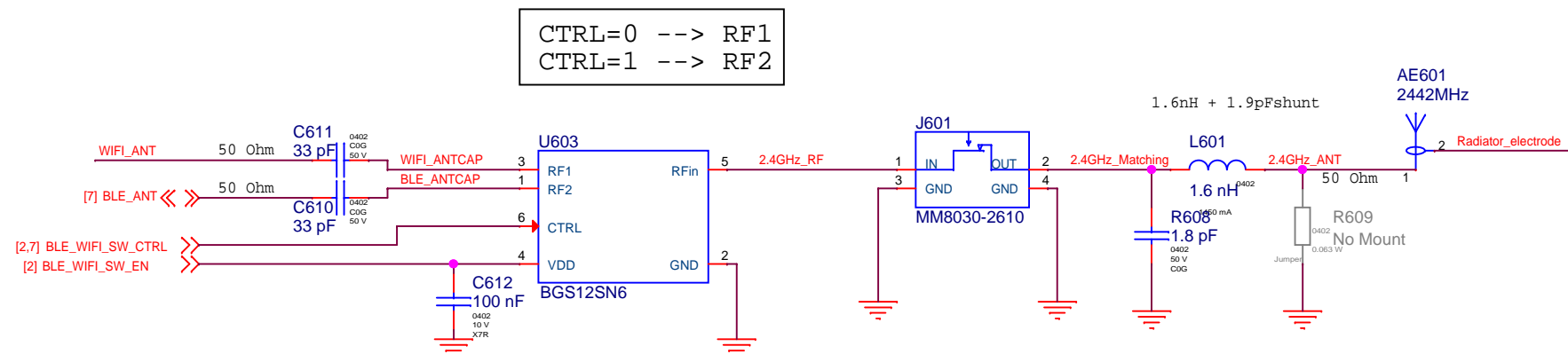




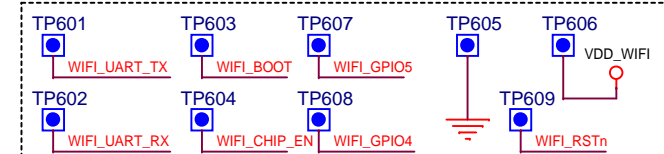
## WIFI

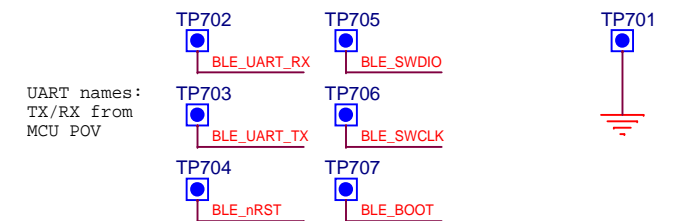
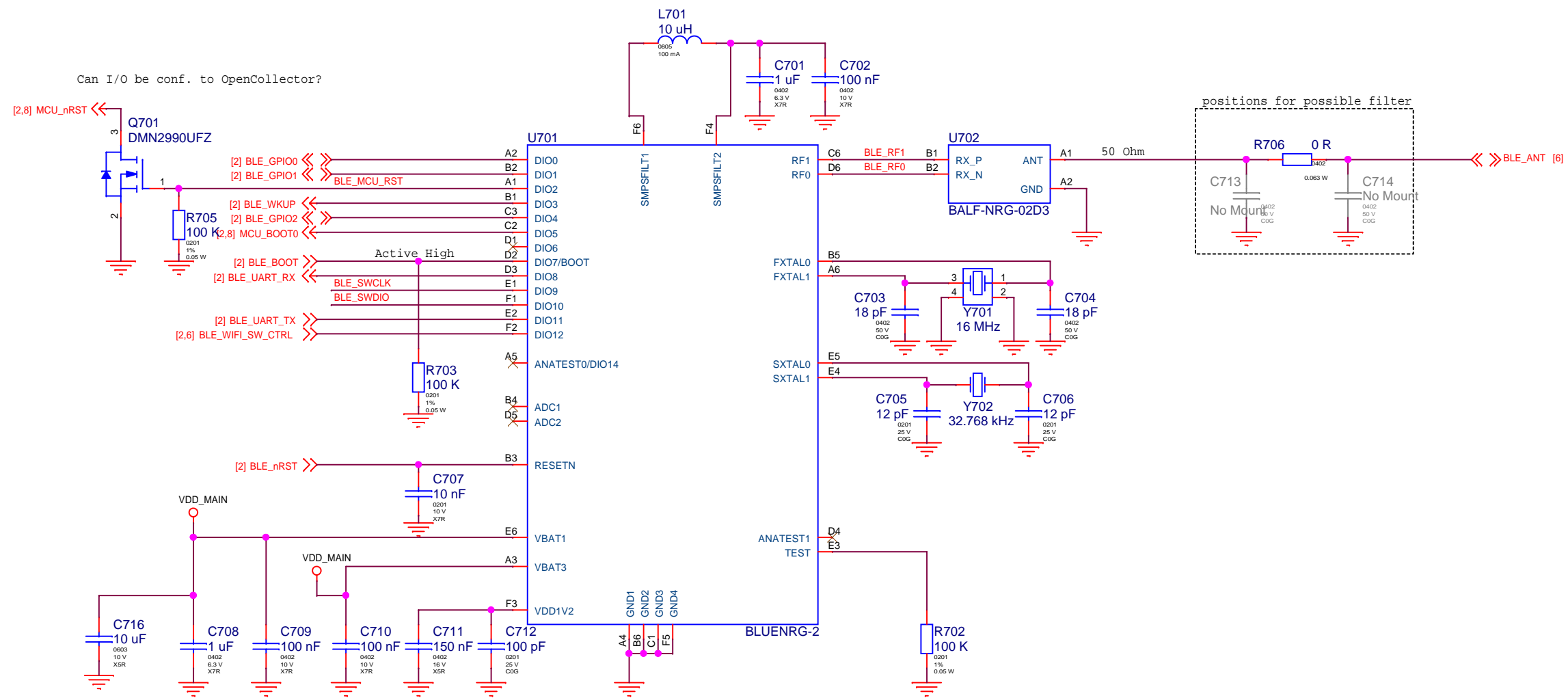


## RF-Switch, BLE and WIFI

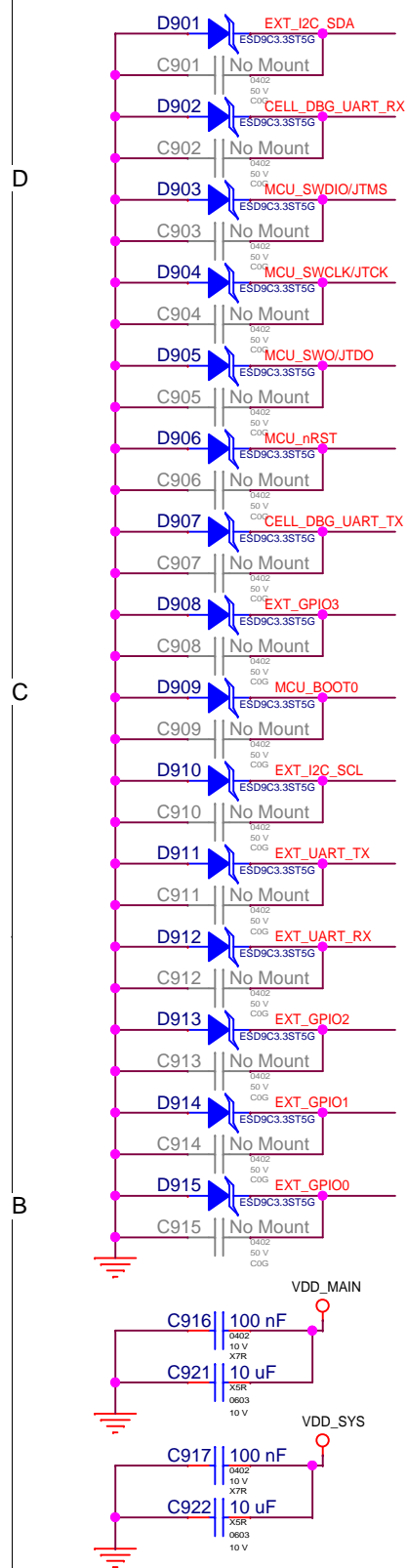


For UART names:  
TX/RX from MCU POV



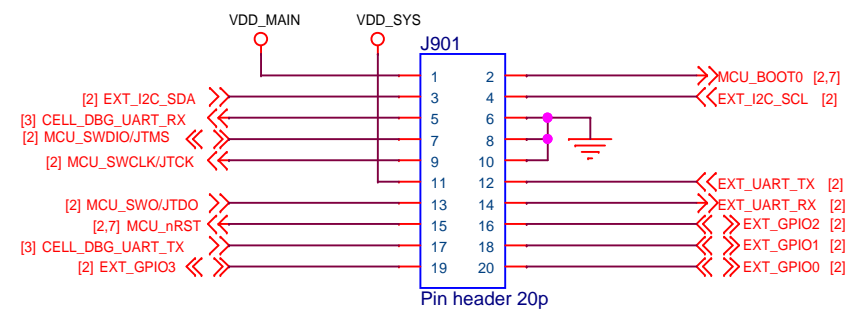


## ESD Protection

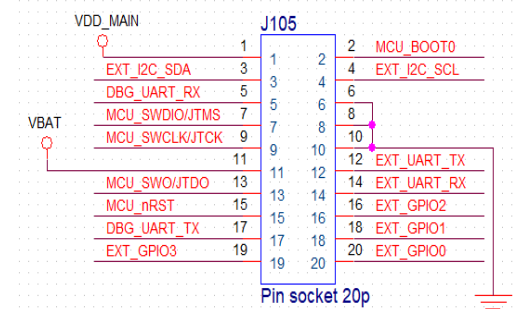


A

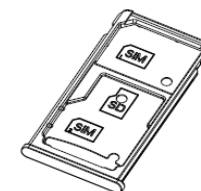
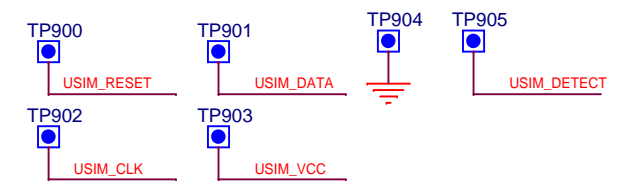
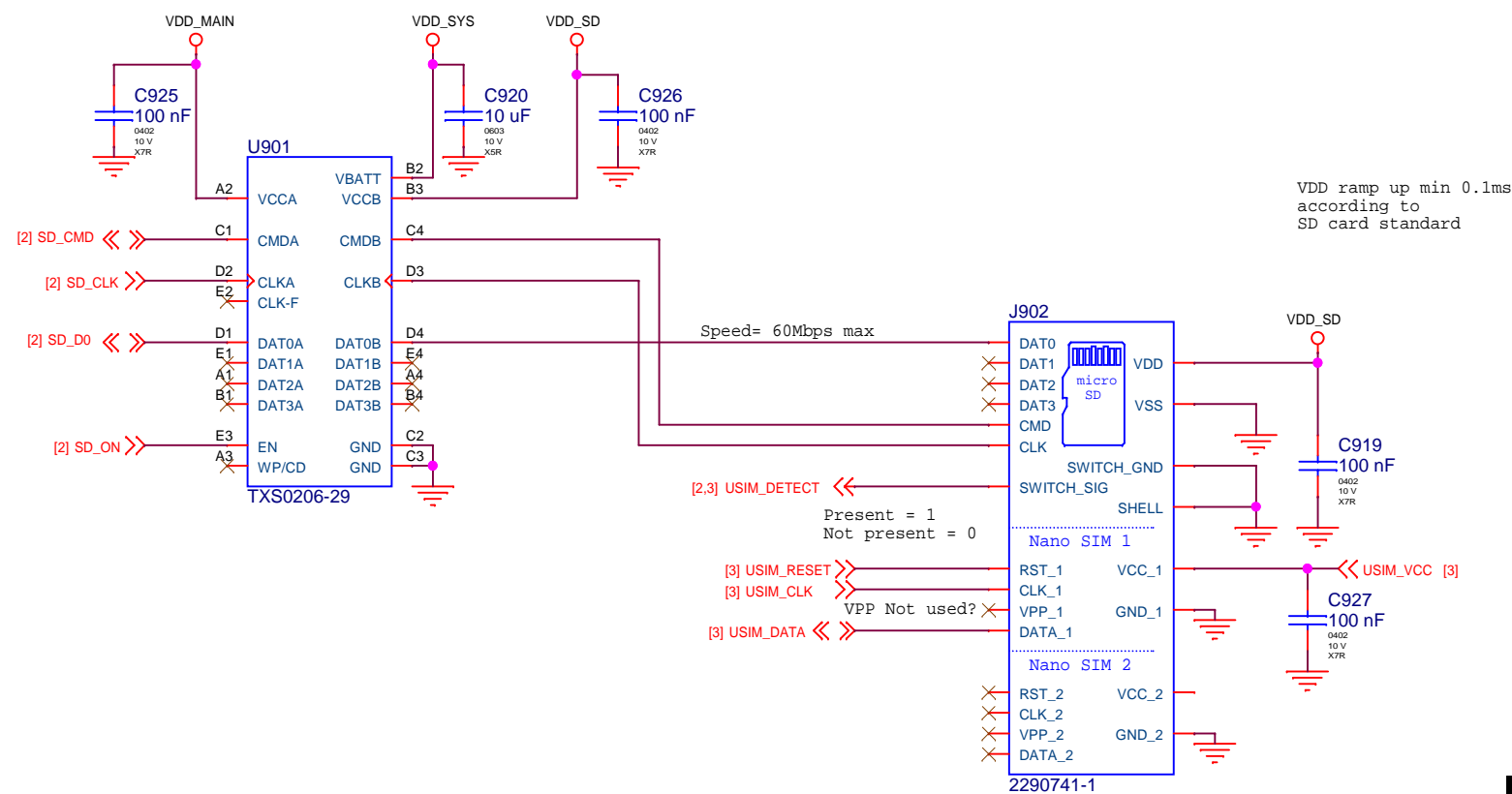
## External connector




Just for information:  
This is how the connector is mapped on Bool



## Micro SD slot



|   |                                   |                            |   |            |  |
|---|-----------------------------------|----------------------------|---|------------|--|
|    |                                   |                            | <b>Entei</b><br><b>8 External connector</b>         |            |  |
|   |                                   |                            | Flex<br>Datalinjen 3A<br>583 30 Linköping<br>Sweden |            |  |
| Product Number<br>FROA 103 41   | Revision<br>C                     | Variant<br>1 Entei + Ditto |   |            |  |
| Designer<br>LKPLKIHL  | Date<br>Monday, February 25, 2019 | Page<br>8 of 8             |   | Size<br>A3 |  |
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