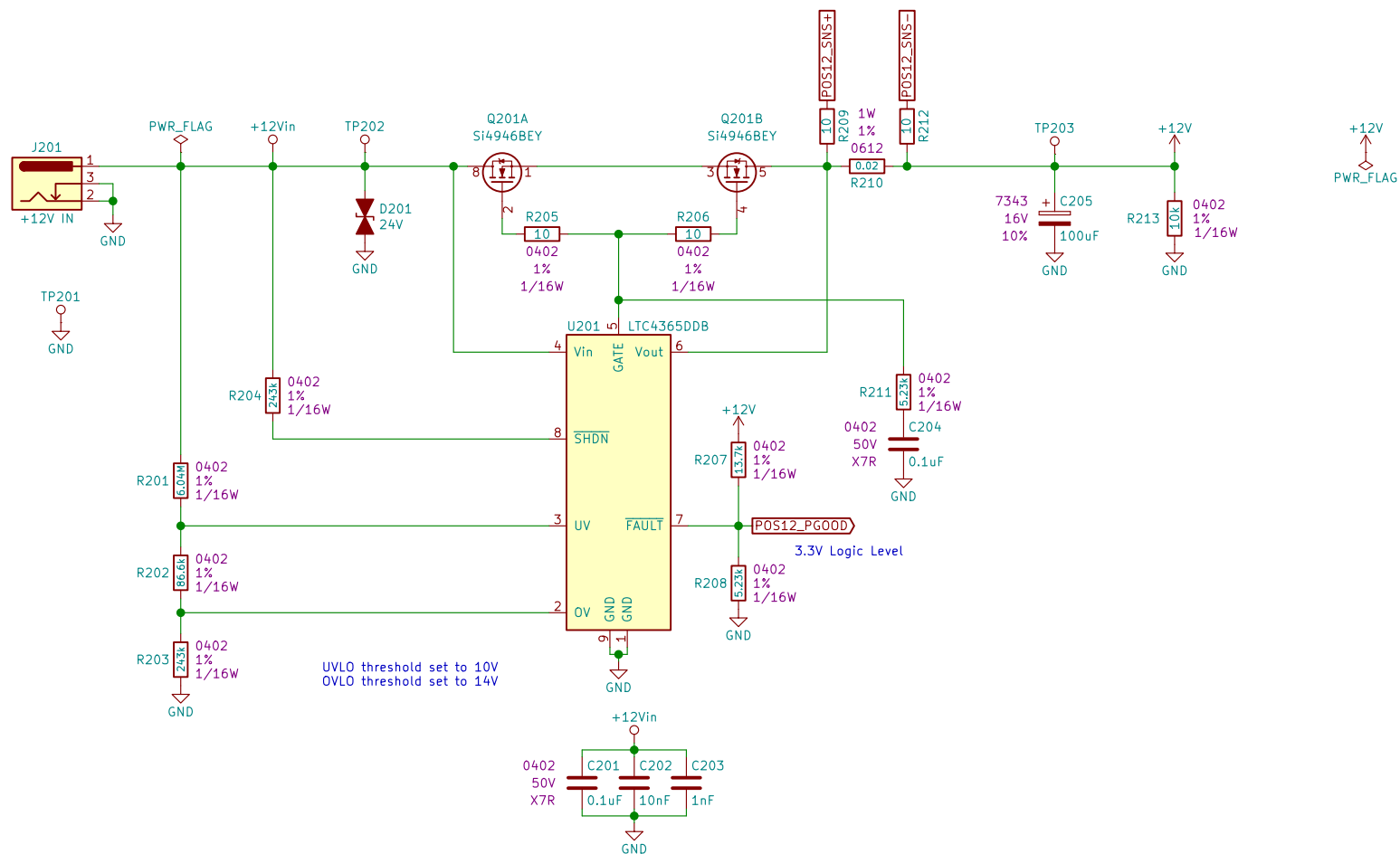


|                              |                  |  |   |  |  |         |                  |        |                              |  |          |   |
|------------------------------|------------------|--|---|--|--|---------|------------------|--------|------------------------------|--|----------|---|
|                              | 1                | 2  | 3 | 4  | 5  |         |                  |        |                              |  |          |   |
| A                            |                  | Sheet: +12V Input<br>File: POS12_Input.sch<br>Sheet: +12V Telemetry<br>File: POS12_Telemetry.sch<br>Sheet: +3.3V Power Supply<br>File: POS3P3_Power_Supply.sch<br>Sheet: +3.3V Telemetry<br>File: POS3P3_Telemetry.sch<br>Sheet: +1.8V Power Supply<br>File: POS1P8_Power_Supply.sch<br>Sheet: +1.8V Telemetry<br>File: POS1P8_Telemetry.sch<br>Sheet: PIC32MZ Programming<br>File: PIC32MZ_Programming.sch<br>Sheet: PIC32MZ Bypass<br>File: PIC32MZ_Bypass.sch<br>Sheet: PIC32MZ Clocking<br>File: PIC32MZ_Clocking.sch<br>Sheet: PIC32MZ<br>File: PIC32MZ.sch<br>Sheet: USB UART Bridge<br>File: USB_UART_Bridge.sch<br>Sheet: USB Telemetry<br>File: USB_Telemetry.sch<br>Sheet: Time of Flight<br>File: Time_of_Flight.sch<br>Sheet: POX Sensor<br>File: POX_Sensor.sch<br>Sheet: Display<br>File: Display.sch<br>Sheet: Pushbuttons<br>File: Pushbuttons.sch |   | Sheet: PG00D LEDs<br>File: PG00D_LEDs.sch<br>Sheet: Status LEDs<br>File: Status_LEDs.sch<br>Sheet: Misc Circuits<br>File: Misc_Circuits.sch<br>Sheet: Mechanical<br>File: Mechanical.sch |  |         | A                |        |                              |  |          |   |
| B                            |                  |  |   |  |  | B       |                  |        |                              |  |          |   |
| C                            |                  |  |   |  |  | C       |                  |        |                              |  |          |   |
| D                            |                  |  |   |  | <div>Drew Maatman<br/>Sheet: /<br/>File: Pulse_Oximeter.sch<br/><b>Title: Pulse Oximeter</b><br/><table><tr><td>Size: A</td><td>Date: 2019-01-03</td><td>Rev: A</td></tr><tr><td colspan="2">KiCad E.D.A. kicad (5.1.4)-1</td><td>Id: 1/21</td></tr></table></div> | Size: A | Date: 2019-01-03 | Rev: A | KiCad E.D.A. kicad (5.1.4)-1 |  | Id: 1/21 | D |
| Size: A                      | Date: 2019-01-03 | Rev: A   |   |  |  |         |                  |        |                              |  |          |   |
| KiCad E.D.A. kicad (5.1.4)-1 |                  | Id: 1/21   |   |  |  |         |                  |        |                              |  |          |   |
|                              | 1                | 2  | 3 | 4  | 5  |         |                  |        |                              |  |          |   |



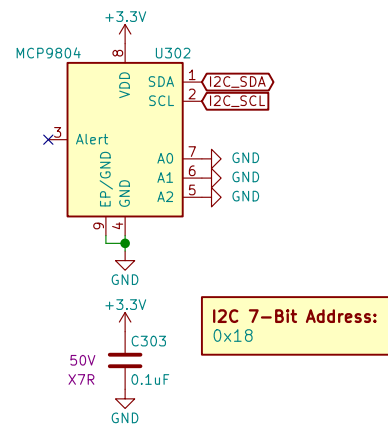
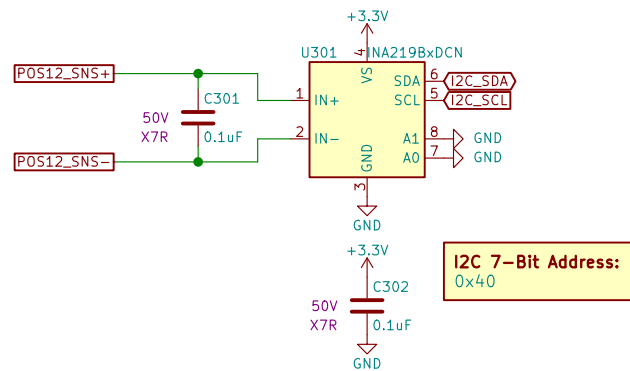
Drew Maatman

Sheet: /+12V Input/  
File: POS12\_Input.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 2/21



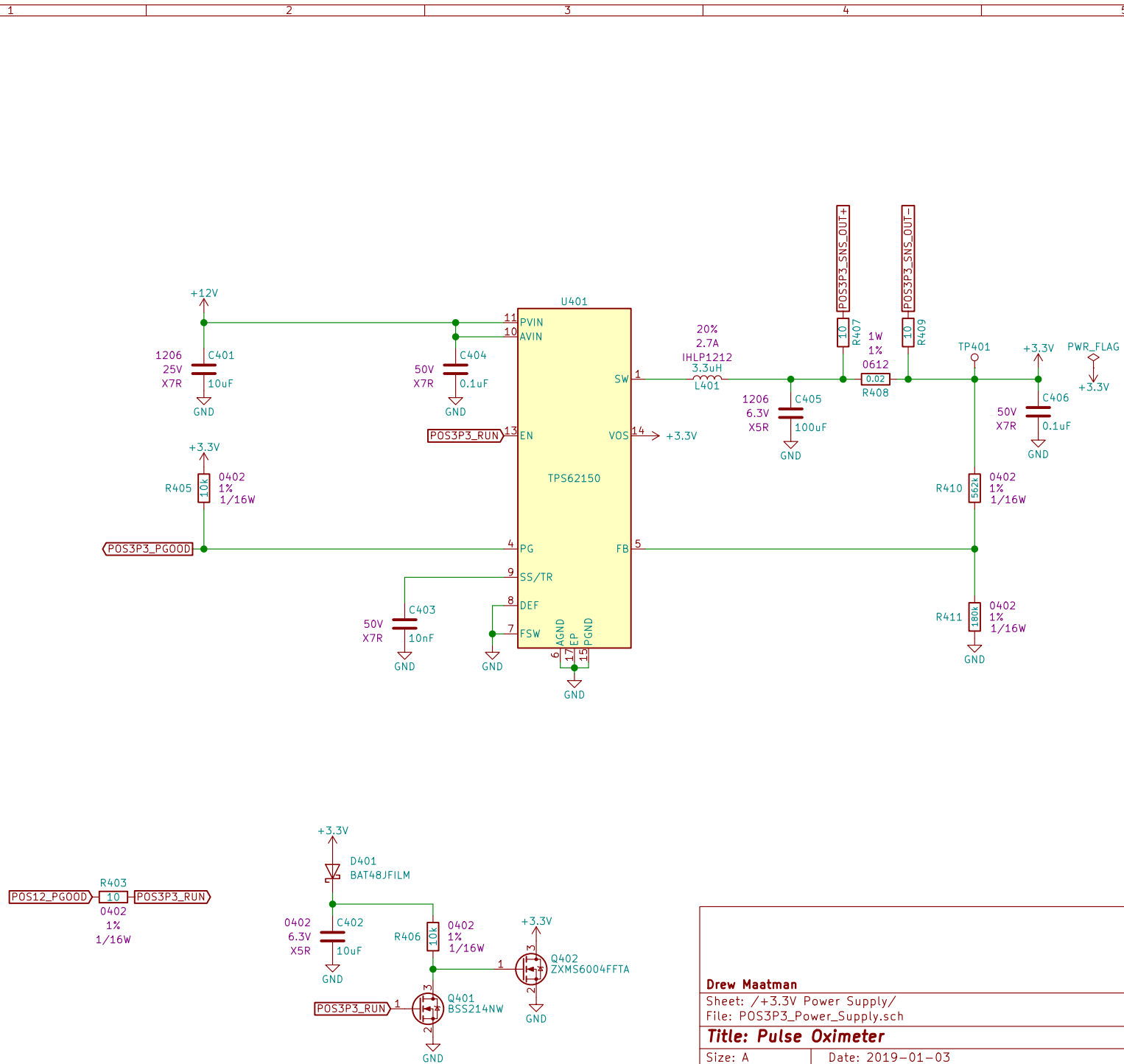
Drew Maatman

Sheet: /+12V Telemetry/  
File: POS12\_Telemetry.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 3/21



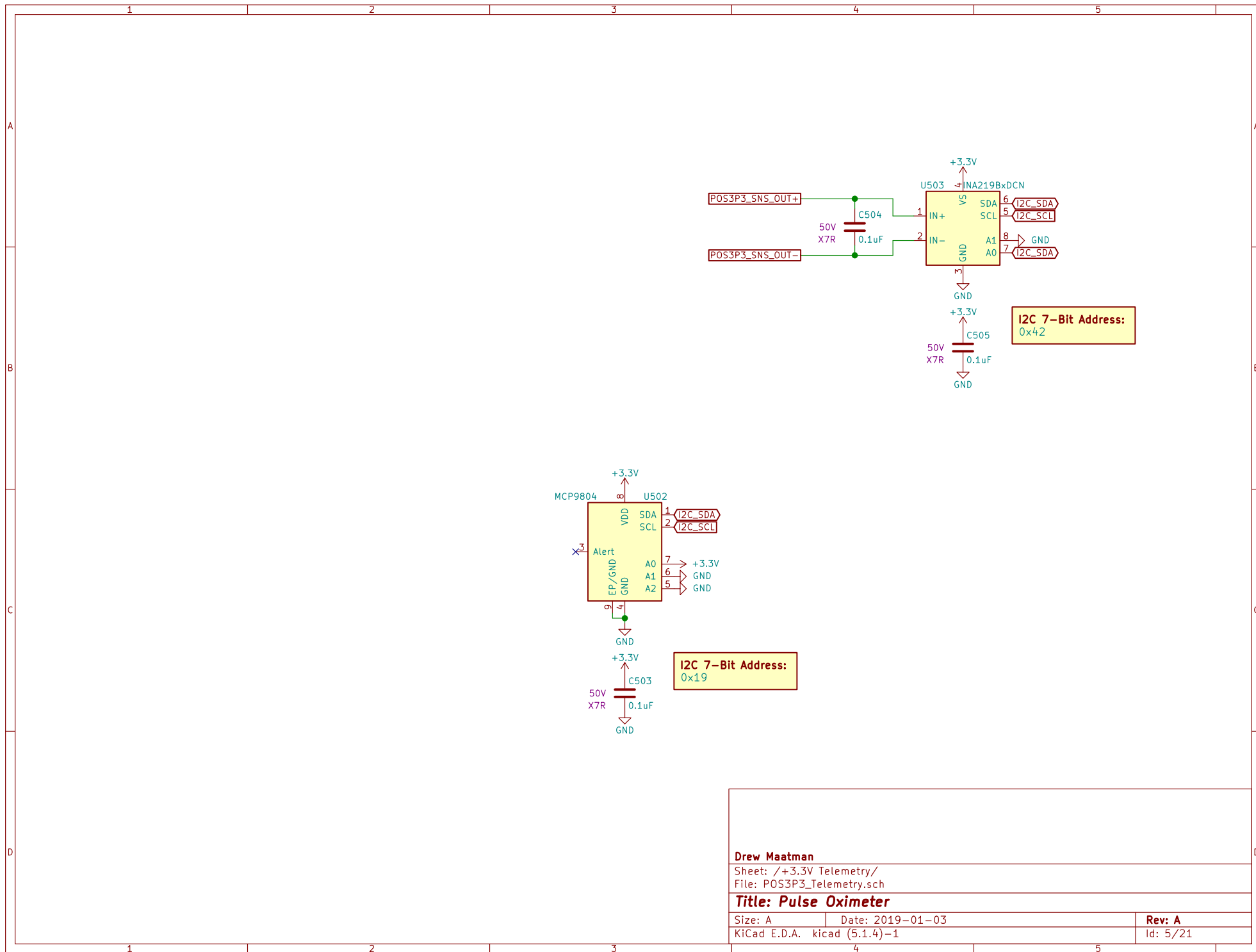
Drew Maatman

Sheet: /+3.3V Power Supply/  
File: POS3P3\_Power\_Supply.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 4/21



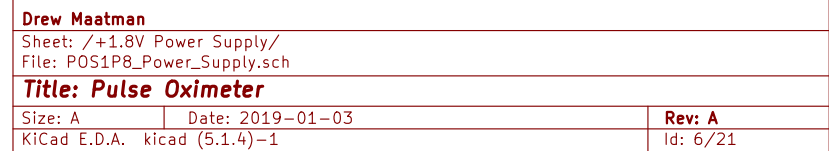
Drew Maatman

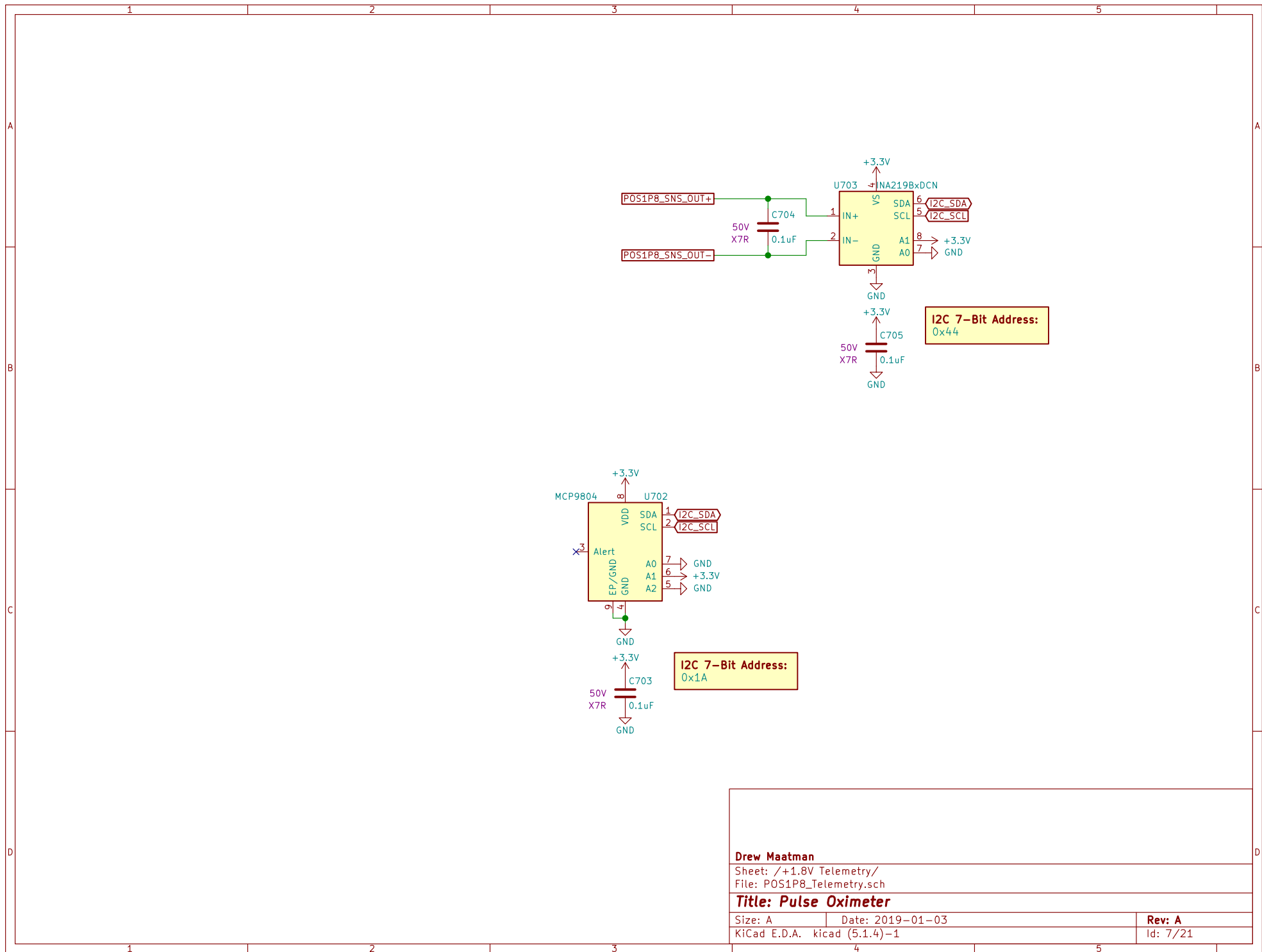
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File: POS3P3\_Telemetry.sch

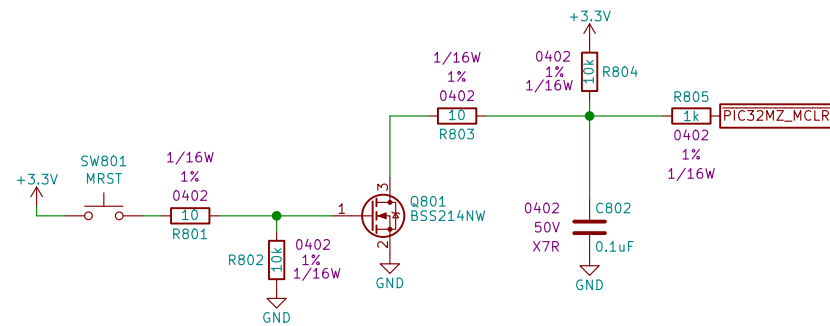
**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 5/21

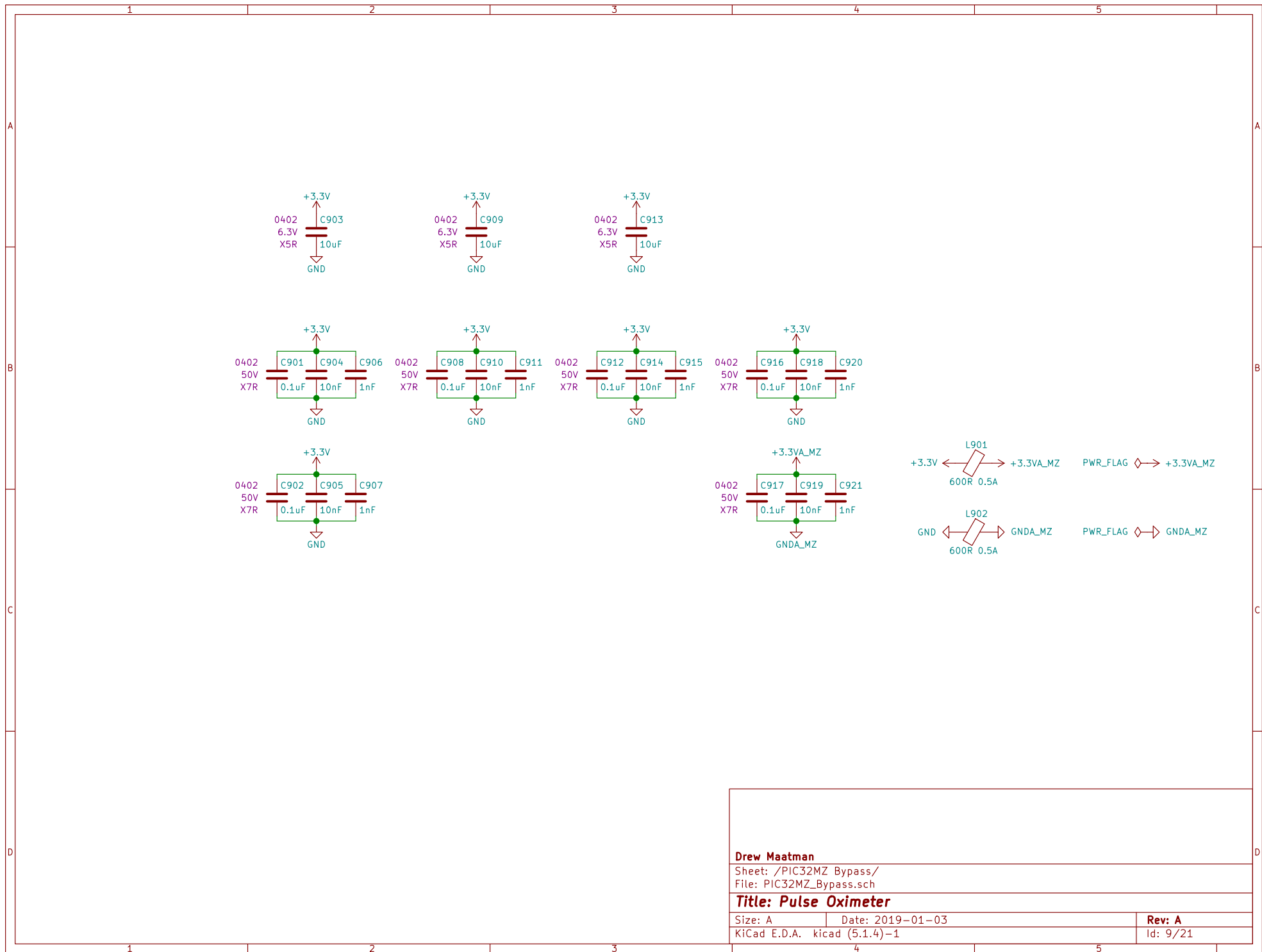


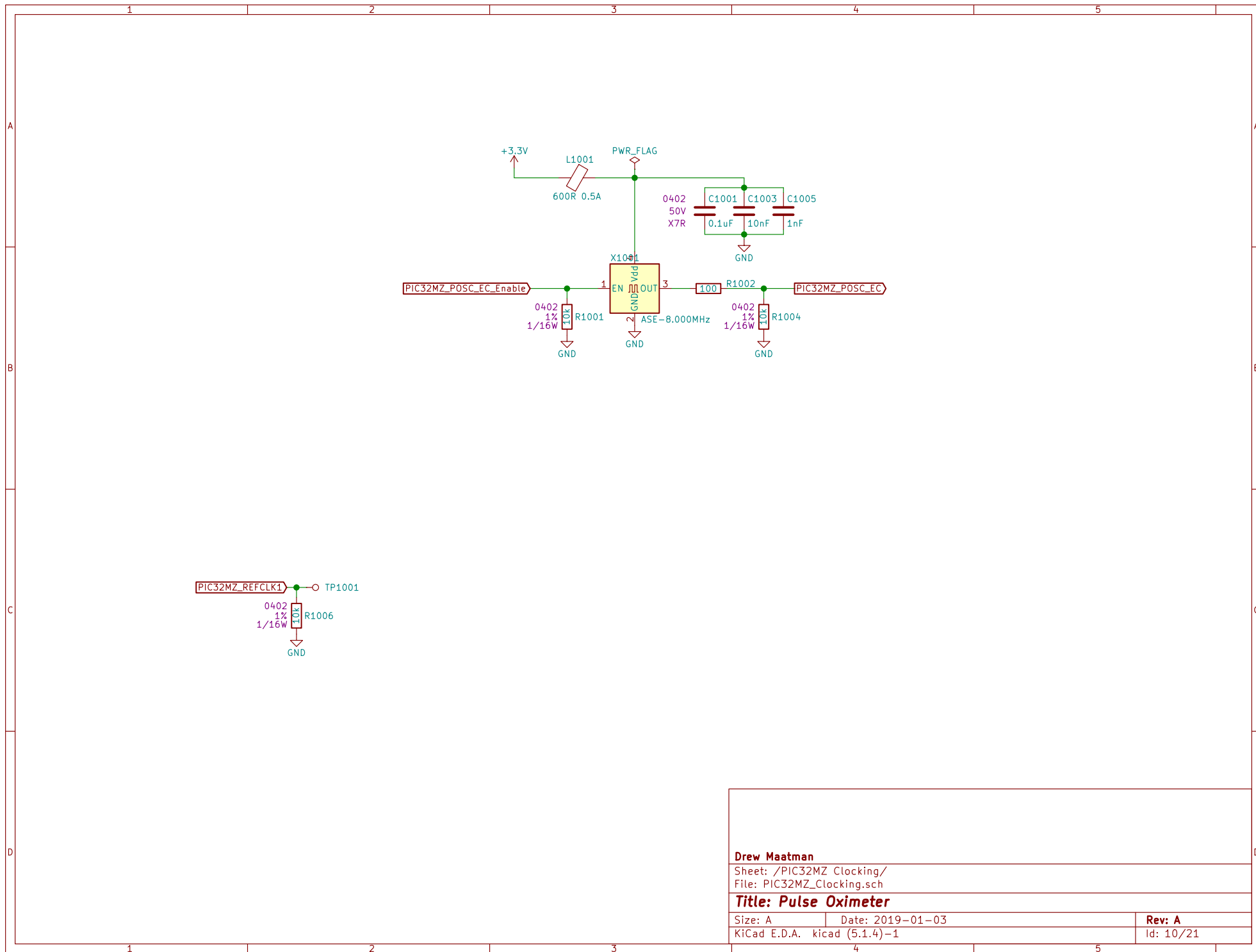




Rev: A  
Id: 8/21







**Drew Maatman**

Sheet: /PIC32MZ Clocking/  
File: PIC32MZ\_Clocking.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03

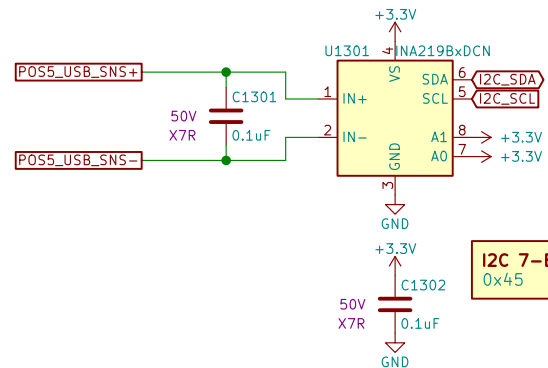
KiCad E.D.A. kicad (5.1.4)-1

**Rev: A**

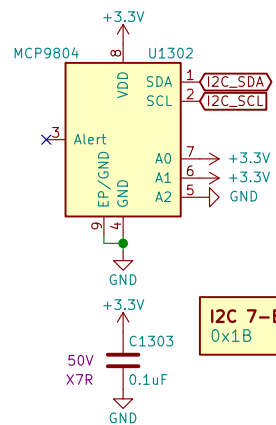
Id: 10/21







**I2C 7-Bit Address:**  
0x45



**I2C 7-Bit Address:**  
0x1B

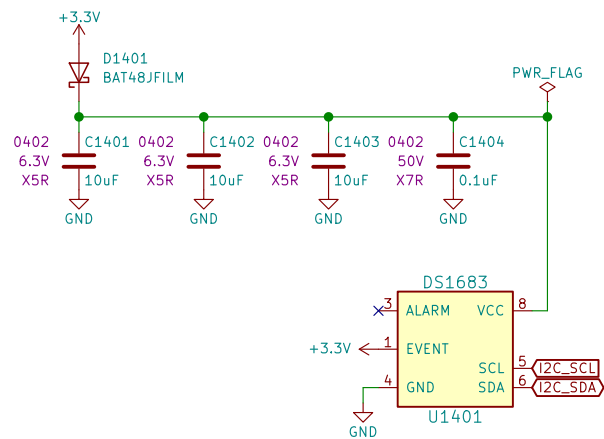
**Drew Maatman**

Sheet: /USB Telemetry/  
File: USB\_Telemetry.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

**Rev: A**  
Id: 13/21



**I2C 7-Bit Address:**  
0x6B

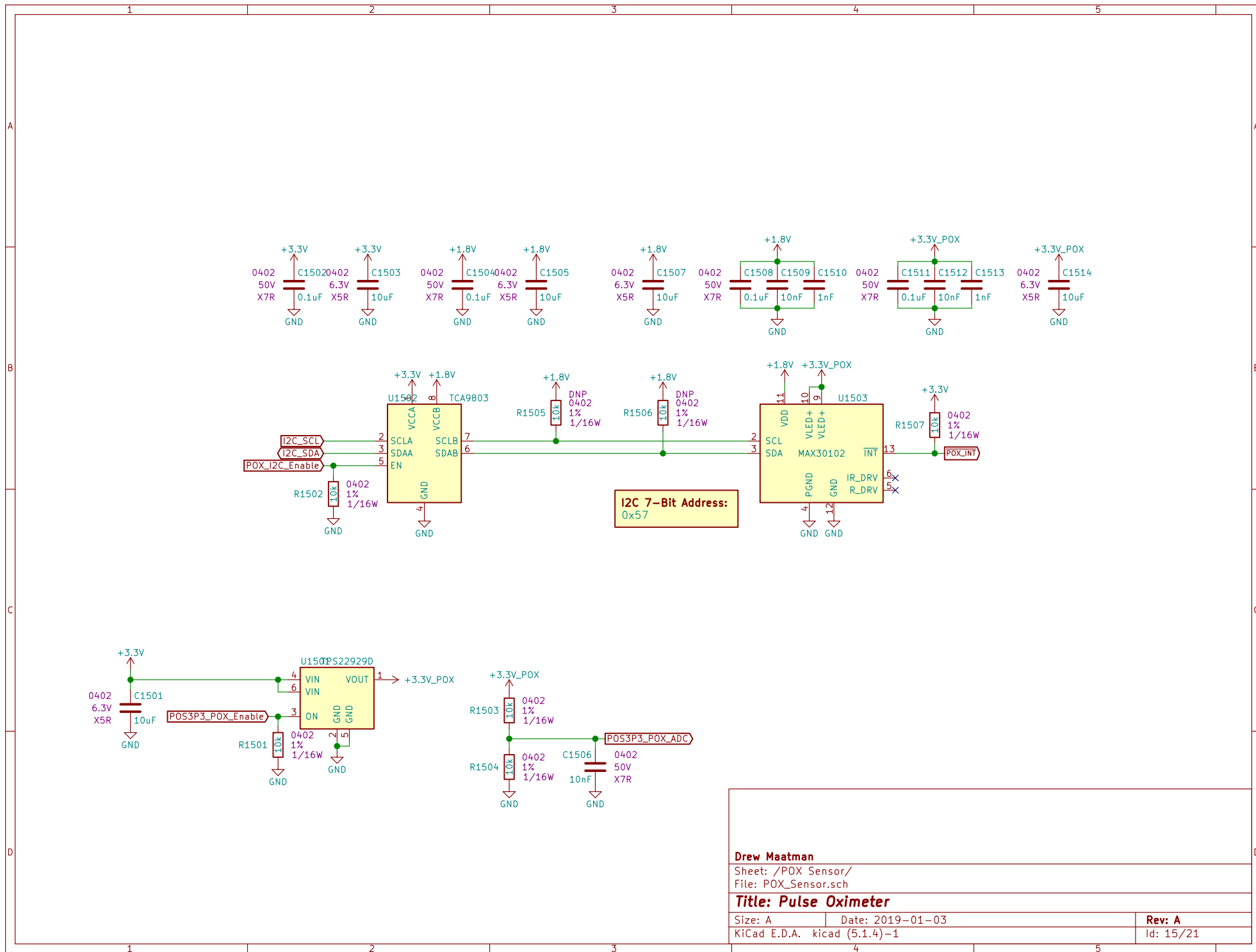
**Drew Maatman**

Sheet: /Time of Flight/  
File: Time\_of\_Flight.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

**Rev: A**  
Id: 14/21



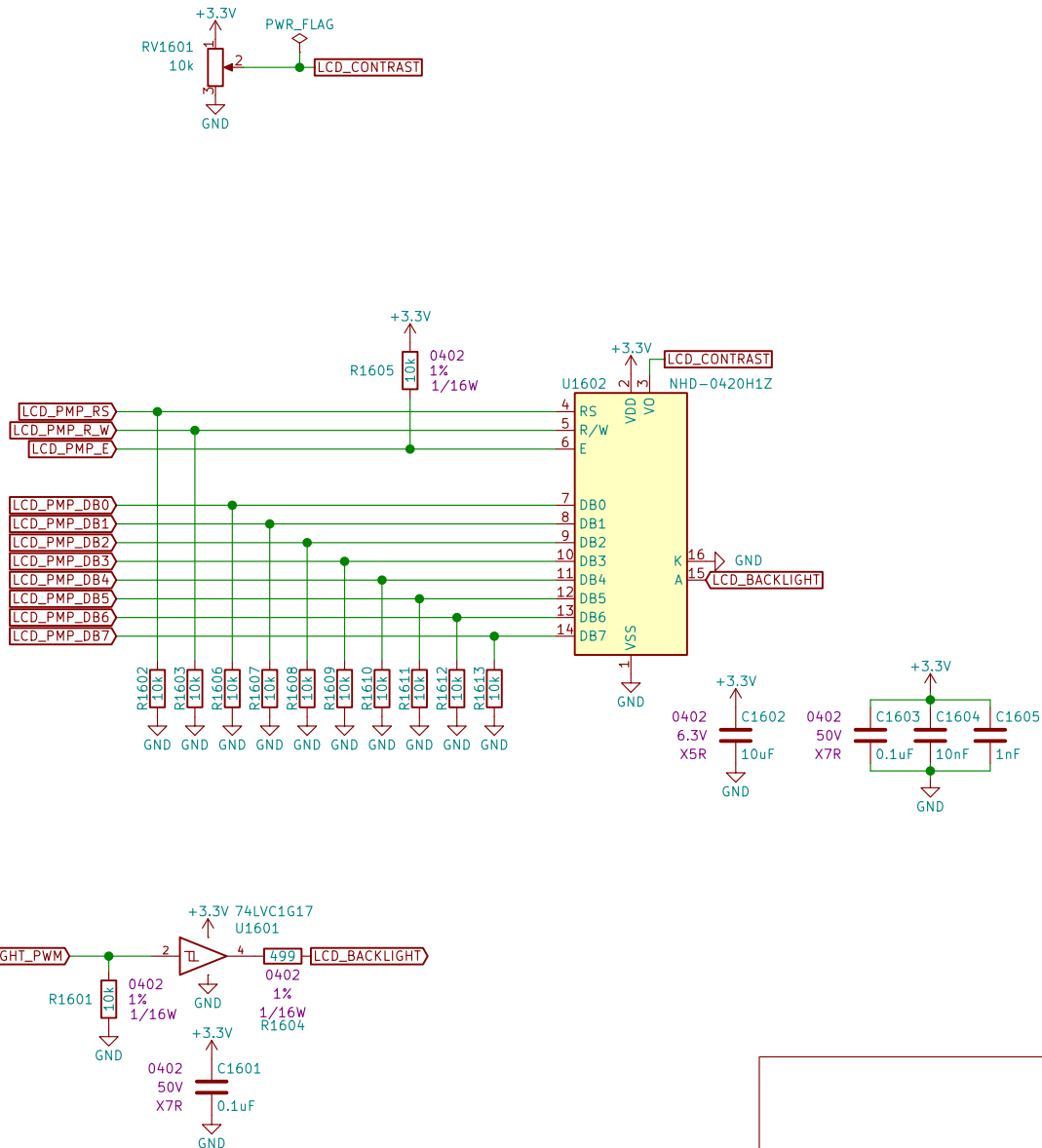
Drew Maatman

Sheet: /POX Sensor/  
File: POX\_Sensor.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 15/21



Drew Maatman

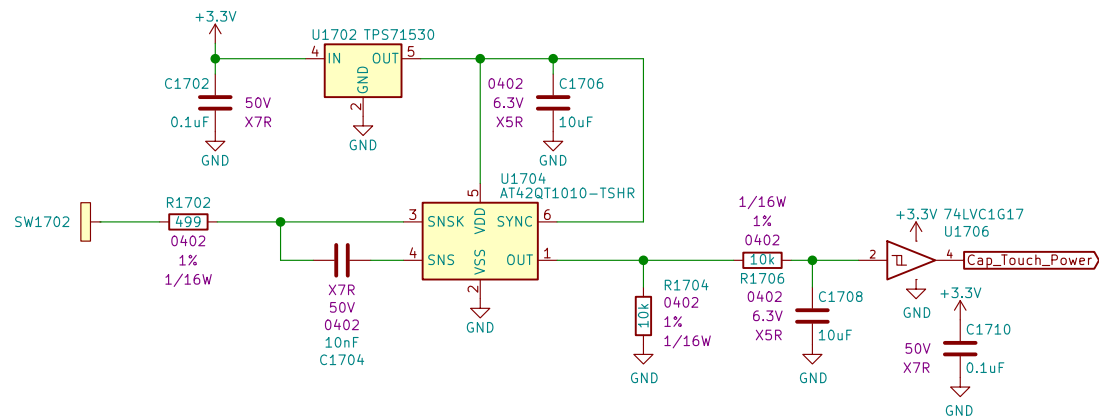
Sheet: /Display/  
File: Display.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 16/21





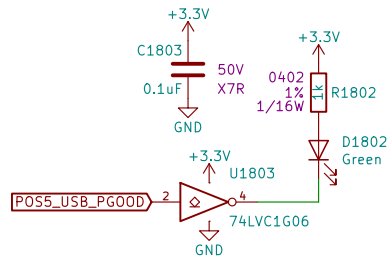
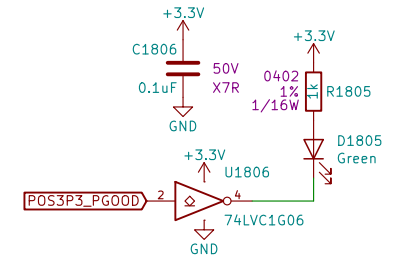
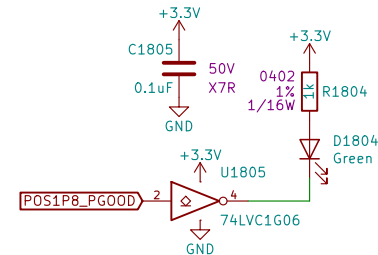
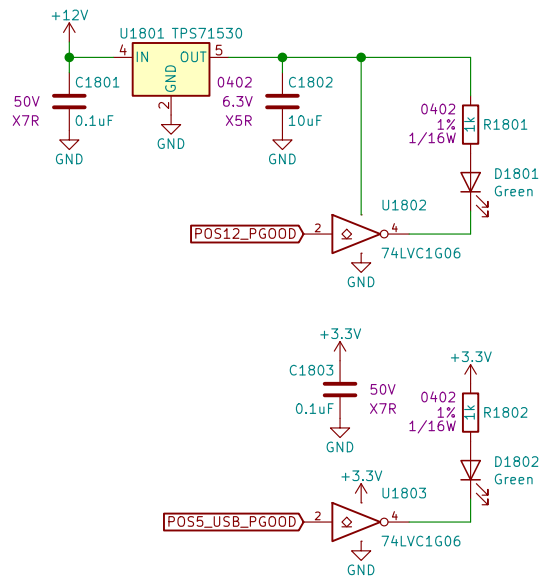
**Drew Maatman**

Sheet: /Pushbuttons/  
File: Pushbuttons.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

**Rev: A**  
Id: 17/21



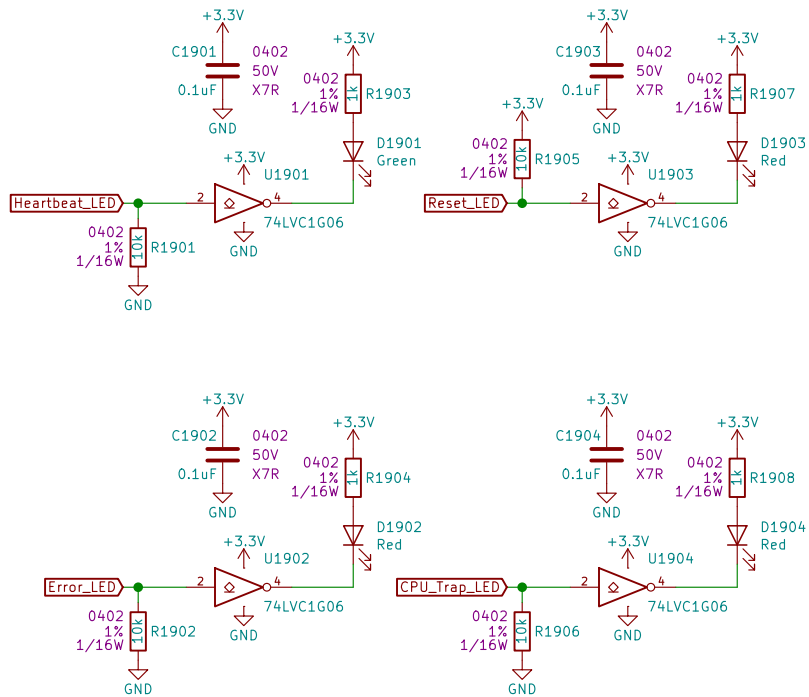
Drew Maatman

Sheet: /PGOOD LEDs/  
File: PGOOD\_LEDs.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

Rev: A  
Id: 18/21



**Drew Maatman**

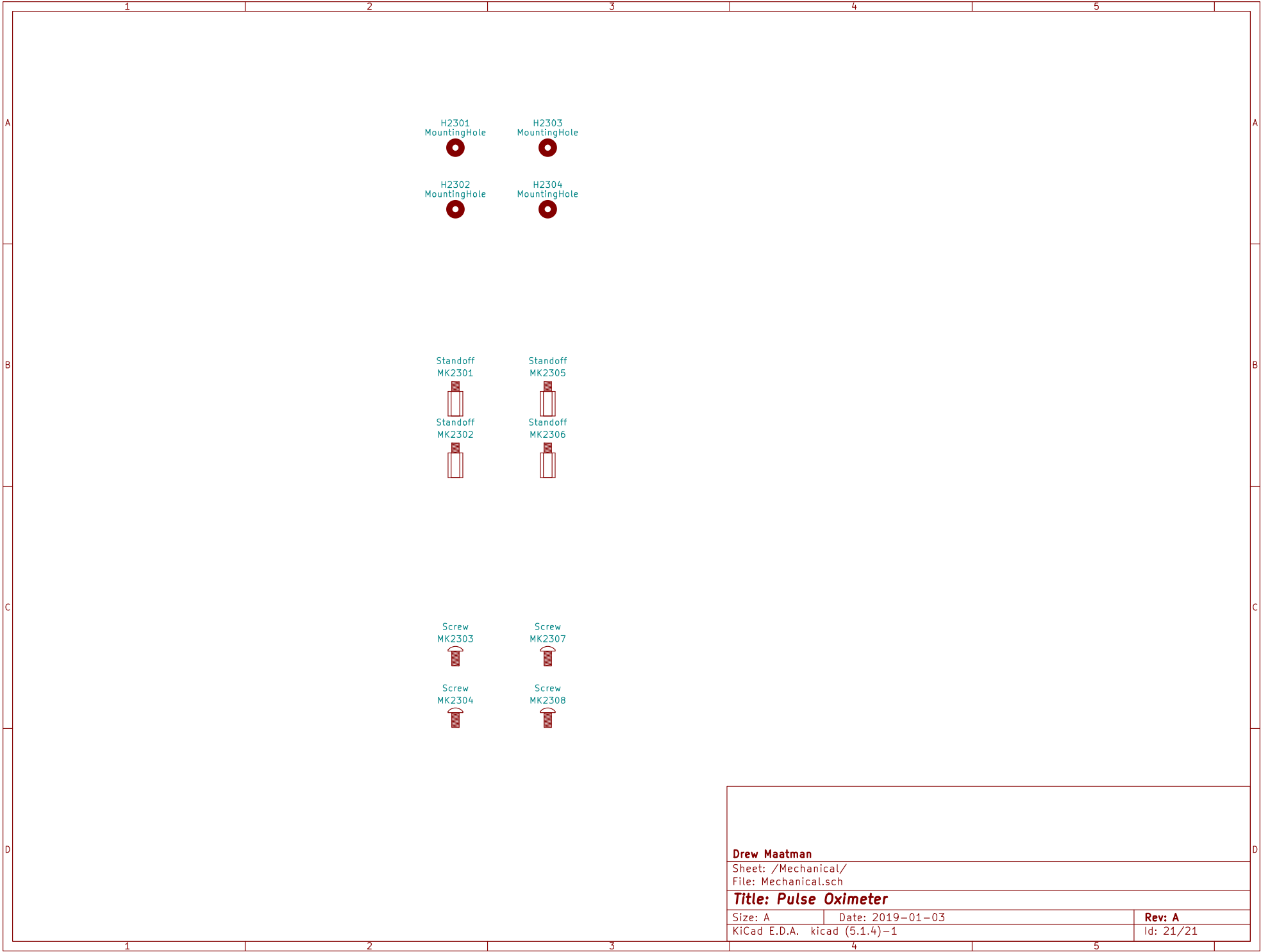
Sheet: /Status LEDs/  
File: Status\_LEDs.sch

**Title: Pulse Oximeter**

Size: A Date: 2019-01-03  
KiCad E.D.A. kicad (5.1.4)-1

**Rev: A**  
Id: 19/21

|           |
|-----------|
| Rev: A    |
| Id: 20/21 |



Drew Maatman

Sheet: /Mechanical/  
File: Mechanical.sch

**Title: Pulse Oximeter**

|                              |                  |           |
|------------------------------|------------------|-----------|
| Size: A                      | Date: 2019-01-03 | Rev: A    |
| KiCad E.D.A. kicad (5.1.4)-1 |                  | Id: 21/21 |