# Pulse Oximeter


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File: Misc_Circuits.sch

Sheet: Mechanical
File: Mechanical.sch

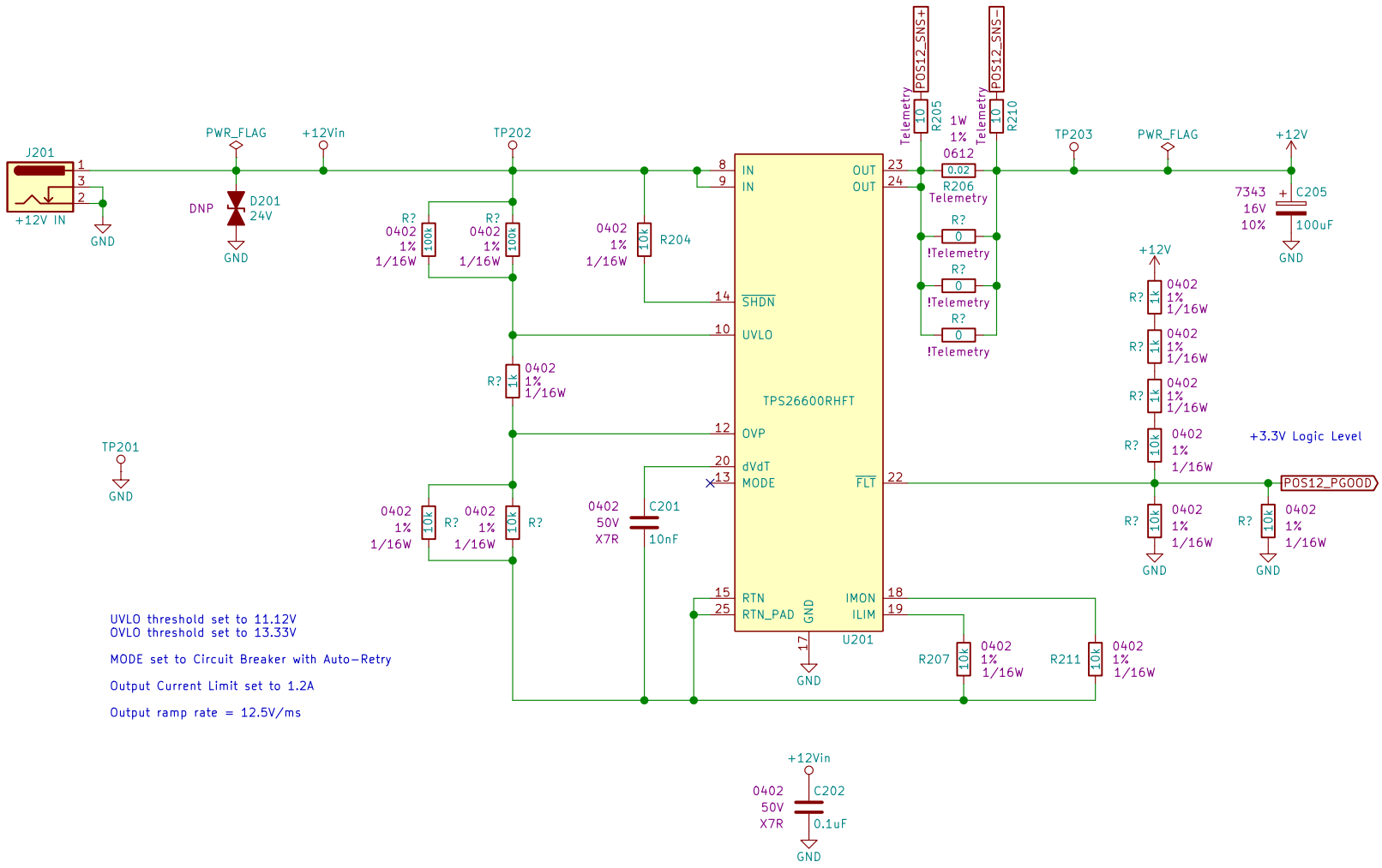


**Drew Maatman**


Sheet: /
File: Pulse_Oximeter.sch

***Title: Pulse Oximeter***

| Size: A | Date: 2020-12-09 | **Rev: B** |
|---|---|---|
| KiCad E.D.A. kicad (5.1.8)-1 | | Id: 1/21 |

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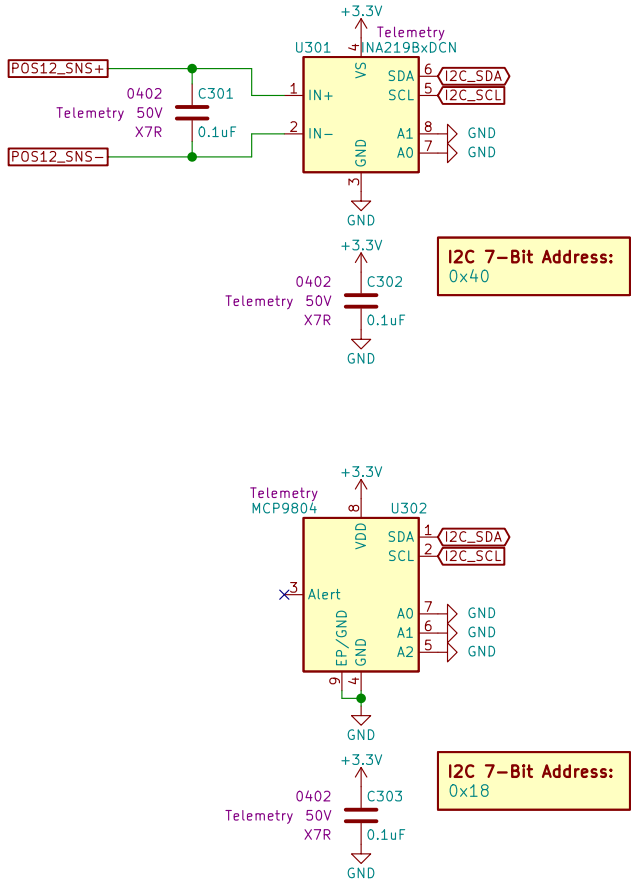
|---|---|
| **Drew Maatman** | |
| Sheet: /+12V Input/ | |
| File: POS12_Input.sch | |
| ***Title: Analog Clock*** | |
| Size: A | Date: 2020-08-15 |
| KiCad E.D.A. kicad (5.1.8)-1 | Id: 2/21 |

**Rev: A**




Drew Maatman

Sheet: /+12V Telemetry/

File: POS12_Telemetry.sch

**Title: Pulse Oximeter**

| Size: A | Date: 2020−12−09 | **Rev: B** |
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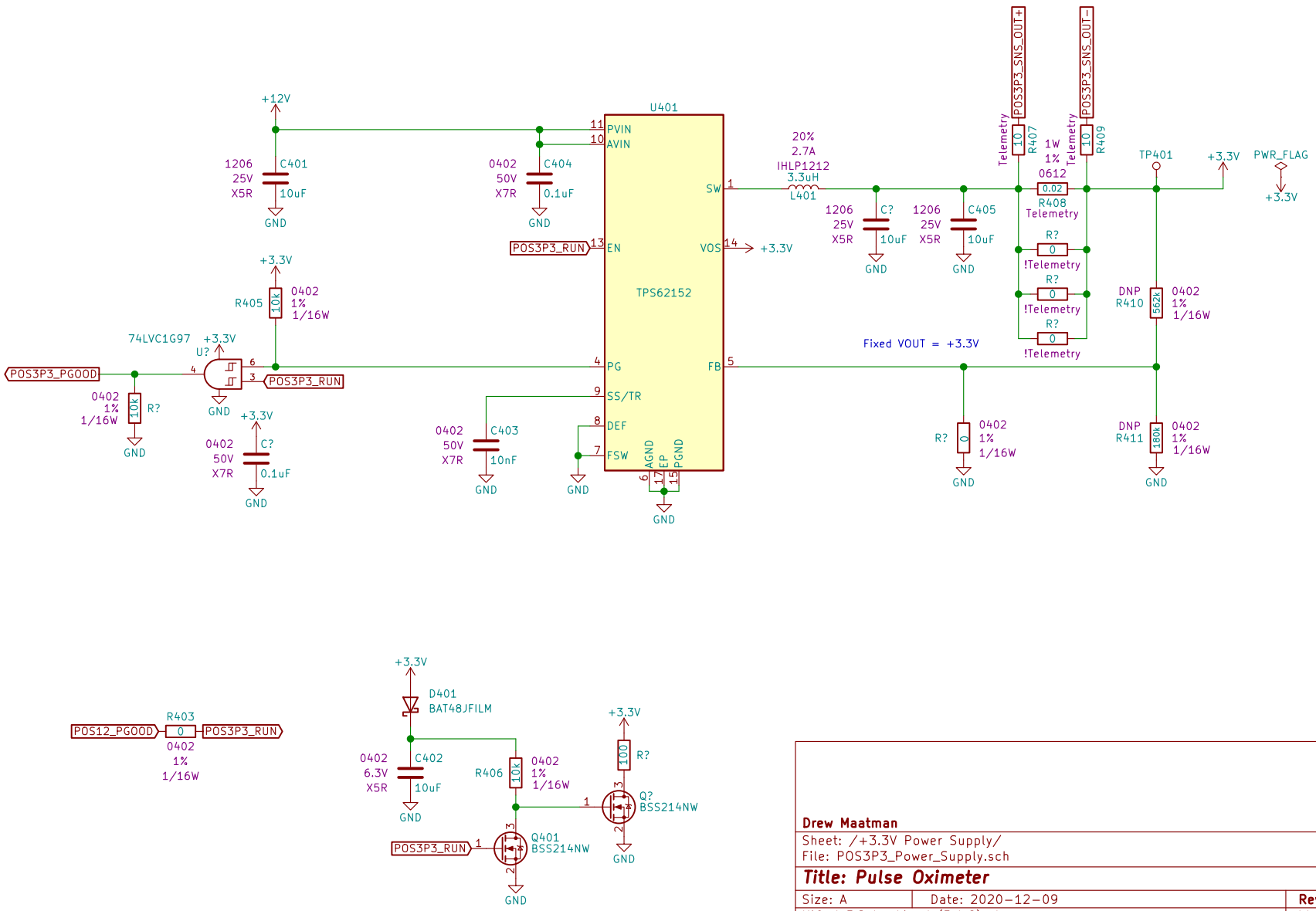


| | | |
|---|---|---|
| **Drew Maatman** | | |
| Sheet: /+3.3V Power Supply/ | | |
| File: POS3P3_Power_Supply.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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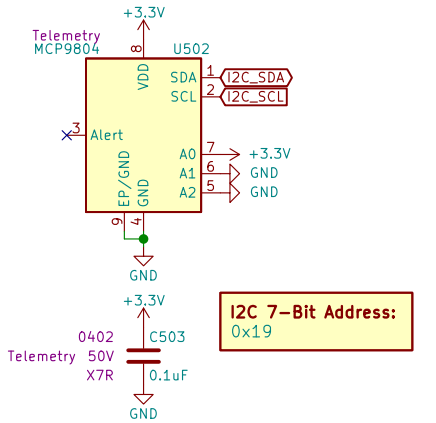


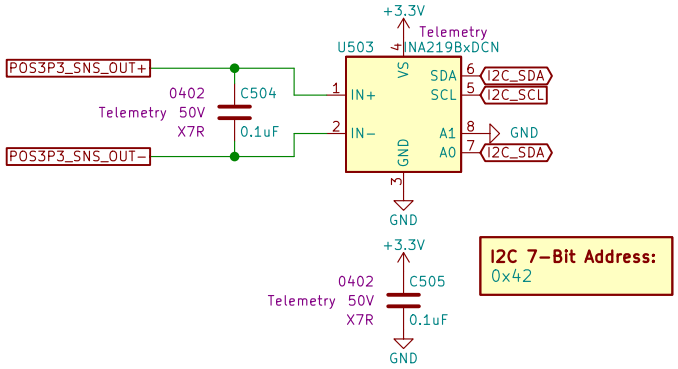


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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /+3.3V Telemetry/ | | |
| File: POS3P3_Telemetry.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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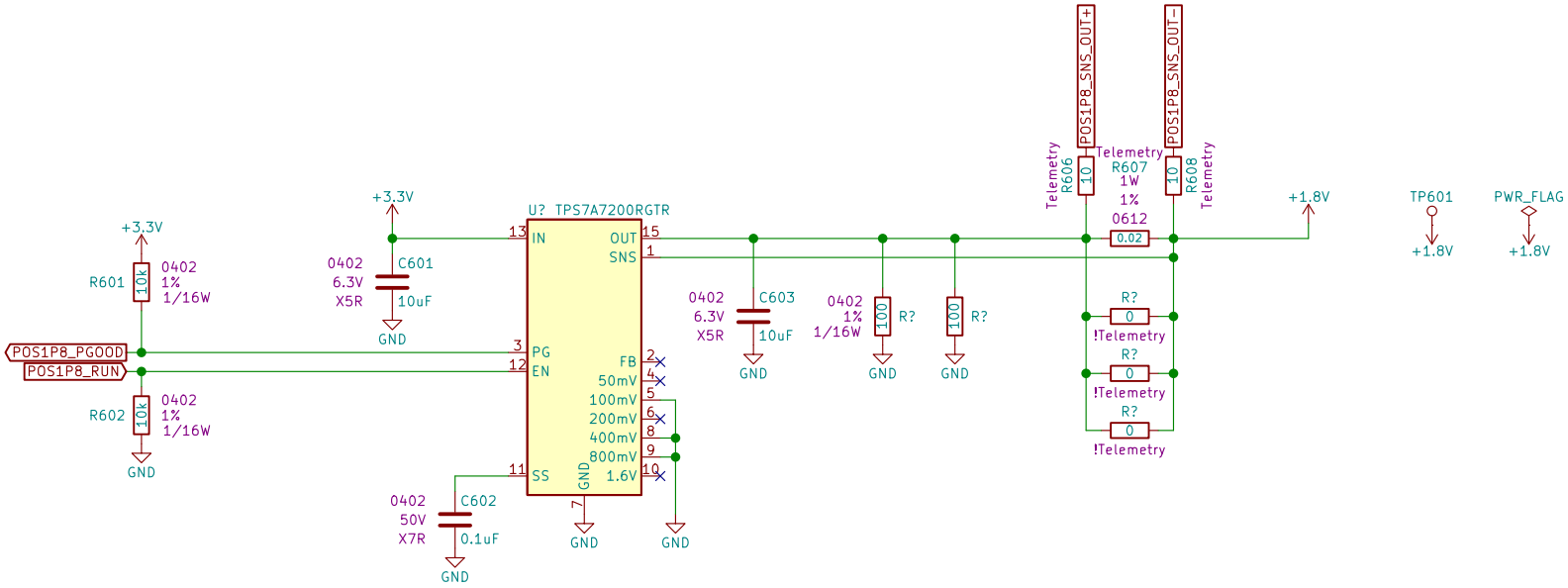


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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /+1.8V Power Supply/ | | |
| File: POS1P8_Power_Supply.sch | | |
| ***Title: Pulse Oximeter*** | | |
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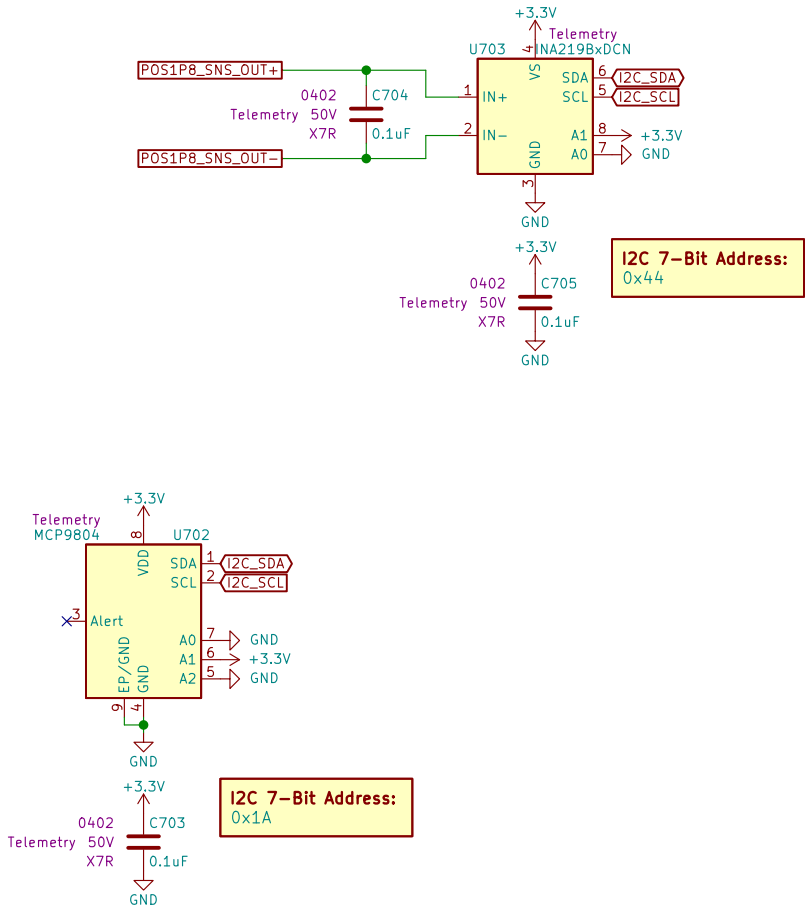


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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /+1.8V Telemetry/ | | |
| File: POS1P8_Telemetry.sch | | |
| ***Title: Pulse Oximeter*** | | |
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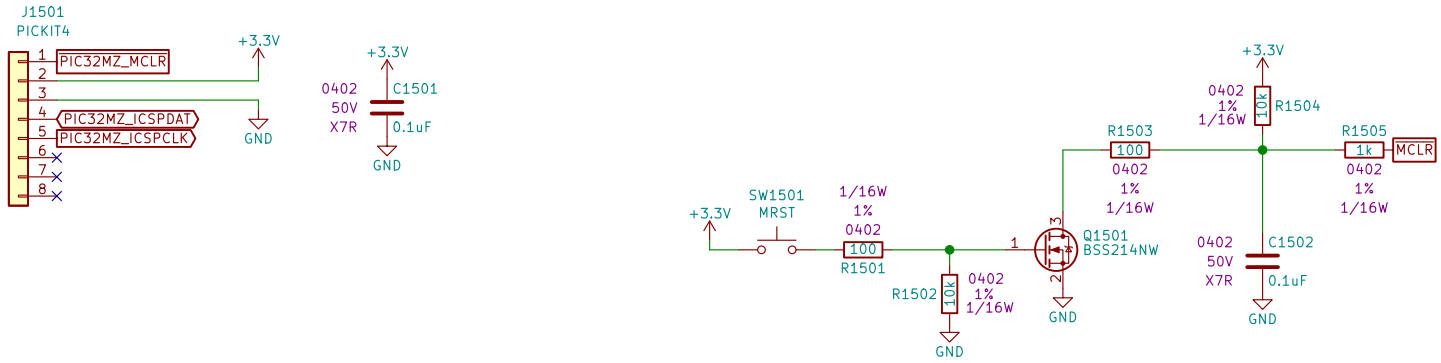


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|---|---|---|---|
| **Drew Maatman** | | | |
| Sheet: /PIC32MZ Programming/ | | | |
| File: PIC32MZ_Programming.sch | | | |
| ***Title: VFD Clock*** | | | |
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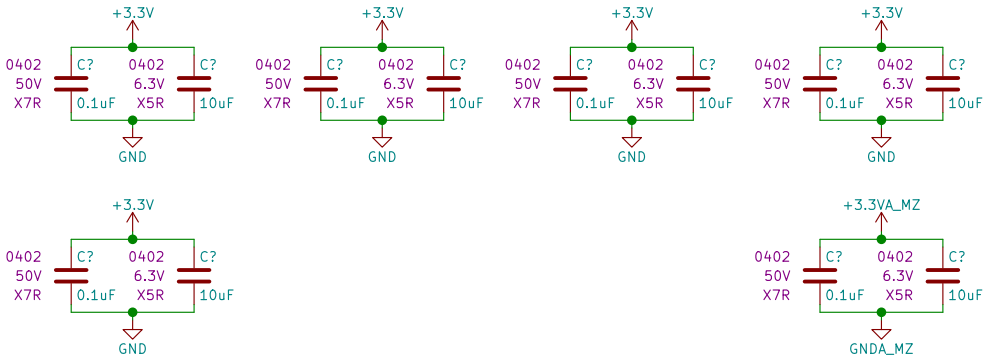


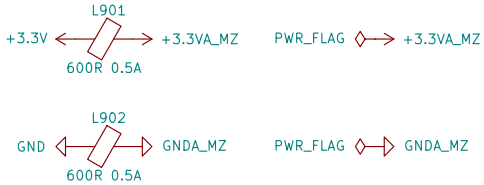


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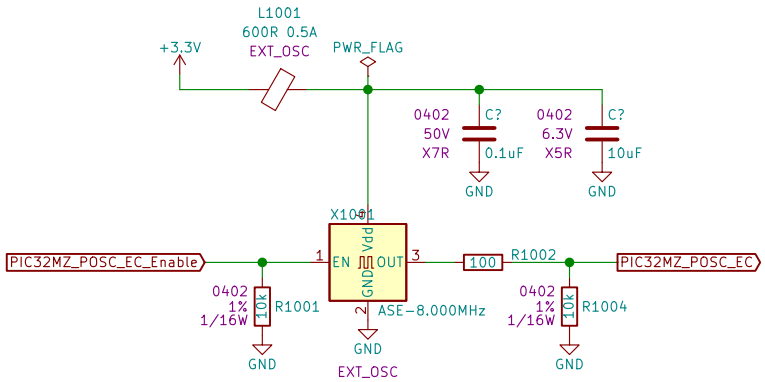
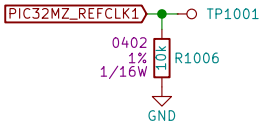
| **Drew Maatman** | | |
| Sheet: /PIC32MZ Bypass/ | | |
| File: PIC32MZ_Bypass.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
| KiCad E.D.A. kicad (5.1.8)-1 | | Id: 9/21 |

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| **Drew Maatman** | | |
| Sheet: /PIC32MZ Clocking/ | | |
| File: PIC32MZ_Clocking.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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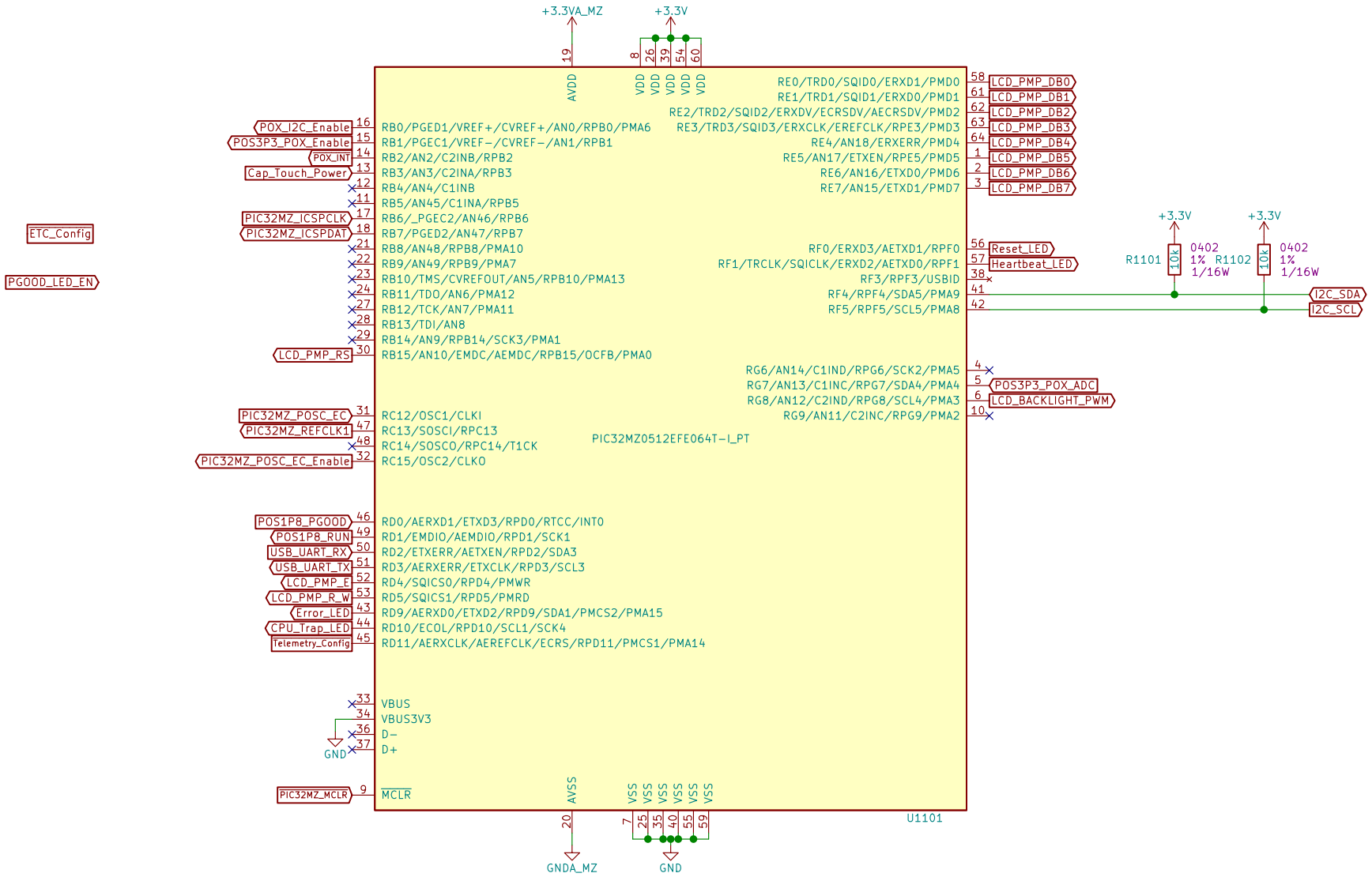


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| **Drew Maatman** | | |
| Sheet: /PIC32MZ/ | | |
| File: PIC32MZ.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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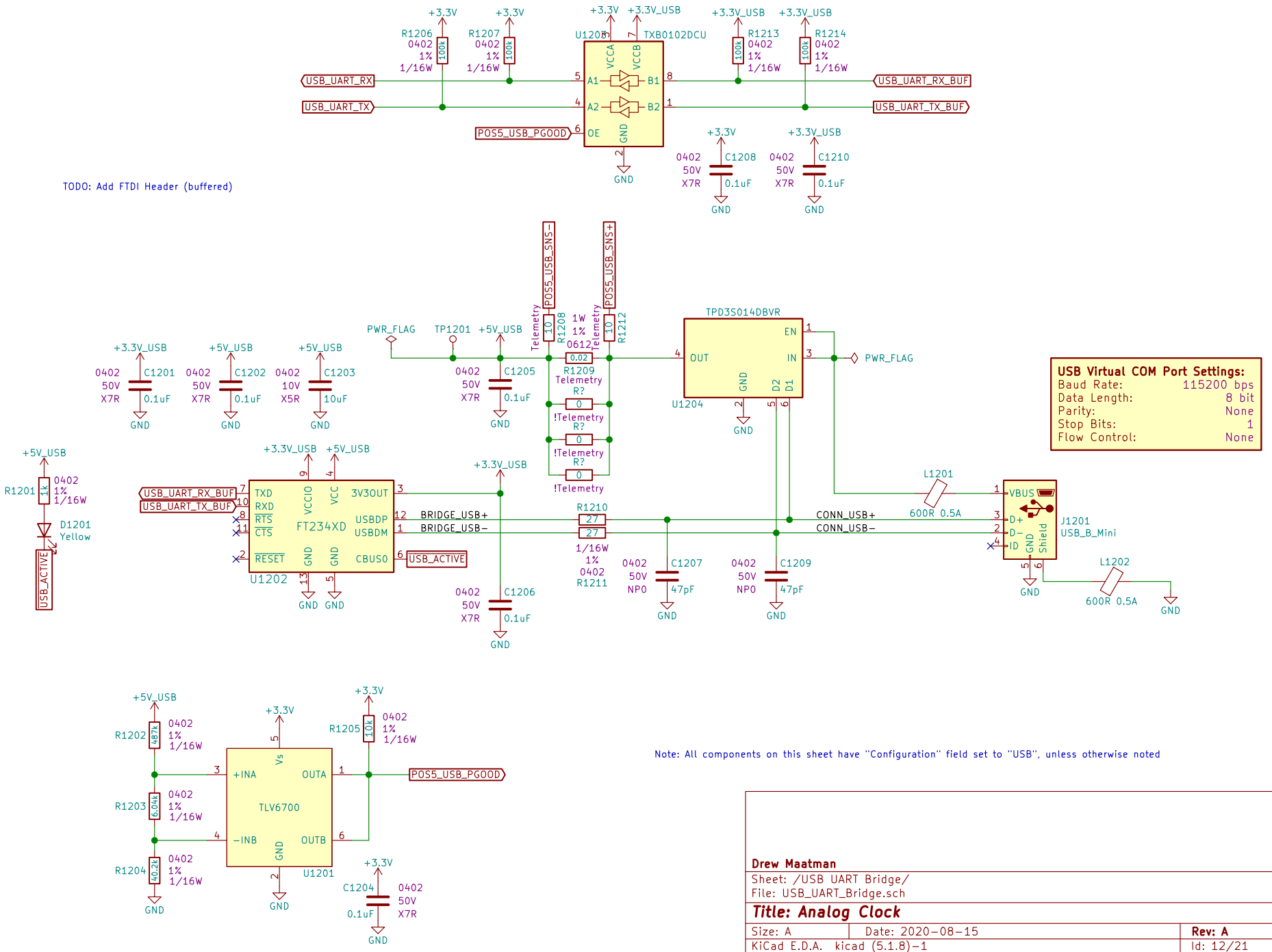
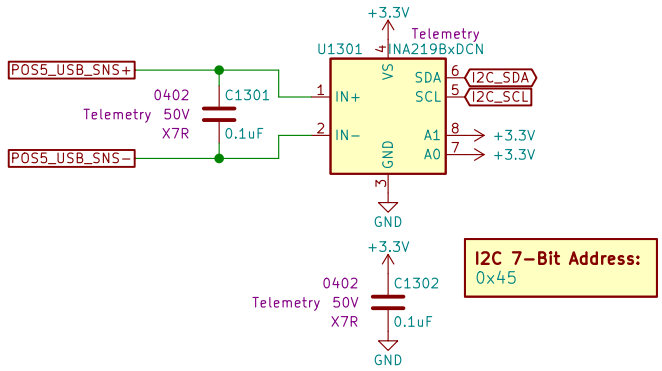
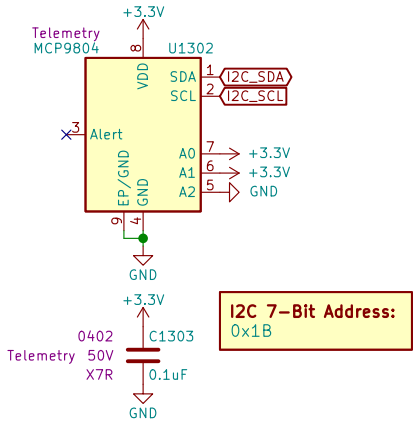

TODO: Add FTDI Header (buffered)
USB_UART_RX
USB_UART_TX
POS5_USB_PGOOD
USB_UART_RX_BUF
USB_UART_TX_BUF
U1203
TXB0102DCU
R1206
R1207
R1213
R1214
C1208
C1210
USB Virtual COM Port Settings:
Baud Rate: 115200 bps
Data Length: 8 bit
Parity: None
Stop Bits: 1
Flow Control: None
PWR_FLAG
TP1201
POS5_USB_SNS−
POS5_USB_SNS+
R1208
R1212
R1209
TPD3S014DBVR
U1204
C1201
C1202
C1203
C1205
L1201
600R 0.5A
J1201
USB_B_Mini
L1202
R1201
D1201
Yellow
USB_ACTIVE
U1202
FT234XD
R1210
R1211
BRIDGE_USB+
BRIDGE_USB−
CONN_USB+
CONN_USB−
C1206
C1207
C1209
47pF
R1202
R1203
R1204
R1205
U1201
TLV6700
C1204
Note: All components on this sheet have "Configuration" field set to "USB", unless otherwise noted
Drew Maatman
Sheet: /USB UART Bridge/
File: USB_UART_Bridge.sch
Title: Analog Clock
Size: A
Date: 2020−08−15
Rev: A
KiCad E.D.A. kicad (5.1.8)−1
Id: 12/21

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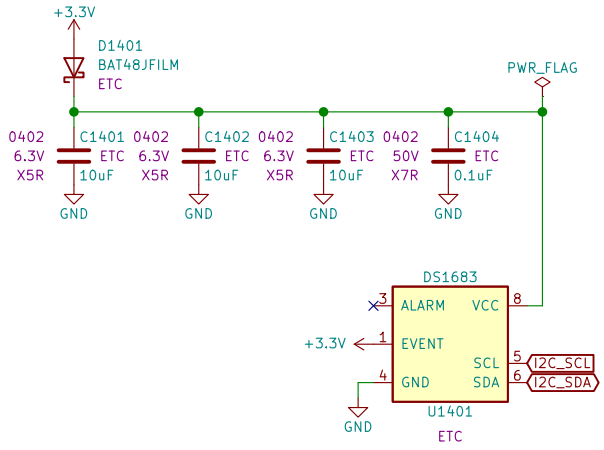
|---|---|---|
| **Drew Maatman** | | |
| Sheet: /USB Telemetry/ | | |
| File: USB_Telemetry.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020−12−09 | **Rev: B** |
| KiCad E.D.A. kicad (5.1.8)−1 | | Id: 13/21 |

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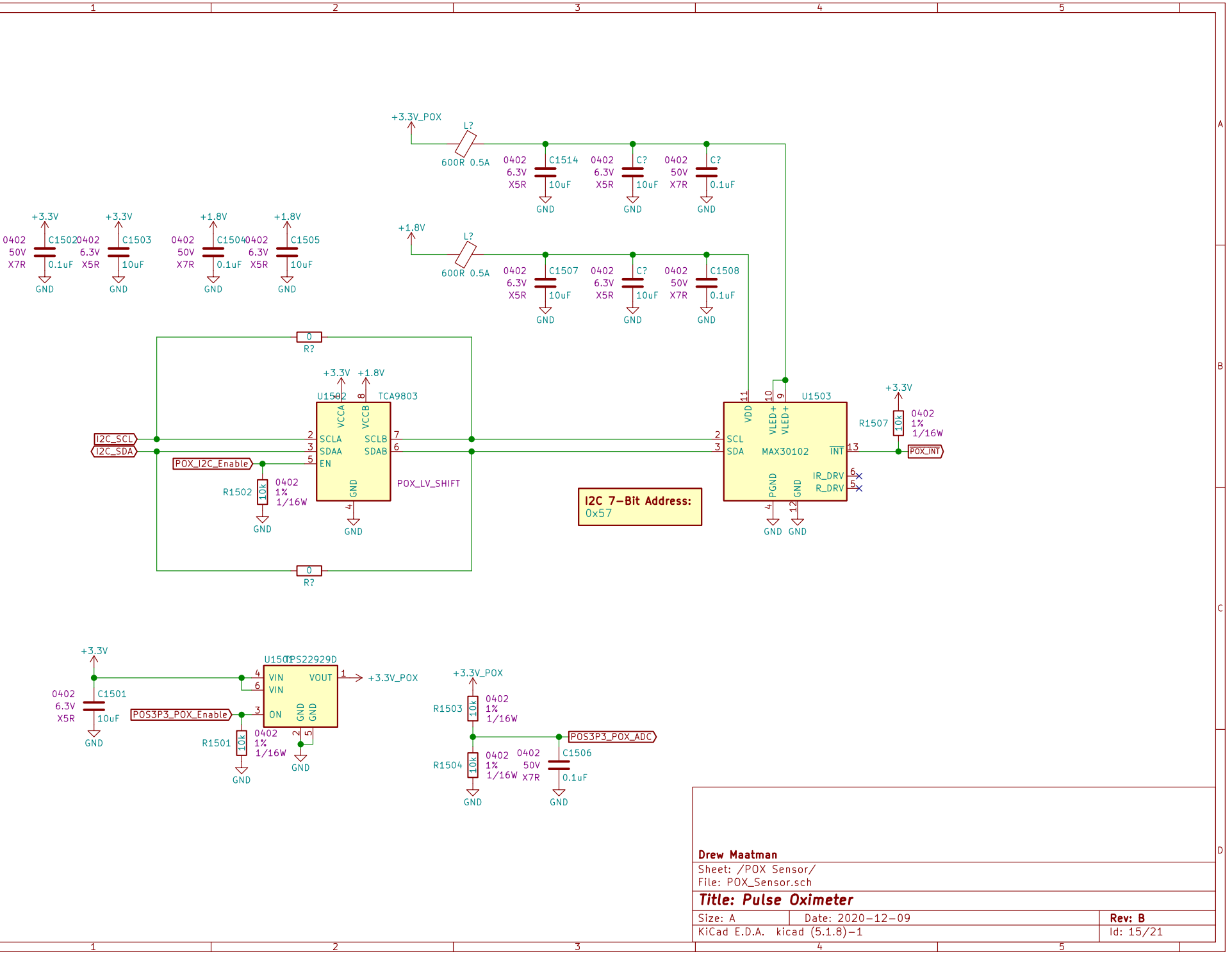
|---|---|---|
| **Drew Maatman** | | |
| Sheet: /Platform ETC/ | | |
| File: Platform_ETC.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
| KiCad E.D.A. kicad (5.1.8)-1 | | Id: 14/21 |

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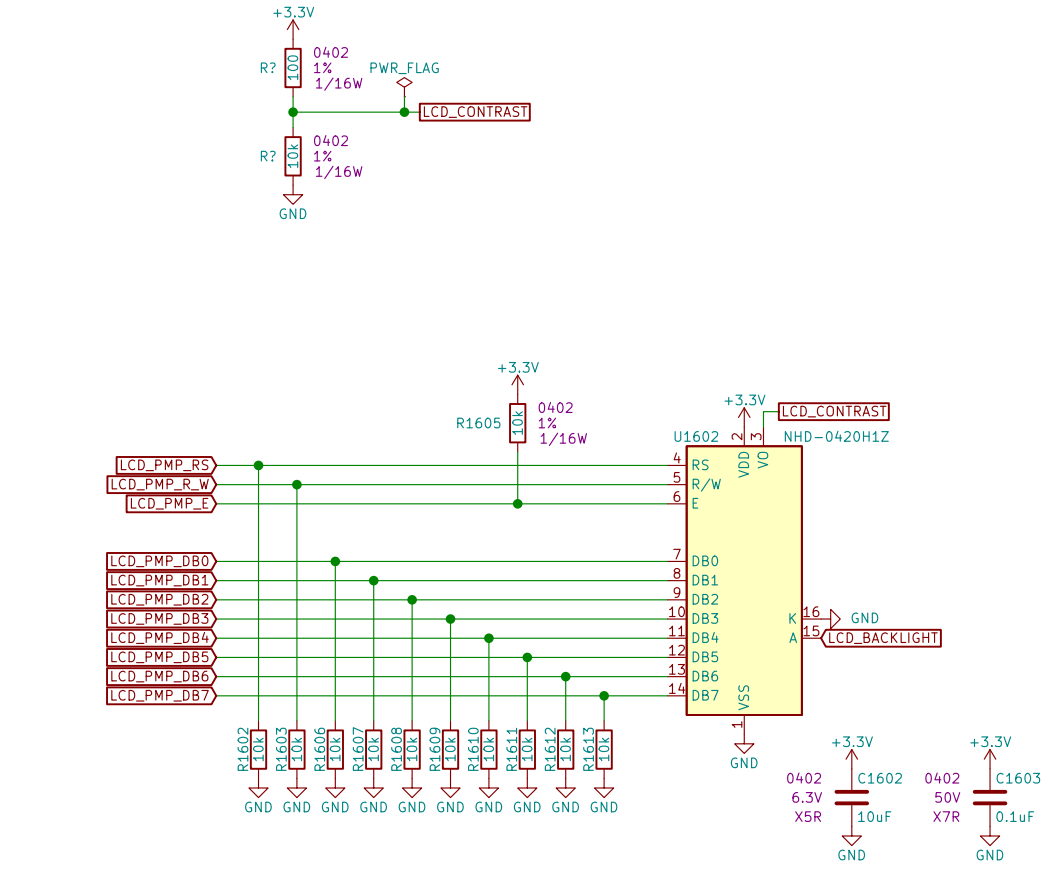
|---|---|
| Drew Maatman | |
| Sheet: /POX Sensor/ | |
| File: POX_Sensor.sch | |
| **Title: Pulse Oximeter** | |
| Size: A | Date: 2020-12-09 |
| KiCad E.D.A. kicad (5.1.8)-1 | Id: 15/21 |

**Rev: B**

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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /Display/ | | |
| File: Display.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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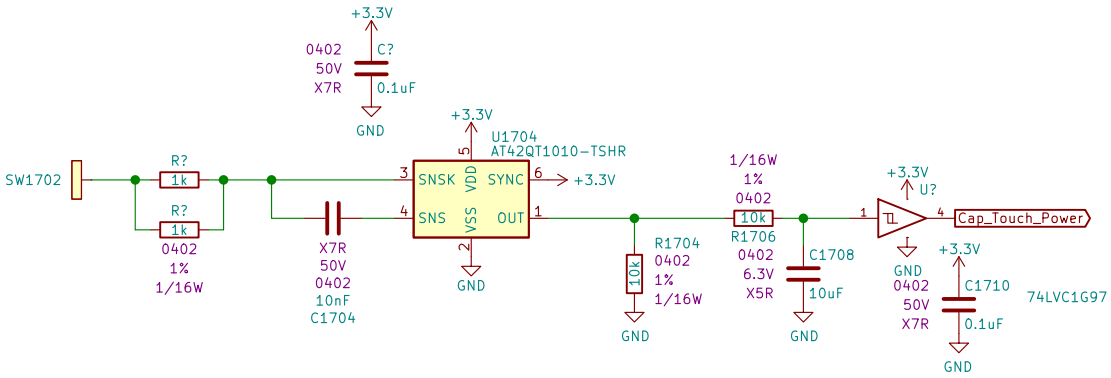


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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /Pushbuttons/ | | |
| File: Pushbuttons.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
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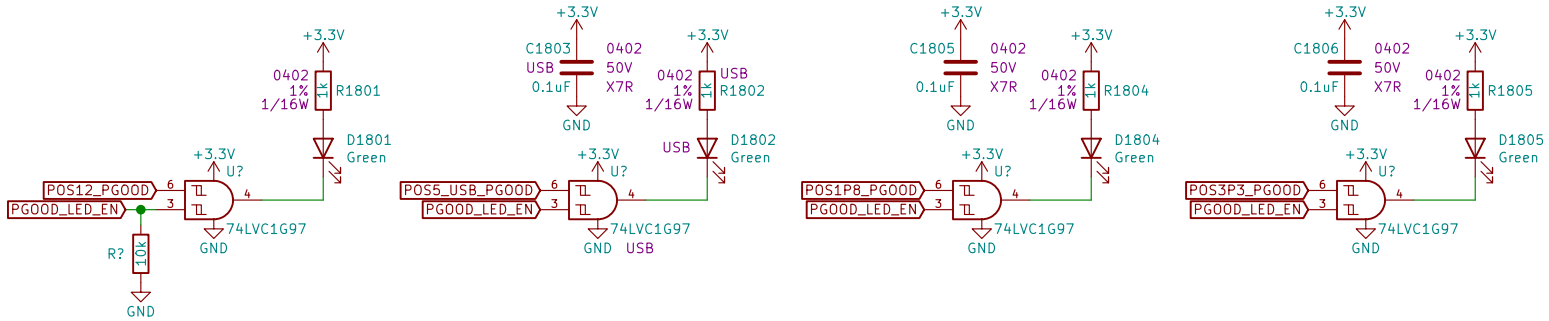


**Drew Maatman**

Sheet: /PGOOD LEDs/
File: PGOOD_LEDs.sch

***Title: Pulse Oximeter***

| Size: A | Date: 2020-12-09 | **Rev: B** |
|---|---|---|
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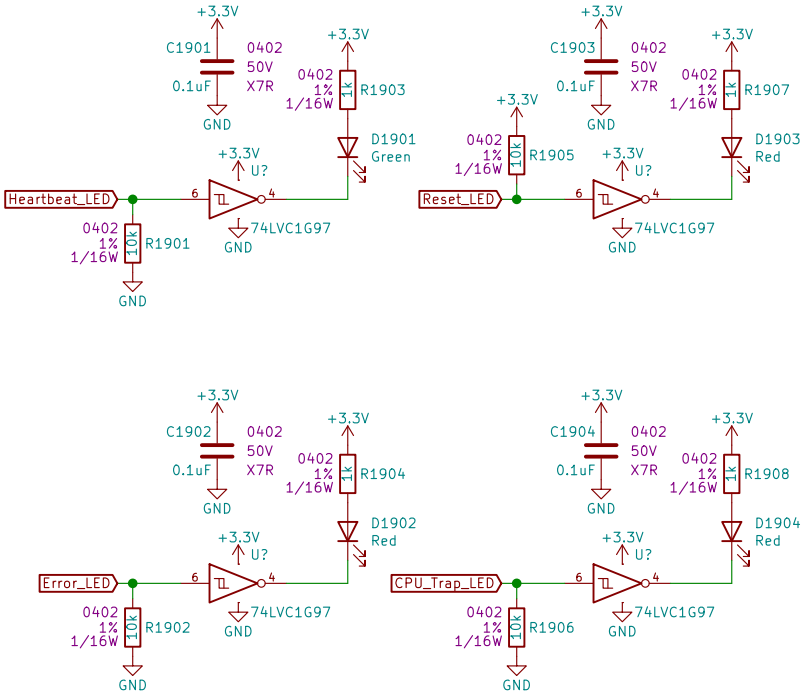


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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /Status LEDs/ | | |
| File: Status_LEDs.sch | | |
| ***Title: Pulse Oximeter*** | | |
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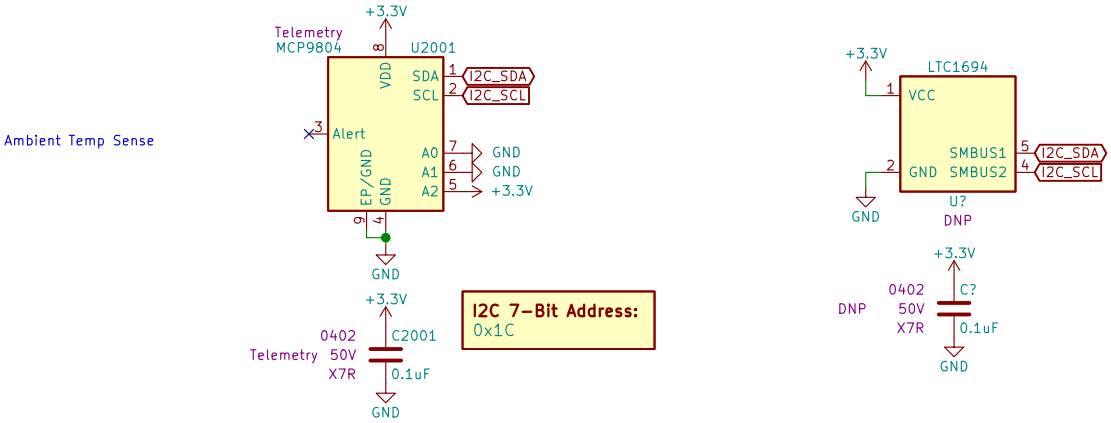

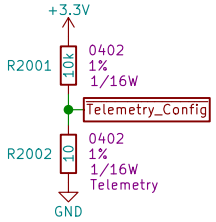


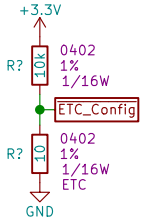


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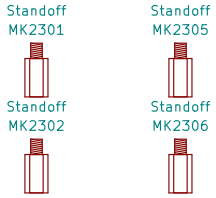
|---|---|
| Drew Maatman | |
| Sheet: /Misc Circuits/ | |
| File: Misc_Circuits.sch | |
| **Title: Pulse Oximeter** | |
| Size: A | Date: 2020-12-09 |
| KiCad E.D.A. kicad (5.1.8)-1 | Id: 20/21 |
| | **Rev: B** |



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|---|---|---|
| **Drew Maatman** | | |
| Sheet: /Mechanical/<br>File: Mechanical.sch | | |
| ***Title: Pulse Oximeter*** | | |
| Size: A | Date: 2020-12-09 | **Rev: B** |
| KiCad E.D.A. kicad (5.1.8)-1 | | Id: 21/21 |