Sheet: +12V Input

File: POS12_Input.sch

Sheet: +12V Telemetry

File: POS12_Telemetry.sch

Sheet: +3.3V Power Supply

File: POS3P3_Power_Supply.sch

Sheet: +3.3V Telemetry

File: POS3P3_Telemetry.sch

Sheet: Microcontroller

File: Microcontroller.sch

Sheet: Microcontroller Programming

File: Microcontroller_Programming.sch

Sheet: Microcontroller Bypass

File: Microcontroller_Bypass.sch

Sheet: Microcontroller Clocking

File: Microcontroller_Clocking.sch

Sheet: +5V Power Supply

File: POS5_Power_Supply.sch

Sheet: +5V Telemetry

File: POS5_Telemetry.sch

Sheet: +1.2VFF Power Supply

File: POS1P2_VFF_Power_Supply.sch

Sheet: +1.2VFF Telemetry

File: POS1P2_VFF_Telemetry.sch

Sheet: Status LEDs

File: Status_LEDs.sch

Sheet: PGOOD LEDs

File: PGOOD_LEDs.sch

Sheet: +60VAN Power Supply

File: POS60_VAN_Power_Supply.sch

Sheet: +60VAN Telemetry

File: POS60_VAN_Telemetry.sch

Sheet: +3.3V BCKP Supply

File: POS3P3_BCKP_Supply.sch

Sheet: TELEM I2C Buffer

File: TELEM_I2C_Buffer.sch

Sheet: IO Connectors

File: IO_Connectors.sch

Sheet: IO Buffers 1

File: IO_Buffers_1.sch

Sheet: IO Buffers 2

File: IO_Buffers_2.sch

Sheet: Mechanical

File: Mechanical.sch

Sheet: USB UART Bridge

File: USB_UART_Bridge.sch

Sheet: USB UART Isolation

File: USB_UART_Isolation.sch

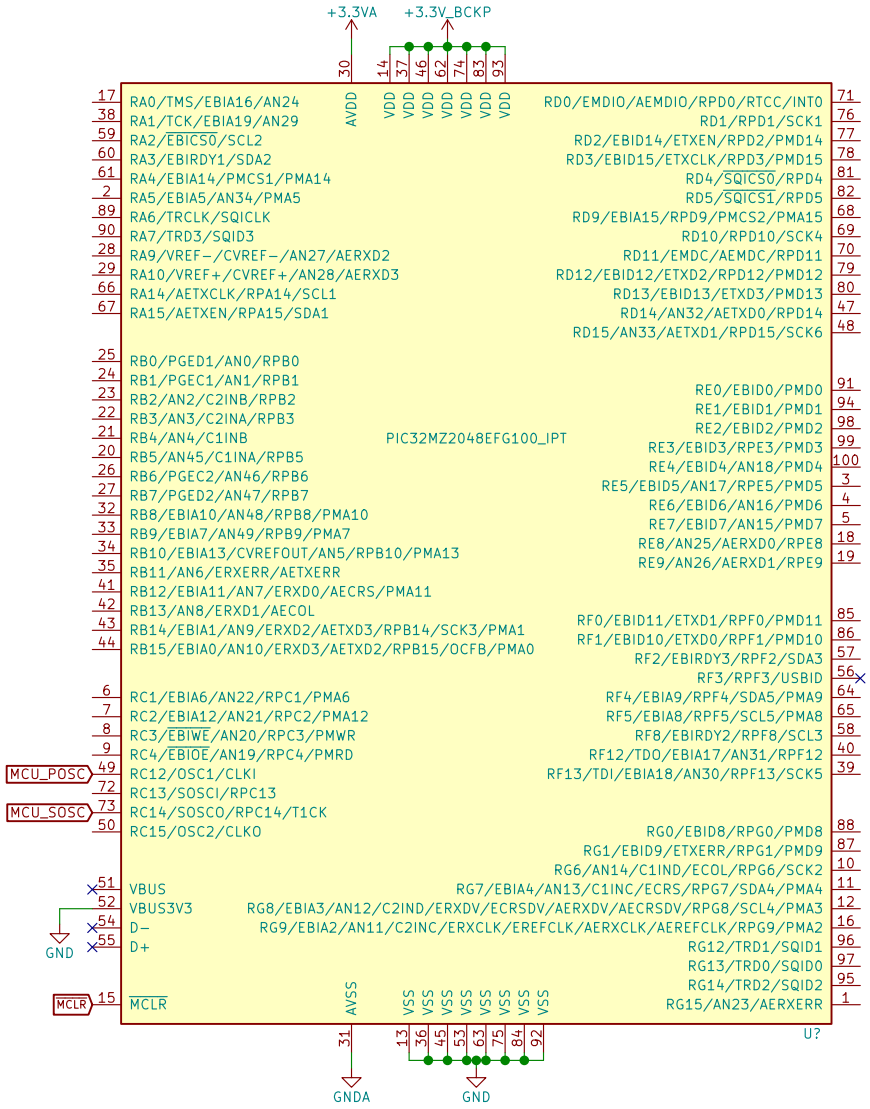
Drew Maatman

Sheet: /

File: VFD_Clock.sch

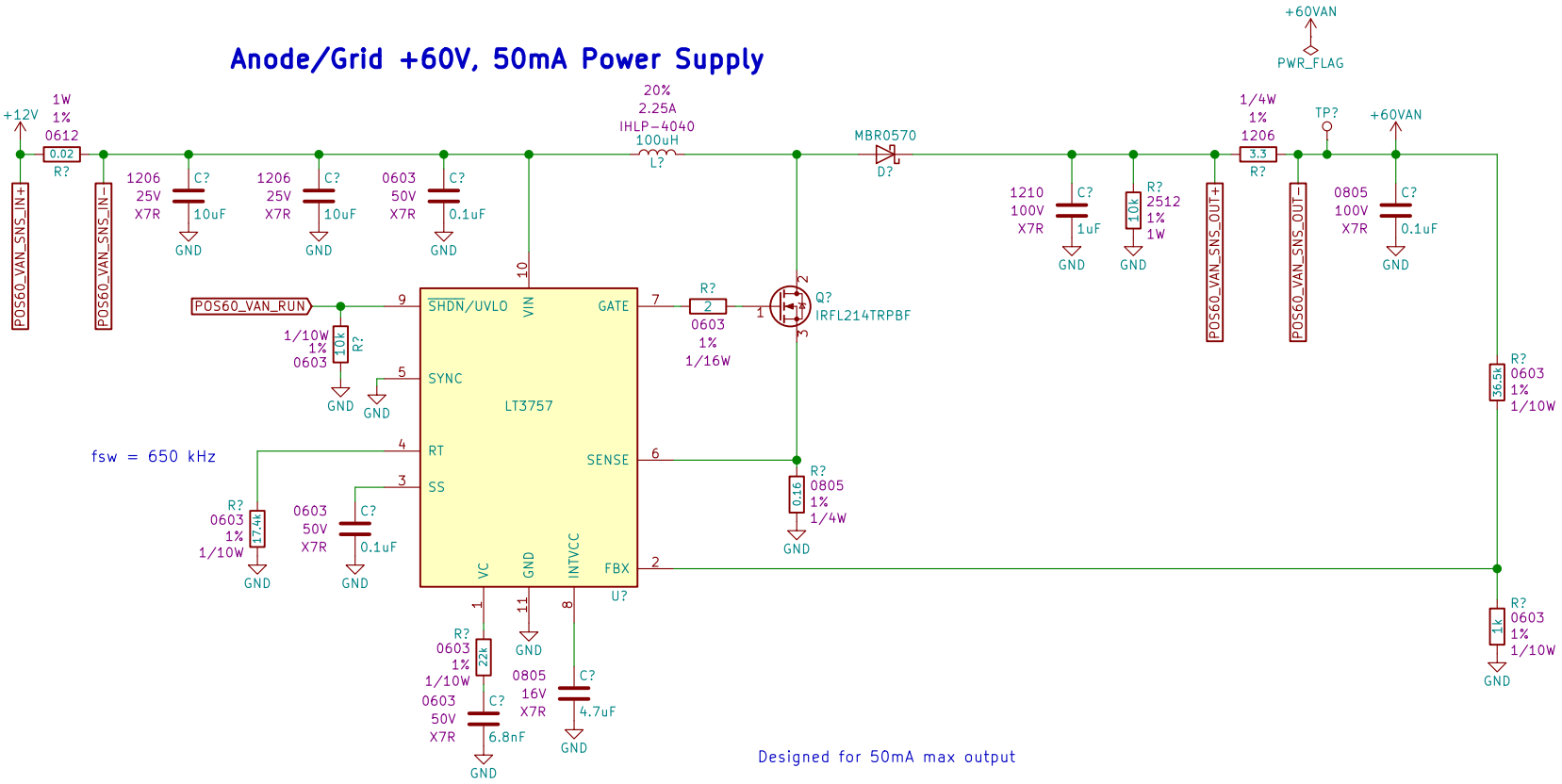
Title: VFD Clock

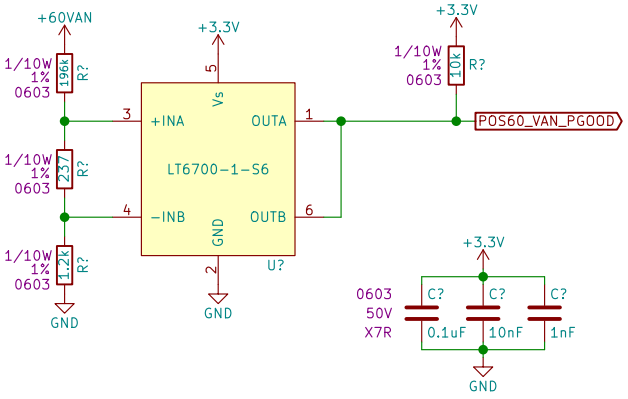
Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 1/25



Drew Maatman		
Sheet: /Microcontroller/		
File: Microcontroller.sch		
Title: VFD Clock		
Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 2/25

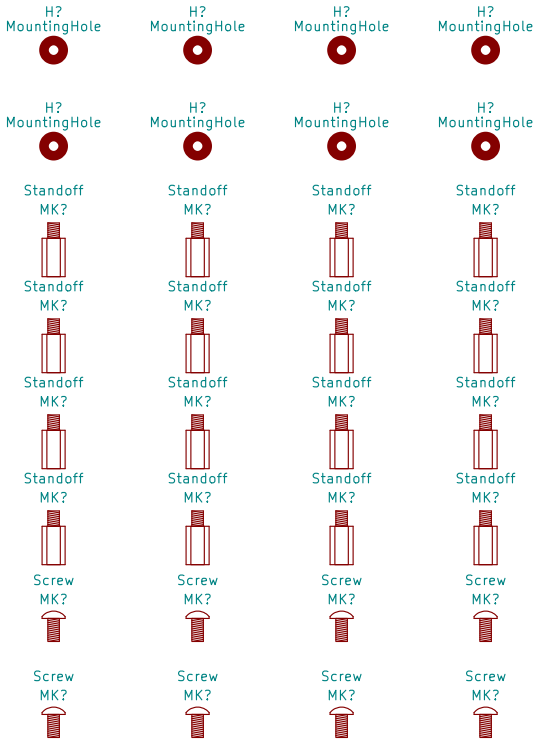
Anode/Grid +60V, 50mA Power Supply





Drew Maatman	
Sheet: /+60VAN Power Supply/	
File: POS60_VAN_Power_Supply.sch	
Title: VFD Clock	
Size: A | Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1	Id: 3/25

Mechanical Components



Drew Maatman		
Sheet: /Mechanical/		
File: Mechanical.sch		
Title: VFD Clock		
Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 4/25

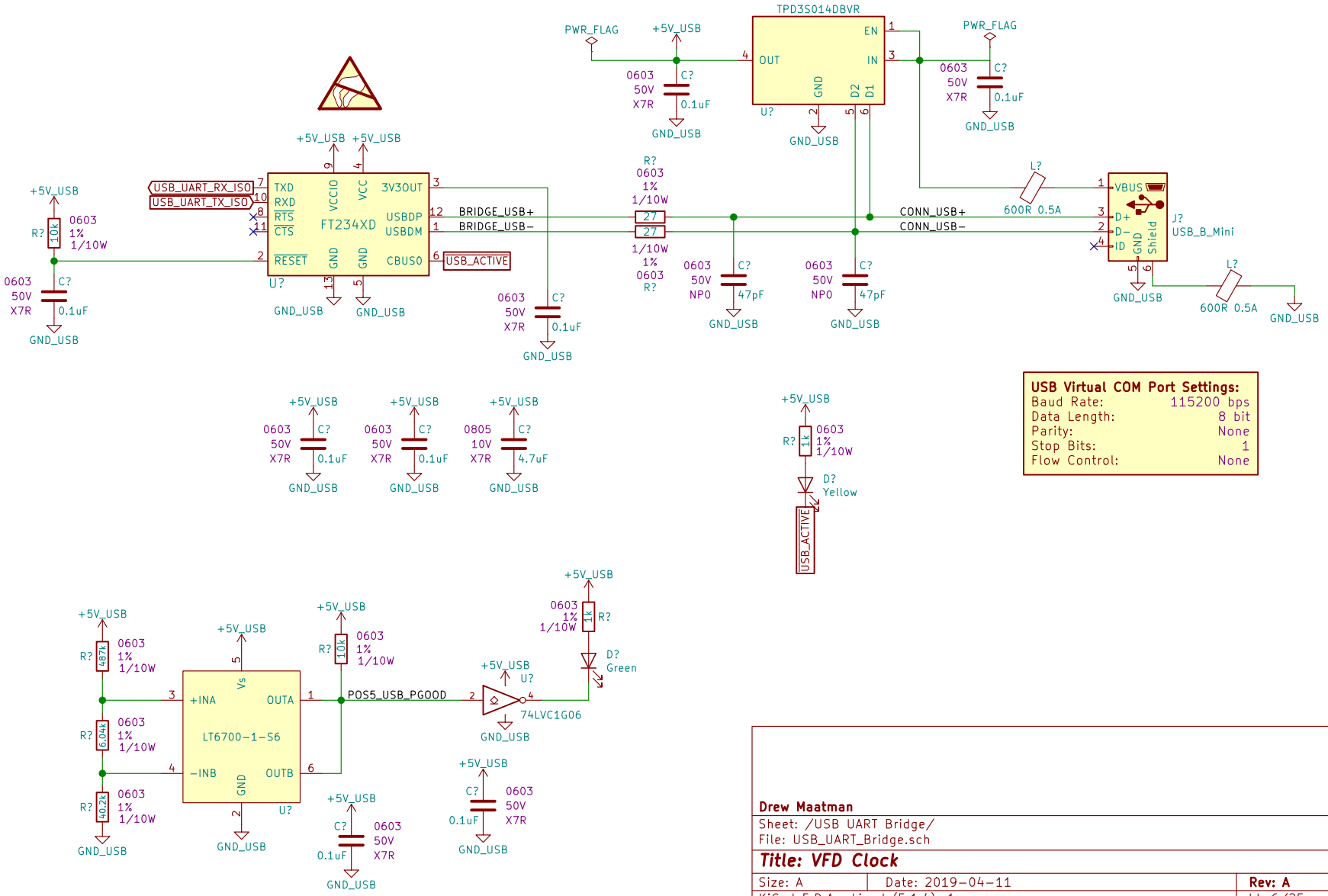
Drew Maatman

Sheet: /+3.3V BCKP Supply/
File: POS3P3_BCKP_Supply.sch

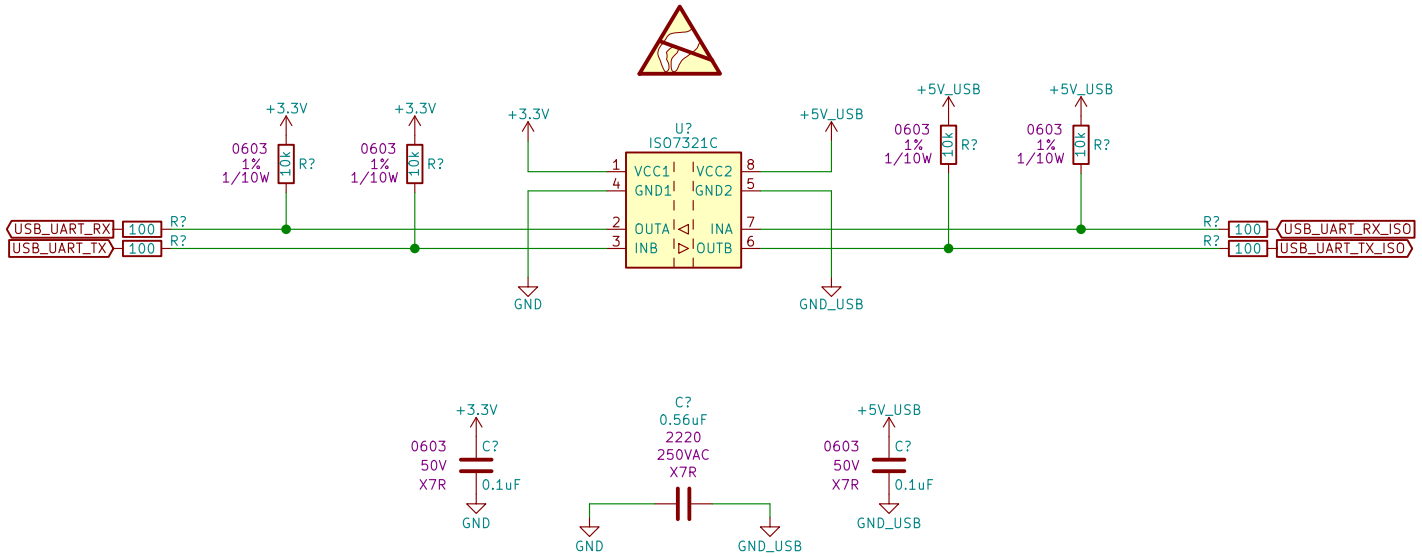
Title: VFD Clock

Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 5/25

11. USB UART Bridge

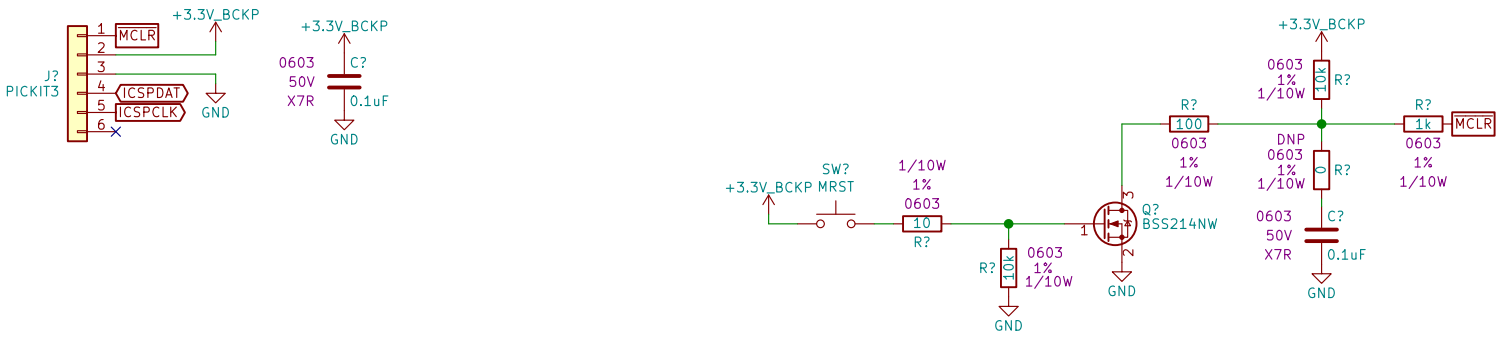


10. USB UART Digital Isolation

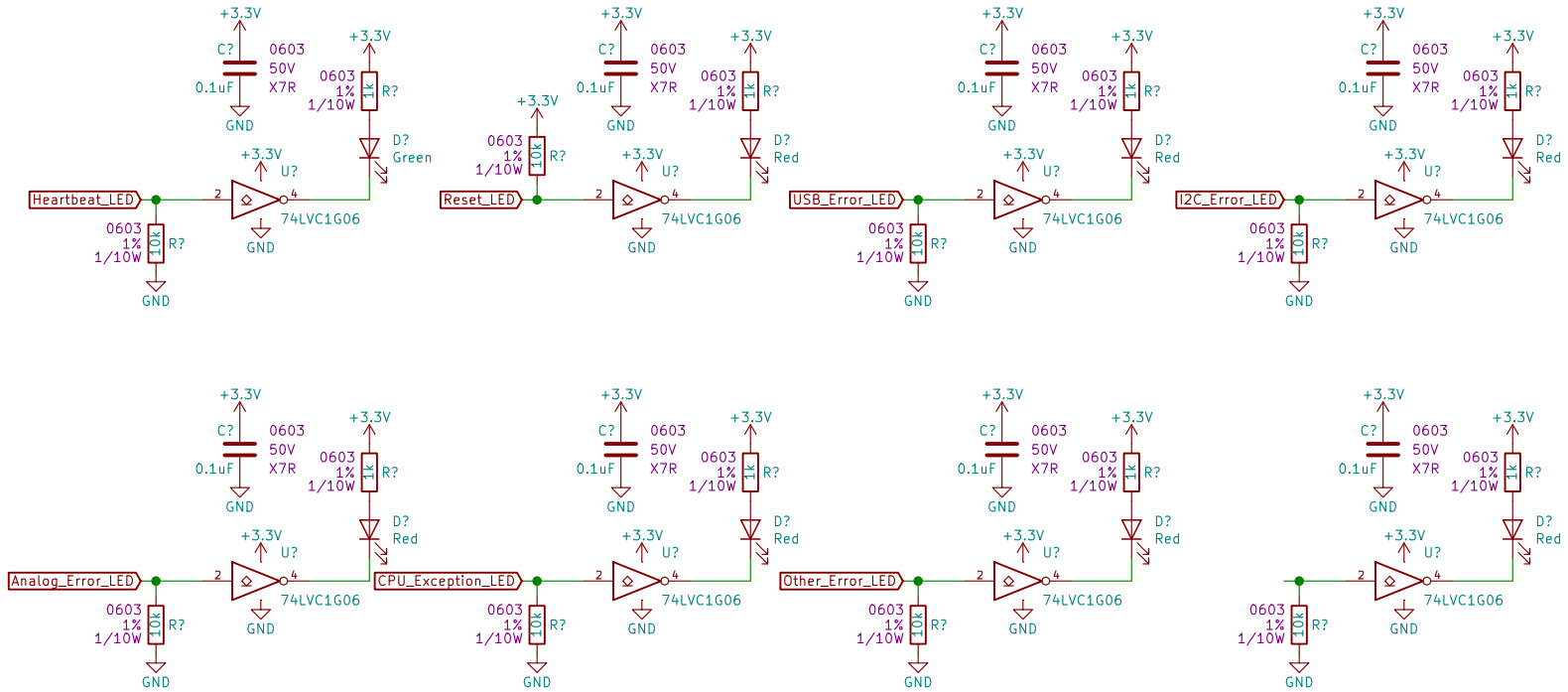


Drew Maatman		
Sheet: /USB UART Isolation/		
File: USB_UART_Isolation.sch		
Title: VFD Clock		
Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 7/25

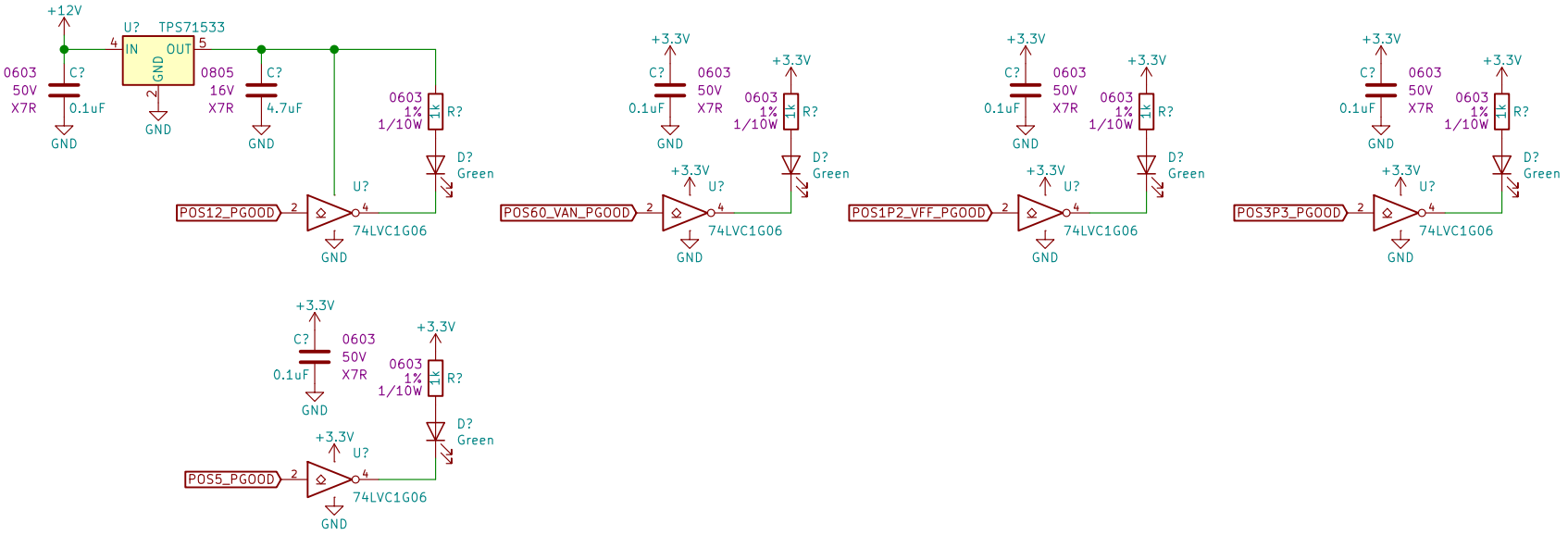
Microcontroller Programming



Drew Maatman		
Sheet: /Microcontroller Programming/		
File: Microcontroller_Programming.sch		
Title: VFD Clock		
Size: A	Date: 2019-04-11	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 8/25



Sheet: /Status LEDs/		
File: Status_LEDs.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 9/25



Sheet: /PGOOD LEDs/		
File: PGOOD_LEDs.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 10/25

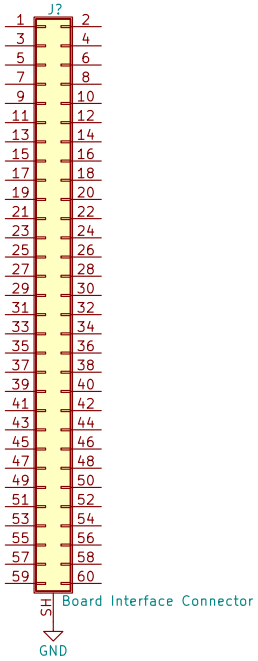
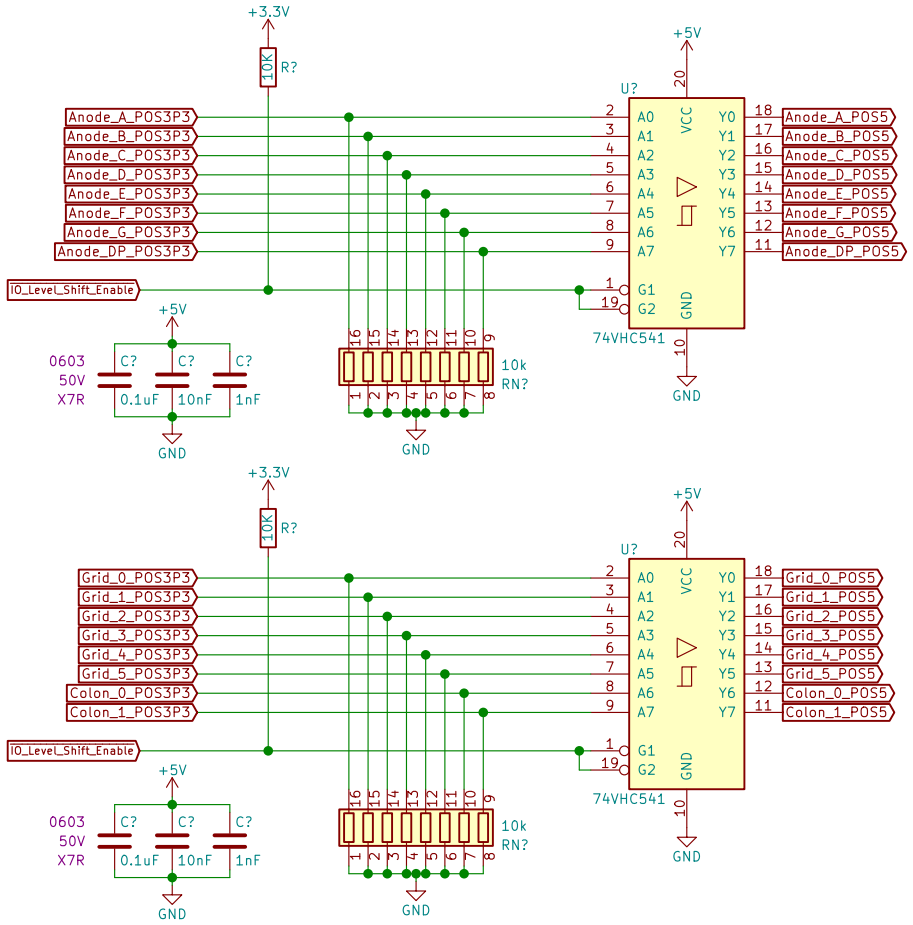


Figure out something else that's good
Get a good idea of this once you have
I/O nailed down

Sheet: /IO Connectors/ File: IO_Connectors.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 11/25

I/O Buffers

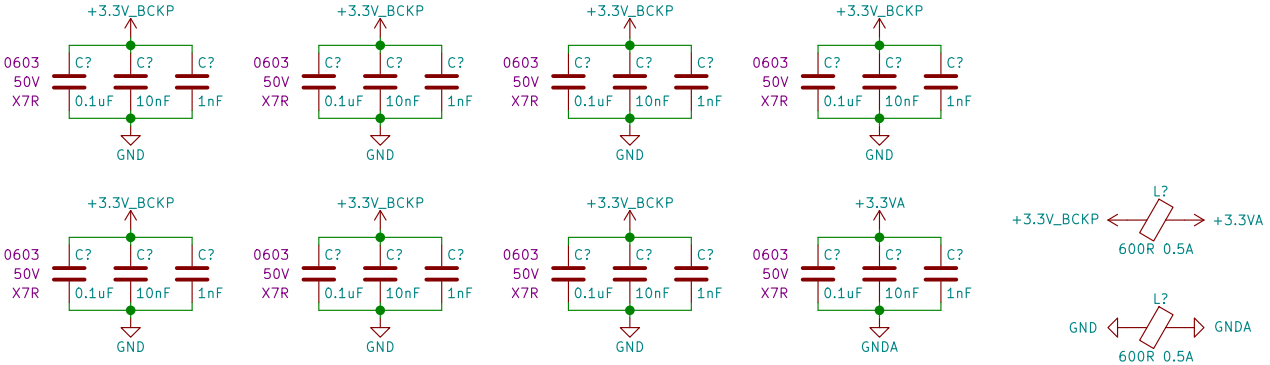


Marquette University Senior Design 2018/2019 Group E44

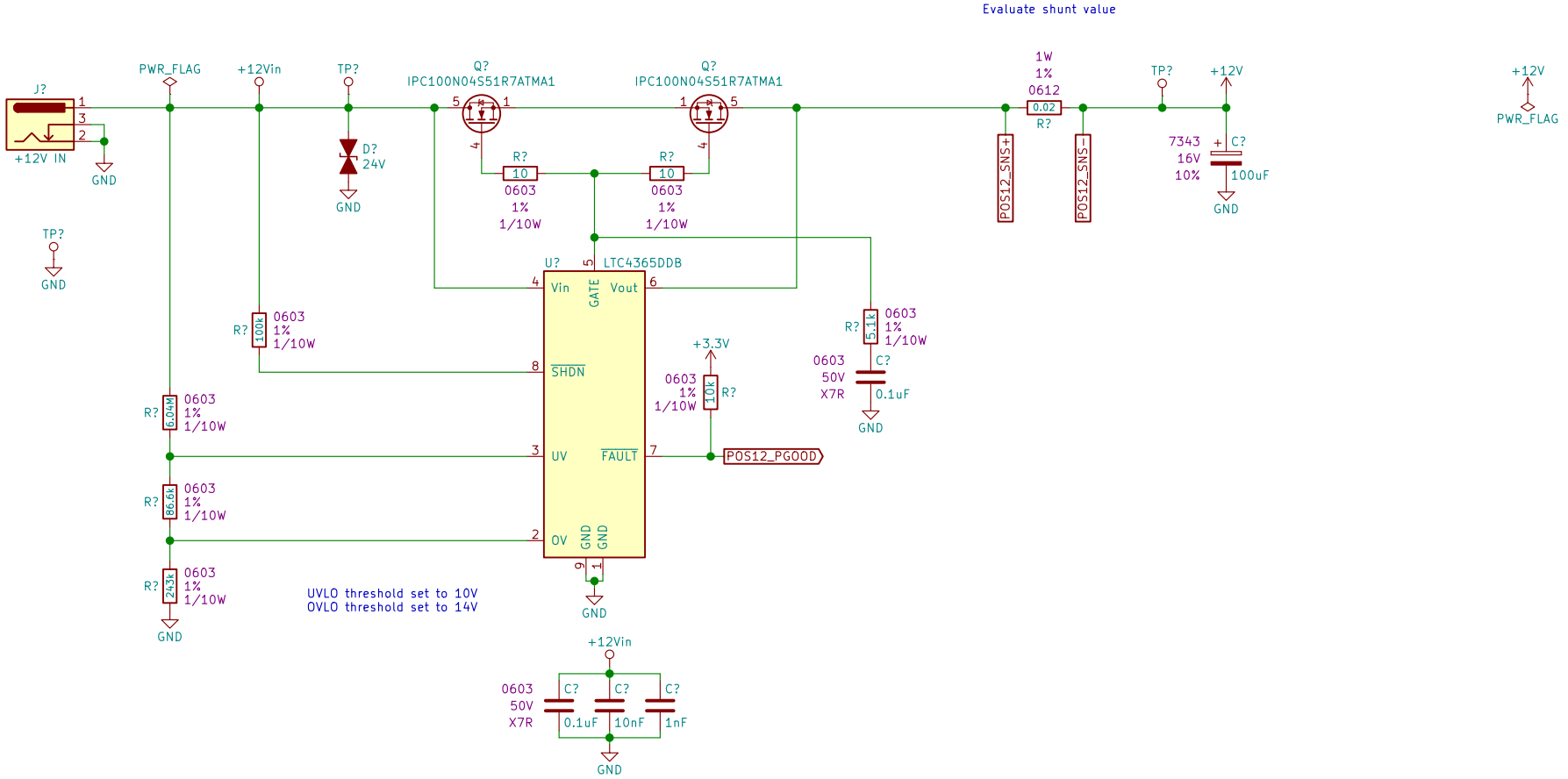
Sheet: /IO Buffers 1/
File: IO_Buffers_1.sch

Title: Electronic Display Logic Board

Size: A	Date: 2018-12-15	Rev: A
KiCad E.D.A. kicad (5.1.4)-1		Id: 12/25

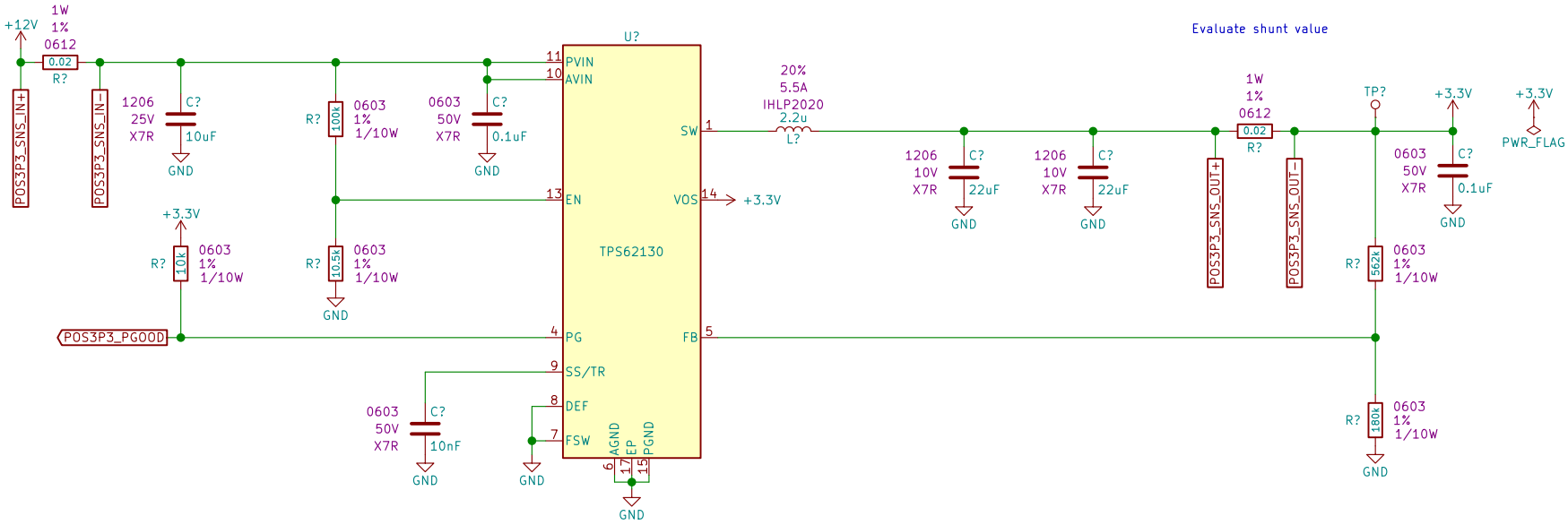


Sheet: /Microcontroller Bypass/		
File: Microcontroller_Bypass.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 13/25



Sheet: /+12V Input/	
File: POS12_Input.sch	
Title: QI Charger	
Size: A	Date: 2019-01-03
KiCad E.D.A. kicad (5.1.4)-1	Id: 14/25

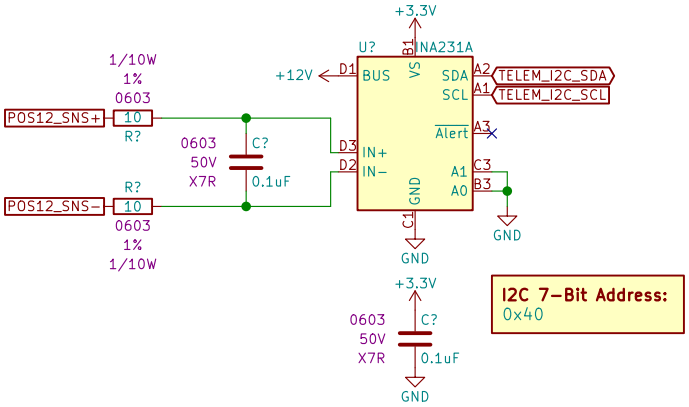
Rev: A

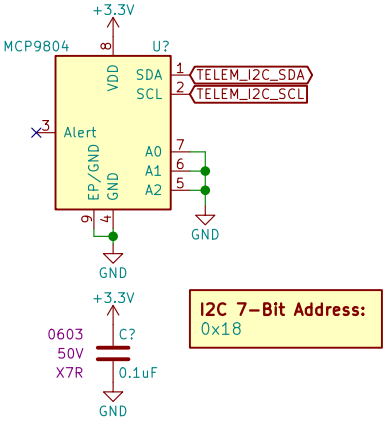


Sheet: /+3.3V Power Supply/		
File: POS3P3_Power_Supply.sch		
Title: QI Charger		
Size: A	Date: 2019-01-03	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 15/25

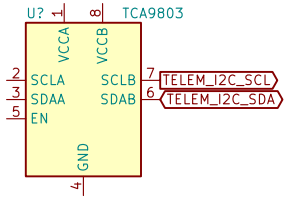
Add cap touch input buffers, menu LED outptu buffers, display board detection, etc

Sheet: /IO Buffers 2/ File: IO_Buffers_2.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 16/25



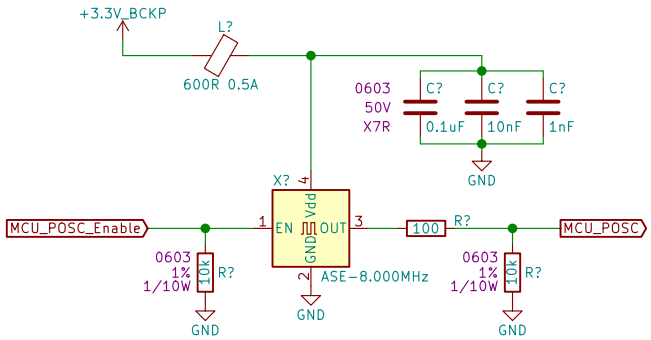


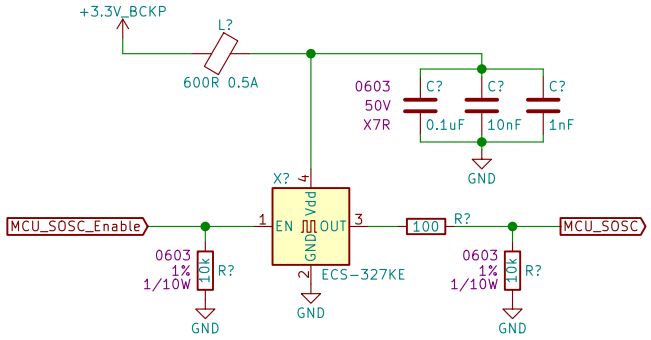
Sheet: /+12V Telemetry/		
File: POS12_Telemetry.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 17/25



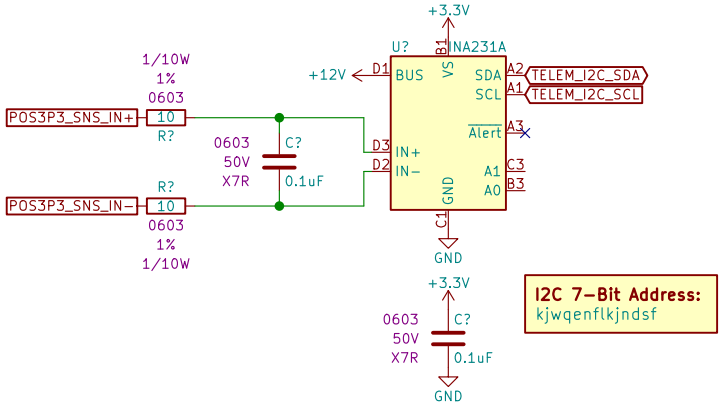
READ DATASHEET, PULLUP/DECOUPLING WEIRDNESS

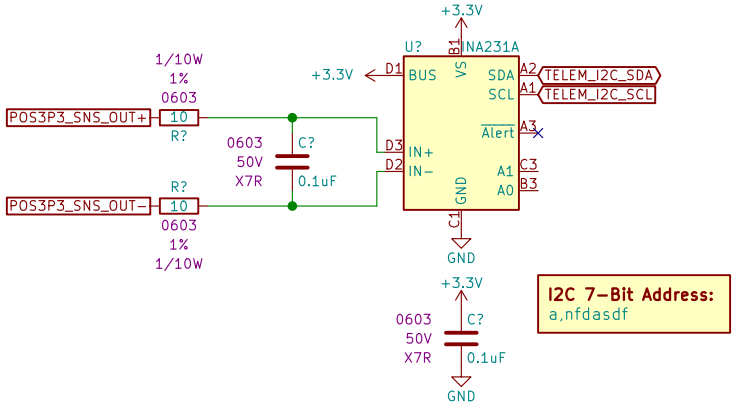
Sheet: /TELEM I2C Buffer/ File: TELEM_I2C_Buffer.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 18/25

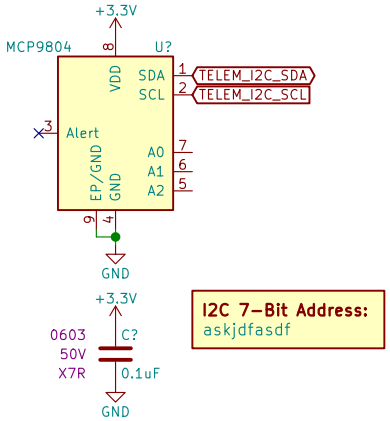




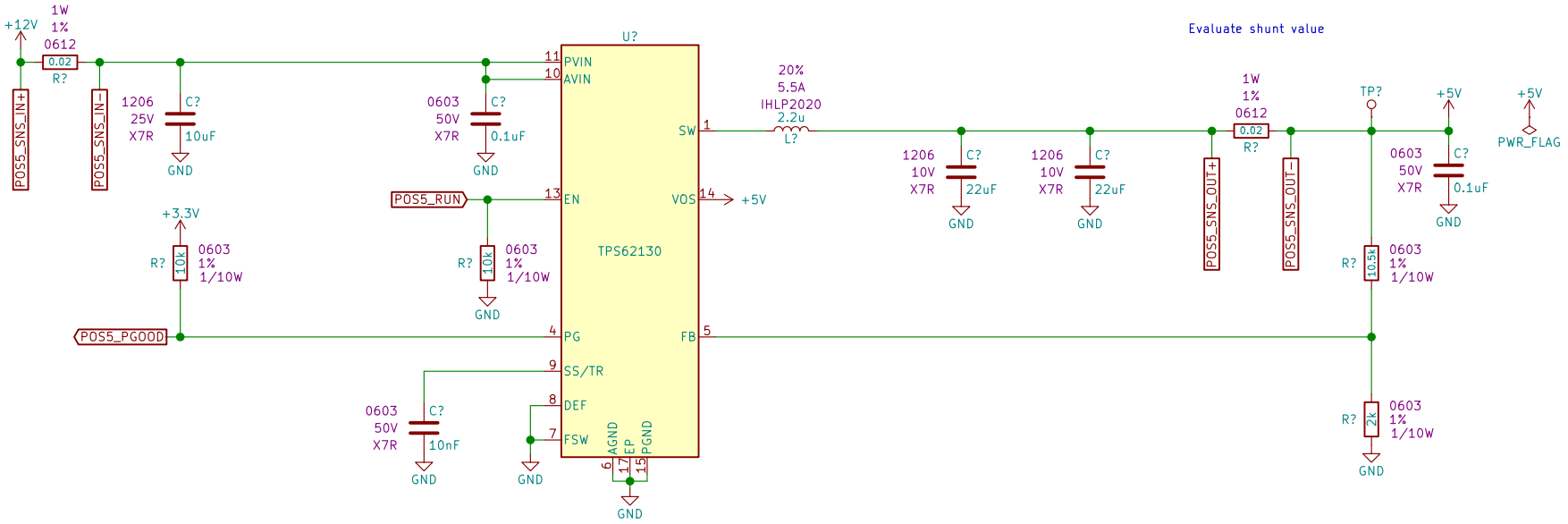
Sheet: /Microcontroller Clocking/ File: Microcontroller_Clocking.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 19/25



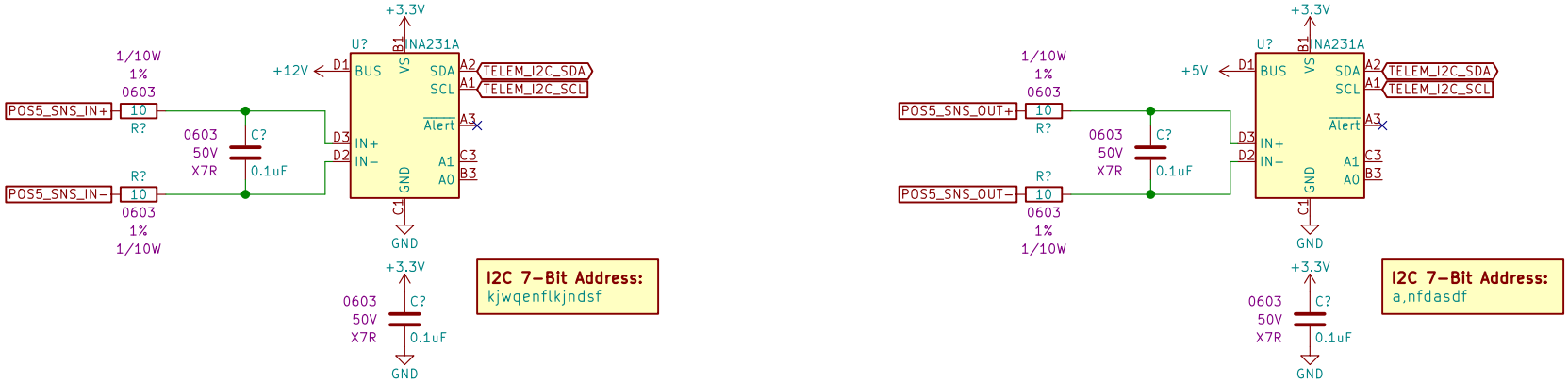


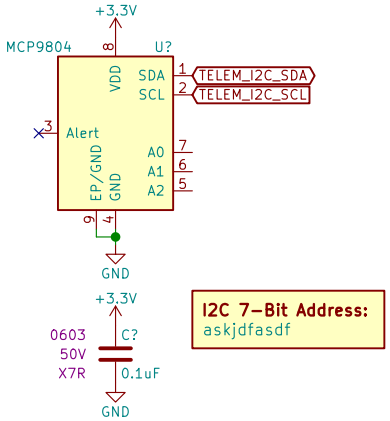


Sheet: /+3.3V Telemetry/		
File: POS3P3_Telemetry.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)−1		Id: 20/25

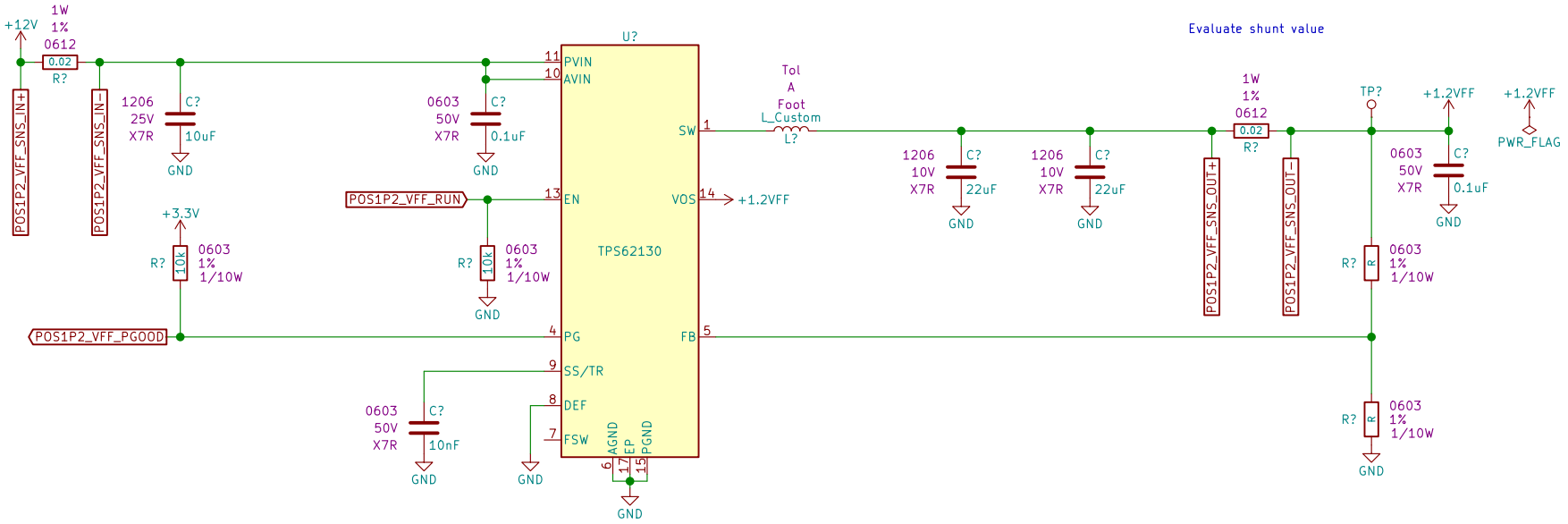


Sheet: /+5V Power Supply/		
File: POS5_Power_Supply.sch		
Title: QI Charger		
Size: A	Date: 2019-01-03	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 21/25

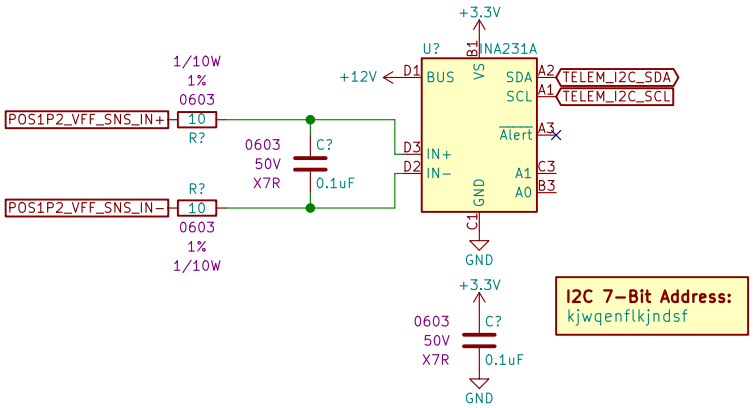


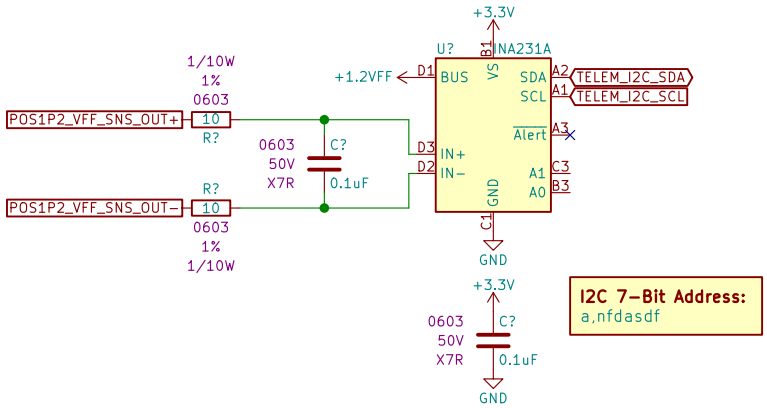


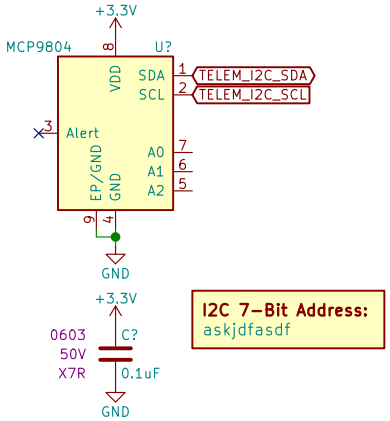
Sheet: /+5V Telemetry/		
File: POS5_Telemetry.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)−1		Id: 22/25



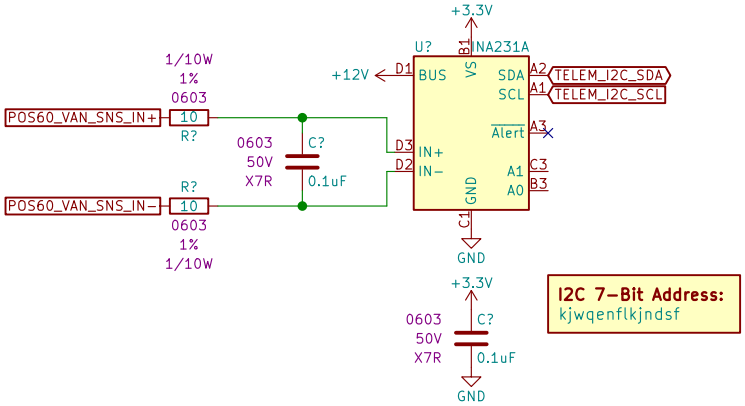
Sheet: /+1.2VFF Power Supply/		
File: POS1P2_VFF_Power_Supply.sch		
Title: QI Charger		
Size: A	Date: 2019-01-03	**Rev: A**
KiCad E.D.A. kicad (5.1.4)-1		Id: 23/25







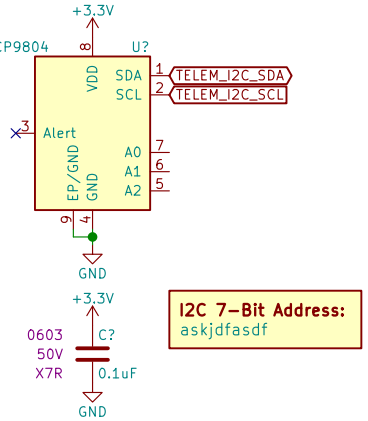
Sheet: /+1.2VFF Telemetry/		
File: POS1P2_VFF_Telemetry.sch		
Title:		
Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)−1		Id: 24/25



POS60_VAN_SNS_OUT+

POS60_VAN_SNS_OUT−

High voltage analog current sense amp bullshit,
+60VAN voltage measurement op amp stuff



Sheet: /+60VAN Telemetry/
File: POS60_VAN_Telemetry.sch

Title:

Size: A	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.4)-1		Id: 25/25