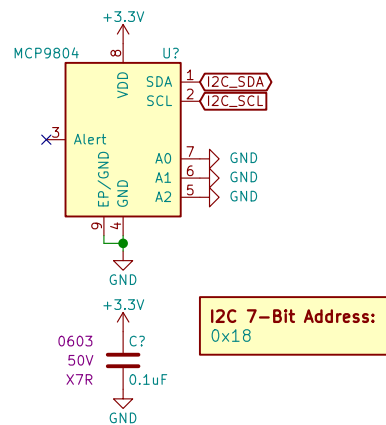
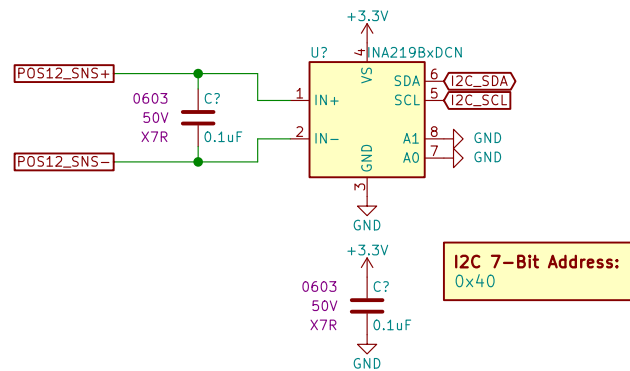


	1	2	3	4	5	
A		Sheet: +12V Input File: POS12_Input.sch		Sheet: PG00D LEDs File: PG00D_LEDs.sch		A
		Sheet: +12V Telemetry File: POS12_Telemetry.sch		Sheet: Status LEDs File: Status_LEDs.sch		
		Sheet: +3.3V Power Supply File: POS3P3_Power_Supply.sch				
		Sheet: +3.3V Telemetry File: POS3P3_Telemetry.sch				
		Sheet: +1.8V Power Supply File: POS1P8_Power_Supply.sch				
B		Sheet: +1.8V Telemetry File: POS1P8_Telemetry.sch				B
		Sheet: PIC32MZ Programming File: PIC32MZ_Programming.sch				
		Sheet: PIC32MZ Bypass File: PIC32MZ_Bypass.sch				
		Sheet: PIC32MZ Clocking File: PIC32MZ_Clocking.sch				
		Sheet: PIC32MZ File: PIC32MZ.sch				
		Sheet: USB_UART Bridge File: USB_UART_Bridge.sch				
C		Sheet: USB Telemetry File: USB_Telemetry.sch				C
		Sheet: Time of Flight File: Time_of_Flight.sch				
		Sheet: POX Sensor File: POX_Sensor.sch				
		Sheet: Display File: Display.sch				
		Sheet: Pushbuttons File: Pushbuttons.sch				
D						D
	1	2	3	4	5	





Sheet: /+12V Telemetry/
File: POS12_Telemetry.sch

Title:

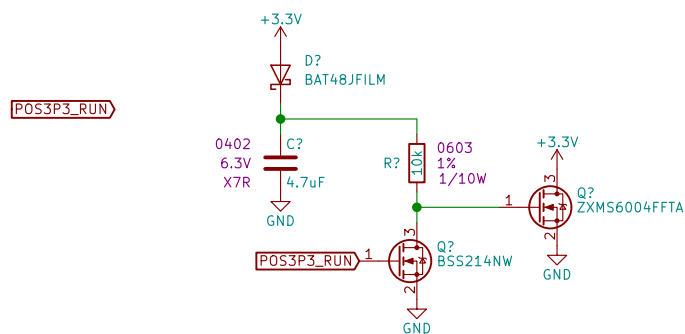
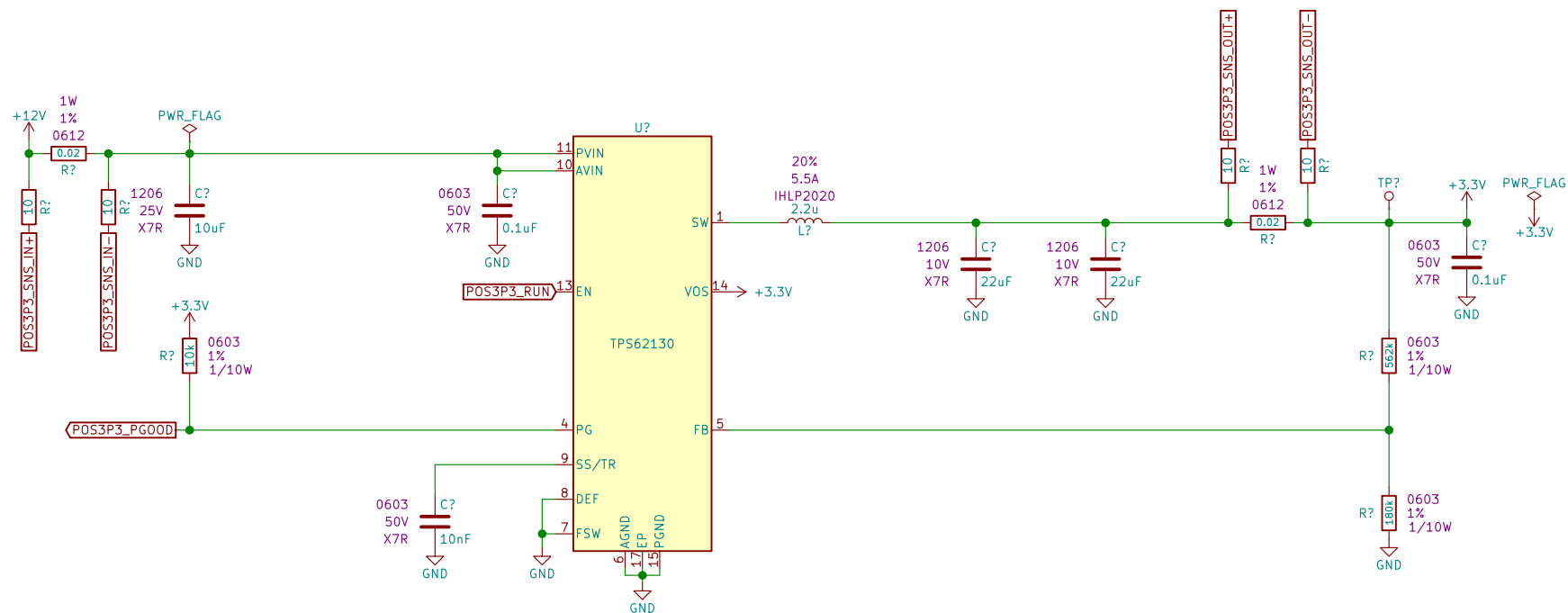
Size: A Date:
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Rev:
Id: 3/19

CONSIDER A SMALLER SOLUTION WITH LOWER OUTPUT CURRENT

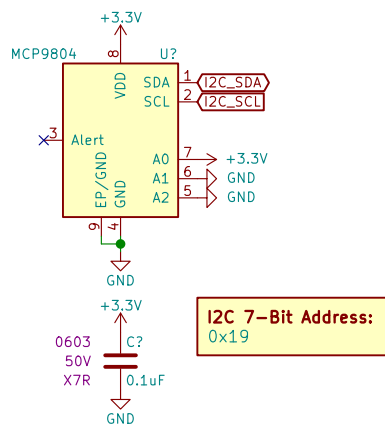
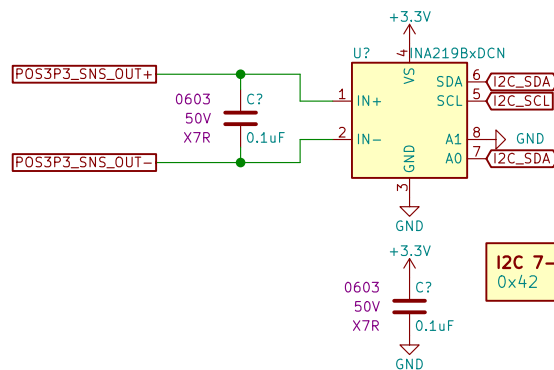
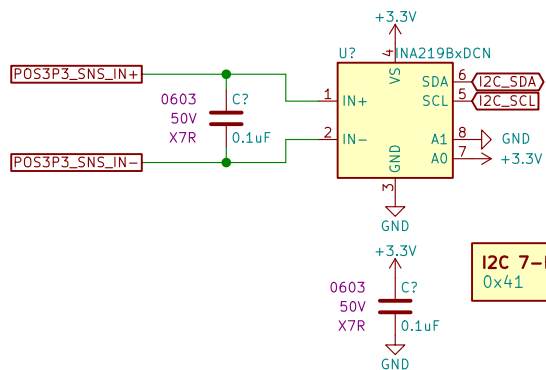
The schematic illustrates a +3.3V power supply and a Qi charger circuit. The main power supply is based on the TPS62130 DC-DC converter. The input is +12V, which is filtered by a 10µF capacitor (C?) and a 0.02Ω resistor (R?). The output is +3.3V, which is filtered by a 22µF capacitor (C?) and a 0.02Ω resistor (R?). The feedback network consists of a 10kΩ resistor (R?) and a 0.02Ω resistor (R?). The output is also filtered by a 10µF capacitor (C?) and a 0.02Ω resistor (R?). The PWR_FLAG signal is connected to the output. The secondary circuit shows a BSS214NW MOSFET and a ZXMS6004FFTA Schottky diode for charging a battery (BAT48JF1LM) from a +3.3V source.

Sheet: /+3.3V Power Supply/
File: POS3P3_Power_Supply.sch
Title: Qi Charger
Size: A Date: 2019-01-03
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Rev: A
Id: 4/19



Title: QI Charger		
Size: A	Date: 2019-01-03	Rev: A
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Size: A	Date: 2019-01-03	Rev: A
KiCad E.D.A. kicad (5.1.4)-1		Id: 4/19



Sheet: /+3.3V Telemetry/
File: POS3P3_Telemetry.sch

Title:

Size: A

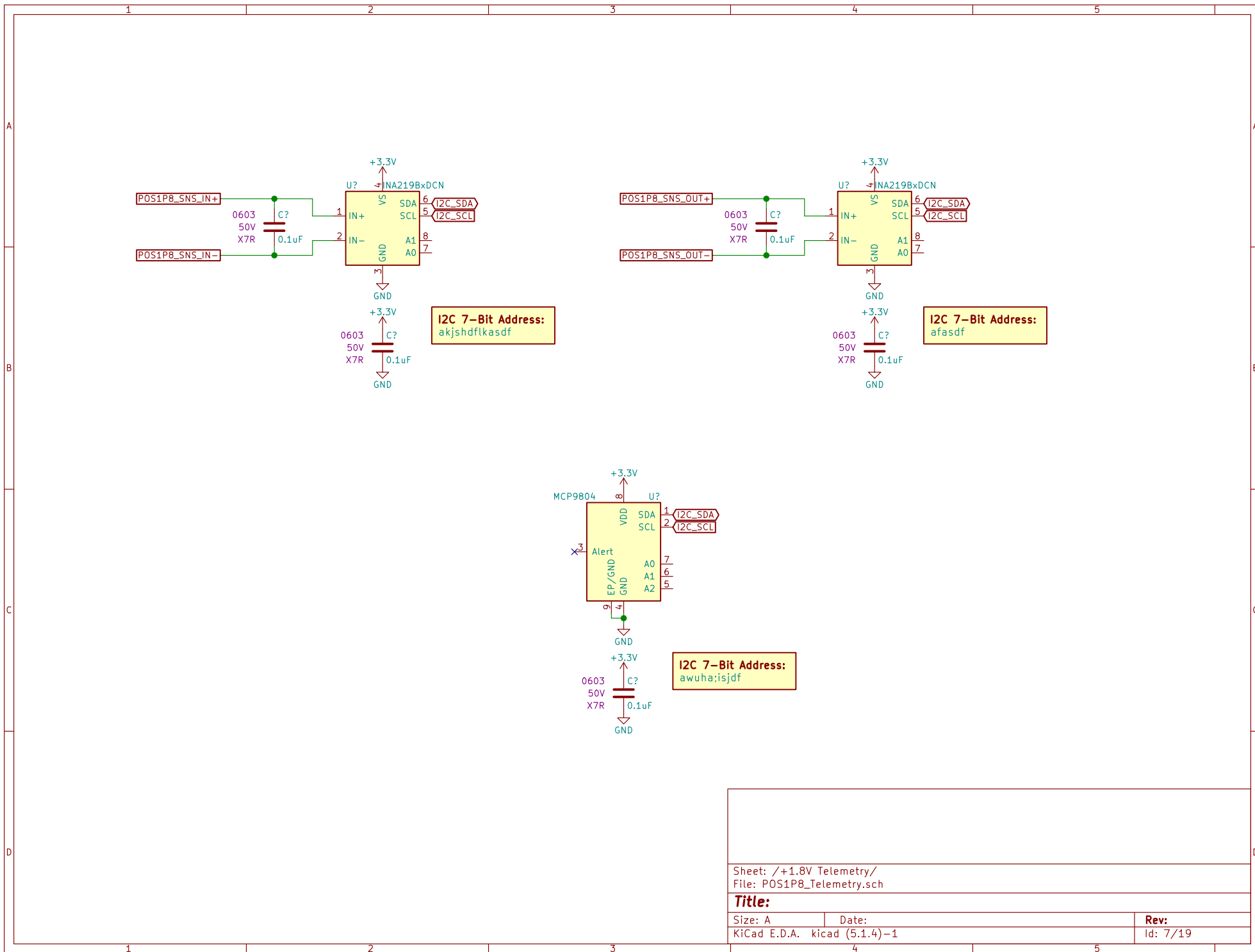
Date:

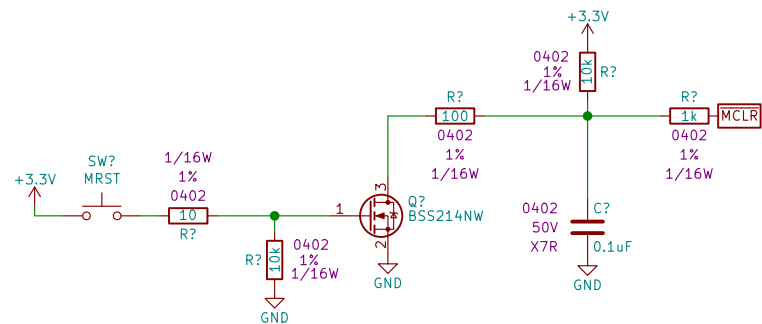
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Id: 5/19

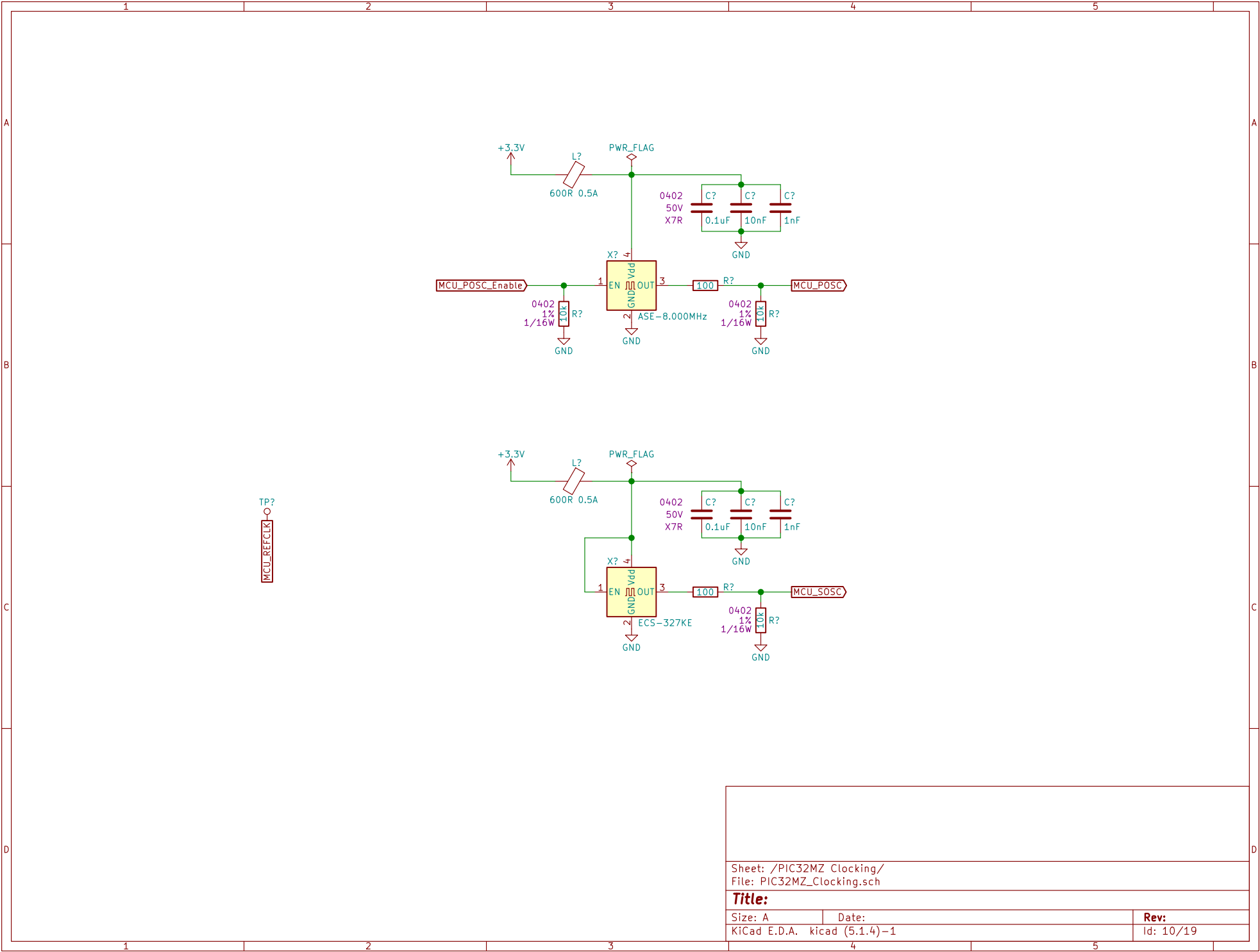
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Id: 6/19





Rev: A
Id: 8/19





Sheet: /PIC32MZ_Clocking/
File: PIC32MZ_Clocking.sch

Title:

Size: A

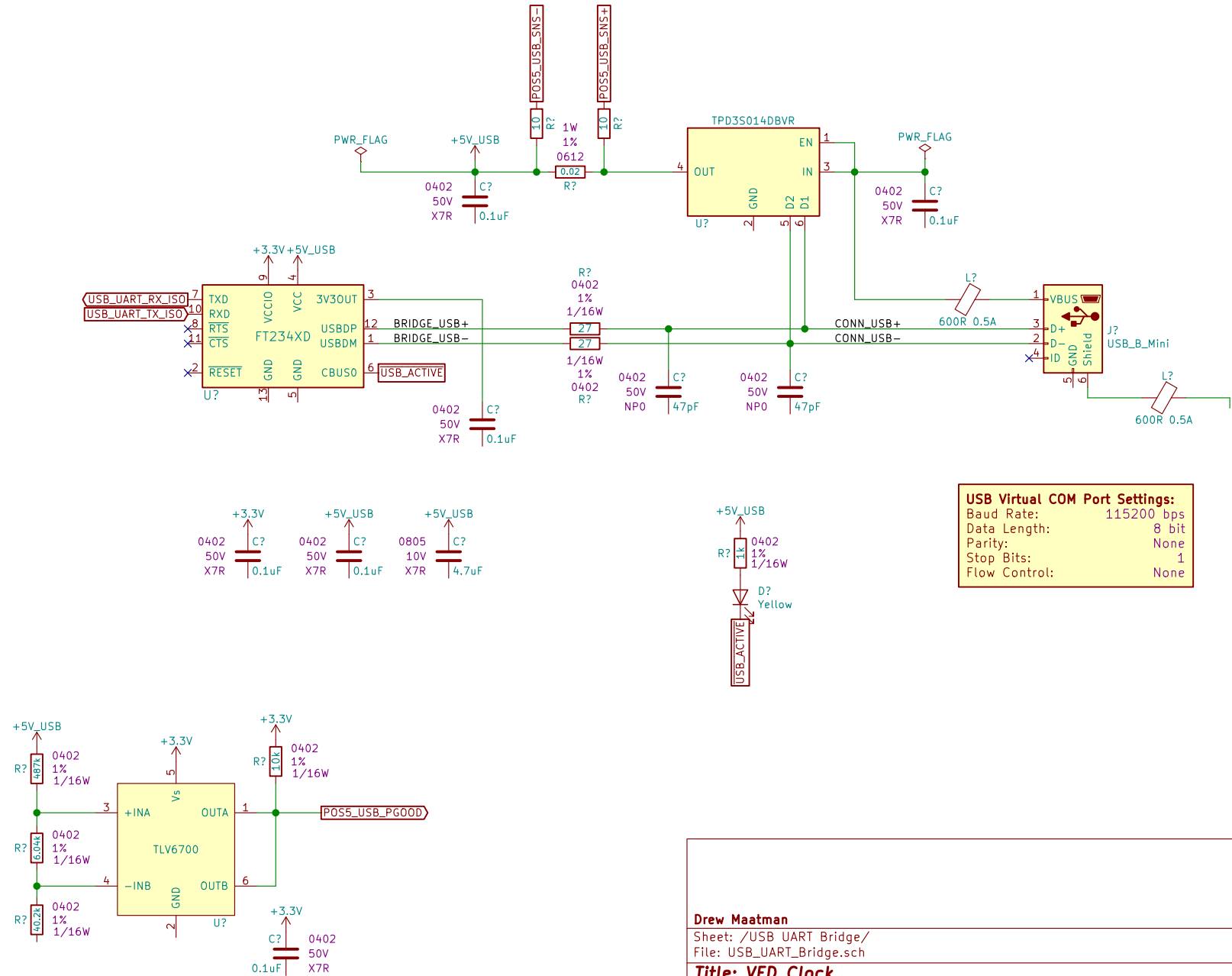
Date:

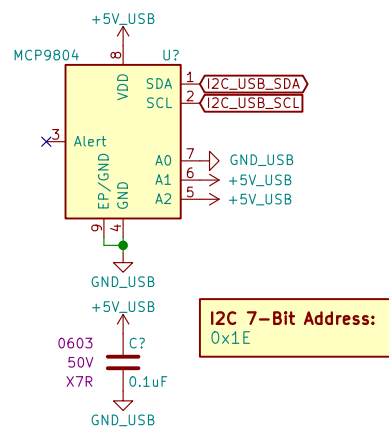
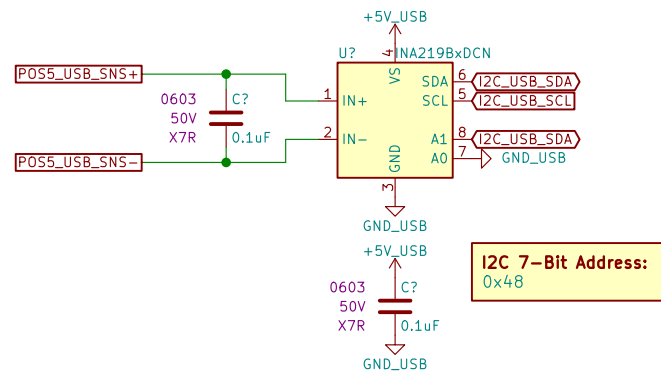
KiCad E.D.A. kicad (5.1.4)-1

Rev:

Id: 10/19

11. USB UART Bridge





Sheet: /USB Telemetry/
File: USB_Telemetry.sch

Title:

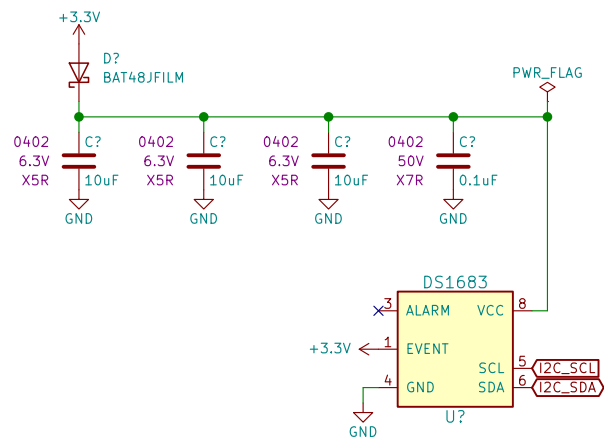
Size: A

Date:

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

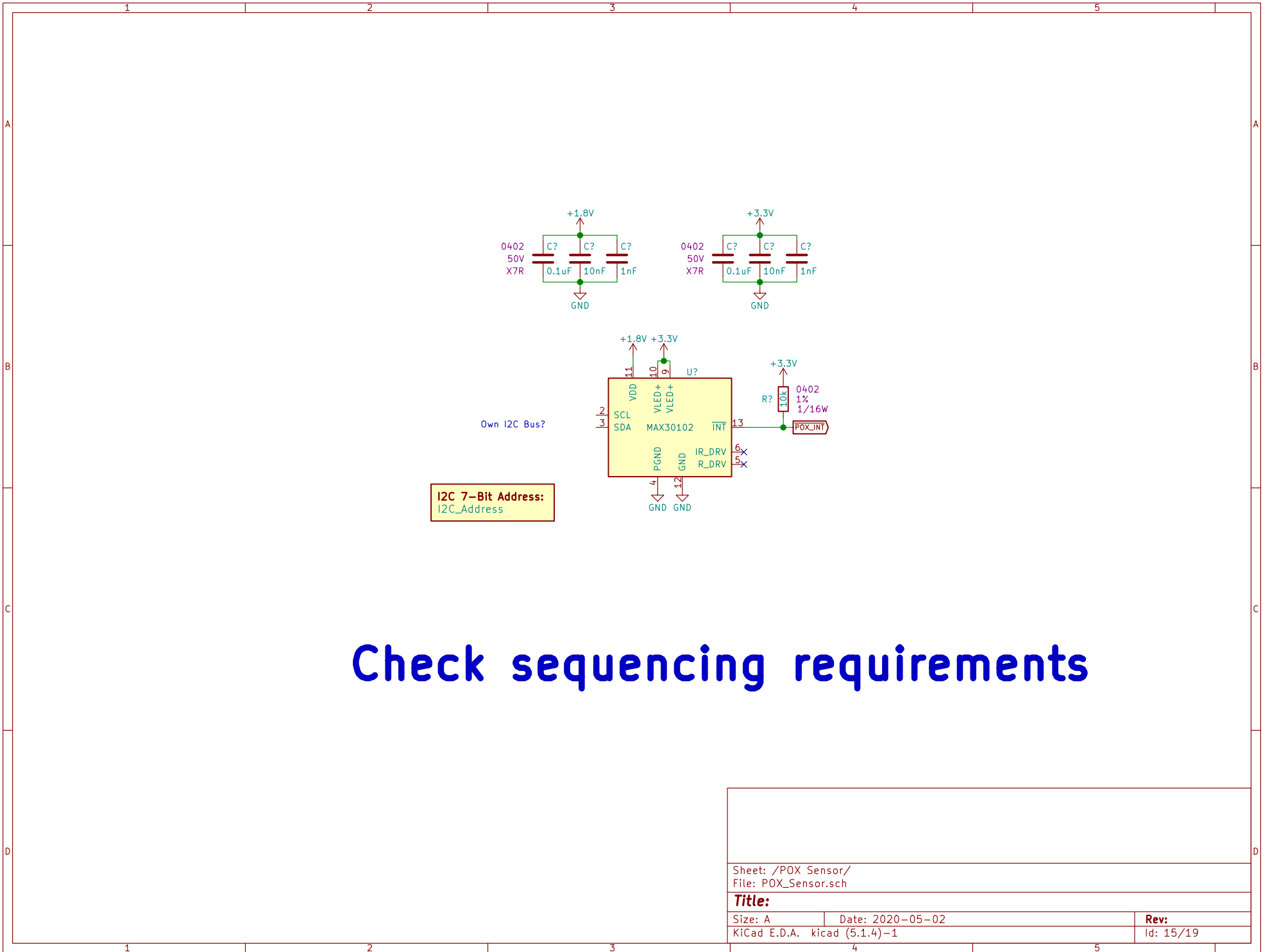
Rev:

Id: 13/19



I2C 7-Bit Address:
0x6B

Sheet: /Time of Flight/ File: Time_of_Flight.sch		
Title:		
Size: A	Date:	Rev:
KiCad E.D.A. kicad (5.1.4)-1		Id: 14/19



Check sequencing requirements

Sheet: /POX Sensor/
File: POX_Sensor.sch

Title:

Size: A Date: 2020-05-02

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Rev:
Id: 15/19

1					2					3					4					5					
A																									A
B																									B
C																									C
D																									D
1					2					3					4					5					

Sheet: /Pushbuttons/
File: Pushbuttons.sch

Title:

Size: A

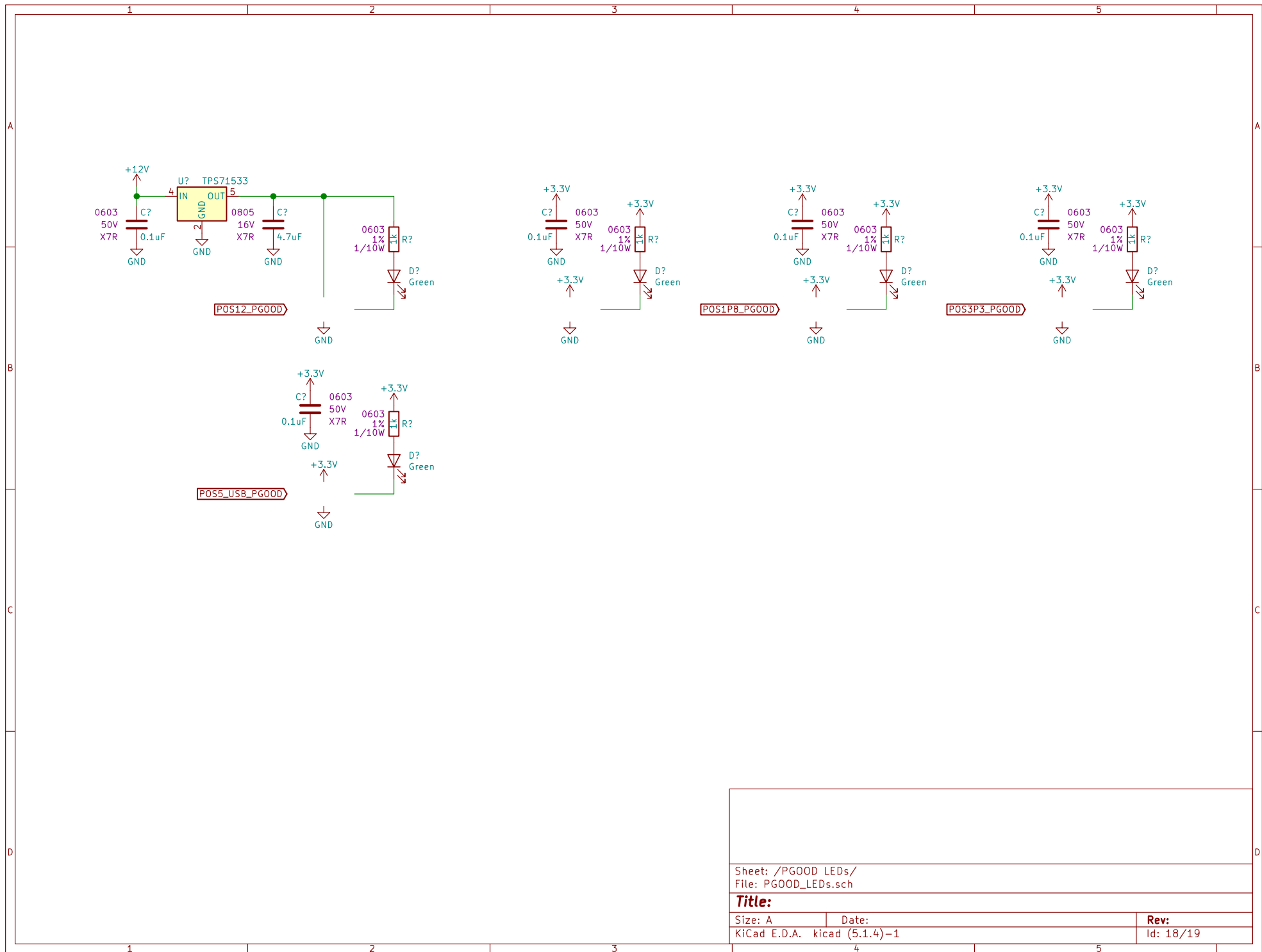
Date: 2020-05-02

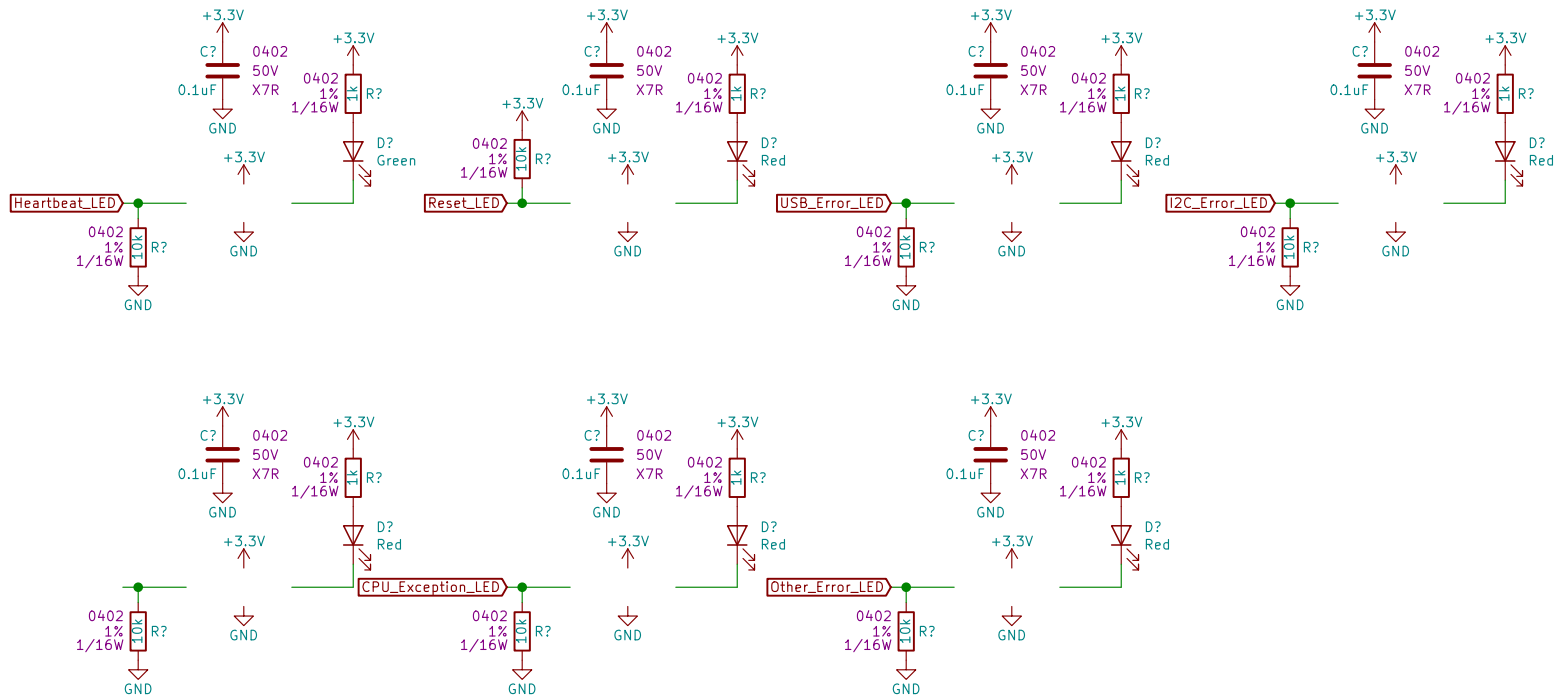
Rev:

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

Id: 17/19

Sheet: /Pushbuttons/ File: Pushbuttons.sch		
Title:		
Size: A	Date: 2020-05-02	Rev:
KiCad E.D.A. kicad (5.1.4)-1		Id: 17/19





Sheet: /Status LEDs/
File: Status_LEDs.sch

Title:

Size: A

Date:

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Rev:

Id: 19/19