

VFD Clock Logic Board

01. Table of Contents

02. +12V Input

Sheet: +12V Input

File: POS12_Input.sch

03. +12V Telemetry

Sheet: +12V Telemetry

File: POS12_Telemetry.sch

04. +3.3V Power Supply

Sheet: +3.3V Power Supply

File: POS3P3_Power_Supply.sch

05. +3.3V Telemetry

Sheet: +3.3V Telemetry

File: POS3P3_Telemetry.sch

06. +5V Power Supply

Sheet: +5V Power Supply

File: POS5_Power_Supply.sch

07. +5V Telemetry

Sheet: +5V Telemetry

File: POS5_Telemetry.sch

08. +1.2VFF Power Supply

Sheet: +1.2VFF Power Supply

File: POS1P2_VFF_Power_Supply.sch

09. +1.2VFF Telemetry

Sheet: +1.2VFF Telemetry

File: POS1P2_VFF_Telemetry.sch

10. +60VAN Power Supply

Sheet: +60VAN Power Supply

File: POS60_VAN_Power_Supply.sch

11. +60VAN Telemetry

Sheet: +60VAN Telemetry

File: POS60_VAN_Telemetry.sch

12. Reserved

Sheet: +3.3V BCKP Supply

File: POS3P3_BCKP_Supply.sch

13. Misc Power

Sheet: Misc Power

File: Misc_Power.sch

14. Microcontroller

Sheet: Microcontroller

File: Microcontroller.sch

15. Microcontroller Programming

Sheet: Microcontroller Programming

File: Microcontroller_Programming.sch

16. Microcontroller Bypass

Sheet: Microcontroller Bypass

File: Microcontroller_Bypass.sch

17. Microcontroller Clocking

Sheet: Microcontroller Clocking

File: Microcontroller_Clocking.sch

18. Misc Circuits

Sheet: Misc Circuits

File: Misc_Circuits.sch

19. Backup RTC

Sheet: Backup RTC

File: Backup_RTC.sch

20. Status LEDs

Sheet: Status LEDs

File: Status_LEDs.sch

21. PGOOD LEDs

Sheet: PGOOD LEDs

File: PGOOD_LEDs.sch

22. I2C Buffer

Sheet: I2C Buffer

File: I2C_Buffer.sch

23. Time of Flight

Sheet: Time of Flight

File: Time_of_Flight.sch

24. USB UART Bridge

Sheet: USB UART Bridge

File: USB_UART_Bridge.sch

25. Reserved

Sheet: USB UART Isolation

File: USB_UART_Isolation.sch

26. USB Telemetry

Sheet: USB Telemetry

File: USB_Telemetry.sch

27. Reserved

Sheet: BLE

File: BLE.sch

28. IO Buffers 1

Sheet: IO Buffers 1

File: IO_Buffers_1.sch

29. IO Buffers 2

Sheet: IO Buffers 2

File: IO_Buffers_2.sch

30. IO Connectors

Sheet: IO Connectors

File: IO_Connectors.sch

31. Mechanical

Sheet: Mechanical

File: Mechanical.sch

Drew Maatman

Sheet: /

File: VFD_Clock.sch

Title: VFD Clock

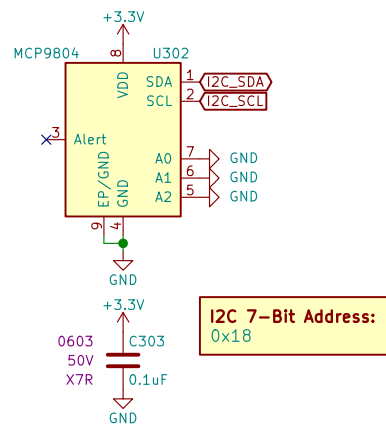
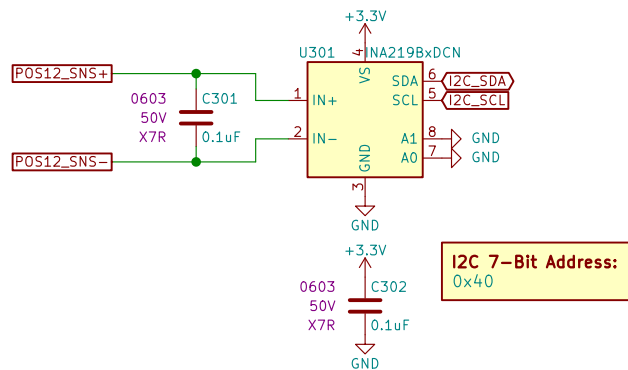
Size: A Date: 2019-04-11

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

Rev: A

Id: 1/31



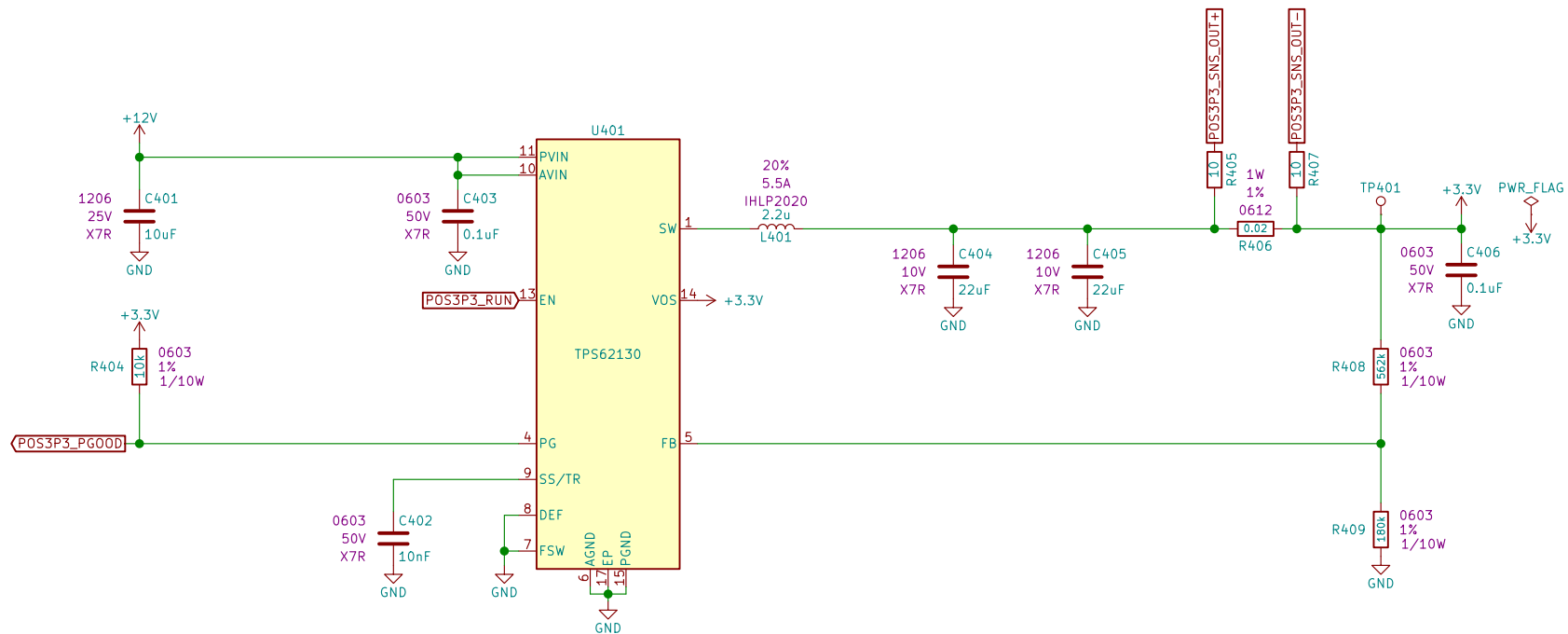


Sheet: /+12V Telemetry/
File: POS12_Telemetry.sch

Title:

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

Rev:
Id: 3/31

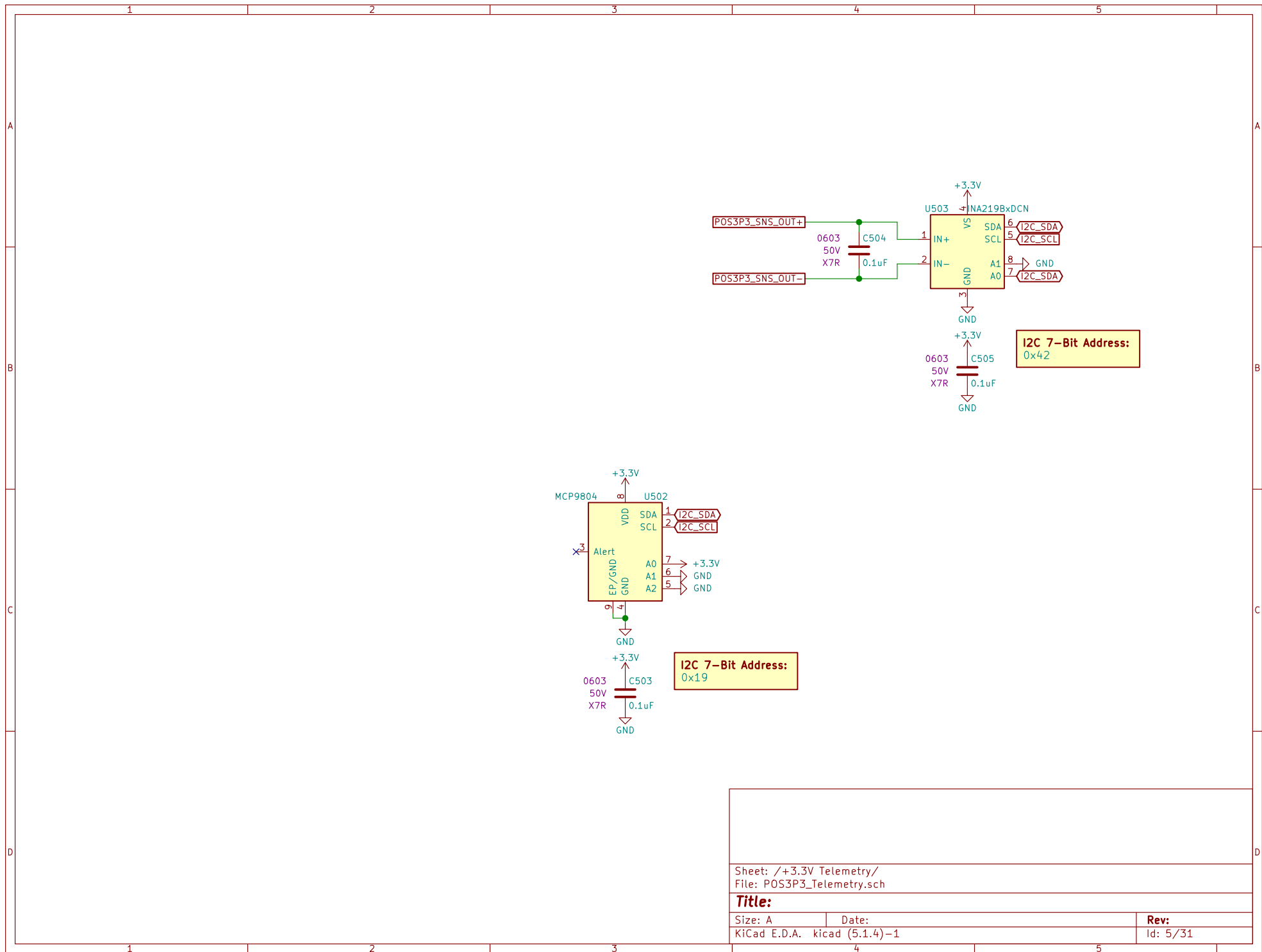


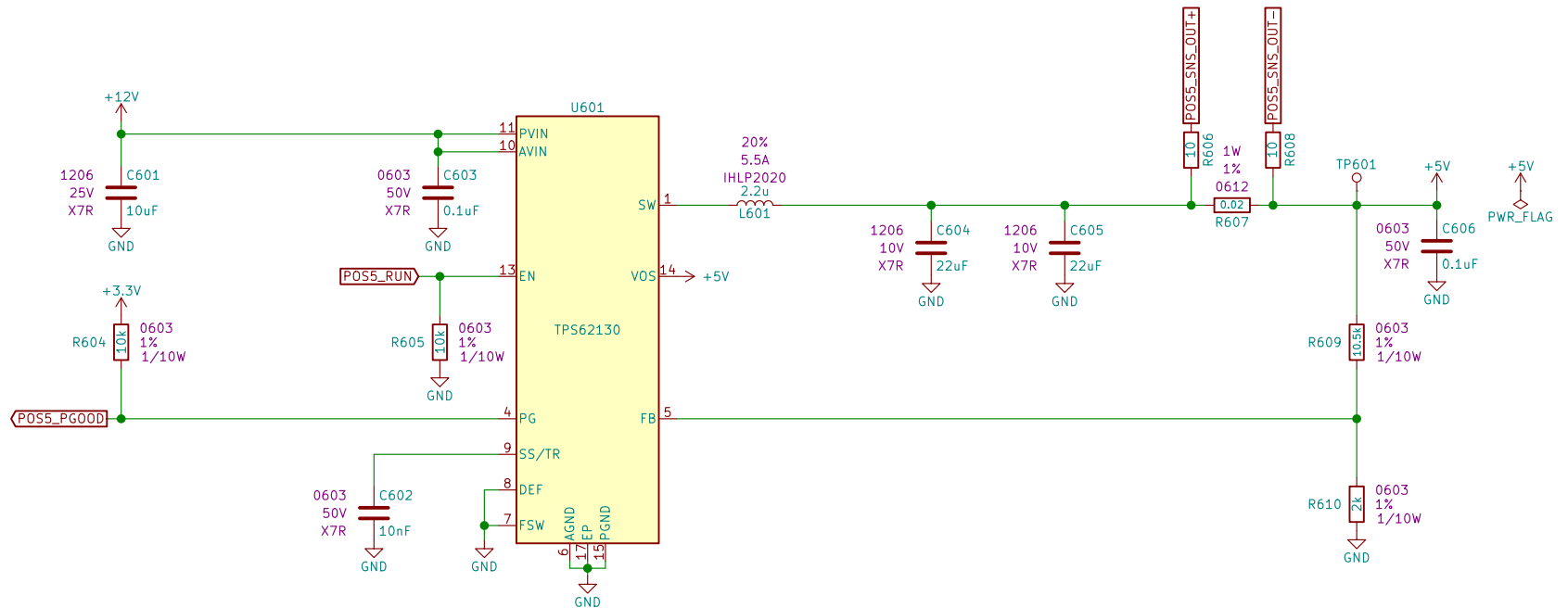
Sheet: /+3.3V Power Supply/
File: POS3P3_Power_Supply.sch

Title: QI Charger

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

Rev: A
Id: 4/31



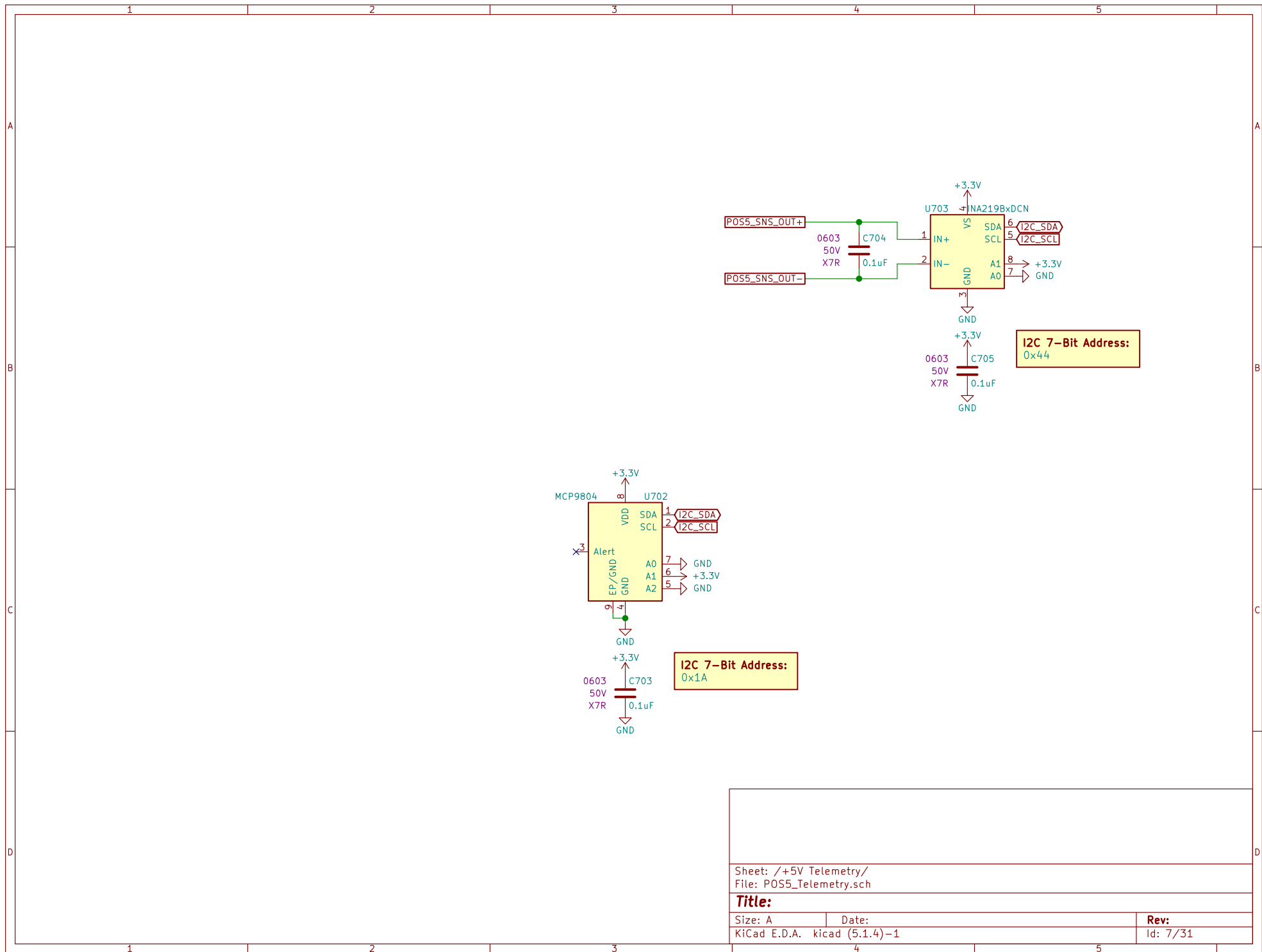


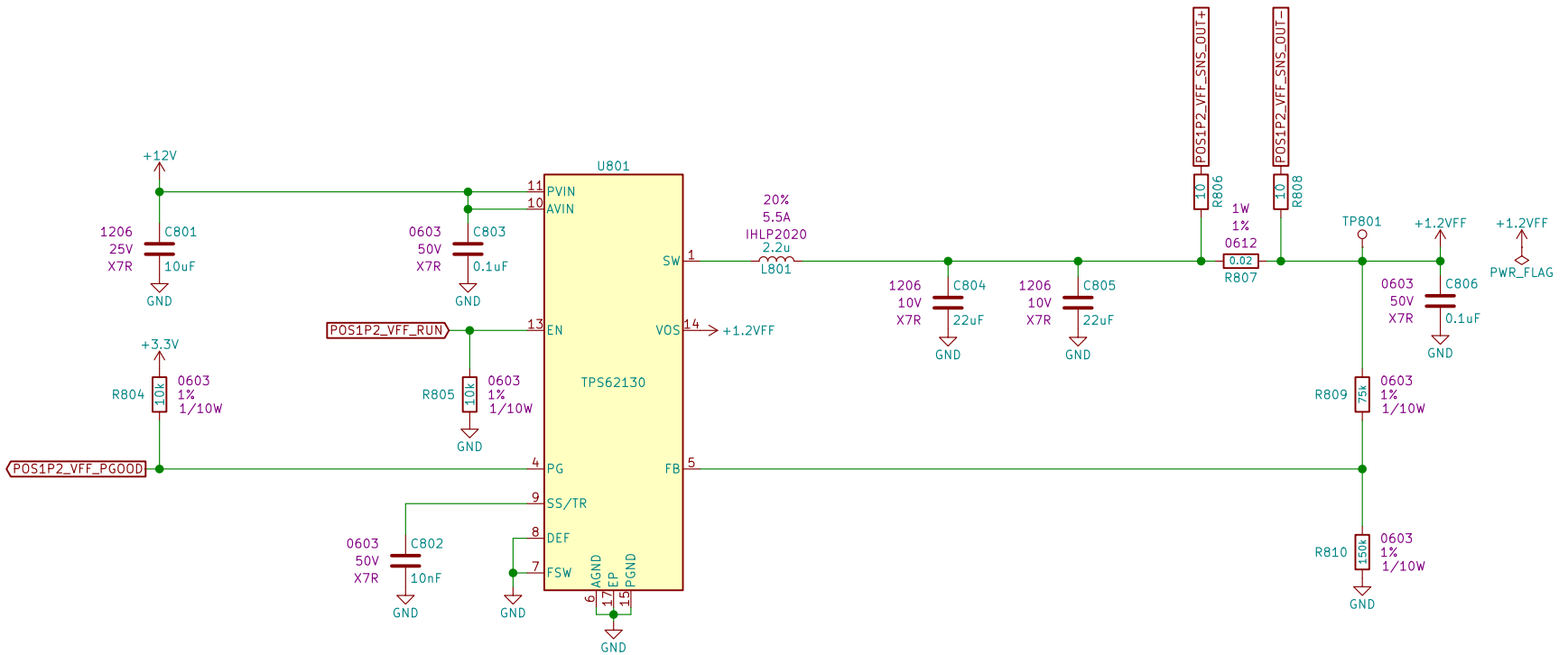
Sheet: /+5V Power Supply/
File: POS5_Power_Supply.sch

Title: QI Charger

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

Rev: A
Id: 6/31





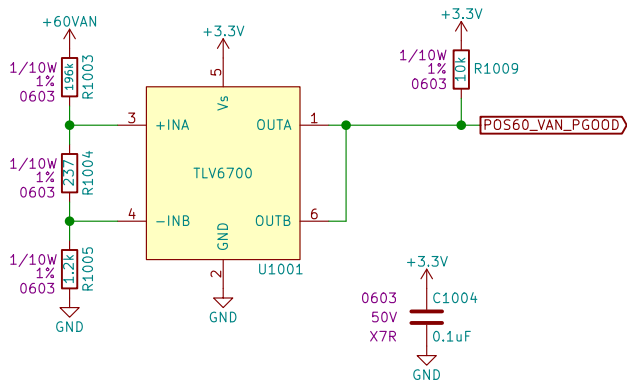
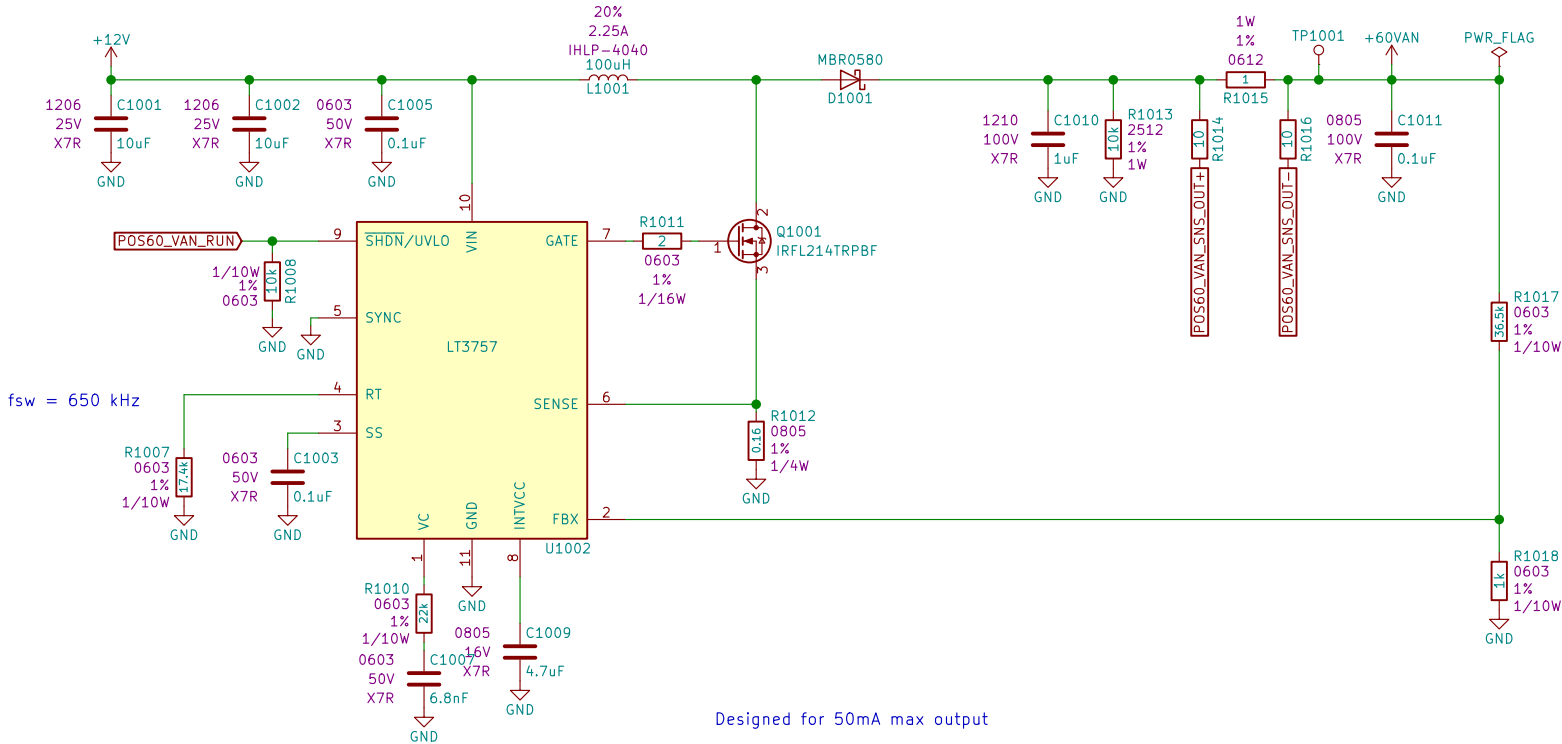
Sheet: /+1.2VFF Power Supply/
File: POS1P2_VFF_Power_Supply.sch

Title: QI Charger

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

Rev: A
Id: 8/31

Anode/Grid +60V, 50mA Power Supply



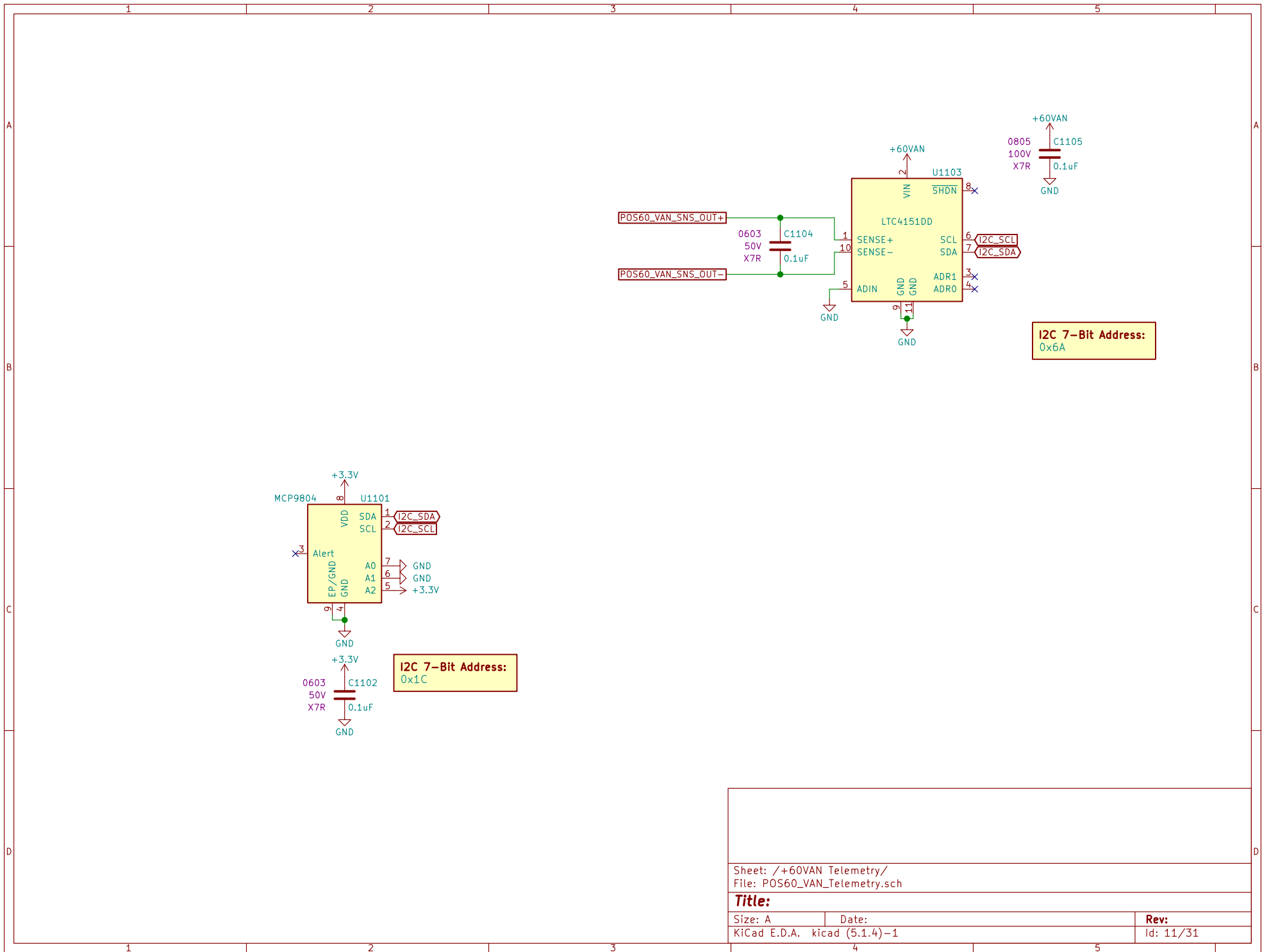
Drew Maatman

Sheet: /+60VAN Power Supply/
File: POS60_VAN_Power_Supply.sch

Title: VFD Clock

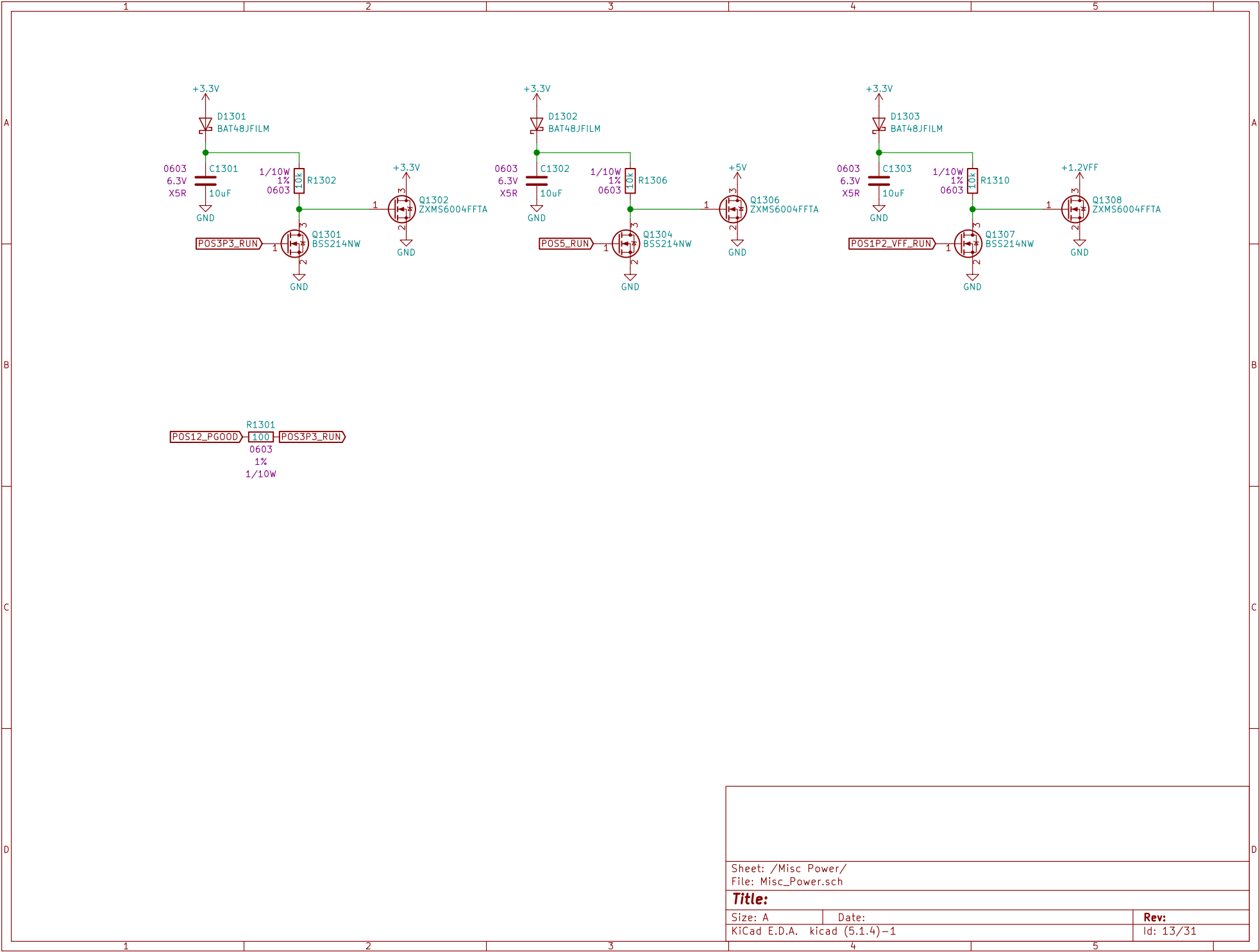
Size: A	Date: 2019-04-11
KiCad E.D.A. kicad (5.1.4)-1	

Rev: A
Id: 10/31





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: 12/31

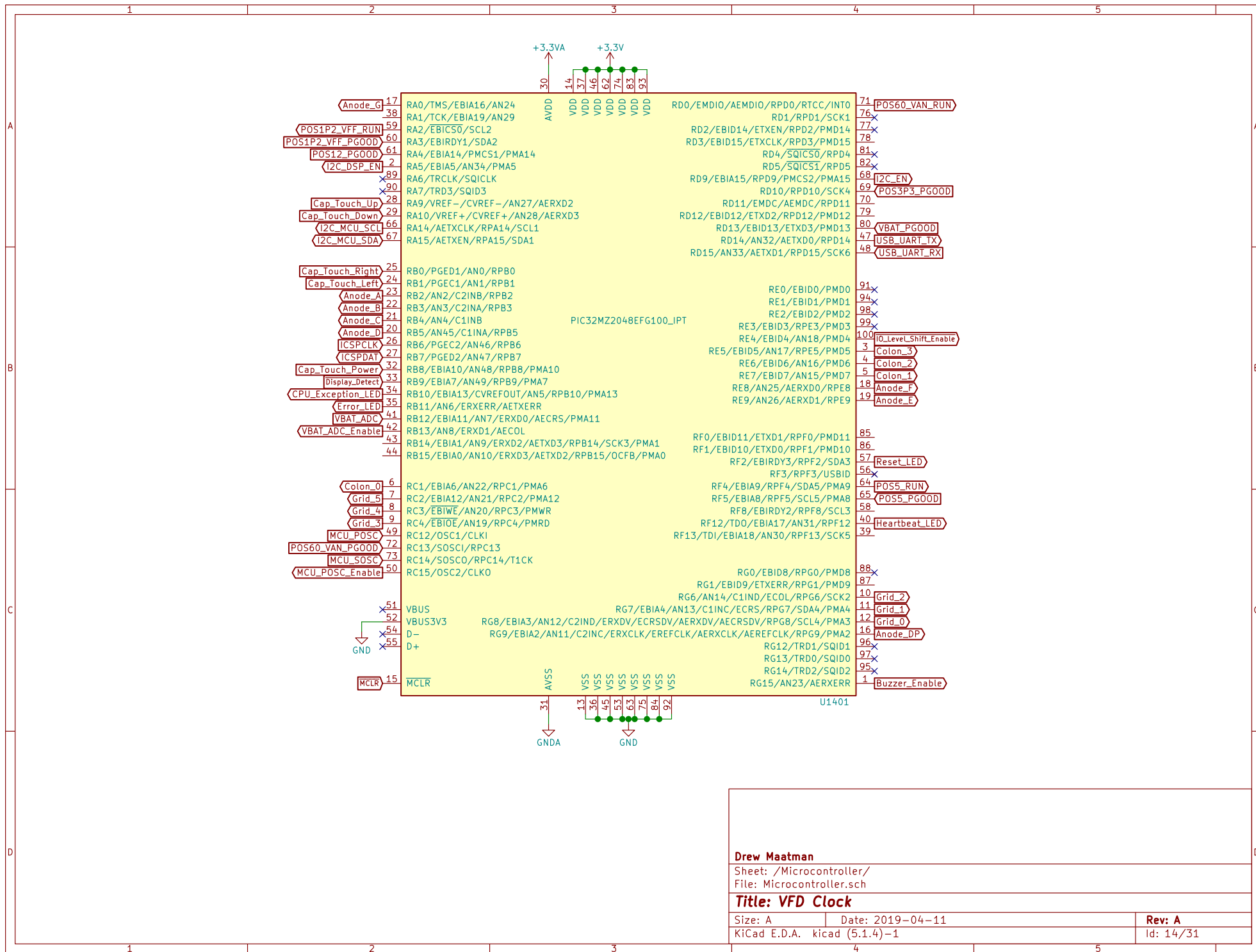


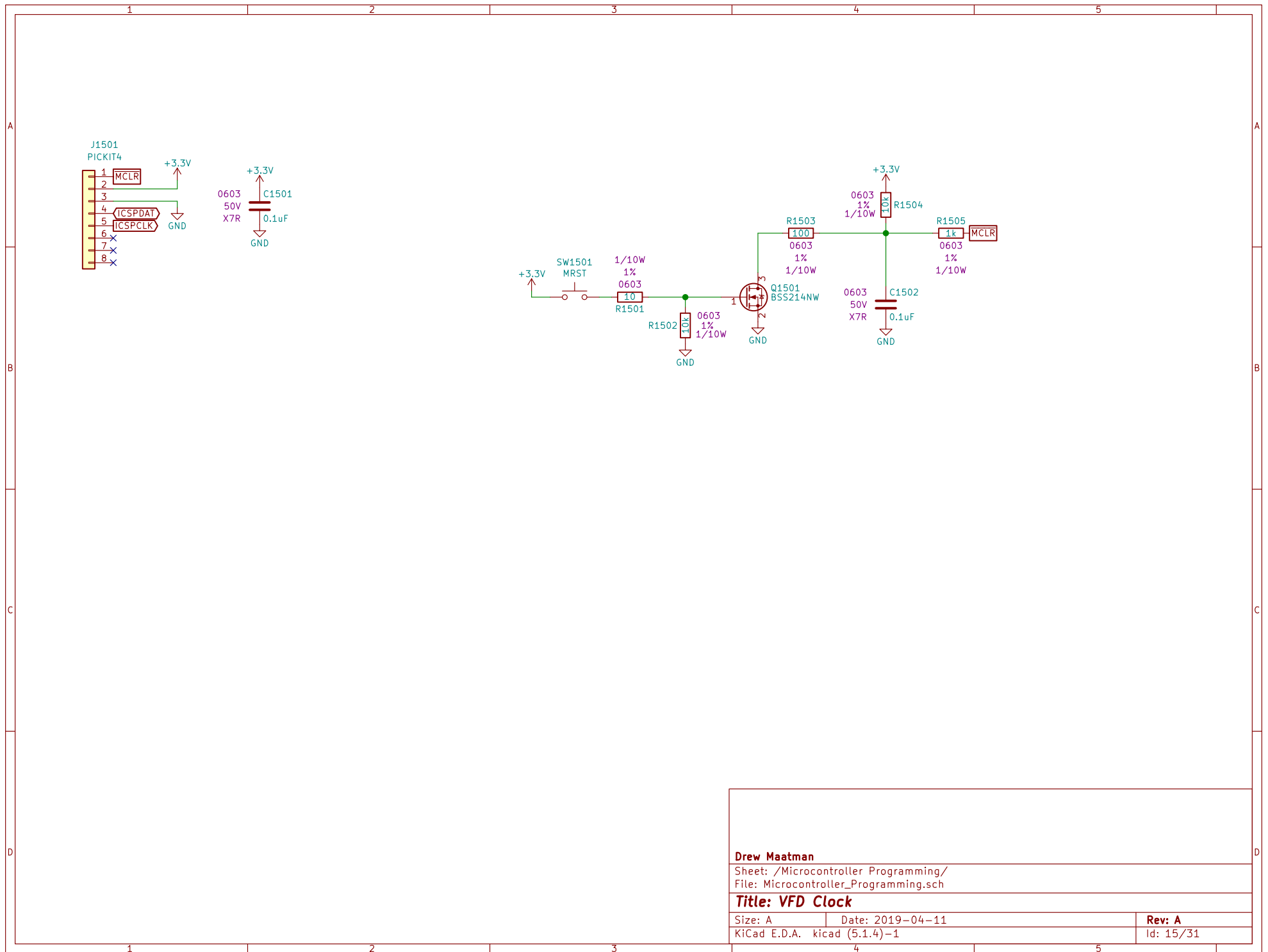
Sheet: /Misc Power/
File: Misc_Power.sch

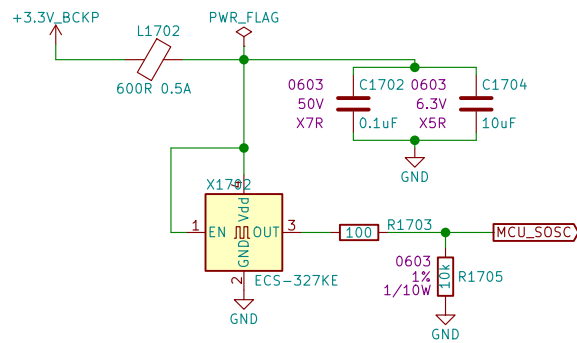
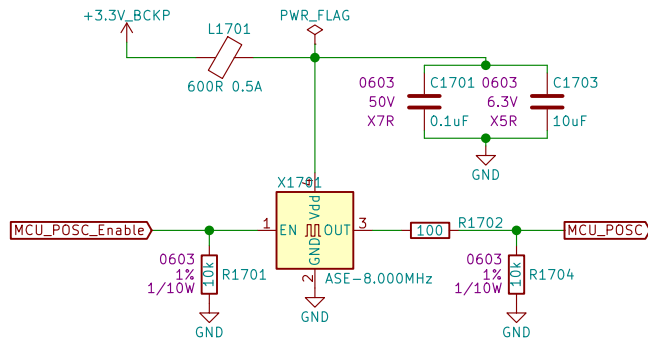
Title:

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

Rev:
Id: 13/31







Sheet: /Microcontroller Clocking/
File: Microcontroller_Clocking.sch

Title:

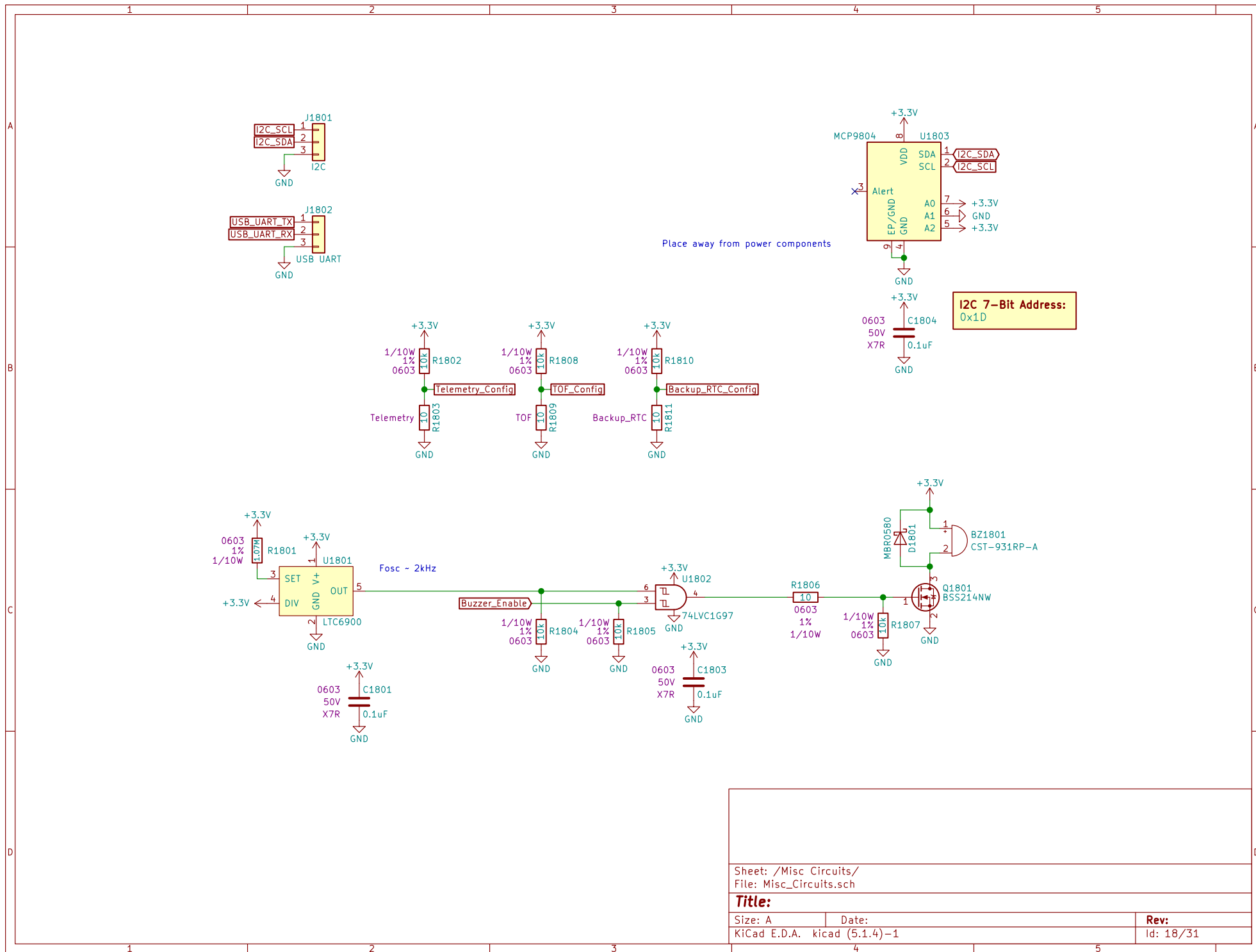
Size: A

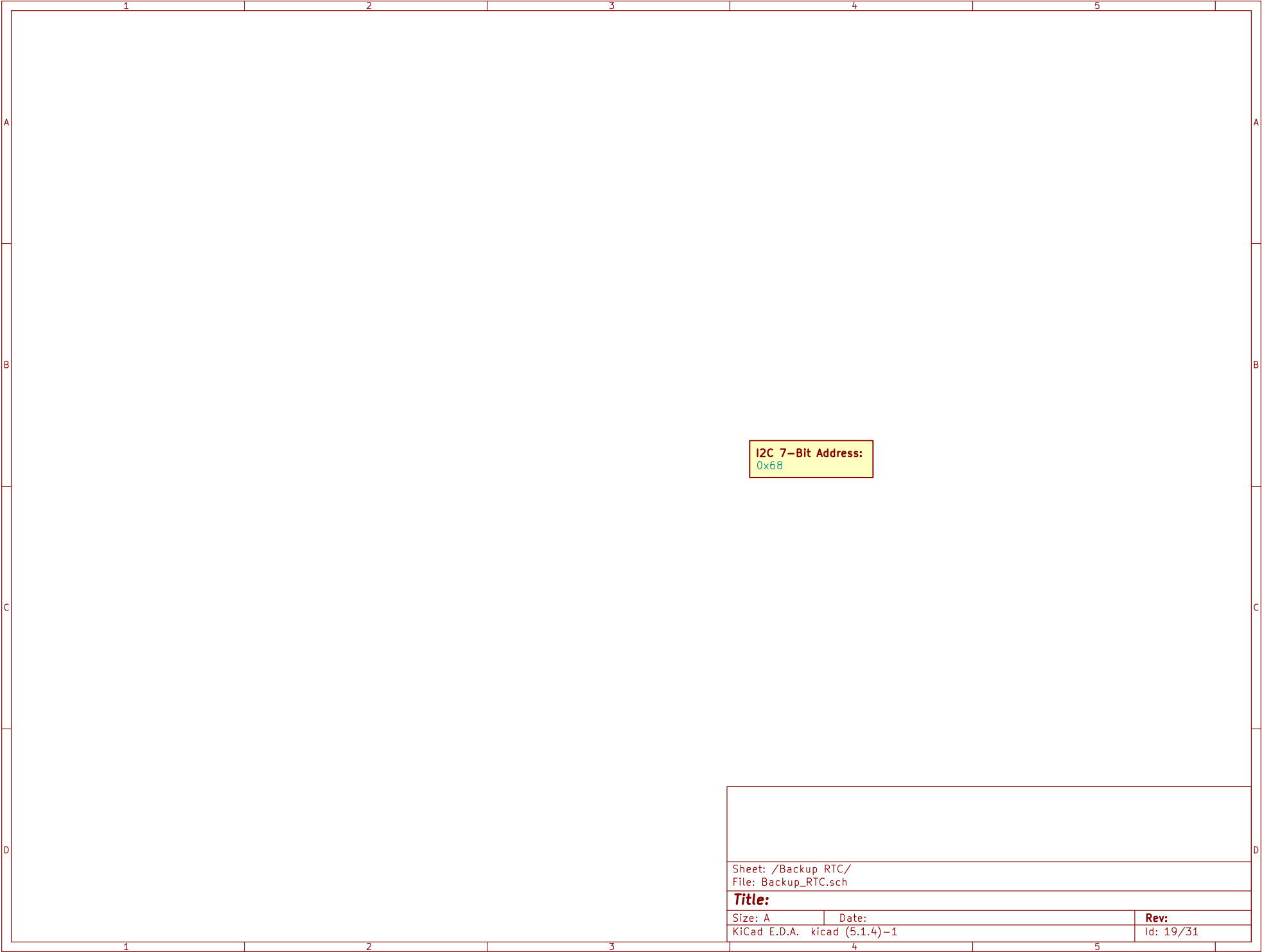
Date:

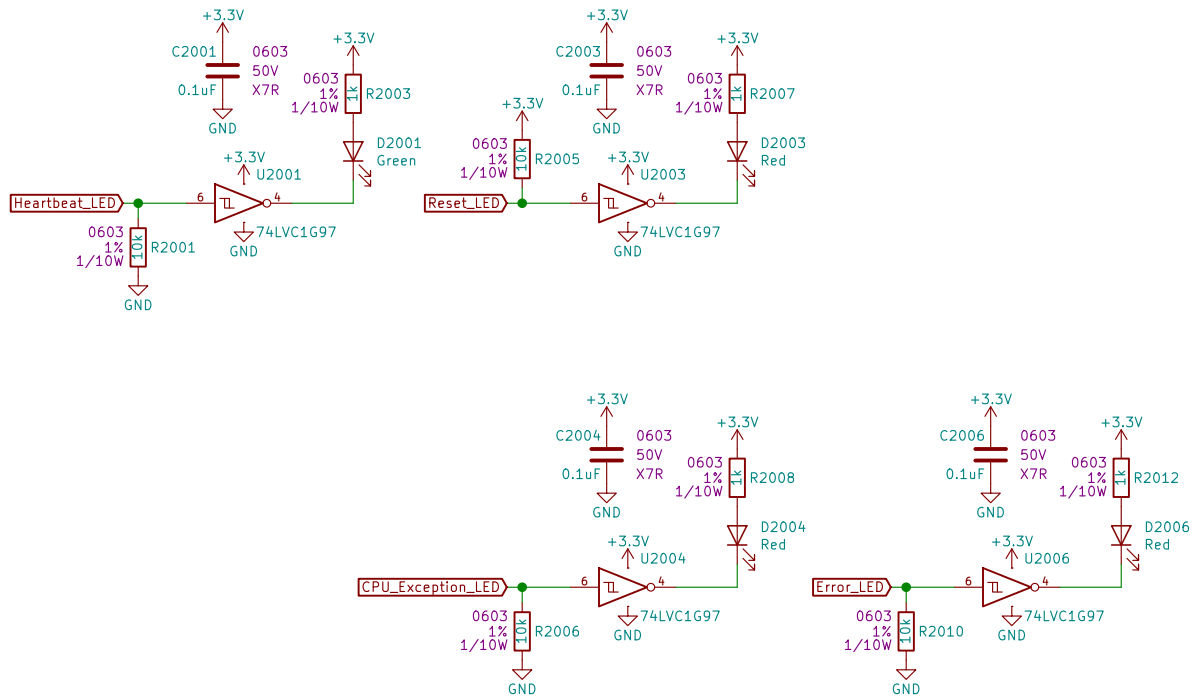
KiCad E.D.A. kicad (5.1.4)-1

Rev:

Id: 17/31







Sheet: /Status LEDs/
File: Status_LEDs.sch

Title:

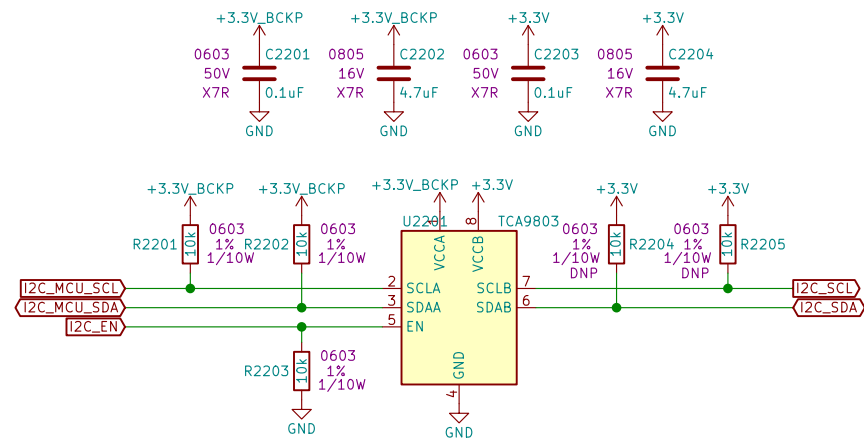
Size: A

Date:

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

Rev:

Id: 20/31



Sheet: /I2C Buffer/
File: I2C_Buffer.sch

Title:

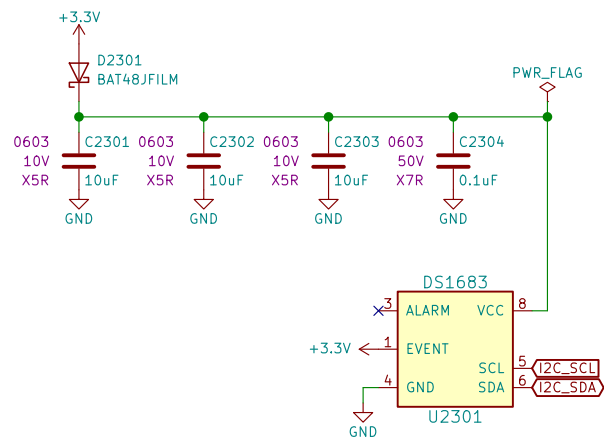
Size: A

Date:

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

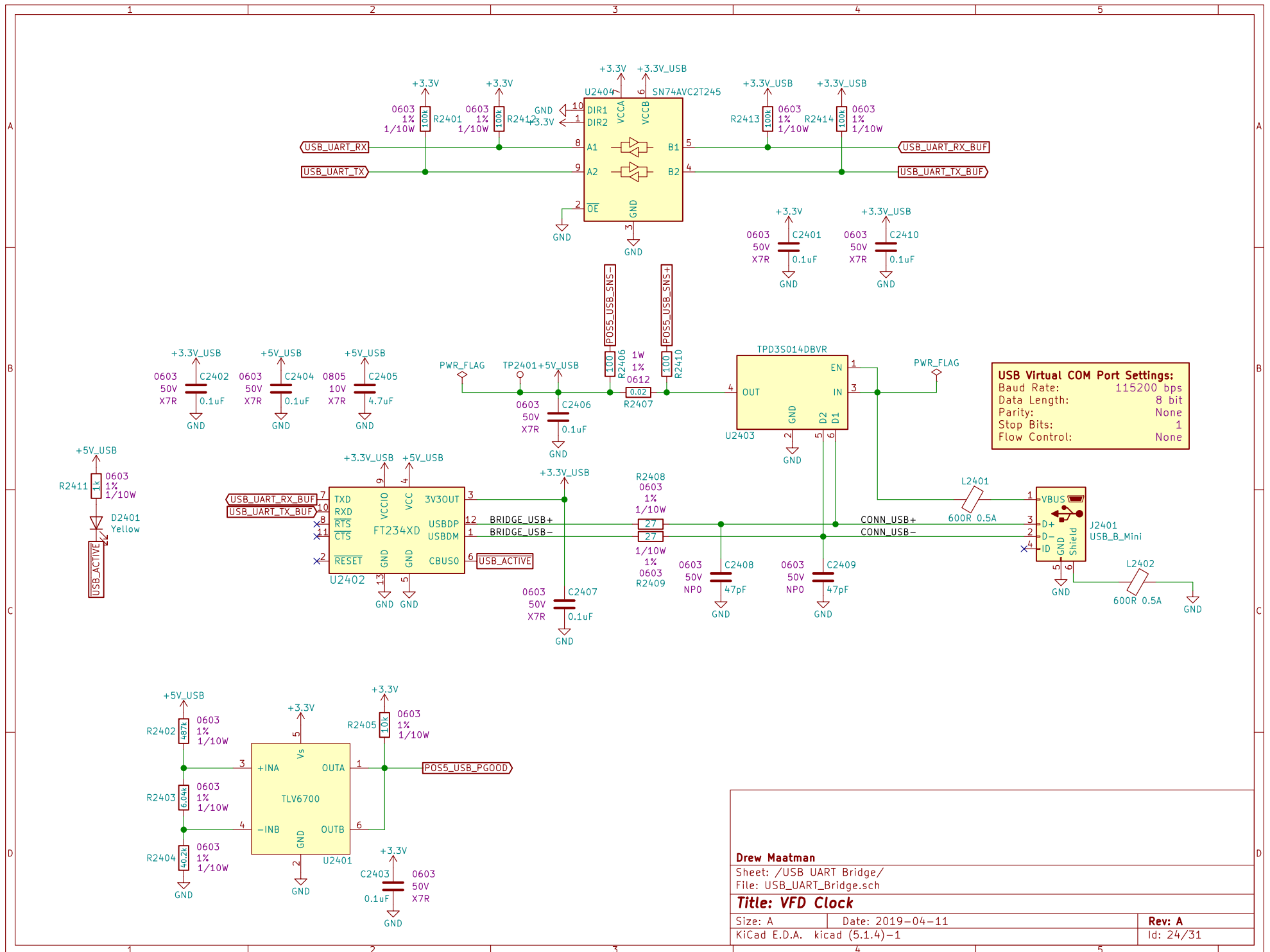
Rev:

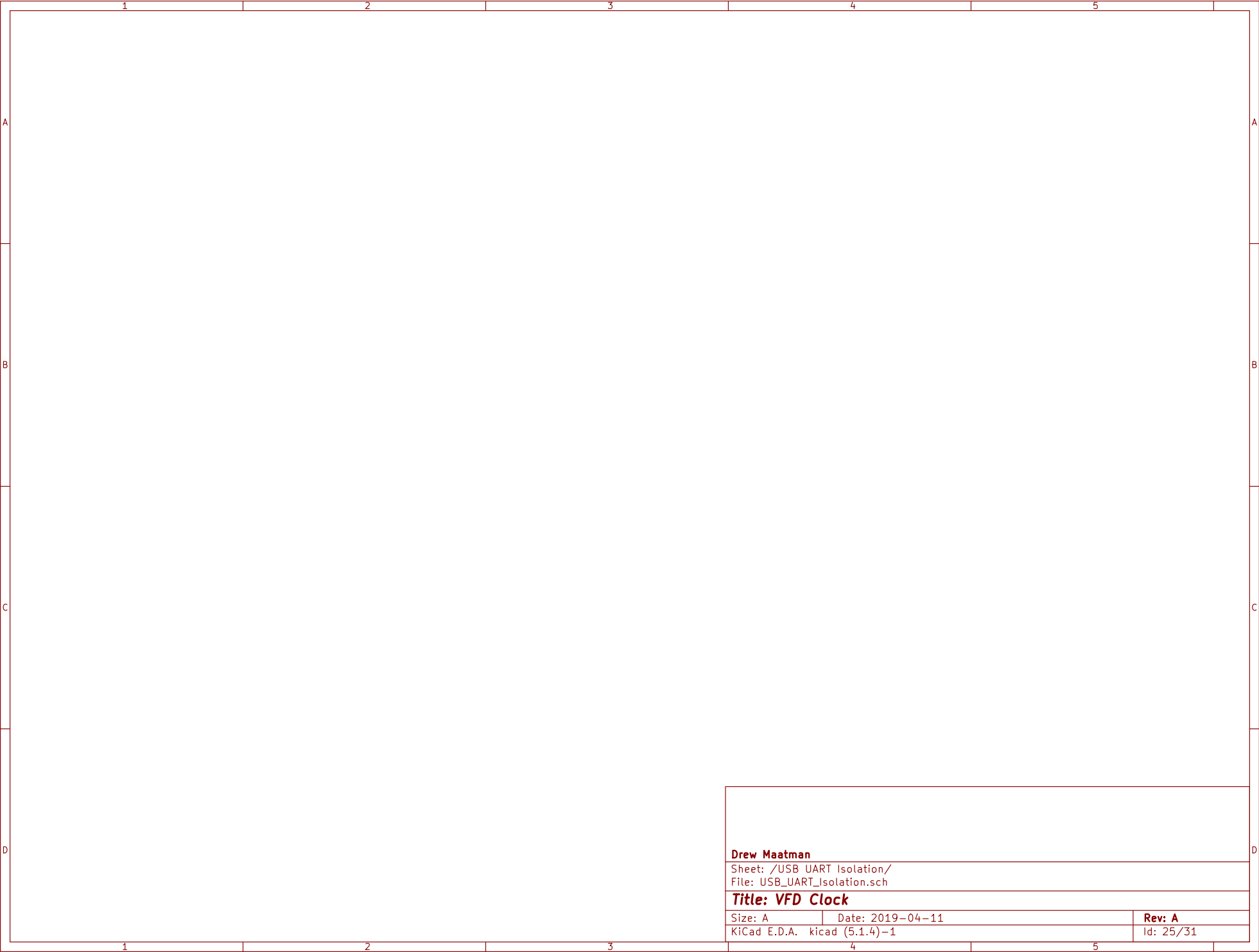
Id: 22/31

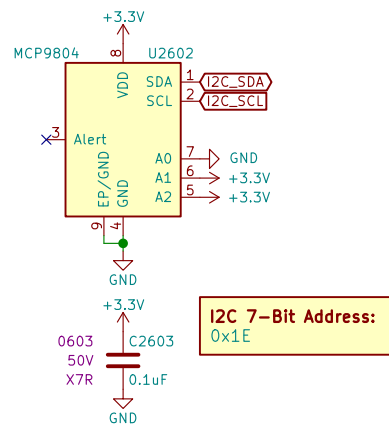
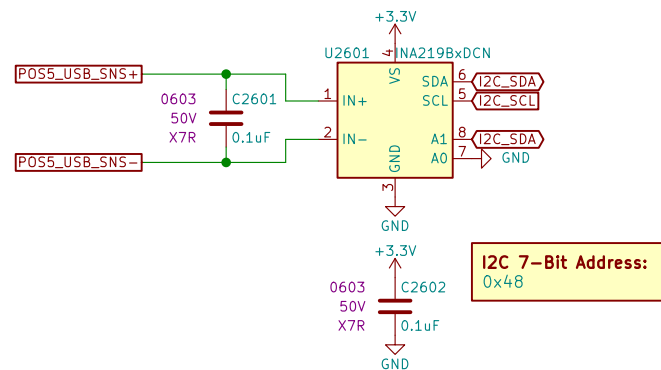


I2C 7-Bit Address:
0x6B

Sheet: /Time of Flight/ File: Time_of_Flight.sch		
Title:		
Size: A	Date:	Rev:
KiCad E.D.A. kicad (5.1.4)-1		Id: 23/31







Sheet: /USB Telemetry/
File: USB_Telemetry.sch

Title:

Size: A

Date:

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

Rev:

Id: 26/31

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

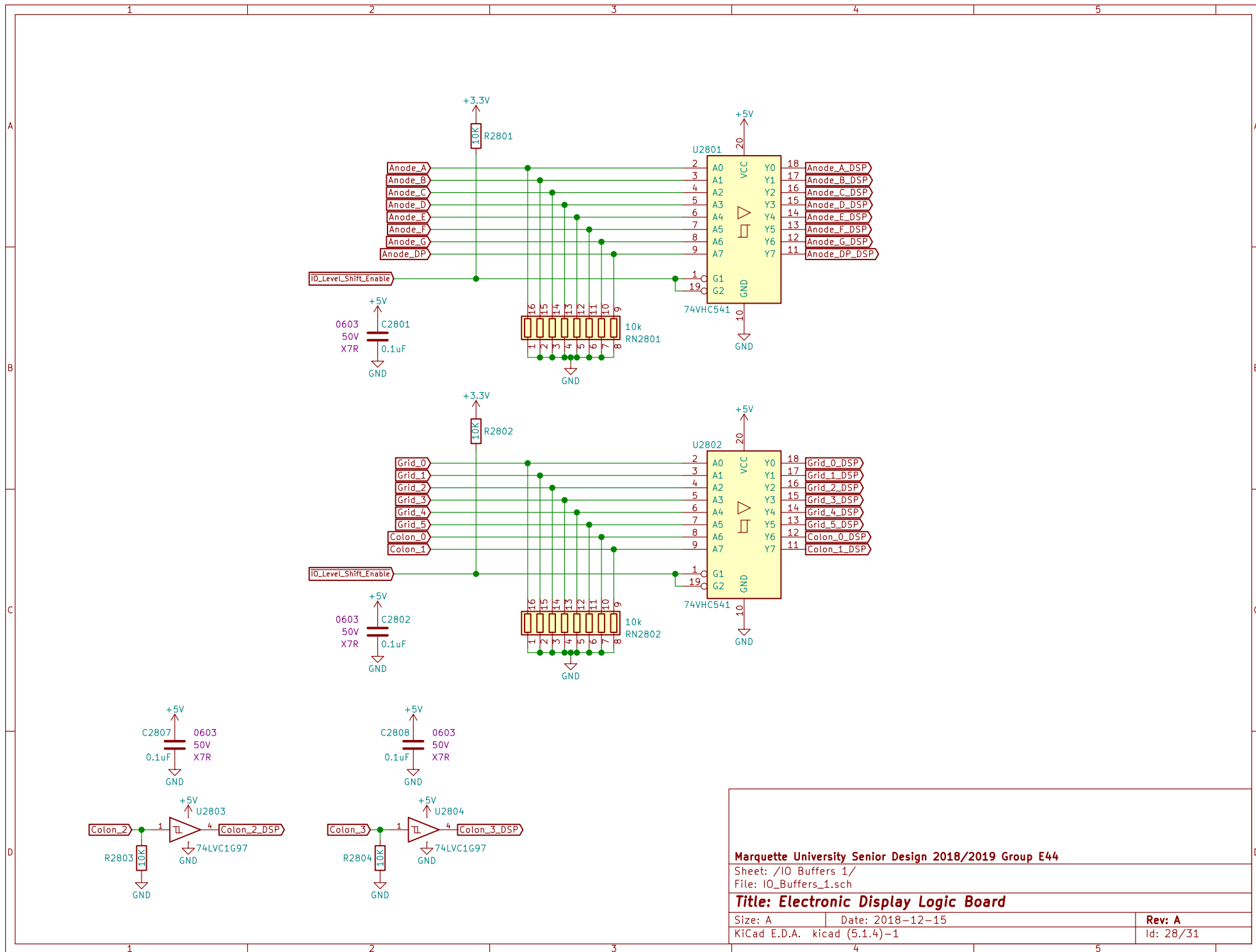
Sheet: /BLE/
File: BLE.sch

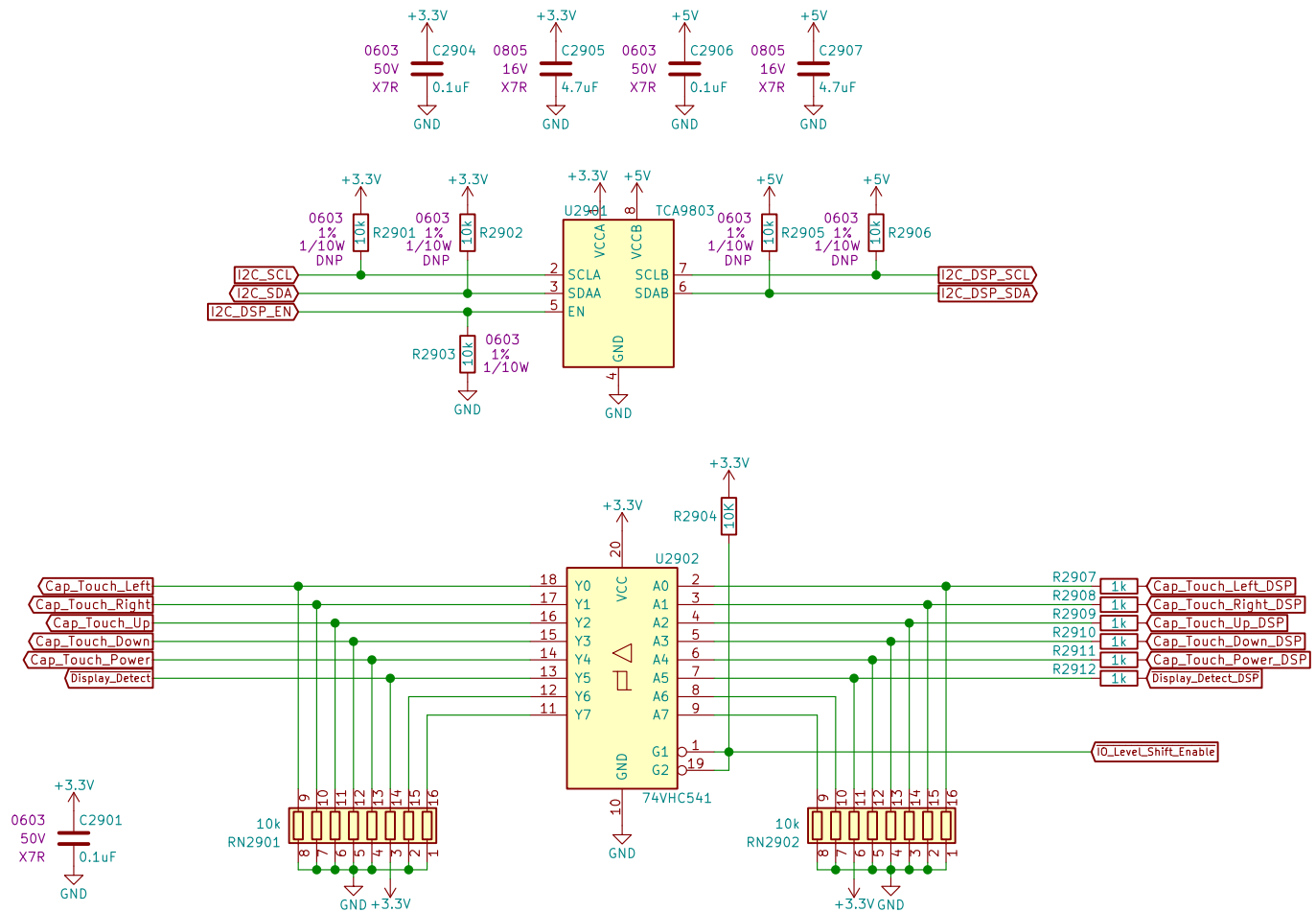
Title:

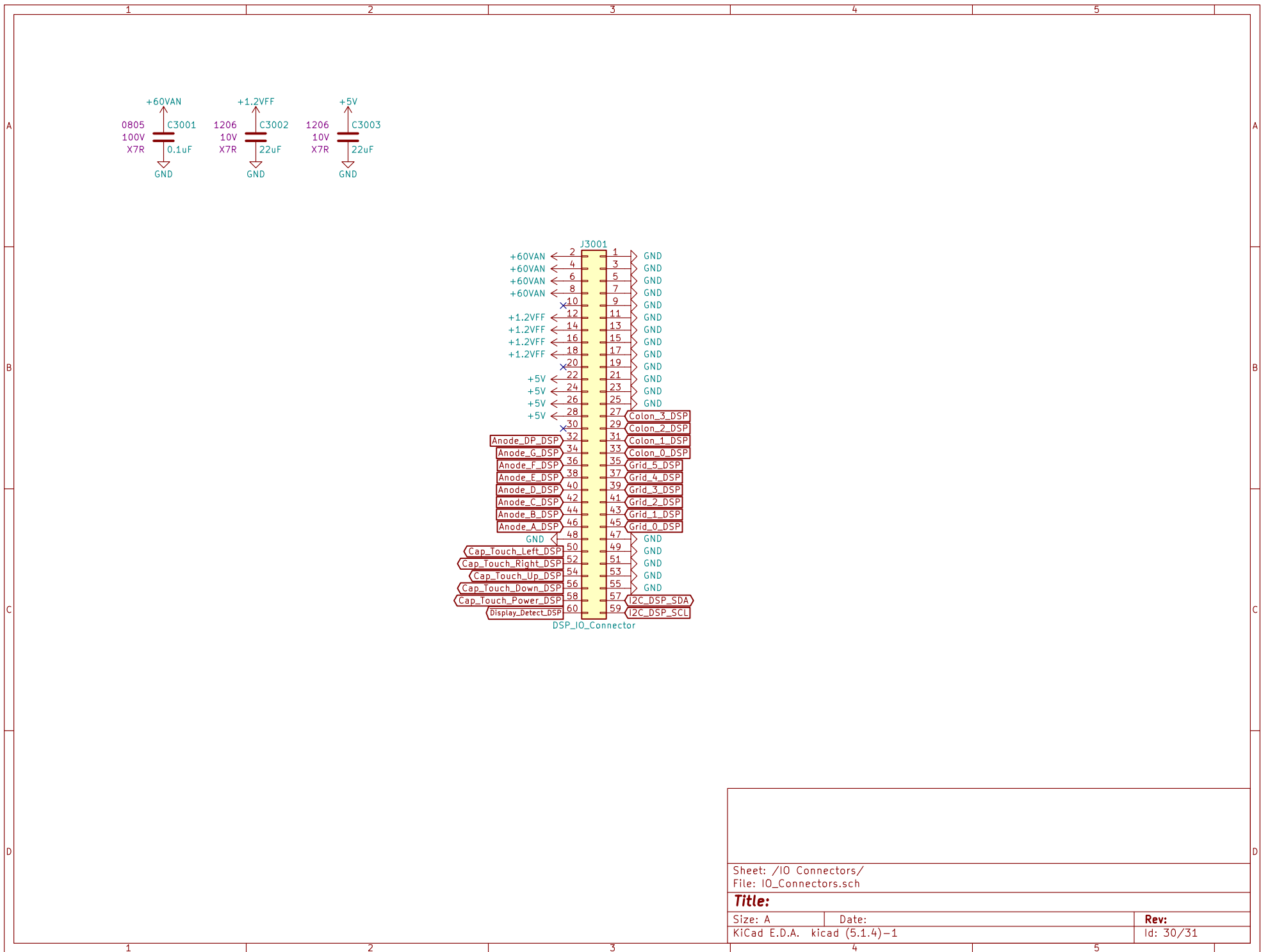
Size: ADate:KICad E.D.A. kicad (5.1.4)–1

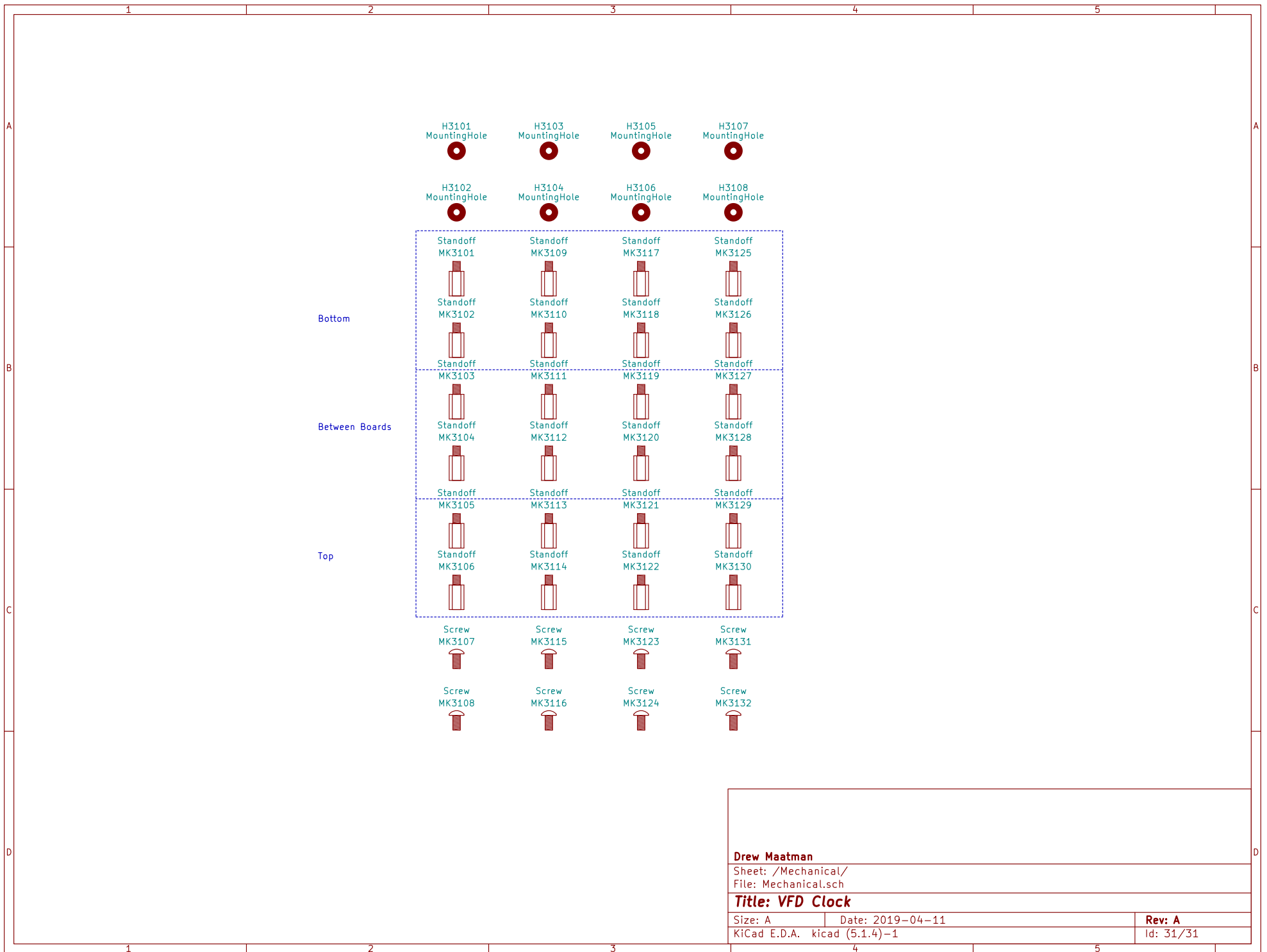
Rev:Id: 27/31

Sheet: /BLE/ File: BLE.sch		
Title:		
Size: A	Date:	Rev:
KiCad E.D.A. kicad (5.1.4)–1		Id: 27/31









Drew Maatman

Sheet: /Mechanical/

File: Mechanical.sch

Title: VFD Clock

Size: A Date: 2019-04-11

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

Rev: A

Id: 31/31