

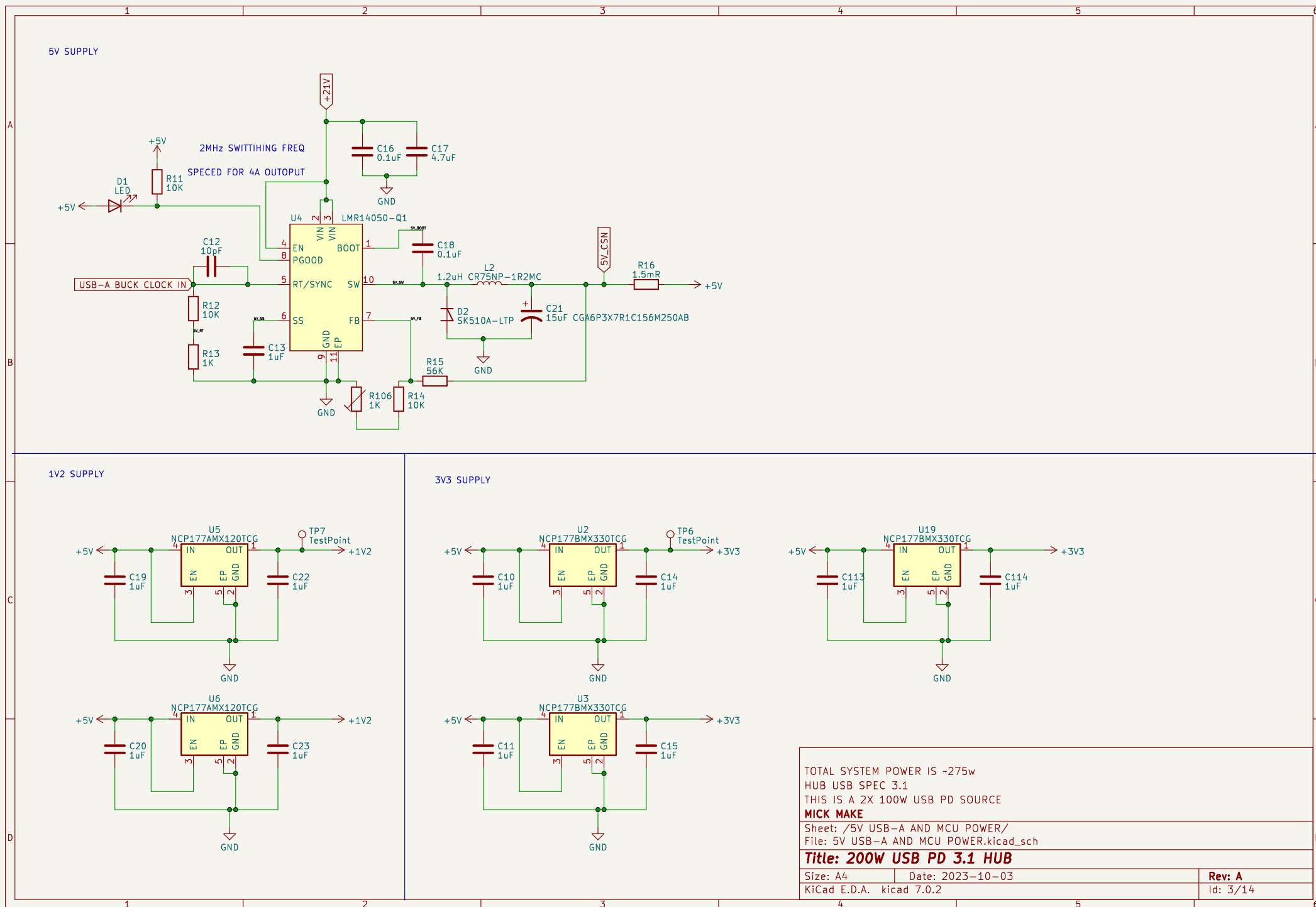
TOTAL SYSTEM POWER IS ~275w  
HUB USB SPEC 3.1  
THIS IS A 2X 100W USB PD SOURCE  
**MICK MAKE**

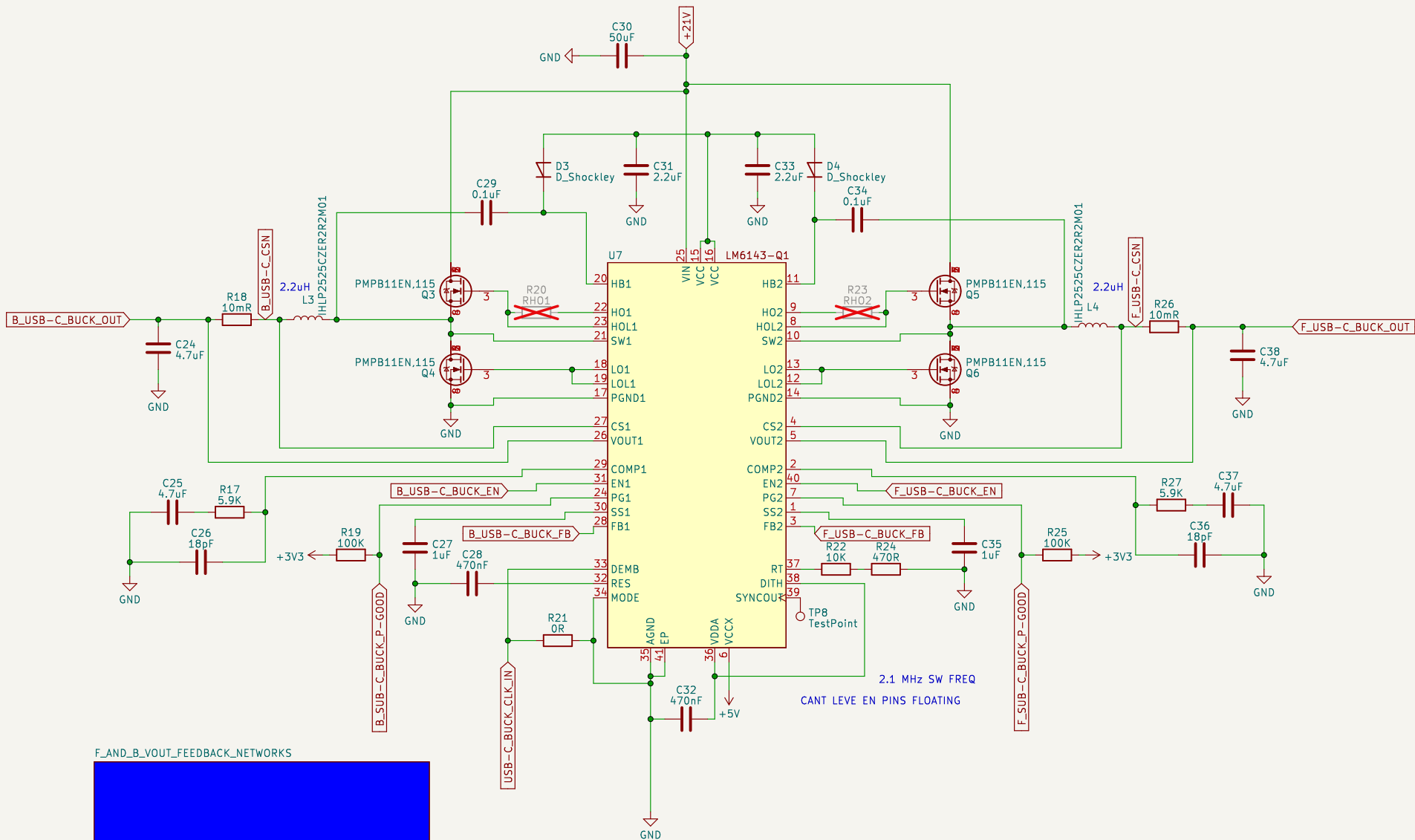
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File: untitled.kicad\_sch

**Title: 200W USB PD 3.1 HUB**

Size: A4	Date: 2023-10-03
KiCad E.D.A. kicad 7.0.2	

Rev: A  
Id: 2/14





F\_AND\_B\_VOUT\_FEEDBACK\_NETWORKS



File: F\_AND\_B\_VOUT\_FEEDBACK\_NETWORKS.kicad\_sch

TOTAL SYSTEM POWER IS ~275w  
HUB USB SPEC 3.1  
THIS IS A 2X 100W USB PD SOURCE

**MICK MAKE**

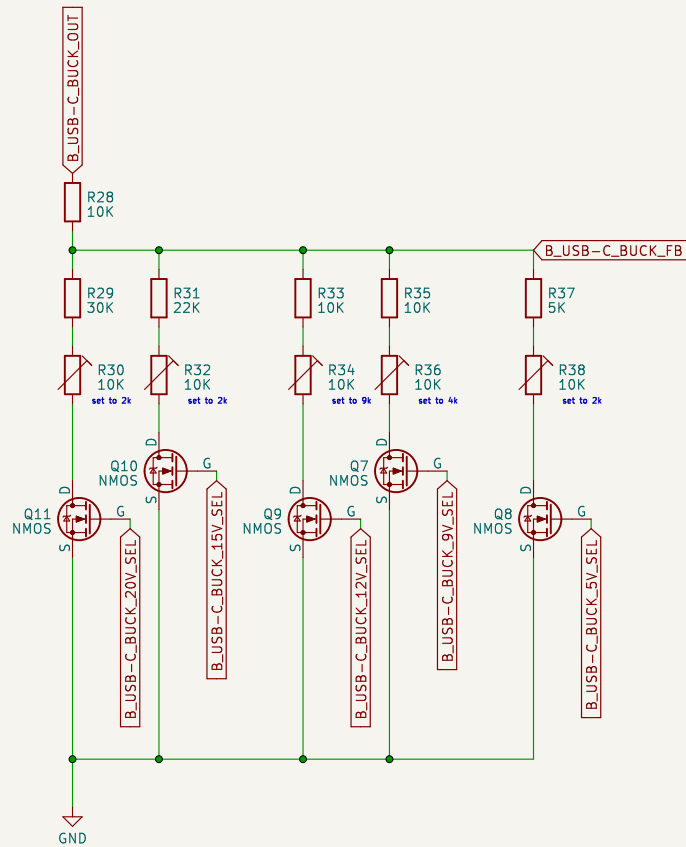
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File: FRONT USB-C POWER.kicad\_sch

**Title: 200W USB PD 3.1 HUB**

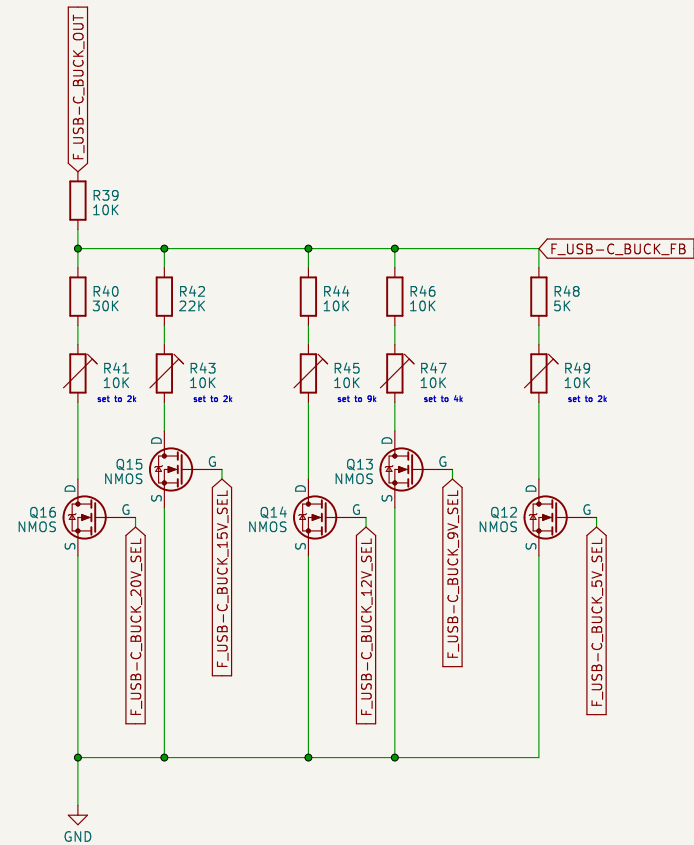
Size: A4 Date: 2023-10-03  
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Rev: A  
Id: 4/14

# FRONT USB-C BUCK SELECTABLE FEEDBACK NETWORK



# BACK USB-C BUCK SELECTABLE FEEDBACK NETWORK



TOTAL SYSTEM POWER IS ~275w

HUB USB SPEC 3.1

THIS IS A 2X 100W USB PD SOURCE

**MICK MAKE**

Sheet: /USB-C\_POWER/F\_AND\_B\_VOUT\_FEEDBACK\_NETWORKS/

File: F\_AND\_B\_VOUT\_FEEDBACK\_NETWORKS.kicad\_sch

**Title: 200W USB PD 3.1 HUB**

Size: A4 Date: 2023-10-03

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**Rev: A**

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The schematic shows two identical PI4IOE5V6416LEX IO expanders, U8 and U9, connected to the system. Both are powered by +3V3 and GND. U8 is connected to IOX\_1 and U9 to IOX\_0. Both have their I2C\_SCL and I2C\_SDA pins connected to +3V3, and their INT pins connected to IOX1\_INT and IOX0\_INT respectively. The RESET pins are connected to RST, and the ADDR pins are connected to +3V3. The pin lists for each device show various peripheral functions like ADC\_ALERT, 21V\_PGGOOD, B\_USB-C\_BUCK\_20V\_SEL, etc.

[illegible]

**MICK MAKE**

Sheet: /ESP-12F/  
File: ESP-12F.kicad\_sch

File: ESP-12F.kicad\_sch

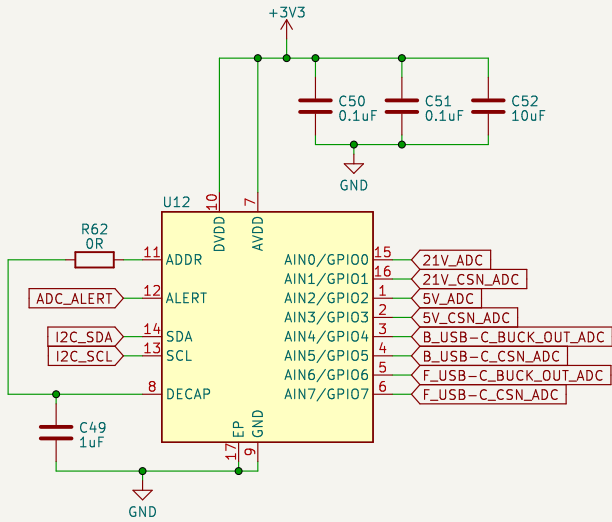
**Title: 200W USB PD 3.1 HUB**

Size: A4	Date: 2023-10-03
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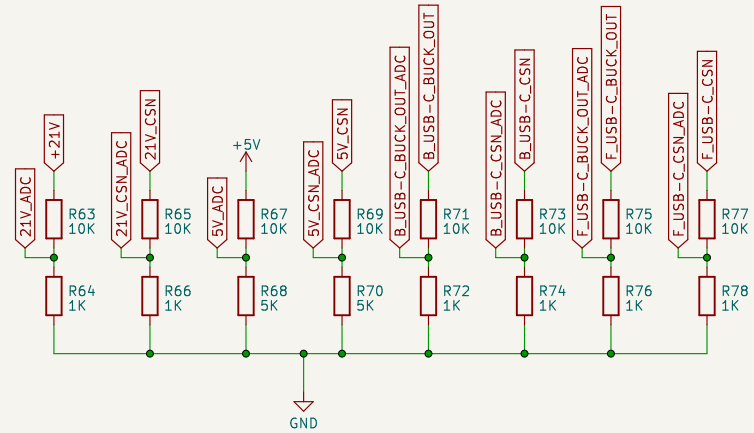
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Rev: A  
Id: 6/14

# I2C ADC



# DEVIDER NETWORKS FOR ADC INPUT



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**MICK MAKE**

Sheet: /ADC/  
File: ADC.kicad\_sch

**Title: 200W USB PD 3.1 HUB**

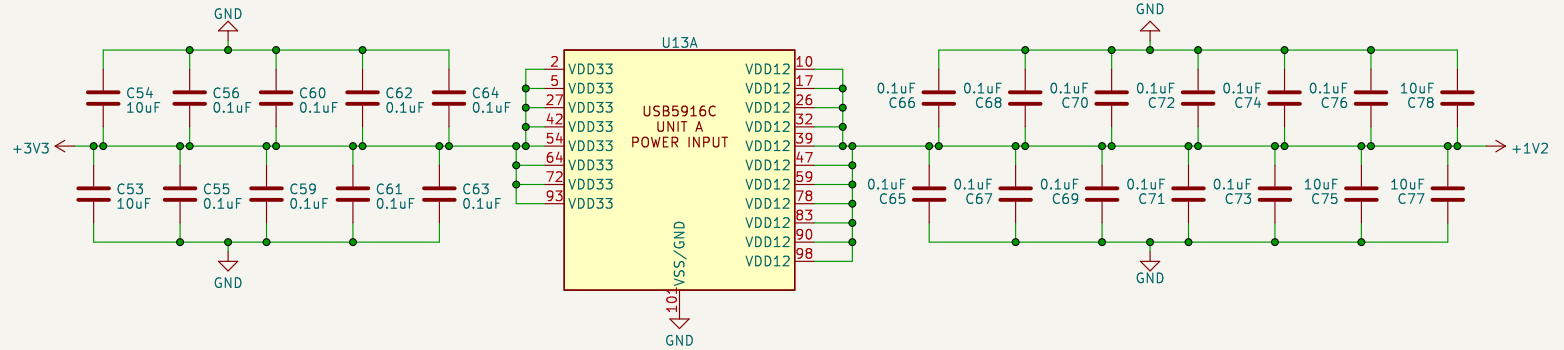
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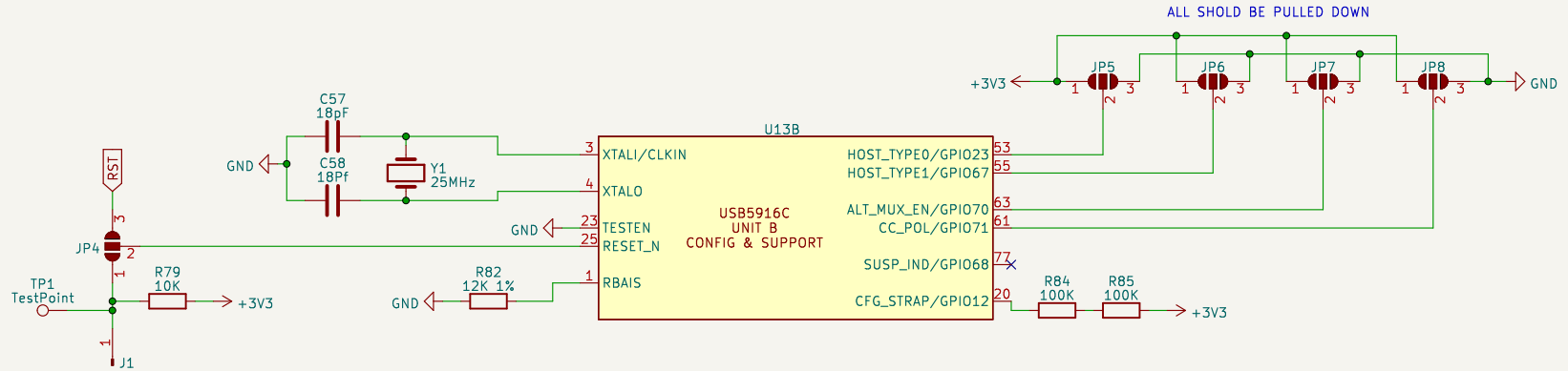
**Rev: A**

Id: 7/14

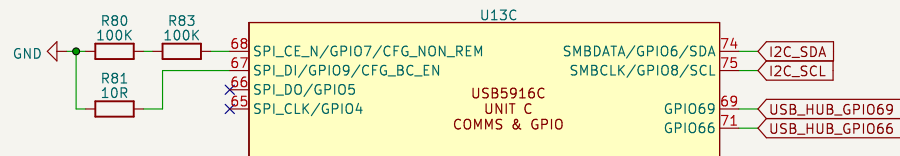
# HUB CHIP POWER INPUT



# HUB CHIP CONFIG



# HUB CHIP COMS



TOTAL SYSTEM POWER IS ~275w  
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**MICK MAKE**

Sheet: /HUBCHIP/  
File: HUBCHIP.kicad\_sch

**Title: 200W USB PD 3.1 HUB**

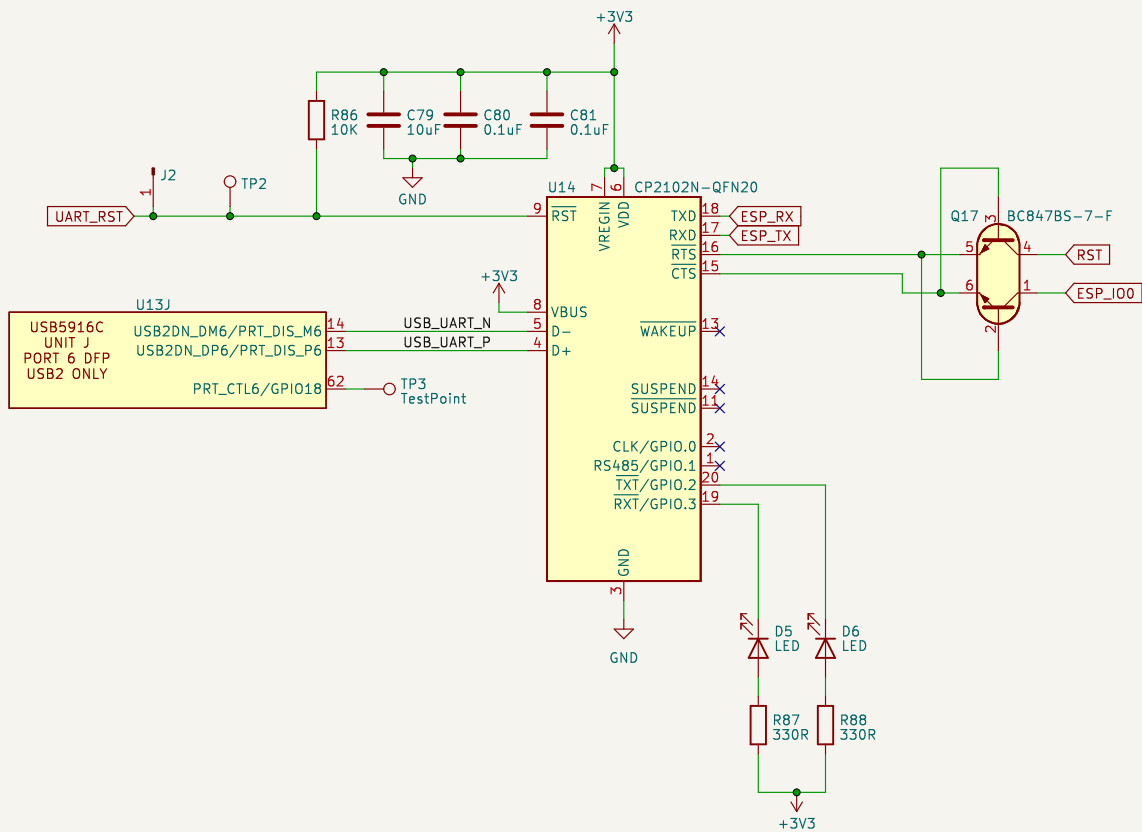
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KiCad E.D.A. kicad 7.0.2

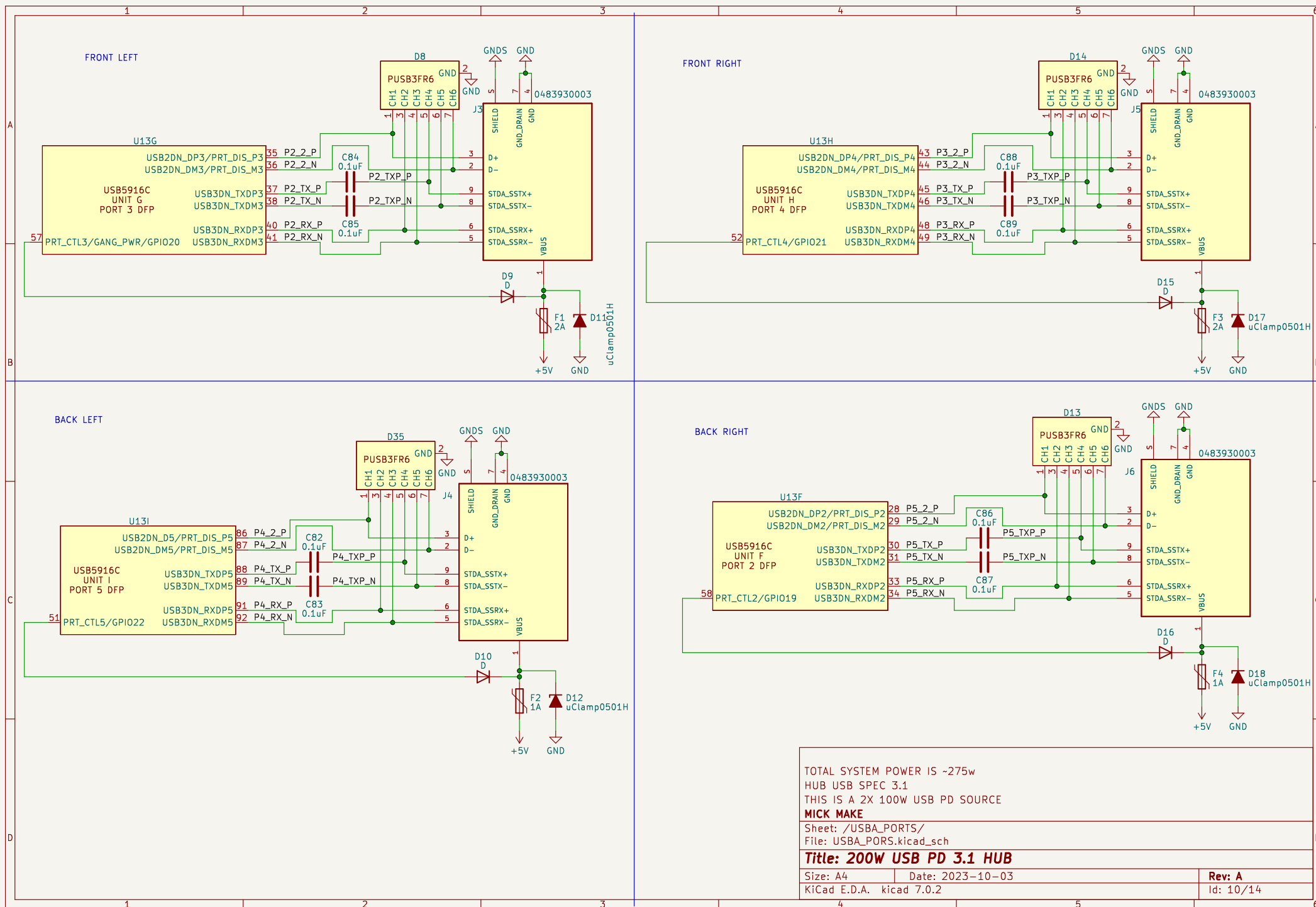
Rev: A

Id: 8/14



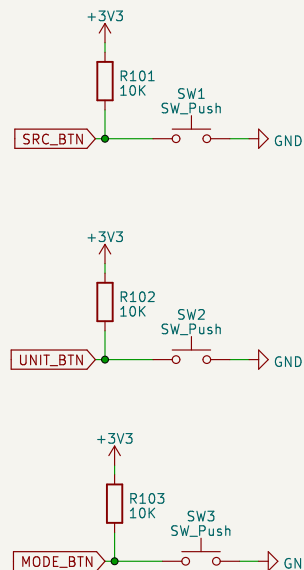
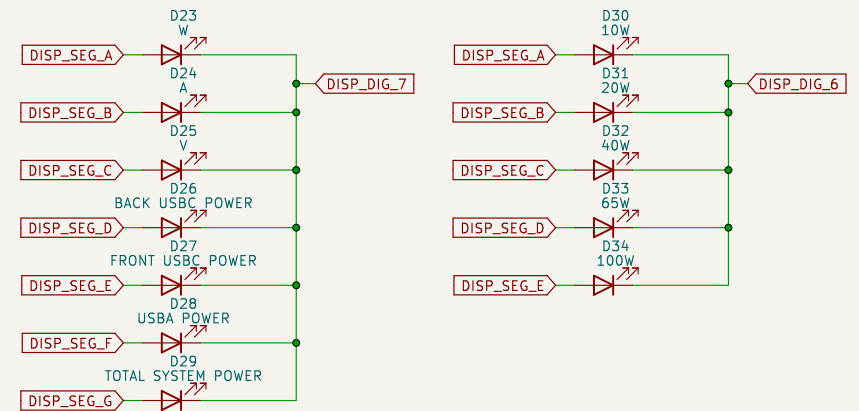
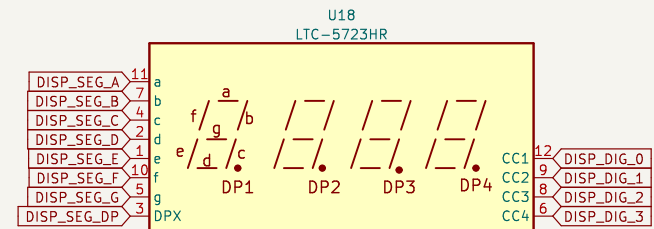
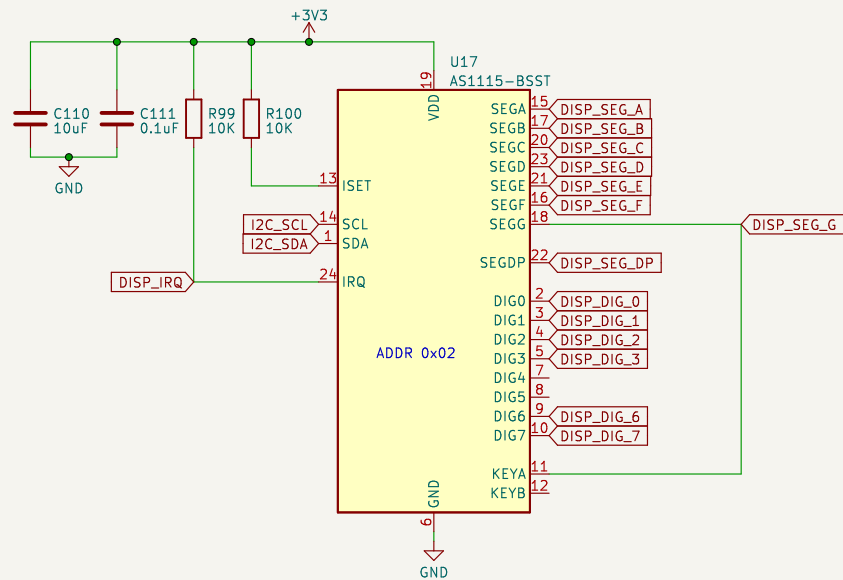


TOTAL SYSTEM POWER IS ~275w  
HUB USB SPEC 3.1  
THIS IS A 2X 100W USB PD SOURCE  
**MICK MAKE**  
Sheet: /USB\_UART/  
File: USB\_UART.kicad\_sch  
**Title: 200W USB PD 3.1 HUB**  
Size: A4 Date: 2023-10-03  
KiCad E.D.A. kicad 7.0.2  
Rev: A  
Id: 9/14









Rev: A  
Id: 13/14

