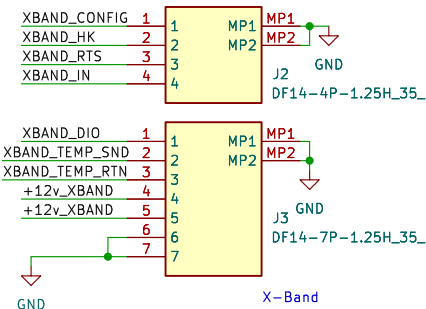
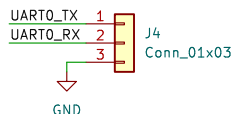


## Connectors



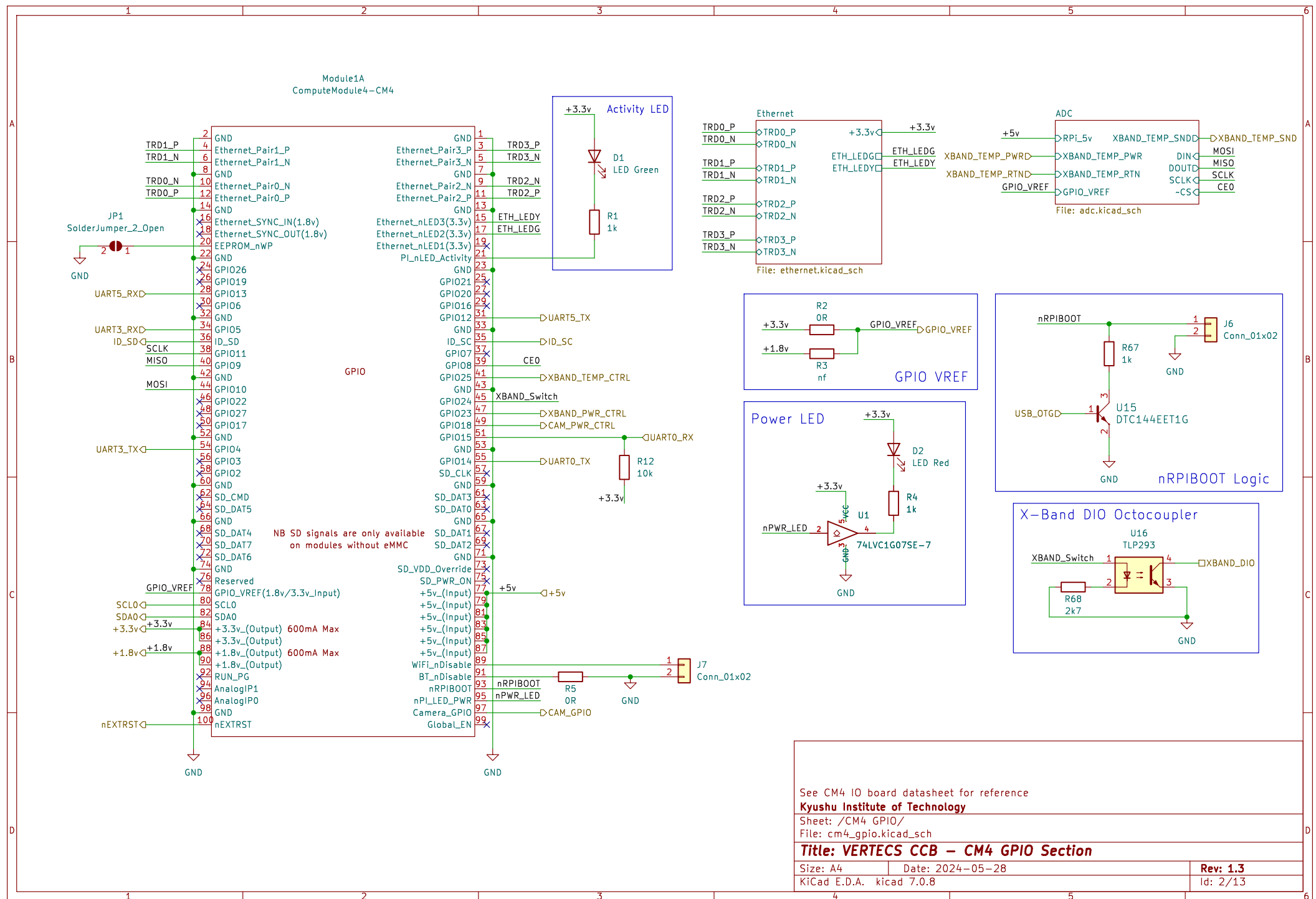
Designed by Ezra Fielding  
 "A" variant features a surface style connector  
**Kyushu Institute of Technology**

Sheet: /  
 File: VERTECS\_CCB\_A.kicad\_sch

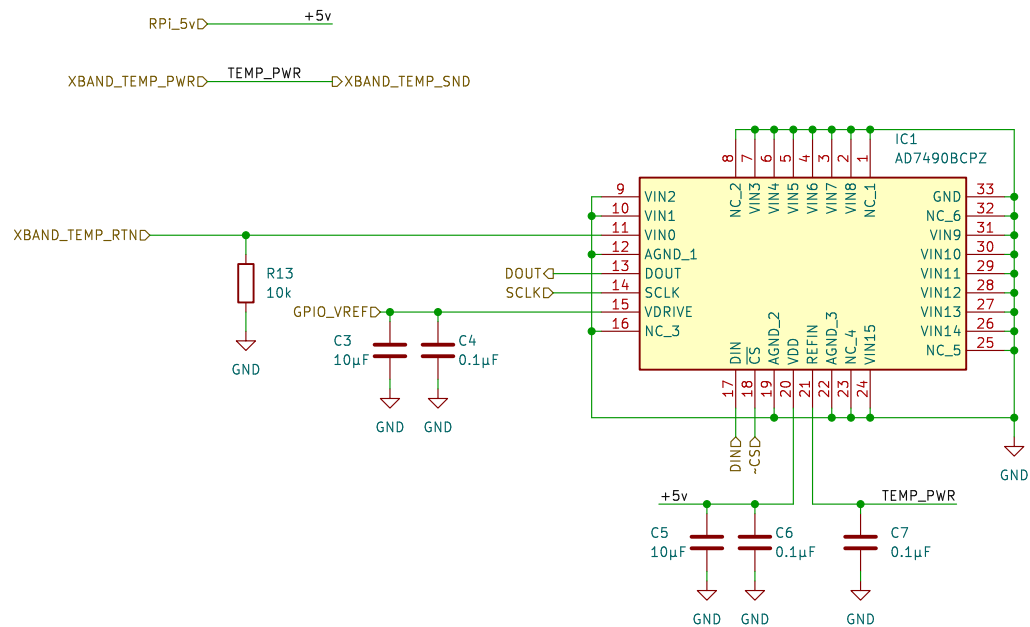
**Title: VERTECS Camera Control Board – A Variant**

Size: A4 Date: 2024-05-28  
 KiCad E.D.A. kicad 7.0.8

Rev: 1.3  
 Id: 1/13



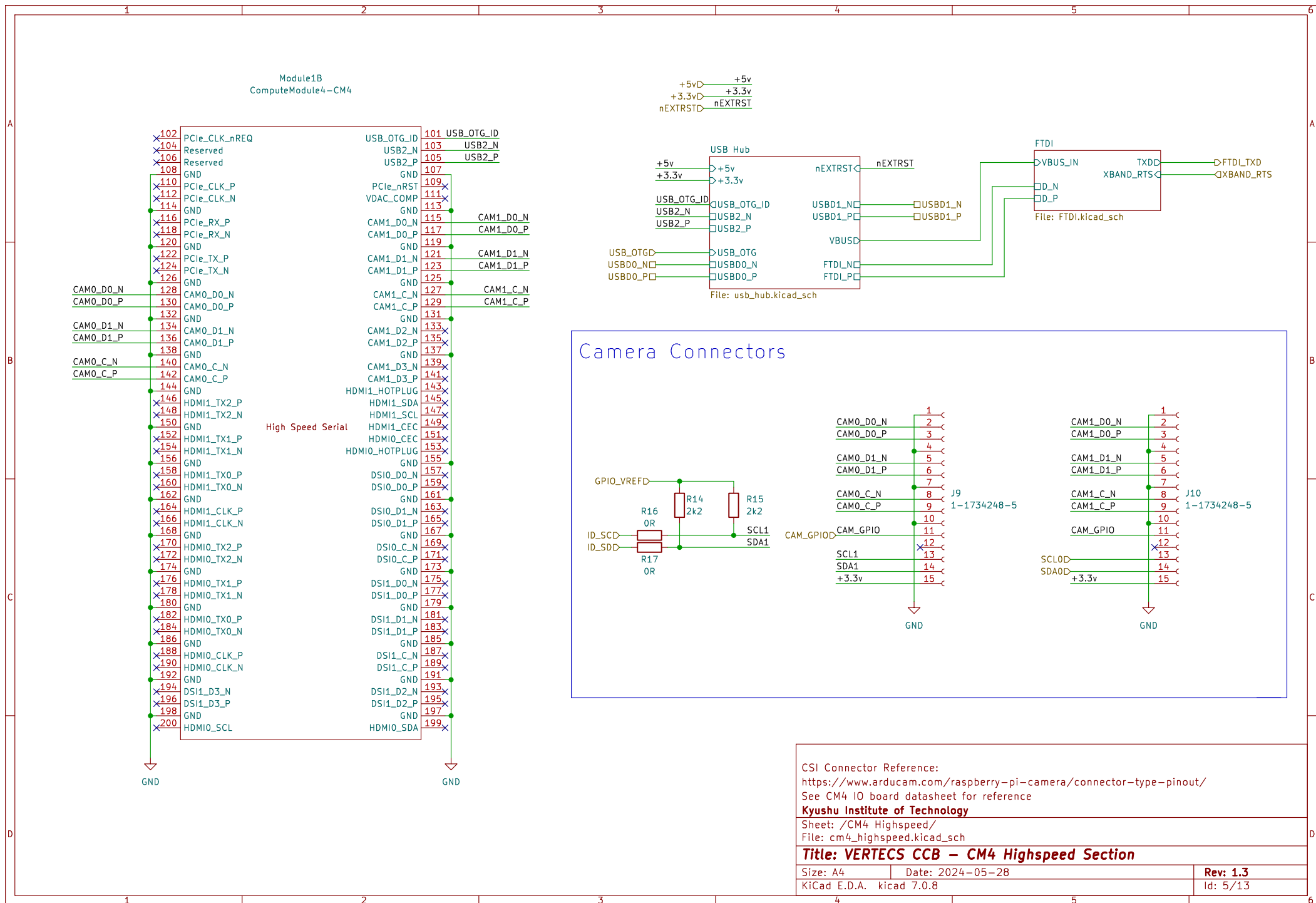


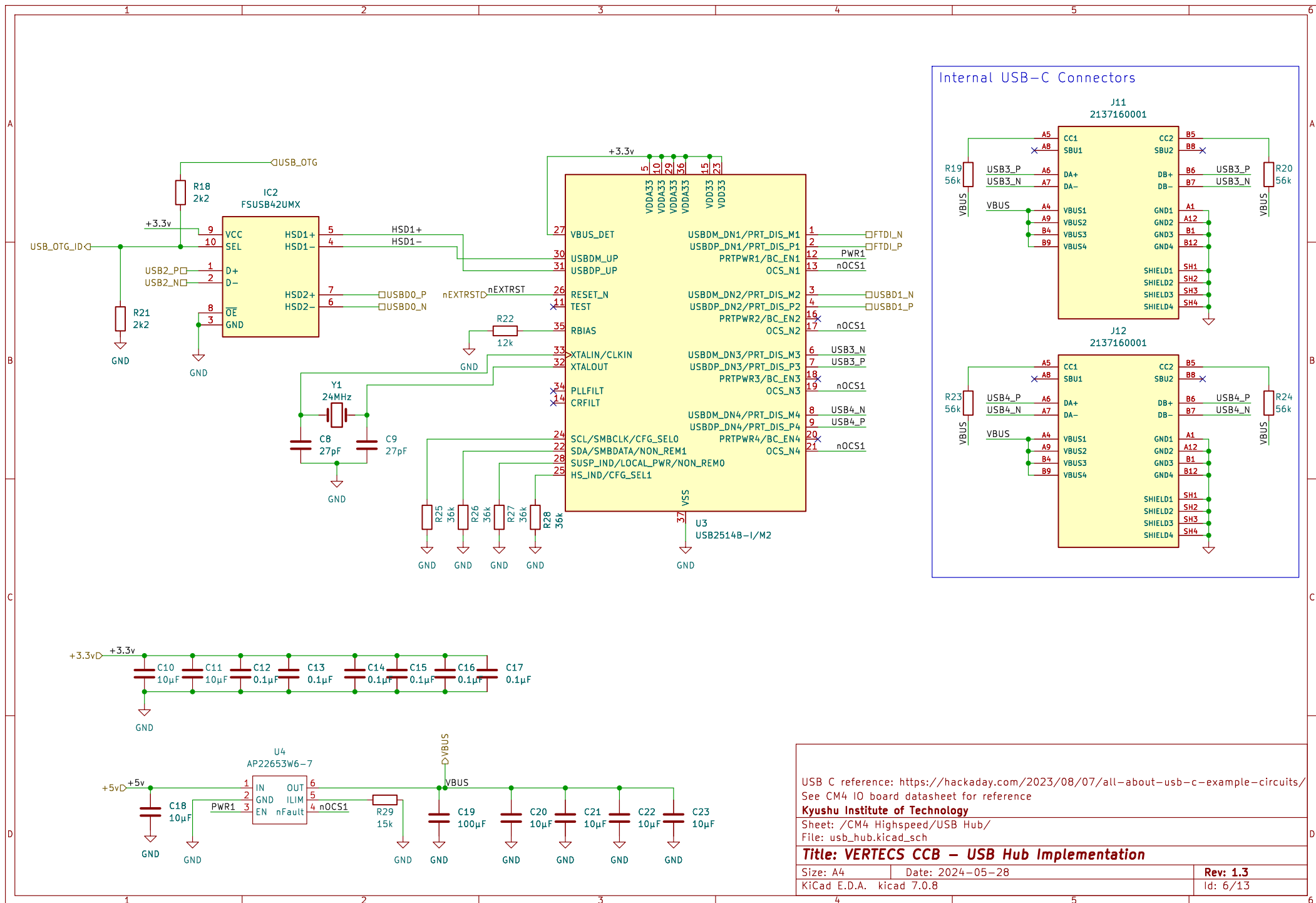


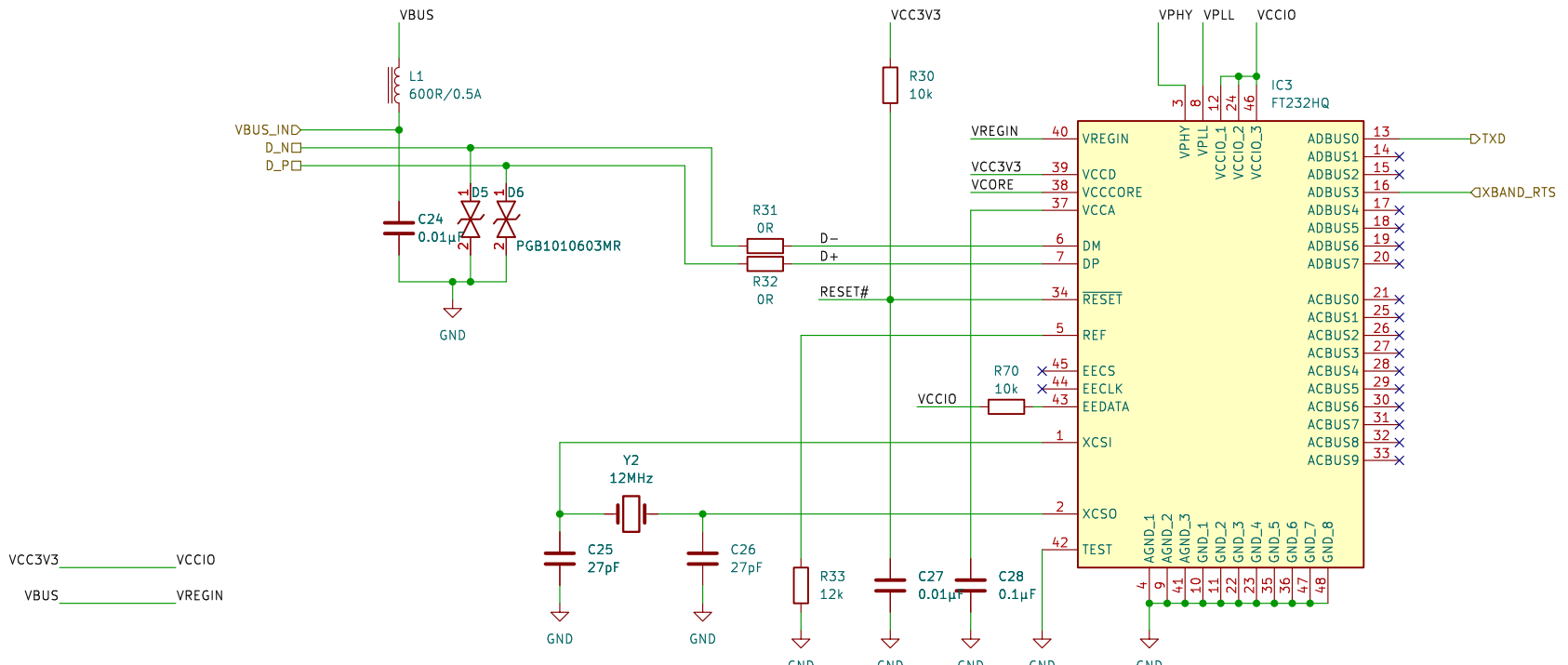
Datasheet:  
<https://www.analog.com/media/en/technical-documentation/data-sheets/ad7490.pdf>  
**Kyushu Institute of Technology**  
 Sheet: /CM4 GPIO/ADC/  
 File: adc.kicad\_sch

# **Title: VERTECS CCB – ADC**

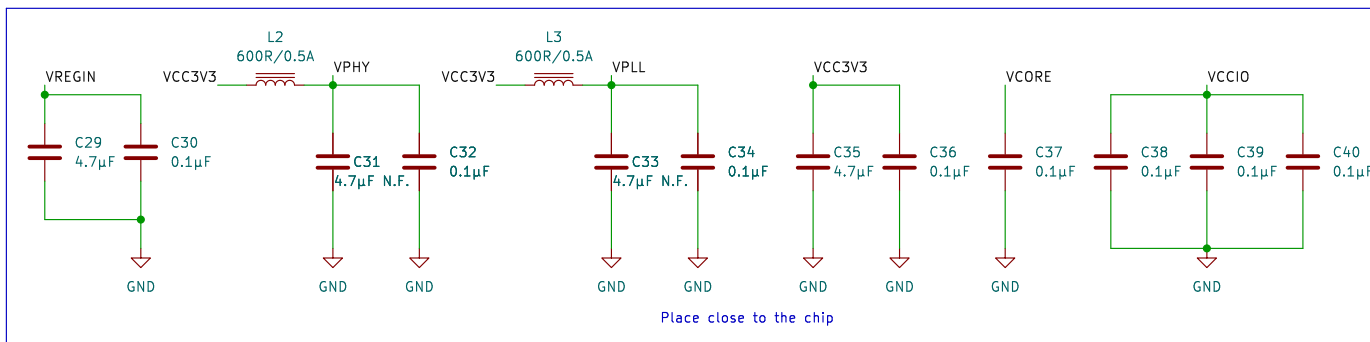
Size: A4	Date: 2024-05-28	Rev: 1.3
KiCad E.D.A. kicad 7.0.8	Id: 4/13	







VCC3V3 \_\_\_\_\_ VCCIO  
VBUS \_\_\_\_\_ VREGIN



Place close to the chip

Reference Implementation:  
[https://ftdichip.com/wp-content/uploads/2020/07/DS\\_FT232H.pdf](https://ftdichip.com/wp-content/uploads/2020/07/DS_FT232H.pdf)

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Sheet: /CM4 Highspeed/FTDI/

File: FTDI.kicad\_sch

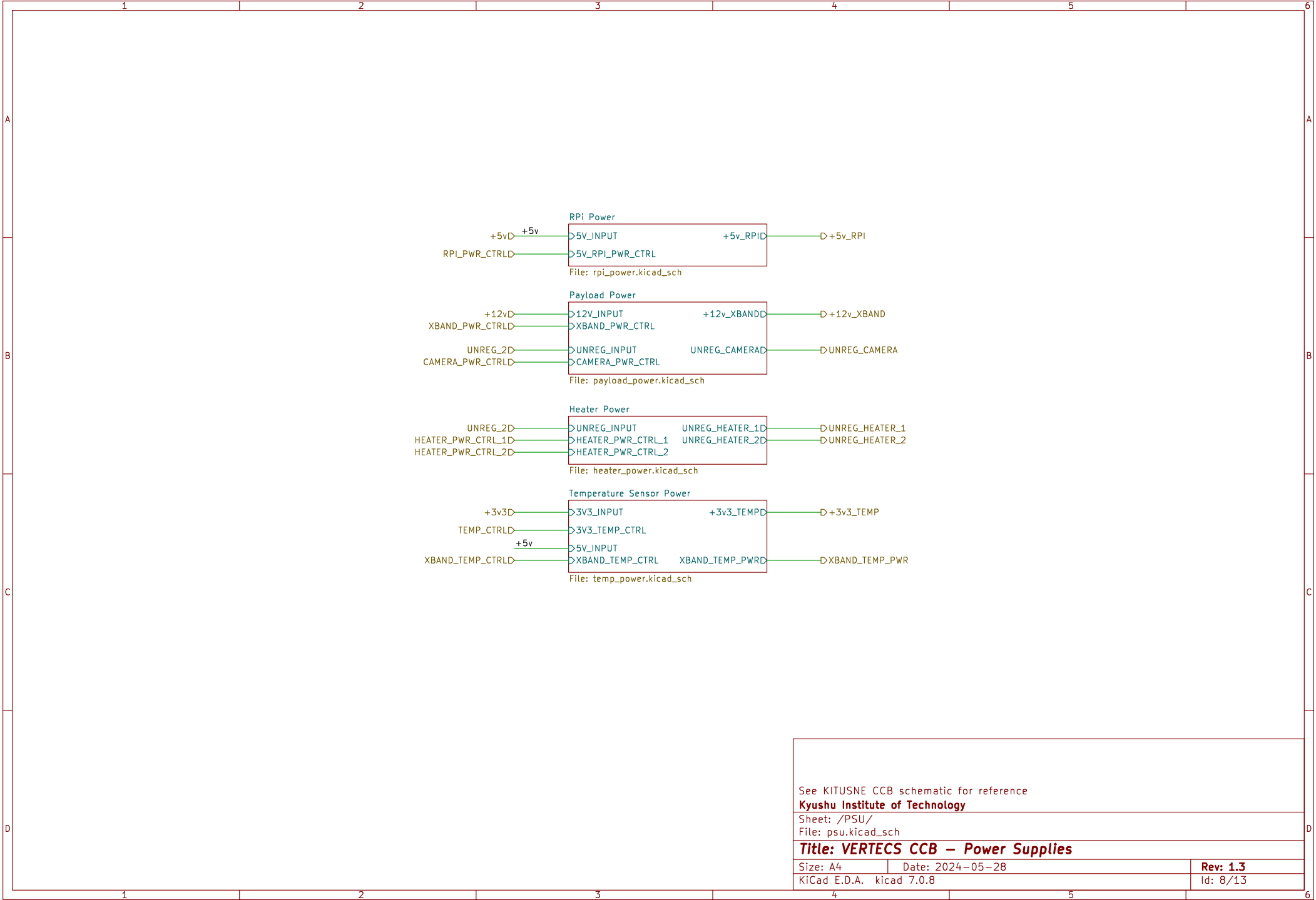
**Title: VERTECS CCB – FTDI Implementation**

Size: A4 Date: 2024-05-28

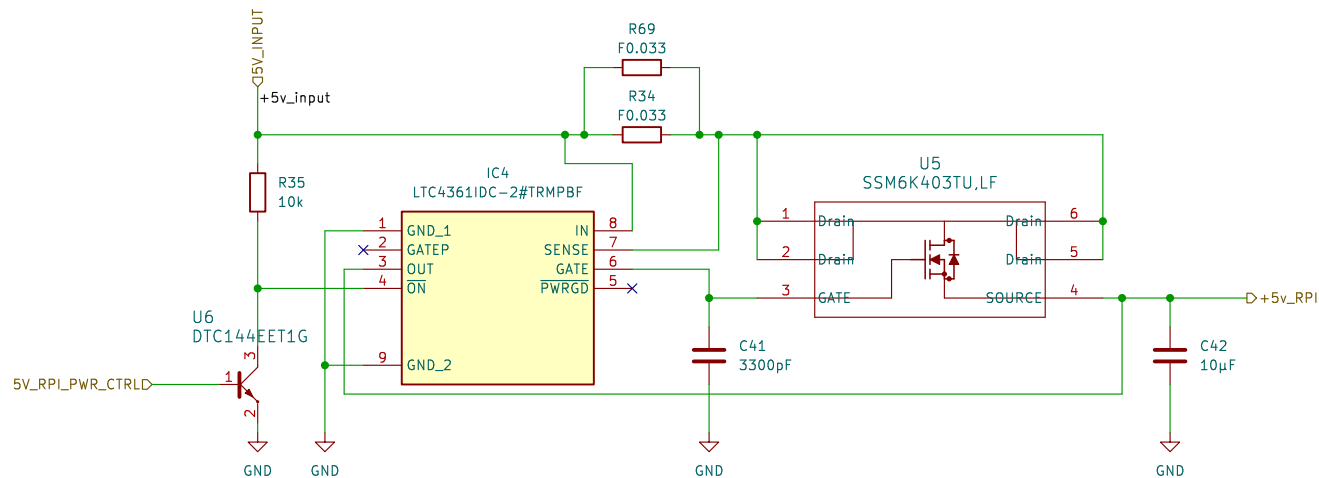
KiCad E.D.A. kicad 7.0.8

**Rev: 1.3**

Id: 7/13





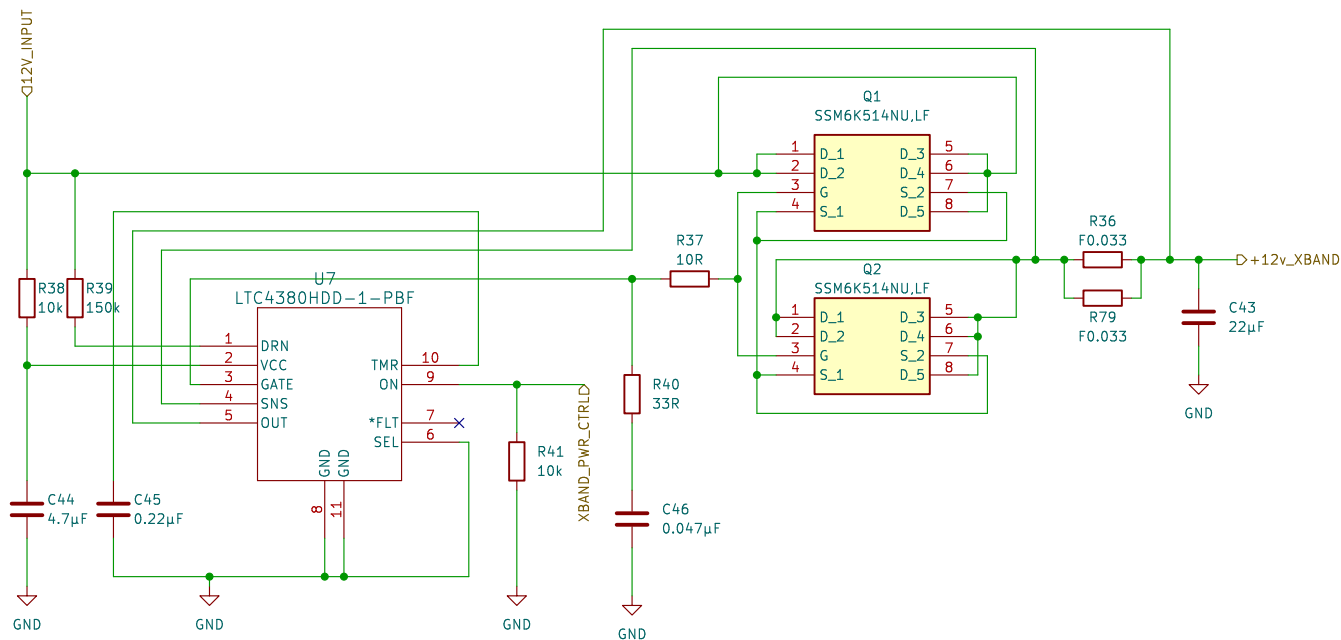


RPi OCP set to ~3A  
 See KITUSNE CCB schematic for reference  
**Kyushu Institute of Technology**  
 Sheet: /PSU/RPi Power/  
 File: rpi\_power.kicad\_sch

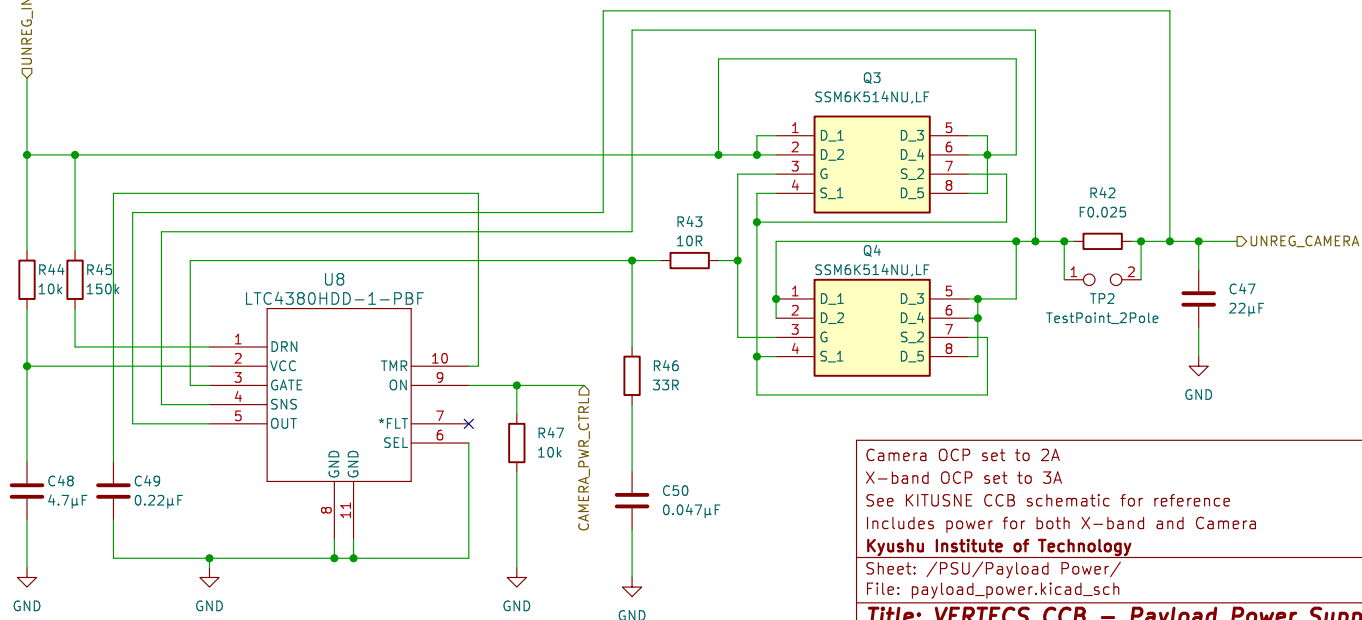
### Title: VERTECS CCB – RPi Power Supply

Size: A4	Date: 2024-05-28	Rev: 1.3
KiCad E.D.A. kicad 7.0.8		Id: 9/13

X-Band PWR



Camera PWR



Camera OCP set to 2A  
X-band OCP set to 3A  
See KITUSNE CCB schematic for reference  
Includes power for both X-band and Camera

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Sheet: /PSU/Payload Power/

File: payload\_power.kicad\_sch

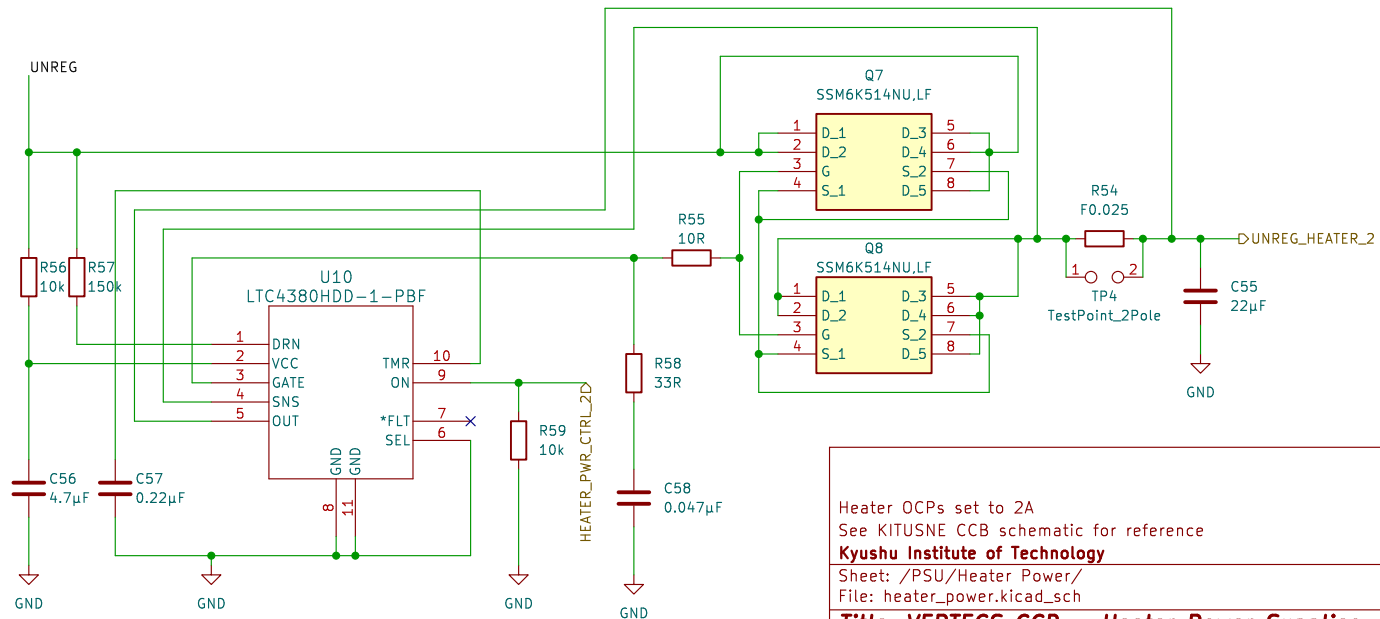
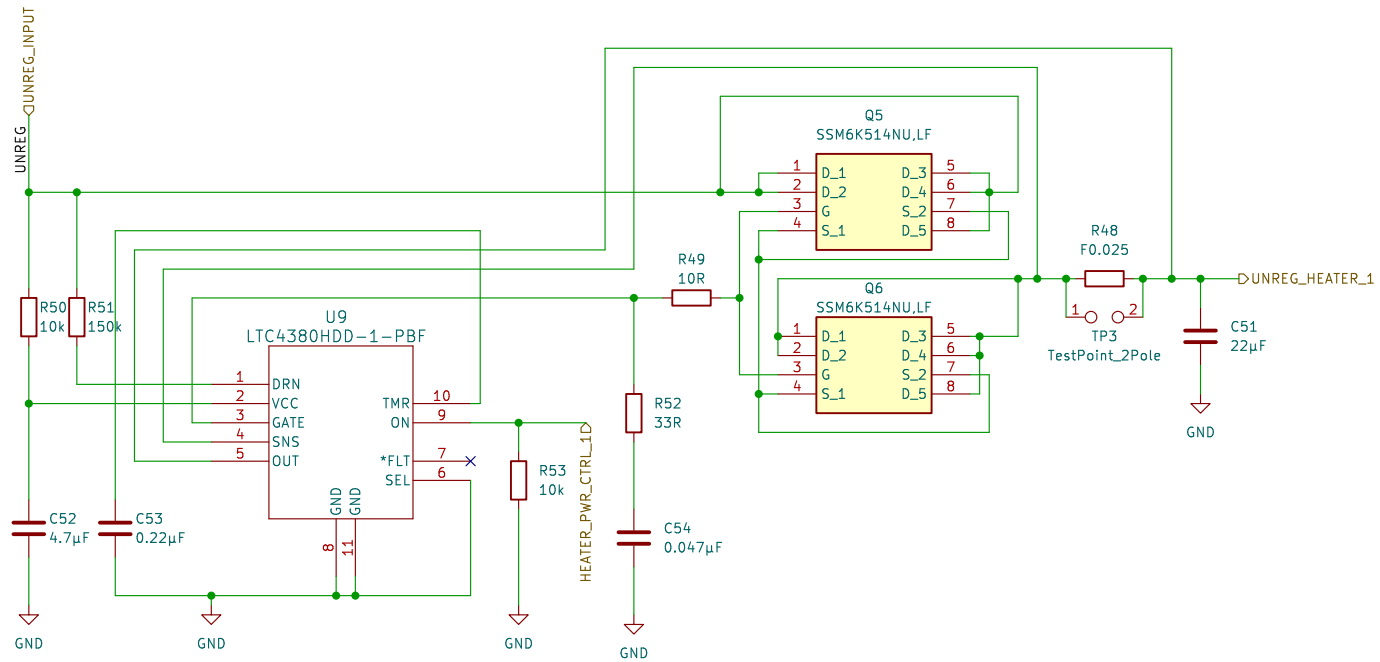
**Title: VERTECS CCB – Payload Power Supplies**

Size: A4 Date: 2024-05-28

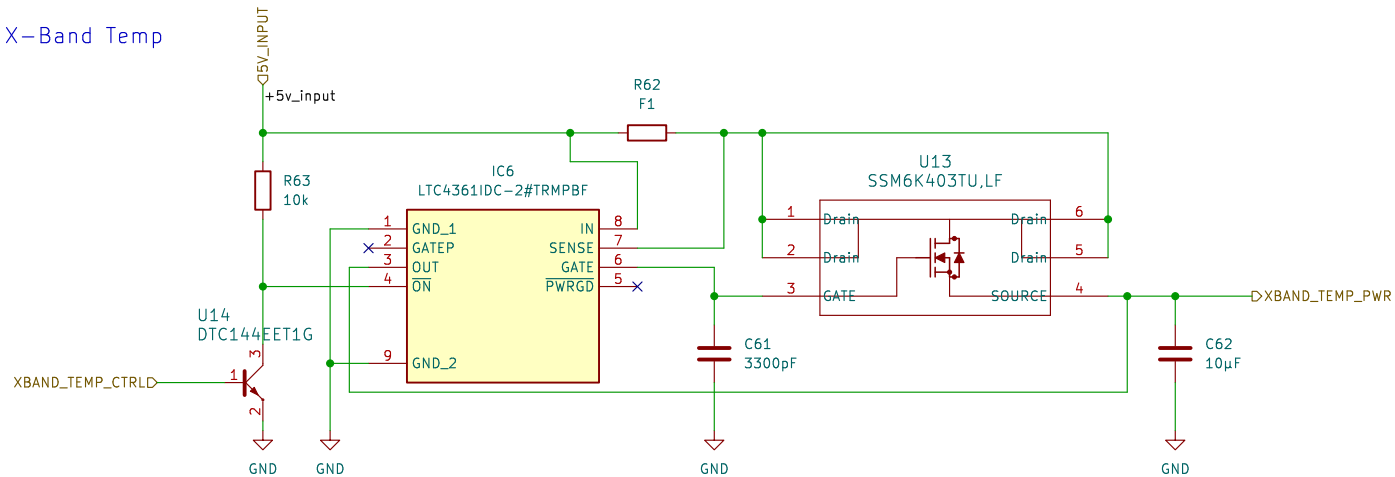
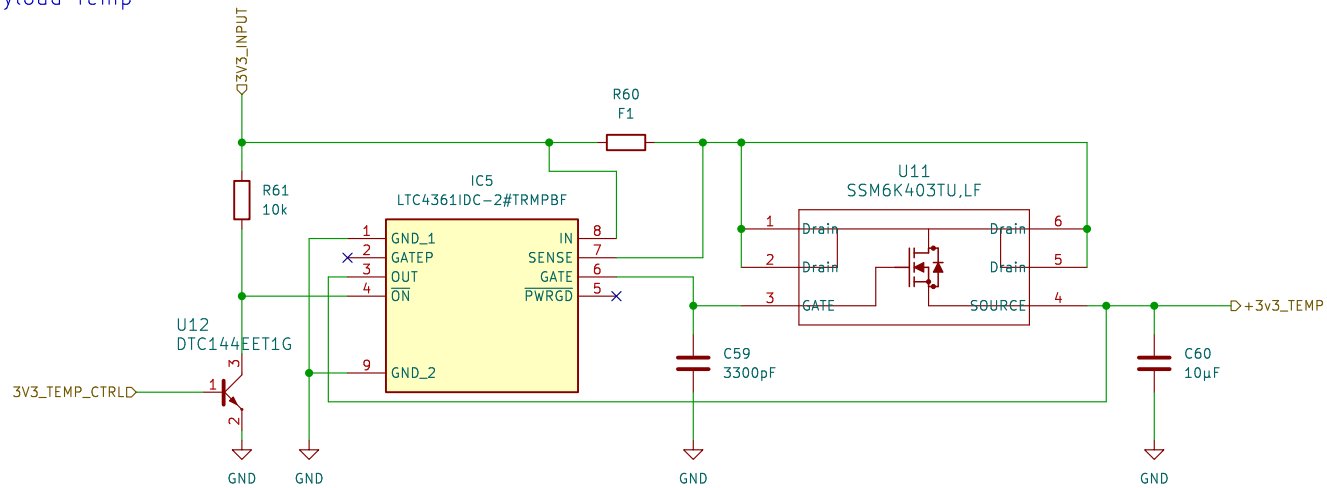
KiCad E.D.A. kicad 7.0.8

**Rev: 1.3**

Id: 10/13

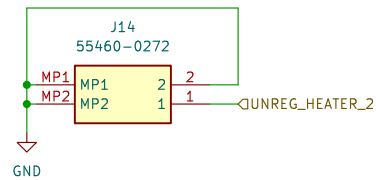
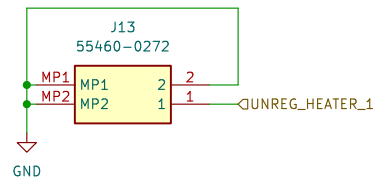


Rev: 1.3  
Id: 11/13

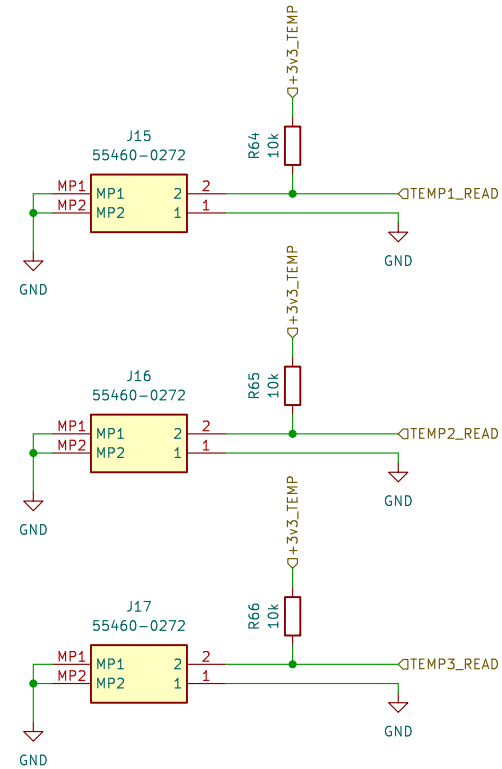


Rev: 1.3  
Id: 12/13

## Heater Connectors



## Temp Sensor Connectors



See KITUSNE CCB schematic for reference  
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Sheet: /Thermal Control/  
 File: thermal\_control.kicad\_sch

**Title: VERTECS CCB – Thermal Control Connectors**

Size: A4 Date: 2024-05-28  
 KiCad E.D.A. kicad 7.0.8

**Rev: 1.3**  
 Id: 13/13