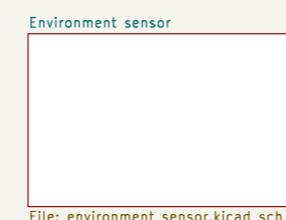
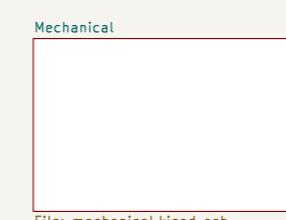
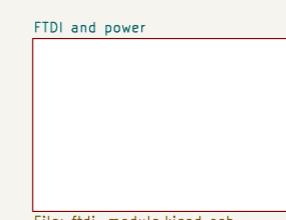
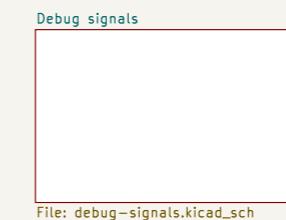
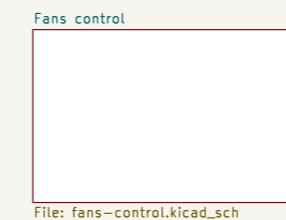
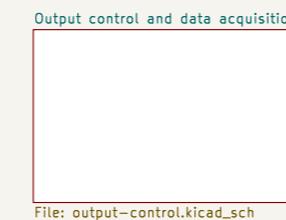
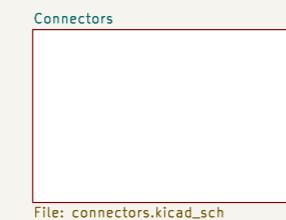
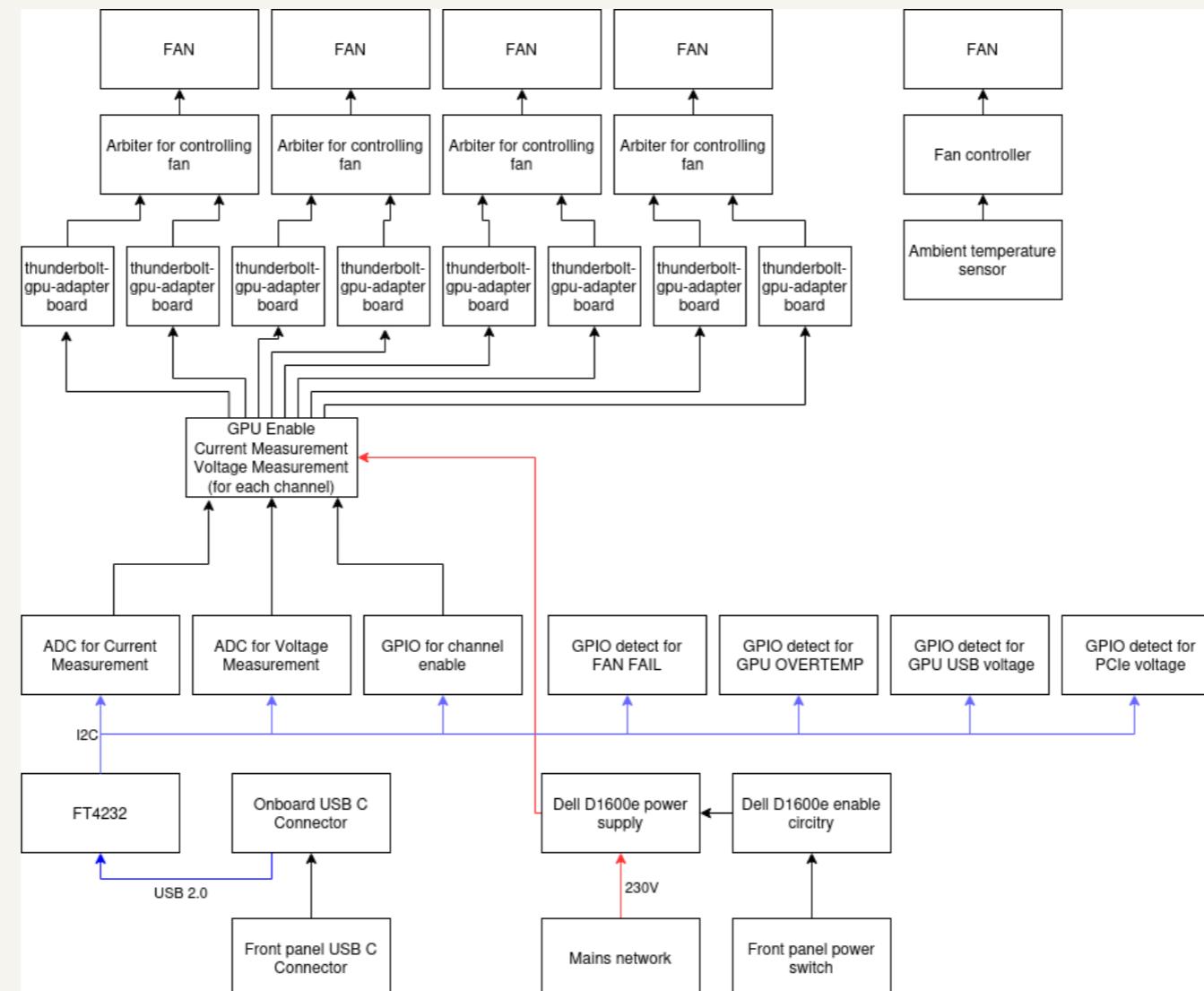


GPU Cluster Backplane



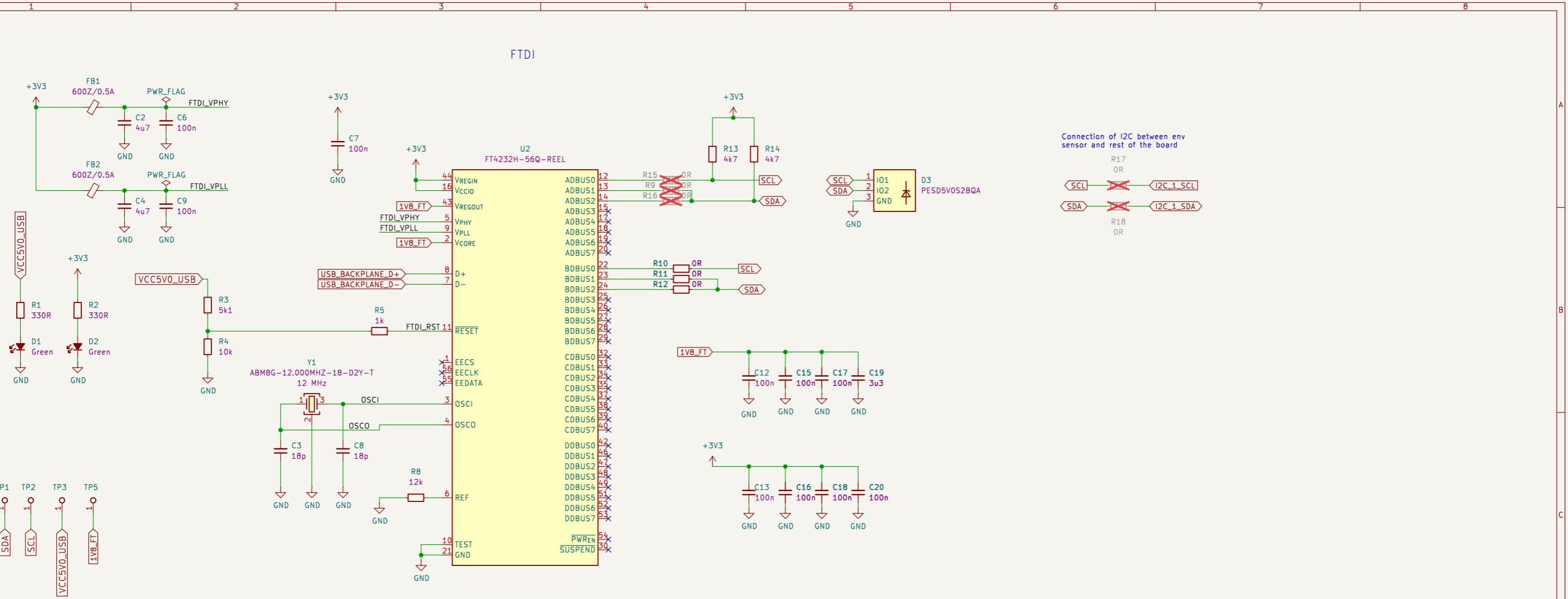
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Sheet: / File: gpu-cluster-backplane.kicad_sch

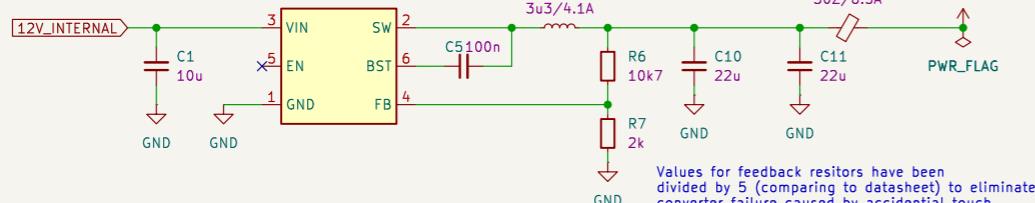
Title: GPU Cluster Backplane

Size: A3 Date: 2024-06-27
KiCad E.D.A. kicad-cli 7.0.11

Rev: 1.0.2:fb0b7
Id: 1/16

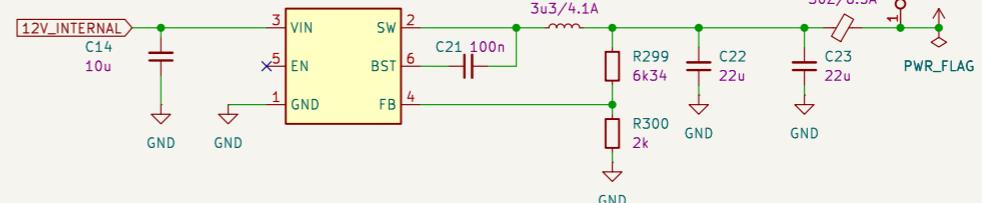


5V0 DC/DC Converter

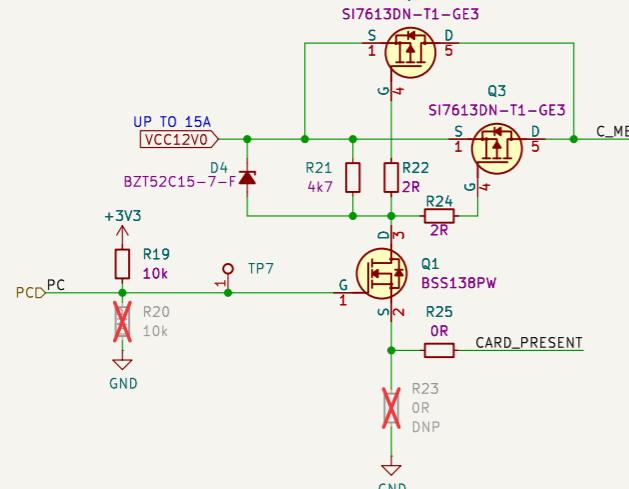


 GND Values for feedback resistors have been divided by 5 (comparing to datasheet) to eliminate converter failure caused by accidental touch

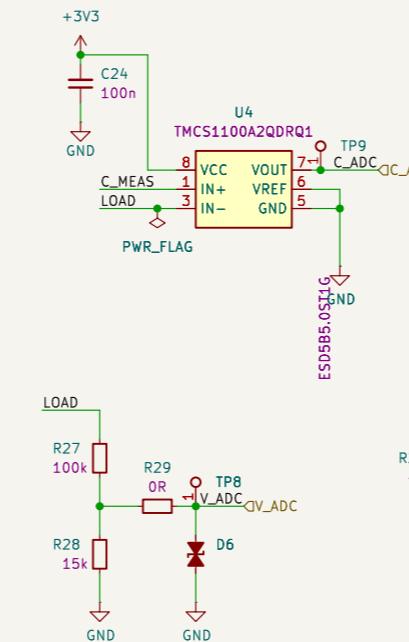
3V3 DC/DC Converter



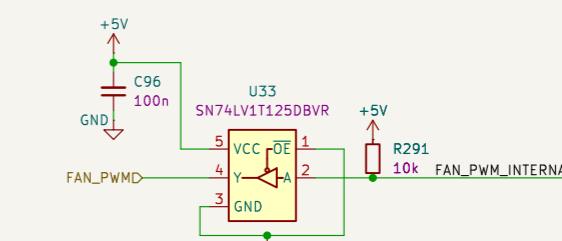
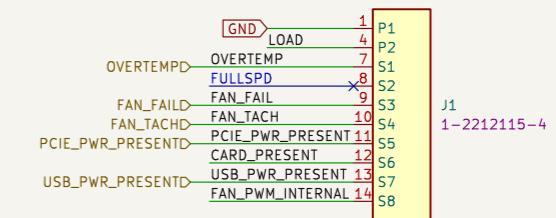
Channel high side switch

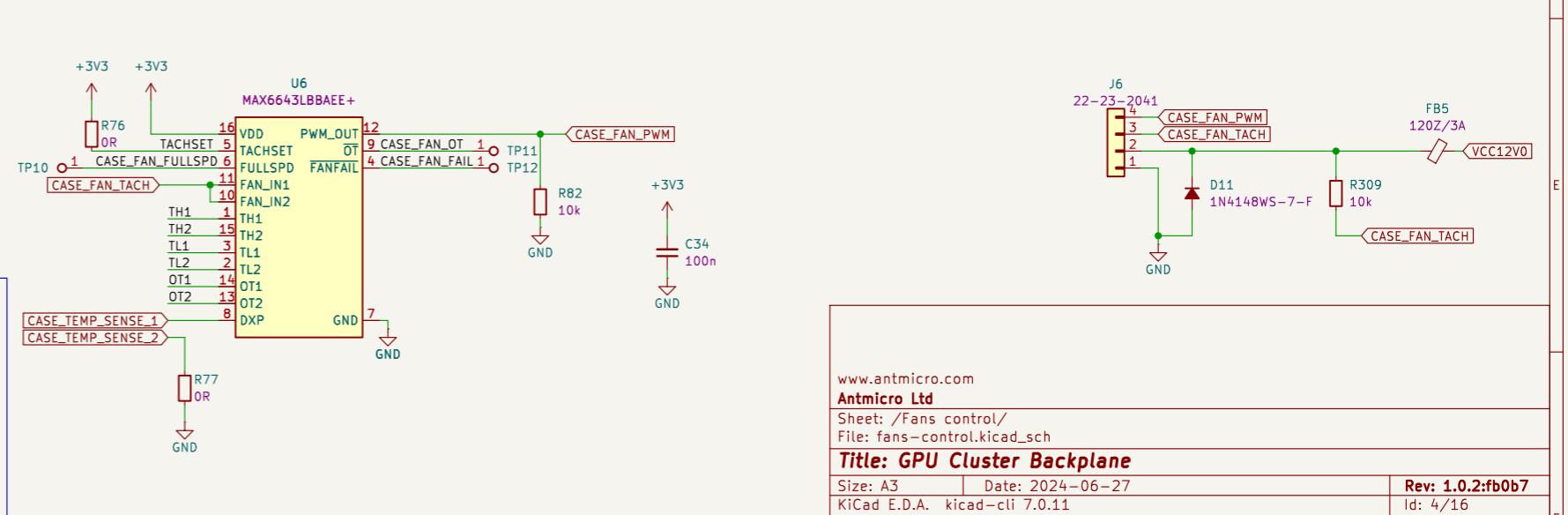
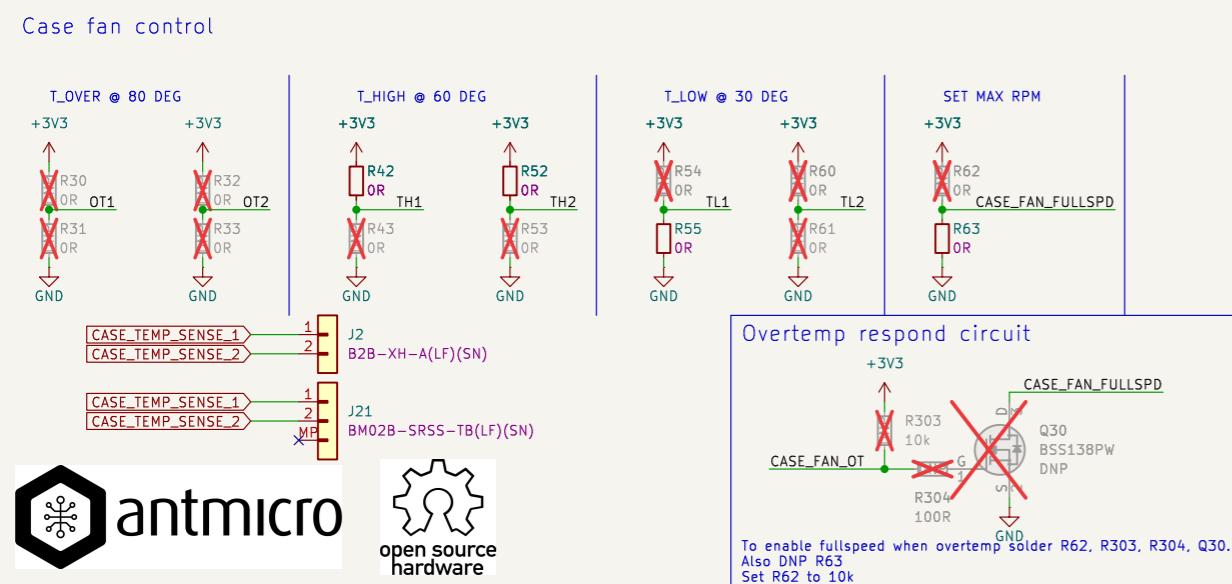
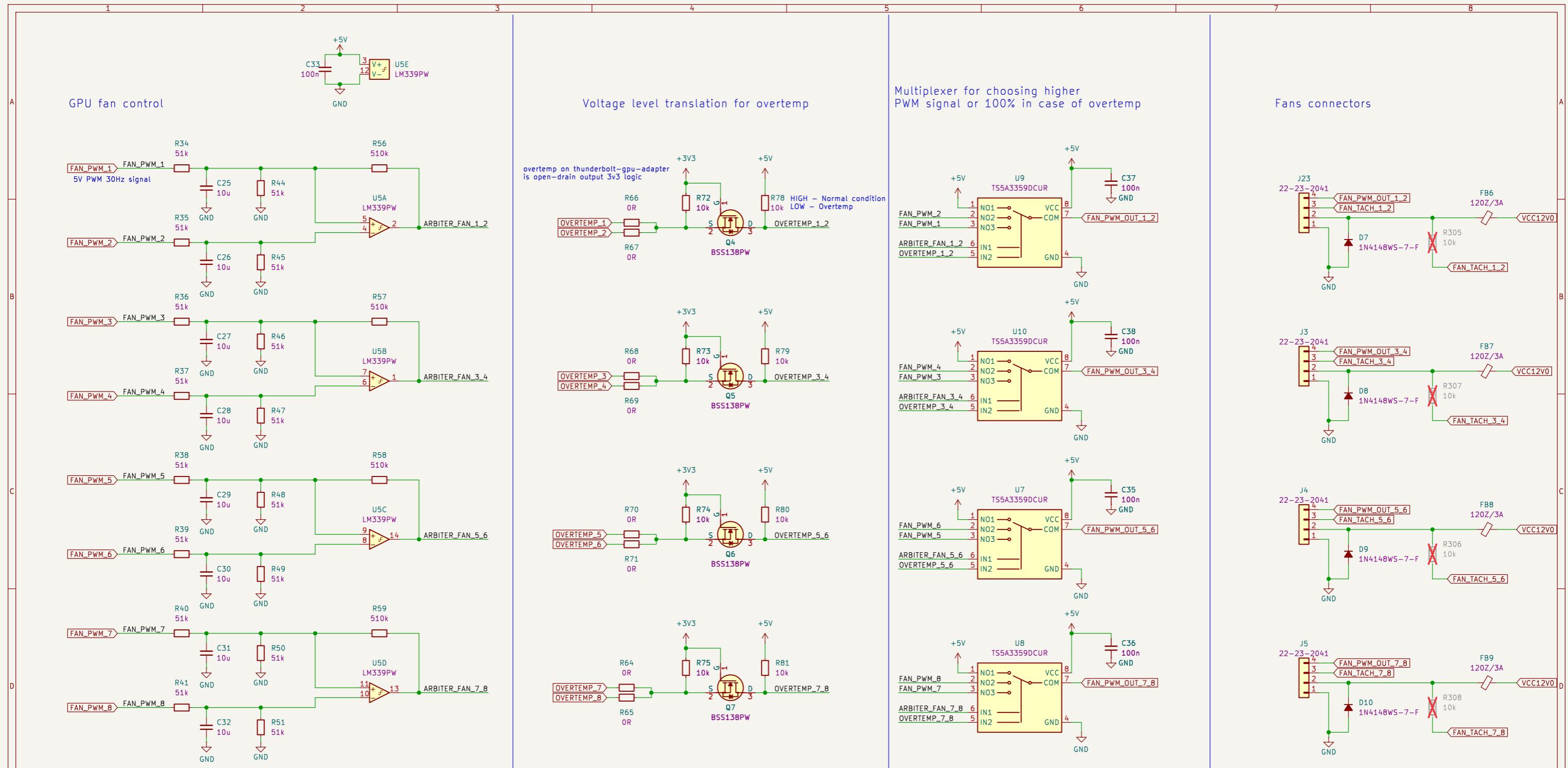


Current and voltage measurement



GPU Adapter connector





A

B

C

D

E

F

A

B

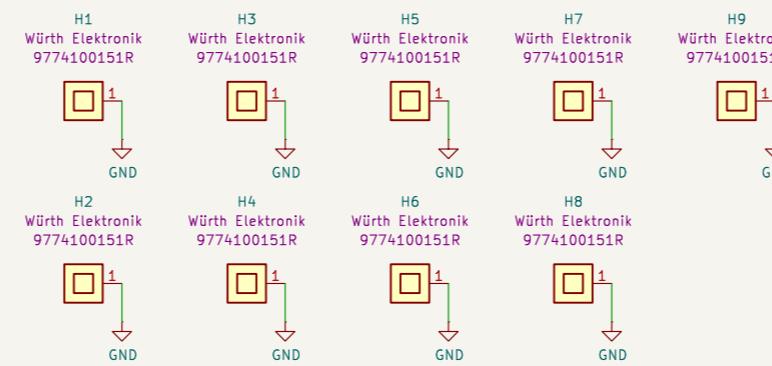
C

D

E

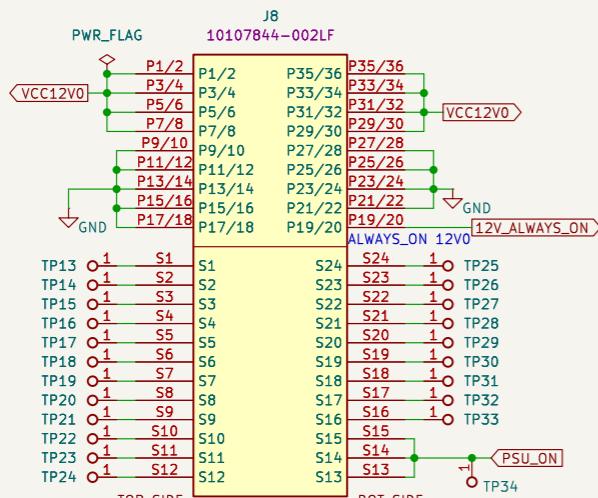
F

Holes for studs

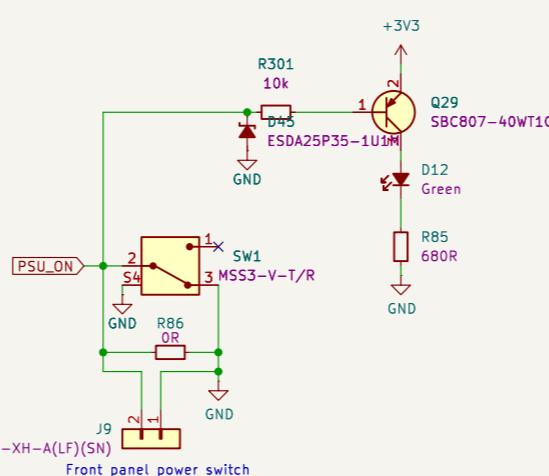


A

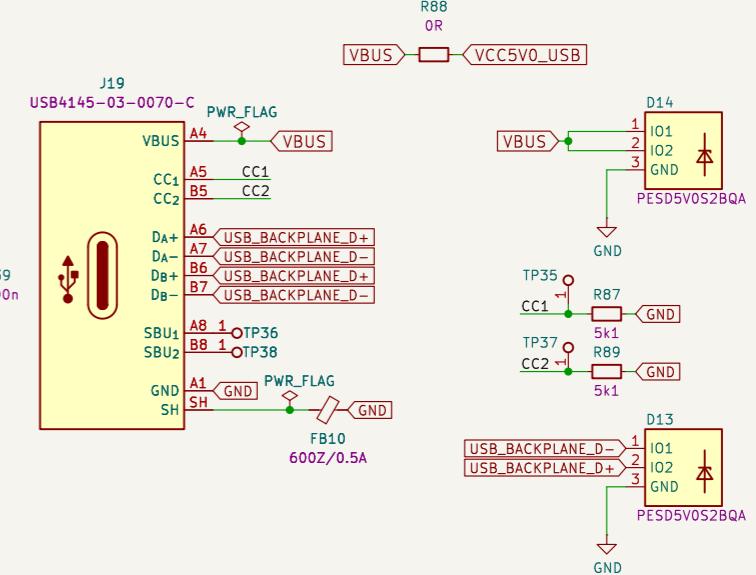
Dell D1600e PSU connector



Power switch connector



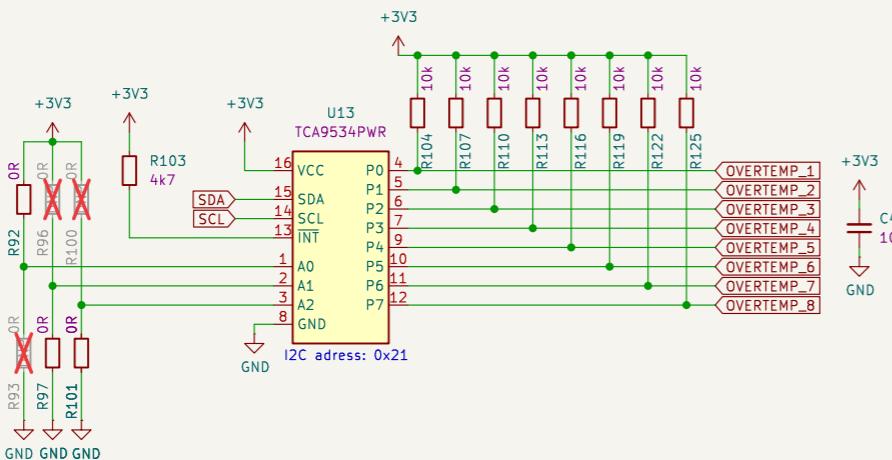
USB C connector



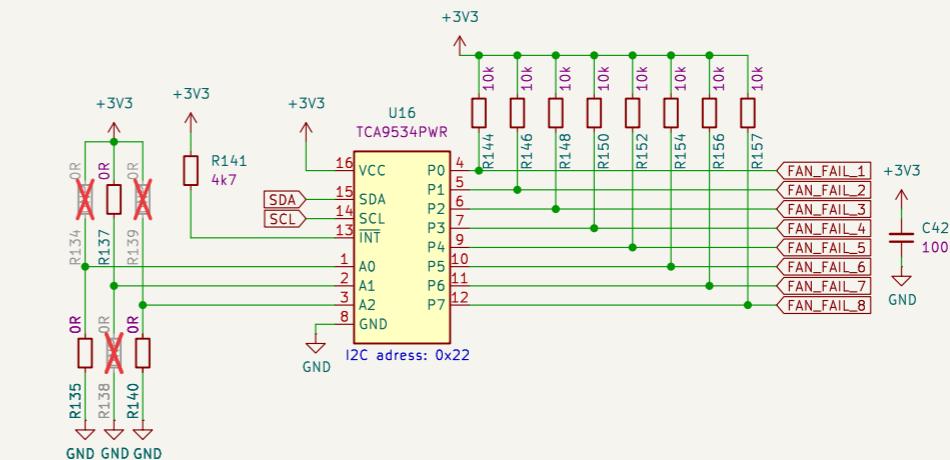
F

1 2 3 4 5 6 7 8

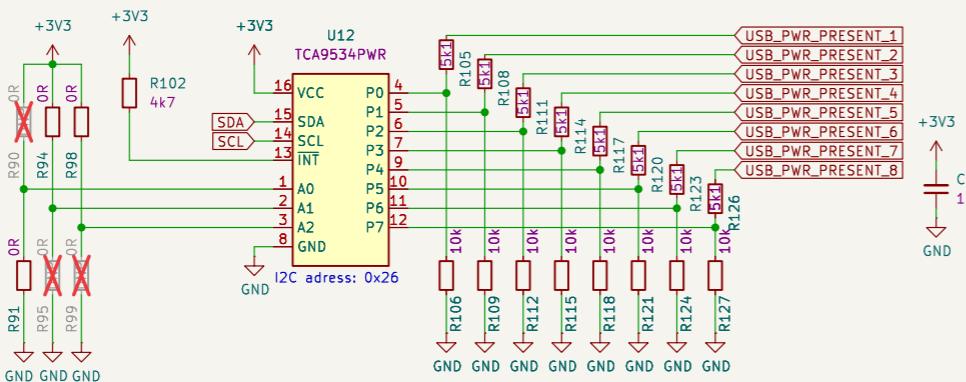
GPIO EXPANDER for OVERTEMP



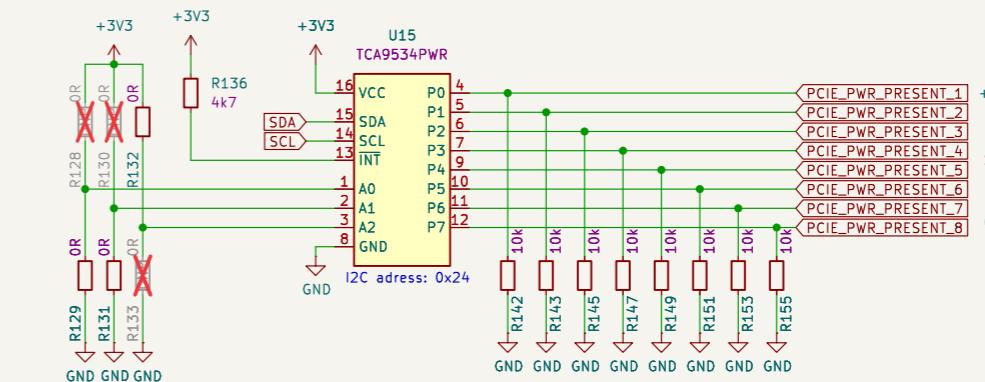
GPIO EXPANDER for FAN_FAIL



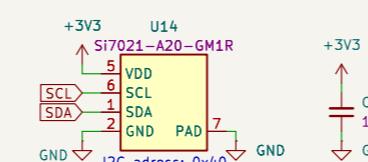
GPIO EXPANDER for USB_PWR_PRESENT



GPIO EXPANDER for PCIE_PWR_PRESENT



Temperature and humidity sensor



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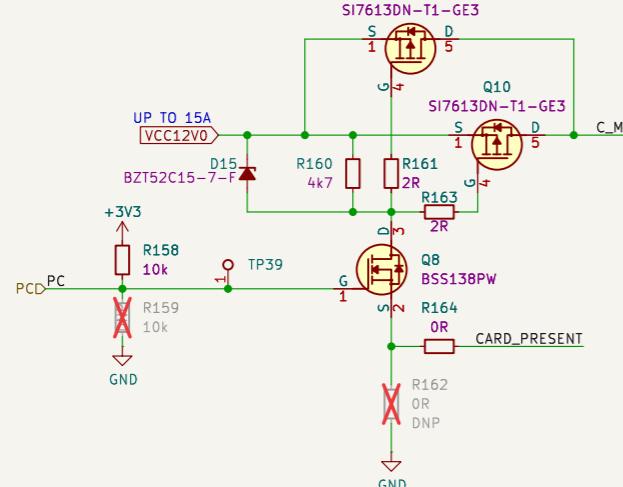
Sheet: /Debug signals/
File: debug-signals.kicad_sch

Title: GPU Cluster Backplane

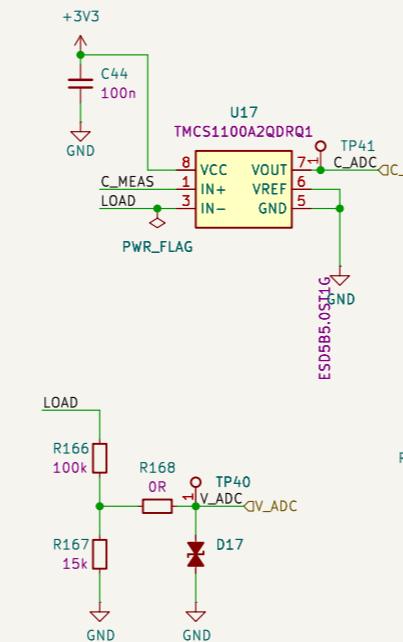
Size: A3 Date: 2024-06-27
KiCad E.D.A. kicad-cl 7.0.11

Rev: 1.0.2:fb0b7
Id: 8/16

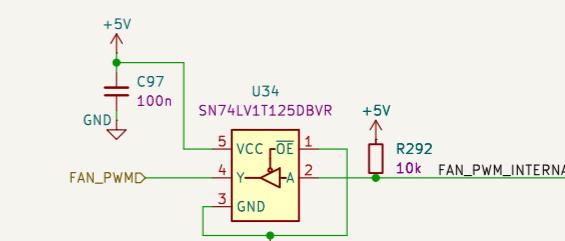
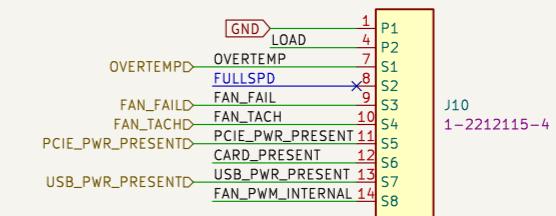
Channel high side switch



Current and voltage measurement

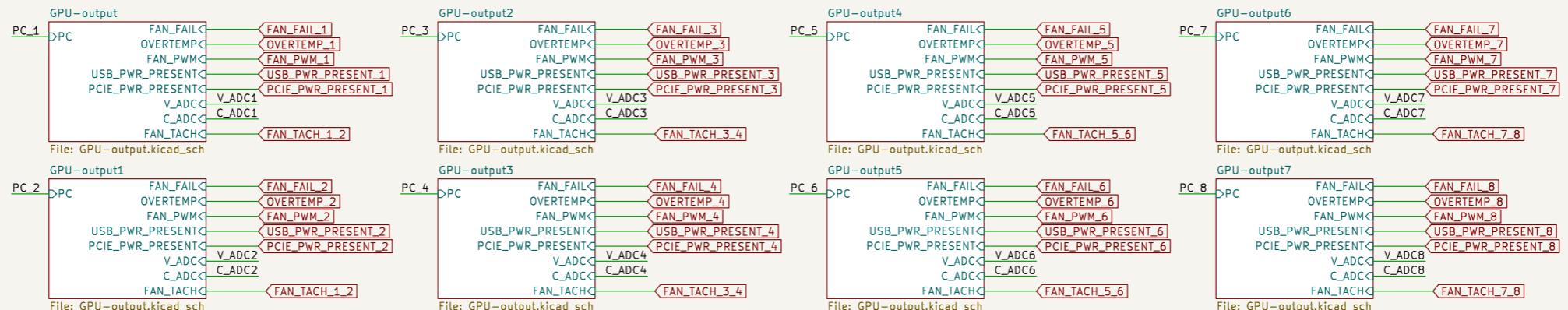


GPU Adapter connector

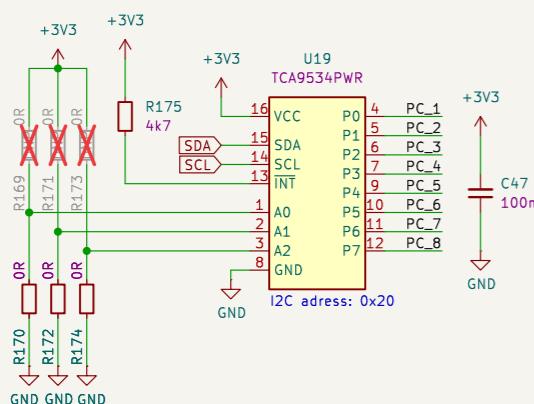


A

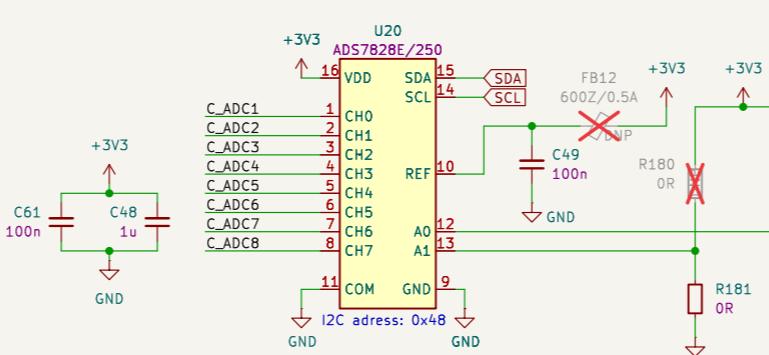
Individual channels for connecting thunderbolt-gpu-adapters



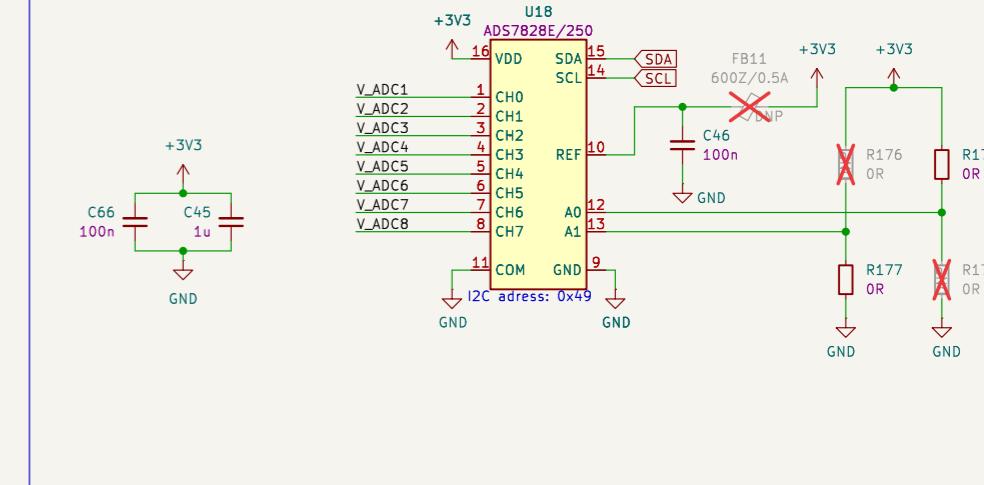
GPIO EXPANDER for power cycling



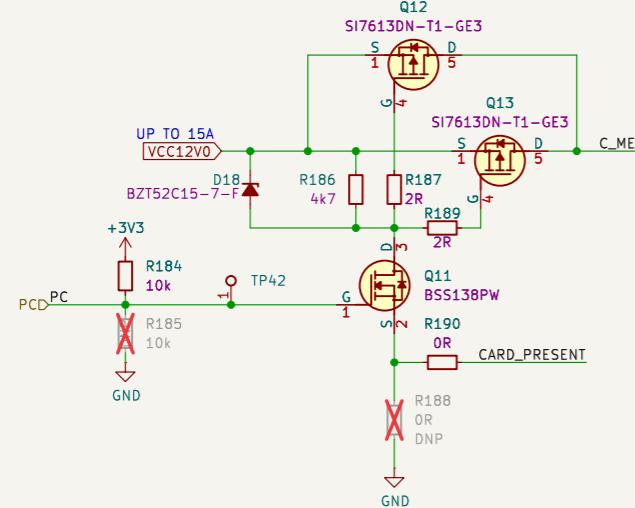
ADC for current measurement



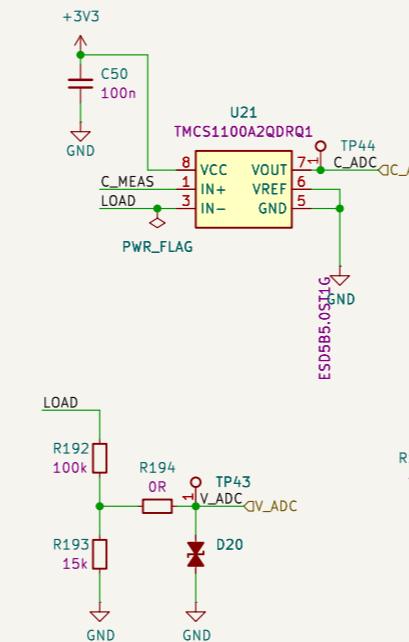
ADC for voltage measurement



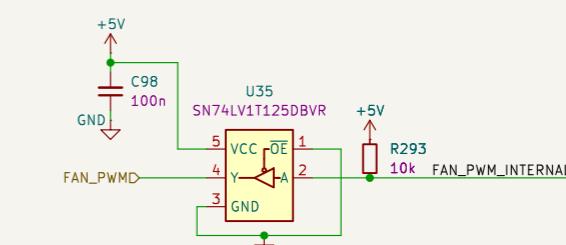
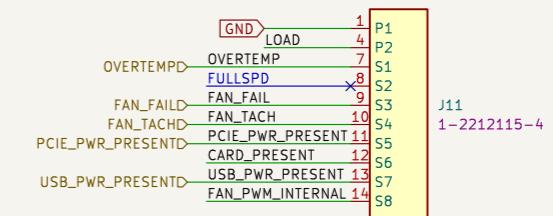
Channel high side switch



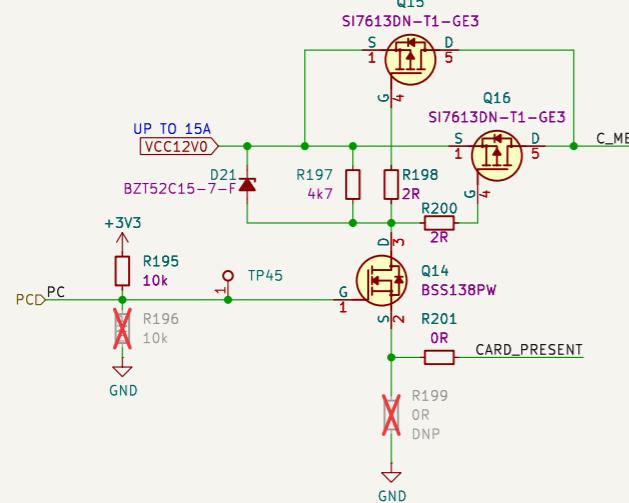
Current and voltage measurement



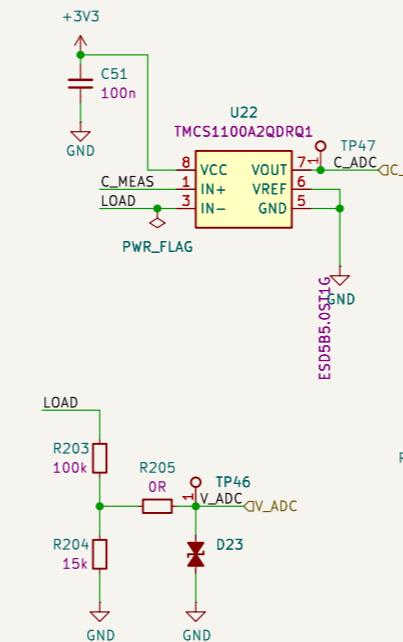
GPU Adapter connector



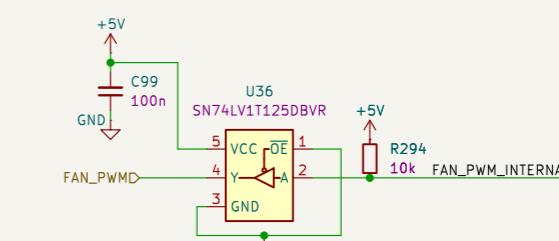
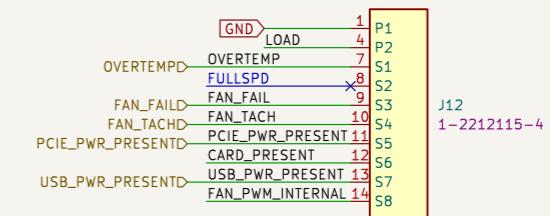
Channel high side switch



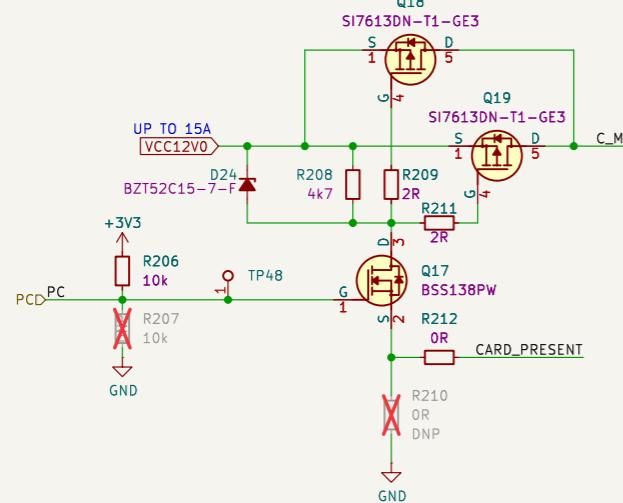
Current and voltage measurement



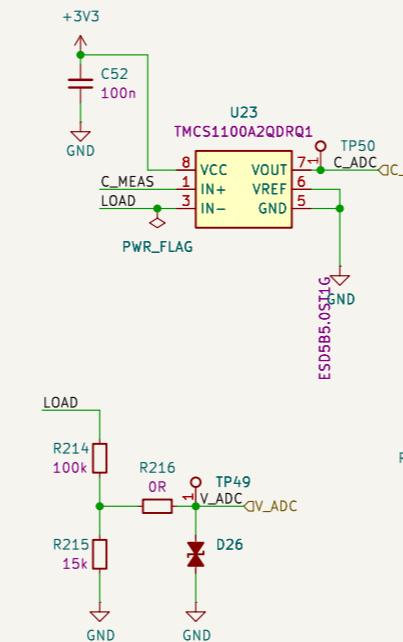
GPU Adapter connector



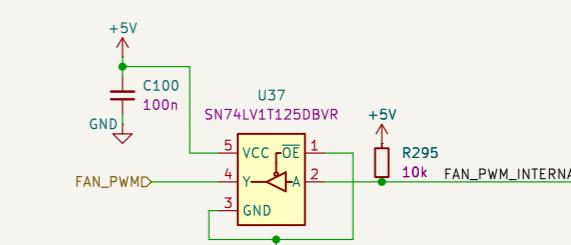
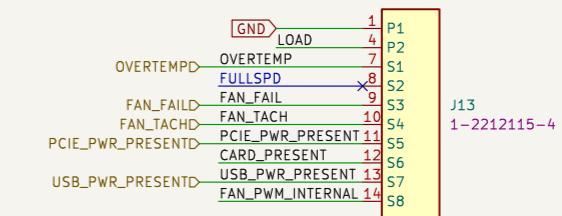
Channel high side switch



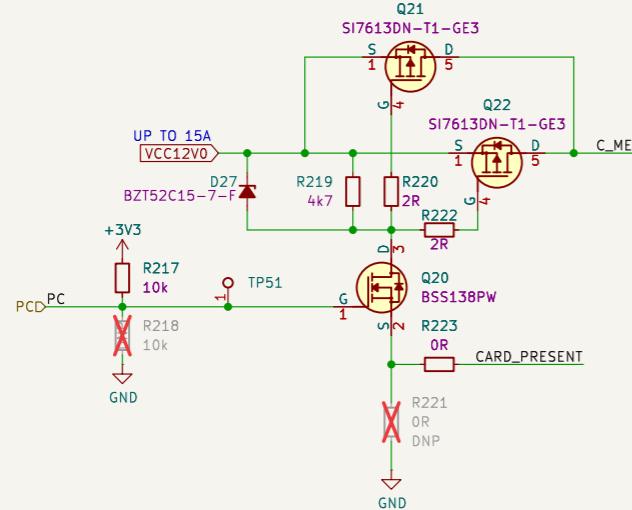
Current and voltage measurement



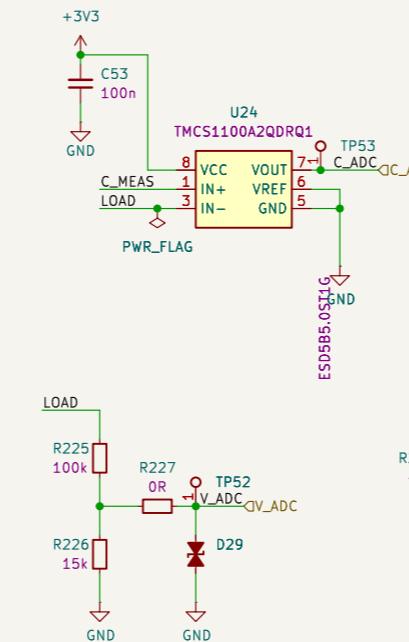
GPU Adapter connector



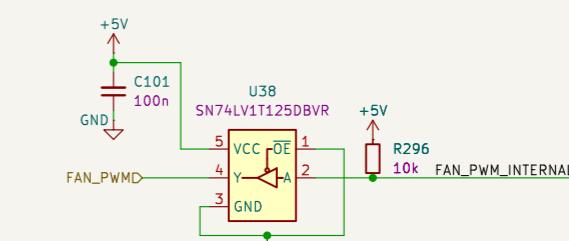
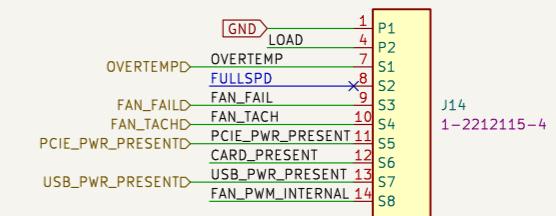
Channel high side switch

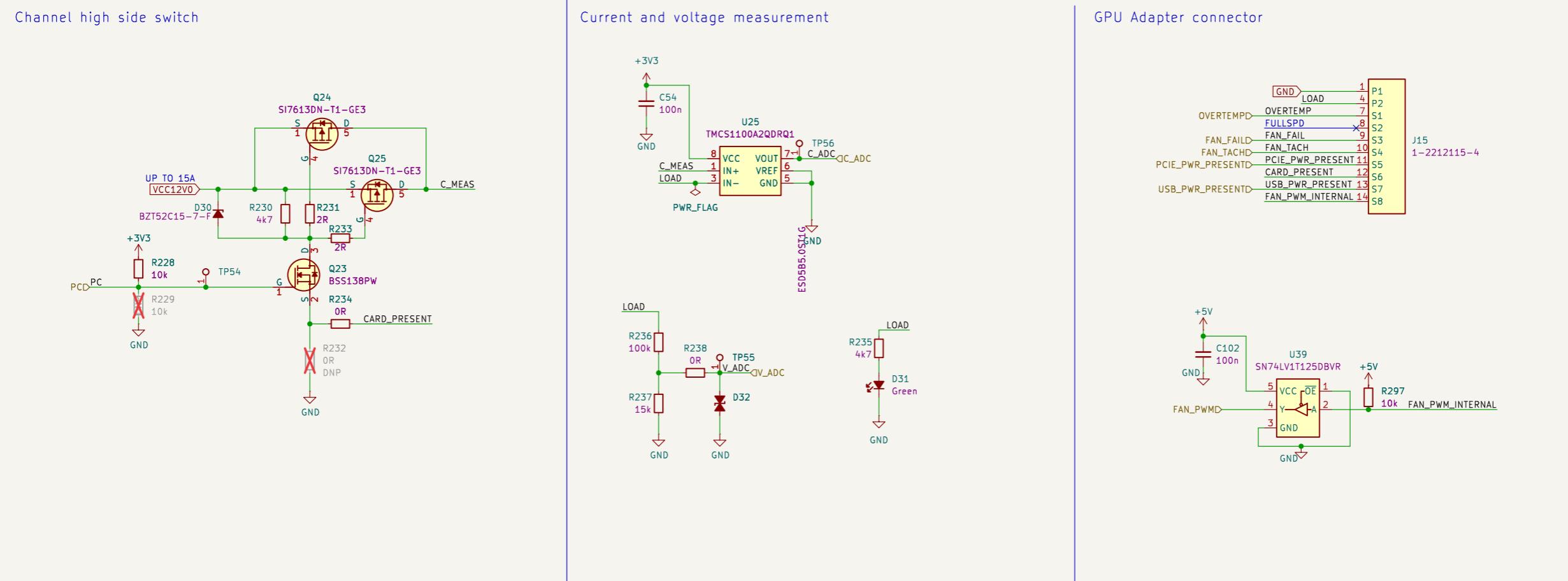


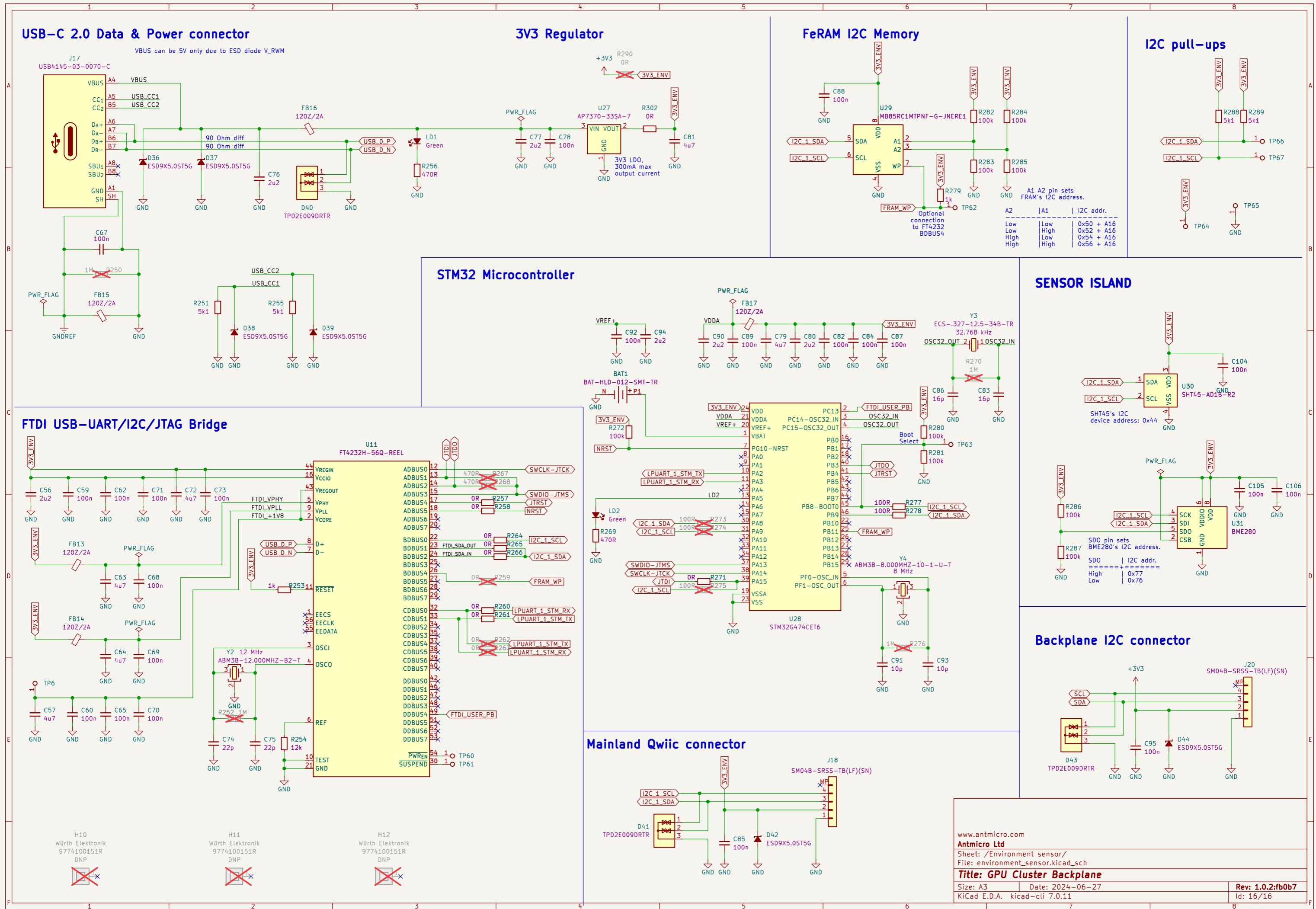
Current and voltage measurement



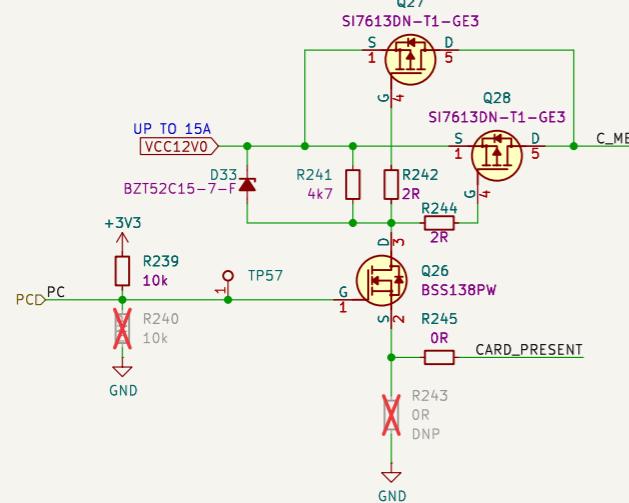
GPU Adapter connector



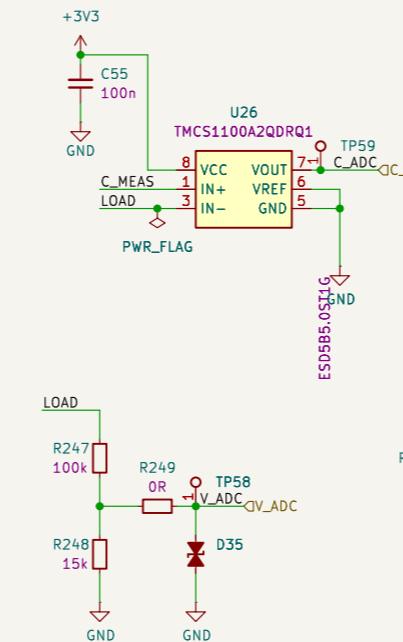




Channel high side switch



Current and voltage measurement



GPU Adapter connector

