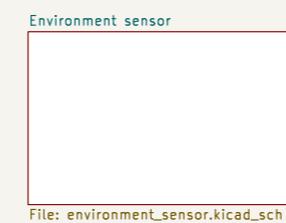
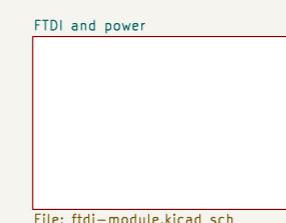
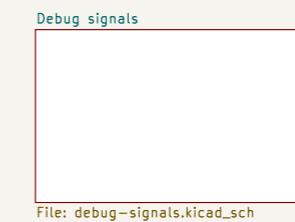
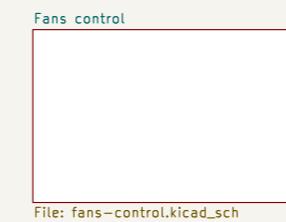
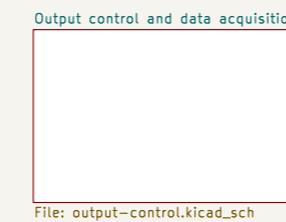
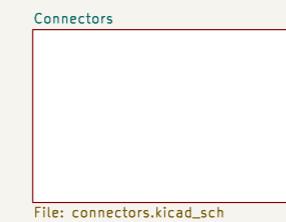
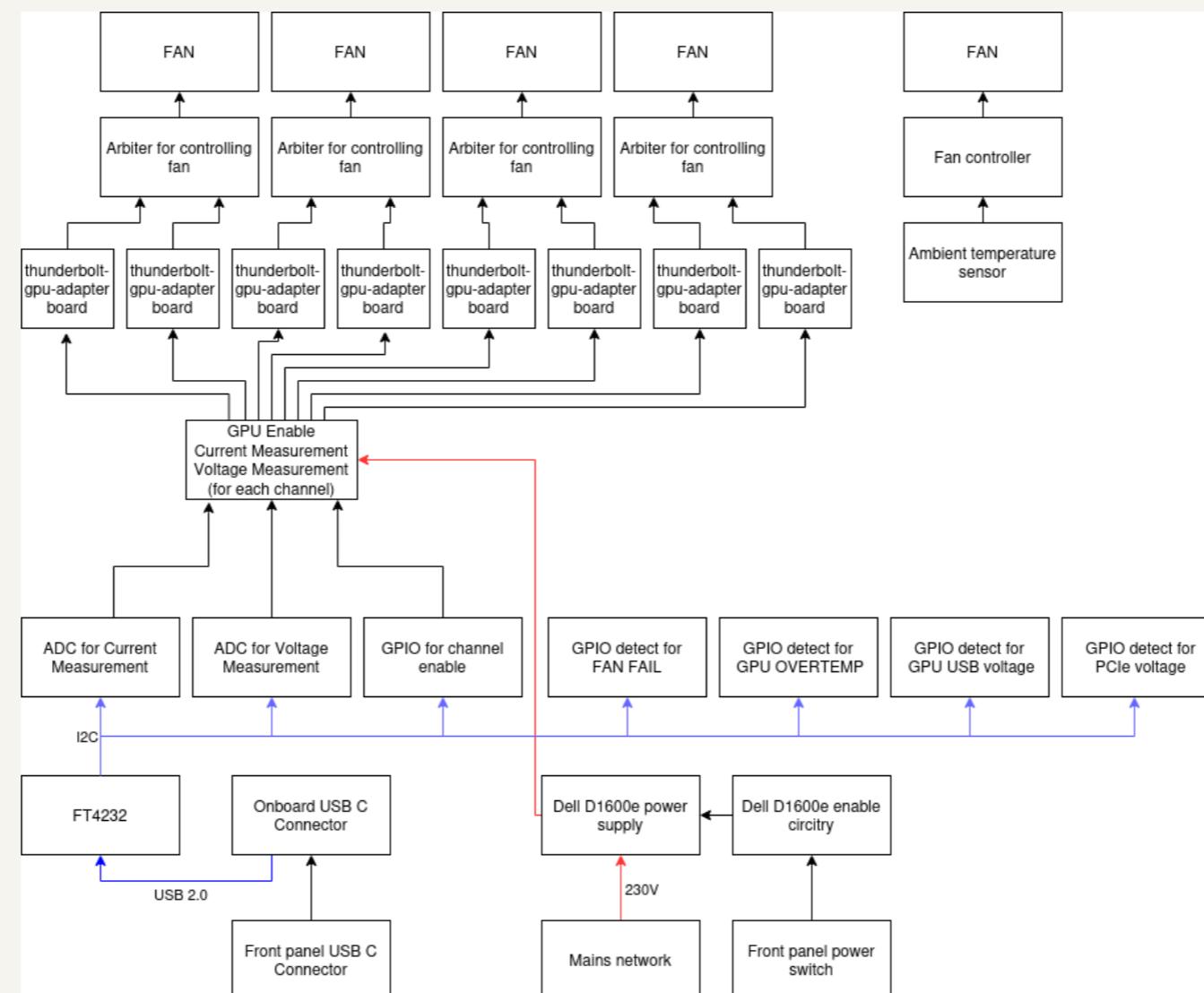
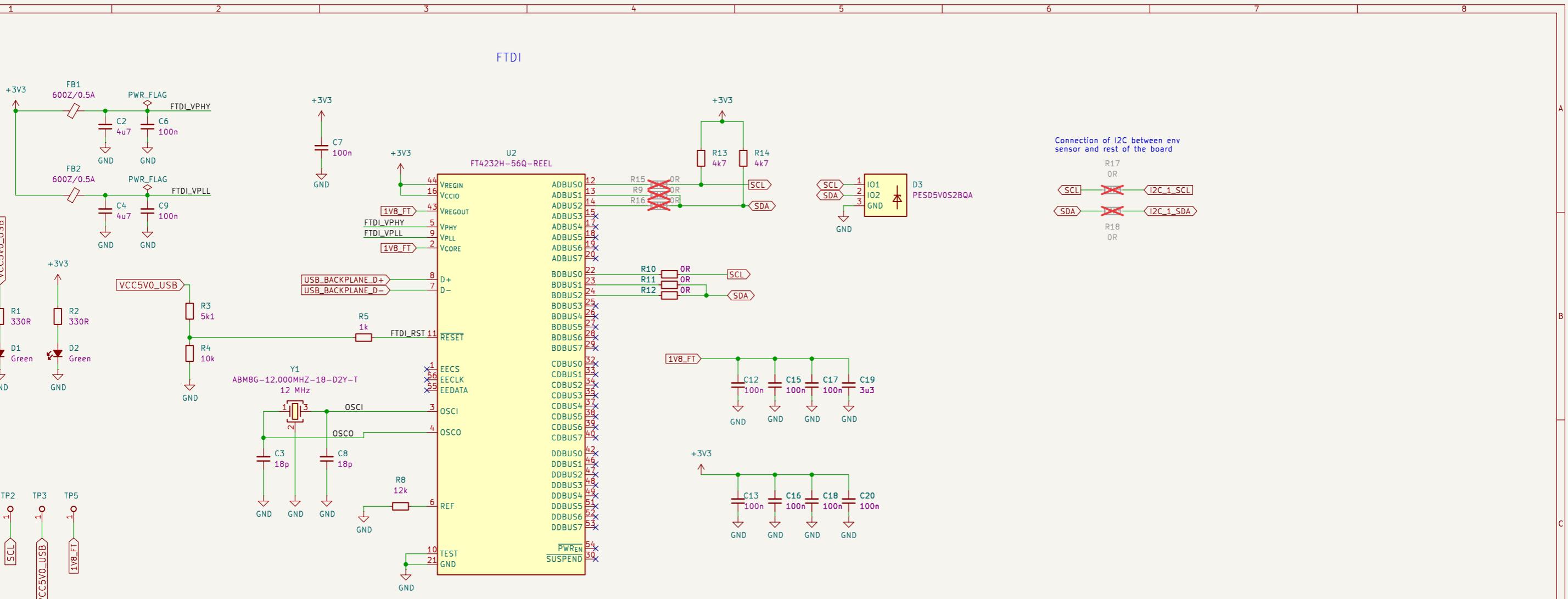


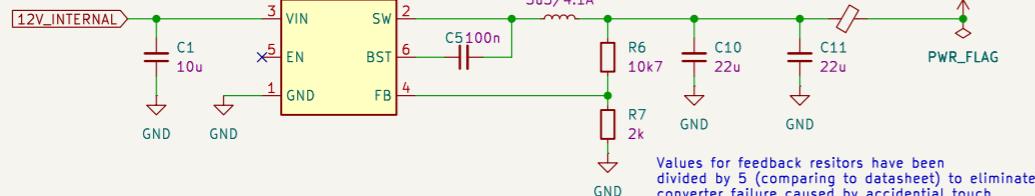
GPU Cluster Backplane



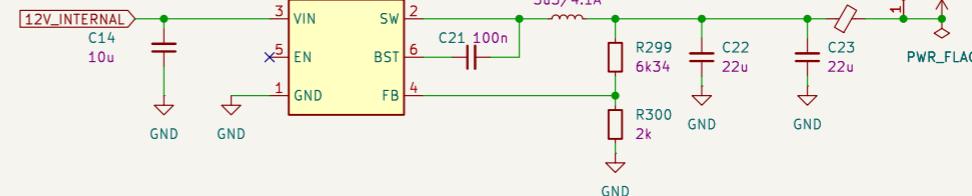
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Sheet: /
File: gpu-cluster-backplane.kicad_sch
Title: GPU Cluster Backplane
Size: A3 Date: 2023-11-28
KiCad E.D.A. kicad-cli 7.0.11 Rev: 1.0.1:9a146
Id: 1/16



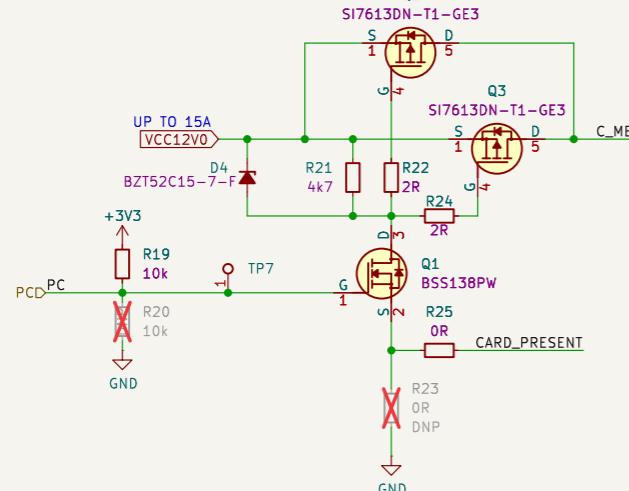
5V0 DC/DC Converter



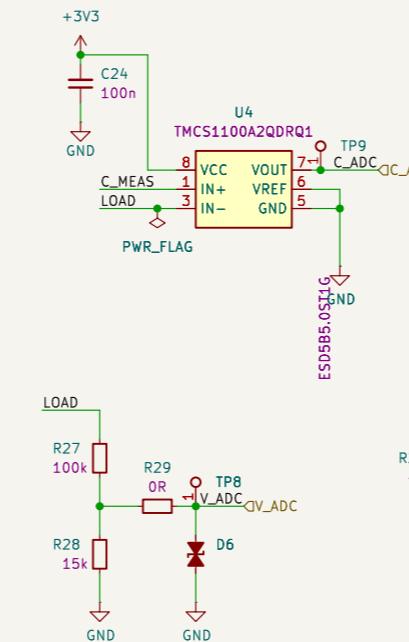
3V3 DC/DC Converter



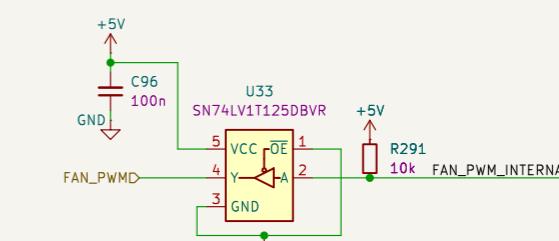
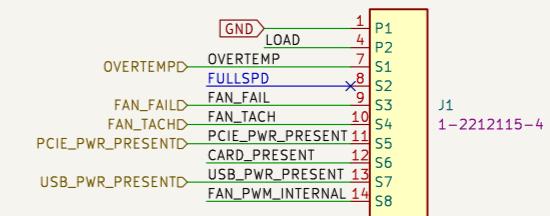
Channel high side switch

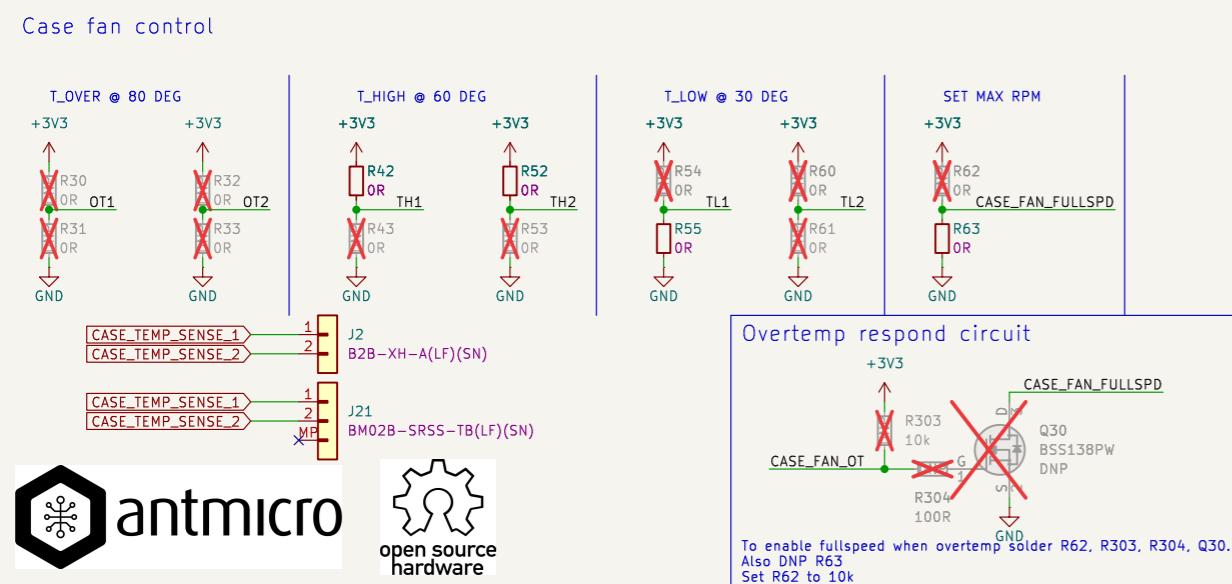
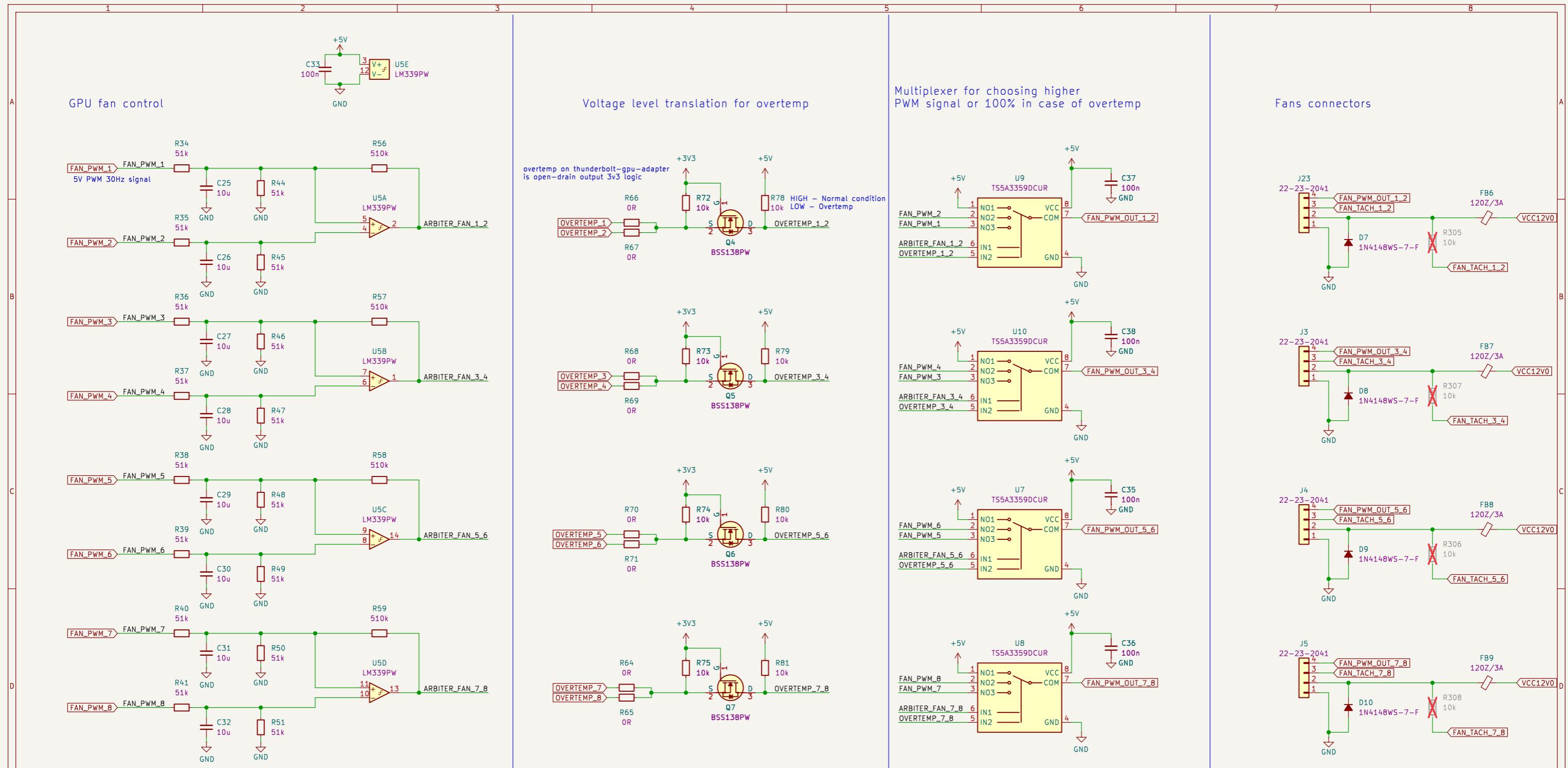


Current and voltage measurement



GPU Adapter connector





open source
hardware

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Sheet: /Fans control/

File: fans-control.kicad_sch

Title: GPU Cluster Backplane

Size: A3 Date: 2023-11-24

KiCad E.D.A. kicad-clt 7.0.11

Rev: 1.0.1:9a146

Id: 4/16

A

B

C

D

E

F

A

B

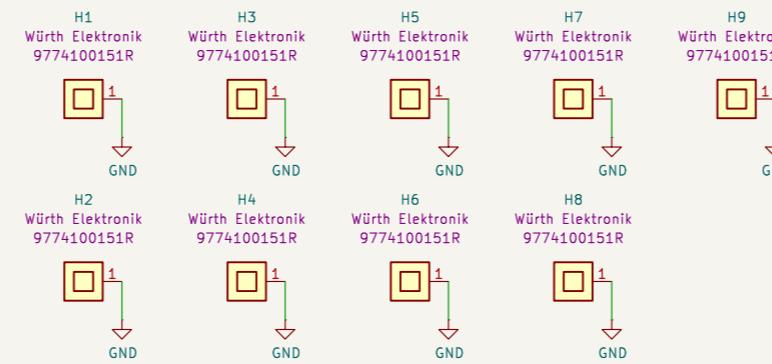
C

D

E

F

Holes for studs


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Sheet: /Mechanical/

File: mechanical.kicad_sch

Title: GPU Cluster Backplane

Size: A3 Date: 2023-11-24

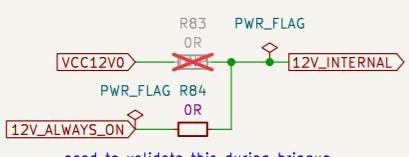
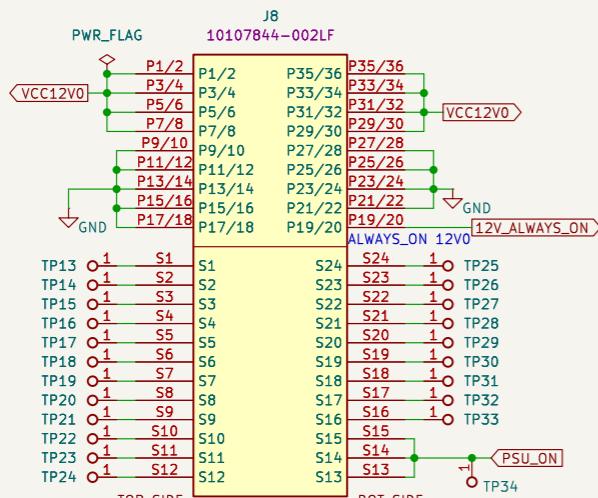
KiCad E.D.A. kicad-cli 7.0.11

Rev: 1.0.1:9a146

Id: 5/16

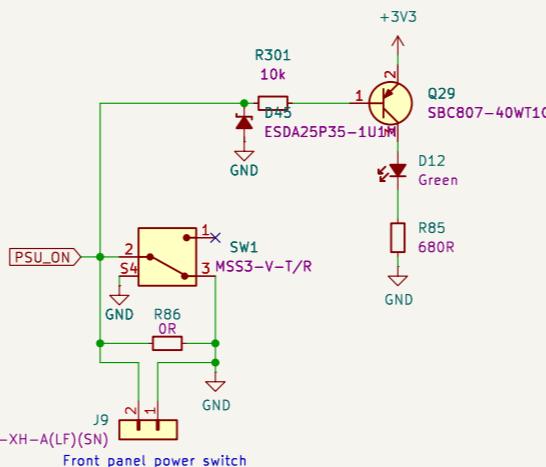
A

Dell D1600e PSU connector



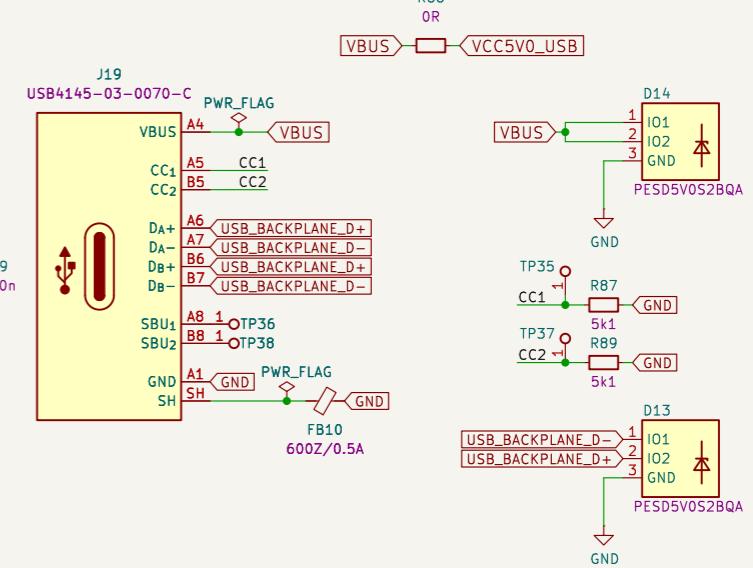
need to validate this during bringup
as we don't know current capabilities
of the 12V always on output

Power switch connector

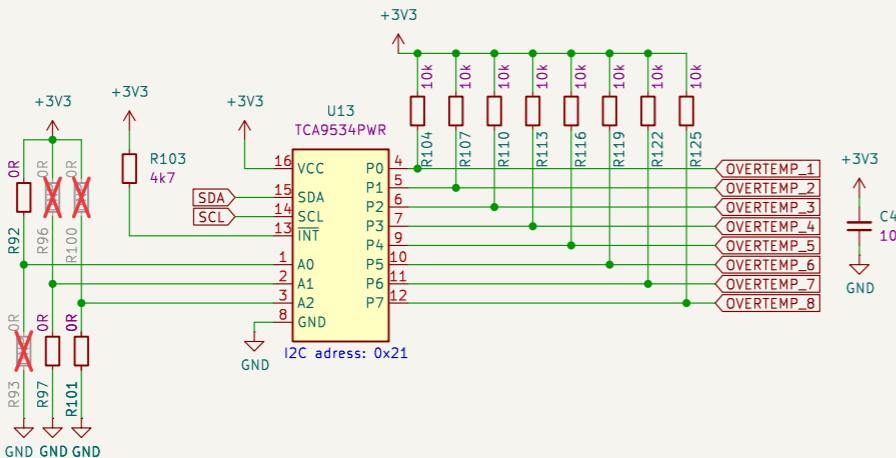


GND

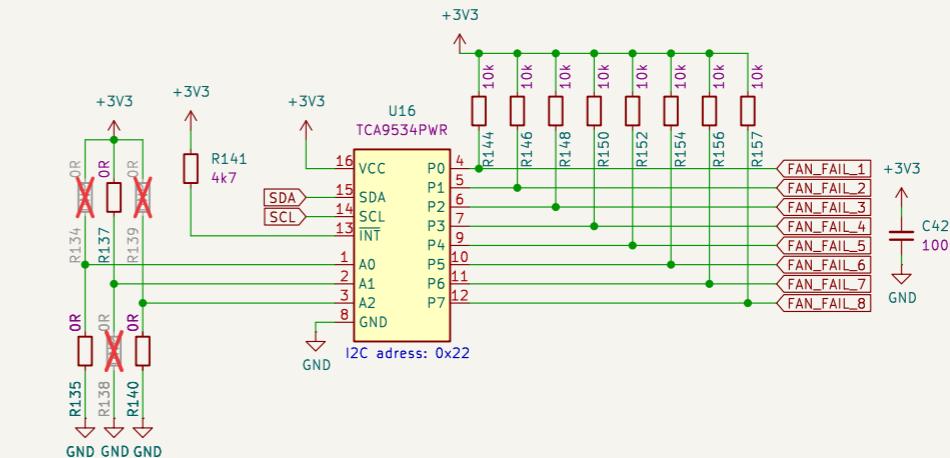
USB C connector



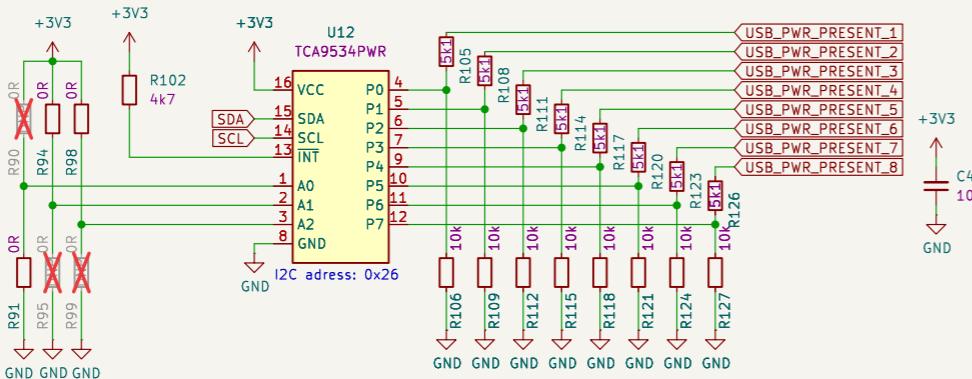
GPIO EXPANDER for OVERTEMP



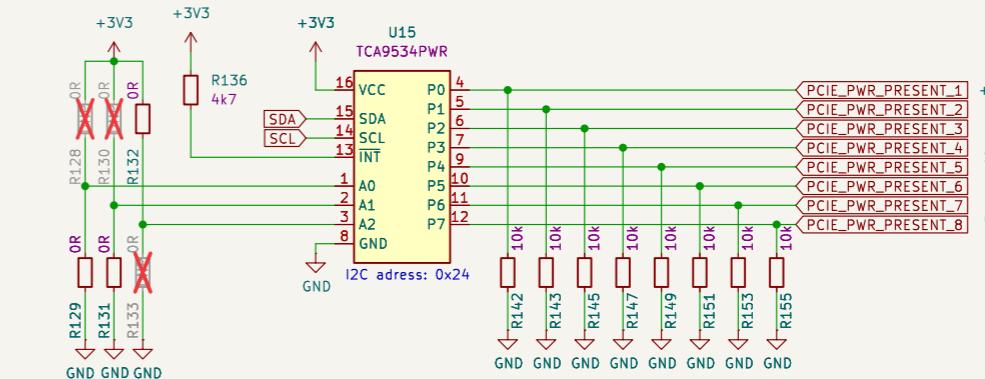
GPIO EXPANDER for FAN_FAIL



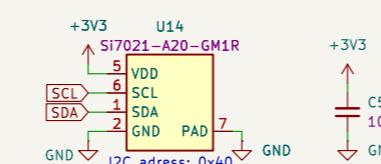
GPIO EXPANDER for USB_PWR_PRESENT



GPIO EXPANDER for PCIE_PWR_PRESENT



Temperature and humidity sensor



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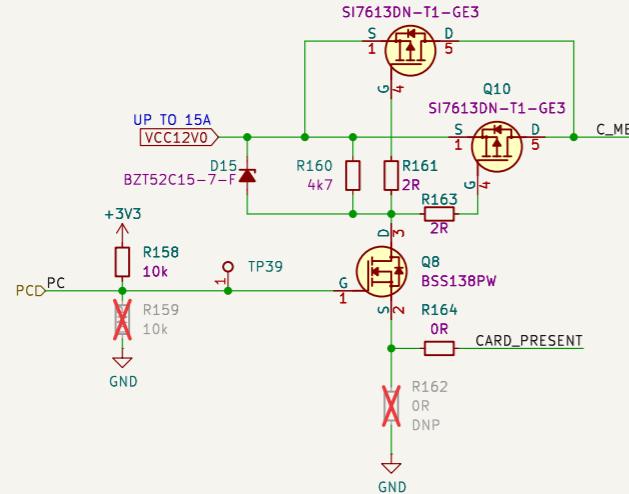
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Sheet: /Debug signals/
File: debug-signals.kicad_sch

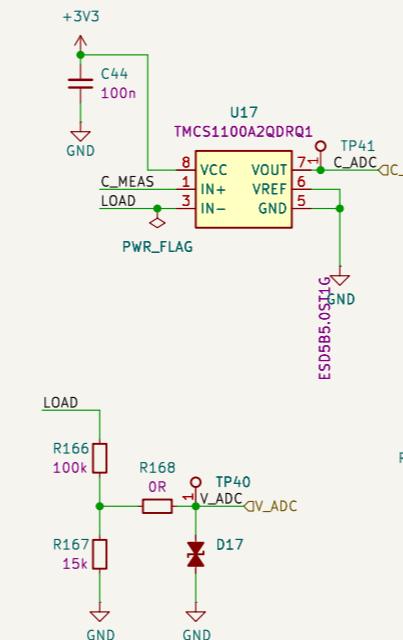
Title: GPU Cluster Backplane

Size: A3 Date: 2023-11-24
KiCad E.D.A. kicad-cli 7.0.11Rev: 1.0.1:9a146
Id: 8/16

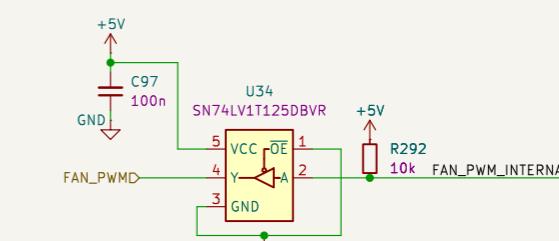
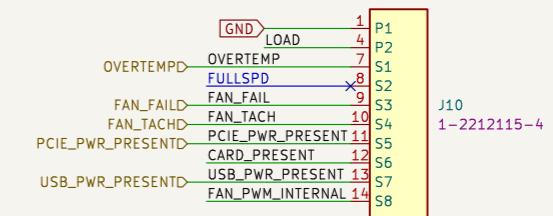
Channel high side switch



Current and voltage measurement

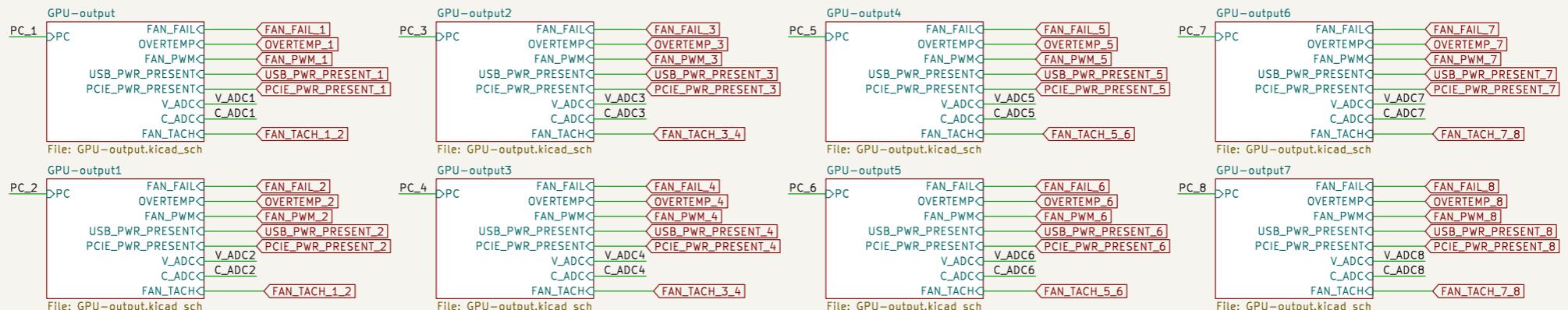


GPU Adapter connector



A

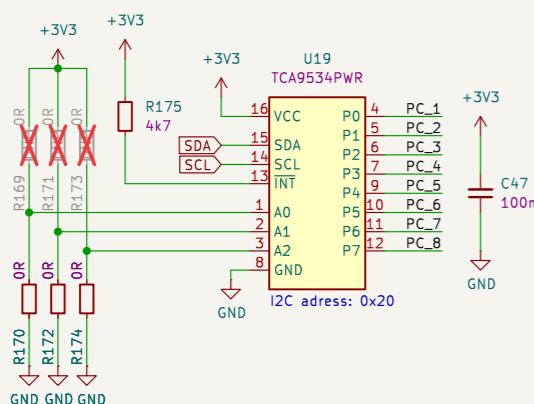
Individual channels for connecting thunderbolt-gpu-adapters



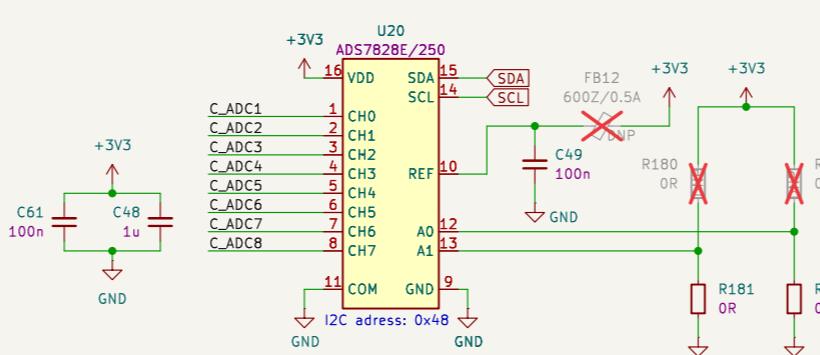
B

A

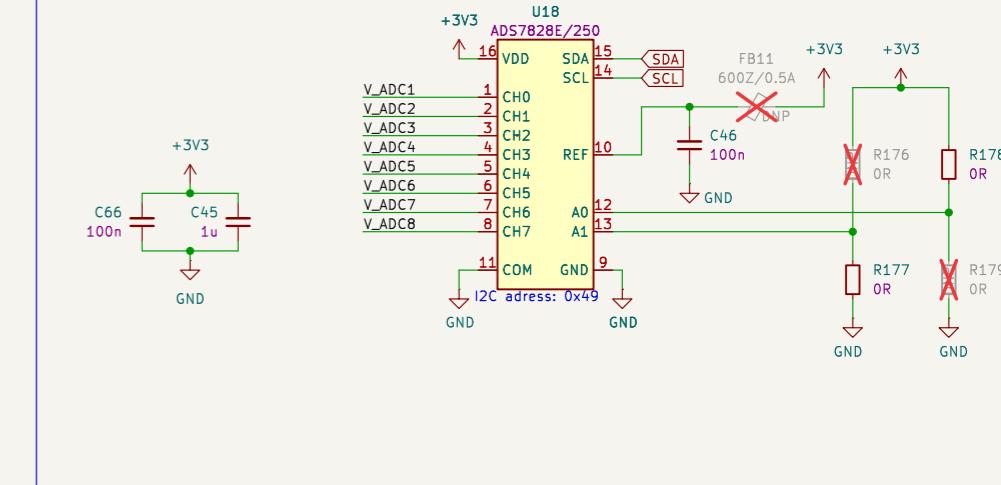
GPIO EXPANDER for power cycling



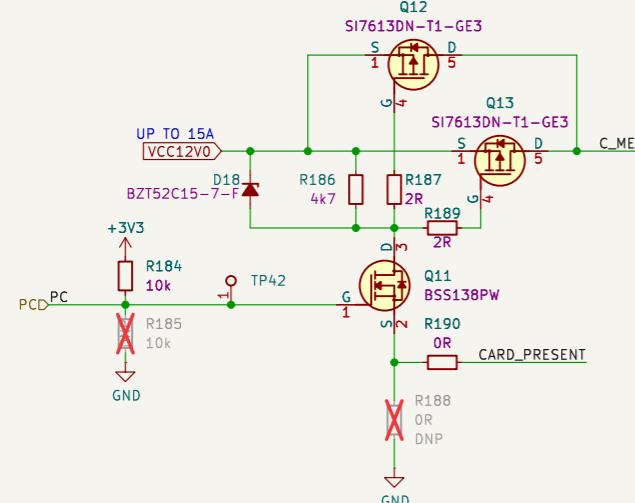
ADC for current measurement



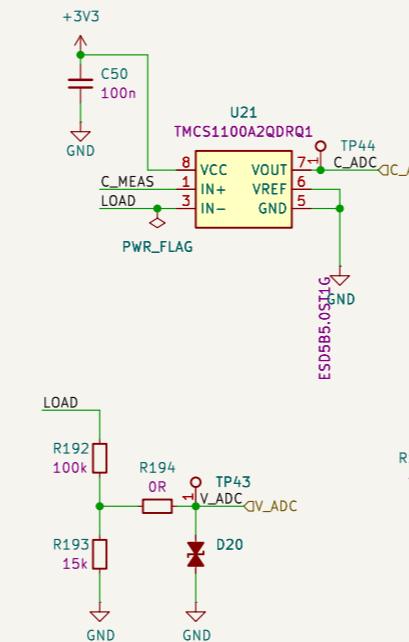
ADC for voltage measurement



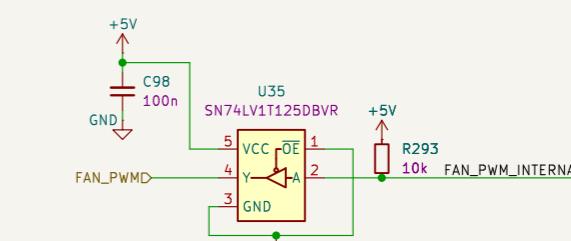
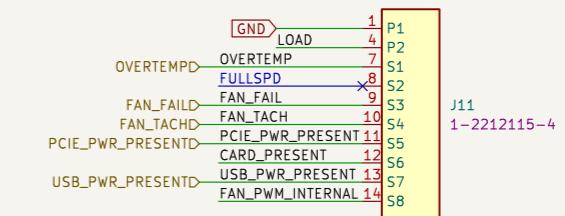
Channel high side switch



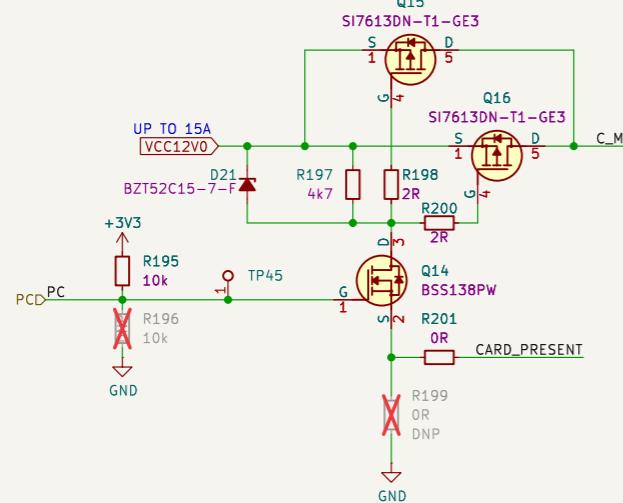
Current and voltage measurement



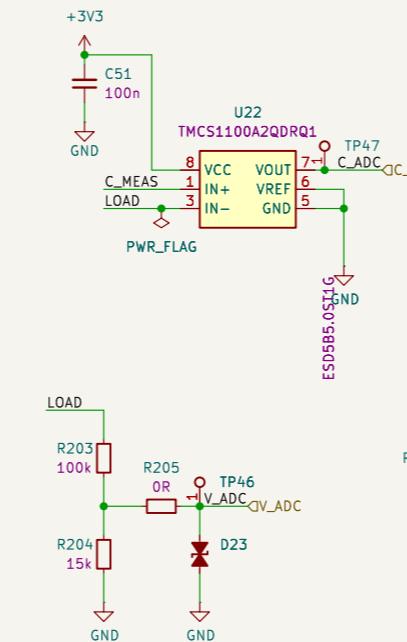
GPU Adapter connector



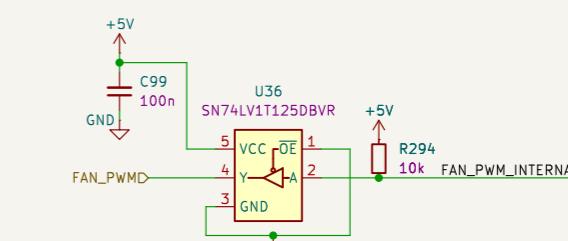
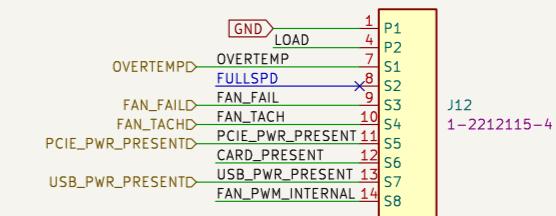
Channel high side switch



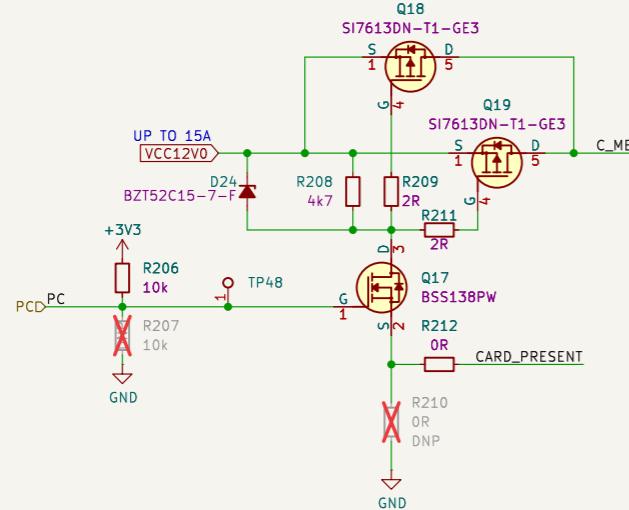
Current and voltage measurement



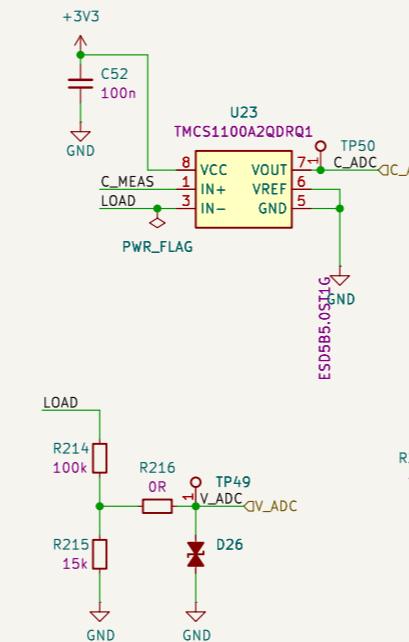
GPU Adapter connector



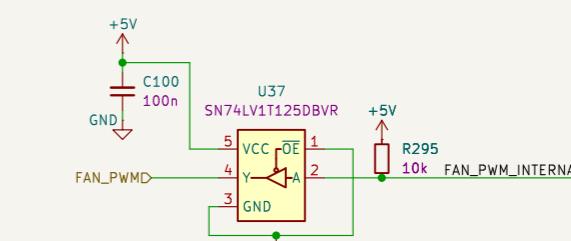
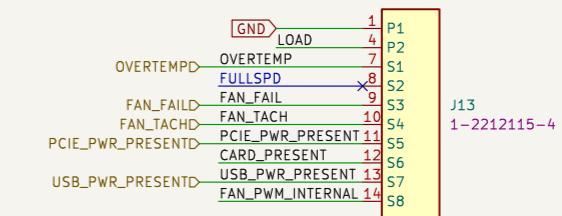
Channel high side switch



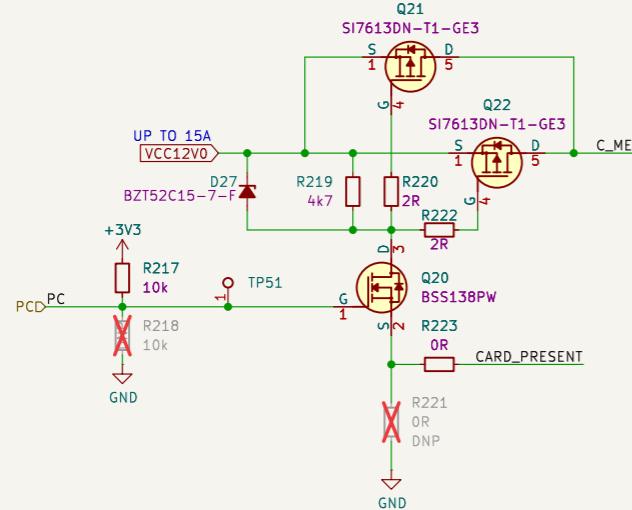
Current and voltage measurement



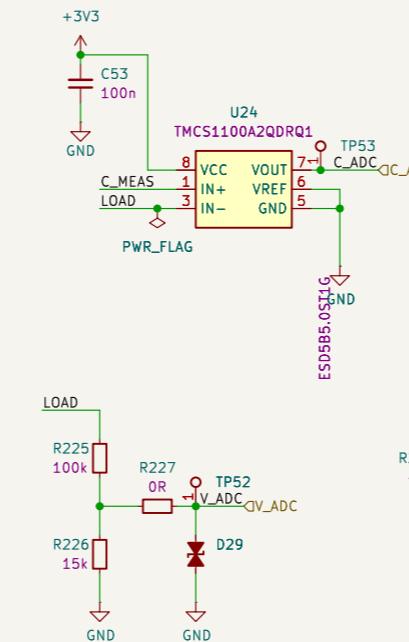
GPU Adapter connector



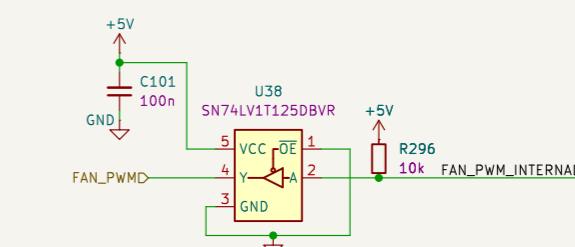
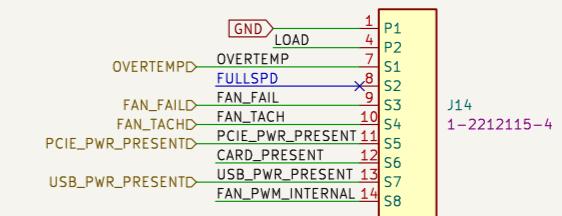
Channel high side switch



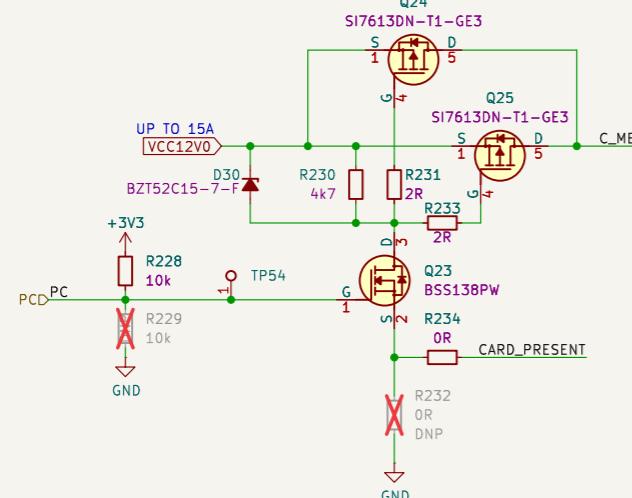
Current and voltage measurement



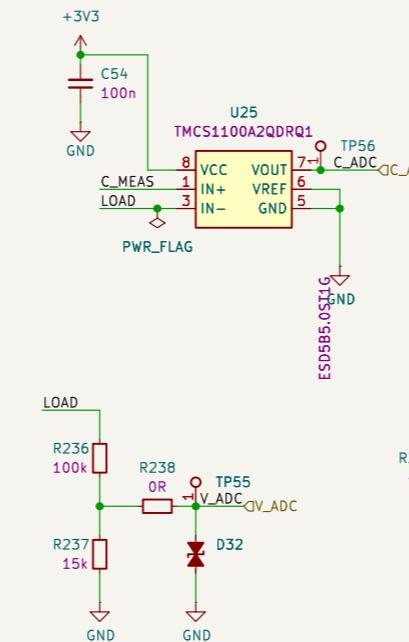
GPU Adapter connector



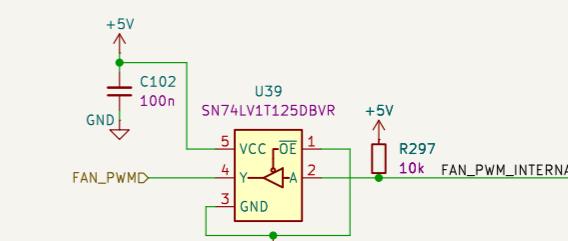
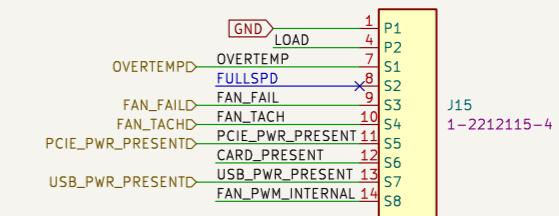
Channel high side switch

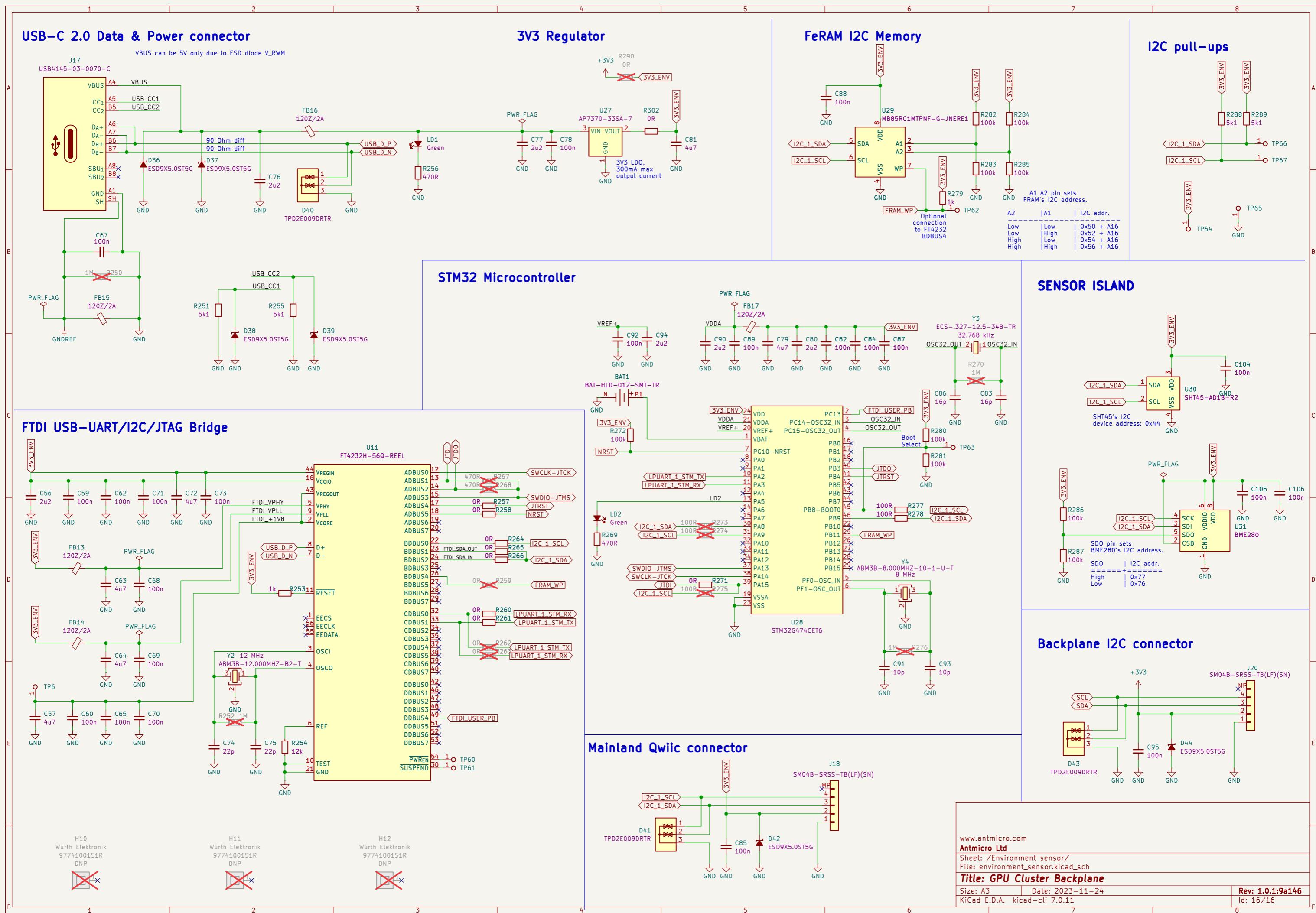


Current and voltage measurement

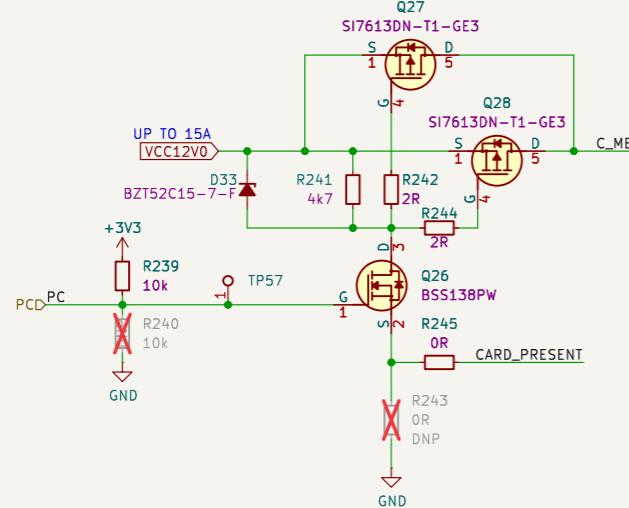


GPU Adapter connector

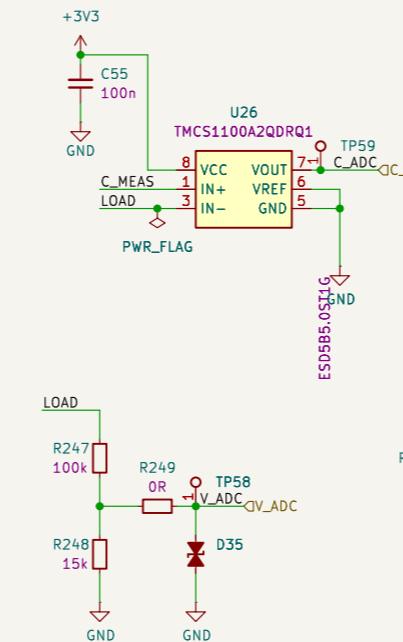




Channel high side switch



Current and voltage measurement



GPU Adapter connector

