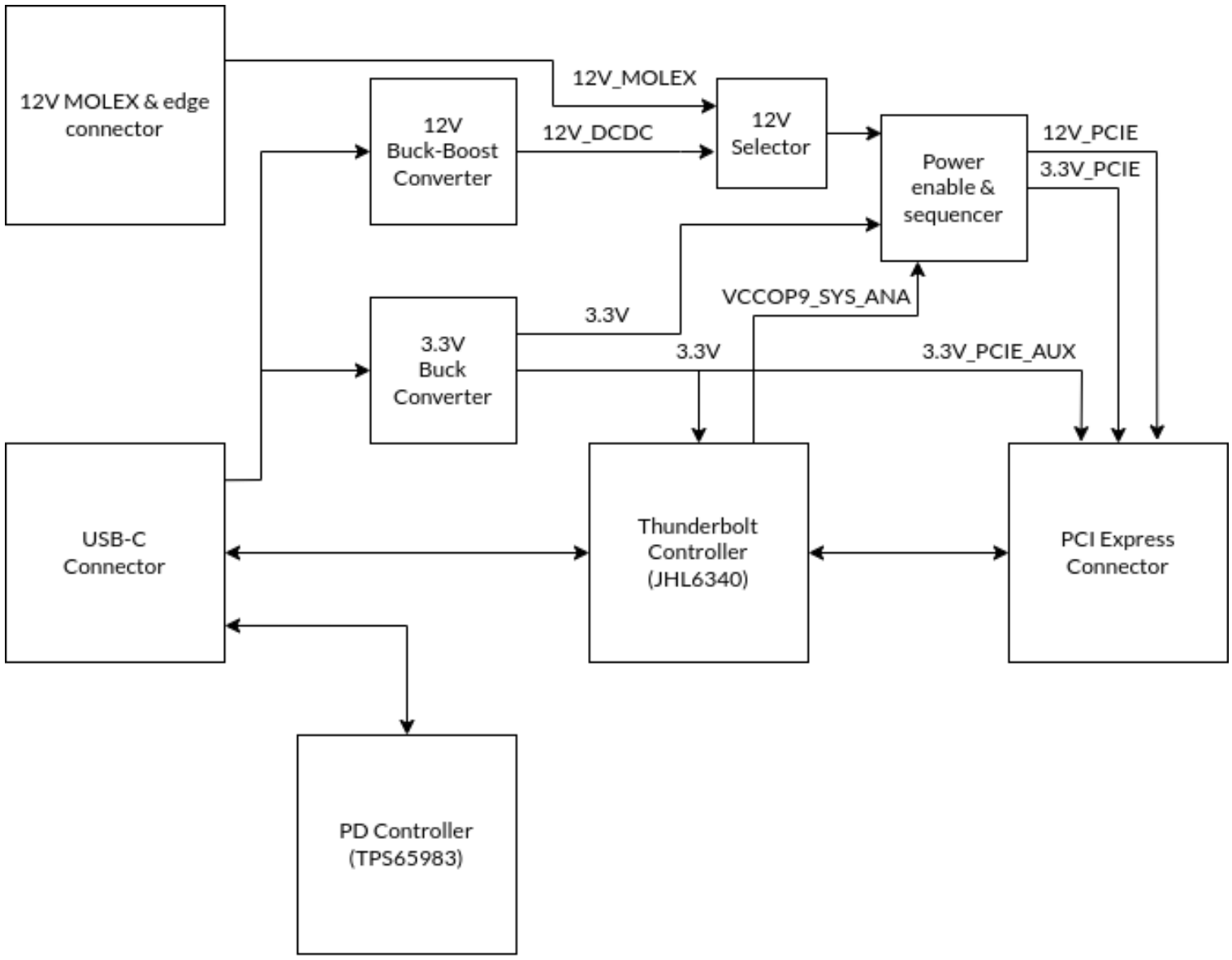


Connectors

File: connectors.kicad_sch

Power

File: power.kicad_sch

Thunderbolt Controller – Power

File: tb-power.kicad_sch

TB Controller

File: tb.kicad_sch

FID1 Fiducial_1mm_Mask3mm

FID2 Fiducial_1mm_Mask3mm

FID3 Fiducial_1mm_Mask3mm

FID4 Fiducial_1mm_Mask3mm

FID5 Fiducial_1mm_Mask3mm

FID6 Fiducial_1mm_Mask3mm

FID7 Fiducial_1mm_Mask3mm

FID8 Fiducial_1mm_Mask3mm

Logo N1 antmicro_logo

www.antmicro.com

Antmicro Ltd

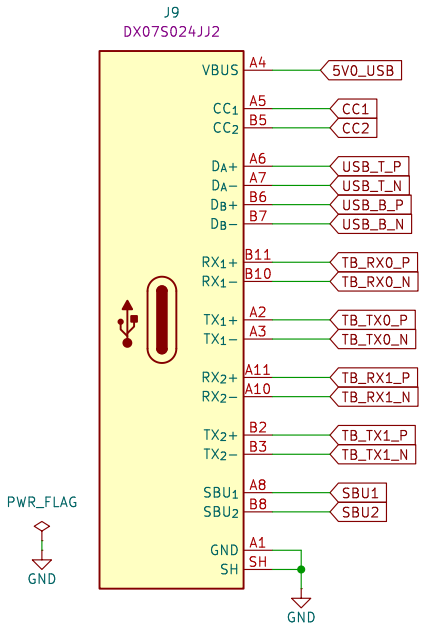
Sheet: /

File: thunderbolt-gpu-adapter.kicad_sch

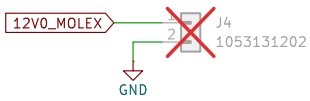
Title: Thunderbolt GPU Adapter

Size: A3	Date: 2024-07-09	**Rev: 1.3.0:9d9c816f**
KiCad E.D.A. 9.0.7		Id: 1/5

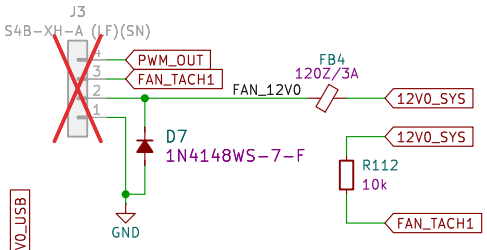
USB-C Connector



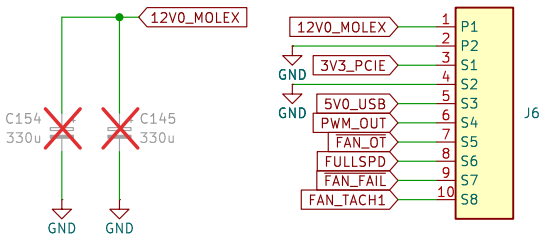
+12V Molex NanoFit Connector (PWR IN)



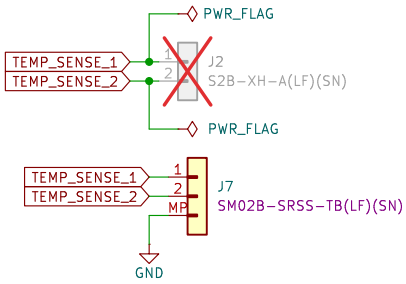
+12V Fan out

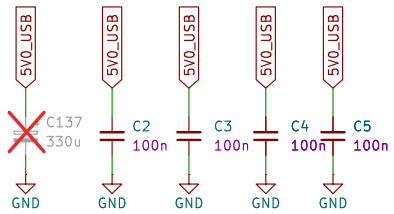


+12V and communication edge connector

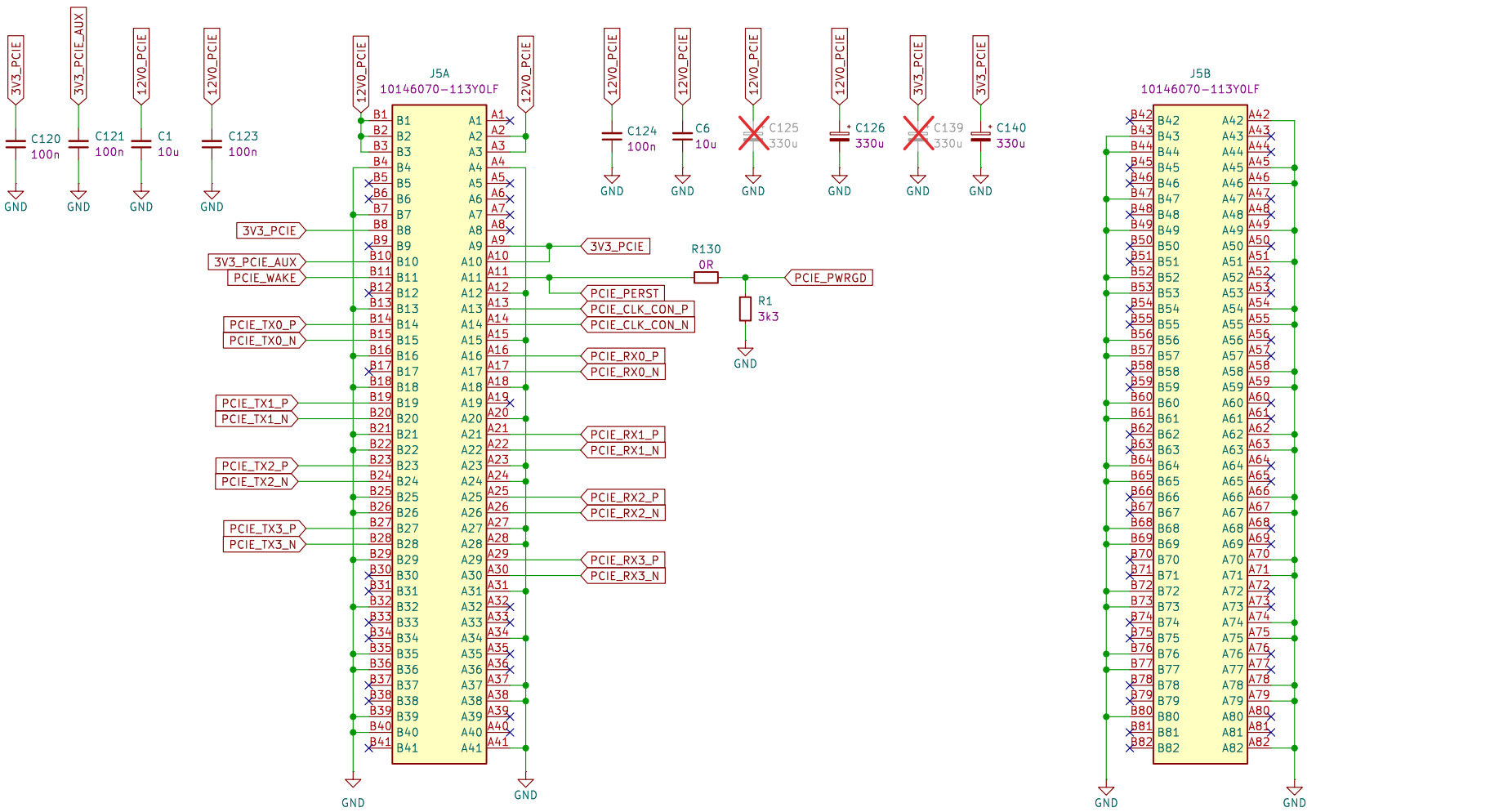


Temperature sensor Connector

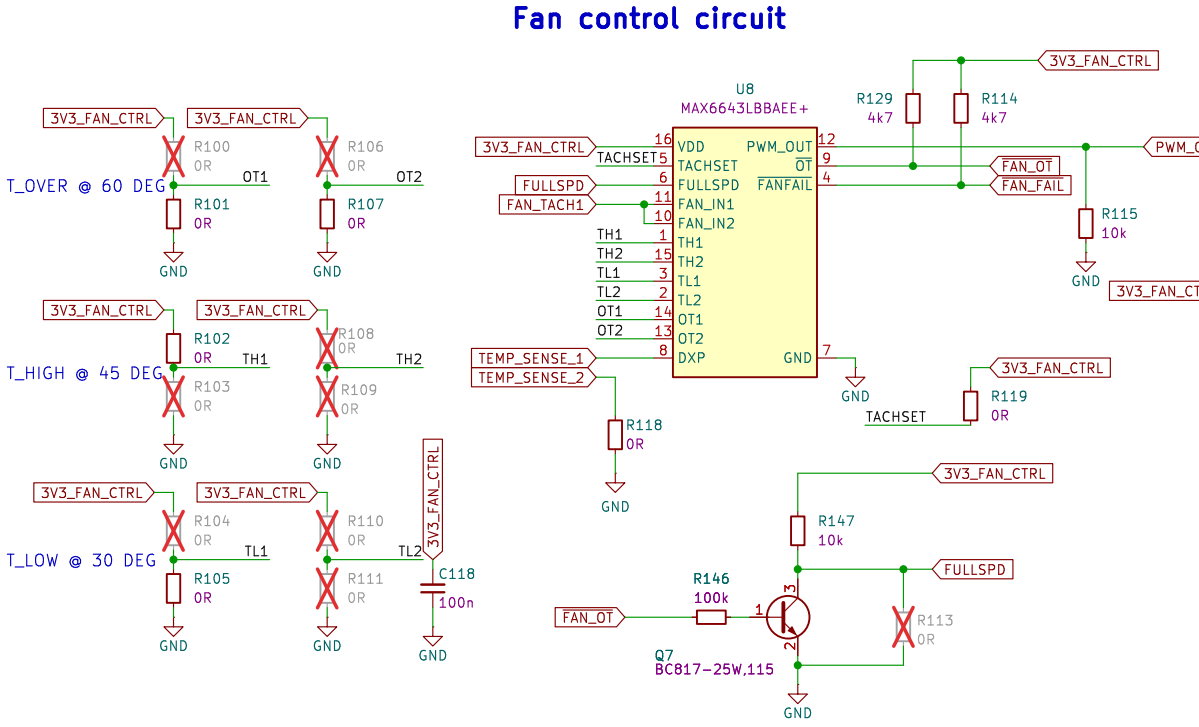




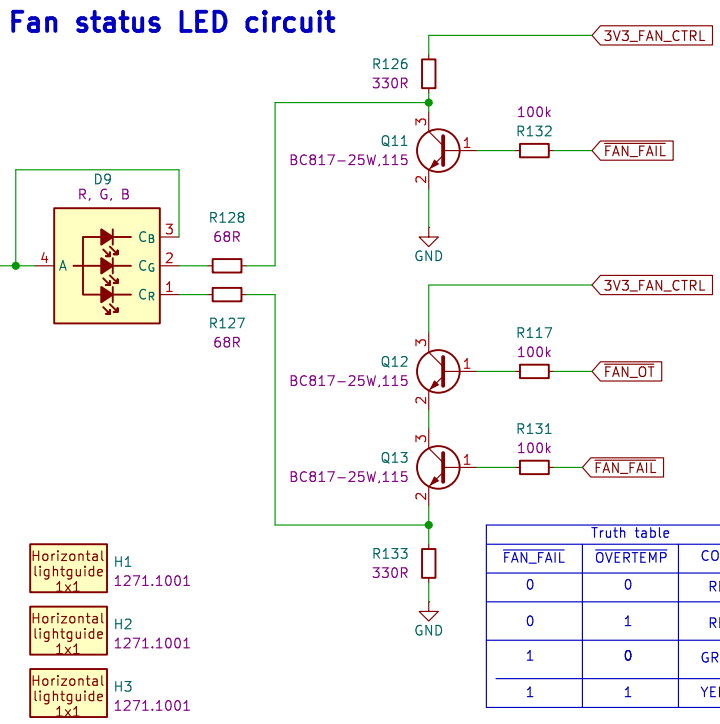
PCI Express Connector



Fan control circuit



Fan status LED circuit



Truth table		
FAN_FAIL	OVERTEMP	COLOR
0	0	RED
0	1	RED
1	0	GREEN
1	1	YELLOW

Mounting holes

www.antmicro.com
Antmicro Ltd

Sheet: /Connectors/
File: connectors.kicad_sch

Title: Thunderbolt GPU Adapter

Size: A3	Date: 2024-07-09	**Rev: 1.3.0:9d9c816f**
KiCad E.D.A. 9.0.7		Id: 2/5

USB Power Delivery Controller

U3
TPS65983BAZBHR

PCIE power

12V Buck-Boost Converter

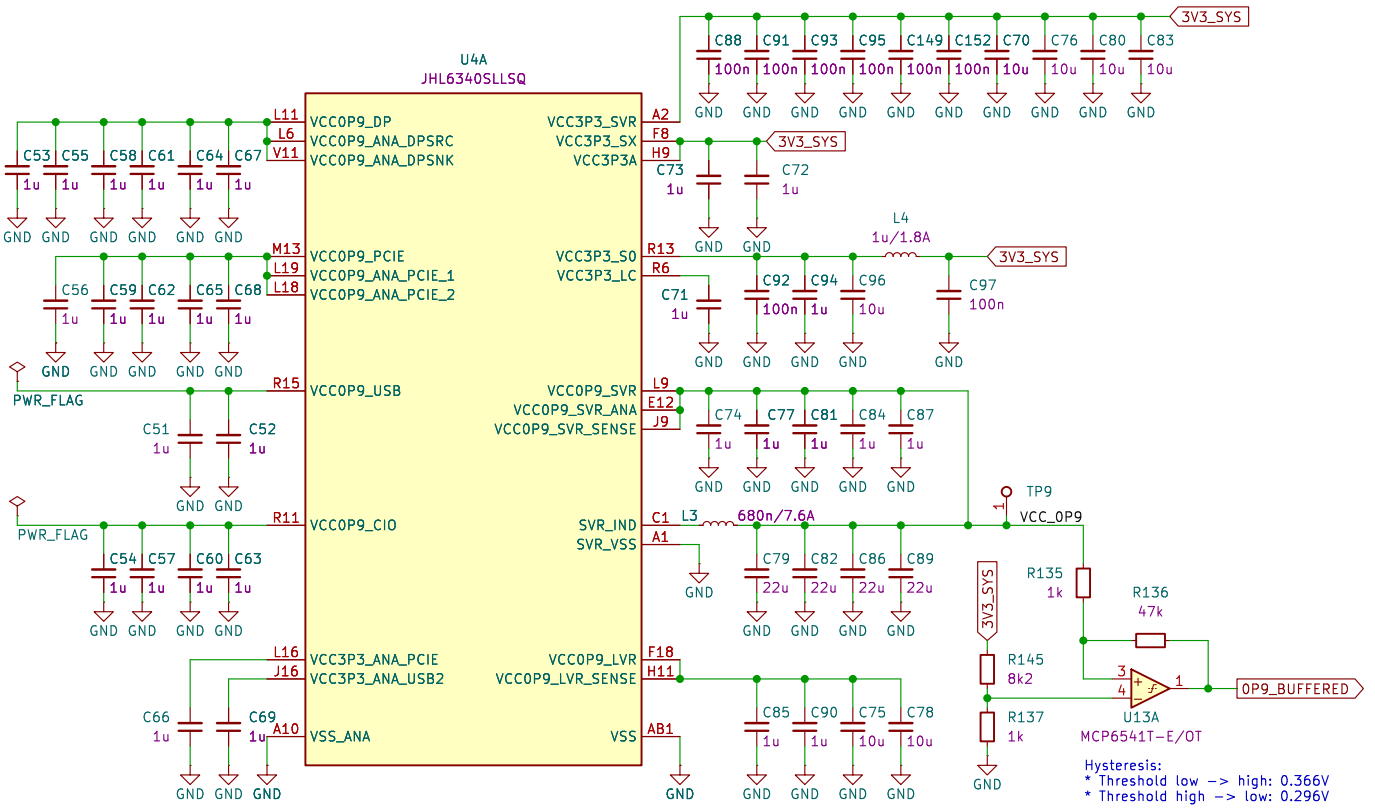
12V source selection

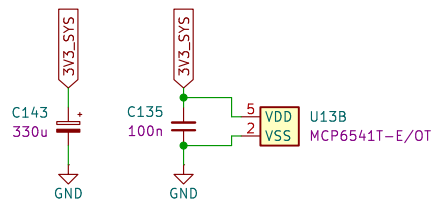
3V3 Buck Converter

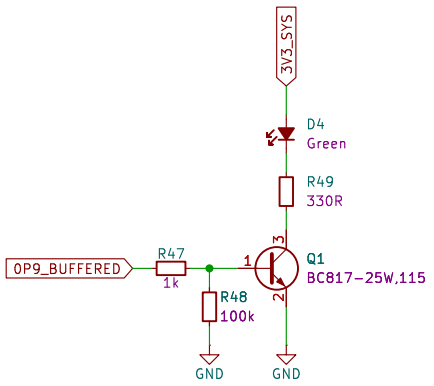
3V3 Fan controller

www.antmicro.com
Antmicro Ltd
Sheet: /Power/
File: power.kicad_sch
Title: Thunderbolt GPU Adapter
Size: A3 | Date: 2024-07-09 | **Rev: 1.3.0:9d9c816f**
KiCad E.D.A. 9.0.7 | Id: 3/5

Thunderbolt Controller – Power







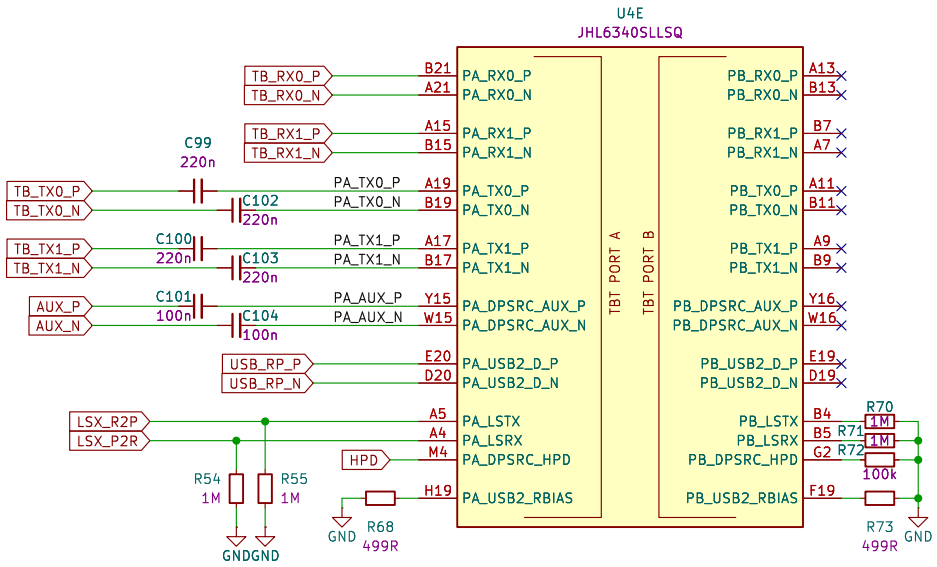
www.antmicro.com
Antmicro Ltd

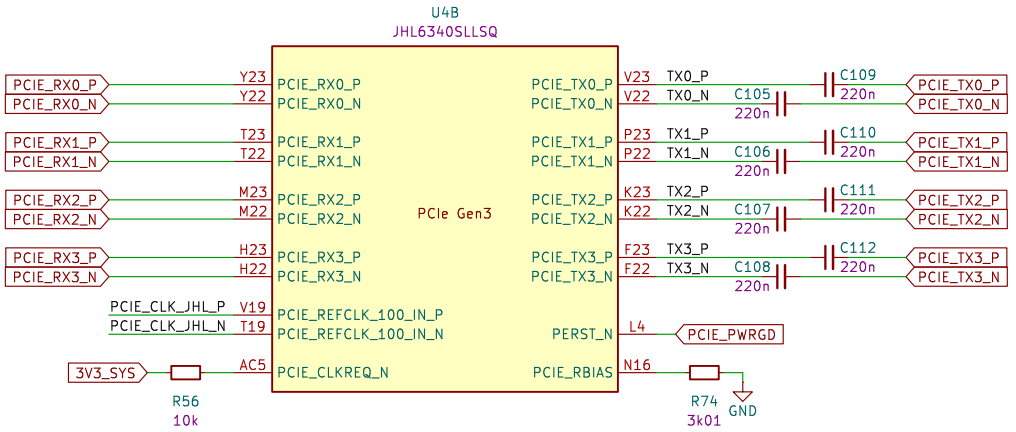
Sheet: /Thunderbolt Controller – Power/
File: tb-power.kicad_sch

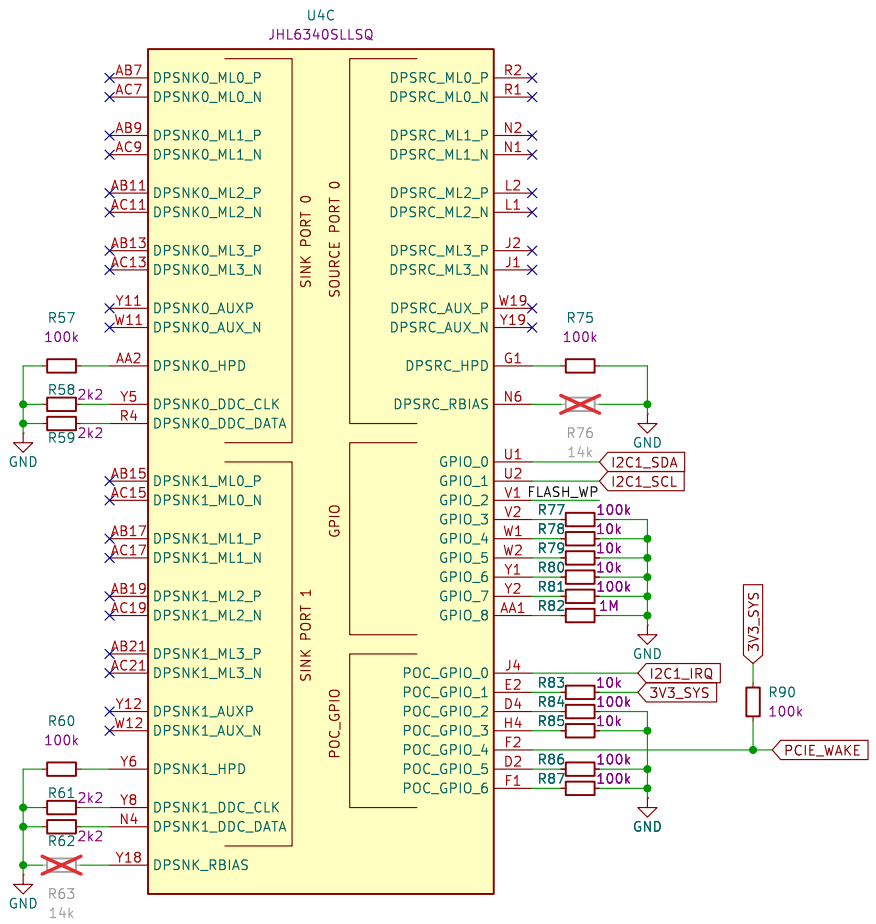
Title: Thunderbolt GPU Adapter

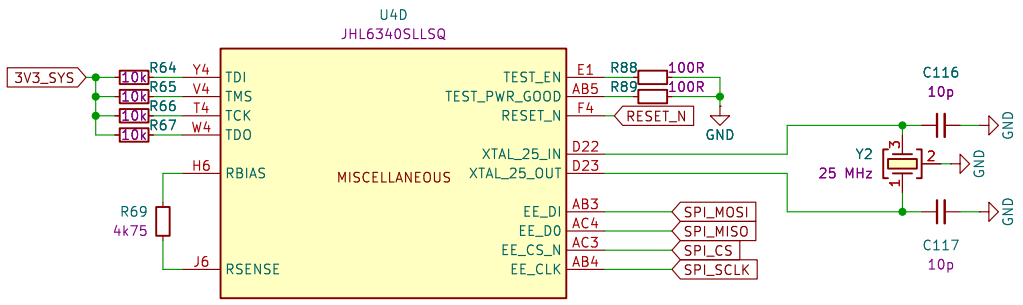
Size: A3	Date: 2024-07-09	**Rev: 1.3.0:9d9c816f**
KiCad E.D.A. 9.0.7		Id: 4/5

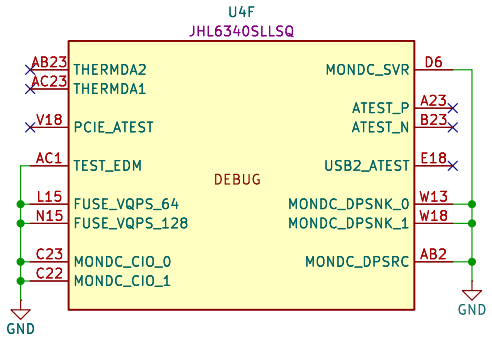
Thunderbolt Controller



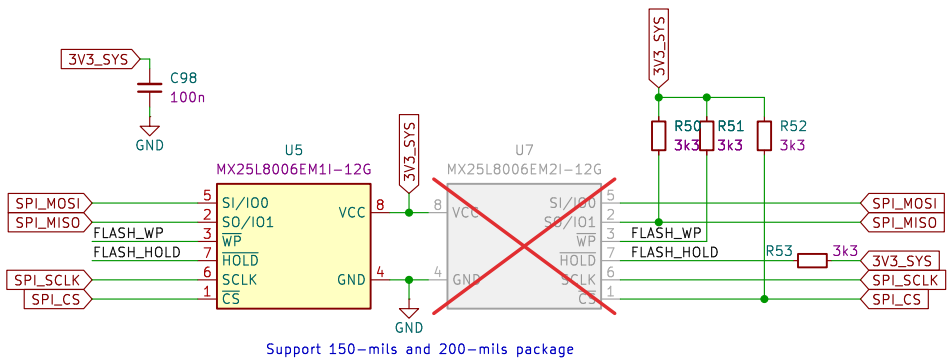




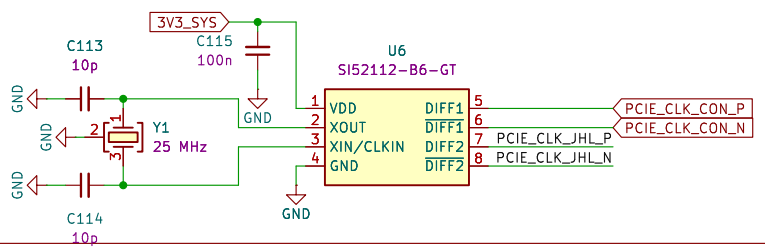




SPI Flash Memory



PCIe Clock Generator



www.antmicro.com
Antmicro Ltd

Sheet: /TB Controller/
File: tb.kicad_sch

Title: Thunderbolt GPU Adapter

Size: A3	Date: 2024-07-09	**Rev: 1.3.0:9d9c816f**
KiCad E.D.A. 9.0.7		Id: 5/5