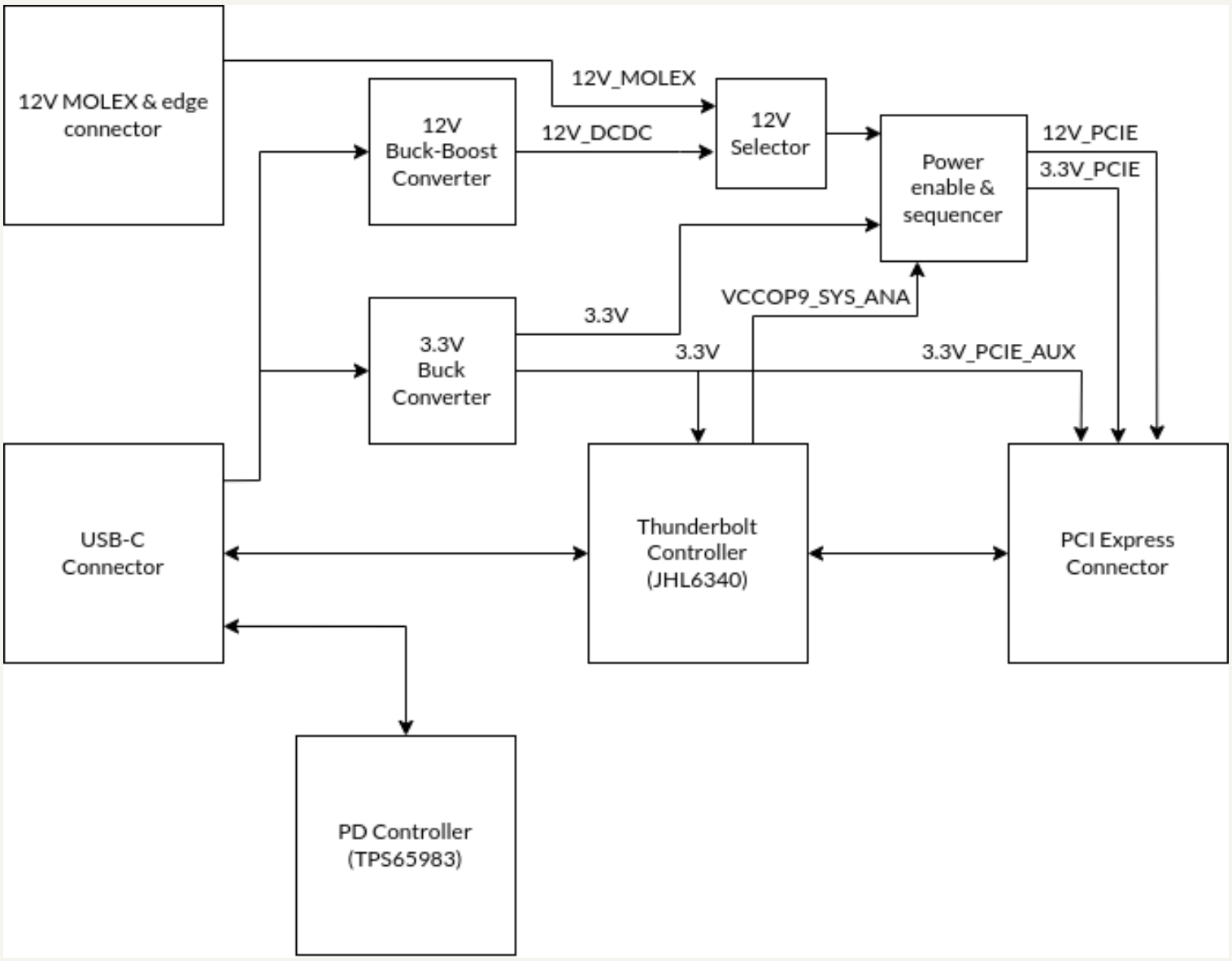

Connectors

File: connectors.kicad_sch

Power

File: power.kicad_sch

Thunderbolt Controller – Power

File: tb-power.kicad_sch

TB Controller

File: tb.kicad_sch

FID1 antmicro_Fiducial_1mm_Mask3mm

FID2 antmicro_Fiducial_1mm_Mask3mm

FID3 antmicro_Fiducial_1mm_Mask3mm

FID4 antmicro_Fiducial_1mm_Mask3mm

FID5 antmicro_Fiducial_1mm_Mask3mm

FID6 antmicro_Fiducial_1mm_Mask3mm

FID7 antmicro_Fiducial_1mm_Mask3mm

FID8 antmicro_Fiducial_1mm_Mask3mm

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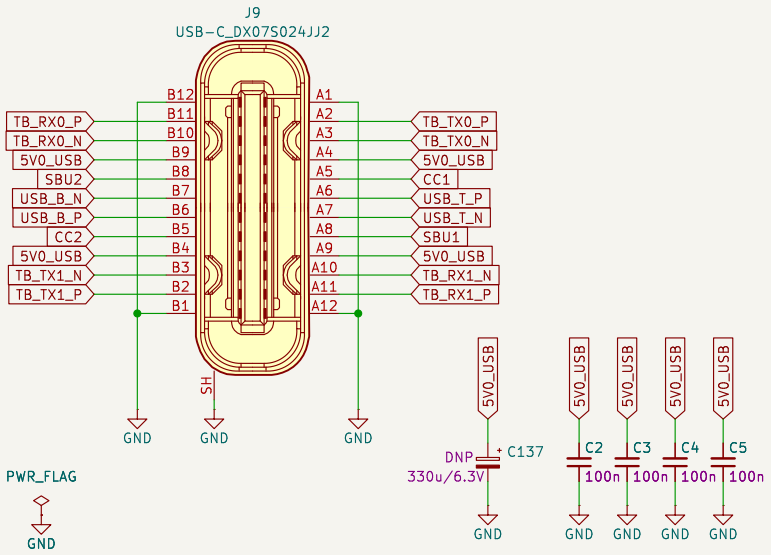
Sheet: /

File: thunderbolt-gpu-adapter.kicad_sch

Title: Thunderbolt GPU Adapter

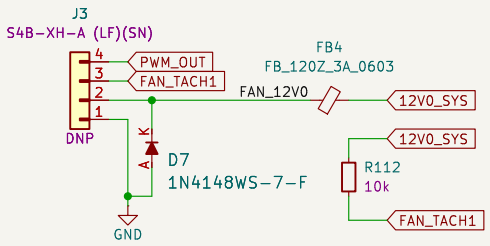
Size: A3	Date: 2024-04	**Rev: 1.2.2**
KiCad E.D.A. kicad-cli 7.0.10+1		Id: 1/5

USB-C Connector

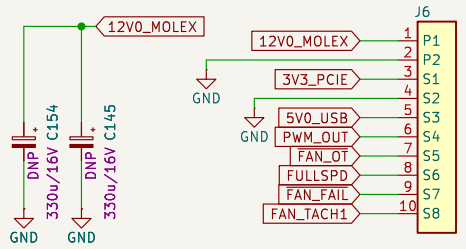


+12V Molex NanoFit Connector (PWR IN)

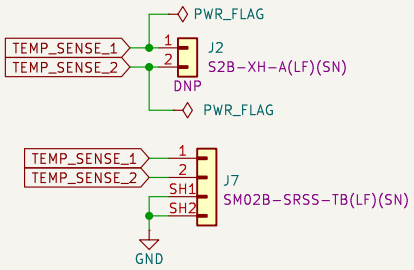
+12V Fan out



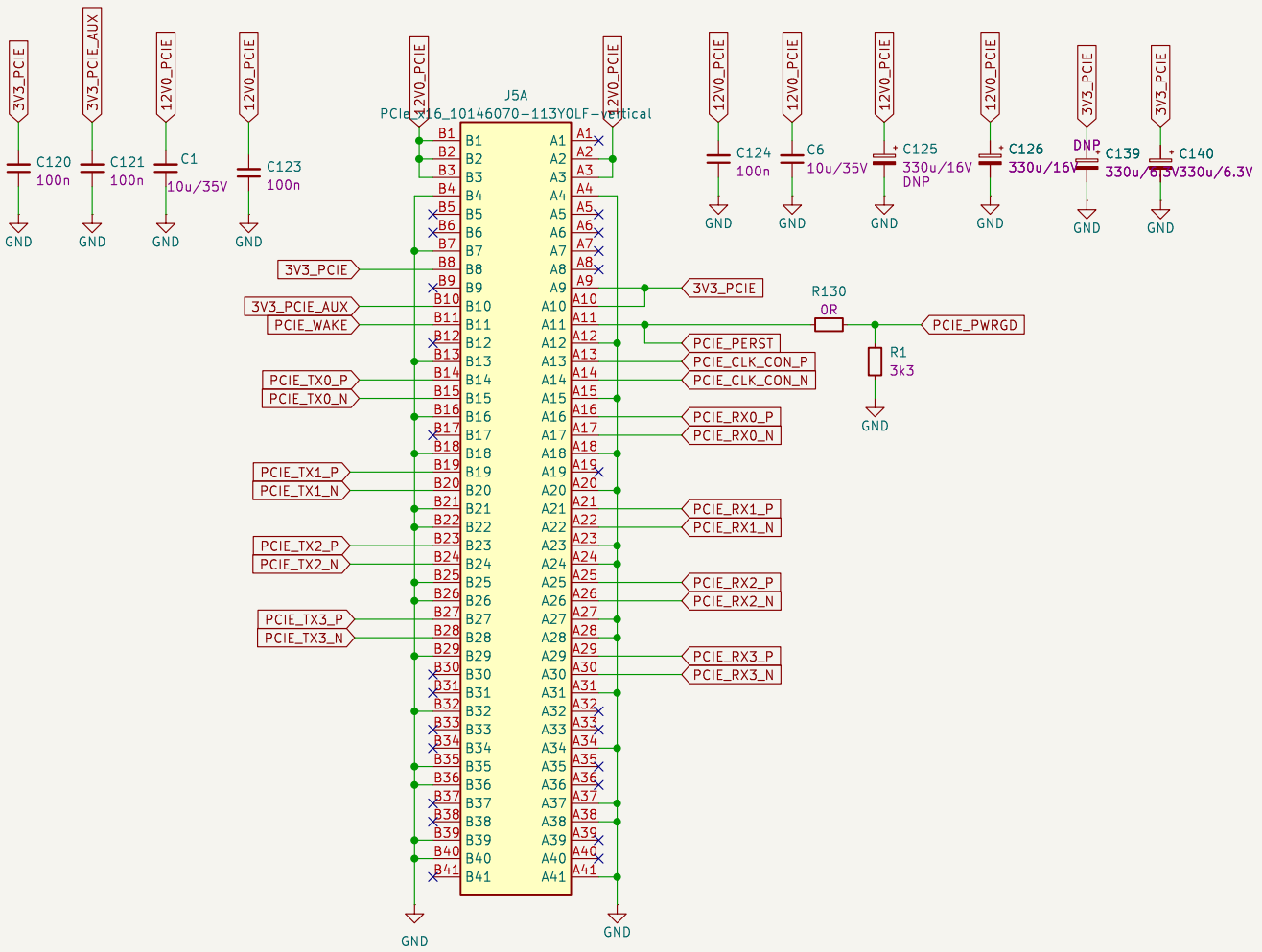
+12V and communication edge connector



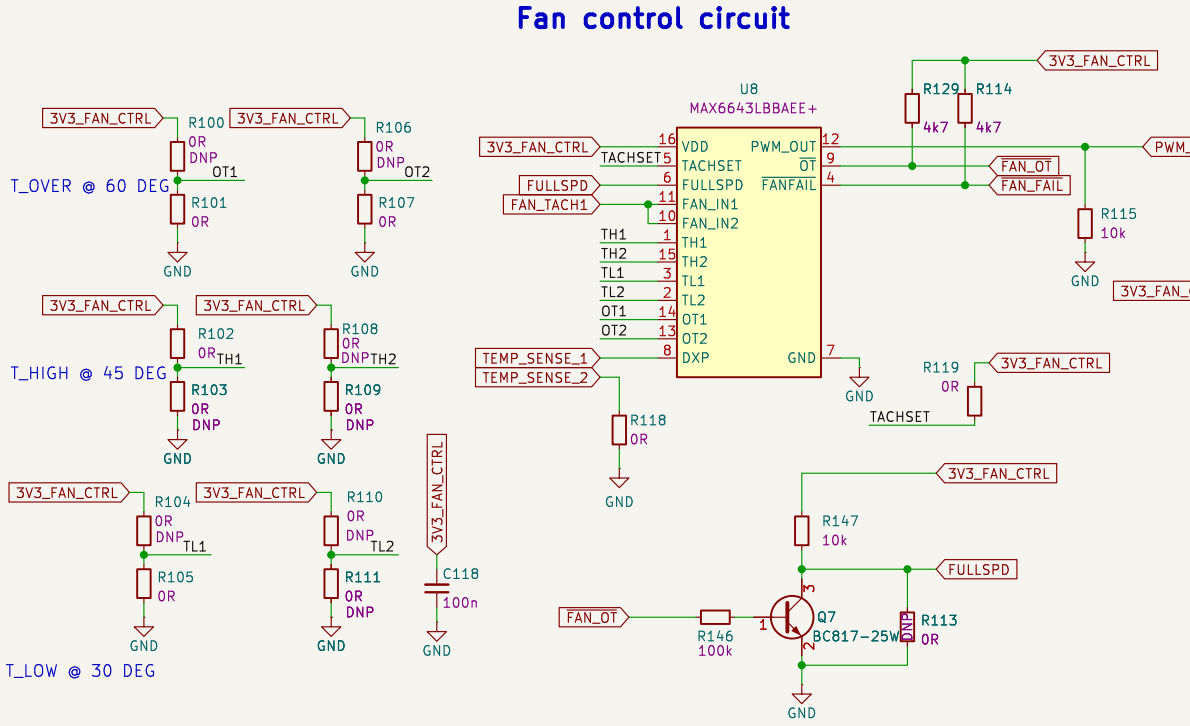
Temperature sensor Connector



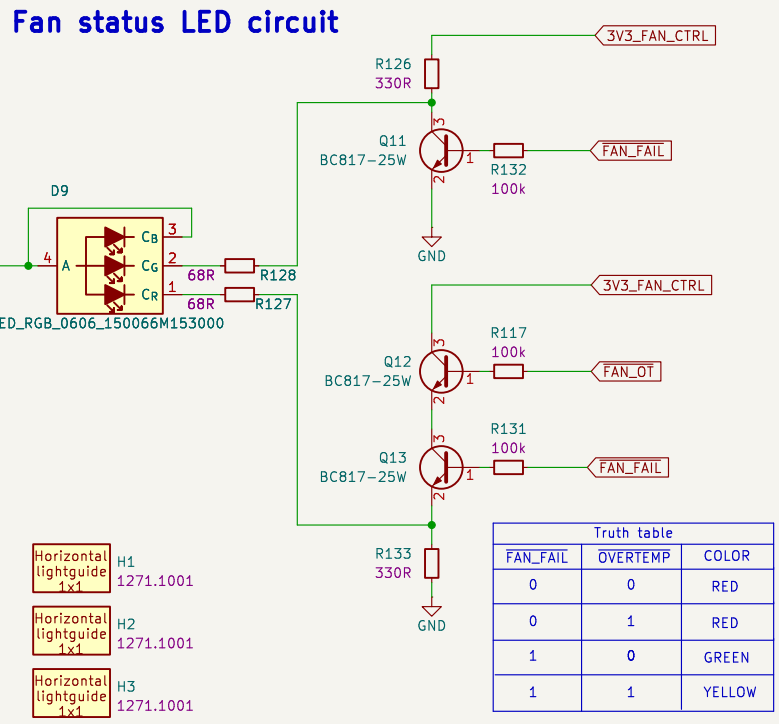
PCI Express Connector



Fan control circuit

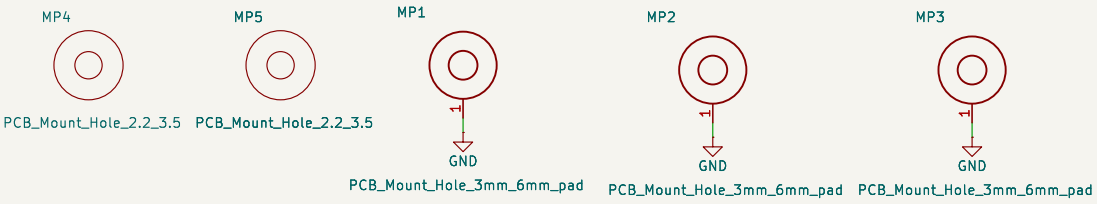


Fan status LED circuit



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

Mounting holes



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Sheet: /Connectors/
File: connectors.kicad_sch

Title: Thunderbolt GPU Adapter

Size: A3	Date: 2024-04	**Rev: 1.2.2**
KiCad E.D.A. kicad-cli 7.0.10+1		Id: 2/5

USB Power Delivery Controller

PCIE power

12V Buck-Boost Converter

12V source selection

3V3 Buck Converter

3V3 Fan controller

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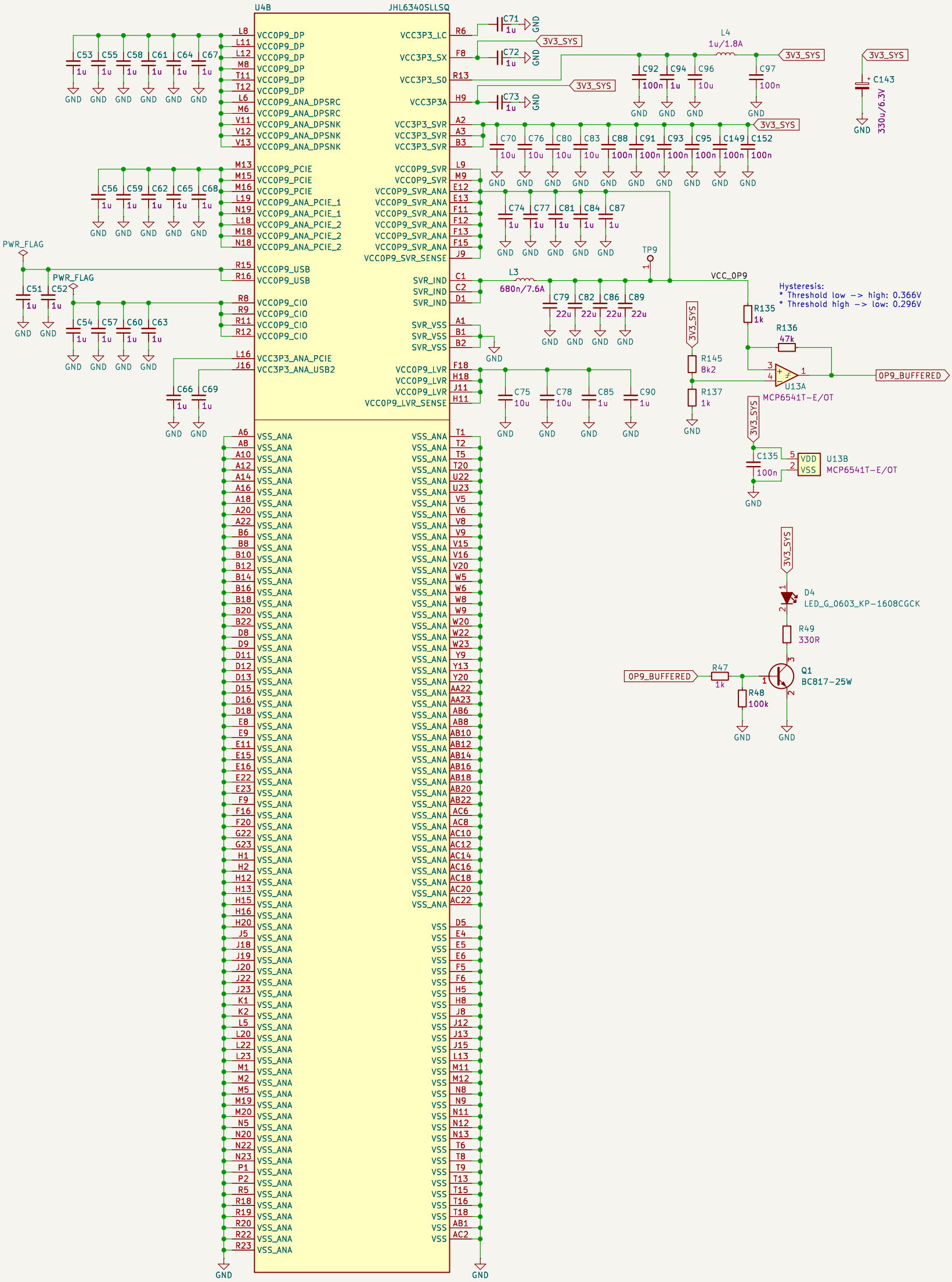
Sheet: /Power/	
File: power.kicad_sch	
Title: Thunderbolt GPU Adapter	
Size: A3	Date: 2024-04
KiCad E.D.A. kicad-cli 7.0.10+1	**Rev: 1.2.2**
	Id: 3/5

Thunderbolt Controller – Power



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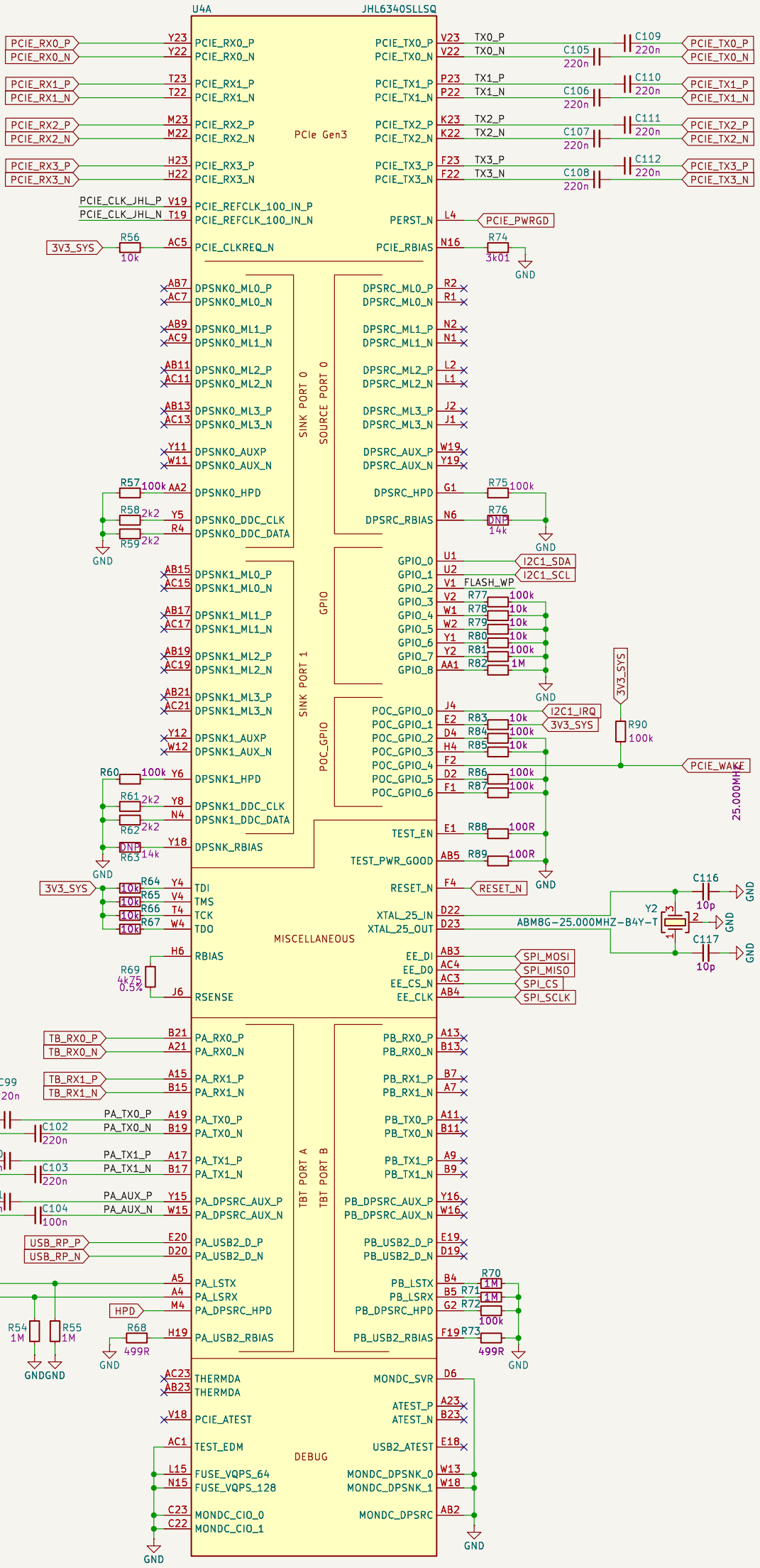
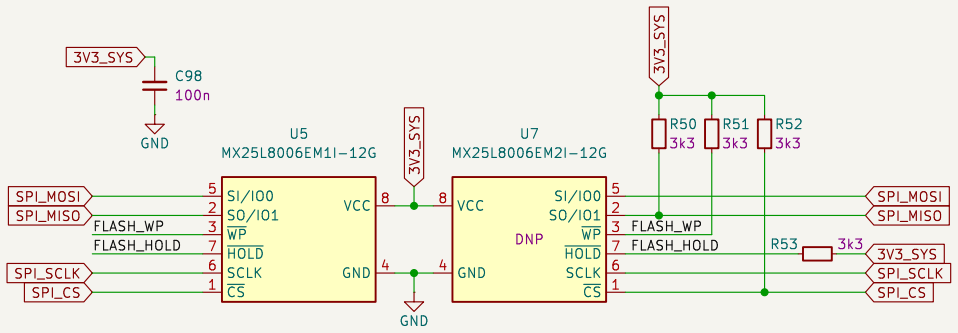
Antmicro Ltd			
Sheet: /Thunderbolt Controller – Power/			
File: tb-power.kicad_sch			
Title: Thunderbolt GPU Adapter			
Size: A3	Date: 2024-04		**Rev: 1.2.2**
KiCad E.D.A. kicad-cli 7.0.10+1			Id: 4/5

Thunderbolt Controller

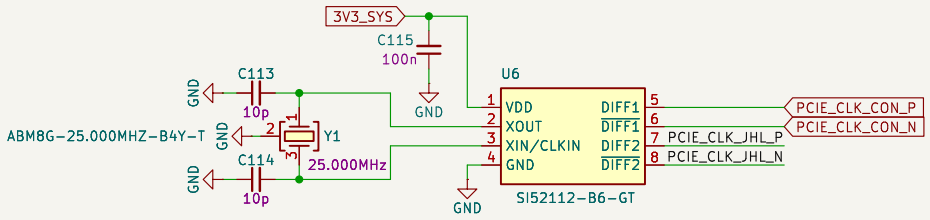


SPI Flash Memory



Support 150-mils and 200-mils package

PCIe Clock Generator



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Sheet: /TB Controller/
File: tb.kicad_sch

Title: Thunderbolt GPU Adapter

Size: A3	Date: 2024-04	**Rev: 1.2.2**
KiCad E.D.A. kicad-cli 7.0.10+1		Id: 5/5