

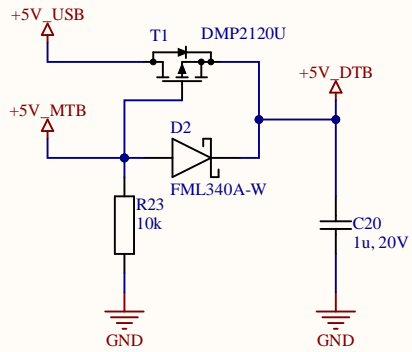
EBS3_DB_Igloo_Kart.PrjPcb	
USB.SchDoc	
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C:\dev\fpga-eb3\02_Execution\04_PCB\01_Igloo_DB\EBS3_DB_Igloo_Kart\USB.SchDoc	

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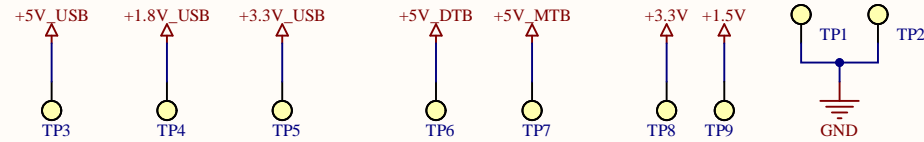
Date : 02.05.2022

Design by : AmA

5V selector

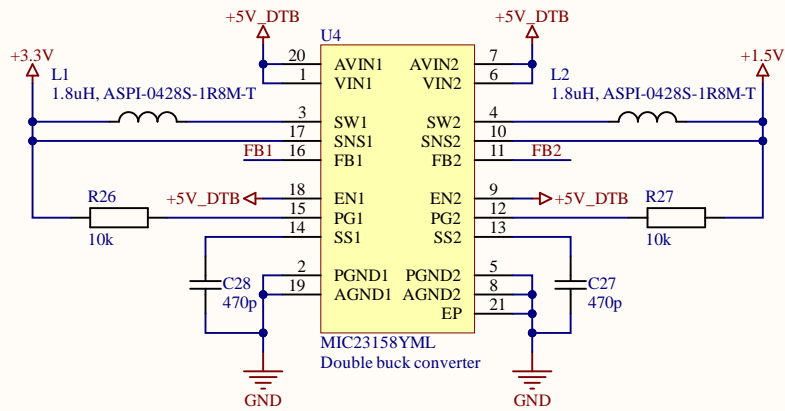


Test points



Indicate voltages on silk
Separate the GND on two points of the board

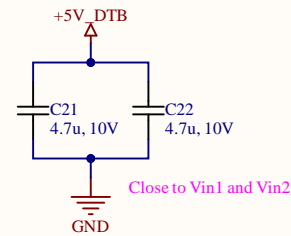
Buck converters



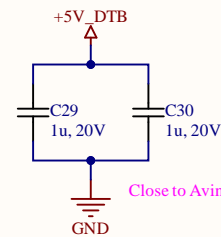
Keep a great connectivity with ground to dissipate heat

Output voltage definition

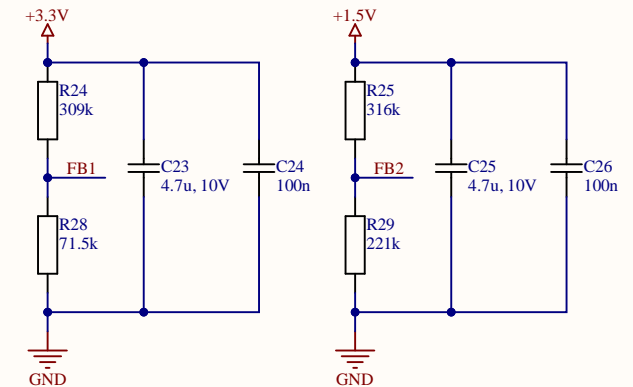
$$V_{out} = V_{ref} (1 + R_h / R_l), \text{ with } V_{ref} = 0.62 \text{ V}$$



Close to Vin1 and Vin2



Close to Avin1 and Avin2



EBS3_DB_Igloo_Kart.PrjPcb

Power.SchDoc

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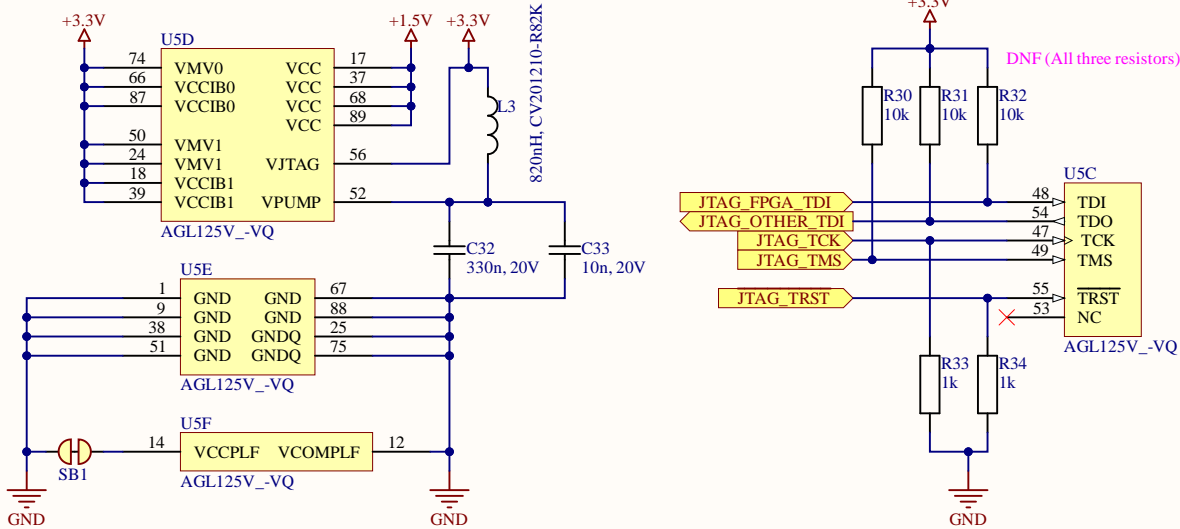
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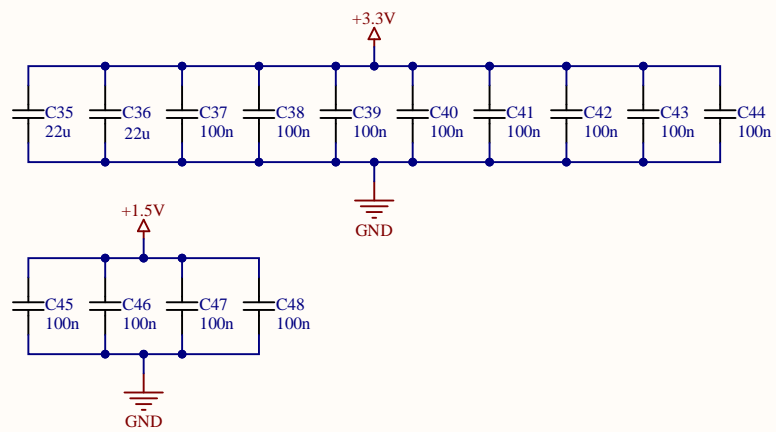


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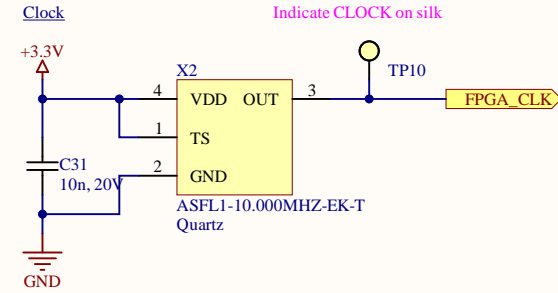
FPGA Power



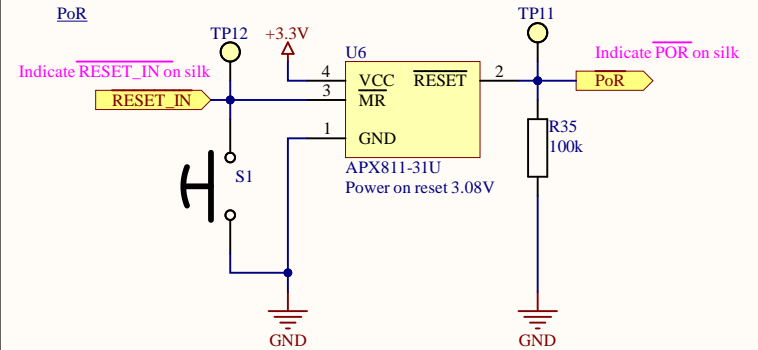
Decoupling



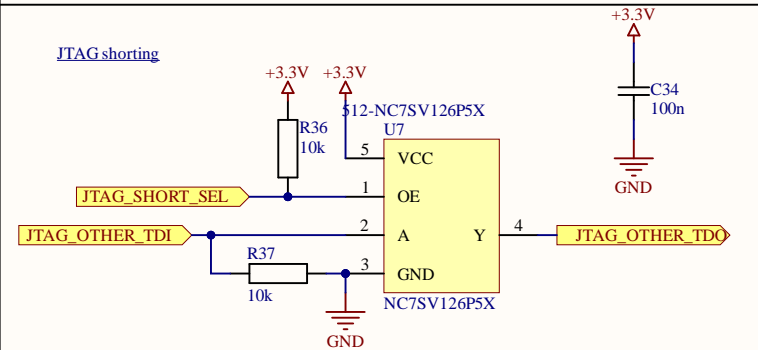
Clock



PoR



JTAG shorting



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FPGA_AlimPeriph.SchDoc

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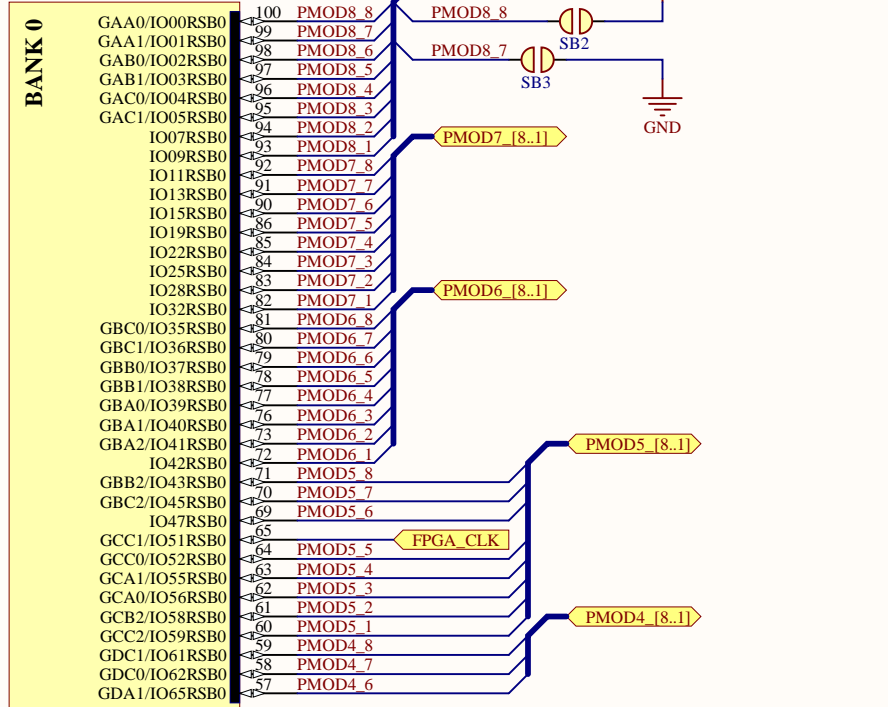


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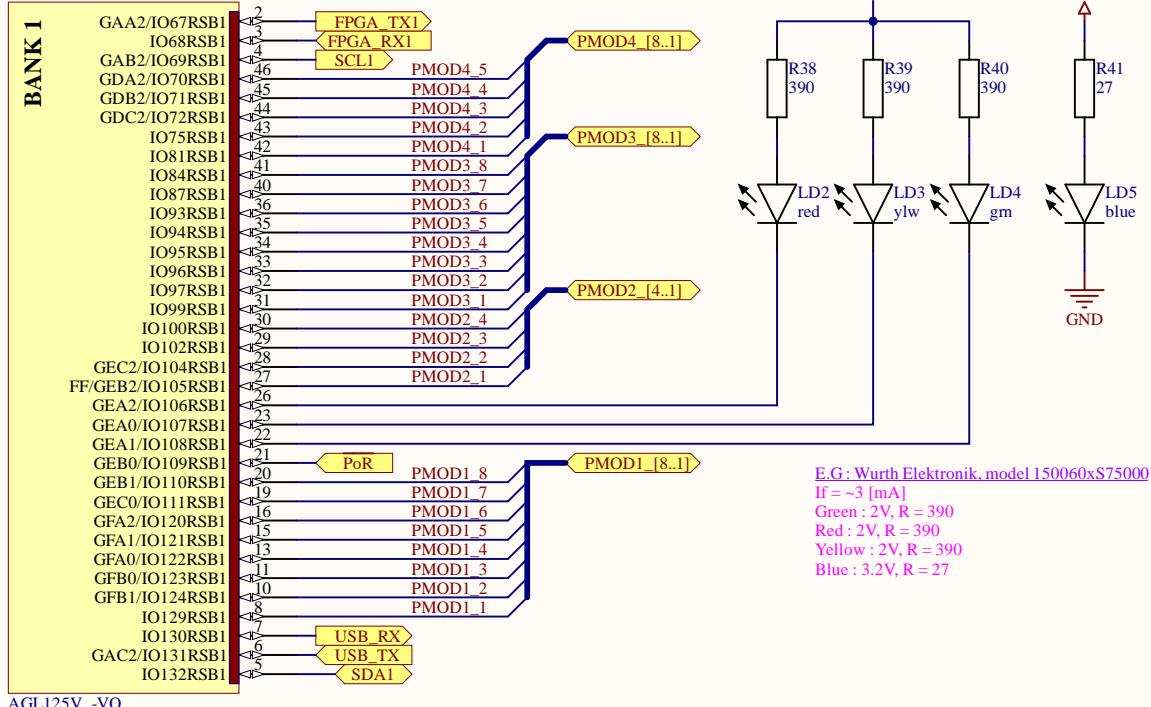
FPGA IOs

Solder bridges must be short for AGL250
Please note on silk (AGL250 : short Others : open)

USA



USB



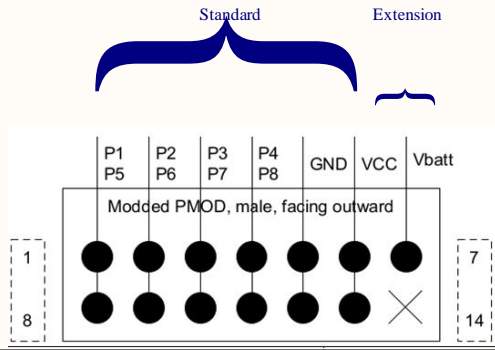
E.G: Würth Elektronik, model 150060xS75000
If = -3 [mA]
Green : 2V, R = 390
Red : 2V, R = 390
Yellow : 2V, R = 390
Blue : 3.2V, R = 27

AGL125V_-VQ

AGL125V_-VQ

All pins can be switched, except CLK
Solder bridges must remain as is on pins 99 and 100
FF (pin 27) must appear on the single-row PMOD2 connector
PMOD2 should preferably be a 90° connector

For PMODs on motherboard, indicate "standard" and "extension" on silk behind the connector such as :
Indicate related PMODx connector number (1 to 8) and, if possible, the pins Px (1 to 8)
For single-row PMOD (PMOD2), use the pins 1 to 7 (with Vbatt included)



EBS3_DB_Igloo_Kart.PrjPcb		Hes·SO VALAIS WALLIS	
FPGA_IO.SchDoc		Date : 02.05.2022	
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