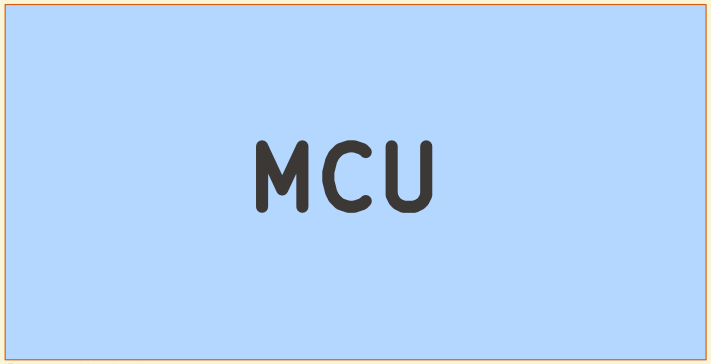
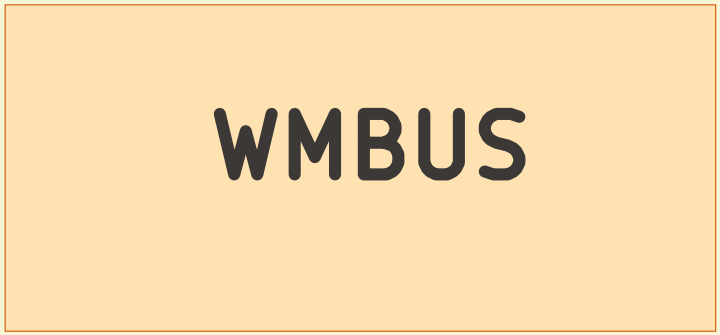
File: connector.kicad_sch

File: peripherals.kicad_sch



File: mcu.kicad_sch

File: lora.kicad_sch



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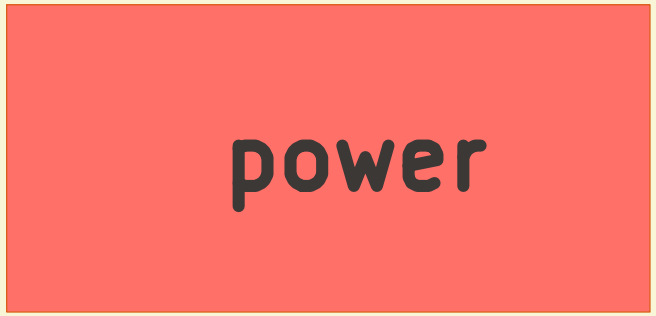

File: power.kicad_sch

Approved By: Jones Kisaka
Designed By: Rodney Osodo
Abstract Machines

Sheet: /
File: s0.kicad_sch

Title: IoT Gateway

Size: A4	Date: 2024-10-15	**Rev: v0.1.0**
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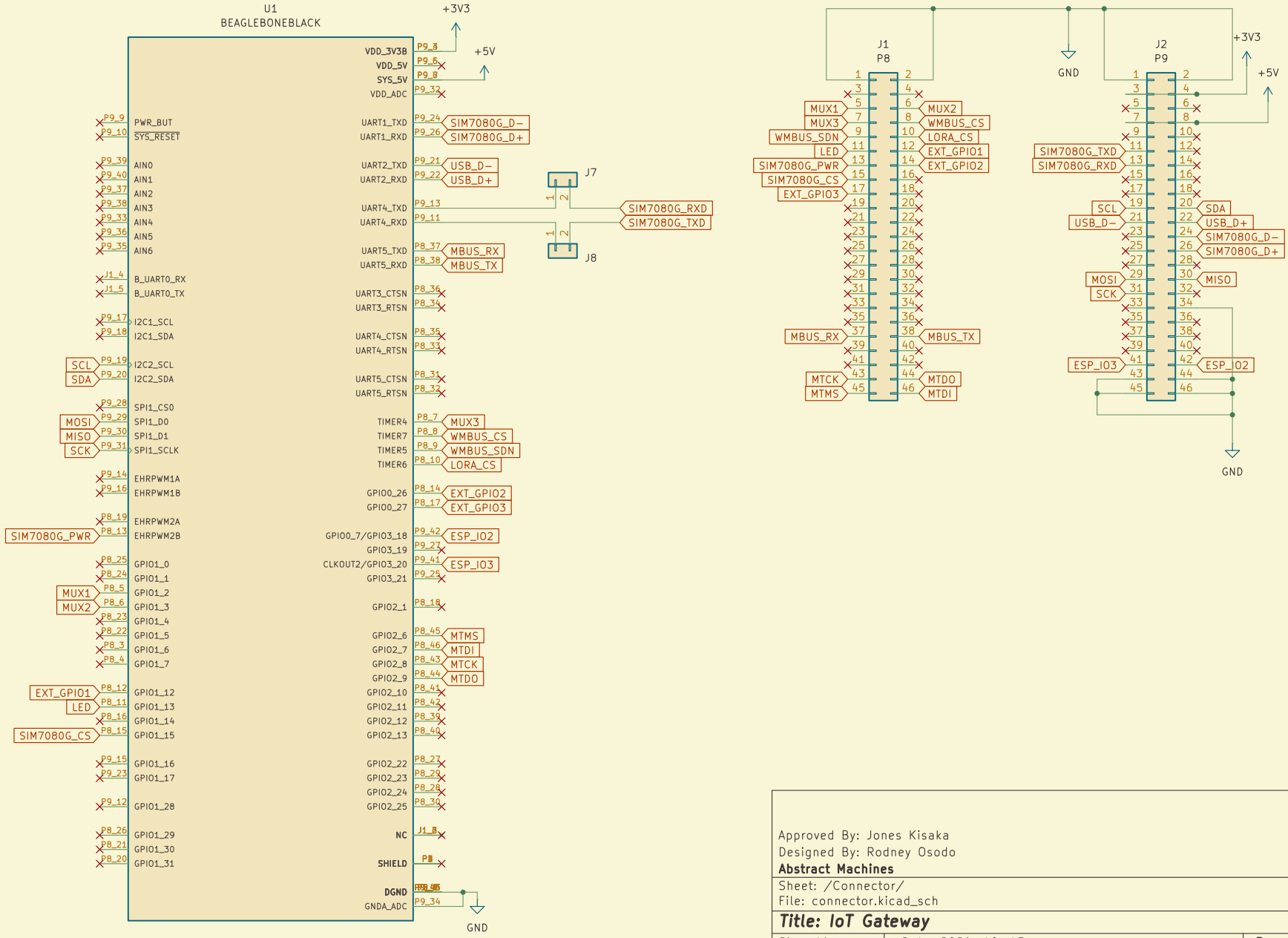
Beagle Board Connector



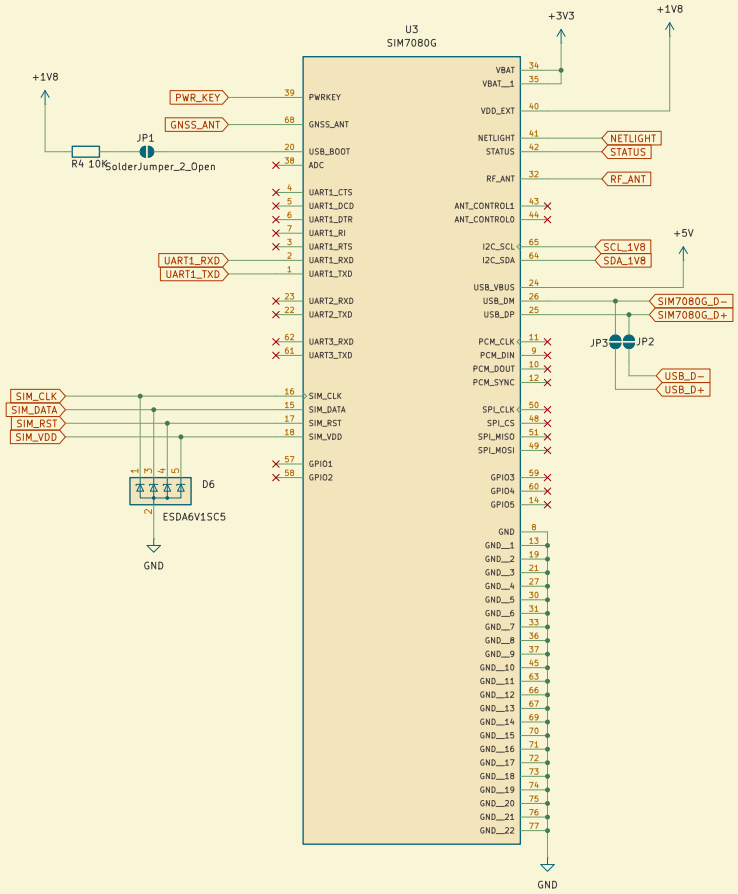
Approved By: Jones Kisaka
Designed By: Rodney Osodo
Abstract Machines

Sheet: /Connector/
File: connector.kicad_sch

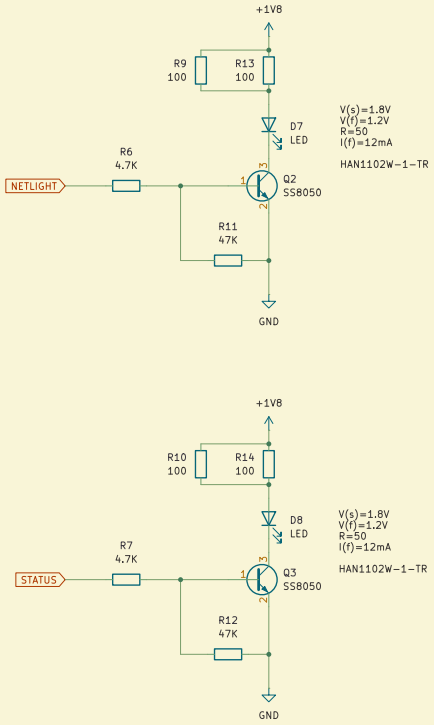
Title: IoT Gateway

Size: A4	Date: 2024-10-15	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 2/7

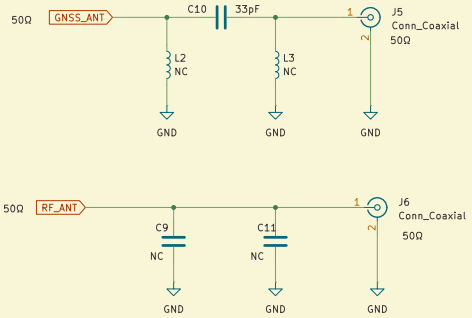
SIM7080G



STATUS LEDS

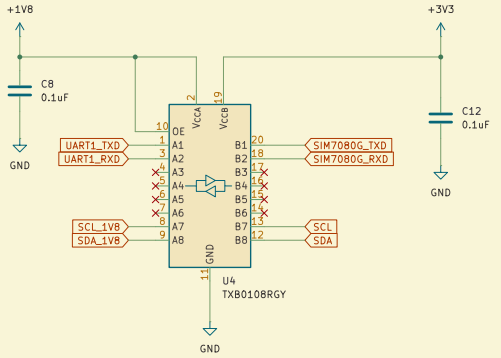


ANTENNAE

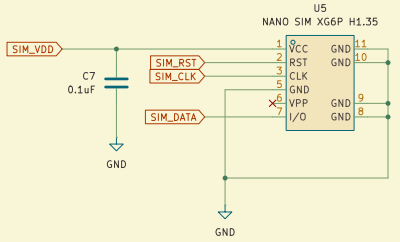


The input and output impedance are matched

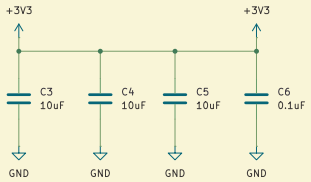
LEVEL SHIFTER



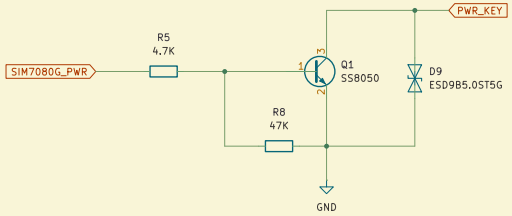
SIM CARD



DECOUPLING CAPS



SIM POWER CONTROL

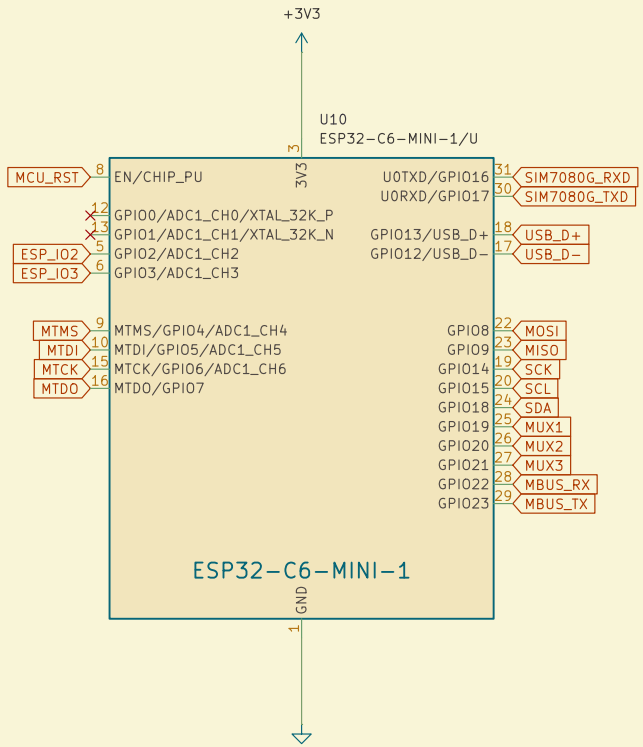


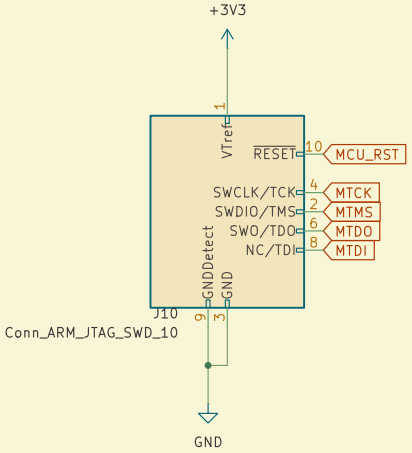
Approved By: Jones Kisaka
Designed By: Rodney Osodo
Abstract Machines
Sheet: /SIM7080G/
File: peripherals.kicad_sch

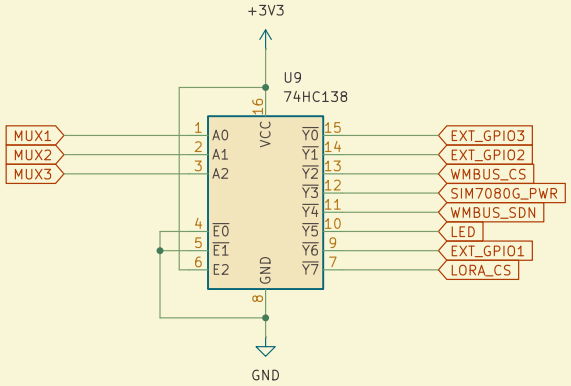
Title: IoT Gateway

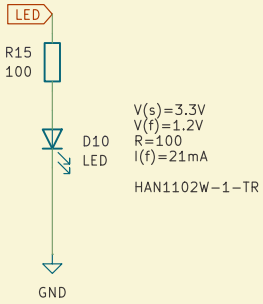
Size: A3	Date: 2024-10-15	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 3/7

MCU-ESP32-C3-MINI









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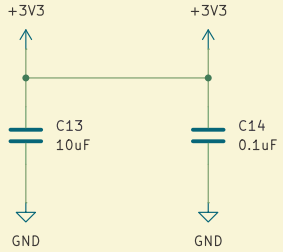
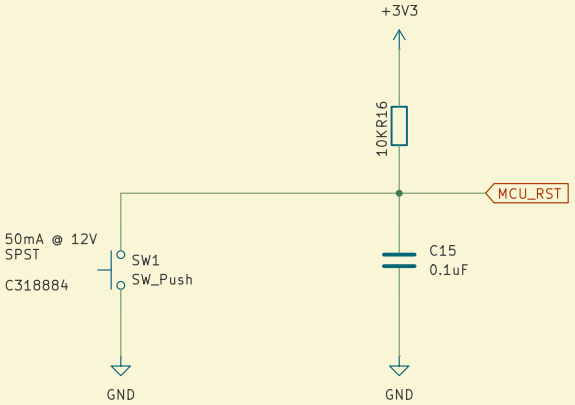


RESET



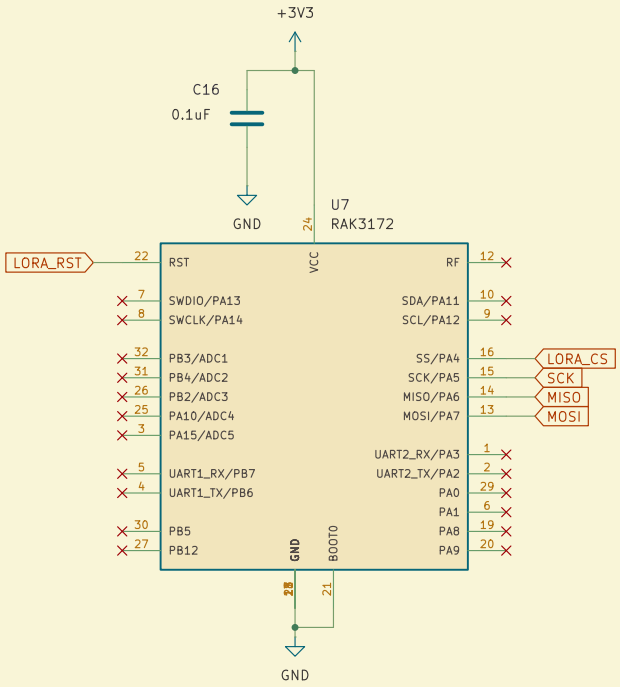
Approved By: Jones Kisaka
Designed By: Rodney Osodo
Abstract Machines

Sheet: /MCU/
File: mcu.kicad_sch

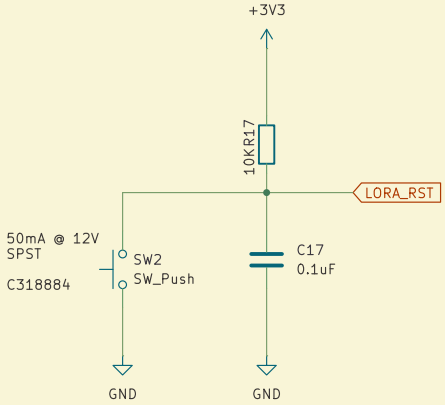
Title: IoT Gateway

Size: A4	Date: 2024-10-15	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 4/7

LORA MODULE



RESET



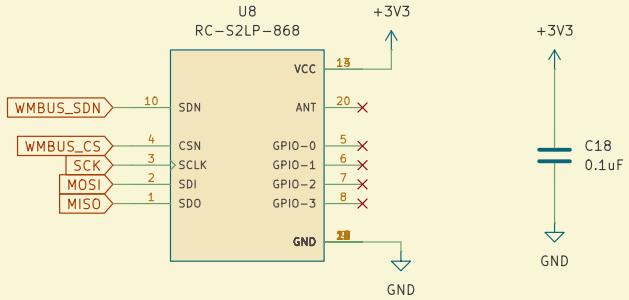
Approved By: Jones Kisaka
Designed By: Rodney Osodo
Abstract Machines

Sheet: /LoRa/
File: lora.kicad_sch

Title: IoT Gateway

Size: A4	Date: 2024-10-15	**Rev: v0.1.0**
KiCad E.D.A. 8.0.8		Id: 5/7

RC-S2LP-868 WMBUS



Approved By: Jones Kisaka Designed By: Rodney Osodo **Abstract Machines**		
Sheet: /WMBUS/ File: wmbus.kicad_sch		
Title: IoT Gateway		
Size: A4	Date: 2024-10-15	**Rev: v0.1.0**
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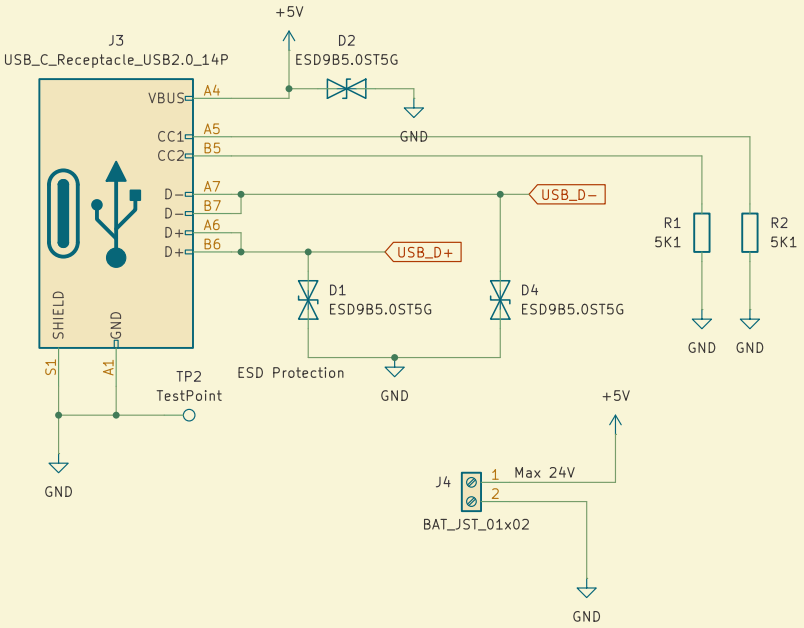
USBC & BAT



Capacitors

33pF
- +/- 10%
- 50V
- GMC10CG330K50NT

0.1uF
- +/- 5%
- 50V
- 0603B104J500XD

10uF
-CL21A106KOQNNNE
-C1713
-X5R ±10%

1uF
- +/- 10%
- 10V
- 0603B105K100XD

100uF
- +/- 10%
- 6.3V
- GMC31X5R107K6R3NT

Resistors

0
- RC0603JR-070RL

100
- +/- 1%
- 0.1W
- ERJ-3EKF1000V

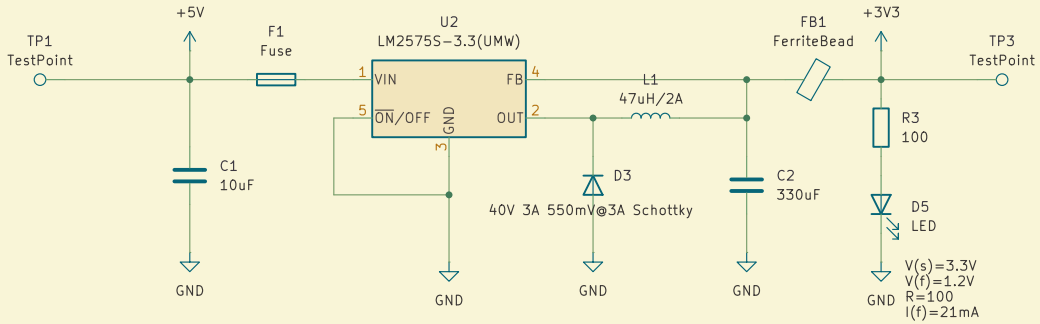
1k
- +/- 1%
- 0.1W
- RC0603FR-071KL

4.7k
- +/- 0.1%
- 0.1W
- RC0603FR-074K7L

10k
- +/- 1%
- 0.1W
- RC0603FR-0710KL

47k
- +/- 0.1%
- 0.1W
- ERA-3AEB473V

BUCK-CONVERTOR



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Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.8		Id: 7/7