

Connector

File: connector.kicad_sch

SIM7080G

File: peripherals.kicad_sch

MCU

File: mcu.kicad_sch

LoRa

File: lora.kicad_sch

WMBUS

File: wmbus.kicad_sch

power

File: power.kicad_sch

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

Sheet: /
File: s0.kicad_sch

Title: IoT Gateway

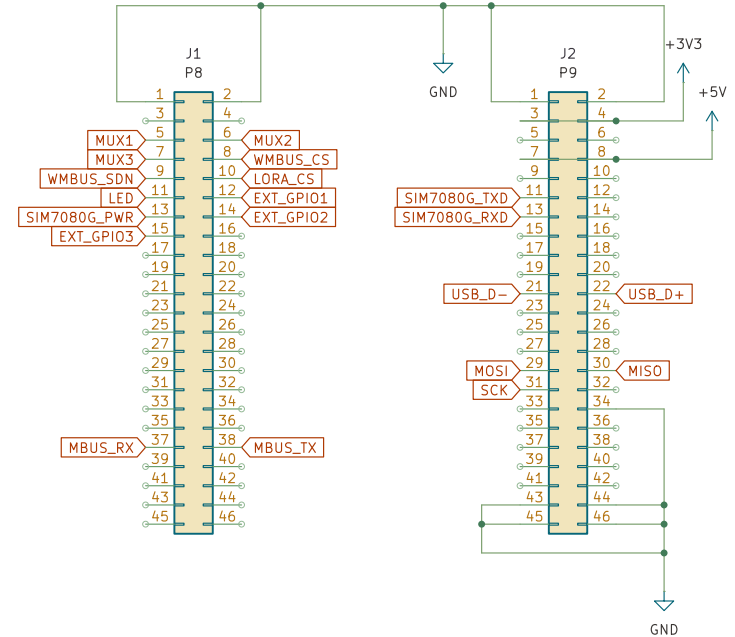
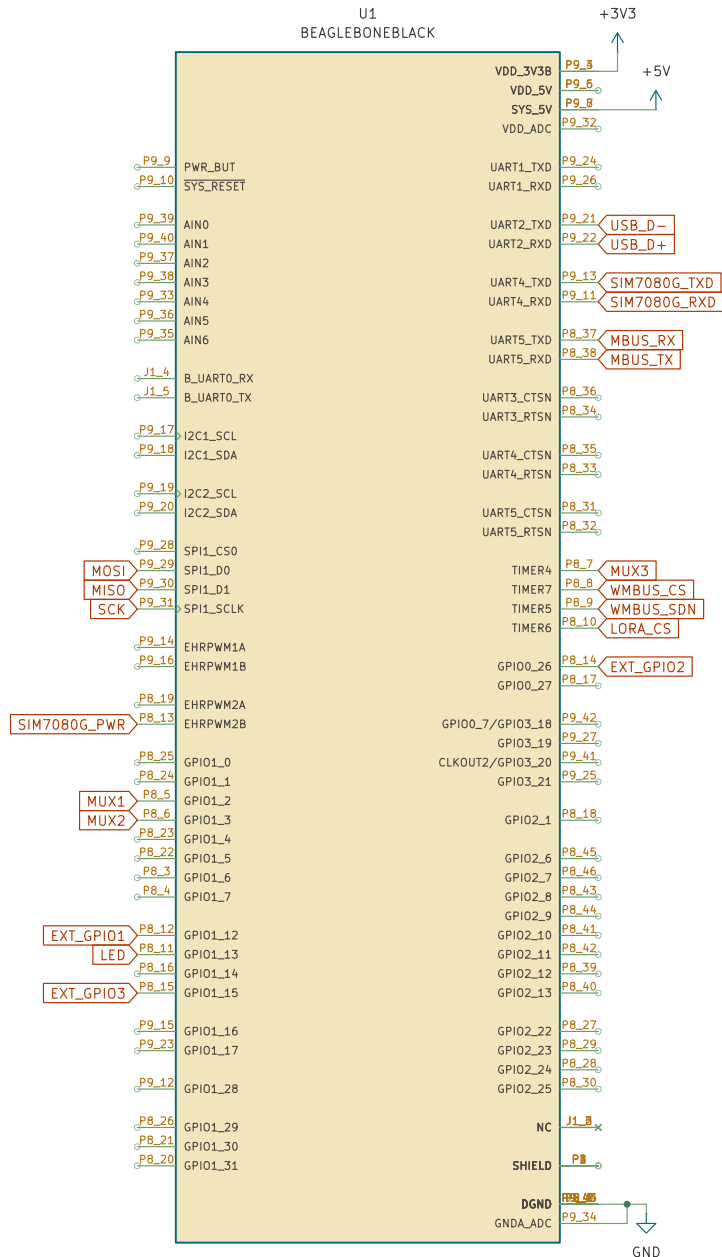
Size: A4 Date: 2024-10-15

KiCad E.D.A. 8.0.8

Rev: v0.1.0

Id: 1/7

Beagle Board Connector



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Title: IoT Gateway

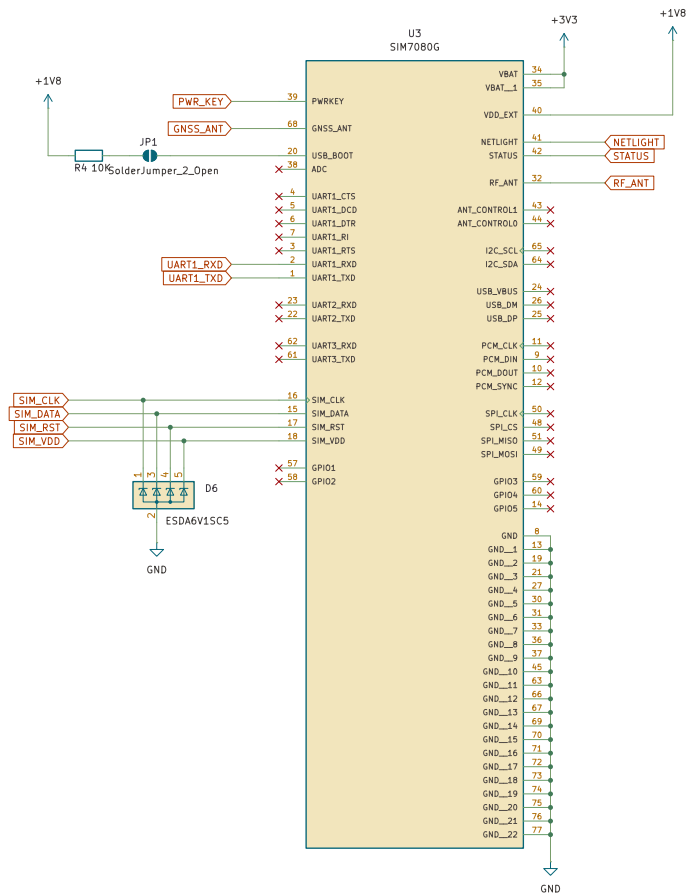
Size: A4
KiCad E.D.A. 8.0.8

Date: 2024-10-15

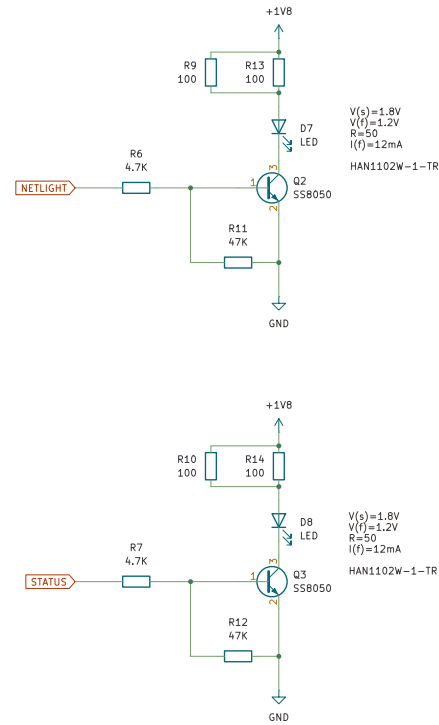
Rev: v0.1.0

Id: 2/7

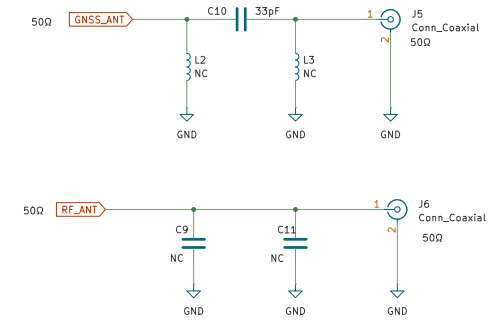
SIM7080G



STATUS LEDs

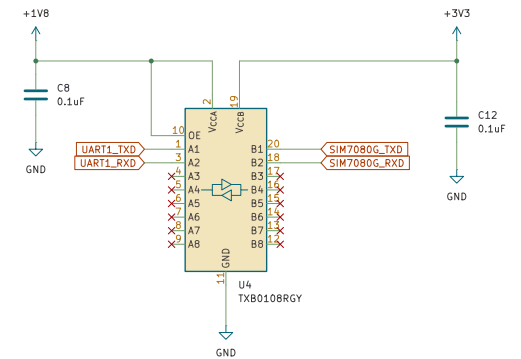


ANTENNAE

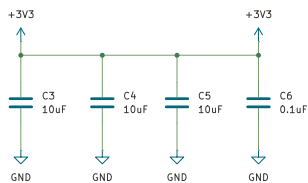


The input and output impedance are matched

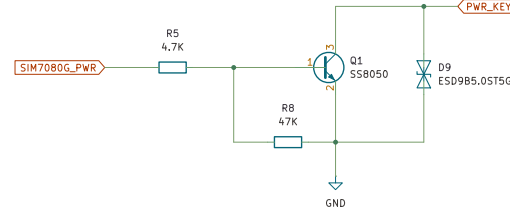
LEVEL SHIFTER



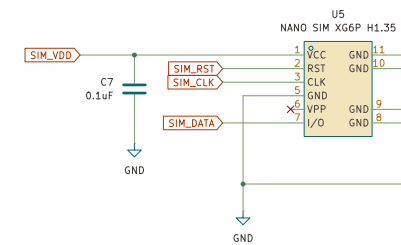
DECOUPLING CAPS



SIM POWER CONTROL



SIM CARD



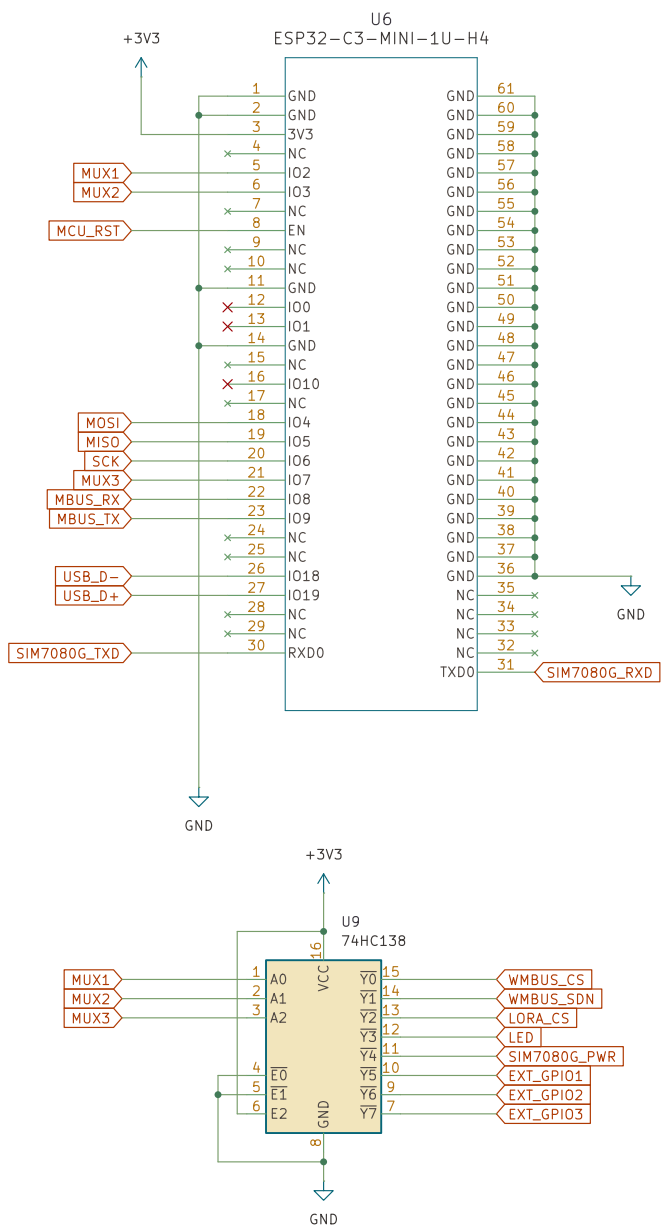
Approved By: Jones Kisaka
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Abstract Machines
Sheet: /SIM7080G/
File: peripherals.kicad_sch

Title: IoT Gateway

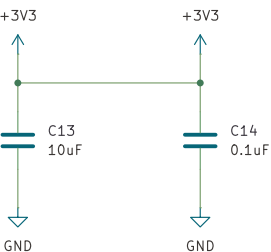
Size: A3 Date: 2024-10-15
KiCad E.D.A. 8.0.8

Rev: v0.1.0
Id: 3/7

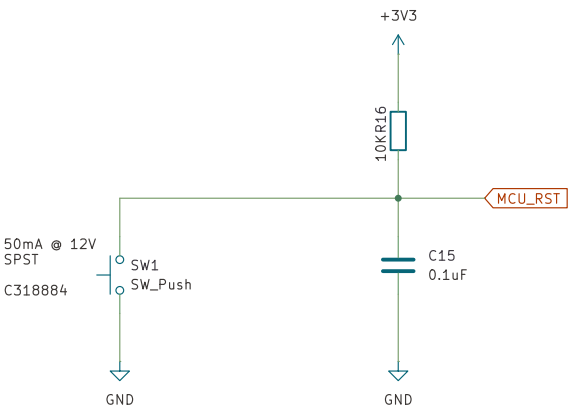
MCU-ESP32-C3-MINI



DECOUPLING CAPS



RESET



Approved By: Jones Kisaka
Designed By: Rodney Osodo

Abstract Machines

Sheet: /MCU/
File: mcu.kicad_sch

Title: IoT Gateway

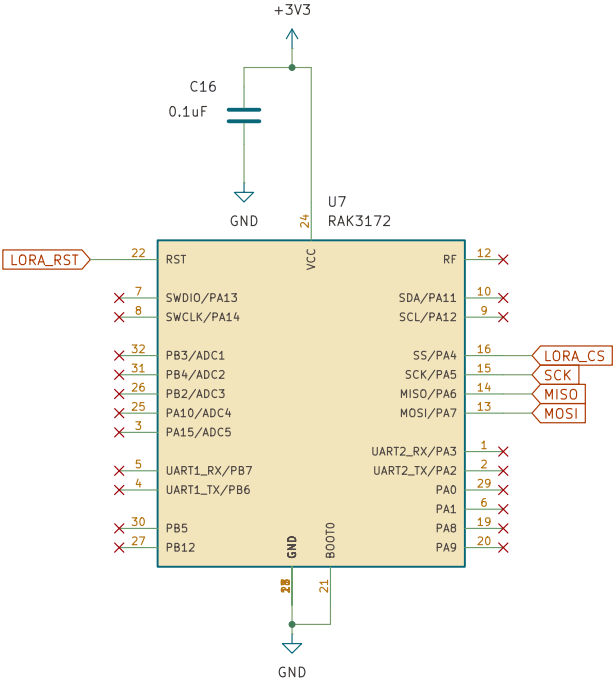
Size: A4 Date: 2024-10-15

KiCad E.D.A. 8.0.8

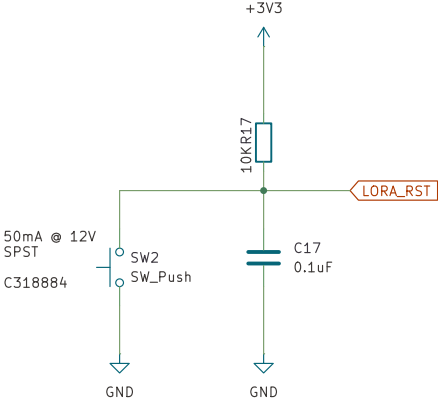
Rev: v0.1.0

Id: 4/7

LORA MODULE



RESET



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Abstract Machines

Sheet: /LoRa/
File: lora.kicad_sch

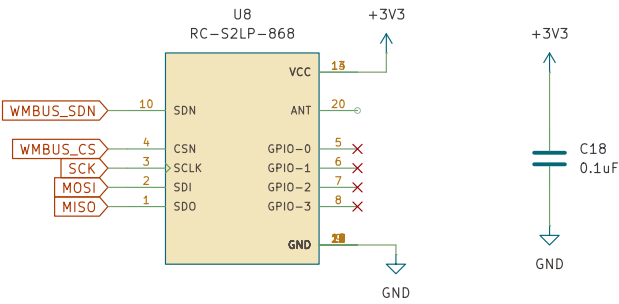
Title: IoT Gateway

Size: A4 Date: 2024-10-15

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Rev: v0.1.0
Id: 5/7

RC-S2LP-868 WMBUS



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Designed By: Rodney Osodo

Abstract Machines

Sheet: /WMBUS/
File: wmbus.kicad_sch

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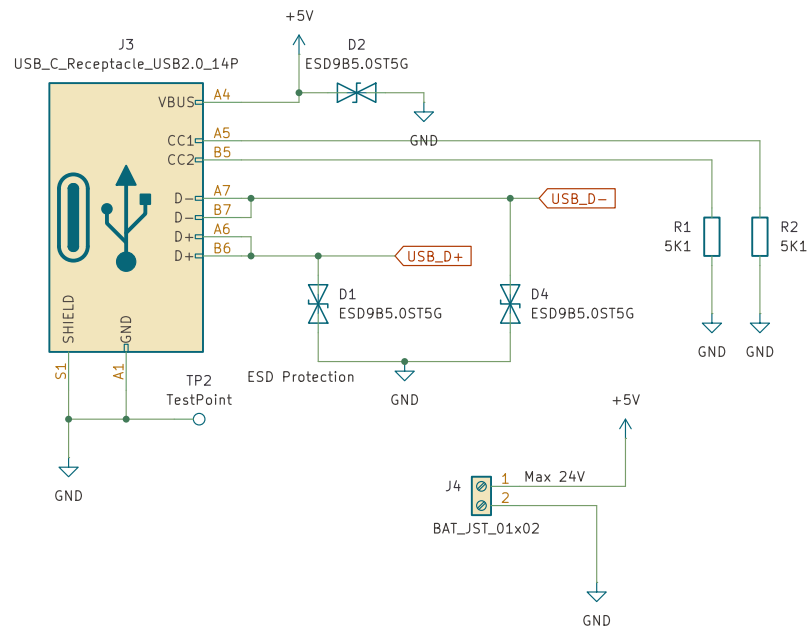
Size: A4 Date: 2024-10-15

KiCad E.D.A. 8.0.8

Rev: v0.1.0

Id: 6/7

USBC & BAT



Capacitors

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

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

10uF
 -CL21A106K0QNNNE
 -C1713
 -X5R ±10%

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

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

Resistors

0
 - RC0603JR-070RL

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

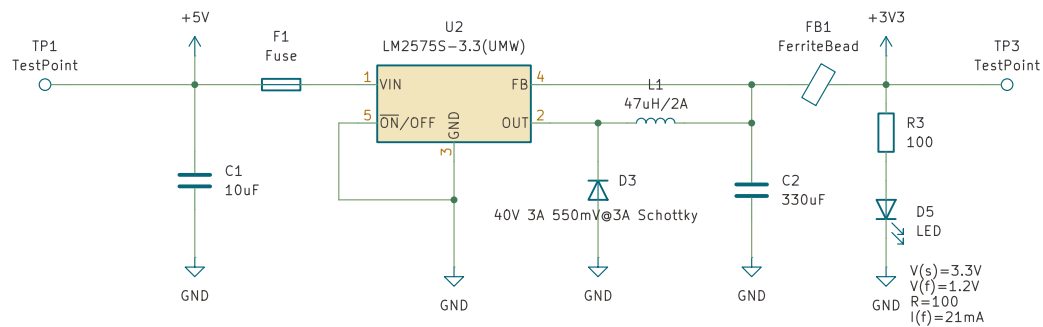
1k
 - +/- 1%
 - 0.1W
 - RC0603FR-071KL

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

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

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

BUCK-CONVERTOR



Sheet: /power/
 File: power.kicad_sch

Title:

Size: A4

Date:

KiCad E.D.A. 8.0.8

Rev:

Id: 7/7