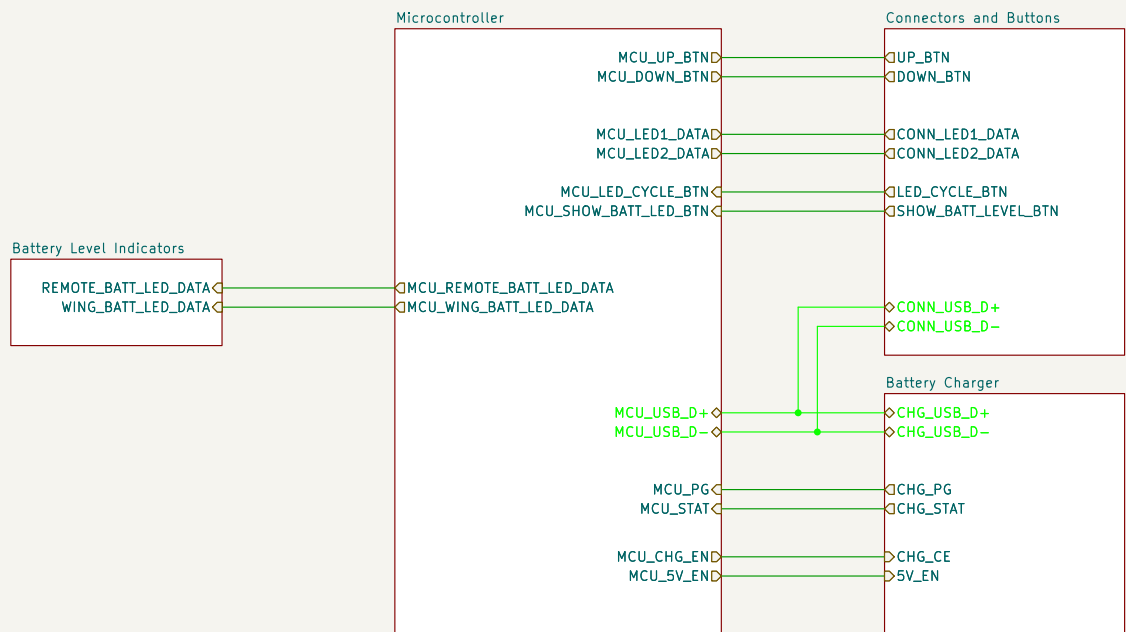


Demon spawn remote



Vagarth Gaurav

Sheet: /

File: demonSpawn.kicad_sch

Title: Demon Spawn Remote

Size: A4

Date: 2026-01-05

Rev:

KiCad E.D.A. 9.0.6

Id: 1/5

Battery Charger

Battery charge controller

The schematic shows the BQ25616 battery charge controller (U4) connected to a USB input and a battery. The USB input is connected to VBUS and GND. The battery is connected to VBAT and GND. The controller is configured for a 1.2A max output current. Key components include capacitors C19-C28, resistors R8-R14, and a diode D1. The controller is labeled U4.

5V Boost converter

0.5V < V_{in} < 5.5V

Output current is 1.2A max

The schematic shows a 5V Boost converter (U5) using the TPS61023DRL. The input is connected to VBUS and GND. The output is connected to +5V and GND. The converter is configured for a 1.2A max output current. Key components include capacitors C29-C32, resistors R13-R14, and an inductor L3. The converter is labeled U5.

Setting output voltage

$R15 = (V_{OUT}/V_{REF} - 1) \times R16$
 $R15 = (5V/610mV - 1) \times 100k$

PWM mode: 580mV < V_{REF} < 610mV (595mV typical)
PFM mode: V_{REF} = 601mV typical.

Sheet: /Battery Charger/ File: battery_charger.kicad_sch		
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Output current is 1.2A max



$$R15 = (V_{OUT}/V_{REF} - 1) \times R16$$

$$R15 = (5V/610mV - 1) \times 100k$$

PWM mode: $580\text{mV} < V_{\text{REF}} < 610\text{mV}$ (595mV typical)

PFM mode: $V_{REF} = 601\text{mV}$ typical.

Microcontroller

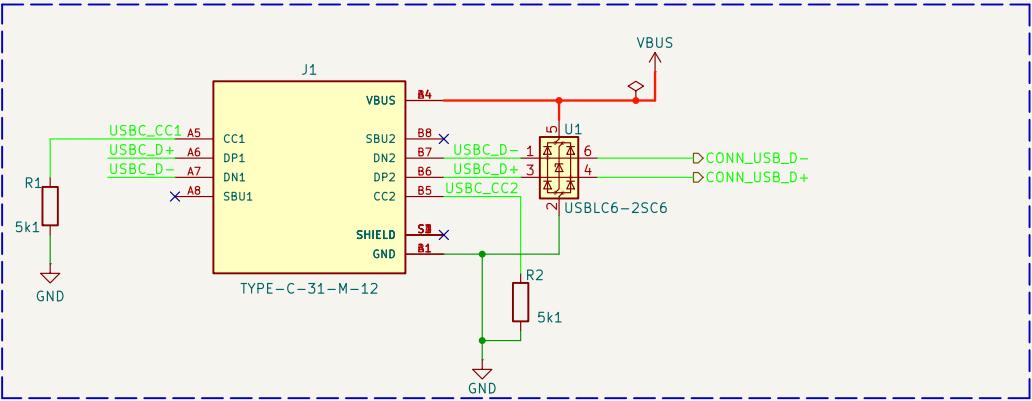
Microcontroller

[illegible]

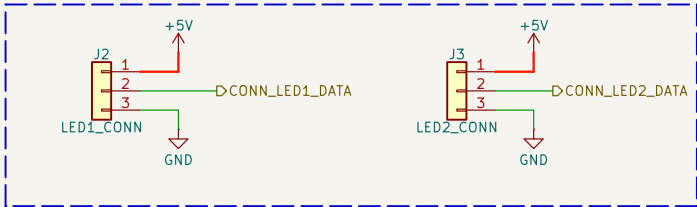
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KiCad E.D.A. 9.0.6		Id: 3/5

Connectors and Buttons

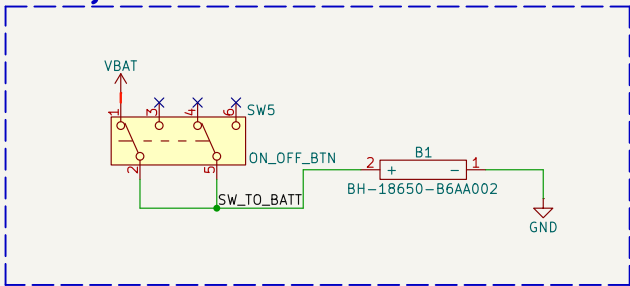
USB C



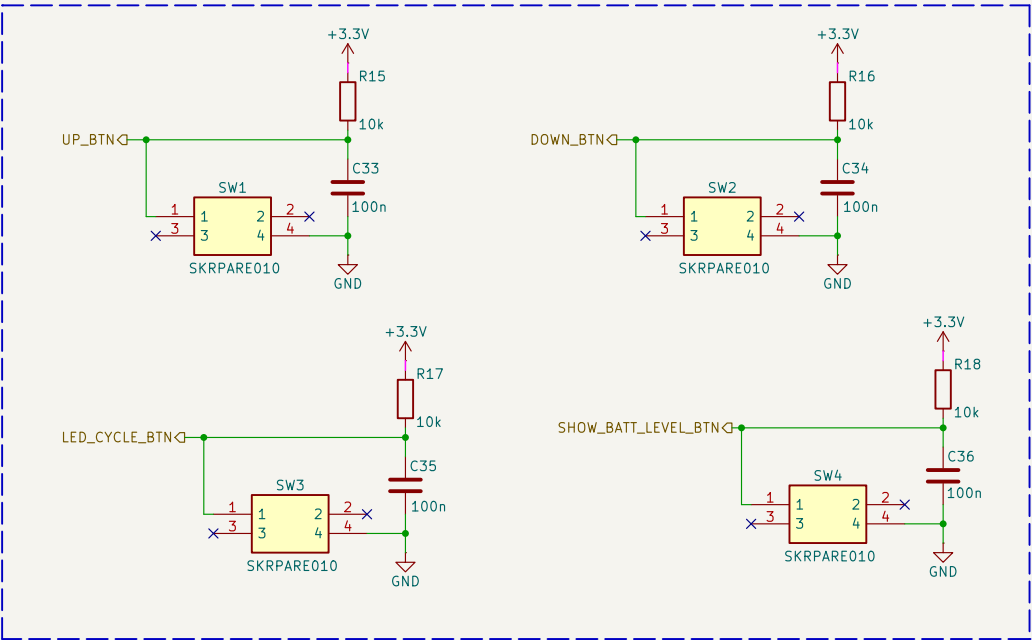
Connectors



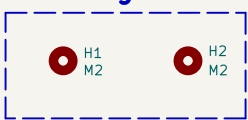
Battery Holder and switch



Buttons



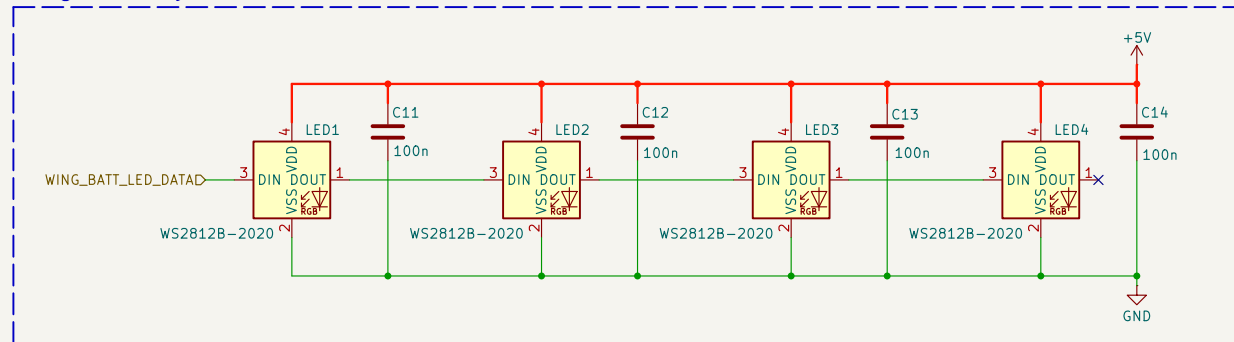
Mounting holes



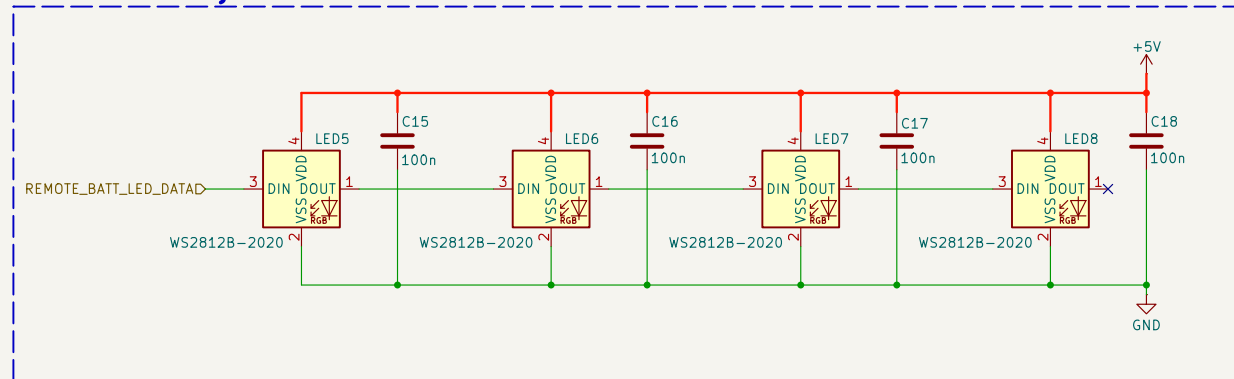
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Title:		
Size: A4	Date:	Rev:
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Charge Level LED's

Wing battery level LED's



Remote battery level LED's



Sheet: /Battery Level Indicators/
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