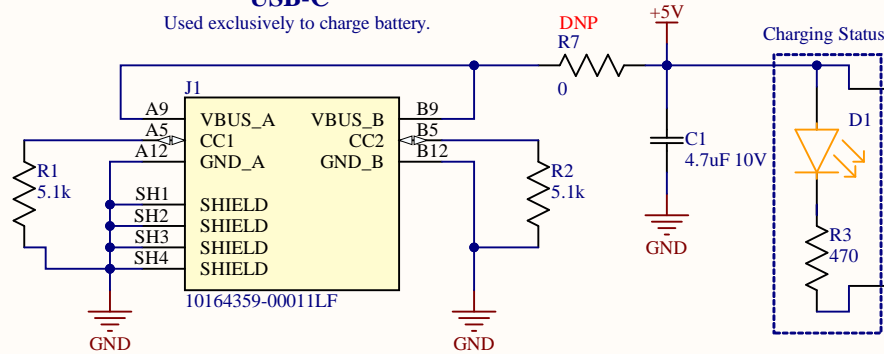


USB-C

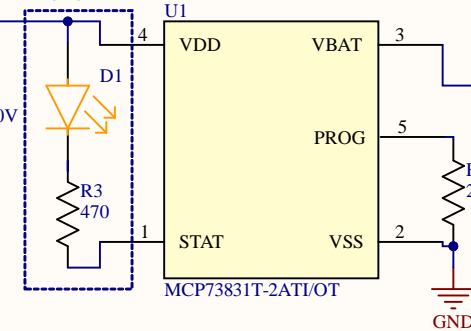
Used exclusively to charge battery.



USB-C plug will be placed on edge of the PCB for access through housing.

Power Charger

Charging Status

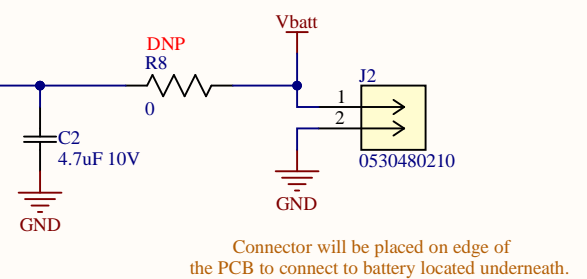


For best thermal performance, add vias from land area of EP to copper layer on opposite side of PCB

Power charger should be placed close to battery connector.

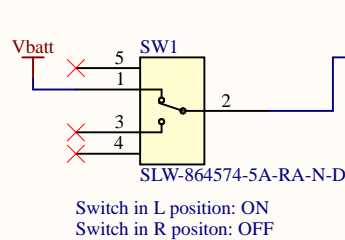
Li Ion Battery

LP384260JU+PCM+MOLEX 51021-0200 35MM



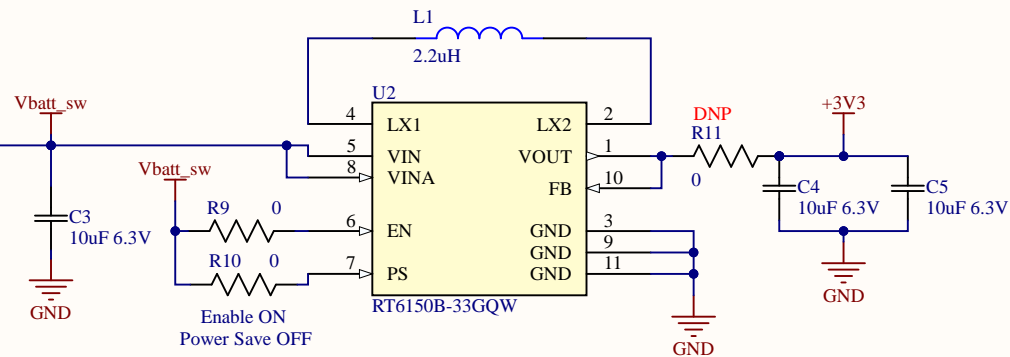
Connector will be placed on edge of the PCB to connect to battery located underneath.

Power Switch



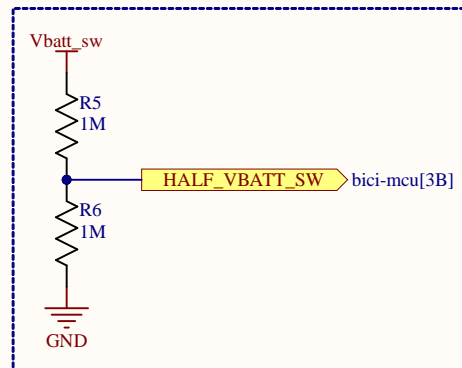
Switch will be placed on edge of the PCB for access through housing.

Buck-Boost

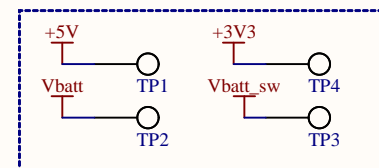


C3 should be placed as close as possible to Vin.
C4 and C5 should be placed as close as possible to Vout.
L1 should be connected to inductor by wide and short trace.

Low Power Detection



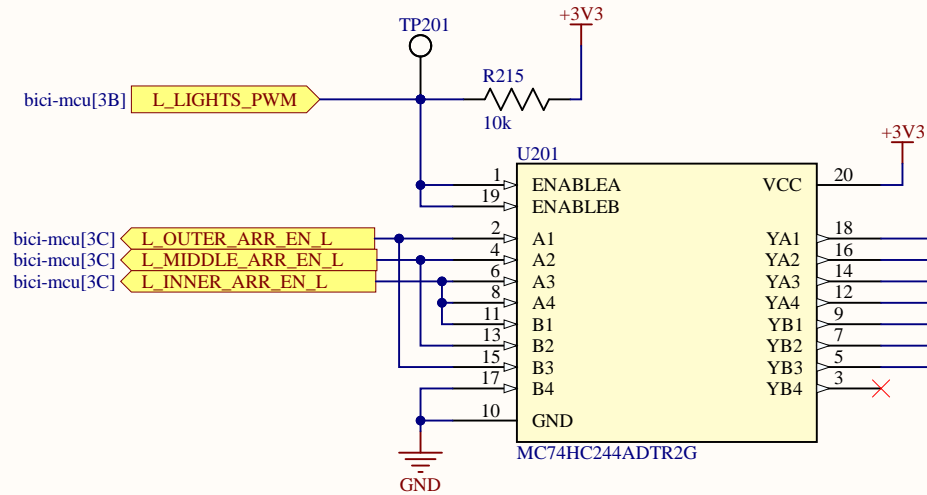
Test Points



| | | |
|---|--------------------------------|---------------------|
| Title | | |
| Bici: Power Management | | |
| Circuitry related to system power and charging. | | |
| Size | Number | Revision |
| A | | V3 |
| Date: | 12/08/2025 | Sheet1 of 5 |
| File: | C:\Users\...\bici-power.SchDoc | Drawn By: Team Bici |

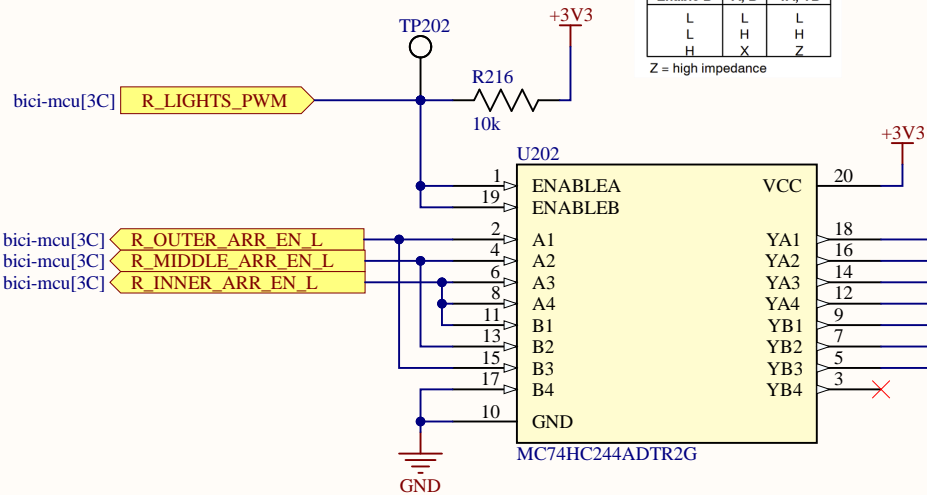
A

A



B

B



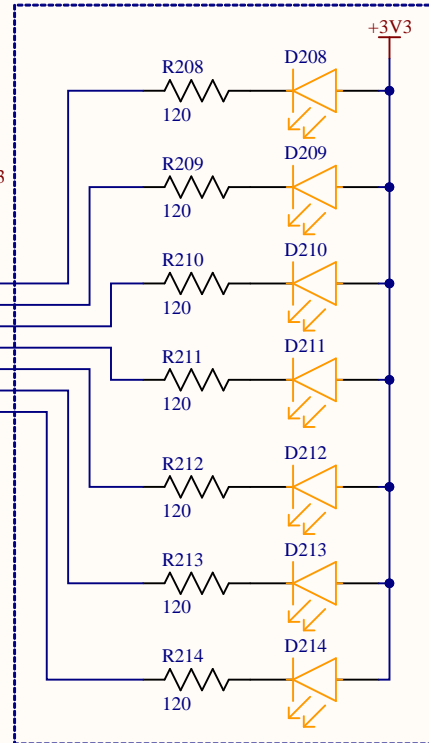
C

C

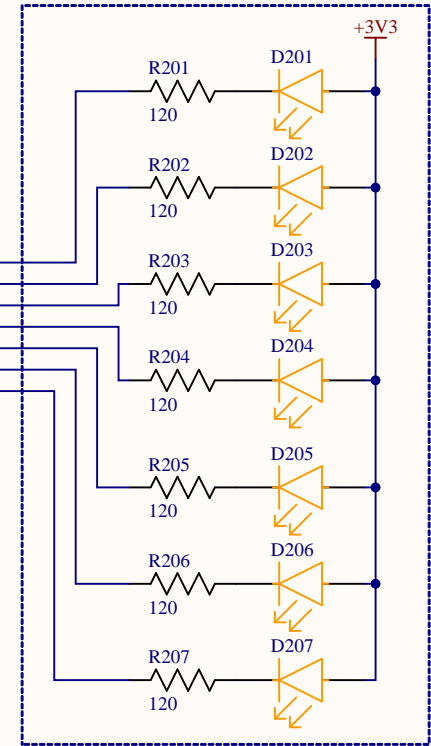
| FUNCTION TABLE | | | |
|-----------------------|------|---------|---|
| Inputs | | Outputs | |
| Enable A, Enable B | A, B | YA, YB | Z |
| L | L | L | H |
| H | H | L | Z |

Z = high impedance

Right Indicator Light Circuit

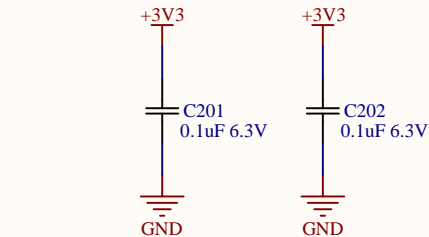


Left Indicator Light Circuit



D

D



C202 should be placed as close as possible to U202 VCC pin.
C201 should be placed as close as possible to U201 VCC pin.

| | | |
|--|--------------------------------------|---------------------|
| Title Bici: Turn Signal Lights Circuitry related to light feedback to surrounding cars. | | |
| Size A | Number | Revision V3 |
| Date: | 12/08/2025 | Sheet3 of 5 |
| File: | C:\Users\...\bici-turn-lights.SchDoc | Drawn By: Team Bici |

A

B

C

D

1

2

3

4

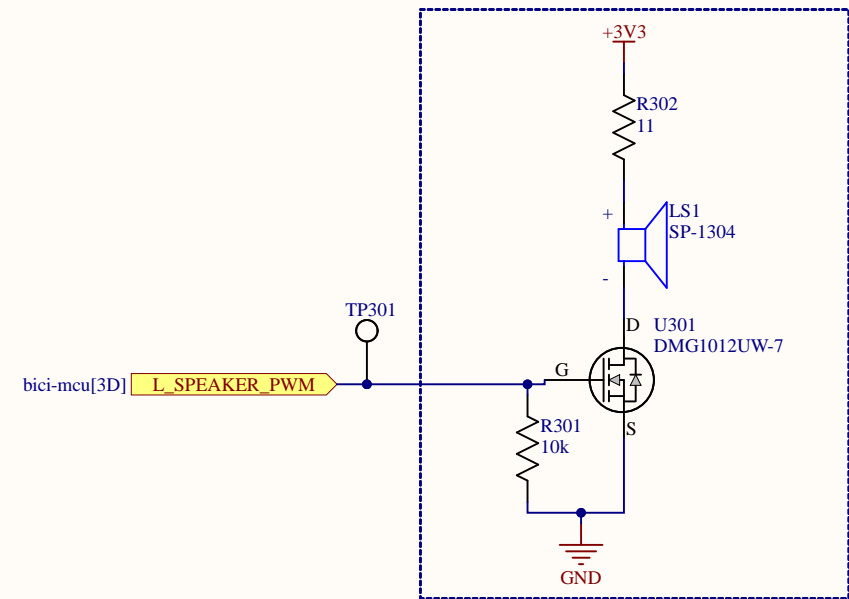
A

B

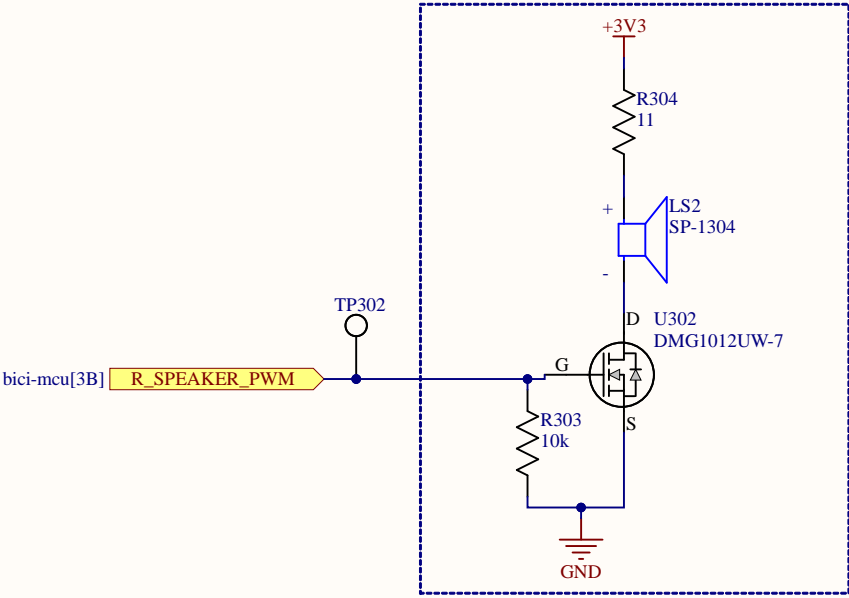
C

D

Left Indicator Audio Feedback Circuit



LS1 should be placed at the edge of the PCB on the left arrow point (to accomodate speaker placement in housing).



LS2 should be placed at the edge of the PCB on the right arrow point (to accomodate speaker placement in housing).

Right Indicator Audio Feedback Circuit

| | | | | |
|-------|-------------------------------------|--|--|--|
| Title | | | Bici: Turn Signal Audio | |
| | | | Circuitry related to audio feedback to user. | |
| Size | Number | | Revision | |
| A | | | V3 | |
| Date: | 12/08/2025 | | Sheet4 of 5 | |
| File: | C:\Users\...\bici-turn-audio.SchDoc | | Drawn By: Team Bici | |

1

2

3

4

| | | |
|--|----------------------------|-----------------------|
| Title Bici: MCU Circuitry related to embedded MCU. | | |
| Size A | Number | Revision V3 |
| Date: 12/08/2025 | Sheet 5 of 5 | |
| File: C:\Users\Abici-mcu\SchDoc | Drawn By: Team Bici | |

