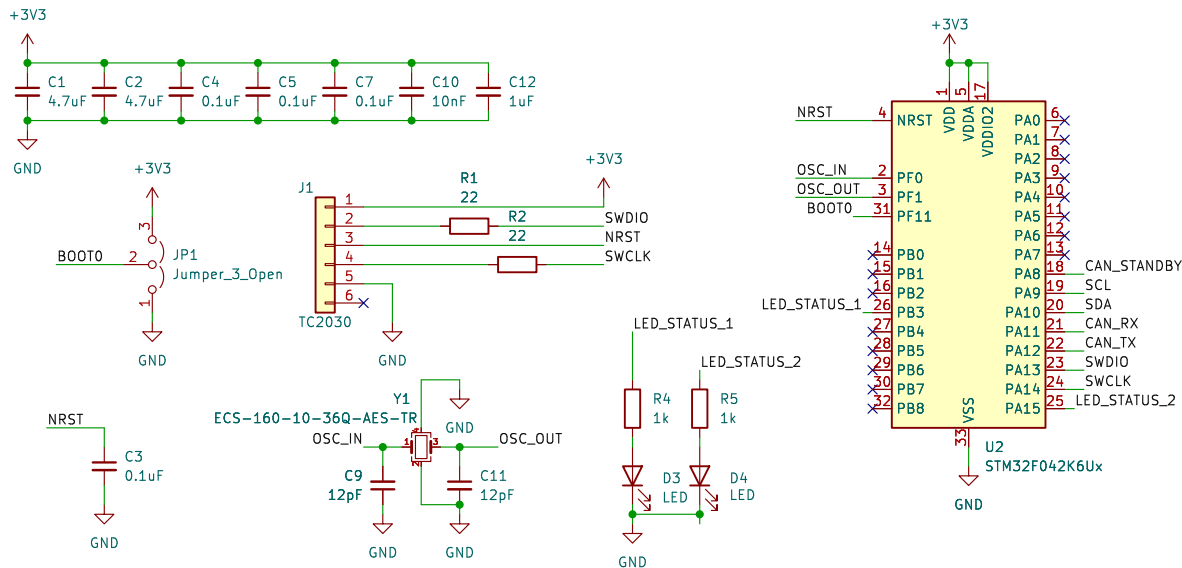


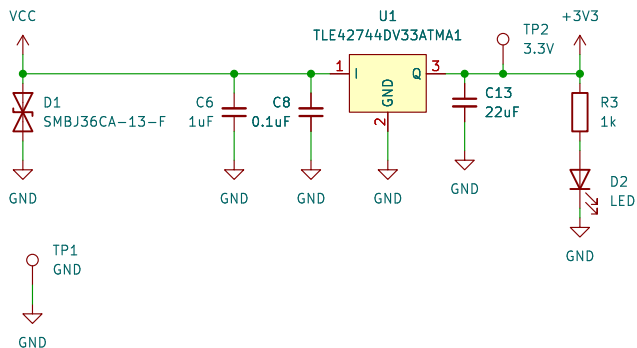
- Hardware Requirements
- MLX90641ESF-BCA-000-SP IR Sensor Array
  - I2C bus interface
  - non-isolated can transceiver
  - robust, unable to break device easily from power / CAN pins
  - must be powered from 5 – 12V, survive high transients

## Microcontroller



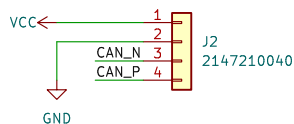
## Power Supplies

- 3.3V Regulator 400mA max, 4.5-40V input
- reverse-polarity protection
  - over temperature protection
  - over current protection
  - short circuit protection

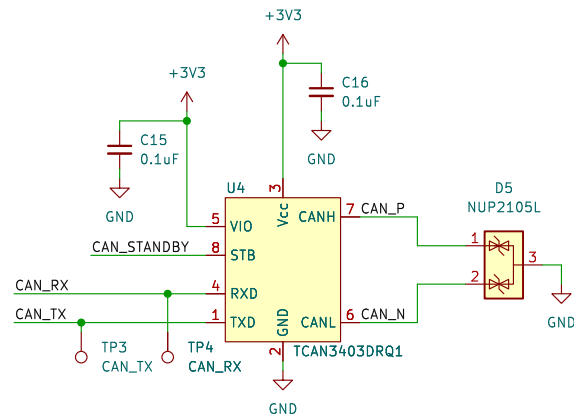


## Connector

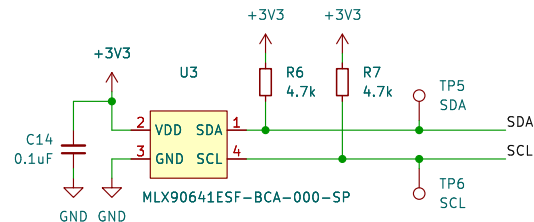
Molex Zero-Hatchi  
Mating Assembly: 2263921043



## CAN Bus Tranciever



## IR Sensor



Brian Glen

Sheet: /  
File: canbus\_tire\_temp\_sensor.kicad\_sch

**Title: CAN Bus Tire Temperature Sensor**

Size: A4 Date: 2025-06-11

KiCad E.D.A. 9.0.1

**Rev: 1.3**

Id: 1/1