Schematic: Optical Tracking Sensor

U2 — LD3985M33R_SOT23
- VIN, VOUT, INH, BYP, GND
- Pins: 1 VIN, 5 VOUT, 3 INH, 4 BYP, 2 GND
- C6 4.7u, C7 10n, C8 1u
- VIN → 3.3V
- GND

J1 — Grove
- 1 SCL_H
- 2 SDA_H
- 3 VIN
- 4 GND

TP1 — MOTION / INT

Q1 — Q_NMOS_GSD
- SCL_H (3), SCL (2), 3.3V (1)

Q2 — Q_NMOS_GSD
- SDA_H (3), SDA (2), 3.3V (1)

R5 10k, **R6** 10k (VIN) → SDA_H, SCL_H

R1 10k, **R2** 10k (3.3V) → SDA, SCL

R3 10k — Not Mounted (3.3V)
R4 10k → GND

U1 — PAT9125EL
- 1 VLD
- 2 VDDA
- 3 VDD
- 4 VSS
- 8 ID_SEL
- 7 MOTION / INT
- 6 SDA
- 5 SCL

- C1 10u, C3 0.1u (3.3V) → GND
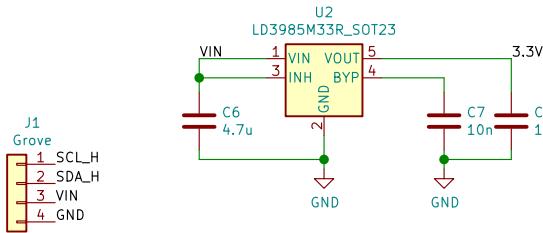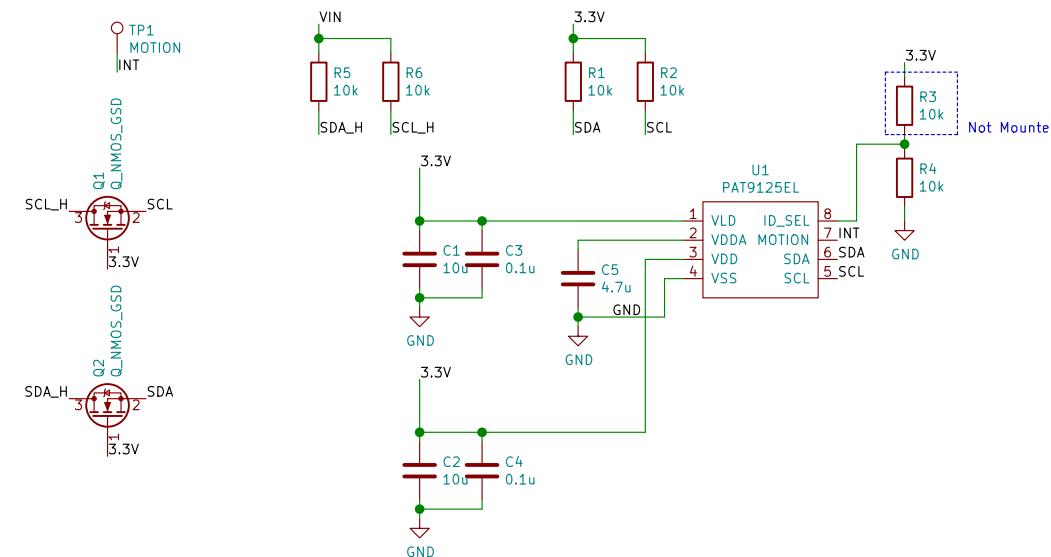- C5 4.7u → GND
- C2 10u, C4 0.1u (3.3V) → GND

Title Block
Crescent
Sheet: /
File: ots.sch
Title: Optical Tracking Sensor
Size: A4 | Date: 2025-09-13 | **Rev: v1.1**
KiCad E.D.A. kicad (5.1.2)-1 | Id: 1/1