Avionics

File: Avionics.kicad_sch

Connectors

File: Connectors.kicad_sch

Power

File: Power.kicad_sch

Motors

File: motor_driver.kicad_sch

Watchdog

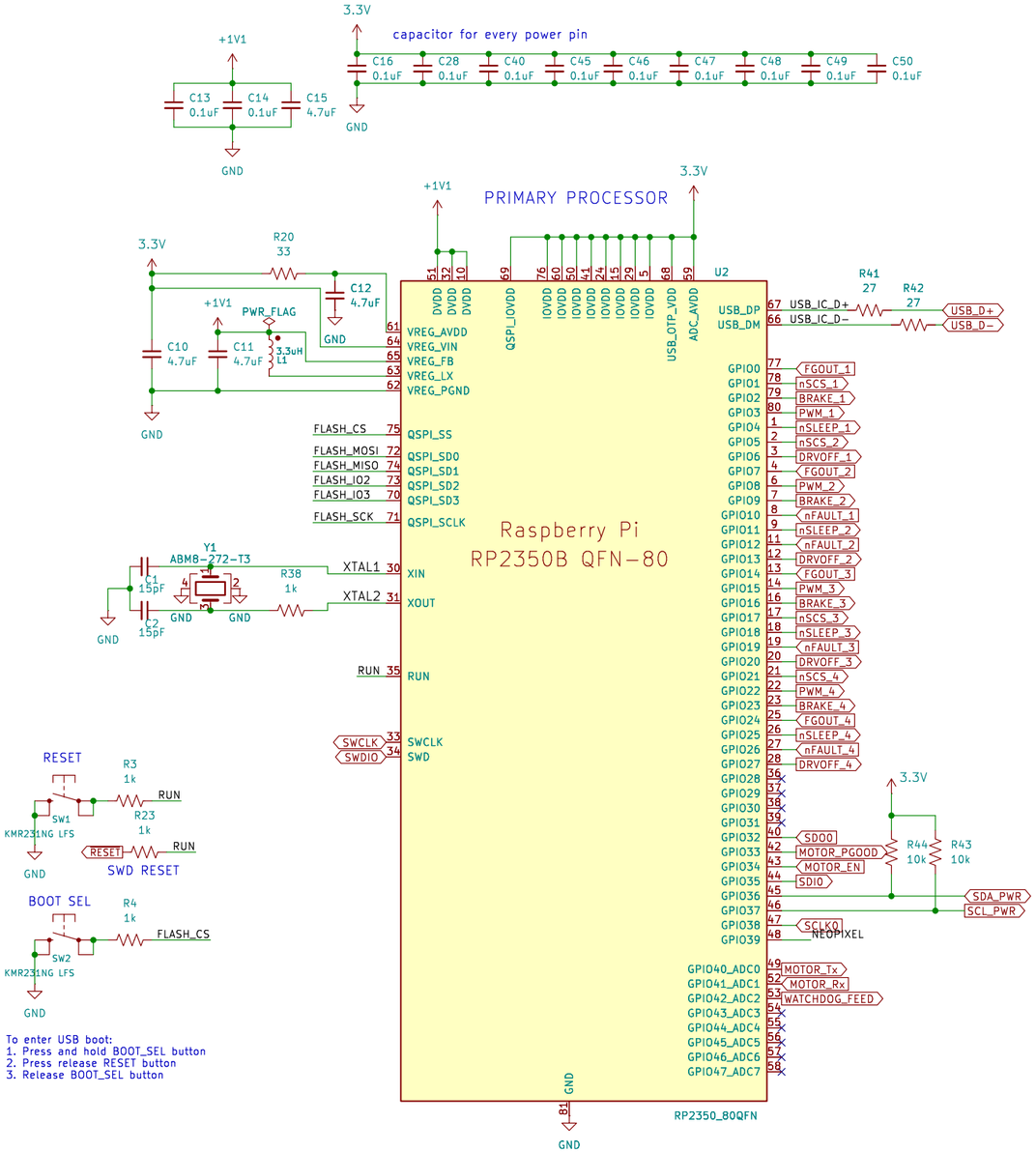
File: watchdog.kicad_sch

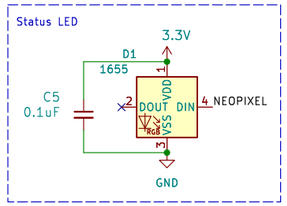
Carson Lauer
Stanford Student Space Initiative

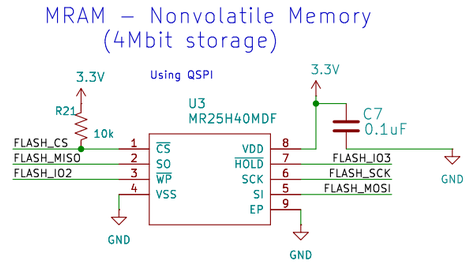
Sheet: /
File: motor_board.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 1/10







NOTE: Components labeled "do not install" (DNI) are not populated by default

Avionics

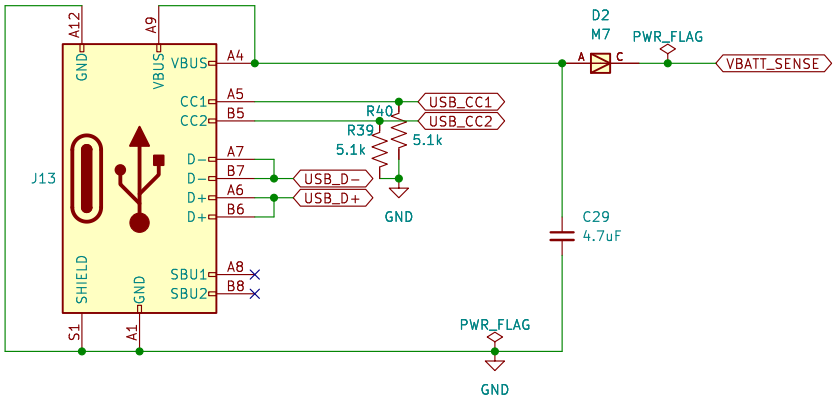
Carson Lauer
Stanford Student Space Initiative

Sheet: /Avionics/
File: Avionics.kicad_sch

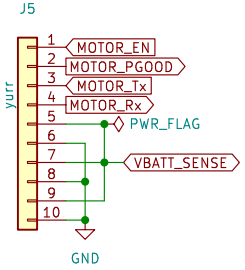
Title: Reaction Wheel Motor Board

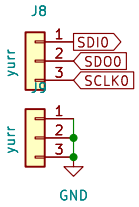
Size: USLedger	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 2/10

Power Connectors: USB-C Power Delivery to 2S Li-ion Battery

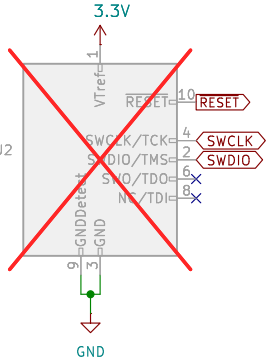


ADCS

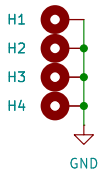




SWD



Mounting Holes



NOTE: Components labeled "do not install" (DNI) are not populated by default

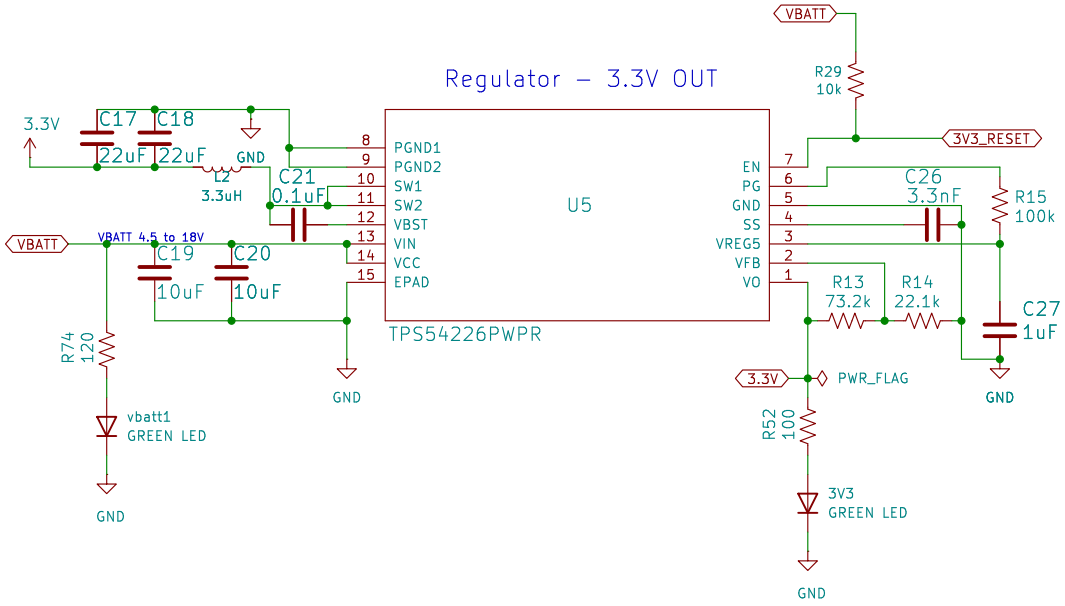
Connectors

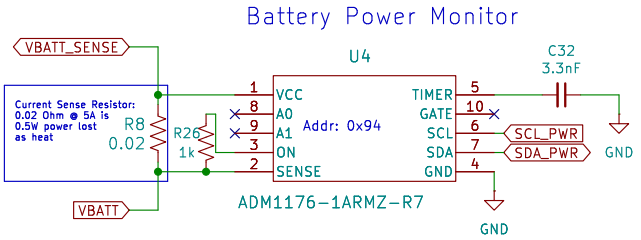
Carson Lauer
Stanford Student Space Initiative

Sheet: /Connectors/
File: Connectors.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 4/10





NOTE: Components labeled "do not install" (DNI) are not populated by default

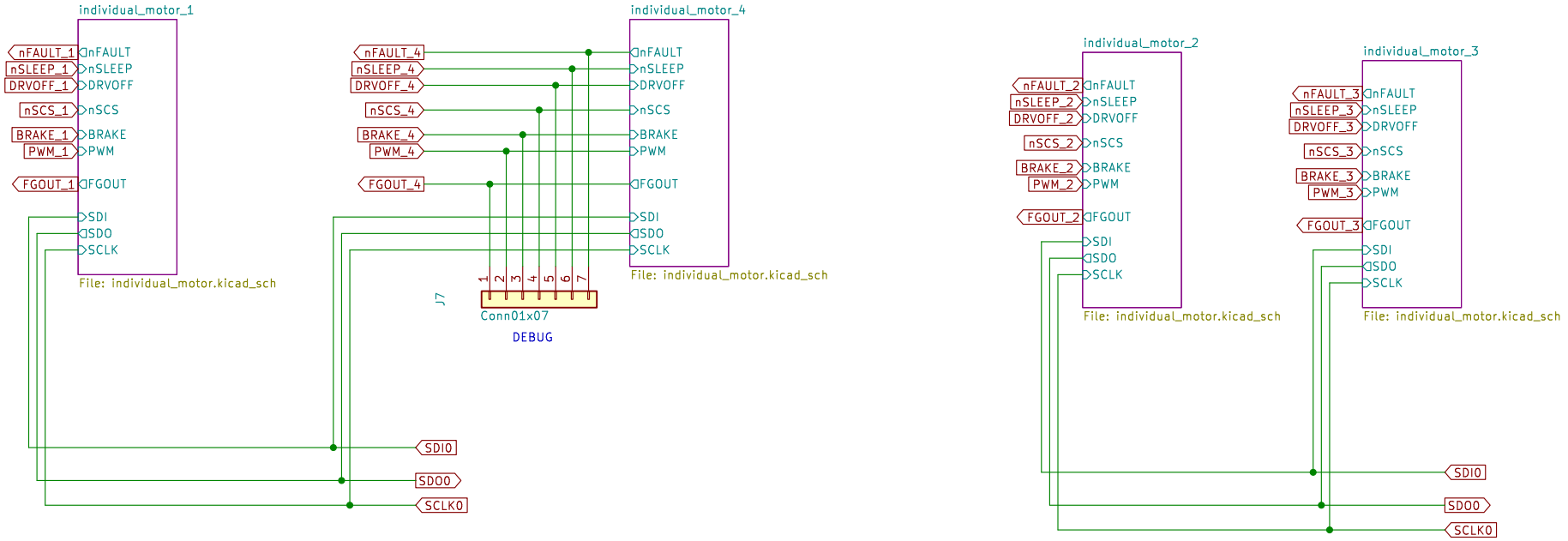
Power

Carson Lauer
Stanford Student Space Initiative

Sheet: /Power/
File: Power.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 5/10

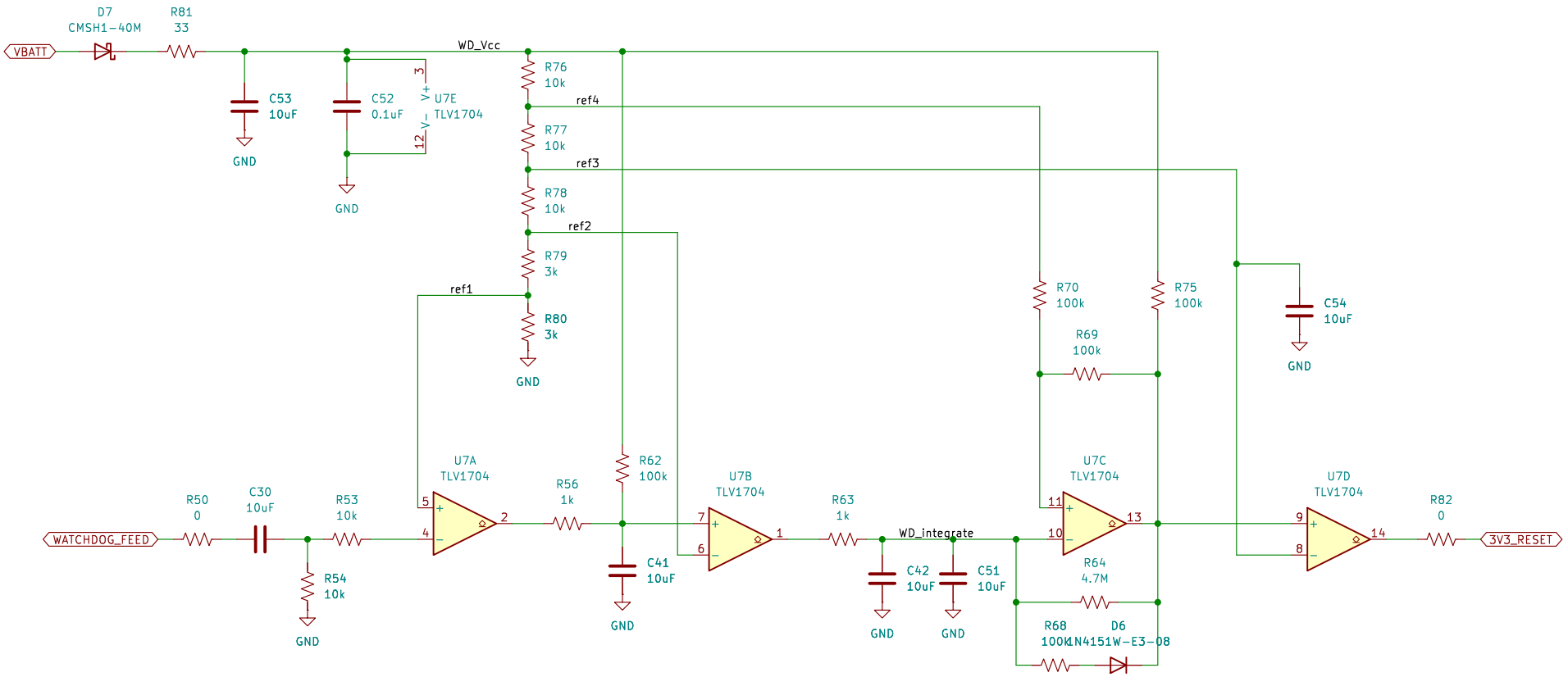


Carson Lauer
Stanford Student Space Initiative

Sheet: /Motors/
File: motor_driver.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 6/10



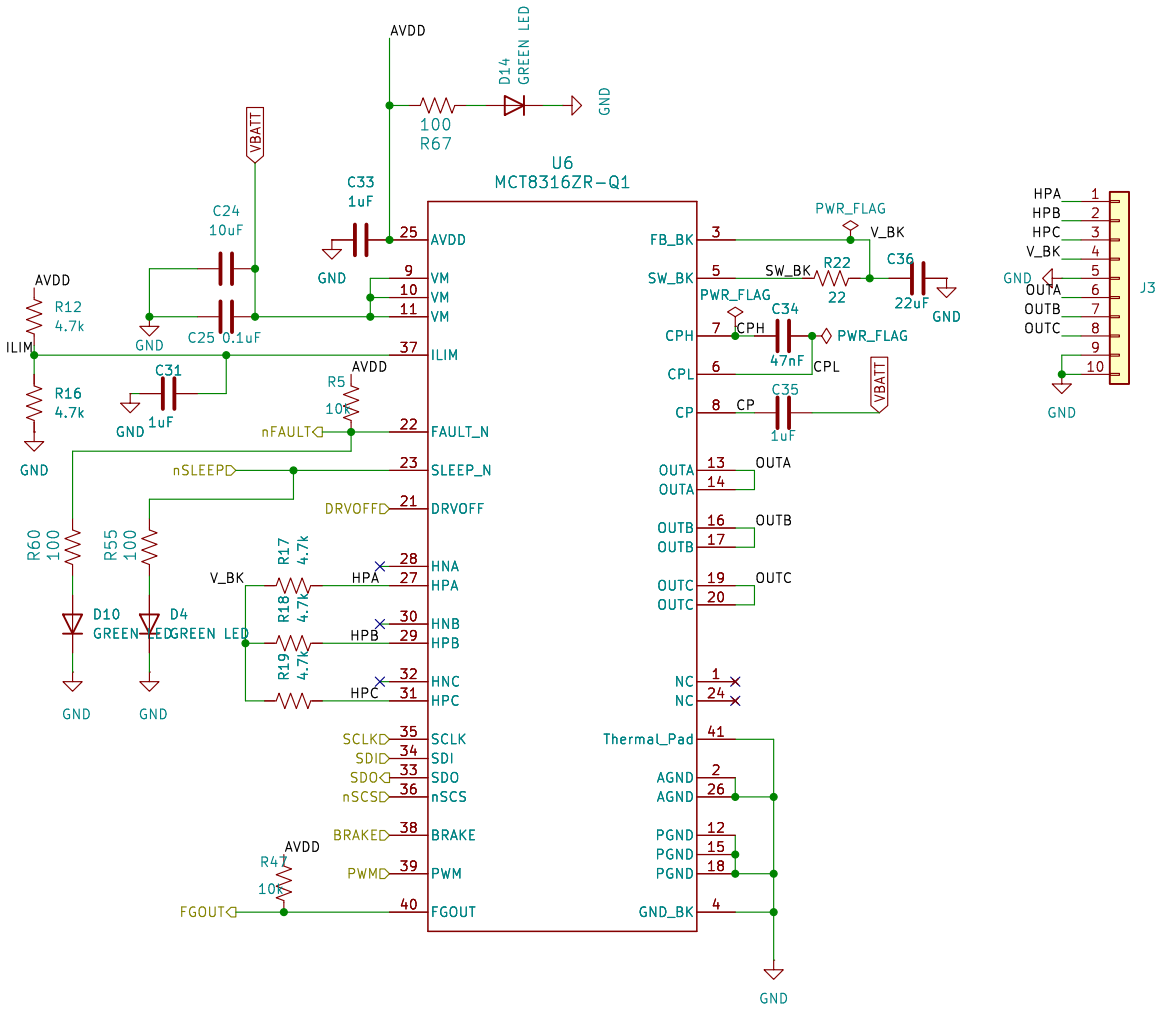
Circuit based on Oresat's watchdog circuit:
https://github.com/oresat/oresat-c3-hardware/blob/master/kicad/oresat-c3-sch-watchdog.kicad_sch

Carson Lauer
Stanford Student Space Initiative

Sheet: /Watchdog/
File: watchdog.kicad_sch

Title: Reaction Wheel Motor Board

Size: USLetter	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 7/10



Carson Lauer

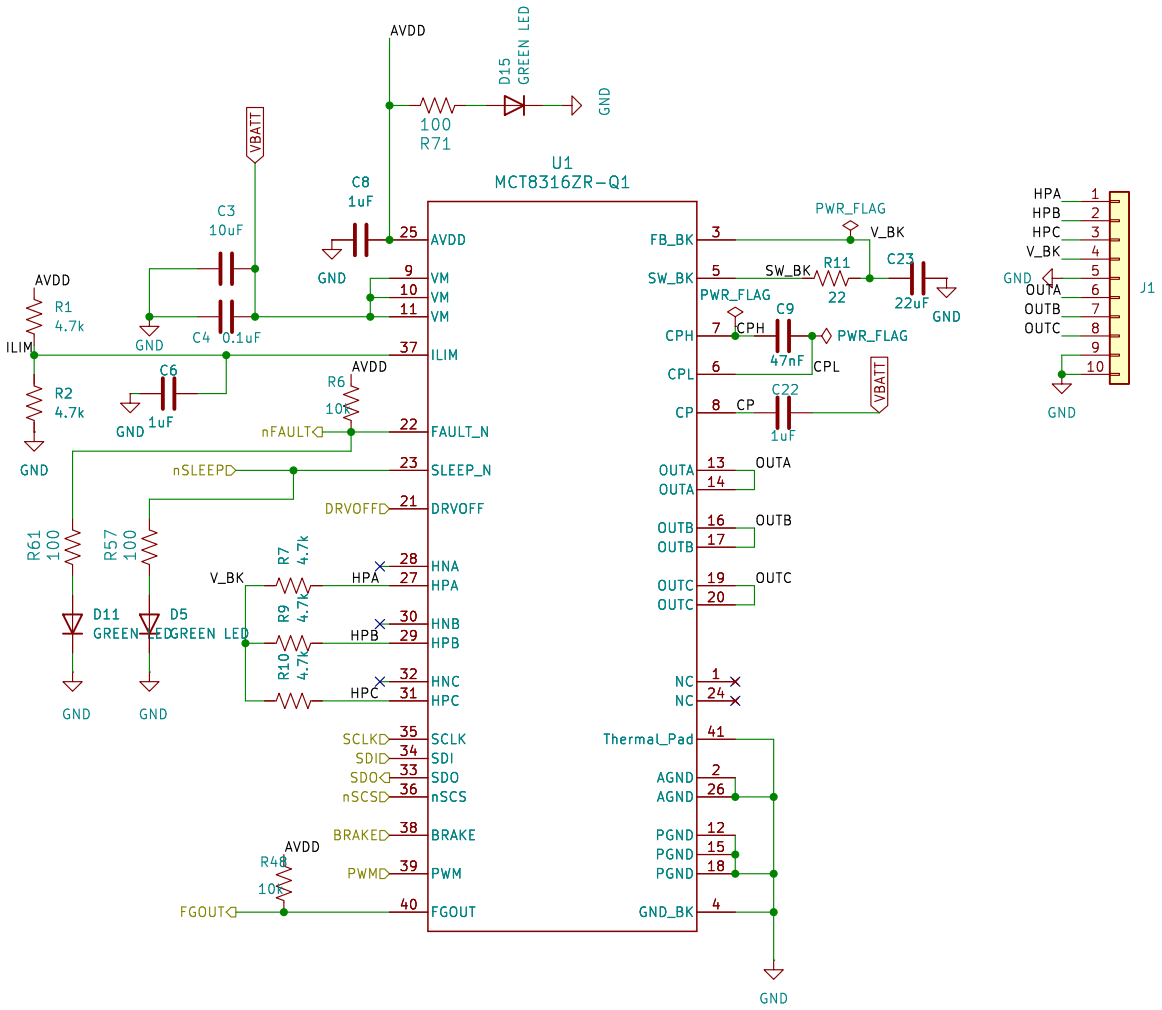
Stanford Student Space Initiative

Sheet: /Motors/individual_motor_2/

File: individual_motor.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 3/10



Carson Lauer

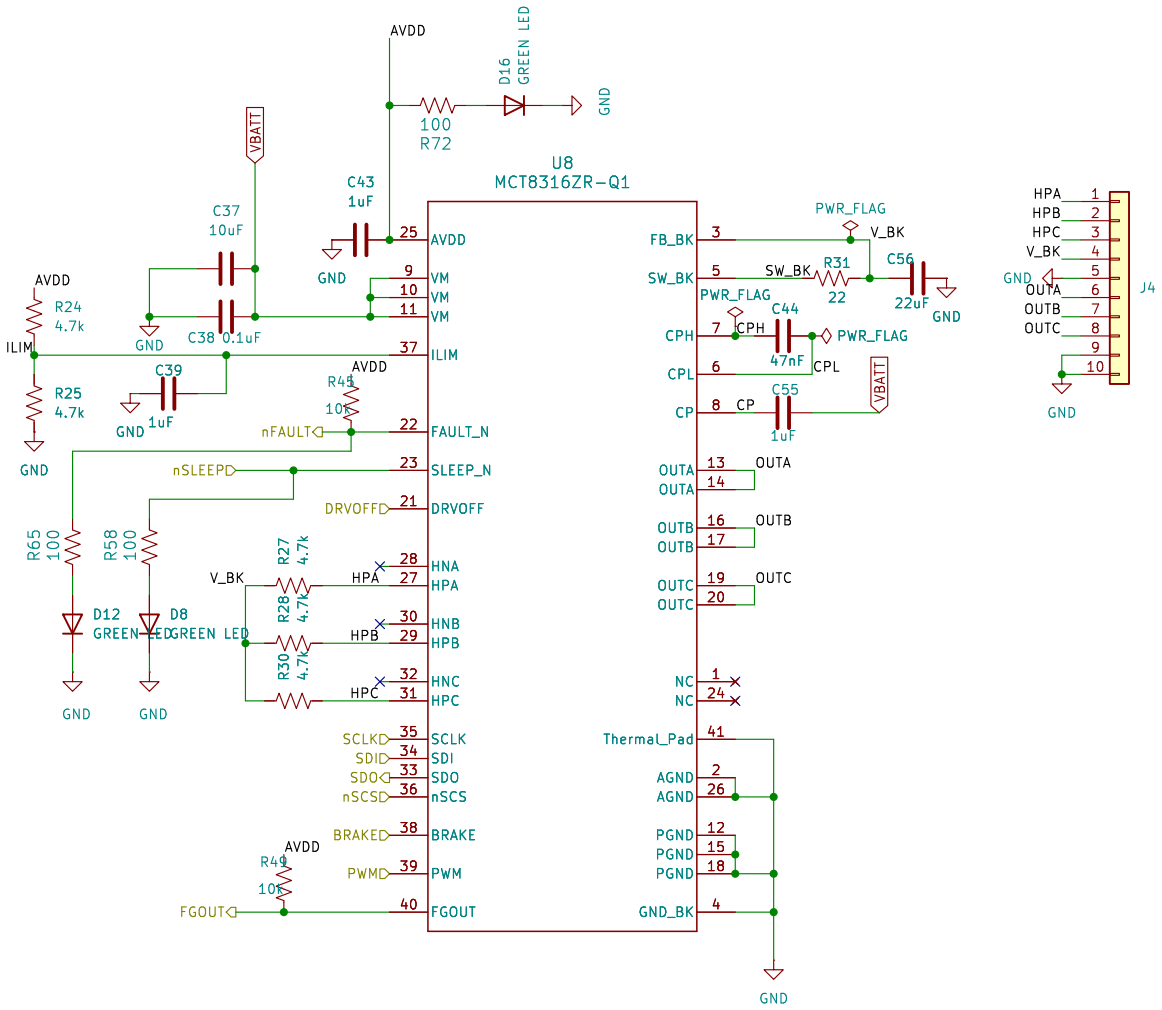
Stanford Student Space Initiative

Sheet: /Motors/individual_motor_1/

File: individual_motor.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 7/10



Carson Lauer

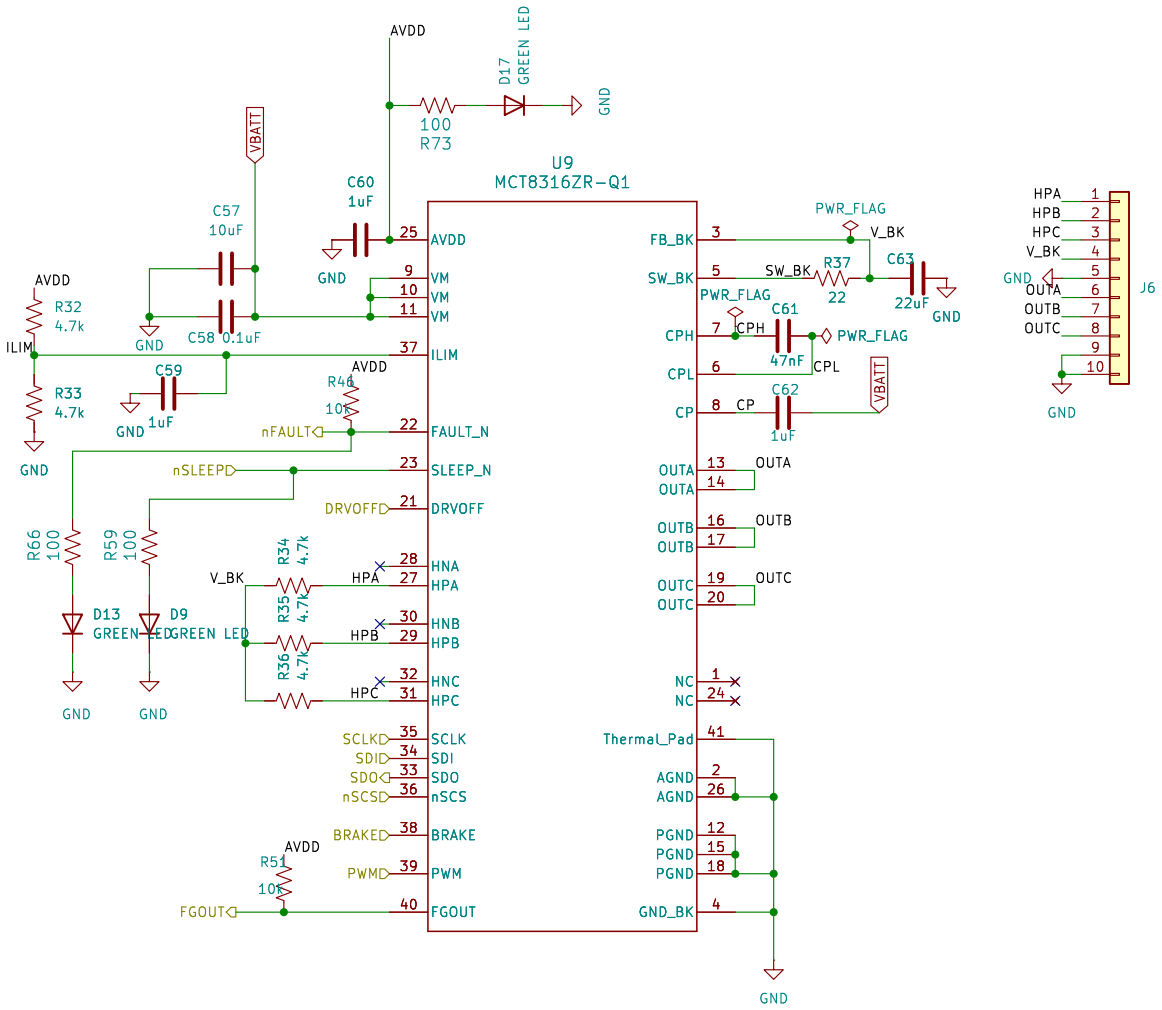
Stanford Student Space Initiative

Sheet: /Motors/individual_motor_3/

File: individual_motor.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 8/10



Carson Lauer

Stanford Student Space Initiative

Sheet: /Motors/individual_motor_4/

File: individual_motor.kicad_sch

Title: Reaction Wheel Motor Board

Size: A4	Date: 2025-04-07	**Rev: 1.1**
KiCad E.D.A. 9.0.2		Id: 9/10