

Provides Position and Acceleration Data  
 BHI160B Inertial Measurement Unit & Supporting Components  
**Thomas Francois, Missouri S&T Mars Rover Design Team**

Sheet: /Top Board/IMU #1 - BHI160B/  
 File: BHI160B.kicad\_sch

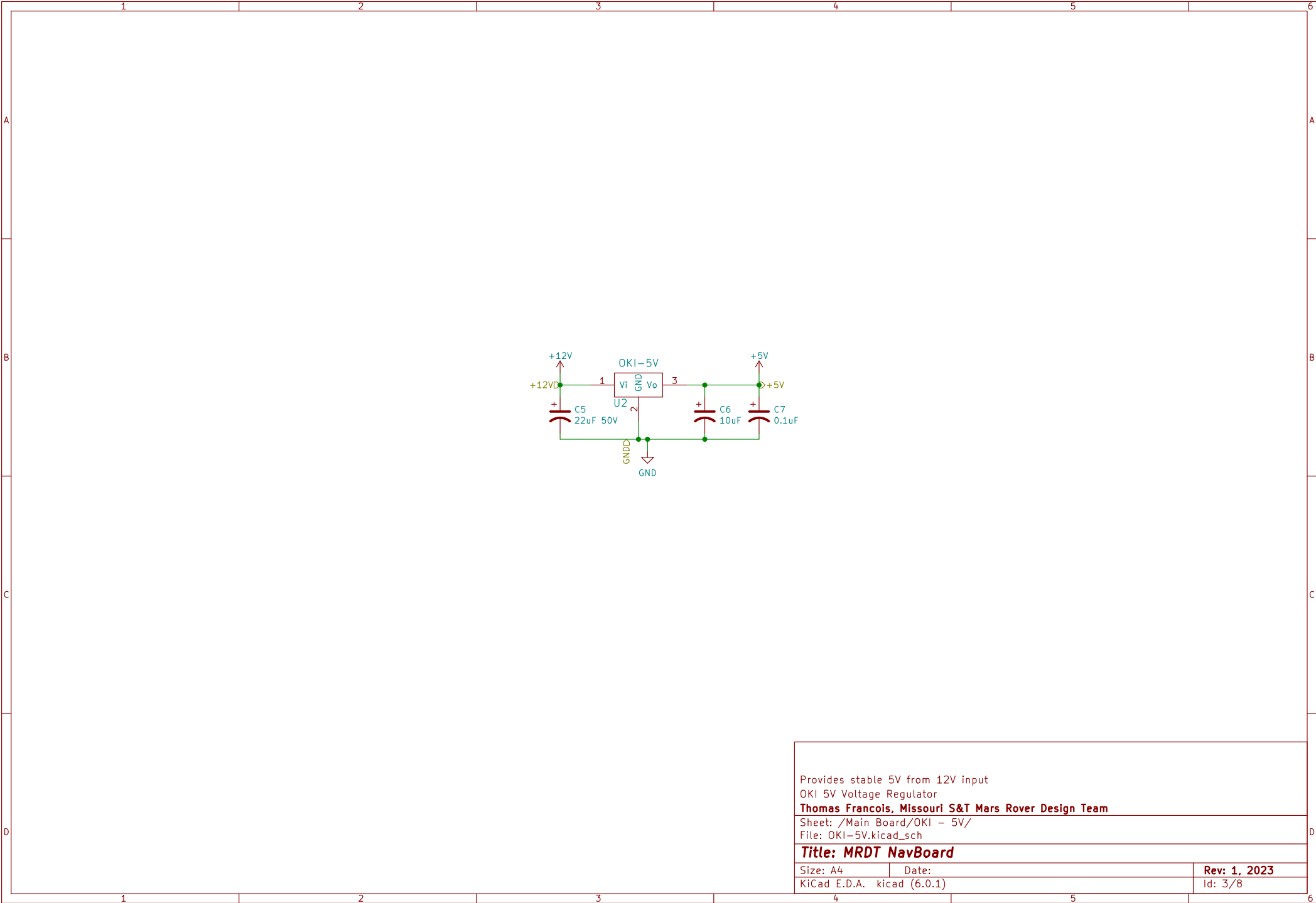
**Title: MRDT NavBoard - BHI160B**

Size: A4 Date: 2022-09-15

KiCad E.D.A. kicad (6.0.1)

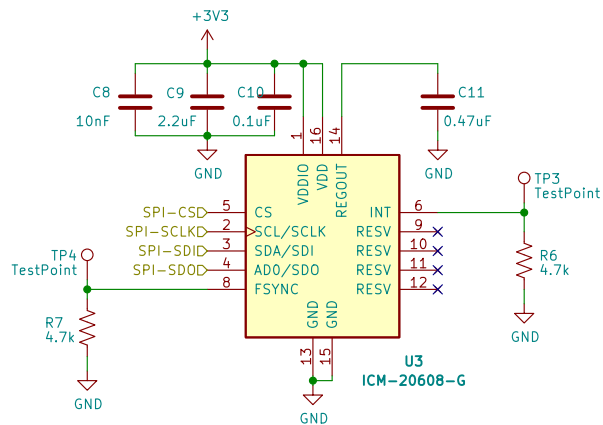
**Rev: 1, 2023**

Id: 2/8



Provides stable 5V from 12V input  
OKI 5V Voltage Regulator  
**Thomas Francois, Missouri S&T Mars Rover Design Team**  
Sheet: /Main Board/OKI - 5V/  
File: OKI-5V.kicad\_sch

<b>Title: MRDT NavBoard</b>		
Size: A4	Date:	Rev: 1, 2023
KiCad E.D.A. kicad (6.0.1)		Id: 3/8

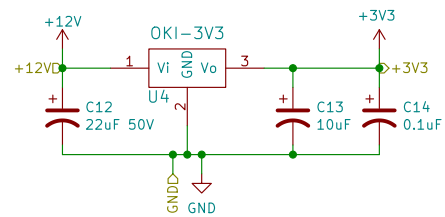


Provides Position & Acceleration Data  
Inertial Measurement Unit and Supporting Components  
**Thomas Francois, Missouri S&T Mars Rover Design Team**

Sheet: /Top Board/IMU #2 - ICM-20608/  
File: ICM-20608.kicad\_sch

**Title: MRDT NavBoard - ICM-20608-G**

Size: A4	Date: 2022-09-15	Rev: 1, 2023
KiCad E.D.A. kicad (6.0.1)		Id: 4/8



Provides stable 3V3 from 12V input

OKI 3V3 Voltage Regulator

**Thomas Francois, Missouri S&T Mars Rover Design Team**

Sheet: /Main Board/OKI - 3V3/

File: OKI-3V3.kicad\_sch

**Title: MRDT NavBoard - OKI 3V3 Voltage Regulator**

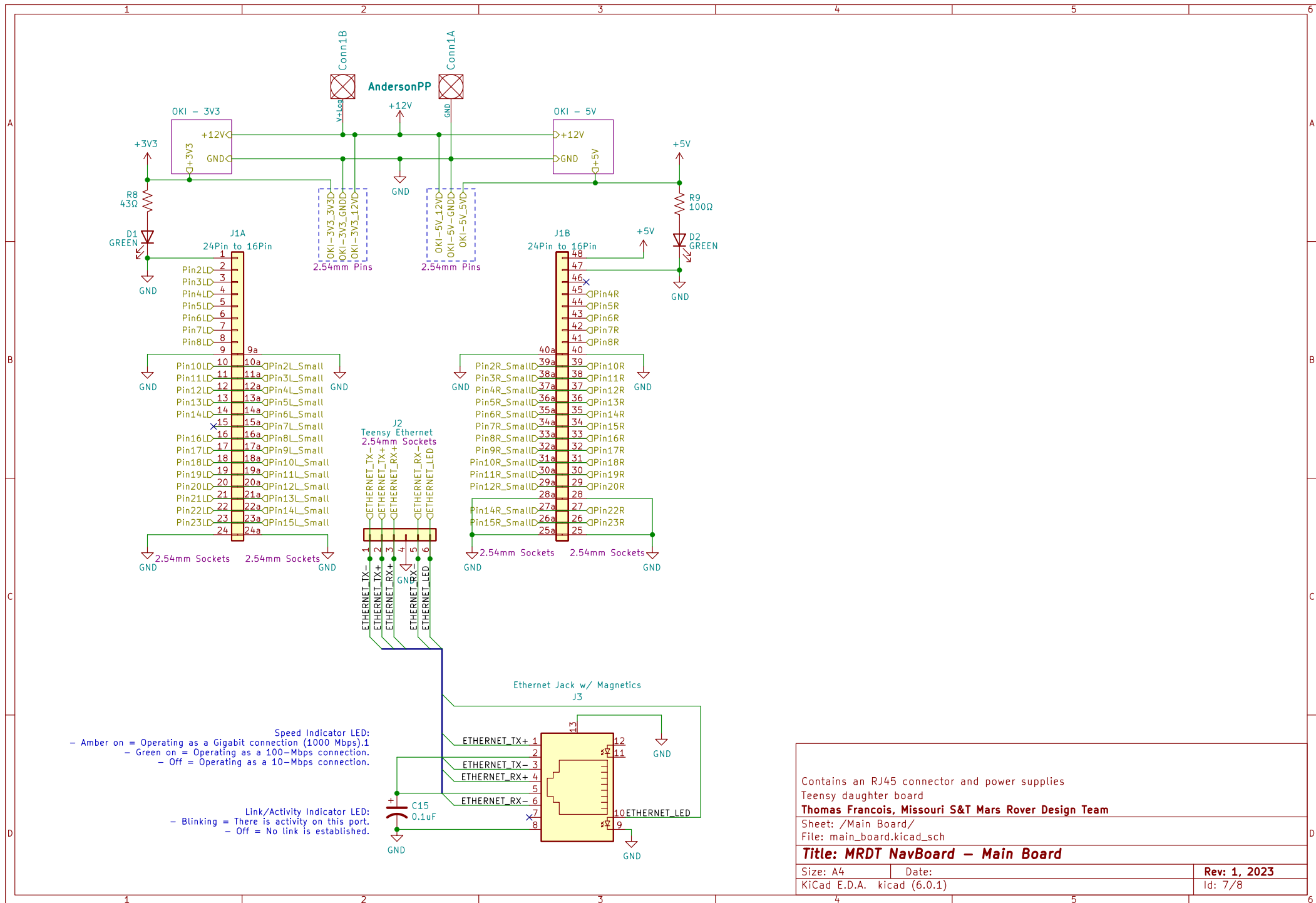
Size: A4

Date: 2022-09-17

Rev: 1, 2023

KiCad E.D.A. kicad (6.0.1)

Id: 5/8



Contains an RJ45 connector and power supplies

Teensy daughter board

**Thomas Francois, Missouri S&T Mars Rover Design Team**

Sheet: /Main Board/

File: main\_board.kicad\_sch

**Title: MRDT NavBoard - Main Board**

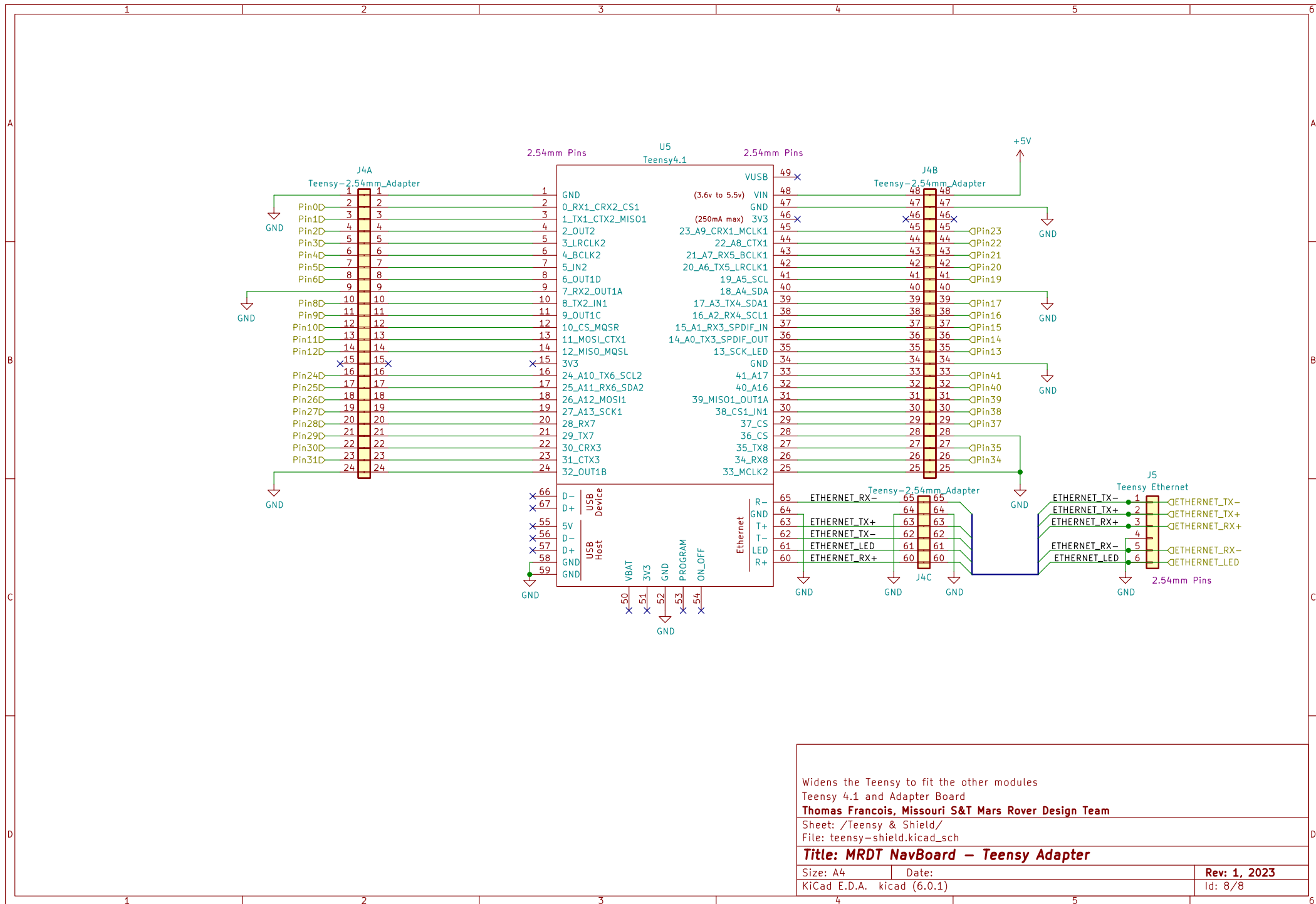
Size: A4

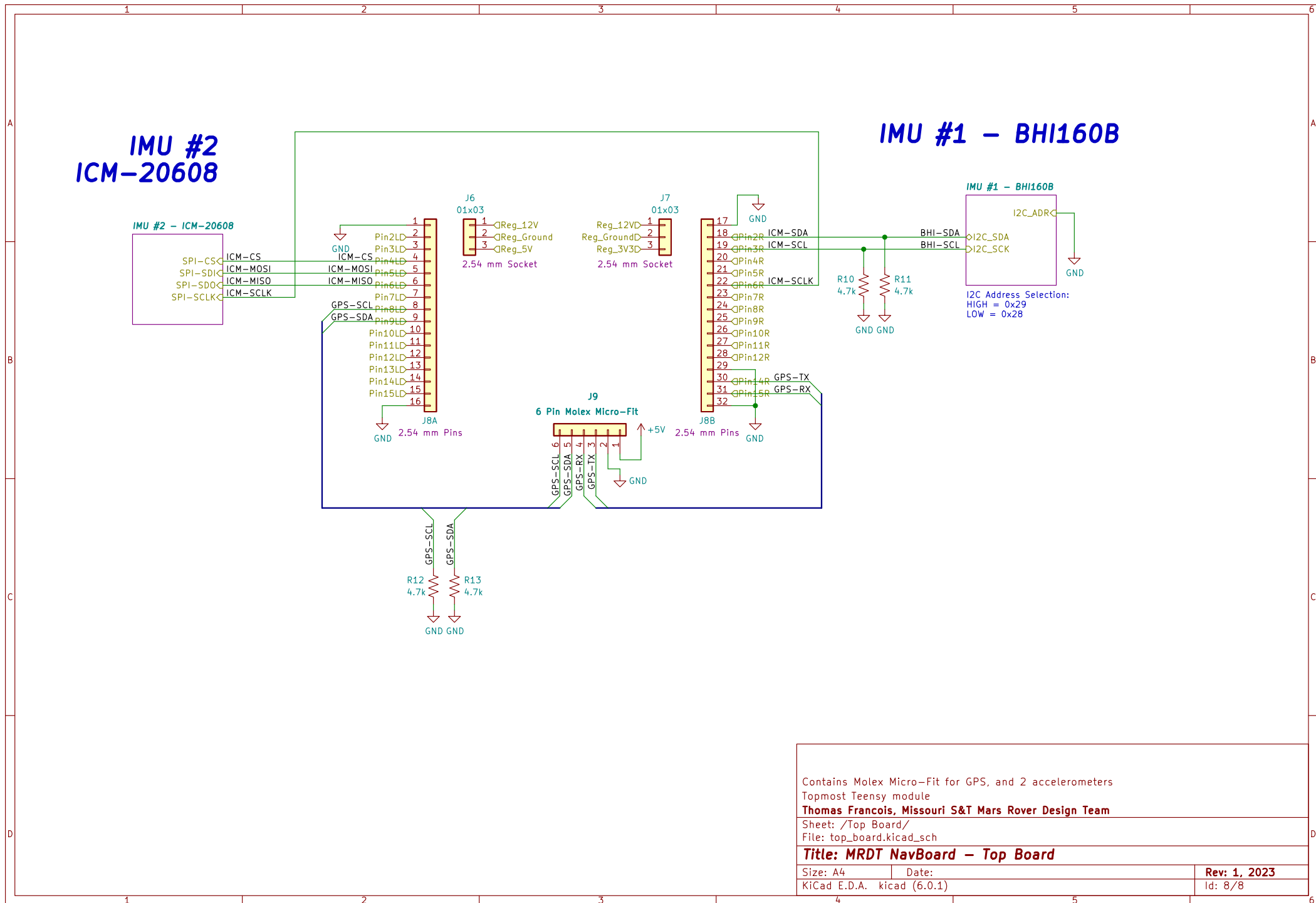
Date:

KiCad E.D.A. kicad (6.0.1)

**Rev: 1, 2023**

Id: 7/8





Contains Molex Micro-Fit for GPS, and 2 accelerometers Topmost Teensy module <b>Thomas Francois, Missouri S&amp;T Mars Rover Design Team</b>		
Sheet: /Top Board/ File: top_board.kicad_sch		
<b>Title: MRDT NavBoard – Top Board</b>		
Size: A4	Date:	Rev: 1, 2023
KiCad E.D.A. kicad (6.0.1)		Id: 8/8