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Milestone 2: Written Test Plan

Engr 454

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Milestone 2

Hardware tests:

* After finishing the build kit, check all screws and connections to ensure a solid frame with maximum stability.
* Plug in power and check to see if both boards are powered on (LED’s on and flashing or solid)
* Connect SCL and SDA pin of the Balance Shield V3 to ADC0 and ADC1 on the ESP32 (check for continuity).
* Connect ESP32 to a computer and verify that it will accept software downloads/that the computer recognizes the connection port.

Software tests:

* Run encoder tests to confirm we get the correct angle and angular velocity of the wheels from the encoder.
  + Encoder test
  + Kalman test
  + MPU\_6050\_ESP32 test
* Implement a test to confirm which pins control the direction and speed of each motor.