

Brake Testing Software Plan

Objective: Test functionality of brake software

Hardware: Raspberry Pi, STM32

Test Description	Test Steps	Expected Output	Status Notes
Braking Condition	Output voltage from RPi to either analog pin	Braking condition, GPIO lights up	
Disconnected condition	Output low from RPi to either analog pin	Disconnected condition triggers, no light	
Sensor Error Test	Output low to analog pin 1 and high to analog pin 2.	Flicker GPIO	Not implemented yet

Need to Implement:

- Add functionality to compare the two sensors and signal when they are significantly different, indicating an issue with the one sensor.
- Find max possible value that the analog pins should output and check whether either average is above (might not be able to test using RPi because max is 3.3V.)