

# Door Handle Tester - Team 17

## Overview of Purpose

- Create an automotive door handle tester to increase the speed and accuracy of testing.

## Overview Specs

- Test setup should be no longer than 15 minutes
- Test duration should be no longer than 2 minutes
- Less than 10% in a Gauge R&R study
- Fit 5 unique MAGNA handles
- Create a universal benchmark fixture

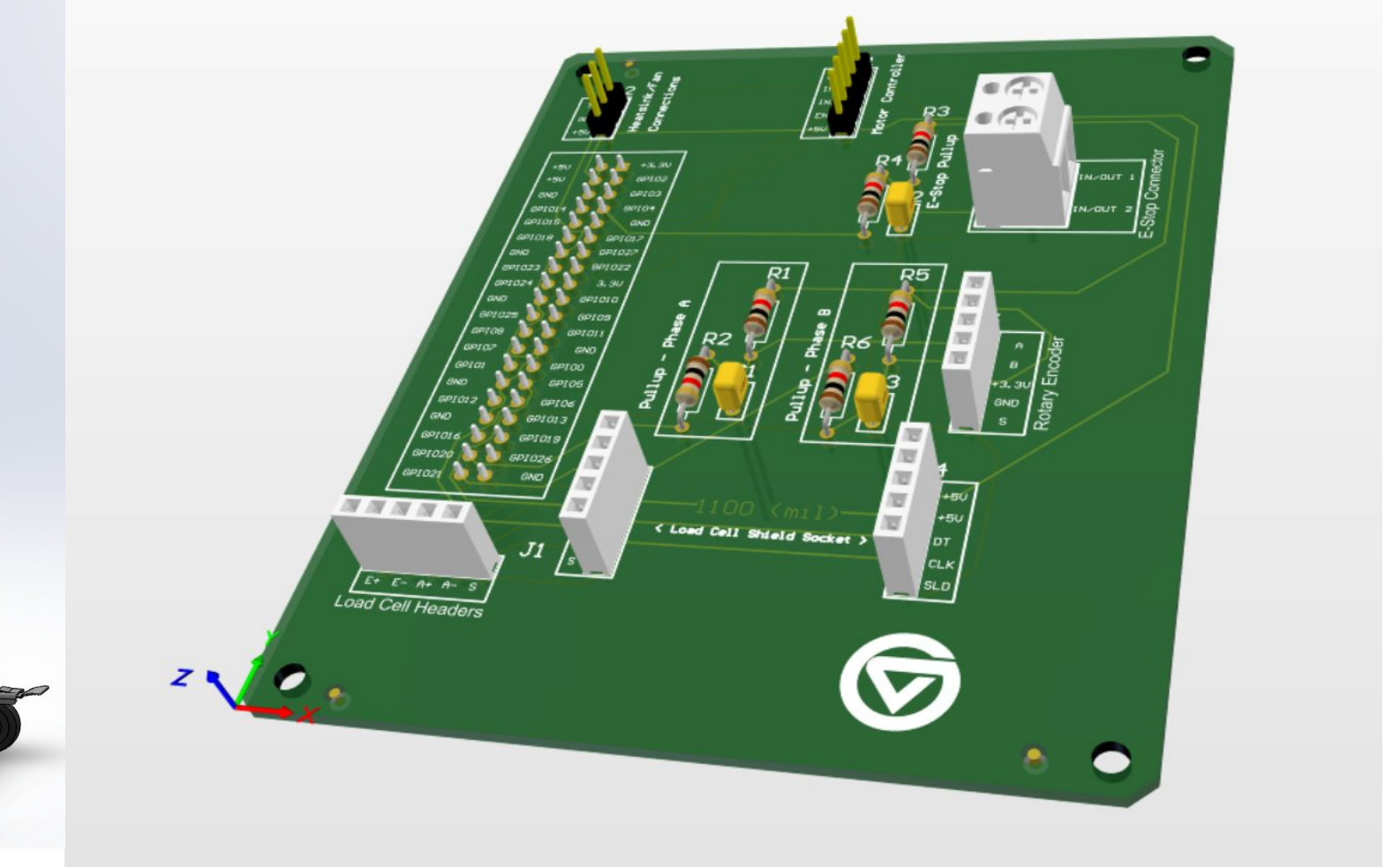
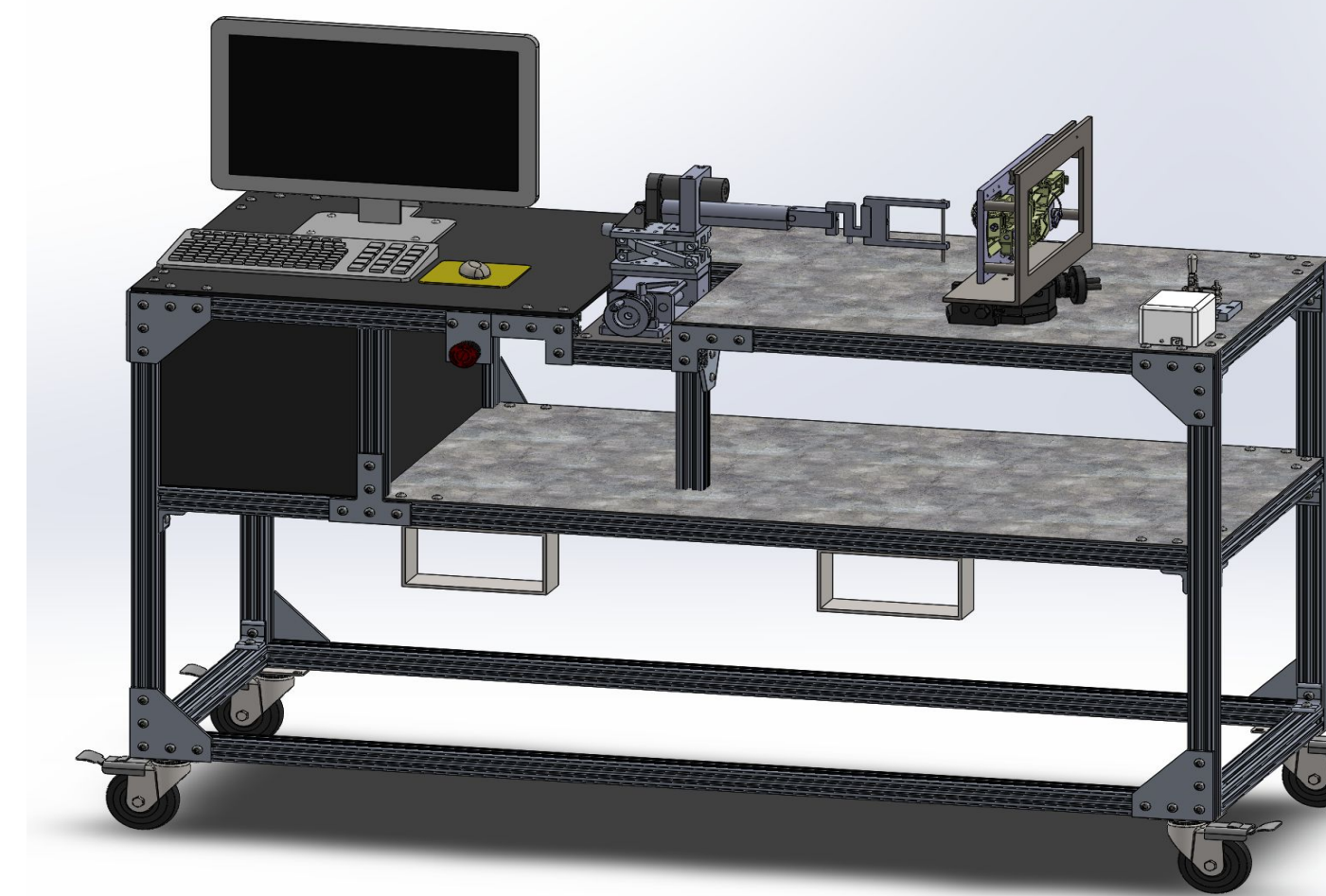
## Use Case

- User manually load handles on to fixture
- Control actuator position with custom user interface to position handle gripper
- Start test to pull handle, measure cable travel, and force
- Exports data to USB for further study

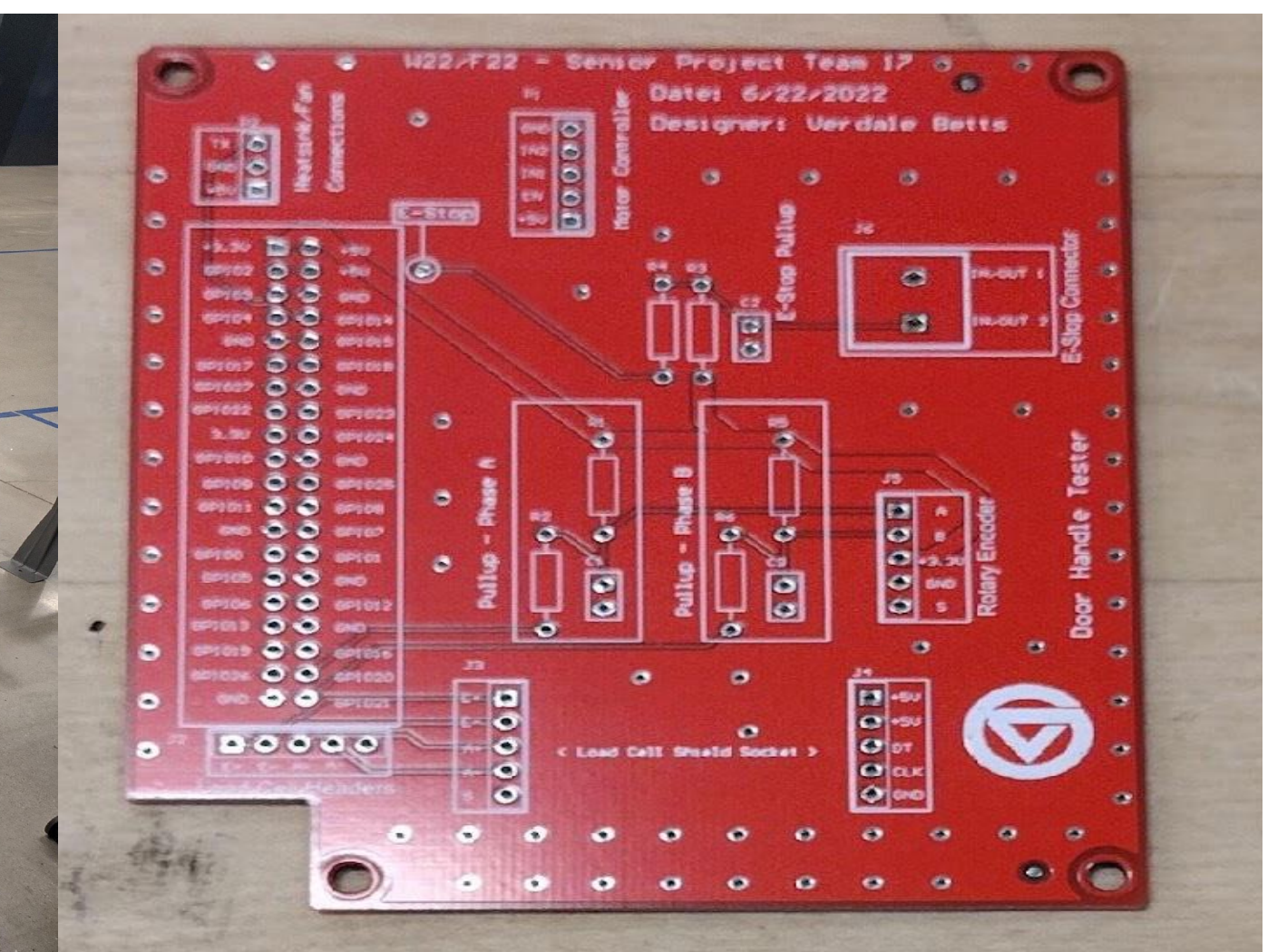
## How Specs Were Met

- To meet time specs
  - Thumb screws to hold handles to fixture
  - Automation of pulling handle
- To meet R&R
  - Sturdy frame for tester
  - Automated pulling of handle
- To fit all handles
  - Adaptable handle fixture
  - Benchmark plate

## Design



## Build



## Test

