

## Problem Statement

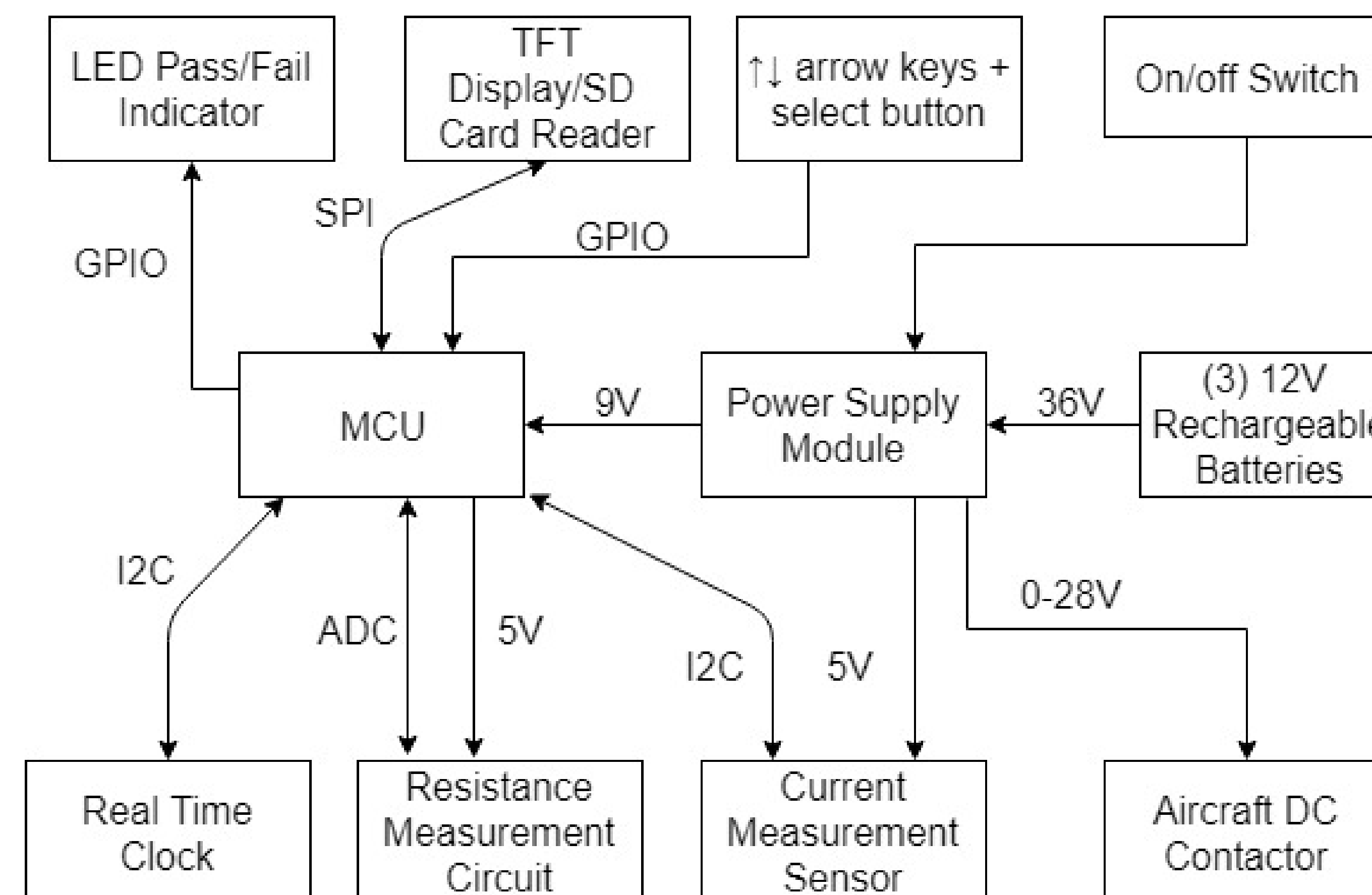
Develop a portable, automated test set to test aircraft DC contactors to their specification datasheets.

## Product Requirements

- Portable (less than 10lbs)
- Tests contactors according to manufacturer datasheet
- Display PASS/FAIL results
- Transfer data through USB to a non-network computer



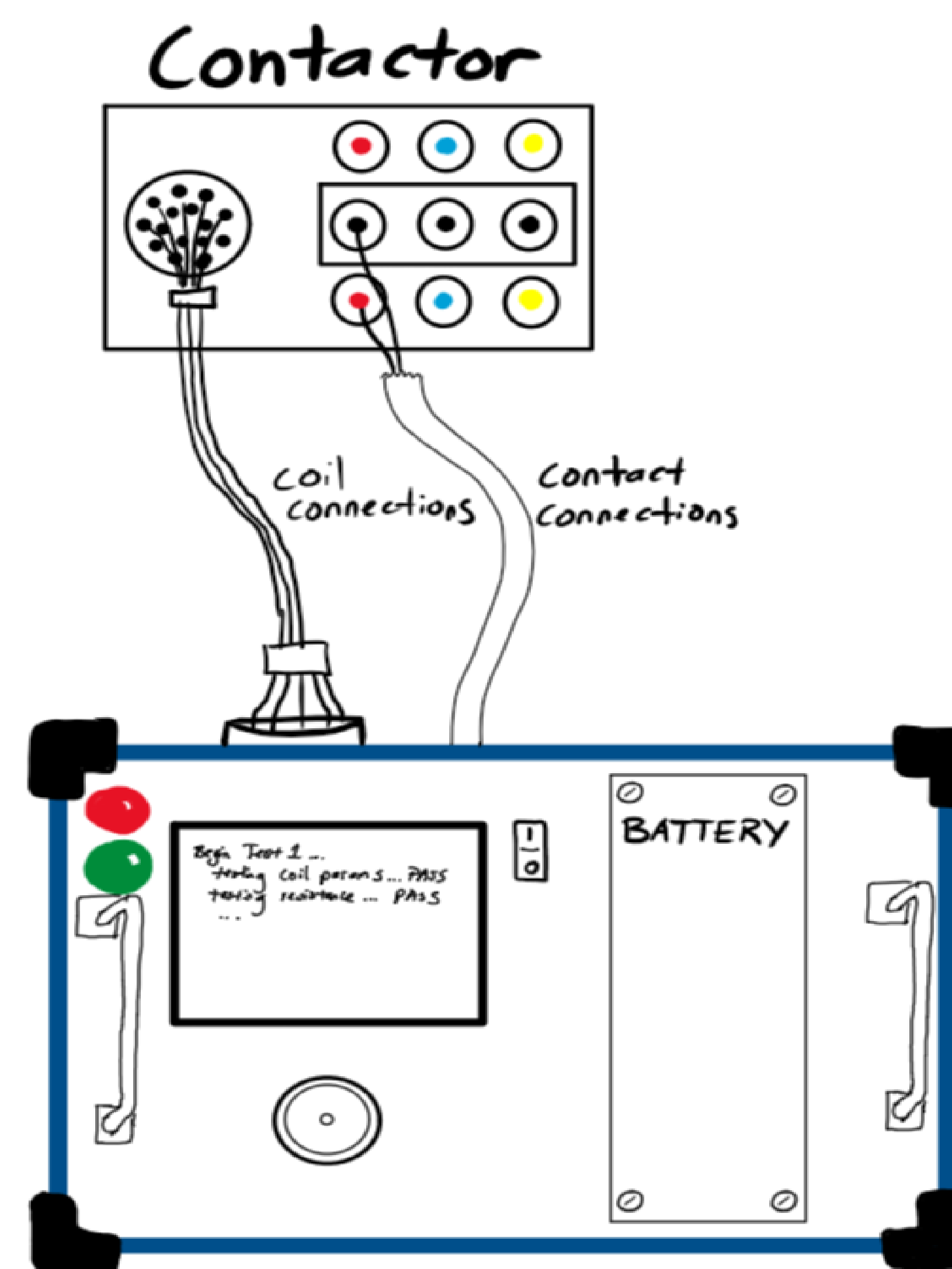
## Current System Diagram



## Major Achievements

- Variable voltage power supply
- Precise resistance measurement
- Intuitive user interface design
- File transfer capabilities
- Streamline system operation for reduced power consumption
- Migration to custom PCBA

## User Implementation



## Conclusion

- Achieved proof of concept – full automation and comprehensive multi-configuration testing of DC contactors via portable test set
- Test set is scalable for higher power DC contactor configurations