

Problem Statement

HyTech racing is interested in a custom battery management system, a data recording system, and a user interface for charging Lithium Cobalt Oxide pouch battery cells. The end goal is efficient battery charging and health estimation. The designed system/device is required to: charge at least 9 battery cells at a time (~38V total), charge at around 10A of current, record voltage and current data for every battery cell, implement a cell balancing algorithm, and must be powered from a regular electrical wall outlet.