

Power Rangers

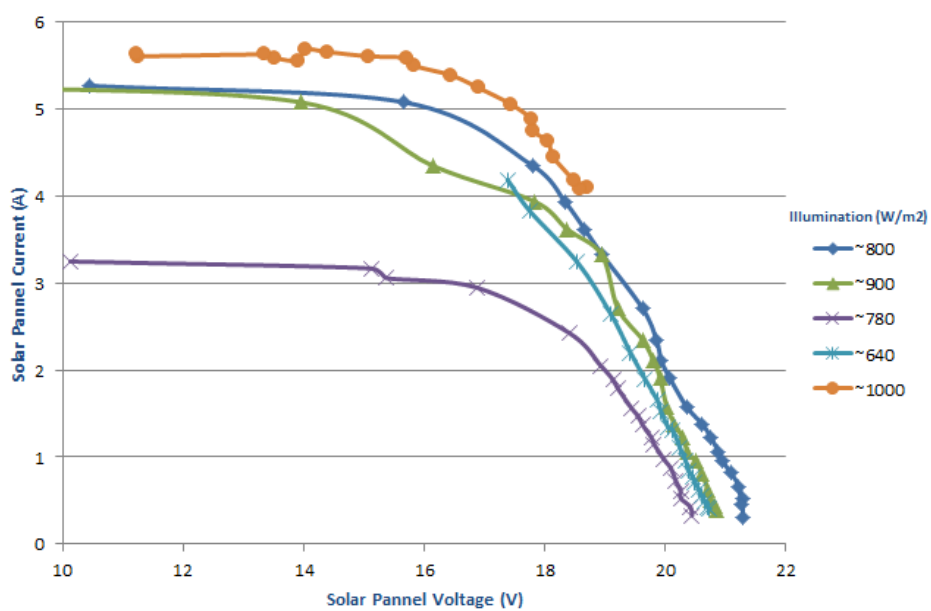
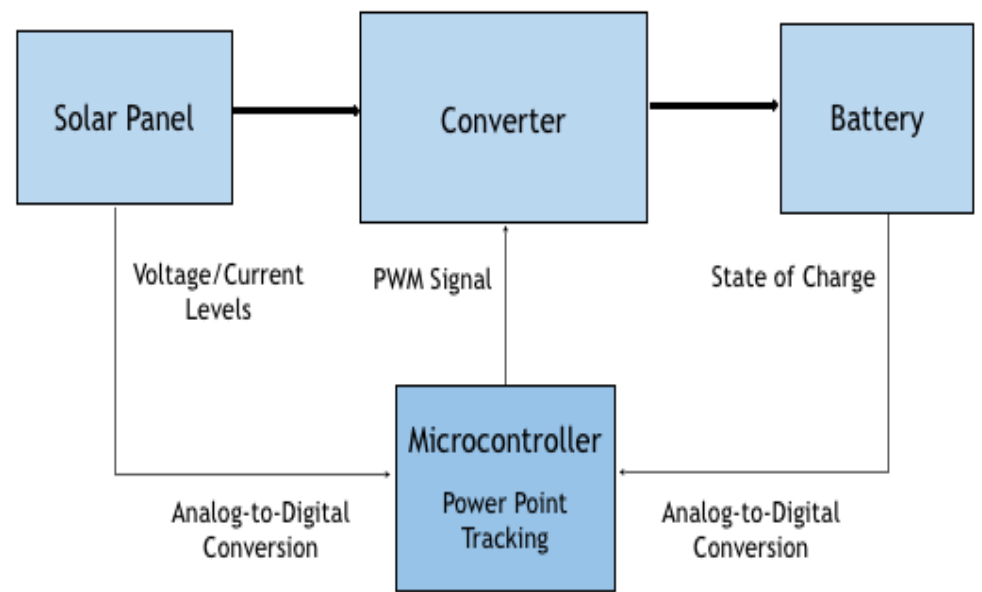
Maximizing the Efficiency Out of a Solar Panel

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Proposal

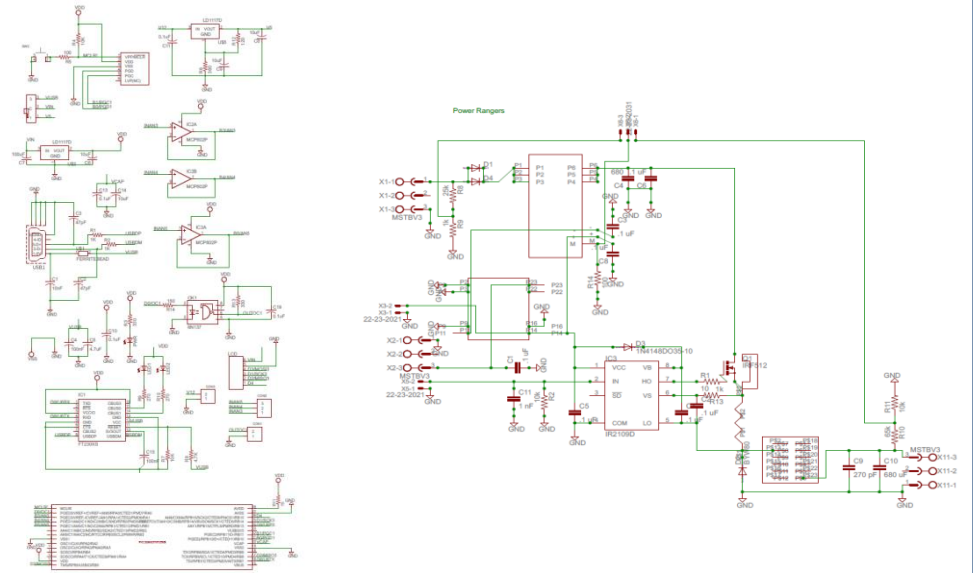
The fundamental phenomenon leading to the necessity of this project is dependence of power generated by a solar array on the voltage it is being operated at. Depending on the irradiance of light, the point at which the solar array outputs maximum power occurs at a different voltage. The goal of this project is to have a converter that tracks the maximum power point, and drives the converter so that maximum power is always being input to the battery.

Proposed Solution



Current/Voltage Relationships for Solar Array

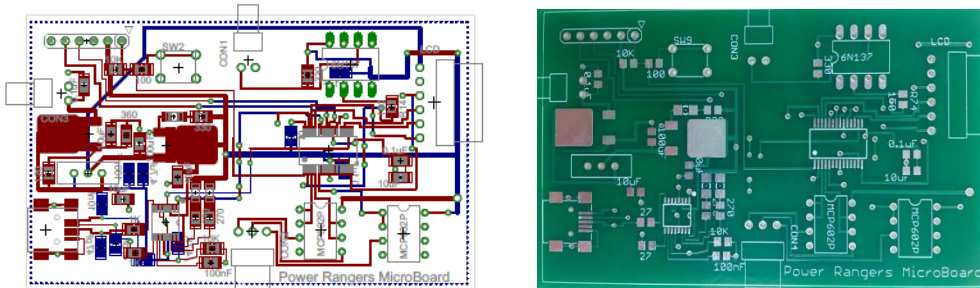
Schematics



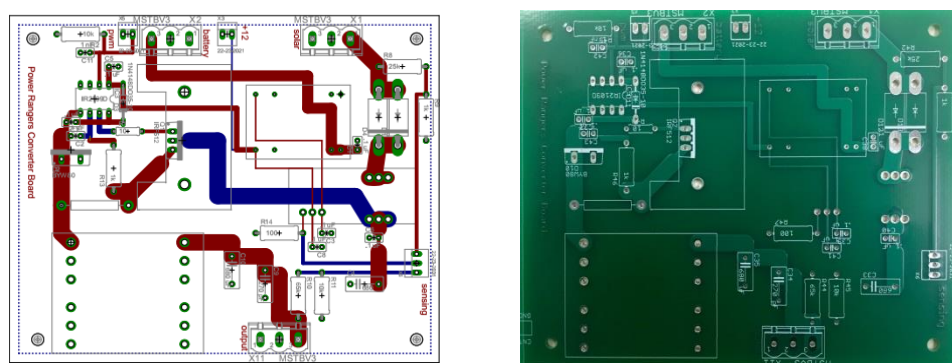
Microcontroller

Converter Board

Board Designs



Microcontroller



Converter Board

