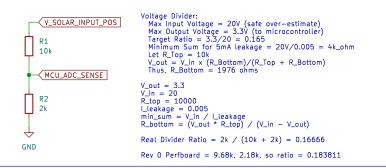
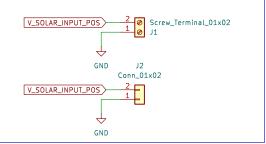


Microcontroller:

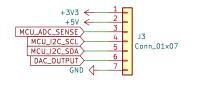
Voltage Divider: Sense the total cell/panel voltage



Solar Cell/Panel Hook-Up



Microcontroller Pin Breakout for Debugging



TODO: maybe add driver to apply voltage to panel shortly

A short story explaining this project

This solar panel load tester is design to apply a known, consistent, variable load to solar cells and/or panels in order to characterize their I-V and P-V curves. It uses two methods for current sensing; a current sense shunt resistor and precision current sense IC, AND, a MOSFET in its linear region with an op-amp and another shunt resistor.

The microcontroller will log information about the total panel/cell voltage and current over UART for plotting and analysis.

This schematic will first be built on a perfboard, and will likely be manufactured into a PCB shortly thereafter.

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