**EEE3088F Week 3: Design Proposal**

**Group Number**:

**Group Members:** MD SHAIHAN ISLAM (ISLMDS002), MICHAEL HILLS (HLLMIC031), ZUHAYR LOONAT (LNTZUH001)

**Power Subsystem:**

**Specifications:**

* Must have polarity protection for charging the battery
* Must have polarity protection from the input voltage for the rest of the circuit
* Must accept input voltage of 5V via a battery or leads
* Must output a voltage of 3.3V
* Must have a LED output when output voltage of power subsystem is on
* Must have voltage cut-off when input voltage into the voltage divider is less than 3.3V

**Draft Bill of Materials**

<https://github.com/zuhayrl/EEE3088F_Proj/blob/82cb426b756778753f15d8b4452abae63c901c77/Power%20BOM.xlsx>

Total = $0.2101 /PCB = $1.505

Diagram, schematic

Description automatically generated

**Submodule Interface:**

This circuit interfaces with the outside world via visual stimulus, as when the circuit has power, an LED turns on. It also receives an input voltage from a 5V Lithium-Ion Battery. It Interfaces with every other circuit on the board via its output 3.3V as their input voltage/power supply.