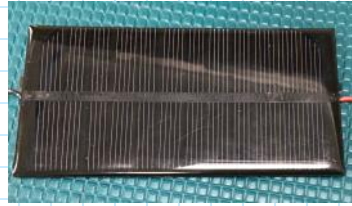


Energy harvesting board testing 1111

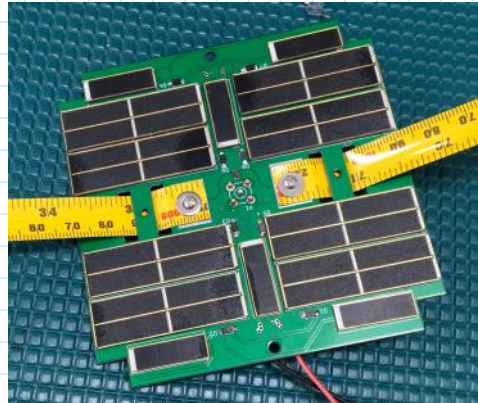
2019年11月11日 星期一 15:35

1. Apparatus :

Solar cell 1 :



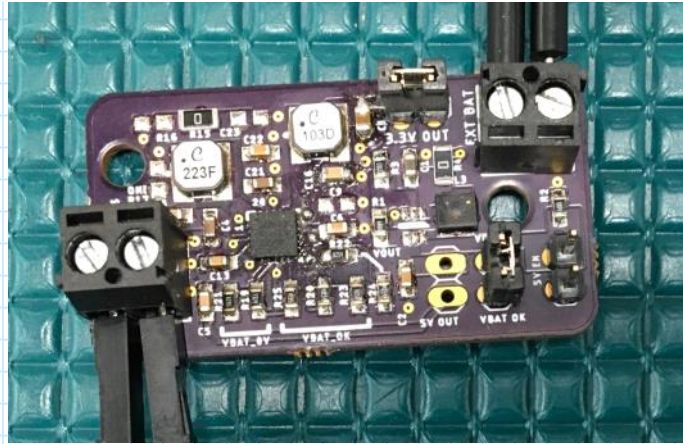
Solar cell 2 :



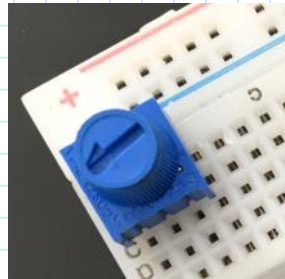
Battery :



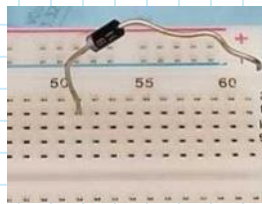
Energy Harvesting Board:



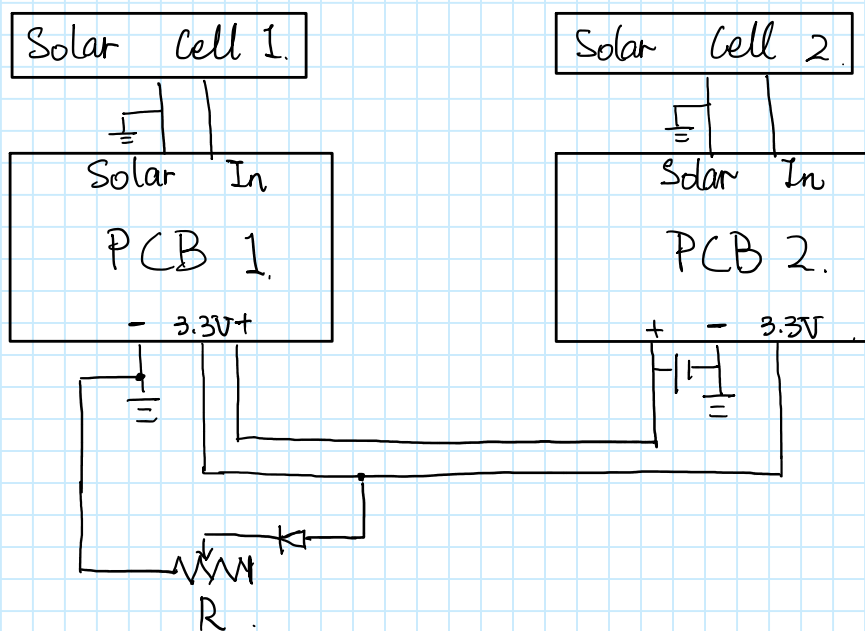
Potentiometer.

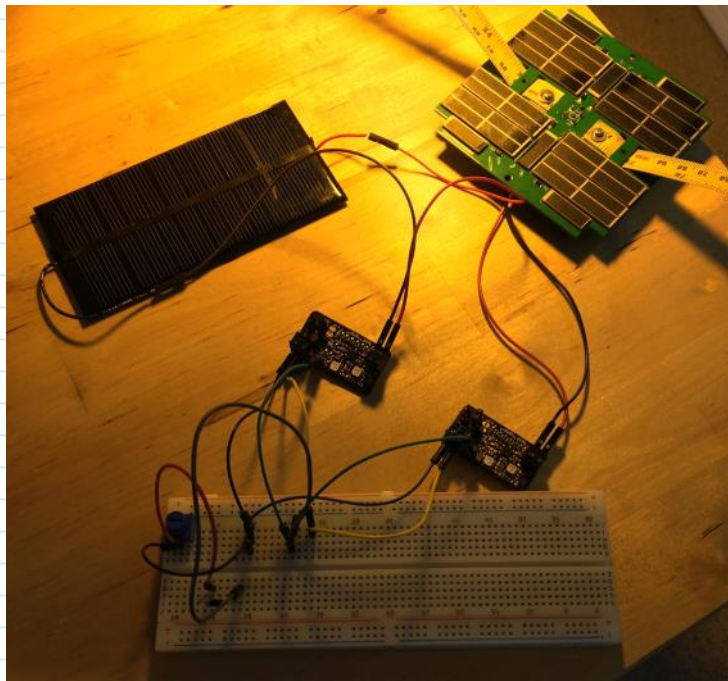


Diode.



2. Test 2 PCBs with lamp light and diode.





Case 1: $R = 146.2 [\Omega]$.

Solar Cell 1: $3.3 - 4.3 [V]$

Solar Cell 2: $2.3 - 2.6 [V]$.

1) Before connect diode & resistor.

PCB 1: EXT BAT: $4.0 [V]$
 $3.3V OUT: 3.265 [V]$.

PCB 2: EXT BAT: $4.0 [V]$
 $3.3V OUT: 3.265 [V]$.

2) After connect resistor.

PCB 1: EXT BAT: $2.3 - 2.8 [V]$
 $3.3V OUT: 0.3 - 0.4 [V]$.

PCB 2: EXT BAT: $2.3 - 2.8 [V]$
 $3.3V OUT: 0.3 - 0.4 [V]$.

3) After connect resistor and diode.

Solar Cell 1: $2.2 - 2.6 [V]$

Solar Cell 2: $2.2 - 2.7 [V]$.

PCB 1: EXT BAT: $2.3 - 2.8 [V]$
 $3.3V OUT: 0.7 - 0.8 [V]$.

PCB 2: EXT BAT: $2.3 - 2.8 [V]$
 $3.3V OUT: 0.7 - 0.8 [V]$.

a) Only with PCB 1

3.3V OUT : 0.7-0.8 [V].

a) Only with PCB1.

PCB 1 : EXT BAT : 2.4-2.7 [V]

3.3V OUT : 0.60 - 0.69 [V].

b) Only with PCB2.

PCB 2 : EXT BAT : 2.3-2.6 [V]

3.3V OUT : 0.62 - 0.65 [V].