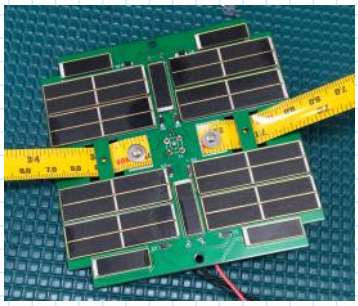
Energy harvesting board testing 1026

2019年10月16日 星期三 19:28

1. Apparatus :

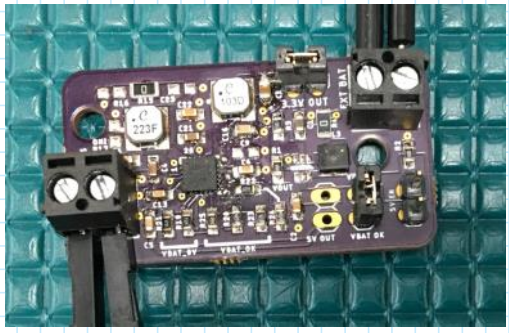
Solar cell 1 :

Solar cell 2 :



Battery :

Energy Harvesting Board :



2. Test behavior of 1 EXT BAT when connect different solar cell.

1) Connected RT

2) Connected 3.7 V battery to EXT BAT.

Battery voltage : 3.94 V.
VBAT OE : 3.93 V
3.3 V OUT : 3.27 V.

3) Connected Solar cell 1 to SOLAR IN.

Solar cell voltage :

Before connect : 3.85 V

After connect : jumping between 3.10 V ~ 3.60 V

Solar cell voltage :

Before connect : 3.85 V

After connect : jumping between 3.10 V - 3.60 V.

3.3 V OUT : jumping between : 3.7 V - 4.4 V.

EXT BAT : jumping between : 3.5 V - 4.3 V.

4) Connected Solar Cell 2 to SOLAR IN.

Solar cell voltage :

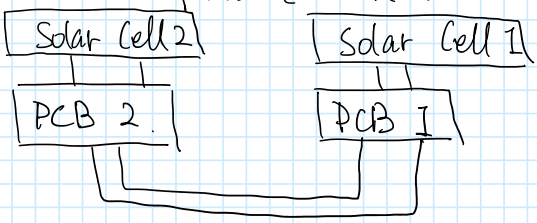
Before connect : 6.6 V

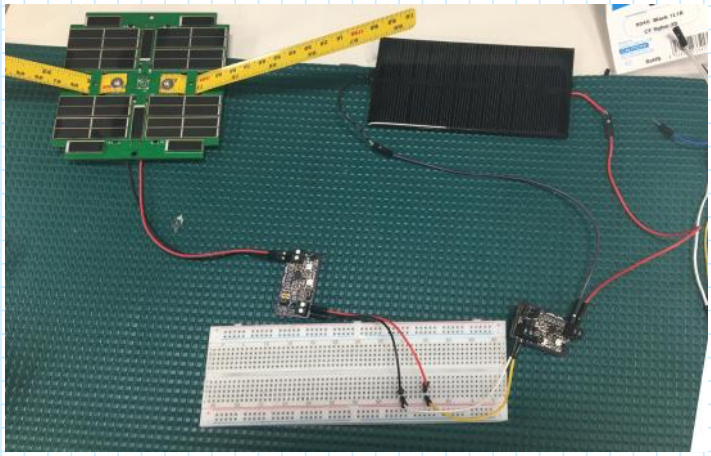
After connect : 3.7 V.

3.3 V OUT : jumping between : 3.43 V - 3.47 V.

EXT BAT : jumping between : 3.46 V - 4.16 V.

3. Test 2 PCB parallel behavior :





Solar Cell 1 : 3.60 V

Solar Cell 2 : 3.55 V

PCB 1 : 3.3 V OUT : 3.29. V

EXT BAT : 4.08 V

PCB 2 : 3.3V OUT : 3.32 V

EXT BAT : 4.08 V

All the measurements for parallel set up are stable.