

HelioMote - a pioneer demo

Software interface

- Software support to enable “harvesting aware management”

```
async command result_t getData();  
async event result_t dataReady(uint16_t volt,  
    int16_t current, uint32_t rtc, uint8_t acc);
```

- nesC API that help Mica2 mote gather information
 - Instantaneous solar power availability
 - Battery terminal voltage
 - Accumulated current

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ElectroMagnetic Interference (EMI) consideration

- Some good design practice
 - Place the GND plane low in the board stack to protect other circuits*
 - Using higher freq PWM for the DC-DC converter to enable smaller filter
 - Moving EMI sourcing components away from the RF circuits

* not clearly illustrated in the paper