Circuit Description

When moving the cap, the PSD sensor will output raw data.
The MCU will read the raw data by ADC and calculate it.
Then it detects the cap moving direction and position. It
upstreams the moving data to host computer by USB interface
or RF2.4G interface. The MCU's basic frequency is 8MHz and
2.4G transreceiver's basic frequency is 16MHz.The charger
will charge for battery when connect USB cable. The slider
switch and FET will turn off the battery power source. The
voltage detector will detect the battery level,it will auto
power down the system when battery level is less than 3.0V.