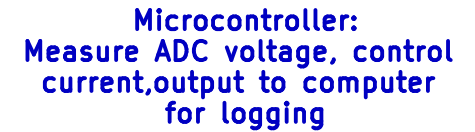


Shunt should
handle 1A max



The diagram shows a voltage divider circuit. The solar panel's positive output, labeled `V_SOLAR_INPUT_POS`, is connected to a 10k resistor (`R1`). The other end of `R1` is connected to a 2k resistor (`R2`). The node between `R1` and `R2` is connected to the `MCU_ADC_SENSE` pin. The bottom of `R2` is connected to ground (`GND`).

```
V_out = 3.3
V_in = 20
R_top = 10000
I_leakage = 0.005
min_sum = V_in / I_leakage
R_bottom = (V_out * R_top) / (V_in - V_out)
```

Rev 0 Perfboard = 9.68k, 2.18k, so ratio = 0.183811

Pin connection diagram for J3 connector:

- Pin 1: +3V3
- Pin 2: +5V
- Pin 3: MCU_ADC_SENSE
- Pin 4: MCU_I2C_SCL
- Pin 5: MCU_I2C_SDA
- Pin 6: DAC_OUTPUT
- Pin 7: GND

Connector: J3 Conn_01x07

Rev: Rev 0
Id: 1/1