



CDR Presentation



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Overview

Block Diagram

Progress since PDR

Work to be finished

Questions



Overall Block Diagram





Progress since PDR



Sensor Schematic

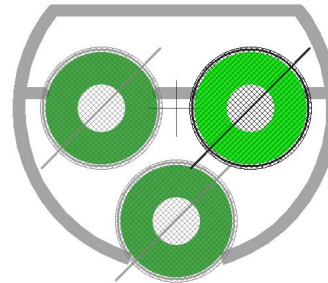
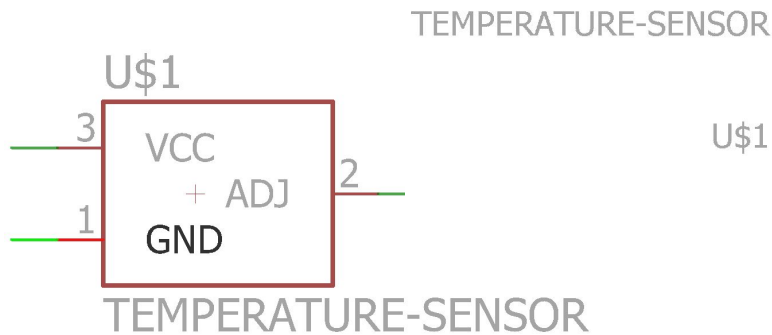
Temperature sensor data sheet is correct

Part in Eagle

Library: Sparkfun-Power

Device: Temperature Sensor

Package: TO-92



CORRECT



TO-92
(DS18B20)



TO-92

1. Emitter
2. Base
3. Collector

1 2 3

Populated Boards

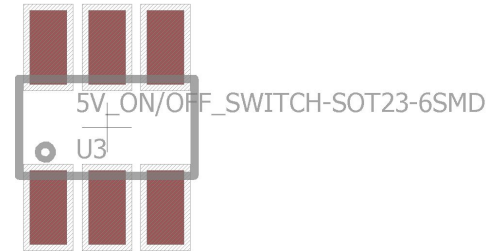
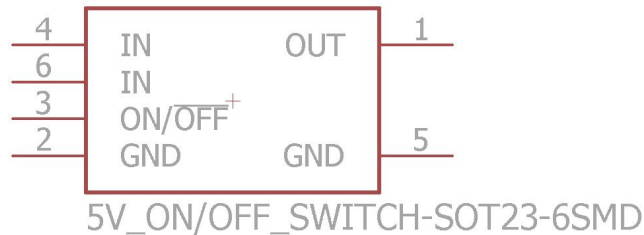


Soldered and connected all parts to PCB and tested Power

Sensors got no power because of the incorrect 5V ON/OFF Switch package

- Pin 1 (OUT) and pin 3 (ON/OFF) were switched
- Bypass switch by jumping pin 3 and pin 4 (IN)

Corrected by creating our own part

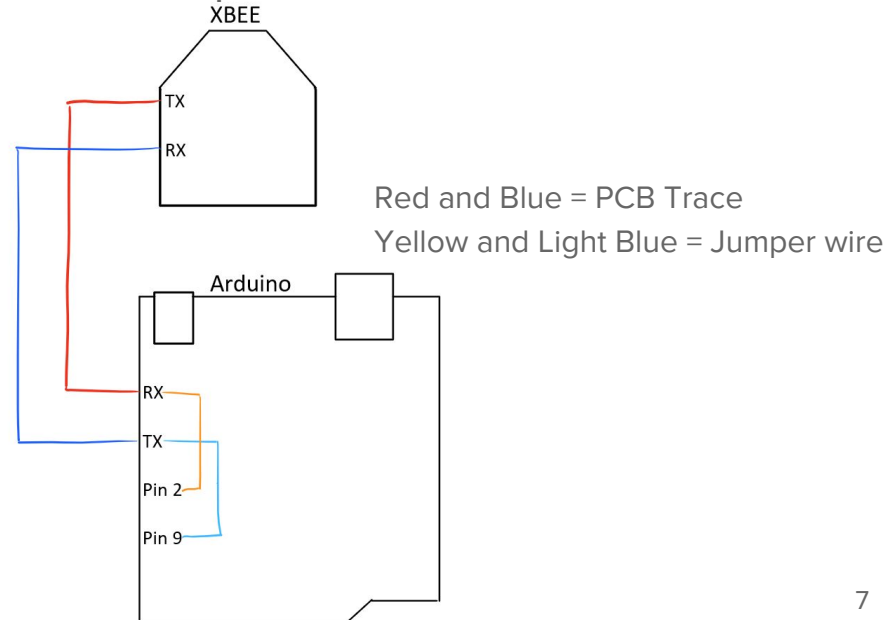


Firmware

BMP-180 sensor code updated

Manually rerouted the RX and TX pins on the XBEE to pins 2 and 9 on the Arduino

- Programmable without removing the XBee



Housing Design

Mounting: Trigger clamp

Housing Structure: (4 sections)

Mounting slot attachment

Hardware enclosure

Solar panel brackets

Pyranometer resting plate



Work to be finished

Research more mounting techniques

Finalize the housing design

Review and revise documentation and design choices





Questions?