

# Wireless Environment Sensor

## Project Termination

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# Objective

Discuss the rationale for terminating the project as well as the lessons learned and any spin-off work that will be completed.

# WES Original Purpose

The purpose of the WES Project was as follows:

- 1) Learn about Circuit Design and PCB Design
- 2) Learn about micro-controllers, sensors, and power electronics
- 3) Practice soldering
- 4) Further the understanding of micro-controller assembly programming

# Termination Rationale

The Rationale for termination is:

- 1) Many lessons were learned throughout the project
- 2) Most of the objectives have been accomplished or will be accomplished with some post-work.
- 3) The benefits of continuing the project no longer outweigh the cost to continue.

# Remaining Post-Work

The following work will continue outside the context of WES:

- 1) Learn to interface the micro-controller with the 3.3V tolerant sensor over I2C
- 2) Learn to interface between two micro-controllers using SPI
- 3) Learn to interface between two micro-controllers using UART

# Design Data

All design data and existing code as of today's date will be uploaded to git and linked in the description for anyone wanting to try to continue the project.

# Lessons Learned

The following lessons learned are recorded for future reference:

- 1) When using digital logic switches (identity) pull down to ground.
- 2) Order micro-controllers and other hard to get ICs before performing board layout.
- 3) Perform a review of pin signal levels prior to board order.
- 4) Complex chips (wifi) should be ordered with easy to verify solder pads