Enclosure Block

ECE441 Wearable Sensor for the Blind Project

Keywords—Enclosure; switch; block description; design verification

# Introduction

The purpose of this document is to describe the Bluetooth block of the ECE441 Wearable Sensor for the Blind project to 4th year ECE students with the intention of these students being able to build and verify the block without further research. The Enclosure block securely storing system components and prevents water from entering the system enclosure. This document provides an overview of the overall block function including STL design, verification for the design in the form of a step-by-step testing process, and support for the validity of the design in the form of outside research and numerical justification addressing individual properties.

# Design Details

The wiring diagram (Fig.1) presents the block design, including the interfaces of the block. These interfaces are further elaborated through validation information given in Table 1, which demonstrates externally-supported validly for each of the block’s properties.

# Block Overview

Enclosure

1. Black Box Diagram of User Controls Block

# Block Verification

Based on the interfaces for this block, a verification (testing) process needs to be indicated. This will allow the final constructed design to be tested verifying that all the interface properties have been met and that the block is ready for integration into the system.

If the block passes all the listed tests, all interface properties have been verified and the block is ready for inclusion into the system.

# Design Validation

# Bills of Materials

Table 3 lists the bills of materials used for the Bluetooth block.

| Item | Price | Link |
| --- | --- | --- |
|  |  |  |

1. Bills of Materials for the Enclosure Block