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**ECE5532 Final project: IGVC CoursE**

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**Abstract**

This report documents our design process for developing a capacitive touch sensor.

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# **Introduction**

First, this document will generally flow from abstract details to specific reasons for engineering decisions.

# **Microsoft Teams Folder Organization**

The documents are divided into five categorical folders:

# **Block Diagram**

The first phase of this design was to create a block diagram.

# **Components**

This component section will mesh and being expanded on in the Altium Project: Schematic

# **Altium Project: Schematic**

The Altium project is in the Altium Project Teams folder.

# **Altium Project: PCB**

The first stage of PCB design is gathering all the footprints for the components. The

# **Atmel Studio: Software Implementation**

Atmel Start was used to verify the pin out for the PTC (QTouch) pins and I2C pins.

# **Project Testing**

As mentioned in the Altium Project: Schematic section, the plan is to design the QTouch