

ELECTRONIC LOCATOR DISPLAY FOR BUSES

A Project Study

Presented to

The Faculty of Engineering

DE LA SALLE UNIVERSITY - DASMARIÑAS

In Partial Fulfillment

**Of the Requirements for the Degree of
BACHELOR OF SCIENCE IN ELECTRONICS
AND COMMUNICATIONS ENGINEERING**

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2N3904 (pnp transistor)

2N3906 (nnp transistor)

74LS154 (4 to 16 demultiplexer)

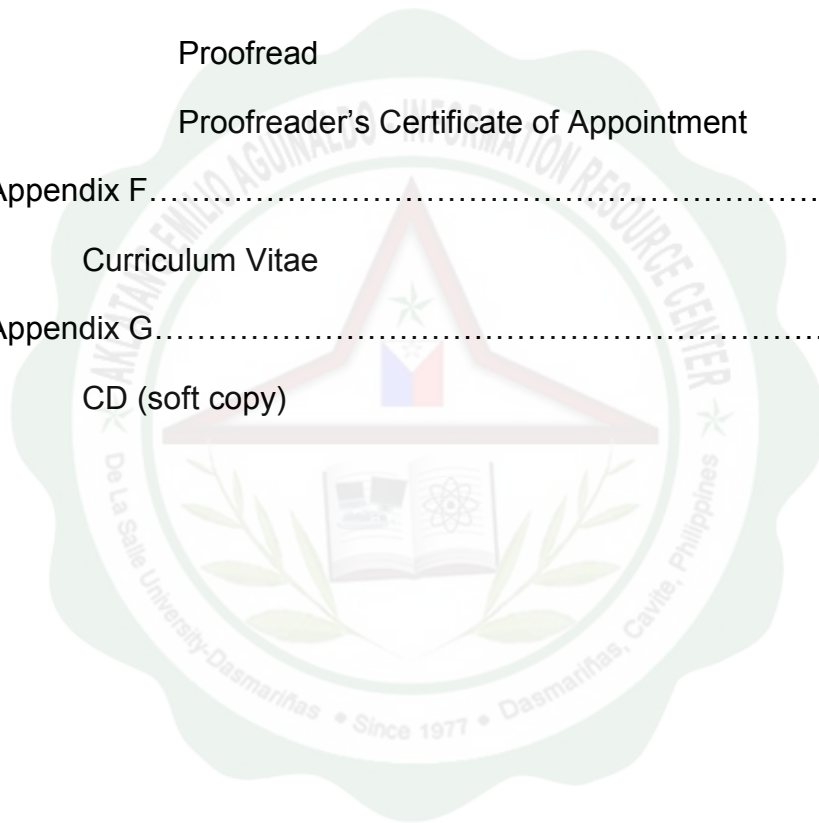
7805 (5v voltage regulator)

EE-SA102 (photo interrupter)

PIC16F84A (18-pins microcontroller)

PIC16F877 (40-pins microcontroller)

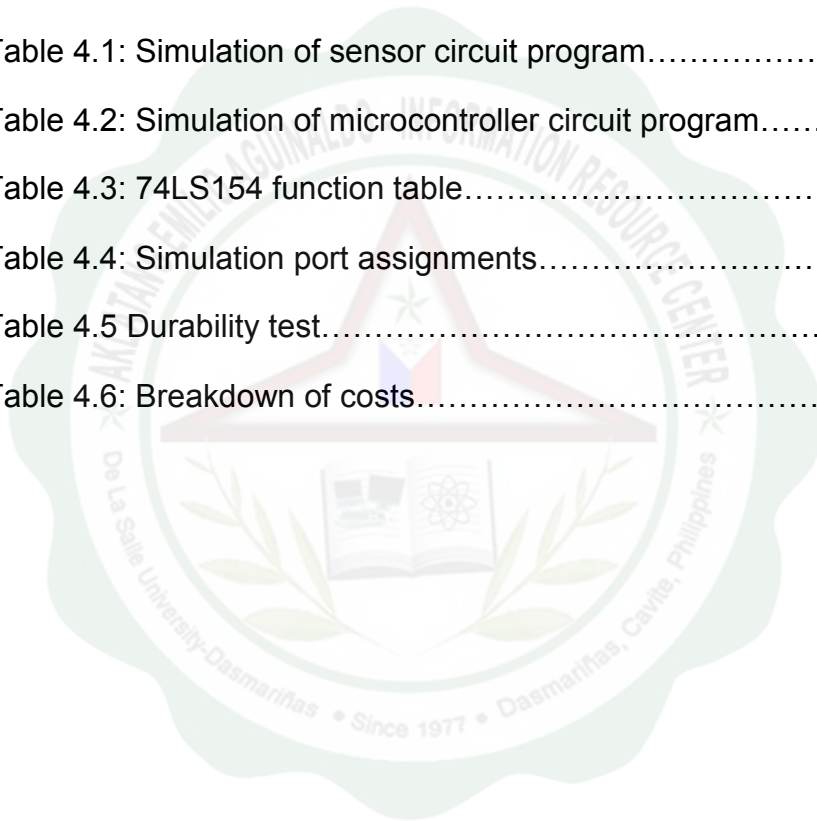
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Appendix A

Source Codes

Display Circuit

Sensor Circuit

Appendix B

Data Sheets

2N3904 (pnp transistor)

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Appendix C

Invitation Letters

Appendix D

Documentations

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Appendix F

CD (soft copy)

Abstract

Buses are one of the most used modes of transport in the Philippines and the whole world. These vehicles are ideal for mass transport as they can carry up to 50 persons without compromising the comfort of each passenger.

However, as to almost any system in the world, problems are seen and experienced in buses. Based on the authors' observations, one of the most common problems experienced in Public Utility Buses is the inability of passengers to identify the current location of the bus they are in, which creates many other problems that put passengers into a disadvantage.

With this, the authors developed an Electronic Locator Display for Buses that aims to solve the problem on how to be able to display the current location of the bus in its fixed route. This was done by answering the specific objectives of building a circuit and program that will be capable of displaying the locations' names, and interfacing the display to the bus' odometer.