DigiLog: A Digital Logic Design Calculator

A.F. Agarap

Intel ISEF Finalist, Society for Science & the Public

JISSA Research & Development

Adamson University

Research Plan

Purpose of the Study

General

1. To develop a calculating device using the Intel Galileo board for conversion and computation of numerical entities across different number systems such as binary, octal, and hexadecimal.

Specific

1. To develop a calculating device capable of accomplishing its task with utmost efficiency possible.
2. To ensure that the developed device could render correct and precise calculations.
3. To determine if the experimental device could compare well against its existing comparators.

Null Hypothesis

1. The device is not capable of accomplishing its task with utmost efficiency.
2. The developed device could not render a correct and a precise calculations.
3. The experimental device is not comparable against its existing comparators.

Materials and Equipment

The materials that will be used in this study are Intel Galileo Board, micro SD Card (for storage purposes), and a personal computer (desktop/laptop; for programming purposes; operating system to be determined). Kindly add other materials required for the study here.

Procedure

1. Preparation of Materials
2. Installation of required IDEs
3. Construction of the Software
4. Integration of Software & Hardware
5. Testing of the Experimental Device
6. Testing of Commercial Comparators
7. Data Analysis
8. Statistical Treatment