Documentation

Team Exemplary

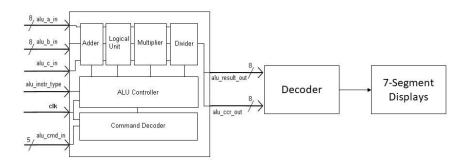
1 Team members

- Arfat Kamal
- Tasawar Siddiquy
- ASM Nurussafa
- Nirojan Navaratnarajah.

2 Introduction

The goal is to create a 8 bit calculator using VHDL and display the result using a 7 segment LED, 3 bit display. VHDL is very important for our project because it can be used to optimize our circuit and also simulate to verify our hardware

3 Concept description



source:[1]

The main application of our prototype is to do addition, subtraction, multiplication, division.

4 Project/Team management

We plan to use the iterative development model to realize our project. Because it allows us to test and implement our model iteratively. It is also very easy to implement..

Breakdown of tasks:

Tasawar Siddiquy - Addition and Substraction,

ASM Nurussafa - Testbench,

• Nirojan Navaratnarajah - Multiplication,

Arfat Kamal - Division.

5 Technologies

- · VHDL
- · Eagle

6 VHDL Implementation

7 PCB Design

8 Sources/References

Github Repository -

https://github.com/Asm-Nurussafa/Advanced-Embedded-System--Team-Exemplary

[1] *Implementation and simulation of MC68HC11 a thesis ... - researchgate*. (n.d.). Retrieved May 17, 2022, from

https://www.researchgate.net/profile/Cumhur-Tuncali-2/publication/301804902_Impleme ntation_and_Simulation_of_MC68HC11_Microcontroller_Unit_Using_SystemC_for_Codesign_Studies/links/57290d1908aef5d48d2c907a/Implementation-and-Simulation-of-MC68HC11-Microcontroller-Unit-Using-SystemC-for-Co-design-Studies.pdf