## EE 224 (Digital System) Prof. Virendra Singh Course Project – CPU

## Team members:

- 1. Siddick Mohammad Hamza Khatri
- 2. Shikhar Moondra
- 3. Nishant Bhave
- 4. Aviral Vishesh Goel

## Work distribution:

- Siddick Mohammad Hamza Khatri Wrote the code for reset and start.
- Shikhar Moondra Wrote the code for printing out the values of the registers and the input interface for seeing the lower and higher bits
- Nishant Bhave Tested on the board and helped remove warnings
- Aviral Vishesh Goel Tested on the board and helped verify the correct working on the board.

## Changes made to the previous code

- We have implemented a reset button to clear the existing values and and enable the execution of the code from start at any given point of time during execution
- We have introduced 3 switches whose value enables us to read the data of the
  particular register and display it in the form of LEDs on the board.
   This help to keep track of the program execution and we can ensure that the
  expected data transfers are actually taking place.
- There is a start/stop button with which we can analyze the current state and the register values and cross-reference them with the expected ones.
- There is another switch which depending on its state displays the higher order/lower order 8 bis of the data in the 16 bit registers.