**Intel Challenge - Ruppin**

Abed Nashif

Calculator with trigonometric functions using DE10

**Summary:**

This calculator can perform basic arithmetic operations and trigonometric functions such as add, subtract, multiply, division, cosine and sine.

4bits, 16 states, 8 selection states

This calculator uses SW [7:0] as inputs, and LEDR [7:0] or HEX5 - HEX0 as outputs\*, KEY0 acts as an operation selector, the LEDR [7:4] will display the next state and LEDR [3:0] will display the current state.

When the desired operation is selected, KEY1 will commit that operation, the 7-segment display will change to its respective operation, and the switches will serve as operand inputs.

The user can push the KEY1 again to go back to select one of the other operations

\*Operations results are signed