

CPE 1500 Lab 2: Schematic capture, simulation and DE10 verification

1 dedicated lab period, 1 lab period to complete

Objectives

- Create a schematic
- Simulate from a schematic
- Use the DE10 to verify a schematic design

Prelab

- Review the [Schematic Generation](#) slides
- Review the [Schematic Simulation – University Waveforms](#) slides
- Review the [Schematic to DE10](#) slides

student
check off

Assignment

Part 1: Multiplexor

- Generate the Multiplexor schematic
 - Simulate the Multiplexor schematic
 - Download the Multiplexor to the DE10 and verify the operation
- Print the simulation results
Create a table showing the results of the DE10 verification

Part 2: Mystery Circuit

- Generate the Mystery schematic
 - Simulate the Mystery schematic
 - Download the Mystery schematic to the DE10 and verify the operation
- Print the simulation results
Create a table showing the results of the DE10 verification

Check Off

[You must demonstrate parts 1C and 2C prior to submission of your report](#)

- Demo part 1C results and informal report 50%
- Demo part 2C results and informal report 50%

Due at 3:00pm on Tuesday following the lab period – in the box