

# Final Project

William Harrington, Ahmed Abdulkareem  
ECE485

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## Introduction

This report contains initial information regarding the final project

## Initial Estimates

1. Unit cost: 80
  - (a) Memory consists of M1 x 1, M3 x 10
  - (b) Memory capacity is 10.2 kB
  - (c) Best case/worst case memory latency is 1 clock cycles / 15 clock cycles
2. Communication cost: .95 dollars
3. Cumulative latency: 2976 clock cycles

## Task list

1. Initial design of architecture (Will, Ahmed)
  - (a) Make design decisions on the types of memory to use and how to implement
  - (b) Document design decisions
2. Program initial simulation (Will)
  - (a) Program initial simulation in python using MyHDL
  - (b) Document tool chain (MyHDL, other python libraries needed to run simulation)

- (c) Provide ample documentation on use and implementation
- 3. Debug and test initial simulation (Will, Ahmed)
  - (a) Use initial traffic file in simulation
  - (b) Generate waveforms with test bench
  - (c) Verify that simulation performs as expected
  - (d) Eliminate any bugs as needed
  - (e) Document performance
- 4. Design review (Will, Ahmed)
  - (a) Go over the performance of the design in the simulation
  - (b) Discuss possible changes regarding design
  - (c) Document any decisions and/or pending changes
- 5. Implement final changes (Will, Ahmed)
- 6. Complete documentation (Ahmed)

**Project Timeline** ✓ = complete by

Milestone	Nov 18	Nov 22	Nov 25	Nov 27	Nov 29	Nov 30	Dec 1
Initial design of arch.	✓						
Initial simulation		✓					
Debug and test initial sim.			✓				
Design review				✓			
Implement final changes					✓		
Complete documentation						✓	
Final test and completion							✓