

## JEE 2600 Fall 2018 Test 3 Study Guide

Test 3 will primarily cover material in chapters 7 and 8. Each new topic in this class builds upon old material, so the topics from tests 1 and 2 are likely to be on this test. Be sure to understand the following topics:

All the material from the test 1 and 2 study guides.

Chapter 7:

- Configurable Logic Blocks (CLB)
  - 2 CLB configuration
  - 4 CLB configuration
- Switch Matrix
- Mapping a circuit into CLB and Switch Matrix

Chapter 8:

- Understand the 3 instruction processors studied in class.
  - Understand the HLSM
    - Load, Store, Add, etc.
    - How to get the FSM
  - Understand how to add new operations
  - Understand the data path
  - Understand the control and status signal between the datapath and control unit
- Stages of execution and why they are needed.
  - Fetch, Decode, Execute
- Machine code versus assembly code
- Be able to read and write assembly code for the processor (with enhanced instructions)
  - MOV, ADD, and other arithmetic/logic operations

**Note: This is not an exclusive list of topics to study, but a high level guideline.**