CprE 3810, Computer Organization and Assembly Level Programming

Team Contract – Project Part 1

Project Teams Group: A_02

Team Members: Luke Olsen – Matthew Estes

Discuss the following aspects of teamwork with your team – make sure to get input from each member. Write down your team's consensus for each of the bolded headings. Italicized text contains instructions and examples and should be deleted once you've read it. Please see the example contract for rough length expectations.

Course Goals: List and acknowledge the goals of your individual team members. Examples may include:

- learn everything about computer architecture
- know enough to understand security risks posed by hardware primitives
- *get an A/B/C/Pass in the course*
- minimize the number of lost points
- prepare myself for a career in hardware design
- prepare myself to be able to do research involving FPGAs
- be able to explain the workings of a stored-program computer from gates to C

Team Expectations:

- Conduct: What are the expectations for personal conduct of group members?
 - Contribute to the project and make deadlines and communicate effectively.
- Communication: What is the best mode of communication for the group? How often should communication occur? How fast should a response be expected?
 - During lab time and over discord. A response should be as soon as possible.
- Group conventions: Naming conventions? Compilation and simulation methodology? Testbench strategies? Do file usage? Version control strategies? Commenting standards?
 - Use the same naming conventions throughout all files. The compilation and simulation can be modeled off of the previous labs, so same as before. Version control and file usage will be tracked by github repository.
- Meetings: Given the significant portion of the course that the lab covers, it is expected that your team will spend more time working on the labs than in your scheduled lab sections. How will your group expect to handle this? Please include at least two additional times outside of lab that your team can meet (preferably in-person). Examples of other issues to consider include:
 - Work together in-person outside of lab sections?
 - O Work together online outside of lab sections?
 - O Work separately on responsibilities?

- We can meet Monday afternoon and Wednesday afternoon. We will also be meeting whenever possible online.
- **Peer Evaluation Criteria:** Please create a brief criteria for how effort and contribution are defined. Note that teams with **vastly** divergent scores may require a meeting with course instructor and result in different grades for different group members. Teams with reasonably equitable scores will receive the same grade.
 - Contribution

Does work assigned, or does not

- Communication

Does communicate, or does not

- Follows group conventions

Follows group conventions, or does not

- Attendance for meetings

Participates in meetings, or does not

Role Responsibilities: Complete the following planning table. Each lab part should be the responsibility of one team member. Also make sure that no one team member is the lead on both the design and test aspects of a single lab part. These guidelines aid in all students having a complete view of the lab. Plan for an anticipated deadline (read the lab manual and ask your TAs for assistance in setting up a good timeline). Note that the non-lead is encouraged to participate and support the lead wherever possible, increasing both the quality of the lab part and each team member's knowledge.

Lab Part	Estimated	Design		Test	
	Time	Lead	Deadline	Lead	Deadline
High-level design	1 hr	Luke	Week 6	Matthew	Week 6
Test programs	4 hr	Matthew	Week 9	Luke	Week 9
Control logic	2 hr	Luke	Week 7	Matthew	Week 7
Fetch logic	3 hr	Matthew	Week7/8	Luke	Week 7/8
Barrel shifter	2 hr	Luke	Week 8	Matthew	Week 8
ALU integration + Misc updates	2 hr	Matthew	Week8/9	Luke	Week 8/9
High-level integration	4 hr	Luke	Week 9	Matthew	Week 9
Synthesis (human effort)	1.5 hr	Matthew	Week 9	Luke	Week 9

Estimated Time is given as a **very rough** guide for even distribution of tasks assuming you've already read through the lab document and have the prerequisite knowledge. Depending on your group's skill and prerequisite knowledge, some tasks may take disproportionately long or short. For your future planning, track this – for future prelabs you will be asked to note why past tasks took longer than expected and how you might avoid such issues in the future.

Integrity of Work: *Do not delete the following.* We agree that the work we provide to other team members and ultimately submit for a grade is a direct result of our own work as described in the course syllabus. Specifically, we will generate all VHDL code

ourselves and not copy VHDL code from online sources, other groups, book companion material, or past student projects to which anyone outside of my team has contributed.

Student Signature: Luke Olsen **Date:** 9/30

Student Signature: Matthew Estes **Date** 9/30