University of California at Berkeley College of Engineering Department of Electrical Engineering and Computer Science

EECS150, Spring 2013

Guidelines for Preliminary Project Proposal Version 2 Due: Beginning of your lab session, week of 2/18

This week in lab we would like to review your revised project proposal. At this point you should have digested the feedback from your initial project proposal and started to work through the details. Next week (Feb 25th) during your lab session, we will collect from you, a "final project specification". This week is a checkpoint towards that goal.

Here is what we will be reviewing this week, so please plan accordingly.

- 1. You should have a firm idea of the functionality of your project. If you were considering several different options, this is the time to narrow it down to one.
- 2. The next step in the process is to determine the "technical approach". This is essentially a description of the algorithm or technique that you will implement in the core of the FPGA to achieve your particular functional requirements.
- 3. You need to understand the high-level structure that your design will take. Is it a co-processor to a CPU, or standalone? If you will be using a CPU, what are the functions on in software versus what's in hardware on the FPGA? What external devices will you be using? And what is the physical interface to these devices? Do they require software support? Do you require external memory? If so, how much?
- 4. What is the demonstration of your project? What will you show us to convince us that it is working as specified?
- 5. Draw out a High-level block diagram showing inputs, outputs, external devices and memory, etc.

After the review this week, we will ask you to prepare a more format design specification, in electronic format. In addition to the information above, it will include:

- 1. A testing and verification plan
- 2. A check-point schedule
- 3. Specification of a baseline set of functions, versus extra features that you plan to implement if there is time.