**Proposal Review** **SPRING 2010**

**Objectives:**
The objective of the proposal is to provide sufficient detail to convince me and you that your project and ideas are possible, feasible, interesting and useful. You mention your objectives, and steps you plan to take to achieve those objectives. Mention any constraints your design has to work under and any specification you are trying to meet. Be reasonable with your specifications. The feasibility of your project is also very important. Obviously, this demands more work.

**Work Plan:**
This is where every group presents an inside view on an individual's responsibilities. Every individual in a group is responsible for a specific portion of the design. Delineate this well showing every person's work. Mention any external sources that may be helping you out with your designs.

**Schedule:**
Every project is time bound, which means that it has to be planned to be finished by the deadlines set. Since this is the first time you will be working on a project like this, it can be a good experience to set a schedule for yourself. It would be interesting to look back at how naive we were about schedules. The 'Time Schedule' presentation should have as many detailed deadlines and estimated work to be done by then.

**Project Feasibility**

The project is designed to be like a real-life project you may work on in the industry. You have assigned yourself a project, divided the work and looked at the different possible approaches you could use to finish your project. The proposal review is where you proposed your ideas.

The next step now is to go deeper into your projects and specifically your part individually, and show the feasibility of your ideas and designs ("Feasibility"). A full functional definition of the tile and its verification should be shown in the coming review. This is when you should have set the specifications of your tile too. The design flow must be precisely defined with an updated and realistic schedule.

*Oral presentation (feasibility part):*

- It is difficult to present your detailed designs in such a short time, consider it a challenge!
- Convince me that you know what is going on and that your design is feasible.
- Do NOT make slides of all of your schematics and initial simulations: Just selected, interesting, ones.
- DO make slides of detailed block diagrams, floorplans, timing diagrams, cell hierarchies, etc. But be prepared to answer detailed questions by bringing all of your design materials.

- Recognize the fact that we know a lot about VLSI and a fair bit about your project. Don't waste time stating the obvious.
- Try and predict what kinds of questions will be asked and prepare convincing answers.
- Remember to finish your presentations in the time allotted, else the group coming in second is affected.

---

*Check List:*

- Full functional definition of the title.
- Preliminary simulations and results.
- System Specifications (this will probably be your fist pass at it)
- Detailed floorplans.
- Clocking and power schemes.

---

*Web Report (put everything in your project web):*

- Be sure to explicitly include the following in your web-site:
- A well-organized home page and table of contents so that we can find things.
- Detailed block diagram of chip function
- SELECTED Logic and Timing simulations (I do not need to see simulation of trivial circuits, just the interesting/critical ones).
- Clocking scheme and timing design of blocks (critical paths?, clock generation?, clock distribution?, buffering of long and heavy loaded lines?) This will make or break your chip!
- Detailed floorplan with area estimates of blocks routing and I/O pin assignments (to avoid surprises when it comes to layout)
- Power estimates: (model, worst case, average case)
- External interfaces (ASOC, clock, power, configuration bus)

**Deliverables:**
Layouts, simulations, HDLs, estimates, interface specs., architectures and any other work that you feel is important from your design point.

**References:**
Both your own web-page and external papers, web references, etc.

**Presentation:**
The presentation should be for about 40 minutes consisting of about 15-20 slides using Powerpoint or web. A laptop and projector will be provided. Treat these presentations as formal presentations, refraining from any hand drawn text or diagrams. Don't rely on network access. So bring a disk as an alternative. And, finally it is important that everybody talks, both as an exercise in communication and to demonstrate that you are an active participant in the project.

**Web:**
Look at the previous year projects to see how your proposals and future presentations need to be put on the web. The previous year projects are listed with links at the bottom of the ECE 758 webpage.