

EECE 690/890

Digital Radio Hardware Design

Critical Design Review Presentation Guidelines

We will hold our Critical Design Reviews (CDRs) each Thursday for the next four weeks, beginning with team 1 of both companies presenting on Thursday, October 29. The reviews will be conducted in the EECE conference room (RA274) during normal class hours and must be attended by all class members.

Although the primary purpose of the reviews is to finalize any remaining design issues and to determine if we are ready to build the radios, there will be a grade associated with the presentations as well. All class members will be asked to provide a realistic assessment of the design work presented, and that assessment will be factored into a score for the individual's presentation. Note that the main issue being assessed is the current state of the design, and not the smoothness of the presentation. However, it is well known that a good presentation goes a long way toward leaving a good impression of the work done. Hence, you should first make sure that your design is in good shape, and then try to present your work clearly and concisely.

Audience:

The primary audience is your classmates (both companies). You may assume that the audience is familiar with the overall product development goals, but not with your team's activities.

Presentation Time:

We must limit each presentation to 15 minutes, with 3 minutes for questions in order to fit 4 presentations into the 75 minute class period. It is very important that we remain on schedule. A good guideline is to allocate 2 minutes per viewgraph, although 1 minute per viewgraph can be done if you are very careful about keeping yourself on track.

Outline of Talk:

A recommended outline of what to include in your talk is given below with suggested slide count in parenthesis. If you wish to deviate significantly from this outline, please discuss the changes you wish to make with your CEO.

- **Title Slide (1)** - Include your team name, company name, your name, and your teammates names
- **Transceiver Block Diagram (1)** - Highlight what you and your team are working on and overview what interfaces you have to other teams.
- **Overview of Design Effort (1 - 2)** - Block diagrams, flowcharts, or mechanical drawings as appropriate to your task. Discuss any architectural issues such as frequency plan, packet reception/transmission, call processing, and/or product packaging and board floorplanning.
- **Detailed Design Drawings (2 - 4)** - Schematics, VHDL, pseudo-code, or artworks/panel drawings. Keep in mind that the best you can do here is give a brief look at your design. The audience will not be able to check everything, but should get a good idea of whether or not the portions you show look like they are designed well and will work.
- **Interfaces to Other Teams and to the “Outside World” (1 - 2)** - List of signals, direction (in, out, or in/out), polarity (active high or low), voltage levels, etc. Also a summary of your power supply requirements (voltages, and currents in sleep and wake modes).
- **Status Summary (1)** - A summary of your status. Are you ready for fabrication/integration into the final product? If not, what remains and how will you accomplish it?

Advise on Making Your Presentation:

A few words of advise on preparing and giving your presentation:

- **Remember that you know far more about your work than others do**, so you do not have to worry about others being too critical. Concentrate on the main goal - to relate information that will help all of us toward creating a successful product.
- **Use figures on viewgraphs**, not lots of words. You will probably have most of what you need from earlier assignments.
- **Use 12 point or larger type** (preferably 16 pt or larger).
- **Use “landscape” mode slides**. It is more common at conferences than “portrait mode” slides.
- Rehearse your presentation the night before. You should think about what you need to talk about and how you will keep on track (15 minutes total), but should probably not “script” your entire talk. Just think about the key points you want to make on each slide. **(You will not have time to relate much more than key points anyway!)**
- Finally, the most important advise: **Remember who your audience is**. Ask yourself what they already know, what do they need to know, and how you can concisely provide that knowledge in your presentation.