

Some More Ideas about Projects

- The issue of SOI (silicon-on-insulator) has come up a few times in class. A group report on SOI – SOI process technologies, circuit applications and future development potentials - would certainly be great.
- MEMS component technologies would be useful. What are the major MEMS processes implemented today? How are conventional components (transistors, resistors, capacitors, etc.) integrated into MEMS technology. Again, what are the future potential MEMS “success” stories?
- Satellite communications is a “hot topic” in the integrated circuit world. Satellite orbits expose components to a host of ionizing radiations. Is it possible to make our components “radiation hard” by design? What are the effects of radiation on components?
- What is “system on a chip” (SOC) really all about? What new process or component technologies are required for it?
- Multimedia (camera-in-cell phon, for example) components are now becoming widely available. What new component and/or circuit challenges does this create?