

Berkeley EECS: A Tradition of Impact in Research

- ✦ Berkeley Unix
- ✦ Relational Database Technology
- ✦ Electronic Design Automation: SPICE to Synopsys
- ✦ RISC
- ✦ RAID
- ✦ NOW (Networks of Workstations)
- ✦ IEEE Floating Point
- ✦ Infopad
- ✦ Semiconductor Devices & Modeling
- ✦ MEMS

- ✦ Many, many more... and many "in the oven"
- ✦ At Berkeley, we are **fundamentally motivated by high-potential-impact, long-range research**

Observations

- ✦ Almost all projects involve **multiple sponsors** (federal, state, and corporate) and overlapping research agendas
- ✦ In all cases, the **specific research artifacts** developed during the projects could have been circumvented relatively easily
- ✦ In all cases, **many millions of dollars have flowed to the campus** during and since the projects in support of faculty in their research
- ✦ Conversely, in almost all software & embedded systems cases **where technology was protected** and licensed, the **financial return has not been high** and the **full potential of the research has been (arguably) compromised**

Summary

- ✦ Berkeley EECS (and Engineering) faculty are motivated by the **IMPACT** of their work
 - ✦ In EECS, impact is usually maximized by making the work widely available
 - ✦ In other disciplines, impact may be maximized by exclusive licensing for royalties
- ✦ Corporate sponsors that collaborate with Berkeley are primarily concerned about **ACCESS** to research results
 - ✦ In certain areas, access is actually maximized by making work open and available
 - ✦ Access clearly includes consideration of background rights and shared rights

Issues Related to EECS Pilot Program

- ✦ We must quickly move to implement an evaluation program for the trial
 - ✦ Task force recommended a survey now, then again at the end of the program, of: EE/CS research sponsors, faculty, and SPO/OTL staff
- ✦ Two key issues remain to maximize effectiveness of such a program:
 - ✦ Ownership in research projects with joint participation and where IP is protected (should be joint!)
 - ✦ Copyright clarification and an equivalent "open" option with associated wording