Microsemi Innovation Lab
A shared use design and development space

Research Group Members
• Michael Klopfer (Technical Management)
• G.P. Li (Director)

Michael Klopfer
949-824-7866
mklopfer@uci.edu
Projects we are working on in the upcoming year

Project/research summary

Founded by a donation from Microsemi in 2015, the laboratory space is a recharge-based shared use facility to support product development, PCB prototyping, FPGA application development for students and faculty, small course meeting area/teleconference.

Available Equipment: Layer FR-4 CNC (2-layer), PCB Pick and Place, PCB Reflow Oven, tabletop CNC, tabletop lathe, hydraulic press, UV treatment, surface microscopes, soldering/hot air, spot welding, high-bandwidth oscilloscopes/function generators, power supplies, and more.

- Current and upcoming large projects:
  - Novel ureteroscope for improved kidney stone removal (USMC)
  - Energy efficient controls for consumer electronics (CalPlug)
  - Numerous small design projects

- Example Past Projects:
  FPGA based aircraft tracking system (student)
  FPGA based automated sample sorter (Microsemi contracted)
  Prototype surgical force measurement system (USMC-Urology/POP Grant)
Possible areas of collaboration with other groups

• Resources and know-how for PCB manufacture
• Electronics/FPGA/RF design
• Prototype fabrication/integration
• Small course/lab meeting location with teleconference
• Course support workshop facility