

Keynote Address I

“The Impact of Communications Convergence on Silicon Integrated Circuits”

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Telephone, wireless, datacom, and broadcasting are quickly converging around the internet, creating an integrated environment for work, education, entertainment, and shopping. You will have access to any service whether you are at home or on the road. In order to ensure the quality of services it is necessary to provide ubiquitous support, high bandwidth, security, and ease of use. A new family of integrated circuits that brings about this brave new world and the design methodology it requires will be described.

Keynote Address II

“Research, Design, and Fabrication - Brain Power, Tool Power, and Electric Power”

Prof. C. L. Liu, Sc.D.

President,
National Tsing Hua University, Hsin-chu, Taiwan



Research and education, design tools, and fabrication technology are key and inter-related ingredients in to-day's vast and rapidly growing micro-electronic economics. We shall examine some of the current issues and future challenges we are facing.

Keynote Address III

“Design Challenges in Multi-GHz Microprocessors”

William Herrick

Director, Alpha Microprocessor Development,
Compaq Computer Corporation, USA



Advances in semiconductor technology will soon enable multi-GHz microprocessors and present designers with opportunities and challenges. Transistors and interconnect will exhibit new behaviors which must be modeled. Logical and circuit complexity will explode making data management critical. Power distribution and clocking methods must be re-thought. A new generation of synthesizers must be developed and new electrical and timing verification tools must be created.