

Evening Panel:
Past and Future Blockbusters in Low-Power Design

Moderator:

Jan M. Rabaey, University of California, Berkeley, CA

Organizer:

Chuck Traylor, National Semiconductor, Santa Clara, CA

Panelists:

Bryan Ackland, Lucent Technologies, Holmdel, NJ

Bob Brodersen, University of California, Berkeley, CA

Christer Svenson, Linkoping University, Linkoping, Sweden

Bruce Wooley, Stanford University, Stanford, CA

Since the re-emergence of power as a major design issue in the early 1990s, a wide range of techniques and approaches have been introduced. These innovations, which range from the technology to the circuit, architecture and system levels and span design methodology and design automation tools as well, have led to drastic power reductions for some applications or have at least helped to keep power at bay in others.

The goal of this panel is to identify which of these wide range of approaches or techniques have had the most impact so far. Each of the panelists (which come from different backgrounds) will present his top five of most-dominant power reducing techniques and defend his choices against objections of the other panelists or the audience.

It is furthermore clear that all is not well yet with respect to power reduction and management. Therefore, the panelists will also be asked to present their top three choices of design challenges to have to be resolved in the next decade if power is not to become a show stopper for the future generation of designs.

The outcome of the panel will (hopefully) be an audience-approved chart of past and future blockbusters in low-power.