

# GENERAL CHAIR'S WELCOME

Welcome to San Francisco and the 43rd Design Automation Conference! San Francisco is an excellent venue for DAC, with its proximity to many high-tech companies, its beautiful location, and a wide variety of activities and sights. DAC's return to San Francisco after eight years of absence promises a lively and especially well-attended event. Thousands of executives, managers, designers, academics, journalists, and others are converging here during DAC, the largest and most prestigious event focused on the design of electronic circuits and systems.

The technical program, which received a record 865 regular paper submissions, includes hot topics such as low power, DFM, and ESL among many others. This year, it sees an increase in design papers and includes two new topics: beyond-the-die, and emerging technologies. Overall, the program contains more than 200 technical presentations in 11 tracks, eight technical program panels, seven special sessions, and seven full-day tutorials – all led by widely respected industry experts. Full-day tutorials are being held Monday and Friday, and cover a wide range of topics including DFM, verification, ESL, embedded systems, chip-package co-design, and test.

DAC is highlighting a special MEGa theme – Multimedia, Entertainment, and Games – found throughout the program in all three keynotes, several pavilion sessions, and in a full day of technical sessions on Wednesday. Topics will range from issues faced in the design of the iPod, to technology requirements for 3D graphics in feature films, to power management for next-generation media applications. This promises to be an exciting part of the program as the topic is timely, exposes cutting-edge problems, and touches everyone's lives.

Three keynote addresses will be held this year. Monday's keynote is Joe Costello, appearing nearly 10 years after leaving his post as Cadence's CEO. His recent endeavor has been serving as Chairman of Orb Networks, Inc., a company working to bring media to mobile devices, and his talk will focus on today's macro consumer trends. Tuesday's keynote is Hans Stork, Senior Vice President and CTO of Texas Instruments Inc., who brings a wealth of experience and knowledge in process technologies. He will address issues in the sub-50nm processes that enable SoCs in mobile communication devices of the future. On Thursday, DAC welcomes Alessandro Cremonesi, VP of Strategy and System Technology and General Manager of Advanced System Technology at STMicroelectronics, who has been leading ST's efforts in SoC design. He will deliver a keynote on the challenges of convergence – handling the increased complexity at the system, embedded software, and silicon implementation level.

DAC has again organized Management Day to be held Tuesday, offering mid- and senior-level design managers a forum for sharing information on technology trends and decision-making processes.

The exhibit floor is crowded and will be lively with more than 240 exhibitors. On the floor, be sure to visit the DAC pavilion which returns with a full schedule of 18 panels, the MEGa theme booth with exciting demos, and the networking opportunities at the Monday exhibit floor happy hour. Hands-on tutorials given by exhibitors are scheduled throughout the week, all covering low-power design.

DAC promises to be a great learning experience. Advancements, research and insights that the global design community brings to this year's event has something to interest everyone.

It is the contributions of many people that make DAC the success that it has been for over four decades as the premier design automation event. The technical program participants and the many volunteer committees work to provide the core of the program content and direction for future years. Conference Managers MP Associates, Inc. continue to be focused on DAC's success. We are grateful for the support of our sponsors, ACM/SIGDA, IEEE/CASS/CANDE/CEDA, and the EDA Consortium.

Enjoy an educational and exciting week at DAC in San Francisco!



Best regards,  
**Ellen Sentovich**  
*General Chair, 43rd DAC*

# PROCEEDINGS OF THE 43RD DESIGN AUTOMATION CONFERENCE®

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