Welcome to DATE 2000

The Design, Automation and Test conference and exhibition is the main European event bringing together design automation researchers, users and vendors, as well as specialists in the design, test and manufacturing of electronic circuits and systems.

The decrease of minimum feature size in micro-electronics processing and the growing complexity of the systems, exploiting these capabilities, require a dramatic increase in design productivity. Moreover, design methodologies will be driven by the exponentially growing demand of information appliances requiring a short time-to-market. More and more designers will have to deal with the world of wireless network components that require sophisticated low power architectures, running real-time embedded software. As a consequence, semiconductor companies are rapidly evolving into system-on-chip companies. The chip designers are confronted with problems such as hardware/software co-design, low power design, real-time issues and system IP.

DATE 2000 addresses the challenges and the solutions to bridge this productivity gap, involving all apects of the design, verification and test of hardware and software for complex, embedded electronic circuits and systems. The four day event consists of a conference with plenary keynotes, regular papers, posters, panels and tutorials as well as a commercial exhibition.

The conference program addresses new techniques for improving performance of design tools and reports on results and insights gained during the application of innovative methods and tools. This includes both hardware and embedded software design issues. The scope also includes the elaboration of design requirements and new architectures for challenging application fields such as wireless communications, multimedia and automotive systems. In response to the Call for Papers, a total of 306 regular paper submissions have been received, which is an increase of 20 percent over last year. The Program Chair, Peter Marwedel, and his program committee selected 106 papers for oral presentation and 33 poster presentations. On top of this, 90 submissions were received for the User's Forum and the Special Sessions.

The organization of a User Forum, a PCB Symposium, user group meetings, a university booth, hands-on tutorials, vendor presentations, fringe meetings and social events offer a wide variety of extra opportunities to meet and exchange information on relevant issues for the design and test community. The conference is complemented by a presentation of the most recent commercial electronic design automation tools and test products in what is by far the largest EDA exhibition in Europe, hosting more than 90 exhibiting companies.

The exhibition and the conference start on Tuesday morning by a plenary keynote session, addressing **future system design needs in the Post-PC era**. The invited speakers are industry leaders that are shaping the future in this field i.e. Wim Roelandts, CEO of Xilinx and Jerry Fiddler, Chairman and co-founder of Wind River Systems.

Furthermore, all attendees of the event will be able to gain insight and inspiration from the information shared with Ray Bingham, CEO of Cadence, Aart De Geus, CEO of Synopsys and Walden Rhines, CEO of Mentor Graphics, who are participating in a **CEO Forum** on Thursday at noon.

The event will be further extended by an extra track including **hands-on tutorials** that shall allow a personal experience of tools in new product areas. This year the theme of the hands-on sessions will be on **C/C++ based system design**. Recent announcements show that this technology is at the verge of becoming a commercial reality to support the System on Chip design flow. The hands-on tutorials will highlight current approaches, their capabilities and limitations.

This year's **special sessions** focus on emerging issues that come with designing systems on silicon such as: **emerging standards** for system level design, solving the **memory access** bottleneck in embedded systems, the use of **C++ for system design**, the European **design technology roadmap**, architectures for **platform based design**, **low power** system design, designing close to **the physical edge**, design practices for **better reliability and yield**.

In conclusion, one can state that the Design, Automation and Test Event in Europe offers a unique opportunity to tap into a large reservoir of research and development in the field of design technology. Due to the eminent presence of European industry in the markets of wireless telecommunication and automotive electronics, embedded system design is a European recognized speciality which makes DATE an excellent occasion to hear the technology details and the projections from the leading actors in this field. DATE offers a unique occasion to find out more about the technical, architectural trends and what they mean to tool vendors, PCB companies, semiconductor vendors and IP providers.

Many volunteers have given their best efforts to make this Conference and Exhibition an outstanding event. Therefore, we would like to thank all the members of the Sponsor Committee, the Executive Committee, the Program Committee, the Vendors Committee and last but not least the reviewers for their continued interest and energy.

Ivo Bolsens, General Chairman *Peter Marwedel*, Program Chairman