# **Conference Theme**

Over recent years, embedded systems have gained an enormous amount of processing power and functionality. Many of the formerly external components can now be integrated into a single System-on-Chip. This trends has resulted in a dramatic reduction in the size and cost of embedded systems. As a unique technology, the design of embedded systems is an essential element of many innovations.

Embedded systems meet their performance goals, including realtime constraints, through a combination of special-purpose hardware and software components tailored to the system requirements. Both the development of new features and the reuse of existing intellectual property components are essential to keeping up with ever demanding customer requirements. Furthermore, design complexities are steadily growing with an increasing number of components that have to cooperate properly. Embedded system designers have to cope with multiple goals and constraints simultaneously, including timing, power, reliability, dependability, maintenance, packaging and, last but not least, price. The significance of these constraints varies depending on the application area a system is targeted for. Typical embedded applications include multi-media, automotive, medical, and communication devices.

The goals of the International Embedded Systems Symposium are to present, exchange and discuss the state of the art, novel ideas, actual research results, and future tendencies in the field of embedded systems. Contributors and participants from both industry and academia are encouraged to take active part in this symposium.

### **Topics** include but are not restricted to the following:

- Specification and modeling of embedded systems
- Design methodology for embedded systems
- Validation and verification of embedded systems
- New technologies and trends for embedded systems

### Submission should consist of:

### Cover page including

most appropriate topic, title of the paper, names and affiliations of authors, contact author's name, address, phone number, fax number, and email address.

The paper (up to 10 pages in 11 point or larger) or an abstract (3 - 5 pages), which should provide a summary of the main results and their details to allow the program committee to assess their merits and significance, including references and comparisons.

Hardware/software co-design Network and communication

- Re-configurable architectures and applications
- Software synthesis for embedded systems
- Case studies of embedded systems (e.g. automotive and Dependability and fault tolerance medical applications)

The contribution must be

author of each accepted paper

should present it at the conference.

The Proceedings will be published

by Springer, the official publisher of

IFIP. Full details on how to format

your paper can be found at at the

IESS 2007 web site www.iess.org

or the web site of the conference

publisher, Springer:

www.wkap.com/ifip/styles/

Power management and

optimization

You can submit Postscript, PDF, or MS Word files to: unpublished and not submitted for IESS@iess.org publication elsewhere, including journals and the proceedings of

or hard copies to: other symposia or workshops. One

svstems

architectures

Achim Rettberg University Paderborn Fuerstenallee 11 D-33094 Paderborn Germany

# www.iess.org

# IESS **``**7

# Location

Beckman Conference Center National Academies of Sciences & Engineering Irvine, California, USA

## Important Dates

December 20, 2006 Submission due January 20, 2007 Notification of acceptance

February 20, 2007 Final papers

### Organization

IFIP - http://www.ifip.org/

Distributed and modular controller

General Chair

Achim Rettberg C-LAB, Germany

Mauro Cesar Zanella ZF Lemförder Fahrwerktechnik Germany

General Co Chair

Franz Ramming University of Paderborn Germany

**Program Chair** 

Rainer Doemer University of California at Irvine, USA

Local Arrangements Chair

Andreas Gerstlauer University of California at Irvine. USA

**Program Committee** (tentative)

Juergen Becker University of Karlsruhe Germany

Brandon Blodget Xilinx Research Labs USA

Christophe Bobda University of Kaiserslautern Germany

## Rainer Doemer

at Irvine, USA

Rolf Ernst

C-LAB University of California Germany Technical University of

Braunschweig, Germany Germany

Germany

LAAS

France

Philips

USA

OFFIS

Germany

UFRGS

Brazil

Germany

University of Tokyo Japan Daniel Gajski

Masahiro Fujita

University of California at Irvine. USA Andreas Gerstlauer

University of California at Irvine, USA

Frank Hansen Altera Germany

Joerg Henkel University of Karlsruhe Germany

Thomas Heurung Mentor Graphics

Germany Uwe Honekamp Vector Informatik Germany

> Marcel Jackowski USP Brazil

Kane Kim University of California at Irvine, USA

Bernd Kleinjohann Stefan Schimpf Robert Bosch Ltda. Brazil

Thorsten Koelzow Audi Electronics Venture

Hermann Kopetz Technical University of Vienna Austria

Horst Krimmel ZF Friedrichshafen

Jean-Claude Laprie

Thomas Lehmann

Mike Olivarez Freescale Semiconductor

Frank Oppenheimer Mauro Zanella

Carlos Pereira

Franz Rammig University of Paderborn Germany



Juergen Schirmer Robert Bosch GmbH Germany Aviral Shirvastava

Arizona State University USA

Joachim Stroop dSPACE Germany

> Hiroyuki Tomiyama Nagoya University Japan

Ansgar Trächtler University of Paderborn Germany

Flavio R. Wagner UFRGS Brazil

> ZF Lemförder Fahrwerktechnik Germany

Jianwen Zhu University of Toronto Canada



Ą

UCITVINE UNVERSITY OF CALIFORNIA, IRVINE

6



call for papers May 29 - June 1, 2007 Irvine, California, USA www.iess.org



