

## KEY DATES **submission key dates**

D, A, T and E papers  
Deadline is Sunday, September 11, 2011

Special Session proposals  
Deadline is Sunday, September 11, 2011

Tutorial proposals  
Deadline is Sunday, September 11, 2011

Friday Workshop proposals  
Deadline is Friday, September 2, 2011

Exhibition Theatre  
Deadline is Monday, October 24, 2011

PhD Forum  
Deadline is Friday, November 11, 2011

Notification of acceptance  
Deadline is Monday, November 14, 2011

Camera-ready paper due date  
Deadline is Monday, December 12, 2011

University Booth proposals  
Deadline is Monday, January 16, 2012

## INSTRUCTIONS **submission instructions**

All manuscripts for any technical topic of the D, A, T and E tracks must be submitted for review electronically, following the instructions on the conference Web page:

[www.date-conference.com](http://www.date-conference.com)

The accepted file format is PDF. Any other format and manuscripts received in hard-copy form will not be processed.

Papers can be submitted for either formal oral presentation or for interactive presentation. Oral presentations require novel and complete research work supported by experimental results. Interactive presentations are expected to articulate emerging and future design, verification and test problems including work in progress and identify open problems that merit innovative future research. These presentations are given on a laptop in a face-to-face discussion area.

**Submissions should not exceed 6 pages in length for oral-presentation papers and 4 pages in length for interactive-presentation papers. Submission of 2 page papers in topic A7 (Industrial Experiences Brief Papers) will also be considered.**

All papers should be formatted as close as possible to the final format: A4 or letter sheets, double column, single spaced, Times or equivalent font of minimum 10pt (templates are available on the DATE Web site for your convenience). To permit blind review, submissions should not include the author names. Any submission not in line with the above rules will be discarded.

All papers will be evaluated with regard to their suitability for the conference, originality and technical soundness. The Programme Committee reserves the right to reorient oral-presentation papers to interactive-presentation and vice versa, to obtain the most suitable presentation format. Submissions simultaneously under review or accepted by another conference, symposium or journal will be rejected. The DATE conference will work cooperatively with others to check for double-submissions. It is mandatory that authors of accepted presentations attend to present their work at the conference and also that each paper is accompanied by at least one full conference registration fee payment at the speaker rate.

## SPECIAL SESSIONS **special sessions**

Special Sessions can take the form of **Panels** discussing visionary and/or controversial issues, **Hot-Topic Sessions**, dealing with the introduction and discussion of new R&D problems, and **Embedded Tutorial Sessions**, addressing trends in the technical domains that are of interest to the conference participants.

Special Session proposals consist of an extended summary of up to 1500 words describing the session content and format, and must be submitted via the Web site by Sept. 11, 2011.

Contributors of accepted special sessions will be asked to submit final texts or statements of panellists, as appropriate, for publication in the Proceedings (deadline Dec. 12, 2011). Panel sessions are entitled to one page in the Proceedings, whereas Embedded Tutorials and Hot Topic sessions are allocated a maximum of 6 pages per session. For more information, please contact:

Andreas Herkersdorf  
Tel: +49 89 289 22515

a.herkersdorf@ei.tum.de  
Fax: +49 89 289 28323

## TUTORIALS **tutorials**

On the first day, half- and full-day technical tutorials on selected topics will be given by leading experts in their respective fields. The proposal should motivate the topic and its relevance for both academia and industry, describe the target audience (who? how many? match with typical DATE audience?), the reason for a tutorial, (why a tutorial, why now, why half or full day), tutorial objectives and a clear planning hereto (tutorial outline and speakers, what will be done to attract the audience). Proposals should be sent by using the form available on the web, before Sept. 11, 2011 to:

Luca Fanucci  
Tel: +39 050 2217 668

l.fanucci@iet.unipi.it  
Fax: +39 050 2217 522

## UNIVERSITY BOOTH **university booth**

A University Booth will be organised in order to help the transfer of technology to industry. Research institutes and universities interested in demonstrating their prototypes and pre-commercial results should contact by Jan. 16, 2012:

Jens Lienig  
Tel: +49 351 463 34742

jens@ieee.org  
Fax: +49 351 463 37183

Andreas Voerg  
Tel: +49 511 762 19686

voerg@edacentrum.de  
Fax: +49 511 762 19695

## PHD FORUM **phd forum**

The PhD Forum is a poster session hosted by the European Design and Automation Association (EDAA) and ACM SIGDA for PhD students to present and discuss their research work with people in the design automation and system design community. It represents a good opportunity for students to get feedback on their research and for the industry to see academic work in progress. Submissions should be sent by Nov. 11, 2011:

Peter Marwedel  
Tel: +49 231 755 6111

peter.marwedel@tu-dortmund.de  
Fax: +49 231 755 6116

## EXHIBITION THEATRE **exhibition theatre**

An open discussion forum in the midst of Europe's largest electronic system design exhibition: The programme combines expert panel sessions and customers' testimonials. The aim is to offer exhibition visitors a fresh view on the key industrial and business issues in the electronic systems design market. Submissions are invited from industry consortia, technology groups, standards bodies, or any person with opinions on future industry trends by Oct. 24, 2011 to:

Juergen Haase  
Tel: +49 511 762 19698

haase@edacentrum.de  
Fax: +49 511 762 19695

## FRIDAY WORKSHOPS **friday workshops**

Proposals for Friday Workshops on emerging research and application topics are invited. Particularly suitable topics are those not directly covered in the technical programme and which have the potential to impact on future DATE technical areas in design and test of microelectronic systems. For information and detailed descriptions on how to propose a workshop, please refer to the Web site. Proposals should be sent by Sept. 2, 2011 to:

Nicola Nicolici  
Tel: +1 905 525 9140

nicola@ece.mcmaster.ca  
Fax: +1 905 521 2922

Lorena Anghel  
Tel: +33 4 76 57 46 96

lorena.anghel@imag.fr  
Fax: +33 4 76 57 49 81

## FRINGE MEETINGS **fringe meetings**

There are a limited number of rooms available for the organisation of fringe meetings (birds of a feather sessions) open to all DATE attendees, as well as for appropriate on-site closed meetings. Requests are considered in the order of their arrival, and should be directed to:

European Conferences  
Tel: +44 203 052 8065

Claire.cartwright@ec.u-net.com  
Fax: +44 131 225 2925

Requests for commercial meetings will incur the standard room charges.

## final call for papers



# Design, Automation & Test in Europe

## ICC, Dresden, Germany March 12 - 16, 2012

[www.date-conference.com](http://www.date-conference.com)

The 15th **DATE conference and exhibition** is the main European event bringing together designers and design automation users, researchers and vendors, as well as specialists in the hardware and software design, test and manufacturing of electronic circuits and systems. It puts strong emphasis on ICs/SoCs, reconfigurable hardware and embedded systems, including embedded software.

The five-day event consists of a **conference** with plenary invited papers, regular papers, panels, hot-topic sessions, tutorials and workshops, two special focus days and a track for executives. The scientific conference is complemented by a commercial **exhibition** showing the state-of-the-art in design and test tools, methodologies, IP and design services, reconfigurable and other hardware platforms, embedded software, and (industrial) design experiences from different application domains, e.g. automotive, wireless, telecom and multimedia applications. The organisation of user group meetings, fringe meetings, a university booth, a PhD forum, vendor presentations and social events offers a wide variety of extra opportunities to meet and exchange information on relevant issues for the design and test community. Special space will also be allocated for EU-funded projects to show their results.

## THE CONFERENCE the conference

The **conference** addresses all aspects of research into technologies for electronic and (embedded) systems engineering. It covers the design process, test, and tools for design automation of electronic products ranging from integrated circuits to distributed large-scale systems. This includes both hardware and embedded software design issues. The conference scope also includes the elaboration of design requirements and new architectures for challenging application fields such as telecom, wireless communications, multimedia and automotive systems. Persons involved in innovative industrial designs are particularly encouraged to submit papers to foster the feedback from design to research. Panels, hot-topic sessions and embedded tutorials highlight and inform about emerging topics.

**Special Days** in the programme will focus on two areas bringing new challenges to the system design community:

**More than Moore:** A Special Day on More-than-Moore technologies (MtM) will be organised. After a broad overview of the MtM field, dedicated talks will address specific technologies including *ams-rf*, power and 3D integration, and applications such as energy and healthcare.

**e-Mobility:** The e-Mobility Special Day will take up the latest trend towards hybrid and fully electric vehicles by discussing upcoming issues to be addressed by the design automation, microelectronics and embedded system communities. The major challenge is to smooth the way in developing the high requirements for the electronic systems inside an electric vehicle. Important topics to be discussed are among many others control and operation strategies to optimise energy consumption and recovery, electromagnetic interference due to high and low voltage electronics, and efficient vehicle to grid solutions with smart recharging capabilities.

On the first day of the DATE event, half- and full-day in-depth technical tutorials are given by leading experts in their respective fields. The tutorials are well suited for researchers, tool developers and system designers.

Friday Workshops concentrate on specialised and novel topics.

## THE EXHIBITION the exhibition

The conference is complemented a large **exhibition** and unique networking opportunity for vendors of tools and services for hardware and embedded software for the design, development and test of Systems-on-Chip, IPs, Embedded Systems, ASICs, FPGAs and PCBs including a broad range of design reuse technologies and services.

To inform attendees on commercial and design related topics, there will be a full programme in the Exhibition Theatre which will combine presentations by exhibiting companies and selected conference special sessions.

## TOPIC AREAS topic areas for submission

Within the scope of the conference, the main areas of interest are organised in the following tracks. Submissions can be made to any of the track topics. For detailed descriptions of the track topics, please refer to the DATE Web site.

**Track D: Design Methods and Tools**, addressing design automation and design tools for electronic and embedded systems. Emphasis is on methods and tools related to the use of computers in designing products. This includes designer feedback on existing design methods and tools as well as to initiate discussions on requirements of future system architectures, design flows and environments.

This track is organised in the following topics:

- D1 System Specification and Modelling
- D2 System Design, Synthesis and Optimization
- D3 Simulation and Validation
- D4 Design of Low Power Systems
- D5 Power Estimation and Optimisation
- D6 Emerging Technologies, Systems and Applications
- D7 Formal Methods and Verification
- D8 Network on Chip
- D9 Architectural and Microarchitectural Design
- D10 Architectural and High-Level Synthesis
- D11 Reconfigurable Computing
- D12 Logic and Technology Dependent Synthesis
- D13 Physical Design and Verification
- D14 Analog and Mixed-Signal Systems and Circuits
- D15 Interconnect, EMC and Packaging Modelling

**Track A: Application Design**, is devoted to the presentation and discussion of design experiences with a high degree of industrial relevance, as well as innovative design methodologies and applications of specific design technologies. Contributions should illustrate state-of-the-art or record breaking designs, which will provide viable solutions in tomorrow's silicon and embedded systems. In topic A7, there is the opportunity to submit short, 2-page papers, that relate to industrial research and practice.

This track is organised in the following topics:

- A1 Computing and Green IT Systems
- A2 Communication, Consumer and Multimedia Systems
- A3 Transportation, Management and Energy Generation Systems
- A4 Medical and Healthcare Systems
- A5 Secure Systems
- A6 Reliable and Reconfigurable Systems
- A7 Industrial Experiences Brief Papers

**Track T: Test Methods and Tools**, addressing design-oriented embedded test solutions as well as defect analysis, modelling, test generation and silicon debugging. Emphasis is on both system- and chip-level test.

This track is organised in the following topics:

- T1 Test for Defects, Variability, and Reliability
- T2 Test Generation, Simulation and Diagnosis
- T3 Test for Mixed-Signal, Analog, RF, MEMS
- T4 Test Access, Design-for-Test, Test Compression, System Test
- T5 On-Line Testing and Fault Tolerance

**Track E: Embedded Systems Software** is devoted to modelling, analysis, design and deployment of Embedded Software. Areas of interest include methods, tools, methodologies and development environments. Emphasis will also be on embedded software platforms, software integration, adaptive real-time systems, and dependable systems.

This track is organised in the following topics:

- E1 Real-time, Networked, and Dependable Systems
- E2 Compilers and Software Synthesis for Embedded Systems
- E3 Model-based Design and Verification for Embedded Systems
- E4 Embedded Software Architectures
- E5 Cyber-Physical Systems

In addition to the above conference tracks, we welcome proposals for **Special Sessions, Tutorials** and **Friday Workshops**, and submissions for the Special Days on **More than Moore** and **E-Mobility**.

## COMMITTEES committees

A full list of the executive and programme committee members is available on the DATE Web site.

## SPONSORS sponsors

DATE is sponsored by the European Design and Automation Association, the EDA Consortium, IEEE Council on EDA, ECSI, ACM-SIGDA & RAS. In cooperation with IEEE Computer Society (TTTC), IEEE Solid-State Circuits Society (SSCS), IFIP and IET.

## INFORMATION information

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To add your name to the mailing list go to the Web site:  
[www.date-conference.com](http://www.date-conference.com)