

Call for Papers

Application Design Track at DATE 2009

Nice, France - April 20-24, 2009



The **Design, Automation and Test in Europe 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. The **Application Design Track** is devoted to the presentation and discussion of design experiences with a high degree of industrial relevance, as well as innovative design methodologies and use of specific design technologies in different application domains.

This five-day event consists of a **conference** with plenary keynotes, regular papers, interactive presentations, panels and hot-topic sessions, tutorials, master courses and workshops. DATE is also Europe's leading commercial **exhibition** showing the state-of-the-art in design and test tools, methodologies, IP and design services. Both the conference and the exhibition, together with the many user group meetings, fringe meetings, university booth and social events offer a wide variety of opportunities to meet and exchange information.

TOPICS

A1 Signal processing for the media domain

Chairs: John Dielissen (NXP Semiconductors, NL), Gibong Jeong (Samsung Electronics, JP)

Intellectual Property, System on Chip and embedded system design experiences for the Audio, Video, and Vision domain. Examples of IP are JPEG, MPEG, FFT decoders, data compression, and Application Specific Processors (ASP) /Digital Signal Processors (DSP) for these domains.

A2 Wireless Communication and Networking

Chairs: Cyprian Grassmann (Infineon Technologies, DE), Guido Masera (Politecnico Torino, IT)

Practical design experiences for digital and mixed-signal integrated circuits, RF architectures, Software Defined Radio components, Analog/mixed-signal, Intellectual Properties for wireless communication, baseband processing, forward error correction and networking.

A3 Automotive

Chairs: Luca Fanucci (University of Pisa, IT), Christian Sebeke (Robert Bosch, DE)

Practical design experiences for automotive applications: analogue and mixed-signal integrated circuits, micro-electromechanical systems, integrated sensors and transducers, RF architectures, real-time reliable embedded systems, interconnected systems, design for reliability and design of safety-critical systems. Practical application of design methods to automotive systems.

A4 Secure embedded implementations

Chairs: Ingrid Verbauwhede (Katholieke Universiteit Leuven, BE), Jerome Quevremont (Thales, FR)

Technologies and experiences in designing secure system-on-chips and embedded systems. Topics of interest include novel techniques for embedded cryptography, side-channel attacks and fault attacks modeling, characterization, simulation and associated countermeasures, random numbers generation, embedded secure processors, trusted computing, off-chip memories and network on chip enciphering and integrity checking, trust establishment and attestation.

A5 Military, space and avionics

Chairs: Bernard Candaele (Thales, FR), Philippe Manet (Université Catholique de Louvain, BE)

Practical design experiences and innovative solutions for military, space and avionic systems. Topics of interest address applications like Software Radio, Galileo systems, on-board computing for Avionics, and development items like reconfigurable hardware, DSP and image processing, safety critical design, new electronic devices, covering also the specificities of the domain in terms of high performance and life cycle.

A6 Application of Reconfigurable and Adaptive Systems

Chairs: Christoph Heer (Infineon Technologies, DE), Michael Huebner (Universität Karlsruhe, DE)

Reconfigurable and adaptive systems in real application cases featuring structured ASIC, FPGA and coarse-grained architectures and platforms.

A7 Technologies and applications for healthcare

Chairs: Marco Bianchessi (STMicroelectronics, IT), Danilo De Rossi (University of Pisa, Italy)

Technologies and experiences in designing bio-medical systems. Topics of interests include: bioelectronics/biomedical instrumentations, implantable and wearable electronics, biomedical aids to the disables, integration of fluidics and electronics (biosystem-on-chip), technology and application for healthcare, bio-medical signal acquisition and processing.

A8 Multi-core Platforms

Chairs: Marcello Coppola (STMicroelectronics, FR), Frédéric Pétrot (TIMA, FR)

Practical design experiences and funded project application demonstrators based on innovative energy/performance efficient multi-core architectures. Topics of interest but are not limited to: multi-processor, configurable cores, memory controllers, efficient memory hierarchy, on chip communication (bus, NoC) architecture and support for multicore, programming models, power and energy issues in multi-core architectures, floor plan aware architecture optimization.

A9 MEMS and analogue/mixed signal system implementations

Chairs: Paolo D'Abramo (Austriamicrosystems, IT), Jörg Eichholz (Fraunhofer Institut für Siliziumtechnologie, DE)

Practical design experiences of MEMS and analogue/mixed signal systems. Topics of interests include design, implementation and testing of data converter, analog and mixed signal processing, sensor conditioning, smart interfaces, controlling techniques and system in a package technology for a wide range of practical cases including biomedical, environmental applications, consumer, automotive.

PAPER SUBMISSION

All manuscripts must be submitted electronically before **September 7th, 2008**, following the instructions on the conference Web page:

www.date-conference.com

Papers can be submitted for either standard oral presentation or for interactive presentation. Submissions should not exceed 6 pages in length for oral presentation and 4 pages in length for interactive-presentation papers.

INFORMATION

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