



Sponsored by
VLSI Society of India (VSI)
Ministry of Communications &
Information Technology
Government of India

January 3 - 7, 2010
NIMHANS Convention Centre
Bangalore, INDIA

In Cooperation with (proposed)
IEEE
IEEE Circuits and Systems Society
IEEE ED/SSC/CAS Bangalore chapter
ACM Special Interest Group on Design Automation

THEME: Affordable Technology for Emerging Markets

This joint conference is a forum for researchers and designers to present and discuss various aspects of VLSI design, electronic design automation (EDA), enabling technologies, and embedded systems. It covers the entire spectrum of activities in the two vital areas of very large scale integration (VLSI) and embedded systems, which underpin the semiconductor industry. The five-day technical program will consist of three days of regular paper sessions, special sessions, embedded tutorials, industry presentation sessions, panel discussions, design contests and industrial exhibits, and two days of full-day tutorials.

Electronic systems are ubiquitous today in multiple applications, with emerging markets in health-care, entertainment and machine intelligence spurring several new ones. These markets often hinge delicately on the right blend of technology and affordability. Accordingly, the theme for this conference is set as "Affordable Technology for Emerging Markets".

TOPICS: Papers are invited on topics related to (but not limited to) the following areas:

VLSI Design and Design Methodologies

Analog and RF mixed-signal design
CMOS sensors and MEMS
Design for manufacturability, reliability and yield
High-performance computing
Medical and automotive electronics
Mixed-signal design and technology CAD
Multi-core architectures
Nano-scale computing and nano-electronics
Networks-on-chip
Packaging and board design
Physical design
Power analysis and low-power design
Synthesis, DFT and test
Thermal analysis and temperature-aware design
Verification (simulation and formal)

Embedded Systems

Audio, image and video processing
Case studies
ESL design flows
Embedded software tools
Emerging applications: Health-care, imaging systems, entertainment, sensor networks, ambient intelligence
Extensible, application-specific and reconfigurable processing
FPGA/Emulation based design prototyping
Hardware/Software co-design
Performance analysis and profiling
Security and compression

Theme Based

Automation needs to meet new product challenges
Concurrent engineering
Design and technology management
Economics of design and manufacturing
Emerging markets

SUBMISSION GUIDELINES: All submissions must be made at the conference web site, <http://www.vlsiconference.com>.

- **Regular papers:** The manuscript, to be prepared in IEEE two-column conference format and not to exceed six pages, must describe previously unpublished work, focusing on novel ideas, results and applications of the contribution. Submissions will undergo a BLIND review process: Papers disclosing the identity of the authors will be rejected.
- **Embedded tutorials & Special Sessions:** Proposals in emerging areas of relevance to this conference can be submitted as two-page extended abstracts with details of topics covered. Accepted proposals will require full regular papers to be submitted.
- **Panels:** Proposals must be submitted together with an abstract, together with names of panelists.

All submissions of papers and proposals will imply that, if selected, the same must be presented at the conference in person. Hence, approvals from parent organizations must be obtained before the submissions are made.

TUTORIALS: Two days will be dedicated to full-day tutorials on important and emerging topics. Coordinating presenters are encouraged to submit proposals in the specified format giving adequate information on topics covered and details of other presenters.

EXHIBITS: The conference provides a unique opportunity for vendors of VLSI design tools and services to display their products and services. Exhibition space is limited, hence those interested should contact the Exhibit Chair.

DESIGN CONTEST: Please check the conference website or contact the Design Contest Chair for more information.

FELLOWSHIPS: The Fellowship Chairs will award fellowships, based on need and merit, to partially cover the expenses of attendees from India. Candidates with accepted submissions will be given preference.

IMPORTANT DATES:

Submissions:
Regular papers
Special sessions, Embedded Tutorials & Panels
Full-day tutorials

Acceptance notification
Fellowship applications due

July 17, 2009
July 17, 2009
July 17, 2009
September 15, 2009
October 01, 2009

For more information, please visit <http://www.vlsiconference.com>

Steering Committee Chair

Vishwani D. Agrawal Auburn University
vagrawal@eng.auburn.edu

General Chairs

Mahesh Mehendale, Texas Instruments
m-mehendale@ti.com

Srivaths Ravi, Texas Instruments
srivaths.ravi@ti.com

Program Chairs

Niraj K. Jha, Princeton University
jha@princeton.edu

Rubin A. Parekhji, Texas Instruments
parekhji@ti.com

Tutorial Chairs

Anand Raghunathan, Purdue University
raghunathan@purdue.edu

Preeti Ranjan Panda, IIT Delhi
panda@cse.iitd.ac.in

Publications Chair

C. P. Ravikumar, Texas Instruments
ravikumar@ti.com

Organizing Committee

R. Madhu (Chair), Texas Instruments
rmad@ti.com

S. Ramesh (Chair), Texas Instruments
s-ramesh@ti.com

Sponsorship Chair

S. Uma Mahesh, Indrion Technologies
mahesh@indrion.co.in

Exhibit Chair

Jai Durgam, Synopsys
jai.durgam@synopsys.com

Industry Forum Chair

Pradip Dutta, Synopsys
pradip.dutta@synopsys.com

Publicity Chair

Kanishka Lahiri, AMD
kanishka.lahiri@amd.com

Finance Chair

Gopal Naidu, Texas Instruments
srgnaidu@ti.com

Design Contest Chair

Nagendra Krishnapura, IIT Chennai
nagendra@iitm.ac.in

Fellowship Chairs

V. Kamakoti, IIT Chennai
kama@cs.iitm.ac.in

Pradip Thaker, Analog Devices
pradip.thaker@analog.com

Regional Liaisons

Dimitris Gizopoulos, Univ. of Piraeus
dgizop@unipi.gr

Vijay K. Narayanan, Penn State University
vijay@cse.psu.edu

Kazumi Hatayama, STARC
hatayama.kazumi@starc.or.jp

IEEE Liaison

N. Ranganathan, Univ of South Florida
ranganat@csee.usf.edu

Student Track Chairs

Virendra Singh, IISc Bangalore
virendra@computer.org

R. Venkatraman, Texas Instruments
rvenkat@ti.com