



# GLSVLSI 2010

Providence, Rhode Island, May 2010

<http://www.glsvlsi.org/>



Sponsored by ACM SIGDA, with Technical Support of IEEE CEDA



## General Chairs

Iris Bahar  
*Brown University*  
Fabrizio Lombardi  
*Northeastern University*

## Program Chairs

Erik Brunvand  
*University of Utah*  
David Atienza  
*EPFL*

## Publicity Chair

José L. Ayala  
*Complutense University*

## Website Chair

Theocharis Theocharides  
*University of Cyprus*

## Steering Committee

David Garrett  
*Broadcom*  
Yehea Ismail  
*Northwestern University*  
John Lach  
*University of Virginia*  
Gang Qu  
*University of Maryland*  
Mircea Stan  
*University of Virginia*  
Vijaykrishnan Narayanan  
*Penn State University*  
Zhiyuan Yan  
*Lehigh University*  
Enrico Macii  
*Politecnico di Torino*

The 20<sup>th</sup> edition of GLSVLSI will be held in Providence, Rhode Island. Original, unpublished papers, describing research in the general area of VLSI are solicited. Both theoretical and experimental research results are welcome. Proceedings will be published by the ACM and will be available through the ACM Digital Library. For more information, visit <http://glsvlsi.org/>.

## Program Tracks:

- **VLSI Design:** design of ASICs, microprocessors/micro-architectures, embedded processors, analog/digital/mixed-signal systems, NoC, interconnects, memories, and FPGAs.
- **VLSI Circuits:** analog/digital/mixed-signal circuits, RF and communication circuits, chaos/neural/fuzzy-logic circuits, high-speed/low-power circuits, arithmetic circuits.
- **Computer-Aided Design (CAD):** hardware/software co-design, logic and behavioral synthesis, logic synthesis and technology mapping, simulation and formal verification, layout (partitioning, placement, routing, floorplanning, compaction), buffer insertion, CAD for datapath synthesis, algorithms and complexity analysis.
- **Low Power and Power Aware Design:** circuits, micro-architectural techniques, thermal estimation and optimization, power estimation methodologies, and CAD tools.
- **Testing, Reliability, Fault-Tolerance:** digital/analog/mixed-signal testing, design for testability and reliability, test vector compression, silicon debug and diagnosis, online testing techniques, static and dynamic defect- and fault-recoverability, and variation-aware design.
- **Emerging Technologies:** 3D integration, probabilistic architectures, optical interconnects, microfluidics, CNT, SET, RTD, QCA, VLSI aspects of sensor and sensor network, and CAD tools for emerging technology devices and circuits.
- **Post-CMOS VLSI:** evolutionary computing, optical computing, quantum computing, reversible logic, spin-based computing, biological computation, nanotechnology, molecular electronics, quantum devices, biologically-inspired computing. Emphasis should be on the analysis, novel circuits and architectures, modeling, CAD tools, and design methodologies.

**Paper submission deadline:**

**December 7<sup>th</sup>, 2009**

**Special session proposals deadline:**

**November 30<sup>th</sup>, 2009**

**Acceptance notification:**

**February 5<sup>th</sup>, 2010**

**Camera-ready paper due:**

**March 3<sup>rd</sup>, 2010**

**Paper Submission:** Authors are invited to submit full-length (6 pages maximum), original, unpublished papers along with an abstract of at most 200 words. To enable blind review, the author list should be omitted from the main document. Previously published papers or papers currently under review for other conferences/journals should not be submitted and will not be considered. Electronic submission in PDF format to the <http://www.glsvlsi.org> website is required. Author and contact information (name, street/mailling address, telephone, fax, e-mail) must be entered during the submission process.

**Paper Format:** Submissions should be in camera-ready two-column format, following the ACM proceedings specifications located at:

<http://www.acm.org/sigs/pubs/proceed/template.html>

and the classification system detailed at: <http://www.acm.org/class/1998/>

**Paper Publication and Presenter Registration:** Papers will be accepted for regular or poster presentation at the symposium. Every accepted paper MUST have at least one author registered to the symposium by the time the camera-ready paper is submitted; the author is also expected to attend the symposium and present the paper.