Call for Papers

Paper Deadline: February 16th, 2012

International Conference on IC Design & Technology
Austin, Texas; May 30th – June 1st, 2012

As IC design & process technology continue to advance toward increased performance, lower power, and accelerated time-to-market, engineering teams that are traditionally separated by the boundary between design and process technology will have difficulties meeting the shrinking window available for product optimization tasks. The International Conference on IC Design & Technology provides a forum for engineers, researchers, scientists, professors and students to cross this boundary through interactions directly focused on tying together design and process technology. The unique workshop style of the conference provides an opportunity to technologists and product designers to exchange breakthrough ideas and collaborate effectively. Two days of technical presentations and workshops will be preceded by a one-day tutorial program of value to both the expert and the beginner.

The venue for the 2012 ICICDT will be Freescale Semiconductor at 7700 W Parmer Lane, Austin, Texas, 78729, U.S.A.
(**http://www.ICICDT.org**)

Papers are solicited on:

- Design approaches including system, circuit and EDA to manage power, leakage, process variation, signal integrity, reliability, yield, and manufacturability.
- Advanced VLSI design, including embedded and host processors, ASICs, memory sub-systems, analog and mixed-signal circuits.
- Multicore System-on-Chip (SoC), System-in-Package (SiP), and IP reuse for fast design closure.
- Advanced materials, advanced metallization, and 3D interconnection to realize novel interconnect schemes and future SoCs.
- Process and circuit technology for advanced memories: ReRAM, PRAM, MRAM, FeRAM, DRAM, Nanocrystal Memory, Flash, etc. with emphasis on reliability.
- Advanced transistor structures for bulk, multiple Gate (FinFET & Tri-gate FET), FDSOI, PDSOI, SSOI, SiGe, etc. technologies.
- RF & analog properties of advanced devices (MOS, BJT, MEMS …) & analog circuits on advanced technologies (planar, heterogeneous, 3D…).
- New gate materials for adjusting Vt, enhanced mobility & scalability, low leakage, and low power.
- SER, thermal, leakage, Plasma-Induced Damage (PID), reliability, yield, etc. effects on advanced transistor structures and circuits.
- Simulation & modeling on advanced processes, devices & circuits.
- Nanotechnology materials, devices and circuits.
- ESD protection circuitry, mixed-voltage-tolerant I/O design, high speed and low power I/O buffers
- Emerging IC technology and circuit crossovers such as organic IC's, integrated sensors and integrated actuators.
- High Power, High Voltage devices and technology.

Prospective authors are invited to submit a camera-ready paper of maximum four pages in length, including figures and references. The authors should obtain paper submission guidelines from **http://www.ICICDT.org**. Accepted / Invited papers will be included in the proceedings of the conference (available on CD-ROM). Accepted papers must be accompanied by a non-refundable registration fee and presented at the conference to be published in IEEE Xplore.

Conference Format

ICICDT features a popular and unique format structured to maximize face-to-face interaction. An abbreviated synopsis of each paper is presented in a plenary session, and following the presentations, a workshop-style forum allows for more detailed discussions on an individual basis. Many participants in previous years have commented that this interaction is very rewarding.

Contact Information

For further general information or assistance in selecting a subject area, please contact:

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