



CALL FOR PAPERS

CUSTOM INTEGRATED CIRCUITS CONFERENCE 2001

"Fueling the Communications Revolution"

...the leading technical conference for IC development

web address: www.ieee-cicc.org

TOWN AND COUNTRY HOTEL
SAN DIEGO, CA
DATE: MAY 6 - 9, 2001

The IEEE Custom Integrated Circuits Conference is the premier conference devoted to IC development, showcasing original first published technical work and innovations. It provides a forum for circuit designers, CAD developers, manufacturers and ASIC users to present and discuss exciting new developments, future trends, innovative ideas and recent advancements. CICC is sponsored by the IEEE Solid-State Circuits Society.

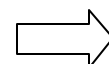
CONFERENCE HIGHLIGHTS

- Technical Papers:** The technical program is the focal point of the CICC where new state of the art developments are presented. Over 150 papers addressing a broad range of leading-edge circuits, applications, design techniques and tools, test and reliability, fabrication, and system on a chip will be presented.
- Panels:** Discussions and debates by industry leaders on key issues, problems, and controversial topics of the IC industry. CICC panels are well known for their lively and thought-provoking discussion.
- Educational Sessions:** Four sessions with invited speakers offer a valuable opportunity for practicing professionals to refresh their skills in traditional integrated circuit design methods, as well as to get acquainted with futuristic design principles like system-on-a-chip, broadband communication and wireless IC design. These tutorials are rated among the best in the industry.
- Exhibits** Exhibits will include displays and demonstrations by semiconductor manufacturers, software tool suppliers, design service houses, technical book vendors and software suppliers.
- Conference Events:** Throughout the conference, additional events are scheduled which will complement the technical character of the conference with stimulating social happenings, such as an Exhibitor's Reception and conference luncheon.

PAPERS IN THE FOLLOWING AREAS ARE REQUESTED:

- Communications**
Analog, Wired and Wireless Circuits
Data converters, modulators, filters, high-speed analog, low voltage techniques. Mixed analog-digital IC applications, disk read/write channels, RAMDACs. Data, voice, image and video transmission. Digital, analog modulation, equalization, error correction, coding, switching. SONET/SDH, xDSL, LAN/WAN/ATM, set-top receiver, cable modem, high-speed serial links and broadband applications. Advanced read-write channel ICs. Analog or mixed-signal integrated circuits and systems for voice and data communications. Receivers, transmitters, and their functional blocks. Mixed-signal innovations for auto calibration, adaptive signal processing, modulation and demodulation.
- Digital Systems:**
Embedded Memories, SOC, IP Generation and Project Management
Use of SRAM, DRAM, EPROM, EEPROM, ROM and CAM in ICs. Innovative memory architectures, sense amplifiers, special memory interfaces, low-power design techniques, and design of memories in new technologies such as SOI or ferroelectric material. System-on Chip (SoC) design, demonstration of IP usage, coverage of complete design flow. Complexity demonstrated in both gate count as well as type of functions integrated onto the same IC. IP generation, methodology implementation, use within conventional CAD flows, evaluation, and protection. IC design technical project management, design effort estimation, automation support resource estimation, multi-team design efforts, enterprise (24/7) design methodology.
- Simulation-Modeling**
Circuit, functional, timing, and logic simulation. Device and block modeling. Analog, RF modeling and simulation. Mixed signal simulation and modeling of analog/digital interfaces. Signal Integrity and Reliability Verification. Clock/Power Network design, synthesis and verification. R(L)C extraction and analysis. Modeling of device/interconnect process and variations.
- DSP**
Digital video and audio, MPEG, image recognition and enhancement. Audio coding and speech recognition. Specialized processing function architectures. Digital filtering, encryption, HDTV, video conferencing, multimedia, graphics controllers, video drivers, and novel DSP algorithm implementations.
- Custom /Low-Power**
Papers detailing custom circuit designs including low power and low voltage design techniques are requested. Innovative designs for cell based or full custom ICs for applications such as automotive, biomedical, and consumer. Sensor interface circuits and high-performance circuit designs, including dynamic logic, clocking circuits, and I/O circuits.
- Programmable Devices**
Innovations in EPLD, FPGA, PLD, PAL, GA device architecture and product features. Advances in circuit techniques, device and/or product feature applications, and CAD tools targeting these devices.
- Fabrication / Foundry**
Process, Foundry
Advanced process integration techniques for the manufacturing & prototyping of system-on-a-chip ICs using any combination of CMOS, bipolar, SOI, BiCMOS, smart power, Ferroelectrics, and MEMS technologies. New and evolving chip packaging like BGA, flipchip, chip-on-chip, and multi-chip modules. Package modeling, techniques, ESD protection, and fiber optic transceivers.
- Test and Reliability**
Advances in design-for-testability (DFT), including analog design for test, fault modeling and grading, IDDQ measurements, scan, Analog and Digital BIST, and JTAG, parametric characterization, high speed or high frequency measurement techniques and failure analysis.

Over for important information on submission of papers



SUBMISSION OF PAPERS:

Deadline for Papers is November 29, 2000

Prospective authors must submit CAMERA READY papers and a PDF file, up to four pages in length inclusive of all illustrations, charts and tables. Those interested in submitting papers should contact the Conference Office as early as possible to obtain an author's kit and detailed instructions. The address is: CICC, 101 Lakeforest Blvd., Suite 400B, Gaithersburg, MD, 20877, Telephone: (301) 527-0900 x207, Fax: 301-527-0994, email: cicc@his.com, web page: <http://www.ieee-cicc.org>.

ACCEPTED PAPERS WILL BE PRINTED IN THE PROCEEDINGS WITHOUT OPPORTUNITY FOR FURTHER CHANGE. The paper should report original and previously unpublished work, including specific results. Circuit oriented work must include measured experimental results. Deadline for RECEIPT of technical papers is November 29, 2000. Appropriate company and government clearances MUST be obtained prior to submission. Authors of accepted papers will be notified by mail by January 31, 2001.

Accepted papers will be used for publicity purposes and portions of these papers may be quoted in pre-conference magazine articles and also via the Web. If this is not acceptable, authors must indicate this in the cover letter when submitting the paper for review.

Tutorial Papers:

Tutorial papers can have a length of up to 8 pages and must be pre-approved prior to submission. Those interested in submitting a tutorial paper should contact the Technical Program Chair, Phillip Diodato (pwd@lucent.com) as soon as possible as the number of tutorial slots are limited. Submission of tutorial papers in the area of telecommunication design is encouraged.

Presentations:

Authors presenting papers at the CICC Conference will be required to use Powerpoint (IBM compatible-PC format) as the projection medium.

FURTHER INFORMATION:

For complete author kit instructions, registration information, and general inquiries contact the Conference Office: Custom Integrated Circuits Conference, 101 Lakeforest Boulevard, Suite 400B, Gaithersburg, MD, 20877, Telephone: 301/527-0900 x207, Fax: 301/527-0994, email: cicc@his.com, web page: <http://www.ieee-cicc.org>.



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