First Call for Papers

IEEE Asian Solid-State Circuits Conference (A-SSCC) 2011

Location: Ramada Plaza Jeju Hotel, Jeju, Korea
Date: November 14, 2011 (Monday) – November 16, 2011 (Wednesday)

Sponsored by IEEE SSCS, IEEE Region-10 SSCS Chapters

Conference Theme
Integrated Circuits for Sustainable Future

The design, manufacture, and research on electronics are proliferating in Asia. Motivated by pursuing a better life quality, smart electronics for healthy living and sustainable environment are gaining attention. Development of these technologies will improve the lives for people in Asia and the whole world.

Submiting papers which support the healthy living and sustainable environment are highly encouraged.

The IEEE A-SSCC 2011 (Asian Solid-State Circuits Conference) is an international forum for presenting the most updated and advanced chips and circuit designs in solid-state and semiconductor fields. The conference is supported by the IEEE Solid-State Circuits Society and will be held in Asia. Further details on the conference and paper submission guidelines and templates will be available at the A-SSCC official website http://www.a-sscc.org/ around the beginning of April, 2011.

Paper Submission
Prospective authors are invited to submit full-length, four-page manuscripts, including figures, tables and references, to the official A-SSCC 2011 website. All papers will be handled and reviewed electronically. Papers are solicited in the following categories:

Regular Session

1. Analog Circuits & Systems: Amplifiers, comparators, switch capacitor circuits, continuous-time & discrete-time filters, voltage/current references; DC-DC converters, power-control circuits; IF/baseband analog circuits, AGC/VGA; display driver circuits; non-linear analog circuits.
2. Data Converters: Nyquist-rate and oversampling A/D and D/A converters, sub-circuits for data converters including sample-and-hold circuits, calibration circuits.
5. RF: Receivers/transmitters/transceivers for wireless systems; narrowband RF, ultra-wideband and millimeter-wave circuits (MMDs, 60GHz); circuits and sub-circuits for RF front-end, LNA, mixer, power amplifiers, VCOs, frequency synthesizers, RF filters, RF switches, power detectors, active antennas.
6. Wireline & Mixed-Signal Circuits: Receivers/transmitters/transceivers for wireline systems including (but not limited to) LAN, WAN, FDDI, Ethernet, token-ring, fiber channel, SONET, SDH, PON, ATM, ISDN, xDSL, cable-modem; optical/electrical data links and backplane transceivers; power-line communication; clock generation circuits, PLL, DLL, spread-spectrum clock generation.
7. Emerging Technologies and Applications: Advanced circuit technologies and techniques; ultra-low-voltage and sub-threshold logic design; molecular-, organic-, and nano-electronics; flexible substrates and printable electronics; 3D-integration and novel packaging technologies; compound-semiconductor, superconductive, and micro-photonic technologies and circuits; energy sources and energy harvesting; ambient-intelligence; emerging applications and circuits; medical/bio-electronics/bio-inspired chip design; RFID; analog and optical processors, non-transistor-based analog and digital circuits and systems; advanced memory technologies; spintronics; quantum storage.
8. Memory: Static, dynamic, non-volatile, and read-only memory; magnetic and ferro-electric memory designs and architectures; data storage and multi-bit-cell-based memory designs; embedded memory architectures, cache-memory systems, multi-port memory, and CAM designs, nano-crystal, phase-change, and 3D memories; yield-enhancement redundancy and ECC techniques; and memory testing and built-in self-test.

Special Session

1. Industry Program: This special category accepts only papers based on state-of-the-art products. The paper may cover specifications, applications, state-of-the-art points, chip photos, chip architecture/software, circuits (not necessarily very original, significant improvement is fine), live demo if any, characterization results, and packaging/testing results.
2. Student Design Contest: A student design contest is held among the accepted papers with system prototypes or measurement results of which operations can be demonstrated on-site. Refer to the web for further information.

Papers on low-power and/or low-voltage approaches, signal integrity, noise, test, and manufacturability for all the above categories are welcomed. Measurement results are highly recommended, especially for analog, and RF categories. Design methodologies for SiP, SoC, interconnections and statistical design are included in the scope of the conference; the papers only describing CAD tools and CAD algorithms are not considered. Dual submission to other conferences is not allowed. A special issue of the IEEE Journal of Solid-State Circuits will be prepared for publication of the outstanding papers of this conference.

Important dates
June 7, 2011, 20:00 (GMT) Paper submission deadline
August 1, 2011 Acceptance notification
September 19, 2011 Deadline for final paper submission

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