

Call for papers

ACM Transactions on Design Automation of Electronic Systems (TODAES) Special Section on Low Power Electronics and Design

This special section focuses on recent advances in all aspects of low power electronics and design, ranging from process and circuit technologies, simulation and synthesis tools, to system level design and optimization. Authors who presented regular papers at ISLPED 2009 are specially invited to submit an extended version of their paper to ACM TODAES for inclusion in this special section. Besides submissions from ISLPED 2009 regular papers, any other high quality submissions that fits the topics of the special section are welcome.

1. Architecture, Circuits, and Technology	2. Design Tools, System and Software Design
1.1. Technologies and Digital Circuits Emerging logic/memory technologies and applications; Low power device and interconnect design; Low power low leakage circuits; Memory circuits; Noise reduction; 3-D technologies; Cooling technologies; Battery technologies; Variation-tolerant design; Temperature-aware and reliable design	2.1. Design Tools Energy simulation and estimation tools that operate at the circuit/gate level, RT level, behavioral level, and algorithmic level; Variation-aware design; Physical design and interconnects
1.2. Logic and Microarchitecture Design Processor core design; Cache and register file design; Logic and RTL design; Arithmetic and signal processing circuits; Encryption technologies; Asynchronous design	2.2. System Design and Methodologies Microprocessor, DSP and embedded systems design; FPGA and ASIC designs; System-level power- and thermal-aware design; System-level reliability- and variability-aware design
1.3. Analog, MEMS, Mixed Signal and Imaging Electronics RF circuits; Wireless; MEMS circuits; AD/DA Converters; I/O circuits; Mixed signal circuits; Imaging circuits; Analog noise; Circuits to support emerging technologies; DC-DC converters	2.3. Software Design and Optimization Power- and thermal-aware software design, scheduling, and management; Application-level optimizations; Wireless and sensor networks; Emerging applications

The papers should be submitted via the Manuscript Central website and should adhere to standard ACM TODAES formatting requirements (<http://todaes.acm.org/>). The page count limit is 25. For additional questions please send an email to naehyuck@snu.ac.kr.

Schedule:

Paper submission deadline:	February 22, 2010
Editorial decisions:	June 7, 2010
Camera-ready manuscripts due date:	July 1, 2010
Target Issue:	October, 2010

Guest Editors:

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