

Call for Papers

Special Section on Low-Leakage, Low-Voltage, Low-Power and High-Speed Technologies for System LSIs in Deep-Submicron Era.

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Electronics announces a forthcoming special section on "Low-Leakage, Low-Voltage, Low-Power and High-Speed Technologies for System LSIs in Deep-Submicron Era" to be published in **April, 2009**.

Thanks to the continuous advancement in CMOS device scaling, system LSIs has achieved a great performance enhancement. Recently, the leakage current increased by CMOS device scaling is the one of the performance-limiting factors not only for mobile LSIs but also for high-speed LSIs. In addition, low-voltage operation of these LSIs is hindered by increase of device variation. With an application of system LSIs to ubiquitous devices, low-power, high-speed technologies are in greater demand than ever before. The purpose of this Special Section is to explore and stimulate original researches and innovative applications in the area of low-leakage, low-voltage, low-power and high-speed technologies. The papers are solicited from all people engaged in this field.

1. Scope

Possible topics include, but are not limited to:

- High-performance system LSIs
- New devices
- DRAM, SRAM, Flash, New memories,
- High-speed circuit technologies
- Low-leakage, Low-voltage, Low-power circuit technologies
- Low-power, High-speed design schemes
- 3D packaging
- DFM, Signal integrity, Modeling, simulation

2. Submission Instructions

The deadline for submission is **August 1, 2008**. Manuscripts should be prepared according to the guidelines indicated in the Information for Authors; http://www.ieice.org/eng/shiori/mokuji_es.html. This special section will accept only papers by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

- (1) Submit a paper using the IEICE Web site https://review.ieice.org/regist_e.aspx. The acceptable format of the file is PDF file. Authors should choose the [Special-EC] Low-Leakage, Low-Voltage, Low-Power and High-Speed Technologies for System LSIs in Deep-Submicron Era as a "Type of Issue (Section)/Category of Transactions" on the online screen. Do not choose [Regular-EC].
- (2) Send "One copy of the printed manuscript including figures and tables", "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" to

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by postal mail. (NOT by FAX or E-mail). Please do not forget to send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration". We cannot start the review process without them, even if we receive the manuscript.

3. Special Section Editorial Committee

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* Please note that if accepted, all authors, including authors of invited paper, are requested to pay for the page charges covering partial cost of publications. Authors will receive 50 copies of reprints.

*At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit the web-page, <http://www.ieice.org/eng/member/OM-appli.html>.