# — Call for Papers, Special Section on Circuits and Systems (Transactions A) —

Special Section Editorial Committee

This "Special Section on Circuits and Systems" is organized as a special section of the IEICE Transactions A (issued in January 2024). IEICE Engineering Sciences Society (ESS), System and Signal Processing Subsociety [composed of the Chair: Horoshi Kamabe and Technical Committees on Circuits and Systems (CAS) (Chair: Yoshinobu Maeda), Signal Processing (SIP) (Chair: Toshihisa Tanaka), VLSI Design (VLD) (Chair: Namiko Ikeda), and Mathematical Systems Science and its Applications (MSS) (Chair: Atsuo Ozaki)] held this year's "Circuits and Systems Workshop" in August 2022. This workshop is held once every year with this year being the 35rd. It has become an established workshop among researchers and engineers in related fields. Nowadays, a lot of papers are presented and vigorous discussions are conducted. In addition to the high-quality papers presented in this workshop, by accumulating the results of the latest research from various fields, this Special Section aims to contribute to the further advancement of relevant fields. We cordially invite you to submit original papers associated with the following topics.

## **Topics of Interest**

within the scope of this special section include the following areas:

Circuits and Numerical Analysis (Circuit Theory, Modeling/Simulation, Filters, Analog/Digital Circuits, A/D and D/A Converters, Applications of Electronic Circuits, Neural Networks, Control Theory, Power Devices and Management Systems, Connectivity, Memory, Co-design of MEMS and Circuits, IoT, Sensor Circuits)

**Digital Signal Processing** (Basic Signal Processing, Digital Filters Design, Adaptive Signal Processing, Graph Signal Processing, Nonlinear Signal Processing, Speech/Acoustic Signal Processing, Image/Video Processing, Signal Processing for Communications, System Realization Technology, Security Application, Biomedical Signal Processing, Practical Technologies of Signal Processing)

VLSI Design Technology (Design environments and tools, Embedded system, Reconfigurable system, Multi/Many core design, Software/Hardware co-design, System level design, IP-based design, High-level synthesis, Logic synthesis/verification, Layout design/verification, 3D-IC, Analog CAD, Timing analysis, Testing/Diagnosis, Low power design, Approximate Computing, Stochastic Computing, Analog Computing, Reliable design, Hardware security, Design for Manufacturability, Lithography CAD, Biochip design, Case studies of VLSI design)

**System Theory** (Graph/Network Theory, Discrete Optimization, Algorithm Theory, Software Specification, Formal Methods, Petri Net and Discrete Event Systems, Hybrid Dynamical Systems, Scheduling, Parallel/Concurrent/Distributed Processing, Distributed Cooperative Systems, Systems Biology, Theory and Application of Machine Learning, Process Mining)

## **Writing and Handling Instructions**

Writing instructions and reviewing criteria are the same as those for standard papers. The number of pages is basically limited to **eight** pages for a paper, **two** pages (maximum of **four** pages) for a letter. Please beware that letters exceeding four pages will not be accepted. For more details, please see the following "Information for Authors":

### https://www.ieice.org/eng/shiori/mokuji ess.html.

In this special section, papers and letters deviating from the standard format and exceeding the standard number of pages may be rejected. The resubmission period after the 1st review may be shortened (usually 60 days).

Please note that, when papers and letters are accepted, the authors are should pay the page charges covering partial cost of publication around July, 2023. If payment is not completed by 15th July, 2023, your manuscript will be handled as rejection.

If there are non-members among the authors, we recommend that the authors take this opportunity to join the IEICE. For detailed information on the IEICE Membership Application, please visit the web-page:

#### https://www.ieice.org/eng r/join/individual member.html.

If all authors are non-members, the article processing charge for non-members will be applied, except for invited papers. All papers published in or after October 2022 issue are opened to all readers in the world through J-STAGE.

https://www.jstage.jst.go.jp/browse/transfun

## **Submission of Papers**

Papers should be submitted online. Please access the submission system:

## https://review.ieice.org/regist/regist\_baseinfo\_e.aspx,

register author information, and submit the PDF(s) of paper(s) and the original data for editing by Friday January 20, 2023 Friday February 3, 2023 (extended). Please make sure that "Circuits and Systems" is selected as the submission destination. During the electronic submission process, we ask the authors to accept the "Copyright Transfer, Article Processing Charge Agreement, Notices from the IEICE, and Privacy Policy".

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