

CALL FOR PAPERS

Special Section on Reconfigurable Systems

The Institute of Electronics, Information and Communication Engineers (IEICE) Transactions on Information and Systems announces a forthcoming special issue on Reconfigurable Systems to be published in May 2019. We invite submissions of original and unpublished papers which will review and promote recent progress in the field of Reconfigurable Systems.

Demand for high-performance computing both with flexibility and low energy consumption is dramatically growing in the industry. Reconfigurable systems attract great interest as one of the solutions for the matter. The origin of reconfigurable systems, programmable logic devices or simple FPGAs, has evolved into today's complex system-on-chip FPGAs, dynamically reconfigurable FPGAs, and furthermore a variety of new reconfigurable computing devices. Exploring more effective hardware architectures and devices seeking for performance, flexibility, dependability, low-power, etc., is indispensable activities in this field. In order to utilize such hardware architectures and devices, design (programming) methodologies have been more and more important since techniques for conventional computing systems are not applicable to the new computing paradigm which reconfigurable systems may open, such as, the distinctive characteristic of dynamic reconfiguration. Sharing the experiences of case studies to apply the systems and methodologies to practical targets is also important for the systems to mature into popular products in the market. The objective of this special issue is to introduce and demonstrate the latest research activities on reconfigurable systems.

Scope:

Possible topics include, but are not limited to the followings.

- Reconfigurable Systems, Processors, Architectures, Devices
- FPGAs and PLDs
- Dynamically Reconfigurable Systems, Reconfiguration Techniques, Virtual Hardware, Adaptive Hardware
- Device and Circuit Technologies for Reconfigurable Systems
- Low Power, Asynchronous, or Dependable Reconfigurable Circuits and Systems
- System Software for Reconfigurable Systems
- Design Methodologies, High-level Synthesis, Test, and Verification for Reconfigurable Systems
- Applications of Reconfigurable Technology (e.g., High Performance Computing, IoT, Machine Learning, AI, Big Data, Cloud Computing)

Submission Guidelines:

The deadline for submission is July 20, 2018, JST [firm deadline]. Manuscripts should be carefully prepared according to the guide line in [the Information for Authors](http://www.ieice.org/eng/shiori/mokuji_iss.html) (available at http://www.ieice.org/eng/shiori/mokuji_iss.html). The preferred length of the manuscript is 8 pages for a paper and 2 pages for a letter. Only electronic submission through [the web page](https://review.ieice.org/regist_e.aspx) (https://review.ieice.org/regist_e.aspx) is accepted. Choose "[Special RC] Reconfigurable Systems" from the list in "Journal/Section".

Notice to the Authors:

Authors must agree to the "Copyright Transfer and Page Charge Agreement" via electronic submission. Please note that if accepted for publication, authors are requested to pay for the page charges. At least one of the authors should be an IEICE member when the manuscript is submitted for review. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit the web-page:

http://www.ieice.org/eng/join_ieice/index.html

Editorial Committee:

- | | |
|-------------------------|---|
| Guest Editor-in-Chief | Masato Motomura (Hokkaido Univ) |
| Guest Editor | Yukinori Sato (Tokyo Tech), Yuichiro Shibata (Nagasaki Univ) |
| Guest Associate Editors | Hideharu Amano (Keio Univ), Masahiro Iida (Kumamoto Univ), Hiroaki Inoue (NEC),
Yasushi Inoguchi (JAIST), Tomonori Izumi (Ritsumeikan Univ),
Yasunori Osana (Univ of Ryukyus), Kentaro Sano (RIKEN),
Kazuya Tanigawa (Hiroshima City Univ), Hiroki Nakahara (Tokyo Tech),
Yukio Mitsuyama (Kochi Univ of Technology), |

Contact:

All inquiries should be sent to the guest editor:

Yuichiro Shibata

Division of Electrical Engineering and Computer Science, Graduate School of Engineering, Nagasaki University

E-mail: reconf2019-kanji@pca.cis.nagasaki-u.ac.jp

* The IEICE Transactions on Information and Systems are open access journal since Jan., 2017. Open access to "IEICE Transactions on Information and Systems" is available via the J-STAGE (<https://www.jstage.jst.go.jp/browse/transinf/>).

* **Upon accepted for publication, all authors, including authors of invited papers, should pay the page charges covering partial cost of publication around January 2019. If payment is not completed by 15 February, 2019, your manuscript will be handled as rejection.**