Special Issue on Embedded Multicore Applications and Optimization in Journal of Signal Processing Systems (JSPS)

Call For Papers:
Embedded systems with multi-core designs are becoming increasingly important for signal processing, machine learning, and multimedia applications in recent years. While embedded multi-core systems will look to play an important role ahead for application designs, many challenging problems remain to be resolved. Applications, programming models, compilers, API designs, architecture designs, and software tools all need to contribute to the advance of embedded multi-core computing for signal processing, pixel processing, machine learning, and multimedia applications.

In this special issue, we aim to bring together researchers in the related areas to present the latest developments and technical solutions concerning various aspects of embedded multi-core computing for signal processing and applications. This special issue seeks original unpublished papers focusing on emerging signal processing applications, embedded compilers, embedded memory and architecture design, DSP/GPU systems, and embedded multi-core programming models.

The topics of this special issue include but not limited to:

- Architectures for embedded multi-core signal processing systems
- Compilers for DSP processors
- Embedded GPU processors and designs
- Compilers for heterogeneous embedded multi-core systems
- Programming models for embedded multi-core systems
- Signal processing and machine learning on embedded multi-core systems
- Multimedia signal processing algorithms on embedded multi-core systems
- Multimedia applications on embedded multi-core systems
- OpenCL compilers and applications on multi-core systems
- OpenVX compilers and applications
- Augmented reality applications on multi-core systems
- OpenCL programming models with graph
- OpenCL supports for DSP applications
- Embedded OS designs and performance tuning tools
- Audio signal processing and recognition with multi-core designs
- Numerical libraries and architecture supports for machine learning
**Submission Guidelines:**

Original papers from the above mentioned and related topics will be considered. Please submit regular full papers, including all figures, tables, and references, from the JSPS paper submission website [http://www.editorialmanager.com/vlsi/default.asp](http://www.editorialmanager.com/vlsi/default.asp). Please select the article type "SI: Embedded Multicore Applications and Optimization" for submission to this special issue in the paper submission system. Authors are requested to follow the paper format specified in the above journal submission website. Submitted papers must not have appeared in or be under review/consideration for another journal or conference during the review process.

**Important Dates:**

- Paper submission deadline: Nov. 15, 2016
- Notification of the first-round review: Jan. 15, 2017
- Submission deadline of paper revision: March 1, 2017
- Notification of the second-round review: April 15, 2017
- Camera-ready paper due: May 15, 2017
- Special issue publication: end of 2017

**Guest editors:**

Prof. Jenq Kuen Lee, National Tsing-Hua University, Taiwan, Email: jklee@cs.nthu.edu.tw
Prof. Francois Bodin, IRISA, Campus de Beaulieu, France, francois.bodin@irisa.fr
Dr. Yung-Chia Lin, MediaTek, Boston, USA, Email: yungchia.lin@mediatek.com