

Call for Papers

Special Issue on Software Defined Radio Technology and Its Applications

The Institute of Electronics, Information and Communication Engineering (IEICE) Transactions on Communications is pleased to announce that it will publish a special issue entitled "Special Issue on Software Defined Radio Technology and Its Applications" in **December 2006**. The software defined radio is based on a common platform and its performance can be reconfigured by modifying the software. Progress respecting digital signal-processing devices such as FPGAs, DSPs, and A/D & D/A converters has spurred development of software defined radio technology to the point where it is poised to be widely adopted for radio wave monitoring, broadcasting, mobile communications, ITS, etc. With a view to promoting further progress of R&D in this field, the special issue will present the latest work on software defined radio technology and its applications.

1. Scope

The topics of interest include the following areas, but are not limited as long as related to software defined radio technology:

- Software defined radio, prototypes, experimental models
- Hardware platform for software defined radio
- Software defined radio architectures and application program interfaces
- Software, operating systems and description languages for software defined radio
- Security for software defined radio
- SDR technology for realization of ubiquitous system and service
- Cognitive radio and dynamic spectrum technique
- Roaming technologies among different networks
- Software download technology
- Implementation of radio signal processing technologies on reconfigurable devices
- Broadband or multi-band antennas
- Broadband, multi-band, adaptive analog circuits and devices
- High speed, broadband, adaptive analog to digital and digital to analog converters
- Reconfigurable signal processing devices
- RF direct sampling, band pass sampling technology
- Adaptive signal processing systems for software defined radio
- Surveys related to software defined radio technology and its applications.

2. Submission Instructions

Papers must be submitted by **March 24, 2006**. Manuscript should be prepared according to the guideline given in the "Information for Authors". The latest version of it is available at the web site, <http://www.ieice.org/eng/shiori/mokuji.html>, or you can refer its brief summary attached to IEICE Transactions. The length of the paper should not exceed 8 printed pages in principle. The term for revising the manuscript after acknowledgement of conditional acceptance for this special issue could be shorter than that for other issues (60 days) because of the tight review schedule. In this special issue, only the electric submission is adopted. Prospective authors are requested to follow carefully the submission process described below.

[IMPORTANT NOTICE] At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception.

1. Submit papers using the IEICE Web site https://review.ieice.org/regist_e.aspx. The acceptable format of the file is PDF file. Other any files, e-mail submission, and postal mail are NOT acceptable. Authors should choose the [Special-EB] Software Defined Radio Technology and Its Applications as a "Type of Issue/Category of Transactions" on the online screen. Do not choose [Regular-EB] Communications or other special sections.
2. "Copyright Transfer and Page charge Agreement" and "Confirmation Sheet of Manuscript Registration" must be sent by postal mail to the following address (secretariat of this issue). Please mark "Special Issue on Software Defined Radio Technology and Its Applications" on the envelope.

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