



DSD'2009
EUROMICRO CONFERENCE ON
DIGITAL SYSTEM DESIGN
Architectures, Methods and Tools
August 27th - 29th, 2009, Patras, Greece
Call for Papers

Session Organizer:

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Special Session: SS3

FAULT TOLERANCE IN DIGITAL SYSTEM DESIGN

BACKGROUND

The Euromicro Conference on Digital System Design addresses all aspects of (embedded) digital and mixed hardware/software system engineering. It is a discussion forum for researchers and engineers working on state-of-the-art investigations, development, and applications. It focuses on advanced system design and design automation concepts, paradigms, methods and tools, as well as modern implementation technologies.

For demanding applications it becomes increasingly important to include the fault tolerance features into the resulting design. For this purpose, various methodologies were developed for different design levels – the goal is to support dependability of components, units and systems.

SCOPE

The special session “Fault Tolerance in Digital Systems Design” addresses all aspects related to concepts, theory, implementations and applications of fault tolerance principles in digital systems design. Papers on any of the following and related topics will be considered for the special session:

- Defect/fault tolerant architectures (SoCs, NoCs, embedded systems).
- TMR based designs, voters.
- Dependability modeling, dependability analysis and validation.
- Design for testability in fault tolerant systems.
- FPGA based fault tolerant systems, partial/full reconfiguration based methodologies.
- Single-event upsets and effects, single-event transients.
- Fault injection techniques. Reliability analysis.
- On-line testing, design of checkers
- Communication protocols testing.
- Reliable IP cores.
- Fault tolerance in nanotechnologies.
- Fault tolerant design in practical applications. Reliable applications.
- Functional safety and IEC 61508.

SUBMISSION OF PAPERS

Prospective authors are encouraged to submit their manuscripts for review electronically through <http://www.iuma.ulpgc.es/dsd09> or by sending the paper to the Special Session Chair via email (kotasek@fit.vutbr.cz) (only in the case of the web access problem) before the submission deadline (**please indicate the topic area as: SS3**). Each manuscript should include all text, illustrations, and references. The manuscript should conform to the required format single-spaced, double column, A4/US letter page size, 10-point size Times Roman font, up to 8 pages. **In order to conduct a blind review, no indication of the authors' names should appear in the submitted manuscript.** The DSD'2009 web page should be consulted for complete format requirements. DSD'2009 proceedings will be published by the IEEE Computer Society.

IMPORTANT DATES

Submission of papers: March 27, 2009
Notification of acceptance: April 27, 2009
Deadline for final version: May 26, 2009

Special Session web page:

<http://www.fit.vutbr.cz/events/dsd2009>

Euromicro web page:

<http://www.euromicro.org>

DSD web page: <http://www.iuma.ulpgc.es/dsd09>