CODES ISSS

www.codes-isss.org

The *premier* conference for system level design

Third International Conference on Hardware/Software Codesign and System Synthesis

October 23-25, 2006 – Seoul, Korea
Hotel Lotte, Jamsil (www.lottehotel.co.kr/english/grand)

FIRST CALL FOR PAPERS

The IEEE/ACM/IFIP International Conference on Hardware-Software Codesign and System Synthesis is the premier event in design of embedded systems hardware, software and tools. The conference proudly continues the tradition of being a high-quality forum for active discussion on current and innovative topics. The program will bring together the latest in academic and industrial research and development. High-quality original papers will be accepted for oral presentation followed by interactive poster sessions. Selected papers from the conference proceedings will be targeted for journal publication.

AREAS OF INTEREST

The Conference invites papers on all aspects of the design and architecture of embedded computing systems, from application specific to heterogeneous systems, from custom to FPGA implementations, from handheld to high-performance systems. Topics of interest include, but are not limited to:

1) High-level, architectural and system-level synthesis
Specification and refinement, design representation, synthesis, partitioning, estimation, design space exploration

2) Hardware-Software co-design
Co-design methodologies, interaction between architecture and software design, HW/SW partitioning, design space exploration, HW/SW interface.

3) Specification languages and models
System-level models and semantics, timing analysis, power, formal properties, heterogeneous systems and components.

4) Simulation and verification
Hardware-software cosimulation, verification methodology, formal verification, HW acceleration, test methodology, design for testability

5) Power-aware design methodology
Power management, power modeling and estimation, low-power design methodology

6) Embedded systems architecture
Architecture optimization, application-specific architectures, memory and communication architecture exploration, architecture optimization

7) Multiprocessors and Network-on-chip
Multiprocessor architectures, communication protocols, design space exploration, MPSoC and networks-on-chip.

8) Embedded software
Compilers, memory management, virtual machines, scheduling, power-aware OS, real-time support and middleware.

9) Application-specific design and algorithms
Network processors, media processors, application specific hardware accelerators, reconfigurable processors, securities

10) Industrial practices and design case studies
Design experiences of high interest to the community. Applications of new practical and theoretical approaches, state-of-the-art methodologies and tools to real-life problems in various application areas such as, cell phones, network processors, sensor networks, automotive, multimedia and medical systems.

11) Emerging techniques
New challenges for next generation embedded computing systems, arising from increased heterogeneity, new technologies (e.g., nanotechnology, biochips) or new applications (e.g., ubiquitous computing). Networked embedded systems.

PAPER SUBMISSION

Papers should represent original work, not published or submitted for publication in other forums. Formal proceedings will be published by ACM Press in hardcopy, CD-ROM and web page forms. Papers should be submitted electronically on the web. A blind review process will be enforced, thus AUTHORS SHOULD NOT REVEAL AUTHORSHIP DIRECTLY OR INDIRECTLY THROUGH REFERENCES. Papers must be in PDF format and should not exceed 6 pages in ACM two-column format (9pt on 8.5"x11" letter size paper). **For formatting instructions and templates, visit** www.acm.org/sigs/pubs/proceed/template.html.
Proposals for special sessions and panels are also invited. These should be single page, succinctly outlining the topic, positioning and likely participants.

IMPORTANT DATES

Deadline for submission: **Monday, May 8, 2006**
Notification of acceptance: **Monday, July, 31, 2006**
Deadline for final version: **Monday, August 21, 2006**

CHAIRS

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Embedded Systems Week – www.esweek.org

BIGGER THIS YEAR!
CODES+ISSS 2006 will be colocated with **EMSOFT** (www.emsoft.org), **CASES**(www.casesconference.org) and other events including workshops and tutorials. Together they will represent an exciting event called *Embedded Systems Week* from October 22 to 27.
One Registration Three Conferences: registered attendees to either CODES+ISSS, CASES, or EMSOFT will be allowed to attend sessions in the other conference as well for free! (Associated workshops may require separate registration).

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