

Call For Papers

Workshop on Application Specific Processors (WASP'02)

To be held in conjunction with the 35th International Symposium Microarchitecture (MICRO-35),

November 19th, 2002

Hilton Hotel, Istanbul, Turkey

PROGRAM CHAIR

Alex Orailoglu, UC San Diego

PROGRAM COMMITTEE

Brad Calder, UC San Diego

Apostolos Dollas, TU Crete

Nikil Dutt, UC Irvine

Masaharu Imai, Osaka U.

Faraydon Karim, ST

Scott Mahlke, U Michigan

Peter Marwedel, U Dortmund

Trevor Mudge, U Michigan

Peter Petrov, UC San Diego

Rob Schreiber, HP

Lothar Thiele, ETH Zurich

Stamatis Vassiliadis, TU Delft

Alex Veidenbaum, UC Irvine

Hiroto Yasuura, Kyushu U.

For general information, contact:

Alex Orailoglu, General Chair

9500 Gilman Drive, CSE Department

La Jolla, CA 92093-0114

Tel: (858) 534-0914

Fax: (858) 534-7029

Email: alex@cs.ucsd.edu

The dramatic embedded processor volumes and the associated market segments force a reevaluation of the best way to satisfy the possibly conflicting demands placed on processor designs. Domain-specific embedded processors, such as network, automotive, cellular and others, present interesting architectural refinements, albeit at the cost of splintering the embedded processor market. Reprogrammable and/or reconfigurable embedded processors provide an alternative approach, capable of delivering single, fixed-silicon architectures, thus amortizing design and manufacturing costs across large volumes, yet necessitating an answer to the challenge of effective customization of embedded processors.

The workshop papers explore (micro)architectural design approaches and trade-offs and compiler technologies, for both domain-specific and customizable embedded processors. The workshop aims at generating a forum wherein the various approaches to address the twin challenges of cost amortization over large volumes while delivering optimal cost, performance, and power characteristics for a wide segment of embedded processor market niches will be explored and compared. *WASP* explores emerging trends and novel concepts in application-specific processors. Major topics include, but are not limited to:

- Domain-specific processors (Network, multimedia, etc.)
- Application-specific hardware accelerators
- Microarchitectural customization techniques
- (Re)configurable processor architectures
- Dynamically reconfigurable processors (Microarchitectural, Coarse-grained, FPGA, etc.)
- Application-specific processors in System-on-a-chip (SOC)
- Application-specific customizations for low-power
- Compiler techniques for processor customizations
- OS and Middleware support for application-specific processors

The Program Committee invites authors to submit papers up to 8 pages in length, describing original, unpublished recent work. Clearly describe the nature of the work, explain its significance, highlight novel features, and describe its current status. On the title page, please indicate: title, name and affiliations of all authors, and the topic category. Also identify a contact author and provide complete mailing address, phone number, fax number and an e-mail address. **Selected papers will be published in a special issue of *IEEE Design and Test of Computers Magazine*.** Please indicate in the cover page if you would like your paper to be considered for possible publication in *D&T*.

Authors will be notified of the disposition of their papers by October 5, 2002. The submission of a paper proposal will be considered evidence that upon acceptance, the author(s) will present their paper at the workshop. Final versions of accepted papers will be included in the *Workshop of Application Specific Processors Digest*.

Location: The workshop will be held at the Hilton Hotel, Istanbul, Turkey. Istanbul is a historically rich city, spanning Europe and Asia, and the financial capital of Turkey. The Hilton Hotel overlooks the Bosphorus, offering magnificent scenery. Istanbul has convenient, non-stop air connections from all major European cities and a number of US gateways.

Important deadlines:

Submissions due: **Sept 11, 2002 (+1 week)**; Acceptance notification: **October 5, 2002**, Final papers due: **October 14, 2002**

For up-to-date workshop information: <http://dna.ucsd.edu/wasp1>