Call for Papers

8th IEEE Symposium on Application Specific Processors (SASP)

co-located with the Design Automation Conference (DAC)

Anaheim Convention Center, Anaheim, CA, USA

13-14 June 2010

The market for embedded processors is driven primarily by two factors: cost and volume. This has forced a reevaluation of the best way to satisfy users' needs for high performance and low energy consumption without drastically increasing the complexity of the design process. Domain-specific embedded processors, in markets such as network processing, automotive, and others, have splintered a pre-existing market for general-purpose, low-cost, low-energy processors. Reprogrammable and reconfigurable embedded processors, in contrast, offer a single, fixed-silicon device that could amortize manufacturing costs for low-to-medium volume market segments. SASP explores (micro)architectural design approaches, trade-offs and compiler technologies, for both domain-specific and customizable embedded processors. The symposium is a forum wherein challenges and solutions will be explored, discussed and compared.

Major topics include, but are not limited to:

- Domain-specific processors (network, multimedia, etc.)
- Application-specific hardware accelerators
- Microarchitectural customization techniques
- (Re)configurable architectures (coarse-grained, FPGA, etc.)
- Application specific processors in System-on-a-chip (SOC)
- Application specific customizations for low-power
- Applications and/or industrial experience
- Compiler technology targeting customizable processors
- Tools, techniques, and algorithms for architectural exploration
- Methodologies and tools for hardware/software codesign
- Application specific MPSoCs and design automation for NoCs
- Hardware/software for GPUs and other graphics/gaming platforms
- 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The Program Committee invites authors to submit papers up to 8 pages in length, describing original, unpublished work. Published papers will be 6 pages in length, and authors will have the opportunity to purchase up to 2 additional pages. Papers submitted to SASP must not be under review elsewhere. Papers should clearly describe the nature of the work, explain its significance, highlight novel features, and describe its current status. Paper submission will be considered evidence that, upon acceptance, the author(s) will present their paper at the Symposium.

Proceedings will appear in the IEEE Digital Library; extended versions of selected papers will be invited for submission in a special issue in a major ACM or IEEE journal.

Important deadlines

Submissions: ~~**22 March 2010**~~ DEADLINE EXTENDED TO 29 March 2010

Acceptance: **30 April 2010** Final versions: **16 May 2010**

http://www.sasp-conference.org