ACM Transactions on Embedded Computing Systems (ACM TECS)

Call for Papers

Special Issue on Software and Compilers for Embedded Systems (SCOPES)

The scope of this special issue is software for embedded systems. The emphasis is on code generation techniques (compilers) for embedded processors which consider their typical characteristics, for instance heterogeneous register files, VLIW parallelism and special architectural features for signal processing or microcontroller applications. Topics of highest interest include:

- code generation for embedded processors
- compilers for reconfigurable architectures
- retargetable compilation techniques for fast design space exploration
- compilation for hardware/software co-design
- application specific programmable core/software development tools co-design
- profiling and analysis techniques for embedded software
- optimizations for embedded Java
- specification and validation techniques for embedded software
- run-time support and real-time operating systems
- software synthesis
- exploitation of memory hierarchies
- optimization for low-power architectures
- design of embedded software

Solicited in particular are papers on compilation and software design for heterogeneous single chip multicore processors, including the partitioning and debugging of the software for such processors.

Authors should submit their paper at Manuscript Central adhering to the formatting instructions on the TECS Web page and indicate that they are submitting to the Special Issue of ACM TECS on Software and Compilers for Embedded Systems.

Important Dates

Submission Deadline: February 1, 2005
Acceptance Notice: April 8, 2005
Publication: TBD

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