



IEEE 2005 Conference on Field Programmable Technology



<http://www.comp.nus.edu.sg/~icfpt05>

Venue: School of Computing,
National University of Singapore, Singapore

December 11-14, 2005

Co-sponsorship by IEEE Circuit and Systems Society
IEEE Singapore Section
School of Computing, National University of Singapore

Technical co-sponsorship by IEEE Electron Devices Society

Call for Papers

Extended Submission Deadline : June 20, 2005 2359hr U.S. PST

CONFERENCE THEME

Field-programmable technologies, including complex programmable logic devices and systems containing such components, have become an important topic of research for universities, government, and industry worldwide. Field-programmable devices combine the flexibility of software with the performance of hardware. Their regular structure facilitates rapid improvement in density, capability and speed. Field-programmable systems have a wide variety of applications, such as accelerating computations in molecular biology and medical imaging, low-power control and data processing for palm-size computers, and emulating novel electronic products before manufacture; even advanced microprocessors from Intel and ARM have benefited from field-programmable hardware emulators. The areas of interest of this conference include the following:

- Applications of field-programmable technology: biomedical and scientific computation accelerators, network processors, real-time systems, rapid prototyping, hardware emulation, digital signal processing, interactive multimedia, machine vision, computer graphics, cryptography, robotics, manufacturing systems, embedded applications, evolvable and biologically-inspired hardware.
- Design techniques and tools for field-programmable technology: placement, routing, synthesis, verification, technology mapping, partitioning, parallelisation, timing optimization, design and run-time environments, languages and modeling techniques, provably-correct development, intellectual property core based design, domain-specific development, hardware/software co-design.
- Architectures for field-programmable technology: field programmable gate arrays, complex programmable logic devices, field programmable interconnect, field programmable analogue arrays, field programmable arithmetic arrays, memory architectures, interface technologies, low-power techniques, adaptive devices, reconfigurable computing systems, other emerging technologies.
- Device technology for field-programmable logic: programmable memories including non-volatile, dynamic and static memory cells and arrays, interconnect devices, circuits and switches, emerging VLSI device technologies.

SUBMISSIONS

The program committee solicits papers describing original research in field-programmable technology, including, but not limited to, the areas indicated above. Papers should be submitted electronically in PDF format, following the IEEE style (<http://www.computer.org/cspress/instruct.htm>). The submission site for the conference is <http://www.softconf.com/start/ICFPT05>. Full papers should not exceed 8 pages in length, while posters should not exceed 4 pages in length. **Manuscripts must not identify authors or their affiliations. Papers that identify authors will NOT be considered.** Submissions must be made via the conference webs. (Submission link currently not available yet and will be announced on the conference site in due time.)

Proposals for half and full day tutorials in the areas of interest are also sought. Initial inquiries should be directed to fpt05@icfpt.org.

DEADLINES and KEY DATES

Submission of papers:	June 13, 2005
Notification of acceptance:	July 25, 2005
Final papers & registration due:	September 5, 2005
Conference starts:	December 12, 2005

ORGANISING COMMITTEE

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Please refer to the conference website for a detailed list of the Program Committee.