



The 2004 International Conference on Field-Programmable Technology (ICFPT 04)

6th – 8th December, 2004

The University of Queensland, Brisbane, Australia

<http://www.icfpt.org>

Call for Papers

Extended Deadline 14th June

General Chair

Neil Bergmann

University of Queensland

Program Chair

Oliver Diessel

University of New South
Wales

Finance Chair

Peter Sutton

University of Queensland

Publications Chair

John Williams

University of Queensland

Tutorials Chair

Philip Machanick

University of Queensland

Technical Co-sponsorship

**IEEE Electron Devices
Society**

In cooperation with

**IEEE Queensland
Section**

Organised by

**School of ITEE,
University of
Queensland**

Important Dates

- **Submission of papers**
14th June, 2004
- **Notification of
acceptance**
19th July 2004
- **Camera-ready papers
& registration due**
6th September 2004

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 of interest indicated above. Papers should be submitted electronically in PDF format, following the IEEE style. See <http://www.computer.org/cspress/instruct.htm>. Full papers should not exceed 8 pages in length, while poster papers should not exceed 4 pages. **Manuscripts must not identify authors or their affiliations. Papers that identify authors will NOT be considered.** Submission must be made via the conference website: <http://www.icfpt.org>.

Proposals for half and full day tutorials in the areas of interest are also sought. Initial inquiries should be directed to fpt@icfpt.org. A limited number of grants will be available to support attendance at the conference.

Questions regarding the FPT conference, including the submission procedure and grants, can be sent to: fpt@icfpt.org

Technical Committee

- Hideharu Amano, Keio University
- Jeff Arnold, Stretch, Inc.
- Peter Athanas, Virginia Tech
- Juergen Becker, University of Karlsruhe
- Paul Beckett, Royal Melbourne Institute of Technology
- Neil Bergmann, University of Queensland
- Dinesh Bhatia, University of Texas, Dallas
- Christophe Bobda, University of Erlangen
- Don Bouldin, University of Tennessee
- Gordon Brebner, Xilinx Inc
- Geoffrey Brown, University of Indiana
- Duncan Buell, University of South Carolina
- Nicholas Carter, University of Illinois
- Peter Cheung, Imperial College
- Ray Cheung, Imperial College
- Katherine Compton, University of Wisconsin-Madison
- George Constantinides, Imperial College
- Florent de Dinechin, ENS Lyon
- Andre DeHon, California Institute of Technology
- Oliver Diessel, University of New South Wales
- Apostolos Dollas, Technical University of Crete
- Tarek El-Ghazawi, George Washington University
- Anthony Fong, City University of Hong Kong
- Masahiro Fujita, University of Tokyo
- Manfred Glesner, Darmstadt University of Technology
- Steve Guccione, QuickSilver Technology
- Scott Hauck, University of Washington
- Tetsuo Hironaka, Hiroshima City University
- Mike Hutton, Altera Corp.
- Jim Hwang, Xilinx Inc
- Makoto Ikeda, University of Tokyo
- Tom Kean, Algotronix
- David Kearney, University of South Australia
- Satoshi Komatsu, University of Tokyo
- Koji Kotani, Tohoku University
- Dominique Lavenier, IRISA
- Gareth Lee, University of Western Australia
- Miriam Leeser, Northeastern University
- Guy Lemieux, University of British Columbia
- Philip Leong, Chinese University of Hong Kong
- David Lewis, Altera Corp.
- Wayne Luk, Imperial College
- Patrick Lysaght, Xilinx Inc
- Valavan Manohararajah, Altera Corp.
- Alan Marshall, Elixent
- Oscar Mencer, Imperial College
- Tulika Mitra, National University of Singapore
- Brent Nelson, Brigham Young University
- Toomas Plaks, South Bank University, London
- Marco Platzner, ETH Zurich
- Kara Poon, Actel Corp.
- Jonathan Rose, University of Toronto
- Zoran Salcic, University of Auckland
- Hartmut Schmeck, University of Karlsruhe
- Sakir Sezer, Queen's University of Belfast
- Mark Shand, Hewlett Packard
- Satnam Singh, Microsoft
- Thambipillai Srikanthan, Nanyang Technological University
- Henry Styles, Imperial College
- Juergen Teich, University of Erlangen
- Russ Tessier, University of Massachusetts
- Laurence Turner, University of Calgary
- Milan Vasilko, Bournemouth University
- Ranga Vemuri, University of Cincinnati
- Markus Weinhardt, PACT
- Steve Wilton, University of British Columbia
- Weng Fai Wong, National University of Singapore
- Roger Woods, Queen's University of Belfast
- Angus Wu, City University of Hong Kong
- David Yu Liang Wu, Chinese University of Hong Kong