











# IEEE International Conference on Field-Programmable Technology (FPT)

http://www.icfpt.org

Venue: The Chinese University of Hong Kong, Hong Kong 16-18th December, 2002

Co-organizers: The Department of Computer Science and Engineering, CUHK, The IEEE Hong Kong Section Computer Chapter.

Conference sponsors: The Croucher Foundation, The IEEE Hong Kong Section Electron Devices Society, Chung Chi College, CUHK.

In cooperation with: The IEEE Computer Society, The IEEE Electron Devices Society.

# Call for Participation



# **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 of interest indicated above. Papers should be submitted electronically in PDF format, following the IEEE style (<u>http://www.computer.org/cspress/instruct.htm</u>). Full papers should not exceed 8 pages in length, while posters should not exceed 2 pages in length. Submission guidelines and instructions are available from <u>http://www.icfpt.org</u>.

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 <u>fpt@icfpt.org</u>.

# **DEADLINES and KEY DATES**

- Submission of papers:
- Notification of acceptance:
- Final papers & registration due:

15th July, 2002. 20th September, 2002. 18th October, 2002.

### **KEYNOTE SPEAKERS (in alphabetical order)**

Erik Cleage, Senior Vice President, Marketing, Altera Corporation Michael J. Flynn, Professor of Electrical Engineering, Stanford University Patrick Lysaght, Director, Xilinx Labs Tsugio Makimoto, Chief Technology Officer, Sony Corporation Paul Master, Chief Technical Officer, Quicksilver Technology

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