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Fourteenth Annual Workshop on

High Performance Embedded Computing

15-16 September 2010 Massachusetts Institute of Technology Lincoln Laboratory

Call for Presentations

The High Performance Embedded Computing (HPEC) technical committee announces the Fourteenth Annual HPEC Workshop, to be held 15-16 September 2010 at MIT Lincoln Laboratory in Lexington, MA. The workshop will give U.S. government-funded researchers from academia, industry, and government, working in this important area, an opportunity to discuss techniques, approaches, and ongoing developments with relevance to real-time embedded computing and related military applications. During its fourteenth year, the HPEC 2010 Workshop will have as its theme "Custom clouds and general purpose GPUs: their impact on DoD applications." The technical committee seeks new presentations that clearly describe advances in high performance embedded computing technologies, emphasizing one or more of the following topics:

- · Advanced Multicore Software Technologies
- Automated Design Tools
- · Mapping and Scheduling of Parallel and Real-Time Applications
- Case Studies and Benchmarking of Applications
- Computing Technologies for Challenging Form Factors
- ASIC and FPGA Advances
- Open System Architectures
- · Networking Interconnects and Distributed Computing
- Fault-Tolerant Computing
- · Embedded Cloud Computing
- Digital Front-Ends
- · General Purpose GPU Computing
- Advanced Processor Architectures
- · Data Intensive Computing
- New Application Frontiers
- Anti-Tamper Technologies

All submittals will be competitively reviewed and judged on their technical merit, novelty, and relevance to the technical program. Preference will be given to papers with strong, quantitative results. The workshop will have both Open Sessions and Unclassified/U.S. Only sessions, as well as poster presentations. Presenters with significant hardware demonstrations are encouraged to apply to the poster sessions. Since the presentations themselves will constitute the published proceedings, speakers are requested to prepare charts of the highest quality. Electronic copies of the charts presented at the workshop will be included in the workshop proceedings.

Authors are invited to submit two-page extended abstracts via our website:

http://www.II.mit.edu/HPEC

For further details about the workshop, please contact

HPEC Workshop Office

Joan Napoli, Supervisor

Lori Tsoulas, Workshop Administrator

Phone: (781) 981-4842 Email: hpec@ll.mit.edu http://www.ll.mit.edu/HPEC

Important Dates: Abstract submission deadline 20 May 2010 Notification of acceptances 25 June 2010









