



HPEC 2001
Fifth Annual Workshop on
High-Performance Embedded Computing
<http://www.ll.mit.edu/HPEC>
25-27 September 2001
Lincoln Laboratory
Massachusetts Institute of Technology



General Chairman

Mr. Robert Bond / MIT Lincoln Laboratory

Technical Chairman

Dr. Jeremy Kepner / MIT Lincoln Laboratory

Sponsors

CAPT Carlton Bourne / U.S. Navy / PMS-422
 CAPT Peter Grant / U.S. Navy / PMS-452
 Mr. Robert Graybill / DARPA ITO
 Mr. Cray Henry / High Performance Computing Modernization Program
 Dr. Daniel Radack / DARPA MTO
 Dr. Allan Steinhardt / DARPA TTO

Advisory Committee

Mr. Frederick Lee / U.S. Navy / PMA-231AD
 Mr. David Martinez / MIT Lincoln Laboratory

Keynote Speaker

TBD

Invited Speakers

Mr. Gordon Bell / Microsoft
 Dr. Thomas Knight / MIT

Technical Committee

Mr. Masahiro Arakawa / MIT Lincoln Laboratory
 Dr. Lawrence Bergman / Jet Propulsion Laboratory
 Mr. Robert Bernecky / Naval Undersea Warfare Center
 Dr. Dennis Braunreiter / Raytheon
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 Dr. Alan Edelman / MIT
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 Dr. Richard Gerber / University of Maryland
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 Mr. Rick Pancoast / Lockheed Martin (Moorestown)
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 Dr. John Reynnders / Celera Genomics
 Dr. Mark Richards / Georgia Tech Research Institute
 Dr. Martin Rinard / MIT
 Dr. Gary Shaw / MIT Lincoln Laboratory
 Dr. Dana Sinno / MIT Lincoln Laboratory
 Dr. Henk Spaanenburg / Mercury Computers
 Mr. Brian Sroka / MITRE
 Mr. James Waggett / CSPI

Technical Program

- Future Program Office Needs for Embedded Computing Technologies
- Embedded Computing for Global Sensors and Information Dominance
- Case Study Examples of High-Performance Embedded Computing
- Algorithm Mapping to High-Performance Architectures
- Advanced Digital Front-End Processors
- Networked Embedded Systems
- Reconfigurable Computing for Embedded Systems
- Software Architectures, Reusability, Scalability, and Standards
- Middleware Libraries and Application Programming Interfaces
- Performance Modeling and Simulation for Benchmarking Embedded Systems
- Fault-Tolerant Hardware/Software Techniques
- Automated Tools for Parallel System Development
- High-Speed Interconnect Technologies

Call For Presentations

The focus of this Workshop is on high-performance embedded computing technologies. The HPEC Workshop will give U.S. government funded researchers from academia, industry, and government, working on this important area, an opportunity to discuss techniques, approaches, and ongoing developments with relevance to real-time embedded computing, information dominance, and other military applications. During this fifth year, the HPEC 2001 Workshop will have as its theme *The Role of Embedded Computing in Network-Centric Environments*. The technical committee seeks new presentations which clearly describe the advances in high-performance embedded computing technologies emphasizing one or more of the topics outlined above under the *Technical Program*. All submittals will be competitively reviewed and judged on their technical quality, novelty, and relevance to the technical program. The Workshop will be **UNCLASSIFIED**.

A two-page abstract should be submitted by email or web page. Each speaker will be allotted 30 minutes. Due to the potentially large number of submissions, the program committee reserves the right to organize some presentations in a poster format. Because 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 assembled into a Workshop Proceedings CD-ROM.

Authors are encouraged to submit abstracts for presentations to:

Ms. Jane Daneu
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Authors' Schedule

- Due date for submission of two-page abstracts (via e-mail or web page)
1 June 2001
- Notification of acceptance from HPEC
16 July 2001
- Due date for authorization to publish abstracts
3 September 2001
- Due date for authorization to publish charts in the proceedings
17 September 2001

Please include author name(s), affiliation(s), mailing address, phone number, fax number, and email address with abstract