Synopsis

Over 125 presentations are planned during the 7th Military and Aerospace Programmable Logic Devices (MAPLD) International Conference on programmable logic devices and technologies, digital engineering, and related fields, for military and aerospace applications.

This year, there will be a special emphasis on papers with the following themes:

- War Stories" and Lessons Learned
- High integrity systems design considerations.
- Design verification methods and software
- Logic design, evaluation, and design guidelines
- Do's and Don'ts for SEU mitigation and immunity.
- Fault tolerance with FPGAs
- High reliability processor cores in FPGAs.
- Programmable Logic and Obsolescence Issues
- Reconfigurable Computing applications such as MIL-STD interfaces, munitions controllers, micro air vehicle/unmanned air vehicle controllers, and computational fluid dynamics analysis.

Conference Home Page

http://klabs.org/mapld04 contains registration information, paper titles, authors, and abstracts, as well as biographies of all invited speakers and Panel Session members.

Information to facilitate your trip is included, with information provided on directions, metro and local street maps, lodging, transportation, and local attractions. Proceedings from prior MAPLD conferences are also available on-line at http://klabs.org/mapld

For additional conference information, contact:

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Hans Tiggeler

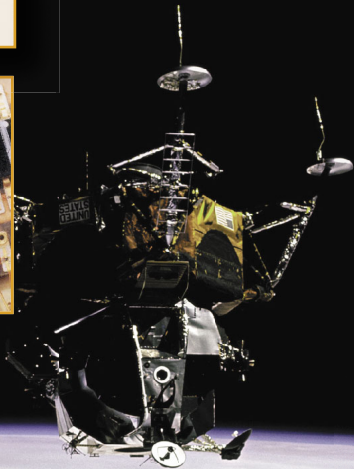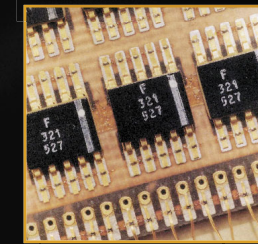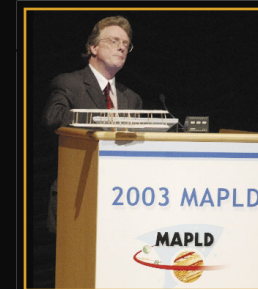European Liaison
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7th Military and Aerospace Programmable Logic Devices (MAPLD) International Conference

September 8-10, 2004

Ronald Reagan Building and International Trade Center

Washington, DC

Program Announcement

Early Registration Deadline
August 9, 2004

Goddard Space Flight Center
Office of Logic Design

Program Sessions and Chairmen

- **Welcome and Opening Remarks**
  Rear Adm. Craig E. Steidle, USN (Ret.)
  NASA Associate Administrator for Exploration
  Systems
- **Applications: Military & Aerospace**
  Virginia Ross and Ralph Kohler
  Air Force Research Laboratory
- **Systems and Design Tools**
  Tanya Vladimirova, University of Surrey
  Hans Tiggeler
- **Radiation and Mitigation Techniques**
  Anne Clark, U.S. Air Force
  Lewis Cohen, Defense Threat Reduction Agency
- **Processors: General Purpose and Arithmetic**
  Keith Bergevin, Defense Microelectronics Activity
  Robert Hodson, NASA Langley Research Center
- **Reconfigurable Computing, Evolvable
  Hardware, and Security**
  Olaf Storaasli, NASA Langley Research Center
  John Harkins, Department of Defense

"Birds-of-a-Feather" Workshops

- **Mitigation Methods for Reprogrammable
  Logic in the Space Radiation Environment**
  Ken LaBel, NASA Goddard Space Flight Center
  Michael J. Wirthlin, Brigham Young University
- **Reconfigurable Computing**
  Alan Hunsberger, National Security Agency
  Douglas Fouts, Naval Postgraduate School
- **PLD Failures, Analyses, and the Impact on
  Systems**
  Jay C. Schaefer, Department of Defense
  Kay Jobe, Boeing
- **Digital Engineering and Computer Design - A
  Retrospective and Lessons Learned for
  Today's Engineers**
  Paul Ceruzzi, Smithsonian Air and Space Museum
- **NESC and Software**
  Steven S. Scott
  NASA Engineering and Safety Center

Late Abstracts

Submissions will be accepted for the Poster and
Workshop Sessions only, on a first-come, first-served,
space-available basis.

Panel Session

This year's panel, conducted immediately after
Thursday evening's Dinner Banquet, will discuss:

"Why Is Space Exploration So Hard? The Roles of
Man and Machine"

Seminars

Two full-day seminars (separate fee) will be given on
September 7th, 2004:

- **"VHDL Synthesis for High-Reliability Systems"**
  led by Jim Lewis
- **"Aerospace Mishaps and Lessons Learned"**
  will be led by Rod Barto and will consist of
  approximately 8 case studies, presented by
  specialists in each of the mishaps.

Industrial and Government Exhibits

The following organizations have reservations for an
exhibit. Additional exhibits will be accepted on a first-
come, first-served, space-available basis.

- NASA Office of Logic Design
- Mentor Graphics Corporation
- Xilinx Corporation
- Synthworks
- Tensilica
- Actel Corporation
- Annapolis Microsystems
- Space Micro, Inc.
- SEAKR Engineering
- Aldec
- IEEE Aerospace and Electronics Systems Society
- Hier Design
- Global Velocity
- Lattice Semiconductor
- Celoxica
- BAE Systems: Information and Electronic Warfare
  Systems
- Nallatech
- The Andraka Consulting Group
- Aeroflex
- Synopsys
- Peregrine Semiconductor
- Starbridgesystems
- Condor Engineering
- AccelChip
- NASA Engineering and Safety Center
- Synplicity
- Defense Microelectronics Activity
- Southwest Research Institute
- Altera
- SRC Computers
- Mathstar