

## Synopsis

Over 125 presentations are planned during the 8th Military and Aerospace Programmable Logic Devices (MAPLD) International Conference which has now been expanded to a full three days. The major focus remains 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.
- Logic design guidelines.
- Do's and Don'ts for SEU mitigation and immunity
- Reliability and fault tolerance with FPGAs
- General-purpose, high-performance, PLD-based computing
- Micro air vehicle/unmanned air vehicle controllers
- Digital Device Obsolescence Issues
- Reconfigurable Computing applications
- MIL-STD interfaces, munitions controllers, and CFD
- High performance, high reliability processor cores in FPGAs.
- Verification of digital logic systems
- Software tools for hardware engineering

## Conference Home Page

<http://klabs.org/mapld05> 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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MAPLD2005PA

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Official Business  
Penalty for Private Use, \$300  
**Office of Logic Design**  
Code 564



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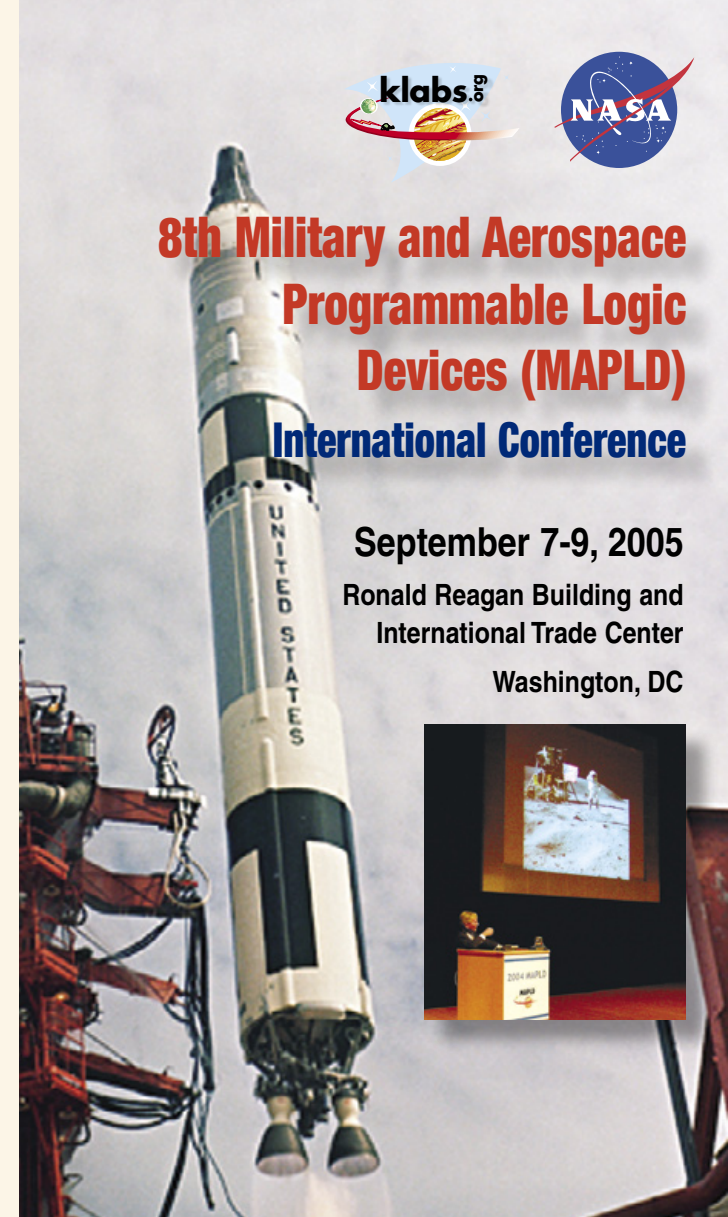


# 8th Military and Aerospace Programmable Logic Devices (MAPLD) International Conference

September 7-9, 2005

Ronald Reagan Building and  
International Trade Center

Washington, DC



## Program Announcement

Early Registration Deadline  
August 8, 2005

Goddard Space Flight Center  
Office of Logic Design

## Program Sessions

- Applications: Military & Aerospace
- Radiation and Mitigation Techniques
- Logic Design and Processors
- Reconfigurable Computing, Evolvable Hardware, and Security
- Poster Session

## Invited Speakers and Special Talks

- Welcome and Opening Remarks: *Ralph R. Roe, NASA Engineering and Safety Center*
- Invited History Talk: *Steven Beckwith, Director, Space Telescope Science Institute*
- Invited Mishap and Lessons Learned Talk: *"Computer Overload and The Apollo 11 Lunar Landing" — Jack Garman, Lockheed-Martin Information Technology (formerly NASA JSC)*

## "Birds-of-a-Feather" Workshops and Special Sessions

- "An Application Engineer's View"
- Mitigation Methods for Reprogrammable Logic in the Space Radiation Environment
- Reconfigurable Computing
- PLD Failures, Analyses, and the Impact on Systems
- NESC and Software
- Verification of Large Designs and Related Design Methodologies
- Digital Engineering and Computer Design - A Retrospective and Lessons Learned for Today's Engineers

## 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 Are Space Stations So Hard?"** Panel will include: *Roger D. Launius, Chair, Space History Department, National Air and Space Museum; Keith Cowing, NASA Watch*

## Seminars

Four full-day seminars (separate fee) will be given on September 6, 2005:

- Design Integrity
- Space Plug-and-play Avionics (SPA) Technical Committee/Workshop
- Device Failure Modes and Reliability
- Reconfigurable High-Performance Computing

## Industrial and Government Exhibits

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

- NASA Office of Logic Design
- Synthworks
- Space Micro
- SRC Computers
- BAE Systems: Information and Electronic Warfare Systems
- Aldec
- Actel Corporation
- ATK Mission Research Corporation
- Aeroflex Colorado Springs
- Xilinx, Inc.
- Sigrity
- Mentor Graphics Corporation
- IEEE Aerospace and Electronics Systems Society
- NASA Engineering and Safety Center
- Nallatech
- Celoxica
- Northrop Grumman Corporation
- SEAKR Engineering
- Synplicity
- Aitech Defense Systems Inc
- LSI Logic
- AndraKa Consulting Group
- Pentek

