

Microsemi Space Forum Virginia

Westfields Marriott Washington Dulles, Chantilly

June 2, 2015



Program

Welcome to the 2015 Microsemi Space Forum!

Microsemi has been developing space solutions for almost six decades and has played an important role in a wide variety of space programs globally.

As part of our ongoing commitment to the space industry, this forum is a unique opportunity to see Microsemi's technical experts, along with our partners, presenting leading space-related products, capabilities, technology roadmaps and solutions, including the newly introduced RTG4™ radiation-tolerant field programmable gate arrays (FPGAs) and the LX7730 telemetry controller, as well as a variety of its radiation-hardened DC-to-DC converters, precision time and frequency solutions, linear and point of load (POL) hybrids, custom hybrid solutions and radiation-hardened discretes—including the broadest portfolio of JANS Class diodes and bipolar transistor products.

This Space Forum is specifically designed for space industry system-level architects, research and development engineers, design and component engineers, and other space industry professionals seeking the latest innovations in this unique market. The Digital Track and Timing, Mixed-Signal and Power Track will run simultaneously after the General Session break.

Space Forum Partners



In an effort to minimize the noise level outside the general session, we are providing a location for offline conversations. The Madison Room is located opposite the Lower Rotunda (exhibiting area) and will be open from 8 a.m. to 6 p.m. Please feel free to utilize this room throughout the day and see the staff at the registration desk if you require a specific meeting time.

General Session

- 7:30 **Registration**
- 9:00 **Welcome and Opening Remarks**
Siobhan Dolan Clancy, Vice President Worldwide Business Development, Aerospace
- 9:30 **Emerging 21st Century Space Industry**
Frank Slazer, Vice President, Space Systems Aerospace Industries Association
- 10:00 **Microsemi Space Technology Journey**
Jim Aralis, Chief Technology Officer
- 10:30 **Break**

Digital Track

- 10.45 **RTG4 Next-Generation Radiation-Tolerant FPGAs**
Ken O'Neill, Director of Marketing, Space and Aviation
- 11.15 **RTG4 Architecture Details**
Minh Nguyen, Senior Marketing Manager, Space and Aviation
- 11.45 **RTG4 Software Features**
Bassam Youssef, Senior Staff Applications Engineer
- 12.15 **Building High Reliability into Microsemi Designs, the Synplify Way**
Steve Gercken, Staff Applications Consultant (Synopsys)
- 12.35 **Lunch**
- 1.35 **RTG4 Packaging Technology**
Raymond Kuang, Director Packaging Engineering
- 2.05 **RTG4 Board Level Considerations**
Bassam Youssef, Senior Staff Applications Engineer
Jim Steward, Application Engineering
- 2.35 **SpaceWire and SpaceFibre**
Prof. Steve Parkes, Managing Director (STAR-Dundee)
- 2.55 **A high efficiency serial interface protocol – ESistream**
Marc Stackler, Application Engineer (e2v)
- 3.15 **Break**

- 3.30 **Mixed Signal ICs for Space**
Dorian Johnson, Product Marketing Manager

- 3.50 **Space System Managers – Architecture and Performance**
Mathieu Sureau, Director of IC Design Engineering

- 4.30 **RTG4 Radiation Test Results and Test Plans**
Dr. Nadia Rezzak, Staff Device Engineer, Technology Development

- 4.50 **RTG4 Reliability and Qualification**
Dr. Amal Zerrouki, Senior Manager Verification

- 5.10 **RTG4 Demo using RTG4 Development Kit**
Bassam Youssef, Senior Staff Applications Engineer

- 5.30 **Questions/Answers and Wrap-Up**

Timing, Mixed Signal & Power Track

- 10.45 **Time & Frequency Product Overview & Key Performance Features**
Peter Cash, Director of Advanced Technology, Space and Defense
Ashley Pollock, Business Development Manager Space, Defense & Avionics
- 11.25 **Mixed Signal ICs for Space**
Dorian Johnson, Product Marketing Manager
- 11.45 **Space System Managers – Architecture and Performance**
Mathieu Sureau, Director of IC Design Engineering
- 12.25 **Space System Managers – LX7730 Demo**
Mathieu Sureau, Director of IC Design Engineering
- 12.35 **Lunch**
- 1.35 **Next Generation Power Solutions - Solving Real World Interface Issues**
Kent Brooten, National Sales Manager
- 2.05 **I²MOS™ Technology Overview - A Truly Rad-Hard MOSFET**
Max Zafrani, Director Product Engineering
- 2.40 **Improving the Performance of a DC-DC Forward Converter using I²MOS™ MOSFET Technology**
Al Ortega, Marketing Manager
- 3.15 **Break**
- 3.30 **Microsemi Precise Satellite Timing Module for Next Generation Satellite Bus**
Peter Cash, Director of Advanced Technology, Space and Defense
Ashley Pollock, Business Development Manager Space, Defense & Avionics
- 4.00 **RTG4 Enabled by Microsemi Power Technology Portfolio**
Ken O'Neill, Director of Marketing, Space and Aviation
Brian Wilkinson, Senior Director Technical and Strategic Marketing and Applications
- 4.30 **TID versus ELDRS on Transistors - The Whole Picture**
Ray DiBugnara, Director of Technology and Radiation Services
- 5.00 **Switching High Voltages & High Currents in Space**
Kent Brooten, National Sales Manager
Brian Wilkinson, Senior Director Technical and Strategic Marketing and Applications
- 5.30 **Questions/Answers and Wrap-Up**

Notes

Notes

Program at a Glance

Tuesday 2 June, 2015
7.30 Registration
General Session 9:00 – 10:30 Welcome Microsemi Space Technology Journey
10:30 Break
Spilt into Two Tracks 10:45 Morning Presentations
12:35 Lunch (Hosted by Microsemi)
1:35 Afternoon Presentations
3:15 Break
3:30 Afternoon Presentations (continued)
5:30 Questions/Answers and Wrap-up

www.microsemi.com

