

## **GOMACTech-11 General information**

### **REGISTRATION**

All sessions of GOMACTech-11 are being held at The DoubleTree Hotel in Orlando, Florida. Both check-in and on-site registration will take place in the hotel's Convention Center Lobby.

#### **Conference check-in and on-site registration hours:**

Monday, 21 March -- 7:00 am - 8:30 am (Tutorial 1 only)

Monday, 21 March -- 9:00 am - 5:00 pm

Tuesday, 22 March -- 7:00 am - 5:00 pm

Wednesday, 23 March -- 7:00 am - 5:00 pm

Thursday, 24 March -- 7:00 am - 3:00 pm

### **SECURITY PROCEDURES**

The GOMACTech Conference is an Unclassified, Export-Controlled event that requires participants to be U.S. Citizens or legal U.S. Permanent Residents. All registrants must provide proof of U.S. Citizenship or Permanent Resident status prior to being permitted entry into the conference. Additionally, a signed **Non-Disclosure Statement** will be required.

You may prove U.S. citizenship with any one of the following:

U.S. Passport

Birth Certificate AND valid government-issued photo ID

Naturalization Certificate AND valid government-issued photo ID

The following are NOT proof of citizenship

Voter registration cards

Driver's license

## **GOMACTech TUTORIALS**

Three tutorials of interest to the GOMACTech community are a special feature of the conference. The tutorials are all being held on Monday, 21 March. There is no additional fee for Tutorials 2 & 3, but individuals must be registered for the Conference and must indicate their intention to attend a specific tutorial on their registration form. Tutorial 1 includes a lunch. The fee for Tutorial 1 is \$20.

### **Tutorial 1: Trusted Suppliers Summit Tutorial**

Monday

21 March 2011, 8:30 am - 5:00 pm

Doubletree Hotel, Universal Center

#### **Organizer:**

Harry Kelzi, Teledyne

### **Tutorial 2: Securing the Full End-to-End Flow of Electronics: Technical Policy & Acquisition Implications**

Monday

21 March 2011, 11:00 am -5:00 pm

DoubleTree Hotel, Goldcoast Room

#### **Organizer:**

Paul Amirtharaj, Army Research Laboratory

Trusted foundry is the first step. What about the rest of the flow? This panel session will discuss the primary issues in the four major sections of IC flow: design, fab, packaging & test, and reliability, as they pertain to leading-edge electronics and the constraints on domestic availability for critical USG applications within a fully globalized market for production and research.

#### **Presenters:**

Paul Amirtharaj, Army Research Laboratory

Romeo DelRosario, Army Research Laboratory

John Penn, Army Research Laboratory

Bill Spaeder, Berkeley Design Associates

Mike Liehr, CNSE/IBM

Ken Decker, Triquint Semiconductor

Doug Goodman, Ridgetop



## **Tutorial 3: SOI-Enabled Technologies For 3D Circuit Integration and Ultra-Low-Power Applications**

Monday

21 March 2011, 1:00 - 5:00 pm

DoubleTree Hotel, Sun and Surf Room

### **Organizer:**

Les Palkuti, DTRA

This two-part tutorial will discuss how the unique attributes of silicon-on-insulator (SOI) technology are being exploited to enable complex three-dimensional (3D) circuit integration and to realize a CMOS process technology optimized ultra-low-power operation.

The first presentation will begin with a discussion of the factors driving the development of 3D circuit-integration technologies and provide a broad overview of the many different 3D integration approaches currently being explored throughout the semiconductor industry. The presentation will then focus on one of these approaches; a 3D circuit-integration technology that exploits the advantages of SOI technology to enable wafer-level stacking and micrometer-scale electrical interconnection of fully fabricated circuit wafers. The presentation will conclude with some examples of advanced focal planes and 3D circuits and microsystems which have been realized in this technology.

### **Presenters:**

Craig L. Keast, MIT Lincoln Lab

Steven A. Vitale, MIT Lincoln Lab

## **LUNCHEON SPEAKERS**

Lunch will be provided on Tuesday, Wednesday, and Thursday. Both Wednesday and Thursday lunches will include presentations of great interest to the GOMACTech community. The Wednesday Luncheon Keynote speaker will be Mr. Dave Davis, Chief, Systems Engineering Division, Air Force Space and Missile Center, Los Angeles Air Force Station, California. Thursday's Luncheon Keynote speaker will be Mr. Don Parman, Chief, Strategic Planning, Defense Threat Reduction Agency, Ft. Belvoir, Virginia

## **EXHIBITION**

An exhibition comprised of commercial vendors exhibiting products of interest to the GOMACTech community is an integral part of the conference. All attendees are reminded to visit the exhibitors when they have some free time. The Exhibit Hall is located in the hotel's Citrus Crown Ballroom. Coffee breaks will be held in the exhibit area when they coincide with the exhibition's hours of operation. On Tuesday evening an Exhibitors' Reception, where attendees can mix in a relaxing atmosphere of food and good spirits. Exhibition hours are as follows:

**Tuesday, 22 March      12:00 – 8:00 pm**

**Wednesday, 23 March    9:00 am – 4:00 pm**

## **List of Exhibitors**

Aeroflex Division  
Analog Bits  
BAE Systems  
Boeing  
Cobham  
Coherent Logix  
Corwil Technology Corporation  
Cypress Semiconductor  
Endicott Interconnect Technologies, Inc.  
Evans Analytical Group  
Honeywell  
HRL  
IBM  
Integra Technologies, LLC  
Interconnect Systems, Inc.  
Kilopass Technology, Inc.  
M/A-COM Technology Solutions  
Mobile Semiconductor Corporation

MOSIS

National Reconnaissance Office

National Semiconductor Corporation

NNSA's National Manufacturing Office

Northrop Grumman Corp

ON Semiconductor

Peregrine Semiconductor

Photronics, Inc.

Rochester Electronics

RTI International

Sandia National Laboratories

Silvaco Data Systems

SVTC Technologies

Synopsys, Inc.

Tahoe RF Semiconductor, Inc.

TAPO (Trusted Access Program Office)

Tektronix Component Solutions

Tela Innovations, Inc.

Teledyne Microelectronics

Teradyne Global Services

Tower Jazz

TriQuint Semiconductor

### **WEDNESDAY EVENING SOCIAL**

The GOMACTech 2011 Special Event is truly a special event.

It includes dinner at The House of Blues -- southern-inspired cuisine -- at the Walt Disney World Resort. Dinner will be followed by a performance of *La Nouba, Cirque Du Soleil*. The show name "La Nouba" originates from the French phrase "faire la nouba," which means to party, to live it up. It is a world where dreams and reality intertwine as the urban and circus worlds meet on stage. Blending acrobatics, dazzling choreography, whimsical characters, and live music, La Nouba stimulates our imagination from beginning to end.

Buses will leave the DoubleTree Hotel at 6:00 pm

Tickets should be purchased in advance along with your conference registration: Adults \$25, Children (13 and under) \$15

### **HOTEL ACCOMMODATIONS**

Steps from the Universal Orlando Resort, the Doubletree Hotel is a short drive from Orlando's world-famous theme parks, shops, restaurants, golf courses, entertainment and sports venues, and exciting attractions, such as Universal Studios, City Walk, Walt Disney World, SeaWorld Orlando, Discovery Cove, and the Orange County Convention Center. The Doubletree Hotel at The Entrance to Universal Orlando, is less than 10 minutes from the Mall at Millenia, Festival Bay Mall. and Prime Outlets.

GOMACTech has reserved a block of rooms at the hotel at a special rate of \$104 single or double. These rates are exclusive of applicable state and local taxes.

Reservations may be made on line at

[http://doubletree.hilton.com/en/dt/groups/personalized/M/MCOUNDT-GOM-20110319/index.jhtml?WT.mc\\_id=POG](http://doubletree.hilton.com/en/dt/groups/personalized/M/MCOUNDT-GOM-20110319/index.jhtml?WT.mc_id=POG)

Or, by calling the hotel reservations department at 407-351-1000. Be sure to note that you are attending GOMACTech.

The deadline for reservations from the GOMACTech block is Friday, 25 February 2011.

## **CONFERENCE CONTACT**

Anyone requiring additional information about GOMACTech should contact the Conference Coordinator, Glenys Natera, GOMACTech, 411 Lafayette Street, Suite 201, New York, NY 10003 (212/460-8090 x217), [gnatera@pcm411.com](mailto:gnatera@pcm411.com).

## **GOMAC PAPER AWARDS**

Paper awards based on audience evaluations from GOMACTech-10 will include the George Abraham Outstanding Paper Award, a Meritorious Paper Awards, and a Best Poster Paper Award. Presentation of these well-deserved awards will be made at the Plenary Session on Tuesday morning in Universal Center. The GOMACTech-10 winners are:

### **The George Abraham Outstanding Paper Award (16.2)**

W. T. Holman, L. W. Massengill, B. L. Bhuva, A. F. Witulski, and D. Loveless  
ISE/Vanderbilt University

*"Recent Advances in Radiation Hardened by Design Analog and Mixed Signal Design"*

### **Meritorious Paper Award (1.2)**

C. Fulton and W. Chappell, Purdue University

*"The Purdue Digital-Array-Radar Testbed"*

### **Best Poster Paper Award (28.8)**

J. Mruk and D. Filipovic, University of Colorado

H. Levitt, Navy Research Laboratory

*"Integrated Wideband Millimeter-Wave Passive Front-Ends"*

### **RATING FORM / QUESTIONNAIRE**

Don't forget to vote for your favorite presentation this year before you leave the conference. A rating form/questionnaire is being handed out at conference check-in. To encourage submission of these forms, GOMACTech has a special gift for all attendees submitting a completed form. Please turn your form in at the Conference registration desk when you leave the Conference to receive your gift item.

### **SPEAKERS' PREP ROOM**

The St. Johns Room has been designated as speakers' prep room and will be available during the hours the conference registration desk is open. Speakers are encouraged to use the facilities to ensure compatibility with the meeting's AV equipment. Speakers having difficulties should request to see an AV operator at the conference registration desk. Speakers are also asked to be at their assigned presentation room **30 minutes before the sessions begins** to meet with their session chair. An AV operator will be assigned to each technical session room.



## **CD-ROM PROCEEDINGS**

The first volume of the GOMACTech CD-ROM Proceedings, containing searchable, condensed versions of submitted papers presented at the Conference will be distributed to all registrants. Additional copies of the CD-ROM can be purchased at the Conference at a cost of \$40.00 per CD.

Previously published as the GOMAC Digest of Technical Papers, Volumes I – XXVII, this publication is the only record of the conference. Previous GOMAC Digests will, upon request, made available copies to qualified Defense Technical Information Center (DTIC) users. Please call 1-800-225-3842 for bound or microfiche copies. Past Digests can be ordered by calling the above number and identifying the following accession numbers (please note that GOMAC was not held in the calendar year of 1995):

GOMAC-84 B113271	-86 B107186	-87 B119187
-88 B129239	-89 B138550	-90 B150254
-91 B160081	-92 B169396	-93 B177761
-94 B195015	-96 B212362	-97 B222171
-98 B235088	-99 B242763	-00 B254138
-01 B264749	-02 M201603	-03 M201604
-04 M201663	-05 M201849	-06 M202011
-07 M202134	-08 M202438	-09 M202646
-10		

## **INFORMATION / MESSAGE CENTER**

The Information/Message Center will be located adjacent to the GOMACTech Registration Desk in the DoubleTree Hotel. The message center telephone number for incoming calls is 407-351-1000. Callers should ask to be transferred to the GOMACTech Registration Desk.

## **PARTICIPATING GOVERNMENT ORGANIZATIONS**

Participating Government Organizations of GOMACTech-10 include: Department of Defense (Army, Navy, Air Force) ... National Aeronautics and Space Administration ... Department of Commerce (National Institute of Standards and Technology) ... National Security Agency ... Department of Energy (Sandia National Laboratories) ... Department of Energy (National Nuclear Security Administration) Defense Logistics Agency ... Department of Health and Human Services ... Defense Threat Reduction Agency ... Defense Advanced Research Projects Agency ... Advisory Group on Electron Devices ... Central Intelligence Agency ... National Reconnaissance Office

## **GOMAC WEB SITE**

Information on GOMACTech may be obtained through its Web site at [www.gomactech.net](http://www.gomactech.net).