



# GOMACTech-11

## Securing the Future through Rapid Technology Insertion

Doubletree Hotel, Orlando, FL  
March 21 – March 24, 2011

[www.gomactech.net](http://www.gomactech.net)

### Call for Papers

In June 1994, Defense Secretary William Perry issued a directive to maximize reliance on existing commercial off-the shelf (COTS) electronics and directed the armed forces to buy products and components from commercial sources. The decision was based on reducing acquisition cost and eliminating outdated procurement regulations to take advantage of the exponential increase in commercial microelectronics capabilities (Moore's law). While technologies have continued to reach subsequently smaller nodes, market forces have driven manufacturing, capital equipment, and design to overseas sources. Although domestic defense systems have benefitted from these technical advancements, these same enabling technologies are no longer solely available to the tactical advantage of the US and its allies. The nexus of integrated microsystems, systems-on-chip, and multiple viable semiconductor material systems presents new opportunities for functionality via heterogeneous integration (synthesis of dissimilar materials, circuits, and sub-systems). Design of these heterogeneously integrated microsystems will also require efficient small batch, custom, next generation design automation tools. The challenge of adaptive threats in the asymmetric paradigm drives the need for higher level integration and transition methodologies. GOMACTech-11 provides a forum for discussing and demonstrating advanced microelectronics that will provide these leap-ahead electronics technologies to gain an efficient tactical advantage. GOMACTech is the premier forum for reporting on government funded micro and nano-electronic research and complementary efforts that focus on the technology needs of government systems. GOMACTech is an unclassified export-controlled event. All registrants must provide proof of U.S. citizenship or permanent resident status and sign a non-disclosure statement prior to being permitted entry into the conference.

### Technical Topic Areas

Design Issues in the Sub-32nm Regime  
Small Batch Microfabrication: Beyond MPWs  
Wireless Communications and Network Technologies  
Broadband Multifunction RF Systems  
Advanced Packaging  
Graphene Devices & Circuits  
Trustworthy Microelectronics  
Digital Waveform Synthesis  
High Power Transmitter Components  
RF Signal Reception and Control Technology  
Analog RF Signal Processing and Distribution  
Monolithic RF Circuits  
Multi-Chip Assemblies and Subsystems  
RF Support Infrastructure Technology

Mixed-Mode RF Components  
Multi-Function/Reconfigurable Antenna Arrays  
Low-power High-speed Electronics  
On-Chip Power Management  
High Performance Signal Processing  
Radiation-Hard Device Technology  
Micro/Nano Electromechanical Devices & Circuits  
Power Electronics  
Semiconductor Materials and Processes  
Alternative Materials for Microelectronics/RF Components  
Novel Nanomaterials and Processes  
Materials for Elector-Optics  
Technologies for Flexible Electronics and Displays

• Electronic Abstracts Due <a href="http://www.gomactech.net/">http://www.gomactech.net/</a>	September 3, 2010
• Author Notification of Acceptance	October 15, 2010
• Final Paper Due	January 14, 2011

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