GOMACTech 2025

Trusted Suppliers Industry Day

Monday, March 17, 2025, Pasadena, CA

"MICROELECTRONICS Full Throttle"

Time	Theme	Presenter(s)
0830	Welcome & TSSG Update	Dr. Brad Ferguson, SkyWater Technology
0845	Keynote: State of Our Industry	Timothy Lee, Boeing and IEEE
0945	China's Chip Threat – Beyond the Silicon	Jon Pelson, Author - *Wireless Wars*
1015	*Break*	
1035	DoD Microelectronics Commons *Moderator: Ms. Stephanie Lin, NSTXL*	Katie Smith, SWAP Dr. John Muth, CLAWS Steve Crago, CA DREAMS Michael Greene, NORDTECH Jackie Janning -Lask, MMEC
1125	NASA's Alternate Grade Part Activities	Mark Porter, NASA Jet Propulsion Laboratory
1200	*Lunch*	
1250	Trusted Supplier Studies: Introduction	Kaye Ortiz, Defined Business Solutions Daniel Elftmann, Lockheed Martin
1300	Trusted Supplier Study #1: Soft IP	Daniel Elftmann, Lockheed Martin
1315	Trusted Supplier Study #2: FPGAs	Mason Kilcarr, Chip Scan
1330	Trusted Supplier Study #3: End-to-End Trust	Kaye Ortiz, Defined Business Solutions
1345	Trusted Supplier Study #4: Trust Value Proposition	Ezra Hall, GlobalFoundries
1400	*Break*	
1420	Future Trusted Capabilities *Moderator: Ray Gingras,* *Defined Business Solutions*	Tom Dalrymple, AFRL Jason Milne, Raytheon Nicole Mueller, DRAPER
1520	Securing 5G: Cybersecurity and Supply Chain Resilience in Microelectronics and Information Communications Technology (ICT) *Moderator: Ms. Michele Iversen,* *The Chertoff Group*	Jeff Stern, Chain Security Jon Pelson, Author, *Wireless Wars*
1630	Industry Day Closing Remarks	John Monk, Northrop Grumman

Keynote Speaker

Timothy T. Lee, President, IEEE-USA

President of IEEE-USA and Boeing Technical Fellow

Timothy Lee is a Boeing Technical Fellow based in Southern California. He leads the development of disruptive microelectronics technologies for advanced communications networks and sensor systems for airborne and space applications. His research interests include 3D Heterogenous Integration (3DHI) technologies for chiplet/wafer stacking of digital/analog/RF silicon/III-V devices for high-performance, and low-power microelectronics for aerospace and defense applications. He is principal investigator for the transition of IRAD, CRAD and university Lab to Fab research into technologies for defense systems. During his over 40 years of experience, he has held technical/managerial positions at research facilities, aerospace companies, and semiconductor foundries. He has led the development of hardware for satellite communications and has built phased-array antenna electronics for commercial and US government customers. Lee has authored over 30 journal and conference papers. He holds SMEE and SBEE degrees from MIT and a master's degree in system engineering from the University of Southern California.

Speakers, Panelists and Moderators Bios, in agenda order:

TSSG Welcome

Dr. Brad Ferguson

SkyWater Technology

Brad Ferguson is focused on accelerating the growth of SkyWater's advanced packaging technology, expanding the company's value chain, and strengthening strategic U.S. government relationships in support of microelectronics manufacturing. Previously, he served as chief technology officer, creating a strong foundation for this critical function. In this role, he was responsible for developing the company's technology roadmap and IP strategy by identifying high growth markets for SkyWater's Technology Foundry business. In addition, Ferguson was focused on leading SkyWater's government relations efforts. Prior to this, he served as senior director of sales in the custom foundry line of business at SkyWater and was also responsible for the government relations strategy.

Ferguson started his career in photolithography process development at Cypress Semiconductor. In 2008, he started up the Cypress custom foundry business to provide differentiated solutions to technology innovators. He also drove the accreditation process to achieve Trusted Foundry status and secured many defense customers, which launched the site's entry into the aerospace and defense market, a key component of SkyWater's market strategy.

Ferguson received a Bachelor of Science in chemical engineering from the University of Minnesota Twin Cities. He also received a doctorate and Master of Science in chemical engineering from the University of Texas at Austin.

Jonathan Pelson

Author – Wireless Wars

Jonathan Pelson joined Lucent Technologies during the telecom boom of the '90s, helping create and market some of the company's breakthrough technology solutions.

He later served as the Chief of Convergence Strategy for British Telecom, developing a global wireless plan for the company. During his time with these and other telecom companies, he traveled to China and saw that country's fledgling telecommunications companies grow and eventually seize the world lead in 5G and other critical technologies.

With deep personal experience in the sector and rare access to the people who run the world's largest telecom companies, he decided to investigate how the lead was lost to the Chinese and what we could do to take it back.

Jon has a degree in economics from Dartmouth College and an MBA from the Darden School at the University of Virginia.

Stephanie Lin - Moderator

VP of NSTXL, Microelectronics Commons

Stephanie serves as the Vice President at the National Security Technology Accelerator (NSTXL) overseeing the execution of the Microelectronics Commons, the $2B DoD program established by the CHIPS and Science Act. She also serves as the Chair to the Commons Hub Board, comprising members of all eight Hubs. Previous to this role, she supported various senior leaders within the Office of the Secretary of Defense for several years in anti-tamper, hardware assurance, and microelectronics policy. She also led policy and Congressional activities for the Defense Microelectronics Cross-Functional Team and supported the Trusted and Assured Microelectronics (T&AM) Program. She holds degrees in electrical and computer engineering.

Katie Smith

Business Development Lead for Microelectronics in the Corporate Engagement and Strategic Partnerships department at Arizona State University

Katie Smith is the Business Development Lead for Microelectronics in the Corporate Engagement and Strategic Partnerships department at Arizona State University. In this role, she is also driving the development of the partnership ecosystem for the Southwest Advanced Prototyping Hub. With over 15 years of experience in research, grant management, and research operations within higher education, Katie plays a pivotal role in cultivating and maintaining strategic collaborations between industry and academia. Katie holds a Bachelor of Science in Biochemistry and an MBA, equipping her with a unique blend of scientific expertise and business acumen. She is passionate about fostering mutually beneficial partnerships that bridge the gap between research and commercialization, advancing innovation in the microelectronics sector.

Dr. John Muth

Director Microelectronics Commons CLAWS Hub
Progress Energy Distinguished Professor Electrical and Computer Engineering
Faculty Scholar, North Carolina State University

Dr. John F. Muth, Progress Energy Distinguished Professor of Electrical and Computer Engineering at NC State University, is the Director of the Microelectronics Commons Commercial Leap Ahead for Wide bandgap Semiconductors (CLAWS) Hub. He has an Applied Engineering Physics BS from Cornell and a PhD in physics from NC State. His expertise lies in optoelectronic materials and device fabrication, contributing to advancements in wide and ultra-wide bandgap materials for LEDs, lasers, RF, power electronics, and transparent thin-film transistors for displays. With over 200 publications and 11 patents, he has received various academic awards and military decorations, including a Bronze Star.

Steve Crago

Director, California DREAMS

Steve Crago is the Director of the California DREAMS hub, an Associate Director of the USC Information Sciences Institute, where he has been since 1997. He holds a joint appointment as a Research Associate Professor in the Ming Hsieh Department of Electrical and Computer Engineering. His research interests include microelectronics lab-to-fab transition, heterogeneous architectures, high-performance and embedded cloud computing, introspective systems, and parallel software.

Michael Greene

Partnership Director, NORDTECH

Michael Greene is a defense and technology leader with 20+ years of experience in cybersecurity, space systems, and advanced sensors. As NORDTECH Partnership Director at Cornell, he drives strategic collaborations in the defense sector. Previously, he held leadership roles at BAE Systems, Johns Hopkins University Applied Physics Laboratory, and Navy Cyber Command. A former U.S. Marine Corps officer and F/A-18D aviator, he brings a mission-focused approach to national security. Michael holds advanced degrees in Business Administration and Systems Engineering from The George Washington University and a B.S. in Physics & Astronomy from the University of Rochester.

Jackie Janning-Lask

Chief Executive Officer, west Microelectronics Consortium

Jackie Janning-Lask is CEO of the Midwest Microelectronics Consortium (MMEC). In this capacity, Jackie is responsible for managing the overall operation of the company as well as advancing state-of-the-art microelectronics through the robust collaboration of MMEC's consortium partners. She is passionate about advancing STEM education and training, growing a strong domestic semiconductor alliance, and furthering the United States' microelectronics ecosystem while driving profitability and economic development for the Midwest region.

Jackie began her career in the federal service as a systems engineer in the United States Air Force (USAF), Aeronautical Systems Division Engineering Directorate in 1988. She has held numerous leadership and technical positions across the USAF most recently serving in the Senior Executive Service (SES) as the Director of Engineering and Chief Engineer of the Air Force Lifecycle Management Center where she led over 6000 engineers in the acquisition, sustainment and test for USAF aircraft, engines, munitions, electronic and business systems. She was also the USAF Technical Airworthiness Authority for Air Force weapons systems and led the transformation to digital engineering in support of rapid capability maturation, delivery, and readiness. Prior to that

assignment, Jackie served as the Director of Sensors, Air Force Research Laboratory, responsible for an annual budget of nearly $1B and ensuring America's air, space and cyber forces have superior USAF intelligence, surveillance, reconnaissance, precision engagement, and electronic warfare systems capabilities.

As an intrepid business strategist, thought leader and innovative engineer, Jackie's passion, enthusiasm, and drive comes from her 35 years serving the warfighter. Her dedication to STEM education is second to none and supports numerous foundations, societies, and communities to advance STEM education, especially for young women.

Mark Porter

Chief Engineer, Component Engineering and Assurance, Jet Propulsion Laboratory

Mark Porter is the Chief Engineer for the Component Engineering and Assurance Office at NASA's Jet Propulsion Laboratory. Prior to JPL, he spent 35 years in the OEM industry leading Specialty Engineering teams at General Dynamics, Boeing, and Spectrum Astro (now Northup Grumman). He is a former chairman of the SAE CE12 Committee where active device issues are worked with Aerospace, DLA, DoD, NASA, OEMs, and the parts industry.

Daniel Elftmann

Lockheed Martin Technical Fellow

Daniel Elftmann is a Lockheed Martin Fellow in Circuitware, with over 43 years of experience in the semiconductor and microelectronics industries. He has a deep understanding of FPGA-based systems, ASIC development, and semiconductor lifecycle management, with a focus on high-reliability applications in the aerospace and defense sectors. In his current role, Daniel works closely with Lockheed Martin programs to accelerate development cycles by leveraging commercially available IP solutions for both ASIC and FPGA-based systems. He has also worked closely with industry leaders, including SpaceX, to support the development of complex systems like satellite constellations, and has expertise in ensuring the secure and reliable use of 3rd party IP with Xilinx products. With his extensive background working with government agencies and industry partners, Daniel is well-positioned to explore innovative solutions for improving assurance in DoD programs through public-private partnerships, including the implementation of Soft IP vetting solutions.

Mr. Mason Kilcarr

Account Manager, Government and Defense, Chip Scan

Mason Kilcarr serves as the Account Manager for Government and Defense at Chip Scan, where he also holds the role of Facility Security Officer. With a strong background in safeguarding critical technology and weapon systems from adversarial exploitation, Kilcarr is deeply committed to advancing national security through innovative solutions. His work emphasizes fostering key relationships and collaborating with industry leaders to ensure the protection of vital assets in an increasingly complex global landscape.

Kilcarr's foundation of discipline and determination stems from his collegiate wrestling experience at George Mason University and Georgetown, where he also earned his degree. This competitive edge translates into his professional approach, driving results and operational excellence.

Beyond his professional pursuits, Kilcarr maintains a focus on personal growth, balancing his responsibilities with interests in fitness, culinary arts, and outdoor activities/beach. His dynamic expertise and commitment to innovation position him as a pivotal contributor to the defense and microelectronics sectors.

Catherine J. Ortiz

President, Defined Business Solutions LLC

Catherine Ortiz is a business development expert with 40 years' experience leading growth initiatives for manufacturing companies and government programs. She is the founder of Defined Business Solutions LLC (DBS), a small business specializing in connecting innovative technology to government programs.

Since 1995 DBS has provided business development and outreach services for major defense companies, for a variety of U.S. Government agencies, and for high-technology industrial ventures. Prior to forming DBS, Ms. Ortiz held staff and operational positions at McDonnell Douglas Corporation (now Boeing) and General Dynamics Corporate Headquarters, focusing on electronics systems development and production.

DBS has supported the Department of Defense Trusted Foundry Program since 2007. Ms. Ortiz has managed the Program's outreach initiative since 2011 with a mission to raise awareness of the importance of using Trusted Microelectronics for critical defense and national security systems.

Ezra Hall

Senior Director of the Aerospace and Defense End Market at GlobalFoundries

Mr. Ezra Hall is the Senior Director of the Aerospace and Defense End Market at GlobalFoundries, one of the world's leading semiconductor manufacturers and the only one with a truly global footprint. In this role, he devises novel and strategic solutions to technical, legal, security, and business challenges in support of U.S. government, national security, and critical infrastructure sector needs. Previously, Ezra worked at IBM Microelectronics where he helped stand up and administer the program responsible for delivering trusted and secure technologies to the U.S. defense and intelligence communities. With nearly thirty years of experience across technical and business roles, Ezra is a recognized leader in microelectronics supply chain security. Recognized as a Master Inventor by IBM and GlobalFoundries, he holds 21 U.S. patents, has published award winning papers, and co-founded the National Defense Industrial Association Electronics Division.

Ray Gingras - Moderator

Defined Business Solutions

Mr. Ray Gingras is a microelectronics industry liaison for Defined Business Solutions, supporting government programs and initiatives. His career has spanned over 30 years, working in both the commercial and aerospace defense sectors for GlobalFoundries, IBM and Raytheon.

Tom Dalrymple

Technical Advisor, AFRL

Mr. Tom Dalrymple is currently assigned as the Technical Advisor for the Sensor Subsystems Branch (AFRL/RYDR). The Sensor Subsystems Branch's primary areas of technology investment include sensor subsystem demonstrations such as wideband, multi-function phased arrays, advanced receivers and exciters, and high performance on board sensor processing to provide world class technology to our Nation's warfighters. He joined the Air Force Research Laboratory in 2002 as a Materials Engineer, and prior to his work with the Air Force, he worked as an electronics packaging engineer at IBM in Endicott, NY. Mr. Dalrymple obtained his BS-MSE from Cornell University in 1997 and a MS- MSE from Cornell University in 1998. His current efforts are focused upon demonstrations of digital beamforming electronics for a variety of radar, communications, and electronic warfare applications, which promise to revolutionize future sensor developments.

Jason Milne, Raytheon

Bio unavailable

Nicole Mueller, Draper

Distinguished Member of the Technical Staff, Draper

Nicole Mueller is the group leader for the Heterogenous Integration and Advanced Packaging (HI/AP) group at Draper, and a Distinguished Member of the Technical Staff. She has nearly 20 years of advanced packaging experience and has led several novel microelectronics technologies from development through deployment for US government customers and industry partners. For the past 10 years, Nicole has led process development, yield improvement, fabrication flow, and delivery of HI/AP products at Draper's corporate Cambridge, MA headquarters and the Advanced Packaging Facility (APF) in St. Petersburg, FL. Nicole also has experience obtaining and maintaining Draper's DMEA 1A trusted accreditation status in Cambridge and at the APF, and supports new product design and introduction at these facilities.

Michelle Iversen - Moderator

Principal and Head of Geopolitical & Regulatory Risk, The Chertoff Group

Michele Iversen, Principal and Head of Geopolitical & Regulatory Risk
Michele Iversen is the Chertoff Group as Principal and Head of Geopolitical & Regulatory Risk. A cybersecurity and Information Communication Technology supply chain expert, she supports clients on geopolitical and supply chain risk management including Foreign Ownership, Control, or Influence engagements.

Prior to joining the Chertoff Group, Ms. Iversen served as Director of Risk Assessment and Operational Integration at the U.S. Department of Defense (DOD) where she specialized in risk and vulnerability assessments, security engineering, 5G/Next G cybersecurity, Information Communications Technology Supply Chain Risk Management, and the Committee on Foreign Investment in the United States.

Ms. Iversen has also held senior IT and Cybersecurity positions in the Intelligence Community (IC) and the Federal civilian sector. Ms. Iversen served with the Central Intelligence Agency's Cybersecurity Division and served as the Chief of System Security Engineering at the National Security Agency.

Ms. Iversen served as the CIO for the Privacy and Civil Liberties Oversight Board (PCLOB) from 2015 to 2017 where she was responsible for the Agency's classified and unclassified technology systems and for providing technical expertise for the Board's oversight and advisory functions. Ms. Iversen is also a retired Army Signal Corps officer who helped establish the first official DOD cyber unit, led a Security Operations Center in Southwest Asia, and retired out of US Cyber Command.

Mr. Jeff Stern

CEO, Chain Security

Chain Security is led by its CEO, Jeff Stern. who had a Silicon Valley background before becoming involved in Government oriented technology development. At Chain Security, Jeff leads its national security compliance practice which designs and implements technology solutions for FOCI mitigated companies. This includes delivery of IT and product development solutions for companies that are re-shoring their product development and customer support from adversary and high-risk countries.

Jeff recently served on the Board of Directors of Marvel Government Solutions (MGS), a provider of ASIC government-oriented solutions for the Department of Defense (DOD). In his Board of Directors role at MGS, Jeff was the Chairman of the Government Security Committee and in that role, he represented the national security interests of DOD. Jeff has served as a senior technology advisor to the Global Investment and Economic Security Directorate of the Department of Defense. That Directorate is the Department of Defense (DOD) CFIUS committee member. Jeff Stern has also conducted a variety of national security oriented due diligence investigations and risk analyses of high technology companies. These investigations have been conducted on behalf of the DOD CIO Office, national security law practices and venture capital firms. He has also built technology partnerships for Defense Industrial Base (DIB) clients with commercial technology companies in Silicon Valley.

Jeff held technology and business leadership roles at TerreStar Networks, including servings as Senior Vice President – Government Solutions. TerreStar developed a unique integrated mobile satellite and cellular service. While in Silicon Valley, Jeff co-founded GoBeam in 2000, a leader in business VoIP SaaS applications. The company was subsequently acquired by Covad Communications. He later served on the board of directors of Nuvio, a wholesale VoIP communications service provider.

Prior to GoBeam, Jeff worked at Pulsar Ventures in the role of Vice President, Investment Strategy where he led investment efforts in e-commerce. At VeriFone he started and led its Client-Server software efforts which were focused on secure credit and debit card processing at financial institutions. Jeff was a co-founder of Independence Technologies which by way of acquisition is now part of Oracle Corporation.

John Monk

Consulting Engineer, Northrop Grumman Mission Systems

John Monk is a Consulting Engineer within the Advanced Technology Laboratories which provides internal, integrated circuit capability for Northrop Grumman Mission Systems.
He is responsible for strategic planning, new business development, and technical support for various programs within the facility. Process expertise in technologies that include mixed signal CMOS at several different technology nodes, high voltage BiCMOS, SiGe and SiC Power Transistors, GaAs and GaN MMIC's, and superconducting microelectronics.

From 2010 to 2021 John was the Director of Northrop Grumman's Advanced Technology Laboratories responsible for leading the organization to a 4x increase in deliveries to over 800,000 production parts per year along with oversight of development efforts for novel "More than Moore" technologies. Prior to joining Northrop Grumman, he was General Manager for Infinera Corporation's Planar Lightwave Circuits Group, Director of Manufacturing Operations at a National Semiconductor Corporation fab and held various semiconductor management positions at Westinghouse Corporation.

John graduated from the Johns Hopkins University in 1981 with a BS degree in Electrical Engineering.