

**GOMACTech 2024**  
**Trusted Suppliers Industry Day**  
Monday, March 18, 2024, Charleston, SC  
*“Community and Collaboration”*

Time	Theme	Presenter(s)
0830	Welcome & TSSG Update	Neil Schumacher, IBM
0845	New Ways of DoD Contracting: Defense Industrial Base Consortium	Chris Van Metre, Advanced Technology International (ATI)
0930	Microelectronics Commons	Bryan Smith, DoD Microelectronics Commons
1010	<i>Break</i>	
1030	NDIA Electronics Division	Neil Schumacher, IBM
1045	What Capabilities Should Be on Trusted Suppliers' Roadmaps? Dan Radack, Moderator	Keith Rebello, Boeing Mark Santoro, RTX David Shahin, Northrop Grumman
1200	<i>Lunch</i>	
1300	How Will CHIPS Awards to Trusted Suppliers Benefit Defense Systems? Jim Will, Moderator	Monica Gilbert, BAE Systems Ezra Hall, GlobalFoundries Greg Money, Microchip
1340	Advancing National Security Through the CHIPS Act: Matt Kay, Moderator	Molly Just, DoD CHIPS Coordination Cell Scott Bukofsky, CHIPS Program Office Mike O'Brien, CHIPS Program Office Steve Palmer, CHIPS Program Office
1440	<i>Break</i>	
1500	DMEA	Dr. Nick Martin
1530	What Value Do Trusted Suppliers Provide? Ken Heffner, Moderator	Sam Hernandez, IBM Scott Jordan, JSTF John Monk, Northrop Grumman Derek Russell, Photronics Brad Ferguson, SkyWater Technology
1630	Industry Day Closing Remarks	Monica Gilbert, BAE Systems

## Keynote Speaker



### Chris Van Metre

President and CEO of Advanced Technology International (ATI)

Chris was promoted to President and CEO of ATI in 2012. In this role, he oversees the strategic direction of ATI, which has grown to become the largest collaboration management services company in the US. ATI's mission is to lessen the burden of government by supporting federal government agencies, industry, and universities in the collaborative execution of our nation's most innovative research initiatives. ATI leads R&D collaborations that cover a broad array of technology domains including armaments, biotechnology, electromagnetic spectrum, space technologies, advanced materials, shipbuilding, and ship repair. Building multi-disciplinary teams from the private sector (Fortune 500 companies to small businesses), federal agencies and universities to deliver prototype technologies is a prominent feature of these programs. Originally hired by ATI as a project manager in May 2005, Chris soon transitioned into a Business Development role, responsible for growing ATI's market reach and business portfolio. Chris led the 2023 spin-out of ATI into an independent not for profit. As President and CEO, Chris has led the growth of ATI's research management portfolio from annual revenues of \$150 million to more than \$3 billion, with ATI repeatedly recognized as a South Carolina Best Places to Work.

Prior to joining ATI Chris completed a 20-year Navy career that included four submarine assignments, including command of a fast attack submarine, as well as a variety of shore assignments focused on training and education.

## Speakers, Panelists and Moderators Bios, in agenda order:

### Neil Schumacher

Partner, Client Executive, IBM Public Sector Services, Federal Cybersecurity

Neil Schumacher is an IBM Executive (Partner) responsible for the market strategy and technical solutions for the Public Sector (Federal) cybersecurity consulting organization. He has over three decades of professional leadership in technology, security, supply chain and business management at the executive level, with a particular focus on microelectronics.

Mr. Schumacher holds industry recognition as a Certified Information Security Manager (CISM) and Certified in Risk & information Systems Control (CRISC), additionally he is an IBM designated Complex Program Executive (CPE). He also holds an active US Department of Defense (DOD) clearance. Mr. Schumacher's client focus for IBM covers Defense and Intelligence, as well as the Defense Industrial Base. He is leading engagements with major industry suppliers and vendors for three co-linear programs providing security and infrastructure for the critical national supply chain in microelectronics.

He joined IBM's Microelectronics Division in 2001 to support its initial foray into digital commerce. Moving to IBM Consulting Services in 2004, he assisted in the development of the first-of-its-kind security approach to the then nascent Trusted Foundry effort. After being promoted to manage the security program, Mr. Schumacher led IBM's effort during the divestment of IBM Microelectronics in 2015, to ensure preservation of the Trusted (Classified) programs being sold to an institution falling under Foreign Ownership, Control, or Influence (FOCI). Leveraging his team's advanced model for

securing Trusted programs within an open commercial environment and working closely with the Defense Counterintelligence and Security Agency (DCSA), the DOD, the National Security Agency (NSA) and the Committee for Foreign Investment in the United States (CFIUS), the transaction was approved, with ongoing program growth into the present. To sustain the next generation of leading-edge microelectronics supply for critical national needs, Mr. Schumacher is currently leading newly DOD sponsored commercial programs creating further transformation of the security and infrastructure model to enable greater access to mission sensitive microelectronic services from Legacy to State-of-the-Art.

Holding a BA in History from Gordon College, Wenham, MA, Mr. Schumacher is also a Certified Accelerate Graduate from Northeastern University and is Executive trained with MIT Sloan. Currently the Chair of the National Defense Industrial Association (NDIA) Electronics Division, Mr. Schumacher is also a regular guest lecturer at the National Defense University (Dwight D. Eisenhower School) for National Security & Resource Strategy.

### **Bryan Smith**

Microelectronics Commons Execution Advisor Naval Surface Warfare Center, Crane Division

As Execution Advisor, Mr. Smith supports the Office of the Under Secretary of Defense (OUSD) for Research and Engineering (R&E) and is responsible for the financial execution of the \$2B program. Microelectronics Commons is a CHIPS Act funded program and Mr. Smith supports the strategic planning and interagency coordination with other CHIPS Act funded programs in Department of Commerce (DoC), Department of State (DoS), Department of Energy (DoE), Office of Strategic Capital (OSC), National Science Foundation (NSF), White House Office of Science and Technology Policy (OSTP), etc. In 2021, Mr. Smith served as the Technical Project Manager (TPM) for the Defense Security Systems Project Portfolio. As TPM, Mr. Smith was responsible for a project portfolio of over \$400M/annually and overall execution of 125 Government work years. In 2019, Mr. Smith supported the development of the Acquisition Strategy approved by NAVSEA that led to the creation of the Strategic and Spectrum Missions Advanced Resilient Trusted Systems (S2MARTS) OTA.

### **Dan Radack**

Assistant Director, Institute for Defense Analyses

Dan analyzes technologies and develops solutions to challenging problems related to microelectronics for U.S. government applications. His primary focus is semiconductor technologies and assured microelectronics. Dan was previously a program manager at the Defense Advanced Research Projects. While there, he developed a portfolio of microelectronics research and development programs that advanced high-performance semiconductor technologies by providing foundational advances to the state of art in manufacturing, advanced devices and circuits, hardening, and integration technologies. He also previously worked for the National Institute of Standards and Technology, where he studied dynamic test circuits and semiconductor metrology. Dan holds bachelor's, master's, and doctorate degrees in electrical engineering from the University of Maryland, and he is a fellow of the Institute of Electrical and Electronics Engineers.

### **Keith Rebello**

Keith Rebello is the Senior Technical Fellow for Microelectronics at The Boeing Company where he leads the company's strategy and investments in microelectronics. He is an expert in applying system level methodologies and agile development processes to both software and hardware to build advanced capabilities. His current research interests are in digital engineering, artificial intelligence, autonomy, sensors, and security technologies. Prior to joining Boeing, Keith served as a Program

Manager in the Microsystems Technology Office at the Defense Advanced Research Projects Agency (DARPA). During his three and a half years there, he directed a \$200M+ research portfolio focused on hardware, supply chain, and cyber security, as well as technologies for intellectual property protection, artificial intelligence accelerators, robotics, and space applications. Previously he served as the Technical Director for Emerging Technologies in the Office of the Undersecretary of Defense for Intelligence, was a member of the Principal Staff at the Johns Hopkins University Applied Physics Laboratory (JHU/APL), and held positions in commercial industry. He has been an instructor at The Johns Hopkins University and adjunct faculty at the United States Naval Academy.

### **Mark Santoro**

Principal Engineering Fellow, Hardware Engineering Center, Raytheon Intelligence and Space

Mark has exceptionally deep, varied experience and knowledge from systems engineering to front and back end physical submicron digital and mixed signal Application Specific Integrated Circuit (ASIC), from years of founding startup and consulting companies and through a variety of technical leadership positions with well-respected industry leading companies. He has led program teams and designed a wide range of systems from commercial communication and financial to security, military radar and GPS. He is the director and chief engineer of the Modernized GPS User Equipment (MGUE) Inc 2 Miniature Serial Interface programs and director of ASIC Technology for the Resilient Navigation & Recon Systems business area. Santoro is on the University at Buffalo Dean's Advisory Council.

### **David Shahin**

Bio unavailable at time of printing.

### **Jim Will**

Jim Will joined SkyWater Technology in June 2021 and is a Senior Director in the A&D Business Unit. His career spans over 30 years in the semiconductor industry with experience in both commercial and national security markets. Jim's A&D BU oversight includes support for large USG and Prime programs based on Trusted and Assured microelectronics. Jim supports NDIA and co-leads the DIB and Policy subcommittee. As DOE NNSA contractor at the Kansas City National Security Campus (KCNSC), Jim supported Trusted Foundry, semiconductor products and components, and enterprise assurance interests. Jim's experience includes roles at Motorola and Infineon from Engineer to Engineering Management. Jim's education includes BSEE with Microelectronics focus and MS Material Science and Engineering degrees from Rochester Institute of Technology.

### **Monica Gilbert**

Monica Gilbert is the Microelectronics Engineering Director in the Electronic Systems sector of BAE Systems. In her current capacity, she leads the Microelectronics Engineering organization which includes the BAE foundries; design and test. She has been with BAE Systems for 1.5 years.

Monica has 40 years of experience in the semiconductor industry including 18 years at the IBM T.J. Watson Research Center as a Sr. Staff Engineer. She also worked at Maxim Integrated Products as a Business Director; Semtech Corp. as Director, Strategic Programs; and Jarjet Technologies as the VP of Strategic Programs.

Monica holds a Bachelor of Science degree in Biology & Chemistry from Pace University.

## **Ezra Hall**

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.

## **Greg Money**

Greg Money is a Sr. Business Development Manager for the Aerospace and Defense Group (ADG) at Microchip Technology, Inc. Before joining Microchip's ADG team in 2018, Greg worked for Texas Instruments, Actel and Microsemi.

With over 30 years of experience in the Semiconductor Market, primarily focused on Sales and Business Development working with Aerospace & Defense clients, Greg has held leadership roles in Sales and Global Account Management and recently held the Sale Director position at Microsemi before joining Microchip through acquisition. Greg is a well-established strategic leader and consultant within the Aerospace and Defense community.

Microchip Technology Inc. is a leading provider of microcontroller, analog, FPGA, connectivity, and power management semiconductors. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 130,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality.

## **Dr. Matthew J. Kay**

Program Manager, Trusted and Assured Microelectronics (T&AM) Program

Dr. Matthew Kay has spent more than twenty years developing his expertise in radiation sciences with an emphasis on space and radiation environmental impacts on microelectronic design, development, test, qualification, and transition to production. He began his DoD career in a Navy lab developing and qualifying the first solid-state strategic radiation-hardened non-volatile memories in support of DoD weapon systems. Since then, Dr. Kay has served in several strategic and technical leadership roles informing Department-wide microelectronics priorities as the Technical Execution Area Lead for Radiation-Hardened Microelectronics and DoD Unique Needs for the T&AM Program, the OUSD(R&E) Executive Secretariat for Strategic Radiation-Hardened Electronics Council (SRHEC), and the Navy Representative to the Defense Microelectronics Cross-Functional Team.

Dr. Kay currently serves as the Program Manager for the OUSD(R&E) T&AM program, where he oversees the multi-billion dollar Department-wide coordination and execution of T&AM initiatives for the Department that addresses microelectronics education and workforce; the Joint Federated Assurance Center; SRHEC; policy and industrial engagement; and access to radio frequency and optoelectronics, state-of-the-art microelectronics, advanced packaging and test capabilities, and RH microelectronics.



Dr. Kay received his Bachelor of Arts in Physics from Wabash College and Master of Science and Doctor of Philosophy in Physics from Purdue University.

### **Molly Just**

Director for the CHIPS Coordination Cell, ASD IBP

Molly is the Director for the CHIPS Coordination Cell in the Assistant Secretary of Defense for Industrial Base Policy organization. Prior to the role she was Senior Director at In-Q-Tel, the strategic investor for the U.S. Intelligence and Defense Communities. In this role, Molly oversaw the strategic direction for partner engagement and managed the IQT investment portfolio for several Partner Agencies across the IC and DoD. Prior to joining In-Q-Tel, Molly was a senior management consultant and practice lead at Oliver Wyman where she specialized in M&A advisory and growth strategy for Fortune 500 companies in the national security space. Prior to Oliver Wyman, Molly spent four years at the Department of Defense serving as a Special Assistant to the Under Secretary of Defense for Acquisition, Technology, & Logistics.

### **Mike O'Brien**

Relationship Director, Investments (CHIPS Program Office)

Mike joined the Investments team in CPO a year ago. The Investments team leads the process of engaging with applicants from initial review through negotiation and potential award. Prior to joining CHIPS, Mike was the Vice President of Aerospace and Government at Synopsys, Inc., the largest EDA (Electronic Design Automation) software and Interface IP (Intellectual Property) supplier to design companies and manufacturers in the semiconductor industry. He has a combined 40 years of experience in the semiconductor, software and computer industries including 27 years in EDA and IP at Synopsys and Cadence Design Systems, Inc., He is a graduate of Harvard University with a degree in Economics.

### **Scott Bukofsky**

Director of Capabilities, NSTC (CHIPS R&D Office)

Dr. Bukofsky joined the CHIPS R&D Office in January 2024 as the Director of Capabilities for the CHIPS NSTC program. In this role, he is responsible for defining and executing on R&D capabilities to support the national semiconductor technology center, including prototyping facilities and the connection to other R&D capabilities around the world. Prior to CHIPS, Scott spent more than 30 years in the semiconductor industry at IBM Microelectronics, GlobalFoundries, and Synopsys in roles spanning research, technology R&D, and technical sales. Scott holds a bachelor's degree in Microelectronic Engineering from the Rochester Institute of Technology and a Ph.D. in Electrical Engineering from Yale University.

### **Steve Palmer**

Head of Emerging Technology, National Security (CHIPS Program Office)

Steve joined the CHIPS Program office in September 2023 as a Senior Advisor for National Security in the CHIPS Strategy Division. Prior to CHIPS Steve spent nearly 25 years in the semiconductor industry with IBM Microelectronics and GlobalFoundries in roles from embedded memory characterization, ASIC IP development, aerospace & defense program management, and silicon photonics product management. Steve has a bachelor's degree in electrical engineering from Michigan Technological University and an MBA from the Kelley School of Business.

## **Dr. Nick Martin**

Dr. Nicholas T. Martin is the Director of the Defense Microelectronics Activity (DMEA). In this capacity he provides engineering expertise to solve Department of Defense (DoD) specific microelectronics issues facing the Warfighter, provides direct support to system program managers in the services, interfaces with special forces and intel community leadership to understand mission needs and to provide innovative and timely solutions, oversees and manages the DoD's only organic semiconductor manufacturing laboratory, maintains a highly skilled civilian workforce, provides management direction and control over the Trusted Access Program Office (TAPO) that facilitates United States Government access to trusted state-of-the-art (SOTA) and state-of-the-practice (SOTP) microelectronics design and manufacturing capabilities, and carries out Head of Contracting Activity (HCA) responsibilities. He assumed his current position in August 2021.

Prior to his current assignment, Dr. Martin served as the Technical Lead of the DMEA Warfighter Solutions Division – leading a multidisciplinary project centric team responsible for providing microelectronics research, designs, prototypes, products, analysis and consultation services with a focus on increasing weapon system lethality and mission capability, while reducing development time and operational cost.

Dr. Martin served in the U.S. Navy as an electronics technician and served two deployments aboard the aircraft carrier USS John C Stennis (CVN-74). He has served as an adjunct professor at California State University, Sacramento, in the Department of Electrical and Electronic Engineering.

Dr. Martin received his Bachelor and Master of Science degrees in Electrical and Electronic Engineering from California State University, Sacramento, and his Doctorate in Electrical and Computer Engineering from University of California, Davis, as a DoD SMART Scholar. He is a Level III certified Defense Acquisition Professional in the career field of Systems, Research, Development and Engineering (SPRDE).

## **Ken Heffner**

Ken Heffner is a Senior Fellow for Honeywell's Defense and Space business unit. His specialties include microelectronics, radiation effects, cryptographic systems, and digital engineering technologies.

Ken joined Honeywell in 1985 and has held progressive roles in product and technology development for navigation, space and defense mission computing systems, microelectronics, and systems security engineering that includes trusted systems. He leads Honeywell's Space and Terrestrial Command and Control technologies based in high-performance 3D-HI microelectronics, connected edge-sensing verification science, zero-trust provenance, cryptographic systems, digital twin modeling and emerging generative A.I. technologies. In January of this year, Ken was assigned to Honeywell's Advanced Technology organization to lead fundamental research in digital engineering technologies.

Ken received his Ph.D. in Chemistry from the University of South Florida. He is a long-term technical lead and representative for the Trusted Supplier Steering Group (TSSG) on behalf of Honeywell. Honeywell is a founding member of the TSSG..

## **John Monk**

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.

### **Brad Ferguson**

Chief Gov't Affairs Officer, SVP Special Programs, SkywaterTechnology

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.

Mr. 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.

Mr. 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.

### **Scott Jordan**

Scott is President of Jazz Semiconductor Trusted Foundry (JSTF), a wholly owned U.S. subsidiary of Newport Fab, LLC (Tower Semiconductor Newport Beach).

Mr. Jordan is a member of the Trusted Supplier Steering Group (TSSG). TSSG is a self-formed alliance of companies that have been accredited by Defense Microelectronics Activity (DMEA) to provide Trusted Microelectronics products and services to Government programs. TSSG is hosted by NDIA (National Defense Industrial Association).

Previously, Mr. Jordan worked at Jazz Semiconductor as the Design Support Manager for the Aerospace and Defense Division. He has over 38 years of Design Automation experience working in CAD departments at RCA, Lucent/Agere, Maxim, and Jazz Semiconductor. Mr. Jordan has been associated with the Mil/Aero community since 2004 and specializes in enabling mmWave and Rad Hard by Design ICs for the A&D customers.



**Sam Hernandez**







Sam Hernandez is the Trusted Foundry CTO at IBM. His professional background with the Trusted program has included several different roles over the years where he has gained a comprehensive perspective of the end-to-end process. Sam has been involved in consulting engagements to assist other organizations on their path into the Trusted Supplier program. In his current role, Sam leads the continual evolution and improvement of IBM's Trusted Foundry Program through thought leadership and business development initiatives. Sam received his undergraduate degrees from Vermont Technical College and an MBA from Bryant university.

**Derek Russell**

Derek is a seasoned Global Account Manager with Photronics and has over 24 years of experience in the semiconductor industry. Starting as a Customer Service Representative at Dupont Photomask in 1995, Derek has held various roles including Production Control Supervisor, US Production Manager, and Regional Sales Manager. He has also spent four years in the Touch Screen industry. Derek's expertise spans customer engagement, trusted supplier relations, and strategic sales analysis. A member of the Trusted Supplier Support Group for six years, Derek's profound understanding of the industry landscape and strategic mindset have driven his success. He holds a bachelor's degree in marketing from Texas State University.

## Trusted Suppliers Industry Day Resources

Scan or photograph these QR codes for access to additional resources and information.

	<p><b>Trusted Supplier Capabilities</b></p> <p>Download a pdf file that contains up-to-date information on the DMEA accredited Trusted Suppliers including:</p> <ul style="list-style-type: none"><li>• Map with 81 Trusted Suppliers</li><li>• Matrix of foundry capabilities by technology</li><li>• Dashboard of Trusted services</li><li>• Links to DoD policy and guidance resources</li><li>• Matrix of Trusted Suppliers' services by location with POCs</li></ul>
	<p><b>Defense Microelectronics Activity</b></p> <p>Visit the DMEA Trusted Access Program Office for information on the following:</p> <ul style="list-style-type: none"><li>• Strategy and Doing Business with DMEA</li><li>• Multi-project Wafers</li><li>• Trusted Program and Trusted Suppliers</li><li>• Services Available (ASICs, Foundry, Prototype and Production Runs, Packaging and Test)</li></ul> 
	<p><b>Microelectronics Commons</b></p> <p>The NSTXL website provides access to documents including:</p> <ul style="list-style-type: none"><li>• Awareness Days</li><li>• Core and Capability Pitch Days</li><li>• Industry Days</li><li>• Responses to MEC Questions</li></ul> 
	<p><b>CHIPS Program Office</b></p> <p>The CHIPS.gov website provides information on the implementation of the CHIPS Act including:</p> <ul style="list-style-type: none"><li>• Implementation Strategy</li><li>• Notice of Funding Opportunity</li><li>• Research and Development</li><li>• Workforce Development</li><li>• Webinars and Publications</li></ul> 