

Electronics Division Subcommittees

Chair:	Irene Lau (Intel)
Vice Chair:	Shawn Fetterolf (Synopsys)
Secretary:	Roy Bishop (Draper)
Member-at-Large:	Eric Sharret (Dust Identity) Grant Meyer (Lockheed Martin)
Government Liaisons:	Allen Tillerson (OUSD A&S) Syd Pope (OUSD R&E)

Trust and Assurance Subcommittee

Ezra Hall (GlobalFoundries) Jim Gobes (Intrinsic) Harry Clapsis (SIA)

Subcommittee Vision and Goals:

- Resource for rapid Government access to broad industry representation
- Engage on Trust and Assurance matters
 - Policies
 - Procedures
 - Best practices
- Engage on NDAA Sec 224 (standards development and related work)
- Stay informed on changes in Trust and Assurance related legislation and Government Policies and Requirements
- Resource for documents and education for Trust and Assurance topics
- Provide input on Trust and Assurance business models that work for government and industry
- Broader coordination across NDIA Divisions and NDIA Electronics division subcommittees

Key Stakeholders – Industry Set

- Broad representation across end-to-end workflow from design to manufacturing of supply chain for systems with Microelectronics focus
- Commercial and defense electronics firms represented
- Liaise / co lead with SIA
- Welcome and encourage broader participation from adjacent commercial industries that rely on trusted supply chain and operational security of microelectronics products and services

Key-Stakeholders – Government Set

- Research and Engineering, Acquisition and Sustainment
- Select defense services and agencies
- DOE
- Subject matter expert attendees per need
- Welcome and encourage broader participation from Government

Highlights & Accomplishments

- NDAA Sec 224 strategy review with Ms. Reed Jan. '20, subsequent workshop held Oct. '20 w/identification of gaps – work products posted to NDIA Connect
- G32 industry news cross posting to NDIA Connect

Issues & Concerns

- Broaden participation of semiconductor companies in subcommittee
 - Semiconductor manufacturers, standard product companies, system integrators,...
- Clarity of Government strategy for electronics and semiconductors
- Policy changes, 5200.44 update, NDAA Sec 224 timeline/response, all require extensive industry coordination to be effective and adopted by industry – increased government/industry dialogue needed

Upcoming Events:

- Risk Transfer and Insurance subcommittee
- Tracking security related policy changes and being a resource to the OSD as an industry resource.
- Bridging Trust and Assurance subcommittee modeling results to industry efforts in this domain
- Q&A Session in collaboration with SDO's (e.g. SAE G-32 & CE-12) with Brian Dupaix, the Air Force Design Assurance Lead to discuss OUSD's response strategy to NDAA Sec 224
- Deep dive on DOD INSTRUCTION 5000.90 CYBERSECURITY FOR ACQUISITION DECISION AUTHORITIES AND PROGRAM MANAGERS

Planned Activities – 1st half of 2021

- Monthly steering
- Weekly topic specific sessions throughout the year
- NDIA Connect Documentation framework for T&AM Subcommittee
- Pilot coordination with other NDIA division, Manufacturing (supply chain network subcommittee)

DIB – Policy Subcommittee

Jim Will (Microcross) Mike Fritze (Potomac Institute)

USG Microelectronics Policy, Strategy & Budget

- Analyze POTUS request & appropriated budgets
- CHIPS/AFA/NDAA legislation
- Track trends and influence process

Supply Chain

- Achieve secure and resilient supply chains for critical electronic components including Foundry, Package/AP, MCM, BOM, Assy & Test
- Secure SOTA, SOTP and Legacy access strategies

5G Issue

- USG DoD/National Security Strategy; Risks
- Mitigate foreign supply chain dominance
- Industry engagement

SPACE

- Track new commercial activities
- USG needs and engagement w/ commercial world

Goals

- 2 Executive Breakfast and/or Remote Events
- 2 Policy, DIB or Supply Chain Activities w/ Recommendations
- Engage NDIA Stakeholders with Key USG Policy Issues

Highlights & Accomplishments

- Participation and engagement in OSD (A&S) and (R&E) DASD Listening Session
- Webinar and Division Meeting sessions on CHIPS/AFA Legislation
- White Paper on Stakeholder Recommendations for ME Policy

Issues & Concerns

- Unclear/inconsistent ME strategy messaging from DoD
- Appropriate ME expertise within DoD
- Includes “non-traditional” company participation
- Address small and medium sized company business model needs

Key Stakeholders – Industry Set

- Broad representation from design to manufacturing
- OEM (LM, NG, Boeing, BAE, GD, etc)
- Supply Chain, Contract and Sub-Contractors (Teledyne E2D, Mercury, Microcross, Integra, Golden Altos, etc)
- Pure Play Foundries (GFUS, JSTF, Skywater, ON, Qorvo, etc)
- Non-trad large (GF, INTEL, IBM, Micron, EDA/CAD, etc)
- Non-trad small (More outreach needed here)

Key-Stakeholders – Government Set

- OSD(R&E, A&S, Industrial Policy, etc), USG Space Community, USG IC Community, DOD Laboratories, MDA
- Services: Space Force, Navy, USAF, Army, Marines
- DOE NNSA, GoCo's, Laboratories
- Welcome and encourage broader participation from Government
- Focused outreach to our desired stakeholder communities

Upcoming Events:

- Micron ‘Real Life’ USG Partner Goto or Zoom meeting, tentative 2/23 3:30pm ET

Planned Activities – 1st half of 2021

- White Paper completion & delivery
- ODNI Supply Chain security event
- A&S CFT engagement (B. Gumahad)
- R&E Strategy Outbrief (N. Petta)

FPGA Subcommittee

Nikhil Shenoy (Colvin Run Networks)

Subcommittee Vision and Goals:

The NDIA Electronics Division FPGA Subcommittee provides a forum for interaction, development and guidance on a wide range of issues with the aim of informing defense & industry stakeholders at on key topics in defense applications of FPGA supply chain innovation, production, deployment, sustainment, compliance, safety, and security.



Key Stakeholders – Industry Set

- Big Four PGA Vendors: Intel PSG, Xilinx, Microchip, Lattice
- Major Defense Primes
- Research Labs
- Small Businesses & Academic Innovators

Key-Stakeholders – Government Set

- OSD – R&E, DMEA, JFAC, MINSEC, DARPA
- Services – AFRL, NSWC Crane, Army
- Non-Defense FPGA Stakeholders – Commerce, NASA

Highlights & Accomplishments

- The FPGA Manufacturers WG has been working with OSD on requirements for trusted supply chain
- Establishment of other WG's is underway, including guidance on design aspects of emerging microelectronics standards & legislation

Issues & Concerns

- Fostering collaboration in a highly competitive proprietary arena
- Coordinating across DOD stakeholder organizations and industry
- Aligning DOD mission with compelling business cases

Upcoming Events:

- Achronix Webinar: eFPGA Capability
- GOMACTech
- FICS Research Conference

Planned Activities – 1st half of 2021

Several working groups are envisioned which can be driven by the level of interest of participants

1. FPGA Manufacturers - established
2. Rad-Hard
3. 3rd Party IP Assurance
4. Security / Privacy
5. New Technology

Strategy and Emerging Technologies

Shawn Fetterolf (Synopsys) Irene Lau (Intel)

Subcommittee Vision and Goals:

Enhance dialog between Industry (Commercial and Defense), Academia, and Government on the strategy for research, development, adoption, commercialization, and use of DoD relevant emerging technologies.

Key Stakeholders – Industry Set

- Defense industry
- Commercial industry
- Non-profits

Key-Stakeholders – Government Set

- OSD(R&E)
- AFRL
- NSWC Crane
- Department of Energy (Sandia)
- NASA (JPL)

Highlights & Accomplishments

- 2020 committee launch
- 2020 Division Meeting panels on Rad Hard and CryoCMOS with academia and industry
- 2020 Committee panel sessions with government
- 2020 Committee panel sessions with industry

Issues & Concerns

- More and broader participation needed
- Better linking to other sub-committees and new topics
- Stable technology focus areas for future work
- Challenges of online only meetings and webinars

Upcoming Events:

- Expanded committee sessions every other month (Feb., April, June, Aug., Oct., and Dec.)
- June-August webinar
 - Focus topic TBD
- Regular meetings every other Wednesday

Planned Activities – 1st half of 2021

- February expanded topic focused session
 - Subject IARPA & DARPA Technology Foci
 - Date February 22nd (14:30-15:30 EST)
- April expanded topic focused sessions
 - Subject TBD
 - Date TBD