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)
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)

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

At the Heart of the Mission Since 1919
DIB – Policy Subcommittee
Jim Will (Micross) 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, Micross, 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.

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

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

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