IEEE Global Semiconductors Collaborative Opportunities with S/C's

Kathy Herring Hayashi, Chair – IEEE Global Semiconductors Ad Hoc Committee

TAB Presidents' Forum

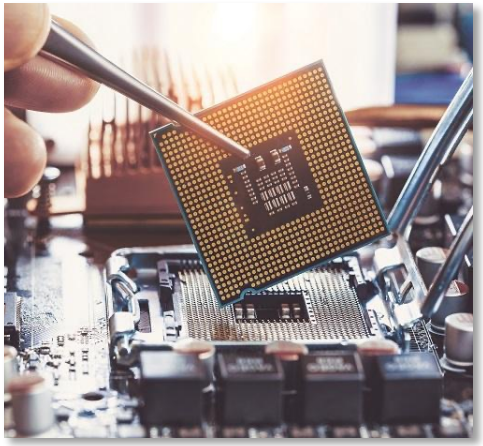
16 February 2024

ieee.org

IEEE
Advancing Technology for Humanity

IEEE Global Semiconductor Activities

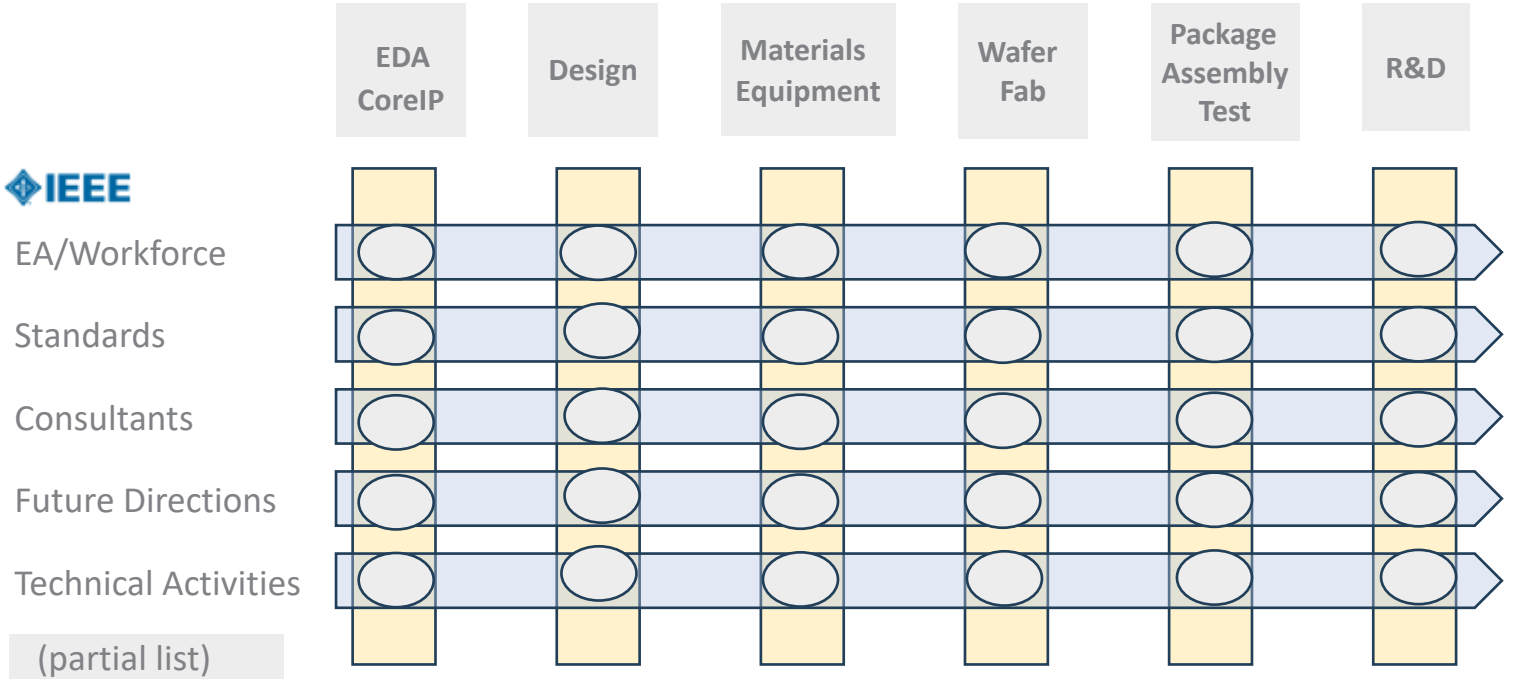
Ad hoc formed under IEEE Future Directions



- Chairs:
  - Tom Coughlin, IEEE President and CEO at IEEE
  - Kathy Hayashi, IEEE Region 6 Director
- Objectives:
  - **Inform** – Create website with links and information related to global semiconductor initiatives and related programs
  - **Engage** – Identify opportunities for IEEE members and groups to expand their reach with the initiatives and guide industry advancements
  - **Support** – Support overall involvement in the industry including DEI for industry professionals and STEM for encouraging the future workforce

IEEE's Areas of Opportunity & Engagement

Working with organizations internally and globally to tackle the challenges of the semiconductor value chain



Global Semiconductor Activity – Tracking interactions with global initiatives, non-profit organizations and other external entities

Supporting Global Semiconductor Initiatives

Global Semiconductor Ad Hoc Committee Outreach

Penang, Malaysia – Hazel Stoiber, Global Semi committee member, discussed education and skills development with R10 members

ICOS International Cooperation On Semiconductors

Brussels, Belgium - Paolo Gargini, Global Semi committee member, presented on IEEE workforce and roadmap initiatives

OECD BETTER POLICIES FOR BETTER LIVES

Paris, France- Kathy Hayashi, Global Semi committee member, presented to the Organization for Economic Co-operation and Development (OECD) Semiconductor Informal Exchange Network on ensuring the long-term resilience of the semiconductor ecosystem

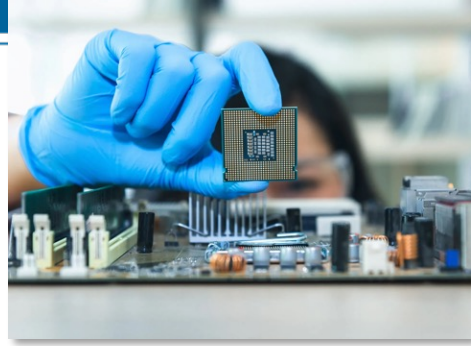
IEEE USA Designing Chips with CHIPS

California, USA - Global Semi provided sponsorship to the IEEE USA one day summit which highlighted keynotes on packaging, lithography, workforce development and other areas of the semiconductor value chain

Veldhoven, Netherlands - Tom Coughlin, IEEE President & CEO presented to **ASML** as a part of continued industry engagement by IEEE on a global level

IEEE

Society/Council Opportunities



- **Submit** your Society or Council information, events, activities to post to website
- **Share** your ideas for increased coverage across the globe: Europe, Asia, South America, Africa
- **Contribute** to workforce development (DE&I, Sustaining Women in Technology)
- **Identify** needs in standards, WFD and other areas
- **Help** efforts to fill the gaps

Email: semiconductors@ieee.org

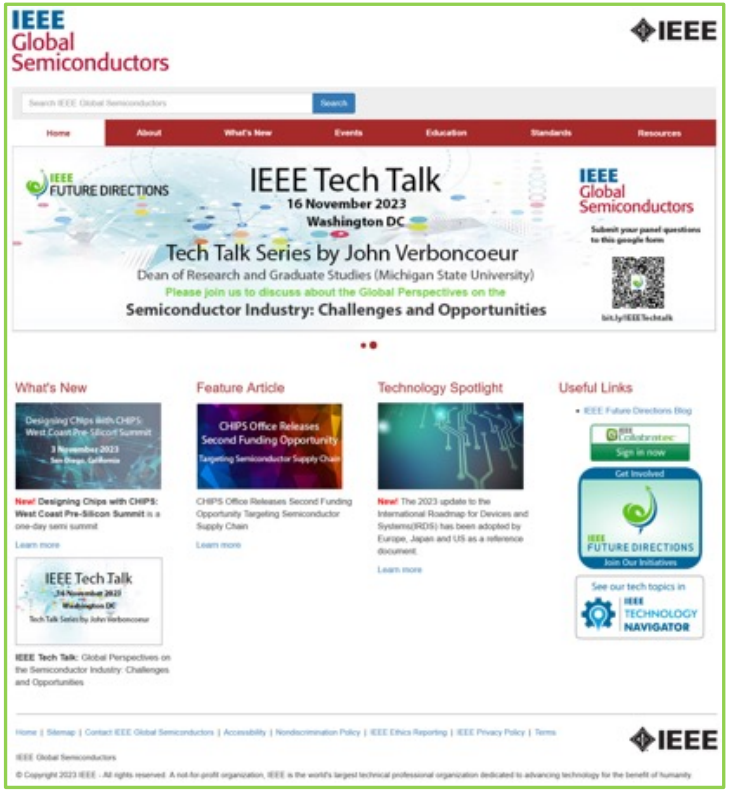
Additional Information

IEEE Advancing Technology for Humanity

IEEE Global Semiconductors Website Launched

semiconductors.ieee.org

- Common repository to expose content and activities in the space specifically related to the CHIPS Acts and semiconductors
- Focus areas include workforce development, addressing supply chain issues, and fostering the discussion globally



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Recent Activities

Event	Dates	Location
CHIPS R&D Chiplets Interfaces Technical Standards Workshop (In-person and Virtual)	12-13 December 2023	Rockville, MD
IEEE Tech Talk	16 November 2023	Washington DC
Industrial Advisory Committee (IAC) Meeting	08 November 2023	Virtual Event
Designing Chips with CHIPS: West Coast Pre-Silicon Summit	03 November 2023	San Diego, California
CHIPS R&D Standards Summit	26-27 September 2023	Capital Hilton,1001 16th St NW Washington, DC 20036

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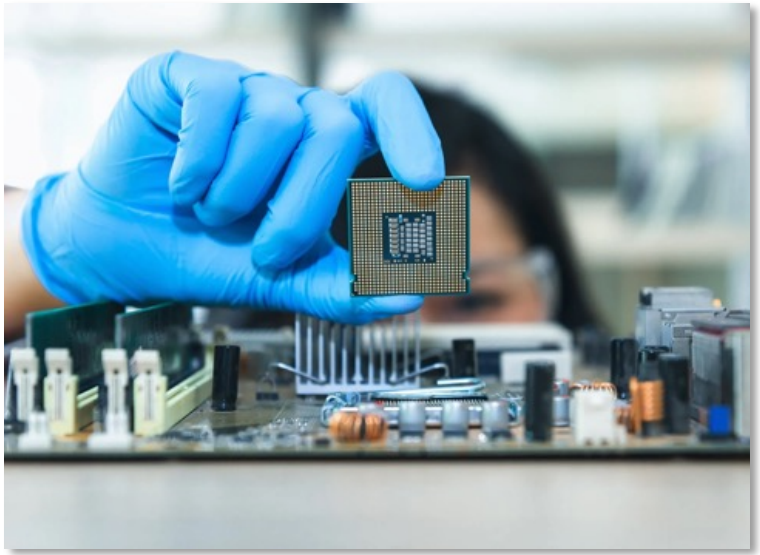
Semiconductor Workforce Development

- Currently a severe shortage of trained semiconductor workers
- Workers needed span from technicians that don't require a four-year degree to advanced engineering roles
- US Chips Act requires workforce development efforts to include underrepresented communities
- Community colleges are mobilizing to provide technician training alongside apprenticeships
- IEEE may be able to help upskill current engineers to work in the semiconductor industry



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