



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Eddie Bernice Johnson (D-TX)

Research and Technology Subcommittee Hearing:
Strengthening the U.S. Microelectronics Workforce

Tuesday, February 15, 2022

Thank you Chairwoman Stevens and Ranking Member Feenstra for holding this morning's hearing on strengthening our nation's microelectronics workforce. I want to welcome and thank the expert witnesses for their testimony.

We spend a lot of time in the Science Committee focusing on the challenges to growing a skilled STEM workforce for the 21st Century. I am proud that many provisions in the America COMPETES Act, which passed the House earlier this month, would help address some of those challenges. While we need to develop the STEM pipeline across all fields, there are particular fields for which the gap between supply and demand is especially acute. Microelectronics is one such field.

The semiconductor industry is no stranger to labor supply challenges. In 2018, the Semiconductor Industry Association noted there were thousands of unfilled technical positions across the country. This labor shortage has only worsened with the pandemic. In addition, Congress is now considering providing \$52 billion in funding to bring semiconductor manufacturing back to our shores. If fully funded, the Chips for America Act would create an estimated 42 thousand additional semiconductor-related jobs. Addressing these workforce challenges is going to require new investments and partnerships.

One of the major challenges is recruiting a diverse workforce. In 2021, the Semiconductor Industry Association reported that Black employees held 4% of all jobs in the semiconductor workforce, compared to 12% across all employment sectors. Hispanic employees make up 13% of the semiconductor workforce, compared to 18% across all sectors. And fewer than one quarter of employees in the semiconductor workforce are women. The semiconductor industry acknowledges these challenges and has worked to increase representation through apprenticeship models and engagement. I am pleased that we have a representative from SEMI here today to discuss these programs.

Creating a capable microelectronics workforce also requires hands-on learning. Several of our witnesses today have implemented innovative programs to offer access to hands-on learning tools for technical and community college students. If these programs prove successful, we must

scale them up. Distance learning tools and virtual reality technologies may also offer solutions to increase access.

I look forward to hearing our witnesses' insights on how we can grow and diversify the U.S. semiconductor workforce, including through new public-private partnerships. I also look forward to continuing the bipartisan work of this committee to advance bold policies to address these challenges.