NATIONAL STRATEGY ON MICROELECTRONICS RESEARCH

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CHIPS for America

- H.R. 6395 116th Congress: National Defense Authorization Act for Fiscal Year 2021 Title XCIX-Creating Helpful Incentives to Produce Semiconductors for America (CHIPS for America Act)
- H.R. 4346 CHIPS and Science Act



Subcommittee for Microelectronics Leadership

- Co-chaired by OSTP, DARPA, and NIST
- Established to coordinate related R&D, education, and workforce development efforts
- Responsible for developing National Strategy on Microelectronics Research
- Broad engagement across relevant Departments and Agencies
- Closely connected to other White House efforts and initiatives



Intersection with other Initiatives









National Strategy on Microelectronics Research

"In consultation with the advisory committee established in (b), and other appropriate stakeholders in the microelectronics industry and academia, the Subcommittee shall develop a national strategy on microelectronics research, development, manufacturing, and supply chain security to—

(I) accelerate the domestic development and production of microelectronics and strengthen the domestic microelectronics workforce; and

(II) ensure that the United States is a global leader in the field of microelectronics research and development."



Connecting the Dots

Microelectronics R&D ecosystem includes researchers across "the stack" from academia, government, and industry along the entire supply chain





Infrastructure



- User facilities for R&D
- Lab-to-fab infrastructure required to accelerate innovation
 - Education and workforce development



Images courtesy of NNCI





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National Strategy on Microelectronics Research



- Goal 1. Fuel Discoveries for Future Generations of Microelectronics
- Goal 2. Expand, Train, and Support the Workforce
- Goal 3. Facilitate the Rapid Transition of R&D to U.S. Industry



OSTP seeks comment from the public on the Draft National Strategy with a focus on:

- 1. Does *the Draft National Strategy* capture the key R&D areas that will support future generations of microelectronics? If not, what additional areas of R&D focus are required?
- 2. What additional approaches should be considered to develop and expand the microelectronics workforce at all levels, including advanced degrees?
- 3. Are there additional mechanisms that should be considered to ensure rapid transition of R&D to industry?
- 4. Do you have any additional suggestions on how the final *National Strategy* can help ensure the success of the broader CHIPS efforts and ensure continued U.S. leadership in this important area?



Thank you.

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