

October 14, 2022

The Honorable Gina Raimondo Secretary of Commerce U.S. Department of Commerce 1401 Constitution Ave NW Washington, DC 20230

Dear Secretary Raimondo,

As the Department of Commerce begins implementing the CHIPS and Science Act, we respectfully urge your department to consider using a decentralized, so-called "hub-and-spoke" model as the basis for the National Semiconductor Technology Center (NSTC) and the National Advanced Packaging Manufacturing Program (NAPMP). Allowing the NSTC and NAPMP to draw upon experts, institutions, entrepreneurs, and private-sector partners spread across the country would best position these programs to fulfill their missions of driving semiconductor and advanced packaging research forward, coordinating and scaling up the ongoing workforce development efforts, promoting geographic diversity, and ensuring long-term U.S. competitiveness in this critical technology sector.

When Congress passed the Creating Helpful Incentives to Produce Semiconductors for America Act in January 2021 and funding of \$11 billion in the recently-passed CHIPS and Science Act, it recognized the need for increased investment in research and development (R&D). This R&D will include prototyping of advanced semiconductor tools, technology, and packaging capabilities to advance both U.S. economic competitiveness and the security of our domestic supply chain.

The NSTC was established as a way to drive this research forward, bringing together the Department of Commerce, Department of Defense, Department of Energy, the National Science Foundation, and the private sector in a public-private consortium. Congress created the NAPMP to "strengthen semiconductor advanced test, assembly, and packaging capability in the domestic ecosystem" in coordination with the NSTC.

Incredibly diverse knowledge and expertise will be required to ensure that the NSTC and NAPMP are successful. We believe that it would be in the best interests of the long-term success of these programs if the Department of Commerce was to embrace a "hub-and-spoke" model for these programs. In fact, the President's Council of Advisors on Science and Technology recommended such an approach in their report to President Biden titled, "Revitalizing the U.S. Semiconductor Ecosystem." The report states, "The Secretary of Commerce should ensure the NSTC founding charter includes establishing prototyping capabilities in a geographically distributed model encompassing up to six centers of excellence (COEs) aligned around major technical thrusts." Such a model would allow them to draw upon the strengths of experts,

<sup>&</sup>lt;sup>1</sup> President's Council of Advisors on Science and Technology. "PCAST Report on Revitalizing the U.S. Semiconductor Ecosystem," Sept. 2022.

research facilities, and private-sector partnerships and consortia from across the country. This model would consist of central research facilities with centers of excellence in various locations across the country where there is particular expertise in memory, logic, packaging, testing, or other elements of the semiconductor ecosystem. Doing so would ensure that a broader range of expertise is captured by the NSTC and NAPMP and ensure entrepreneurs and researchers across the country can take advantage of these programs to drive America's semiconductor ecosystem forward.

Thank you for your consideration and for all of the work that you and your team are doing to implement this important legislation.

Sincerely,

Mark R. Warner United States Senator

Mark Kelly

**United States Senator** 

Rob Portman

United States Senator

Amy Klobuchar

United States Senator

Ben Ray Luján

**United States Senator** 

John Cornyn

**United States Senator** 

Tim Kaine

**United States Senator** 

Showed Brown

Sherrod Brown

United States Senator

Kyrsten Sinema

United States Senator

Ron Wyden

**United States Senator** 

Dianne Feinstein

United States Senator