Congress of the United States
Washington, DC 20510

August 2, 2022

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

The Honorable Jennifer Granholm
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585

Dear Secretary Raimondo and Secretary Granholm:

As the CHIPS and Science Act heads to the President's desk, we write to express our strong support for New Mexico as a potential site for the National Semiconductor Technology Centers (NSTC) and National Advanced Packaging Manufacturing Program (NAPMP). New Mexico has long been at the cutting edge of the semiconductor industry, and with a culture of innovation and a diverse pool of talent, New Mexico is well-positioned to rapidly advance national goals for semiconductor innovation.

New Mexico is a Leader in Semiconductor R&D

New Mexico has a long history of leadership in the semiconductor industry. Our state is home to world-class research and development institutions and successful startups that continue to revolutionize the semiconductor industry. Sandia National Laboratory has been at the forefront of research and development since 1957, from patenting the laminar flow clean room and developing radiation-hardened microelectronics to designing extreme ultraviolet lithography (EUVL) and pioneering advances in nanoscience at the Center for Integrated Nanotechnologies (CINT). Intel recently announced a $3.5 billion investment in New Mexico, and Albuquerque-based 3D Glass has set new world records in speed with their unique glass-based wafer that could transform the future of this industry.

New Mexico's two Department of Energy National Laboratories represent a major source of continuing innovation, and their research infrastructure capabilities and personnel resources have been developed for a broad spectrum of semiconductor types and are ready to advance the US microelectronics industry. These capabilities span device testing, characterization, and fabrication and integration facilities as well as broad-based materials, physics, and computing competencies. Staff and external users at the Center for Integrated Nanotechnologies have immediate access to a comprehensive suite of nanofabrication techniques in a dedicated class-100 cleanroom with full silicon processing which, unlike industry cleanrooms, is designed for the study of a wide variety of unconventional materials.

There are over 100 companies operating in New Mexico in the space industry alone, and the state performs significant R&D around materials and electronics in extreme or unique environments. For example, the Air Force Research Laboratory in New Mexico has worked with United Semiconductors, a small business, since 2005 to grow large-diameter semiconductor

crystals with high optical quality, which have uses in several key U.S. Air Force and U.S. Space Force systems, including in-space manufacturing of advanced materials. In-space manufacturing and other microgravity advancements can potentially reduce the cost and schedule required to build sensors.

This combination of breadth across many microelectronics technologies coupled with top-tier multi-disciplinary research capabilities makes New Mexico a unique national resource, eager to support key national priorities.

The Land of Enchantment is a Welcoming Home to a Skilled and Diverse Workforce

Establishing National Semiconductor Technology Centers (NSTC) and National Advanced Packaging Manufacturing Program (NAPMP) sites in New Mexico would not only reap benefits from our state's research and development sector, but would also provide opportunities to a demographic that is underrepresented in STEM but that has the skills and training to make advancements in this field.

In making these new investments, the CHIPS and Science Act emphasizes that the Commerce department must "increase participation of and outreach to economically disadvantaged individuals, minority owned businesses, veteran-owned businesses, and women-owned businesses." This directive aligns with President Biden's Day-1 executive order (#13985) to support underserved communities with actions by every federal agency. With the highest percentage of Hispanic or Latino-identifying residents in the country and one of the largest Native and Tribal constituencies, New Mexico prides itself on our unique and diverse population, and they are ready for this promise to be realized through major new investments.

According to Census data, New Mexico has the highest proportion of Hispanic small business ownership and the third highest proportion of women-owned small businesses[1]. In New Mexico, female-founded tech startups outraise those based in other states, with an average of $9.8 million in venture capital secured per fundraising round – the third highest in the country[2]. There are also dozens of Minority Serving Institutions (MSIs) in New Mexico, including our three largest research universities. When your respective agencies designate a liaison for MSI outreach, as required by CHIPS and Science Act, we ask that you ensure the full diversity of our many MSIs, including Hispanic-Serving Institutions (HSIs) and Tribal Colleges and Universities (TCUs), have a seat at the table. New Mexico is breaking barriers in innovation, and new federal investments would empower our communities to model that success for the nation and the world.

New Mexico is affectionately known as the Land of Enchantment. It is a wonderful place to live – full of art, heritage, natural beauty, and amazing food – and it is brimming with talented

[1] U.S. Small Business Administration. Office of Advocacy. "2021 Small Business Profiles For The States, The District Of Columbia, And The U.S." 30 August 2021. https://advocacy.sba.gov/2021/08/30/2021-small-business-profiles-for-the-states-the-district-of-columbia-and-the-u-s/

[2] Clarify Capital. "Women-Owned Businesses Are on the Rise in America, but Which State Offers the Best Environment for Female Entrepreneurs?" https://clarifycapital.com/best-states-for-women-owned-small-businesses

communities that have far too often been left behind in the innovation economy. In 2021, Business Facilities ranked Albuquerque, NM, one of the top 10 Tech Hubs for Growth Potential[3], and the online magazine Livability ranked the city in the top 5 Best Cities for STEM Workers[4]. It's clear that New Mexico is a prime location to create new, equitable opportunities and power America's leadership in semiconductor advances.

New Mexico is Interconnected and Fast-Growing

New Mexico is at the heart of the fastest-growing region in the United States. Our state is well-connected to the rest of the country and the world: it has several large airports, is bisected by three major highways, and has three international ports of entry, including the Santa Teresa Port of Entry on the US-Mexico border. The industries of aerospace and defense, advanced manufacturing, data centers, logistics and distribution, and technology commercialization – all of which are deeply invested in semiconductors and electronics – already have a very strong presence in New Mexico and would be excellent partners for the Commerce Department's new initiatives.

Our state is a hub of semiconductor innovation, brimming with diverse and talented people and the right industries poised for growth. We strongly urge you to consider sites in New Mexico for the National Semiconductor Technology Centers and National Advanced Packaging Manufacturing Program.

Sincerely,

Martin Heinrich
United States Senator

Ben Ray Luján
United States Senator

Teresa Leger Fernández
Member of Congress

Melanie Stansbury
Member of Congress

[3] *Business Facilities*. "Business Facilities' 2021 Metro Rankings Report." 12 August 2021. https://businessfacilities.com/2021/08/business-facilities-2021-metro-rankings-report/
[4] Dimeo-Ediger, Winona. *Livability*. "These Are the 10 Best Cities for STEM Workers." 12 June 2018. https://livability.com/topics/education-careers-opportunity/these-are-the-10-best-cities-for-stem-workers/