

July 26, 2021

The Honorable Maria Cantwell
Chair
Senate Committee on Commerce,
Science, and Transportation
Washington, DC 20510

The Honorable Roger Wicker
Ranking Member
Senate Committee on Commerce,
Science, and Transportation
Washington, DC 20510

Dear Chair Cantwell and Ranking Member Wicker:

I am writing on behalf of more than 1,500 U.S. electronics manufacturers to express support for the United States Innovation and Competitiveness Act (USICA) and to recommend you make modest refinements during conference deliberations with the House of Representatives to make this great bill even greater.

IPC commends you for making federal research and development a top bipartisan priority. The USICA is a strong statement, renewing the commitment of the United States to innovation. The federal programs and robust funding levels established under the bill will position the United States to build upon the nation's rich history of technological achievement and economic prosperity.

Electronics, as you know, have been at the heart of modern technological innovation. Electronics are critical in the performance of automobiles, aircraft, medical equipment, retail, industrial operations, IT and telecom, consumer technologies, and more. And yet, government initiatives often focus on bolstering competitiveness in certain sectors, such as semiconductors, or verticals, such as automobiles, without appreciating that electronics manufacturing is essential for innovation and growth across the economy. Due to this short-sighted approach, U.S. electronics manufacturing capabilities have eroded significantly over the last twenty years, as the White House's recent *Building Resilient Supply Chains* report acknowledged.

The electronics manufacturing industry's erosion increases the likelihood that the technologies prioritized in the bill may be designed in the United States but built elsewhere, not due to a lack of financing but rather due to a lack of technical capacity. To ensure its technological leadership, the United States must be in position to both design and build the most cutting-edge electronics. Achieving this goal will require a special focus, just as our desire for leadership in semiconductor design and fabrication requires a special focus.

To this end, IPC encourages you to make two modest but critically important changes to the legislation.

First, we urge you to add language specifically listing electronics manufacturing alongside semiconductors as a "key technology focus area." Increasing support for semiconductors without concurrently increasing support for the wider electronics ecosystem would be like building better engines without building better cars. Including electronics in the definition of this key technology area

would help ensure that semiconductors fabricated in the United States can also be packaged and assembled into electronic systems here as well, thereby addressing a critical supply chain vulnerability that the White House Supply Chain Report identified.

Second, we urge you to expand the National Advanced Packaging Manufacturing Program to include electronic interconnection. Advanced packaging of semiconductor chips relies on fabrication of substrates and interposers, as well as expertise in first-level assembly, all of which are technologies in which the United States currently lags. Interconnection is foundational to advanced packaging and should be promoted accordingly.

In today's world, our lives depend on electronics, and that dependence is growing. In addition to supporting innovation in other sectors, electronics manufacturing is a robust, vertical industry in its own right, generating more than \$700 billion a year in U.S. GDP and jobs for more than 5 million people.

For the prosperity and security of current and future generations of Americans, the United States needs a stronger and more resilient domestic electronics manufacturing industry. Without the changes we suggest, the USICA will not advance this critically important objective.

IPC and our members are eager to work with you and your colleagues to improve and advance this vital legislation.

Sincerely,

A handwritten signature in black ink, appearing to read "John Mitchell". The signature is fluid and cursive, with a large initial "J" and "M".

John Mitchell
President & CEO