

June 18, 2019

The Honorable Mitch McConnell
Majority Leader
United States Senate
Washington, DC 20510

The Honorable Charles Schumer
Democratic Leader
United States Senate
Washington, DC 20510

The Honorable Nancy Pelosi
Speaker of the House
United States House of Representatives
Washington, DC 20515

The Honorable Kevin McCarthy
Republican Leader
United States House of Representatives
Washington, DC 20515

Dear Speaker Pelosi, Majority Leader McConnell, Leader Schumer, and Leader McCarthy:

As you work to negotiate budgetary caps, I'm writing to urge you to triple federal investments in research that advance semiconductor technology in the United States. Maintaining the United States' leadership in semiconductor technology is critical to supporting the nation's economic prosperity and protecting national security.

For 50 years, America has led the world in semiconductor innovation, driving transformative advances in nearly every modern technology, from computers to mobile phones to the Internet itself. Today, semiconductors underpin the most exciting "must-win" technologies of the future, including artificial intelligence to power self-driving cars, quantum computing to analyze huge volumes of data and enhance digital encryption, and advanced wireless networks to seamlessly connect people at unprecedented speeds and security.

Robust and ongoing investments in semiconductor research in the past have enabled the United States to be a global leader in the industry, and at this critical juncture this effort must not flag. The federal government currently invests approximately \$1.5 billion in research programs specifically focused on the semiconductor industry. These programs fund critical research in nanoelectronics, security, energy efficiency, and other important areas. To meet current technology challenges and keep up with global competition, we ask you to set aside funding for these semiconductor research programs to be tripled over the next 5 years.

Federal research investments supplement robust private investment from the industry (in 2018, the semiconductor industry in the U.S. invested approximately one-fifth of the industry's revenue into research and development, among the highest of any industry sector in the United States), speeding up the pace of innovations that will buttress the next generation of state-of-the-art semiconductor technologies.

Moreover, federally funded investments in semiconductor research train the next generation of highly skilled American engineers and scientists. Taken as a whole, federal investments in semiconductor research at the U.S. Department of Energy, the U.S. Department of Defense, the National Science Foundation, and the National Institutes of

Standards and Technology provide a significant return on investment to the American taxpayer by accelerating the development of cutting-edge technologies and a skilled workforce in the United States will ensure our prosperity and strength in the 21st century.

Our global competitors have long recognized America's national strength derives in large part from the United States' stalwart commitment to innovation. Competitors, such as China, are investing to challenge U.S. leadership in semiconductor technology, and the federal government must invest in research to maintain our competitive advantage in this critical industry.

We urge you to consider setting aside funding for increased investments in these federally funded research programs during budgetary cap negotiations this year.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Neuffer', followed by a horizontal line extending to the right.

John Neuffer
President & CEO
Semiconductor Industry Association