March 11, 2025

Via Regulatory Portal

The Honorable Jamieson Greer
U.S. Trade Representative
Office of the U.S. Trade Representative
600 17th St. NW
Washington, D.C. 20006

cc. Ms. Catherine Gibson, Deputy Assistant U.S. Trade Representative
Ms. Jennifer Thornton, General Counsel

Re: Request for Comments to Assist in Reviewing and Identifying Unfair Trade Practices and Initiating All Necessary Actions to Investigate Harm From Non-Reciprocal Trade Agreements (90 FR 03047, February 25, 2025)

Dear Ambassador Greer:

The Semiconductor Industry Association (SIA) welcomes the opportunity to respond to the Office of the U.S. Trade Representative's (USTR) *Request for Comments to Assist in Reviewing and Identifying Unfair Trade Practices and Initiating All Necessary Actions to Investigate Harm From Non-Reciprocal Trade Agreements*, 90 Fed. Reg. 03047 (February 25, 2025) (the "Request").

SIA has been the voice of the U.S. semiconductor industry for nearly half a century. Our member companies, representing more than 99 percent of the U.S. semiconductor industry by revenue as well as major non-U.S. chip firms, are engaged in the full range of research, design, manufacture, and back-end assembly, test, and packaging of semiconductors. Semiconductors are historically a top U.S. export sector, running a healthy trade surplus for nearly three decades.[1] SIA's members design and produce all major advanced and mature-node semiconductor types, including logic, memory, analog, microprocessors, and optoelectronics. The semiconductor was invented in America more than 65 years ago, and the U.S. semiconductor industry remains the global leader in semiconductor technology and innovation, driving America's economic strength, national security, and global competitiveness in a range of downstream industries – from automotive to artificial intelligence data centers. More information about SIA and the semiconductor industry is available at www.semiconductors.org.

We stand ready to partner with USTR and leaders across the Trump Administration to advance trade policies that enhance U.S. semiconductor leadership, including by pursuing mutually advantageous bilateral and sectoral trade negotiations that create domestic manufacturing jobs, enhance competitiveness, open markets to U.S. semiconductors and semiconductor products, and achieve our shared goals of making America safer, stronger, and more prosperous.

[1] U.S. International Trade Commission, "DataWeb," accessed March 3, 2025, HTS codes: 8541 (excluding photovoltaic cells and modules) and 8542.

Given the global nature of the semiconductor market; the complexities of our upstream and downstream supply chains; the critical role of exports in supporting U.S. investment, research and development, and jobs; and the high risk of inadvertent consequences from misguided government policies, we urge USTR to approach each step of this investigation carefully and through a deliberative process, in close consultation with SIA and our member companies. We also urge USTR and other involved agencies to coordinate closely with allied and partner governments – in particular other leading semiconductor-producing economies – to inform a comprehensive approach that enhances the effectiveness of U.S. policies and avoids potential actions that could inadvertently harm our industry.

I. BACKGROUND

Semiconductors are the bedrock of today's global economy, powering and enabling a host of American technologies, industrial products, and virtually everything digital from cellphones and cars to supercomputers, AI applications, and medical equipment. Few industries, if any, have a supply chain and development ecosystem as complex, geographically widespread, and interdependent as the semiconductor industry. A joint report by the Boston Consulting Group (BCG) and SIA found that more than 120 countries were involved as an exporter or importer of semiconductor products.

We are encouraged by President Trump's goals of restoring U.S. trade leadership, promoting U.S. strength in semiconductors, and reindustrializing the U.S. Building on initial U.S. investments announced during President Trump's first term, SIA member companies are investing more than half-a-trillion dollars to manufacture and develop more semiconductors in the U.S. The CHIPS Act, which was initially conceived during the first Trump Administration, is on track to strengthen American manufacturing, create jobs, boost economic growth, and promote national security. To date, over 90 new semiconductor projects across 28 U.S. states—totaling hundreds of billions of dollars in private investments—have been announced since the CHIPS Act was first introduced during the first Trump Administration. These announced projects, including major, leading-edge fabs in Texas, Arizona, and Ohio, will create more than 58,000 jobs in the semiconductor ecosystem and support hundreds of thousands of additional U.S. jobs throughout the U.S. economy. These investments are creating and supporting hundreds of thousands of high-paying jobs throughout our economy, as well as securing and stabilizing American supply chains. Based on our current trajectory, the U.S. is projected to triple its chipmaking capacity by 2032, growing at a rate that leads the world and increasing America's share of global semiconductor capacity for the first time in four decades. It is imperative that we maintain this momentum because, despite our significant and transformative progress at home, U.S. semiconductor leadership continues to face worldwide challenges. As Vice President JD Vance stated at the Paris AI Action Summit: "Now the computing power this stack requires is integral to advancing AI technology, and to safeguard America's advantage, the Trump Administration will ensure the most powerful AI systems are built in the U.S. with American-designed and manufactured chips."

Supply-side investments in the U.S. are helping to reverse a decades-long downward trajectory in the share of semiconductor manufacturing capacity in the U.S. and secure our supply chains at home. But to support long-term, capital-intensive investments in U.S. semiconductor production,

chipmakers need confidence that their products will have access to global markets and a global customer base. Our customers in the U.S. and overseas will continue to seek the highest quality chips for the lowest price. Should the cost of manufacturing chips in the U.S. continue to rise, SIA member companies and their products will be less globally competitive, and others will step in to fill the gap. As such, it is critically important to ensure U.S. trade policy and other domestic policies (e.g. tax, permitting, etc.) are designed to reduce the cost gap between constructing and operating a semiconductor manufacturing facility in the U.S. vs other locales.

America must run faster to win the technology race of the future. To do this, we need a comprehensive, whole-of-government strategy encompassing: (i) policies that incentivize domestic chip research, design, and manufacturing; (ii) a proactive, market-opening trade and investment agenda that creates new demand for Made-in-America chips and facilitates U.S. chips sales in new and emerging markets; (iii) investments in basic research to power the next generation of semiconductor technologies; (iv) stable and predictable national security policies pursued in coordination with other key supplier nations; (v) continued access to the global supply chain and critical material inputs; and (vi) programs and policies that support the development of a skilled American workforce with access to global talent.

Overseas sales help to fuel the capital-intensive semiconductor industry and power our manufacturing expansion in the U.S. To support long-term, capital-intensive investments in semiconductor production and research and development here at home, semiconductor companies need confidence that their products will have access to global markets, which represent 70% of U.S. sales. To the end, the U.S. semiconductor industry has pushed successfully for reciprocal, zero-tariff treatment for cross-border trade in chips. Today, almost all major semiconductor producing and consuming countries maintain a tariff of 0% on semiconductor imports (see Figure 1).

Figure 1: *Chips Tariffs by Country (2024)**

Country	Avg. Tariff	Tariff Range
Brazil	2.7%	0 - 6.1%
Canada	0%	0%
China	0%	0%
EU27**	0%	0%
India	1.3%	0 - 7.5%
Indonesia	0.8%	0 - 5%
Israel	0%	0%
Japan	0%	0%
Korea, Republic of	0%	0%
Malaysia	0%	0%
Mexico	0%	0%
Philippines	0%	0%
Singapore	0%	0%
South Africa	0%	0%
Taiwan	0%	0%
Thailand	0%	0%
United Kingdom	0%	0%
Vietnam	0%	0%

Source : World Trade Organization

* Semiconductors tariffs based on HS 8542 and HS 8473.30.

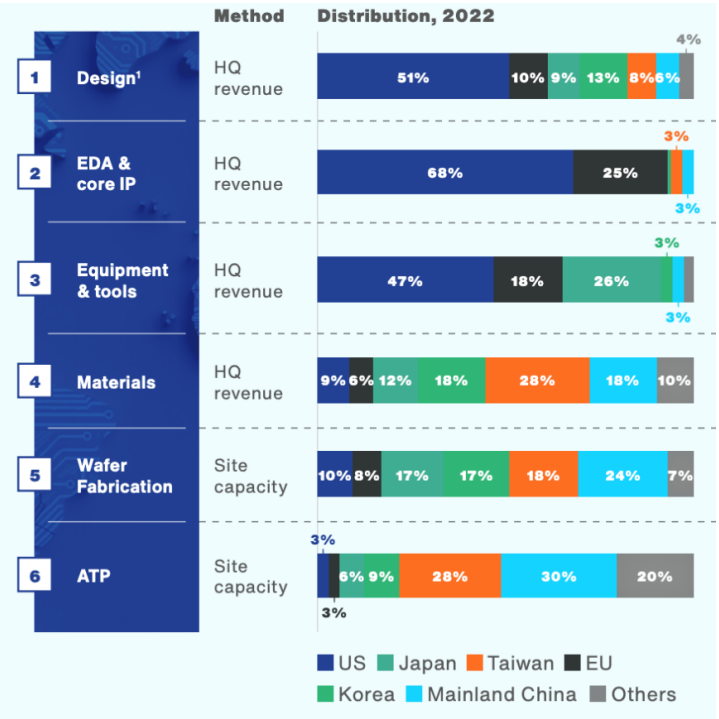
**EU27 includes: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

Over the past four years, other governments have been aggressively negotiating market-opening trade and investment deals to secure preferential access for their domestic companies, create new demand for domestically produced goods, and expand their economic influence and role in regional supply chains. The Trump Administration has an opportunity to pursue its own market opening deals for exports of U.S. semiconductors and other manufactured products.

II. SEMICONDUCTOR SUPPLY CHAINS

A 2024 SIA-BCG report illustrated the degree of specialization in the global semiconductor supply chain in 2022 (see Figure 2). For example, U.S.-headquartered companies lead in design and core IP, and command almost half the global market share in semiconductor manufacturing equipment. In manufacturing, while the U.S. only accounted for 10% of global capacity for front-end wafer fabrication, subsequent private sector investments (fueled by semiconductor manufacturing grant incentives and investment tax credits) have set the U.S. on a path to triple its fab capacity, a growth rate that leads the world. Accordingly, the U.S. is on track to reach 14% share for overall capacity and 28% for leading edge capacity by 2032.[2] For materials used in semiconductor manufacturing – such as raw wafers, photoresist chemicals, photomasks, gases, wet chemicals, substrates, leadframes, etc. – U.S. semiconductor manufacturers rely principally on suppliers from Taiwan, Japan, South Korea, and China. It is in the U.S. economic and national security interest to ensure U.S. companies maintain continued cost-competitive access to these materials, many of which lack readily available substitutes.

Figure 2: *Semiconductor Diversification by Supply Chain Segment*



1. Represents both fabless and IDM design
Source: SEMI; Yole Group; BCG Analysis

[2] SIA analysis on SEMI, "World Fab Forecast–Q4 2024," December 19, 2024.

In an earlier SIA-BCG report, we found that fully "self-sufficient" localized supply chains would require at least $1 trillion in incremental upfront investment and lead to a 35-65% increase in semiconductor prices.[3] Under such a scenario, U.S. chip companies would not be able to maximize the capital needed for continued investments in manufacturing capacity, operate at optimal capacity utilization rates, or generate a positive return on investment.

III. RECOMMENDATIONS

We fully support USTR leading the Trump Administration's comprehensive review of U.S. trade policies, pursuant to the White House's "America First Trade Policy" memorandum. In the course of these reviews, we ask USTR and other Administration leaders to take into account the following points regarding the U.S. semiconductor industry:

- Roughly **70%** of industry revenue comes from sales to overseas customers.
- The U.S. semiconductor industry invests about **20%** of its revenue in R&D, one of the highest rates of any sector.
- SIA member companies are investing over **$500** billion in private capital in semiconductor production capacity in the U.S.
- Roughly **two-thirds** of U.S. headquartered front-end manufacturing facilities are located in the U.S.
- The total construction and operating costs of a semiconductor wafer fabrication facility in the U.S. is **30-50% more expensive** than in Asia, with as much as **40-70%** of that differential being attributable to government incentives.[4]

In comments submitted to USTR in February 2025,[5] we underscored our view that global challenges are best addressed through coordinated, multi-country solutions. We therefore encourage the Trump Administration to negotiate reciprocal trade and economic deals with key partners and allies that facilitate increased sales of U.S. semiconductors globally, create preferential markets for U.S.-made semiconductors (and downstream electronics products that incorporate our chips), encourage investments in the U.S. by international semiconductor firms, and incentivize the creation of trusted supply chains. We highlighted a semiconductor-focused working group established by Group of Seven (G7) Leaders[6] under Italy's G7 Presidency to promote resilient and reliable semiconductor supply chains. We believe that the Trump Administration could effectively use this and other appropriate fora to develop a sectoral approach

[3] SIA and Boston Consulting Group, "Strengthening the Global Semiconductor Supply Chain in an Uncertain Era", April 2021. https://www.semiconductors.org/wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-Semiconductor-Value-Chain-April-2021_1.pdf

[4] SIA and BCG, "Government Incentives and US Competitiveness in Semiconductor Manufacturing", September 2020. https://www.semiconductors.org/wp-content/uploads/2020/09/Government-Incentives-and-US-Competitiveness-in-Semiconductor-Manufacturing-Sep-2020.pdf

[5] Semiconductor Industry Association, Request for Public Comments: China's Acts, Policies, and Practices Related to Targeting of the Semiconductor Industry for Dominance, February 5, 2025. https://www.semiconductors.org/wp-content/uploads/2025/02/USTR-2024-0024-00109674-CAT-5016-Public-Document.pdf

[6] G7, "Apulia G7 Leaders' Communiqué," June 15, 2024. https://www.g7italy.it/wp-content/uploads/Apulia-G7-Leaders-Communique.pdf

amongst key partners and allies that could create new demand for Made-in-America semiconductors. Elements of such a sectoral approach could include:

- Preferential access to government procurement and critical infrastructure markets for chips manufactured in countries party to the agreement;
- Mutual recognition arrangements for semiconductor testing and standards;
- Protection and enforcement of intellectual property rights;
- Coordinated inbound and outbound investments policies/requirements for semiconductors;
- Alignment on export control regulations and enforcement; and
- Initiatives to facilitate secure research and development collaboration on critical and emerging technologies.

A semiconductor sectoral framework with the elements outlined above could also include key upstream sectors and critical downstream semiconductor end user industries.

CONCLUSION

SIA appreciates the opportunity to share our views and stands ready to work constructively with USTR to advance trade policies that reinforce America's economic strength, national security, innovation base, and semiconductor technology leadership, and achieve our shared goals of making America safer, stronger, and more prosperous. We hope USTR will consider SIA and our member companies as a resource as you formulate U.S. trade policies. We urge USTR to approach each step of this investigation carefully and through a deliberative process, in close consultation with SIA and our member companies. We also urge USTR and other involved agencies to coordinate closely with allied and partner governments – in particular other leading semiconductor-producing economies – to inform a comprehensive approach that enhances the effectiveness of U.S. policies and avoids potential actions that could inadvertently harm our industry. If you have any additional questions or would like to discuss these comments further, please contact SIA via cesko@semiconductors.org or ymeng@semiconductors.org.

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