

1000 Maine Avenue, SW, STE 500 Washington, DC 20024 202.872.1260 brt.org

May 7, 2025

Uploaded to: https://www.regulations.gov

Hon. Howard W. Lutnick Secretary of Commerce U.S. Department of Commerce 1401 Constitution Avenue, NW Washington, DC 20230

RE: Comments on Section 232 Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment (Docket XRIN 0694-XC121)

Dear Secretary Lutnick,

Business Roundtable ("the Roundtable" or "BRT") respectfully submits these comments to the Department of Commerce ("Commerce") and Bureau of Industry and Security ("BIS") in response to the request for public comments on the national security investigation of imports of semiconductors and semiconductor manufacturing equipment ("SME") under Section 232 of the Trade Expansion Act of 1962, as amended ("Section 232").¹ Business Roundtable is an association of more than 200 chief executive officers ("CEOs") of America's leading companies, representing every sector of the U.S. economy. BRT CEOs lead U.S.-based companies that support one in four American jobs and almost a quarter of U.S. gross domestic product ("GDP"). BRT appreciates the opportunity to comment as the production or consumption of products within the scope of this investigation reaches across the Roundtable membership.

BRT supports Commerce's goal to increase domestic production of and strengthen U.S. competitiveness in the semiconductor and SME sectors. However, BRT believes that: (1) the current broad scope of the investigation, encompassing all classifications of semiconductors, equipment, and derivatives that contain semiconductors could inadvertently undermine innovation and competitiveness across many segments of the U.S. economy; (2) given the breadth and complexity of the investigation, Commerce should prioritize further stakeholder engagement as it refines the scope, consider a process for companies to petition for relief for inputs that cannot be sourced domestically or available in sufficient quantities to meet domestic demand, and provide sufficient phase-in periods for companies to adjust to any

¹ Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment, 90 Fed. Reg. 15, 950 (April 16, 2025) (Docket No. BIS-2025-0021; XRIN 0694-XC121).

remedial measures implemented through the investigation; and (3) to effectively accomplish its goals of bolstering the domestic semiconductor and SME sectors, the Administration should take a highly focused, strategic approach that makes U.S. production more cost-effective and efficient. Additionally, BRT encourages Commerce to consider how this investigation intersects with other ongoing Section 232 investigations to avoid overlap.

While Business Roundtable agrees that ensuring a reliable supply of semiconductors and SME products is important for national security, the conditions upon which the U.S. government has previously used in Section 232 investigations are not currently present in the overall semiconductor and SME sectors. For example, the United States maintains trade surplus in both the semiconductor and SME sectors,² U.S. manufacturing output in the semiconductor sector has been on a strong upward trajectory in the last decade and a half,³ and research and development (R&D) by U.S. semiconductor companies has grown at steady rates in the last two decades.⁴ Moreover, to the extent the United States does import semiconductors, these imports are frequently of semiconductor types that are not available from domestic sources, reflecting specializations that have occurred over time and the complementary nature of foreign trade in the sector.

I. The Scope of the Section 232 Investigation Should Be Carefully Construed

The current scope of the Section 232 investigation covers imports of "semiconductors, semiconductor manufacturing equipment, and their derivative products" which include "semiconductor substrates and bare wafers, legacy chips, leading-edge chips, microelectronics, and SME components" as well as "downstream products that contain semiconductors, such as those that make up the electronics supply chain."⁵

The scope of this investigation appears to substantially intersect with the previously announced Section 232 investigation of imports of processed critical minerals and derivative products.⁶ In

² U.S. semiconductor exports exceeded imports by at least 20 percent in recent years (e.g., \$57 billon of exports in 2024, compared to \$46 billion in imports). In the most recent five-year period (2020-2024), U.S. exports of SME (\$112 billion) were more than double the value of U.S. imports (\$52 billion). U.S. Census (HS 8486); U.S. Census (HS 8542 and (non-solar) 8541).

³ Board of Governors of the Federal Reserve System, Industrial Production: Manufacturing: Durable Goods: Semiconductor and Other Electronic Component (NAICS = 3344), (2025)

⁴ Semiconductor Industry Association, Factbook, 2024

⁵ Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment, 90 Fed. Reg. 15,950 (Apr. 16, 2025).

⁶ Notice of Request for Public Comments on Section 232 National Security Investigation of Imports of Processed Critical Minerals and Derivative Products, 90 Fed. Reg. 17,372 (Apr. 25, 2025) (The notice defines the term "critical minerals" to encompass minerals listed in the "Critical Minerals List" published by the U.S. Geological Survey and uranium, whereas the term "rare earth elements" includes the 17 elements included in the Department of Energy's April 2020 publication, "Critical Materials Rare Earths Supply Chain." The notice provides that additional minerals can be subsequently added).

particular, the critical minerals investigation defines the term "derivative products" to include any goods that incorporate processed critical minerals as input, such as motors, batteries, radar systems, wind turbines, and advanced optical devices⁷, which are also downstream products that contain semiconductors.

Thus, when taken together, the breadth of these two investigations, capturing virtually all aspects of the semiconductor and SME supply chains from processing critical minerals to manufacturing products that contain semiconductors, will have sweeping economic and national security implications that may be damaging to the health and competitiveness of U.S. semiconductors and SME sectors. Overly inclusive and intrusive investigations could hamper investments, innovation, and advancements in these sectors.

Commerce should utilize the practical experience and insight of the U.S. semiconductor and SME industries, trade associations, and other interested parties when carefully crafting the scope of these investigations. Through these cooperative efforts, Commerce can narrowly tailor the scope of the Section 232 investigation, evaluating only industries within the semiconductor and SME sectors that have a direct bearing on national security.

By limiting the scope of the investigation, Commerce can focus in on key U.S. national security interests while maintaining the economic welfare of domestic industries and consumers, avoiding inadvertent harmful consequences to the domestic semiconductor and SME sectors and to the broader economy, without sacrificing Commerce's objectives.

II. Semiconductor and SME Tariffs Will Severely Impact the U.S. Economy and Technology Ecosystem

Semiconductors and SME are key technologies for the broader business community and modern economy. Semiconductors are a critical input for more than 300 downstream industries, underpinning products and services used by 26 million American workers.⁸ The U.S. semiconductor industry alone contributed \$55.8 billion to U.S. GDP and directly employed over 277,000 workers in 2020.⁹ These numbers increase to \$246.4 billion and 1,852,049 workers when considering the U.S. industries and U.S. jobs the semiconductor sector supports.¹⁰

Semiconductor chips have long been recognized as general-purpose technologies that fuel productivity growth and innovation. A vital mix of advanced and legacy chips enables progress in virtually every cutting-edge field – from artificial intelligence and quantum computing to

⁹ *Id.* at 4.

⁷ Id.

⁸ Chipping In: The U.S. Semiconductor Industry Workforce and How Federal Incentives Will Increase Domestic Jobs, Semiconductor Industry Association and Oxford Economics (May 2021), 6.

¹⁰ Id.

autonomous systems and advanced manufacturing – and underpins the daily economic activity of the vast majority of industries. Because of this, semiconductors are not only economically significant but also essential to national security, powering critical defense and aerospace capabilities.¹¹ U.S. leadership in technology domains of today and tomorrow relies on a steady supply of chips.

Virtually all major industries use semiconductor technology in their products or operations and would be impacted by the application of immediate tariffs on the semiconductor and SME sectors. Some examples include:

- Modern vehicles contain large numbers of chips for engine control, safety systems, infotainment, and electric powertrains. On average, a new car carries roughly 1,000 to 3,000, primarily automotive grade, semiconductor chips.¹² As vehicles become more electric and autonomous, semiconductor content (sensors, power electronics, CPUs) is only increasing.
- The healthcare and life sciences industries rely on semiconductors to save lives and improve care. Medical equipment such as MRI and CT scanners, ultrasound machines, and patient monitoring systems all use advanced chips for imaging, data processing, and control. Even everyday medical devices—from digital thermometers and blood glucose monitors to implanted pacemakers—contain semiconductor microcontrollers or sensors. The chips that enable high-speed data analysis, imaging, and connectivity are now fundamental in modern healthcare delivery.
- The communications sector (telecom, networking, and consumer devices) is one of the largest consumers of semiconductors, reflecting increasing digital lifestyles. Semiconductors enable all forms of modern connectivity: telecom infrastructure (cell towers, 5G base stations, fiber-optic network gear) runs on specialized chips and consumer electronics like smartphones, computers, and networking equipment are essentially bundles of semiconductor components. Together, communications and computing equipment account for about 60 percent of global semiconductor sales by end-use.¹³
- The energy sector has become a significant semiconductor user. In oil and gas, chips are used in sensors and control systems for exploration and pipeline monitoring. Power semiconductors (such as high-voltage transistors and converters) are critical for solar

¹¹ U.S. Business R&D in Semiconductor-Related Industries, National Center for Science and Engineering Statistics (Nov. 20, 2024).

¹² How Many Semiconductor Chips Are in a Car? [Infographic], POLAR semiconductor (Nov. 30, 2023), https://polarsemi.com/blog/blog-semiconductor-chips-in-a-car/.

¹³ Recent Developments in Global Semiconductor Industry, U.S. International Trade Commission (2023), 1

panels, wind turbines, and energy storage systems, where they convert and control power. Smart grids and modern utility networks use semiconductor-based sensors and control chips to manage electricity distribution efficiently. Solar inverters and battery systems use chips to convert DC to AC power and regulate voltage.

 Industrial machinery and advanced manufacturing depend heavily on semiconductors and the precision tools that produce them – programmable logic controllers ("PLCs"), robotics, machine vision systems, and energy-efficient drives used in factories all rely on mature-node semiconductors for sensing, computing, and control. At the same time, the machines that fabricate these chips – including deposition, etching, metrology, and lithography tools – are themselves high-precision industrial equipment designed and often exported by U.S. firms, making SME both a consumer of and a catalyst for other advanced manufacturing sectors.

Tariffs will result in the use of resources that could have otherwise been invested in innovation, R&D, and manufacturing capacity, including U.S. fabrication facilities. Many remaining costs will ultimately be passed on to U.S. consumers. Tariffs could also upset the delicate balance between supply and demand, risking production delays, stoppages, and shortages of finished and intermediate goods. Further, unilateral actions by the United States could prompt other countries to impose similar restrictive measures on U.S. semiconductors and SME exports, harming the competitiveness of U.S. companies as roughly 70 percent of U.S. chip sales are to overseas customers.¹⁴

To the extent tariffs are considered as part of any remedy recommendations in the investigation, they should be construed as narrowly as possible to address national security risks and avoid stacking with tariffs imposed through different regimes. Broad-based tariffs are not necessary to address U.S. security interests in the semiconductor sector, nor to incentivize further investment in light of current industry realities, and risk harm to the U.S. economy and ongoing efforts to grow the semiconductor and related industries in the United States.

III. Policies to Incentivize Domestic Semiconductors and SME Production

Instead of pursuing total self-reliance across all segments of the semiconductor and SME markets, Commerce should aim for a more attainable and practical goal of increasing the resilience of the U.S. economy by boosting domestic capabilities in areas where the United States currently has a relatively lower share of global activity. Crucially, this effort is already underway and is yielding enormous success. Further increasing the domestic supply base will

¹⁴ Expand Access to Global Markets, SIA, https://www.semiconductors.org/policies/trade/; Rodrigo Balbontin, Retaliatory Tariffs Could Cut US ITA Exports by \$56 Billion, ITIF (Apr. 23, 2025),

https://itif.org/publications/2025/04/23/retaliatory-tariffs-could-cut-us-ita-exports-by-usd56-billion/.

require additional time, persistent and stable deployment of capital, and development of workforce talent, as well as close ongoing collaboration between industry and government. According to the Semiconductor Industry Association, the rising demand in semiconductors coupled with the Advanced Manufacturing Investment Credit and manufacturing grant incentives triggered a series of investments in the United States – over 100 projects across 28 states totaling more than half of a trillion dollars in private investments since 2020.¹⁵ This includes over 30 projects relating to upstream chipmaking materials, 9 projects involving packaging, and 50 projects involving the establishment, expansion, or modernization of semiconductor fabrication facilities. This trend is expected to continue in the foreseeable future – the United States is projected to more than triple its semiconductor manufacturing capacity.¹⁶

While Business Roundtable acknowledges that there are gaps in the current U.S. semiconductor ecosystem – including domestic access to substrates, glass and laminate, as well as advanced packaging capability – those are better addressed through targeted policies rather than with broad-based tariffs. For example, the U.S. government should create and appropriately resource a trusted trading partnership to, among other pursuits, harmonize export controls and streamline trade in critical materials for semiconductors with allies and partners, so we can rely on respective comparative advantages.

To support the expansion of the domestic manufacturing base of semiconductors and SME – particularly as additional capacity is still needed for legacy or mature-node semiconductors – Commerce should work across the Administration and with Congress to initiate strategic policy reforms that will make production of semiconductors and SME more cost effective and efficient. For the full scope of Business Roundtable's recommendations for building domestic manufacturing capacity and supply chain resilience for certain portions of the semiconductor and SME sectors, please review our recent report, <u>Resilient</u>, <u>Diverse</u>, <u>and Secure: Improving Critical Supply Chains</u>. Potential areas of focus include:

A. <u>Pro-Growth Tax Code</u>

Business Roundtable applauds the Administration for working with Congress to maintain a competitive tax code that encourages semiconductor and SME companies to invest, produce, and create jobs in the United States.¹⁷ A more attractive U.S. tax environment gives both U.S.- and foreign-headquartered companies an incentive to invest more capital – equipment, technology and other facilities – in the United States.

¹⁵ America's Chip Resurgence: Over \$540 Billion in Semiconductor Supply Chain Investments, SIA (last updated Mar.

^{7, 2025),} https://www.semiconductors.org/chip-supply-chain-investments/.

¹⁶ 2024 State of the U.S. Semiconductor Industry, SIA (Oct. 2024), 4.

¹⁷ Resilient, Diverse and Secure: Improving Critical Supply Chains, Business Roundtable (2023), 11-12.

Retain the permanent corporate income tax rate of no more than 21 percent. Reforms in the 2017 Tax Cuts and Jobs Act ("TCJA") resulted in historic wage and job growth and investment in the United States. Prior to the 2017 reforms, the U.S. corporate tax rate was the highest among industrialized countries. The new combined federal and state corporate rate of 25.8 percent puts the United States in the middle of Organization of Economic Co-operation and Development ("OECD") countries — higher than 23 of our 37 OECD competitors, including Belgium, Spain, and the United Kingdom.

Restore the full expensing for R&D investments and for equipment and machinery investments to further incentivize domestic research and manufacturing expansion. The federal government can stimulate private sector investments in R&D through targeted tax provisions that allow companies to expense research expenditures. For nearly 70 years, the U.S. tax code has allowed businesses to fully deduct their R&D expenses in the year in which the spending occurred. However, since 2022, businesses now must amortize these expenses over a period of five years, making R&D more costly to conduct in the United States. As a result of this change, the United States is now one of two developed countries requiring the amortization of R&D expenses.

Maintain and strengthen an approach to the taxation of international earnings that incentivizes owning intellectual property in the United States and keeps the system of minimum taxes on foreign income competitive. Prior to 2017, the U.S. international tax system penalized U.S. companies for returning foreign earnings to the United States with a significant layer of additional tax. Tax reform moved the United States to a more modern international system and included significant base erosion provisions. Scheduled changes to the international tax regime in 2026 will harm the competitiveness of U.S. companies. Business Roundtable applauds the Administration's work with Congress to ensure a competitive international tax landscape.

B. <u>Permitting Process Reform</u>

Streamline permitting and approval processes, including harmonization of standards and expedited pathways. The Administration could improve construction speed and reduce costs by streamlining permitting processes to shorten decision timelines, including embracing the National Environmental Policy Act ("NEPA") reforms; requiring agencies to issue final decisions on environmental reviews within 90 days of completing an environmental impact statement ("EIS") and providing preliminary feedback within 14 days of submission; digitizing operations by supporting implementation of a centralized digital system for agencies to streamline processes; and differentiating and prioritizing projects by revising project permitting requirements in areas with operations and community engagement.

As the Trump Administration has undertaken a variety of initiatives to address bottlenecks in the permitting process, Commerce should utilize these initiatives for the semiconductor and

SME sectors. These would include "fast-tracking" investment from allied and partner sources in "advanced technology" areas,¹⁸ expediting environmental reviews for investments over \$1 billion, and bringing greater efficiency, transparency, and predictability to permitting processes.

C. <u>Workforce Development</u>

Modernize and expand education and training programs to help build the pipeline of skilled talent required to sustain long-term growth in the semiconductor ecosystem. The Administration should work with Congress to improve the Workforce Innovation and Opportunity Act to direct resources to training programs that focus on in-demand careers, including those requiring STEM-related skills. Additionally, the Administration should work with Congress to expand Pell Grant eligibility for students pursuing high-quality, short-term education and training programs. BRT encourages the Administration to support a broad range of work-based learning opportunities that allow workers to develop skills and gain experience in real-world settings, including modernizing the U.S. Department of Labor's Registered Apprenticeship system.¹⁹

IV. Transparent and Efficient Process to Evaluate Individual Circumstances Is Needed

In addition to narrowly crafting the scope of the investigation, Commerce should establish a transparent and efficient process by which interested stakeholders can raise specific situations related to their products to Commerce. This process will enable Commerce to prevent any inadvertent yet harmful consequences of the investigation to U.S. industries, workers, and economy.

The process must be transparent as it will not only enable companies to share information related to the specific situations related to their products but also allow Commerce to fully evaluate all necessary information before making any determinations and build in any phase-in periods allowing industries to safely adjust to any changes. The transparent process will also save time and resources for both Commerce and companies so as to determine whether certain products are truly affected by the scope of the investigation and require attention by the Administration. The process must also be efficient as it will mitigate any inadvertent disruptions to the U.S. semiconductor and SME supply chains. Faster processing time means that companies carry on with their day-to-day operations more swiftly and without the uncertainty of potential harmful enforcement.

¹⁸ Presidential Actions, America First Investment Policy, The White House (Feb. 21, 2025).

¹⁹ BRT is encouraged by the recent executive order, "Preparing Americans for High-Paying Skilled Trade Jobs of the Future," directing the Secretaries of Labor, Commerce, and Education to prepare a "Comprehensive Worker Investment and Development Strategy" and a plan to expand participation in Registered Apprenticeships. Coordinating education and training programs across agencies, using workforce investments more efficiently, and improving individual programs like Registered Apprenticeship are critical to helping meet the needs of workers and employers. *See* Executive Order No. 14,278, 90 Fed. Reg. 17,525 (April 12, 2025).

V. Conclusion

The strength of the U.S. semiconductor and SME sectors lie in their innovative capacity and global competitiveness, attributes vital to national security and economic prosperity. Broad tariffs threaten these foundational strengths by increasing costs, reducing innovation funding, and eroding competitiveness of U.S. firms.

Accordingly, BRT urges Commerce to narrow the investigation's scope to specific national security functions and prioritize policies that foster a more cost-effective, efficient domestic manufacturing environment. This strategic approach will reinforce America's economic resilience and further its leadership within the global semiconductor value chain.

BRT looks forward to working with Commerce as it refines the scope of the investigation and encourages additional opportunities for stakeholder engagement, including public hearings and industry forums, to ensure that the practical implications of the investigation are fully understood and any unintended consequences are mitigated. Active engagement with stakeholders, such as industry and allied partners, will be essential in effectively protecting critical supply chains and successfully achieving the Administration's policy objectives while avoiding unintended consequences for American competitiveness.

Finally, BRT appreciates Commerce's work to swiftly negotiate deals with top trading partners that level the playing field for American goods and services and remove harmful tariffs and retaliatory measures and welcomes the opportunity to engage with Commerce on these issues as well.

* * * * *

Should you have any questions about this submission, please contact Casey Denoyer, Senior Policy Director (<u>cdenoyer@brt.org</u> or 202-496-3260).