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May 7, 2025

Hon. Jeffrey Kessler
Under Secretary of Commerce for Industry and Security
U.S. Department of Commerce
1401 Constitution Avenue NW
Washington, DC 20230

Re: Preliminary Comments of the Consumer Technology Association on the Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment, Docket No. 250414-0066 (XRIN 0694-XC121)

Dear Under Secretary Kessler:

The Consumer Technology Association ("CTA") welcomes the opportunity to provide comments to the BIS Bureau of Industry and Security ("BIS") to respond to its *Federal Register* notice requesting comments on the national security impact of the importation of semiconductors, semiconductor manufacturing equipment, and their derivative products.[1] CTA supports President Trump's goals of strengthening U.S. economic technological leadership. Our view is that strategic openness and collaboration with U.S. allies and trading partners—not economic isolation—is the most effective way to beat China in the semiconductor race.

Under President Trump's leadership, the United States has made historic strides toward restoring American economic strength and reasserting technological leadership on the world stage. Rather than reverting to broad trade restrictions, now is the time to build on that progress through policies that unleash private-sector investment, attract top global talent, and deepen strategic partnerships with allies. U.S. technology companies stand ready to invest and expand in America, but they need a predictable, pro-growth policy environment. Smart immigration policy will strengthen our talent pipeline, while friendshoring with trusted partners will harden supply chains against geopolitical threats. The most effective way to outcompete China is not through isolation, but through confident U.S. leadership grounded in openness, innovation, and strength.

[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 (Apr. 16, 2025).

CTA's comments outline the development and limitations of the growing U.S. semiconductor manufacturing environment, explain the relationship between semiconductors and products in the electronics supply chain, offer recommendations of policies to support U.S. domestic semiconductor manufacturing capacity, and outline why international coordination is essential to achieving U.S. goals.

CTA's primary request of BIS is to narrow the investigation's scope to semiconductors critical to national security applications by excluding consumer and commercial technology products from potential restrictive measures. CTA urges BIS to narrowly tailor any Section 232 remedy to direct national security threats and avoid imposing tariffs that would damage U.S. innovation and economic competitiveness.

CTA represents the more than $537 billion U.S. consumer technology industry, which supports more than 18 million U.S. jobs. Our members are comprised of over 1200 companies from every facet of the consumer technology industry, including manufacturers, distributors, developers, retailers, and integrators, with 80 percent of CTA members being start-ups or small and mid-sized companies.

CTA also owns and produces CES®—the most influential technology event in the world—which showcases and serves as a forum for discussion of international policies concerning existing and new technologies, international technology trade and investment, and global opportunities and challenges facing the consumer technology industry. Over 141,000 people attended CES 2025, including over 50,000 from outside the United States. Companies from across the world demonstrated innovative new products for the consumer marketplace, all of which contain semiconductors.

I. U.S. Semiconductor Manufacturing Capacity is Growing – But Cannot Meet Current Demand

U.S. semiconductor manufacturing capacity is growing. Over the past five years, more than 100 projects across 28 states have been announced, totaling over $540 billion in new investments.[2] These projects include the establishment, expansion, or modernization of semiconductor fabrication facilities, which are expected to increase U.S. fabrication capacity by over 200% by 2032.[3] This growth is driven by market signals, projections of growing demand, tax incentives, and interest among buyers for more diversified sources of supply.

Despite this growth, the United States does not currently have the capacity to produce and supply the full range of chips required by companies manufacturing consumer technology products for the U.S. market. U.S. semiconductor manufacturing capacity

[2] *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/.
[3] *Emerging Resilience in the Semiconductor Supply Chain*, SIA and BCG (May 2024), https://www.semiconductors.org/emerging-resilience-in-the-semiconductor-supply-chain/.

remains limited due to several factors. Despite significant recent investments in U.S. chip manufacturing, domestic production of advanced and legacy chips remains far below the levels needed to satisfy current and projected downstream demand from U.S. users. Similar demand-supply gaps extend to materials and components required for semiconductor production.

Several factors contribute to this situation. First, the construction of semiconductor fabrication facilities is a complex undertaking that requires thousands of pieces of highly specialized equipment and worker hours. This means that for the United States, the semiconductor manufacturing process today is more time-consuming relative to processes in other regions. Additionally, permitting inefficiencies and workforce shortages further slow the growth of the semiconductor industry. Reports have highlighted that federal and state permitting processes can be slow, unpredictable, and lacking in transparency, creating bottlenecks for fab construction. The projected labor shortage of up to 146,000 needed workers between 2024 and 2029 also poses a significant challenge.[4]

Second, much of the broader semiconductor manufacturing ecosystem exists outside the United States, including raw material extraction and processing[5], substrate manufacturing, testing[6], mask-making, tooling, and quality assessment. Further U.S. development of these elements of the industry is necessary to support increased domestic semiconductor manufacturing capacity.

The high costs of building and operating advanced fabs necessitate thoughtful and facilitative policies to ensure that chipmaking activity in the United States can be cost-competitive with other markets. Any restrictive measures, such as tariffs and import restrictions, would increase costs of producing in the United States, harming ongoing efforts to grow the U.S. semiconductor industry.

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[4] *Reimagining labor to close the expanding US semiconductor talent gap*, McKinsey & Company (Aug. 2, 2024), https://www.mckinsey.com/industries/semiconductors/our-insights/reimagining-labor-to-close-the-expanding-us-semiconductor-talent-gap.

[5] Critical minerals such as gallium and germanium are incorporated into semiconductors, and other critical materials are foundational to the chip manufacturing process, such as fluorospar. These are among the critical minerals that President Trump identified as “fac{ing} significant global supply chain vulnerabilities” because their availability is heavily reliant “on a small number of foreign suppliers.”

[6] Advanced Packaging and Testing, or Outsourced Semiconductor and Test (OSAT), infrastructure is necessary to prepare semiconductors for incorporation into downstream hardware. Over 80% of advanced packaging and testing occurs in Asia, leaving U.S. manufacturers vulnerable to supply chain disruptions. Even with immediate action, establishing new OSAT facilities requires 3-5 years for construction and qualification, with additional time needed for workforce development.

II. Semiconductor Use in Consumer Technology Is Complex and Non-Interchangeable

CTA would like to contribute our perspectives on the prevalence of semiconductors in consumer technology products, which may be helpful to BIS as it undertakes this Section 232 investigation. We previously submitted written comments[7] to USTR regarding its investigation on "China's Targeting of the Semiconductor Industry for Dominance" under Section 301 of the Trade Act of 1974 and testified at the March 11, 2025, public hearing.[8] CTA recently conducted unique research on this topic, which is contained in our May 2025 report "Legacy Semiconductor Tariffs: Navigating Sourcing Complexities in Consumer Technology."[9] We include a broad overview of the results of the research in **Annex A** of our comments.

Also, BIS should acknowledge how important legacy chips are to the entire economy and to U.S. technology leadership. According to an April 8, 2025, report from the Congressional Research Service:

> *"Mature-node chips support most consumer, industrial, and defense needs. They constituted 88% of global chip sales by volume and 40% of chip sales by value in 2023. They support a range of advanced applications: communications (e.g., 5G technology, blue-tooth, wireless); power electronics (e.g., electric vehicles); display systems (e.g., mobile phone and television screens); the internet of things (e.g., smart devices); and sensing."*[10]

Conventional wisdom is that semiconductors are all similar, commodified products. In fact, they are differentiated and increasingly customized for customers. Even within a particular semiconductor type or technology node, a wide array of highly specialized products exists, often manufactured to meet the precise needs of a particular user or application. Semiconductors are not easily interchanged "commodities."

For these reasons, companies procure semiconductors in a varied manner. Manufacturers of finished goods can purchase them directly. But other companies

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[7] *Letter to Acting USTR Juan Millan from CTA, Preliminary Comments of the Consumer Technology Association on the Section 301 Investigation into China's Acts, Policies and Practices Related to Targeting of the Semiconductor Industry for Dominance*, Docket No. USTR-2024-0024 (Feb. 5, 2025), https://www.cta.tech/media/rnyjzcob/final-cta-comments-to-ustr-on-sec-301-investigation-on-prc-legacy-chips-20250205.pdf.

[8] *Testimony of Ed Brzytwa, Vice President, International Trade Consumer Technology Association (CTA)® Before the Office of the United States Trade Representative (USTR)* (Mar. 11, 2025), https://www.cta.tech/media/o4cor23e/cta-oral-testimony-for-ustr-section-301-investigation-on-prc-legacy-chips.pdf.

[9] https://shop.cta.tech/products/legacy-semiconductor-tariffs-navigating-sourcing-complexities-in-consumer-technology

[10] *Section 301 and China: Mature-Node Semiconductors*, CRS (Apr. 8, 2025), https://www.congress.gov/crs-product/IF12958.

frequently purchase semiconductors for incorporation into pre-assembled components delivered to finished goods manufacturers.

The interplay between semiconductor manufacturers and downstream manufacturers is highly relevant for BIS to consider during its Section 232 investigation according to the factors set out in the statute and in the formulation of its determination in this investigation and any related remedies. Given the interplay and the complex supply chains these companies are in, CTA strongly urges BIS to continue to consult with stakeholders, including CTA and our members, other trade associations, and industry participants, throughout the investigation, including through holding a public hearing.

III. BIS Should Narrow the Investigation Scope to Products with Direct National Security Use

Based on the current U.S. semiconductor manufacturing capacity and the prevalence of semiconductors in consumer technology products, CTA asserts that consumer technology products do not fall within the definition of national security products or strategic goods. As the name implies, consumer technology products are products designed for consumer use. We are concerned that this investigation may subject the entire electronics supply chain to potential restrictive measures arising out of the investigation rather than address specific national security concerns in an appropriately scoped manner.

The inclusion of derivative products appears to represent a broad categorization that encompasses both a wide range of semiconductor types and the myriad devices that contain them, including everything from consumer electronics and household appliances to medical devices and vehicles. Considering that the scope of this investigation substantially intersects with the concurrent Section 232 investigation of imports of processed critical minerals and derivative products,[11] the breath of the investigations may have unintended, harmful consequences, including constraining the flexibility of consumer and industrial supply chains to respond efficiently to shifts in market demand.

More, we are concerned that this expansive approach may exceed the BIS's stated national security mandate. According to BIS, the role is to "restrict the export and reexport of items that would make a significant contribution to the military potential of any other destination or combination of destinations that would prove detrimental to the national security (NS) of the United States."[12] A narrower focus aligned with this definition would help ensure that policy actions are targeted and proportionate.

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[11] *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)
[11] 15 CFR § 742.4.
[12] 15 CFR § 742.4.

The inclusion of derivative products introduces ambiguity and confusion regarding compliance, evaluation, and enforcement processes. Many semiconductors serve as integral components within larger finished goods, making it unclear which customs reporting mechanisms apply under which Section 232 framework and how a given product may be classified. For example, a semiconductor embedded within an infotainment system could potentially fall under Section 232 measures related to automotive parts, steel, aluminum, critical minerals, or other categories. The lack of clarity and duplicative regulatory regimes risk creating overly burdensome reporting requirements for industry stakeholders, while complicating enforcement for regulators.

To aid BIS with narrowing the scope, CTA recommends an alternate approach. We suggest focusing the investigation on technologies and components that are directly related to the Administration's national security mission and the primary or exclusive use of which is a National Security System as defined by the National Institute of Standards and Technology (NIST).[13] Such a targeted scope will enhance the efficiency and relevance of the investigation, and ensure resources are directed where the risk is most acute. Further, by focusing only on products with a clear national security risk to minimize the impact of any potential actions on U.S. consumers.

CTA's view is that consumer technology products, including those on the list of HTS codes in the presidential memorandum "Clarification of Exceptions Under Executive Order 14257 of April 2, 2025, as Amended" from April 11, 2025, should not be subject to this investigation and to any Section 232 tariff actions upon conclusion of the investigation.[14] We are concerned that many other consumer technology products remain subject to one or another of the many current tariffs, including the 10% tariff imposed by the President on April 5 and the higher rates that took effect on April 9 but are now subject to a 90-day pause. According to CTA research, $433 billion in 2024 imports of consumer tech products remain subject to these tariffs (**see Annex B for additional CTA analysis**).[15]

We urge BIS to exclude consumer and commercial technology products from the scope of this investigation. These products do not pose critical risks to U.S. national security and are in fact necessary for supporting productivity of U.S. companies, the competitiveness of the U.S. economy, and the maintenance and advancement of U.S. global technology leadership.

By narrowing the scope of the investigation, BIS would ensure that any potential remedies do not have unintended, harmful consequences particularly given that other

[13] Glossary, *national security system*, NIST (*last accessed* May 1, 2025), https://csrc.nist.gov/glossary/term/national_security_system.
[14] Press Release, *CTA CEO: Tech Exclusion Not a Permanent Solution*, CTA (Apr. 14, 2025), https://www.cta.tech/press-releases/cta-ceo-tech-exclusion-not-a-permanent-solution.
[15] Exclusions from the Reciprocal Tariffs and Future Section 232 Tariffs, CTA (last accessed May 6, 2025), https://www.cta.tech/media/sjmly1vf/cta_reciprocaltariffspaper56.pdf

Section 232 tariffs already exist for steel, aluminum, autos, and auto parts, which include many of the components and finished end uses of semiconductors.

IV. Better Alternatives: Policy Tools to Expand U.S. Semiconductor Leadership

CTA recommends a range of non-tariff policy actions that – unlike tariffs – would have a meaningful impact on addressing challenges to growth of the semiconductor industry in the United States. Such actions would align with Trump Administration policy initiatives and draw on recommendations the Commerce Department has made in prior Section 232 investigations, in which it was determined that the imposition of tariffs or other import restraints was not an optimal remedy.[16]

A. Permitting Reform:

Infrastructure constraints are a major barrier to a robust U.S. semiconductor manufacturing ecosystem because they can cause prohibitive delays for construction projects and bringing new facilities online at scale. Accordingly, we also recommend expanding infrastructure development investments (*e.g.*, electric grid modernization and specialized processing facilities) to develop the domestic industry of semiconductor manufacturing, SME production, and advanced assembly, testing, and packaging capabilities. We support efforts to accelerate and streamline federal permitting for energy and other infrastructure builds to meet domestic demand faster.

The Trump Administration has undertaken a variety of initiatives to address bottlenecks in the permitting process that slow investment in the U.S. economy. This includes initiatives to "fast-track" investment from allied and partner sources in "advanced technology" areas,[17] to expedite environmental reviews for investments over $1 billion, and to bring greater efficiency, transparency, and predictability to permitting processes. The United States Investment Accelerator could be the right office in Commerce for carrying forward these initiatives.

B. Workforce Development:

Shortages of skilled labor are another major barrier. Building U.S. semiconductor manufacturing capabilities requires specialized technical talent (*e.g.*, chip design engineers) and a broadly skilled AI workforce. We recommend investing in Science, Technology, Engineering, and Mathematics ("STEM") training pipeline programs, advanced engineering programs for semiconductor design and manufacturing, and

[16] See, e.g., *The Effect of Imports of Titanium Sponge on the National Security* (November 2019), and *The Effect of Imports of Neodymium-Iron-Boron (NdFeB) Permanent Magnets on the National Security* (September 2022).
[17] Presidential Actions, *America First Investment Policy*, The White House (Feb. 21, 2025), https://www.whitehouse.gov/presidential-actions/2025/02/america-first-investment-policy/.

developing practical training programs for production operations. Further, in connection with the bilateral deals referenced above, we recommend launching a "train-the-trainer" program with technical experts from international partners to establish international engineering exchange initiatives to upskill the U.S. workforce. These steps will accelerate knowledge transfer, close critical skill gaps, and expand the pool of qualified talent needed to support domestic semiconductor manufacturing.

Numerous initiatives are currently underway to seek to build the pipeline of talent needed to ensure that the U.S. workforce has the skills needed to support continued growth of the U.S. semiconductor industry. Commerce, in addition to the Department of Labor and Education, is well placed to convene the various entities involved in developing and implementing these initiatives (businesses, universities, state and local governments) to assess where gaps exist, how existing efforts can be optimized, and where additional resources could be deployed to accelerate workforce development. Recent White House initiatives offer an example of how the federal government can galvanize these efforts.[18]

To bolster domestic semiconductor production and innovation, expanding avenues for highly skilled STEM immigrants is crucial to strengthening the talent pipeline. Current rigid limits on employment-based visas, like the 85,000 annual cap on new H-1B visas, fail to meet demand and exclude Ph.D. scientists and engineers vital for U.S. chip R&D and manufacturing. The administration should collaborate with Congress to raise or exempt visa caps for advanced STEM degree holders in critical sectors, utilizing existing Immigration and Nationality Act authorities. In the meantime, the Department of Homeland Security should quickly assess mechanisms like National Interest Waivers or special visa programs to attract and retain top global microelectronics engineers. Easing these immigration bottlenecks will enable U.S. companies to fill specialized roles, mitigating the skills gap hindering semiconductor ecosystem growth. This infusion of talent is linked to national security, as designing and producing innovative chips for AI, quantum, and defense systems relies on accessing the world's best minds within the U.S. innovation system.

In addition to long-term talent development, the Trump Administration can take actions to ensure that U.S. semiconductor companies can address short-term labor shortages through smart immigration policy that affords businesses access to highly skilled foreign workers—particularly those with specialized skills which are scarce or not available in the United States—as well as through efficient and predictable processing of "deemed export" license applications, which allow businesses to undertake valuable semiconductor supply chain activity here in the United States, rather than being forced to send that activity overseas for lack of available labor.

[18] Presidential Actions, *Preparing Americans for High-Paying Skilled Trade Jobs of the Future*, The White House (Apr. 23, 2025), https://www.whitehouse.gov/presidential-actions/2025/04/preparing-americans-for-high-paying-skilled-trade-jobs-of-the-future/.

C. Infrastructure:

Semiconductor fabrication facilities require large tracts of land, reliable and continuous supply of energy and other utilities, access to raw materials, and a transportation infrastructure that enables the efficient movement of materials, machinery, and finished products. Federal agencies can deploy a variety of programs that can help support and expedite the construction of new infrastructure to meet the needs of semiconductor fabrication projects. A coordinating body within the White House or Commerce Department could help corral and direct departmental efforts in support of individual projects, including by mobilizing private capital where needed.

D. Trade and Investment:

Exports and inward investment afford opportunities to attract additional capital into the U.S. semiconductor industry and further boost the industry's revenue. The Trump Administration has already undertaken early efforts to identify and implement strategies to facilitate greater inward investment into the United States and should intensify this effort for the semiconductor sector in particular – one example would be the conclusion of a U.S.-Taiwan Tax Agreement,[19] which could facilitate even greater inward investment from Taiwan. The Administration could also undertake to address market access barriers in foreign markets, including in China, which impede the sale of (non-sensitive/non-export-controlled) U.S. semiconductors and equipment into those markets.

The Administration should also work with industry and U.S. allies to support the competitiveness and resilience of the semiconductor sector and related supply chains, including through support for increasing domestic production capacity for legacy chips. At the same time, the Administration should avoid placing duties on chips imported from our allies.

E. White House Leadership:

The White House could shepherd all the above efforts through a newly established council of senior cabinet officials and executives drawn from U.S. industry. These leaders can advise the President on each of the elements outlined in a comprehensive US semiconductor leadership plan and provide regular updates to senior Administration officials on investments being made in the U.S. semiconductor supply chain, challenges to making and growing investments, and recommendations to buttress the United States' global leadership in the sector.

[19] Press Release, *Foreign Relations, Finance Committees Introduce U.S.-Taiwan Tax Legislation*, Foreign Relations Committee (Jan. 23, 2025), https://www.foreign.senate.gov/press/rep/release/foreign-relations-finance-committees-introduce-us-taiwan-tax-legislation.

F. National Security Alignment:

To effectively enable diversification of semiconductor manufacturing, including reshoring and friendshoring– as envisioned in the Administration's broader national security and economic strategy - significant investments in financial resources, human capital and education are necessary. Importantly, the Administration should ground its reshoring efforts in specific national security priorities, rather than driven by a blanket objective to localize production.

V. International Coordination Is Essential to U.S. Semiconductor Manufacturing Goals

International coordination with U.S. allies and trading partners strengthens the U.S. position to prevent the weaponization of semiconductor supply chains by U.S. adversaries. At the same time, it enables the United States and its allies to keep the costs of shifting the semiconductor supply chains at reasonable levels.

A. Multi-Geography Team Approach to Counter Foreign Threats

CTA believes that effective strategies against those measures by adversaries will require collaboration with foreign nations that are U.S. allies. CTA is a firm believer that a multi-geography "team approach" is best suited to counter non-market policies and practices. Acting with the support of and coordinating measures with U.S. allies and trading partners is a force multiplier when confronting such challenges. This approach would enable the United States to maintain leadership in advanced semiconductor manufacturing, while recognizing the years of development and expertise that close U.S. allies and trading partners have in critical parts of the semiconductor supply chain such as extraction and processing of raw materials, substrates, testing, mask-making, and tooling, which would require a significant runway to successfully increase domestic manufacturing capacity.

Without engaging others, unilateral efforts by the United States to change foreign adversaries' policies, shift supply chains, and promote their resilience in this sector will be futile. Rather than imposing trade-restrictive measures that force higher burdens on U.S. companies or restrict imports from U.S. allies, BIS's focus should be on leading a whole of government approach and engaging stakeholders in like-minded countries to address the challenges posed by China and other foreign adversaries. Among other things, the United States can:

- negotiate bilateral agreements providing for foreign investment in U.S. semiconductor manufacturing;
- enter into agreements with partners on security of supply arrangements (for semiconductors, SME, or materials/services);
- coordinate support for supply chain investments and offtake agreements to facilitate investment in upstream materials;

- align on export controls; and
- coordinate to identify and address overcapacity, transshipment concerns, and market-distorting practices in non-market economies.

To advance this effort, the United States could establish a new, semiconductor-focused plurilateral group comprised of partners such as the European Union, Japan, South Korea, Malaysia, Singapore, Philippines, Taiwan, and the United Kingdom. For example, Taiwan has suggested the creation of a "Global Democratic Semiconductor Supply Chain Initiative,"[20] which would include the United States.

Additionally, one important watchpoint for BIS is the reaction from China. If the Administration chooses to impose tariffs, China would retaliate in a variety of ways to undermine U.S. competitiveness regarding semiconductor manufacturing and the manufacturing of downstream electronics products. China has defined wafer origin as the country origin for semiconductors. Many U.S. companies would face China's retaliatory measures based on this definition. BIS must consider the impacts on U.S. companies operating in global markets during its investigation and consideration of any remedies.

B. International Coordination for Supply Chain Resiliency

In October 2023, CTA published a landmark study on "Building a Resilient Consumer Technology Supply Chain"[21], which the consultancy Kearney conducted at our direction.

This study found that reshoring the production of all the consumer technology for the U.S. market out of China would require a $500 billion direct business investment over ten years and a 10x increase in labor available. Kearney concluded at the time of the study that these estimates were conservative. The environmental and energy costs of doing this would also be considerable. Given these business realities and the likely prohibitive cost for U.S. consumers, our study found that this option was neither feasible nor desirable.

However, there is a better path. Our study also found that by moving and creating production across a range of segments of the consumer technology industry to both the United States, U.S. treaty allies (e.g., Canada, France, Germany, Japan, South Korea, Thailand, and the United Kingdom), and other key trading partners (e.g., Mexico, India, and Vietnam), the cost of such friendshoring would be only a $127 billion direct business investment over ten years and the labor requirements would be more diffuse.

[20] Judy Lin, *Taiwan Proposes Building a Democratic Supply Chain Amidst Geopolitical Challenges*, TechSoda (Feb. 17, 2025), https://techsoda.substack.com/p/taiwan-proposes-building-a-democratic.
[21] *Building a Resilient U.S. Consumer Technology Supply Chain*, CTA (Sept. 2023), https://www.cta.tech/research/building-a-resilient-us-consumer-technology-supply-chain/.

CTA's study is a useful guide for U.S. government officials seeking to understand the supply chain dynamics of the consumer technology industry. It also presents a compelling case for greater cooperation between the United States and its allies and close trading partners on making consumer tech supply chains resilient, including with respect to creating more semiconductor production capacity – both leading edge and legacy chips – across the world to meet increased demand over time.

Imported chips used in U.S. supply chains are sourced primarily from close allies and partners, such as the European Union, Israel, Japan, South Korea, and Taiwan. Such trusted partners are integral parts of a secure and resilient supply chain for the U.S. technology ecosystem. Importantly, these partners play an essential role in meeting demand for semiconductors that are not available from U.S. sources or for which U.S. foundries cannot today meet market demand. Cooperation with U.S. allies, therefore, is essential to U.S. economic and national security.

CTA agrees that certain foreign countries such as China have enacted numerous non-market policies and practices with respect to semiconductors, among other items. These measures, which include subsidies and other distortive non-market policies, unfairly manipulate the competitive landscape. The Administration's ongoing Section 301 investigation on China's acts, policies, and practices regarding intellectual property theft and forced technology transfer is the appropriate avenue to address these measures.

We encourage BIS to use the learnings from the Section 301 investigation to support improved international coordination. We suggest building on existing transparency mechanisms with allies to address legitimate concerns about subsidies through cooperation rather than unilateral action. For example, we recommend that BIS consider supporting industry-led initiatives aimed at enhancing supply chain transparency. This could include the development of early warning systems for potential shortages, and the promotion of voluntary inventory management practices to assess the true nature of disingenuous trade practices. From here, the United States and its allies could develop a further system to address true impacts of unfair trade practices implemented by China.

VI. Any Potential Tariffs Must Be Targeted, Limited, and Phased

Tariffs and other restrictive measures should be narrowly scoped both to address U.S. security interests in the semiconductor sector and avoid unnecessary harm to the U.S. economy and to ongoing efforts to grow the semiconductor and related industries in the United States.

A. Section 232 Restrictive Measures Will Be Costly and Burdensome for U.S. Companies – And for the U.S. Economy

We urge BIS to consider enforceability and administrative burden when considering potential remedies. For example, if BIS chooses to tariff the semiconductors in finished consumer technology products, the U.S. Customs and Border Protection ("CBP"), a critical U.S. agency already struggling with resource constraints, would face significant challenges in enforcing the use and import of the broad range of semiconductors contained within these goods. Detailed disclosures and tariff calculations on each of thousands of semiconductors to determine derivative value in each end-product would create a substantive administrative burden on both companies and the U.S. government. Higher costs due to tariffs on foreign chips could pass through the supply chain until they reach the end consumers.

Given how the Administration has already implemented Section 232 tariffs on derivatives of steel, aluminum, and autos and auto parts, we believe that it has set a precedent for semiconductor tariffs. In our view, tariffs on semiconductors, SME, microelectronics, and downstream products in the electronics supply chain would:

1. Directly raise production costs, which companies could pass on to American consumers in the form of higher prices. At a time when prices are already at historic highs and interest rates remain elevated, this would put additional financial pressure on American households—especially working-class families;
2. Reduce competitiveness of U.S.-based manufacturing operations relative to foreign producers, particularly in markets where we compete globally; and
3. Slow innovation cycles by constraining access to innovative or specialized chips not yet widely manufactured domestically.

As we have begun to see, even the potential for additional tariffs has an impact on consumer prices. Additional tariffs would raise costs on thousands of inputs into US semiconductor production, potentially making domestic manufacturing less globally competitive and more domestically expensive for other manufacturers.[22] The Information Technology and Innovation Foundation (ITIF) stated last year in its December 10, 2024, report "Chipping Away at Competitiveness: Why Tariffs Won't Save U.S. Semiconductor Manufacturing"[23]:

> "*Manufacturing semiconductors is perhaps the most complex, expensive engineering task humanity undertakes…Because semiconductor manufacturers must make the right choice in where to site a $30 billion-plus investment, they consider as many as 500 discrete factors—ranging from countries' and states'*

[22] https://itif.org/publications/2024/12/10/chipping-away-at-competitiveness-why-tariffs-won-t-save-u-s-semiconductor-manufacturing/

[23] https://itif.org/publications/2024/12/10/chipping-away-at-competitiveness-why-tariffs-won-t-save-u-s-semiconductor-manufacturing/

talent, tax, trade, and technology policies to their regulatory, environmental, and labor-market policies."[24]

The tariffs on imports of semiconductors would impact the entire electronics supply chain. The consumer electronics industry is highly cost sensitive. Imposing tariffs or restrictions on imported semiconductors would raise costs for widely used devices such as smartphones, televisions, laptops, and tablets—costs that could be passed on to American consumers. This would disproportionately impact low- and middle-income households that depend on affordable tech for work, education, and communication.

Tariffs will also increase the cost of importing critical SME, such as lithography machines, deposition tools, and etching systems, which are manufactured outside the United States. This could raise U.S. chip production costs by 20% to 32%, depending on the equipment's origin.[25] Tariff induced cost increases could lead to shifts in sourcing strategies and shortages and/or delays. This would weaken U.S. economic competitiveness.

In light of the above perspectives on the possible impacts of tariffs, CTA urges BIS to be mindful of the limitations and consequences of unilateral action in conducting this investigation and determining any remedies. First, inflation continues to undermine the potential of the U.S. economy and increase costs for U.S. businesses and workers. CTA supports the Administration's goals of addressing inflation and making products more affordable for U.S. consumers. In making a determination upon conclusion of the investigation, BIS must balance any proposed remedies with an appreciation that some, such as tariffs, may increase the costs of technology products and inputs sold in the United States, which would undermine its goal of reducing inflation. Given the broad use of semiconductors in a wide range of consumer products, the cost increase will be widespread and felt across product categories from everyday appliances to phones and cars.

B. Section 232 Restrictive Measures Will Harm U.S. Relationships with Allies and Trading Partners

In addition to increasing burdens on U.S. companies and the U.S. economy, potential Section 232 tariffs or restrictions on all imports of semiconductors, SME, microelectronics, and all downstream products in the electronics supply chain would threaten the U.S. trade surplus in semiconductors and SME, especially if U.S. allies and other trading partners retaliate against these exports. They would also fracture U.S. trust with our allies, undermine current cooperation and jeopardize future cooperation.

[24] *Ibid.*

[25] https://www.marketsandmarkets.com/ResearchInsight/trump-tariffs-impact-on-semiconductor-manufacturing-equipment-market.asp

Also, for those companies seeking to manufacture in the United States, imposing tariffs on semiconductors now – when domestic semiconductor manufacturing, assembly, advanced packaging, and testing capacity, and availability of talent and skilled labor are limited – could backfire. Access to affordable inputs, such as semiconductors, raw materials, processed materials (e.g., substrates, glass, and laminate), and components, is a significant priority for any manufacturer. For consumer technology, appliance, and automotive manufacturers, it is a necessity given the need to make affordable, safe, and high-quality products for the competitive U.S. consumer market.

By tariffing semiconductors, on top of tariffs on steel and aluminum and their derivatives (and possibly on critical minerals and their derivatives), the Administration is making the United States an increasingly high-cost location for manufacturing. The April 29 Executive Order on "Addressing Certain Tariffs On Imported Articles"[26] does not address future Section 232 actions, so at this point CTA assumes that any Section 232 tariffs resulting from this investigation would stack on other Section 232 actions, both those in effect (e.g., steel and aluminum) and those that could result from other ongoing investigations (e.g., critical minerals and their derivatives).

These factors may cause manufacturers seeking to make products for global markets to establish or expand facilities outside of the United States, precisely due to the need to access affordable inputs. Manufacturers may indeed forgo the manufacture of products for the U.S. market in the United States. This is the opposite of what CTA believes the Administration is trying to achieve and will impair U.S. national security.

C. BIS Should Exclude Certain Semiconductors from Section 232 Actions

If BIS includes tariffs in any remedy recommendations in the investigation, it should narrow those tariffs to address specific risks or concerns, while avoiding unintended harm to U.S. national interests.

Specifically, tariffs should not apply on imports of semiconductors:

- For which adequate capacity – that is, enough supply to meet demand – does not exist in the United States. This applies with respect to current availability of semiconductor types and technology nodes, as well as quantity of available U.S. supply.
- Designed, fabricated, or packaged in the United States, even if that semiconductor crosses U.S. borders multiple times in the manufacturing process.

[26] https://www.whitehouse.gov/presidential-actions/2025/04/addressing-certain-tariffs-on-imported-articles/

- Sourced from jurisdictions such as, but not limited to, the European Union, Japan, South Korea, Taiwan, and the United Kingdom, whose governments whose policies align with U.S. security and foreign policy interests.
- Produced by, or imported from, countries, whose companies are making significant investments in U.S. semiconductor production or other segments of the U.S. semiconductor supply chain.

Similarly, tariffs should avoid penalizing U.S. companies that are making investments that will boost demand for semiconductors made in the United States. To the maximum extent possible, the Administration should only use tariffs to address specific harms caused by imports determined through an appropriate statutory investigation (e.g., under Section 301 of the Trade Act of 1974) to be unfairly traded or exported by entities that pose national security risks to the United States.

D. Commerce Must Take Steps to Mitigate Tariff Impacts on Manufacturers and Consumers

BIS must also ensure that the implementation of any potential remedy recommendations provides sufficient time for companies to prepare and adapt. For example, we urge a phase-in period appropriate to the industries implicated, of at least two to three years, to fully operationalize as design cycles for more complex goods may not have the same turnover.

Any remedy action that immediately imposes duties on chips or articles containing them risks significant supply chain disruption for downstream U.S. technology companies and will have negative consequences for U.S. consumers. Any remedies proposed through this investigation must not disrupt technology supply chains. The Administration must implement any proposed remedies in a manner that provides sufficient lead time (which, in the case of semiconductor manufacturing could be 4-5 years, with an investment horizon of 10+ years) necessary for core semiconductor manufacturing to operationalize in the United States.

We also encourage BIS to consider additional mechanisms when evaluating remedies, including regulatory support for the investments companies are making, to protect and ensure current and future manufacturing capabilities. In this regard, we welcome the new United States Investment Accelerator that Commerce will establish according to the March 31, 2025, Executive Order.[27] Commerce should also consider increased interagency cooperation to expedite federal and local government regulatory approvals for new wafer fabs, assembly/test, advanced packaging, and end device assembly in the United States.

[27] https://www.whitehouse.gov/presidential-actions/2025/03/establishing-the-united-states-investment-accelerator/

CTA provide recommendations **in Annex C on** allowing companies that use semiconductors sufficient time to adjust their supply chains and final assembly without their foreign competitors disadvantaging them.

E. BIS Should Conduct an Open, Transparent, and Fair Engagement Process with Stakeholders

We welcome a consistent, transparent process and approach with the opportunity for continued industry input as BIS considers potential remedy actions. A stable and consistent policy environment is necessary for American and foreign companies to build up a significant manufacturing footprint in the United States. Any uncertainty stemming from remedy actions will threaten to undercut the confidence of companies.

To provide informed, substantive input to this investigation, we respectfully encourage BIS to allow sufficient time and opportunity for meaningful engagement between government and the private sector. We would welcome the establishment of a clear and structured timeline for stakeholder engagement, following this solicitation of public comment but before the conclusion of the Section 232 investigation, which would enable us to contribute constructive and well-researched recommendations to support the Administration's efforts.

F. Alignment with Other Section 232 and Section 301 Actions Is Critical

BIS should align any remedies resulting from this investigation with those stemming from other ongoing investigations and trade actions, including USTR's Section 301 investigation into legacy semiconductors made in China. A coordinated approach will ensure proposed actions do not end up duplicating other remedies and result in actions that undermine U.S. national security priorities.

Additionally, we strongly encourage BIS to avoid the "stacking" of any potential Section 232 tariff actions for this investigation and with stacking actions for other tariffs—such as a potential tariff rate on the component and an additional tariff on the whole item, or a stacking of tariffs resulting from concurrent Section 301 and Section 232 investigations.

The Executive Order from April 29, 2025, on "Addressing Certain Tariffs on Imported Articles"[28] sets a positive example of how eliminating stacking of Section 232 tariffs can provide clarity and flexibility for companies subject to them. Should the Administration decide to impose tariffs on semiconductors, SME, microelectronics, and downstream products in the electronics supply chain, we encourage it to take a similar approach on avoiding stacking.

[28] https://www.whitehouse.gov/presidential-actions/2025/04/addressing-certain-tariffs-on-imported-articles/

If the President determines to impose tariffs or other import restrictions despite the concerns described above, we recommend adopting an approach similar to the recent adjustments he made to automotive tariffs: implement targeted offsets against the tariffs for companies that undertake microelectronics-related investment, procurement, or production in the United States.

VII. Conclusion

Under President Trump's leadership, the United States has made historic strides toward restoring American economic strength and reasserting technological leadership on the world stage. Rather than reverting to broad trade restrictions, Now is the time to build on that progress through policies that unleash private-sector investment, attract top global talent, and deepen strategic partnerships with allies.

U.S. technology companies stand ready to invest and expand in America, but they need a predictable, pro-growth policy environment. Smart immigration policy will strengthen our talent pipeline, while friendshoring with trusted partners will harden supply chains against geopolitical threats. The most effective way to outcompete China is not through isolation, but through confident U.S. leadership grounded in openness, innovation, and strength.

We respectfully request that BIS narrowly tailor any Section 232 remedy to direct national security threats and avoid imposing tariffs that would damage U.S. consumer tech innovation and economic competitiveness.

Sincerely,

Vice President of International Trade
Consumer Technology Association

Michael Petricone
Senior Vice President of Government Affairs
Consumer Technology Association

Annex A – Relevant Data from May 2025 CTA Research Legacy Semiconductor Tariffs: Navigating Sourcing Complexities in Consumer Electronics

Research Objective

CTA undertook a survey of consumer technology industry experts to better understand the impact of potential tariffs on legacy semiconductors incorporated into finished consumer technology (CT) products. The research explored the awareness of legacy semiconductors in CT products, their country of origin and the potential of sourcing legacy components from other countries.

Key Findings

- **Importers of consumer technology devices source their legacy semiconductors from a variety of sources.**

Country of origin of legacy semiconductors in imported CT device	% respondents
United States	**45%**
Japan	**41%**
China	**39%**
Taiwan	**39%**
South Korea	32%
European Union	23%
Don't know	5%
Other	2%

- **Seventy-two percent (72%)** of CT importers indicate their company will **continue to source legacy semiconductors from China.** The primary reasons for continuing to source from China include:
  - Performance or quality concerns with alternative sources (34%)
  - Supply chain reliability (23%)
  - Lower cost of Chinese legacy semiconductors (21%)

- Across CT importers**:**
  - **55% are preparing for increased retail prices for consumers due to tariffs**
  - **48% are preparing for increased production costs due to tariffs**
  - **45% are preparing for increased costs of raw materials due to tariffs**

- CE importers cited **lack of documentation, lack of transparency from suppliers, complex supply chains and costs associated with compliance** as challenges they would face with tariffs on legacy semiconductors.

CT Importers See Hurdles Complying with Semiconductor Tariffs

The intricacies of the consumer technology supply chain make it difficult to track the origin of components in products. CT importers cited a lack of documentation, lack of transparency from suppliers, complex supply chains and costs associated with compliance as challenges they would face with new tariffs.

“What challenges, if any, does your company foresee in determining the country of origin for all legacy chips in the products you import/manufacture?”

Complex Supply Chains

- "Many semiconductor components go through multiple fabrication, assembly, and testing locations, making it difficult to pinpoint a single country of origin."
- "It can be complex and complicated as semiconductors are highly globalized and there are so many suppliers and subcontractors involved in it, that it is sometimes hard to know the origin of the semiconductors we use."

Lack of transparency from suppliers - either intentionally or unintentionally

- "Supplier resistance to revealing sensitive sourcing information."
- "Suppliers or independent distributors may not always give comprehensive details regarding the precise place of origin of each semiconductor, particularly if the chips were acquired in large quantities or are from earlier technological generation"
- "Semiconductor suppliers also employ third-party subcontractors, further hiding the actual source of components."

Limited information and varying definitions on country of origin

- "There may be gaps in historical data because older chip models were purchased from suppliers who are no longer in business, have changed ownership, or do not keep proper records"
- "Limited support from suppliers who lack detailed records for older components"
- "Absence of industry wide agreement on the definition of country of origin for intricate semiconductor supply chains."

Compliance Costs

- "Conducting detailed supply chain audits to verify semiconductors origins adds financial and operational burdens."

Annex B – CTA Analysis of Products Still Subject to April 2 IEEPA Reciprocal Tariffs

Customs value in 2024: $433 billion

Number of applicable HTS-10 codes: >1000

Subject to:

- 125% China reciprocal
- 10% universal baseline tariff (if origin is other than China)
- 20% China IEEPA fentanyl tariff
- Section 301 tariffs

Product Category	HTS Code	Product(s)*
Consumer Tech Devices	**8301.40.60**	Smart locks (8301406030), electronic door locks
Consumer Tech Devices	**8443.31, 8443.32, 8443.39**	Printers, printer cartridges, photocopiers, scanners
Consumer Tech Devices	**8516.79.00**	Wearable sensor patch
Consumer Tech Devices	**8517.11.00, 8517.18.00**	Landline Telephones
Consumer Tech Devices	**8517.14.00**	Medical Alert Device, Personal Emergency Response System (PERS), cellular, smartwatches (LTE)
Consumer Tech Devices	**8518.21, 8518.22**	Finished speakers, portable Bluetooth speakers
Consumer Tech Devices	**8518.29**	Unmounted/unenclosed speakers
Consumer Tech Devices	**8518.30.20**	Headphones and earbuds, wired and wireless
Consumer Tech Devices	**8518.40, 8518.50**	Audio amplifiers
Consumer Tech Devices	**8519.81.30**	Soundbars
Consumer Tech Devices	**8519.30, 8519.89.10**	Turntables
Consumer Tech Devices	**8525.50.10, 8525.50.30**	Streaming media player, USB stick style, set-top boxes

Product Category	HTS Code	Product(s)*
Consumer Tech Devices	**8525.80**	Home security cameras, smart doorbells, video conference cameras, indoor/outdoor cameras (IOT)
Consumer Tech Devices	**8525.89**	Digital cameras/camcorders
Consumer Tech Devices	**8526.91.00**	Portable navigation devices
Consumer Tech Devices	**8527**	Radios, A/V receivers, audio baby monitors
Consumer Tech Devices	**8528**	TVs, video monitors, baby monitors, video projectors (Not including PC monitors 8528.52.00, which are excluded from reciprocal tariffs)
Consumer Tech Devices	**8531.10.00**	Alarm systems, smoke detectors, CO detectors
Consumer Tech Devices	**8539.50.00**	Smart light bulbs, smart lamps, Light-emitting diode (LED) lamps
Consumer Tech Devices	**8543.70.87**	Gaming controllers and accessories; E-readers
Consumer Tech Devices	**8543.70.96**	Home automation controllers / interfaces
Consumer Tech Devices	**8711.60.00**	E-bicycles
Consumer Tech Devices	**8711.90.01**	E-Scooter
Consumer Tech Devices	**8806.21.00**	Drones
Consumer Tech Devices	**9018.19.55**	Remote patient monitoring equipment, Temperature monitors
Consumer Tech Devices	**9018.19.95**	Pulse oximeters and other electro-diagnostic medical apparatuses
Consumer Tech Devices	**9018.90.50**	Blood Pressure Monitor
Consumer Tech Devices	**9018.90.80**	Spirometer
Consumer Tech Devices	**9019.10.20**	Massage apparatus, electrically operated, battery powered, handheld
Consumer Tech Devices	**9021.40.00**	Hearing aids / PSAPs
Consumer Tech Devices	**9025.19.80**	Meat thermometers, smart thermometers

Product Category	HTS Code	Product(s)*
Consumer Tech Devices	**9027.89.45**	Blood glucose meter
Consumer Tech Devices	**9029.20.40**	Pulse oximeters
Consumer Tech Devices	**9031.80.80**	Fitness trackers (basic pedometers, for the most part)
Consumer Tech Devices	**9032.10.00**	Thermostats
Consumer Tech Devices	**9102.91.20**	Watches (excl. wrist watches) nesoi, electrically operated, with opto-electronic display only
Consumer Tech Devices	**9504.50.00**	Video game consoles; Augmented Reality and Virtual Reality Products and Components
Consumer Tech Accessories	**8523.52.00, 8523.59.00, 8523.80.20**	Flash memory, including solid state drives; SIM cards
Consumer Tech Accessories	**8526.92.10**	Gaming controllers and accessories
Consumer Tech Accessories	**8526.92.50**	RF remote controls
Consumer Tech Accessories	**8544.42**	HDMI cables, Data cables, video cables, charging cables
Appliances	**8415**	Air Conditioners
Appliances	**8418**	Refrigerators and freezers
Appliances	**8419, 8451**	Clothes Dryers
Appliances	**8421**	Air/water filtering
Appliances	**8422**	Dishwashers
Appliances	**8423**	Scales
Appliances	**8424**	Sprinklers
Appliances	**8433**	Robotic lawnmowers
Appliances	**8450**	Washing machines
Appliances	**8508**	Vacuum cleaners
Appliances	**8516.50**	Microwave ovens
Appliances	**8516.60**	Electric cooking stoves, ranges and ovens
Batteries	**8506, 8507**	Batteries: EV batteries, lithium, lead-acid, etc.
Electronics components	**8504.40.40**	Chargers and Power Adapters

Product Category	HTS Code	Product(s)*
Electronics components	**8505.11.00**	Neodymium magnets used in loudspeakers
Electronics components	**Various**	Parts of consumer tech devices
Electronics components	**Various**	PC components
Electronics components	**Various**	Printed circuit board assemblies (PCBAs)
Electronics components	**Various**	Printed circuit boards (PCBs) (without electronic components)
Electronics components	**Various**	TV Components
Industrial Tech	**8479.50.00, 8428.90.02**	Industrial robots for lifting, handling, loading or unloading, nesoi; Other machines for lifting, handling, loading or unloading printed circuits or substrates for the manufacture of printed circuit or printed circuit assemblies
Industrial Tech	**8485**	3D printers/parts and additive manufacturing machines
Industrial Tech	**8479.89.83**	Machines for the manufacture of optical media
Industrial Tech	**8479.89.92**	Machinery for electronics manufacturing/PCBA manufacturing
Semiconductor manufacturing	**3402.90.50**	Cleaning preparations used in semiconductor processing
Semiconductor manufacturing	**3917.40.00**	Fittings of fluoropolymers used in semiconductor equipment
Semiconductor manufacturing	**3919.10.10**	Self-adhesive plates, sheets, other flat shapes, of plastics, in rolls n/o 20 cm wide, light-reflecting surface produced by glass grains
Semiconductor manufacturing	**3919.10.20**	Carrier tape for (semiconductor) dies
Semiconductor manufacturing	**3919.90.50**	Game controller skin overlays for personalization; Circular polishing pads of a kind used for the manufacture of semiconductor wafers
Semiconductor manufacturing	**7020.00.60**	High grade fused silica or fused quartz nozzles and quartz rings designed for semiconductor manufacturing equipment; Quartz items of a kind used for the

Product Category	HTS Code	Product(s)*
		production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays
Semiconductor manufacturing	**8481.80.50**	Hand operated valves, other than copper, iron, or steel type, of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays
Semiconductor manufacturing	**8481.80.90**	Valves, other than hand-operated, of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays
Semiconductor manufacturing	**8547.20.00**	Insulating jackets or sleeves designed to cover electrical components used in semiconductor manufacturing equipment
Semiconductors	**8541.41.00**	LEDs
Semiconductors	**8541.42.00, 8541.43.00**	Photovoltaic cells/solar cells

**Product descriptions are generalized for quick reference; not intended for trade compliance purposes.*

Annex C – CTA Recommendations on Mitigating the Impact of Section 232 Tariffs

1. **Reduction of Tariff Accounting for U.S. Content**
    - Valuation of the semiconductors for purposes of determining tariffs should consider the Administration's policy of increasing U.S. content.
    - Accordingly, any semiconductor tariff should only be assessed on the value of the non-U.S. content of the semiconductor or within the semiconductor derivative.
    - The value of the U.S. IP or know-how should be considered "U.S. content" for this purpose.

2. **Derivative Valuation Process**
    - The dutiable value of the imported item for purposes of any tariff should be based solely on the value of semiconductors.
    - For example, the tariff should not apply to the value of an entire notebook, its chassis, or other components, only to the value of the impacted semiconductor(s).

3. **IEEPA/USMCA/FTA Exemption**
    - Certain derivative products, including consumer electronics, were exempted from IEEPA reciprocal tariffs.
    - All USMCA eligible products should be exempt from any tariff imposed because of this (or other) Section 232 investigations.
    - Commerce should expressly clarify that any products subject to tariffs under this (or other) Section 232 investigations are exempt from the from IEEPA reciprocal tariffs, consistent with Section 3(b)(vi) of the reciprocal tariff executive order.
    - Commerce should consider similar exemptions for eligible products under other U.S. free trade agreements.

4. **Pause Implementation**
    - Supply chain adjustments take time. Delay implementation of any tariff under this investigation for at least 6 months to allow companies sufficient time to either (i) find the best options for including more U.S. content within their products or (ii) determining accurate calculations for U.S. content analysis.
    - It takes up to 5 years for semiconductor fabs to go from breaking ground at a new site to producing consistently reliable output for customers. Companies that have announced plans for new U.S. semiconductor production that have begun to expend capex to implement those plans should be excluded from the scope of potential Section 232 tariffs.

Customers who have committed to procuring the output of these facilities should be excluded as well.

5. **FTZ production**
    - Domestic production of components will be an essential part of the movement of final assembly for technology products. To encourage that movement, component manufacturers that are in the process of moving their production to the United States through a free trade zone (FTZ) should be excluded from the tariffs and allowed to admit components duty free into the zone until the zone is operating at sufficient capacity to meet their end customers' needs.