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Taiwan Semiconductor Industry Association
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May 06, 2025

Via Regulatory Portal

Ms. Katherine Reid
Director, Office of Strategic Industries and Economic Security
Bureau of Industry and Security
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

RE: Public Comments on Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment (BIS-2025-0021; XRIN 0694-XC121)

Dear Ms. Reid:

The Taiwan Semiconductor Industry Association (TSIA) welcomes the opportunity to respond to the Bureau of Industry and Security's (BIS) notice of request for public comments on Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment.

About Taiwan Semiconductor Industry Association (TSIA)

The Taiwan Semiconductor Industry Association (TSIA) represents 221 member companies conducting business in Taiwan. Founded in 1996, TSIA works closely with government agencies, academic institutions, and other industry stakeholders to foster a favorable business environment, drive technological innovation, enhance R&D capabilities, strengthen the global semiconductor supply chain and promote sustainable development within the industry.

TSIA is one of the six members of the World Semiconductor Council (WSC), an international forum that brings together industry leaders to address issues of global concern to the semiconductor industry. The WSC, co-founded by the U.S. Semiconductor Industry Association, has been working successfully for nearly 30 years to support the elimination of global tariffs on semiconductor trade.

Executive Summary

The U.S.–Taiwan semiconductor partnership is vital for sustaining technological leadership in the U.S., particularly in advanced applications like artificial intelligence (AI), high-performance computing (HPC) and mobile. This collaboration leverages U.S. strengths in semiconductor design and system architecture, while benefiting from Taiwan's

semiconductor ecosystem. Imposing tariffs or trade restrictions would weaken this strategic partnership, leading to fragmented supply chains, higher costs, and compromised access to crucial capacity and technology.

Preserving the U.S.-Taiwan partnership is essential for advancing U.S. leadership in the highly competitive global technology race. TSIA appreciates this opportunity to offer our comments. We respectfully urge the Department of Commerce to carefully consider the effect of any trade measures on the pace of U.S. semiconductor innovation, current onshoring momentum, and the goal of strengthening supply chain resilience. We also request the Department to uphold long-standing partnerships with semiconductor ecosystem partners like Taiwan. Continued collaboration with Taiwan complements—rather than replaces—domestic efforts and ensures U.S. competitiveness in rapidly evolving technology sectors.

1. The U.S.–Taiwan Semiconductor Partnership Is Complementary and Strategic

The global semiconductor supply chain has been instrumental in sustaining U.S. technological leadership, enabling firms like Apple, NVIDIA, AMD, Qualcomm, Broadcom, and Intel to benefit from specialized manufacturing and rapid innovation. Taiwan's semiconductor industry plays a unique and complementary role in U.S. leadership in applications like AI, HPC, mobile and various high-end applications. The U.S. excels in IC design and system architecture, while Taiwan augments this strength with high-yield, cutting-edge semiconductor manufacturing and packaging technologies. Additionally, Taiwan is a top customer and co-development partner for leading U.S. EDA software and IP vendors such as Synopsys, Cadence, and Keysight Technologies.

Given the inherently interdependent and globally integrated nature of the semiconductor supply chain, and the synergistic U.S.-Taiwan partnership, we recommend against imposing tariffs or trade restrictions on imports of semiconductors, SME, or derivative products from trusted ecosystem partners such as Taiwan. Disrupting this collaboration risks fragmenting established supply chains, limiting U.S. firms' access to the international ecosystem, and inflating costs across critical sectors. Maintaining strong international collaboration is essential not only for supply chain resilience but also for sustaining U.S. innovation leadership and long-term technological competitiveness on the global stage.

2. Sustaining and Advancing U.S. Semiconductor Innovation and Competitiveness

Since the adoption of the Information Technology Agreement (ITA) in 1996, tariff barriers for semiconductors—including certain electronic products incorporating semiconductors— have been substantially eliminated over time. Removing tariffs created efficiencies in the supply chain, providing U.S. firms, which lead in product and technology innovation, with cost-effective solutions. This pro-integration environment, combined with the foundry business model pioneered by Taiwanese semiconductor manufacturers, has catalyzed the flourishing of U.S. semiconductor companies over the past decades. In 2000, the top ten semiconductor companies by revenue included only three U.S.-based companies; by 2023, that number had doubled to six, with Nvidia taking the lead (Source: McClean Report 2024 update).

Supported by this well-established global ecosystem, semiconductor technology advanced at a remarkably rapid rate and has been fundamental to the modern computing revolution. It powers the innovative progress of computers, smartphones, and data centers, contributing to the productivity gains that underpin global economic growth. Tariffs imposed on semiconductors and SME could slow or stall this pace of innovation due to increased costs for products, diminished market demand, and weakened financial capability to invest in future R&D. The impact will be felt most acutely by leading U.S. companies competing to develop "must-win" technologies of the future, such as AI, autonomous vehicles, and robotics, to sustain and expand their leadership. Losing the innovation race would have serious security implications for years to come.

Expanding the scope of tariffs to the embedded IC content in imported downstream electronics would amplify the negative effect. Administrative burdens and higher costs could delay advancements in sectors vital to national security. Furthermore, this might push international partners towards alternative supply chains, potentially diminishing US influence over global technology standards and security protocols. Paradoxically, these expanded tariffs could weaken America's technological leadership and its ability to address emerging national security threats in our increasingly digital world.

3. Preserving and Enhancing U.S. Onshoring Momentum

Rather than strengthening the domestic industry, imposing trade measures such as tariffs may further thwart onshoring efforts and drive costs even higher, potentially delaying progress on key U.S. policy objectives. The semiconductor supply chain is long and complex. Efforts to fully onshore the supply chain would require significant capital investment, long-term infrastructure development, and substantial workforce expansion—likely over the span of decades. In the near term, without adequate

adjustment time and planning, such efforts could lead to higher production costs, elongated manufacturing cycles, and reduced responsiveness to market demands, all of which could undermine the competitiveness of U.S. firms in fast-evolving technology sectors.

Tariffs on SME, in particular, would be counterproductive to the goal of bolstering U.S.-based semiconductor production. Modern IC design and fabrication rely on SME sourced from a diverse global supply base that plays a key role in the semiconductor development ecosystem, including critical tools designed and manufactured by leading U.S. equipment suppliers. Indiscriminate restrictions on SME imports could disrupt the entire design-to-manufacture pipeline, significantly increasing the cost and complexity of building new fabrication facilities and expanding production capacity in the United States. This, in turn, could weaken onshoring momentum.

4. Co-investing in Ecosystem Resilience and Advancement

TSIA supports initiatives where trusted ecosystem partners co-invest in supply chain resilience, SME, IC design enablement, and workforce development. A long-time TSIA member, Taiwan Semiconductor Manufacturing Company (TSMC), recently announced plan to invest up to $165 billion to build a major advanced semiconductor manufacturing cluster in Arizona, exemplifying this type of high-impact cooperation.

Taiwan has proven to be a reliable supplier, even amid global disruptions such as the COVID-19 pandemic. Its operational consistency enhances U.S. emergency readiness and security. Targeted U.S. incentives, such as advanced manufacturing investment credit, and the pursuit of a U.S.-Taiwan tax agreement would encourage Taiwan-based firms to expand their footprint in the U.S. This would further catalyze domestic ecosystem development, drive job creation, stimulate technology innovation, strengthen the semiconductor supply chain across the U.S., and foster long-term shared prosperity.

5. Observations Aligned with §705.4 Criteria of the Trade Expansion Act

- **Demand:** Taiwan supports U.S. needs for both advanced and mature-node semiconductors used in diverse applications like consumer electronics, robotics, automotives and infrastructure.
- **Domestic Capacity:** While U.S. domestic manufacturing capacity is expanding, it remains insufficient to fully meet market demands for both advanced and mature technology node semiconductors. Taiwan's ecosystem offers scalable, complementary capacity.
- **Human Resources:** Taiwan's experience in STEM workforce development, academic partnerships, and co-op programs can further strengthen U.S. semiconductor talent development and knowledge sharing.

- **Industry Growth:** The U.S.-Taiwan semiconductor partnership drives cost-efficiency and innovation for U.S. design houses, leading systems companies, and SME and material suppliers, and thereby bolsters the U.S. domestic ecosystem.
- **Critical Technologies:** Collaborating with Taiwan helps the U.S. maintain its leadership in AI, HPC and robotics.
- **Foreign Competition:** Taiwan advocates for transparency, IP protection, and fair competition. Collaboration with Taiwan enables high-volume, cost-efficient manufacturing that complements domestic efforts rather than displacing them.
- **Economic Welfare:** Restrictive trade measures increase costs, potentially undermining investment and onshoring momentum, stifling innovation, and reducing employment opportunities. In contrast, the U.S.-Taiwan semiconductor partnership fosters innovation, drives industrial growth, and supports sustained job creation.
- **Product Displacement:** Taiwan's semiconductor output—across both mature and advanced technology nodes—complements and supplements U.S. production instead of displacing it.
- **Supply Chain Resilience:** A structured U.S.–Taiwan framework ensures coordinated emergency response and redundancy for critical supplies.
- **National Security:** Taiwan's reliable IC design and manufacturing capabilities make it a trusted ecosystem partner in advancing U.S. security objectives.
- **Broader Risks:** Trade measures like tariffs risk severing collaboration and integration with trusted ecosystem partners, weakening U.S. technological leadership, slowing innovation, and increasing geopolitical fragmentation.

Conclusion

The synergy between the U.S. and Taiwan in the semiconductor industry is a cornerstone of U.S. technological advancement and global competitiveness. Taiwan's unique capabilities in semiconductor design, manufacturing, packaging and assembly have positioned it as a reliable ecosystem partner for U.S. leadership in cutting-edge applications like AI, HPC and mobile technology. Imposing tariff or other restrictions on semiconductors, SME and their derivative products would create uncertainty around this well-established synergy, increasing costs, diminishing demand, and limiting access to essential capabilities for leading U.S. companies. Such disruptions risk eroding the innovation advantage of U.S. firms, ultimately harming their competitiveness in rapidly evolving technology sectors.

Onshoring momentum is vital yet challenging. Rather than imposing tariffs, TSIA recommends co-investing with trusted partners in ecosystem resilience, including supply chain redundancy and workforce development. This would better support the expansion of U.S.-based production. Initiatives like TSMC's significant investment plan in Arizona, coupled with targeted U.S. incentives, would further accelerate the development of the

domestic semiconductor ecosystem, driving job creation and fostering long-term prosperity. Such policies would maintain robust international collaboration with trusted ecosystem partners like Taiwan to enhance this synergy for a resilient, secure, and innovation-driven semiconductor future.

Please contact Dior Chen (dior@tsia.org.tw) with any follow-up requests.

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