

Before the
Office of the United States Trade Representative
Washington, D.C.

In re

Request for Public Comments: China's Acts, Policies, and Practices Related to Targeting of the Semiconductor Industry for Dominance

Docket No. USTR-2024-0024
Docket No. USTR-2024-0025

COMMENTS OF
THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION (CCIA)

In response to the requests for comments, published in the Federal Register at 89 FR 106725 (Dec. 30, 2024),¹ the Computer & Communications Industry Association (CCIA) submits the following comments. CCIA is an international, not-for-profit trade association representing a broad cross section of communications and technology firms. For over 50 years, CCIA has promoted open markets, open systems, and open networks.²

I. Introduction

Addressing foreign countries' targeting of critical technology sectors for dominance, particularly if conducted through trade-distortive mechanisms, is a well-warranted exercise. Given the prevalence of foundational semiconductors across various industries, the U.S. government should continue to identify and respond to the risks that anticompetitive and non-market policies pose to American industry and workers, critical U.S. supply chains, and U.S. economic security.

However, the method of addressing this challenge outlined in the Federal Register Notice (FRN) – obtaining market-relevant information and consideration of tools USTR has at its disposal – is unfocused and misguided. Given both the design and rushed timeline envisaged in

¹ Office of the United States Trade Representative, *Initiation of Section 301 Investigation; Hearing; and Request for Public Comments: China's Acts, Policies, and Practices Related to Targeting of the Semiconductor Industry for Dominance*, 89 FR 106725 (Dec. 30, 2024), <https://www.federalregister.gov/documents/2024/12/30/2024-31306/initiation-of-section-301-investigation-hearing-and-request-for-public-comments-chinas-acts-policies>.

² For more, visit www.ccianet.org.

this investigation, it is also unlikely to provide a meaningful basis, either informational or analytic, for an effective policy response. The stated goals of the investigation, identifying and addressing the People’s Republic of China’s (China) non-market practices that pose economic and national security concerns for the U.S., can best be achieved through alternative policy tools rather than through this investigation.

II. Issues with the Investigation’s Scope and Objective

A key challenge of the foundational semiconductor market, particularly with respect to any remedies one might consider to address market distortions, is that trade with the United States is dominated not by the semiconductors themselves, which are imported at very low levels, but, rather, products incorporating them.

This investigation conflates the manufacturing of foundational semiconductors with their incorporation into downstream products, without clearly differentiating the two, despite their distinct market dynamics. The actors driving demand for semiconductors in downstream applications are highly diverse and consider a wide range of factors—many of which are unrelated to either the identity of the semiconductor manufacturer or the policies of any single government. These actors include Chinese companies producing for both domestic and foreign markets, but also foreign companies, including from both U.S. and allied countries, producing in China or nearby regions, targeting China or other foreign markets including the United States. By blurring the lines between these different stages of the semiconductor supply chain, the FRN risks diluting the investigation’s focus and undermining the effectiveness of any resulting policy actions.

The initiation of the investigation identifies a focus on “the impact of the PRC’s acts, policies, and practices on the production of silicon carbide substrates” and other wafers. However, the language of the notice is unclear as to whether the investigation will focus on China’s acts, policies, and practices related to wafer production, or only their impact on semiconductor production. While the notice seems to suggest the latter, it fails to provide any detail or clarity on what specific acts, policies, or practices the public should comment on, nor whether these policies themselves will be included in the investigation’s scope.

Additionally, the notice does not explain why this particular segment of the semiconductor value chain—specifically wafers—was selected for examination. The Biden

Administration’s own early-term analysis indicated that China is not a significant player in the wafer market, with a market share of less than five percent and very limited production capacity.³ By contrast, the same analysis identified upstream raw materials, particularly silicon and gallium, as areas where China has a greater potential for market dominance.⁴ Yet, the production of these materials is notably absent from the investigation’s scope, suggesting an arbitrary and incoherent focus in the investigation’s parameters.

The notice also states that the investigation will explore the relationship between China’s policies targeting “dominance” and several issues, such as “existing or threatened overcapacity,” “overconcentration of semiconductor production” in China, “dependencies and vulnerabilities” in “certain downstream industries” (without specifying which industries), and “harm to U.S. semiconductor producers and foundries.” However, these issues are ill-defined, complex and influenced by a wide range of factors, many of which fall outside of Chinese governmental control or influence. Without a more thorough explanation of these factors or a clear basis for their inclusion, the investigation risks misidentifying the root causes of these problems and misdirecting policy responses. For example, while clearly benefitting from governmental policies in the past, much of the current strength of the Chinese electronics industry today powering demand for foundational semiconductors lies in the vast ecosystem of engineering talent, design, manufacturing, warehousing, and transportation built up over decades that now provides China a competitive advantage, that cannot be easily or quickly diverted elsewhere through the use of trade remedies. To the extent that such diversion is infeasible, incentivizing the demand within China for U.S. foundational semiconductors produced outside of China must overcome not only the price advantage Chinese production enjoys but also the advantages of proximity to this ecosystem, a value that this investigation should also investigate.

III. China’s Targeting of the Semiconductor Industry for Dominance

The first substantive question in the FRN asks for public comment on China’s acts, policies, and practices “related to its targeting of the semiconductor industry for dominance.”

³ The White House, *Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth: 100-Day Reviews Under Executive Order 14017* 46 (2021),

<https://www.govinfo.gov/content/pkg/GOVPUB-PR-PURL-gpo156599/pdf/GOVPUB-PR-PURL-gpo156599.pdf>.

⁴ The White House, *Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth: 100-Day Reviews Under Executive Order 14017* 48-49 (2021),

<https://www.govinfo.gov/content/pkg/GOVPUB-PR-PURL-gpo156599/pdf/GOVPUB-PR-PURL-gpo156599.pdf>.

However, the notice does not clarify whether China is actually seeking such dominance, nor does it provide any detailed context or evidence to support the USTR’s assessment of this claim, other than a vague reference to “evidence.” For example, the one public policy cited, Made in China 2025, is more of a blueprint for import substitution than export dominance. If the “dominance” targeted in this investigation is within China (where the policy’s local content goals of 70 percent are indeed relevant), that suggests a market access target for this investigation that is very different from an export inquiry.⁵ This lack of specificity leaves significant ambiguity regarding the basis for the investigation. The lack of such clarity in this FRN undermines the transparency and effectiveness of the current investigation, leaving stakeholders with little understanding of the precise concerns driving the inquiry or the scope of relevant evidence.

In the absence of specific evidence, the notice suggests that China’s “targeting” of the semiconductor industry can be inferred from its pursuit of market share targets and efforts to “achieve indigenization and self-sufficiency.” However, recent evidence from other major markets indicates that these policy objectives are not unique to China, but rather are commonplace across the semiconductor sector. For instance, the European Commission, in its proposal for the European Chips Act (which has since been adopted), set a target of achieving a 20% global market share in semiconductors by the end of this decade.⁶ This effort is widely seen as an initiative to promote self-sufficiency within the European Union.⁷ Similarly, the Biden Administration articulated similar objectives on multiple occasions. Former Commerce Secretary Gina Raimondo, for example, highlighted that achieving specific capacity and market share targets (such as 20% for leading-edge chips) was a key metric for the success of the U.S. CHIPS and Science Act, frequently emphasizing the strategic importance of indigenizing “the entire silicon supply chain.”⁸ These examples suggest that the goal of achieving self-sufficiency and

⁵ It is unlikely that China will achieve even this domestic goal for foundational semiconductors. Although gains have been impressive, China’s global market share in this sector was reportedly only 31% in 2023, according to the source Rhodium. See Reva Goujon, Jan-Peter Kleinhans and Laura Gormley, *Thin Ice: US Pathways to Regulating China-Sourced Legacy Chips*, Rhodium Group (May 13, 2024), <https://rhg.com/research/thin-ice-us-pathways-to-regulating-china-sourced-legacy-chips/>.

⁶ European Commission, *European Chips Act*, <https://digital-strategy.ec.europa.eu/en/policies/european-chips-act>.

⁷ European Parliament, *Strengthening EU chip capabilities: How will the chips act reinforce Europe’s semiconductor sector by 2030?* (2022), [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733585/EPRS_BRI\(2022\)733585_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733585/EPRS_BRI(2022)733585_EN.pdf).

⁸ U.S Department of Commerce, *Remarks by U.S. Secretary of Commerce Gina Raimondo: Investing in Leading-Edge Technology: An Update on CHIPS Act Implementation* (Feb. 26, 2024),

targeting market share growth is not an inherently problematic or exclusive policy to China, but rather a common strategic aim pursued by multiple nations. By failing to address this broader context, the investigation risks framing China’s practices as uniquely aggressive, when in reality they reflect a widespread global trend in semiconductor policy.

Regardless of the value of such policy objectives, they are becoming increasingly common among the world’s largest economies given the strategic importance of the semiconductor sector. As such, the assertion that such objectives are indicative of “targeting” in a manner that is unreasonable or actionable under Section 301 is highly questionable. These policies reflect a broader global trend toward securing self-sufficiency and market share in critical technologies, making it difficult to single out China’s actions as uniquely aggressive or unfair. Consequently, the framing of these goals as “targeting” may not provide a solid basis for Section 301 remedies, especially when similar strategies are being pursued by other major economies.

IV. Anticompetitive and Non-Market Means Employed by China

The notice of initiation seeks comment on various “anticompetitive and non-market means employed by the PRC” in its alleged pursuit of “targeting,” such as market access restrictions, subsidies, and forced technology transfer. While many Chinese government acts and practices pose challenges for U.S. companies seeking to access and operate in the Chinese market, it is important to consider the specific context of the semiconductor sector.

With regards to “massive state support of industry,” such government interventions are not unique to China, as detailed above. While certain Chinese practices—such as market access barriers and subsidies—may be problematic, they reflect broader global trends in which numerous governments engage in similar strategies to support their domestic industries in strategic sectors. As recently noted by the National Bureau for Economic Research, “governments have played an important role in shaping the semiconductor industry” and have “used a variety of policy levers to foster a domestic semiconductor industry.”⁹ This is observed in all markets with a meaningful semiconductor sector - China is not “an outlier in its subsidy

<https://www.commerce.gov/news/speeches/2024/02/remarks-us-secretary-commerce-gina-raimondo-investing-leading-edge-technology>.

⁹ Pinelopi K. Goldberg et al., *Industrial Policy in the Global Semiconductor Sector*, National Bureau of Economic Research 10 (2024), https://www.nber.org/system/files/working_papers/w32651/w32651.pdf.

use; rather its level of support is comparable to other countries when considering the size of its market.”¹⁰ Similar observations are made with respect to other aspects of state support, such as international technology transfer facilitated by public agencies. Therefore, singling out China’s actions without considering the broader global landscape overlooks how similar strategies are being implemented elsewhere. It is also worth noting that foreign firms, representing a significant share of foundational semiconductor production in China,¹¹ are beneficiaries of many of China’s policies, including subsidies. Accordingly, a focus on discriminatory policies, rather than policies similar to those of other countries, might be more valuable. With regard to market access restrictions, it is important to note that a variety of factors affect the ability of U.S. companies to sell semiconductors and related machinery, materials, products, and services into the Chinese market. Among these factors, export restrictions imposed by the United States have become increasingly the primary barrier. Cascading and expanding controls have restricted larger segments of the Chinese market that U.S. companies are lawfully able to serve, particularly at the more advanced end of the technology spectrum where the United States is most competitive. Likewise, measures (formal and informal) adopted by China in response to these controls have further complicated the market access situation for U.S. chipmakers.¹² These significant elements of the current situation of bilateral trade in the semiconductor sector appear not to have been considered in any way in the decision to initiate this investigation.

Finally, while there may be economy-wide issues in China (such as political guidance, activities of state-owned or state-controlled enterprises, and intellectual property theft) that have implications for the semiconductor sector, these issues are structural, are not unique to the sector, and can—and arguably should—be addressed in a horizontal manner. This was precisely the approach taken in the Section 301 investigation into China’s Acts, Policies, and Practices

¹⁰ Pinelopi K. Goldberg et al., *Industrial Policy in the Global Semiconductor Sector*, National Bureau of Economic Research 4, 47 (2024), https://www.nber.org/system/files/working_papers/w32651/w32651.pdf.

¹¹ Jan-Peter Kleinhans, Reva Goujon, Julia Hess, and Lauren Dudley, *Running on Ice: China’s Chipmakers in a Post-October 7 World*, Rhodium Group (April 4, 2023), <https://rhg.com/research/running-on-ice/>.

¹² Sujai Shivakumar, Charles Wessner, and Thomas Howell, *Balancing the Ledger: Export Controls on U.S. Chip Technology to China*, Center for Strategic & International Studies 1, 6, 9 (2024), <https://www.csis.org/analysis/balancing-ledger-export-controls-us-chip-technology-china>.

Related to Technology Transfer, Intellectual Property, and Innovation, as well as in subsequent negotiations with China following the conclusion of that investigation.¹³

V. Overcapacity

The FRN makes references to “excess capacity” in China’s semiconductor manufacturing sector, but it does not indicate any methodology or data for calculating Chinese capacity. Given significant disagreement¹⁴ on the meaning and implications of this term, precision would be helpful. Even absent credible data, a few points should be noted regarding the semiconductor sector generally.

First, the semiconductor sector is very different from other sectors in which the U.S. Government has previously expressed concern about overcapacity, such as steel. Unlike in the steel sector, overall global demand for semiconductors is growing rapidly, driven by the increasing digitalization of all products and rapid advances in technology that require new and expanding computing capabilities. Indeed, “global demand for semiconductors is forecast to grow, resulting in a need for an increase in semiconductor manufacturing capacity of more than 50 percent between 2020 and 2030.”¹⁵ This was a key factor used by the prior administration to justify significant publicly funded investments aimed at growing domestic chipmaking capacity.

Second, and relatedly, the most pressing and prevailing recent concern among policymakers in the United States and around the world has not been excess capacity for semiconductor production, but under-capacity, which has led to supply shortages. Such shortages, particularly with respect to mature node chips used in industrial applications, were frequently cited by Biden Administration officials as justification for a range of U.S. government policies and programs.¹⁶

¹³ Office of the United States Trade Representative, *Findings of the Investigation into China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 of the Trade Act of 1974* (2018), <https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF>.

¹⁴ Paul Triolo, *Legacy Chip Overcapacity in China: Myth and Reality*, Center for Strategic & International Studies (April 30, 2024), <https://www.csis.org/blogs/trustee-china-hand/legacy-chip-overcapacity-china-myth-and-reality>.

¹⁵ Antonio Varas, Raj Varadarajan, Jimmy Goodrich, and Falan Yinug, *Government Incentives and US Competitiveness in Semiconductor Manufacturing*, Semiconductor Industry Association (2020), <https://www.semiconductors.org/wp-content/uploads/2020/09/Government-Incentives-and-US-Competitiveness-in-Semiconductor-Manufacturing-Sep-2020.pdf>.

¹⁶ U.S. Department of Commerce, *Biden-Harris Administration Announces Preliminary Terms with Texas Instruments to Expand U.S. Current-Generation and Mature-Node Chip Capacity* (Aug. 16, 2024),

Finally, and as explained further below, the notion of overcapacity is itself less suitable in the semiconductor sector, given the highly differentiated nature of semiconductor technology, the specialized nature of many chips, and the fact that (again, unlike steel) semiconductors are limited in the ease with which they can be interchanged in particular applications and for specific users.

VI. Potential for China’s Policies to Burden or Restrict U.S. Commerce in Semiconductors

A central question posed in the notice of initiation is whether China’s policies and practices in the semiconductor sector result in harm to U.S. semiconductor producers and foundries. There are several reasons why developments in China’s semiconductor sector are likely to have a limited impact on the pricing ability and commercial performance of producers outside China, particularly those in the U.S.

First, even though certain segments of the semiconductor market, such as DRAM, have behaved like commodities, others have become highly differentiated, with varying process technology and performance characteristics that render them non-substitutable in many applications.

Second, it is important to note that, even within the “foundational” portion of the semiconductor market that the notice indicates will be an initial focus of the investigation, there is a vast range of very different chips used in diverse and specialized applications. In many segments of the “mature node” market, U.S. producers and foundries simply do not have the capability to provide the required products, nor have they expressed any interest in developing these capabilities.

A final key factor that serves as a bulwark between the U.S. and Chinese markets is the expansive (and growing) range of U.S. national security measures that preclude U.S. and other Western companies from transacting with companies based in China and/or from using semiconductors sourced from China. China’s leading semiconductor companies are on one or more U.S. Government lists that effectively remove those companies from consideration as suppliers for major U.S. end users, and the evolving nature of these lists is such that end users

are increasingly avoiding sourcing chips from China as a precaution and for reasons of reputational risk, even where current rules do not prohibit transactions.¹⁷

Fundamentally, the most significant factors impacting the health and viability of the U.S. semiconductor industry emanate from within the United States itself, rather than from developments in China. In the U.S. government's estimation, the primary challenges to the growth of U.S. semiconductor production relate to capital costs, labor availability, permitting and other domestic factors, which, according to the Biden Administration's analysis, result in it costing 30% more to build a new fab in the United States than it does to build the same capacity in Singapore, South Korea, or Taiwan.¹⁸ Action under Section 301 will not address these core competitiveness issues.

VII. Potential for China's Policies to Burden or Restrict U.S. Commerce in Downstream Industries

The FRN posits that PRC acts, policies, and practices in the semiconductor sector could create “dependencies and vulnerabilities” for the United States, particularly in certain downstream industries. In the first instance, it is important to re-emphasize that, due to various geopolitical risks, reputational concerns, and legal constraints, the use of Chinese-fabricated chips in U.S. supply chains already faces limits and its share is likely to decline further. It is also the case that the current presence of Chinese-fabricated chips in U.S. supply chains is exceedingly low, indicating that PRC-sourced semiconductors are not positioned to create vulnerabilities for the United States.

More generally, in the semiconductor sector, the notion of U.S. dependence on China is at odds with the realities in the industry. As noted above, while there are limited areas (concentrated in upstream raw materials) where China dominates, in essentially every other segment of the value chain, it is China that faces significant vulnerabilities. The U.S.

¹⁷ Matteo Crosignani, Lina Han, Marco Macchiavelli, and André F. Silva, *Geopolitical Risk and Decoupling: Evidence from U.S. Export Controls*, Federal Reserve Bank of New York 2 (2024), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr1096.pdf?sc_lang=en.

¹⁸ Antonio Varas, Raj Varadarajan, Jimmy Goodrich, and Falan Yinug, *Government Incentives and US Competitiveness in Semiconductor Manufacturing*, Semiconductor Industry Association (2020), <https://www.semiconductors.org/wp-content/uploads/2020/09/Government-Incentives-and-US-Competitiveness-in-Semiconductor-Manufacturing-Sep-2020.pdf>.

Government has leveraged this dependence in a series of actions expressly directed at halting China's further development of chipmaking capabilities.

As a final point, while there is limited evidence suggesting that Chinese acts and practices in the semiconductor sector create dependencies and vulnerabilities for U.S. downstream sectors (and ample evidence to the contrary), it is highly questionable whether such dependence, even if it were to exist, would reasonably equate to a “burden or restriction on U.S. commerce” for purposes of the Section 301 statute.

VIII. Potential for Tariff and Non-Tariff Actions

It is difficult to envisage any scenario in which the imposition of tariffs or non-tariff import restrictions would remedy any actionable measures determined to exist as a result of the initiated investigation. For one, imports from China are already subject to extensive import restrictions, including tariffs—these include, as of January 2025, tariffs of 50% on Chinese semiconductors.¹⁹ Moreover, a key issue is the lack of clarity regarding the actual use of PRC-manufactured chips, which makes it difficult to accurately target and assess the impact of tariffs, especially for end-products like smartphones and cars that often contain 1,000 - 2,000 such chips. According to a report by the Department of Commerce's Bureau of Industry and Security 38% of end users report that their products contain chips from PRC-based foundries, 17% do not, and 44% are unsure.²⁰ Even companies that know the origin of the chips often cannot determine whether the chips were fabricated by the original design company or outsourced to a foundry - and are often unable to when they purchase components from distributors that consider detailed component information as proprietary. Accordingly, before any policy is instituted targeting such chips, the feasibility of such a measure and a thorough evaluation of the disruptions it could entail is in order. While PRC chips are widespread, they represent a small share of value—likely found in 66% of products sold, by value, yet only representing 2.8% of total chips consumed by

¹⁹ Office of the United States Trade Representative, *Notice of Modification: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation* (Sep. 18, 2024), <https://ustr.gov/sites/default/files/Section%20301%20FRN%20for%20Modifications%20for%205%20Additional%20Subheadings%20-%20Final%20Rev.pdf>.

²⁰ United States Department of Commerce, *Public Report on the Use of Mature-Node Semiconductors* 3 (2024), <https://www.bis.gov/media/documents/public-report-use-mature-node-semiconductors-december-2024>.

units, and 1.3% of total chips by value.²¹ For U.S. chip producers with foundries in China, chips produced there account for less than 2% of total chip sales.²² These complexities suggest that tariffs would be an ineffective tool for addressing the broader issues, as they would fail to target the relevant market dynamics or trade practices.

Instead of enacting tariffs to address any policies found actionable under Section 301, the U.S. should pursue both negotiations with China and cooperation with like-minded allies. Previously, the U.S. government engaged directly with China to seek the elimination of acts, policies, and practices found to be actionable in that administration’s Section 301 investigation. The result was an agreement that set out a series of binding commitments intended to address barriers to U.S. trade and investment and achieve greater balance in the U.S.-China bilateral trade relationship. In keeping with this approach, a productive avenue for addressing concerns identified in the initiation would be to resume negotiations with China on structural issues—such as subsidization and other state support, the activity of state-owned enterprises, and if it can be meaningfully defined, excess capacity—that can impact global markets in several industries. Additionally, the U.S. should seek enforceable commitments from China to refrain from imposing restrictions (formal or informal) on the importation and use of U.S.-sourced semiconductors. It would also be crucial to examine late-stage executive actions developed without appropriate stakeholder and Congressional consultation, that significantly curtail sales by U.S. semiconductor companies to myriad customers in non-China markets, essentially capping the growth of the export potential for U.S. industry.

Finally, to address issues that truly are impeding U.S. investments and international competitiveness in the semiconductor sector, the U.S. government should examine areas where domestic regulatory reform could reduce the costs and burdens of conducting manufacturing activity in the United States. This should include examining the conditions imposed by the executive branch upon recipients of CHIPS Act incentives, which exceed those established by Congress in the law itself.

²¹ United States Department of Commerce, *Public Report on the Use of Mature-Node Semiconductors* 4 (2024), <https://www.bis.gov/media/documents/public-report-use-mature-node-semiconductors-december-2024>.

²² United States Department of Commerce, *Public Report on the Use of Mature-Node Semiconductors* 1 (2024), <https://www.bis.gov/media/documents/public-report-use-mature-node-semiconductors-december-2024>.

IX. Conclusion

While the U.S. government should continue to identify and address unreasonable and discriminatory practices targeting the semiconductor industry, this investigation suffers from a poorly defined scope and would fail to address its goals through the remedies available under Section 301. U.S. economic and national security interests in the semiconductor sector are better served through policies and programs other than a Section 301 investigation.

Respectfully submitted,

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