

Comments Concerning Proposed Modification of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Docket No. USTR 2019-0004 June 2019

Executive Summary

Semiconductors are the building blocks of the modern economy, making possible the countless devices on which we rely. The United States currently possesses market and technological leadership in the manufacturing technology, equipment, and materials that enable semiconductor production. This advantage is afforded by superior intellectual property, which is paramount for the electronics manufacturing supply chain. While we appreciate the goal of better protecting U.S. intellectual property, we believe ever escalating tariffs are a costly and illusive means to achieve protection of intellectual property or other goals of fair and balanced international trade.

The semiconductor manufacturing industry operates across the global economy and is heavily reliant on trade. Over the last 15 years, companies in this sector have exported, on average, more than 80 percent of what is produced domestically. As a result, the United States holds a trade surplus in semiconductor equipment globally, and even bilaterally with China. In this industry, trade and innovation are intrinsically intertwined. Indeed, a change to either affects the other; without trade opportunities, innovation dries up, and without innovation, opportunities to export slow.

While there is a belief that items on the tariff list can be sourced from other countries or even produced domestically, this approach completely discounts the complexity of the global supply chain. Many items central to the semiconductor manufacturing process are not available, in terms of quality or cost, from domestic sources or foreign, non-Chinese sources. Further, a fundamental revamp of supply chains is simply not feasible. This would be an expensive, time-consuming, and resource-intensive effort—one that would harm U.S. companies and ultimately fail.

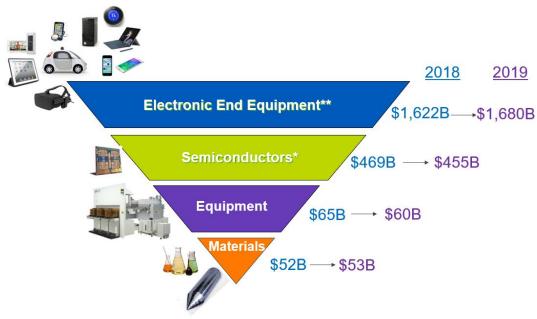
About 30 tariff lines in the proposed Section 301 tariffs directly impact the semiconductor supply chain, and together, these tariff lines will collectively cost our more than 430 U.S. members millions annually in additional duties. These tariffs will reduce exports, increase costs, and introduce significant uncertainty. Further, most problematic is that these limits on global commerce will limit innovation, potentially raise prices and put thousands of high-paying and high skill jobs at risk. The continued increase in tariffs will not achieve the intended goal. Because tariffs on the semiconductor industry are especially pernicious for the United States, we request that these tariff lines (full list below) be removed from the proposed list.



SEMI appreciates the opportunity to submit comments to the Office of the United States Trade Representative (USTR) to assist in preparation of action pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation.

Background

Established in 1970, SEMI is the leading global industry association that works to advance the technology and business of the electronics manufacturing supply chain. SEMI has over 2,100 members worldwide, including more than 430 American companies, and represents the full range of U.S. semiconductor companies, including designers, equipment makers, materials producers, and subcomponent suppliers.¹ While SEMI's membership includes many large companies, more than 85 percent of SEMI members are considered small or medium-sized businesses. Our member companies are the foundation of the \$2 trillion electronics industry. This vital supply chain supports 350,000 high-skill and high-wage jobs across the United States.²



Source: SEMI and WSTS* February 2019 and **IC Insights, February 2019

Semiconductors Are the Building Blocks of the Modern Economy

Semiconductors are the lifeblood of the modern economy, making possible the countless products on which we rely for business, communication, transportation, healthcare, research, and more. SEMI member companies provide the innovations and manufacturing technologies that enable faster, more powerful, and more affordable electronic systems and applications. The material and equipment segments in the semiconductor industry invest about 15 percent of revenue, or about \$20 billion in nominal terms, into R&D annually.³ R&D investment from just the top 10 device makers adds an additional \$36 billion of the over \$60 billion total spent by companies in that segment. This development, research has shown, has boosted economic growth, enhanced productivity, and driven innovation.⁴ These products have also been central



in helping to close the digital divide, bringing the power of the digital age to more people every day. This globally connected industry is vital to U.S. growth, productivity, and prosperity.

This industry has recently entered a new era of growth, ushered in by the continued development of emerging technologies and the creation of new technological segments, such as smart healthcare, autonomous driving, and the broader Internet of Things ecosystem. While mobile phones are a critical driver of this industry, currently about 10 percent of the chip supply are embedded into cars. Not only do these connected devices and applications require chips to operate, but also these products produce terabytes of data, which have to be processed and stored on servers, which need semiconductors. Emerging technologies, in which semiconductors will play a foundational role, will serve as a growth escalator for this industry.

However, the single most important part of the semiconductor manufacturing industry is its valuable intellectual property. Continued technological development requires significant resource commitments, and as such, strong global intellectual property protections are a top priority. The ability to leverage this intellectual property means that U.S. companies in this industry can engage in trade and reinvest revenue into research, which drives forward innovation. SEMI strongly supports efforts to better protect intellectual property and encourages greater enforcement of trade and investment rules aligned with the basic principles of protecting IP, open access to markets, eliminating forced technology transfers and refraining from market distorting subsidies.

China's Role in the Semiconductor Industry

Within the last decade, China has become an engine for global semiconductor consumption, fueled by product demand from a growing consumer base and its status as the center of electronic systems assembly. Semiconductor consumption in China continues to outpace the overall market growth and represents well over 50 percent of the global total. It has been reported that China imports more chips than oil. Semiconductor companies from around the world, including those in the United States, greatly rely on the fast-growing Chinese market.

While the rewards are great, these companies are aware of the potential risks. As a result, leading U.S. companies take proactive steps to protect IP when manufacturing in China. This includes keeping IP in the United States, preventing leading-edge manufacturing from occurring in China, and not partnering for any reason with companies that could be required to share IP. Importantly, it is the sales from these markets that help the U.S. semiconductor industry maintain its global leadership. Currently, leading edge semiconductor technology in the United States is about three generations (or about 10 years) ahead of Chinese leading edge, despite significant incentives. By stifling these global trade flows, that gap will surely shrink.

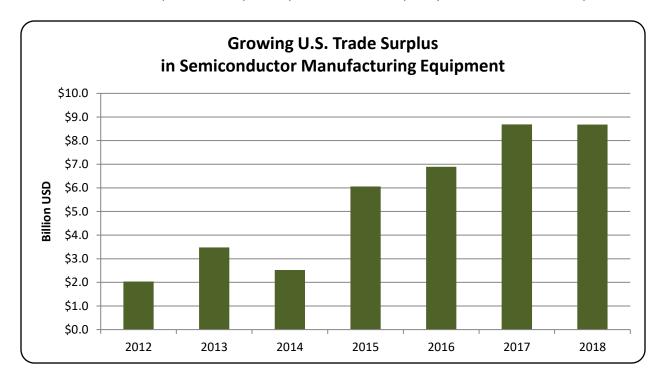
Supply Chains in the Semiconductor Industry

Trade has been central to the success of the semiconductor industry. By allowing companies to better tap into foreign markets, trade has enabled greater investment in research and development (R&D), which has fueled innovation and growth. In this sector that requires cutting-edge technology, innovation allows companies to adapt to increasingly complex market



demands. In this industry, trade and innovation are intrinsically intertwined. Indeed, a change to either affects the other; without trade opportunities, innovation dries up, and without innovation, opportunities to export slow.

The semiconductor manufacturing industry operates across the global economy and is heavily reliant on trade. The semiconductor equipment industry relies on complex and expansive supply chains that traverse the globe. This industry—perhaps more than most industries—is one in which constituent parts cross borders many times. Components are made all around the world, brought together and assembled into a single sub-system, which is then integrated into a larger system or tool which is used in the chipmaking process. Chips will also cross borders many times as they are integrated into various subsystems, ultimately finding their way into a final application. U.S. companies have invested significant resources to develop these supply chains to ensure that partner companies provide the best quality and most affordable products.



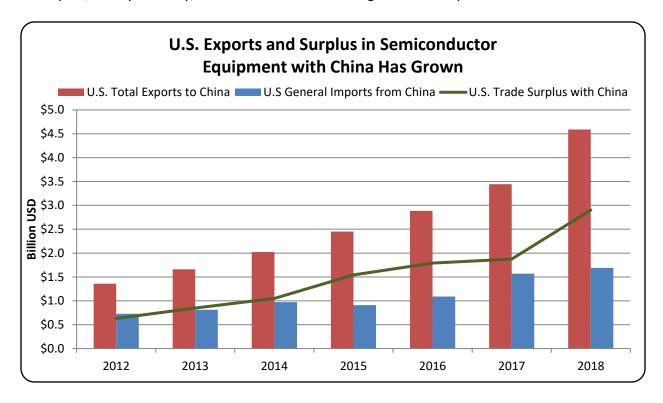
While other industries have largely moved offshore, the semiconductor manufacturing supply chain has remained in the United States. In fact, the United States remains the global leader in the \$60 billion semiconductor manufacturing equipment market and in the \$50 billion global semiconductor materials market. Across both segments, the United States has more than 40 percent of the global market share.⁷

This strong domestic industry has allowed U.S. firms to sell items that are produced in the United States overseas. Over the last 15 years, U.S. companies in this sector have exported, on average, more than 80 percent of what is produced domestically. This trend seems to be improving; in 2018, about 90 percent of U.S. semiconductor equipment sales were sent abroad.⁸ It is because of this dynamic that the United States has long held a trade surplus in the semiconductor equipment industry. In 2018, U.S. exports totaled \$25.2 billion, while imports



totaled \$16.5 billion, resulting in a \$8.7 billion surplus in this industry. The U.S. surplus has nearly quadrupled over the last 5 years. 10

Looking bilaterally with China, the United States had a \$2.9 billion surplus in this industry in 2018, which has more than tripled in the last 5 years. ¹¹ U.S. semiconductor exports to China have increased steadily over the past half-decade, with compound annual growth rates exceeding 25 percent. In 2018, the United States registered a trade surplus with China in only a handful of segments; the semiconductor manufacturing industry is not only one of these areas of surplus, but by industry, it also holds one of the largest trade surpluses. ¹²



Additionally, U.S. firms are tied to Chinese exports in many cutting-edge manufacturing industries. For semiconductors, many of the components that U.S. companies import from China are in fact made by other U.S.-owned companies. These companies only perform low-value manufacturing in China, while the high value-added work is completed in the United States. Recent government data suggests that more than 40 percent of U.S. imports from China in this sector were sourced from foreign firms, with the vast majority of these imports being produced by U.S. companies or companies that are themselves owned by U.S. companies that operate in China.¹³ Indeed, companies within the semiconductor industry are not required to use joint ventures and have not been subject to forced transfers of IP or technology. In fact, many U.S. semiconductor companies operate in China using a wholly foreign-owned enterprise (WFOE) structure, which leaves technology and IP in the hands of the U.S. company. In short, this simply means that U.S firms that have operations in China will inevitably suffer alongside Chinese competitors from the blunt application of trade action.



While there is a view that products on the tariff list can be sourced from other countries or even produced domestically, SEMI urges caution with this thinking. This approach completely discounts the complexity of the global supply chain. Companies in our industry rely on certain products that are produced or materials that are made, often by U.S. companies, in China. However, many items central to the semiconductor manufacturing process are not available, in terms of equivalent quality or cost, from domestic sources or non-Chinese foreign sources. Indeed, other sources may simply lack the spare capacity to meet market needs.

Accommodating a shift in production and a fundamental revamp of supply chains is simply not feasible. This would be expensive, time-consuming, and resource-intensive, and ultimately, this would be ineffective. Companies in the semiconductor supply chain have spent years developing cost effective and highly qualified suppliers across the globe. Manufacturing tools are extremely complex, precise, and difficult to manufacture, and it's not reasonable to simply replace a component from China that has been systematically designed into a tool with a component from another source. Materials producers are required to give customers notice of up to 18 months before a change in material is made. This is to qualify the new raw material, test it at the customer location, and gain customer acceptance. This means that if a company tried to substitute a new raw material—in addition to the time and money of finding a new supplier, obtaining the material, testing, and qualifying—they would still have to purchase the Chinese-sourced raw material for at least 18 months to produce the current product, during which time the company operating in the U.S. would have to either absorb the increased cost for these raw materials or pass it onto the customer, neither of which is a reasonable option to remain competitive. Changing suppliers, if available, would undoubtedly raise costs, which would negatively impact the ability of U.S. companies to export goods.

Impact of the Section 301 Tariffs

SEMI is concerned that continuing to escalate tariffs and thereby constricting global commerce broadly could be extremely harmful to advanced manufacturing sectors, and we believe that the imposition of a 25 percent tariff will not address concerns with China's trade practices.

We believe that these tariffs will undercut the ability of semiconductor companies with operations in the United States to sell products overseas. This will reduce U.S. exports and will potentially expand the U.S. deficit with China. Decreased exports mean decreased investment in R&D. Further, because of the globalized nature of the supply chain, the U.S. semiconductor companies that have operations in China would be directly and severely affected by these tariffs. Simply, these tariffs will result in increased costs and significant uncertainty.

Over 30 total tariff lines in the proposed Section 301 tariff list directly impact the U.S. semiconductor supply chain. These tariff lines cover products central to this industry, many of which are made by major U.S. semiconductor companies, and effectively enable this industry and the countless industries that depend on semiconductors. Estimates from our more than 430 U.S.-based companies suggest that these proposed tariffs, if implemented, will cost millions of dollars in additional duties and lost revenue. We request that these tariff lines be removed from the proposed Section 301 action. The full list can be found below.



We worry that these tariffs will impact the competitiveness of companies who operate and have invested in the United States. Costs for companies who operate within the U.S. in the electronics manufacturing supply chain will increase, while costs for those who operate outside of the U.S. will remain the same. However, most companies within the electronics manufacturing supply chain have varied and diversified supply chains with manufacturing sites around the world. Many non- U.S. companies have operations in the United States. and support other U.S. -based companies. These companies also employ many people in the United States who design, build, and sell equipment to both domestic and international companies. These sales fuel additional R&D work and other investments in the United States.

Given that only U.S. and Chinese companies are subject to these tariffs, companies with operations solely in other countries would avoid these tariffs. The net impact of this trade action will be that firms without U.S. operations receive an advantage, which is ultimately opposite of the intention. Currently, increased costs and growing uncertainty has caused companies to assess their existing supply chains, potentially putting thousands of U.S. jobs in our industry at risk. In this industry that requires constant innovation and cutting-edge development to meet modern market demands, this change, even if slight, will have long-term, compounding impacts. Simply, we believe that these tariffs will threaten future growth of our industry, put companies who have invested in the United States at a competitive disadvantage and stifle much needed innovation at a time when it is required, more than ever, to maintain a competitive advantage.

We are also concerned by the potential impact of further tariffs imposed by China. We expect that, should the situation worsen, more products from our member companies will be hit. It would be particularly easy for China, given their significant role in the globalized semiconductor supply, to target U.S. semiconductor products, which would be a serious threat to U.S. manufacturers. Chinese retaliation, in any form, could also stunt near-term U.S. innovation, fundamentally altering the development of advanced technologies in their favor for the foreseeable future. This, of course, is on top of the other trade actions, which have raised the costs for businesses. For instance, estimates suggest the Section 232 tariffs on steel and aluminum will cost individual SEMI member companies anywhere between \$5 and \$25 million annually, and the already implemented Section 301 tariffs will cost SEMI's collective membership more than \$700 million annually.¹⁵

Pathway to Address Concerns with China

SEMI acknowledges Chinese trade practices—intellectual property theft, forced technology transfer, restricted market access, and government subsidies—have caused harm to semiconductor companies, have distorted trade, and constitute serious violations of China's obligations to the World Trade Organization. Because prior U.S. efforts to eliminate these Chinese practices have been unsuccessful, tariffs offered a seemingly attractive new option to change Chinese behavior, but continuing tariff escalation breeds stalemate and constricts trade to the detriment of all.



No one wins a trade war. This tit-for-tat behavior will only continue to escalate, posing significant damage for all. SEMI believes that the overall aim of this investigation should be to produce an agreement with China that includes specific outcomes that remove the offending acts, practices, or laws. Further, any agreement should remove all tariffs that have been imposed in this process. SEMI's Global Trade Principles (copied below) can be used as a model of high-standard trade rules that should be a part of any agreement with China, and will benefit all parties.

It is critical for the Trump Administration to identify and outline the specific actions that the U.S. seeks from China to resolve these differences, while also ensuring that China commits to this agreement and is enforceable. Criticism related to unfair Chinese trade practices is not exclusive to the United States, and other countries face similar burdens. A key component of this strategy is engagement with allies and other trade partners to encourage China to agree to a deal that includes high standards. Working multilaterally, either through the World Trade Organization or a less formalized group of like-minded countries, increases the likelihood of success in this negotiation and adherence to the agreement. Other major economies have already shown their willingness to engage with the United States on China trade issues. We believe that this approach can be successful in changing Chinese policies. Acting unilaterally threatens the competitiveness of all companies and even opens these companies to retaliatory action. Working with like-minded countries will lessen the risk of these companies facing retaliatory action.

Looking more broadly, the semiconductor industry depends on the United State's ability to support, harness, and grow innovation, not simply curbing China's efforts. To better position companies within the U.S. to compete in the semiconductor industry, the Administration must support efforts to bolster American innovation and technological development. As outlined in the President's Council of Advisors on Science and Technology (PCAST) working group report titled "Ensuring U.S. Leadership and Innovation in Semiconductors" released in January 2017, on which SEMI's President and CEO Ajit Manocha was a member, the United States needs to run faster than other countries. ¹⁶ This means greater investment in federal research and development, more public-private partnerships, promoting skills development, and attracting more people to fill high-skill job openings in this industry.

Conclusion

As intellectual property is the crown jewel of the semiconductor industry, SEMI supports efforts to better protect our valuable technologies, and we respect the Administration's willingness to engage on this front. However, this approach, which has led to the growing threat of a trade war, will result in disproportionate economic harm and the stifling of American innovation. These new tariffs will inflict damage, such as a shift in the supply chain away from the United States and reduced R&D investment in the U.S. while expediting the growth of the innovation ecosystem in China and causing price increases which will likely result in reduced foreign sales and job losses. SEMI believes all stand to benefit by supporting a vibrant global electronics



industry supply chain and by anchoring any trade deal to global standards such as those outlined in SEMI's Global Trade Principles.

https://www.mckinsey.com/~/media/mckinsey/dotcom/client_service/semiconductors/issue%204%20autumn%2 02014/pdfs/mosc2014_by_the_numbers_rnd_productivity_in_the_semiconductor_industry.ashx, September 2014.

¹ "About SEMI," http://www.semi.org/en/About, May 2019. A full list of SEMI members can be found here: http://www.semi.org/en/Membership/MemberDirectory.

² "Trade Policy," SEMI, http://www1.semi.org/en/trade-policy, May 2019.

³ "IP Challenges for the Semiconductor Equipment and Materials Industry," SEMI, http://www.semi.org/sites/semi.org/files/docs/2012 IP White Paper V2 SupAdd.pdf, October 2012; Aaron Aboagye, Dorian Pyle, and Alexander Silbey, "By the numbers: R&D productivity in the semiconductor industry," McKinsey,

⁴ "Top 10 Semiconductor R&D Spenders Increase Outlays 6% in 2017," IC Insights Research Bulletin, http://www.icinsights.com/data/articles/documents/1045.pdf, February 16, 2018.

⁵ Jonathan Davis, "SEMI Update: Driving to the Future" Presentation to IEEE-CNSV, October 2017.

⁶ Adam Minter, "Why Can't China Make Semiconductors?" April 29, 2018,

https://www.bloomberg.com/view/articles/2018-04-29/why-can-t-china-make-semiconductors

⁷ "Trade Policy," SEMI, http://www1.semi.org/en/trade-policy, May 2019.

⁸ This is based on data collected and analyzed by SEMI, May 2019.

⁹ Based on data from the U.S. International Trade Commission's Dataweb portal.

¹⁰ SEMI calculations based on data from the U.S. International Trade Commission's Interactive Tariff and Trade DataWeb, May 2019.

¹¹ SEMI calculations based on data from the U.S. International Trade Commission's Interactive Tariff and Trade DataWeb, May 2019.

¹² SEMI calculations based on data from the U.S. International Trade Commission's Interactive Tariff and Trade DataWeb, May 2019.

¹³ SEMI calculations based on data from the U.S. Census Bureau's "NAICS Related Party Database," June 2019.

¹⁴ This is based on internal analysis by member companies, which was then provided to SEMI.

¹⁵ This is based on internal analysis by member companies, which was then provided to SEMI.

¹⁶ President's Council of Advisors on Science and Technology, "Report to the President: Ensuring Long-Term U.S. Leadership in Semiconductors," Executive Office of the President, January 2017,

https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_ensuring_long-term_us_leadership_in_semiconductors.pdf



Proposed Tariff List with SEMI Member Company Impact Proposed Modification of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Docket No. USTR 2019-0004 June 2019

HTS Code	Description
3926.90.99	Other articles of plastic, nesoi
	Tubes, pipes and hoses of vulcanized rubber other than hard rubber, not
4009.12.00	reinforced or combined w/other materials, with fittings
	Stainless steel, welded, w/circ. x-sect & ext. diam. 406.4mm or less, tubes,
7306.40.50	pipes, hollow profiles, w/wall thick. of 1.65 mm or more
7318.16.00	Iron or steel, nuts
7606.12.30	Aluminum alloy, plates/sheets/strip, w/thick. o/0.2mm, rectangular
7609.00.00	Aluminum, fittings for tubes and pipes
8301.10.40	Padlocks, base metal, not of cylinder or pin tumbler construction
	Base metal locks (o/than padlocks, locks for motor vehicles or furniture,
8301.40.60	luggage
8301.60.00	Base metal parts of padlocks, other locks, and clasps and frames with clasps
8302.42.30	Iron or steel, aluminum, or zinc mountings, fittings & similar articles
8443.99.25	Parts and accessories of printers, nesoi
8471.30.01	Portable automatic data processing machines
	ADP machines, nesoi, entered as a system (consisting of a central
	processing unit,
8471.49.00	an input unit, and an output unit)
	Sound recording and reproducing apparatus using magnetic tape, optical
8519.81.40	media, or semiconductor media
8523.29.90	Pre-recorded magnetic media other than tape, nesoi
8523.41.00	Unrecorded optical media
8523.51.00	Semiconductor media, solid state non-volatile storage devices
	Discs, tapes, solid-state non-volatile storage devices, "smart cards" and
8523.80.20	other media for the recording of sound or of other phenomena, whet
8525.80.40	Digital still image video cameras
	Color video monitors w/flat panel screen, video display diagonal n/ov 34.29
8528.59.25	cm, not incorporate VCR or player
	Electrical filament lamps nesoi, designed for a voltage not exceeding 100 V,
8539.29.30	excluding ultraviolet and infrared lamps
	Electrical filament lamps, designed for a voltage exceeding 100 V, of a
8539.29.40	power exceeding 200 W
8539.50.00	Light-emitting diode (LED) lamps
9025.80.35	Hygrometers and psychrometers, non-electrical, non-recording



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	Instruments and apparatus, other than electrical, for measuring or checking
9026.20.80	the pressure of liquids or gases
	Nonelectrical instruments and apparatus for measuring or checking
9026.80.60	variables
	Watches (excl. wrist watches) nesoi, electrically operated, with opto-
9102.91.20	electronic
9608.10.00	Pens, w/ball point



10 Principles for the Global Semiconductor Supply Chain in Modern Trade Agreements

The global semiconductor industry, which enables the \$2 trillion electronics market, is built on international commerce and vast networks of complex supply chains. SEMI stands strong for free trade and open markets, and roundly supports efforts to increase market access and tap into more foreign economies.

Free trade agreements reduce tariffs, which result in cost savings and productivity gains. But the benefits of modern free trade agreements extend well beyond tariff reduction. Indeed, trade deals enhance global trade rules that enable companies to innovate and compete fairly on a level playing field. SEMI urges policymakers across the globe to maintain high standards in modern trade agreements, including these principles:

1. Affirm principles of non-discrimination.

Non-discriminatory treatment is a central tenet of the global trading system. SEMI strongly believes that any trade deal should provide that all products from a party to the deal cannot be put at a competitive disadvantage in any other party's market. Related, any agreement must be fully compliant with the World Trade Organization's rules.

2. Maintain strong respect for intellectual property and trade secrets through robust safeguards and significant penalties for violators.

Protection for intellectual property are essential for the semiconductor industry. These standards enable the ability to innovate and grow. SEMI supports robust copyright standards, strong patent protections, and regulations that safeguard industrial design. SEMI also strongly supports rules that preserve trade secrets protection, including establishing criminal procedures and penalties for theft, including by means of cyber theft.

3. Remove tariffs and end technical barriers on semiconductor products.

Parties should eliminate tariffs and technical barriers on semiconductors and all technology products that rely on electronic chips. This includes establishing permanent duty-free treatment on all digital transmissions. Removing tariffs and technical barriers is crucial for businesses, especially for small and medium-sized enterprises, in penetrating new markets. Related, any trade deal should open markets for services providers, ensuring that all face fair and transparent treatment.

- 4. Simplify and harmonize the customs and trade facilitation processes.
 - The trade deals should include strong commitments on customs procedures and trade facilitation to ensure that border processing will be quick, transparent, and predictable. The parties should also work to use electronic customs forms to expediate customs processing.
- 5. Combat any attempts of forced technology transfer.

All trade deals should have clear and firm rules that prohibit countries from requiring companies to transfer their technology, intellectual property, or other proprietary information to persons in their respective territories.

6. Enable the free flow of cross-border data.



In today's global economy, all industries, including the semiconductor industry, rely on the free flow of data. Countries should refrain from putting in place unjustifiable regulations that limit the free flow of information, which simply serve to curb innovation and impact growth. SEMI supports provisions that enable the movement of data, subject to reasonable safeguards for privacy and other protections.

- 7. Eliminate forced data localization measures.
 - Many countries have created laws that require physical infrastructure and data centers in every country they seek to serve, which add unnecessary costs and burdens. Forward-looking policies should eliminate the use of forced data localization measures.
- 8. Harmonize global standards to achieve "one standard, one test, accepted everywhere". Businesses should not have to face different standards for each market they serve. Global standards, driven by industry, should be market-oriented, and there should be strong commitments on transparency, stakeholder participation, and coordination.
- 9. Create transparent rules for state-owned and -supported enterprises to ensure fair and non-discriminatory treatment.
 - SEMI supports a trade deal that contains robust commitments to ensure that state-owned and -supported enterprises compete based on performance, quality and price, as opposed to discriminatory regulation, opaque subsidies, favoritism, or other tools that artificially benefit state-backed businesses.
- 10. Establish protections for companies and individuals that respect privacy while also balancing security.

Any trade deal should have firm consumer protections, including privacy, that enables ease of use, but also does not forgo security. SEMI supports efforts to use encryption products in support of this venture and also believes that parties should work to advance efforts on cybersecurity through self-assessment, declaration of conformity, increased cooperation and information sharing, all of which will help prevent cyber-attacks and stop the diffusion of malware.

Revenue from the global semiconductor industry is expected to exceed \$1 trillion by 2030. Achieving this milestone will only be possible through trade and greater market access. Without trade, this industry, global innovation, and the broader global economy, will face dire consequences.