

**Comments from SEMI on the Interim-Final Rule Amending General Prohibition  
Three (Foreign-Produced Direct Product Rule) and the Entity List  
RIN 0694–AH99, Docket No. BIS 2020– 0011  
July 14, 2020**

SEMI is pleased to provide comments to the Department of Commerce’s Bureau of Industry and Security (BIS) regarding the impacts of this interim-final rule amending General Prohibition Three (Foreign-Produced Direct Product Rule) and the Entity List.

### **Background**

Established in 1970, SEMI is the leading industry association working to advance the technology and business of the global electronics manufacturing supply chain. SEMI has more than 2,100 members worldwide, over 400 in the United States, and represents the full range of U.S. semiconductor companies, including manufacturers, equipment makers, materials producers, and subcomponent suppliers. While SEMI’s membership includes many large companies, more than 85 percent of SEMI members are considered small 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. These companies underpin the U.S. economy and empower U.S. technological leadership.

### **Discussion**

SEMI has consistently recommended the pursuit of multilateral export controls that apply concurrently to exports from other trading partners over unilateral U.S. controls which disproportionately impact U.S. exports and create unique disincentives to the purchase of U.S.-origin items. A multilateral approach is essential when foreign availability exists in order for any controls to effectively contribute to national security interests. If the controlled items reach parties of concern via non-U.S. suppliers, U.S. national security interests are not served, and U.S. jobs are lost as U.S. exports are merely replaced by non-U.S.-origin items.

SEMI appreciates BIS' efforts "to narrowly and strategically target"<sup>1</sup> new controls and minimize unintended commercial harm to exports of U.S.-origin semiconductor design software and manufacturing equipment. Media reports earlier this year indicated BIS was considering large-scale changes to the foreign-produced direct product and de minimis rules which could have caused significant and widespread disruption to the semiconductor industry. This regulation's focus on specific parties that are on the Entity List thus limits its direct impact. While SEMI appreciates BIS' efforts to keep new controls narrowly-focused, these new unilateral controls nonetheless create strong disincentives to purchase U.S.-origin semiconductor manufacturing equipment and design software, which are likely to harm the industry over time and undercut the controls' contributions to U.S. national security and foreign policy.

#### I. The Regulation Asserts Novel Extraterritorial Jurisdiction and May Invite Similar Assertions from Other Nations

The regulation is a novel and significant expansion of U.S. jurisdiction over foreign-made items which do not contain a de minimis amount of controlled U.S. content and which are not the direct products of national security-controlled U.S. technology, but are instead the direct products of technology that is not controlled multilaterally. The U.S. has opposed efforts of other nations to assert extraterritorial jurisdiction in other contexts; the regulation may undercut such U.S. efforts in the future. Furthermore, it may lead to similar assertions of extraterritorial export control jurisdiction, potentially to the detriment of U.S. companies. For example, on June 28, 2020, a new draft of China's Export Control Law was submitted to the Standing Committee of the National People's Congress for a second review ("Second Review Draft"). This Second Review Draft would apply the law extraterritorially, an assertion of jurisdiction that was not included in the first draft published in December 2019.

#### II. The Regulation Creates Strong Disincentives to Purchase U.S.-Origin Items

The regulation creates new license requirements for the export of items that are the direct products of U.S.-origin items that may have been exported years ago and are located outside the United States. By effectively limiting the ways companies that purchased U.S.-origin software and equipment can use those items, the regulation creates a unique disincentive for future purchases of such items by creating doubt about their permitted future uses. No other nation imposes similar restrictions on their exports. For example, with a choice between 1) U.S.-origin equipment or software that now cannot be used to produce items for certain

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<sup>1</sup> <https://www.commerce.gov/news/press-releases/2020/05/commerce-addresses-huaweis-efforts-undermine-entity-list-restricts>

customers and may be further limited in the future, or 2) non-U.S. origin equipment or software that is not similarly restricted, a semiconductor manufacturer is likely to prefer non-U.S. options that can be used with fewer or no such limitations. The precedent created by the regulation to impose new license requirements on items that have long since been exported from the United States creates doubt among semiconductor manufacturers that U.S. suppliers and U.S.-origin items are reliable components of their supply chains. Expected efforts by semiconductor producers to reduce or remove uncertainty are likely to contribute to a reduction in purchases of items to which new license requirements are directly applied and auxiliary U.S.-origin equipment and materials.

### III. Sales of U.S.-Origin Items Have Been Lost, Harming U.S. Technological Leadership and Undermining the Regulation's Effectiveness

By creating disincentives to purchase U.S.-origin items and in conjunction with other policy changes BIS has implemented, the regulation is likely to erode the competitiveness of U.S.-origin items and contribute to customer efforts to avoid or “design out” U.S.-origin products and technology. With over 86 percent of semiconductor equipment<sup>2</sup> and 89 percent of semiconductor materials<sup>3</sup> shipped to facilities outside the United States, access to export markets is essential to these segments of the semiconductor industry and is the foundation of U.S.-headquartered companies' leading market share positions in both the equipment and design software segments. Exports of U.S.-origin equipment alone exceed \$20 billion per year, roughly one-third of the global equipment market. Already, with only a few responses, SEMI members report \$17 million in lost sales due to the regulation and the trend is likely to continue as its ramifications become fully apparent. Importantly, these are not lost sales to Huawei and its affiliates, but to companies in the semiconductor supply chain seeking to avoid the uncertainty the regulation creates for U.S.-origin items.

If U.S.-origin items are considered unreliable and designed out of overseas supply chains, continued U.S. leadership in semiconductor devices, equipment, design software and materials will be jeopardized. The potential loss of essential foreign revenue needed to maintain research expenditures and compete at the leading edge of technology will make U.S. exporters even less competitive and further shift market share away from U.S. exports. The technological leadership position of U.S.-origin equipment and design software has been cited by officials as an important factor supporting the regulation.<sup>4</sup> However, by leveraging this position with a

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<sup>2</sup> <https://www.semi.org/en/news-resources/press/2019-global-semiconductor-equipment>

<sup>3</sup> <https://www.semi.org/en/news-resources/press/global-semiconductor-materials-market>

<sup>4</sup> See: <https://www.state.gov/briefing-with-under-secretary-for-growth-energy-and-the-environment-keith-krach-science-and-technology-adviser-to-the-secretary-mung-chiang-and-assistant-secretary-for-international-security-and-n/> Under Secretary of State Krach: “With respect to the cutting edge of chip technology, the Chinese technology

unilateral control, the regulation is likely to contribute to the demise of U.S. leadership in these segments, reducing the effectiveness of the rule and harming U.S. exporters with little long-term, positive impact on U.S. national security.

#### IV. Unilateral Controls are Likely to Complicate Efforts at Multilateral Controls

While policymakers generally agree that unilateral controls are inferior to multilateral controls, the potential for unilateral controls to impede the development of multilateral ones can be overlooked. As discussed above, unilateral controls in the face of foreign availability generally lead to the substitution of U.S.-origin items in favor of non-U.S.-origin items that are not similarly controlled. Over time, this leads to increasing market share for non-U.S.-origin items and decreased market share for U.S.-origin items. As the market share of non-U.S.-origin items increases, trading partners who may be considering applying controls similar to those imposed by the United States may become less willing to do so. For example, if country A's market share in semiconductor equipment grows from 10 to 20 percent as a result of unilateral U.S. controls, new controls imposed by that trading partner will impact a greater share of exports than before U.S. controls distorted the market. Concurrent multilateral controls applied by all nations producing significant amounts of the items at issue are needed to eliminate these distortions. Instituting these new controls before other trading partners have agreed to and implemented similar changes may increase the difficulty of doing so now.

#### V. Proposed Rules Should be Issued Whenever Possible

SEMI seeks to work closely with BIS and other U.S. agencies to provide information regarding the structure, operations, business dynamics and competitive pressures of the interconnected but distinct segments of the semiconductor industry, including device makers (design firms, IDMs and foundries) equipment manufacturers, materials suppliers and sub suppliers. We value the opportunity to provide formal comments and the availability of government officials to receive information from industry and respond to industry questions and concerns. Interim-final rules limit the ability of industry to provide information responsive to specific policies

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companies of course would very much like to and are working very hard to try to indigenize all aspects of the supply chain. But at least for the moment and for at least some time to come, U.S. companies have still a very significant comparative advantage when it comes to the largely software-facilitated design tools that are involved in producing the very best chips. One might be able to find non-U.S. providers for design tools for making somewhat less sophisticated chips, but if you really want to play on the cutting edge of this technology area right now, you still for the most part have to use U.S. technology. And so frankly, it's taking advantage of that relative position that enables the direct product rule change that we have just rolled out to be effective, because it applies to anyone who wishes to use the very best tools in support of Huawei."

under consideration before they are announced and limit the ability of government officials to account for industry's recommendations and concerns before a regulation is issued. We understand national security and foreign policy concerns arise which need to be addressed before a formal notice and comment period can be completed. However, this rule and others recently issued by BIS without the opportunity for industry comments have the potential to impact a large portion of this complex and fiercely competitive global industry without an opportunity for industry to engage policymakers on key details and potential ramifications.

### **Closing**

SEMI appreciates the opportunity to offer comments on this interim-final regulation. We stand ready to assist BIS and all government agencies and officials to provide information and perspectives regarding the complexities of the globally integrated and interdependent semiconductor supply chain, and the potential effect of regulatory changes on this vitally important industry. Due to the significant, harmful and potentially far-reaching unintended consequences of the regulation, SEMI respectfully requests BIS suspend its application to provide time to determine the scope of its effects and develop an economic impact analysis.