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Locke Lord QuickStudy: BIS Highlights Risks in “Legacy” ?Semiconductor Supply Chains

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On December 6, 2024, the U.S. Department of Commerce’s Bureau of Industry and Security (“BIS”) released a report (the “Report”) highlighting significant risks associated with the use of mature-node semiconductor chips, also known as legacy chips, in U.S. critical infrastructure supply chains; legacy chips are generally low value and generic utility. The Report, based on data collected under the Defense Production Act, underscores challenges posed by the reliance on legacy chips manufactured in the People’s Republic of China (“PRC”). Rather than posing a dependency risk, these chips benefit from PRC government subsidies that can drive over-supply and low prices resulting in forcing non- PRC competition out of business.

Background

In January 2024, BIS issued surveys to a representative sample of U.S. industry to better understand the production and use of mature-node semiconductors sourced from PRC-based foundries. The survey aimed to identify how U.S. companies are sourcing these legacy chips, which are used in critical industries and U.S. Government supply chains. The analysis will inform U.S. policy to strengthen the semiconductor supply chain, promote a level playing field for legacy chip production, and reduce national security risks posed by the PRC.

Implications for U.S. Supply Chains

BIS officials emphasized the urgency to address growing use of low-cost chips:

- Under Secretary Alan F. Estevez called for actions to build diverse and resilient semiconductor supply chains, warning of challenges posed by PRC overproduction.
- Assistant Secretary Thea D. Rozman Kendler stressed the importance of using the findings to secure critical industries, including telecommunications, automotive, medical devices, and the defense industrial base.

While PRC-manufactured chips currently represent a small percentage of chips by count and value, low pricing and availability could drive overreliance on PRC semiconductors, creating significant economic and national security risks.

Low prices could increase use and build vulnerabilities in critical infrastructure supply chains. Moreover, subsidies for PRC foundries and pressure to use PRC-origin components in China continue to challenge the competitive landscape for U.S. suppliers. During the COVID-19 pandemic, PRC production shutdowns caused disruptions to

chip supply chains, including legacy chips, that dominoed into supply chain disruptions and price spikes in a wide variety of products, including automobiles, consumer appliances, and medical devices. These disruptions highlight the risks of overreliance on cheap PRC chips for critical components.

U.S. Resilience and Proposed Actions

Below are a few of the actions and proposals that the U.S. has and proposes to take to reduce semiconductor supply chain disruptions.

- The CHIPS and Science Act provides more than $50 billion of incentives to invest in domestic semiconductor manufacturing capacity, research, and innovation, and the semiconductor workforce.
- The U.S. Government proposes to implement Section 5949 of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, which will prohibit, starting in December 2027, U.S. Government departments and agencies from procuring products and services that include semiconductors products or services from certain PRC firms.
- President Biden announced a suite of tariffs to counteract PRC's unfair trade practices regarding technology transfer, intellectual property, and innovation across a variety of strategic sectors such as steel and aluminum, semiconductors, electric vehicles, batteries, and critical minerals. As part of that effort, the tariff rate on semiconductors is increasing from 25% to 50% by 2025.
- Lastly, the United States has coordinated with its trading partners to take a coordinated approach to protect against PRC's non-market overcapacity and economic coercion. The U.S. and the European Union have joined to (i) collect and share non-confidential information and market intelligence about non-market policies and practices, (ii) consult proposed retaliatory actions, and (iii) cooperate to implement measures to protect the legacy chip supply chain from unfair competition.

Conclusion

This paper is intended as a guide only and is not a substitute for specific legal or tax advice. Please reach out to the authors for any specific questions. We expect to continue to monitor the topics addressed in this paper and provide future client updates when useful.

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