AmCham EU
SPEAKING FOR AMERICAN BUSINESS IN EUROPE

Our position

EU Chips Act

AmCham EU speaks for American companies committed to Europe on trade, investment and competitiveness issues. It aims to ensure a growth-orientated business and investment climate in Europe. AmCham EU facilitates the resolution of transatlantic issues that impact business and plays a role in creating better understanding of EU and US positions on business matters. Aggregate US investment in Europe totalled more than €3.4 trillion in 2021, directly supports more than 4.9 million jobs in Europe, and generates billions of euros annually in income, trade and research and development.

American Chamber of Commerce to the European Union
Speaking for American business in Europe

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Executive summary

The European Union has released its EU Chips Act, an initiative aimed at developing and accelerating Europe's semiconductor supply chain. The proposal rightly focuses on research, development and innovation across all segments of the semiconductor supply chain. However, further clarification is needed on a range of issues, among them: pilot lines and the virtual design platform; support for developing quantum technology; the role of the Chips Joint Undertaking; first-of-a-kind status aimed at driving innovation; and the Commission's proposed role as a central purchasing body for public procurement. Furthermore, the initiative would benefit from greater participation of industry in nearly all categories, including standardisation requests, export controls and priority orders. Along with developing a stronger and safer semiconductor supply chain, the proposal has the opportunity to both implement protections for businesses' valuable intellectual property and strengthen the transatlantic relationship through engagement and cooperation on semiconductors and other strategic supply chains.

Introduction

The American Chamber of Commerce to the European Union (AmCham EU) welcomes the publication of the European Chips Act and its ambition to develop a more geographically diversified, sustainable and resilient semiconductor supply chain. This timely initiative addresses key trends such as:

- The EU's decades-long decline in semiconductor manufacturing;
- The ever-growing EU demand for and consumption of semiconductors, including leading-edge technologies for artificial intelligence, high-performance computing, autonomous driving, 5G, cloud and Internet of Things applications; and
- Europe's current dependency on Asia, which has led to chip shortages in past years.

The Chips Act focuses on the right priorities: investments in research and development and innovation (R&D&I), public funding of manufacturing capacity to increase EU supply chain resilience and a crisis response mechanism to strengthen the EU semiconductor ecosystem and talent pipeline. These objectives support the EU's ambition to boost its market share of semiconductor production to 20% of world production in value by 2030,[1] as set out in the European Commission's Digital Compass.

Semiconductors can be the testbed for renewed transatlantic cooperation. Notably, the Transatlantic Trade and Technology Council (TTC) can be a platform to collaborate on R&D&I initiatives and to improve international coordination on monitoring and response to future chip shortages, and supply chain disruptions, including the definition of tools such as certification, priority orders and export controls. EU-US cooperation is critical also in light of the announced objective of reaching 50% of global production together. Increasing capacity is essential to achieve production in leading, advanced and mature nodes.

While the EU's plan to mobilise €43 billion is encouraging, the financial breakdown remains vague, and the Member States will need to take concrete actions to allocate appropriate resources. Consistency with the guiding principles of the Commission's Communication[2] should be ensured throughout the law-making process.

[1] European Commission, 'Communication from the Commission: 2030 Digital Compass: the European Way for the Digital Decade '.

[2] European Commission, 'Communication from the Commission: A Chips Act for Europe'. 8 February 2022, https://ec.europa.eu/newsroom/dae/redirection/document/83086

Pillar 1 – Chips for Europe initiative

The proposal rightly focuses on R&D&I across all segments of the semiconductor supply chain. Co-locating manufacturing and design proved successful for technological leadership in the US, South Korea and Taiwan and has also been effective in other industries in Europe.

Pilot lines for prototyping and the virtual design platform will play an important role in driving innovation and experimentation, bridging the gap between lab and fab. However, the EU Chips Act does not provide the necessary detail on how the Commission envisions the creation of, access to and functioning of those pilot lines and the virtual design platform. AmCham EU would appreciate additional clarification from the Commission and stands ready to assist the co-legislators in defining these aspects.

The legislation's support for building advanced technology and engineering capacities for accelerating the innovative development of quantum chips is appreciated. However, the initiative would benefit from further details on how it will support design libraries, pilot lines and testing and experimentation facilities for quantum technologies, as well as the role of the Chips Joint Undertaking in this respect.

Europe has many strengths to build on, including some of the leading tool makers and research centres. It is the region that trains the highest number of master- and PhD-level graduates in science, technology, engineering and mathematics (STEM) disciplines. Where Europe has gaps (e.g. manufacturing), it should attract and develop partnerships with non-EU players.

Pillar 2 – Supply chain security

The definition of first-of-a-kind facilities appropriately offers investment opportunities and public funding to EU and non-EU companies that are driving innovation across the semiconductor value chain.
In relation to Open EU Foundries, while the amount should not be minimal, the proportion of own production capacity vs capacity for third parties should be market-driven and based on business needs that might change over time.

Furthermore, some clarifications would be welcome in the areas of: eligibility criteria for the recognition of first-of-a-kind status, especially on the commitment to invest in the next-generation chips; the extraterritorial requirements for priority orders from non-EU countries; and the possibility of revoking the above-mentioned status of new facilities.

New certifications for trusted, secure and green chips will be defined in the context of the new EU Standardisation Policy.[3] The semiconductor sector must provide perspective and expertise from the outset when developing the standardisation request for chips, including on scope and objectives, to avoid the disruption of well-established industrial development and production practices.

Any initiative seeking to establish the certification of trusted, secure and green chips should be voluntary, technology-neutral, risk-based and focused on concrete security outcomes. Certifications should also be based on market-driven international standards. Also, companies should not be prevented from having their chips certified and provided within the Single Market simply because they do not have their global headquarters in Europe. Companies should be able to rely on the most innovative and reliable chips regardless of their manufacturing site location.

[3] European Commission, 'Proposal for a Regulation amending Regulation (EU) No 1025/2012 as regards the decisions of European standardisation organisations concerning European standards and European standardisation deliverables'. 2 February 2022, https://ec.europa.eu/docsroom/documents/48599/attachments/2/translations/en/renditions/native

It is appropriate to acknowledge that first-of-a-kind facilities will contribute to supply chain security and hence are in the public interest. For this reason, faster procedures and permits are encouraged in the Chips Act; this approach is key to the timely and effective strengthening of the EU semiconductor ecosystem.

Pillar 3 – Monitoring and crisis response mechanism

The emergency toolbox described in the EU Chips Act recommendation to the Member States will require more industry participation in defining the requirements for new facilities. Practical implementation of export controls, information-sharing and priority orders will require industry input, as well as strong alignment with international standards, market-driven best practices and harmonised approaches across the Member States. Currently, there is little detail in the draft regulation on: the types of restrictive measures and how these would be imposed; the provisions on priority-rated orders and their interaction with similar extraterritorially applicable laws in third countries; and the particularities of information requests and how this data will be adequately protected.

Clarity should be provided on the specific functioning of the mechanism in Art. 22 for the Commission to act as a central purchasing body for public procurement, if and when applied. A common purchasing system could limit companies' access to semiconductor technology at competitive prices, including the most advanced technologies available in the global marketplace.

The Chips Act in Recital 45 refers to the possibility for the European Semiconductor Board to advise on the necessity of introducing an export control regime. AmCham EU supports a harmonised export control regime among like-minded transatlantic partners, including a fully aligned approach for exports of emerging technologies including semiconductors. Any measures limiting the export of semiconductors must be well-defined, justified, exceptional and proportionate, following consultation with stakeholders including the semiconductor industry.

As shown by the tangible consequences of the current shortages, chips are an essential component for numerous industries. Therefore, the EU Chips Act should be oriented towards ensuring the availability of semiconductors across sectors and for all types and generations of chips.

The Chips Act is also an opportunity to help businesses in the semiconductor value chain protect their valuable intellectual property (IP) integrated into chips. In particular, co-legislators should consider the introduction of specific provisions to stop companies from producing counterfeit products that put customers at risk and infringe on trade secrets.

Confidentiality measures should not only apply to the business data that authorities handle as part of Pillar 3. The European Parliament and European Council should include in Art. 27 legal safeguards against any circumvention of technological protection measures and use of confidential data contained in chips by malicious actors. Similar measures exist already for some other forms of IP, like copyright. Investments in state-of-the-art chip design rely on strong legal IP protection. Such safeguards would also significantly help in the fight against illicit products sold in the EU.

Governance, international collaboration and industry participation

The Industrial Alliance for Processors and Semiconductor Technologies should start its activities without further delay. In addition, more clarity on the Chips Joint Undertaking's governance and functioning would be beneficial.

The Commission should also consider more structured participation and regular interaction between the European Semiconductor Board and the private sector.

The TTC initiative is highly supported, and semiconductors should be the test case for renewed transatlantic relations by strengthening engagement and cooperation on this and other strategic supply chains. This partnership would: identify collaborative actions to improve resilience; ensure a level playing field for transatlantic foreign direct investments to support R&D and manufacturing; and build transatlantic collaboration in semiconductor R&D.

Moreover, as countries (e.g. Japan) outside the EU and US consider substantial investments in their domestic semiconductor supply chains, a coordinated strategy between international partners is essential to balance global market dynamics, national security needs and supply priorities, ensuring both immediate and long-term supply solutions for the semiconductor market. Without this coordination, there is a risk of continued global semiconductor market imbalance.

Finally, to advance innovation in the supply chain, public authorities and industry should foster a diverse and inclusive workforce by advancing STEM education for students at all levels and from all backgrounds. Governments should implement national strategies to increase the number of people, including women and other underrepresented minorities, graduating in STEM fields.

Conclusion

The current chip shortages have demonstrated the urgent need for action at both the EU and national level. The Chips Act is a positive development as Europe seeks to ensure the availability of semiconductors across sectors and for all types and generations of chips. With the above modifications and a stronger partnership with the private sector, the proposal has the potential to benefit both businesses and consumers alike.