# **Briefing note on the EU Chips Act to the Committee for Economic Affairs and Climate of the House of Representatives of The Netherlands**

## **11 May 2022**

## **General remarks on the EU Chips Act**

Intel welcomes and strongly supports the EU Chips Act package and its ambition to develop a
more geographically diversified, sustainable, and resilient semiconductor supply chain. The
initiative is timely to address key trends such as a) the EU decades-long decline in
semiconductor manufacturing; b) the ever-growing EU demand and consumption of
semiconductors, including leading-edge for AI, HPC, autonomous driving, 5G, cloud and IoT
applications; and c) the current dependencies on Asia that created the chip shortages
experienced over the past years. The Kearney report, published in November 2021, provides
further details about these trends.[[1]](#footnote-2)

The EU Chips Act focusses on the right priorities: increased investments in R&D&I, public
funding for first-of-a-kind manufacturing facilities in Europe to increase EU supply chain
resilience, and a crisis response mechanism to strengthen the EU semiconductor ecosystem
and talent pipeline.

While Intel is encouraged by the EU plan to mobilize €43 billion, the financial breakdown
remains still vague and will need concrete actions by Member States to allocate appropriate
resources.

Intel commends the EU Chips Act focus on “first-of-a-kind” front and back-end
manufacturing investments that do not currently exist in Europe. This will ensure public support is wisely allocated to the supply chain manufacturing gaps in the EU that are most critical from both a supply chain resilience and technology leadership viewpoint. We encourage the
Government of The Netherlands to ensure that the Communication[[2]](#footnote-3) principles are not diluted throughout the lawmaking process of the proposed Regulation.[[3]](#footnote-4)

## **Pillar 1 – Chips for Europe initiative**

Intel agrees with the focus on R&D&I across all segments of the semiconductor supply chain.
Emphasis on innovative design (with the creation of an EU design platform) is consistent with
the parallel goal of increasing production. In fact, co-locating manufacturing and design
proved successful for semiconductor leadership in the US, in South Korea and in Taiwan and
for other industries in Europe, as described in the Kearney report.[[4]](#footnote-5)

Pilot lines, which Pillar 1 supports, will play an important role in driving innovation with testing and experimentation. The EU Chips Act, however, does not provide details on how the EC envisions those pilot lines will be created, funded, and operated (including providing access to those lines by first-of-a kind facilities in Europe).

We commend the European Commission for the fact that the Chips for Europe initiative draws
attention to and drives investments in quantum chips capacities, the development of a
network of competence centers, and access to funds for startups, scaleups and SMEs.

Europe has many strengths to build on, including some of the leading tool makers and
research centers. It is the region that trains the highest number of master’s- and PhD-level
graduates in STEM disciplines. Where Europe has critical gaps in its supply chain (e.g.,
manufacturing, design), it should focus its resources on filling those gaps and partnering with global companies to develop leading-edge technologies.

## **Pillar 2 – Supply chain security**

The changes in state aid rules for first-of-a-kind production facilities in the EU will help attract them to Europe by leveling the playing field with other locations outside Europe that have been more competitive.

The EU Chips Act makes clear that first-of-a-kind projects in Europe that are supported by state aid packages can be submitted directly under the Treaty on the Functioning of the European Union. They will not be examined under existing rules applicable to Important Projects of Common European Interest (IPCEI) for which state aid approval can take a long time because application of those rules requires multiple projects and Member States. This is a major benefit of the EU Chips Act Package in fulfilling the Commission’s desires to develop a next gen state-of-the-art ecosystem.

Intel commends the Commission in its presumption under the EU Chips Act that first-of-a-kind
facilities are in the public interest (e.g., they provide supply chain security for the continent at
large) and acknowledge that they may have significant positive effects. The Commission has
clarified that those benefits may include, in addition to contributing to supply chain security,
an increasing qualified workforce, a positive impact on innovation, allowing access to
innovative products in geographic proximity and additional benefits that can be shared widely
and without discrimination across the EU economy. This guidance is very useful to investors and confirms that the EC recognizes large manufacturing investments can have both direct and indirect/induced benefits in terms of economic growth and employment.

In addition, we strongly support the EU Chips Act’s encouragement to Member States to
implement faster procedures for permits needed to construct and operate first-of-a-kind
facilities. This approach reflects the sense of urgency that the Commission has in reversing as
fast as possible the steady decline in the EU’s share of manufacturing capacity.

In relation to Open EU Foundries (one of two types of first-of-a-kind facilities), 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.

Some other clarifications would be welcomed in the context of eligibility criteria for the
recognition of first-of-a-kind facilities in the EU, specifically:

* The commitment to invest in the next gen chips is broadly worded. Intel assumes that
investments in Europe which make a marked contribution to the development of next
gen chips qualify, even if they are not directly connected to the investor’s production
facility that has been designated first-of-a-kind in the EU.
* The possibility of revocation of the status of a facility as first-of-a-kind is troubling
because, without clear and narrow standards for revocation that don’t yet exist, this
creates significant uncertainty that can undermine confidence in making major
manufacturing investments sorely needed for Europe’s technology future.
* The guarantee to be given that extraterritorial requirements for priority orders from
non-EU countries will not apply to the first-of-a-kind facility also is concerning despite
some of the exemptions included in the EU Chips Act package. Implementation of any
priority orders will need to be done very carefully and in a balanced way to not upset
the market and EU competitiveness. This issue is discussed again later on.

The EU Chips Act also includes product related requirements in the context of supply chain security. In fact, new certifications for trusted, secure and green chips will be defined in the context of the new EU Standardization Policy. It is important for the semiconductor sector to provide perspective and expertise from the outset of developing the standardization request for chips.

## **Pillar 3 – Monitoring and crisis response mechanism**

The emergency toolbox described in the EU Chips Act recommendation to Member States will
require more industry participation in the definition of requirements for new facilities in the
proposed Regulation. 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 harmonized approaches across Member States.

## **Governance, international collaboration, and industry participation**

We trust the Industrial Alliance for Processors and Semiconductor Technologies can start its
activities without further delay.

The EC may consider a more structured interaction between the European Semiconductor
Board and the private sector. Further clarity would also be beneficial with regards to the Chips
Joint Undertaking.

Intel strongly supports the Trade and Tech Council initiative and hopes that common
semiconductor challenges in the EU and US can be the testbed for renewed transatlantic
relations by strengthening engagement and cooperation on semiconductor and other
strategic supply chains to (1) identify collaborative actions to improve resilience; and (2)
ensure reciprocity for transatlantic FDIs to support R&D and manufacturing.

## Appendix - Intel in the Netherlands and in the EU

Intel has been operating in the Netherlands since 1978, headquartered at our logistics center in Schiphol-Rijk. This logistics warehouse supports all of Intel's customers in Europe and the Middle East. Intel main investments in the Netherlands include a $10M investment in QuTech, the quantum research institute of TU Delft and TNO to support research on quantum computing (started late 2015). In 2021 we acquired a Dutch Artificial Intelligence (AI) R&D company, Cosmonio BV, based in Groningen.

Intel innovations support large enterprise accounts in the Netherlands such as Shell, Philips, Booking.com, ING, the Port of Rotterdam, TNO and ASML. To enable manufacturing operations in the EU, Intel buys equipment, raw materials, and products from Dutch, German, and Italian companies amongst others thereby supporting the entire ecosystem.

Intel has a well-established supply chain within the EU supporting a network of indigenous suppliers, products and equipment, most notably with our longstanding partner and supplier ASML. As part of our long-term High-NA collaboration framework, Intel very recently announced an order of ASML’s new, advanced chipmaking tool, an extreme ultraviolet (EUV) high-volume production system.

Intel has been producing its chips in Europe, in an advanced manufacturing plant (or ‘fab’) in Ireland, for over 30 years. This is a cumulative investment of some $22 billion and has 4500 highly skilled employees. Currently the plant is being expanded so that the most advanced chips can be produced there also for third parties (foundry services).

In March 2022, Intel announced[[5]](#footnote-6) plans to invest as much as €80 billion in the European Union over the next decade along the entire semiconductor value chain – from research and development (R&D) to manufacturing to state-of-the art packaging technologies. Our investment is centered around balancing the global semiconductor supply chain with a major expansion of our production capacities in Europe. It includes plans to invest an initial €17 billion into a leading-edge semiconductor fab mega-site in Germany, to create a new R&D and design hub in France, and to invest in R&D, manufacturing and foundry services in Ireland, Italy, Poland and Spain. With this landmark investment, Intel plans to bring our most advanced technology to Europe, creating a next-generation European chip ecosystem and addressing the need for a more balanced and resilient supply chain.

R&D and design are critical to advance leading-edge semiconductor manufacturing. Europe is home to world-class universities, research institutes, and leading chip designers and suppliers, and Intel has academic collaborations in 15 Member States. Supporting this innovation cluster with additional investments in R&D and linking them to Intel’s leading-edge manufacturing plans will boost the circle of innovation in Europe, including providing small and medium enterprises (SMEs) better access to cutting-edge technologies.

1. Kearney report, “Europe’s urgent need to invest in a leading-edge semiconductor ecosystem”, Chapter 1 & 2, [https://www.kearney.com/documents/20152/272966470/Europes+urgent+need+to+invest+in+a+leadingedge+semiconductor+ecosystem.pdf/f3ec1e30-b8ff-b367-417c-62cf476342ea?t=1636491271000](https://www.kearney.com/documents/20152/272966470/Europes%2Burgent%2Bneed%2Bto%2Binvest%2Bin%2Ba%2Bleadingedge%2Bsemiconductor%2Becosystem.pdf/f3ec1e30-b8ff-b367-417c-62cf476342ea?t=1636491271000) [↑](#footnote-ref-2)
2. Communication from the Commission to the European Parliament, the Council, the European Economic and
Social Committee and the Committee of the Regions, A Chips Act for Europe, COM (2022), 8.2.2022, at 11
[hereinafter Communication]. [↑](#footnote-ref-3)
3. Proposal for a Regulation of the European Parliament and of the Council, establishing a framework of measures
for strengthening Europe’s semiconductor ecosystem (Chips Act), 2022/0032 (COD), 8.2.2022. [↑](#footnote-ref-4)
4. Ibid. page 19 [↑](#footnote-ref-5)
5. See <https://www.intel.com/content/www/us/en/newsroom/news/eu-news-2022-release.html#gs.1006nvy> [↑](#footnote-ref-6)