

Infineon Comments on the European Chips Act Package

29 April 2022

Infineon welcomes the opportunity to submit the comments below on the European Chips Act proposal of the European Commission with the aim of feeding into the legislative procedure.

Invest in capabilities advancing the European Green Deal. One of the objectives of the proposed Chips Act is to advance the green agenda of the Union. Semiconductors play a pivotal role in optimizing energy efficiency in the generation, transmission and consumption of electrical energy. Thanks to semiconductor-based solutions only from Infineon, as one single company, 33 times more CO2 can currently be avoided than is generated during production¹. Energy-efficient chips, thus, provide great potential for Europe to deal with climate change by switching electricity intelligently, minimizing energy consumption in numerous applications. In this light, public support provided under the Chips Act to boost Europe's semiconductor industrial base should in parallel accelerate the continent's green transition. Receiving public support for pilot lines and recognition of first-of-a-kind facilities should have clear energy efficiency criteria and a significant positive impact on semiconductor user industries such as energy, manufacturing, mobility and buildings, as the main targets of the European Green Deal.

Ensure that Europe's broader semiconductor ecosystem is involved in the Chips Act's implementation. The technology scope proposed in the Chips Act is encouraging as it addresses all spectrum of chips demanded by semiconductor user industries. Consistent with this principle, decisions by the Commission and the Member States in the implementation phase to support new pilot lines and first-of-a-kind facilities should be made after careful analysis of market demands in key sectors, e.g. automotive, industrial, consumer, energy and healthcare. Also, it is crucial to understand and use notions such as cutting-edge or next-generation semiconductors in the Chips Act's implementation correctly. Today, final electronics products include chips of various typologies such as logic/micro, memory, sensors, analog, power discretes and optoelectronics. A car can have up to 1000 different embedded chips of varying typologies. A shortage in any typology can cause severe delays in supplying the entire final product, be it a car or a piece of medical equipment. In addition, the European Commission and the Member States should ensure fair and equal treatment in access to new pilot lines developed under the Chips for Europe Initiative instead of prioritizing benefits to Integrated Production Facilities and Open EU Foundries as stated in the European Commission's proposal. There is no reason to deprioritize broader industry access to new pilot lines developed under the Chips for Europe Initiative.

Simplify the Chips Act's governance architecture and avoid delays in investment. The Chips Act proposes a complex governance structure with new (in)formal bodies such as the European Semiconductor Board (the Board) and its sub-groups, the Semiconductor Committee, the European Chips Infrastructure Consortium, National Single Points of Contact and National Competent Authorities. This is proposed in addition to existing organizations such as KDT JU Boards and the Alliance on Semiconductors and Processor Technologies (the Alliance). Such bodies, in particular the Board, are proposed to be given far-reaching competencies to implement the Chips Act. Yet, the roles and responsibilities of each proposed structure should be clarified in the legislative procedure and duplication of roles should be eliminated. The industry should play a more direct role in working together with public authorities. This can be ensured by institutionalizing the relationship between the Board and the Alliance. The Alliance and its working groups can play a pivotal role in providing the Board with industry insights and advice. This way, there will be no need for sub-groups under the Board, which would only duplicate and dilute the Alliance's work. Unless all roles and responsibilities in the Chips Act governance architecture are clarified and simplified, there is a serious risk of delayed approvals of the much-needed new semiconductor investment in Europe. Finally, the EU Institutions and the Member States should provide as soon as possible further details concerning budgetary implications, guidance on funding

¹ Infineon position on climate neutrality



gap analysis and timelines in a consistent manner to accelerate the industry's preparation to benefit from the Chips Act.

Strengthen Europe's talent pipeline. The proposed Chips Act aims to address Europe's acute skills shortage and support the emergence of a skilled workforce. The skills shortage in the European semiconductor industry is not a new challenge, but it is becoming even more business-critical. The technology industry in Europe, overall, is experiencing a lengthy time-to-hire process due to a lack of skilled engineers. In order for Europe to increase its semiconductor manufacturing capacity drastically, it should secure access to critical talent. To realize this objective, the proposed European competence centers that are optional to have in each Member State should be prioritized, and adequate funding should be provided. Such competence centers should have a clear "skills mandate" and play a critical role in improving semiconductor skills intelligence in the Member States, delivering industry-driven curriculum and connecting semiconductor businesses with technical students up to PhD level across Europe.

Prevent hampering market dynamics. The proposed Chips Act alludes to several terms such as "crisis", "disruption", and "crisis stage" and proposes that public authorities should be granted far-reaching competencies, e.g. information gathering, emergency toolbox, common purchasing, priority rated orders, export ban and penalties. It is worth noting that the current semiconductor shortage - which is not properly described as a "semiconductor crisis" in the Chips Act – is a consequence of the skyrocketing global demand for "everything digital" during and after the pandemic as well as procurement decisions and "just-in-time" practices by downstream players. Today, semiconductors are embedded in an inestimable number of final products, which is increasing the sector's fragility against many risks, including geopolitical instabilities that are challenging to mitigate. For instance, the proposed monitoring and crisis response tools in the Chips Act would not have helped to prevent or reduce the negative impact of the COVID-19 crisis or the crisis caused by the current war in Ukraine on semiconductor supply chains. In this regard, collecting quantitative chip supply/demand data from businesses will always be a late or irrelevant measure to prevent a future crisis. Instead, a contingency plan should be developed jointly by all stakeholders, including the European Commission, Member States, industry players and research organizations with clear roles and responsibilities. Such a contingency plan should be implemented as early as possible in case of a crisis and before market data indicate a shortage. Besides, the proposed instruments in the Chips Act do not seem to reflect the complex, B2B and know-how-driven characteristics of the global semiconductor supply chain and the customized needs of downstream players. Before any disruptive market interventions that are proposed in the Chips Act can be considered, a sound legal basis, clear definitions and framework conditions must be established, avoiding any damage to market players' competitiveness. In addition, in the legislative procedure, the European Parliament and the Member States should explore developing suitable mechanisms addressing critical users of semiconductors which can hold chips inventory for a certain period of time to avoid shortages and delays.

Infineon appreciates the opportunity to discuss the comments above and work closely with the EU Institutions and the Member States to enable a Chips Act that advances Europe's semiconductor industry.

About Infineon. Infineon Technologies AG is a world leader in semiconductor solutions that make life easier, safer and greener. Microelectronics from Infineon are the key to a better future. With around 50,280 employees worldwide, Infineon generated revenue of about €11.1 billion in the 2021 fiscal year (ending 30 September). Further information is available at www.infineon.com.