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Airbus Position Paper on the Review of the European Chips Act (Chips Act 2)

28 November 2025

Executive Summary

Airbus welcomes the launch of the review for the Chips Act (Chips Act 2) as a vital opportunity to transition from an emergency-era response to **a robust, long-term strategic industrial policy in support of European technological sovereignty**.

The current pace of technological development has positioned semiconductors as **a strategic industry for strategic industries**; while the geopolitical context has clearly shown the **risk of weaponisation** in case of excessive dependencies.

Airbus thus fully supports the **Semicon Coalition Declaration** to ground the revised Act around three strategic objectives: **Prosperity, Indispensability, and Resilience.**

However, Airbus believes that an EU semiconductor policy should be **guided by the need to safeguard critical industrial sectors, among which Aerospace and Defence is second to none**, as stated by the Declaration.

Therefore, the revised Act **must comprehensively address the unique needs of the full Aerospace and Defence sector, and not only defence, as it represents a unique ecosystem**. Our specific low-volume, long-lifecycle and high-reliability requirements— particularly concerning component obsolescence and supply chain resilience for mature and advanced chips— must be fully incorporated and protected across all pillars of the new Regulation.

To overcome the shortcomings of the original Chips Act, a key focus should be to **enhance production capacity in the EU**. However, this should be targeted not only towards leading-edge chips but also legacy chips above 10nm. **Priority should be given on the basis of the criticality and competitiveness of the end-markets** for the chips being produced. The role of **industrial alliances will be key** to build virtuous circles by aggregating demand in order to provide investment certainty and allow for innovation.

Moreover, the objectives will not be met without a **reinforced governance that provides for better public-private information exchanges** in a confidential manner, visibility across supply chains and strategic reserves.

1. A strategic sector for strategic sectors

Semiconductors are strategic assets for Airbus and the entire Aerospace and Defence supply chain - practically raw materials for embedded electronics systems. The sector has been severely affected by shortages, which have endangered the delivery of critical assets.

The **Aerospace and Defence sector as a whole thus must be explicitly designated and fully encompassed as a "critical sector"**, and not just defence alone as was the case in the original Act.

This is because our ecosystem is **fundamentally dual**. Civil and defence activities (aircraft, helicopters, satellites, launchers), technologies, and skills are deeply intertwined - which

allows for **strong operational, financial, and industrial synergies** and constitutes a key specificity and European asset.

Specifically, without successful civil aeronautics, the necessary increase in defence and space capabilities cannot be delivered. This is also applicable with regards to our semiconductor needs, where the **added volume coming from the much higher commercial aircraft production helps to anchor demand** and enhance resiliency.

This reliance is particularly critical at a moment in which the sector is **ramping-up production for commercial and defense portfolios in parallel**. In commercial aircraft, we are currently targeting to deliver 1,000 aircraft per year by 2027, while we are responding to the increasing needs of States in terms of defence readiness.

However, despite our ramp-up and the combined commercial and defence needs, the worldwide aerospace market represents below 1% of global demand for advanced semiconductors, with a negative trend due to the massive growth rates of other sectors like Generative AI or Electric Vehicles.

Airbus, as an OEM leader with the capability to design, integrate and certify major aerospace systems, tractioning the whole supply chain, has a prescriptive role on a new model setup that ensures tomorrow's industrial resilience.

2. End-users as the starting point

A core issue for Airbus is the significant **mismatch between the short lifecycle of semiconductor components and the long operational lifecycle of its products** (20+ years), which is compounded by **stringent certification and airworthiness constraints**. This mismatch requires changes of technology or re-sourcing of critical components (such as highly complex integrated circuits) during the production lifecycle, representing a serious burden. This is inadequately addressed by the current Act.

As a result, the reviewed Act must broaden its scope to fully consider and define **end-users (such as Airbus) as part of the semiconductor value chain**, at least for strategic sectors.

Moreover, The Chips Act 2 must take into account end-user's specific needs through actionable measures to **achieve the necessary resilience** for advanced and mature chips' design and production for aerospace and defence:

- **Longevity Feedback Obligation:** Component manufacturers must be obligated to **provide information/feedback on the longevity of the component** during the life of the product, extending beyond the current, inadequate 6-month prior notice before obsolescence. Depending on the criticality of the component, we recommend extending this period to a minimum of 3 years in order to be able to develop a replacement strategy throughout the value chain.

- **Chip architecture transparency**: Requirements for transparency in chip architecture necessary for airworthiness certification and substitution along the lifecycle of the end product.

3. Industrial alliances for competitive production

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Airbus supports the **conclusions of the Draghi report** that the Chips Act 2 must support a **holistic industrial strategy that drives competitiveness and secures Europe's indispensable position** in the global value chain.

It is our view that more efforts need to be made in **increasing semiconductor production in the EU**, beyond the First-of-a-kind concept of the original Act. A **strong semiconductors ecosystem in the EU** (including, at least, chip manufacturing, packaging and testing) can drive the EU's prosperity through economic growth and contribute to closing the innovation gap, strengthen the EU's position in the global technological race, and reduce dependencies.

For this, **substantial public funds need to be mobilized, in a coordinated manner between the national and EU level**. We welcome the proposal of the European Competitiveness Fund as a fit-for-purpose tool that can support these efforts, specially for the production of semiconductors which require low volume but are essential for strategic uses. In this regard, EU investment must be tied to guarantees that funded industrial capabilities will **prioritise critical sectors.**

However, **local semiconductor production needs to be competitive and sustainable from an economic point of view**. Therefore, the European Commission, in close coordination with Member States and the private sector, can play a key role through **demand aggregation, in order to align demand and prioritise investments** in the production of those chips which both have an ensured demand and support critical industrial sectors downstream.

Therefore, **Airbus fully supports the establishment of vertical industrial alliances** that can help make investments into semiconductor production a reality. We understand that several alliances can be established focused on the needs of different sectors.

In this regard, it is important to stress that while cutting-edge technologies need to be supported, for instance by strengthening our **local capability to control core chiplets' ecosystem** either from an IP/die-level or encapsulation, packaging and testing point of view, **more emphasis also needs to be put for the production of mature and current technologies** (e.g., 28nm and above) that form the vast majority of our current and future supply chain needs (power control, switching, IOs, …). The focus on the upstream value chain (R&T, advanced technologies <16nm) is insufficient to support our immediate needs.

In order for local production to be competitive compared with the global actors in the US or Asia, as a way to further aggregate demand, synergies between vertical alliances can be established, e.g. with the automotive sector, which has much higher volumes than aerospace and defence. Moreover, the EU can partner with like-minded players and countries to ensure the resilience of the semiconductor value chain (design, manufacturing, packaging and testing).

Another element to take into account when pursuing semiconductor production in the EU is to have the **right enabling conditions**, in terms of sufficient and affordable energy and skills, amongst others.

Finally, in line with other upcoming EU initiatives such as the RESourceEU Plan and the Industrial Accelerator Act, in parallel to local production coming online, measures could be introduced to introduce **local content requirements as a way to establish lead markets**

for resilient chips supply. However, this should be done in a way that doesn't hinder the competitiveness nor the resilience of end-users.

4. Prepare the future

From the same end-users first approach, and while the priority should remain to increase semiconductor production, it would be **wise not to lose track of the future needs of critical sectors**, such as aerospace and defence, **in order not to further deepen dependencies.**

While keeping the same specificities in terms of volume, reliability and life-cycle, undoubtedly as our systems become more complex, connected and digital, there is an increasing need in terms of processing power for highly-critical applications, such as AI-based functions, specially onboard defence and space systems. However, it is currently extremely difficult to procure semiconductors which **comply with both performance and certification requirements**.

Therefore, a secondary target in terms of establishing an European semiconductor value chain would be to extend it to the design of novel **high-performance processing chips for highly critical applications**, to secure future business and capabilities.

As the same competitiveness constraints would apply, growth potential and synergies could be established as well with other industries e.g. automotive and industrial systems. This would support the sector's future resilience and ensure the EU's indispensability in critical segments of the global value chain.

5. Reinforced resilience to protect from geopolitical turmoil

The proven risks of weaponisation of the semiconductors value chain call for reinforced measures to strengthen its resilience from supply disruptions through enhanced visibility and the creation of stock buffers. This shall include:

- Promote greater **transparency and traceability** from intermediaries (distributors, EMS, etc.). They must inform semiconductor producers about the end-user/sector so that a proper impact assessment is considered in the prioritisation process.

- Reinforce mechanisms for a **more comprehensive monitoring and mapping of the semiconductor value chain**, including inventory levels, production bottlenecks, and critical dependencies, particularly for components relevant to strategic sectors, while ensuring confidentiality.

- Identify and organise **strategic stocks of critical variants' references f**or which there is not yet a redesign alternative, in coordination with producers and end-users. Industrial alliances can play a role through **incentives for additional production** put into these reserves.

- In case of supply disruptions, **strategic sectors need to have prioritised access** to supplies.

- This prioritisation within the EU must prevail over other extraterritorial jurisdictions, such as the **US Defence Priorities and Allocation System (DPAS),** which can currently block European access to core electronic components. Undertakings

benefiting from European funds should guarantee access to core components to critical sectors on European soil.

6. A joint effort which requires a reinforced governance

Airbus believes that the ambitious but necessary objectives set for the Chips Act 2 require a joint effort across the semiconductor value chain, end-users and public institutions at EU and national levels.

Therefore, in line with the proposal to establish an overarching EU Competitiveness Coordination Tool, the European Semiconductors Board should be engrained as the “chips leg” of the former, while being reinforced in order to carry out the demand aggregation and value-chain monitoring described above.

As part of its governance architecture, the EU should look for and adopt, *mutatis mutandis*, the best practices from other leading powers in the semiconductors value chain, such as the the establishment of a body with the scope and responsibilities akin to the US National Semiconductor Technology Center (NTSC).

Moreover, building on the establishment of the **Observatory of Emerging Technologies** as per the European Competitiveness Fund proposal, the working of the current **Observatory of Critical Technologies should be transformed so that the private sector can participate.** This would allow for synergies, better situational awareness and reduced duplication in mapping efforts between the public and private sectors.

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Airbus stands ready to work with the European Commission and Member States to ensure that the revised Chips Act sets the basis for a robust, coordinated, and effective industrial policy that safeguards the competitiveness and resilience of all critical sectors, including Aerospace & Defence.

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ANNEX - Current and future priority technologies

The two below lists are non exhaustive but capture the most pressing technology needs for Aerospace & defence:

Current technologies are:

- Field Programmable Gate Arrays (FPGA)
- Application Specific Integrated Circuit (ASIC)
- Analog (example AD/DA converters)
- Micro/Logic
- Memory: Especially FLASHmemory and high speed like DDR4/DDR5
- Optoelectronics / Photonics
- Sensors
- Micro-processors (CPU): digital-signal-processors (DSP), micro-controllers (MCU), system-on-chip (SOC), multi-cores (MPSOC), graphic micro-processor (GPU)
- Gate driver ICs
- Ethernet Switches, copper and fiber optic

Future technologies that the Aerospace & Defence sector is considering are:

- SiC and GaN (new semiconductor technologies for low / medium and high power) & other future Ultra-Wide Bandgap technologies (i.e. Gallium Oxide Ga2O3)
- DSM < 20nm (ie: 16 nm FinFET & below, FD-SOI; GAAFET Gate-All-Around Field-Effect Transistor …)
- Chiplet architecture (including OpenHW concepts), System-in-Package
- Image sensors (CMOS, ToF "Time of Flight")
- Chip integrated radar sensors
- Packaging: multi-die (SiP: System in Package), stacked-die, photonics packaging …