

THE PRESIDENT

Thierry Breton
**Commissioner for Internal
Market**

European Commission
Rue de la Loi 200
B – 1049 Brussels

Munich, 11 October 2021

Subject: ACEA Support Letter for Semiconductor Resilience in Europe

Dear Commissioner Breton,

dear Thierry,

I am reaching out to you to follow up on our previous correspondence and constructive discussions on the role of semiconductors for the European automotive industry. Since then, the semiconductor shortage continues to disrupt automotive supply chains and production processes, with critical repercussions on European automakers. We therefore hereby wish to **reiterate our strong support for a concerted European initiative to enhance the EU's future semiconductor manufacturing capability.**

As you are aware, the current global shortage of microchips is aggravated by several concurring issues:

- The **huge increase in demand** in the fields of mobile communications, computer and consumer electronics during the global COVID-19 pandemic surpassed the availability of semiconductors. The demand for individual mobility also remains high; the pandemic has not changed this fundamental trend.
- **Local interruptions** are still occurring in global supply chains due to national supply bottlenecks or coronavirus-related lockdowns with chip suppliers.

ACEA
European Automobile
Manufacturers' Association

Avenue des Nerviens 85
1040 Brussels, Belgium
+32 2 732 55 50
info@acea.auto

Microchips are critical components for the successful transformation of mobility and our industry. Although the automotive industry uses only a relatively small percentage of microchips produced worldwide, the electrification of drivetrains and the digitalisation of vehicle functions are dramatically increasing our industry's need for semiconductors. They are essential for many vehicle systems, notably alternative powertrains, emissions reduction, safety, drivers' assistance systems, automated and autonomous driving, services based on connectivity and digital radio. They are also central to processes based on artificial intelligence and other innovative applications that enhance vehicles' capabilities.

Since warehouses are empty, there is a **direct impact on the availability of microchips for our vehicles**, at a time when global vehicle sales are recovering from the COVID-19 crisis. The limited availability of vehicles, added to the rising prices of semiconductors due to their scarcity, will **impact consumer choice and the affordability of new vehicles**. A slowed down renewal of vehicle fleets risks, in turn, weakening our contribution to the environment and climate commitments.

Firstly, this crisis poses **challenges that need to be faced in the short term**. We would like to stress that this is an acute supply chain issue with severe and immediate consequences on the European auto sector. Achieving reliability amongst the different tiers of the supply chain must be a primary goal given the complexity of the automotive value chain. Whereas competition for capacity and investment with non-automotive demand presents a challenge, the automotive just-in-time and just-in-sequence supply chain aggravates our situation, as it does not match the long semiconductor manufacturing cycles and capacity lead times.

Secondly, as a more **long-term strategic objective**, we support the Commission's intention to **increase the production of semiconductors in the EU**. It is important however to ensure that such production plans include the types of semiconductors that are used in motor vehicles. Besides the installation of cutting-edge 2 nm chip production in Europe, the production of 14-28 nm chips remains of paramount importance for our sector, as this category is currently widely used in motor vehicles. High-tech chips of 7 nm and smaller are used in a few niche applications in automobiles now, but developments in artificial intelligence and advanced displays are expected to generate greater demand in the future.

ACEA
European Automobile
Manufacturers' Association

Avenue des Nerviens 85
1040 Brussels, Belgium
+32 2 732 55 50
info@acea.auto

To better capture the magnitude of the impact of semiconductor shortage on the auto industry, the technical annex attached to this letter provides you with an overview of the major impacts suffered by ACEA member companies since January 2021.

This unprecedented crisis reveals how unexpectedly vulnerable today's semiconductor supply chain is, and how urgent it is to minimise our dependency on overseas markets, especially Asia, for these vital components. The risks of this dependency are becoming more apparent as **geopolitical tensions rise and an increase in demand is forecast**. The gravity of the situation requires a **strong and coordinated response across the European Union**. We therefore believe that intensifying collaboration with all partners across all levels of the supply chain is essential. As end-users of the semiconductor value chain, we support the goals of the recently launched European Alliance on Processors and Semiconductor Technologies.

As the installation of manufacturing capacity in association with qualified partners is of high strategic importance, we also fully support the proposal by European semiconductor manufacturers and an advanced foundry partner to establish a joint venture in Europe, with support from the European Union, the European Commission, relevant member states and industry.

We remain at your disposal to assist in any way that can help to address this issue and stand ready to support the EU's key policy objectives in microelectronics.

Yours sincerely, *with best wishes from Munich,*



Oliver Zipse

President

Attachment: Technical Annex

ACEA
European Automobile
Manufacturers' Association

Avenue des Nerviens 85
1040 Brussels, Belgium
+32 2 732 55 50
info@acea.auto