Volkswagen Group reorganizes semiconductor procurement

Wolfsburg, August 24, 2023 - The Volkswagen Group is reorganizing its procurement of electronic parts and semiconductors to ensure supply over the long term and, in doing so, securing itself a leading position in terms of technology as well as competitiveness. To this end, the Group has developed a new strategy for the procurement of parts with electronic components.

“A high degree of transparency in the semiconductor value chain – the exact knowledge of the parts used – enables us to better determine the global demand and availability of these components. This is underscored by risk management which, in future, will extend to the level of individual electronic parts and help us detect bottlenecks early on and avoid them. For strategically important semiconductors and even the Group’s own planned developments in the future, we will rely on direct purchasing from the semiconductor manufacturers,” said Dirk Große-Loheide, Board Member for Procurement of Volkswagen Passenger Cars and member of Group management.

In the past, electronic components like control units were procured and the Tier 1 suppliers were largely free to decide which parts they used. Going forward, in close collaboration and partnership with Tier 1 suppliers, Group procurement will define which semiconductors and other electronic parts are to be used.

“Additionally, this is done across all brands by the Semiconductor Sourcing Committee (SSC) established especially for this purpose, with representatives from the procurement and development departments of the brands as well as from Volkswagen Group Components and CARIAD. Furthermore, the transparency regarding semiconductors means that technical alternatives can be identified and implemented more quickly in the event of bottlenecks. Another positive effect is that a reduction in the diversity of variants in the hardware results in a lower degree of software complexity,” said Karsten Schnake, Board Member for Procurement at Škoda Auto and head of the cross-brand and cross-functional task force COMPASS (Cross Operational Management Parts & Supply Security), explaining the advantages.
Semiconductors are indispensable in the automotive industry: not only are they elementary for mass production, but they are also innovation drivers and key for launching new products on the market.

The greatest increase in demand for semiconductors is the result of the increasing electrification of vehicles and the trend towards the growing use of assistant functions through to fully autonomous driving. The corresponding innovations will also result in the use of cutting-edge semiconductors, while the demand for more common semiconductors will remain or even rise further. Vehicle innovations are heavily characterised by the use of semiconductors: in 1978, only eight semiconductors were installed in a control unit of a Porsche 911. Today, a Škoda Enyaq has around 90 control units with some 8,000 electronic components.

This development also has an impact on the value of electronic components in the vehicle, the value of which will more than double by the year 2030 from today’s average of around 600 euros per vehicle. According to the Group’s assessment and corresponding analyzes, the importance of the automotive sector as a customer of the semiconductor industry is also increasing. Today, the automotive industry is in 5th place among the major buyers with a global procurement volume for semiconductors of around 47 billion US dollars. By 2030, our industry is expected to secure third place with a market volume of around 147 billion US dollars.

The after-effects of the COVID-19 pandemic and the associated chip crisis can still be felt. To solve these enormous challenges and ensure the semiconductor supply, the Volkswagen Group launched the COMPASS initiative at the beginning of 2022, initially with the operational focus of safeguarding the vehicle programme. Strategic action areas were identified on the basis of lessons learned during the semiconductor crisis and solutions were developed and implemented for the long term.
About the Volkswagen Group:
The Volkswagen Group, with its headquarters in Wolfsburg, is one of the world's leading automobile manufacturers and the largest carmaker in Europe. The Group comprises ten core brands from seven European countries: Volkswagen Passenger Cars, Audi, SEAT, CUPRA, ŠKODA, Bentley, Lamborghini, Porsche, Ducati and Volkswagen Commercial Vehicles. The passenger car portfolio ranges from small cars all the way to luxury-class vehicles. Ducati offers motorcycles. In the light and heavy commercial vehicles sector, the products range from pick-ups to buses and heavy trucks. Around 675,800 employees around the globe are involved in vehicle-related services or work in other areas of business. With its brands, the Volkswagen Group is present in all relevant markets around the world.

In 2022, the total number of vehicles delivered to customers by the Group globally was 8.3 million (2021: 8.9 million). Group sales revenue in 2022 totaled EUR 279.2 billion (2021: EUR 250.2 billion). The operating result before special items in 2022 amounted to EUR 22.5 billion (2021: EUR 20.0 billion).