

## **Embedded Systems in Automotive Industry – Trends and Challenges**

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In the automotive industry, more and more innovations aiming at the further improvement of safety and comfort are based on Embedded Systems. Future targets regarding the reduction of fuel consumption and emission can only be realized by means of innovative powertrain electronics and advanced energy management concepts, which are based on software to a large extent. At the same time, complexity and the need for powerful and fast in-car data processing and transfer are increasing significantly. Hence, enabling technologies such as software engineering, functional safety, and electric/electronics architectures are essential core competencies for every automotive OEM. Future challenges in Embedded Systems design and development can only be met by an extensive cross-domain bundling of forces in research and innovation in an international setting like ARTEMIS on European level.

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