OSXCAR

Optimized Software-defined Car ARchitectures

Platform for Researching Architecture Variants in Software-Defined Vehicles

Project Overview

The project aims to develop an innovative platform that explores various architecture variants for software-defined vehicles. The main features are:

- Universally applicable test environment across Industries – Automotive, Robotics, Avionics, Medical, Cloud
- Platform-independent programming
- Use of artificial intelligence for optimization

Benefits and Goals

1. **Improved energy balance** in the vehicle through AI-optimized architecture solutions

2. **Reduction of development costs by 50%** through more efficient testing procedures

3. **Contribution to climate protection** through CO_2 savings up to 30%

4. **Cost efficiency** through focus on AI optimization and WebAssembly technology the OSxCAR project pursues an innovative approach with minimal implementation costs, as the main savings are achieved through intelligent optimization of vehicle architecture and the use of modern technologies such as WebAssembly

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- 5 Partners
- Total Budget: 7 Mil €
- Total Grant: 5 Mil €
- Funding rate Aptiv: 2.2 Mil € (65% of Total Costs)
- Duration: 3 years
- 01 Jun 2024 – 31 May 2027

Universities:

- Bergische Universität Wuppertal
- Universität Bielefeld

Industrial Organisations:

- Aptiv Services Deutschland GmbH

SME

- paraXent GmbH
- CETEQ GmbH

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The Team