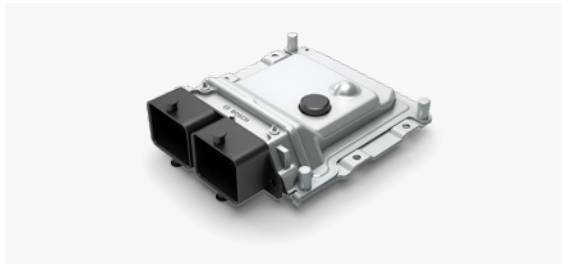


# Vehicle control unit

The powertrain domain controller as central E/E architecture component for all powertrain topologies

## High performance for versatile applications



VCU-S: Controller for integration into the powertrain or as a cross-domain integration platform



VCU-P: Computer platform for advanced applications in the powertrain and for cross-domain use

## versatile

Can handle the growing variant diversity and complexity in vehicles

## powerful

Makes processing power available with high-performance microcontrollers and microprocessors

- ▶ As the central control unit for the powertrain, the vehicle control unit (VCU) coordinates various functions, such as torque distribution and thermal management. It enables the integration of new functions like range management, charging management, or various kinds of predictive strategies.
- ▶ Cross-domain functions are also increasingly supported in higher configuration stages.
- ▶ The VCU is used in electrified and cloud-based solutions for passenger cars, commercial vehicles, and off-highway vehicles. The VCU can cover functions for the safe operation of highly automated vehicles in failure case.