Efficient powertrain solutions for future mobility
EFFICIENT POWERTRAIN SOLUTIONS FOR FUTURE MOBILITY

The increased mobility of today's modern lifestyle comes at the cost of higher CO₂ emissions and consumption of ever scarcer natural resources. Personal transportation is evolving to ensure future mobility with lower emissions than we have today.

Electronic components are a key to this improved energy efficiency. To help save energy and reduce pollution Infineon delivers innovative high-performance solutions with best-in-class technologies for Hybrid Electric Vehicles (HEVs), which represent one of the most efficient energy conversion approaches for personal transportation.

Infineon combines know-how of the world leader in advanced power electronics and world’s second largest automotive semiconductor company to deliver innovative electronic solutions for these new forms of personal transportation. These solutions continue our commitment to exceptional quality and reliability that the world’s leading light vehicle manufacturers expect.

Our system expertise means we are able to provide complete chipsets offering the best balance between performance and cost. Today, we are proud to serve our customer with technologically leading products in many areas for HEV application like: Power Semiconductors, Power Modules, Microcontrollers and Sensors.

With our components delivering cost effectiveness, high efficiency and power density, Infineon is driving efficient powertrain solutions for future mobility.
High voltage semiconductors for automotive systems developed by the leader in power semiconductors

Based on Best In Class IGBT, diode and CoolMOS® semiconductor technologies Infineon offers discrete components and high power modules for inverters and converters in Electric, Hybrid electric and Fuelcell Electric Vehicles. In combination with the Infineon driver IC these can help to increase the efficiency and power density of your power electronic application.

Microcontroller portfolio providing scalable performance, real-time behaviour and specialized safety features dedicated for your automotive requirements

From an 8-bit up to best in class 32-bit TriCore® family you will find your solution of choice to manage the battery, control DC/DC converters, electrical drives and main powertrain. An excellent low level driver (AUTOSAR) and tool chain support brings your resources to maximum productivity with the Infineon’s experience and know-how in automotive microcontroller applications.

After 30 years in the automotive electronics market, Infineon’s Automotive Power products encompass our semiconductor knowledge and application experience

Automotive Power Products are designed to provide the highest quality and reliability for consumer and commercial vehicles. MOSFETs, Driver IC, HITFET®, Switches, Voltage Regulator and Transceivers can help to make hybrid vehicles safer, cleaner and more efficient.

Digital and analog magnetic field sensors optimised for measuring current, position, distance, direction or speed

Infineon addresses automotive sensing needs with a wide variety of Hall effect and giant magnetic resistance sensors. Our GMR based speed sensors and angle sensors allow for a large air gap and low jitter values, providing you with an accurate measurement for your hybrid electric vehicle control.
Infineon’s commitment to Hybrid

- No. 1 worldwide in power electronics, No. 2 worldwide in automotive electronics
- Broaderest product portfolio to optimise Hybrid Electric Vehicle (HEV) system cost
- Dedicated HEV components for highest power density and efficiency
- Experienced application support
- Comprehensive quality management program (Automotive Excellence)

Hybrid System Example