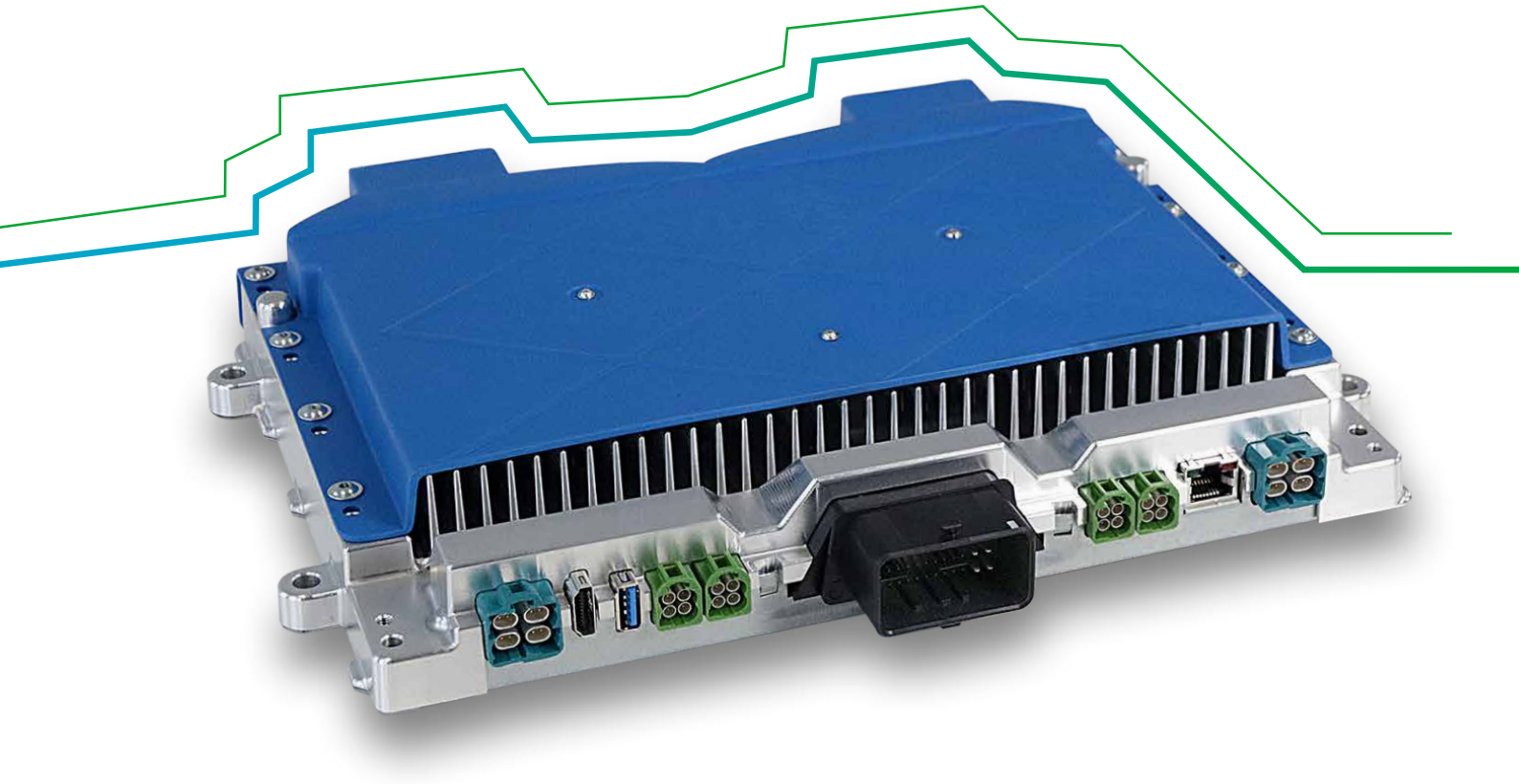

AVL Ajunic®

A High-Performance Controller for Advanced and Complex Processing

THE CHALLENGE

The growing complexity of today's vehicles requires powerful ECUs (Electronic Control Unit) for real-time data processing and precise system control. Autonomous driving and electromobility further increase the need for these controllers to ensure reliable decisions.
In addition, the use of high-performance control units enables the integration of advanced safety and assistance systems, which are essential for safe and convenient mobility.

THE SOLUTION

AVL's Ajunic® is a versatile and rapid development platform that is tailored to your specific application needs and provides a secure environment that significantly reduces development time. Due to its adaptability, it is suitable for both prototypes and series production.

The platform supports advanced functionalities such as ADAS/AD perception, sensor fusion, motion control, ground truth data recording and real-time object recognition.

ADDED VALUE

- Built with automotive-qualified components, ready for direct vehicle installation
- Fully customizable hardware and software
- Ideal for prototypes and scalable for series production
- ISO 26262 ready, with independent dual-channel processing and up to triple power supply
- Software options: Linux, ROS, classic/adaptive AUTOSAR
- Safety and security-enabled operating systems available

THE PLATFORM

Performance:
Flexible and scalable high-performance processing power

Connectivity:
Ready for various ADAS/AD sensor setups

Functional Safety:
- Hardware design based on safety requirements
- Design can be used as a base for safety relevant projects up to ASIL-D

Customization:
- Modular approach offers options of customization
- A variety of operating systems and middle-layers are supported

Start of production (SOP):
Automotive components and ISO 26262 enable SOP

TECHNICAL DATA

Controller:	– Powerful multicore SoC processors (Renesas R-Car: H3 and V3H) with multiple hardware accelerator assembled to customer's needs – Safety controller (Aurix) – Neural networks acceleration hardware for AI and object detection	**Interfaces:**	– GMSL – CAN/CAN-FD – FlexRay and LIN – Gbit automotive and standard ethernet – HDMI/PCI-E – USB 2.0/3.0
Power:	– For 12 V and 24 V board-nets – Power consumption: < 80 W	**Dimensions and weight:**	– 325 x 320 x 47 mm (l x w x h) – 2.8 kg

AVL Software and Functions GmbH
Im Gewerbepark B29
93059 Regensburg
Germany

E-mail adas.ecu@avl.com
www.avl-functions.com