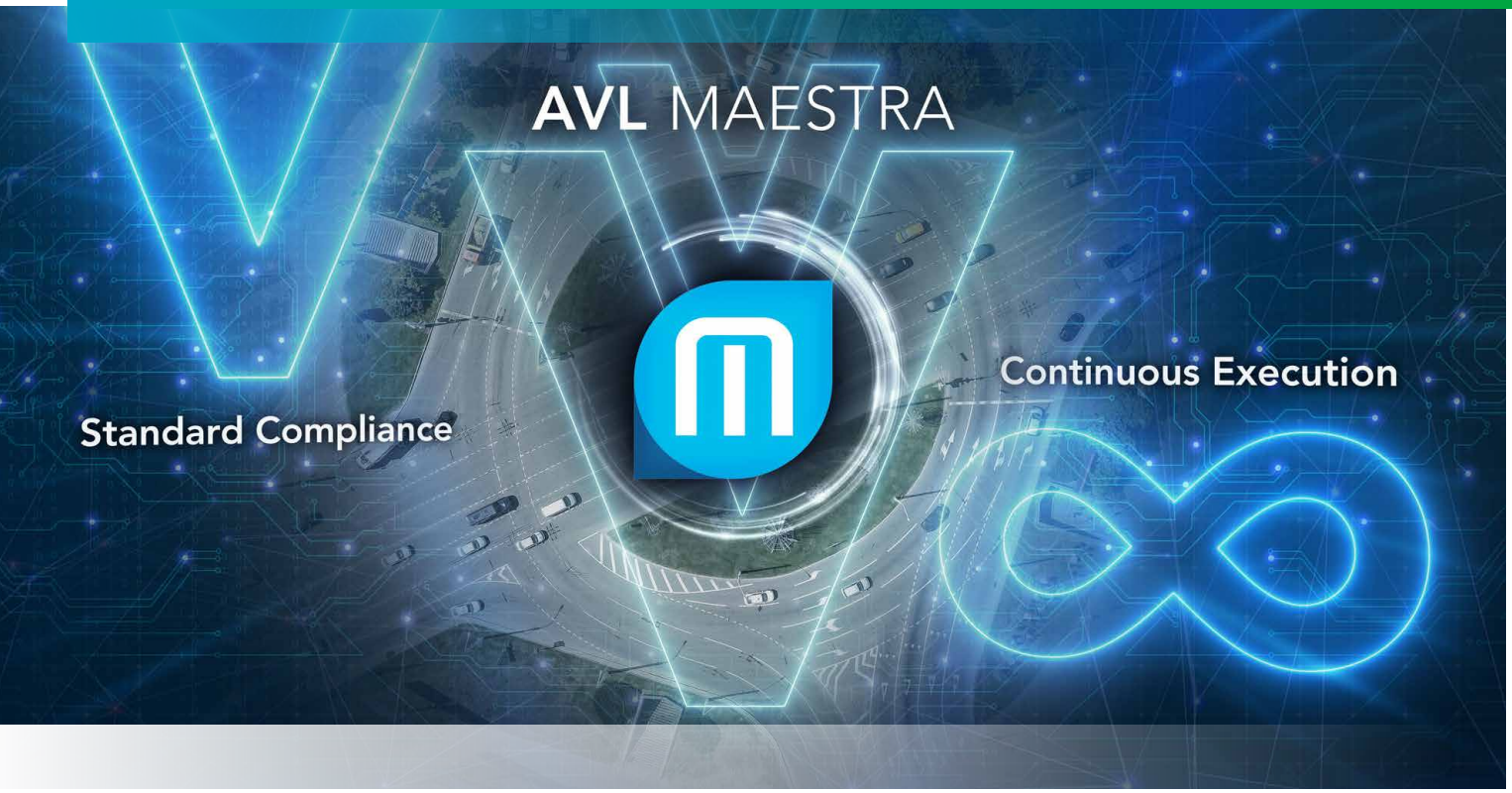

AVL Maestra® – Mastering Model-Based Software Development

A powerful suite that connects architecture, development, and testing in one seamless workflow.

Automotive software development is increasingly complex. Diverse toolchains and rising quality demands challenge developers to stay agile and compliant.

AVL Maestra® unifies fragmented workflows into an efficient, future-ready solution.

THE CHALLENGE

Modern embedded software development involves a multitude of tools, suppliers, and standards. Managing interfaces, ensuring traceability, and maintaining quality across the V-cycle is a daunting task. Developers often struggle with disconnected processes, manual overhead, and inconsistent outputs.

THE SOLUTION

AVL Maestra® structures the development process, builds intelligent interfaces between tools, and supports the entire model-based workflow. From requirements engineering to virtual testing. It enables agile CI/CT workflows while ensuring compliance with ASPICE and ISO 26262, even up to ASIL D.

AVL MAESTRA® SUITE & HIGHLIGHTS

AVL Maestra® is not just a tool – it's a suite of integrated modules designed to support every step of the software development journey.
Whether you're designing architectures, developing components, or validating systems, Maestra® provides the structure, automation, and flexibility you need.

> "With AVL Maestra®, we finally have one environment that connects architecture, development, and testing – and saves us hours every week."
>
> Lead Software Engineer, Automotive OEM

KEY MODULES AND BENEFITS:

- **Maestra.CONTROLS**
  ASPICE-compliant model-based development
- **Maestra.SIGNAL**
  Architecture authoring & variant management
- **Maestra.TESTING**
  Virtual ECU generation & system simulation
- **Maestra.SAFETY**
  Safety autocode generation & compliance documentation
- **End-to-end workflow**
  From requirements to validation & testing
- **Toolchain cockpit**
  Centralized control across 3rd-party tools
- **Future-ready**
  AUTOSAR, vECU, multi-level testing
- **ISO 26262 qualified**
  Up to ASIL D
- **Automatic vECU creation for early system simulation saving time and cost**
- **Built-in checks ensure ASPICE & ISO 26262 compliance**
- **Unified interface for seamless toolchain operation and configuration**

AVL Software and Functions GmbH
Im Gewerbepark B29
93059 Regensburg
Germany

Phone +49 941 630 89-0
E-mail info.sfr@avl.com
www.avl-functions.com