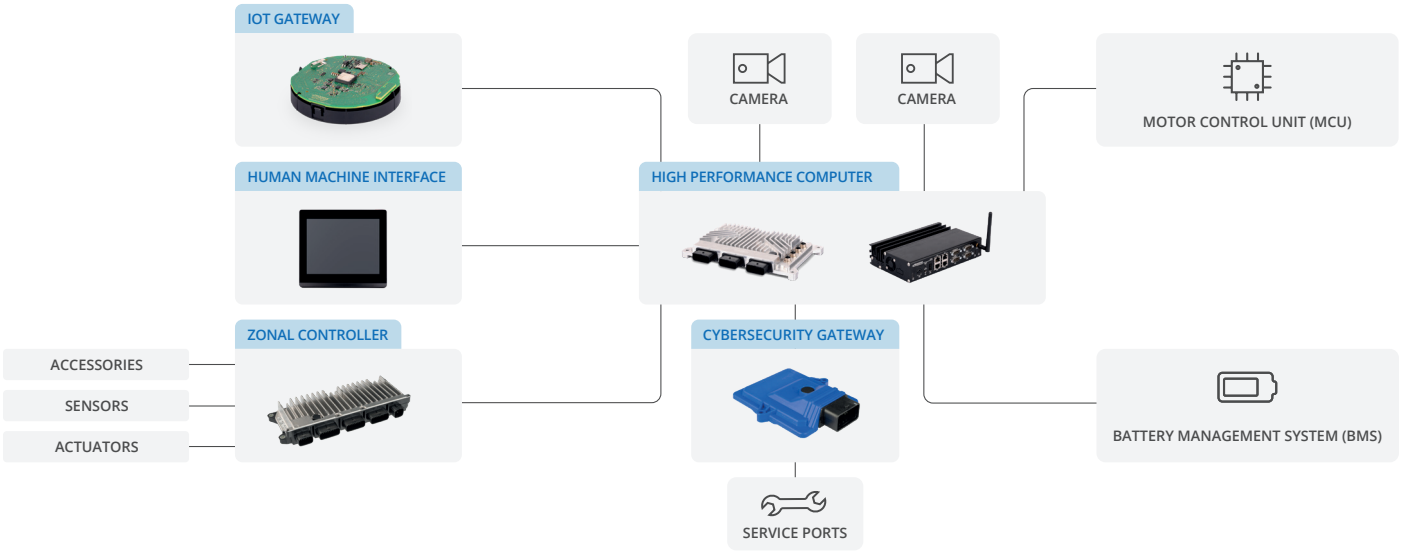


Industrial Vehicles

Enabling Software-Defined Vehicle through Embedded Controls & Industrial IoT

Prodrive Technologies is your one-stop-shop development and manufacturing partner for rugged embedded controllers, Human Machine Interfaces (HMI) and industrial IoT for industrial vehicles, enabling software-defined industrial vehicle.

OUR PRODUCT OVERVIEW



OUR PROMISE

- Mature technology building blocks
- CRA-aligned
- Long product lifecycle
- High quality manufacturing

Software-Defined Vehicle (SDV)

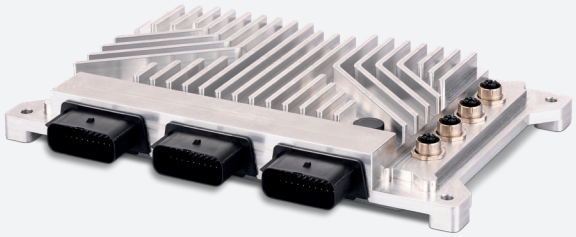
A Software-Defined Vehicle (SDV) architecture built around a central high-performance computer (HPC) gives industrial vehicles a more flexible and efficient foundation. It enables faster innovation through continuous feature upgrades and over-the-air updates, while ECU consolidation reduces wiring and harness complexity. Centralized software also makes the architecture easier to maintain and evolve.

HIGH PERFORMANCE COMPUTER

PTcontrol – A55-CC

A55-CC is a high-performance central computer for industrial vehicles to enable Software-Defined Vehicle (SDV). The HPC is a multi-core ARM-based computer featuring state-of-the-art compute power, real-time control, safety control and AI processing.

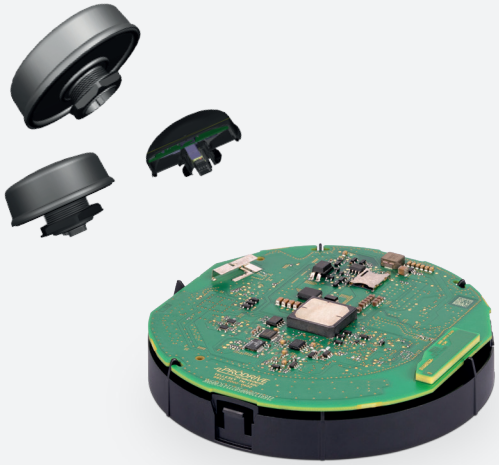
The HPC offers vehicle connectivity with multiple Automotive Ethernet and CAN-bus interfaces, all housed within a rugged IP67 enclosure.



IOT GATEWAY

PTlink – AM4-TL

AM4-TL Vehicle IoT Gateway delivers real-time visibility to enable smarter, more sustainable warehouse operations. Its compact design with built-in antennas ensures easy integration without complex installation, while maintaining reliable connectivity. By supporting energy optimization, asset tracking, and streamlined logistics, the gateway empowers efficient, data-driven decision-making.



HUMAN MACHINE INTERFACE

PTview – A53-ET

A53-ET is a robust and customizable high-performance human machine interface designed for industrial environments. Featuring a capacitive touchscreen, this controller ensures intuitive and responsive operation across a wide range of applications. Housed in a durable IP65-rated enclosure, it is built to withstand harsh conditions such as dust, water, and extreme temperatures.



DEVELOPMENT KIT

PTedge – A55-SD

A55-SD is a development kit specifically targeted at software-defined vehicle applications and is designed to showcase our hardware and software frameworks. The kit enables you to start software development early on a proven and well-integrated platform, reducing development risk and accelerating time to market.



ZONAL CONTROLLER & AGGREGATORS

PTcontrol – A53-PT

A53-PT, featuring the NXP i.MX 8M series as the main application processor, combines robust connectivity with Automotive Ethernet and CAN-bus with a rich set of digital and analog inputs and outputs. With its IP67 enclosure it ensures durability in harsh conditions to provide powerful, reliable, and scalable control in demanding industrial environments.



Why Software-Defined Vehicle?

A service-oriented architecture facilitates over-the-air updates, including cybersecurity enhancements, and enables new features to be added through software upgrades. It also centralizes the software architecture, making software maintenance more efficient.

From a cost perspective, it supports ECU consolidation, reduces wire harness complexity and costs, and speeds up the innovation cycle.

CYBERSECURITY GATEWAY

PTcontrol – AM4-LD

AM4-LD is a rugged, CAN-based cybersecurity gateway designed to protect traffic and devices across internal vehicle networks. Housed in a durable, industrial-grade enclosure, it is built to withstand the demands of heavy-duty trucking environments, making it ideal for mission-critical mobile applications. By isolating internal CAN buses from external service connectors, the gateway prevents unauthorized access from reaching digital devices inside the vehicle, offering a reliable and scalable layer of defense against cyberattacks.



SOFTWARE

Prodrive Technologies Industrial Control

PTIC is the Prodrive Technologies Industrial Control platform which delivers modular, production-ready processor platforms for controllers, I/O, HMI and connectivity modules to accelerate product development. Combined with the robust bootloader and Yocto-based Linux OS, PTIC allows developers focus on application development from day one without concerns about secure boot or boot behavior complexities.

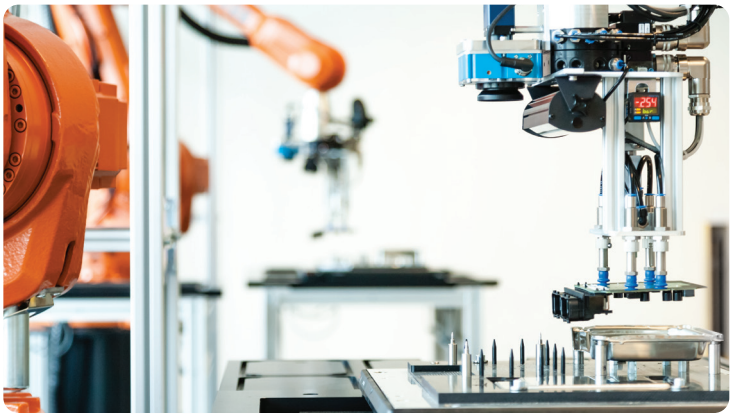
Our PTIC Yocto distribution is tailored for industrial customers, whether it is for HMI, control, edge-AI, or real-time networking. It is engineered for reliability and security right out of the box, eliminating the need for your team to design or maintain the Board Support Package. It's continuously tested and improved to ensure smooth compilation and configuration.

Global manufacturing at scale

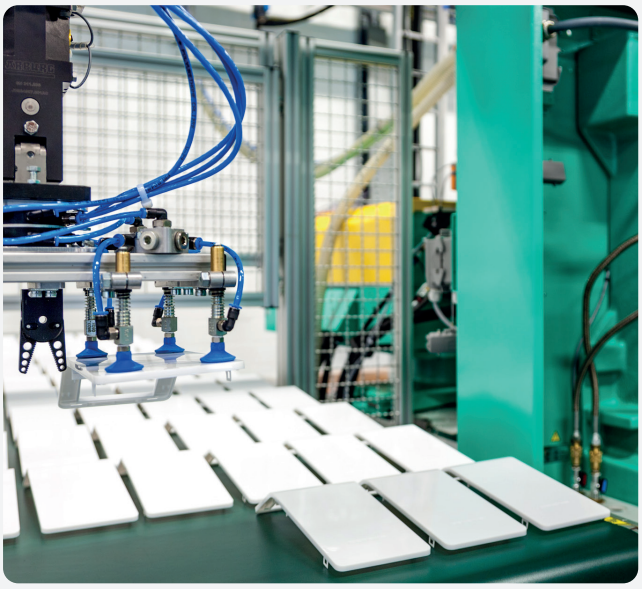
Global presence

At Prodrive Technologies, you gain access to a global manufacturing footprint with production facilities in the Netherlands, the USA, China and Malaysia. This enables us to support your business with a true local-for-local manufacturing strategy, ensuring shorter lead times, greater flexibility, and local market responsiveness. At the same time, our global presence helps you navigate geopolitical challenges and market uncertainties. By leveraging multiple manufacturing locations, we can mitigate supply chain risks and provide a stable, resilient, and reliable supply of your products, wherever your business operates.









Copy exact

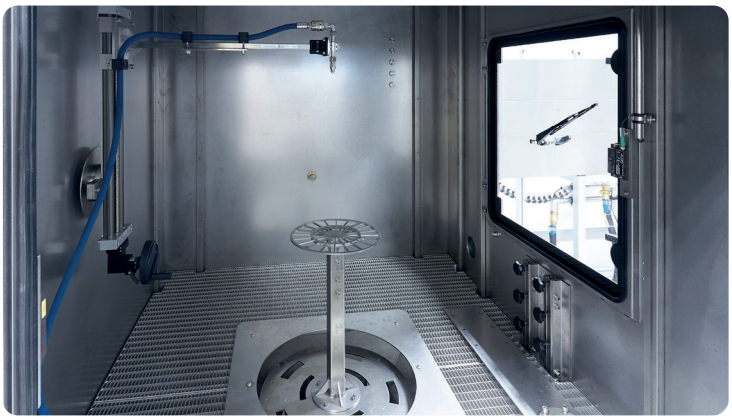
When you choose Prodrive Technologies, you benefit from a global manufacturing organization built around our copy-exact manufacturing strategy. Supported by common processes, quality standards, and a shared Manufacturing Execution System (MES), our facilities deliver consistent quality, reliability, and traceability worldwide. We offer high-volume and high-mix electronics manufacturing, including PCB assembly with Surface Mount Technology (SMT), wave soldering, inline testing, and programming, alongside injection molding, cable assembly, automated system assembly, and other value-added manufacturing services. This combination of advanced manufacturing expertise and global production capacity enables you to scale efficiently while maintaining the highest standards throughout the product lifecycle.

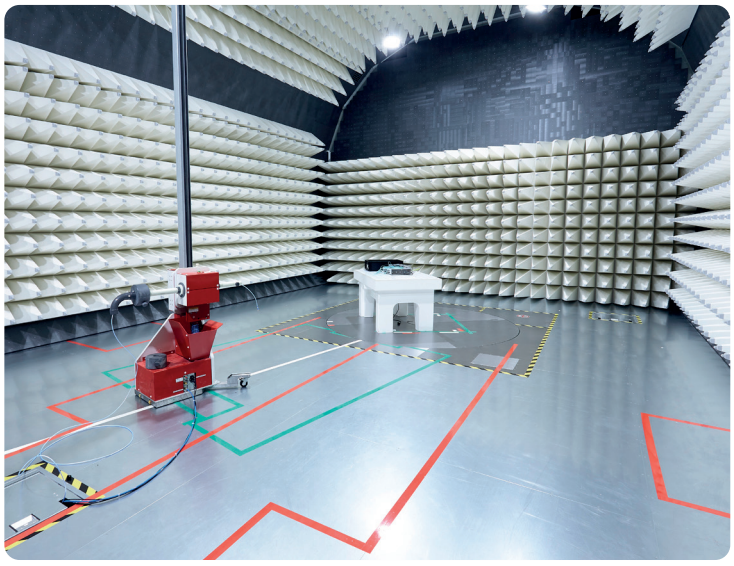
In-house design validation

As a development partner and supplier of industrial vehicle technology components, we go beyond delivering products by providing advanced design validation services that help our customers accelerate development and reduce risk. Prodrive Technologies Laboratories offer a comprehensive range of test capabilities, including temperature and humidity, shock and vibration, ingress protection (IP) testing and electromagnetic compatibility (EMC) testing. These services ensure reliable performance and seamless integration of components into demanding vehicle applications









Accredited test lab and global certification

As an accredited test laboratory, our test reports are recognized and accepted by certification bodies worldwide. This enables you to streamline certification processes, reduce development cycles, and achieve a faster time-to-market.

Check the accredited scope at the Dutch Accreditation Council **http://www.rva.nl**

Products that accelerate technological innovation in your equipment



About Prodrive Technologies

For more than thirty years, Prodrive Technologies has been a trusted partner in innovation. We design and manufacture mission-critical technologies that accelerate global megatrends: digitalization, energy transition, advanced & affordable healthcare and Industry 4.0.

Our approach is to collaborate. We don't just supply products; we co-create solutions. From concept and design to validation and production, we work side by side with our customers to turn challenges into breakthroughs.

Information subject to change, contact us for more details:

WWW.PRODRIVE-TECHNOLOGIES.COM SALES@PRODRIVE-TECHNOLOGIES.COM +31 (0)40 2676200