

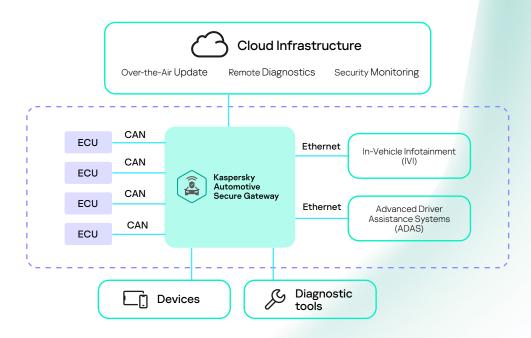
### Key benefits

- Automotive grade
- AUTOSAR Adaptive
- Compliance
- Secure by Design

Solution for connected vehicle manufacturers and ECU developers.
Let Kaspersky take care of the cybersecurity so that you can focus on the product functionality

Kaspersky Automotive Secure Gateway (KASG) is specialized software that is designed for high-performance controllers of connected vehicles and combines the functions of a telematic control unit (TCU) and a gateway. The solution provides secure and reliable communication between electronic units of the E/E architecture and between these units and the connected vehicle cloud and diagnostic devices.

This software can be used to implement security controls and a range of business functions, including remote diagnostics, over-the-air ECU updates, and other telematic services.





Strict isolation of vehicle system components and secure updates, including over-the-air updates and remote diagnostics throughout the life cycle of the vehicle.



## Compliance with standards

The solution helps manufacturers meet the requirements of UN cybersecurity regulations R.155/R.156 and complies with the international regulatory frameworks for functional safety (ISO 26262) and cybersecurity (ISO/SAE 21434). The solution includes a runtime environment for applications that complies with the AUTOSAR Adaptive standard.



# **Economic** efficiency

Reduces costs throughout the entire vehicle life cycle:

- Functions of multiple ECUs combined into one – on the AUTOSAR Adaptive platform
- Reduced maintenance costs and vehicle recalls
- Reduced cybersecurity costs during development



### Problems covered by the solution



Authentication and access control for auto functions

Trusted environment and secure data storage

Trusted time server

Online cybersecurity monitoring



Compliance: automotive industry standards and regulations

ISO 26262

ISO/SAE 21434

UN R155, UN R156

**AUTOSAR Adaptive** 

Uptane



Reducing costs throughout the entire vehicle life cycle

Functions of multiple ECUs combined into one - on the AUTOSAR Adaptive platform

Reduced maintenance costs and vehicle recalls

Reducing the trusted codebase with a Cyber Immune approach

### Kaspersky approach to cybersecurity

#### Kaspersky Cyber Immunity

Fundamentally new approach to creating secure-by-design IT solutions. The overwhelming majority of types of attacks on a Cyber Immune system are ineffective and unable to impact its critical functions.

Cyber Immunity can be achieved by using KasperskyOS and following a specific development methodology.

#### KasperskyOS

Microkernel operating system for industries with high information security requirements.

KasperskyOS is based on a combination of different security approaches. Due to its distinctive architecture, KasperskyOS creates an environment in which it is safe to run untrusted and potentially vulnerable programs.

#### Kaspersky Automotive Secure Gateway

KasperskyOS-enabled software transforms the gateway ECU as a central hub of security and trust for all interconnected in-vehicle ECUs, enhancing defense against cyber threats.

## Solution components



Kaspersky Automotive Secure Gateway

Kaspersky Automotive Secure

Router Framework

Component that provides

all communication channels

the V2X infrastructure.

secure data exchange across

including between ECUs in the

automotive network and within



KasperskyOS-based SDK for creating ECU applications that are compatible with the AUTOSAR Adaptive Platform standard.



Component for remote vehicle diagnostics (RVD) and telemetry for various vehicle ECUs.



Kaspersky OTA Agent

Component that provides centralized over-the-air (OTA) updates to various ECUs in a vehicle.



Kaspersky Vehicle SOC Agent

Component that provides centralized over-the-air (OTA) updates to various ECUs in a vehicle.



#### Additional information

Request an expert consultation to learn more about Kaspersky Automotive Secure Gateway

https://os.kaspersky. com/solutions/ kaspersky-automotivesecure-gateway

os.kaspersky.com www.kaspersky.com





