



# Kaspersky Automotive Adaptive Platform $\beta^*$

Solution for smart car manufacturers and ECU developers. Focus on the functionality of your products, because Kaspersky's already taken care of their cybersecurity

## Key benefits

- Automotive grade
- Secure by design
- Multi-layer cybersecurity system
- Modular and flexible
- Compliance

## Multi-layer security system

Protection at several levels:

### Device level

- Device software/firmware alteration
- Downgrade/rollback attacks

### Communication level

- Man-in-the-middle attacks/session hijacking for:
  - Message spoofing, code injection, replay attacks
  - Interception of information/monitoring communications
- DoS attacks on CAN bus
- Malicious diagnostic sessions (CAN-TP)

### Application level

- Supply chain attacks (compromise of third-party components)
- Malicious code execution (exploits, malware)
- Corrupted applications

## Security by default

Software development for electronic control units based on KasperskyOS cybersecurity technologies. Anything not specified in the security policies is prohibited by default. Even if a component proves vulnerable and comes under attack, it cannot affect the performance of critical system functions.

## Compliance with standards

Kaspersky Automotive Adaptive Platform and the applications based on it meet the AUTOSAR Adaptive standard. The platform also complies with international regulatory frameworks for safety and cybersecurity.

## Comprehensive approach

Software developed with Kaspersky Automotive Adaptive Platform makes it possible to build a comprehensive ecosystem of applications for embedded vehicle systems. It ensures reliability and functionality of these systems at each level.

## Compatibility

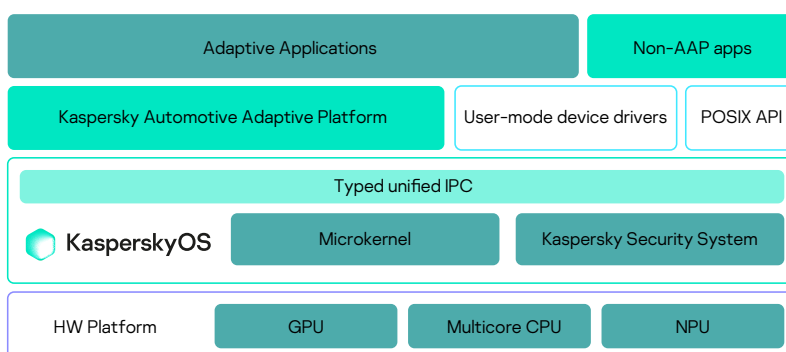
Applications built on Kaspersky Automotive Adaptive Platform can be used in high-performance controllers in mixed-criticality scenarios.

## Flexibility and convenience

Support for multicore architecture and easy prototyping. Integration with vehicle security operations centers (VSOCs) planned for 2022.

## Service-oriented architecture

Electronic assembly-agnostic development: ability to run adaptive applications and transfer non-AUTOSAR services to the platform without compromising performance or security.



Elements comprising the Kaspersky Automotive Adaptive Platform solution

\* Ready for prototyping

### Protecting connected ECUs

- DCU
- TCU
- HAD / ADAS
- HPC

### Key features

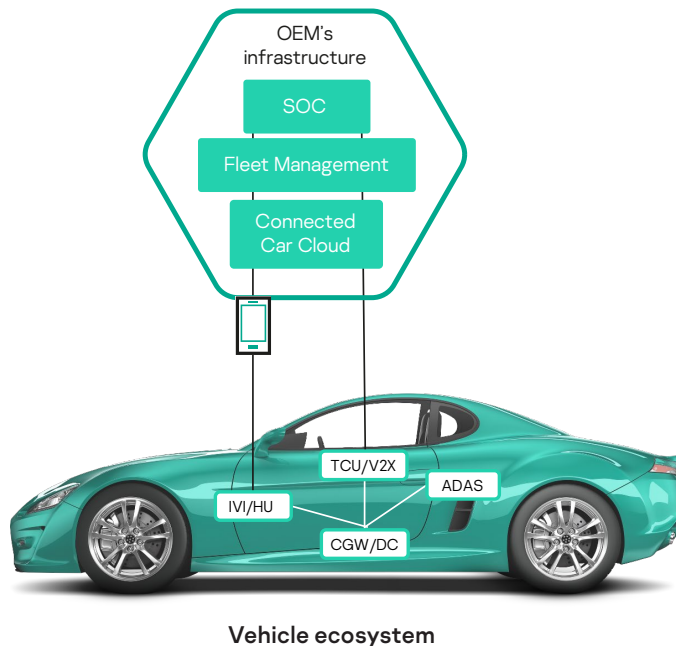
- Service-oriented architecture
- Designed for easy reuse across ECUs
- OTA
- Strong isolation of components
- Tailored cybersecurity controls

### Covering multiple attack scenarios

- Zero-day exploits
- Supply-chain attacks/malware
- MiTM attacks
- Attacks via automotive bus
- Rollback/firmware alteration

Multilayer protection for various attack phases (initial access, privilege escalation, lateral movement, etc.)

Connected cars are not just vehicles with integrated digital systems – they're essentially smart infrastructures with mobile management apps, OEM clouds, fleet management systems, and more. As a result, the internal ecosystems of connected cars have multiple entry points vulnerable to cyberattacks.



## Why Kaspersky

- Strong player and innovation leader in cybersecurity
- Partnership with industry leaders
- Experienced team of experts
- Holistic approach to ecosystem protection



KasperskyOS



Kaspersky  
Automotive  
Adaptive  
Platform

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