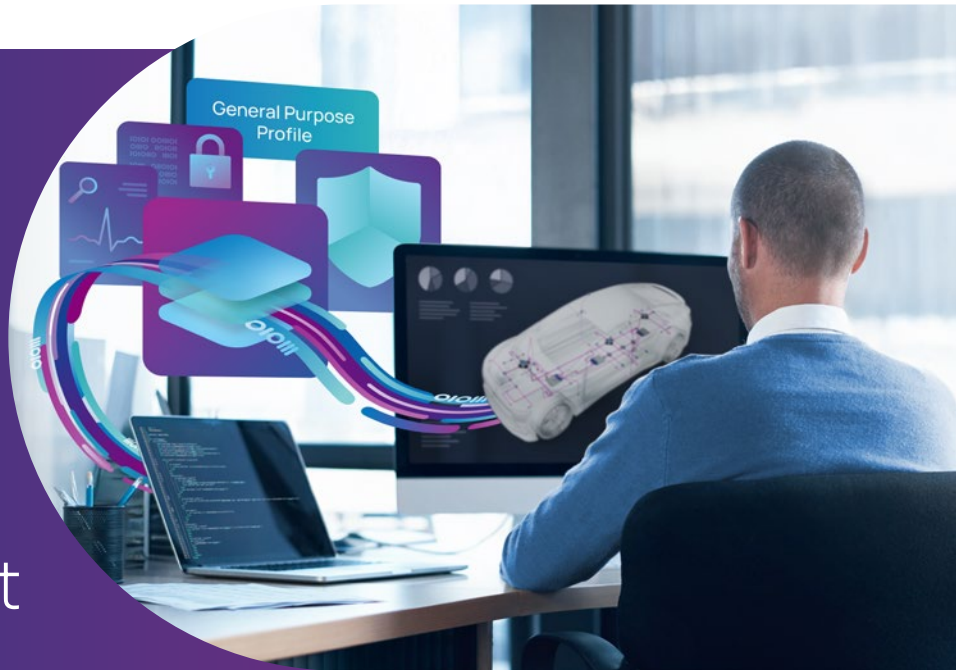


Vehicle Software Platform Suite General Purpose Profile (VSPS-GP)

The foundation for SDV Development



The General Purpose Profile (VSPS-GP) is the foundation of the ETAS Vehicle Software Platform Suite, enabling modern Software-Defined Vehicle architectures. As a founding member and lead contributor to the Eclipse S-CORE initiative, ETAS delivers a production-grade, commercial distribution combining S-CORE open-source middleware with ETAS runtime components and development tools.

From open source to production

ETAS extends S-CORE with:

- Guidance and consulting
- Project-specific adaptation
- Integration with existing solutions
- Reliable timelines and maintenance
- Safety certification



Areas of application

- **Zonal and Centralized E/E Architectures:** Optimized to serve as the high-performance middleware backbone for High-Performance Computers (HPCs) and Zonal ECUs.
- **Broad Domain Spectrum:** Ideal for primary automotive application domains including Body Control, Gateway systems, Vehicle Motion, and highly safety-critical ADAS domains.
- **Cross-Platform Deployments:** Designed for seamless deployment on both x86 and ARM hardware architectures, running on POSIX-compliant operating systems (including Linux and QNX).



Features

- **Essential Runtime Middleware Services:** Out-of-the-box core modules including Lifecycle & Health Management, Inter-Process Communication (com-ipc), Persistence (per), Intrusion Detection (ids), and Time Synchronization.
- **Bazel-Native SDK:** A complete developer kit containing all necessary header files, libraries, toolchain files, and configuration validators designed to natively integrate with Bazel build environments.
- **VS Code & DevContainer Integration:** Turnkey Visual Studio Code extensions paired with a QEMU-ready virtual development environment for instant developer onboarding.

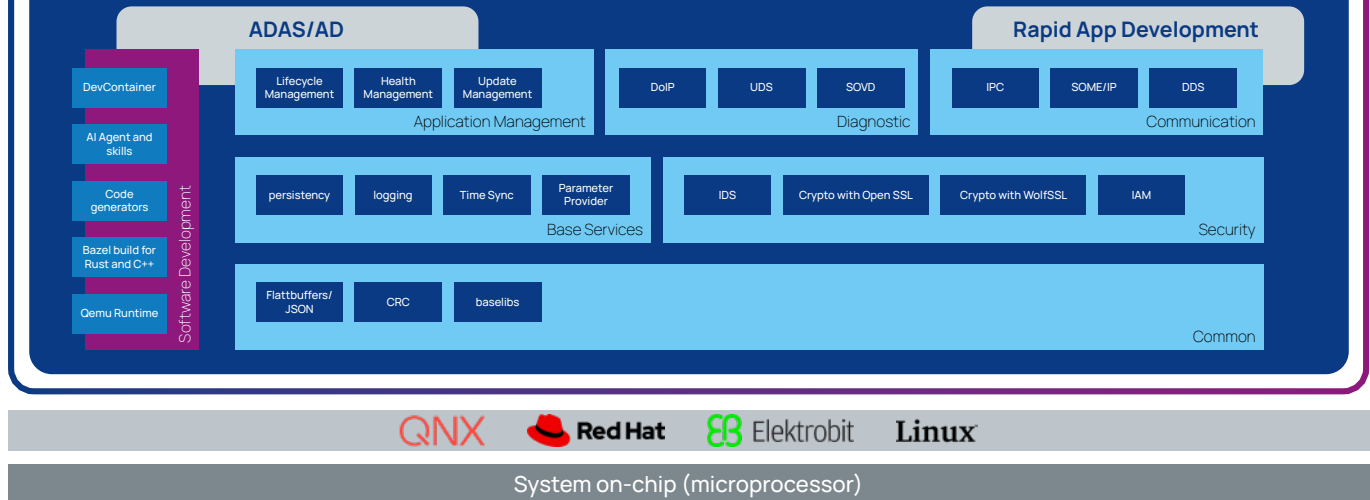


Benefits

- **Commercial-Grade Support & Maintenance:** Combines the flexibility of open-source S-CORE with ETAS's enterprise-grade commercial maintenance, security hardening, and professional tooling support.
- **Strict Safety & Security Compliance:** Engineered to meet rigorous safety processes up to ISO 26262 ASIL-B and prepared for modern automotive cybersecurity regulations (ISO/SAE 21434 and UN R155).
- **Accelerated Time-to-Market:** Decouples vehicle hardware from application software through stable interfaces, allowing developers to focus entirely on unique business/application logic.

Vehicle Software Platform Suite

High performance integration & pre-built & certified & maintained



The runtime modules of the General-Purpose middleware offer the essential core services required by every SDV operating system, allowing SDV developers to focus entirely on their unique application logic. ETAS VSPS-GP is designed for the next-generation High-Performance Computers (HPCs) and Zonal ECUs targeting a broad spectrum of domains

Software Development Tooling and SDK

The VSPS-GP SDK contains everything you need to build your application on top of our middleware. It covers the libraries and header files, toolchain files and also command-line tools like code generators or config validators. All elements are designed to work in a bazel build environment.

Specialized Visual Studio Code extensions streamline editing JSON configuration files or defining interfaces and datatypes in our S-CORE IDL.

The Experience Package accelerates your onboarding with the Vehicle SW Platform Suite. It is a ready-to-run DevContainer setup combining the SDK and all tools with many step-by-step documented examples in a virtual development and runtime environment. It allows you to experience the middleware features and try out your own created applications without any prior development setup.

Features and Runtime Services at a glance

Runtime modules in VSPS-GP v0.6:

- Lifecycle and Health Management (lcm)
- Inter process communication (com-ipc)
- SOME/IP communication (com-someip)
- Persistency (per)
- Intrusion Detection System (ids)
- Logging (log)
- Time Synchronization (time)

Tooling and SDK in VSPS-GP v0.6:

- Supported target platforms: Linux and QNX, each for x86 and ARM architectures
- Devcontainer and QEMU virtual runtimes
- S-CORE Interface Definition Language (SCIDL)
- com api code generator, SOME/IP serializer generator
- JSON Config validation
- VS Code Extension for JSON editor
- VS Code Extension - SCIDL Editor
- Examples for every runtime feature
- Tutorial and documentation