COLLABORA

Renesas Ready Ecosystem Partner Solution
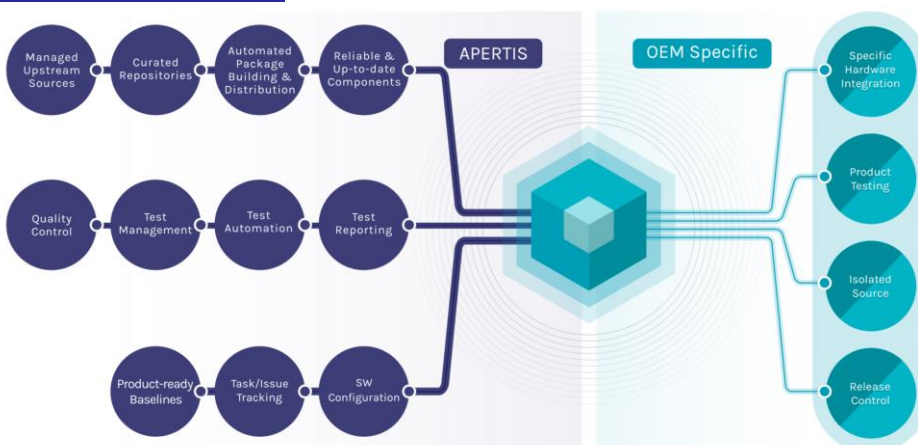# Collabora Apertis End-to-End, Debian-Based Software Infrastructure

Solution Summary

Apertis is a versatile Open Source GNU/Linux distribution and feature-rich infrastructure built on Debian. Designed with security and modularity at its core, it supports a wide range of applications. Apertis offers robust software management, from source code to signed binary packages, alongside a complete testing framework, including hardware-in-loop, and resilient upgrade mechanisms. Apertis v2025 adds support for Renesas RZ/G2L. From integration and customization to long-term maintenance and security updates, Collabora can help you harness the full potential of the Apertis Open Source infrastructure.

Features/Benefits

- Collaborative workflow enabling developers to ramp up quickly, iterate efficiently, accelerate time-to-market, and continuously deliver up-to-date software with minimal maintenance cost
- Produces all artifacts in well integrated automation pipelines, from source packages, git repositories, to system images and corresponding software bill of materials (SBOM)
- Source identical system images, root-file systems, virtual machines, containers, and development environments to greatly facilitate development and deployment
- Mirrored source packages providing clean downstream control and reproducibility, while retaining access to the vast Debian universe of packages
- Based on Debian Bookworm with latest long-term support (LTS) 6.12 Linux, Apertis v2025 brings numerous new features including support for Podman, ONNX Runtime and OP-TEE
- By choosing Apertis to assemble your product's Open Source software, you can be confident in meeting the new requirements of the EU Cyber Resilience Act (CRA)

Diagrams/Graphics
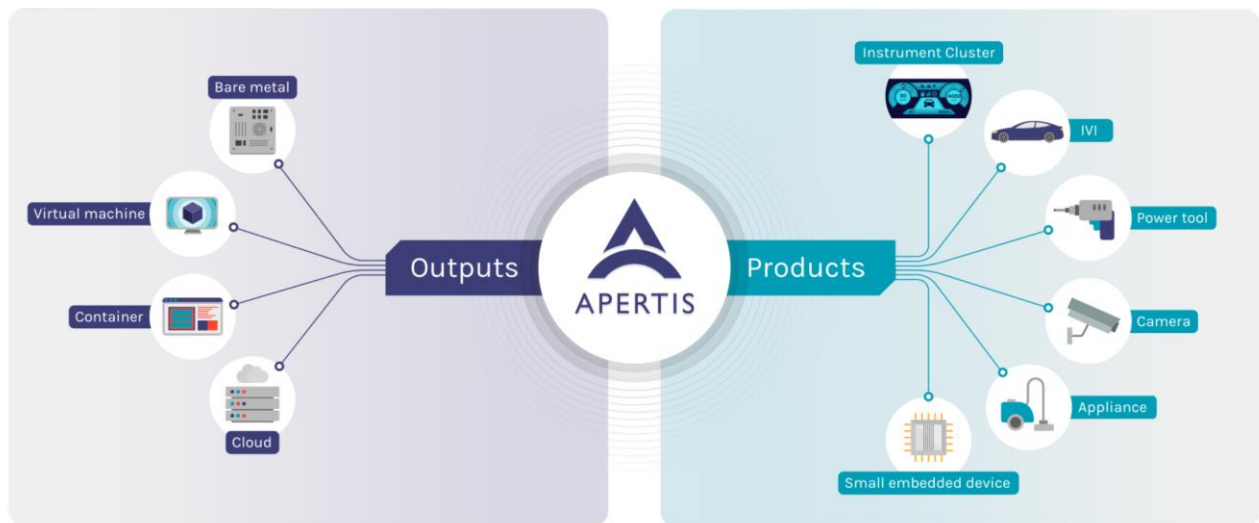

Target Markets and Applications

- Smart home
- Home appliance
- Consumer electronics
- Smart buildings
- Industrial
- Robotics

www.apertis.org

Company Profile

Collabora is a global consultancy specializing in delivering the benefits of Open Source software to the commercial world. Whether it's the Linux kernel, graphics, multimedia, machine learning or XR, Collabora's expertise spans across all key areas of Open Source software development. Since 2005, Collabora has helped its clients navigate the ever-evolving world of Open Source, enabling them to develop the best solutions – whether writing a line of code or shaping a longer-term strategic software development plan. By harnessing the potential of community-driven Open Source projects, and re-using existing components, Collabora helps its clients reduce time to market and focus on creating product differentiation. To learn more, visit collabora.com.

More information

Whether you are building in-vehicle infotainment systems, industrial devices, or custom embedded applications, Collabora can help you leverage the robust tooling and methodologies of Apertis to build production-grade embedded solutions. From guiding you through component selection, to shaping your software architecture, and defining a solid lifecycle management strategy, Collabora can work with you to ensure your embedded Linux solution is stable, secure, and ready for the future. Please contact us at contact@collabora.com or via our contact page to see how we can help.