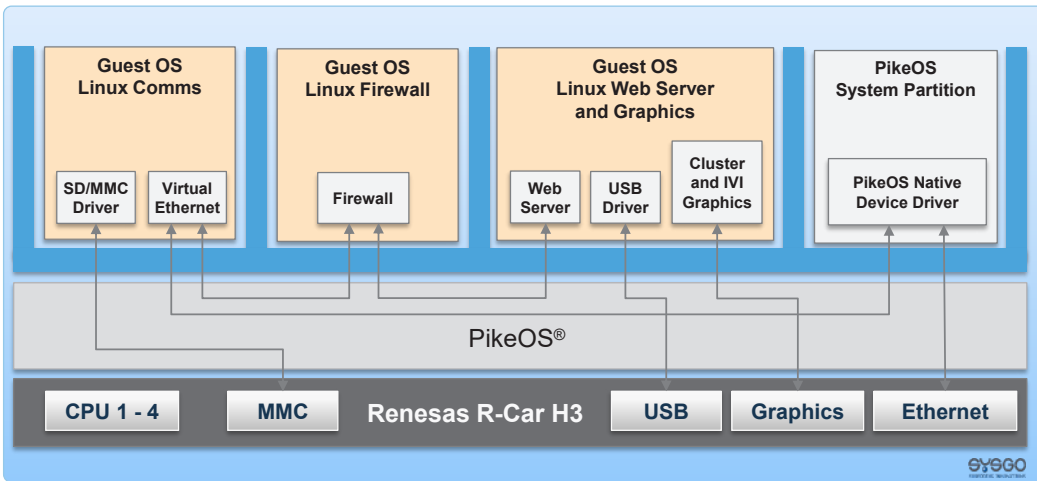


FPS:43



Renesas R-Car H3-based Secure Guest-OS Integration

SYSGO is presenting its Safe & Secure hypervisor PikeOS®, set up as a secure gateway running on the Renesas R-Car H3 based Automotive Starter kit. PikeOS® is configured with several partitions that each host a guest Linux using HW virtualization. One of the partitions is used as a security network firewall to enforce security communication policies between the critical automotive partition running a cluster graphic application, and a third partition acting as the communication application with the external world.



MILS
Freedom of Interference
Secure-Separation

HW-Virtualization

Benefits

- Flexible and extendible architecture
- Reuse of SW infrastructure via Guest OS (e.g. Network Stacks, Crypto Libraries)
- Simplifying the architectural complexity by using separated partitions and SYSGO's development tools
- Increase the effectivity of development processes for distributed development teams
- No error propagation

Features

- Secure and separated communication for autonomous driving
- Using Linux or Android in a secure and certifiable environment
- Separated and stable integration of 3rd-party or user applications or components
- Strong separation of critical automotive car infrastructure prevents hacking

Use cases

- Secure Gateway
- Security by Separation
- HW Virtualized Guest OS

About SYSGO: Founded in 1991, SYSGO became a trusted advisor for Embedded Operating Systems and is the European leader in hypervisor-based OS technology offering worldwide product life cycle support. We are well positioned to meet customer needs in all industries and offer tailor-made solutions with highest expectations in Safety & Security. More information at www.sysgo.com/automotive