

Press Release

emlix is nominated for the embedded award

Embedded Linux for Safety Applications bridges the gap between open source software and safety-critical applications

Embedded Linux for Safety Applications solution has been nominated for the Embedded Award 2025 in the category Safety & Security at the upcoming embedded world.

As part of an innovative development project together with Elektrobit Automotive GmbH, emlix has developed a Linux Safety Monitor which reliably supervises the Linux kernel, enabling a SIL2 /ASILB application to be run directly on Linux.

Rather than trying to make Linux safe emlix provides an execution environment for applications which lets them execute correctly and indicate, if this is not the case. Elektrobit's EB corbos Linux for Safety Applications creates a dependable data-space for safety applications.

In order to achieve this goal

- a hypervisor provides Linux with virtualized memory and computation resources, hence the hypervisor has full control over the access to those resources by Linux
- a supervisor software analyses any attempt made by Linux to access memory or computation resources and detects when such an attempt is able to adversely affect the dependable data-space of safety applications

During the more than six years of development Elektrobit and emlix worked together very closely. To successfully learn from each other was undoubtedly one of the keys to success: Elektrobit as software safety experts and emlix as embedded Linux experts.

emlix offers industrial-grade embedded Linux and Android systems for the digitalization and secure networking of devices, machines and plants.