



**emtrion**

embedded systems

## Why virtualization?

- You want to run multiple operating systems (e.g. Linux and FreeRTOS) at the same time?
- You want to run a real time application alongside a full operating system?
- You want to separate security sensitive software from the remaining system?
- You want to prevent a complete system failure when an error occurs in one of the subsystems?

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In cooperation with the Institute for reliable embedded systems and communication electronics at the Hochschule Offenburg.

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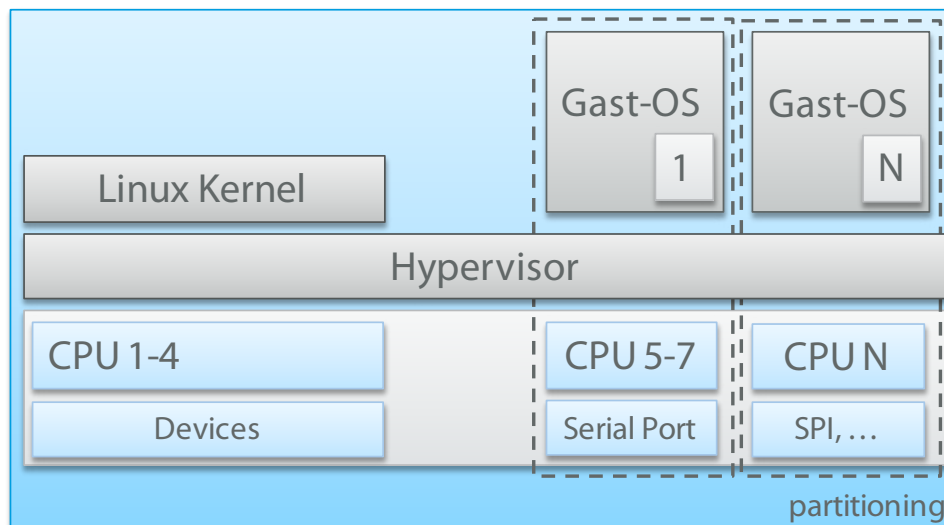
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Virtualization on embedded systems offers you the possibility of running multiple operating systems at the same time concurrently on one multicore embedded processor whilst being isolated from one another.

This provides a system with which safety-critical systems can be executed next to the display layer, for example. At the same time, the reliability of the safety critical system remains unaffected.

Partitioning Hypervisor (e. g. Jailhouse)



## Hardware requirements:

- ARM virtualization and security extensions from cortex-A7 and newer
- Examples for SOM's: emCON-RZ/G1E, emCON-RZ/G1M, emCON-MX8, emCON-LS1012A

## Getting started with your embedded development!

### Reduce your time to market with emtrion Virtualization Developer Kits!

With an emtrion developer kit you can easily start your application development and reduce your time to market.

Emtrion's engineers are unique experts in hardware and software development. The embedded solutions are all from one source.