OpenAMP: “Open Asymmetric Multi-Processing” Project

Runtime coexistence and collaboration
Runtime hardware resource assignment
Resource sharing and IPC between runtimes
Control mechanisms to start and stop runtimes
Typical system: Linux + RTOS on one system-on-chip

www.openampproject.org
OpenAMP Project Intro
Standardizing Asymmetric Runtime Integration
Modern Embedded Targets integrate multiple HW resources, e.g. multiple core clusters, shared memory and peripherals
OpenAMP Embedded Runtimes

*Embedded Targets have multiple Runtimes that need to collaborate*

- Linux + Apps
- RTOS App
- Bare Metal App
OpenAMP HW Assignment

The HW resources need to be assigned into Runtime Domains
OpenAMP Runtime Control

The Runtimes need to be managed, e.g. loaded into memory and started
OpenAMP Resource Sharing and IPC

The Runtimes need to share data and services

Linux + Apps | RTOS App | Bare Metal App
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Memory Linux | Memory Shared | Memory Shared
Peripheral A | Peripheral B | Peripheral C | Peripheral D | Peripheral E
OpenAMP provides standards, runtime libraries and tooling built on top of existing open source projects to simplify runtime collaboration.
Check it out and get involved!

- Community Project Website
  - www.openampproject.org

- Contributing companies:
Thank You