CAPE Brings Open, Composable Edge-Cloud Server Architecture to edge lab LIVE! at electronica 2026

--CAPE demonstrates multi-partner hardware-software platform at edge lab LIVE!, premier technical conference and exhibition for edge AI, edge computing, and CRA-compliant embedded and IoT product development

BIELEFELD, Germany — September 14, 2026 — European Open Compute Architecture for Powerful Edge (CAPE) — a multi-partner European research project developing open, composable edge-cloud infrastructure —will showcase its modular server hardware platforms, accelerated AI workloads, and CAPE orchestration software working together as a composable edge-cloud system during edge lab LIVE! (November 10-13 at electronica in Munich, Germany).

“The industry needs cloud-edge infrastructure to adapt to the workload instead of forcing every application into a fixed, oversized server configuration,” said Martin Kaiser, CAPE dissemination lead. “At its core, CAPE accelerates efficiency, modularity, and heterogeneity — ensuring that the hardware envelope flexes to fit the software, rather than overpaying in cost and power to make the software fit the hardware. This approach gives developers and SMEs a more flexible path toward efficient, sovereign infrastructure.”

“CAPE combines modular heterogeneous hardware, well-established hardware components and interfaces, and an open-source software stack,” said Jens Hagemeyer, CAPE project coordinator. “It promotes dynamically composed computing resources and applications that can be deployed more easily across the edge-cloud continuum.”

“edge lab LIVE! focuses on the practical aspects of modern embedded and IoT edge systems, software, and secure development," said Brandon Lewis, co-founder of edge lab LIVE! and president of ThroughPut Marketing. “CAPE’s collaborative approach to open, composable edge-cloud infrastructure brings together hardware, software, and standards reflects the hands-on engineering conversation we want to foster at electronica 2026. We’re delighted to welcome the project to edge lab LIVE!"

About CAPE's Composable Edge-Cloud Infrastructure

CAPE is developing two modular server platforms: the embedded High-Performance Server (eHPS) and the Edge Micro Data Center (EMDC). Both use open, well-established Computer-on-Module (COM) form factors such as COM Express and COM-HPC to combine x86 and ARM processors with heterogeneous compute resources, including RISC-V, GPU-SoC, FPGA-SoC, storage and memory. The architecture is designed around a high-speed PCIe/CXL fabric so compute, acceleration, storage, and memory resources

can be composed according to workload needs. The current eHPS prototype supports up to three COM-HPC modules around a PCIe Gen6 switch, with CXL support planned for a subsequent hardware revision.

On the software side, CAPE combines Kubernetes orchestration with Pulumi-based Infrastructure as Code (IaC) and openMPMC, an open-source web/Redfish management layer for CAPE and third-party servers. The project evaluates the architecture in Smart Grid, Edge AI, and satellite data processing use cases.

CAPE is also developing an AI-based agentic setup for non-expert users, using its Cognitive Framework to generate Infrastructure-from-Code (IfC) for workloads and applications. This approach is intended to simplify deployment across the edge-cloud continuum and support placement on the most suitable hardware resources for energy-efficiency or computing-performance requirements.

Meet CAPE at edge lab LIVE!

CAPE will exhibit in the edge lab LIVE! space at Hall C5, Stand C5.100/33. edge lab LIVE! takes place November 10-13, 2026 at electronica in Munich, Germany.

CAPE's booth features a live presentation of the CAPE architecture, allowing attendees to see the embedded High-Performance Server (eHPS) and Edge Micro Data Center (EMDC) hardware, accelerated AI workloads, and CAPE orchestration software components working together.

To arrange a meeting with the CAPE team during the event, email info@cape-project.eu.

About edge lab LIVE!

edge lab LIVE! is a multi-faceted program designed for technical leaders and developers in the fields of embedded systems, the IoT and edge artificial intelligence (AI). edge lab LIVE! is jointly hosted by ThroughPut Marketing and Messe München. It takes place November 10-13, 2026 at electronica (Trade Fair Center Messe München, Munich, Germany). For more information visit: https://electronica.de/en/trade-fair/program/edge-lab/

About CAPE

European Open Compute Architecture for Powerful Edge (CAPE) is a European research project developing composable, cognitive, and sustainable edge-cloud server infrastructure based on open standards and open-source hardware and software. Launched in December 2024, CAPE brings together seven SMEs, four academic partners, and the international standardization organization, PICMG. CAPE combines modular heterogeneous server hardware, PCIe/CXL-based resource composition, open server management, and software for orchestration and deployment across the Edge-Cloud Continuum. Project results are evaluated in Smart Grid, Edge AI, and satellite data processing use cases. CAPE receives funding from Horizon Europe, the European Union's key research and innovation programme under grant agreement No. 101189899. It is co-funded by the Swiss National Science Foundation (SNSF, No. 200429) and by armasuisse Science and Technology.

For more information, visit https://cape-project.eu, follow CAPE on LinkedIn at https://www.linkedin.com/company/cape-project-eu, or contact info@cape-project.eu.

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