

Enclustra Expands Global Portfolio with Launch of New Physical AI Technology Line

In partnership with SiMa.ai, Enclustra introduces the MLSoC Modalix System-on-Module to accelerate the adoption of next-generation AI at the embedded edge.



Zurich, Switzerland – October 1, 2025 – Enclustra, the Swiss-based leader in FPGA innovation with a strong footprint across Europe, the Americas, and Asia, today announced the launch of its new **Physical AI Technology Line**. This milestone builds on the March 2025 announcement at Embedded World, Nuremberg, of Enclustra's strategic partnership with SiMa.ai and the joint introduction of the **MLSoC™ Modalix System-on-Module (SoM)**, leveraging SiMa.ai's 50 TOPS MLSoC device.

With industries worldwide accelerating digital transformation, Enclustra's new product line addresses the growing demand for **multi-modal AI, Physical AI, and Generative AI** applications at the embedded edge. The Modalix SoM provides a high-performance, energy-efficient solution that enables organizations in manufacturing, robotics, industrial automation, aerospace, and defense to integrate advanced AI capabilities faster, more reliably, and at scale. **Customers can place orders immediately to secure early delivery and be among the first to deploy next-generation AI at the embedded edge.**

Unleashing Physical AI

The Enclustra - Modalix MLSoM represents the convergence of **Enclustra's leadership in Edge AI** with **SiMa.ai's expertise in Physical AI**. The result is best-in-class performance per watt, setting a new benchmark for AI processing in real-world environments where machines must both think and act.

Key benefits include:

- **Best-in-Class Processing:** 50 TOPS of edge-optimized computing power with SiMa.ai's MLSoC.
- **Seamless Integration & Flexibility:** Compact design with extensive I/O options ensures compatibility with GPU-based SoMs and existing architectures.
- **Accelerated AI Development:** SiMa.ai's ONE Platform for Physical AI, including the Palette and Palette Edgematic software suites, streamlines development with Python, PyTorch, and OpenCV.
- **Industrial-Grade Reliability:** Advanced thermal management and performance monitoring ensure dependable operation across industries with demanding requirements.

Voices from the Leaders

"As a pioneer in high-performance embedded solutions, Enclustra is committed to pushing the boundaries of FPGA and SoM innovation," said **Philipp Baechtold, CEO of Enclustra**.

"With Swiss innovation at our core and a growing presence across global markets, this launch strengthens our ability to deliver Edge AI solutions that empower industries to scale AI adoption efficiently."

Krishna Rangasayee, CEO and Founder of SiMa.ai, added: "The introduction of our Modalix SoM represents a critical expansion into Physical AI, addressing the diverse needs of robotics, automation, and autonomous systems. Together with Enclustra, we are removing integration barriers and making it remarkably simple for companies worldwide to upgrade from legacy systems to Modalix's superior performance."

Early Access Program

Engineering samples of the MLSoC Modalix SoM are available now through Enclustra's exclusive Early Access Program. Organizations worldwide can request participation at www.enclustra.com. **Order today to secure early delivery slots and be among the first to accelerate your Physical AI innovation with Enclustra's Modalix SoM.**

About Enclustra GmbH

Enclustra is a Swiss-based innovator in FPGA technology, shaping the future of high-performance embedded solutions. With headquarters in Zurich and offices in Germany, the USA, and China, supported by a global partner network, Enclustra serves industrial, aerospace, and research organizations worldwide. Its portfolio spans FPGA-based modules, optimized IP solutions, and end-to-end engineering services that cover hardware, firmware, embedded software, and prototyping. Learn more at www.enclustra.com.

© 2025 Enclustra GmbH. All rights reserved.

About SiMa.ai

SiMa.ai is a software-centric, embedded edge machine learning system-on-chip (MLSoC) company delivering **ONE Platform for Physical AI**. Its MLSoC, Modalix, and Palette product family deliver unmatched performance and efficiency for AI use cases across manufacturing, robotics, aerospace, defense, agriculture, and healthcare. Founded in 2018, SiMa.ai has raised \$270M and is backed by Fidelity, Maverick Capital, Point72, and other leading investors.

Learn more at www.sima.ai.

© 2025 SiMa Technologies, Inc. All rights reserved.