

Conversational AI — Multi-Modal Functionality

Modalix SoM in Production Now!



SiMa Value Proposition



Language, speech,
and vision on one
chip



Real-time response
with zero cloud
latency, for natural
conversational flow
with your equipment

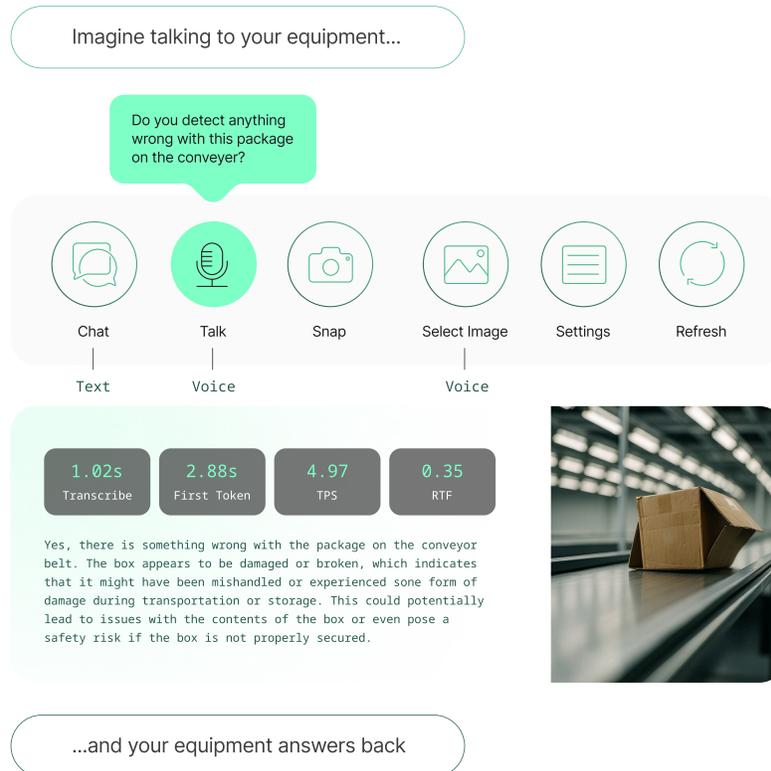


All processing stays
local - your data is
secure



Conversational
intelligence in <10 W,
even off the grid

SiMa Modalix brings Large Multi-Modal Models (LMMs) to life for physical AI



Give machines the power to read, hear, see... and understand

Across factories, vehicles, and field equipment, systems are evolving from command-based control to natural interaction. SiMa.ai Modalix enables that shift — running multimodal LLMs, LMMs, and VLMs entirely on-device for real-time intelligence without cloud latency, cost, or privacy concerns. Sim.ai partnered with HTEC — whose strong background in AI/ML engineering and embedded edge systems makes them an ideal strategic collaborator.

- Enables natural human-machine interaction through voice, vision, and text interface.
- Processes speech, image, and language locally — no cloud required.
- Provides sub-second response times for real-time equipment feedback.
- Eliminates need for cloud or external host, reducing cost and complexity, while preserving privacy.

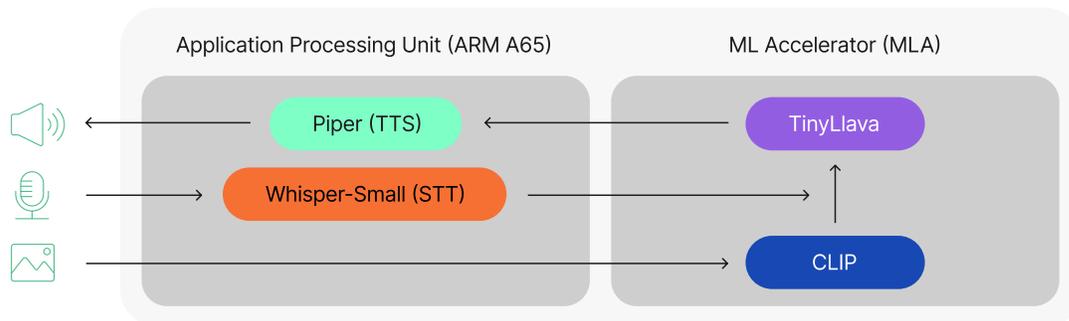
Conversational AI, Multi-Modality Demo

Powered by SiMa.ai Modalix Running TinyLlava on Device at under 10W

Technical Details:

- Unified Multimodal AI** LLMs, VLMs, LMMs work together to understand text, voice, and images.
- Fully On-Device** Runs TinyLlava, Whisper, CLIP, and Piper TTS — no cloud or host needed.
- Real-Time Response** Delivers up to 13 TPS and 0.5 s TTFT for human-like interaction.
- Flexible Deployment** CLI and Web modes for production use in physical AI environments.
- Under 10 W** Efficient & thermally stable operation.
- Private by Design** All data stays local.

MLSoC™ Modalix



Convert Hugging Face models into optimized, ready-to-run binaries using **SiMa's LLiMa framework**, which compiles LLMs and VLMs for the MLA block—fully integrated into the **Palette SDK** and ML compiler.

Hardware				Software		
Our Silicon	Our Boards			Palette Edgematic	Palette SDK	LLiMa by SiMa^{ai}
Modalix	SoM	SoM Dev	PCIe HHL			



Model Zoo

About SiMa.ai

SiMa.ai is a leader in Physical AI, delivering a purpose-built, software-centric platform that brings best-in-class performance, power efficiency, and ease of use to Physical AI applications. Focused on scaling Physical AI across robotics, automotive, industrial automation, aerospace & defense, smart vision, and healthcare, SiMa.ai is led by seasoned technologists and backed by top-tier investors. Headquartered in San Jose, California. Learn more at www.SiMa.ai.

About HTEC

HTEC Group Inc. is a global AI-first provider of strategic software and hardware embedded design and engineering services, specializing in Advanced Technologies, Financial Services, MedTech, Automotive, Telco, and Enterprise Software & Platforms. HTEC has a proven track record of helping Fortune 500 and hyper-growth companies solve complex engineering challenges, drive efficiency, reduce risks, and accelerate time to market. HTEC prides itself on attracting top talent and has strategically chosen the locations of its 20+ excellence centers to enable this. Learn more at www.htec.com.