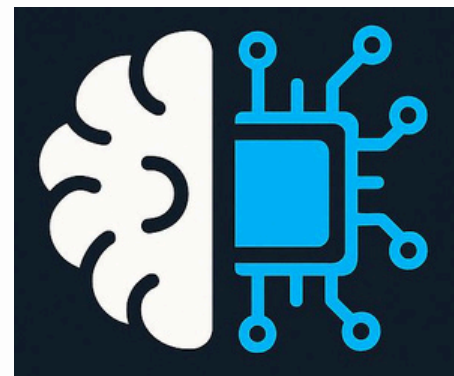


EmbedMind Studio



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Overview

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Problem

Hardware AI Development Complexity

- Requires simultaneous expertise in embedded systems + AI + cloud
- Fragmented tools: Separate IDEs for coding, sensor sims, LLM integration
- Slow iteration cycles between code changes and hardware testing

Solution



Unified AI Agent Builder for Embedded Hardware

- All-in-One IDE:

Build, simulate, and deploy AI agents for ESP8266/Raspberry Pi in one platform.

- LLM Integration:

Use Gemini/OpenAI models directly in your agent code—no extra setup.

- Sensor Simulation:

Instantly test agent logic with virtual sensors (smoke, temp, CO, flame).

- Hardware-in-the-Loop:

Live, two-way testing with real devices—see immediate results.

- One-Click Deployment:

Instantly push code and configs to hardware—no manual flashing.

Target Audience

Primary Users

- IoT Developers (60%)
- Hardware Engineers (30%)
- AI Practitioners (10%)

Market Opportunity

- \$1.2B embedded AI tools market (2025)
- 28M+ ESP32/ESP8266 devices shipped annually



Market Demand

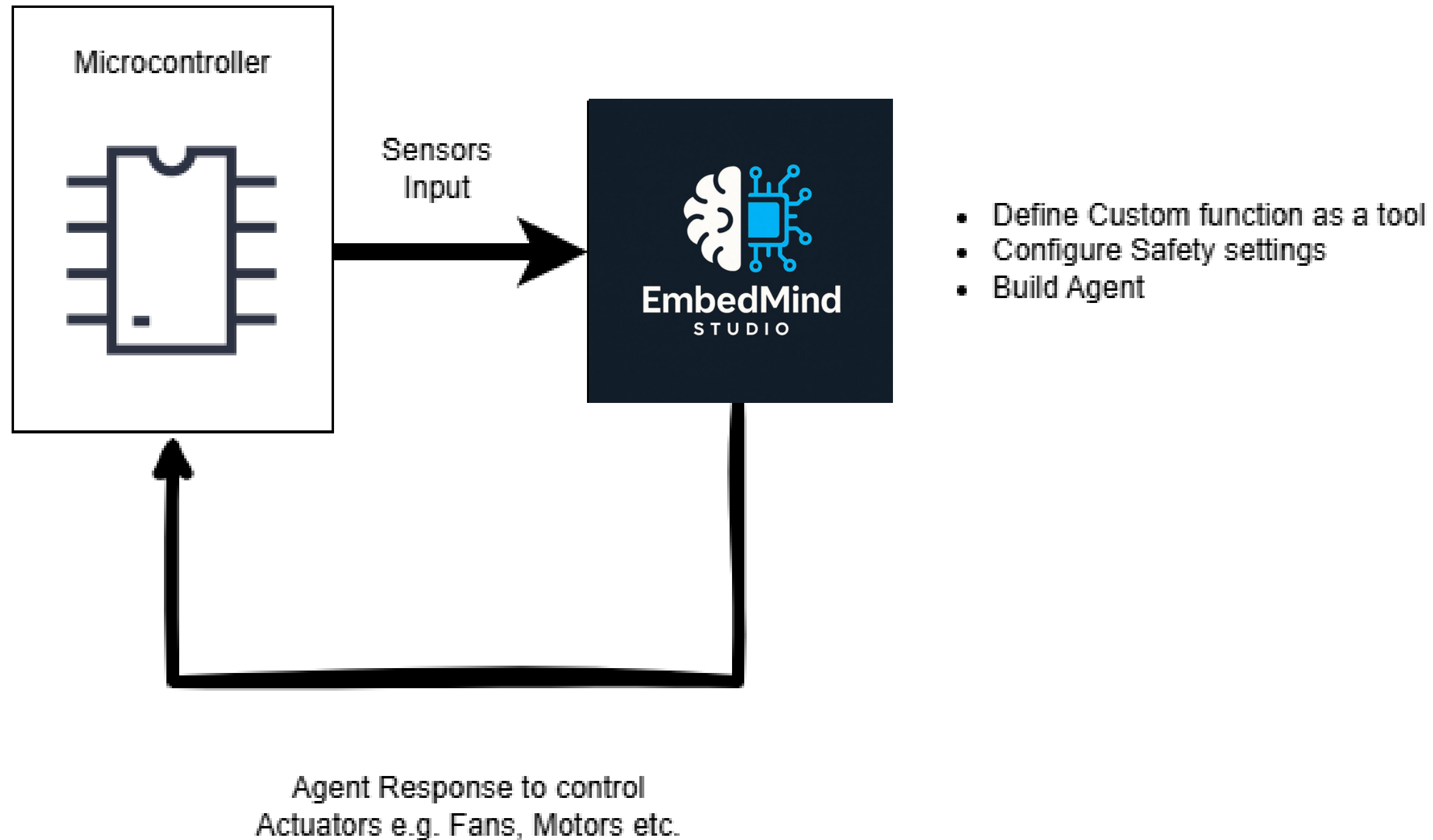
- 450% growth in "LLM for IoT" GitHub repos (2023-2025)

450%

- 23k+ Threads on Stack Overflow about sensor-LLM integration
- Existing solutions only solve parts (PlatformIO for coding, Edge Impulse for ML)

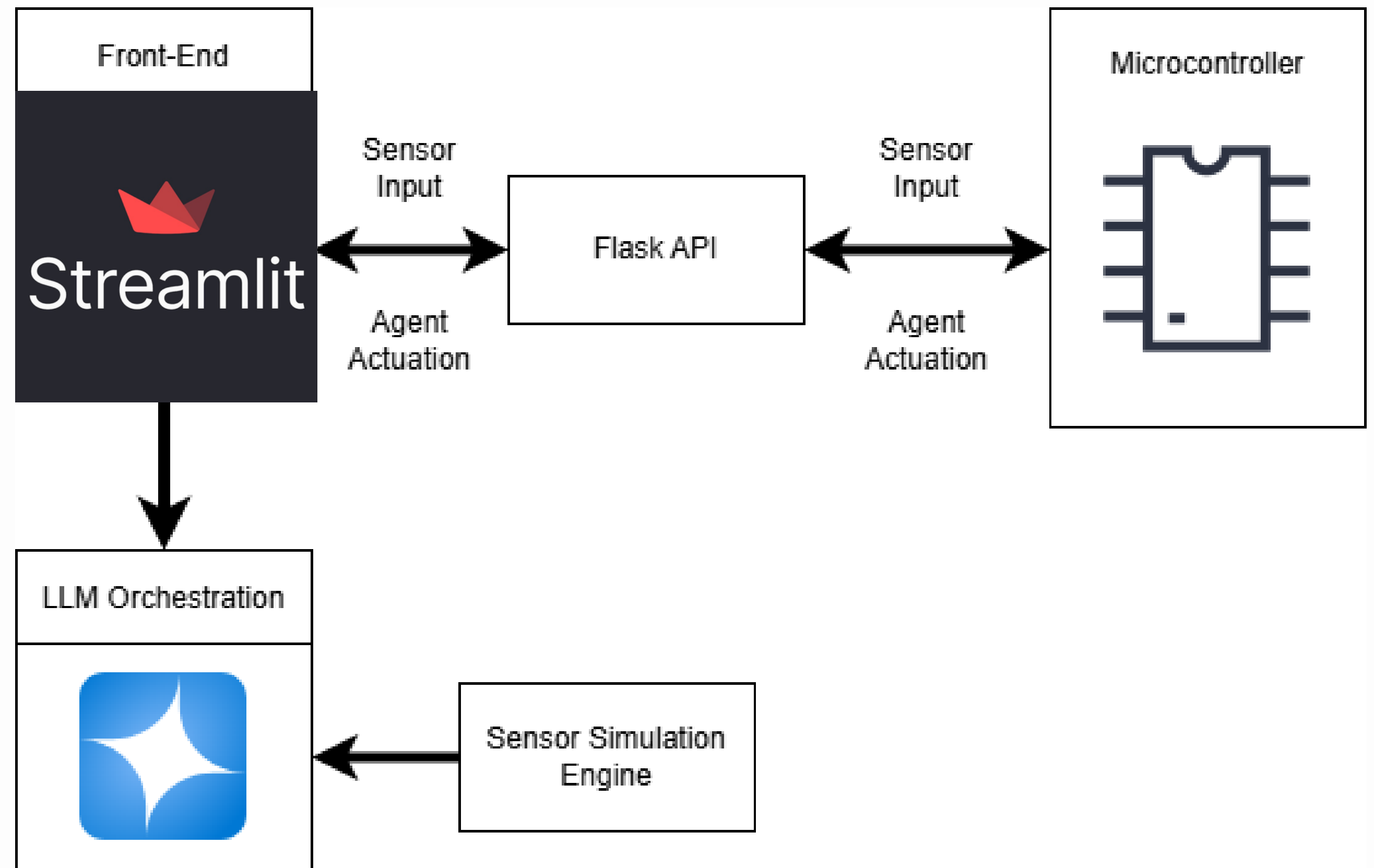


Solution Design



Demo

Technical Architecture (Agent Action)



Competition

	EmbedMind	Platform IO	Edge Impulse
LLM Integration	✓ Native	✗	✗
Real Testing	✓ HIL	✓	✗ Sim Only
Code Generation	✓ AI	✗	✓ ML

Go-to-Market & Growth Strategy

Launch

- Developer Communities (Hackster.io, GitHub)
- Hardware Vendor Partnerships (Espressif, Raspberry Pi)
- Hackathon Sponsorships

Monetization

- Free Tier: 1 device, community LLMs
- Pro (\$99/mo): Team collaboration, premium LLMs
- Enterprise: Custom SLAs

Roadmap

2025

Q3: Arduino/RPi Pico support

Q4: Prebuilt agent marketplace

2026

Q1: Multi-device swarm simulation

Q2: On-device LLM optimization



Thank you