

Linumiz GmbH

Embedded Intelligence. Engineered for Scale.

We are Linumiz — an embedded systems company focused on building secure, scalable hardware and software solutions. We operate at the intersection of embedded engineering, AI, and automotive-grade systems.

Full-Stack Embedded Engineering

Embedded Hardware

- Custom Board Design
- High-speed PCB Layout
- Signal Integrity & Power Optimization
- Industrial & Automotive-grade designs

Embedded Software

- BSP & Low-level drivers
- RTOS / Zephyr / Linux Integration
- Secure Firmware Development
- Functional Safety & Compliance Support

Regulatory & Compliance

- CRA (Cyber Resilience Act) Consulting
- Security Architecture & Risk Assessment
- Approval & Market Certification Guidance



Open Source in Automotive

Enabling Zephyr for Automotive with Infineon

- Collaboration with Infineon
- Bringing Zephyr RTOS & NuttX RTOS into Automotive Applications
- Focus on:
 - Automotive-grade reliability
 - Security & Safety alignment
 - Long-term maintainability
- Bridging open-source innovation with automotive compliance

Cyber Resilience Act (CRA) – From Risk to Readiness

- Product Security Architecture Design
- Documentation & Audit Preparation
- Vulnerability & Lifecycle Management Strategy
- Guidance through Certification & Market Approval Processes

Security is no longer optional — it is regulatory.

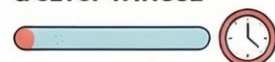
Embedded DX – AI Driven Developer Experience

The Future of Embedded Development: AI-Driven Developer Experience (DX)

THE HIGH BARRIER TO ENTRY



THE “DEPENDENCY HELL” & SETUP FATIGUE



Developers often spend weeks on environment configuration and reading thousand-page technical datasheets.



AI HALLUCINATIONS IN EMBEDDED CODING

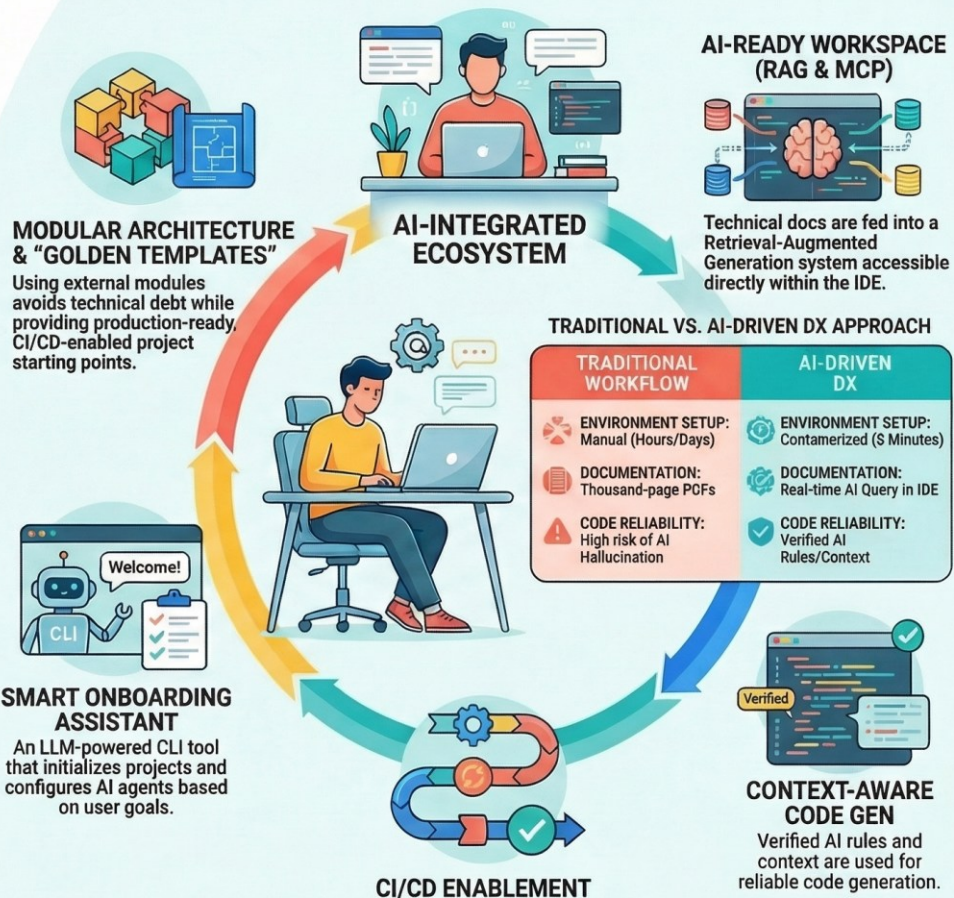
Standard AI models often suggest outdated patterns or incorrect hardware register configurations.



HIGH SUPPORT COSTS

Significant resources are wasted answering repetitive, trivial technical queries from new users.

THE 5-PILLAR AI-DRIVEN SOLUTION





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