ERARGE & ERGTECH

Dual Core Secure Processor and HW-based Cyber-Physical Resilience Solution Family

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Company at a glance

We are a Research-Oriented SME working in the following fields since 1975

Some selected products of honour:

- **EAL4+**
- PRIGM™ Network/Cloud / PCI Hardware Security Module
- PRIGM Midi Series Secure Gateways
- Rastgele™ True Random Number Generators chips (12 patents) Chaos™
- Dual Core Secure Microprocessor (Crypto-accelerator) based on RISC-V

Our offices across Europe and Turkey

Why you may prefer working with us

Research-oriented ambition for Application-to-Industry
- 12 PCT patents in various domains
- 150+ papers in top journals/proceedings
- 3 international best paper awards

ERARGE’s European Project C³PO awarded twice (ITEA Award of Excellence 2018 – Highest Business Impact & Most Innovative Project Award in Altın Karınca Contest)

BiMy received the same award in 2021 (ITEA Award of Excellence 2021)

Experience in international projects (2 Horizon Europe (HEU), 1 HEU-KDT, 2 H2020, 1 H2020-ECSEL, 4 ITEA, 3 TEYDEB, 1 KOBİGEL)

3 PHDs, 1 PHD candidate ~70 employees (25% research staff)

Strong network with end users & industry

End products available in the market (ERINOX, PRIGM, Sensation, Rastgele, Chaos, 5D Kent Platform,...)

Deep Knowledge & Technology provider

Aeneas AENEAS Member
## Collaboration Expectations

<table>
<thead>
<tr>
<th>Collaborative project of interest to you</th>
<th>Chips JU, Clean Hydrogen, 6GSNS, Horizon Europe, Eureka Clusters</th>
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<tbody>
<tr>
<td>Scope</td>
<td>Technology Development, Prototyping and Application to Industry</td>
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<td>Project idea</td>
<td>Energy-efficient and Trustworthy Chip Practices strengthened with Green Circularity- and Sustainability-by-design in the Manufacturing Chain (can be integrated with other consortia)</td>
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| Project impact | - Reduce the GHG emissions  
- Improve the production and manufacturing life cycle, reduce the costs  
- Improve the cyber-physical resilience and trustworthiness in Industry5.0 |
| Project consortium | Partners showing interest to our approach: Nokia, NXP, Weidmüller, EnerjiSA, CWEnergy, Otokar, Sweco, RISE, CERTH, MDU, Analog Device |
| Other information (e.g. project budget, duration) | Looking for being a part of a consortium  
Or open to <20-partner well-dedicated project that can be prepared for the upcoming call TBD |

### Offered Innovations by ERARGE&ERGTECH (based on legacy and ongoing projects)

- **a Dual Core Secure Processor (DCSP) with RISC-V architecture** (looking for investment/project for IC prototyping)
- **Low-Energy RISC-V-compliant Chaotic Clock against Side Channel Attacks and for EMC compliance used in cyber-physical resilience**
- **True Random Number Generators TRNG-on-chip** for central processing units and conventional architectures
- **Verification and Validation of Cryptosystems** for cryptanalysis by formal methods
- **Digital Product Passport** Research for Decentralised Industry 5.0 and Society 5.0 strengthened with IoT-enabled and AI-powered blockchain ecosystem