TEMPO

Technologies and hardware for neuromorphic computing

Low-power chips for AI applications

Based on neuromorphic hardware and technologies

The TEMPO project develops neuromorphic technologies & hardware, inspired by biological neural architectures, to boost local data processing capability in edge AI devices.

TEMPO focuses on the following topics

Emerging technologies

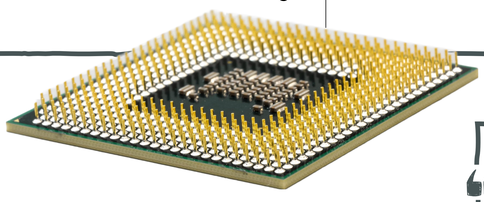
- Define emerging technology platforms
- Enable development through foundries
- Infrastructure alignment to enhance wafer exchange

Technologies, architecture & design

- Design enablement
- Power-performance-area optimization

Algorithms & applications

- Identification of critical workloads for hardware implementation
- Application-driven DNN & SNN optimization
- Leverage technologies in application demos



> TEMPO brings Europe in pole position to address the neuromorphic market by strengthening the entire value chain in Europe

Neuromorphic hardware technologies will be applicable in a broad range of use cases and applications.

The project's proof of concepts demonstrate the developed technologies over four application areas.

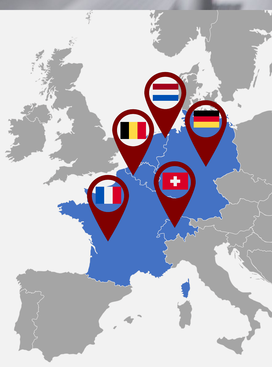
Health | Digital industry | Automotive | Digital life

Project facts & figures

Start May **2019**	End Jan **2023**
Duration **45M**	Budget **30€M**
Partners **18**	Countries **5**

TEMPO's activities are based on **collaborative research** between world-leading research centers, large and small industrial enterprises, and universities.

imec, ST life.augmented, PHILIPS, SynSense, ATOGEAR, cea, Infineon, THALES, videantis, University of Zurich, Fraunhofer, Valeo, BOSCH, InnoSenT, Technische Universität Dresden



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ECSEL Joint Undertaking

https://tempo-ecsel.eu
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SCAN ME to visit website

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