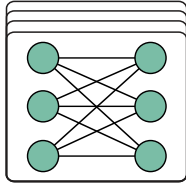




This project has received funding from the ECSEL Joint Undertaking (JU) under grant agreement No 826655. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Belgium, France, Germany, Netherlands, Switzerland



Addressing the call/topic: H2020 ECSEL-2018-2-RIA
Research and Innovation Action



TEMPO

Technologies and hardware for neuromorphic computing

Deliverable

D6.9 – Application Mapping

Work Package:	WP6 (Application Specification and Demonstration)
Dissemination level:	Confidential
Official due date:	30.11.2022
Document editor:	Kay Bierzynski (IFAG)
Contributing partners:	IMEC-NL, PMS, PRE, ATO-gear, UZH, SynSense, STC, STG, IFAG, VIC, CEA, Fraunhofer, INNOSENT, Bosch, IMEC
Internal reviewers:	Gert-Jan van Schaik (IMEC-NL), Björn Debaillie (IMEC), Ilja Ocket (IMEC)
Document version:	V1.0

© Copyright TEMPO Project. All rights reserved.

This document and its contents are the property of the TEMPO Partners. All rights relevant to this document are determined by the applicable laws. This document is furnished on the following conditions: no right or license in respect to this document or its content is given or waived in supplying this document to you. This document or its content is not be used or treated in any manner inconsistent with the rights or interests of TEMPO Partners or to its detriment and are not be disclosed to others without prior written consent from TEMPO Partners. Each TEMPO Partner may use this document according to the TEMPO Consortium Agreement.

1 Publishable summary

This deliverable describes the deployment of the TEMPO use cases and their corresponding applications to the TEMPO demonstrators and their NN platforms developed or applied in the project. Accordingly, the results described in this report merge two major development tracks of the project, i.e. the application development and the hardware development, which previously ran largely in parallel.

Specifically, this includes the following mapping of each of the following use cases to at least one demonstrator:

- Medical image denoising
- Real-time nutrition assessment
- Human movement data analysis
- Simulated cue integration navigation task
- Framework for fast deployment of a spiking recurrent neural network
- Gesture recognition and keyword spotting
- SCALA traffic object classification
- Radar angle-of-arrival estimation
- Object recognition and sound localization