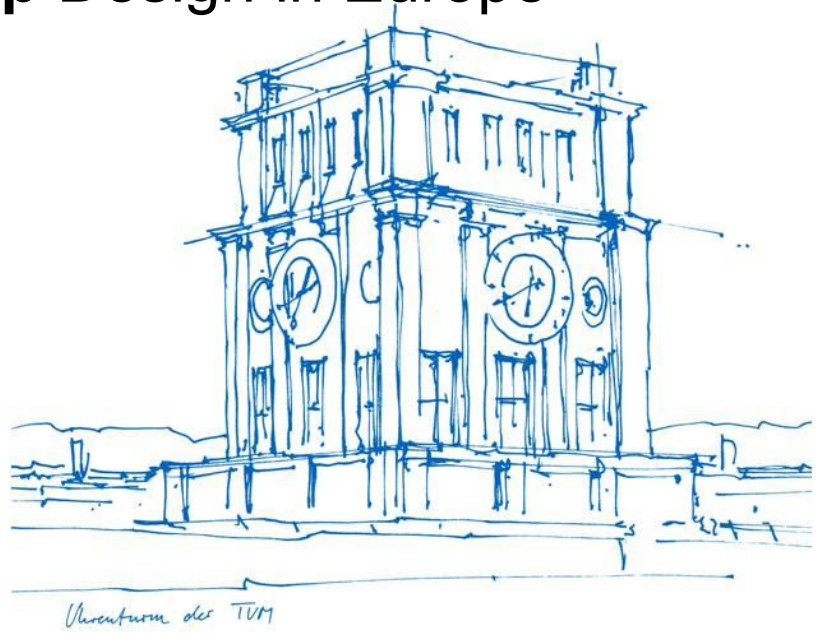
Edu4Chip

Joint **Edu**cation **for** Advanced **Chip** Design in Europe

PD Dr.-Ing. habil. Michael Pehl
Chair of Security in Information Technology
TUM School of Computation, Information and Technology
Technical University of Munich
Contact: m.pehl@tum.de



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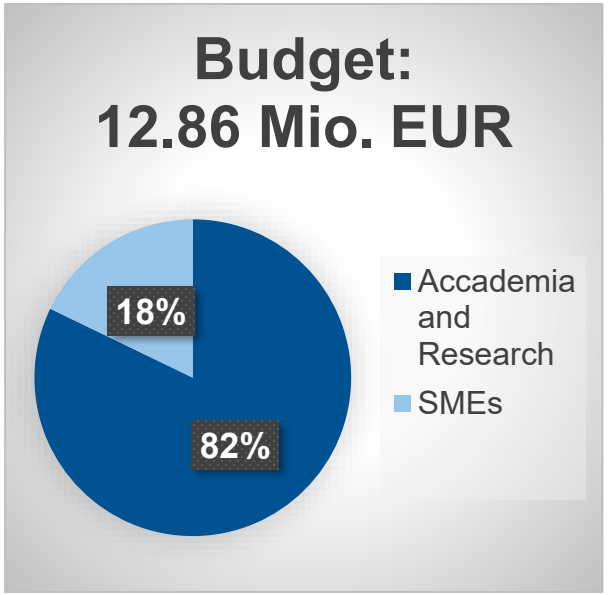
Agenda

- What is Edu4Chip?
  - Funding.
  - Partners.
  - Core Developments.

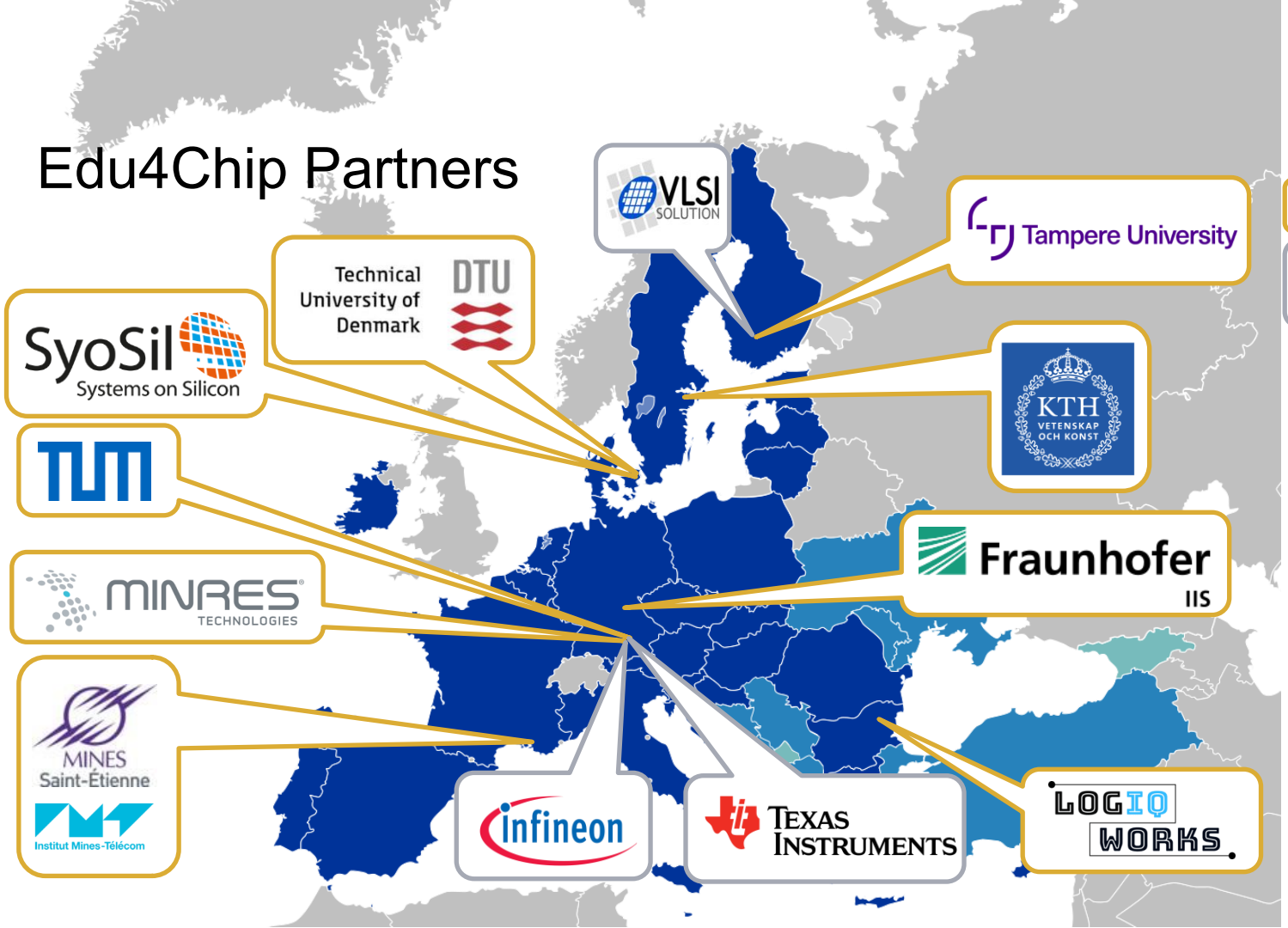
- How to make use out of it?
  - Core challenges during the setup of the project.
  - Resources offered.

Joint Education for Advanced Chip Design in Europe (Edu4Chip) – Key Data

- Call “Digital Europe Specialised Education Programmes” (DIGITAL-2022-SKILLS-03).
- 9 Beneficiaries
  - 5 universities, 3 SMEs, 1 center of excellence.
  - Project leader: TUM.
- Budget: 12.86 Mio. EUR; 50% funding.
- Project duration: October 2023 – September 2027.



Edu4Chip Partners



9 Beneficiaries

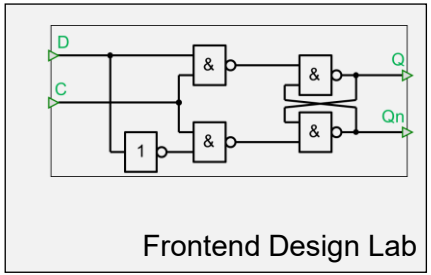
3 Associated Partners

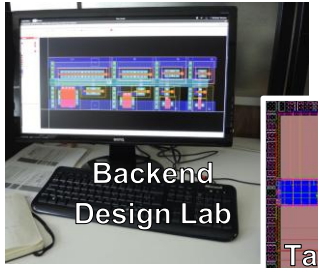
7 Supporters

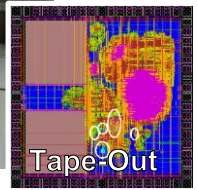
- Airbus Defence and Space GmbH
- Google Germany GmbH
- Intel Deutschland GmbH
- MunEDA GmbH
- NXP Semiconductors Germany GmbH
- Robert Bosch GmbH
- Thales DIS France SAS

Edu4Chip Aligned Master Programs

Term 1	Term 2	Term 3	Term 4
Local Modules (existing/new)	Local Modules (existing/new)	Local Modules (existing/new)	Master Thesis Project
Online Modules (new/existing)	Online Modules (new/existing)	Online Modules (new/existing)	
	Development of Green Hardware	Research Internship (Industry Partner)	



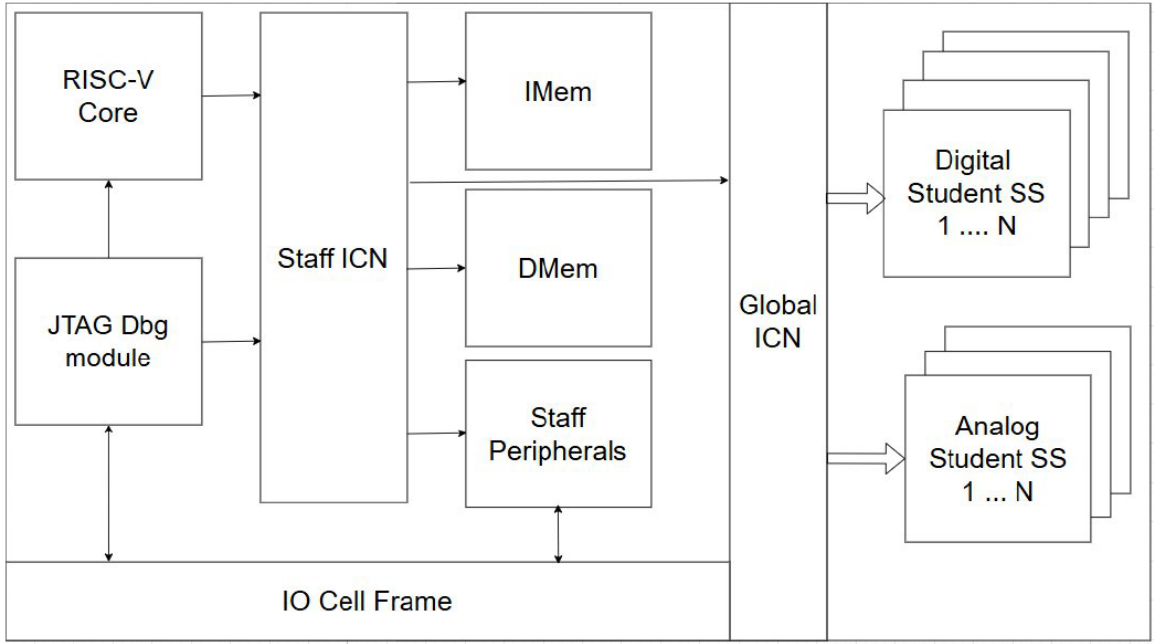




Chip Design Tape-Out Project

Life-long learning modules

Edu4Chip Didactic-SoC



- Platform for ASIC-Design by students.
- “Staff-part” ensures basic functionality.
- Students provide independent designs.

Core Challenges

- University-specific, national, European and international regulations:
  - Collaboration between countries more difficult than expected.
    Solution: Aligned programs, no joint programs/degrees, partially as separate programs or within existing programs.
  - Export control (US) and NDAs:
    - Technology access depends on nationality and
    - Students cannot be forced to sign NDAs but
    - Universities must take students independent of nationality and willingness to sign NDAs and ensure feasibility of studies.

    Solution: (i) Different tracks depending on export control status of students and
    (ii) For one partner pure open-source-based programs
- 50% funding of program
  - Co-funding (at that time) not easy to get → individual solutions per partner.

Resources

- Detailed information on the program, curricula, achievements: https://edu4chip.github.io
- Didactic-SoC: https://github.com/Edu4Chip/Didactic-SoC
- Didactic-PCB: https://github.com/Edu4Chip/Didactic_PCB
- Feel free to contact me in case of questions: m.pehl@tum.de