

Czech Semiconductor Centre

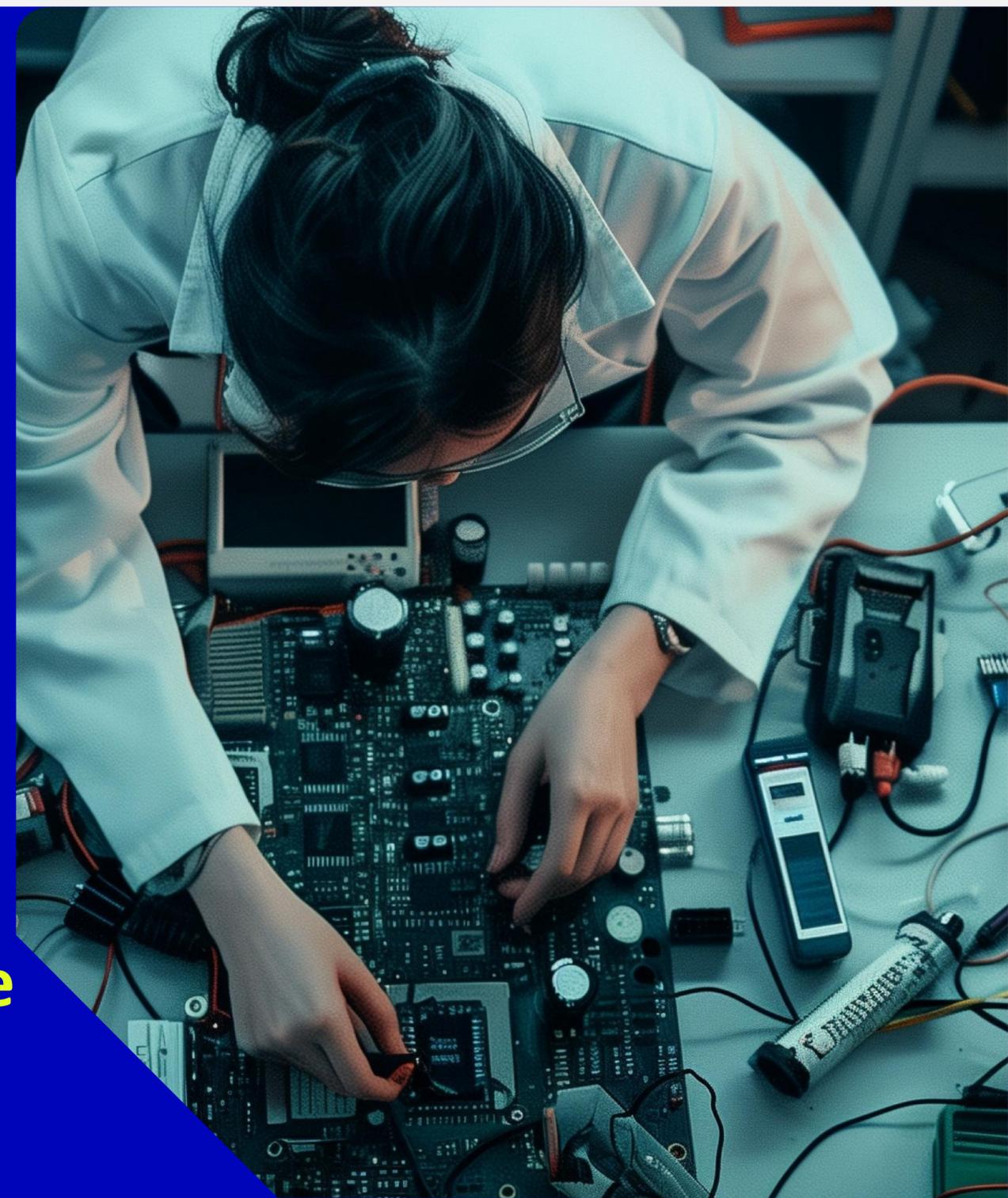
(Chip Competence Centre in the Czech Republic)

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Your breakthrough guide



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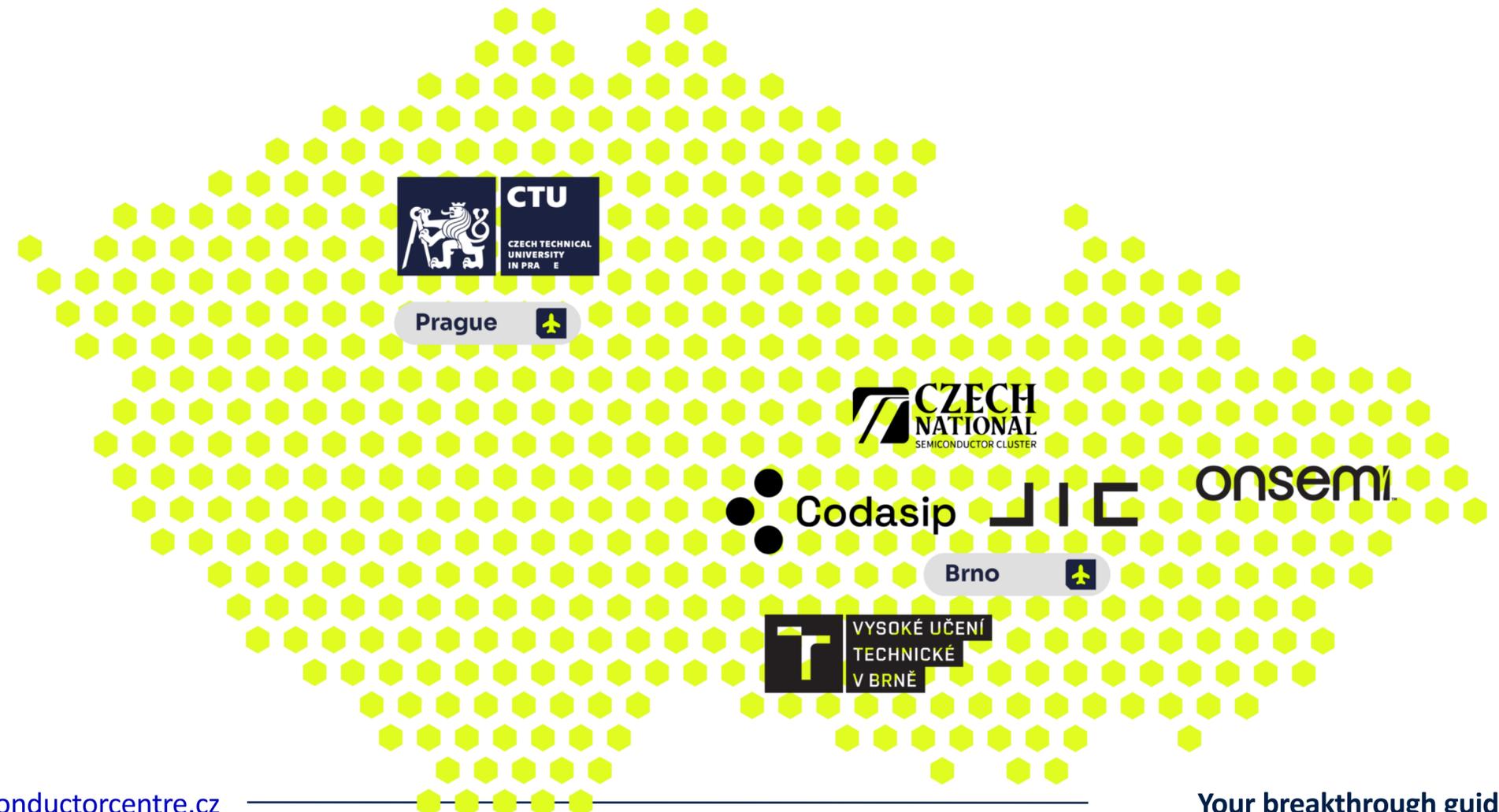


How CSC Helps Companies Develop Semiconductor Technologies



Czech Semiconductor Centre

- › Connecting industry, research and infrastructure for semiconductor innovation in Europe
- › Host organisation: **Brno University of Technology**
- › Director: **Karel Masařík**



Why Semiconductors Matter Now



Semiconductors are the foundation of modern technologies:

- › artificial intelligence
- › automotive electronics
- › energy infrastructure
- › industrial automation
- › aerospace systems

Europe is strengthening its semiconductor ecosystem through the **EU Chips Act**, investing **more than €40 billion** into semiconductor innovation. European and Czech companies play a key role in this ecosystem.

Why the Czech Semiconductor Centre Exists



Developing semiconductor technologies requires collaboration between:

- industry
- research institutions
- specialised infrastructure

Many companies face barriers such as:

- limited access to semiconductor expertise
- high development costs
- complex innovation ecosystems

The Czech Semiconductor Centre (CSC) helps overcome these barriers and acts as an entry point to the European semiconductor ecosystem.



What CSC Can Do for Your Company



CSC supports companies throughout the semiconductor **innovation process**.

We help companies to:

- › develop semiconductor technologies
- › access specialised research infrastructure
- › collaborate with experts and research teams
- › participate in European innovation projects
- › build semiconductor workforce and skills

Our goal is to help companies move from **technology ideas to real semiconductor solutions**.

CSC services are organised into four main areas:

- **Chip Design & Technology**

Support for semiconductor and hardware development

(IC design, modelling, FPGA prototyping, connection to EuroCDP)

- **Infrastructure Access**

Access to advanced laboratories and nanotechnology facilities

(CEITEC Nano, onsemi infrastructure, European pilot lines)

- **Innovation & Funding**

Support for innovation projects and European collaborations

(Horizon Europe, Digital Europe, Chips JU, EIC, national funding, investors)

- **Talent & Skills**

Education and workforce development for semiconductor companies



CSC connects companies with key semiconductor infrastructure in the Czech Republic.

Main infrastructures include:

- › **CEITEC Nano (BUT)** – largest nanotechnology cleanroom in the Czech Republic
- › **onsemi Rožnov** – semiconductor wafer and chip manufacturing (Si and SiC)
- › **CTU NanoLab** – nanoelectronics technologies and education
- › **Masaryk University semiconductor laboratories**
- › **Institute of Scientific Instruments (CAS)** – electron beam lithography

This ecosystem enables support **from concept validation to advanced prototyping.**

Use Case 1

Startup Developing AI Hardware

Example: startup developing an AI accelerator or specialised chip

CSC can help with:

- › chip architecture consultation
- › access to EDA tools and design platforms
- › FPGA prototyping and validation
- › collaboration with academic experts

Result:

- › reduced development risk
- › faster technology development

Use Case 2

Industrial Company Developing Embedded Electronics

Example: industrial company developing advanced embedded electronic systems

CSC can support the company with:

- › prototyping and testing of semiconductor components
- › access to specialised laboratories and equipment
- › collaboration with research institutions
- › development of semiconductor-based technologies

This enables companies to test and validate new technological solutions.

Use Case 3 From Laboratories to Market

Research teams sometimes develop new semiconductor technologies

CSC can support the transition from research to business by:

- › supporting startup creation
- › advising on IP strategy
- › connecting teams with industry partners
- › assistance in approaching investors

Example: innovation teams from CEITEC BUT

Goal: bring new semiconductor technologies from research to the market.

Use Case 4 Access to Finance

CSC helps companies access funding and investment opportunities

We provide:

- › guidance on public funding programmes
- › support for European innovation projects
- › consortium building and partner search
- › connections with investors and industrial partners

Example: Zaitra (Zaitra develops space-grade onboard edge computing systems that use advanced processors and FPGAs to process satellite data in orbit.)

CSC supported their access to the EIC Accelerator programme.

Use Case 5

Training, Reskilling and Upskilling

CSC supports workforce development for semiconductor companies

Training programmes include:

- › chip design courses
- › semiconductor technologies training
- › EDA tools and prototyping
- › micro-credentials for professionals

Example: onsemi training programmes for Škoda Auto engineers

Goal: develop the skilled workforce needed for semiconductor innovation.

Where CSC Fits in the Semiconductor Value Chain



Semiconductor value chain:

Materials → Chip Design → Fabrication → Testing → Applications

CSC supports companies across multiple stages:

- › chip design
- › prototyping
- › testing and characterisation
- › system integration

Starting collaboration with CSC is simple:

1. Contact CSC

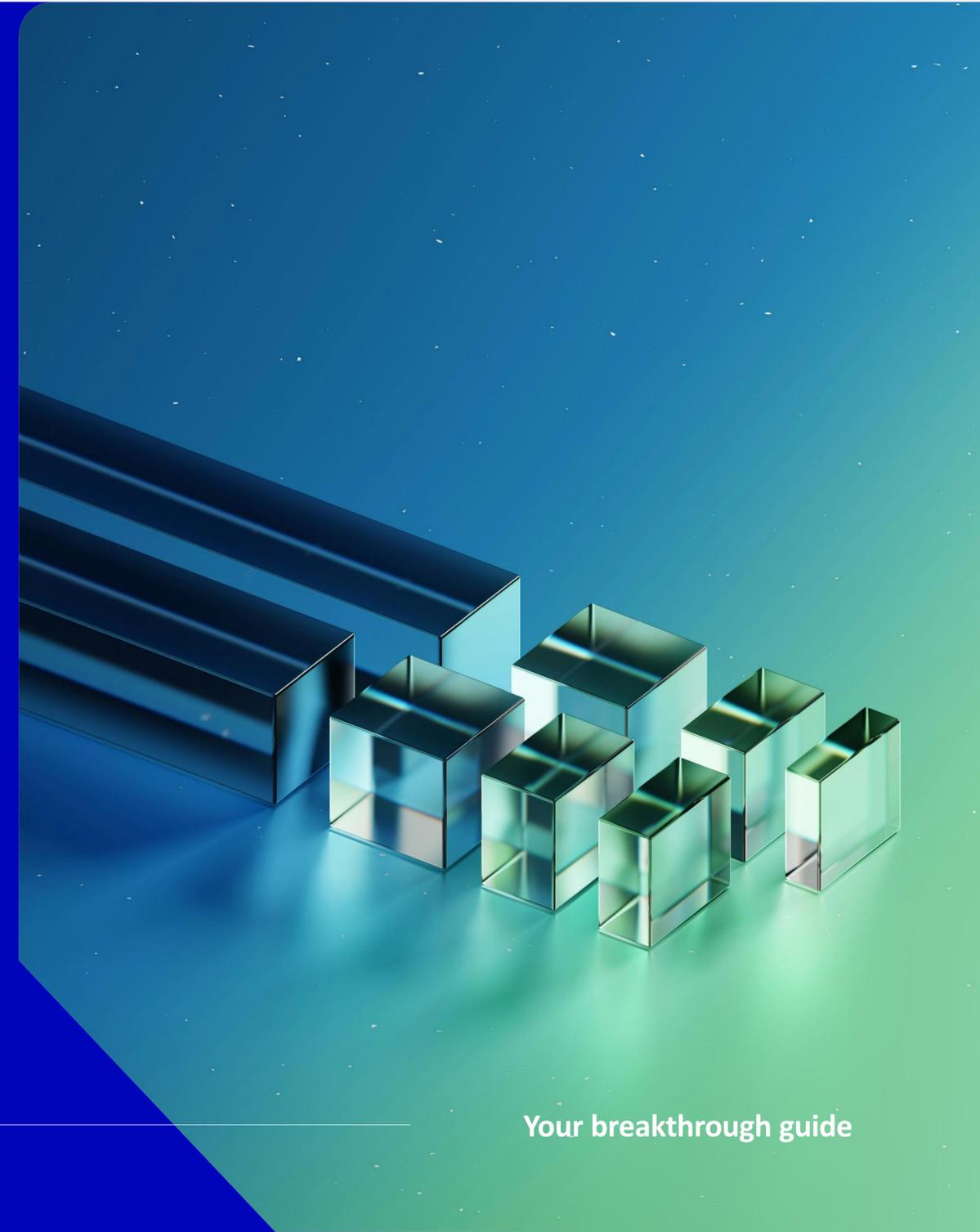
Share your technology challenge or innovation idea.

2. Consultation

CSC experts identify collaboration opportunities and available services.

3. Innovation project

Together we launch a collaboration project and propose a technological solution.



Let's Collaborate



If your company is working on:

- semiconductor technologies
- AI hardware
- automotive electronics
- energy and power electronics
- industrial electronics

we invite you to collaborate with the Czech Semiconductor Centre

Visit our booth during **Czech Semicon Days (May 18-19)**
or schedule a short meeting with our team.



Czech Semiconductor Centre
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**Thank you for your
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