imec

embracing a better life

THE WORLD'S LEADING INDEPENDENT NANOELECTRONICS R&D HUB

WHO WE ARE

Imec is the world-leading research and innovation hub in nanoelectronics and digital technologies. For over 40 years, we have been at the forefront of semiconductor innovation, working with industry leaders, startups, and academia to push the boundaries of what's possible. Together, we enable breakthroughs **towards microchips that are smaller, faster, more affordable, and more sustainable.**

Our ambition is supported by three valuable assets:

1. Top talent

At imec, we bring together over **6,500 top researchers and engineers from over 100 countries.** Their expertise and diversity fuel groundbreaking discoveries and accelerate innovation.

2. World-class infrastructure

Imec's cutting-edge facilities, including a 3.5-billion-euro **300mm semiconductor pilot line**, cutting-edge cleanrooms and labs, provide a technological playground for innovation. This world-leading infrastructure enables our researchers and partners to turn ideas into reality.

As an extension of its existing infrastructure, imec hosts the **NanoIC pilot line**, a pivotal initiative of the European Chips Act, supported by Flanders and the EU. This complementary state-of-the-art facility accelerates the development of **beyond-2nm chip technologies**, reinforcing Europe's leadership in semiconductor innovation. By offering early access to next-generation chip technologies to industries, including startups, universities, and design and system companies, NanoIC bolsters Europe's role in the global ecosystem. These advancements are key to fostering a more **resilient and interconnected industry** worldwide.

3. Global ecosystem

We innovate together. Imec works side by **side with all players of the ecosystem in a neutral and open innovation model**. From over 800 industrial partners to startups and more than 200 universities: **our global and local partnerships accelerate progress.**

WHAT WE DO

Advanced microchip R&D is at the heart of everything we do. We push the boundaries of nanotechnology to create breakthrough innovations that drive progress across industries. **Our research is applied in multiple domains**, transforming society and enabling a more sustainable future.

- **Compute Technologies & Systems**

  Pushing the boundaries of semiconductor scaling, advanced chip architectures, and high-performance computing to meet the growing demands of data processing and AI.

- **Health**

  Leveraging nanoelectronics and data-driven innovations to advance precision medicine, wearables, and preventive healthcare, enabling early detection and personalized health monitoring.

- **Automotive**

  Driving innovation with advanced chiplet design for autonomous vehicles, electrification, and intelligent driver assistance systems (ADAS), shaping the future of safe and connected mobility.

- **Energy**

  Developing energy-efficient chips and sustainable technologies to power smart grids, renewable energy systems, and low-power electronics for a more sustainable future.

- **Infotainment**

  Enabling immersive experiences through cutting-edge microchip technology for ultra-fast communication, augmented reality (AR), virtual reality (VR), and next-generation consumer devices.

- **Industry**

  Enabling smart manufacturing with advanced sensors, chips that enable edge AI, and robotics for increased automation and operational efficiency.

- **Agrifood**

  Developing sensor technologies and advanced analytics to optimize food production, improve sustainability, and ensure global food security.

- **Space & security**

  Imec harnesses its premier R&D and services capabilities in nanoelectronics and digital technologies to advance space and security applications to help build a safer, more resilient future.

HOW TO COLLABORATE WITH US?

Imec offers **various ways to collaborate**, whether you are part of the semiconductor or deep tech ecosystem, a startup, or an academic institution. Let's connect through:

- **Our research**

Partner with us on cutting-edge R&D in nano- and digital technology. There are three ways in which you can shape the future with us: join one of our programs with multiple partners, enter a bilateral collaboration with imec, or become part of a government-funded project.

- **Our services**

IC-link by imec, imec's service department, has a full-service offering including design and foundry services, IP support, assembly, advanced packaging, testing, qualification, and optimization. Imec.IC-link is a TSMC value chain aggregator (VCA) and has agreements with other major foundries, ensuring easy access to IC production in any volume and in several standard to advanced technologies. Thanks to the European Union's Europractice platform, this service is also available to the academic world, which benefits from reduced entry costs, early advice, and ongoing support.

- **Our venture support**

Imec.DeepTechVentures helps startups leverage imec's network, IP, design, prototyping, and manufacturing expertise. A team of experts supports deep-tech entrepreneurs in turning disruptive ideas into commercial success, helping with market fit, business planning, talent acquisition, and funding.

Imec.istart accelerates digital startups through specialized coaching, facilities, and broad support, helping technology entrepreneurs scale their businesses.

Imec.xpand is a key investor in startups. This independent venture capital fund backs hardware-based nanotechnology innovations where imec's technology, expertise, and network create a competitive edge.