

# **Photonic Integrated Circuits**

Photonic Integrated Circuits (PICs) open up whole new opportunities in improving existing electronic and photonic devices. PICs have a wide variety of applications, such as:

- ultra-high speed data communication for the next generation Internet;
- extremely sensitive detectors for gasses, temperatures or strain in mechanical structures securing our environment and the safety of machines;
- new biomedical analysis devices for a quick diagnosis of diseases.

#### What is PICs4AII?

PICs4All brings together the PIC-value chain of Europe's key players in the field of photonic integration, including manufacturing and packaging partners, photonic CAD software partners, R&D labs and Photonic IC design houses.

#### Why PICS4AII?

The application of Photonic Integrated Circuits is less well known than traditional electronic ICs. PICs offer many advantages: they enable cheaper or more compact solutions as compared to pure electronic solutions. Or they enable unprecedented performance improvements or even entirely new applications.

The technology has been subject to research and development in academia and industrial

laboratories for several decades but can now be truly considered as industrially ripe for many applications. A large number of companies offer their services commercially, e.g. PIC design and Multi-Project Wafer-services to manufacture your prototypes, or even full mass production.

But should you engage in PIC-technology?

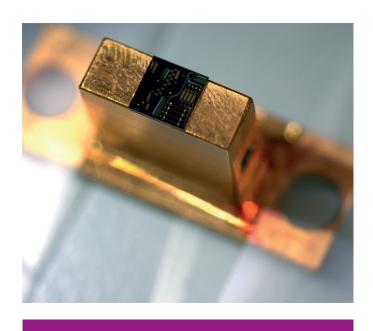
## **Need support with PIC technology?**

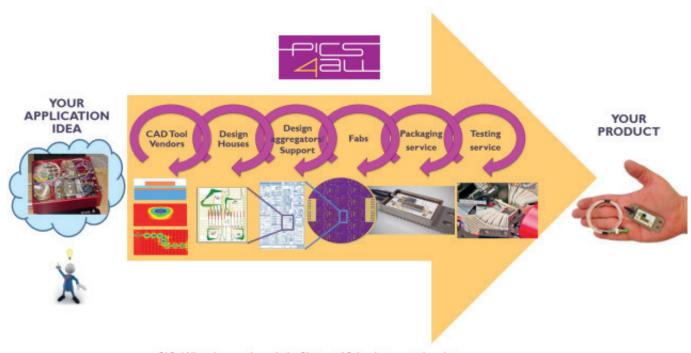
PICS4All is an EU-sponsored initiative in which Application Support Centres (ASCs) have been set up at 9 Integrated Photonics specialized universities throughout Europe. So, an ASC is always near to you.

The PICS4AII specialists offer their support to academia, research institutes, SMEs and larger companies to:

- assess whether your idea or product can be realized using PICs
- determine whether the application of PICs is economically viable in your product;
- access PIC design, manufacturing and evaluation facilities.

In this way, PICS4AII increase the impact of integrated photonics by bridging the gap between technology and market.





PICs4All guides you through the Photonic IC development value chain

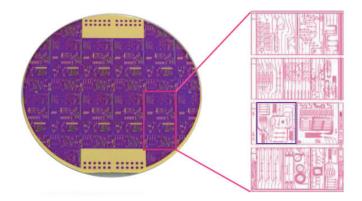
### **PICs4All consortium members:**

- Eindhoven University of Technology, the Netherlands
- 2. University of Cambridge, United Kingdom
- 3. Universitat Politècnica de València, Spain
- 4. Politecnico di Milano, Italy
- 5. Warsaw University of Technology, Poland
- 6. Technische Universität Berlin, Germany
- 7. Aarhus University, Denmark
- 8. Telecom ParisTech, France
- 9. National Technical University of Athens, Greece
- European Photonics Industry Consortium, France
- 11. Berenschot, the Netherlands

## **Interested?**

Visit www.pics4all.jeppix.eu for more information or contact us at pics4all@jeppix.eu and get support in PICs.









PHOTONICS PUBLIC PRIVATE PARTNERSHIP