

We help you to apply Photonic Integrated Circuits in your products

Photonic Integrated Circuits (PICs) open up whole new opportunities to create new products or in improving existing electronic and photonic devices. The main advantages of PICs are:

- Miniaturization
- Cost reduction
- Performance enhancement



What are PICs?

The application of PICs is less well known than traditional electronic ICs. Instead of electrons, photons (light) are manipulated in a very small piece of semiconductor or dielectric material to perform switching, detection or transmission activities. Due to the unique properties of light, PICs create performance improvement of existing solutions but also enable entirely new applications.

The technology of Photonic ICs has been subject to research and development in academia and industrial laboratories for several decades and can now be truly considered as industrially ripe for many applications.

Where to use PIC technology?

PICs have a wide variety of applications, such as:

- new biomedical analysis devices
- ultra-high speed data communication for the next generation computing and Internet



Compact handheld Optical Coherence Tomography (OCT) instruments for quick diagnoses of diseases



High-speed photonic USB 3.0 data interconnect cables

- extremely sensitive detectors for gasses, temperature or strain in mechanical structures securing our environment and the safety of machines



Miniaturized high-performance optical strain sensors for structural monitoring in aircraft

Need support with PIC technology?

Now you are curious about the benefits it might bring to your business, but you have no or limited knowledge of the possibilities PIC technology can offer? We, the partners cooperating in the PICS4All programme, can help you.

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.

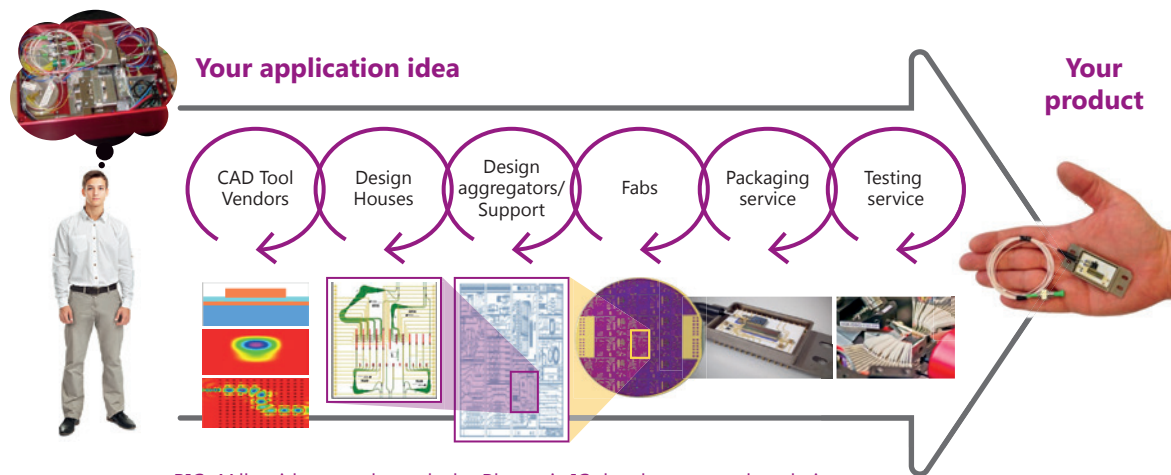
What can PICS4All offer you?

The PICS4All 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;
- provide you access to PIC design, manufacturing and evaluation facilities, either by opening up their own facilities to you or through their large network of PIC-service providers and manufacturers.

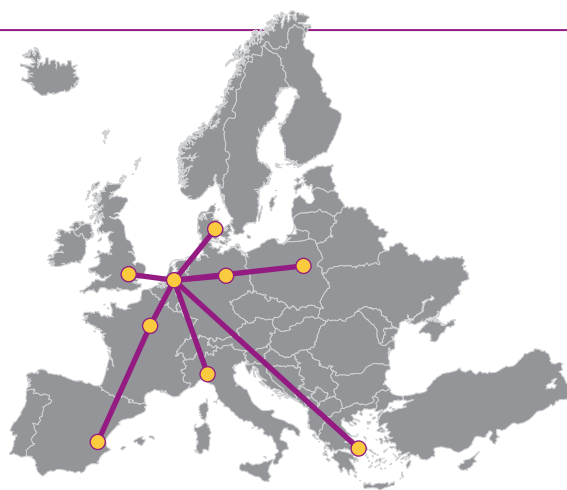
In this way, the PICS4All ASCs provide you with hands-on support in applying PIC-technology which might offer you new business opportunities.

We can do most of this free of charge since the PICS4All-initiative is subsidized by the European Commission. Extensive design work and making prototypes will require an investment by yourself.



PICS4All consortium members:

1. 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



Interested?

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