# ASCENT

## Access to European Nanoelectronics Network

ascent
European Nanoelectronics Access

*ASCENT 1 min video*

## ASCENT Provides

- Fast and easy access to the world's most advanced CMOS technologies and infrastructure
- Access to 14nm CMOS device data, nanoscale test chips and characterisation facilities in Tyndall National Institute (Ireland), CEA-Leti (France) and imec (Belgium)
- Unique opportunity to share best scientific and technological practices, form a knowledge–innovation hub, train new researchers and establish a nanoelectronics research network
- Interface to global industrial leaders in nanoelectronics

## Goals / Objectives

- Enable Europe's world-leading atomic scale device, TCAD and compact modelling community to perform the systematic studies required to develop nanoscale design methodologies and identify the impact of quantum effects on sub-10nm device performance.
- Deliver access to the world's most advanced 14 nm and beyond-CMOS nanoelectronics data and test structures in Europe's leading nanofabrication research institutes.
- Results of the Access activities will be published and shared at User Workshops enabling strong interaction between the Users and Providers.
- Virtual access projects are already underway giving researchers remote access to advanced data. Transnational projects have been funded enabling researchers to travel and use the advanced fabrication facilities and characterisation equipment at the partner sites.

## Impact

ASCENT will have a global impact and contribute significantly to competitiveness and growth capacity in the Europe's nanoelectronics industry and will:

- Improve and accelerate nanoscale device development by sharing the results from the access activities with device manufacturers and the wider community.
- Strengthen knowledge in the research community and enable the design/modelling community to benchmark their new developments against state-of-the-art technology.
- Build strong collaborations and exploit existing infrastructure.

## How to access ASCENT:

- Sign up to this exciting network at www.ascent.network
- Make an enquiry and describe your area of interest
- Submit an application form for fast and easy access
- Selection panel will assess application for access
- Access world leading infrastructure at the partner sites
- Share your results with the wider nanoelectronics community


## Partners

- imec, Belgium
- CEA-Leti, France
- Tyndall National Institute, Ireland (Coordinator)

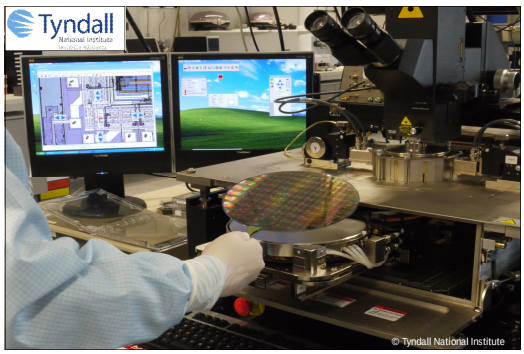
## Industry Innovation Committee

Intel, Qualcomm, STMicroelectronics, Synopsys

## Users Representative Group

- Technical University of Sofia, Bulgaria
- Universitat Rovira i Virgili, Spain
- University of Granada, Spain
- ETH, Switzerland
- University of Glasgow, UK



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