

Europe?s Bid for Photonic Chip Leadership Begins in Barcelona

Barcelona hosted PIXEurope Connect, an event driven by the European PIXEurope initiative - a pilot line backed by a ?400 million investment to accelerate the photonic chip market and strengthen European technological sovereignty.
Following their participation in the event, Spain's Minister for Digital Transformation and Civil Service, Oscar Lopez Agueda, the Minister for Research and Universities of the Generalitat de Catalunya, Nuria Montserrat, and the Government Delegate in Catalonia, Carlos Prieto Gomez, visited the ICFO facilities to see first-hand the latest advances in photonic chip technologies.

May 22, 2026

On 21 May 2026, Barcelona hosted PIXEurope Connect - Industry Ecosystem Building Day, an event organised to align visions and expertise, and to reinforce the extraordinary technological potential and transformative capacity of the PIXEurope Pilot Line in accelerating collaborations and driving innovation in photonic chip technologies across

Europe.

??The event brought together, in the auditorium of Torre Glories in Barcelona, the leading players in the semiconductor and photonics sector - including policymakers, scientists and technologists, manufacturers and end users - to strengthen Europe's position in next-generation chip development and ensure its technological sovereignty in the photonic chip industry.

The event succeeded in bringing together more than 300 field experts, industry players and institutional representatives, and was attended by **Oscar Lopez Agueda**, Minister for Digital Transformation and Civil Service of Spain; **Carlos Prieto Gomez**, Government Delegate in Catalonia, **Nuria Montserrat**, Minister for Research and Universities of the Generalitat de Catalunya; **Jari Kinaret**, Executive Director of the Chips Joint Undertaking (Chips JU); **Werner Steinhogl**, Head of Sector of the Microelectronics and Photonics Industry Unit of the European Commission; and **Oriol Romero-Isart**, Director of ICFO, the coordinating institution of the PIXEurope Pilot Line. In their speeches, all of them underscored these institutions' commitment to advancing Europe's strategy for integrated semiconductor and photonic chips.

Following the welcoming remarks from the ICFO Director, Minister Nuria Montserrat opened the institutional addresses. i¿½**PIXEurope is a strategic project, a European project conceived and designed from the outset to ensure the generation of knowledge, as well as sovereignty in terms of capacity and technology in integrated photonics, to be developed here in Europe, rather than relying exclusively on regions outside this part of the world**i¿½, noted Montserra . The minister recalled that i¿½**In Catalonia we also want to play a leading role, and we want to do so because we have a world-class scientific ecosystem in which ICFO is one of our long-standing research institutes, alongside other institutions working in photonics in collaboration with our universities, and also because we want to understand and be part of this twenty-first century technological race**.i¿

Minister Oscar Lopez expressed during his address i¿½**the honour of taking part in the institutional launch of this industrial ecosystem. A day of construction, a gathering that highlights the potential of PIXEurope**i¿½. Lopez stressed the need for European momentum n terms of knowledge, talent, innovation and collaborations such as those represented y PIXEurope. Lopez also noted that the country is driving science forward with a wide range f initiatives linking academia, talent and industry across various strategic areas. i¿½**Those who dare today to imagine the unthinkable could become tomorrow's pioneers. Our country puts its trust in light to transform our future and our GDP. That is why we believe in this pilot line to achieve self-sufficiency in Spain's photonic supply chain by 2030. Soon, this technology will**

be crucial for any superpower, and Spain is getting ready to seize the opportunity.i¿
? concluded the ministe

Following his participation in the PIXEurope Connect event, Minister Oscar Lope
, accompanied by Minister Nuria Montserrat and the Government Delegate in Catalonia, Carl
s Prieto Gomez, had the opportunity to visit ICFO's facilities in Castelldefels to see first-ha
d the advances in photonic chip fabrication technolog

During the tour, accompanied by the Director General of Research and Universities, Tere
a Sanchis, the Rector of UPC, Francesc Torres, and the Director of CERCA, Laia Pelleja, th
y visited various laboratories and the Nanofabrication Laboratory (NFL), a new facility whe
e state-of-the-art photonic chip prototypes are designed and developed. The visit allowed t
e minister to witness first-hand the work being carried out by ICFO researchers in advanci
g integrated photonics, semiconductors, quantum communications and other technologi
s key to strengthening European digital sovereignty. The tour also included a visit to ICFO
s new building, whose renovation - funded through the Singulars project of the Generalitat
e Catalunya - will help reinforce the photonic chip programmes and the so-called Quant
m Valle

The event concluded with brief remarks from the minister and minister to the members
f ICFO's research community. Lopez emphasised that Spain is i¿½at the forefronti?
½ of photonics thanks to the talent of its researchers and the support provided by public pol
cies. Finally, he reaffirmed the Government's commitment to developing these technologie
as a pillar of European competitiveness and technological sovere



The Torre Glories auditorium hosted the PIXEurope event to a packed audience from the industrial sector. ©ICFO/R. Puras



Oriol Romero-Isart, Director of ICFO, delivering the welcoming remarks. ©ICFO/R. Puras



Valerio Pruneri, Director of PIXEurope, explaining the objectives of the new pilot line. ©ICFO/R. Puras



Oriol Romero-Isart, Director of ICFO, welcoming Minister Oscar Lopez to ICFO. ©ICFO/J. Salas.



Rossella Zaffino, member of the NanoFabrication Lab team, explaining the photonic chip fabrication process to Minister Oscar Lopez, Minister Nuria Montserrat, Francesc Torres, Rector of UPC, and Government Delegate Carlos Prieto Gomez. ©ICFO/J. Salas.



Group photo with members of ICFO?s research and operational community. ©ICFO/J. Salas.