

Electronics

Micro and nano-electronics take us to the world in miniature, where big things are facilitated by the smallest and smartest electronic components and systems.



When talking about micro-technologies, we are referring to those in millimetres. Nanotechnologies take us even smaller, to nanometres: one millionth of a millimetre, or 1/60,000 the width of a human hair.

Why are these tiny things so important?

We have come to depend more and more on electronic components and systems; these technologies and the solutions that they provide are the very basis of our everyday devices, such as mobile phones and computers.

This is just the beginning

Within this field we are working at the frontiers of hardware and software. Micro and nano-electronics are part of the key enabling technologies (KETs). KETs are the drivers of the development of digital goods. They can open important new possibilities for Europe's growth and industrial competitiveness, create new jobs and usher in new products and services.

Follow the latest progress and learn more about getting involved.

-

Follow the Commission's work on electronics @Electronics_EU

Latest

PRESS RELEASE | 19 July 2021

Commission launches alliances for
microelectronics and cloud technologies

The European Commission has kick-started two new Industrial Alliances: the Alliance for Processors and Semiconductor technologies, and the European Alliance for Industrial Data, Edge and

Cloud.

PRESS RELEASE | 23 February 2021

EU to set up new European Partnerships and invest nearly €10 billion for the green and digital transition

The Commission has proposed to set up 10 new European Partnerships between the European Union, Member States and/or the industry. The goal is to speed up the transition towards a green, climate neutral and digital Europe, and to make European industry more resilient and competitive. The EU will provide nearly €10 billion of funding that the partners will match with at least an equivalent amount of investment.

DIGIBYTE | 23 February 2021

Key Digital Technologies: new partnership to help speed up transition to green and digital Europe

The Commission announced a new partnership aimed at reinforcing Europe's innovation potential, boosting its competitiveness and ensuring technological sovereignty in the field of electronics.

PRESS RELEASE | 07 December 2020

Member States join forces for a European initiative on processors and semiconductor technologies

The Commission is welcoming a joint declaration by 22 EU Member States on processors and semiconductor technologies, discussed at the Video conference of the Ministers of Telecommunications this morning . Through their declaration, the Member States will commit to work together to bolster Europe's electronics and embedded systems value chain and strengthen leading-edge manufacturing capacity, in view of reinforcing Europe's capabilities in semiconductor technologies and offering the best performance for applications in a wide range of sectors.

Related Content

Big Picture

Advanced computing

EU investment in high performance computing and computing technologies will enable Europe to lead the way in supercomputing in the Digital Decade.

Dig deeper

Alliance on Processors and Semiconductor technologies

The Alliance on Processors and Semiconductor Technologies brings together key actors to design and produce microelectronics chips.

See Also

Destination Earth

Destination Earth aims to develop a high precision digital model of the Earth to model, monitor and simulate natural phenomena and related human activities.

Photonics

We are on the verge of a new photonics era, and the European Commission is working to ensure citizens and businesses enjoy the full benefits of this technology.

Quantum

To unlock the transformative power of quantum, the EU should develop a solid industrial base that builds on its tradition of excellence in quantum research.

High Performance Computing

High performance computing refers to computing systems with extremely high computational power that are able to solve hugely complex and demanding problems.

Source URL: <https://digital-strategy.ec.europa.eu/policies/electronics>