Chips JU (formerly KDT JU)



Nature of the Initiative	European Project	
Mission	To foster the European Union's strategic autonomy in electronic components & systems.	
	To promote scientific excellence & innovation leadership in emerging technologies.	
	To facilitate the involvement of SMEs, address societal & environmental challenges.	
	To advance semiconductor technologies for enhanced design, systems integration, and chip production capabilities within the EU.	
Sector(s) addressed	Green Deal (including Smart Communities) Mobility Manufacturing	
Leading organisation	Led by the European Commission together with participant Member States and 3 private Industrial Association members (AENEAS, EPoSS, & INSIDE)	
Members (approx.)	49	
Founded (Year)	2023	
Social Media Presence	<u>LinkedIn Twitter - X YouTube</u>	
Relevance for Industry 4.0	In the ever-evolving landscape of technology, the European semiconductor ecosystem stands as a crucial pillar of progress. At the heart of this dynamic field lies the Chips Joint Undertaking (Chips JU), a pioneering initiative committed to catalysing research, development, & manufacturing capabilities across Europe.	
Key Information	Levels	Important Links
Data Space Technical Specifications	*	<u>Website</u>
Data Space Governance	***	Document Library Link
Data Space Demonstration	***	<u>Events</u>
Data Space Adoption	X	NA
Connected Initiatives	Quantum, <u>6GSNS</u> , <u>ETP4HPC</u>	NA .
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Report

What is Chips JU?

Chips JU (formerly Key Digital Technologies (KDT) JU) encompasses electronic components, their design, manufacture and integration in systems and the software that defines how they work. The overarching objective of this partnership is to support the digital transformation of all economic and societal sectors and the European Green Deal, as well as support research and innovation towards the next generation of microprocessors.

On 22 September 2023 the European Chips Act and the amendment to the Regulation establishing the Joint Undertakings under Horizon Europe entered into force, paving the way for strategic developments in the chip technology sector. One significant outcome of these changes is the expansion and renaming of the Key Digital Technologies Joint Undertaking (KDT JU), which will now be known as the Chips Joint Undertaking (Chips JU).

Mission & Objectives

In the coming years, Chips JU will develop, together with the European nanoelectronics community and the Member States, a strong portfolio comprising several pilot lines for:

- advanced nanoelectronics' technologies
- a design platform for the design of advanced chips
- a broad set of projects that make use of those technologies to innovate all along the value chain in mobility, energy, health, robotics, and chip manufacturing

This portfolio of actions will be supported with a network of competence centres all over Europe that will facilitate the access to those actions for European start-ups, SMEs, universities, and larger companies. The general objectives are:

- to reinforce the EU's strategic autonomy in electronic components and systems to support future needs of vertical industries and the economy at large
- to establish the EU's scientific excellence and innovation leadership in emerging components and systems technologies, and promote the active involvement of SMEs
- to ensure that components and systems technologies address Europe's societal and environmental challenges
- to enable the development and deployment of cutting-edge semiconductor technologies, cutting-edge quantum technologies and the innovation of established technologies that will reinforce advanced design, systems integration and chip production capabilities in the EU

Members and partners

- the EU, represented by the European Commission;
- the following participating states: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Türkiye;
- the following industrial associations: <u>AENEAS</u>, <u>EPOSS</u> and <u>INSIDE</u> representing the micro- and nanoelectronics, smart integrated systems, and embedded/cyber-physical systems sectors.

Events

Through the year they organise a few events related to their objectives, as well as partners' events. One of the main events is the EPoSS annual event. This year it will be hold on June 18-21 in Cork, Ireland. This time, EPoSS member Tyndall National Institute will host the event which follows the motto Sensing the Future of Smart Systems: Bridging Minds and Microelectronics. In order to present the latest developments in Smart Systems Integration (SSI), they invited people to send their abstracts for presentations or posters and showcase their latest Smart Systems innovations or technology developments for Smart Systems Integration.