



Chips for Europe Initiative

Policy brief

Weblink	https://digital-strategy.ec.europa.eu/en/factpages/european-chips-act- chips-europe-initiative						
Relevance	□ National policy x EU policy □ other:						
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Short summary of the policy

The Chips for Europe Initiative (the "Initiative") is established by Pillar I of the European Chips Act for the duration of the Multiannual Financial Framework 2021-2027. The implementation of the Initiative is designed in a way to pool resources from the Union, the Member States as well as the private sector. The total Union funding amounts to 3,3 billion EUR, which includes funding from Horizon Europe and from the Digital Europe Programme (DEP).

The Initiative is a cornerstone of the European Chips Act. It aims to strengthen the EU's semiconductor ecosystem, to boost competitiveness and achieve technological sovereignty. The main objective of the Initiative is to support large-scale technological capacity building and innovation and enhance collaboration among key players across the Union. The bigger part is implemented by the Chips Joint Undertaking (Chips JU) which implements activities for infrastructure building. Support for start-ups and SMEs for the development of semiconductor technologies and solutions for production and commercialisation of new semiconductor chips is provided by the Chips Fund and implemented by the European Investment Fund (InvestEU).

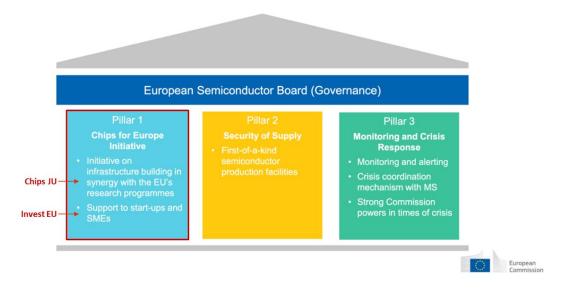


Figure 1: Pillars of the Chips Act and the Chips for Europe Initiative \mid © EC





The aim of the Initiative is outlined within its five operational objectives that address challenges of the semiconductor ecosystem from the supply (e.g. materials, tools) as well as the demand (e.g. packaging, testing) side.

The key elements of the Initiative are:

- Design Platform: a cloud-based virtual environment to connect various key actors of the ecosystem to provide virtual prototype solutions.
- Pilot Lines: enhancement of existing and development of new advanced pilot lines to enable development and deployment of cutting-edge semiconductor technologies and next-generation semiconductor technologies.
- Quantum Chips and associated semiconductor technologies: support of development of design libraries, new or existing pilot lines, cleanrooms and foundries for prototyping and producing quantum chips as well as facilities for testing and validating advanced quantum chips produced by the pilot lines.
- Competence centres and skills: competence centres will provide access to technical expertise
 and experimentation around semiconductors, e.g. via facilitation of access to pilot lines and the
 design platform, support to finding investors, and the provision of trainings.
- Chips Fund: to facilitate access to debt financing and equity through a blending facility under the InvestEU Fund and via the European Innovation Council.

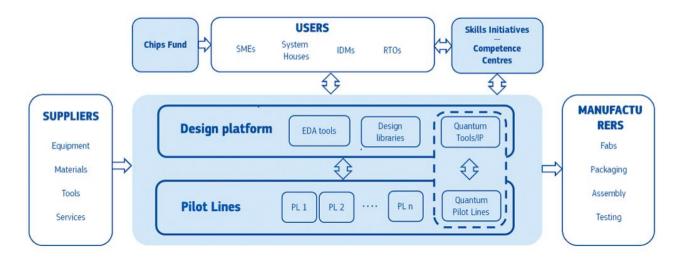


Figure 2: Overview of the Chips for Europe Initiative \mid © EC

Main objectives of the policy

- 1. Setting up a virtual design platform to reinforce the Union's design capacity
- 2. Enhancing existing and developing new **advanced pilot lines** to strengthen the security of supply and the Union's semiconductor ecosystem
- 3. Building capacities for accelerating the development of **Quantum chips** and associated semiconductor technologies
- 4. Establishing a network of **competence centres** across the Union to promote the use of semiconductor technologies
- 5. Setting up a **Chips Fund** to facilitate access to debt financing and equity in particular for start-ups, scale-ups, SMEs and small mid-caps

Context and relation to DIGITAL EUROPE





DEP aligns closely with Chips JU's objectives, particularly through Specific Objective 6 dedicated to semiconductor technologies.

Until 2027, an indicative amount of 1,575 bn EUR will be provided by DEP and implemented by the Chips JU. The activities funded by the Chips JU under DEP focus on capacity building. A good example on how the use of funding from Horizon Europe and DEP are complementary to each other is demonstrated by the pilot lines: Horizon Europe supports the setup and integration of pilot lines, while DEP provides funding for equipment procurement and access provision.

Additionally, the DEP Work Programme 2023-2024 introduced the Chips Fund. This is a dedicated investment facility aiming to facilitate access to finance for SMEs and investment in general in the area of semiconductors. Under the InvestEU Programme, SMEs can receive a top-up from DEP to bring their innovation to market.

What parts of the Policy are directly related to specific objectives (SO) in DEP

The operational objectives of the Initiative directly link to specific actions funded by the Chips JU (with DEP money under SO6, see <u>Chips JU Work Programme</u>). Article 4 and Article 5 of the Chips Act describe the objectives and content of the Chips for Europe Initiative and provide additional information for specific activities.

Which activities in the current DEP Work Programme contribute to meeting the objectives of the policy

In line with the announcement in the Chips Act, 61.7 million EUR will be provided for the Chips Innovation Fund in 2025 and 2026. These funds are implemented under indirect management with the European Investment Fund.

Apart from the management of the Chips Fund, it is the Chips JU, which is primarily entrusted with the implementation of the Initiative. Specific activities are described in <u>Appendix 6</u> of Chips JU's multiannual work programme 2023-2027. For 2025 two topics are foreseen to be funded under DEP by the Chips JU:

_	DIGITAL-	JU-CI	11ps-2025-C	SA-DET:	Set-up	and	integrat	ion	ΟŤ	Design	Enablement	ieams
	Estimated	b	EU		Expendit	ture:		5		m	nillion	EUR
	EU			funding				rat	e:			100%
	Link	to	the	Initiatives	a o	oeratio	nal	obje	ctiv	/e:	design	platform

_	DIGITAL-JU-Chips-20)25-SG-SSOI:	Accelerat	tor for	Advanced	Strained	Silicon	on	Insulator
	Substrates								
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Estimated EU Expenditure: 30 million EUR EU funding rate: max. 50%

Link to the Initiatives operational objective: pilot lines





Please match any specific activity mentioned in the policy with concrete call topics from the current/upcoming DEP Work Programme

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Events

For finding related events, please check out the following online calenders: <u>Shaping Europe's digital future</u>, <u>HADEA</u>, <u>ChipsJU</u>