



*Semicon Europa
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The Chips Act **and Europe's path to a stronger, resilient** **semiconductor ecosystem**



Gustav Kalbe
Enabling and Emerging Technologies – Acting Director

Context

Europe is facing significant challenges

Market trends

- Surge of demand for AI datacentres (GPUs + Memory)
- Automotive experiencing unstable transitions

Supply chain vulnerabilities

- Concentration of production in Asia
- Critical raw materials dependencies

Trade issues

- Export control on key technologies
- Non-market policies and practices

Global competition

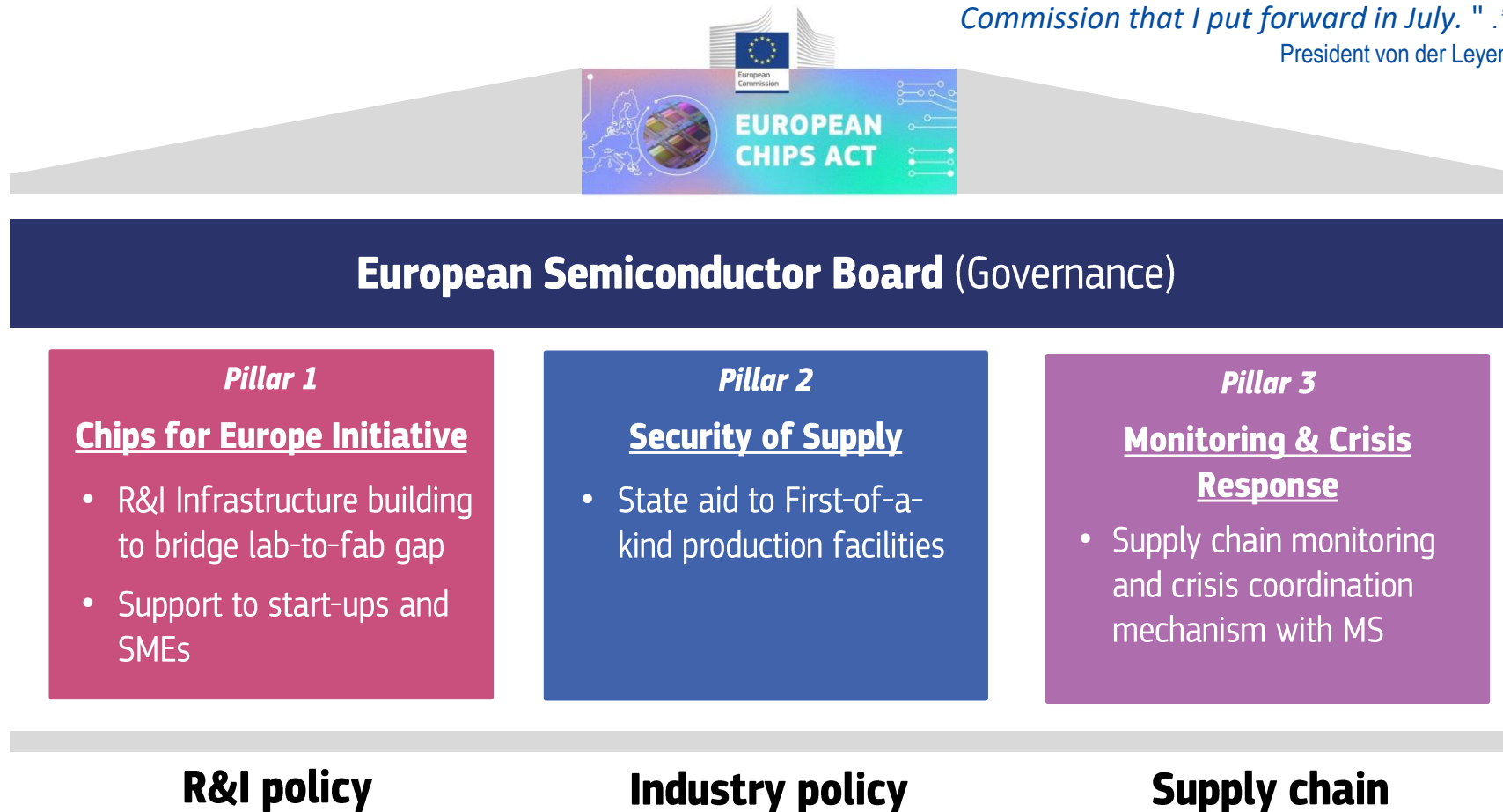
- Massive public investments in US and Asia
- Talent shortage

- In globalized past, trade could address dependencies
- No single Member State can secure technological sovereignty
- Addressing these issues requires **a unified European response**

European Chips Act

"It is upon Europe's industrial strength, that we have built our European Chips Act. (...) Since then, we have seen new state-of-the-art chip factories break ground across Europe. (...) And this is just the beginning. Boosting our industrial competitiveness is a central pillar of the new five-year programme of the European Commission that I put forward in July. " ."

President von der Leyen, ESMC groundbreaking 20/08/2024



Chips Act entered into force in September 2023 – where do we stand 1 year later?

Pillar I – Chips for Europe Initiative

Supporting innovation, from lab to fab

EUR 3.7 billion

Pilot lines

Prototyping of validated designs
Testing of equipment
Validation of process flows



4 Pilot lines funded, 5th selected



EUR 800 million



Design Platform

Cloud-based access to EDA tools and IP libraries, support for fabless SMEs



Coordination project starting

Competence centres & Skills

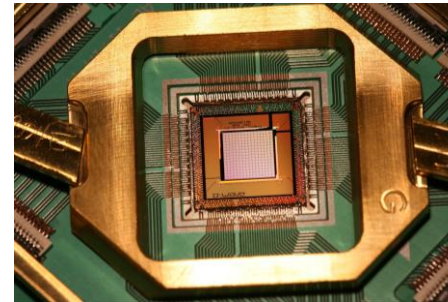
Access to technical expertise, helping companies to approach and improve design capabilities and developing skills



27 CCs selected



Up to EUR 500 million



EUR 400 million

Quantum chips

Technology and engineering capacities for accelerating innovative development of quantum chips



First call open

Chips Fund

Financial support to semiconductor start-ups/SMEs

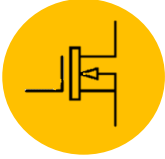
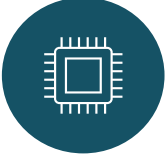
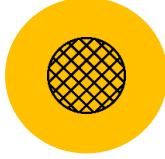
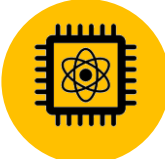


Implemented EIC Accelerator + InvestEU



EUR 550 million

Pilot lines - status

Leading-edge nodes below 2nm  NanoIC Coord: IMEC (BE) Funded: €1,485 Mio	FD-SOI scaling towards 7nm  FAMES Coord:CEA-Leti (FR) Funded: €831 Mio	Heterogeneous systems integration  APECS Coord: Fraunhofer (DE) Funded: €746 Mio	Wide-bandgap semiconductors  WBG Coord: CNR (IT) Funded: €362 Mio	Photonic Integrated Circuits  TBC Selected: €380 Mio	Quantum chips  TBD 1st Call open
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- Prototyping of validated designs
- Testing of equipment
- Validation of process flows

➡ Future Industrialisation

Pillar 2 - Security of supply and resilience

State aid for production facilities

Sets framework to facilitate the implementation of projects that **contribute to the security of supply** and **strengthen the resilience of the semiconductor ecosystem** in the Union



First-of-a-kind facility: to qualify, facility needs to offer innovation in terms of products or process (e.g. environmental performance) that is not yet present in the Union

All stages of semiconductor production are eligible



- Relevant projects announced by major manufacturers (GlobalFoundries, Infineon, Intel, ST Microelectronics, TSMC, ...)
- State aid approved for 4 projects by ST, GF and ESMC; more to be announced soon
- Further, IPCEI ME-CT started in 2023 with over EUR 21 Billion investments
- Planned investments exceeding **EUR 85 Billion**, out of which investments over EUR 50 Billion are already materialising



Europe keeps moving forward with investments and progress

International collaborations

EC is committed to **cooperate with partners**, proactively managing **interdependencies** and ensuring a reliable global **marketplace** for EU products and **security of supply**

Multilateral

GAMS - Government/Authorities Meeting on Semiconductors

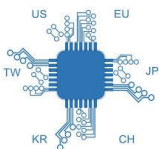
among US, EU, Japan, South Korea, China, Chinese Taipei: exchange on global semiconductor issues – EU chaired meeting delivering results on GHG and PFAS

G7 Semiconductors Point of Contact (PoC) Group

Set up under Italian presidency: focus on industrial R&D priorities, impact of non-market policies and practices and crisis coordination channels

OECD Semiconductors Informal Exchange Network:

Coordinated approach to gain a better understanding of global semiconductor ecosystems - 38 OECD members



Bilateral

Trade and Technology Council:

- US
- India



Digital Partnerships:

- Japan
- South Korea
- Singapore
- Canada



Next

- **Chips for Europe Initiative** - focus on **implementation**, aiming to benefit users of pilot lines, design platform and competence centers to enhance Europe's **competitive edge**
- **Manufacturing facilities** - continued support is a priority, with upcoming decisions and ongoing collaboration with industry and Member States to attract private **investments**
- **Industrial Alliance** – we engage with industry in the context of the Alliance; 3 working groups have started on **Supply Chains**, **PFAS** and **Skills** (feel free to apply on the dedicated EC web page)
- EC will **assess** the implementation of the Chips Act, preparing for a 2026 **review** to further enhance its benefits for the semiconductor ecosystem
- Under guidance of **new College** (2024-29), we shall focus on semiconductor policies to bolster Europe's **resilience** and **competitiveness***



* see: "Political guidelines 2024-2029"; "Mission letters to Commissioner-designate 2024-2029"; "The future of European competitiveness" report by Mario Draghi