

Semiconductor Ecosystem CHINA

Main Stakeholders

POLICYMAKING

- 1. Ministry of Industry and Information Technology (MIIT)
- 2. The State Council of the Peoples Republic of China
- 3. China National Intellectual Property Administration
- 4. National Development and Reform Commission
- 5. Cyberspace Administration of China
- 6. Ministry of Science and Technology
- 7. Ministry of Finance
- 8. Ministry of Commerce
- 9. China Automotive Technology & Research Center (CATARC)



RESEARCH ORGANISATIONS

- CAS Institute of Semiconductors
 CAS Institute of Microelectronics
- CAS Institute of Microelectronics
 University of Electronic Science and
- Technology of China
- 4. School of Intecrated Circuits
- 5. China Electronics Standardization Institute (CESI)
- 6. China Electronics Technology Group Corporation (CETC)
- 7. IC institutes including Chinese Universities

INDUSTRY ASSOCIATIONS

- 1. China Semiconductor Industry Association
- 2. Shanghai Integrated Circuit Industry Association
- 3. China Association of Automobile Manufacturers
- 4. Internet Society of China
- 5. China Association of Communication Enterprises

INDUSTRY (NON-EXHAUSTIVE)

- 6. Asian Metal (Raw Materials)
- 7. BYD Micro (IDM)
- 8. ChangXin Memory Technologies (IDM)
- 9. dsbj (PCB)
- **10.** Fastprint (IC Substrate)
- 11. GigaDevice (IDM)
- 12. HiSilicon (Design)
- 13. Hua Hong Semiconductors (Foundry)
- 14. Huawei (Design and Application)
- 15. JCET (OSAT)
- 16. Naura (Equipment)
- 17. Nexchip (Foundry)
- **18.** Silan Microelectronics (IDM)
- **19. SMIC** (Foundry)
- 20. Supermask (Photomask)
- 21. Swaysure Technology (IDM)
- 22. TFME (Packing)

On Semiconductors

International Cooperation

23. Unisoc (Design)

- 24. United Nova Technology (IDM)
- 25. VeriSilicon (IP Blocks)
- 26. Wingtech Technology (IDM)
- 27. YMTC (IDM)

Chip Strategy

Made in China 2025 Strategy: Launched to achieve self-sufficiency in semiconductors by securing its supply chain and reducing imports. The strategy emphasizes investment and development across semiconductor technologies, especially in advanced nodes where China remains heavily reliant on external sources. [1]

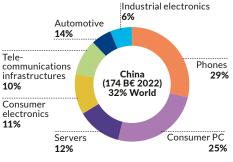
Al Strategy: In 2017, China released the National New Generation Al Plan. This plan entails becoming the primary worldwide center for Al innovation by 2030. [2]

Quantum Strategy: Since 2023, China aspires leadership in quantum computing technologies. [3]

RISC-V strategy: As of March 2025, China is currently working on a National RISC-V Strategy, setting a focus on the topic of open source based processor design. [4]

High-quality Development of the Integrated Circuit and Software Industry in the New Era (2020) [5], [6]

Demand by Application



Market and Production Share

Source: DECISION Etudes & Conseil

Relations with the EU

- Cooperation between China and EU not formalised on a political level.
- Cooperation occurs on company level. Large European companies invest in chinese locations and participate in Joint Ventures or cooperative activity. China is an important market, especially for automotive suppliers.
- EU companies also submit to a mainly US-driven export control regime (e.g. ASML not selling EUV equipment to chinese companies).
- Since 01.08.2023, China exercises export control on raw materials Gallium and Germanium, since 15.09.2024 on Antimony, and since 03.02.2025 on Indium. As of now, EU has not fallen under export restrictions.

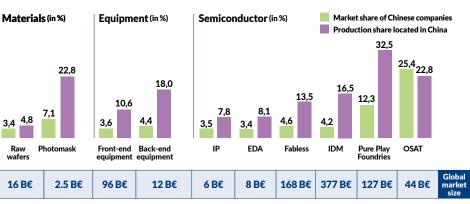
Funding Instruments

Big Fund: The "China Integrated Circuit Industry Investment Fund" (ICF, "Big Fund") is the national chinese investment fund for public investment into the semiconductor industry in China through share acquisition. The first phase of the fund started on 26.09.2014. Three five year phases of the fund allocate about 686 billion Yuan (approx. 98 billion USD) for the public acquisition of minority shares and further investments until 2029. [7], [8], [9], [10]

Tax breaks: In 2019, China announced a tax incentive policy, assuring semiconductor tech companies of a corporate tax discount of 100% for two years and then 50% for three years [<u>11</u>], [<u>12</u>] – amounting to about 4.2 billion Yuan (605 million USD) in the first half of 2020 [<u>13</u>]. This program ran until 2024.

Public-Private Partnerships: Additional to the Big Fund, China prepared public technology venture capital guidance funds – benefitting semiconductors among other technology branches – of 1 trillion Yuan (144 billion USD) in 2022 [14] and 2025 [15].

Technological Innovation Fund: In March 2025, ICBC launched a technological innovation fund totalling 80 billion yuan (around 11 billion USD). The fund targets strengthening the private economy, especially in fields like semiconductors and advanced manufacturing. [16]



Source: DECISION Etudes & Conseil

ICOS has received funding (2023-2025)

GA No 101092562

from the European Union's Horizon Europe research and innovation programme under

