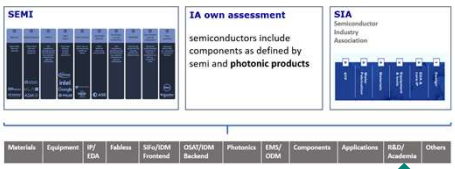
Industrial Alliance for Processors and Semiconductor Technologies

zvei electrifying ideas

European Commission

Supply Chain Working Group

Cluster **R&D/Academia**



Objectives of the Supply Chain Working Group

Industrial Alliance for Processors and Semiconductor Technologies → **Working Group on Supply Chain**

- **Transparency and Resilience**
- **Collaboration on Monitoring**
- **Crisis Response**

- **Scope**
- **Survey**
- **Digital Twin**
- **Stress Test**

An industry working group working for the European industry on **End-to-End semiconductor*) supply chain and supply chains containing semiconductors**.

Join

Propose and implement measures to increase supply chain resilience and transparency, Support COM and ESB Board with analysis/knowledge and advise on possible future actions

Cluster Academia

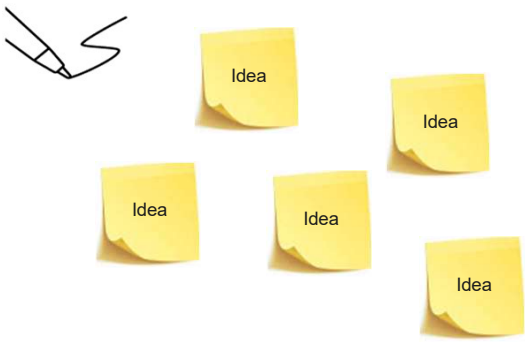
Definition:

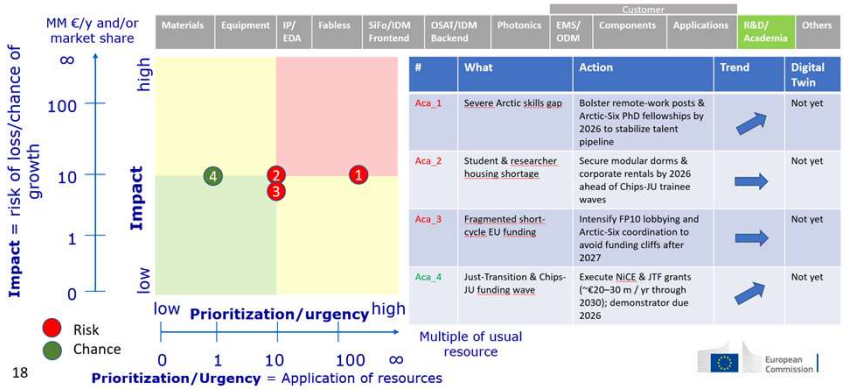
Universities and public research organizations that **educate talent** and run shared cleanrooms, pilot lines, and design ecosystems for **semiconductor R&D**—often in close partnership with industry. This includes academic nanofabs and mission-driven R&D hubs that provide **CAD/PDK access, process labs, and prototyping**

Pivotal actors in semiconductor related academia:

- **Imec [link] — EU Chips Act sub-2 nm pilot line lead; High-NA EUV lab with ASML**
- **CEA-Leti / MINATEC [link]— 300 mm pilot line and advanced integration (3D/FD-SOI)**
- KAIST [link]— semiconductor devices/materials, IC design; advanced nanofab and industry collaboration
- TU Dresden ecosystem [link]— Leaders in hafnium-oxide ferroelectric devices and emerging memories
- MIT [link] — microelectronics and materials, IC/quantum/AI; Microsystems Technology Laboratories and strong industry ties
- University of Twente [link] – MESA+ NanoLab — Open-access nanofab (NanoLabNL) for academic R&D and pilot runs
- KTH Royal Institute of Technology [link]– Electrum Lab — now part of the EU Wide-Bandgap Pilot Line (SiC/GaN)
- Tsinghua University [link] — microelectronics, IC design, materials; state-of-the-art nanofabrication and research alliances
- **Luleå University of Technology [link] — EISLAB/Electronic Systems with a microelectronics lab**
- National Taiwan University (NTU) [link] —EECS and semiconductor research; nanofabrication facilities and TSMC/industry collaboration
- Fraunhofer [link] — Research & design services; IP cores (audio codecs, DSP/RF, RISC-V)
- KIT [link] — Artificial Intelligence for Materials Sciences (AiMat)

Feedback (on Definition, on companies, on actual Chance/Risk Matrix, on increasing resilience, on ...)





The TASK

- Think about IDEAS & SUGGESTIONS to link the Base to the overall objectives
- Do some (silent) BRAINWRITING to put your Idea & Suggestion to a POST-IT
- Put your Post-it on the Poster with some EXPLANATORY WORDS to the group
- BRAINSTORM in the group about the ideas and make it as meaningful as possible
- PRESENT to the group (allow different opinions to be heard as well)

- **Risk due to geopolitical situation in our domain and its supply chain mitigation strategy**
- **Risk due to complexity increase in our domain and its supply chain mitigation strategy**
- **Chances due to AI in our domain and how to accelerate harvesting the chances**
- **Chances due to collaboration in our domain and how to accelerate harvesting the chances**