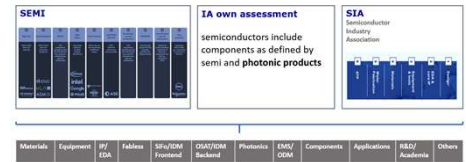
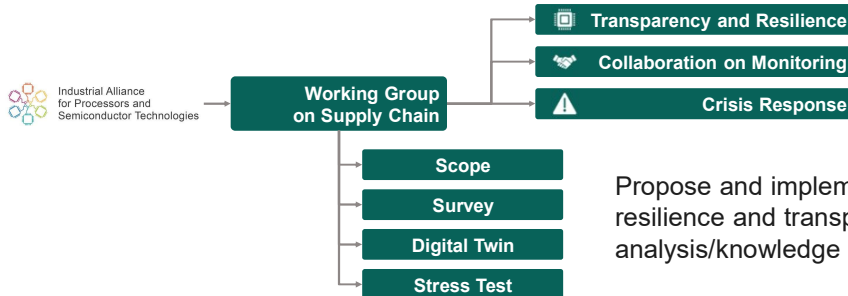


Supply Chain Working Group Cluster Photonics



Objectives of the Supply Chain Working Group



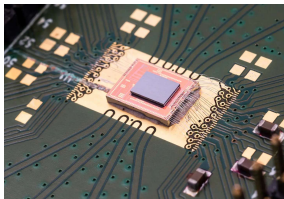
An industry working group working for the European industry on **End-to-End semiconductor*) supply chain and supply chains containing semiconductors**.

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 Photonics



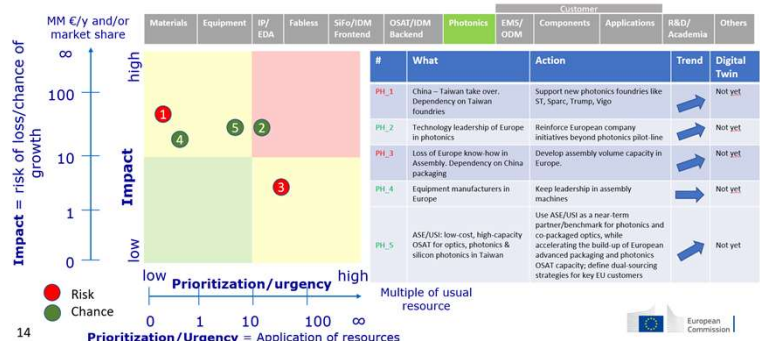
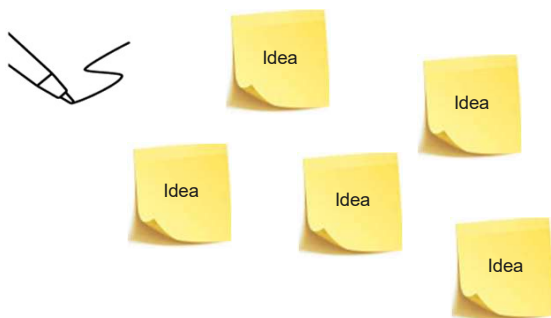
Definition:

Photonics in semiconductors encompasses integrated photonics and optical interconnects—using silicon, silicon nitride, and III–V compound semiconductor photonic chips such as indium phosphide—with lasers, modulators, detectors, optical digital signal processors, and transceiver modules. These technologies are used for data centers, telecommunications, and sensing.

Pivotal actors in semiconductor photonics :

- KD Technology [\[link\]](#) — design-only semiconductor company; high-speed optical networking transceivers
- Jenoptik [\[link\]](#) — precision optics and photonics for lithography and metrology (beam shaping, objective lenses, optical modules)
- Intel [\[link\]](#) — silicon photonics transceivers and optical input/output; demonstrated a fully integrated optical chiplet
- Soitec [\[link\]](#) — engineered photonics silicon-on-insulator wafers enabling silicon photonic platforms
- STMicroelectronics [\[link\]](#) — optical sensing and integrated photonics; single-photon avalanche diode image sensors
- GlobalFoundries [\[link\]](#) — silicon photonics foundry; turnkey silicon photonics platform targeting optical interconnects
- Philips (MEMS Foundry and Engineering Solutions) [\[link\]](#) — micro-electro-mechanical systems design, prototyping and manufacturing
- X-FAB [\[link\]](#) — specialty foundry for analog and mixed-signal, high-voltage, bipolar, complementary metal–oxide–semiconductor
- OSRAM [\[link\]](#) — LEDs/laser diodes; automotive/IR; opto sensors
- Hamamatsu Photonics [\[link\]](#) — Photodiodes/PMTs/SiPMs; image sensors; light sources
- SensL (onsemi) [\[link\]](#) — SiPMs/SPAD arrays; LiDAR/ToF
- VCSEL [\[link\]](#) — Vertical-cavity surface-emitting lasers; 3D sensing/datacom
- Sony Semiconductor Solutions [\[link\]](#) — CMOS image sensors; ToF/stacked sensors
- Lumentum [\[link\]](#) — Lasers/VCSELs; 3D sensing; telecom/datacom
- Coherent Corp [\[link\]](#) — Industrial/scientific lasers; optics; telecom/datacom
- Broadcom [\[link\]](#) — Optical transceivers; datacenter/telecom optics

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