

SCANTINEL[®]
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**Next Generation Coherent LiDAR for autonomous vehicles
A ZEISS-backed venture**

Scantinel Photonics is developing compact and affordable FMCW LiDAR modules based on Photonic Integration

Our FMCW LiDAR on Chip overcomes the obstacles of autonomous mobility

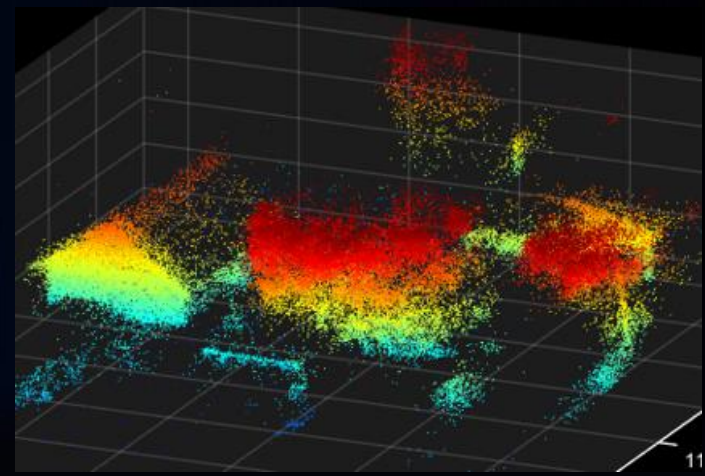
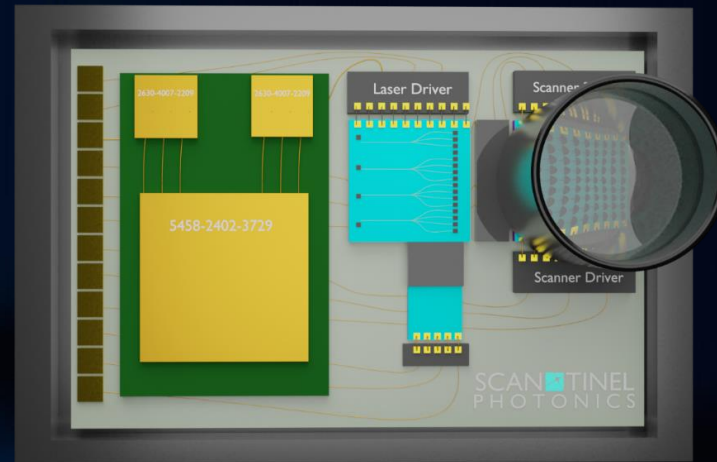
We provide a distinctive FMCW LiDAR on Chip module to solve the existing limitations of LiDAR solutions.

Photonic Integration is the key enabler to provide compact and affordable LiDAR solutions

Scantinel is developing a unique PIC based solid state scanner and FMCW laser engine

Highly parallel multichannel scanning FMCW LiDAR demonstrated

Long range FMCW measurement results are available



ZEISS Scantinel is backed by ZEISS Ventures



Scantinel is the European champion of FMCW LiDAR

US – Cluster: ~10 Companies

EU – Cluster: 1 Company

Asia – Cluster: 1 Company



Scantinel partners with leading photonics research institute IMEC

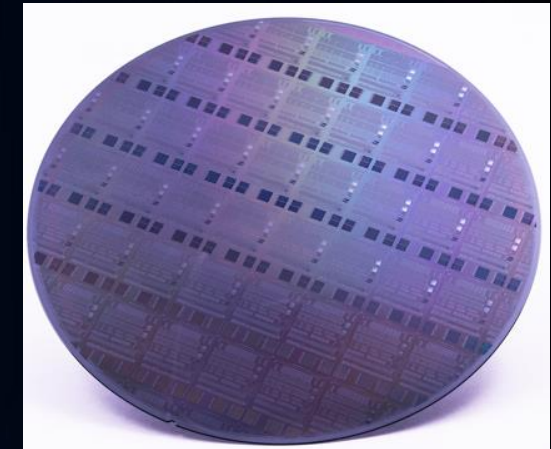


Complementary
competencies

- Photonic design incl. laser integration
- Photonic manufacturing platform (Si, SiN)
- Foundry for prototyping and small series

Role

- Development partner for photonic design, photonic manufacturing and laser integration



Jointly we are solving the challenges of

- Solid state beam Steering/Scanning
- Integrated long coherence length tunable laser sources

FMCW LiDAR system integration requires additional photonic integration capabilities

The integrated FMCW LiDAR will still require a few discrete components which need to be integrated on the packaging level:

- Micro-isolators, either chip scale or micro-optical components
- Semiconductor Optical Amplifiers, 2-4W output power with high efficiency
- Advanced assembly technologies for micro-optical components with high throughput, suitable for volume manufacturing

Collaboration proposals in the above areas are welcome!

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Let's stay in touch!

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