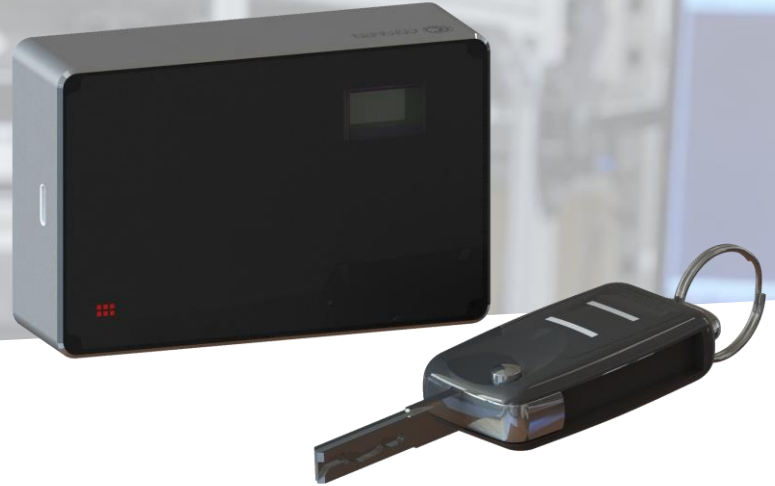


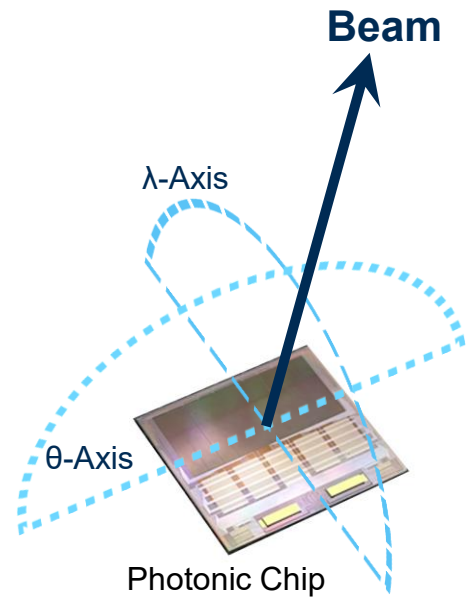
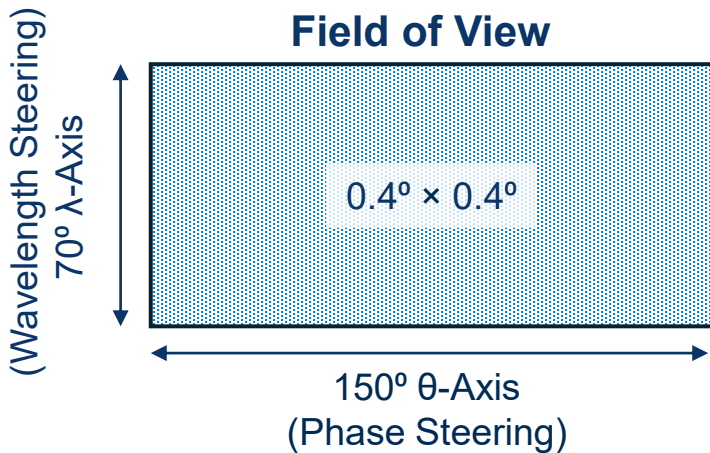
# SR-1S LiDAR

## Solid-State Coherent Optical-Phased-Array Short-Range LiDAR



### Applications & Benefits

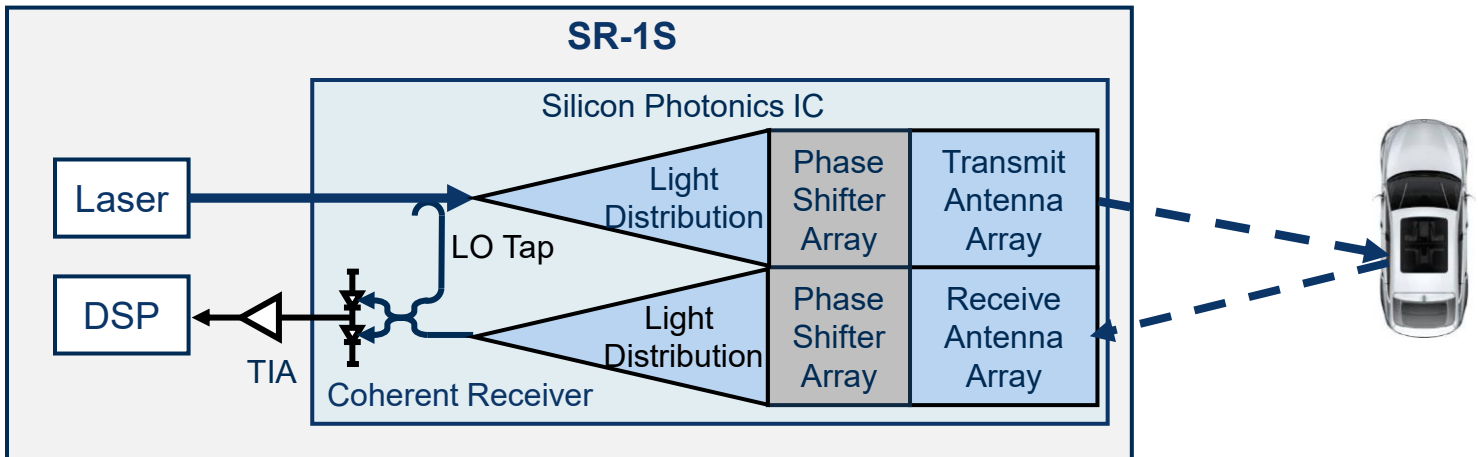
- Compact LiDAR module
- Flat form factor – no lenses
- Coherent receiver
- FMCW gives range & Doppler radial velocity
- Integrated tunable laser
- Optimized for short-range, wide field-of-view



Feature	Specification
Wavelength	C + L-Band
Range	20 m @ R10%
Eye Safety	Class 1
Beam Spot Size (H×V)	≤ 0.04° × 0.02° FWHM
Field of View (H×V)	150° × 70°
Angular Resolution (H×V)	0.4° × 0.4° (programmable)
Measurement Rate	660k points/sec
Electrical Power	35 W (< 10W with DSP ASIC)
Form Factor	6.5 cm × 10 cm × 3 cm
Mass	< 250 g



## Block Diagram



## Integration Approaches



### Compact Design

The module is only 200 cm<sup>3</sup> and < 250 g due to SiPh and CMOS integration.



### No Lenses

All LiDAR optical components are integrated into the Silicon Photonics.



### Scalable

SiPh & CMOS are made in 300 mm nodes; hetero III/V integration.



### No Interference

Interference such as from sunlight/other sources is naturally rejected.



### Availability

Q4 2025.



### Dynamic FoV

The scan pattern is chosen by the user in the field of view.



### Minimal Absorption

1.55 μm exhibits excellent atmospheric transmission.



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