

## Quantum sensing and computing

Highest detection rate at room and ultra  
low temperatures

Ultra-fast single photon  
detection for quantum  
applications with the  
lowest dark count rate

### Technology

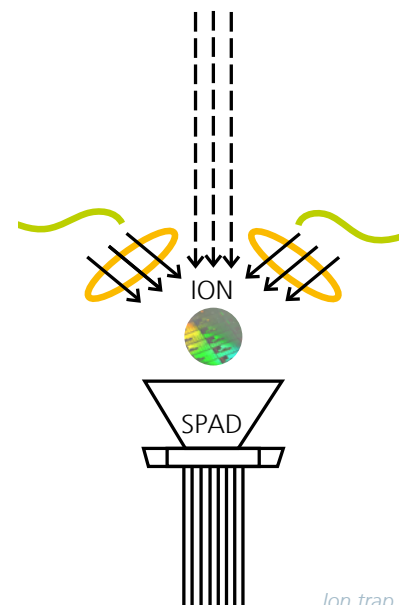
Backside illuminated silicon based SPAD technology with integrated CMOS

### Customer benefits

- Low effort integration through wafer-based processing
- Optimized functionality in single chip integration with integrated CMOS
- Backside illumination and bottom up fabrication for versatile applications

### Technical advantages

- Lowest dark count rate, suited for cryogenic (mK) and ultrahigh vacuum environment
- Low field and no AC emission
- Extremely robust against external electromagnetic fields or temperature changes



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### Application fields

Quantum computing (QC) chip environments, where high integration is needed

Optical gravimetry with ultra sensitive light detection for spectroscopic or interferometric purposes

Superconductive and ion trap based QCs

Space applications

### Contact and further information

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