

# Australian Silicon Photonics Technology



## Overview

Australian Silicon Photonics has new designs for critical building blocks that help silicon photonics designers marry high-capacity optical links with electronic processing, to deliver 100x today's computing power with 10x less energy. But data centers already consume 3% of the world's energy - the same amount as the entire United Kingdom - and this is growing exponentially. To. The Institute of Photonics and Optical Science (IPOS) draws together research and teaching expertise across the Schools of Physics, Electrical and Information Engineering, Mathematics, and Chemistry. We span all areas of optics and photonics, both fundamental and applied, including those of the. Wavelength Opto-Electronic specializes in manufacturing and customizing optics for various applications, including laser processing and medical imaging. A compound annual growth rate of 28. 6% is expected of Australia silicon photonics market from 2024 to 2030. 9 million. Our team at the Integrated Photonics and Applications Centre (InPAC) is made up of six teams that work with industry to design, prototype and scale-up photonic chips to make new products.



## Article Content

Sep 30, 2025

NSYSU signed an agreement with Australian Azimuth Avionics Pty

Professor Yung-Jr Hung of the Department of Photonics of NSYSU demonstrated the application of silicon photonics integrated circuits and fiber optic gyroscopes in drones. NSYSU research team

Sep 02, 2025

Australia Silicon Photonics Market Size & Outlook, 2030

This country databook contains high-level insights into Australia silicon photonics market from 2017 to 2030, including revenue numbers, major trends, and company profiles.

May 26, 2026

NSYSU signed an agreement with Australian Azimuth

To improve the speed and efficiency of moving large amounts of data, international semiconductor giants, including TSMC, Intel, Nvidia, AMD, and other companies

Oct 06, 2025

Lighting the way forward: The bright future of photonic integrated ...

The ongoing trend towards elevated levels of integration favours the widespread embrace of silicon (Si) photonics, particularly in utilizations such as LiDAR. The integration of PICs with other

Jan 21, 2026

Silicon photonics

Silicon photonics is the study and application of photonic systems which use silicon as an optical medium. The silicon is usually patterned with sub

Mar 28, 2026

NSYSU signed an agreement with Australian Azimuth

A research team from the Department of Photonics (DoP), National Sun Yat-sen University (NSYSU), developed a "Silicon photonics integrated circuit and fiber

Jul 10, 2025

Australian Silicon Photonics

Australian Silicon Photonics has new designs for critical building blocks that help silicon photonics designers marry high-capacity optical links with electronic processing, to deliver 100x today's

Dec 06, 2025

Australia Silicon Photonic Chips Business & Technology ...

The convergence of AI, automation, and digitalization is transforming silicon photonic chips into versatile, high-value components that meet the evolving needs of Australia's digital economy.

Feb 28, 2026

Perspective on the future of silicon photonics and

Silicon photonics is advancing rapidly in performance and capability with multiple fabrication facilities and foundries having advanced passive and

Mar 19, 2026

Institute of Photonics and Optical Science

The Institute of Photonics and Optical Science (IPOS) draws together research and teaching expertise across the Schools of Physics, Electrical and Information

Nov 04, 2025

Australia Silicon Photonics Market Size & Outlook, 2030

The silicon photonics market in Australia is expected to reach a projected revenue of US\$ 92.4 million by 2030. A compound annual growth rate of 28.6% is expected of Australia silicon photonics market

Apr 29, 2026

PHOTONIC AND QUANTUM TECHNOLOGIES IN AUSTRALIA AND

COMBS - The Australian Research Council Centre of Excellence in Optical Microcombs for Breakthrough Science (COMBS) brings together multi-disciplinary researchers from eight universities

Feb 14, 2026

Key research areas

We have created Australian Silicon Photonics, with Ghent University using our service. Now we are applying what we've learnt from the

Dec 04, 2025

Silicon Photonics Market Report 2026

The countries covered in the silicon photonics market report are Australia, Brazil, China, France, Germany, India, Indonesia, Japan, Taiwan, Russia, South Korea, UK, USA, Canada, Italy, Spain.

Feb 03, 2026

Australian Silicon Photonics

At Australian Silicon Photonics, we believe in an amazing future world, with self-driving cars and virtual reality. But data centers already consume 3% of the world's energy - the same amount as the entire

Nov 16, 2025

Australian Silicon Photonics

Australian Silicon Photonics has developed unique, patented designs for key silicon photonic functional building blocks that help designers of integrated silicon photonic subsystems marry high-capacity

May 14, 2026

A new era in Australian photonics

The Australian photonics ecosystem is healthy, with a track record in creating and commercialising photonics technologies that have been widely deployed in telecommunications networks around the

Aug 27, 2025

Institute of Photonics and Optical Science

Optofab Sydney  
Microstructured Polymer Optical Fibre (mPOF) Facilities  
Fibre Characterisation Facilities  
Fibre Tapering Facilities  
OptoFab provides the EXFO NR9200 HR which is state of the art commercial equipment for characterising optical fibre. It produces high resolution 2D maps of the Refractive Index Profile (RIP) and of the Mode Field Distribution (MFD). See more on [sydney.ensun](#)

Top 100 Silicon Photonics Companies in Australia (2026) | [ensun](#)

Discover all relevant Silicon Photonics Companies in Australia, including Wavelength Opto Electronic and Diamond Optics Pty Ltd

Sep 21, 2025

Roadmapping the next generation of silicon photonics

Silicon photonics has developed into a mainstream technology driven by advances in optical communications. The current generation has led to a

Dec 05, 2025

## Top 100 Silicon Photonics Companies in Australia (2026) | ensun

Furthermore, the global market relevance of Silicon Photonics is increasing, with Australia positioned as a player in the Asia-Pacific region. Staying informed about technological advancements and market

Aug 22, 2025

Australian Silicon Photonics 2026 Company Profile ...

Information on valuation, funding, cap tables, investors, and executives for Australian Silicon Photonics. Use the PitchBook Platform to explore the full profile.

## Contact Us

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