

Article Overview

Top silicon photonics module brands include Cisco Systems, Intel, IBM, Marvell, STMicroelectronics, NeoPhotonics, and Hamamatsu Photonics, recognized for high-performance optical interconnects and AI-ready data center solutions.

Leading Brands and Their Strengths

Cisco Systems - Offers 1.6T optical transceivers, 800G linear pluggables, and AI networking solutions built on its silicon photonics platform acquired through Acacia and Luxtera, making it a strong player in AI data center optical connectivity . Intel Corporation - A pioneer in CMOS-based silicon photonics, Intel develops cloud infrastructure and data center optical transceivers, integrating photonics with electronic components for high-speed, power-efficient data processing . IBM - Provides advanced silicon photonics solutions for high-bandwidth data centers, leveraging its extensive R&D and integration capabilities to support scalable optical interconnects . Marvell Technology - Focuses on 1.6T optical DSP platforms and AI-data-center interconnects, including collaborations on optical circuit switching, emphasizing high-speed, low-power solutions . STMicroelectronics - Specializes in co-packaged optics for next-generation AI and data centers, delivering optical interconnects above 400 Gbit/s with reduced power dissipation . NeoPhotonics - Known for high-performance optical modules and components, particularly in telecommunications and data center networking, offering solutions optimized for speed and integration . Hamamatsu Photonics - Provides innovative photonic devices and laser technologies, including fiber and optical components, with a strong presence in research and industrial applications .

Additional Notable Companies

Other reputable players include MACOM, GlobalFoundries, Lumentum, Coherent, Rockley Photonics, and Ayar Labs, which focus on specialized applications such as AI, healthcare, and high-speed data centers, often leveraging vertical specialization or niche photonic solutions .

Considerations for Selection

When choosing a silicon photonics module brand, consider:

- o Data rate and bandwidth requirements (e.g., 400G, 800G, 1.6T)
 - o Integration with existing networking infrastructure
 - o Power efficiency and thermal management
 - o Support for AI and hyperscale data center applications
 - o Vendor R&D and long-term roadmap for photonics innovation
- These brands are widely recognized for their



The best manufacturer of silicon photonics modules

reliability, performance, and innovation in silicon photonics, making them suitable for high-speed optical networking, AI data centers, and next-generation computing infrastructure.

However, do you know who the top optical transceiver manufacturers are? Do you know the

DustPhotonics specializes in Silicon Photonics solutions, providing high-speed modulators and detectors that support a wide range of

Silicon photonics is defined as an optical technology that integrates photonics and electronics to enhance high-speed

Key takeaway Intel is a leading manufacturer in semiconductor technologies, and its Intel® Silicon Photonics product line integrates

Optical transceiver market leaders: the top 10 manufacturers powering 400G and 800G modules for hyperscale data

Chapter 2, to profile the top manufacturers of Silicon Photonics Modules, with price, sales quantity, revenue, and global

Top 21 Photonics Industry Companies 1. Thorlabs Website: [thorlabs.com](https://www.thorlabs.com) Ownership type: Family Owned Headquarters: Newton,

Intel Corporation (US) Intel is the global semiconductor innovation leader with deep core strengths in leading-edge chip

The "Global Silicon Photonics Market 2025-2035" report has been added to ResearchAndMarkets.com's offering. The

Skorpios ([https://](https://www.skorpios.com/)), a US-based startup, has developed a way to directly integrate optical

Silicon photonics delivers manufacturing yield, throughput and process tool utilization by solving manufacturing problems at a

Silicon Photonics Market Summary The global silicon photonics market size was estimated at USD 1.29 billion in 2022 and is

We've organized a list of the top photonics companies as of 2026. Read on to learn more about the state of the



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For high-volume optics applications, Rockley Photonics is a fabless supplier of silicon photonics chipsets, IP, and

Insider Brief Photonic quantum computing uses photons instead of matter-based qubits, offering room-temperature

Leading manufacturers include Intel's silicon photonics division, Broadcom, Lumentum, and Cisco, alongside

Web: <https://www.millstraining.co.za>

