Thursday, November 13, 2025

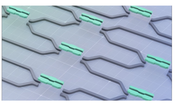
PHOTONICS spectra

Weekly News

Universal Coupler Cuts Cost to Quantum Computers by Hundreds of Millions of Dollars

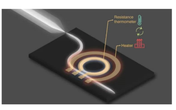
It was a busy week for mergers and acquisitions with several optics companies absorbed by larger groups. M Squared Lasers has completed the sale of its assets, with its founder buying back its intellectual property. And a new 'universal coupler' promises to cut the cost of building a quantum computer by $900 million. Sponsored by Edmund Optics.

Watch Now



Universal Coupler Promises to Cut the Costs of Photonic Quantum Computers

Quantum Pulse Ventures, a company developing technology to reduce barriers to quantum computing, has created what it describes as a universal directional coupler for photonic quantum computers. According to the company, the couplers can reduce the cost per computer by up to $900 million by lowering hardware requirements, reducing run time, and improving robustness against imperfections. Read Article



Researchers Reveal Dual Function in Integrated Photonics Component

The combination of electrical and photonic circuits is a major goal of the integrated photonics industry, but it also presents a problem. Electrical circuits are notorious for generating heat. If photonic devices become a little bit too hot, or a little bit too cold, their finely tuned photonic properties can be disrupted. Read Article

Opdo and Luximprint Partner for Optics Manufacturing Workflow

Opdo, a developer of AI-enabled optical design and a specialist in 3D printing for optics, has partnered with Luximprint, a provider of 3D printed optics. The companies plan to integrate their respective technologies to bridge AI design and digital manufacturing, and to increase the speed at which optical systems are conceived, developed, and brought to market. Read Article

Featured Products & Services

IR Filters for Thermal Imaging

Spectrogon US Inc.

Spectrogon manufactures infrared filters and windows with high transmission, high rejection outside the passband, while maintaining excellent coating uniformity for thermal imaging and gas detection applications such as cryogenically cooled IR detectors and uncooled microbolometers. Our filters and windows range in dimension from Ø6.0 to Ø200.0 mm, with dicing capabilities down to as small as 1.0 × 1.0 mm.

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New Innovating CTI Pyrometer Series

Optris Infrared Sensing LLC

Discover the new Optris CTI LT pyrometer: a modular, high-precision solution built for demanding industrial environments. With robust performance, rapid response, and versatile connectivity, it ensures accurate, reliable temperature monitoring while reducing downtime — setting a new standard in non-contact measurement.

Visit Website | Request Info

More News

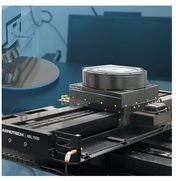
M Squared Lasers Completes Sale of Assets

MicroVision to Acquire Fellow Lidar Tech Firm Scantinel Photonics

EMTEK Acquires Cubert to Lead Newly Formed Hyperspectral Group

Denmark's FOSS Group Acquires Wasatch Photonics

Latest Webinars



Advanced Motion Control for Semiconductor Metrology

Tue, Nov 18, 2025 1:00 PM - 2:00 PM EST

This webinar explores advanced motion control principles and critical technologies vital for semiconductor inspection and metrology tools, addressing the industry's escalating demands for accuracy, speed, and reliability. Participants will gain insight into how precision motion systems enable advanced applications such as wafer inspection, SWLI, SEM/FIB, AFM, and reticle/mask inspection. Presented by Aerotech.

Register Now

Design-for-Excellence (DfX): Building Scalable, Reliable Optical Systems

Wed, Nov 19, 2025 11:00 AM - 12:00 PM EST

Whether you are designing high-precision optical instruments, imaging systems, or ruggedized solutions for aerospace and medical markets, this session will offer actionable strategies to improve product outcomes, reduce total cost of ownership, and shorten time to market. Join the Optikos team as it shares real-world lessons from decades of optical system design and explore how a DfX mindset can future-proof your next product. Presented by Optikos.

Register Now

Solving Processing Demands for High-Bandwidth Imaging

Thu, Dec 4, 2025 11:00 AM - 12:00 PM EST

This session offers system designers, integrators, and imaging device designers practical insights into optimizing high-bandwidth imaging systems. Learn how GigE Vision-to-Thunderbolt™ solutions reduce CPU load while enabling compact platforms such as laptops and embedded systems for demanding imaging tasks. Discover how RoCEv2 technology allows direct data transfer from camera to memory - bypassing the CPU and operating system - to support ultrahigh bandwidths up to 400 Gbit/s with minimal latency. Sponsored by Plexra Technologies.

Register Now

All Things Photonics

Optical Biosensor Detects MPOX — With Partha Ray and Mete Aslan

While the threat of MPOX may not be making headlines in the U.S., the virus is still present. The World Health Organization says it has been on the rise in more than 40 countries, and the latest strain is more severe and more infectious. **Partha Ray** and **Mete Aslan** are part of a research team from the University of San Diego School of Medicine and Boston University. Hear them discuss a newly developed optical biosensor that can quickly detect the virus at the point of care, without the wait for lab results.

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Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazines (*Photonics Spectra*, *BioPhotonics*, and *Vision Spectra*). Please submit an informal 100-word abstract to editorial@Photonics.com, or use our online submission form.

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