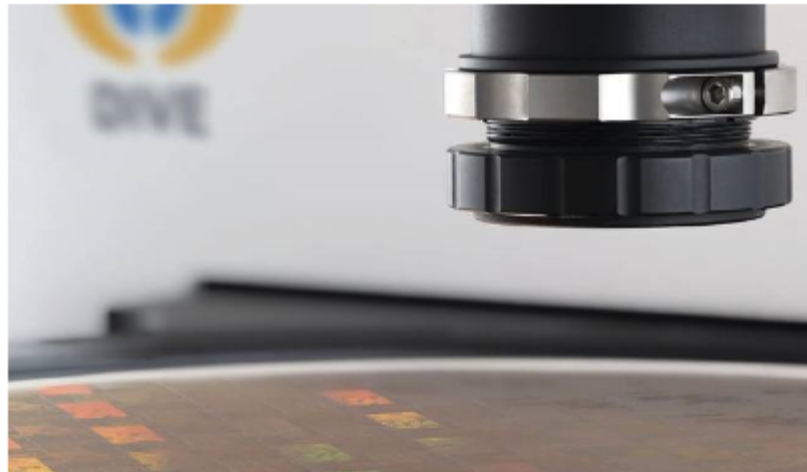




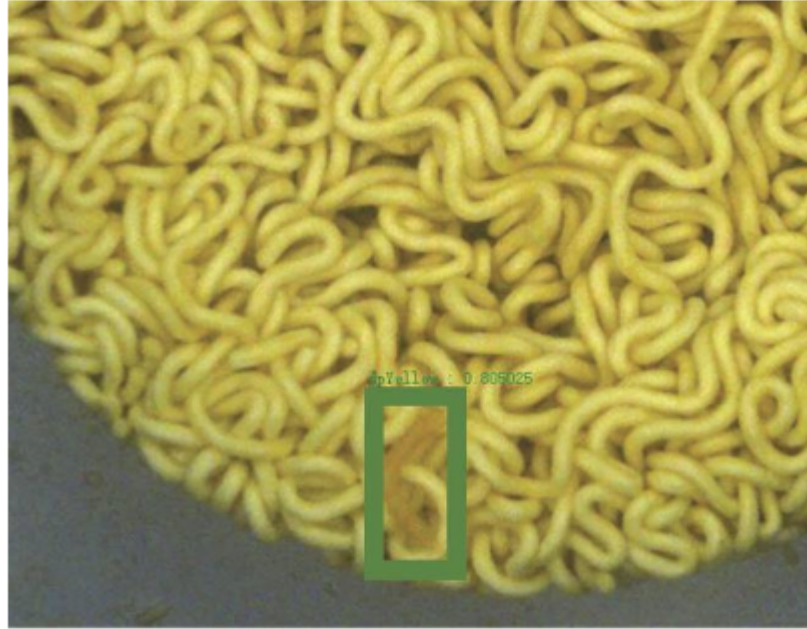
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## Hyperspectral Imaging Boosts Wafer Inspection with Help of AI

Hyperspectral imaging combines spectroscopy, which provides material and topological information, with imaging for shape and structure recognition. This convergence of technology yields a comprehensive data set for those in the manufacturing sector. Hyperspectral imaging has been leveraged in a number of applications from medical imaging

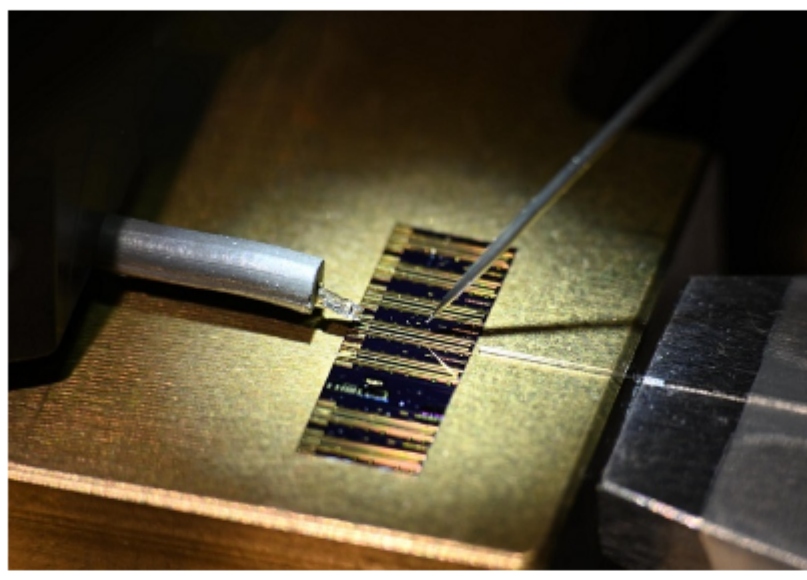
and agriculture to defense and surveillance. But the technology can also be a much-needed boon in the factory as an aid for materials and quality inspection. [Read Article](#)



## AI-Driven Vision Monitors Instant Noodle Quality in Production

Instant noodles, a global staple, are consumed at a rate of more than 100 billion servings annually, and there was a 10% surge in demand for them during the pandemic alone. Major producers in countries such as China, Japan, Korea, and Taiwan supply a wide variety of instant noodle brands with diverse flavors, catering to millions of consumers. Manufacturers must ensure that each batch meets the desired standards for texture, appearance, and taste, and that machine vision cameras can detect defects in instant noodles in mere

milliseconds. [Read Article](#)



## Laser-Based Artificial Neuron Surpasses its Analog Version, With Strong AI Potential

Researchers have developed a laser-based artificial neuron that fully emulates the functions, dynamics, and information processing of a biological graded neuron. With a signal processing speed of 10 GBaud — a billion times faster than its biological counterparts — the new laser graded neuron could lead to breakthroughs in fields like artificial intelligence and other types of advanced computing. [Read Article](#)



## Featured Products & Services



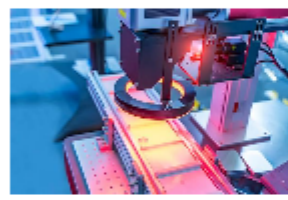
### 3S Series High-Resolution 3D Sensors

**Zebra Technologies Inc.**

Zebra's 3S Series delivers best-in class 3D scanning to address a broad range of machine vision automation applications. Using Structured Light technology, the 3S series scans areas with sub-millimeter resolution and accuracy for both static scenes and items in motion.

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### 11 Specs for Effective Machine Vision

**Teledyne DALSA, Machine**

**Vision OEM Components**

Crafting an efficient machine vision system involves numerous factors that impact its performance. This list will review 11 specifications and the variables to watch out for when building a complete vision system.

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## In Case You Missed It

### Edge AI and Vision Alliance Names Annual Award Winners

The Edge AI and Vision Alliance has named the 2025 winners of the Edge AI and Vision Product of the Year Awards and the AI Innovation Awards. The Edge AI and Vision Product of the Year Awards celebrate building-block components that enable edge AI and vision applications, while the AI Innovation Awards recognize end products that use edge AI or vision technologies. The awards recognize diverse applications from medical diagnostics to autonomous drones. [Read Article](#)

### Research Project to Bolster Edge AI with Sensor Tech

An interdisciplinary research project is developing new technological approaches for better and more effective integration of artificial intelligence at the edges of IT networks. These developments could fuel future applications in industrial electronics, medical technology, and environmental monitoring. [Read Article](#)

### STEMMER IMAGING Updates Leadership Structure

Machine vision company STEMMER IMAGING has updated its leadership structure with the aim of driving commercial growth, innovation, and operational excellence. Peter Keppler, who has been with STEMMER for the past 27 years, has been promoted to chief marketing officer from his previous position as senior director of international sales enablement.

[Read Article](#)

## Next Issue

### Features

Embedded Vision, Hyperspectral and multispectral imaging, Next-Gen UAV hyperspectral processing, and 3D Vision

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