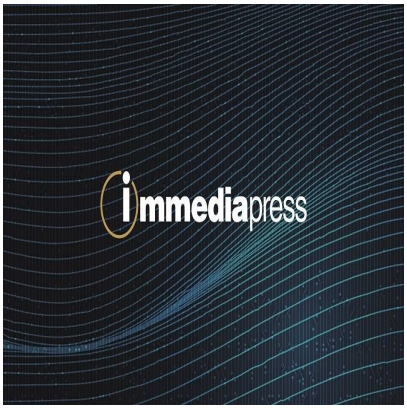

Raytron Unveils Worldâ??s First SWLP-Based 8Î¼m Infrared Detector at LASER World of PHOTONICS CHINA 2026

Descrizione

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SHANGHAI, May 6, 2026 /PRNewswire/ â?? At LASER World of PHOTONICS CHINA 2026, Raytron introduced the OHLE6081, the worldâ??s first second-generation uncooled infrared detector built on SWLP (wafer-level packaging) technology. The OHLE6081 represents a significant step forward in infrared imaging, making high-performance infrared detectors more compact, manufacturable, and cost-efficient. Combining an 8Î¼m pixel pitch, 640Ã?512 resolution and an ultra-compact 11.2Ã?11.2 mm design, the infrared detector is designed for seamless integration and applications such as commercial drones, industrial thermography, outdoor night vision, and ADAS, driving the next wave of compact, low-power, and scalable infrared cores.

Three Major Trends Reshaping the Infrared Industry

First, there is a clear shift toward miniaturized terminals. Applications, such as handheld thermal imagers, portable devices, and commercial drones increasingly require tighter constraints on size, weight, and power (SWaP). Second, cost-effective manufacturing is becoming essential, as traditional detectors rely on Class 100 cleanroom environments and complex integration processes, limiting scalability. Third, performance expectations continue to rise, with 640Ã?512 resolution becoming the mainstream standard, alongside higher requirements for temperature measurement range and image quality.

Four Key Advantages of the OHLE 6081 for OEM integration

The next-generation 8Î¼m pixel design delivers higher resolution and improved detail recognition within the same size, while optimizing SWaP and cost for easier system integration.

SWLP dual-layer packaging enables assembly in standard environments without dependency on cleanroom facilities. Compatible with SMT processes, it supports high-volume production and reduces module size by approximately 74% compared with conventional 640Ã?512 ceramic-packaged thermal

detectors, significantly lowering cost and shortening delivery cycles.

Based on a VOx sensor, the OHLE 6081 achieves NETD < 50 mK, delivering high-quality, low-noise imaging for precise target detection.

Covering -40Â°C to 800Â°C, the detector features an ultra-compact 11.2 Ã? 11.2 mm size, <1 g weight, and <120 mW power consumption, enabling integration into commercial drones, handheld devices, automotive, and industrial systems.

About Raytron

Raytron is a leading provider of infrared thermal imaging solutions and the developer of the worldâ??s first 8Î¼m and 6Î¼m infrared detector chips. The company continues to drive innovation across infrared detectors, modules, cameras, and industrial solutions, providing incremental values for customers through technological advancement.

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