Teledyne FLIR OEM Launches Boson SX8, the First NDAA-Compliant 8 µm SXGA LWIR Thermal Camera Module

The 1280 × 1024 Boson SX8 and Boson SX8-CZ 15–75 deliver optimized size, weight, and power with high-performance thermal imaging

GOLETA, Calif., June 8, 2026 — Teledyne FLIR OEM, a business unit of Teledyne Technologies Incorporated, announced the release of the ITAR-free Boson® SX8, the first NDAA-compliant, volume production, uncooled longwave infrared (LWIR) thermal camera module to combine an 8-micron pixel pitch with SXGA (1280 × 1024) resolution. The state-of-the-art 8-micron pixel enables industry-best thermal performance and four times the resolution of today's high-volume, uncooled VGA (640 × 512) thermal camera modules, all within a similarly sized compact package.

Designed for high-performance and optimized for size, weight, and power (SWaP) constrained defense and industrial applications, the Boson SX8 family enables integrators and operators to see more, see farther, and deploy high-performance thermal imaging at production scale.

Critical for uncrewed aircraft systems (UAS), counter-UAS, perimeter security, handheld devices, seekers, visual augmentation, and intelligence, surveillance, and reconnaissance (ISR) systems, the Boson SX8 family delivers performance previously available only in heavier, larger, and more power-hungry cooled, midwave infrared (MWIR) thermal imaging systems.

"By reducing pixel area by 55% compared to the standard 12-micron LWIR pixel format, Boson SX8 represents a transformational moment for thermal imaging," said Paul Clayton, President, Teledyne FLIR OEM. "By pairing this advanced 8-micron pixel architecture with SXGA thermal resolution at full-rate production, we're giving customers greater situational awareness and longer effective range without compromising SWaP or supply-chain confidence."

In addition to multiple fixed-lens options, the new Boson SX8-CZ 15–75 features a factory-integrated 5x continuous-zoom (CZ) lens to further extend range performance. This option pairs the camera module with a 15–75 mm continuous-zoom lens, engineered and calibrated as a single system. The integration provides optimized optical performance with focus-through-zoom, thermal gradient compensation, factory alignment, and a single-source warranty, reducing integration risk while accelerating time to market.

Engineering Breakthrough, Delivered at Production-Scale

The Boson SX8 and Boson SX8-CZ 15–75 are manufactured at high volume in the United States by the world's leading supplier of OEM thermal camera modules. Designed for production deployment, the Boson SX8 family offers OEMs a low-risk path from development through full-rate manufacturing, including integration with Teledyne FLIR OEM's Prism™ intelligent embedded software products.

Teledyne FLIR OEM will demonstrate the Boson SX8 product family at Eurosatory 2026 at the Teledyne FLIR booth in Paris, where attendees can experience the latest advances in high-definition, SWaP-optimized thermal imaging. For more information, visit oem.flir.com/bosonsx8.

About Teledyne FLIR OEM
Teledyne FLIR OEM, part of Teledyne Technologies Incorporated (NYSE:TDY), is the world's largest volume manufacturer of ITAR-free and NDAA-compliant infrared (IR) sensor and camera modules. As a vertically integrated supplier, Teledyne FLIR OEM delivers thousands of thermal imaging modules and related software tools daily for defense, automotive, uncrewed, professional, and artificial intelligence applications designed to improve decision support and situational awareness. Teledyne FLIR OEM enables life-changing thermal sensing so the world can do and see more. For more information, please visit oem.flir.com/ or follow @flir.

ABOUT TELEDYNE TECHNOLOGIES

Teledyne Technologies is a leading provider of sophisticated digital imaging products and software, instrumentation, aerospace and defense electronics, and engineered systems. Teledyne's operations are primarily located in the United States, the United Kingdom, Canada, and Western and Northern Europe. For more information, visit teledyne.com

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