

Raytheon, Quantum Imaging sign deal on SWIR capability for ISR

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Quantum Imaging, a subsidiary of Israel-based infrared sensing and imaging company Semiconductor Devices (SCD), has finalised a deal to supply Raytheon with short-wave infrared (SWIR) cameras and optical sensor packages for use on the company's product line of intelligence, surveillance, and reconnaissance (ISR) platforms.

The USD13.5 million deal, announced by Quantum Imaging on 25 March, will finance the procurement of SCD's Cardinal 1280 SWIR platform for integration on ISR products developed under Raytheon's Space and Airborne Systems directorate. All work on that system and the Cardinal 1280 platforms under contract to Raytheon and the US Department of Defense (DoD) will continue to be conducted inside the United States, at Quantum Imaging's headquarters in Colorado Springs, Colorado.

Touted as SCD's and Quantum Imaging's main high-resolution and high-sensitivity offering in the SWIR realm, the Cardinal 1280 features $1,280 \times 1,024$ image resolution with a 10-micrometre indium gallium arsenide (InGaAs) SWIR pixel detector and on-chip image processing, enabling the platform to conduct real-time, long-range ISR operations under low-light to no-light conditions through most adverse weather conditions.

Adoption of the Cardinal 1280 will "further enhance a family of products that provides detailed intelligence data from the visual and infrared spectrum" to US armed forces and civilian national security agencies deployed across the globe, said Mark Fydenkevez, president and CEO of Quantum Imaging and head of SCD's US operations, in a 25 March statement. The Quantum Imaging supply deal with Raytheon is the latest example of efforts by SCD and its subsidiaries to tailor the company's SWIR offerings to meet standing and future US military requirements for persistent surveillance and unmanned applications.

Aside from the Raytheon deal, the Cardinal 1280 has been selected and integrated into at three DoD programmes, SCD's vice-president for Marketing & Business development Kobi Zaushnizer told *Jane's* on 4 February. He declined to comment on which specific US armed forces' programmes the Cardinal 1280 has been integrated. However, Zaushnizer did note that it has been included as a subsystem aboard US rotary-wing and unmanned fixed-wing aircraft as well as into an EO/IR sensor package for airborne and maritime operations.

Comment

Quantum Imaging's selection by Raytheon to supply SWIR platforms to the company's ISR programmes appears to be a significant win for the SCD subsidiary, in terms of its Israel-based parent company gaining a larger foothold in the US military ISR market. Expansion into US and allied defence programmes is part of the company's FAB 2020 initiative. The goal of the initiative is to extend SCD's product lines over the next decade, in both production and research and defence (R&D) infrastructure, for SWIR, medium-wave infrared, and long-range infrared product lines.