

SECURE ELECTRONIC WARFARE SYSTEMS SHOULD NEVER REQUIRE COMPROMISE – OR BE COMPROMISED

When a leading A&D industry company needed to upgrade three mission-critical EW systems, they found themselves connected with silicon tech solutions beyond their own industry.

TOO BIG, TOO COMPLEX AND TOO MANY VARIABLES

A leader in the A&D industry was using individual, custom-designed modules in each of their three EW systems, requiring multiple RF and data processing cards. They needed to create a significantly smaller and standardized EW architecture for a range of spectrum processing subsystems without sacrificing security, performance and reliability. For this one design to support multiple applications, a new level of broadband performance with trust and security not typically found in the commercial semiconductor sector was required.

TRUSTED PARTNER OPENS DOORS TO SECURE, SCALABLE INNOVATION AT CHIP SCALE

By employing the trusted, safe and secure onshore manufacturing capability of the Mercury Processing Platform, along with breakthrough technology performance, the customer was able to leverage existing commercial semiconductor technology enhanced to meet A&D industry needs. By combining state-of-the-art FGPA processing, 64 GSPS data converters and memory chiplets, Mercury delivered a secure, flexible and cost-effective direct-to-digital RF system-in-package (SiP) that enables high-speed sensor processing at the edge in a 50 mm x 50 mm size.

MISSION-READY, FUTURE-READY HIGH-TECH DEFENSE

Through a connection to commercial high tech, the customer was able to utilize Mercury’s silicon integration and packaging capabilities for a customizable baseline sensor component for all three of their EW systems. They were able to minimize risks with a trusted supply chain, reduce costs by 3x and minimize downtime through single-product maintenance.