

SECURE COMPUTER PLATFORM SOLVES EW DISTRIBUTED SYSTEM REQUIREMENT



CUSTOMER
Defence Prime



PROJECT
Naval EW System



PRODUCT
Octagon TRAX-2

CHALLENGE

Prime systems integrator for the United States Navy's LPD-17 Advanced warfare ship program required SWaP-optimized, conduction cooled, rugged computing platform for a critical shipboard Electronic Warfare (EW) system.

Very stringent electronic emissions & compatibility requirements combined with the necessity for high reliability indicated the need for a flexible, proven solution in a distributed system architecture.

GOALS

Rugged computing platform meeting stringent LPD sensitive shipboard electronic security requirements

Custom I/O end panels to accommodate shipboard system interface with standard PC-style connectors

Integration of customer specified third party DIO module

Conduction cooled MIL-810G thermal, humidity, shock, vibration compliance

Made in USA solution (ITAR compliance)



SOLUTION

The TRAX-2 low profile modular chassis with flexible internal expansion was ideally suited to meet the rigorous SWaP requirements for the LPD-17 digital control assembly application.

Given a distributed fault tolerant system, the TRAX-2 enabled integrated communication, control and customized I/O with rugged, proven system components.

RESULTS

A cooperative parallel effort between the Prime contractor, subsystem supplier and J-Squared resulted in a semi-custom COTS platform offering a continuous delivery cycle which supported not only the current, but also future requirements of LPD-17 program

Long term In-Service Support throughout extended deployment and multiple fleet upgrade periods were accommodated with the TRAX-2 platform.

Over 350 TRAX-2 systems are now in service onboard LPD-17 ships, with an additional 250 to be potentially deployed in a future fleet upgrade.

