Ship-to-Ship Communications Tech Refresh

CURTISS–WRIGHT

Challenge

- Aging hardware for naval program needed tech refresh

- New hardware needed to fit into original space with backward compatible connectivity

- As much Canadian content as possible required for Prime's opportunity

Solution

- Scalable, application-ready system designed to unique specifications

- Local manufacturing, Canadian-made hardware, with Canadian-based program support

Results

- New hardware meets Canadian content criteria and saves money and effort

- Backward compatibility enables replacement of older systems

- Total LifeCycle Management Services support new hardware for the long haul

Challenge

A customer approached Curtiss-Wright with requirements to build a maritime system with as much Canadian content as possible. Their system – a ship-to-ship communications package – contained aging hardware. Their previous vendor could not supply this program with replacement boards, and as our customer was interested in chasing new opportunities, they wanted to update their product. Since their ship-to-ship communications system requirements would not be changing, they needed the new hardware to fit into the same SWaP-constrained area occupied by their existing hardware. They also required backward compatible connectivity and functionality with their currently installed systems. What's more, they needed to find a supplier who could support their program for another 20+ years.

VPX6-1958   VPX6-648

Solution

We worked closely with this customer from the initial design of their new solution to ensure their system contains the flexibility and unique specifications required.

We supplied our customer with our VPX6-1958 Intel® Core™ i7 Haswell Single Board Computer and our VPX6-684 VPX Managed Ethernet Switch and Router, packaged into a chassis with backplane and power supply – an application ready system with ready-fit connectivity that they can port their existing software solution to and to fit into existing ship hardware.

We were also able to support this customer's long-term embedded program through our Total LifeCycle Management Services. Not only could our Ottawa, Ontario, Canada manufacturing facility supply Canadian-made hardware to support this lengthy program, we could also supply local support to the Canadian government and Canadian Primes working with our customer.

Results

Our customer is very happy with their Canadian-made ship-to-ship communication system - a cost effective solution with the latest and greatest technology capable of working well into the future, as well as enabling replacement of older, existing systems.

Their new system also has the potential to be ported into new form factors, and therefore, enables our customer to easily tap into new markets. Not only that, but their new system is also scalable, allowing our customer to add additional processors and other modules into their system if needed, and it's supported for the long haul through our Total LifeCycle Management Services.

Their new COTS hardware saves them money, man hours of support, and allows them to move to the future with new technology while still keeping existing systems up and running without added expense and time. The fact that the hardware we provided is Canadian-made and the support we offer is Canadian-based made all the difference to our customer and their targeted opportunity.