

NEWS RELEASE

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Curtiss-Wright Introduces First SOSA Aligned A-PNT Module with Integrated ALTNAV and Support for the pntOS Operating Environment

New VPX3-673A OpenVPX™ module delivers MOSA solution for trusted PNT information in environments with limited or denied GPS

AUSA 2022, Walter E. Washington Convention Center, Washington D.C. (Hall A/B/C - Booth 1309) – October 10, 2022 – Curtiss-Wright's <u>Defense Solutions division</u>, a leading supplier of Modular Open Systems Approach (MOSA) based solutions engineered to succeed, today introduced the <u>VPX3-673A</u>, the first rugged module that delivers an Assured Position, <u>Navigation and Timing (A-PNT) solution</u> that includes both Alternative Navigation (ALTNAV) and the pntOS architecture. ALTNAV, a space-based commercial system, is currently being evaluated by the U.S. Army as an alternative/complementary source of PNT information on the battlefield. As an open source, government-owned plug-in architecture for building integrated PNT sensor-fusion applications, pntOS significantly reduces the time and effort required to develop algorithms and add support for new sensors. The VPX3-673A is a rugged 3U OpenVPX form factor module compatible with the U.S. Army's CMOSS suite of standards and aligned to the SOSA Technical Standard 1.0.

"Curtiss-Wright is a leader in the development of high performance MOSA based solutions that deliver complementary A-PNT sources in the battlefield," said Chris Wiltsey, Senior Vice President and General Manager, Curtiss-Wright Defense Solutions division. "With the introduction of the VPX3-673A module, the first CMOSS/SOSA aligned solution to support both ALTNAV and pntOS, we reinforce our commitment to fielding the highest performance, most cost-effective technologies for providing trusted position, navigation, and timing data in a GPS contested or denied environment. This rugged CMOSS/SOSA aligned A-PNT card is designed to ingest positioning and timing data from multiple sensors and output consistent and trusted timing and navigation information to the warfighter."

At the heart of the VPX3-673A is a low noise Chip Scale Atomic Clock (LN-CSAC), with intelligence provided by a Xilinx® MPSoC. These devices are complemented by an ALTNAV receiver and a 10-degree of freedom Inertial Measurement Unit (IMU). The board supports an internal GPS module capable of both SASSM and M-CODE, or an external GPS via an easily accessible front panel connector. The VPX3-673A communicates PNT information using standard VICTORY data messages in compliance with the CMOSS Mounted Form Factor (CMFF) architecture.

Designed to meet the SOSA radial clock profile SLT3x-TIM-2S1U22S1U2U1H-14.9.2-1, the VPX3-673A also acts as system wide timing master by producing and distributing reliable, phase aligned, clock signals. The source is user selectable from multiple options, including the LN-CSAC, GPS, ALTNAV or external sources via the Ethernet backplane or coax connectors. Additionally, this module supports NTP/PTP protocol. In compliance with the SOSA radial clock profile, the VPX3-673A is capable or outputting 11 radial clocks on the backplane and one radial clock on the coax connector. If more clock channels are required, multiple VPX3-673A modules can be daisy-chained together.

To support multiple platform types and applications, the VPX3-673A provides the processing resources and sensor interface capabilities required for operability with a wide variety of external processing and sensor units. The module's easy integration with existing navigation sensors increases the level of assurance in the platform's PNT solution for vehicles operating in environments with limited or denied access to GPS. This innovative size, weight, and power (SWaP) optimized module effectively eliminates the need for multiple in-platform boxes, or the use of "bolt-on" technologies, to field new Navigation Warfare (NAVWAR) capabilities.

To download the VPX3-673A product sheet click here.

For additional information about Curtiss-Wright Defense Solutions products, please visit <u>www.curtisswrightds.com</u>, LinkedIn, and Twitter @CurtissWrightDS.

About Curtiss-Wright Corporation

Curtiss-Wright Corporation (NYSE:CW) is a global integrated business that provides highly engineered products, solutions and services mainly to Aerospace & Defense markets, as well as critical technologies in demanding Commercial Power, Process and Industrial markets.

Headquartered in Davidson, North Carolina, the company leverages a workforce of 8,000 highly skilled employees who develop, design and build what we believe are the best engineered solutions to the markets we serve. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing innovative solutions through trusted customer relationships. For more information, visit <u>www.curtisswright.com</u>.

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