

# **NEWS RELEASE**

FOR IMMEDIATE RELEASE

Contact: Robert F Coveny

VP of Business Development <a href="mailto:rcoveny@curtisswright.com">rcoveny@curtisswright.com</a>

John Wranovics

**Director of Communications** 

M: 925.640.6402

jwranovics@curtisswright.com

Curtiss-Wright Unveils its Strategic Vision for 25 Gbaud "Gen 5" OpenVPX Products for Next Generation 100G Systems

Next-generation Fabric100™ 3U and 6U modules and systems will feature support for 100Gbit Ethernet and PCle Gen 4 to eliminate processing chain bottlenecks

ASHBURN, Va. - June 13, 2023 - Curtiss-Wright's Defense Solutions division today announced the launch of its new Fabric 100 suite of 3U and 6U OpenVPX™ modules and systems. Fabric 100 brings 100Gbit Ethernet and high performance PCIe Gen4 interconnect speeds to tomorrow's new generation of rugged deployable computing architectures. Today, system integrators must satisfy their C5ISR applications' insatiable appetite for sharing ever increasing volumes of information. The higher-speed interconnects required to support these performance demands introduce significant integration challenges for systems integrators. What's more, the ability to meet the industry's goal of simplified interoperability, in other words, to quickly and effectively build systems using open standards based building blocks and make them work well together, becomes increasingly risky as system designers migrate to faster 16Gbaud and 25Gbaud signaling technology. To address this daunting problem and reduce the system design risks associated with higher speed interconnects, Curtiss-Wright has developed *Fabric100*, a complete end-to-end ecosystem of high-speed rugged OpenVPX modules and system components. It is not enough to simply provide 100Gbit connections between a system's modules yet fail to support the ability to process all this data within the modules themselves. Recognizing that, Curtiss-Wright's Fabric 100 board architectures are designed to deliver full 100Gbit performance through the entire processing chain, to effectively eliminate data bottlenecks that might otherwise compromise system performance.

The first members of the *Fabric100* family, which will feature both 3U and 6U modules, will be publicly announced throughout 2023. The debut products in the *Fabric100* family, a pair of multi-processing 6U OpenVPX modules, will include a dual-processor compute module and a dual-processor signal acquisition and processing module.

## **Support for SOSA Architectures**

For customers building systems based on the SOSA Technical Standard, all *Fabric100* products are designed to align with the SOSA Technical Standard, including I/O Intensive Single Board Computer Profile modules, Payload/Compute Profile modules, and several Switch profile modules. Customers that don't require alignment with SOSA will also benefit from *Fabric100* innovations since the SOSA standard's common pinouts and Curtiss-Wright's adherence to specific SOSA profiles for all *Fabric100* 3U and 6U modules will help deliver unprecedented levels of systems integration ease and greater flexibility and options for future technology insertions.

## A Seamless Upgrade Path from 40Gbit to 100Gbit

For customers currently using Curtiss-Wright *Fabric40*™ OpenVPX technology with 40Gbit interconnect speeds, the new *Fabric100* solutions will provide a simplified technology insertion path. As *Fabric40* and *Fabric100* products share considerable architectural hardware and software commonality, customers that plan to deploy *Fabric100* based designs can begin their system development using *Fabric40* hardware and upgrade later as needed, with only minimal systems and application design updates required. Customers will also benefit from having a single vendor that provides a consistent development ecosystem, including platform software and application APIs, to ease their transition from 40Gbit to 100Gbit processing.

Designed to provide system designers with unmatched interoperability, the *Fabric100* suite of products will address the widest range of rugged deployed applications, from those that require low power and high efficiency general purpose processing (GPP) to those that demand the most extreme and compute intensive processing performance. The *Fabric100* family will enable system designers to architect their entire system, whether they require GPP or High Performance Embedded Computing (HPEC), Virtualization, AI/ML Engines, GPU acceleration or Programmable FPGA Processors, all while using members of the same product suite which have been optimized to work seamlessly together. Curtiss-Wright ensures that benefits of this high-speed technology are realized by systems integrators with the verification of the 100Gbit throughput performance of

**Fabric 100** products, not just at the interface or module level, but when used together at the system level, too. To support and validate **Fabric 100**'s 25 Gbaud interconnects, Curtiss-Wright has developed the industry's most rigorous 25 Gbaud signal integrity design rules for system-level integration.

#### **New and Innovative Module-level Thermal Management**

Predictably, the use of faster signaling technology in Gen 5 OpenVPX systems drives increased power and thermal dissipation requirements. As the industry moves to 100W, 150W, 200W, and even 300W modules, the ability to cool contemporary processing engines becomes a critical differentiator between competing COTS vendors. While two suppliers may use the same or similar processing chipsets, the design that uses a better thermal solution will deliver the superior operational performance. For that reason, Curtiss-Wright has implemented new and innovative module-level thermal management techniques that provide superior cooling for COTS versions of its *Fabric100* product suite. In addition, a wide range of advanced chassis-level cooling methods is also supported by the *Fabric100* product suite, including Air Flow-Thru (AFT), Liquid Flow-Thru (LFT), and Fluid Flow-Thru (FFT) technologies.

# Download the Fabric100 White Paper

To learn more about Curtiss-Wright's Fabric100 Technology, please download the new white paper, "Fabric100 100G Processing: The Path Forward for Faster, More Capable Systems".

#### A Leader in Open Standards

Curtiss-Wright has been a leading contributor to the success of open standards, with seats on multiple open standards organizations such as VITA and SOSA. For decades, Curtiss-Wright has been helping to lead the discussion to shape how open standards are defined and adopted, enhancing our intimate knowledge of the critical aspects of open standard design.

For more information about Curtiss-Wright Fabric100 technology and products, please click here

For more information about Curtiss-Wright MOSA solutions, please click here.

For additional information about Curtiss-Wright please visit <a href="www.curtisswrightds.com">www.curtisswrightds.com</a>, 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. We leverage a workforce of approximately 8,100 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 <a href="https://www.curtisswright.com">www.curtisswright.com</a>.

###

**NOTE**: All trademarks are property of their respective owners.