

# INTEL® ARCHITECTURE COTS PRODUCTS

**CURTISS-  
WRIGHT**

CURTISSWRIGHTDS.COM



+ Products + Capabilities + Solutions



AIR



LAND



SEA



# HIGH PERFORMANCE COMPUTING FOR EMBEDDED APPLICATIONS

Today's commercial embedded, aerospace, and defense industries rely heavily on modern technology solutions that cater to the power, size, and performance requirements needed for mission-critical systems. Intel's technology advancements cadence, which alternates micro-architecture development with technology optimizations and die geometry shrinkage has produced continuous performance improvement with reliable, scalable processing options available to suppliers of Single Board Computers (SBCs) and DSP engines for use in embedded compute-intensive applications.

## The Curtiss-Wright Advantage

Our complete line of Intel architecture COTS modules is engineered for rugged deployed SWaP-constrained platforms.

- Architecting the Complete COTS System Solution: we support a wide variety of operating systems on our boards, complete with module drivers and middleware, designed to enable quick development
- Pin-compatibility: we invest to enable technology insertion from generation to generation to offer you the latest technology with minimal risk
- System Ready Applications: we provide pre-tested and pre-validated hardware and software combinations to speed your time to deployment
- Modified COTS: we can take our COTS products and modify them to meet the needs of a particular program, saving you time and money while reducing your program risk
- Safety and Security: Our TrustedCOTS™ initiative ensures a high level of trusted computing, protecting your valuable assets.



**To find out more, visit our website:**

[www.curtisswrightds.com](http://www.curtisswrightds.com)

## PROTECT YOUR PROGRAM INVESTMENT

Application stability and predictability are essential for deployed COTS-based systems, which may have an in-service life far longer than the typical commercial production period of some of the system's key components. A comprehensive lifecycle management strategy is the key to safeguarding programs and mitigating the challenges associated with COTS technology deployed in long-term mission-critical systems.

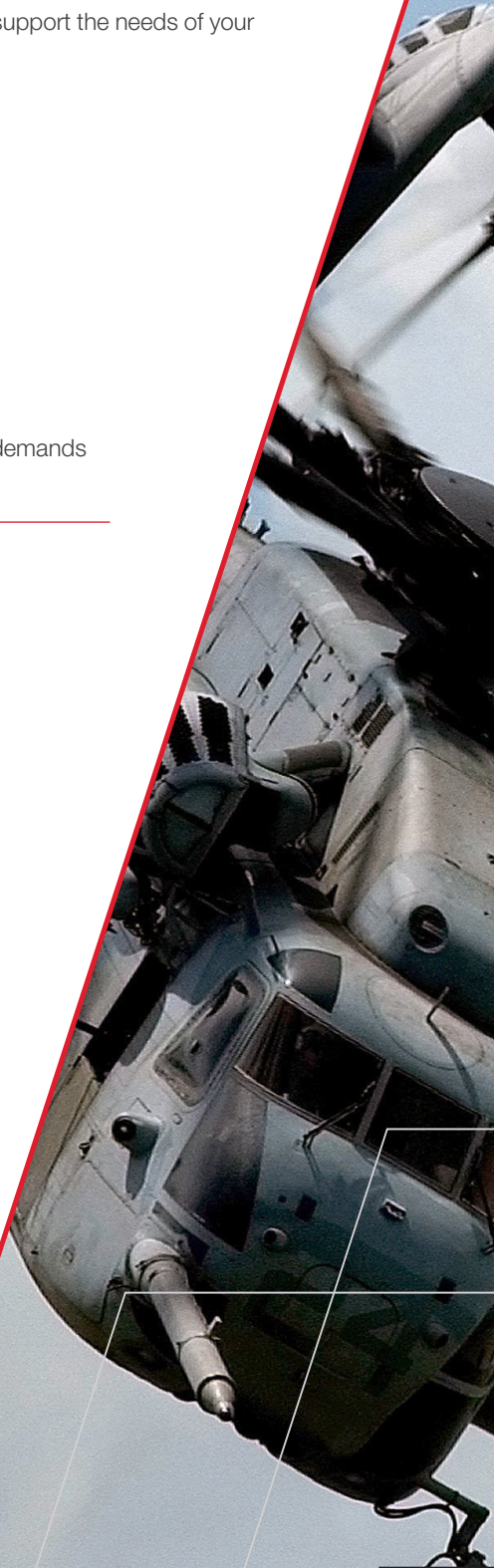
We offer a standard 7+ year availability on all products, as well as a wide range of services to support the needs of your program over its entire lifecycle.

### Program Support over 25+ Years Lifecycle

To ensure longevity of supply and repair for your program, we:

- Identify and reduce the risks of COTS component obsolescence
- Provide control over product configuration changes
- Ensure compliance with DOD requirements pertaining to counterfeit prevention
- Extend the availability of product builds and repair capability to meet long-term program demands

## Customer Satisfaction





# Proven COTS Technology Building

Curtiss-Wright's Intel products are building blocks for embedded rugged computers and digital signal processing. Curtiss-Wright offers solutions spanning the entire range of embedded Intel processors.

## 3U VPX SBCs

**VPX3-1260**  
> 8th Gen Coffee Lake Xeon



**VPX3-1220**  
> 7th Gen Kaby Lake Xeon



**VPX3-1259**  
> 5th Gen Broadwell



**VPX3-1258**  
> 4th Gen Haswell



## 6U VPX SBCs

**VPX6-1959**  
> 5th Gen Broadwell



**VPX6-1958**  
> 4th Gen Haswell



## Mezzanine Processors

**XMC-121**  
> 7th Gen Kaby Lake Xeon

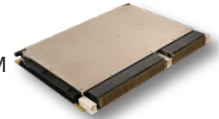


**XMC-120**  
> Intel Bay Trail Atom



## VPX Digital Signal Processors

**CHAMP-XD2M**  
> Intel Xeon D with 128 MB DRAM



**CHAMP-XD2**  
> Intel Dual Xeon D 6U



**CHAMP-XD1**  
> Intel Xeon D 3U



**CHAMP-AV9**  
> 4th Gen Dual Haswell



**CHAMP-AV8**  
> 3rd Gen Dual Ivy Bridge



## VME

**VME-1909**  
> 5th Gen Broadwell i7 SBC



**VME-1908**  
> 4th Gen Haswell i7 SBC



*Curtiss-Wright's VME SBCs are ideal for legacy processing and mission computing as well as tech refreshes.*



# Rugged, Pre-Validated Embedded Solutions

Below are some examples of the powerful, pre-engineered solutions created by Curtiss-Wright, designed to save you time, money, reduce your program risk, and speed your time to deployment.

## Highly Integrated Signal Acquisition and Processing

- Intel Core i7 or Xeon processor
- User-programmable Xilinx FPGA for signal acquisition

- > VPX3-1258/1259/1220/1260 Single Board Computer
- > VPX3-530 Xilinx® Virtex®-7 FPGA ADC/DAC
- > XF07 Xilinx Kintex-7 FPGA Receiver

## Secure Computing Platform

- Intel Core i7 processor
- Fully-featured Layer 2/3 managed Ethernet router with highly integrated security subsystem
- Intel Xeon D 12-Core processor

- > VPX3-1259 Single Board Computer
- > VPX3-685 10 GbE Secure Router
- > CHAMP-XD1 Digital Signal Processor

## Single VPX Slot Integrated FPGA IO and Processing

- Intel Xeon D 8 or 12 Core processor
- User-programmable Kintex XC7K325T FPGA with LVDS or CameraLink IO

- > CHAMP-XD1 Digital Signal Processor
- > XF07-523 Xilinx Kintex-7 FPGA Digital IO

## Fabric40™ HPEC Processing Solution

- Intel Core i7 processor
- Dual Intel Xeon D DSP for extreme numerical processing
- Xilinx Virtex-7 FPGA-based high performance signal acquisition
- 40 GbE network switch to eliminate bottlenecks
- Intel Xeon D 16 Core processor with 128 GBytes memory
- 2 Intel Xeon D 12-Core processors

- > VPX6-1959 Single Board Computer
- > CHAMP-XD2 Digital Signal Processor
- > CHAMP-FX4 FPGA Processor Card
- > VPX6-6802 Ethernet/InfiniBand® Switch
- > CHAMP-XD2M Digital Signal Processor
- > CHAMP-XD2 Digital Signal Processor

# Supported Software

### Linux®

General Purpose Computing - supporting:

- > Red Hat® Enterprise Linux®, CentOS®
- > Fedora™
- > LynxOS®
- > Red Hawk



### Real-Time Operating Systems

Real-time Embedded Control Computing

- > Wind River® VxWorks®
- > Green Hills® Integrity
- > LynxOS®



### Microsoft® Windows®

GUI-rich Application Processing

- > Microsoft Windows 7 Embedded Standard
- > Microsoft Windows 10 IOT



# CURTISS - WRIGHT



## Curtiss-Wright Defense Solutions

 333 Palladium Drive, Ottawa, ON K2V 1A6

 +1-613-599-9199

 [curtisswrightds.com](http://curtisswrightds.com)

 [ds@curtisswright.com](mailto:ds@curtisswright.com)