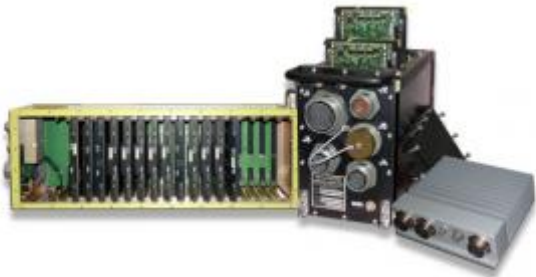


What's New Curtiss Wright Controls M-COTS Jan 2011



Curtiss Wright Controls : The World Leader in Fully Rugged, Embedded, Computer products for Military Systems.

Curtiss-Wright Embedded Systems:



Whether your intent is to maximize COTS content or leverage an existing custom solution, you've come to the right place for all your Embedded Systems needs. At Curtiss-Wright Controls Embedded Computing, we take advantage of our decades of experience in assembling generic platforms, upon which you can build your applications or leverage the expertise in creating these generic platforms to provide specific system solutions that focus on addressing tailored functionality optimized for a specific platform/program. Either way, we have the products, open standard technologies and system platforms to keep your program ahead of schedule and on budget. Your success is the standard.

VPX3-685 14/17/20-Port Router layer 2/3 with ICSA Certified Security Sub-System:

Enabling the vision of Network Centric connectivity, Curtiss-Wright Controls VPX3-685 Secure FireBlade switch/router provides an accelerated path to 'secure network ready' architectures that can interoperate seamlessly within the Global Information Grid (GIG). **Fully Managed Secure Network Router**, Flexible port configurations to rear VPX connectors, 12x 10/100/1000Base-T, High-performance Layer 2/3+ features, Wire-speed non-blocking IPv4/v6, Extensive IETF RFCs support, Switching, VLANs, Routing, Multicasting, Tunneling, Port Mirroring, Flow Control, QoS and Traffic Shaping using CoS, Enhanced Security Processor with extensive secure software support, Statefull Firewall (ICSA certified), Network Address Translation (NAT), Access Control List (ACL) filtering, Encryption/Decryption/Authentication, VPN with secure tunneling support (IPSec/I2TP), Intrusion detection and content filtering, Declassification capability for secure erasure. Air-cooled and conduction-cooled build grades, for tactical aircraft, armored vehicles and harsh environment naval systems.



MPMC-9310:

The MPMC-9310 is the smallest member of the Multi-Platform Mission Computer family & is less than 5 pounds. Packaged in an ultra compact 3U form factor and equipped with unprecedented processing power, the MPMC-9310 has all the elements required of modern mission computers. The slim profile of the MPMC-9310 allows the unit to fit easily into available nooks on any platform making the 9310 ideal for space constrained applications such as UAVs.

3U cPCI Backplane

Volume optimized – single slot chassis - 3.71" x 4.89" x 7.80"

Under 5 lbs. fully populated

28 VDC input @ up to 55W

Size, Weight and Power (SWaP):

As the Department of Defense moves to the platforms of the 21st century battlefield, new network-centric capabilities must be integrated into current battlefield vehicles. These new network-centric systems bring size, weight and power and cooling (SWaP-C) demands that most of the existing platforms cannot address. Therefore, in addition to incorporating new capabilities into the current force, much of the existing electronics within current systems must be upgraded to optimize the use of SWaP-C, while improving performance and reducing life cycle cost (SWaP²-C²).

To realize the DoD's vision of a ubiquitous network-centric battlefield, connecting the warfighter with critical data in real time, embedded COTS vendors like Curtiss-Wright Controls Embedded Computing have begun to deliver innovative open standards-based rugged application servers, high-speed switches and router modules. These network-centric switches and routers need to enable and optimize connectivity in extremely harsh environments. The modules need to be rugged and based on small form-factor architectures, in order to survive in harsh environments with their extremes of cold, heat, shock and vibration, while meeting the SWaP²-C² constraints of legacy platforms.



Safety Certifiable

DO-254/178B certification can be a costly and time consuming undertaking - especially if it's new to your organization. For years, Curtiss-Wright has invested heavily in the people and infrastructure to efficiently deliver products for safety critical applications. Our rigorous design methodologies combined with our disciplined product development approach makes DO-254/178B certification a natural extension to our business model. Through hands on experience with DO-254/178B projects, Curtiss-Wright has developed "certifiable" COTS hardware and software products with re-usable design artifacts to help reduce your certification risk and project costs and accelerate your time to market. These certifiable COTS products can be modified to meet your unique hardware requirements and Curtiss-Wright can provide the appropriate planning and design documents to support your certification effort.

Curtiss-Wright Control Embedded Computing offers a broad range of COTS products founded on open systems architecture such as 6U VME, 3U/6U CompactPCI, VPX and VPX-REDI, and FPGA Mezzanine Card (FMC) and XMC technologies. With board-level products, software and systems integration services CWCEC can offer an embedded computing solution that meets the requirements of any development or production program. Every one of our products is engineered from the onset to perform reliably when subjected to the extreme environments found in military applications.

Single Board Computers:

Curtiss-Wright Controls Embedded Computing offers COTS single board computers to fit any application, supporting PowerPC™ and Intel™ processor families, in 6U VME/VPX and CompactPCI form-factors. CWCEC offers the CompactCore family of small form-factor embedded computing solutions with products offered in 3U CompactPCI (cPCI)/VPX and Processor PMC (PrPMC) form-factors. These small form-factor products allow systems developers to employ COTS solutions for space and weight constrained applications that cannot accommodate the 6U standard. CWCEC supports the long life cycle of military programs by offering most new generation SBCs with backwards pin-compatibility to allow easy system upgrades from older products.

Digital Signal Processors:

Curtiss-Wright Controls' Advanced Multi-Computing business unit builds high-performance digital signal processing computing solutions tailored to the needs of the most demanding defense applications such as radar, sonar, signal intelligence and image processing. Our digital signal processing products are founded on the principle of focusing on high-integrity design aimed at harsh environment applications, backed by customer support and lifecycle management to support the programmatic needs of defense customers.

FPGA Processors:

The use of FPGAs has revolutionized the way DSP subsystems are configured. With a large number of gates, hardware multipliers and high-speed serial interfaces, an FPGA can outperform a microprocessor by a factor of ten or more. FPGAs are applicable to a variety of applications including RADAR, signal intelligence and image processing that have elements of computing that are characterized by repetitive fixed-point processing that can be expressed in highly parallel form. FFTs, pulse compression, filters, and digital down converters are examples of functions that FPGAs perform well. In deployed systems, this technical advantage translates to smaller, lower-power and lower-cost systems.

Graphics and Video:

Curtiss-Wright Controls Embedded Computing family of graphics controllers and video frame grabbers are specifically designed for providing man-machine interfaces where graphics and sensor imagery must be combined. Supported with standards-based X11 and OpenGL software interfaces, a range of needs is supported from simple graphics output, to multi-head, high-performance 3D rendering for the most advanced applications such as 3D terrain mapping, target acquisition/tracking and helmet mounted displays.

Networking and Switching:

Curtiss-Wright Controls Embedded Computing switches enable the vision of internetworked military and aerospace systems by providing systems integrators with a fast and powerful way to interconnect chassis, cards, and CPU's through switched Gigabit Ethernet links. Operating at wire-speed, Gigabit Ethernet switching can be used to architect the infrastructure for unified (GbE only) or hybrid (GbE and other switched fabric) networks for transferring IP-based control and data packets within advanced military systems.



Other products in CWC range include:

VPX Power PC multi core DSP
VME and cPCI SBCs
Custom ATR chassis/Systems
Scramnet High Speed comms
Graphics for Mission Systems
Aircraft Ethernet Networking

For further information on these products or for technical support call:

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