

SYSTEM INTEGRATION CAPABILITIES

Letchworth, UK

**CURTISS -
WRIGHT**



 LAND

 AIR

 SEA

CURTISS-WRIGHT DEFENSE SOLUTIONS

Curtiss-Wright Defense Solutions is a long established technology leader in the development of rugged electronic components and systems for commercial and defense applications. Experts in highly engineered commercial off-the-shelf (COTS) module and system-level products designed for deployment in harsh defense environments, our technology delivers real-time data to support hundreds of critical airborne, ground and naval missions globally. Curtiss-Wright delivers complete integration and support services that reduce interoperability risks, lower program costs and accelerate time to market. Our unmatched capabilities ensure the success of your program's system development and integration.

EUROPEAN DESIGN CENTRE

The Letchworth, UK site is a leader in the design, development and integration of mission computers and Packaged COTS (PCOTS). With electronics systems engineering experts, a deep history of program support for a wide range of platforms across Europe and industry leading support services, the UK team has been established as a premier European supplier of system solutions. Systems designed and integrated in the UK are then subject only to UK export regulations. Customers benefit from the local support the UK facility can provide due to both the physical proximity of support staff as well as the ability to communicate on a similar time zone. Additionally, the UK facility has extensive experience with local regulatory requirements such as CE and RoHS which ensures maximum efficiency and a risk-free integration.



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System Integration

Backed by the entirety of Curtiss-Wright Defense Solution's expertise, the Letchworth systems integration team supports several stages of a product's lifecycle.

Definition

- The team works with customers to perform trade study analysis and define and capture system requirements.
- The team helps define the system architecture based on these requirements and determines if COTS products, or custom system development, is required.
- All artifacts related to the project including the Requirements Traceability Matrix (RTM), the Interface Control Documents (ICD) and the overall system architecture are generated and maintained by the team.

Compliance & Support

- System compliance is ensured and support for risk management and mitigation is supplied.
- Later in the product lifecycle, the team provides ongoing operations support, generates and updates documentation and conducts any transitional activities.
- Integration and verification is provided to troubleshoot and debug products, plan testing and verification, and develop test equipment and software.

Qualification

- With qualification expertise, the systems integration team also ensures products are designed to EU regulations like CE and RoHS as well as typical environmental standards such as US MIL-Standards 810, 461, 1275, UK DEF-STANs 00-35, 61-5 and RTCA DO-160.

MPMC-9675
6U 7-slot



MPMC-9655
6U 5-slot



MPMC-9365
3U 6-slot



MPMC-9335
3U 3-slot



MPMC-9355
3U 5-slot



MPMC-9105
XMC 2-slot



Third Party Product Integration

If your program requires features and/or technology outside of the team's product and expertise offering, they will identify, source and integrate third party products to meet your requirements. In these cases, Curtiss-Wright will test the interoperability of our cards and systems with third party products, eliminating your risk and reducing your integration costs.

Curtiss-Wright collaborates with product vendors and technology providers to offer customers complete, integrated solutions to their system development challenges as well as unique insights into technology trends that they require for planning their future products. The Partner Program is a product and service collaboration between us and complementary embedded computing product vendors and technology providers. It is an extension of our commitment to full circle customer support and it is designed to improve a customer's out-of-the-box experience with commercial and rugged grade COTS computing solutions.

With the Curtiss-Wright Partner Program, customers see Curtiss-Wright and its partners as one continuum, providing a seamlessly integrated solution based on the knowledge, experience and expertise of Curtiss-Wright and its technology and association partners.

Custom System Development

The Letchworth team has extensive experience creating custom, program specific system solutions. Having developed numerous 3U and 6U VPX based systems for a range of platforms and applications, the team draws from their IP portfolio of proven designs to minimize risk and timescales. Their experience of Curtiss-Wright products can also help guide customer solutions again to minimize cost and risk but also maximize performance within size, weight, power and cost constraints. The team analyzes system requirements and conducts trade studies to identify appropriate board level products, analyze datapaths and select suitable cooling approaches. Further, the Curtiss-Wright Defense Solutions proven ruggedization technology pedigree is utilized to ensure the final solution provides high performance in the specified operating environment. Example custom systems the team has developed include:

CUSTOM SYSTEMS

Avionic Gateway Processor

Vetric Image Processing Platform

Airborne Integration Computer with Removable Storage

Airborne High Performance Signal Processing and Display Computer

Airborne Hostile Fire Indicator

Drive By Wire Computer for Ground Vehicle

Proven COTS Technology Building Blocks

Curtiss-Wright offers full environmental testing of its system-level products to MIL standards including MIL-STD-810 and DO-160. Testing is performed either at Curtiss-Wright facilities or at the premises of accredited test contractors. System products developed by Curtiss-Wright are all designed to meet applicable requirements from MIL-STD-461 and/or DO-160 for EMI/EMC. Compliance to these standards is achieved through solid input power filtering, output filtering, proper conductive sealing of the enclosure and assurance that bonding requirements are met. All testing for these requirements is done at certified facilities and detailed test reports are developed to document the testing methodology and results.

Support Services

Product Training and Field Support

Full product documentation and customer training is available, we work with you to ensure that you have the knowledge necessary to understand, integrate and use our systems.

Product Lifecycle Management

A comprehensive lifecycle management strategy is the key to safeguard programs and mitigate the challenges associated with leveraging COTS technology for long-term mission-critical systems. The Lifecycle Services Group helps identify and reduce the risks of COTS component obsolescence, provide control over product configuration changes when required and extend the availability of product builds and repairs to meet program demands.

Lifecycle Services

Visibility and control via configuration management

Longevity of supply and repair

Variant creation

Component storage and handling

Counterfeit electronics parts protection

Quality Control

Curtiss-Wright employs a formal AS9100C and ISO-9001 registered quality system. Engineering data, purchase orders and manufacturing planning documents are reviewed prior to release to ensure that engineer and QA requirements are properly included. Each section of the Quality Manual is audited annually to verify procedure compliance. Both Curtiss-Wright and sub-tier supplier facilities are available for government and customer surveillance during the life of a contract.



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