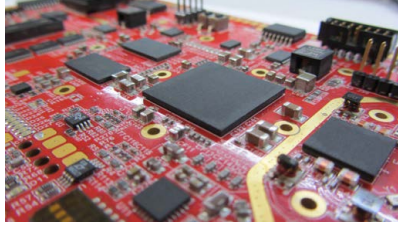


CAVU AEROSPACE UK



Embedded Design Services Catalog

Charting the Course for Space Innovation

CAVU Aerospace UK, a leader in the Scottish space technology sector, offers comprehensive embedded design services to empower your space missions. We combine cutting-edge technology with a collaborative approach to deliver reliable and customizable solutions that propel your mission forward.

Our Services:

Application-Specific Processing Systems:

Design, manufacture, and implement single-board computers tailored to your mission requirements. Leverage the power of FPGAs, DSPs, and microcontrollers for optimal performance and efficiency.



Radiation Mitigation:


Ensure system integrity through comprehensive radiation mitigation techniques. We utilize both system-level and commercial-off-the-shelf (COTS) approaches, including flash-based FPGAs and magnetic memories, for optimal protection against harsh space environments.




Pre-Production Validation:

Minimize risk and maximize success through rigorous pre-production validation. Our services include signal and power integrity verification, ensuring a robust and reliable system foundation. Additionally, we offer pre-production vibration testing and simulation to guarantee your system can withstand the rigors of launch.



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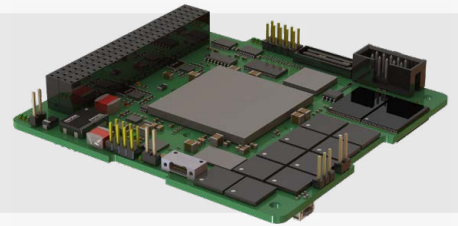


Unparalleled Expertise, Unmatched Flexibility:

CAVU Aerospace UK goes beyond pre-built solutions. We offer a range of customization options to perfectly align our embedded design services with your specific mission needs.

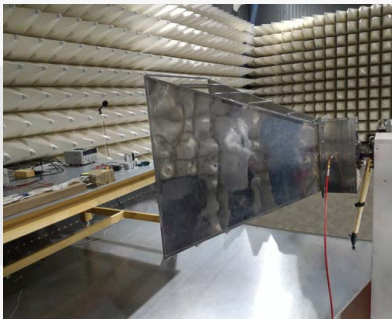
Advanced Processor Implementations:

Leverage our expertise in implementing soft-core CPUs like LEON processors on Xilinx and Actel-Microsemi-Microchip flash-based FPGA platforms. Additionally, customize your system with various embedded operating systems like Linux, eCOS, and uCOS, ensuring seamless integration with your existing infrastructure.



Command & Data Handling (C&DH) Applications:

Entrust your mission-critical C&DH applications to us. We design and implement robust systems for managing spacecraft data, telemetry, and commands.



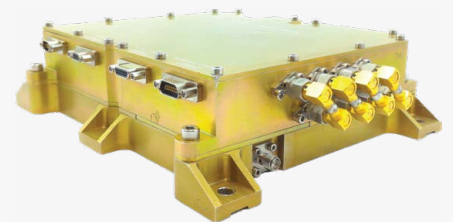
Enhanced Reliability:

Safeguard your systems against single event upsets (SEUs), a major concern in space environments. We employ various techniques like Triple Modular Redundancy (TMR), Error Detection and Correction (EDAC), and FPGA configuration scrubbing to enhance system reliability.



Customizable Communication Systems:

Design customized Software Defined Radio Based telemetry/telecommand transceivers for different satellite and ground station configurations. Our services encompass Micro-Satellite and CubeSat options, catering to a wide range of mission types.



Unleash the Potential of Your Space Mission

Customization Highlights:

- Design custom single-board computers (FPGAs, DSPs, SoCs) for your mission's needs.
- Develop radiation-resilient systems using COTS components and design mitigation techniques.
- Rigorous pre-production validation ensures a reliable and robust system.
- Unmatched customization: Payload processing, data acquisition & complex interfaces.