

At Unibap Space Solutions, we innovate and manufacture edge computing hardware, software and services for intelligent space missions. Our solutions enhance real-time surveillance and high-speed communication, and make every space operation more agile, cost-efficient and sustainable.

Hardware Design Engineer (Schematic & Architecture) – High-Speed Computers for Space

About the job
As a Hardware Design Engineer focusing on schematic capture and circuit architecture, you will become a key member of our high-performing hardware team. We are looking for someone with deep expertise in advanced electronics architecture and circuit design to take on a responsible role in the development of our computers for space applications. Your primary focus will be on defining and capturing complex digital systems, with a special emphasis on high-speed interfaces, component selection, and the robust power architectures required to drive them.

In this role, you are not only expected to deliver circuit designs of the highest quality, but also to maintain a keen eye for the overall system. You will work closely with PCB layout engineers, mechanical engineers, and software teams, contributing a system-level perspective to ensure our products are optimized for the extreme conditions of space. You will join a passionate team where your specialist knowledge will be highly valued.

Responsibilities

- **Circuit Architecture & Schematic Capture:** Act as a technical expert and drive the electrical design of complex printed circuit boards, from initial architecture and component selection to schematic capture in Altium Designer, with a focus on high-speed digital systems and power supplies.
- **Layout & System Collaboration:** Work hand-in-hand with PCB layout engineers to define routing constraints, stackups, and placement strategies. Ensure the integrity of the overall design across electronics, mechanics (thermal dissipation, connectors), and software/firmware interfaces.
- **Test & Verification:** Lead and perform the "bring-up," troubleshooting, and electrical validation of prototypes in the lab. Act as a technical resource in the functional and environmental testing of the company's products.

- **Technical Contribution & Review:** Actively participate in and lead schematic design reviews, worst-case circuit analyses, and technical discussions to ensure high reliability and technical quality.
- **Documentation:** Be responsible for ensuring that thorough technical documentation—including schematics, Bills of Materials (BOMs), interface control documents (ICDs), and test reports—is produced in accordance with the company's established templates and processes.

Required Qualifications

- Master of Science (M.Sc.) or Bachelor of Science (B.Sc.) in Electrical Engineering, Engineering Physics, or a related field.
- Solid and extensive experience in advanced hardware development, from specification and schematic capture to a verified product.
- Deep expertise in digital high-speed circuit design (DDR4/5, PCIe, Ethernet, etc.) and defining Signal Integrity (SI) constraints.
- In-depth knowledge of power supply architecture and circuit design for complex digital systems, including multi-phase SMPS, LDOs, power sequencing, and Power Integrity (PI).
- Excellent proficiency in schematic capture and library management in Altium Designer or equivalent EDA tools.
- Experience working on system design where electronics, firmware, and mechanics intersect, with a good understanding of thermal management challenges.
- Fluent in English and Swedish, both written and spoken.

Preferred Qualifications

- Experience designing circuits and selecting/derating components for harsh environments (radiation, vacuum, extreme temperatures).
- Knowledge of standards for space electronics (ECSS) and high-reliability design practices.
- Knowledge of EMI/EMC filtering, grounding strategies, and mitigation techniques at the schematic level.

Some of the assignments we carry out for our customers may require placement in a security class. This means that in such cases you will need to undergo a security clearance with a register check in accordance with the Security Protection Act (Säkerhetsskyddslagen (2018:585)).

About you

We are looking for a self-driven, structured, and pragmatic individual with a genuine passion for technology. You are a skilled problem-solver who sees the bigger picture and understands the importance of cross-disciplinary collaboration. You are confident in your skills, humble, and happy to share your knowledge.

Why join us?

At Unibap, we value innovation, collaboration, and the pursuit of excellence. You will have the opportunity to make a significant impact in a supportive, flexible and engaging environment with room to grow.

As an employee of Unibap Space Solutions AB, you can enjoy a benefit package that includes the following:

🌴 30 days of vacation each year

🌟 A comprehensive technical career for personal growth

💰 ITP1-equivalent occupational pension

💌 Extensive insurance package including private healthcare and medical checkups

🏸 Yearly wellness allowance

👶 Generous parental leave

We are based in Uppsala, Sweden where we have our HQ and production facility. The company consists of 50+ staff (both employees and consultants) including our international sales team and our American subsidiary.

Unibap is a publicly traded company on Nasdaq First North Growth Market.

How to apply:
If you're ready to take your career to the next level, apply by sending you resumé to jobs@unibap.com.

Join us and be part of something great!