



→
WE ARE I DOKING FOR

# Power Electronics Engineer to join our team!

As Power Electronics Engineer, your mission will be to develop and optimize high-voltage power electronics for the ATHENA Nano and Pico thrusters. You will play a key role in the development and enhancement of a quasi-resonant Flyback converter with symmetric high-voltage outputs. Join our dedicated team as we work to refine this high-voltage converter into a robust, mature, and fully space-qualified device.





## Key responsabilities

- Advanced design of switched-mode power supplies (SMPS): architecture definition, high-voltage design and optimization of thermal and electromagnetic performance.
- Simulation and analysis: use of advanced tools to model and simulate power circuits, parasitic effects and power integrity.
- Component selection: identify and select optimal components for performance, efficiency and reliability.
- PCB design: design multilayer PCBs using Altium Designer, with attention to high-voltage clearances, parasitics and planar transformer integration.
- Thermal and EMC design: perform thermal calculations, simulations and electromagnetic compatibility (EMC) pre-compliance testing.
- Testing setup and lab work: design, plan and execute complex inhouse tests (thermal pre-qualification. EMC pre-compliance, etc.).
- Confident in EEE lab environments: circuit debugging, diagnostics and use of lab instrumentation (oscilloscopes, power analyzers, etc.).
- Skilled in SMD soldering and hands-on prototyping.
- Documentation and reporting: produce detailed technical reports, schematics, test documentation and progress updates.
- Collaboration: work closely with multidisciplinary teams to ensure integration with propulsion systems and mission requirements.

#### Your team

You will be part of our Electrical Engineering and Electronics team, which is part of our Electric Propulsion department. This team is in charge of designing, testing, manufacturing and has the mission of continuous improvement of the electronic devices that enable thruster operation.



### Qualifications & skills

#### MUST HAVE:

- At least 5 years of experience in developing power electronics.
- Master's degree in Power Electronics
   Engineering, or another degree with a strong focus on electronics development.
- Proven experience in designing switchedmode power supplies, high-voltage circuits, and thermal/EMC design.
- Full proficiency with Altium Designer.
- Hands-on experience in Electronics labs (debugging, testing, instrumentation).
- · Proficiency in SMD soldering.
- Basic knowledge of C/C++, Matlab/Python, and Arduino.
- Spoken and written professional proficiency in English.
- Fast learner, hands-on, autonomous, team player, and proactive project contributor.

#### NICE TO HAVE:

- Experience in environmental testing (thermal, vibration, radiation).
- Experience working in automotive or other high-reliability sectors.
- · Experience performing FMECA analysis.



## Benefits & perks

- A key role in a pioneering space startup, where you will directly impact the development of cutting-edge propulsion technology.
- A full-time contract of 40h per week.
- Flexible working hours, allowing you to manage your schedule for better work-life balance.
- <u>M Hybrid work model</u>: work remotely up to 9 days per month.
- Extra holidays: in addition to 23 vacation days, enjoy 6 additional days off during the Christmas period (from 24 December to 2 January, both included).
- Private health insurance, fully covered by the company.
- PLearning & Development: €1000 per year budget for training, courses, and professional growth.
- Autonomy and responsibility: your contributions will directly shape our technology and success.