

Position Title

Power Electronics Engineer

Reports to

Department

Location

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Space Engineering

Pisa

Position Mission

The Power Electronics Engineer will have the task of design power electronic hardware for space applications, in accordance to customer requirements and applicable standards. The design activity has to be conducted in multidisciplinary team in a scenario where requirements are all closely related to each other, and technical compromises have to be readily identified.

Responsibilities

- Design and sizing of active power device/module and passive component such capacitor and inductor;
- Designing high frequency magnetics, including transformers, coupled inductors, EMI chokes and common mode filters;
- Analyze EMC susceptibility and emissions from power conversion products;
- Design, validation and key components of high voltage high power DC/DC converter;
- Managing thermal issues;
- Hands-on prototyping and debug experience testing complex power systems, including switch-mode and linear regulators;
- Create Design Verification Plans, Procedures and Test Reports;
- Writing technical documentation.

Technical Skills, Qualifications and Professional Experience

- Master's degree in Electronic Engineering is requested, with a preferred specialty in power electronics;
- 5yrs+ hands-on experience in the theories, concepts, principles, techniques, and practices of power electronics system design, architecture, and implementation;
- Previous experience with avionics is a plus;
- Familiar with appropriate engineering tools such as OrCAD, LTSpice, Matlab (or similar);
- Basic knowledge of PCB layout design;
- Experience on typical design analysis methodologies for power electronics in harsh environments (WCA, PSA, FMEA);
- English language (fluent in oral and written is preferred);
- Availability to travel occasionally.

Required Soft Skills (select the skills the candidate must have from the list below)

- Results Orientation
- Initiative
- Innovation
- Partnering
- Planning and organization
- Leadership and development of others
- Commercial acumen