Junior Hardware Electronic Engineer with Focus on PCB-Design

Leuze electronic Private Limited
3-5 years
Bangalore, India

About Leuze Electronic

With curiosity and determination, we – the Sensor People from Leuze – have been innovators for technological milestones in industrial automation for more than 50 years. The success of our customers is what drives us alongwith our work future-oriented work, Leuze continuously sparks new ideas thus actively contributing to progress within the industry.

Website: www.leuze.com

Below are the Key Responsibilities but not limited to:

Key Responsibilities & Duties:

- Design and develop printed circuit boards (PCBs) for various electronic products, ensuring adherence to design specifications and industry standards.
- Create detailed schematics and PCB layouts using ECAD tools (such as Altium Designer, OrCAD, KiCAD, or Eagle).
- Select appropriate components and materials for PCB design, considering factors such as cost, performance, and availability.
- Perform circuit simulations and analyses (using tools like SPICE) to validate PCB designs and optimize for performance and reliability.
- Build prototypes and conduct testing to verify the functionality, performance, and reliability of PCB designs.
- Optimize PCB designs for manufacturability, cost-effectiveness, and performance, while ensuring compliance with all relevant standards (such as EMI/EMC).
- Prepare detailed documentation, including schematics, layout drawings, BOMs (Bill of Materials), test procedures, and design reports.
- Work closely with cross-functional teams, including firmware engineers, mechanical engineers, and production teams, to ensure seamless integration and production of PCBs.
- Assist in the transfer of PCB designs from development to mass production, providing support throughout the product lifecycle.
- Conduct design reviews, peer reviews, and quality assurance checks to ensure that PCB designs meet all quality and reliability standards.
- Stay up-to-date with the latest trends, tools, and technologies in PCB design and electronics, and apply this knowledge to continuously improve design processes and product quality.

Qualifications:

- Bachelor’s Degree in Electronics Engineering, Telecommunication Engineering, or a related field. A Master’s degree is a plus.
- Strong theoretical and practical knowledge of analog and digital circuit design, particularly in the field of optical sensor technology and EMC.
- Extensive knowledge of electronic components and competent handling of ECAD tools and circuit simulation software (such as SPICE).
- Familiarity with programming in C and VHDL is an advantage.
- Proven experience in evaluating solutions against industry standards, including CE compliance.
- High level of creativity and cost-awareness with a strong interest in tackling new, technically complex challenges.
- "Hands-on" approach in an electronics industrial environment, with experience using basic test equipment and EMC/EMI test standards.

Competencies:

- Strong understanding of electronics hardware design principles.
- Ability to work independently and collaboratively within a team.
- Creativity and high-cost awareness in development process.
- Excellent communication and problem-solving skills.
- Effective time management skills and the ability to prioritize tasks effectively.
- Willingness to take on responsibility and implement ideas with great commitment.

Experience Requirements:

- 3-5 years of experience in electronics hardware design.
- Fresh graduates with creative embedded projects or candidates with strong analog and digital design intuition.