enatel

# Position Description

**Position:** Associate Hardware Engineer
**Department:** Engineering
**Reports to:** Power Conversion and Energy Storage Lead
**Direct Reports:** None

## Position purpose:

As an Associate Hardware Engineer, you will utilise your technical qualifications, your understanding of the theory and your appreciation of the practical application to support the development of Enatel's existing and new products. You will be enthusiastic, quick to learn and inquisitive.

## Key responsibilities:

- Working with Internal and External Customers
    - Fully understand the internal and external customer relationships and requirements.
    - Understands stakeholder needs and expectations and monitors for changes in stakeholder requirements.
    - Manage stakeholder expectations at all levels of the business.
- Product Design
    - Understand user needs, align with different stakeholders, study systems flow and integration, define required work processes, and investigate any problem areas.
    - Develop and maintain high quality designs and architecture across multiple products and product families, including product functionality, reliability, ease of use and maintainability.
    - Develop cost-effective new products by producing clean, efficient hardware designs.
    - Review and fault find designs.
    - Escalate issues and risks in a timely manner.
    - Work to plan and commit to schedule.
    - Modify, enhance, and maintain existing Enatel product designs as required.
- Design Lifecycle Management
    - Conform to hardware development processes, tools, and standards (including design, environment, change and configuration management standards) while continuously improving on them throughout the entire design lifecycle.
- The Associate Hardware Engineer is a member of the Research and Development Team. As a member of this team, you are expected to take an interest in projects being worked on by other members of the team.

## Other duties:

- Upholds the company values.
- Perform any other tasks as required by your Team Leader and/or the business.
- Contributes to the achievements of department goals and objectives.

## Health & Safety:

- Ensuring all Health & Safety policies and rules are followed, with all tasks completed in a safety conscious manner.
- Maintaining a safe and clean working environment by complying with Enatel Policy and Procedures.
- Leads by example in all matters relating to Health & Safety.

## Environmental:

Enatel is committed to minimising the environmental impact of our operations and products.

- Ensuring Environmental policies and processes are followed.

## Key Relationships:

| Internal | External |
|---|---|
| • Sales/Marketing team, Product Management | • Customers |
| • Project Management | • Third party manufacturers & other suppliers |
| • Engineering teams including Engineering Services, CAD Services, Systems Solutions and Power Management. | • Contractors |
| • Operations team including manufacturing, sourcing, logistics | |
| • Other Enatel departments as required | |

## Person Specification:

| | **Essential** | **Desirable** |
|---|---|---|
| **Competencies** | • **Functional/Technical Skills** - has the functional and technical knowledge and skills to do the job at a high level of accomplishment.<br>• **Action orientated** - enjoys working hard and is full of energy for the things he/she sees as challenging.<br>• **Process Management** – good at figuring out the processes necessary to get things done. Can simplify complex processes.<br>• **Learning Agility** - the ability to learn quickly in a new environment.<br>• **Problem Solving** – looks for opportunities to resolve issues and solve problems. Learns quickly when facing new problems.<br>• **Integrity and Trust** – is seen as a direct, truthful individual; is widely trusted.<br>• **Ethics & Values** - Has an appropriate and effective set of core values and beliefs, and acts in line with those values at all times. | |
| **Skills, Experience & Knowledge** | Basic knowledge through technical qualifications and limited experience in the following, some of which may be performed under supervision:<br>• Designing and building hardware solutions that have been delivered to customers on time, to budget and to the required quality standards (includes scope).<br>• Simulation tools (LtSpice, Tina, Micro-Cap), Mathcad (Maxima, Scilab, Python), thermal, magnetic, and electric field FEA and project management techniques.<br>• Altium. | FPGA/CLPD design (VHDL or similar).<br><br>Battery and battery pack design using various battery technologies (including lithium cells). |

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| | • Design for EMC and design for manufacture.<br>• Hardware test and monitoring tools (oscilloscope, spectrum analyser and power meters).<br>• Differing SMPS topologies, PCB layout for power solutions (including creepage and clearance distances) and SMPS design (closed loop control, amplifier / magnetics design and noise control).<br>• Agile development tools and techniques including scrum and Kanban.<br>• Configuration management and change control.<br>• Electronics design, including the ability to understand and navigate electrical schematics.<br><br>Analytical mind with problem-solving aptitude.<br><br>Excellent organizational skills. | |
| **Qualification / Licenses** | Degree in electrical / electronic engineering, or equivalent vocational training. | Membership of a relevant industry body (e.g., IEEE) |