

# Electronics Layout Engineer

## Position Description

<b>Employment Type:</b>	full-time
<b>Hours of Work:</b>	38 hours per week, worked flexibly between 8am and 6pm, Monday - Friday
<b>Term:</b>	Ongoing
<b>Award:</b>	Professional Employees Award 2020
<b>Location:</b>	QuantX Labs, Lot Fourteen, Level 2 space labs, Frome Road, Adelaide
<b>Reports To:</b>	Lead Electronics Engineer
<b>Direct Reports:</b>	none

## Benefits

1. Be part of an emerging, world-leading deep-tech company with a strong pipeline of work in the Defence and Space sectors.
2. Contribute to the development of QuantX's optical atomic clock.
3. Lead the design of the next generation of FPGA and clock control electronics.
4. Live, and benefit from, our company values of "respect, excellence and integrity"

## About the Position

The opportunity has arisen to appoint a highly capable and versatile Electronic Layout Engineer to work across our pipeline of unique projects and products. There will be a particular focus on our new optical atomic Rubidium clock electronics. The Electronics Layout Engineer will be responsible for the design, layout and prototyping of dedicated boards required for the clock.

The successful applicant will be a highly versatile individual; capable of working in a diverse team of engineers, technicians, scientists and operations staff in a rapidly growing company. This will mean that you will frequently be called to work closely with other team members with different skills to bring about a device with characteristics that meet the market need. You will need experience in electronics design and testing, and an exceptional ability to problem solve.

## About You

We are seeking an Electronics Layout Engineer with strong layout background who wants to see their expertise and hard work translated into real-world products that make a difference. You will want to work in a small but rapidly growing company in which your individual efforts will be a much larger component of the company's activities. You will want to stretch yourself beyond the safety of your home discipline expertise because this is a necessity within a small company – all employees end up contributing to all sorts of diverse activities.

You will have a tertiary degree in Electronics Layout Engineering or equivalent experience as well as at least 3 years of relevant experience. Since your work will be focussed on building world-class high-precision clocks, oscillators and magnetometer sensors, it is essential that you have a good understanding of signal characterisation in the

radiofrequency or microwave domain with deep understanding of thermal management in Electronics design. It is likely that you have specific experience in FPGA or SDR board design.

We are hoping that you also have some understanding of control and feedback. You need to be able to produce high quality drawings and technical documents that will be for both internal and external stakeholders. Most importantly, you will be a team player who is highly adaptable, hard-working, and motivated.

## Duties & Responsibilities

<b>Technical</b>	<p>Ensure effective electronics and systems engineering is applied to all projects, by:</p> <ul style="list-style-type: none"> <li>• Design, layout and review electronics boards.</li> <li>• Conducting design analyses, trade-off studies and system performance calculations.</li> <li>• Developing and maintaining technical documentation.</li> <li>• Preparing for and contributing to design reviews.</li> <li>• Contributing to integration and testing electronic systems.</li> <li>• Providing support and troubleshooting for the electronics.</li> <li>• Contributing to all phases of the product development life cycle (e.g., Research &amp; Development, system requirements, design, integration, validation and verification, and in-service support).</li> </ul> <p>Assist with system integration and testing:</p> <ul style="list-style-type: none"> <li>• Developing assembly, test plans and test documentation.</li> <li>• Following and improving configuration management and version control processes</li> </ul> <p>Work effectively and collaboratively as an active member of the engineering team by:</p> <ul style="list-style-type: none"> <li>• Contributing to project planning</li> <li>• Reviewing other engineer's work</li> <li>• Providing advice on all aspects of the electronic design</li> </ul>
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The responsibilities as specified above may be altered in accordance with the changing requirements of the position.

## Special Requirements

- Australian Citizen and has or can obtain a Defence Security Clearance
- Police check required

## Selection Criteria

<b>Education Requirements</b>	<ul style="list-style-type: none"> <li>• Bachelor's Degree in an Engineering discipline (Electronic Engineering preferred).</li> </ul>
<b>Experience Requirements</b>	<ul style="list-style-type: none"> <li>• 3+ years' work experience in relevant electronic design.</li> <li>• 3+ years relevant work experience with electronic systems (microwave and RF in particular)</li> <li>• Hands on experience in R&amp;D and production engineering</li> <li>• Exceptional problem-solving abilities.</li> </ul>

	<ul style="list-style-type: none"> <li>• Previous industry experience in defence, space and/or start-up product development organisations highly advantageous.</li> </ul>
Knowledge Requirements	<ul style="list-style-type: none"> <li>• Knowledge of product development lifecycle.</li> <li>• Knowledge of defence project documentation requirements.</li> <li>• Knowledge of system engineering methods</li> </ul>
Personal Qualities	<p><b>Achieving High-performance:</b> results orientated, accepts accountability and can be relied upon.</p> <p><b>Focusing on the customer:</b> builds strong relationships with customers, understands their needs and focusses on satisfying customers' expectations.</p> <p><b>Working Together:</b> being an effective team member to develop open, honest and supportive relationships</p> <p><b>Continuously Improving:</b> challenging existing processes and offers innovative alternatives</p> <p><b>Developing Others:</b> works well to inspire, engage and empower others</p>