

April 2008

### **Analogue Design and Control Electronics Engineer Brief**

OptiSynx is a start-up company on the Cambridge Science Park in the product development phase of a revolutionary, new, high-precision, proprietary time source. Markets are in wired and wireless communications and wherever it is important to accurately know time, such as in auditable time stamping, stock exchanges and billing systems.

This innovative product contains a mix of electronics, optoelectronic, mechanical design and control system elements. This leads to a requirement for specialists many fields, initially targeting a discrete component design and rapidly moving towards a fully integrated solution.

OptiSynx is looking for an experienced Electronics Design engineer who also possesses the necessary control system experience to join this rapidly growing team.

#### Attributes.

- A good degree in Electronics, Electrical Engineering or Control systems.
- Demonstrate excellent general engineering skills.
- *Analogue* - design expert with experience in signal processing, both active and passive filter design, transistor and op-amp circuits and comfortable operating at frequencies up to a few hundred MHz.
- *Digital* - experienced in signal processing and control circuits.
- *Control* – experienced in control system theory circuit design and optimisation. The ability to make a design impact as a system level.
- Experience in the use of schematic capture and pcb layout tools.
- Experience in the field of optoelectronics, while not essential, would be a real benefit for this role.
- A hands-on engineer with a real desire to grow in this role.
- Excellent analytical and problem solving skills.
- Experienced in simulation software, filter design software and basic programming of logic devices.
- Self motivated with the capability to develop a concept through to a final product.
- An enthusiastic team player demonstrating excellent communication skills.



#### Key Tasks.

- As the control system architect you will be the focal point for the system level design and implementation.
- At a component level you will be responsible for the design, and prove-out of the control electronics. This will include:-
  - Design of analogue control sub-systems – filters/amplifiers/ linear power supply design.
  - Programming of logic devices such as CPLD, FPGA etc
  - Laser drive electronics, peltier control circuits and lock-in amplifier circuits.
- Responsibility for component specification, build and evaluation of sub-systems.
- Layout and fabrication of circuit boards.
- Take ownership of design documentation through schematic capture.
- Ensure that the design can be made in the most cost effective manner and still meet exacting performance requirements demanded by the team.
- Work closely with the development team to provide interactive feedback leading to design improvements.
- Attend regular team meetings, be an active participant of the design process and report progress against milestones.

To apply for this position please email your CV with covering letter to [recruitment08@optisynx.com](mailto:recruitment08@optisynx.com)