Electrical Engineer

Company Overview

Polaris Motion is a growing technology company with roots going back to 1994. We have clients in advanced manufacturing all over the world, and our headquarters is in Victoria B.C.

Our market areas include ultra-fast, laser-based machining, 3D metal printing, ultra precision optics, and automotive and aerospace hardware-in-the loop test systems. Our activities are wide ranging, including digital and analog electronics, power electronics, embedded software, user interface software, real-time systems and networks, laser optics, machine vision, and mechanical design. We've developed unique industry leading motion control technologies and we continue to push the performance envelope. It's due to our talented staff of engineers, scientists and software developers that we've been able to beat our competitors in many high-end design-ins.

Our company values include commitment, integrity, truth, and respect **(CITR)**. We promote a culture that is innovative, creative, and competitive; one that fosters a climate of high team spirit, fun and accomplishment; and one that promotes personal growth and development. We strive to empower our employees to achieve their full potential.

We look forward to receiving your application. Please send your resume to **careers@pmdi.com**.

Job Summary

We're seeking an individual with electrical and electronics hardware design experience to join our company. The new team member will help expand and fulfill our product line.

Responsibilities

- Hardware designs, schematic capture and layout
- VHDL design, coding, simulation, synthesis and programming
- Collaborate with a cross-functional technical team
- Create test procedures, and document technical work clearly
- Research new technologies and methods to improve the company's products and processes
- Communicate your developed works with internal and external customers
- Participate in peer review of designs; provide and receive critique in an effective manner
- Work effectively to deliver quality products in a fast-paced environment
- Manage multiple competing tasks
- Ability to accurately scope, estimate and schedule work on projects

- Make design decisions with minimal supervision

Qualifications

- Bachelors or Master's Degree in Electrical, Computer Engineering or Equivalent
- Three years relevant experience or equivalent

Skills & Abilities

- Schematic Capture and Layout
- Compact, multi-layer PCB design and layout
- Integrate FPGAs, high speed digital & analog interfaces, and power MOSFET devices
- VHDL design, coding, synthesis and programming using Xilinx ISE and Vivado
- VHDL testbench creation and simulation using ISIM and Vivado Simulator
- Trouble shooting of electronic circuits and FPGA designs
- Test and measurement equipment
- Repository and version control systems
- Excellent written and verbal communication skills
- Strong problem-solving skills with high attention to details, quality, and meeting deadlines
- Self-motivated and disciplined

Other Valued Experience

- Programming C in the Linux environment
- ARM processor architecture, Zynq Ultrascale+, Xilinx 3A, 3A-DSP, and 7-series FPGAs, GigE, PCIe
- Experience with motor control, PID tuning, motion control
- Experience with EMI and EMC mitigation

How to Apply

Please submit your resume and cover letter to careers@pmdi.com with subject line "Electrical Engineer"

Other Info

Polaris Motion is in Victoria, B.C. on beautiful Vancouver Island. We offer a competitive salary and a comprehensive extended health package. If you are self motivated and enjoy working in a professional environment with a bright and talented team of product developers, you've found the right place. We'd love to hear from you.