**Job position:**

**Electronics Hardware Design Engineer**

<https://resolutephotonics.com/> (website under review)

**Date:** September 2023

**Job description:**

This is a fantastic opportunity for a highly skilled and experienced electronics hardware design engineer to contribute to the development of advanced optical, photonics and quantum technologies for future hyperscale data centre and high performance computer environments.

The successful candidate will join a small dedicated team at Resolute Photonics in Ireland and be required to work closely with European collaboration partners to work on at least two Horizon Europe collaborative research projects. Requiring close and frequent collaboration within consortia of world-leading universities, research institutes and companies; the ideal candidate will have the communication and technical skills to develop advanced optical communication solutions for future Hyperscale Data Centres and High Performance Computers.

Based in our office at the Tyndall National Institute in Cork, Ireland, with some flexibility for hybrid working for the right candidate, the post holder will be responsible for the design and development of high-speed PCB systems and subsystems, incorporating advanced photonic technologies developed by our international partners.

**Responsibilities**

* Designing and developing electronic PCB hardware solutions for high-speed subsystems and rack-level systems
* Collaborating with world-leading partners to incorporate advanced photonic and quantum solutions onto high speed electronic PCBs
* Capturing schematics and designing PCB layouts
* Modelling and simulating high RF signal integrity with SPICE or equivalent
* Completing associated technical documentation including design specifications, schematics, test reports, BoMs and test instructions
* Liaising with component suppliers to find best components
* Preparing Bills of Material and being responsible for ordering
* Identifying and working with PCB fabricators to commission PCB raw cards and PCB assembly houses to develop prototypes
* Testing and validating the electrical aspects of the PCB at partner sites
* 3D mechanical CAD modelling experience and competence preferable, but not essential
* Able to complete tasks and assignments in a timely fashion with minimal supervision
* Language: English; This job will require some international travel mostly within Europe

**Requisites**

* Minimum of Bachelors or Master’s degree in electrical engineering or related discipline.
* Minimum 5 years’ experience in high-speed electronic PCB hardware design
* Full competency with electronic hardware design schematic capture, PCB layout software e.g. Cadence Schematic Capture, Cadence Allegro, Mentor Graphics or equivalent
* Knowledge of optics and photonics useful, but not essential
* Familiar with SPICE simulation or equivalent signal integrity analysis software
* Familiar with mechanical CAD software such as SolidWorks or equivalent

**For the right candidate**

* Highly competitive salary dependent on experience and proven competencies
* Overall compensation package includes bonus incentives and employee benefits
* Hybrid working