

Job Title: Hardware Designer

Reference: ENG-057

About EERS

EERS develops enabling hardware and software for noise management, hearing protection, audio clarity and voice intelligibility through devices that are comfortable and secure. We are expert in real-time signal processing that builds applications for augmented hearing in industrial, medical, and consumer use cases.

Our bio-mechanical skills allow us to map and address the complexity of the human ear canal to build novel comfortable, usable, and manufacturable earpieces that are acoustically efficient.

The EERS team is made up experts in audiology, acoustics, embedded software, hardware design, bio-mechanical, industrial design, and prototype assemblers capable of working on the smallest of form factors.

Our head office is located in the heart of downtown Montréal. We offer competitive salaries as well as a great team environment with a hybrid WFH model. EERS Global is an equal-opportunity employer committed to diversity.

Job Description

We are looking for a Hardware Designer to join our multidisciplinary R&D team!

We have just launched a very challenging and exciting new project which will allow the hardware designer to be directly involved in all phases of product design. Reporting to the Senior Hardware Design Engineer, we expected him/her to perform a variety of tasks ranging from proof-of-concept prototyping to high-level hardware design, while still being able to do hands-on debugging. In addition, this hardware designer will have a direct impact on the design of the hardware platform that we are currently defining. We are therefore looking for a versatile and passionate team member who is not afraid to take on multiple tasks.

Duties and Responsibilities

- Collaborate with cross-functional R&D teams on new product designs.
- Produce schematics, PCB layouts, BOMs, wiring diagrams and manufacturing packages.
- Work with manufacturers to build prototypes and production units.
- Create proofs of concepts and early prototypes to validate product design choices.
- Test and validate prototypes to characterize their performances (electric, acoustic, temperature, etc.).
- Maintain accurate documentation throughout the development and validation phases.
- Learn, own, document and maintain existing PCB designs.
- Troubleshoot and fix hardware issues, improve production yield.
- Design and validate test fixtures for device manufacturing.
- Lead and participate in design reviews.
- Work with external laboratories for EMC/EMI testing and safety certification.
- Train electronics and prototyping technicians.



Education

Bachelor's degree in electrical engineering, or equivalent combination of education and experience.

Qualifications

- 6+ years of experience designing circuit boards.
- Creating complex, high-density, multi-layer PCBs.
- Debugging hardware faults using lab equipment (ex: oscilloscope, spectrum analyzer, logic analyzer, etc.).

Nice to Have

- Analog and/or audio circuit design and troubleshooting a major asset.
- Integration of radio-frequency components a major asset.
- Involvement in the design of a complex product that was commercialized.
- EMC/EMI testing and troubleshooting.

Soft Skills

- Great communication skills in English and French.
- Ability to efficiently communicate design ideas and solutions.
- Strong writing and documentation skills.
- Ability to work both individually and as part of a team in a fast-paced environment.
- Excellent time management skills and ability to contribute to multiple projects simultaneously.

Depending on the daily tasks to be performed, working from home may be possible. However, as we often need laboratory equipment and great collaboration between the R&D teams is essential, the hardware designer must be able to come to the office with short notice if necessary.

If you are meticulous, a problem solver, and a team player, you will feel right at home. Please send your cover letter and resume to <u>cv@eers.ca</u> OR submit them through our <u>EERS Career platform</u>.