



Hardware / Firmware Engineering Co-Op

Department:	<i>Engineering</i>
Reports To:	<i>Lead Hardware Engineer</i>
Supervises:	<i>N/A</i>
FLSA Classification:	<i>Exempt</i>
Approved By:	<i>Bryan DeMaster</i>
Revision Date:	

JOB DESCRIPTION:

HED is offering an exciting opportunity to join a growth-oriented small business with a growing product offering in the on-vehicle market. We work with leading OEMs to help design their vehicle systems using CAN controller networks primarily and in recent years expanded our portfolio to include Telematics modules and services. This is a fast paced market and we are a leading provider, making this exciting technology available to small to midsize OEMs in our segment who are eager to benefit from the capability. This is a chance to be part of some exciting work with the latest vehicle & communications technologies.

JOB PURPOSE:

- Design, develop, troubleshoot and test hardware (electronics) and firmware for HED® products.

ESSENTIAL DUTIES and RESPONSIBILITIES:

- Designing, developing, troubleshooting and testing hardware (electronics)
- Designing, developing, troubleshooting and testing firmware
- Misc.

% of Total Time	
	40
	40
	20

An individual in this position must be able to successfully perform the essential duties and responsibilities listed above. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of this position.

The above list reflects the general details necessary to describe the principle and essential functions of the position and shall not be construed as the only duties that may be assigned for the position.

MINIMUM QUALIFICATIONS:

Education

- Current enrollment in an accredited college or university, pursuing a Bachelor's degree in Electrical Engineering, Computer Engineering, Computer Science, or directly related field.

Experience and/or Training

- Exposure to electronic circuit design, analysis, and testing through course work or previous job experience, including practical application using:
 - Passive Components (e.g. resistors, inductors, capacitors)
 - Discrete Components (e.g. transistors, diodes)
 - Integrated Circuits (e.g. MCUs, Memory, etc)
 - Component datasheets
- Ability to read and understand electronics circuit schematics
- Ability to use common test equipment including multi-meters, oscilloscopes, power supplies, and similar.
- Exposure to software development and/or software testing through course work or previous job experience.
- Exposure to and practical application of:
 - C or C++
- Exposure to standard programming concepts, practices, and procedures
- Personal Abilities:
 - Learning agility, self-directed and highly motivated learner
 - Good verbal and written communication skills
- Specific On the Job training will be provided

PREFERRED QUALIFICATIONS:**Experience and/or Training**

- In additional to minimum qualifications, it is desirable to have exposure to or experience with:
 - Managing multiple projects\tasks concurrently
 - Wired and wireless communication technologies (e.g. CAN, Ethernet, Cellular, Wi-Fi, GNSS)
 - Root cause analysis
 - Cadence/OrCAD Schematic Capture, PCB Editor, and/or PSPICE tools
 - Mechanical 2D or 3D design tools (e.g. AutoCAD)

PHYSICAL AND MENTAL DEMANDS:

While performing the duties of this job, the employee is frequently required to sit, talk and/or hear, and/or use hands to finger, handle, or touch objects, tools, or controls. The employee is occasionally required to stand, and/or walk. The employee must occasionally lift and/or move up to 10 pounds while moving files or small packages. Specific vision abilities required by this job include close vision and the ability to focus.

The mental and physical requirements described here are representative of those that must be met by an individual to successfully perform the essential functions of this position.



WORKING ENVIRONMENT:

Work is typically performed in an office environment. The noise level in the work environment is usually moderate. Infrequent travel to a customer's location may be required and may include factory or test environments.

The work environment characteristics described here are representative of those an individual encounters while performing the essential functions of this position.

I have read and understand the duties, responsibilities and requirements for this position.*

Employee Acknowledgement

Date

*This document does not create an employment contract, implied or otherwise, other than an "at-will" employment relationship. HED, Inc. retains the discretion to add duties or change the duties of this position at any time.