Senior Software Engineer

Department:	**Engineering**
Reports To:	**Lead Software Engineer**
Pay Grade:	
Supervises:	*None*
FLSA Classification:	
Approved By:	
Revision Date:	

JOB PURPOSE or JOB SUMMARY:

This position designs, develops, maintains, and troubleshoots the embedded firmware used by HED's microcontroller based products including board bring up, drivers, and firmware features.

ESSENTIAL DUTIES and RESPONSIBILITIES:

	% of Total Time
• Developing new software	40
• Troubleshooting and maintaining existing software	15
• Supporting production	5
• Creating documentation	10
• Testing of software	25
• Misc.	5

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.

COMPETENCIES:

Required

- *Knowledge of standard programming concepts, practices and procedures*
- *Experience with writing low level hardware drivers based off cpu and component data sheets*
- *Experience with board bring up, trouble shooting hardware, reading a schematic*
- *Ability to use hardware test equipment such as: multi-meter, scope, function generator, etc.*
- *Ability to accept multiple tasks, work on them in a prioritized manner, and complete them in a timely fashion*
- *Ability to effectively manage their own time*
- *Communicate and work well with other engineers, business development, and external customers*
- *Experience with using a revision control system and bug tracker*
- *Experience writing requirements and software designs based on requirements*
- *Experience creating test plans based on requirements*

Preferred

- *Experience using CAN and CAN tools*
- *Experience using CANOpen*
- *Experience with J1939*
- *Experience with ATDs, Timers, PWM, and interrupts in general*
- *Experience of selecting and implementing a RTOS*
- *Experience with implementing boot loaders/flash update routines*

MINIMUM QUALIFICATIONS:

Education *BS in Electrical Engineering, Computer Engineering, or similar*

Experience and/or Training Minimum of *5 years of experience*

Licenses/Certificates None

Technology/Equipment *Proficient in C or C++ programming*

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