



Embedded Linux Systems Engineer

About the Company

Intelligent Product Solutions (IPS) is a globally recognized product design and development company headquartered in New York. Specializing in end-to-end services, IPS brings ideas to life through expertise in UI/UX, mechanical, software, embedded, systems, electrical, and optical engineering. The team is dedicated to delivering innovative, high-quality solutions tailored to clients' unique needs at every stage of product development. With a commitment to excellence and customer satisfaction, IPS is a trusted partner for turning concepts into market-ready products. Please look at what we do:

www.intelligentproductsolutions.com

Position Overview

IPS is seeking an Embedded Linux Systems Engineer with a strong electrical engineering background to support the design, development, bring-up, and validation of connected embedded products. The ideal candidate will have experience with embedded Linux, embedded C/C++ development, microcontroller and processor-based hardware, wireless connectivity, and hardware/software integration. This role offers the opportunity to work alongside mechanical, electrical, software, and systems engineers on a diverse range of products from concept through production.

This is a full-time contract-to-hire position based on-site in our Hauppauge, NY office.

Required Qualifications

- Bachelor or Master of Science degree in Computer Engineering, Electrical Engineering, or a related field.
- 5-10+ years of experience designing and developing embedded electronic systems and embedded Linux-based products.
- Strong experience with Unix/Linux environments, including Linux kernel architecture, device trees, shell scripting, and Linux-based systems.
- Experience developing and debugging embedded Linux-based systems, including application and firmware development.
- Proficiency in C/C++ programming, low-level firmware development, verification, analysis, optimization, and debugging for microcontroller/processor-based systems.
- Experience with multi-threaded and multi-core system architectures and software design.
- Experience with wired protocols, including USB, I²C, and SPI.
- Experience supporting hardware bring-up, design verification, integration, and troubleshooting of embedded electronic assemblies.
- Ability to read, review, and interpret electrical schematics, PCB layouts, component datasheets, and technical specifications.



Preferred Qualifications

- U.S. Citizenship
- Detailed knowledge of MIDI specifications and audio-related embedded systems.
- Experience with multimedia frameworks such as GStreamer.
- Experience developing bare-metal and RTOS-based firmware.
- Java programming experience.
- Experience designing microprocessor and microcontroller subsystems, including power management, clocking, reset circuitry, memory interfaces, and communication architectures.
- Hands-on experience debugging electronic systems using oscilloscopes, logic analyzers, power analyzers, protocol analyzers, and related laboratory equipment.
- Experience with UART, CAN, BLE, Bluetooth, and Wi-Fi technologies.
- Understanding of microcontroller peripherals and interfaces, including GPIO, ADC, DAC, PWM, timers, and serial communication interfaces.

Benefits

- A competitive salary and benefits package commensurate with your experience and expertise.
- A dynamic and collaborative work environment where creativity and innovation are encouraged and fostered.
- Opportunities for continuous professional development and training, empowering you to stay at the forefront of the industry.
- A flexible work schedule that accommodates your lifestyle with a 9/80 work schedule, on-site presence required
- The satisfaction of working with a team of passionate and innovative engineers within a second-to-none culture of camaraderie.
- The opportunity to contribute to innovative products that improve people's lives across medical, industrial, consumer, and connected device markets.

Equal Opportunity Employer

Intelligent Product Solutions is an equal-opportunity employer and values diversity at our company. We do not discriminate based on race, religion, color, national origin, gender, sexual orientation, age, marital status, veteran status, or disability status.