

Senior Software Engineer - Embedded Systems

JOB DESCRIPTION

As a Senior Embedded Systems Software Engineer, you will be responsible for design, implementation, and debug of software control systems in Multibeam's electron-beam lithography system. This role requires experience in specification, design, programming, test, and debug, of embedded equipment control systems. The ideal candidate will have at least 5 years of experience in embedded software development.

This position is based at our headquarters in Santa Clara, California.

Please also check our website for additional related job openings at:

<http://www.multibeamcorp.com/careers.htm>

FUNCTIONS and RESPONSIBILITIES

- Develop and improve custom embedded systems software running on Linux and RTOS
- Review control system requirements; understand existing hardware and software
- Work closely with software, electronics, and systems engineers on the overall control system
- Implement and improve various control modes, operating modes, and calibration routines
- Develop, verify and improve test cases
- Create and improve software documentation
- Prepare pertinent reports and share technical information with team

SKILLS and EXPERIENCE

- Experience with C and C++
- Experience with communication protocols such as RS-232, I2C, SPI, SERDES, PCIe, Ethernet
- Experience with embedded Linux and RTOS systems
- Experience in synchronization of multiple embedded systems
- Experience in developing secure and reliable equipment control systems
- Strong systematic problem solving skills

EDUCATION and TRAINING

- B.S., M.S. or Ph.D. in electrical engineering (EE), computer science (CS), or related fields

ABOUT MULTIBEAM CORPORATION

[Multibeam Corporation](#) is a leading electron-beam technology innovator in wafer fab equipment. The company's proprietary miniature e-beam column array is currently being used to build lithography systems for the U.S government. In addition to these systems that enable low-volume, high-mix production of microchips, the company aims to apply its e-beam platform to serve other key applications such as embedding chip-specific security information to enhance cybersecurity and enhanced precision etch/deposition. Based in Santa Clara, California, Multibeam is led by Dr. David K. Lam, the founder and first CEO of Lam Research.