

**About ARRADIANCE**

Founded in 2003, Arradiance combines unique talents in material science, charged particle physics, equipment design, modeling, simulation, vacuum technology, and metrology providing world class Atomic Layer Deposition (ALD) and Plasma Enhanced Deposition (PEALD) systems and Foundry services solutions.

To continue our track record of growth, we are seeking to add a hands-on and versatile **Test & Controls Engineer** to join our team. As a key player on a team you will be designing, developing, and delivering ALD capital equipment solutions that enable technologies across markets around the world. We welcome applications from technically skilled engineers who are ready to take their career to the next level and meet all requirements below.

**Job Description: Test & Controls Engineer, R&DE**

**Employment Type:** Full-Time – This is an in office on-site position to start immediately

**Location:** Littleton, MA

**Travel:** Estimate <10%

**How will you make an impact**

- Design, develop, test, debug and document embedded electrical control systems supporting Arradiance products.
- Write high level control software (PC based) as well as low level embedded firmware as required.
- Design custom microcontroller (ARM based) based PCBs as required.
- Assist Technical Support for reported field problems as well as manufacturing.

**Position Summary:**

The Test and Controls Engineer will develop, validate, and sustain advanced control and test systems for plasma-enhanced and thermal (ALD) equipment. The role emphasizes process control, automation, and safety compliance in multi-chamber cluster tools and robotic systems for semiconductor manufacturing.

**Key Responsibilities:**

- Design, develop, test, debug and document embedded electrical control systems supporting Arradiance products.
- Write high level control software (pc based) as well as low level embedded firmware as required.
- Design custom microcontroller (ARM based) based PCB's as required.
- Assist Technical Support for reported field problems as well as manufacturing.

**Qualifications:**

- Bachelor's degree in electrical engineering, Controls Engineering, Mechatronics, or related field
- 3–5 years of hands-on experience developing and testing control systems in semiconductor, vacuum, or robotics equipment
- Proficiency in C/C++ and related automated test platform development
- In-depth knowledge of safety interlocks and practical implementation of SEMI S2 standards
- Demonstrated experience with automation systems including cluster tools and robotic controls
- Familiarity with PLC programming and control system architectures for modular, expandable automation platforms
- Preference given to candidates with experience in the BRX PLC family
- Strong troubleshooting, documentation, and cross-disciplinary collaboration skills

**Preferred Experience:**

# **ARRADIANCE, LLC**

Littleton, MA, USA



- Plasma-enhanced ALD equipment development
- Cluster tool and robot automation for semiconductor processes
- Integration with PLC or SCADA systems

## **As part of our team, you'll enjoy:**

- A dynamic and collaborative work environment with a multicultural and highly educated team
- Competitive compensation package including exceptional benefits (401(K), medical, dental, bonus program, etc.)
- Application knowledge of ALD (Atomic Layer Deposition) and numerous other technologies
- Potential for rapid career development alongside a well-established and growing team
- Working with world-class big company talent, with the work life balance of a small company

## **Please get in touch with us!**

Arradiance is an Equal Opportunity Employer that is committed to hiring a diverse and talented workforce. Send your resume and a brief cover letter to [HumanResources@Arradiance.com](mailto:HumanResources@Arradiance.com)