

SUBCRITICAL SYSTEMS · JOB OPPORTUNITY

Director / Head of Semiconductor Development



Department Engineering

Posted

September 18, 2026

Location Austin, TX

Employment

Full Time

ABOUT SUBCRITICAL SYSTEMS

Subcritical Systems, Inc. is a venture-backed startup in Austin, Texas building the accelerator driven systems and the only US commercial manufacturer of accelerator cavities. What Space X did for rockets, we plan to do for accelerator cavities and commercialize across applications of power production, medical isotopes, semiconductors and waste transmutation.

We are in the process of building the Energy Amplifier — a novel nuclear fission system in which a particle accelerator drives a subcritical core, making meltdown physically impossible for clean power production. Due to its inherent safety, our system has a more streamlined licensing process. Our founding team includes successful entrepreneurs with a track record of building several multibillion dollar companies in deep-tech, and scientists who were leading U.S. national labs with deep experience in accelerator & nuclear technologies.

We are actively hiring to expand our team as we work toward licensing, regulatory submissions, and construction of our first energy amplifier. More information is available at subcritical.com.

ROLE SUMMARY

This role leads SSI's growth in the semiconductor industry. The Director/Head of Semiconductor Development will engage current and prospective customers, build SSI's go-to-market strategy for its SRF cavity and accelerator technology, and shape product direction to support the deployment of free-electron-laser based EUV lithography systems and related supporting technologies.

KEY RESPONSIBILITIES

- Develop and manage relationships with current and prospective customers across semiconductor manufacturing, capital equipment, and lithography OEMs
- Define and execute SSI's commercial strategy for entering and scaling within the semiconductor lithography market
- Track technology and competitive trends across EUV source approaches (free-electron-based systems, laser-produced plasma, and discharge-produced plasma) and translate them into strategic direction
- Convert customer and market requirements into product and technology roadmap input for SSI's engineering team

- Represent SSI at industry conferences, technical reviews, and customer site visits
- Structure and negotiate commercial terms for capital equipment sales, technology licensing, or partnership agreements
- Build and lead the commercial function for this business line as it scales, including future hires
- Brief SSI leadership and investors on semiconductor market traction and strategic progress

QUALIFICATIONS

Required

- BS or MS in Electrical, Mechanical, Manufacturing, Industrial, Materials, Optical, Chemical, Aerospace, or a related engineering discipline
- 10+ years of leadership experience in the semiconductor industry, in semiconductor manufacturing or tool development
- Demonstrated track record managing complex, long-cycle capital equipment sales or partnerships
- Strong technical fluency: able to engage credibly with process engineers, device engineers, and technology executives
- Excellent communication skills and executive presence; comfortable representing SSI to senior leadership at major fabs and OEMs
- Comfortable operating in a startup, fast-growth environment with evolving scope

Preferred

- Direct experience with EUV source technology, deep ultraviolet (DUV) lithography systems, semiconductor capital equipment, or advanced semiconductor manufacturing
- Familiarity with free-electron-based EUV source technology, laser-produced plasma systems, or superconducting RF systems
- Existing relationships within leading semiconductor manufacturers (logic or memory fabs) and lithography OEMs
- Understanding of total cost of ownership drivers for EUV lithography: source power, uptime, cost per wafer
- MBA or equivalent business background

BENEFITS

Benefits: We offer health, dental, and vision insurance.

LOCATION & WORK POLICY

This role is fully in person in Austin, Texas. Our facility is located next to Austin Airport.

HOW TO APPLY

Apply on LinkedIn or submit your resume and a brief cover letter to careers@subcritical.com with the subject line "Director / Head of Semiconductor Development - Application". Applications are reviewed on a rolling basis.