

Senior to Fellow Device Engineer

Location: : Lehigh Valley (Bethlehem), Pennsylvania

Department: Technology Development

About iDEAL Semiconductor

At iDEAL Semiconductor, we're redefining what silicon can do.

Our proprietary SuperQ® technology is breaking long-standing performance limits of traditional power MOSFETs—enabling faster switching, higher efficiency, and more compact system designs across applications like AI infrastructure, battery management, motor drives, and fast charging.

We're a fast-moving, highly collaborative team of engineers and innovators focused on solving real-world power challenges.

Silicon. Reinvented.

The Role

We're looking for an experienced Senior to Fellow Device Engineer with deep expertise in silicon power semiconductor device physics, simulation, and technology development. This highly technical individual contributor role will lead the design, development, and optimization of next-generation silicon power diodes, MOSFETs, and IGBTs that push the boundaries of performance, efficiency, and ruggedness. You will lead device engineering and related development responsibilities for these devices, while collaborating closely with a cross-functional product development team

This role reports to the Chief Technology Officer

Key Responsibilities:

- Develop, institute, and communicate strategies that position the company to shape and capitalize on emerging customer and market needs.
- Identify longer-term needs and opportunities that have significant revenue and profit potential and develop intellectual property strategies that capture value.
- Leverage trends in customer industries and marketplaces to shape solutions and approaches for the customer.
- Analyze gaps in technology in order to bring organization forward to industry standards.
- Help leadership develop successors and talent pools to ensure availability of future talent.
- Mentor or manage key technologists through regular and repeated sessions.
- Influence senior leaders and act as a trusted advisor for key strategic decisions.
- Drive the development of Intellectual Property (IP) and actively participate in the IP Program

Required Qualifications:

- BS Electrical Engineering or Solid State Physics plus a minimum of 20 yrs of related experience; MS Electrical Engineering or Solid State Physics plus 14 of related experience; or PhD Electrical Engineering or Solid State Physics plus 8 yrs of related experience
- Proven history of technical accomplishment, leadership, planning & coordinating, and executing on multiple projects simultaneously.
- Proven experience leading power semiconductor product development activities.
- In-depth knowledge and experience in power semiconductor device design and process development with an emphasis on high voltage (>500V) class of IGBT devices.
- Develop and drive next-generation IGBT technology roadmaps.

Nice to Have

- 20 years minimum experience in power semiconductor device and process design.
- Multi-generational device design and process development of high voltage (>500V) power IGBT semiconductor products.
- Proficient in charge balance/compensated type of devices. Proficient in TCAD simulation tools.

Why Join iDEAL

- Work on next-generation silicon technology redefining performance limits
- Direct impact on products used in high-growth markets
- Collaborative, low-ego culture with high technical depth
- Opportunity to grow with a scaling semiconductor company
- Exposure to global customers and cutting-edge applications
- Opportunity to shape the future of next-generation power electronics

Compensation & Benefits

- Competitive salary
- Equity participation
- Health, dental, and vision insurance
- 401(k), PTO

How to Apply

Submit your resume via [Careers - iDEAL Semiconductor](#)