

**Inventive technology product developer** with 15+ years' experience leading product development, from conception through commercialization, while meeting customer and business needs.

**Lead product development teams, launch products, and fix field equipment** by consistently providing outstanding customer service in high-pressure, time-sensitive situations.

*Multi-Platform Strategies  
Product Design & Vision  
Thin Film & Solar Knowledge  
Team Management  
Relationship Builder  
Business Development  
Customer Solutions*

## CAREER HIGHLIGHTS

- ▲ **Design lead** for 60kW and 120kW bi-polar dual magnetron sputtering DC accessory supply.
- ▲ **Project manager and design lead** for 500kW solar inverter project, resulting in product compliance and emergence into new target markets.
- ▲ **Oversee \$5.6 million in design architecture annually**, ensuring customer requirements, reducing material costs, verifying designs, validating test results, and mentoring engineers and technicians.

## EXPERIENCE

### Honeywell

1999–Present

*Global producer of commercial and consumer products with 132,000+ employees.*

#### Member of Technical Leadership, Thin Film Unit

Establish product vision and manage product delivery from conception through discontinuance. Relationship manager for key customer accounts and product customization projects.

2012–PRESENT

- ▲ **Design lead** for 60kW and 120kW bi-polar dual magnetron sputtering accessory to DC sputtering supply, resulting in customized products and increased market share.
- ▲ **Manage cross-functional development team** of 15 employees focused on meeting product specification, cost goals, and manufacturing schedules.
- ▲ **Effectively resolved a \$4 million customer product issue** ensuring continued customer relationship and future equipment purchases.

#### Member of Technical Staff, Renewable Energy Unit

Invited to join solar division to lead product architecture and design for new business unit. Contributed to business development strategy including emersion into new target markets. Directed engineering validation testing, ensuring regulatory compliance and performance specifications.

2009–2012

- ▲ **Designed 500kW solar inverter system** ensuring product release that met market demand.
- ▲ **Oversaw hardware design projects**, including development, testing, DFMEA, PFMEA, and worst-case stress analysis, resulting in manufacture-ready products and timely product releases.
- ▲ **Supervised cross-functional team of 5 technical personnel** on solar inverter projects.

*"Joel excels when working with teams and customers. He is talented across a number of technical disciplines and applications." – B. Lewis, Honeywell Senior Development Manager*

## Hardware Design Engineer

Mentored new department engineers and technicians in methodologies, issue resolution, and company processes. Coordinated engineering product validation testing activities, switch network verification, control loop analysis, thermal validation, and specification testing, resulting in product release to production.

- 2005–2009
  - ▲ **Invented and designed new method for arc handling** in vacuum deposition process for a 400kW sputtering supply, resulting in awarded patent.
  - ▲ **Researched solar inverter compliance requirements for European market**, effectively creating new European company product offerings and new market share options.
  - ▲ **Investigated 20kW DC generator product issue** at international customer site, determined root cause, and implemented hardware corrective action, solidifying customer relationship.

## Design Engineer I

Coordinated hardware designs and validation of power supplies in order to meet product specification performance requirements, UL certifications, and CSA safety requirements.

- 1999–2005
  - ▲ **Analyzed and interpreted test information** resolving design-related problems and providing solutions to senior engineers.
  - ▲ **Problem-solved and evaluated power and control sections of power conversion systems** used in plasma process equipment, resulting in customer solutions and stronger product offerings.

## EDUCATION & PATENTS

Master of

Business

**Administration**, Colorado State University, 2014  
**Power Electronics Certification**, University of Colorado, 2001  
**Bachelor of Science, Electrical Engineering**, University of Colorado, 1998

**Patent** US 751498B5, System and Method for Managing Power Supplied to a Plasma Chamber

*"Joel takes personal responsibility and positively influences others." – L. Sanford, Honeywell Director of Engineering*