



Product Development Engineer - DCDC Power Management

Job description

You have strong knowledge of PWM Controllers, Point-of-Load (POL) and/or PMIC buck regulator control theory, MOSFET device requirements, buck topology systems. This includes hands-on development experience in the area of high-frequency, low voltage buck systems. In this role, you will create silicon designs with IC designers and customers, define, choose components, develop, validate and design-in PWM controllers, power stages and POL's. We are looking for strong product development engineers with minimum 2 years of experience in related industries to become key members of Infineon's DCDC Enterprise Power (EP) division!

****Opportunities can be based at any of Infineon's EP office locations including El Segundo CA, Milpitas, CA, Andover MA, and Warwick RI***

The DCDC Enterprise Power (EP) management product line defines, designs, develops, manufactures and markets PWM controllers, power stages and integrated Point-of-load (POL) products for the Server, AI, Communications, Consumer and industrial markets. **We are looking for strong product development engineers in PWM controller, MOSFET based power stages and POL product developments with minimum 2 years of experience in related industries.** The ideal candidate has knowledge of POL & PMIC buck regulator control theory, MOSFET device requirements, buck topology systems with a focus on creating silicon designs with IC designers and customers. Candidates are expected to have hands-on development experience in the area of high-frequency, low voltage buck systems (3.3V to 25V). As the PDE expert, you will work with customers and Engineering teams to define, choose components, develop, validate and design-in PWM controllers, power stages and POL's.

In your new role you will:

- Work with customers and marketing teams to **define and develop products** such as:
 - **Point of Load regulators, Power modules with POL silicon**
 - **Multiphase Buck Controllers**
 - **Power Stages**
- Perform simulation and hands-on development in the area of **high-frequency, low voltage buck systems (<25V)**
- Work with Field Applications Engineering (FAE) teams, System Architects and Applications Marketing in **defining right-fit product requirements** addressing customer requirements

At a glance

Location: **Andover, MA (United States)**
Job ID: **61917**
Start date: **as soon as possible**
Entry level: **1-3 years**
Type: **Full time**
Contract: **Permanent**

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Job ID: **61917**
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- Develop **product target datasheets** and act as technical interface between the Infineon R&D teams and customers
- Work with internal development teams to **develop new products**, validate these products in the lab and support **customer design-in activity** once the product is available
- **Specify the MOSFET's**, and the components (L's and C's) for product applications. Validate the individual components including **PCB, capacitors inductors, MOSFET's** etc. along with the reference design
- Create **go-to-market evaluation boards, datasheets**, application notes and design tool for new products.
- **Benchmarking of competitor's products** and **generation of promotional material** and collaterals (test reports, application notes, white papers) for product promotion.
- **Gain customer and application knowledge** and understand device usage in end-application through regular Customer interaction

Profile

You are a well-organized, self-driven team player with good communication and presentation skills. You are able to effectively multi-task, manage priorities and solve technical problems independently.

You are best equipped for this task if you have:

- **BSEE or MSEE** with at least **2 years of power related experience**
- Knowledgeable in **power conversion topologies, power device, magnetics and control loop design**
- Experience in selection of **MOSFET's, Gate Drivers, Capacitors, Inductors** and use of these components in **power supply designs**
- Familiar with communication protocols such as **(I2C, PMBUS, AVS bus, NPWM, SVID, SVI3)**
- Lab skills in using **digital oscilloscopes, function generators, and network analyzers** for the test and debug of switching power supplies
- Ability to connect instruments together using **Python to Automate testing** of designs
- Proficient in using **schematic entry, circuit simulation, and PCB layout** tools.
- Experience with **Matlab/Simulink, SIMetrix**, or similar engineering tools is required.
- Able to collaborate with all functions in the organization from Program management, to IC design, Software (GUI) development, Marketing, FAE's and sales to ensure companies success
- Extremely responsive, ready to jump on the most difficult design and/or customer issues instantly
- Oral & written English language proficiency a must.

Infineon **Power & Sensor Systems (PSS)** semiconductors play a vital role in enabling intelligent power management, smart sensitivity as well as fast and reliable data processing in an increasingly digitalized world.

Our leading-edge power devices make chargers, adapters, power tools and lighting systems smarter, smaller, lighter, and more energy-efficient. Our trusted sensors increase the context sensitivity of “things” and systems such as HMI, and our RF chips power fast and reliable data communication.

– We drive leading-edge power management, sensing, and data transfer capabilities –

[Click here](#) for more information about working at PSS with interesting employee and management insights and an overview with more #PSSDreamJobs.



Why Us

Part of your life. Part of tomorrow.

We make life easier, safer and greener – with technology that achieves more, consumes less and is accessible to everyone. Microelectronics from Infineon is the key to a better future. Efficient use of energy, environmentally-friendly mobility and security in a connected world – we solve some of the most critical challenges that our society faces while taking a conscientious approach to the use of natural resources.

Infineon Technologies Americas Corp. is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex (including pregnancy, childbirth, or related medical conditions), gender identity, national origin, ancestry, citizenship, age, physical or mental disability, legally protected medical condition, family care status, military or veteran status, marital status, domestic partner status, sexual orientation, or any other basis protected by local, state, or federal laws. Applicants with questions about access or requiring a reasonable accommodation for any part of the application or hiring process should contact the Talent Network by phone at (408) 503-2194.

Employment at Infineon is contingent upon proof of your legal right to work in the United States under applicable law, verification of satisfactory references and successful completion of a background check and drug test, and signing all your onboarding documents .

In some instances, if applicable, U.S. export control laws require that Infineon obtain a U.S. government export license prior to releasing technologies to certain persons. This offer is contingent upon Infineon's ability to satisfy these export control laws as related to your employment and anticipated job activities. The decision whether or not to submit and/or pursue an export license to satisfy this contingency, if applicable, shall be at Infineon's sole discretion.

IMPORTANT NOTICE :

Infineon is requiring all new U.S. employees and contractors to be fully vaccinated against COVID-19. Full vaccination is defined as two weeks after both doses of a two-dose vaccine or two weeks since a single-dose vaccine has been administered. Anyone unable to be vaccinated, either because of a sincerely held religious belief or a medical condition or disability that prevents them from being vaccinated, can request a reasonable accommodation.

Infineon Technologies takes data privacy and identity theft very seriously. As such, we do not request personally-identifiable information (PII) from applicants over the internet or electronically. Please kindly refrain from disclosing your PII electronically during the application process or to unauthorized websites that may purport to be Infineon or any of our affiliates.

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