Software & IP Engineering
at
ALTERA

The Programmable Solutions Company®

Altera is the leader in systems-on-a-programmable-chip solutions. That makes Altera a semiconductor company, right? What you may not know is that Altera produces cutting-edge design software and IP that enables customers to implement their systems in Altera’s comprehensive line of FPGAs and CPLDs with the fastest time to market.

The Software & IP Engineering (SWIP) department develops the Altera Complete Design Suite (ACDS). Altera customers use ACDS to implement complex digital systems on Altera programmable logic devices. ACDS includes both ready-to-use IP and design tools for authoring custom logic such as Quartus II, which alone has over 10 million lines of code. Every day, SWIP engineers utilize their experience to solve challenging problems in many areas: Optimization Algorithms, Parallel Programming, Languages & Compilers, Modeling of complex I/O, Embedded Systems and Digital Design & Computer Architecture.

If you are an exceptional and energetic engineer looking for challenging employment where you will work with and learn from a research and development engineering team that is among the best in the world, we want to hear from you!

The following 4 Software and IP engineering positions are available at Altera’s headquarters in San Jose, California.

**Advanced Software Engineer, Quartus II Core Infrastructure [Requisition ID: 281]**

The Quartus II Core Infrastructure team develops and maintains many important aspects of the Quartus II software. In this position, your work will be diverse but may include: (1) Defining the high-level C++ architecture of Quartus II, (2) maintaining and enhancing TimeQuest (a static timing analysis engine used throughout Quartus II), (3) building infrastructure to improve the productivity of software developers and (4) improving the software’s performance through careful analysis and optimization of key metrics such as memory usage and performance.

This position provides an excellent opportunity to gain experience developing large-scale commercial software.
**Requirements:** (i) BS or MS in Computer Science, Electrical Engineering, Computer Engineering, or equivalent. (ii) Knowledge of data structures and algorithms and experience with object-oriented programming in C++ or Java.

**Senior Design Engineer, Device Features [Requisition ID: 301]**

In this position, you will design, implement, and maintain software and IP for features of Altera’s FPGAs such as Multi-gigabit Serial Transceivers (HSSI, LVDS), Phase locked loops (PLLs), and Clock networks. You will also work with Altera’s hardware design teams in defining and developing the next generation of these device features.

**Requirements:** (i) BS, MS, or PhD in Computer or Electrical engineering. (ii) Strong background in C++ design and a good understanding of hardware design concepts.

**Senior Design Engineer, Device Features [Requisition ID: 294]**

In this position, you will develop high speed transceiver Intellectual Property (IP) cores, such as PCI Express and 10 Gigabit Ethernet PCS IP. As an IP engineer, you will be part of a dynamic and energetic team that pushes the design and technological boundaries in building high speed serial protocol IPs. In addition to developing our current generation of IPs, you will also work with Altera’s hardware design teams in defining and developing the next generation of transceivers.

**Requirements:** (i) BS, MS or PhD in Computer or Electrical engineering. (ii) Knowledge of RTL design and verification in Verilog or VHDL.

**Senior Design Engineer, Device Features [Requisition ID: 82]**

In this position, you will develop hardware and software tools with a team of engineers to support the checkout and use of Altera's FPGAs. You will be responsible for design, development and deployment of a highly available and scalable, state of the art hardware testing platform. You will drive and own the development of customer programming hardware solutions, specifically networked and USB-based solutions. Additionally, you will be involved in the design, development and deployment of HSSI, Memory Interface, and PCI Express automated testing solutions.

**Requirements:** (i) BS in Electrical engineering or equivalent, (ii) Strong background in C/C++, Python, and Perl, (iii) Hardware design and debugging experience, (iv) Embedded systems development.

If you are interested in the above positions, submit your resume and accompanying cover letter through [http://www.altera.com/jobs](http://www.altera.com/jobs). Choose Location: “US-CA-San Jose” and Category: “Software Engineering” to find the positions referred to here. Only candidates selected for an interview will be contacted.