Example of FPGA Design Engineer Job Description

Our innovative and growing company is looking for a FPGA design engineer. Thank you in advance for taking a look at the list of responsibilities and qualifications. We look forward to reviewing your resume.

Responsibilities for FPGA design engineer

- Works closely with Software team to integrate data moves to FPGA IP and memories
- Works closely with RF team to provide LTE test waveforms to RFIC, PAs, and receivers
- Provides FPGA debug capabilities for Hardware / Software root cause investigation
- Maintains revision control of FPGA release code base to Software
- Designs FPGA patch releases and qualifies them for field release once the product is in the commercial field
- Work with block owners in Architecture & IC Design, Product Planning/Marketing, Test Engineering to build viable Fullchip floorplans for future chip family tapeouts
- Perform design entry and basic design optimization
- Write RTL and testbenches according to functional design spec
- Requirements capture, ASIC / FPGA digital architecture and design using RTL, timing analysis and closure, verification, and system integration
- Recommend new tools and practices for continuous improvement in the group's ASIC / FPGA design flow

Qualifications for FPGA design engineer

- Propose and negotiate system architecture, keeping in mind system (cross functional) impact, FPGA features and limitations

- 5+ year's equivalent experience developing, implementing, and verification of high performance communications/networking ASIC/FPGA products
- Experience with Architecting, Implementing high speed digital cores to interface to ARM SOC with bare metal/Linux OS based debug with SDKs, BSP's and profilers
- Experience mapping algorithms and standards (PCIe, NVMe, SATA,USB, Ethernet, TCP/IP, TCP/IP off load engine (TOE), SERDES, LVDS, and Memory Controllers – DDR2/DDR3) to hardware and architecture/system design tradeoffs
- Proficient with CDC, Formal EDA