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# Example of Principal Electrical Engr Job Description

Our company is hiring for a principal electrical engr. Please review the list of responsibilities and qualifications. While this is our ideal list, we will consider candidates that do not necessarily have all of the qualifications, but have sufficient experience and talent.

## Responsibilities for principal electrical engr

* Develops architectures for new designs, to support the capture, and technical execution within the Subsystem Design and Architecture Department
* Oversees the development of suitable components and sub systems that achieve the performance requirements at the system-level
* Provides technical conscience, challenged with making sure the product and process meet appropriate standards
* Ensures balance with risk conditions and constraints while advising leadership
* Visible and accountable for technical decisions
* Technical contact with the customer inclusive of requirements, technical commitments, IRAD, future technical needs
* Participate in major review boards such as Engineering Review Board, Failure Review Board, Risk and Opportunity Review Board
* Communicates and collaborates with Program Management, Product Line Chief Engineer, Functional Management, and Operations & Customers
* Technically successful bringing a balanced solution within the boundary conditions set by a business solution with Program Manager
* PDEs are responsible to Integrated Product Teams (IPTs) for input to the design process in areas such as materials selection, construction, layout, component selection and placement, design rule interpretation and application, and current Center of Excellence (COE) capabilities and practices

## Qualifications for principal electrical engr

* At least 10 years experience in full-custom CMOS Integrated Circuit (IC) design at the transistor level
* Flow down and documentation of customer requirements
* 10+ plus years in-depth understanding and working knowledge of switching power converters
* Requires in depth knowledge of multiple conversion topologies (flyback, forard, push-pull, etc) and the ability to simulate and model designs
* Experience with MATLAB and Simulink modeling tools
* Familiarity with a wide range of RF manufacturing processes, soldering, wire bonding, epoxy