



Example of Circuit Design Engineer Job Description

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Our company is looking to fill the role of circuit design engineer. If you are looking for an exciting place to work, please take a look at the list of qualifications below.

Responsibilities for circuit design engineer

- Architecture, design and development of mixed-signal circuits for LPDDR4/4x @ 4.2gbps and LPDDR5 @ 6.4gbps
- Custom blocks include (not limited to) references blocks, band-gap, Rx/Tx, clock distribution, clocking delay elements (DLL/PLL) Custom schematic capture, SPICE analysis and exhaustive pre-silicon validation
- Should be well versed in a wide spectrum of circuit activities ranging from technical readiness, device and/or cell characterization, bit-cell simulations, critical path simulations
- Design custom blocks to meet stringent Power/Performance/Area constraints
- Proficient in all aspects of circuit design for custom digital blocks including schematic entry, functional verification, static timing analysis, Noise analysis, Reliability Verification
- Should have good understanding of layout design- Must possess good programming skills
- Behavioral traits for this position would include logical thinking, very good verbal/written communication, excellent interpersonal skills, ability to prioritize work, multi-tasking, good analytical and problem solving skills
- Knowledge of a wide spectrum of circuit activities ranging from technical readiness, device and/or cell characterization, bit-cell simulations, critical path simulations
- Should be familiar with all aspects of circuit design for custom digital blocks including schematic entry, functional verification, static timing analysis, Noise analysis, Reliability Verification
- Should have good understanding of layout design

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- Team leadership experience is highly desirable
 - Experience with JTAG test methodologies to test digital logic blocks within the DUT
 - Experience with high speed digital circuits (e.g., serializer, deserializer, counters, dividers)
 - Modeling of CDR and adaptive loops (using C, Matlab or Python)
 - Facility with state of the art photonic performance simulation and modeling tools, such as FDTD in 2.5 and 3D representations
 - A track record of invention, publication and industrial leadership at the state of the art via Current facility with commercial modeling and simulation tools or proven ability to design and implement your own tools, as via C-programming or MATLAB