



# Example of Pre-silicon Validation Engineer Job Description

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Our innovative and growing company is looking for a pre-silicon validation engineer. If you are looking for an exciting place to work, please take a look at the list of qualifications below.

## Responsibilities for pre-silicon validation engineer

- Decomposing problems to fit within the scope of fully automated formal verification tools
- Determining what level of formal verification is sufficient for delivery of an IP or feature to customers
- Keeping aware of advancements in formal verification tools and methodologies with the goal of determining applicability to owned IP and features
- System level validation tasks such as using FPGAs and emulators
- Developing high level (for example, System C) modeling for RTL components
- Collaborate with architects, hardware engineers, and ucode engineers to understand the new features being implemented
- Read and interpret technical specs and create high quality technical documentation like test plans, strategy documents and coverage plans
- Developing validation content like tools, test generators to match the complexity of new cores and be reused in pre-si and post-si
- Investigating new techniques to accelerate validation of CPU hardware
- Perform all aspects of the SoC design flow from high-level design to synthesis, place and route, timing and power to create a design database that is ready for manufacturing

## Qualifications for pre-silicon validation engineer

- Expertise in using compiler and debugging tools like GHS, Lauterbach
- Software Architecture, device driver knowledge would be an advantage
- Working knowledge of Palladium & FPGA platform
- Expertise in using validation environment test equipment Logic Analyzers, Oscilloscope, Protocol Analyzers