

Title: CPU Digital Design/Verification Engineer (Full-time/Intern)

The successful applicant will take part in defining the micro-architecture of different major functional units of a processor core and contribute to the various phases of the development work, including but not limited to feasibility studies, cost and power estimation, performance and functional modeling, software benchmarking, micro-architecture definition, front end design and verification, and synthesis.

Responsibilities

- Interact with architect, software teams and ASIC product development teams to define the micro-architecture of the Multi-thread Processor core including memory hierarchy and various interconnects
- Evaluate and perform trade off analysis of hardware implementation between performance, cost and power.
- Define verification and validation strategies at different levels for the processor core and carry out the related work to ensure functional correctness.

Desired Skills and Experience:

- BS or higher degree in Electrical/Computer Engineering with experience in ASIC design/ verification.
- Good verbal and written communication skills
- Experience with the design/verification in one or more of the following disciplines
- Experience with Multi-Core, multi-threaded processors architecture/design/verification
- Experience with designs of complex high speed RTL modules, or Experience with constrained random and formal verification
- Multi-level cache hierarchy
- multi-core/multi-thread system
- instruction fetch and dispatch unit
- Load Store Unit
- Execution, Integer and Floating Point Unit
- Memory Management Unit
- Interrupts and Exception Handling
- Processor Core Virtualization
- Good understanding of computer system architecture, memory systems or cache coherency
- Good understanding of ARM instruction set
- Good understanding high speed circuit and low power design is a plus
- Good understanding of TCP/IP networking/service packet protocols is a plus

Please apply by sending email to choi.man@huawei.com with your resume. Applicants not invited for interview within 6 weeks from the closing date may assume their applications unsuccessful.