Product Engineer [Job ID# M102]

Job Description

Provide engineering support for a product or range of products through all phases of product development and manufacturing.

* Coordinate and manage new product introduction schedule and activities, and cross-product issues throughout the product life cycle.
* Work closely with test and process engineers during bring-up and production release to drive debug activities, reliability qualification, speed entitlement and yield enhancement.
* Drive activities with packaging and assembly subcontractors to define and design microprocessor packages and assembly process.
* Coordinate the development and implementation of new product manufacturing processes between P. A. Semi and foundry ops engineering teams.
* Communicate technical product status to management.

Experience Required

* BS or MS in electrical engineering with 5+ years of product engineering experience.
* Detailed understanding of diagnostic, product test, failure analysis, and debug techniques.
* Demonstrated ability to take complex chip designs into production.
* Solid understanding of circuit design, semiconductor process and device physics, as well as fault modeling and isolation. High speed I/O knowledge is a plus.
* Self starter with strong leadership, communication skills and demonstrated problem solving ability

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Technology Engineer [Job ID# D116]

Job Description

Participate in the design of a high-performance low-power system on a chip/CPU. Will work extensively with Technology team and interact with foundries to perform technology assessment, evaluation, characterization, and yield projections. Will translate fab design rules into circuit design rules, perform spice simulations, and interact extensively with design and CAD teams.

Experience Required

* Experience in Digital CMOS VLSI design
* Knowledge in deep submicron technologies and device physics
* Experience in processor design from a circuit level
* Reasonable familiarity with CPU/SOC microarchitecture
* Ability to work in a team, deliver tasks
* BSEE + 6 years experience or MSEE + 4 years experience

Additional relevant experience (not required)

* Knowledge of different silicon foundries
* Knowledge of statistics
* Familiarity with EDA tools
* Programming skills

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P&R CAD Designers [Job ID# D111]

Job Description

Participate in the support/place & route of a high-performance low-power system on a chip/CPU. Will work extensively with circuit/logic team on developing a methodology for P&R style design. Will require support of commercial EDA tools and will also require internal tool development as necessary.

Experience Required

* Experience in CAD support of High-Speed ASIC or Digital CMOS processor-based custom designs preferred. We have openings in the following area:
    o Place and Route - SOC Encounter or Astro/Magma Based Flows
* Experience in support of either processor/custom design or SOC/ASIC design
* Strong Scripting skills (PERL/TK/C) a must
* Ability to work in a team, deliver tasks tasks in a fast-paced environment

Additional relevant experience (not required)

* Previous chip tapeout experience a plus
* Fundamentals of Digital CMOS design
* Fundamentals of CMOS layout design and requirements

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SOC Microarchitecture Verification [Job ID# A106]

Job Description

Responsible for verifying the functionality and performance features of a high performance SOC microarchitecture, which includes CPUs, coherent bus, and high speed IO interfaces such as PCI Express and MAC. Develop and use architecture/microarchitecture knowledge to write tests, test plans, and verification environments. Work with designers on RTL model debug, bug fixes, and integration.

Experience Required

* Strong background in architecture, logic design, and software programming
* General CPU, coherency, and IO interface architecture knowledge
* Fluent in Assembly, Verilog, and C
* Work well in team environment

Additional relevant experience (not required)

* Architecture knowledge of networking and IO interfaces
* Experience in C++, PLI, and PERL
* Transaction based random testing
* RTL coding experience
* Logic formal verification

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Implementation/Circuit Design [Job ID# D101]

Job Description

Participate in the the design of a high-performance low-power system on a chip/CPU. Will work extensively with CAD and architecture teams to define a block and take it from definition, perform feasibility spice simulations, write and debug RTL, draw schematics, optimize layout and perform the necessary backend checks. Will be responsible for delivering the block to work under a tight timing and power budget

Experience Required

* Experience in Digital CMOS custom design
* Experience in processor design from a circuit level
* Reasonable familiarity with CPU/SOC microarchitecture
* Design experience in deep submicron technologies and basic device physics
* Design experience in low power methodology
* Design experience in dynamic circuits
* Ability to work in a team, deliver tasks

Additional relevant experience (not required)

* Custom methodology development
* Scripting skills (PERL/TK/C)
* Close familiarity with custom EDA tools
* RTL/Verilog coding experience
* SRAM/Cache design experience

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Logic Design Engineer [Job ID# D109]

Job Description

Participate in the design of a high-performance low-power System On a Chip("SOC")/CPU. Will work extensively with implementation, CAD and architecture teams in the design of an SOC block from the top level definition, RTL coding, synthesis, floorplanning, place and route, timing closure, formal verification, SI work, power analysis.

Experience Required

* MSEE plus 4 years experience
* Design experience and background knowledge covering SOC blocks such as I/O interfaces, network protocols, memory coherency, bus protocols and high speed serial interfaces
* Experience in verification flows for SOCs (tools, scripts, flows)
* Experience in Verilog
* Working knowledge of CMOS VLSI and logic design
* Scripting skills (PERL/TK/C)
* Close familiarity with EDA tools
* CMOS design background
* Ability to work in a team, deliver tasks