

Analog Mixed Signal Design Engineer (Junior/ Senior/ Staff)

Job Description

Responsibilities include (but are not limited to):

- Responsible for the latest industry logic process technology, digital & analog circuit design for the next generation high-speed and low-power circuit solutions.
- Develop Analog Interface IPs such as Data Converters (A/D, D/A), Phase Locked Loop (PLL), High Speed Serial Interface PHY, DDR PHY, and reference circuits with emphasis on high-speed applications. Involve in the transistor-level design and development of high-speed interfaces such as Serdes, PLL, USB PHY, PCIe PHY, DAC, special I/O buffer, transmitter & receiver circuit.
- Take charge of Key IP developments for analog/mixed-signal IC design projects;
- Engage with other team members to establish design requirements and IP specifications. Provide technical support to more junior members of the team.
- Provide technical guidance to layout, application, and evaluation teams;
- Deliver design documents, including the design specifications, review forms, and evaluation plans;
- Definition, design, simulation, verification, and documentation of high-performance mixed-signal integrated circuits;
- Responsible for all activities ranging from architecture and design to silicon bring up and characterisation;
- Collaborate with Applications, Process Technology, CAD, Test, Reliability, Marketing and Product Engineering;
- Define, coordinate, and conduct design verification tests to ensure compliance to customer, environmental, and regulatory requirements.
- Supports customer applications questions and issues.

Minimum Qualifications:

- Experience in high-speed analog and mixed-signal design, architecture, system and integration aspects for A/D and D/A converters, PLLs, DDR, MIPI and HBM PHYs or other similar standards.
- Proficiency in the design of building blocks, such as high-speed op-amps, comparators, clock distribution elements, reference voltage and current source circuits.
- Knowledge of semiconductor device physics and advance process technology. Experience in circuit design, circuit simulation and custom layout design using industry EDA tools i.e. Synopsys, Cadence or Mentor.
- Excellent organization skills to prioritize conflicting requirements, and strong cross-site teamwork skills with the willingness to work independently.
- Good verbal and written communication skills to work effectively with teams spread geographically.
- Ability to technically mentor a few junior engineers.
- Ability to handle ambiguity, and working cross functional domains across internal and external teams.