

# IC Design Engineer

Play a key role in the design of new ICs that will make power conversion safer and more efficient

## Role

Seeking an Analog IC design engineer to work in a team environment developing analog mixed signal ICs for Industrial Control, Industrial Power, Isolation, and other Infrastructure applications. The position requires an analog circuit design background. Depending on experience level, the individual will participate in product roadmaps, definition, technology selection, design, and verification. The individual will have a role in system architecture, designing transistor-level analog circuit blocks, simulating sub-system performance, creating and using behavioural models of blocks and the entire IC. Doing and/or supervising physical layout is helpful. Verifying circuit and chip-level operation and performance, and assisting with tape-out related activities. The individual will be surrounded by experienced engineers with a comprehensive background in IC mixed signal design, power electronics and system design and development.

## Responsibilities

- With support from team: architects, designs and verifies circuits, logic, systems, algorithms, etc. to meet product requirements
- Determine design approaches and parameters
- Reports on design results through design reviews, in accordance with company quality requirements and resolves action items generated as a result of these reviews
- Detailed documentation, silicon evaluation and debugging
- Attends design reviews to provide input and learn from other designers' experiences
- Research design techniques through technical publications and seminars

## Who you are & the skills we seek

- An autonomous, curious and creative person
- A self-starter, willing to learn that excels through times of growth, ambiguity and change
- You adhere to the values of Heyday
- BEng, M.S. or Ph.D in Electrical or Electronic Engineering
- Good knowledge of MOS transistors and analog circuit design
- Advanced understanding of layout trade-offs for performance and size
- Previous design experience in **one** (ideally more) of the following areas:
  - Building blocks: OPAMPs, gm-C filters, switched capacitors, ADCs, DACs, bandgaps, comparators
  - Integrated power conversion circuits (charge-pumps, LDO's, rectifiers, amplifiers)
- 1+ years of analog/mixed-signal design experience developing mixed-signal ICs
- Excellent written and verbal presentation skills

**Additional skills (one or more of these are highly desirable)**

- Synopsys or/and Cadence analog mixed signal tool suite
- Laboratory measurement skills (analog, RF-as req.)
- Knowledge of circuit simulation tools, layout verification tools, Matlab, and UNIX
- Knowledge of AC/DC analysis (poles, zeros, compensation), loop dynamics and feedback systems

**What we offer**

- Permanent contract based in Grasse (Cote d'Azur, France)
- A dynamic workplace with lots of potential for (fast-paced) career growth
- An attractive compensation package including :
  - competitive salary
  - performance related bonus
  - stock-options (BSCPE) plan
  - comprehensive healthcare insurance
  - flexible working hours

**About Heyday**

Heyday is an innovative start-up that is active in semiconductor products in the space of power management integrated circuits. Founded 5 years ago, Heyday has already developed truly innovative isolated gate drivers, based on its own patented technology. The gate drivers will be brought to the market in the coming months. Many new products and functionalities are in the pipeline and that is the reason why we would like to strengthen our team with one or more design engineer(s). Founded with the founders' money, business angels, and Bpifrance, Heyday has already more revenues than expenses. It has also received funding from the ADEME for one of its innovative R&D projects. Nevertheless, a funding round will take place in 2020 to allow for exponential growth.

Heyday is based in Grasse at the "Côte d'Azur" in France, 20 minutes from Cannes and 40 minutes from Nice and its airport.