

Role: Senior Digital IC Design Engineer

Reporting to: Ben Jones, Director of IC Design

Location: UK Based (Remote Working)

Overview

Intrinsic is seeking a Senior Digital IC Design Engineer to help us implement and exploit our revolutionary embedded resistive memory technology. As part of a small but growing IC design team within an innovative semiconductor start-up, you will take a leading role in the development of the digital aspects of our IP portfolio, from design and prototyping through to production.

The successful candidate will help to bring Intrinsic's best-in-class embedded resistive memory (ReRAM) technology to market. Working closely with our analogue engineering team, device development department and industry partners, you will take an active role in a number of key projects, including test chip development, Al accelerator design, non-volatile memory integration and system-level performance analysis.

We are looking for a talented and imaginative engineer who is open to exploring new approaches to high-performance embedded system and digital logic design, and who is keen to apply their analytical and design skills to problems no-one else has solved before.

This is a full-time, permanent role. Applicants must have the right to work in the UK. The position is fully remote with occasional travel for company meetings and events.

Benefits

Intrinsic offers competitive salaries, employee stock options, a pension scheme, and a stimulating and friendly work environment.

Key Responsibilities

- Design and verify digital circuits related to Intrinsic's ReRAM technology.
- Evaluate power/performance/area trade-offs and optimisations.
- Establish and own the company's digital design flows.
- Participate in the design and validation of hardware prototypes and test chips.

Skills and Experience

Required

- 5+ years of experience in digital hardware development.
- Proven track record of specifying and implementing ASIC/SoC IP.
- Proficiency in RTL coding (Verilog/SystemVerilog preferred).
- Knowledge of modern verification and validation techniques for digital circuits.
- Familiarity with RISC-V and/or Arm embedded processor architectures.
- Experience with implementing memory subsystems, ideally in an AI context.



Desired

- Knowledge of digital back-end flow requirements (e.g. floorplanning).
- Basic embedded software development skills.
- Familiarity with the IoT/edge compute/MCU application space.
- Understanding of neural network algorithms.

Education Requirements

Bachelor's degree in Electronic Engineering, Computer Science or a related field.

Personal Attributes

- Enthusiastic and innovative with the ability to think critically and creatively about engineering problems and generate robust solutions.
- Able to move with ease between a high-level, big-picture view and a low-level, detail-oriented approach.
- Enjoys the freedom of working independently with minimal supervision.
- Participates wholeheartedly and respectfully in team processes and conversations.

How to Apply

Send your CV, along with a brief statement explaining your suitability for the role, to careers@intrinsicsemi.com.

Applications are currently being accepted on an open-ended basis.

About Intrinsic

Intrinsic Semiconductor Technologies is a next generation memory technology company. Based on more than a decade's research at University College London (UCL), Intrinsic has developed an innovative approach to non-volatile memory using resistive random-access memory (ReRAM).

Our technology can read and write data 10x to 100x faster than existing solutions, and is fully CMOS compatible – making it easy and cost effective for foundries to integrate the technology within existing chip manufacturing facilities. Together, these technological advantages will allow data hungry applications to overcome the memory bottleneck caused by current external flash memory, delivering dramatically higher performance at a much lower energy consumption.

Intrinsic was founded in 2017 by Professor Tony Kenyon, Dr Adnan Mehonic and Dr Wing Ng, leading researchers into non-volatile memory at the Department of Electronic and Electrical Engineering, UCL.

For more information, visit www.intrinsicsemi.com.