

SoC IP Design and Verification

Internship

GreenWaves Technologies is a fabless semiconductor company based just outside Grenoble, France. We were formed in 2014 with the mission of revolutionizing intelligent sensors and devices. We have developed GAP8, an ultra-low power IoT Application Processor. GAP8 enables devices to handle image, motion and sound data with ultra-low energy which allows years of operation on batteries bringing low installation and operation costs.

We are actively participating in two Open Source projects that provide some of the components in GAP8's design, the **RISC-V** Instruction Set Architecture (ISA) and Parallel Ultra Low Power (**PULP**) projects. The target of this internship is mainly to design and maintain the IP micro-DMA (uDMA) which is responsible for communication with peripherals.

Responsibilities:

- Help in next processor uDMA IP design and verification, with three steps:
 1. Research in the flow and development methodologies
 2. Investigation and development of methods to evaluate coverage of test cases
 3. Complete the development of efficient test cases to cover main part of the Verification.
- Elaborate documentation for uDMA peripheral IPs

Required skills:

- BAC + 5, CS or EE master 2
- System Verilog and linux script, tcl, bash, etc.
- Proficiency in embedded programming, C, C++
- Experience in Modelsim, Git

Desired skills:

- Knowledge of design techniques for low-power
- Experience of Xilinx FPGA is favorable
- Experience in VHDL or Verilog project about I2C, UART is favorable
- Proficiency in English, strong motivation and will to work in international team

Employment type: Full - time;

Duration : 6 months;

Location : Villard Bonnot (near Grenoble, France)

Remuneration: 1000 Euros/month + 200 Euros/Month (bonus)

Please send your application to careers@greenwaves-technologies.com