

Microprocessor architect

STMicroelectronics is a leading semiconductor company specialized in the design of devices for embedded applications in the Consumer, Industrial and Automotive fields.

The company has a long experience in the design of microprocessors whose instruction set is often customized to increase performance and energy efficiency in the different application domain.

The candidate will be the leader of a new microprocessor design, managing the specifications and the architecture definition.

Job description

The jobholder will define the architecture of a new generation of application specific microprocessors to achieve the performance and energy efficiency targets for the selected embedded applications, with results better than the competition.

The work will start from the analysis of the key algorithms of the multiple target applications, will go through the simulation of the microprocessor ISA and will end in the definition of the microarchitecture.

Skills

Preferred knowledge in microprocessor design (ARM or RISC-V or MIPS) and memory architectures, compiler machine descriptions, microprocessor modeling, embedded systems architectures.

Preferred knowledge in DSP algorithm development in MATLAB (such as wireline/wireless baseband processing, AI/audio/video processing, automotive entertainment, etc.) and their constrained implementation in C/Assembly.

HW implementation and RTL design knowledge is a plus.

Strong analytical and problem solving skills, attitude to work autonomously as well flexibility to acquire new skills in the team.