Job Title: Sr. VPU RTL Design (Full Time or Contractor)

Employment Type: Full Time or Contractor

Location: USA – Hybrid: Online and Remote

Department: VLSI

Description:

Esperanto is looking for enthusiastic engineers to join our Vector Processing Unit (VPU) RTL Design team. Working closely with the others on the team, you will be responsible for designing the VPU integer and floating arithmetic, vector and tensor datapaths, pipeline control logic, as well as their integration into the larger SoC. We are looking for highly talented, self-motivated, and versatile engineers that will push hardware to the highest performance and quality standards.

Responsibilities

- Own, develop, and drive the full design process of a high performance RISC-V VPU.
- Write microarchitecture specifications and implement robust RTL in Verilog.
- Work with the design verification team to draft test plans, debug test failures, and ensure functional correctness.
- Synthesize RTL to logic gates using standard CAD tools and create timing constraints.
- Interact closely with the physical design team to ensure proper backend implementation.
- Support silicon bring-up and diagnostics.

Qualifications

- BS or MS in EE.
- 5+ years of experience in FP, SIMD or VPU RTL design.
- Strong understanding of RTL design methodologies and practices.
- Knowledge of IEEE FP16, FP32 and FP64 data types and operations
- Knowledge of RISC-V Vector operations (INT 8/16/32/64, FP16/32/64)
- A solid comprehension of other logic blocks common in CPU clusters such as prefetchers, caches, Load/Store unit and bus interfaces.
- Five or more years of experience in RTL design using Verilog and System Verilog.
- Experience in physical design, design verification, and lab bring-up is a plus.
- Familiarity with Python, Perl, or other scripting languages is a plus.
- A team player in a chip design startup environment who can effectively interact with sites in different geographical locations and time zones.

Benefits

- Base salary range is $150,000 - $300,000.
- The actual salary of a successful applicant may vary from the posted range based on a candidate's experience, training, education, location, and/or other legitimate business reasons.
- You will also be eligible for stock options and benefits.