

Job Posting:166888 - Position: S25 Firmware Engineer (Intern) 166888B E1

Co-op Work Term Posted:	2025 - Summer
App Deadline	03/05/2025 09:00 AM
Application Method:	Through Employer Website
Posting Goes Live:	02/20/2025 02:41 PM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	Astera Labs
Address Line 1	4370 Dominion St
Address Line 2	Suite 240
City	Burnaby
Postal Code / Zip Code	V5G 4L7
Province / State	BC
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Summer
 Job Title 	S25 Firmware Engineer (Intern) 166888B E1
Position Type	Co-op Position
Job Location	Toronto, ON
Country	Canada
Duration	4 months
Salary Currency	CAD
Salary	Salary Not Available, 0 Major List
Job Description	

Astera Labs is a global leader in purpose-built connectivity solutions that unlock the full potential of AI and cloud infrastructure. Our Intelligent Connectivity Platform integrates PCIe®, CXL®, and Ethernet semiconductor-based solutions and the COSMOS software suite of system management and optimization tools to deliver a software-defined architecture that is both scalable and customizable. Inspired by trusted relationships with hyperscalers and the data center ecosystem, we are an innovation leader delivering products that are flexible and interoperable. Discover how we are transforming modern data-driven applications at www.asteralabs.com.

The mission of this internship is to architect and develop firmware and microcontroller subsystems for Astera Labs' SoC and systems products. Firmware is responsible for implementing the major differentiating features of Astera Labs' products. As such, firmware is considered equally important to the hardware, and the firmware team is often customer-facing accordingly to ensure the needs of the customer are fully comprehended.

Basic qualifications:

- Strong academic and technical background taking Computer Science, Electrical/Electronics/Software Engineering or equivalent.
- Completed one or more Co-op terms of firmware or embedded software development.
- Completed one or more courses in Real Time Operating Systems (RTOS) or detailed use of an RTOS during a prior coop term or project.
- Professional attitude with the ability to formulate theories and well thought out questions as part of helping debug/develop complex systems.
- Authorized to work in Canada and available for 4 or more months.

Required experience:

- Proficiency in C (preferred) or C++, including development of firmware.
- Proficient in Python for scripting.
- Experience with developer workflows, SCM (preferably git), code reviews, CI.
- Experience developing firmware to execute in on-chip microcontrollers.
- Experience debugging firmware/hardware issues using JTAG, trace logs, or other lab tools.

Preferred experience:

- Knowledge of tools like PyTest or GoogleTest is an asset.
- Knowledge of software build environments, CI/CD, gcc/make is an asset
- Experience with lab hardware/firmware debug is an asset.
- Experience developing firmware for PCIe/CXL/Ethernet is an asset.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website

Cover Letter Required? Optional

Special Application Instructions

Application Link: <https://job-boards.greenhouse.io/asteraeearlycareer/jobs/4486720005>

Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website.

Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received.

Students should submit their applications as soon as they are ready.