arm

Changing The World. Again.

Arm is defining the future of computing. A future built by one of the most successful technology ecosystems in the world. A future built **on Arm.** We are redefining what's possible in cloud computing, transforming the automotive industry, enabling a thriving IoT economy, and making the metaverse a reality.

Company Highlights

As we are shifting into a new era of AI, integrating our Design Center in **Sophia Antipolis** will offer you the excitement of shaping the Future Wave of Computing that will be fundamental in making the world we live in, more efficient and more sustainable.

- World's leading semiconductor IP company
- Arm technologies reach 70% of the global population
- More than 6,000 employees from 85+ nationalities
- More than 250 billion Arm-based chips shipped to date
- An ecosystem of more than 1,000 partners

Our Business Groups

CPU Verification

The team verifies Arm IPs to the highest quality standards using a wide range of methodologies, tools, and programming languages, from constrained random simulation to real applications on FPGA. Innovative formal methods are also at the heart of the Arm verification strategy.

Skills: System Verilog, C, C++, Python, UVM, Machine Learning

CPU Physical Implementation

The team looks after the physical parameters of products: Area, Frequency, Power, and testability. We work in a close loop with micro-architecture and cells/Macro teams to build and improve methodologies and quality of designs targeting 3nm and beyond.

Skills: VLSI, HDL, TCL scripting, Synthesis, PnR

CPU Performance Analysis & Modelling

The team is in charge of all performance-related activities for CPUs developed in the center. This ranges from the enablement of a configurable C-based microarchitectural model, and associated studies (in collaboration with designers), to RTL performance analysis, verification, and correlation on various platform targets.

Skills: CPU microarchitecture, C, Python

CPU Microarchitecture & Design

The team defines the specifications and develops the most efficient processors that will be embedded in a billion devices. They are responsible for delivering the best Performance, Power, and Area (PPA) solutions through the most innovative and novel approaches.

Skills: CPU microarchitecture, HDL, scripting

Productivity Engineering HW

The Productivity Engineering group enables increased engineering productivity and quality through innovation and collaboration. Our team is developing software solutions to enable and optimize the design processes for HW Engineering. This goes from enabling ML driven flows to running on Cloud on Arm infrastructure through any standards to maximise efficiency at any level.

Skills: EDA tools, software programming, scripting, Python, Cloud

Central Technology CPU

We are investigating the benefits and impact of new technologies from SW applications down to micro-architecture on CPUs. We are extracting relevant traces from complex applications, running some studies on real devices for various operating systems (iOS, Android, Linux,…), running, tuning, and modifying CPU power and performance models to understand bottlenecks and propose improvements to the CPU micro-architecture design teams. We are working closely with CPU design teams, architecture teams defining the instruction set, Performance analysis Teams, and many others.

Skills: C, C++, Python, Jupyter, Git, Linux, Performance analysis, Computer Science CPU micro-architecture

Architecture & Technology Group

The mission of the team is to develop and actively deploy the next evolutions of the Arm architecture. Working at the boundary of software and hardware, we drive the Arm CPU architecture for its adoption in different market segments. By analyzing novel applications and technologies, we align with long-term industry trends to improve performance and efficiency.

Skills: CPU architecture, C, assembly

Our Business Groups

Solutions Engineering Physical IP

- The **Analog / Mixed-signal IPs** team delivers innovative AMS IPs for increasing SoC performance and robustness. It covers sensors (temperature, voltage …), fast adaptive clocking, and voltage regulation IPs developed in the most advanced technologies (3nm). They use plain analog building blocks and advanced digital parts as well.
  Skills: Analog/MS, digital, transistor level

- The **Logic** team is developing standard cell libraries from design to view generation and validation. We are also working with different teams to find solutions to push ahead arm-core performances. Standard cell libraries are at the heart of all such development steps.
  Skills: Cell and path optimization (design, layout), liberty, power, and physical views, PnR understanding, Verilog, cell-aware

- The **Memory** team develops high-performance Embedded Memories including SRAM, Register File, ROM, and eMRAM compilers as well as Fast Cache Instances (FCIs). The team is designing and optimizing Memory IPs on the most advanced technology nodes. Our Memory IPs are contributing to building Arm's compute subsystems with best-in-class PPA targeting four main markets: Automotive, Client, IoT, and Infrastructure.
  Skills: Memory architecture, transistor level design, statistical simulations, EDA views, layout

SE SoC Engineering

- The **System in Package Integration** team optimize, design, and verify systems in package that integrate multi-chip modules which could be in the form of 3D stacking of silicon dies. The team designs the package and does all the signal and power integrity verifications for the whole system (including PCB and voltage regulator modules) using specific electromagnetic extraction tools and spice simulators.
  Skills: package design, high-speed interface interconnect design, power integrity knowledge, S/Y/Z-matrix handling

- Starting from specifications, the **Front End Design** team designs digital circuits, from IPs level to System-On-Chip level, describing them in RTL language. We also take care to define, develop, and run pre-silicon tests to validate all features and stress the design in corner cases to find all possible bugs.
  Skills: Understanding of SoC architecture, RTL coding with Verilog, System Verilog, UVM

- The **Post Silicon Validation** team is in charge of developing the state-of-the-art test solution which aims to validate and qualify ARM IPs on the most recent technology nodes (3nm). A complete test solution foresees the development (SW) of a test program on an ATE (Automated Test Equipment) and the development of all the test boards (HW) needed as interfaces with the ATE. A deep data and failure analysis (FA) activity is also one of the main tasks of the team.
  Skills: coding (C++, Java, Python), PCB design, data analysis

SE Implementation

The **Silicon Enablement Implementation** team optimizes Arm core physical implementations, suggesting new implementation techniques, and working with EDA companies and foundries. We develop improved synthesis, place, and efficient route techniques, and analyze and support key partners. This gives us the opportunity to explore sophisticated design methods and develop ways to use those technologies' strengths and mitigate their weaknesses.

Skills: BE/BTECH/MTECH, synthesis, place & route, CTS, timing convergence, IR/EM checks and signoff DRC/LVS closure

SE Design Enablement

The **Design Enablement** team is enabling Arm physical IP and Implementation design teams by defining, prototyping, deploying, and supporting solutions. We cover topics related to EDA tools and linked to infrastructure as well as software internally developed. Our team is developing software solutions to enable and optimize the design process for Implementation flow. We are also providing external customer support.

Skills: EDA tools linked to IP design and implementation, software programming, internal flows, Cloud

The Recruitment Process

STEP 1
APPLY
Pick a role that best meets your skills and interests.

STEP 2
SUPPORT
Let your recruiter know if you have questions or if you need any support

STEP 3
INITIAL INTERVIEW
Tell us what fuels your passion for progress.

STEP 4
FINAL INTERVIEW
Meet our teams, learn more about Arm and share your talents, in person.

Our Benefits

Holiday Allowance

Competitive salary

Health Insurance

Mentorship

Testimonials

- For my internship at Arm, I worked on neuromorphic neural networks. I greatly appreciated the opportunity my manager has given me to work on a quite original and exciting topic. This resonates with the company's focus on 'low power consumption' and I really enjoyed the creative freedom I got in developing solutions. - Faustine Rossi

- The experience of the internship in Arm allowed me to discover and learn a lot of things that led to a spark in my passion for Formal Verification. The innovative nature of the work done at Arm allows me to always push the boundaries of modern technology and I was able to be selected to present my internship work at a partner's conference. - Demetrio Bori

- The internship was technically challenging and gratifying: I worked on improving computer arithmetic performance and my findings were directly useful to a product in development. - Nadine Jalal

The Future is Built on Arm.
Build Your Future With Us.

Would you like to join our Early Careers programs?

Find Out More

careers.arm.com