

MIPS™ **Atlas Explorer** is a software development and optimization platform designed for the MIPS Atlas portfolio of compute subsystems. It combines the strengths of virtual platforms with micro-architectural performance modeling, enabling software teams to optimize workloads while hardware is still being designed. The benefits are:

- Shift-left optimization for software & platform
- Data-driven insights into workload execution
- Pre-silicon access to system level testing
- Digital-twin conceptualization of platforms for all MIPS compute subsystems
- Reporting shared with broader teams for increased collaboration



With Atlas Explorer, software teams can optimize applications in parallel with hardware design teams, ensuring a more cohesive development process. Atlas Explorer enables the generation of detailed performance reports that provide micro-architectural insights within real application contexts, allowing for more informed decision-making.

Atlas Explorer is a software performance exploration platform that gives visibility into hardware utilization based on a customer provided workload. The hardware insights can be used to optimize workloads for specific MIPS processors. The client application allows for intuitive exploration and individual usage where reports can be shared. The python API supports software quality and regression workflows in CI/CD systems.



Delivered as a Visual Studio Code Extension, it allows developers to visualize performance data in a way that highlights critical optimization areas. Custom reports filters zoom into problem spots, making it easier to diagnose and resolve inefficiencies.

Performance data generation is decoupled from software development, enabling those outside the core team to contribute to optimization efforts without rebuilding software from scratch. Virtual platforms have already improved software developer efficiency, especially in DevOps and quality assurance flows.

MIPS is pushing the boundaries of team collaboration and productivity across the semiconductor value chain.

[Contact us to learn more.](#)

