

## Special issue on

## Research on semiconductor design

## CALL FOR PAPERS

Submission Deadline: August 26, 2023

Publication Date: Jan 2024

This Issue is now open for submissions. Manuscripts should be submitted online at aber.apacsci.com by registering and logging in to this website. Then you can submit the manuscripts.

Papers are published upon acceptance, regardless of the Special Issue publication date. In our journal *Chip Design and Manufacturing*, a special issue is calling for papers about semiconductor design.

Semiconductors are the unsung heroes of the technology world, working behind the scenes to power everything from toys and smartphones to cars and thermostats. In recent years, they have enabled breakthrough technologies, including artificial intelligence and machine learning, that have transformed the way we live and work.

Semiconductor chips are made by building up layers of interconnected patterns on a silicon wafer. The semiconductor chip manufacturing process involves hundreds of steps and can take up to four months from design to mass production. Semiconductor materials are at the heart of integrated circuits, also known as monolithic integrated circuits, integrated circuits, microchips, or just plain old chips. By combining a large number of tiny transistors onto a single chip, a very small chip can be designed to provide faster and more reliable components for electronic devices, with low production costs, durability, low energy consumption and low heat generation. They can be mass-produced by semiconductor companies in generic configurations or specially designed components. When designing semiconductors, they generally fall into either the digital or analog category, depending on the needs and cost points of the components to be manufactured.

In this issue, semiconductor chip design will be the main theme. Related topics are all highly welcome such as **trends in semiconductor design**, **challenges of semiconductor design**, **semiconductor design software**, **3D IC design**, **semiconductor manufacturing**, etc.