

Special issue on

Advances in on-chip antenna

CALL FOR PAPERS

Submission Deadline: August 26, 2023

Publication Date: Jan 2024

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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 the on-chip antenna.

Currently, the most common method of implementing wireless systems is by assembling discrete components such as digital integrated circuits (ICs), mixed-signal ICs, radio frequency integrated circuits (RFICs) and passive components on a printed circuit board (PCB). In some cases, the antenna can be on the same PCB as the IC. This PCB antenna is connected to the RFIC via bonding wires and bonding pads, which unfortunately introduces additional radio frequency (RF) insertion loss and transmission uncertainty because the RF characteristics of these bonding wires and bonding pads are not well characterized, especially for higher frequencies. Despite the challenges mentioned in the previous above, much work has been conducted in the area of on-chip antennas featuring the integration of antennas with other front-end circuits on the same chip in mainstream silicon technologies. Throughout the past two decades, tremendous efforts have been made to resolve the challenges and issues related to on-chip antennas.

In this special issue, we would like to focus our topics on on-chip antenna such as **Incompatible Complementary Metal Oxide Semiconductor (CMOS) stack-up, co-design of circuits and on-chip antenna, on-Chip Antenna layout issue, on-chip antenna characterization, Antenna on Chip (AoC) design.**

We would very much welcome any information on the use, pros and cons and progress of on-chip antenna or other related topics. Potential topics include but are not limited to the ones mentioned above.