#### **STEM Workshop IPCEI on Microelectronics and Communication Technologies**

# **Unlock the Power of Chip Design and Simulation**

# AnaGen and the InfineonSpice Simulation tool 12 November 2024, 09:00-03:30 pm

Infineon Technologies @ University of Sarajevo at the Faculty of Electrical Engineering Bit Alliance lab, Zmaja od Bosne bb, 71000 Sarajevo

This workshop is jointly hosted by the global company Infineon and University of Sarajevo Faculty of Electrical Engineering and supported by ADVANTAGE AUSTRIA.

## Be welcomed to join our session and discover more about:

- Infineon Technologies Austria AG & IPCEI ME/CT
- the Power of Chip Design and Simulation

You are cordially invited to participate in a comprehensive workshop, featuring two exciting topics that will take your chip design and simulation skills to the next level.

#### InfineonSpice Simulation Tool

Building upon more than 35 years of experience in circuit simulator development, Infineon recently shared for free its powerful simulation tool with circuit enthusiast around the globe. Experience an in-depth exploration of the InfineonSpice simulator that supports you in development and optimization of your own circuits. Our experts, Dr. Emira Dautbegovic and Dr. Christoph Kowitz, will guide you through:

- Tool installation and downloading models and reference designs via the Library Manager
- Designing own circuits using component models from InfineonSpice's extensive library
- Simulating and analyzing your circuits using the powerful InfineonSpice simulator

By attending this workshop, you will gain a deep understanding of the InfineonSpice benefits and learn how to use the tool effectively for own product development wrt. circuit design, simulation execution and results review.

#### AnaGen: Revolutionizing Analog/Mixed-Signal IC Design **Efficient Methodologies for Next-Generation Designers**

The increasing complexity of analog and mixed-signal ICs has led to longer design times, higher costs, and increased risks. Traditional design flows, which rely heavily on manual iteration and simulation, are no longer sufficient to meet the demands of modern IC design. This presentation will explore the challenges of conventional analog/mixedsignal IC design and introduce innovative methodologies that can





enhance design efficiency, reduce time-to-market, and improve overall design quality.

Dr. Videnovic-Misic Mirjana will introduce Infineon's AnaGen framework, a programmatic approach to analog IC design that leverages emerging technologies like Generative AI and machine learning. Through real-world examples and case studies, the session will demonstrate how AnaGen can improve design productivity. It will conclude with a live demonstration of the framework and an overview of available internship and MSc thesis opportunities under the AnaGen umbrella.

#### Agenda:

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09:00-09:10 am	Welcome Faculty of Electrical Engineering Sarajevo, Prof. Dr. Tarik Uzunović, Advantage Austria, Damir Dervišefendić, Infineon Technologies Austria AG, DI Dr. Martin Mischitz
09:10–09:30 am	IPCEI ME CT, Infineon Technologies Austria AG, DI Dr. Martin Mischitz
09:30–11:20 am	<b>Thematic Session: InfineonSpice Simulation Tool</b> by <i>Dr. Emira Dautbegovic</i> and <i>Dr. Christoph Kowitz,</i> Infineon Technologies AG (please bring your laptops with you)
11:20-12:00 am	Refreshments & Drinks
12:00-02:00 pm	Thematic Session: AnaGen by Dr. Videnovic-Misic Mirjana, Infineon Technologies Austria AG
02:00-03:30 pm	<b>Refreshments &amp; Open sessions</b> to meet and greet students by <i>Christina Wariwoda, Dipl. Ing. Amira</i> <i>Derado,</i> IPCE PhD students sharing experiences, IPCEI ME/CT student mentoring round table

Wrap Up Language: "BHS" / English

For registration, please send an email by November 4th, 2024 to sarajevo@advantageaustria.org please add as Subject: Infineon Workshop and secure your place.

We look forward to meeting you there!

IPCEI Microelectronics and

Communication Technologies

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IPCEI Microelectronics and Communication Technologies



For more information about our Mission Future and IPCEI on Microelectronics and Communication Technologies, visit our homepage!

### IPCEI on Microelectronics and Communication Technologies

is the largest pan-European initiative in the field of microelectronics. It opens up significant opportunities for universities, research institutions, industry representatives, start-ups and engineering students from across Europe to address technological, market and societal challenges that could not otherwise be tackled. Infineon Austria is part of this strategic effort. We call it our Mission Future. You, too, can join our Mission Future and benefit from many opportunities! For more information about our Mission Future and IPCEI on Microelectronics and Communication Technologies, visit www.infineon.com/ipceiaustria

#### **About Infineon Austria**

Infineon Technologies Austria AG is a subsidiary of Infineon Technologies AG, a global semiconductor leader in power systems and IoT. Semiconductors are essential for mastering the energy-related challenges of our time and helping to shape the digital transformation. Infineon's microelectronics drive decarbonization and digitalization and enable groundbreaking solutions for green and efficient energy, clean and safe mobility as well as a smart and secure IoT.

Infineon Austria pools competencies for research and development, production as well as global business responsibility. The head office is in Villach, with further branches in Graz, Klagenfurt, Linz, Innsbruck and Vienna. With 5,886 employees (including around 2,500 in research and development) from 79 nations, the company generated revenue of EUR 5.6 billion in the 2023 fiscal year (ending 30 September). With research expenditure of 672 million euros, Infineon Austria is the strongest research company in Austria.

