

Sponsor Session

Presentations by Sponsor Institutions

Aug 24th, 15:40 – 17:40

Chair: *Jacobus Swart*

“THE SEMICONDUCTOR INDUSTRY IN THE HEART OF EUROPE”, *Wim Sohier*,
Flanders Investment & Trade

ABSTRACT:

Flanders, the northern region of Belgium, has a reputation as a pioneer in high-tech industries. Flanders boasts expert know-how in the nanotech field, centered around its five universities as well as IMEC, the world-leading research center for nano-and digital tech. From academic and research institutions and centers of knowledge and expertise to leading industry players, including a homegrown fabless ecosystem and international partnerships: Flanders has all the buildings blocks for micro- and nanotechnology innovations and applications. Flanders is also as known for its culture of innovation and R&D supporting such activities through grants and subsidies and the local R&D-friendly tax system. Come join us to learn about the opportunities and trends for the Brazilian business and R&D activities at the semiconductor sector in Flanders/Belgium.

Biography:

Wim Sohier, Msc EE, Science & Technology Counselor – Flanders Investment & Trade, As Science & Technology Counselor,

Wim Sohier is based in Silicon Valley. He was appointed in 2014 by Flanders Investment & Trade to stimulate strategic relations with the Americas. In addition to ramping up & heading the economic diplomatic representation on Sand Hill Road in Palo Alto, his specific focus area's include Information Technology, Semiconductors and Aerospace.

In the 9 year's leading up to 2014, Wim held management roles in the IT industry. A particular fun challenge in this timeframe was a P&L responsibility of 15 M EUR while managing remote R&D teams spread across Asia. He is equally proud having been a system engineer for the first Eurofighter Flight Simulator at Barco, technical product manager for DSL Broadband Gateways at Technicolor, technical marketing manager for Philips' first Android TV.

Wim, graduated as Electrical Engineer at University Ghent in 2005. After pursuing a PhD in the field of Image Processing, he left Europe to establish a strategic relations office in Hsinchu, Taiwan for IMEC, a leading research institute in nanotechnology. That office grew into a local R&D Innovation center employing >50 researchers.



“Stimulating and supporting the local Semiconductor ecosystem”, *Paul Malisse, imec*

Abstract

Imec is primarily known as an R&D institute but also hosts activities which are not purely R&D. Since end of the 80ties the imec IC-link department has been strongly active in supporting academics in their mission to train the engineers of the future. The Europractice service has been a key enabler to support access to training, tools and leading foundries. The success of the project has led to strong strategic collaborations with the key players in the semiconductor ecosystem who acknowledge the value of being part of such a project. This resulted in a broader service offering but also a broader target audience including startups and medium sized to large companies. Today, everybody that seeks support in their ASIC project, can be imec’s customer. Since almost 10 years, imec IC-link also has local presence in Brazil to support Academia and Industry with those services.

Biography

Paul has a master degree in electronics from the Politechnical Highschool Bruges-Ostend. After graduation he joined imec and has been working in the Industrialization unit with a mission to stimulate the semiconductor ecosystem with initial focus on Europe for both Industry and Academia. Paul was heavily involved in the EURO PRACTICE service since the beginning and has held different positions throughout his career at imec. He is now leading business development team with focus on ASIC services for specific regions and applications. In his role he has very strong connections with - and understanding of the foundry ecosystem.



“Accelerating Advancement in the Lab and Classroom with Keysight”, *Mauricio Kobayashi, Keysight Brazil*

Abstract:

Institutional Presentation of company, showing how innovation is completely revolutionizing the Education Industry. Example of Next-Generation Breakthroughs will be presented in Digital/Photonics/Embedded, mmW/THz, Automotive, 5G and Quantum Computing. We also will present how Keysight can empower Educators to enhance student learning with new Keysight Educational Tools.

Biography:

Key account manager at Keysight Brasil with +20 year experience in several markets, including Aerospace & Defense, Wireless, Education, Semiconductor and Data communications.



“Opportunities and Perspectives for the Semiconductor Industry in Brazil after COVID-19”, Rosana Casais. ABISEMI

Abstract:

The Covid-19 pandemic devastated the world and, among many changes, transformed substantially the way people communicate, how they work and so many routines and business that we were used to. In this scenario, there was an indiscriminate increase in the use of components for different industries, especially TICS, where computers and cell phones were the protagonists of social, business and even school relations. This situation promoted a considerable increase in demand that counteracted the recessive scenario that the pandemic beginning has indicated. So, other sectors, such as the automotive, has experienced the global components unavailability that is responsible for the automobiles manufacture interruption. In Brazil it was no different and this reality brought to light their total dependence on international suppliers. In order to cope with this situation, some important dialogues have already started between different working groups and involving public and private actors, especially with industry associations. This sector interaction seeks to evaluate how Brazil can transform this challenging scenario into a new great opportunity, providing the investments and conditions that enable the industry components to offer also for the automotive market.

Biography:

Rosana Casais is the Institutional Director of ABISEMI and holds a degree in Electronic Engineering from PUCRS, a Master's Degree in Computer Science and an MBA in Technology-Based Business Management from UNISINOS. Rosana began her career as a software designer at Edisa, nowadays HP of Brazil, and worked for 18 years as project coordinator and R&D Manager at Altus, a national company in the industrial automation industry. In 2009, Rosana joined HT Micron as co-founder of the company, which is the result of a joint venture between Brazil and South Korea, focused in the area of encapsulation and testing of semiconductors in Brazil. At HT Micron, she was responsible for the company's relationship with the federal and state governments in order to improve public policies for this industry, as well as with funding agencies to finance innovation projects for new products and process technologies.



“Development of IoT LPWAN Devices.”, Rogério Moreira, Smart Modular Technologies Brazil

Abstract:

This presentation is intended to address information about the development of LPWAN IoT devices by SMART MODULAR TECHNOLOGIES BRAZIL. We chose to use ASSP components as a preliminary step of the development of SiP devices, which is being carried out at the Integrated Circuits Package Laboratory at Instituto Eldorado.

Biography

Rogério Moreira is Master in Business Management by PUC-SP, MBA in Marketing Management by FGV-RJ and graduated in Electronics Engineering by FESP-SP. Has long professional experience in design and development of embedded systems. Has worked for large semiconductor companies supporting development engineers in South America. Has long experience as lecturer in Computer Architecture. Recently worked as sales manager for Chipus Microeletrônica S.A. and currently is senior manager for New Business Development at SMART MODULAR TECHNOLOGIES BRAZIL. He is IEEE and RISC-V International member.



“Challenges and Opportunities for Global Semiconductor Businesses”, *Izaias Silva, Silvaco*

Abstract

The semiconductor market at the post-pandemic scenario is already recovering. There are several productive sectors leading the way on the market landscape. On this talk, we will see how the post-pandemic period is affecting these sectors, the importance of joint initiatives combining government, academy and industry and how the pandemic disruption of global supply chain accelerated the expansion of the semiconductor infrastructure and ecosystem. Also, we will show how SILVACO prepared for this situation and how can SILVACO partner with various actors in the value chain to overcome challenges and leverage on the opportunities for global semiconductor business arena.

Biography:

Izaias Silva is SILVACO Strategic Sales director, responsible for SILVACO Sales and Marketing strategy in Brazil. Prior to SILVACO, Izaias took several executive positions at national and international companies as STMicroelectronics, BROADCOM, TOTVS and UNITEC. Izaias worked for several R&D institutes in Brazil (Genius, CTI, Venturus and Atlantico). Izaias has a BSc in Electrical Engineering at UFPE, MSc at UNICAMP and PhD at Carnegie-Mellon University and a MBA at Fundação Getulio Vargas on Enterprise management.



“ASIC design for ultra-low power consumption coherent optical DSPs”, *Jacklyn D. Reis, Idea! Electronics Systems.*

Abstract

This talk will address design challenges to cope with the high level requirements for high-speed coherent optical interconnects. In the first part of the talk, we address the system level requirements for high-speed transmission focusing on energy consumption and lower cost per bit. Finally, we address the main challenges on the ASIC side covering front-end, verification and back-end using deep submicron processes.

Biography

Dr. Jacklyn D. Reis has over 15 years experience in optical communications focusing on high-speed optical transmission, networking and digital signal processing. As a Microelectronics D.U. Director, he leads 60+ top engineers developing signal processing ASICs for optical transceivers in deep sub-micron nodes.

