

Keynote Speaker: Bernd Adler

Wireless CTO & Div. Vice President Platform Engineering Group.
Intel Mobile Communications

Wednesday, Oct 15

9:00-9:50

Ballroom Strauss A & B



Tomorrow's Smart Mobile Systems - by the Power of Ten

The development of advanced mobile communication and multimedia devices face unprecedented challenges. "Internet of Things", "Smart Everything", or "Everything connected" are the new buzzwords characterizing future applications. Their cornerstone will be highly integrated System-on-Chip (SoC) solutions offering a wide range of features at lowest costs and minimal energy consumption. These advanced SoCs cannot be mastered without an end-to-end optimization of the entire development process with improved EDA standards, methodologies and tools. Advanced system features result in a skyrocketing complexity of firmware and software. At the same time, the innovation cycles are constantly shrinking. These contradicting requirements can only be reconciled through a dramatically increased development efficiency.

Today's system and software development is based on virtual prototyping, enabling early feature development where hardware and software can evolve together, including investigations on different system architectures. In addition, silicon, package and printed circuit board need to be developed concurrently to meet the requirements of simultaneously active communication technologies, without sacrificing an optimum system cost position. The final system integration and verification is not possible without extremely high technical expertise and a close collaboration across the entire system.

This keynote will cover: 1) the change in system properties, 2) the evolution in product development and their challenges, and 3) the requirements for the next generation EDA standards, tools and solutions.

Biography

Bernd has held the position of RF Chief Scientist and Head of Wireless System Engineering at Intel® Mobile Communications Group Wireless System Engineering activities engineering, line management, product management and site management positions at Infineon Technologies for over 12 years working on cellular transceivers for CDMA, WCDMA, WIMAX and LTE as well as 2G monolithic integration activities paving the way to ultra low cost products. Before this he held RF engineering positions working on modules and oscillators for Base stations. He received his diploma (electrical engineering) in 1989.