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How piezo MEMS innovate the audio and acoustic industry

The development of MEMS loudspeakers can be compared to the development of the LED technology, and will have similar effects on the audio industry as LED had and still has on the video industry.

In general, MEMS loudspeakers offer several advantages:

- Seamless integration with electronic PCB, indeed the speaker itself is built on a PCB substrate. Single or multiple speakers can be easily integrated on the same substrate together with other electronic components.
- Taking advantage of this seam less integration, USound is able to provide a smart audio module with analog and digital interface. This dramatically shortens the design process of audio products, allowing the customer to easily tune the audio response based on the specific application needs.
- Lower power consumption. The MEMS speaker, due to its own intrinsic high impedance demand lower driving current.

MEMS speakers are a new technology and their full potential has yet to be revealed, but already now, this technology provides unique features and compelling advantages compared to conventional speakers. In fast evolving audio market, early adopters of MEMS technology can provide unbeatable advantages to their end users.

Speaker Biography

Ferruccio Bottoni has almost 20 years of experience in semiconductor and MEMS industry. He started in 1995 at STMicroelectronics working on the flash memories. Subsequently he joined Robert Bosch GmbH in 1999 where he contributed to the ramp-up of MEMS in the automotive markets. He finally joined Sensor Dynamics in 2009 as VP operations and he has retained this position until 2013. During his career, he has held several positions as quality and reliability engineer, process manufacturing manager, technical purchasing manager and VP operations.

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