

Sensor fusion of audio processor, radar and MEMS microphones

Mobile World Congress 2017, Barcelona



Introduction

- › Far field voice capturing by audio beamforming combined with radar target presence detection
- › Infineon radar localizes and tracks the target precisely enabling the microphone array to set a beam to the audio source
- › By shifting the time base of each microphone while suppressing individual mic differences, the microphones are focused on a specific target to optimize sound recognition creating a superior user experience to existing voice enabled systems.



Potential Applications

- › Conference microphones
- › Digital Voice Assistants
- › Secure entry systems
- › Smart Home appliances
- › Smart TV & set top boxes



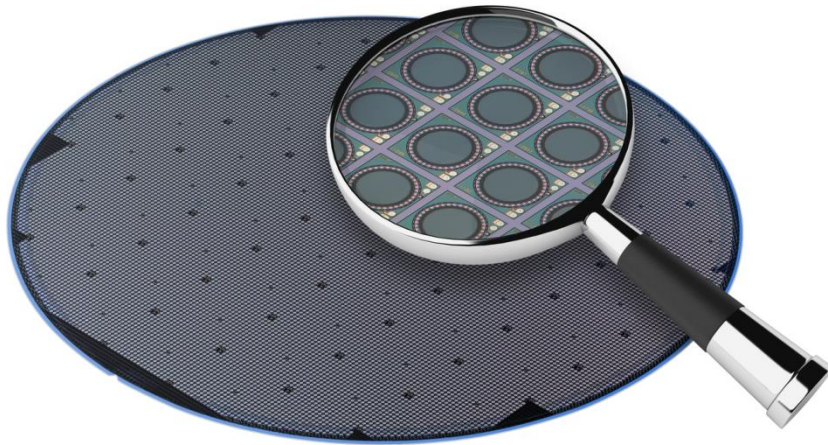
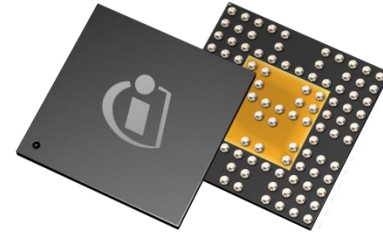
End User Benefits

- › Provides presence detection confirmation through focused LED array
- › Provides focused microphones for optimal sound recognition
- › Enables clear understanding of command and flawless execution
- › Presence detection prevents false trigger commands overheard by device



Demonstration Content

- › Infineon 60GHz radar IC
- › Infineon Ultra High SNR Microphones
- › XMOS Audio Processor





Part of your life. Part of tomorrow.

