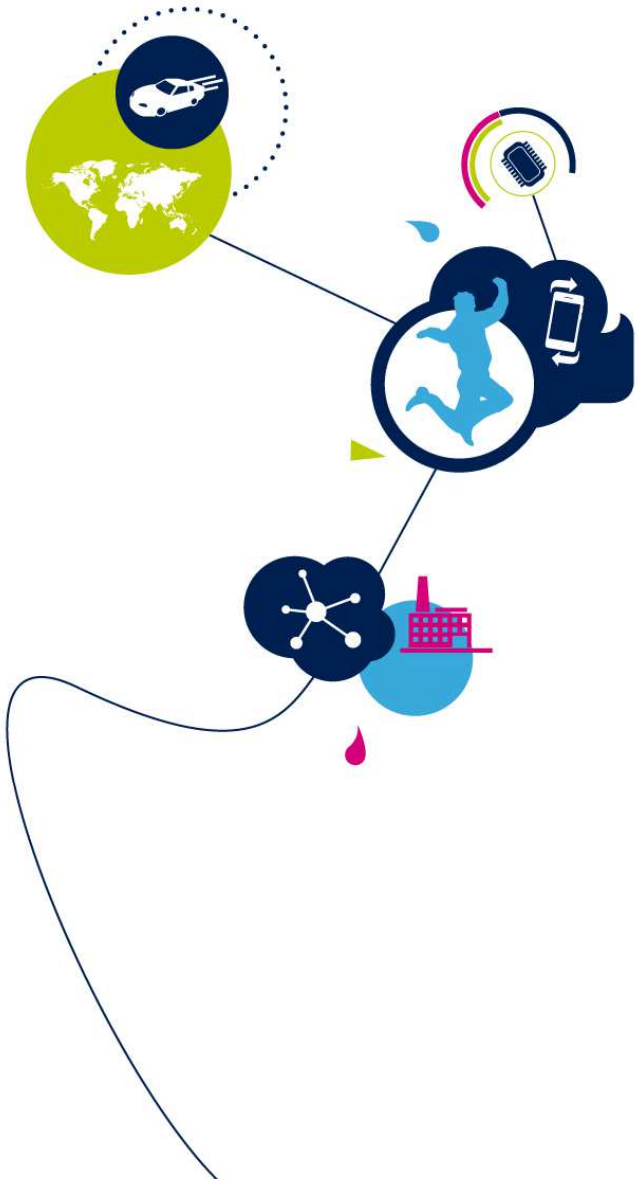
Amazon Alexa Home Control

- Single STM32H747 running Alexa services for Home Control
- Solution features integrated audio front-end
- Small form factor and cost effective microcontroller based solution for voice activated home control
- Scalable to other STM32 devices



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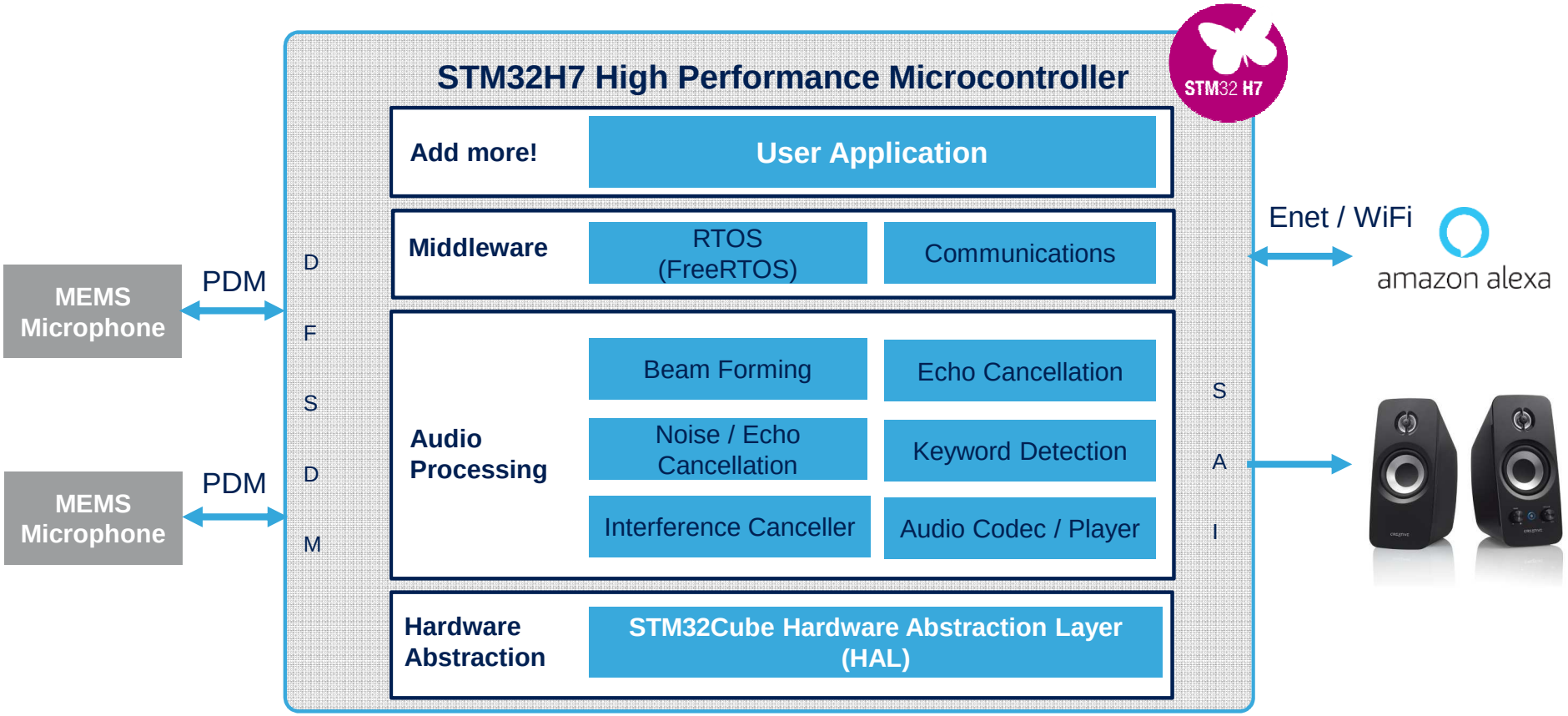
Amazon Alexa Home Control



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Amazon Alexa Home Control

STM32FH7 with two microphones speech recognition based on Sensory' s trigger word recognition and DSP-Concepts Audio Front End

Audio Front End with Acoustic Echo Cancellation, Beamforming, Interference Canceller and Noise Reduction

The STM32 Audio Front End connected via gateway to Alexa Services

STM32H747-DISCO

Extended MEMS microphone array board to demonstrate mutli-microphone inputs and enable dynamic beam forming / source localization

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Amazon Alexa Home Control

- **Key Messages**
  - Highly integrated cost effective solution for Alexa and Voice activated applications
  - High performance STM32H7 microcontroller running Alexa services for Home Control
  - Solution features integrated audio front-end
  - Small form factor and cost effective microcontroller based solution for voice activated home control
  - Significant remaining system resources and interfaces to support increased system functionality with no addition cost
  - Scalable to other STM32 devices

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