

# Voice UI Reference Design for 96Boards

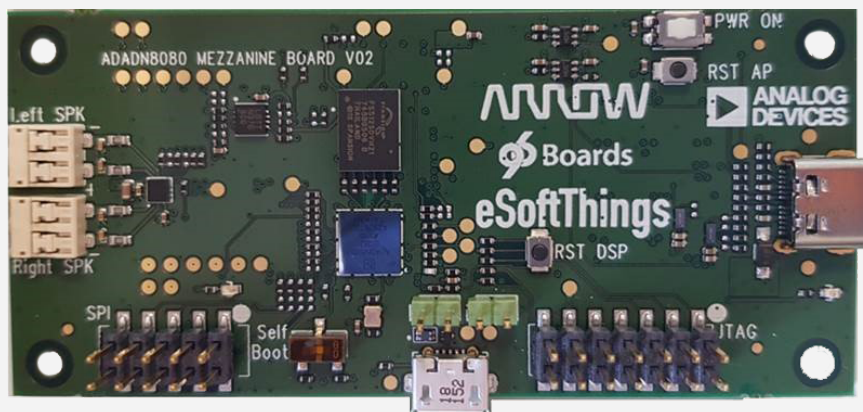
## ADADN8080 Mezzanine Audio Board for Dragonboard™ 410c

The Arrow/ADI ADADN8080 Mezzanine reference design board is a high-end voice control platform that works in conjunction with a Dragonboard™ 410c board and linear or circular microphone array. The board is the product of partnership between Arrow, ADI and eSoft Things showcasing the capabilities of ADI ADADN8080 voice platform. It allows quick prototyping of voice control applications and enables deployment of ADADN8080 based end products. With a low-power always-on voice solution with low-latency audio paths, multiple digital microphone inputs can be supported. Efficient and accurate far-field voice detection makes the board a great fit for consumer as well as professional audio applications.

### Benefits

- > **De-risked prototyping and product development:** Quick prototyping, rapid development and testing of products
- > **Fast time to market for customer products:** Out of the box use case support for voice control applications
- > **Active customer support through dedicated partner ecosystem:** Support from initial evaluation/design through full integration and development

## Voice UI Reference Design

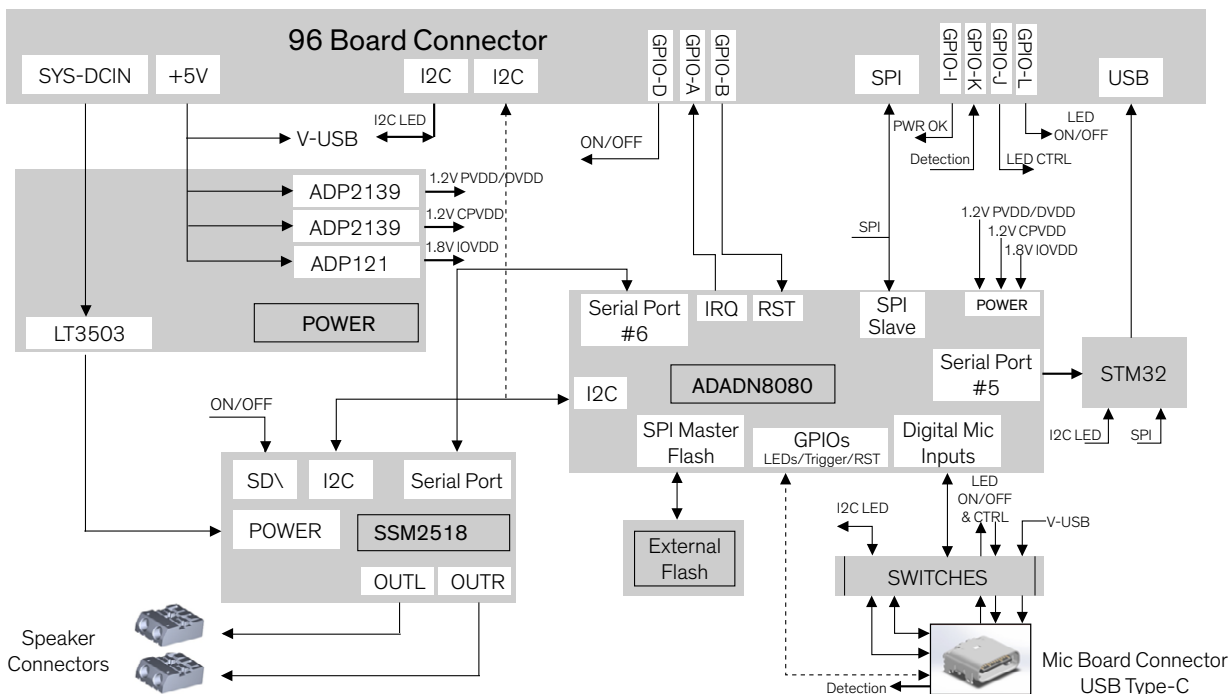


Available: Q1'19

### Voice UI applications

- > Speech recognition systems
- > Virtual assistants
- > Smart speakers
- > Customer service/feedback
- > Voice enabled apps
- > Voice UI security systems

## Block Diagram



## Key Features

- > Far-field voice capture over multiple digital Pulse-Density Modulation (PDM) microphones
- > Low-power always on voice detection with DSP core wake-up
- > Low-Latency audio path for high-performance applications
- > Support for audio media record and playback
- > Tested with AVS
- > Integrated support for beamforming
  - Visual LED indicators to identify direction of origin for Voice stream and Voice trigger capture
- > Integrated barge-in for improved voice trigger capture during music / media playback
- > Linear and circular microphone arrays (4PDM mics) with LEDs

## The kit ships with

- > Mezzanine Board
- > 2 × Speakers
- > 1 × Circular Mic Array (4Mic)
- > 1 × Linear Mic Array (4Mic)

## Related Product

**Arrow Dragonboard 410c:** Base board based on 96Boards™ specification featuring the Qualcomm® Snapdragon™ 410 processor



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