

Speech Recognition by ACH1190

The ACH1190 offers support for local/off-line speech recognition.

- No internet connection – private and secure.
- Control lighting and house-hold appliances with voice commands
- 1 and 2 microphone options, single ended or differential
- Far field voice distance up to 10 meters

The ACH1190 comes with a software application development kit, and speech libraries, to allow customized applications.

https://www.ampedrftech.com/guides/ACH_EvaluationGuide.pdf

- 960K RAM, 200Mhz Cortex M4 CPU
- UART, I2C, SPI, I2S, GPIO, PWM interfaces
- Analog audio input and output
- Internal audio clock generation
- Software examples for voice and speaker applications

ACH1190 reference design for voice assistant applications, one microphone example BOM:

ACC1190 IC

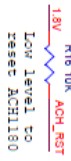
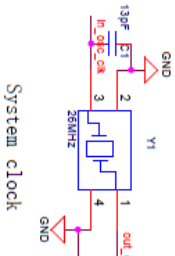
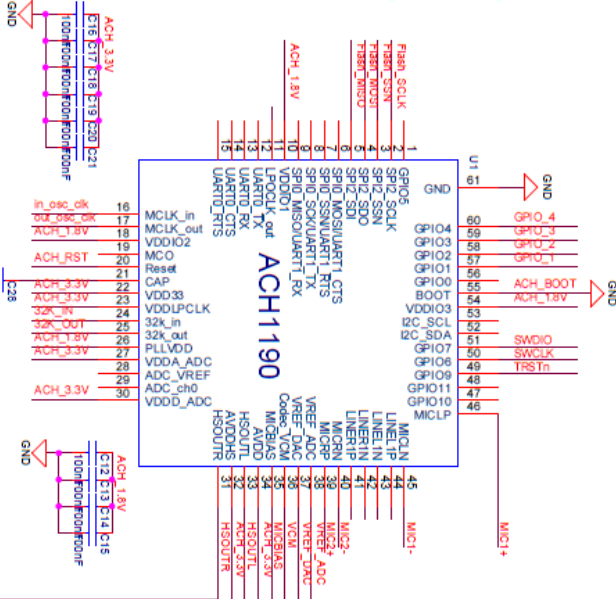
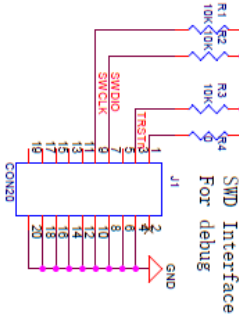
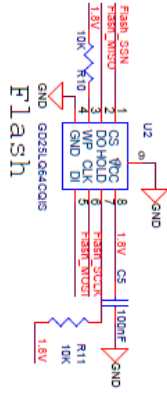
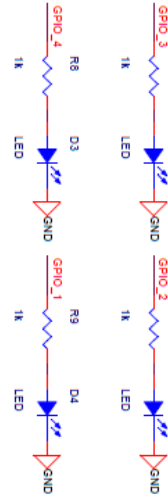
26Mhz crystal

8Mbit flash (minimum size)

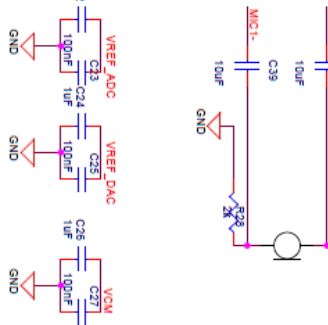
Analog mic

Approx 25 passive components (caps/resisters)

GPIO



Differential Mic



Optional

