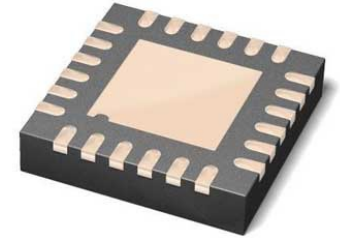



Voiceband Audio Codec 1ADC / 1DAC Ch 24-Pin QFN EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer:	Cirrus Logic, Inc
Package/Case:	QFN24
Product Type:	Communication & Networking ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Obsolete

General Description

The WM8974 is a low power, mono codec with integrated support for a differential or single ended mic, and includes drivers for speakers or headphone, as well as the mono line output. Separate microphone and headphone amplifiers are not required, and advanced Delta-Sigma converters are used along with digital decimation and interpolation filters to give high quality audio at sample rates from 8 to 48 ks/s. Additional digital filtering options are available in the ADC path to provide application filtering such as 'wind noise reduction'. An advanced mixed-signal ALC function with noise gate also is provided. An on-chip PLL is provided to generate the required Master Clock from an external reference clock. The PLL clock can also be output if required elsewhere in the system. Different sections of the chip can also be powered down under software control by way of the selectable two or three wire control interface.

Key Features

Mono codec

Audio sample rates: 8, 11.025, 16, 22.05, 24, 32, 44.1, 48 kHz

DAC SNR 98 dB, THD -84 dB ('A'-weighted @ 8 – 48ks/s)

ADC SNR 94 dB, THD -83 dB ('A'-weighted @ 8 – 48ks/s)

On-chip headphone/speaker driver with 'cap-less' connect

40mW output power into 16Ω / 3.3V SPKVDD

BTL speaker drive 0.9W into 8Ω / 5V SPKVDD

Additional mono line output

Multiple analog or 'Aux' inputs, plus analog bypass path

Mic preamps

Differential or single-ended microphone interface

Programmable preamp gain

Pseudo-differential inputs with common mode rejection

Programmable ALC / noise gate in ADC path

Low-noise bias supplied for electret microphones

5 band EQ (record or playback path)

Digital playback limiter

Programmable ADC high pass filter (wind noise reduction)

Programmable ADC Notch Filter

On-chip PLL

Low power, low voltage

2.5V to 3.6V (digital: 1.71V to 3.6V)

Power consumption <10mA all-on 48ks/s mode

4x4x0.9mm 24 lead QFN package

Recommended For You

WM8962BECSNR

Cirrus Logic, Inc

WCSP-49

WM8731CLSEFL

Cirrus Logic, Inc

QFN28

WM8994ECS/R

Cirrus Logic, Inc

WCSP-72

WM8944BECS/R

Cirrus Logic, Inc
WLCSP-25

WM8776SEFT/V

Cirrus Logic, Inc
LQFP48

WM8993ECS/RV

Cirrus Logic, Inc
BGA48

WM8770SIFT/V

Cirrus Logic, Inc
TQFP64

WM8915ECS/R

Cirrus Logic, Inc
WCSP

WM8772SEDS/RV

Cirrus Logic, Inc
SSOP28

WM8980CGEFL/RV

Cirrus Logic, Inc
BGA

WM8778SEDS/V

Cirrus Logic, Inc
28-SSOP

WM8998ECS/R

Cirrus Logic, Inc
WLCSP117

WM8946ECS/R

Cirrus Logic, Inc
BGA

WM8904ECS/R

Cirrus Logic, Inc
WCSP-36

WM9713CLGEFL/V

Cirrus Logic, Inc
QFN-48