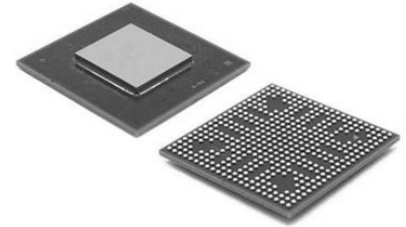



## PCM Audio Codec 2ADC / 4DAC Ch 72-Pin WCSP T/R



Images are for reference only

[Inquiry](#)

<b>Manufacturer:</b>	<a href="#">Cirrus Logic, Inc</a>
<b>Package/Case:</b>	WCSP-72
<b>Product Type:</b>	Communication & Networking ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active

### General Description

The WM8994 is a highly integrated, ultra low power hi-fi codec with an integrated stereo Class D and AB speaker driver, and a Class W headphone driver to minimize power consumption during audio playback. The device requires only Vbatt and a 1.8V supply, generating all other internal supply rails from integrated LDOs. Stereo full duplex asynchronous sample rate conversion and multi-channel digital mixing combined with powerful analog mixing to support a wide range of different architectures and use cases. A fully programmable parametric EQ provides speaker compensation and a dynamic range controller can be used in the ADC or DAC paths for maintaining a constant signal level, maximizing loudness and protecting speakers against overloading and clipping. A smart digital microphone interface provides power regulation, a low jitter clock output and decimation filters for up to four digital microphones. A MIC activity detect with interrupt is available. Active ground loop noise rejection and DC offset correction help prevent pop noise and suppress ground noise on the headphone outputs.

## Key Features

Hi-fi 24-bit 4-channel DAC and 2-channel ADC

100 dB SNR during DAC playback ('A' weighted)

Smart MIC interface

Power, clocking and data input for up to four digital MICs

High performance analog MIC interface

MIC activity detect & interrupt allows processor to sleep

2W stereo (2 x 2W) class D/AB speaker driver

Capless Class W headphone drivers

Integrated charge pump

5.3 mW total power for DAC playback to headphones

4 line outputs (single-ended or differential)

BTL earpiece driver

Digital audio interfaces for multi-processor architecture

Asynchronous stereo duplex sample rate conversion

Powerful mixing and digital loopback functions

ReTune™ Mobile 5-band, 6-channel parametric EQ

Programmable dynamic range controller

Dual FLL provides all necessary clocks

Self-clocking modes allow processor to sleep

All standard sample rates from 8 kHz to 96 kHz

Active noise reduction circuits

DC offset correction removes pops and clicks

Ground loop noise cancellation

Integrated LDO regulators

72-ball W-CSP package (4.511 x 4.023 x 0.7mm)

## Recommended For You

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### WM8974CGEFL/RV

Cirrus Logic, Inc

QFN24

### WM8962BECSNR

Cirrus Logic, Inc

WCSP-49

### WM8731CLSEFL

Cirrus Logic, Inc

QFN28

**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

**WM8915ECSNR**

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

**WM8713CLGEFL/V**

Cirrus Logic, Inc

QFN-48