MAX9860ETG+T

Voiceband Audio Codec 1ADC / 2DAC Ch 24-Pin TQFN EP T/R

Manufacturer:	Maxim Integrated
Package/Case:	TQFN-24
Product Type:	Communication & Networking ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

MAX9860ETG+T Image

Images are for reference only

Inquiry

General Description

Key Features

Supply voltage range from 1.7V to 3.6V (DVDDIO)

Operating temperature range from -40°C to 85°C

Digital high pass elliptical filters with notch for 217Hz (GSM)

Dual low noise microphone inputs and both master and slave timing modes are supported

Automatic microphone gain control and noise gate

90dB DAC DR (fS = 48KHz) and 81dB ADC DR (fS = 48KHz)

Shutdown supply current of 0.56µA (AVDD) at TA = +25°C

Flexible digital audio interface and clickless/popless operation

PSRR of 84dB at VAVDD = 1.7V to 1.9V & output power of 50mW at RL = 16ohm, f = 1KHz (mono headphone)

Total supply current of 4.08mA (AVDD, full operation 8KHz mono ADC + DAC)

Application

The MAX9860's flexible clocking circuitry utilizes common system clock frequencies ranging from 10MHz to 60MHz, eliminating the need for an external PLL and multiple crystal oscillators. Both the ADC and DAC support sample rates of 8kHz to 48kHz in either synchronous or asynchronous operation. Both master and slave timing modes are supported.

Two differential microphone inputs are available with a user-programmable preamplifier and programmable gain amplifier. Automatic gain control with selectable attack/release times and signal threshold allows maximum dynamic range. A noise gate with selectable threshold provides a means to quiet the channel when no signal is present. Both the DAC and ADC digital filters provide full attenuation for out-of-band signals as well as a 5th order GSM-compliant digital highpass filter. A digital side tone mixer provides loopback of the microphones/ADC signal to the DAC/headphone output.

Serial DAC and ADC data is transferred over a flexible digital I2S-compatible interface that also supports TDM mode. Mode settings, volume control, and shutdown are programmed through a 2-wire, I2C-compatible interface.

The MAX9860 is fully specified over the -40°C to +85°C extended temperature range and is available in a low-profile, 4mm x 4mm, 24-pin thin QFN package.

Request S/W Drivers

Applications

Audio Accessories

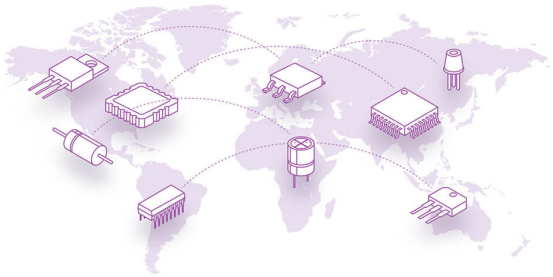
Audio Headsets

Mobile Phones

Portable Navigation Device

Smart Phones

VoIP Phones



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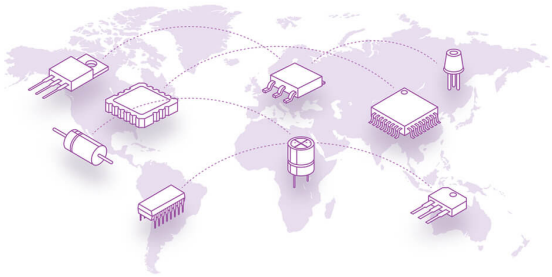

AVAQ

Recommended For You

MAX232ESE+

Maxim Integrated

SOP16

MAX14830ETM+

Maxim Integrated

TQFN48

MAX483ESA+

Maxim Integrated

SOP8

MAX232ACSE+T

Maxim Integrated

SOP-16

MAX6675ISA+T

Maxim Integrated

SOP-8

MAX7300AAX+

Maxim Integrated

SSOP-36

MAX485CPA+

Maxim Integrated

DIP8

MAX232CSE+

Maxim Integrated

SOP16

MAX3100EEE+

Maxim Integrated

SSOP16

MAX31855KASA+

Maxim Integrated

SOP-8

MAX22246CAWA+

Maxim Integrated

SOP-8

MAX3140CEI+

Maxim Integrated

SSOP28

MAX3344EEUE+

Maxim Integrated

TSSOP-16

MAX9180EXT

Maxim Integrated

SC70-6

MAX14830ETM+T

Maxim Integrated

TQFN48