

ADAU1761BCPZ-R7

Data Sheet

Audio Codec 2ADC / 2DAC 24-Bit 32-Pin LFCSP EP T/R - Tape and Reel (Alt: ADAU1761BCPZ-R7)

Manufacturers	Analog Devices, Inc		
Package/Case	LFCSP-32	¥ (
Product Type	Audio DSPs		
RoHS	Rohs		
Lifecycle		Images are for reference or	nly
Please submit RFQ for A	DAU1761BCPZ-R7 or <u>Email to us: sales@ovaga.com</u> We will contact you in	12 hours.	<u>RFQ</u>

General Description

The ADAU1761 is a low power, stereo audio codec with integrated digital audio processing that supports stereo 48 kHz record and playback at 14 mW from a 1.8 V analog supply. The stereo audio ADCs and DACs support sample rates from 8 kHz to 96 kHz as well as a digital volume control.

The SigmaDSP® core features 28-bit processing (56-bit double precision). The processor allows system designers to compensate for the realworld limitations of microphones, speakers, amplifiers, and listening environments, resulting in a dramatic improvement in the perceived audio quality through equalization, multiband compression, limiting, and third-party branded algorithms.

The SigmaStudioTM graphical development tool is used to program the ADAU1761. This software includes audio processing blocks such as filters, dynamics processors, mixers, and low level DSP functions for fast development of custom signal flows.

The record path includes an integrated microphone bias circuit and six inputs. The inputs can be mixed and muxed before the ADC, or they can be configured to bypass the ADC. The ADAU1761 includes a stereo digital microphone input.

The ADAU1761 includes five high power output drivers (two differential and three single-ended), supporting stereo head-phones, an earpiece, or other output transducer. AC-coupled or capless configurations are supported. Individual fine level controls are supported on all analog outputs. The output mixer stage allows for flexible routing of audio.

Features

SigmaDSP 28-/56-bit 50 MIPS digital audio processor			
Fully programmable with SigmaStudio graphical tool			
24-bit stereo audio ADC and DAC: >98 dB SNR			
Sampling rates from 8 kHz to 96 kHz			
Low power: 7 mW record, 7 mW playback, 48 kHz at 1.8 V			
6 analog input pins, configurable for single-ended or differential inputs			
Flexible analog input/output mixers			
Stereo digital microphone input			
Analog outputs: 2 differential stereo, 2 single-ended stereo, 1 mono headphone output driver			
PLL supporting input clocks from 8 MHz to 27 MHz			
Analog automatic level control (ALC)			
Microphone bias reference voltage			
Analog and digital I/O: 1.8 V to 3.65 V			
I2C and SPI control interfaces			
Digital audio serial data I/O: stereo and time-division multiplexing (TDM) modes			
Software-controllable clickless mute			
Software power-down			
GPIO pins for digital controls and outputs			
32-lead, 5 mm \times 5 mm LFCSP			

Related Products



ADV7181CBSTZ Analog Devices, Inc

LQFP-64



<u>AD724JR</u>

Analog Devices, Inc SOIC-16



100 BG

AD8170AR

Analog Devices, Inc SOP8

ADV7393BCPZ

Analog Devices, Inc LFCSP-VQ-40

Application Smartphones/multimedia phones

Digital still cameras/digital video cameras Portable media players/portable audio players

Phone accessories products



ADV7391WBCPZ

Analog Devices, Inc LFSCP-3



ADV7390BCPZ

Analog Devices, Inc QFN32



ADV7341BSTZ Analog Devices, Inc LQFP-64



ADUM4160BRIZ

Analog Devices, Inc SOIC-16