



Data Sheet

Balance Line Driver; Package: PDIP; No of Pins: 8; Temperature Range: TBD

Manufacturers Analog Devices, Inc

Package/Case DIP-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for SSM2142PZ or Email to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The SSM2142 is an integrated differential-output buffer amplifier that converts a single-ended input signal to a balanced output signal pair with high output drive. By utilizing low noise thermally matched thin film resistors and high slew rate amplifiers, the SSM2142 helps maintain the sonic quality of audio systems by eliminating power line hum, RF interference, voltage drops, and other externally generated noise commonly encountered with long audio cable runs. Excellent rejection of common-mode noise and offset errors is achieved by laser trimming of the onboard resistors, assuring high gain accuracy. The carefully designed output stage of the SSM2142 is capable of driving difficult loads, yielding low distortion performance despite extremely long cables or loads as low as 600 Ohm, and is stable over a wide range of operating conditions.

Based on a cross-coupled, electronically balanced topology, the SSM2142 mimics the performance of fully balanced transformer-based solutions for line driving. However, the SSM2142 maintains lower distortion and occupies much less board space than transformers while achieving comparable common-mode rejection performance with reduced parts count.

The SSM2142 in tandem with the SSM2141 differential receiver establishes a complete, reliable solution for driving and receiving audio signals over long cables. The SSM2141 features an Input Common-Mode Rejection Ratio of 100 dB at 60 Hz. Specifications demonstrating the performance of this typical system are included in the data sheet.

Features

Transformer-Like Balanced Output

Drives 10 V RMS Into a 600 Ω Load

Stable When Driving Large Capacitive Loads and LongCables

Low Distortion0.006% typ 20 Hz–20 kHz, 10 V RMS into 600 Ω

High Slew Rate15 V/µs typ

Low Gain Error(Differential or Single-Ended); 0.7% typ

Outputs Short-Circuit Protected

Available In Space-Saving 8-Pin Mini-DIP Package

Low Cost

Application

Audio Mix Consoles

Distribution Amplifiers

Graphic and Parametric Equalizers

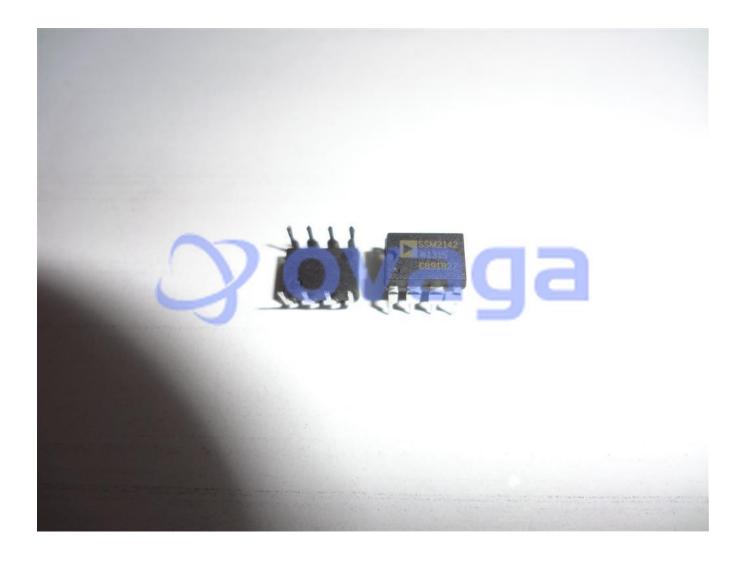
Dynamic Range Processors

Digital Effects Processors

Telecommunications Systems

Industrial Instrumentation

Hi-Fi Equipment





Related Products



SSM2143SZ

Analog Devices, Inc SOIC-8



<u>SSM2164S</u>

Analog Devices, Inc SOP-16



SSM3302ACPZ

Analog Devices, Inc LFCSP-40



SSM2135S

Analog Devices, Inc SOIC-8



SSM2211SZ

Analog Devices, Inc SOP8



SSM2135SZ

Analog Devices, Inc SOIC-8



SSM2165-1S

Analog Devices, Inc SOP8



SSM2143P

Analog Devices, Inc DIP-8