

## 78dB Audio Attenuator

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	SOP20
<b>Product Type:</b>	Discrete Semiconductor Modules
<b>Lifecycle:</b>	Obsolete



Images are for reference only

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## General Description

The LM1972 is a digitally controlled 2-channel 78dB audio attenuator fabricated on a CMOS process. Each channel has attenuation steps of 0.5dB from 0dB–47.5dB, 1.0dB steps from 48dB–78dB, with a mute function attenuating 104dB. Its logarithmic attenuation curve can be customized through software to fit the desired application.

The performance of a  $\mu$ Pot is demonstrated through its excellent Signal-to-Noise Ratio, extremely low (THD+N), and high channel separation. Each  $\mu$ Pot contains a mute function that disconnects the input signal from the output, providing a minimum attenuation of 96dB. Transitions between any attenuation settings are pop free.

The LM1972's 3-wire serial digital interface is TTL and CMOS compatible; receiving data that selects a channel and the desired attenuation level. The Data-Out pin of the LM1972 allows multiple  $\mu$ Pots to be daisy-chained together, reducing the number of enable and data lines to be routed for a given application.

## Key Features

3-Wire Serial Interface

Daisy-Chain Capability

104dB Mute Attenuation

Pop and Click Free Attenuation Changes

Key Specifications

Total Harmonic Distortion +

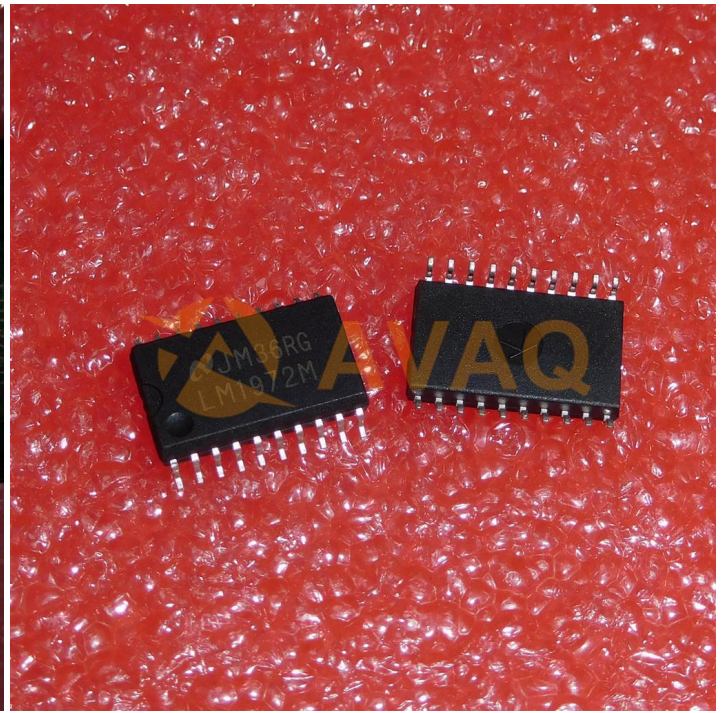
Frequency response: 100 kHz (3dB) (min)

Attenuation range (excluding

Differential attenuation:  $\pm 0.25$  dB (max)

Signal-to-noise ratio

Channel separation: 100 dB (min)



## Recommended For You

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### **LMI496N**

Texas Instruments, Inc

DIP14

### **LMI971M**

Texas Instruments, Inc

SOP-8

### **LMI871N**

Texas Instruments, Inc

DIP18

### **LMH2120UM/NOPB**

Texas Instruments, Inc

DSBGA-6

### **LMX2541SQE2060E/NOPB**

Texas Instruments, Inc

WQFN-36

### **LMI971MX/NOPB**

Texas Instruments, Inc

8-SOIC

### **LMP91051MI/NOPB**

Texas Instruments, Inc

14-TSSOP

### **LMX2470SLEX/NOPB**

Texas Instruments, Inc

QFN

### **LMH2110TMX/NOPB**

Texas Instruments, Inc

DSBGA-6

### **LMH2110TM/NOPB**

Texas Instruments, Inc

DSBGA6

### **LMV221SD**

Texas Instruments, Inc

QFN

### **LMI496M**

Texas Instruments, Inc

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### **LMV225SD**

Texas Instruments, Inc

WSON6

### **LMH2110TM**

Texas Instruments, Inc

SMD-6

### **LMI972M/NOPB**

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