

## Audio Amp Speaker 1-CH Mono Class-AB 8-Pin SOIC Tube



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOP8

**Product Type:** Amplifier ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The OPA1611 (single) and OPA1612 (dual) bipolar-input operational amplifiers achieve very low 1.1-nV/ $\sqrt{\text{Hz}}$  noise density with an ultralow distortion of 0.000015% at 1 kHz. The OPA1611 and OPA1612 offer rail-to-rail output swing to within 600 mV with a 2-k $\Omega$  load, which increases headroom and maximizes dynamic range. These devices also have a high output drive capability of  $\pm 30$  mA.

These devices operate over a very wide supply range of  $\pm 2.25$  V to  $\pm 18$  V, on only 3.6 mA of supply current per channel. The OPA1611 and OPA1612 op amps are unity-gain stable and provide excellent dynamic behavior over a wide range of load conditions.

The dual version features completely independent circuitry for lowest crosstalk and freedom from interactions between channels, even when overdriven or overloaded.

Both the OPA1611 and OPA1612 are available in SOIC-8 packages and the OPA1612 is available in SON-8. These devices are specified from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

### Key Features

#### Superior Sound Quality

**Ultralow Noise:** 1.1 nV/ $\sqrt{\text{Hz}}$  noise density with an ultralow distortion of 0.000015% at 1 kHz. The OPA1611 and OPA1612 offer rail-to-rail output swing to within 600 mV with a 2-k $\Omega$  load, which increases headroom and maximizes dynamic range. These devices also have a high output drive capability of  $\pm 30$  mA.

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### Recommended For You

**OPA445BM**

Texas Instruments, Inc  
CAN

**OPA1611AIDR**

Texas Instruments, Inc  
SOP8

**OPA388QDBVRQ1**

Texas Instruments, Inc  
SOT23-5

**OPA2365AQDRQ1**

Texas Instruments, Inc  
SOP8

**OPA334AIDBVR**

Texas Instruments, Inc  
SOT23-6

**OPA2835IDGSR**

Texas Instruments, Inc  
MSOP10

**OPA656U**

Texas Instruments, Inc  
SOP8

**OPA360AIDCKR**

Texas Instruments, Inc  
SC70-6

**LMI11H/NOPB**

Texas Instruments, Inc  
CAN8

**OPA353UA**

Texas Instruments, Inc  
SOP8

**LMI3700MX/NOPB**

Texas Instruments, Inc  
SOP16

**OPA633KP**

Texas Instruments, Inc  
DIP8

**OPA453FAKTWT**

Texas Instruments, Inc  
TO263-7

**OPA4251UA**

Texas Instruments, Inc  
SOP14

**LMV321M5X/NOPB**

Texas Instruments, Inc  
SOT23-5