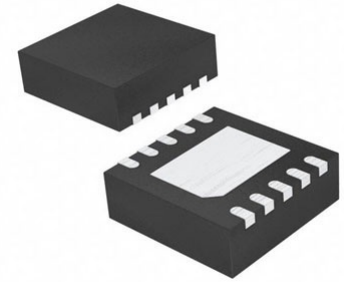


## Audio Amp Speaker 2-CH Stereo Class-AB 10-Pin VSON EP T/R



Images are for reference only

[Inquiry](#)

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

**Package/Case:** VSON10

**Product Type:** Amplifier ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The OPA1622, dual, bipolar-input, SoundPlus audio operational amplifier achieves a very low, 2.8-nV/ $\sqrt{\text{Hz}}$  noise density with an ultralow THD+N of  $-119.2$  dB at 1 kHz, while driving a 32- $\Omega$  load at 100-mW output power. The OPA1622 offers extremely-high ac PSRR and CMRR specifications that eliminate noise from power supplies, making the OPA1622 ideal for use in portable-audio applications. This device also has a high output-drive capability of +145 mA /  $-130$  mA.

The OPA1622 operates over a very wide supply range of  $\pm 2$  V to  $\pm 18$  V, on only 2.6 mA of supply current per channel. The OPA1622 op amp is unity-gain stable and provides excellent dynamic behavior over a wide range of load conditions. The OPA1622 includes a shutdown mode, allowing the amplifiers to be switched from normal operation to a standby current that is typically less than 5  $\mu\text{A}$ . This shutdown feature is specifically designed to eliminate click and pop noise when transitioning into or out of shutdown mode.

The OPA1622 features a unique internal layout for lowest crosstalk, and freedom from interactions between channels, even when overdriven or overloaded. This device is specified from  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$ .

## Key Features

High-Fidelity Sound Quality

Ultralow Noise: 2.8 nV/ $\sqrt{\text{Hz}}$  at 1 kHz

Ultralow Total Harmonic Distortion + Noise:  
-119 dB THD+N (142 mW/Ch into 32  $\Omega$ /Ch)

Wide Gain Bandwidth Product:  
32 MHz (G = +1000)

High Slew Rate: 10 V/ $\mu\text{s}$

High Capacitive-Load Drive Capability: > 600 pF

High Open-Loop Gain: 136 dB (600- $\Omega$  Load)

Low Quiescent Current: 2.6 mA per Channel

Low-Power Shutdown Mode With Reduced Pop  
and Click Noise: 5  $\mu\text{A}$  per Channel

Short-Circuit Protection

Wide Supply Range:  $\pm 2$  V to  $\pm 18$  V

Available in small VSON-10  $\mu\text{Package}$

## Recommended For You

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### LM833N/NOPB

Texas Instruments, Inc

DIP-8

### OPA2134PA

Texas Instruments, Inc

DIP8

### OPA1642AIDR

Texas Instruments, Inc

SOP8

### LM4808MM/NOPB

Texas Instruments, Inc

MSOP8

### LM4667MM/NOPB

Texas Instruments, Inc

TSSOP

### OPA1642AIDGKR

Texas Instruments, Inc

MSOP8

### OPA1612AID

Texas Instruments, Inc

SOP8

### OPA1622IDRCR

Texas Instruments, Inc

VSON10

### OPA1602AID

Texas Instruments, Inc

SOIC-8

### LM4871MX/NOPB

Texas Instruments, Inc

SOP8

### OPA1612AIDRGR

Texas Instruments, Inc

SON8

### LM4890M/NOPB

Texas Instruments, Inc

SOP8

**OPA1632DGN**

Texas Instruments, Inc

MSOP8

**LM4890MM/NOPB**

Texas Instruments, Inc

MSOP8

**LM4562MA/NOPB**

Texas Instruments, Inc

SOP-8