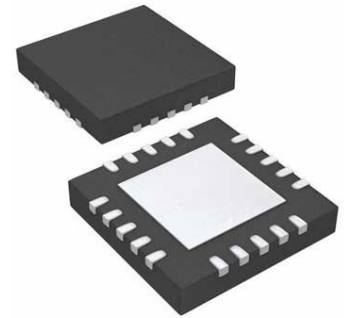


Audio Amp Speaker 2-CH Stereo 1.72W Class-D 20-Pin WQFN EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: QFN20

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The TPA2016D2 device is a stereo, filter-free Class-D audio power amplifier with volume control, dynamic range compression (DRC), and automatic gain control (AGC). It is available in a 2.2 mm × 2.2 mm DSBGA package and 20-pin QFN package.

The DRC and AGC function in the TPA2016D2 is programmable through a digital I²C interface. The DRC and AGC function can be configured to automatically prevent distortion of the audio signal and enhance quiet passages that are normally not heard. The DRC and AGC can also be configured to protect the speaker from damage at high power levels and compress the dynamic range of music to fit within the dynamic range of the speaker. The gain can be selected from -28 dB to +30 dB in 1-dB steps.

The TPA2016D2 is capable of driving 1.7 W/Ch at 5 V or 750 mW/Ch at 3.6 V into 8-Ω load or 2.8 W/Ch at 5 V or 1.5 W/Ch at 3.6 V into 4-Ω load. The device features independent software shutdown controls for each channel and also provides thermal and short-circuit protection.

In addition to these features, a fast start-up time and small package size make the TPA2016D2 an ideal choice for cellular handsets, PDAs, and other portable applications.

Key Features

Filter-free class-D architecture

AGC enable/disable function

Limiter enable/disable function

Short-circuit and thermal protection

Programmable DRC/AGC parameters

Digital I²C volume control

4 Selectable compression ratios

3.5mA Low supply current

0.2µA Low shutdown current

80dB High PSRR

5ms Fast start-up time

Green product and no Sb/Br

Recommended For You

TPA3125D2N

Texas Instruments, Inc

DIP20

TPA6111A2DR

Texas Instruments, Inc

SOP8

TPA2012D2RTJR

Texas Instruments, Inc

QFN20

TPA6132A2RTER

Texas Instruments, Inc

QFN

TPA2013D1RGPR

Texas Instruments, Inc

QFN20

TPA2010D1YZFR

Texas Instruments, Inc

DSBGA9

TPA3118D2QDAPRQ1

Texas Instruments, Inc

HTSSOP-32

TPA6211A1TDGNRQ1

Texas Instruments, Inc

MSOP8

TAS5414CTPHDRQ1

Texas Instruments, Inc

HTQFP-64

PCMI681TPWPRQ1

Texas Instruments, Inc

HTSSOP28

TPA3131D2RHBR

Texas Instruments, Inc

VQFN32

TPA3100D2PHP

Texas Instruments, Inc

QFP

TPA3244DDWR

Texas Instruments, Inc

HTSSOP-44

TPA6017A2PWP

Texas Instruments, Inc

HTSSOP20

TPA4861D

Texas Instruments, Inc

SOP8

