TDA7802

Audio Amp Speaker 4-CH Stereo 50W Class-AB Automotive 27-Pin FLEXIWATT(Vertical) Tube

Images are for reference only

Inquiry

Manufacturer:	STMicroelectronics, Inc
Package/Case:	ZIP
Product Type:	Amplifier ICs
Lifecycle:	Active

General Description

The TDA7802 is a single chip quad bridge amplifier in advanced BCD technology integrating: a full D/A converter, digital input for direct connection to I2S (or TDM) and powerful MOSFET output stages. The integrated D/A converter allows the performance to reach an outstanding 115 dB S/N ratio with more than 110 dB of dynamic range. Moreover the TDA7802 integrates an innovative high efficiency concept, optimized also for uncorrelated music signals, that makes it the most suitable device to simplify the thermal management in high power sets. Thanks to this concept, the dissipated output power under average listening conditions can be reduced up to 50% when compared to the conventional class AB solutions. The TDA7802 integrates also a programmable PLL that is able to lock at the input frequencies of 64*Fs and 50*Fs for all the input configurations. The device is equipped with a full diagnostics array that communicates the status of each speaker through the I2C bus. The same I2C bus allows to control several configurations of the device. The TDA7802 is able to play music down to 6 V supply voltage - so it is compatible with the so called 'start stop' battery profile recently adopted by several car makers (thus reducing the fuel consumption and and the impact over the environment).

Key Features

24-bit resolution

110 dB dynamic range (A-weighted)

SB-I (SB - improved) high efficiency operation the highest ’non - class D’ efficiency

1 Ohm driving capability (only in PowerSO36 package)

High output power capability:4 x 28 W 4Ω@ 14.4 V, 1 kHz, THD = 10 %

Max output power: 4 x 72 W 2 Ω

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Flexible mode control:

Full I2C bus driving 1.8 V/3.3 V) with four addresses selectable (only for PowerSO36 package option)

Independent front/rear play/ mute

Four selectable gains for very-low noise line-out function

Digital diagnostic with DC and AC load detections

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Independent front/rear play/ mute

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Digital diagnostic with DC and AC load detections

Optional H/W control (no I2C bus)

Start-stop compatibility (operation down to 6 V)

Sample rates: 44.1 kHz, 48 kHz, 96 kHz, 192 kHz

Flexible serial data port (1.8 V / 3.3 V):

I2S standard, TDM 4Ch, TDM 8Ch, TDM 16Ch

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Offset detector (play or mute mode)

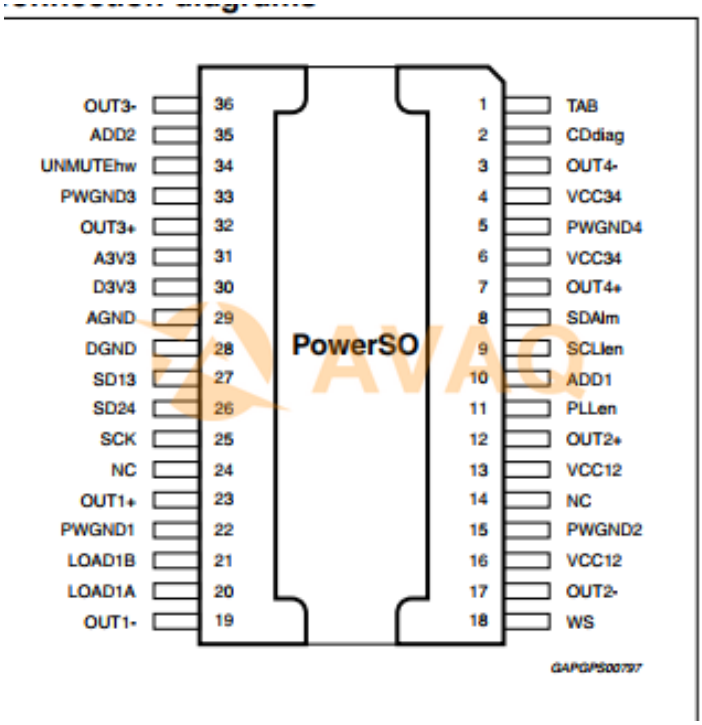
Independent front/rear clipping detector

Programmable diagnostic pin

CMOS compatible enable pin

Thermal protection

Qualification in accordance to AEC Q100 rev. G standard



Recommended For You

TDA7387EP

STMicroelectronics, Inc

ZIP25

TDA7562

STMicroelectronics, Inc

ZIP27

TDA7296

STMicroelectronics, Inc

ZIP-15

TDA7419

STMicroelectronics, Inc

SOP28

TDA7561

STMicroelectronics, Inc

ZIP

TDA7575B

STMicroelectronics, Inc

ZIP27

TDA7376B

STMicroelectronics, Inc

ZIP-15

TDA7851L

STMicroelectronics, Inc

ZIP-25

TDA7417

STMicroelectronics, Inc

QFP

TDA2005R

STMicroelectronics, Inc

ZIP

TDA7801

STMicroelectronics, Inc

ZIP27

TDA7388A

STMicroelectronics, Inc

ZIP-27

TDA7850A

STMicroelectronics, Inc

ZIP27

TDA7563ASM

STMicroelectronics, Inc

ZIP-27

TDA75610LV

STMicroelectronics, Inc

ZIP27