

Audio Amp Speaker 1-CH Mono 8W Class-D Automotive 16-Pin HTSSOP EP T/R



Images are for reference only

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: HTSSOP16

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The TAS5411-Q1 is a mono class-D audio amplifier, ideal for use in automotive emergency call (eCall), telematics, and instrument cluster applications. The device provides up to 8 W into 4 Ω at less than 10% THD+N from a 14.4-Vdc automotive battery. The wide operating voltage range and excellent efficiency make the device ideal for start-stop support or running from a backup battery when required. The integrated load-dump protection reduces external voltage clamp cost and size, and the onboard load diagnostics report the status of the speaker through I²C.

Key Features

Qualified for Automotive Applications

AEC-Q100 Qualified With the Following Results:

Device Temperature Grade 1: -40°C to 125°C Ambient Operating Temperature

Device HBM Classification Level H2

Device CDM Classification Level C5

Mono BTL Class-D Power Amplifier

8-W Output Power at 10% THD+N Into 4 Ω

4.5-V to 18-V Operating Range

83% Efficiency Into 4 Ω

Differential Analog Input

Speaker Guard Speaker Protection With Adjustable Power Limiter

75-dB Power-Supply Rejection Ratio (PSRR)

Load Diagnostic Functions:

Open and Shorted Output Load

Output-to-Power and -Ground Shorts

Protection and Monitoring Functions:

Short-Circuit Protection

40-V Load-Dump Protection per ISO-7637-2

Output DC Level Detection While Music Is Playing

Overtemperature Protection

Over- and Undervoltage Protection

Thermally Enhanced 16-Pin HTSSOP (PWP) Package With PowerPAD Package (Pad Down)

Designed for Automotive EMC Requirements

ISO9000: 2002 TS16949 Certified



Recommended For You

TAS5142DKD

Texas Instruments, Inc
HSSOP36

TAS5717PHPR

Texas Instruments, Inc
HTQFP48

TAS5342ADDVR

Texas Instruments, Inc
HTSSOP44

TAS5707PHPR

Texas Instruments, Inc
HTQFP48

TAS5760MDAPR

Texas Instruments, Inc
HTSSOP32

TAS5760MDCAR

Texas Instruments, Inc
HTSSOP48

TAS5414CTPHDRQ1

Texas Instruments, Inc
HTQFP-64

TAS2505IRGET

Texas Instruments, Inc
VQFN24

TAS2505IRGER

Texas Instruments, Inc
VQFN-24

TAS5086DBTR

Texas Instruments, Inc
TSSOP38

TAS3004PFB

Texas Instruments, Inc
QFP

TAS3004PFBR

Texas Instruments, Inc
TQFP-48

TAS5076PFC

Texas Instruments, Inc
QFP

TAS3108DCP

Texas Instruments, Inc
HTSSOP38

TAS2557YZR

Texas Instruments, Inc
DSBGA42